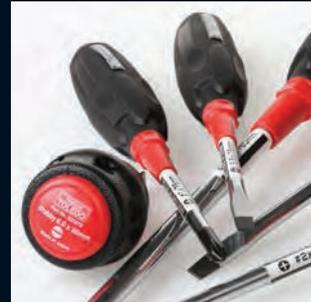
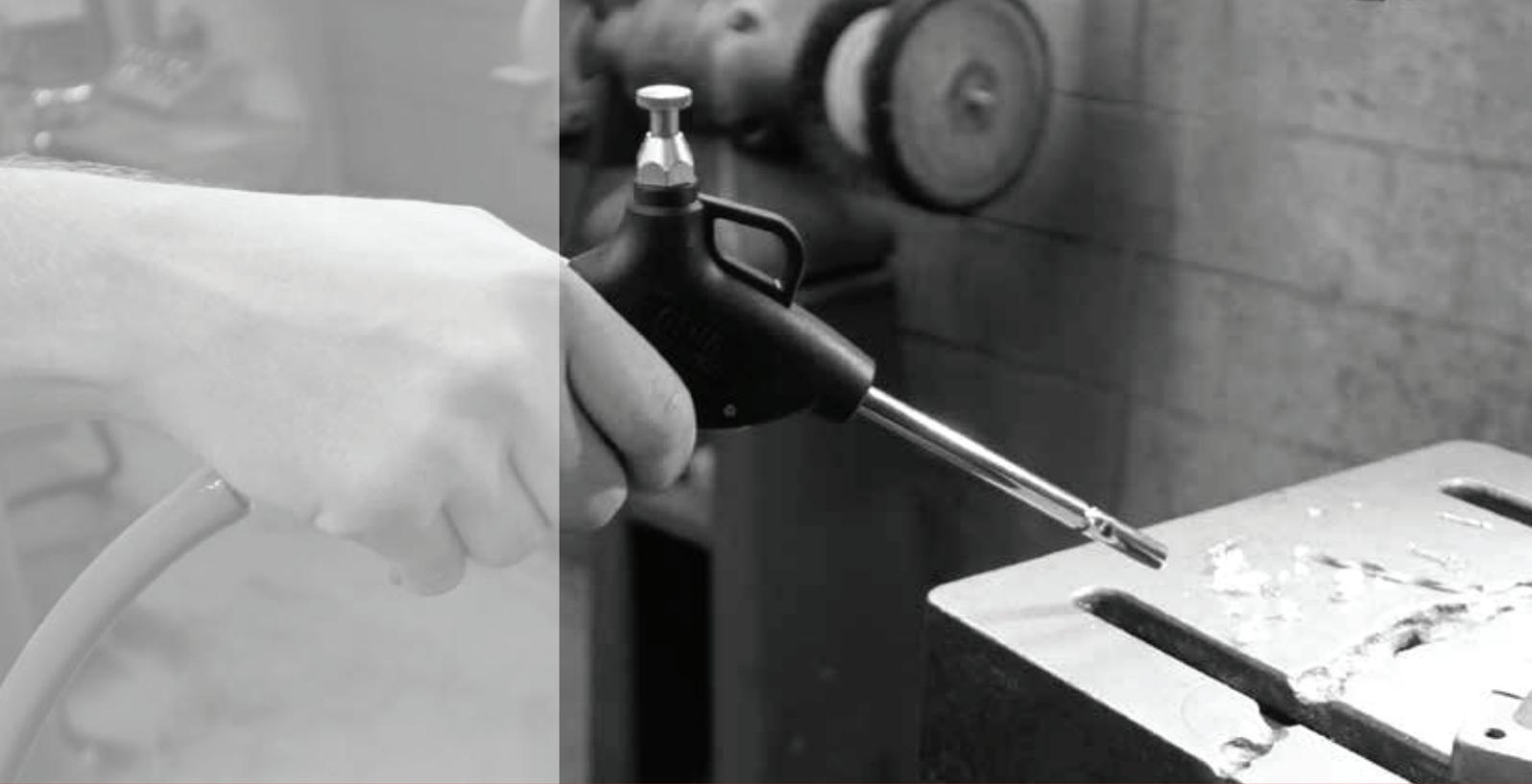


**FAMOUS  
TOLEDO**  
EXCELLENCE BY DESIGN



MASTER **TOOL CATALOGUE**

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# WORKSHOP GENERAL

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AIR/PNEUMATIC



**SPRAY CLEANING GUN**  
PNEUMATIC FLEXIBLE HEAD 1L



- Air operated cleaning gun for degreasing and cleaning parts
- Flexible head allows for deep cleaning in hard to reach areas and crevices
- Features handy hanging hook for storage
- Flexible delivery hose with adjustable spray pattern nozzle
- Simply connects to workshop air supply and is suitable for use with most automotive degreasers
- Ideal for detailing engine bays, cleaning transmission, differential and wheel hub components etc.
- Spares: Replacement flexible hose and nozzle (Part No. 305165A)



Part No.	Working Pressure	Air Inlet	Flexible Hose	Spares
<b>305165</b>	70 - 110 psi (5-8 bar)	1/4"	320mm	305165A



**SANDBLASTING GUN**  
PNEUMATIC ADJUSTABLE HEAD 1L



- Effective way of removing contaminants on hard surfaces such as rust, paint and lacquer and smooth or rough surfaces
- Suitable for automotive and industrial applications
- Supplied with adjustable steel nozzle to control output flow rate
- Manufactured from heavy duty polyurethane with steel head
- Suitable for use with walnut shells, aluminium oxide or any appropriate abrasive media

*Note: Toledo does not supply abrasive media*

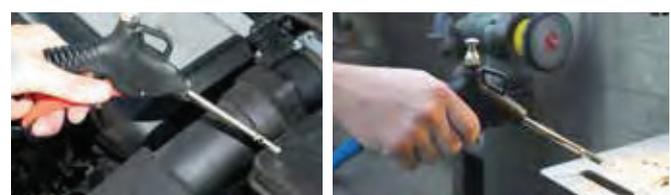


Part No.	Working Pressure	Air Inlet	Nozzle Length
<b>305166</b>	87 - 145 psi (6-8bar)	1/4"	88mm



**AIR BLOW GUNS**  
TRIGGER STYLE

- Trade quality range provides maximum air output with minimal noise
- Ergonomic design for extended use without fatigue or discomfort for user
- Safety versions feature cut-outs in nozzle to eliminate danger if contact is made with user
- Adjustable air flow control (not 321103)
- All feature a 1/4" steel air inlet for heavy duty use
- Air flow: 1175L/M @ 150 psi



Part No.	Description	Nozzle (Length x Width)
<b>321100</b>	High flow safety	100 x 8mm
<b>321101</b>	High flow safety	355 x 8mm
<b>321102</b>	High flow	60 x 8mm
<b>321103</b>	High flow rubber tip	120 x 6 - 16mm

**BRAKE CALIPER PISTON WIND BACK MASTER KIT**  
PNEUMATIC

- Professional trade kit suitable for both right and left handed applications
- Pneumatic operation allows for easy wind back to return brake caliper piston to the resting position during removal, installation or service repairs of the disc brake pads
- Air operated ram applies pressure to the caliper position while the handle is rotated by hand
- Non-impact force with variable trigger for controlled speed
- Magnetic pad securely holds adaptors in place
- Easy to use – works on standard workshop air supply
- Suitable for use on both wind back and push back pistons
- Solid cast aluminium body and chrome alloy steel parts for maximum durability



Part No.	Working Pressure	Air Inlet	Adaptors
<b>310375</b>	115 psi	1/4"	15

Item Ref.	Application (F = Front, R = Rear)	Item Ref.	Application (F = Front, R = Rear)	Item Ref.	Application (F = Front, R = Rear)
0	<b>GM</b> most 2-1/2" diameter pistons	6	<b>Nissan Primera, Volkswagen Golf IV</b>	E	<b>Nissan Maxima, Ford</b>
2	<b>Citroen XM</b> – Xantia (F&R), Honda	7	<b>Audi 80, 90, V8 + 100, Coupe E (R), Subaru L + Z (R), Ford, Nissan Bluebird 1.8 Turbo, Silvia Turbo, Primera 2.0i LS/ GS/GSX (R), Peugeot, Toyota Celica, Corolla GT, MR2 (R), Renault, SAAB, Seat Volkswagen Golf Gti, Jetta Synchro, Jetta Gti 16v, Passat, Citroen, Fiat, Honda, Jaguar, Alfa Romeo</b>	F(G)	<b>Opel (R)</b>
3	<b>Audi (F), Fiat, Alfa Romeo (F), Ford Fiesta (F), Isuzu (F), Jaguar XJ6, XJ40 (F&amp;R), BMW 318is, 320i, 325TD, 518i, 525i &amp; 1x, 740i, 850ci, M5 (F), Mercedes Benz 190, 200, 300, 400, 500 series (F), Mitsubishi Colt (F), Toyota Camry (F), Volvo, Volkswagen Passat, Golf GTI (F)</b>	8	<b>GM</b> most 1-7/8" diameter pistons	K	<b>Ford Motors, Mini R68, Mazda 3</b>
4	<b>Ford Australia and NZ, Mazda (R), Saab 9000 (R), Toyota, Fiat, Alfa Romeo 164 2.0 (R), Honda Prelude, CRS 16i</b>	9	<b>GM</b> most 2-1/8" diameter pistons	M	<b>SAAB, Honda, Alfa Romeo, VAG</b>
5	3/8" adaptor	A(Z)	<b>Renault R21, Laguna (R)</b>	N	<b>Citroen</b>

**AIR GUN/POWER TOOL HOLDER**  
MAGNETIC

- Holds one tool and four sockets



Part No.	Magnets	Overall Length
<b>301187</b>	2 x Circular	370mm

**COOLING SYSTEM VACUUM PURGE & REFILL KIT**  
PNEUMATIC

- This kit eliminates the need for bleeding and purging system to remove air pockets and allows quick refill of coolant into the system
- Includes flexible hose for easier work with hard to reach connections
- Gauge features pressure release valve and shock proof protective rubber casing



Part No.	Working Pressure	Air Consumption	Air Inlet
<b>308552</b>	90 psi	12 CF/M	1/4" BSP

AIR/PNEUMATIC



**AIR PULSE PARTS CLEANER**  
PNEUMATIC LOCKABLE 20L

- Portable air pulse parts cleaner to attach to standard workshop airline
- Lockable lid with latches, side handgrips and a drain plug/stopper
- Air pulse agitates submerged part to loosen dirt and grime
- In-line valve fitted to control air flow
- Suitable for use with any water based degreasers
- Manufactured from high grade plastic to ensure maximum corrosion resistance and features extendable internal aluminium pallet

*Note: Not for use with strong acid or alkali*

Part No.	Working Pressure	Air Inlet	Dimensions (External)
<b>305162</b>	90 - 115 psi/6 - 8 bar	1/4"	600 x 450 x 270mm



**CV BOOT INSTALLATION TOOL**  
PNEUMATIC

- Specialised tool designed to stretch the CV boot over the CV joint without the need to dismantle the CV shaft
- Durable and lightweight construction with an inbuilt airflow controller allows complete portability and ease of use

*Note: Not suitable for plastic type CV boots*

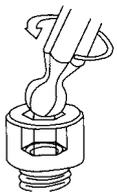


Part No.	CV Joint Diameter	Working Pressure	Air Inlet
<b>311018</b>	Ø25 - 110mm	72 - 113 psi (Max 125 psi)	1/4"

BITS & KEYS

**HEX KEY SETS**  
BALL POINT

- Double ended tools featuring one standard hex end and one ball hex end
- Ball end improves access to application and up to 25° working angle for increased speed and ease of entry
- Manufactured from heat treated vanadium steel with industrial black finish
- Supplied on handy storage clip



HKM



HKMAF

Part No.	Description	Fastener Type	Size x Length	Pieces
<b>HKM</b>	Hex key set - Metric		2.5 x 90mm, 3.0 x 100mm, 4.0 x 110mm, 5.0 x 115mm, 6.0 x 140mm, 8.0 x 160mm, 10.0 x 180mm	7
<b>HKAF</b>	Hex key set - Imperial		3/32" x 90mm, 1/8" x 100mm, 5/32" x 110mm, 3/16" x 115mm, 1/4" x 140mm, 5/16" 160mm, 3/8" x 180mm	7

**BIT SETS**

- Various compact bit sets covering a wide range of fastener types and sizes
- Supplied in various storage styles
- Bits are manufactured from hardened and tempered vanadium steel



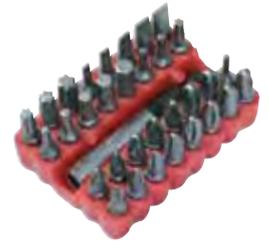
301667



301668



301318



301096



301168



301934



301447

Part No.	Description	Fastener Type	Contents & Sizes	Pieces	Part No.	Description	Fastener Type	Contents & Sizes	Pieces
301667	Torx bit set		<b>Torx bits (Hex 1/4"):</b> T10, T15, T20, T25, T27, T30, T40, T45, T50 <b>Bit holders:</b> 1/4" Sq. Dr. x 1/4" Hex & 3/8" Sq. Dr. x 5/16" Hex socket adaptor	11	301934	Multi-bit set	   	<b>Hex bits:</b> 4mm, 5mm, 6mm, 8mm, 10mm, 12mm	37
301668	Tamper-proof torx bit set		<b>Tamper-proof Torx bits (Hex 1/4"):</b> T10, T15, T20, T25, T27, T30, T40 <b>Bit holders:</b> 1/4" Sq. Dr. x 1/4" Hex socket adaptor	8				<b>Spline bits:</b> M4, M5, M6, M7, M8, M9, M10, M11, M12	
301318	Tamper-proof 5 point torx bit set		<b>Tamper-proof Torx bits (Hex socket adaptor 1/4"):</b> T10, T15, T20, T25, T27, T30, T40, T45, T50 <b>Bit holders:</b> 1/4" Sq. Dr. x 1/4" Hex socket adaptor & extension magnetic (60mm)	11				<b>Ribe bits:</b> M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14	
301168	Ribe bit set		<b>Ribe bit (Hex 10mm):</b> Short (40mm) M5, M6, M7, M8 M9, M10, M11, M12, M13, Long (75mm) M5, M6, M7, M8, M9, M10, M11, M12, M13, M14 <b>Bit holder:</b> 3/8" & 1/2" Sq. Dr.	21				<b>Torx bits:</b> T10, T15, T20, T25, T27, T30, T40, T45, T50, T55, T60, T70	
301096	Multi-bit set		<b>Pozidriv bits:</b> PZ0, PZ1, PZ2.2, PZ3	33	301447	Multi-bit set	     	<b>Hex bits:</b> M1.5, M2, M2.5, M3, M4, M5, M5.5, M6	100
			<b>Tamper-Proof Torx bits:</b> TX10, TX15, TX20, TX25, TX27, TX30, TX40					<b>Phillips bits:</b> PH1 x 7, PH2 x 7, PH3 x 7	
			<b>Hex bits:</b> M1.5, M2, M2.5, M3, M4, M5, M5.5, M6					<b>Torx bits:</b> T10, T15, T20, T25, T27, T30, T40 (1 each)	
			<b>Phillips bits:</b> PH0, PH1, PH2, PH3					<b>Hex bits:</b> H4 x 7, H5 x 7, H6 x 7	
			<b>Slotted bits:</b> 3, 3.5, 4, 4.5, 5.5, 6.5mm <b>Bit holder:</b> 1/4" Hex extension magnetic (60mm)					<b>Bit holder:</b> 1/4" Quick release (60mm) & extension magnetic (60mm)	

**BITS & KEYS**



**SCREWDRIVER**  
RIGHT ANGLE DRILL ATTACHMENT

- Highest quality right angle drill attachment is compatible for use with both corded and cordless drills
- Angled 90° head provides easy access to tight and hard to reach applications
- Heavy duty aluminium construction with multi-positional stabilising handle which features an inbuilt storage compartment
- Made in Japan



Part No.	Fastener Type	Torque	Size
<b>321921</b>		49Nm	Phillips #1 & #2



**SCREWDRIVER**  
STUBBY GEARLESS

- Unique gearless operation provides critically precise, accurate and acute adjustment
- Completely smooth and gearless operation
- Reversible operation with firm locking bit attachments and 1/4" square drive
- Made in Japan



Part No.	Fastener Type	Size
<b>321920</b>		Phillips #1, #2, #3
		Slotted 4.5, 6.0, 7.0mm



301987

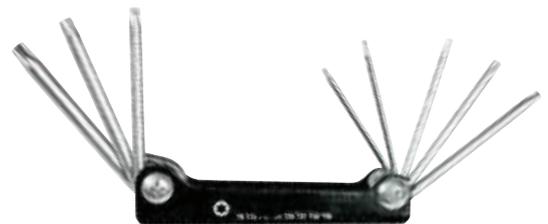


301988

**T-HANDLE SETS**  
HEX & TORX

- T-handle design with unique sliding T-bar and three key points
- Manufactured from high quality chrome vanadium steel
- Supplied in handy storage wallets with identification markings

Part No.	Description	Fastener Type	Size	Pieces
<b>301987</b>	T-handle key set - Hex		2.0, 2.5, 3.0, 3.5 x 125mm, 4.0, 4.5, 5.0 x 180mm, 6.0 x 210mm	8
<b>301988</b>	T-handle key set - Torx		T10, T15, T20 x 125mm, T25, T27, T30 x 180mm, T40 x 210mm	7



**TAMPER-PROOF TORX TOOL**

- For the removal and installation of six point screws, bolts and fittings
- Compact tool design with tamper proof (six point) fittings on each end for quick and easy operation
- Manufactured from heat treated chrome vanadium steel

Part No.	Fastener Type	Size
<b>301119</b>		T9, T10, T15, T20, T25, T27, T30, T40



321044



301938



301937

### EXTENSION BAR SETS WOBBLE 15°

- Wobble extension bars enable up to 15° of movement/wobble at the male end
- Each bar features knurling for improved gripping and a spring loaded ball bearing to securely hold attachment
- Manufactured from drop forged chrome vanadium steel for maximum strength and longevity



Part No.	Square Drive	Lengths	Pieces
<b>321044</b>	1/4"	50, 75, 150, 250, 450mm	5
<b>301938</b>	3/8"	45, 75, 150, 250, 450mm	5
<b>301937</b>	1/2"	50, 125, 250, 500mm	4



### E-STAR SOCKET SET 7 PIECE

- Sockets for use on E-Star fasteners commonly used in modern automotive applications, particularly European vehicle makes
- Manufactured from drop forged chrome vanadium steel for maximum strength and longevity
- Supplied on reusable and mountable socket rail

Part No.	Square Drive	Fastener Type	Size	Pieces
<b>301666</b>	1/4"		E6, E7, E8	9
	3/8"		E10, E11, E12, E14, E16, E18, E20	

## BOLT & THREAD



301065

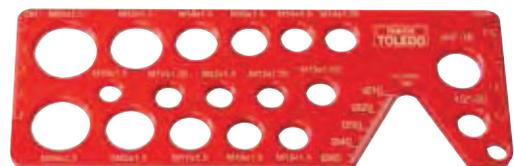


301066

### THREAD FILES INTERNAL & EXTERNAL

- For the restoration of damaged, worn and corroded threads
- Eight internal thread repairers (thread identifiers) and eight external thread files
- Manufactured from heat treated plated steel

Part No.	Thread Files	Pitch	Overall Length
<b>301065</b>	Metric	0.80, 1.00, 1.25, 1.50, 1.75, 2.00, 3.00 mm	230mm
<b>301066</b>	Imperial	10, 11, 12, 14, 16, 18, 20, 24 TPI	230mm



### BOLT PITCH GAUGE METRIC

- Quickly and easily identify bolt size and pitch
- Features 18 different pitch and thread size range, including two imperial sizes
- Includes 5cm (2") rule on edges and flange diameter gauge
- Magnetic rear backing and hang hole ensures safe and easy storage
- Easy to read markings
- Manufactured from ABS plastic for strength and durability

Part No.	Thread	Size	Overall Size
<b>321108</b>	Metric	M10x1.5, M12x1.75, M12x1.5, M12x1.25, M13x1.25, M13x1.5, M14x1.25, M14x1.5, M15x1.5, M16x1.5, M17x1.5, M18x1.5, M20x1.5, M22x1.5, M24x1.5, M26x1.5	195 x 70mm
	Imperial	3/4"-16, 1/2"-20	

### THREAD RESTORING SETS

- For the restoration of damaged, worn and corroded threads
- Available in variable set options including Metric/Imperial only and a master set

*Note: These tool kits are not suitable for use with hardened threads or for cutting new threads*



### THREAD FILE & PITCH GAUGE SET METRIC & IMPERIAL 5 PIECE

Part No.	Thread Files	Size
<b>301068</b>	Metric	0.75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00 mm
	Imperial UNC	11, 12, 13, 14, 16, 18, 20, 24 TPI
	Imperial UNF	9, 10, 12, 16, 20, 27, 28, 32 TPI
	Pitch Gauges	Size
	Metric	0.40, 0.45, 0.50, 0.60, 0.70, 0.75, 0.80, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00, 3.50, 4.00, 4.50, 5.00, 5.50, 6.00 mm
Imperial UNC/UNF	4, 4.5, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 19, 20, 22, 24, 26, 27, 28, 32 TPI	

### THREAD FILE, TAP & DIE SET METRIC 15 PIECE

Part No.	Thread Files	Size
<b>301450</b>	Metric	0.75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00
	Taps & Dies	Size
	Metric Tap	M6 x 1.00, M8 x 1.25, M10 x 1.25, M10 x 1.50, M12 x 1.25, M12 x 1.50, M12 x 1.75
	Metric Dies	M6 x 1.00, M8 x 1.25, M10 x 1.25, M10 x 1.50, M12 x 1.25, M12 x 1.50, M12 x 1.75

### THREAD FILE & DIE SET IMPERIAL 18 PIECE

Part No.	Thread Files	Size
<b>301500</b>	Imperial UNC	11, 12, 13, 14, 16, 18, 20, 24 TPI
	Imperial UNF	9, 10, 12, 16, 20, 27, 28, 32 TPI
	Dies	Size
	Imperial UNC	1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"
	Imperial UNF	1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"

### THREAD FILE, TAP & DIE MASTER SET METRIC & IMPERIAL 51 PIECE

Part No.	Taps & Dies	Size
<b>321010</b>	UNC Taps	1/4 x 20, 5/16 x 18, 3/8 x 16, 7/16 x 14, 1/2 x 13, 9/16 x 12
	UNC Dies	1/4 x 20, 5/16 x 18, 3/8 x 16, 7/16 x 14, 1/2 x 13, 9/16 x 12, 5/8 x 11
	UNF Taps	1/4 x 28, 5/16 x 24, 3/8 x 24, 7/16 x 20, 1/2 x 20, 9/16 x 18
	UNF Dies	1/4 x 28, 5/16 x 24, 3/8 x 24, 7/16 x 20, 1/2 x 20, 9/16 x 18, 5/8 x 18
	Metric Taps	M6 x 1.00, M8 x 1.25, M8 x 1.50, M10 x 1.00, M10 x 1.25, M10 x 1.50, M11 x 1.50, M12 x 1.25, M12 x 1.50, M12 x 1.75, M14 x 1.50
	Metric Dies	M6 x 1.00, M8 x 1.25, M8 x 1.50, M10 x 1.00, M10 x 1.25, M10 x 1.50, M11 x 1.50, M12 x 1.25, M12 x 1.50, M12 x 1.75, M14 x 1.50
	Thread Restoring Files	Size
	No. 1 Metric	0.75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00mm
	No. 2 Imperial UNC	11, 12, 13, 14, 16, 18, 20, 24 TPI
	No. 12 Imperial UNF	8, 9, 10, 11½, 20, 27, 28, 32 TPI



### THREAD RESTORING SETS

#### TAP & DIE RATCHET HANDLE

- For the restoration of damaged, worn and corroded threads
- Includes pitch gauge, taps, dies, tap holder, die holder and ratcheting handle
- Supplied in custom moulded plastic hard case with clip-lock



321048



321049



321050

Part No.	Description	Thread Pitch Gauge	Size	Pieces
<b>321048</b>	Metric set	0.5 - 1.75mm	Metric: M3 x 0.5, M3 x 0.6, M4 x 0.7, M4 x 0.75, M5 x 0.8, M5 x 0.9, M6 x 1.0, M7 x 1.0, M8 x 1.25, M9 x 1.0, M9 x 1.25, M10 x 1.25, M10 x 1.5, M11 x 1.5, M12 x 1.5, M12 x 1.75 BSP: 1/8" x 28 UNC: 4 x 40, 6 x 32, 8 x 32, 10 x 24, 12 x 24, 1/4 x 20, 5/16	40
<b>321049</b>	Imperial set	12 - 40TPI	UNC: 4 x 40, 6 x 32, 8 x 32, 10 x 24, 12 x 24, 1/4 x 20, 5/16 x 18, 3/8 x 16, 7/16 x 14, 1/2 x 13 UNF: 10 x 32, 1/4 x 28, 5/16 x 24, 3/8 x 24, 7/16 x 20, 1/2 x 20 NPT: 1/8" X 27	40
<b>321050</b>	Metric & Imperial set	0.5 - 1.75mm & 12 - 40TPI	Metric: M3 x 0.5, M3 x 0.6, M4 x 0.7, M4 x 0.75, M5 x 0.8, M5 x 0.9, M6 x 1.0, M7 x 1.0, M8 x 1.25, M9 x 1.0, M9 x 1.25, M10 x 1.25, M10 x 1.5, M11 x 1.5, M12 x 1.5, M12 x 1.75 BSP: 1/8" x 28 UNC: 4 x 40, 6 x 32, 8 x 32, 10 x 24, 12 x 24, 1/4 x 20, 5/16 x 18, 3/8 x 16, 7/16 x 14, 1/2 x 13 UNF: 10 x 32, 1/4 x 28, 5/16 x 24, 3/8 x 24, 7/16 x 20, 1/2 x 20 NPT: 1/8" X 27	75

### TAP & DIE RATCHET HANDLE SET

#### HIGH SPEED STEEL (HSS)

- Manufactured from a high performance special steel which improves hardness and wear resistance
- This HSS kit is superior to standard high carbon steel kits and is designed for extra heavy duty enduring use



Part No.	Description	Thread Pitch Gauge	Size	Pieces
<b>321075</b>	Metric set - high speed steel	0.5 - 1.75mm	M3 X 0.5, M4 X 0.7, M5 X 0.8, M6 X 1.0, M8 X 1.25, M10 X 1.5, M12 X 1.75	20

**BOLT & THREAD**



**THREAD PITCH GAUGE SET**  
METRIC & IMPERIAL 2 PIECE

- Designed to easily identify thread pitch sizes including Metric and Imperial
- Twelve pitch blades per tool
- Manufactured from stainless steel for superior strength and durability
- Two piece set



Part No.	Thread	Pitch
<b>301067</b>	Metric	0.50, 0.60, 0.70, 0.75, 0.80, 0.90, 1.00, 1.25, 1.50, 1.75 mm
	Imperial	12, 13, 14, 16, 18, 20, 24, 27, 28, 32, 36, 40 TPI



**THREAD GAUGE SET**  
METRIC & IMPERIAL 4 PIECE

- For quick and easy identification of thread diameter and pitch sizes including Metric, SAE, UNF, UNC and BSP styles
- Holes in gauges allow easy identification of component sizes
- Ideal for identifying bolts, fittings, pipe and spark plug sizes
- Manufactured from soft aluminium alloy

Part No.	Thread	Size	Pitch
<b>301064</b>	Metric	2.5, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 18, 20, 22mm	0.45, 0.50, 0.70, 0.80, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50mm
	Imperial UNC	1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"	10, 11, 12, 13, 14, 16, 18, 20, 24, 28 TPI
	Imperial UNF	#5, #6, #8, #10, #12, 1/4", 5/16", 3/8"	16, 18, 20, 24, 28, 32, 36, 40, 44 TPI
	Pipe Thread NPT	1/16", 1/8", 1/4", 3/8", 1/2"	1.00, 1.50, 14, 18, 20, 27 TPI
	Spark Plug	10, 12, 14, 18mm	



**THREAD CHASER SET**  
EXTERNAL

- Universal outside thread chaser specifically designed with precision dies to restore and repair damaged threads
- Six interchangeable precision dies to suit a wide selection of modern vehicle fastener threads and studs
- Use prior to disassembly can prevent long equipment down times and costly thread or stud repairs
- Working Capacity: 31 - 127mm (1 1/4" - 5") O.D.

Part No.	Thread	Pitch
<b>301152</b>	Metric	1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00 & 4.00 mm
	Imperial	4, 5, 6, 7, 7.5, 8, 9, 10, 11, 11.5, 12, 14, 16, 18, 20 & 24 TPI



301750



301285



301076

**NUT SPLITTERS**

- Designed for the removal of rusted, seized or stubborn nuts safely and without damage to the stud or bolt
- Flat round head design to allow operation in areas where working space is limited
- Hydraulic option includes the quality Toledo 10 tonne ram
- Manufactured from drop forged vanadium steel for superior strength and durability under impact
- Spares: Ram repair kit - Includes seals (small & large), hydraulic oil and installation guide (Part No. 265001)

Part No.	Description	Size Range	Forcing Screw/Ram	Spares
<b>301076</b>	Mechanical nut splitter set 2 Pc.	3 - 16 & 10 - 25mm	14, 19mm	-
<b>301285</b>	Mechanical nut splitter set 4 Pc.	9 - 12, 12 - 16, 16 - 22, 22 - 27mm	12, 14, 19, 21mm	-
<b>301750</b>	Hydraulic nut splitter set 10 Tonne	10 - 48mm	10 Tonne ram	265001



301550



301600

### STUD REMOVER SETS

- Quickly and easily remove studs without excessive force
- Suitable for removing or setting head studs, exhaust manifold studs and broken bolt head studs etc
- Popular sizes to accommodate a wide range of automotive applications
- Unique concentric roller bearing design prevents damage to thread when in use
- Pass through design enables use on longer studs
- Manufactured from high quality chrome vanadium steel for superior strength and durability



Part No.	Description	Size	Square Drive	Overall Length	Pieces
<b>301550</b>	Stud remover set - Imperial	3/16", 1/4", 5/16", 3/8", 7/16", 1/2"	3/8" & 1/2"	230mm	6
<b>301600</b>	Stud remover set - Metric	5, 6, 7, 8, 10, 12, 14mm	3/8" & 1/2"	230mm	7



### STUD SETTER & EXTRACTOR

- Compact and versatile stud extractor ideal for removing broken or seized studs
- Eccentric rotating operation designed for maximum force with little effort



Part No.	Size Range	Square Drive
<b>301910</b>	6 - 19mm	1/2"

### SCREW EXTRACTOR DRILL & GUIDE SET

25 PIECE

- Comprehensive extractor kit designed for the removal of stubborn broken studs and screws using a drill
- Removes studs with the highest allowable torque without expansion, breaking or jamming
- Fluted extractors provide a solid grip on broken studs or screws
- Ideal kit for automotive, building, engineering, plumbing and electrical trades

Part No.	Size Range	Pieces
<b>301534</b>	3/16" to 9/16" (4 - 14mm)	25

Ref.	Description	Size	Ref.	Description	Size
G1	Drill guide	9/32" (7.14mm)	N4	Extractor nut	5/16" (7.92mm)
G2	Drill guide	5/16" (7.94mm)	N5	Extractor nut	11/32" (8.73mm)
G3	Drill guide	11/32" (8.73mm)	1	Extractor Piece	1/4" (6.35mm)
G4	Drill guide	3/8" (9.35mm)	2	Extractor Piece	1/8" (3.175mm)
G5	Drill guide	13/32" (10.32mm)	3	Extractor Piece	11/32" (8.73mm)
G6	Drill guide	7/16" (11.11mm)	4	Extractor Piece	3/16" (4.76mm)
G7	Drill guide	15/32" (11.91mm)	5	Extractor Piece	5/16" (7.92mm)
G8	Drill guide	1/2" (12.70mm)	-	Drill Bit	1/8" (3.175mm)
G9	Drill guide	17/32" (13.49mm)	-	Drill Bit	3/16" (4.76mm)
G10	Drill guide	9/16" (14.29mm)	-	Drill Bit	1/4" (6.35mm)
N1	Extractor nut	1/8" (3.175mm)	-	Drill Bit	5/16" (7.92mm)
N2	Extractor nut	3/16" (4.76mm)	-	Drill Bit	11/32" (8.73mm)
N3	Extractor nut	1/4" (6.35mm)			



**BOLT & THREAD**



321067



301521



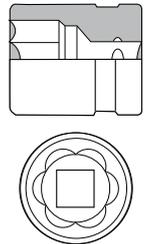
301544



301585

**TWIST SOCKET SETS**

- Twist sockets remove damaged or seized nuts, bolts, studs and nipples easily and efficiently
- Eliminates the need for chisels, hammers or pliers to remove stubborn and seized components
- Single twist sets: Single twist socket at one end and single hex at the other to maximise versatility
- Double twist sets: Single twist socket at one end and double twist socket for added grip and a larger bite at the other
- Manufactured for impact use and constructed from a tough, heat treated ductile alloy steel for superior strength and durability



Part No.	Description	Contents	Pieces
<b>301544</b>	Single twist socket set	Sockets: 17, 19, 21mm & 1/2" Sq. Dr. bit holder	4
<b>301521</b>	Single twist socket set	Sockets: 8, 10, 12, 13, 14, 15, 16, 17, 19, 21mm, Drift punch small 8mm, Drift punch large 8 - 12mm	12
<b>321067</b>	Single twist socket master set	Sockets 1/2" Sq. Dr./21mm Hex: 6 - 22, 24, 27mm, Drift punches 4.4 x 70mm & 5.9 x 80mm	21
<b>301585</b>	Double twist socket set	Sockets: 17, 19, 21mm & 1/2" Sq. Dr. bit holder	4

**DOWEL PIN REMOVER KIT**

METRIC 7 PIECE

- Remove worn or damaged dowels and alignment pins quickly and efficiently with this comprehensive collet kit
- Ideal for automotive applications such as engine blocks and cylinder heads, crankshafts and camshafts
- Hardened chrome vanadium steel slide hammer and six collets with sizes suited to modern passenger and light commercial vehicles
- Supplied in custom moulded plastic hard case
- *Spare: Replacement collets available*



Part No.	Description
<b>301719</b>	Dowel pin remover kit
	Contents
	Description
-	Slide hammer assembly (720g)
-	Collet socket
301722	Collet 6mm
301723	Collet 8mm
301724	Collet 10mm
301725	Collet 12mm
301726	Collet 14mm
301727	Collet 16mm





T404030



T404000

**CHUCK KEYS**

- High quality, precision chuck keys built to last
- Manufactured from chrome molybdenum for superior strength & durability
- Comprehensive range to cover almost all applications in Australia & New Zealand
- Range includes 6 specialty sized keys and one universal multi size unit with ratcheting function

Part No.	Description	Chuck Size	Pilot Size
<b>T404003</b>	Key No. 3	16mm	7.9mm
<b>T404010</b>	Key No. 10	10mm	6.0mm
<b>T404030</b>	Key No. 30	13mm	5.9mm
<b>T404034</b>	Key No. 34	10/13mm	6.0mm
<b>T404036</b>	Key No. 36	10mm	5.9mm
<b>T404038</b>	Key No. 38	13mm	6.3mm
<b>T404000</b>	Ratcheting chunk key 4 in 1 - Master	6mm (1/4"), 10mm (3/8"), 13mm (1/2")	-



**SCREW EXTRACTOR SET**

6 PIECE

- For removal of broken screws, bolts or studs
- Utilises left hand thread design to lock and remove broken component
- Ideal for automotive, industrial and hardware applications
- Manufactured from heat treated high grade steel for superior strength and durability
- Six piece set suitable for use on screw or bolts from 3 - 25mm

Part No.	Size Range	Pieces
<b>301075</b>	M3 (1/8") - M6 (1/4")	6
	M6 (1/4") - M8 (5/16")	
	M8 (5/16") - M11 (7/16")	
	M11 (7/16") - M14 (9/16")	
	M14 (9/16") - M18 (3/4")	
	M18 (3/4") - M25 (1")	

**CLAMPING & FASTENING**

**ANCHOR BOLT TOOL**

HOLLOW WALL

- Specialty tool used for setting anchor bolts
- Correctly activates wall bolt into position by flush mounting into position and locking rear on back of wall
- Suitable for use with Tridon anchor bolts Part No. TWB01



TWB01 (200Pc)



321000



Part No.	Description	Suits
<b>321000</b>	Anchor bolt tool	M4, M5, M6
<b>TWB01</b>	Tridon anchor bolts 200/Pcs	-



**PUNCH TOOL**  
PREFORM BAND CLAMP



- Safely and quickly installs preform style clamp
- Tool has tension, punch and cut off function
- Spares: Replacement punch (Part No. 321002A)

Part No.	Sizes	Overall Length	Spares
<b>321002</b>	15, 16mm	300mm	321002A



301104



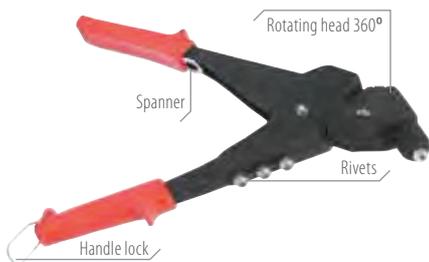
CT1

**BANDING TOOLS**  
WITH CUTTER

- Crank handle with inbuilt cutting assembly to enable band style clamps to be tightened and cut-in during installation

*Note: CT1 will not crimp the clamp or band. Crimping is achieved by using Tridon Uniband Buckles available in 3 types (UBL, UBF and UBS part numbers)*

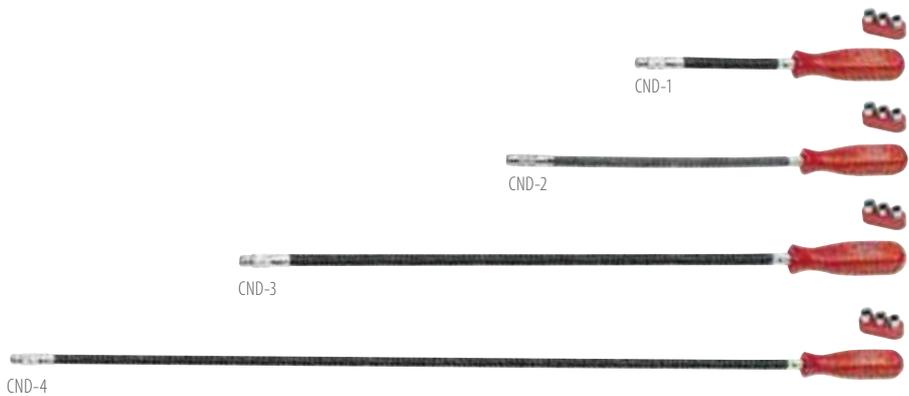
Part No.	Application	Capacity	Overall Length
<b>301104</b>	Band style clamps on CV boots	10mm (3/8")	230mm
<b>CT1</b>	Tridon uniband (UB) clamps & strapping	25mm (1")	420mm



**HAND RIVET TOOL**

- Spring loaded handle and rotating head to suit variable applications and maximise ease of use
- Interchangeable heads for each rivet size, with spanner included
- Powder coated main body with ergonomic plastic handles and locking latch

Part No.	Rivet Sizes	Overall Length
<b>301809</b>	2.4, 3.2, 4.0, 4.8mm	280mm



**HOSE CLAMP NUT DRIVERS**

- Designed for the trouble free installation and removal of most modern hose clamps
- Flexible shaft to allow access to hard to reach hose clamps
- Ergonomic handle for comfort and superior grip
- Includes socket attachments: 6, 7 and 8mm
- Suitable for use on all Tridon worm drive hose clamps

Part No.	Overall Length
<b>CND-1</b>	150mm
<b>CND-2</b>	300mm
<b>CND-3</b>	600mm
<b>CND-4</b>	900mm





**CABLE TIE CUTTERS**  
PLASTIC & METAL

- Automatic tensioning and cut-off of cable ties to produce a safe, neat and professional finish
- Two options to cater for both plastic/nylon and metal cable ties



Part No.	Description	Cutting Capacity (Width x Thickness)	Overall Length x Width
<b>CTC2065</b>	Cable tie cutter - Metal (including S/S)	12 x 0.3mm	220 x 100mm
<b>302500</b>	Cable tie cutter - Plastic	5 x 2mm	160 x 20mm



**SPRING CLAMPS**

- Flexible jaw spring clamps manufactured from high strength plastic
- Lightweight, holds object without force concentration
- Designed to grip flat or odd shaped surfaces
- Ergonomic handles for comfort and ease of operation

Part No.	Description	Jaw Opening (Max)
<b>301657</b>	Spring clamp single	25mm
<b>301659</b>	Spring clamp single	50mm
<b>301660</b>	Spring clamp single	75mm
<b>301656</b>	Spring clamp set 10pc	4 x 25mm, 4 x 50mm, 2 x 75mm



**BENCH VICES**  
STRAIGHT

- Robust bench vices designed and built for the professional workshop
- Manufactured from high quality grey iron castings with high compression strength along with excellent shock absorbing capabilities
- High quality precision machining delivers smooth operation and trouble free service life
- Fully enclosed spindle construction protects the threads from contaminants and damage
- Hardened jaws (45 +/- 5 HRC)
- Spares: Replacement pair of jaws available

Part No.	Jaw Width	Jaw Opening (Max)	Weight	Spare Jaw Set (2 Pc.)
<b>301862</b>	100mm	125mm	9.2kg	301865A
<b>301863</b>	150mm	175mm	21.4kg	301866A
<b>301864</b>	200mm	200mm	32.0kg	301867A



**BENCH VICES**  
OFFSET

- Robust bench vices designed and built for the professional workshop
- High quality steel construction to withstand shocks from hammering, chipping and heavy duty applications
- Integrated anvil for shaping and beating, along with an extra heavy duty sliding jaw with large diameter
- Forged tommy bar and main screw to assist with effective pressure transmission
- Spares: Replacement pair of jaws available

Part No.	Jaw Width	Jaw Opening (Max)	Weight	Spare Jaw Set (2 Pc.)
<b>301868</b>	100mm	120mm	7.5kg	301868A
<b>301869</b>	150mm	150mm	21.0kg	301869A
<b>301870</b>	200mm	200mm	43.0kg	301870A

CLAMPING & FASTENING



**SUCTION PAD CLAMP SET**  
PLASTIC 6 PIECE

- Ideal for holding down trims, badges, windcreens, rain and light sensors on windcreens etc. during repair or whilst waiting for adhesives to set
- Adjustable suction clamps will not mark after being removed
- Manufactured from durable plastic with octagonal rubber suction pads
- Suitable on most non-porous surfaces such as metal or glass



Part No.	Pad Size (Octagonal)	Pieces
<b>321106</b>	80mm (flat to flat)	6



**G-CLAMPS**

- Suitable for metal work and woodwork applications
- Powder coated body and precision cut, black phosphate finished spindle screw for maximum durability and corrosion resistance
- Broad swivel pad allows for even distribution of pressure on angled or uneven surfaces
- Ideal for metal and wood work, industrial and construction applications
- Made from high grade ductile 60,000 psi S.G. iron castings

Part No.	Throat Opening (Max)	Throat Depth (Max)	Part No.	Throat Opening (Max)	Throat Depth (Max)
<b>301876</b>	75mm	44mm	<b>301873</b>	200mm	80mm
<b>301871</b>	100mm	59mm	<b>301874</b>	250mm	90mm
<b>301872</b>	150mm	75mm	<b>301875</b>	300mm	100mm



**PANEL/SLAB CARRYING SET**  
PAIR

- Trade professional set ideal for carrying glass and windcreens
- Ergonomic handles with large rubber pads firmly secure glass
- Light weight and robust aluminium construction
- Also suitable for carrying stone slabs, counter tops and other sheet goods
- Supplied in heavy duty carry case

Part No.	Jaw Opening (Max)	Capacity	Pad Size (W x H)
<b>321107</b>	40mm	160kg	80 x 200mm





### CLEANING BRUSH SETS

2 PIECE

- Sturdy, compact and simple tools for small cleaning jobs, particularly in hard to reach places and confined spaces
- Suitable for rust, scale, ingrained dirt removal
- Each set comes with one curved and one straight brush



Part No.	Description	Pieces
<b>301001</b>	Steel bristles - Curved x 1 (220mm) Straight x 1 (210mm)	2
<b>301002</b>	Nylon bristles - Curved x 1 (220mm) Straight x 1 (210mm)	2
<b>301073</b>	Brass bristles - Curved x 1 (220mm) Straight x 1 (210mm)	2
<b>301074</b>	Stainless Steel bristles - Curved x 1 (220mm) Straight x 1 (210mm)	2
<b>301003</b>	Cleaning brush set - nylon, brass, steel	3



### WIRE BRUSH

WOODEN HANDLE

- Heavy duty steel bristles suitable for removing rust, corrosion, scale and ingrained dirt
- Bristles are hardened and tempered for strength and durability
- Oil resistant ergonomic wooden handle prevents slippage when in use
- Suitable for automotive and industrial applications



Part No.	Configuration	Overall Length
<b>321077</b>	5 x 14 row	235mm

### CLEANING BRUSH

ALLOY WHEEL

- Non-scratching soft bristles specifically designed for cleaning alloy wheels
- Bends in order to access hard to reach, awkward and small crevices



Part No.	Handle	Overall Length
<b>301909</b>	Plastic	240mm

### CLEANING BRUSH

PARTS

- Strong and durable brush with plastic handle and heavy duty flexible bristles
- Ideal for cleaning engine and transmission spares, brake parts and bearings
- Built in easy hanging hole



Part No.	Bristles/Head Diameter	Overall Length
<b>301004</b>	Ø 25mm	260mm

CLEANING



**PNEUMATIC SPRAY CLEANING GUN**  
FLEXIBLE HEAD 1L

- Air operated cleaning gun for degreasing and cleaning parts
- Flexible head allows for deep cleaning in hard to reach areas and crevices
- Flexible delivery hose with adjustable spray pattern nozzle
- Features built-in handy hanging hook for easy storage
- Connection to workshop air supply and is suitable for use with most automotive degreasers
- Ideal for detailing engine bays, cleaning transmission, differential and wheel hub components etc.
- Spares: Replacement flexible hose and nozzle (Part No. 305165A)



Part No.	Working Pressure	Air Inlet	Spares
<b>305165</b>	70 - 110 psi	1/4"	305165A



305153

305154

**PRESSURE SPRAY BOTTLES**  
VITON SEALS

- Ideal for most workshop liquids and solvents such as brake cleaner, degreaser, tyre shine, detergents, acids and specialised lubricants
- Easy to fill with bulk liquids which saves money on spray cans and one off use bottles
- Durable plastic polyethylene bottle with moulded-in measuring scale
- Heavy duty chemical resistant Viton\* seals and carbon fibre components and handle
- Easy to use pump action mechanism with top mounted thumb trigger
- Environmentally safe way of disbursing liquids in a safe and controlled manner
- Nozzle can be adjusted from a fine spray to a direct jet
- Spares: Replacement seal kit (Part No. 305153A)



Part No.	Description	Working Pressure	Spares
<b>305153</b>	Spray bottle 1L	50 - 70 psi	305153A
<b>305154</b>	Spray bottle 2L	50 - 70 psi	305153A

\*Viton is a registered trademark of DuPont Performance Elastomers L.L.C..

INSPECTION & PICK-UP

**STETHOSCOPES**

- Specialty sonic diagnostic units used to locate noises within machinery, engines, compressors, transmissions, drive trains etc.
- 301009: Aluminium probe with extension piece and plastic noise cancelling ear phones
- 301637: Electronic 9V battery operated (included), headset, adjustable microphone with volume control and flexible probe



301009



301637



301637



Part No.	Description	Probe Length	Cord Length
<b>301009</b>	Stethoscope standard	90mm (210mm extension)	-
<b>301637</b>	Stethoscope digital	200mm	700mm

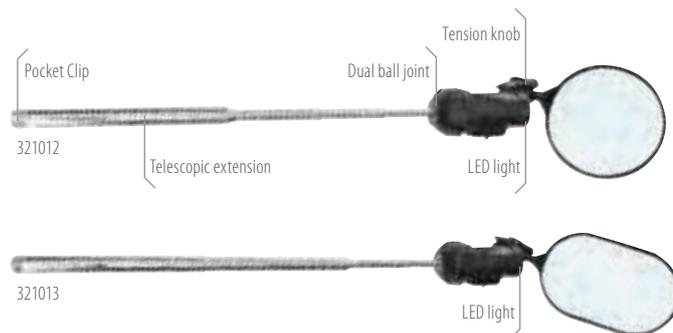


**THERMOMETER**  
DIGITAL INFRARED

- Portable and easy to use infrared thermometer for point and shoot temperature taking
- Laser sighting for simple one hand operation, backlit LCD display, auto-hold function and auto power off
- Supplied with protective pouch, laser end cap and 9 volt battery included
- Ideal for automotive, engineering and industrial etc.



Part No.	Specifications			
<b>321500</b>	Display	LCD	Weight	157g
	Auto power off	10 seconds	Laser	<1mW, Class 2 laser
	Battery	9v (NEDA 1604, IEC 6F22006p)	Range	-30°C to 550°C
	Battery life	9 hours (continuous use)	Accuracy	±2°C on -30°C to 100°C, ±2% on -101°C to 550°C
	Dimensions	148H x 105W x 42D (mm)		



**INSPECTION MIRRORS W/LIGHTS**  
LED

- Specially designed to enable maximum manoeuvrability with adjustable ball joint for variable tension and stiffness
- Long life LED bulbs and stainless steel components
- Telescopic extension with in-built pocket clip
- Premium options made in Japan
- Batteries included (3 x LR44 batteries)
- Made in Japan

Part No.	Mirror Shape	Telescopic Range	Mirror Dimension	Handle
<b>321012</b>	Circle	100 - 530mm	Ø 60mm	Steel
<b>321013</b>	Oval	100 - 530mm	80 x 50mm	PVC Dipped



**INSPECTION & PICK-UP MASTER KIT**  
CIRCLE MIRROR, MULTI-BULB LED, PICK UP TOOL

- Advanced inspection and pick-up kit for the professional workshop
- Innovative replaceable bulbs including one each of Blue, White and UV
- Magnetic pick up capability in head and base
- Robust and firm adjusting flexible cord with rubber moulding for extra strength and durability
- Spares: Replacement bulb set 3 Pc. (Part No. 301399A)

Part No.	Mirror Diameter	Magnet Capacity	Spares
<b>301399</b>	Ø 38mm	0.5 & 1.5Kg	301399A

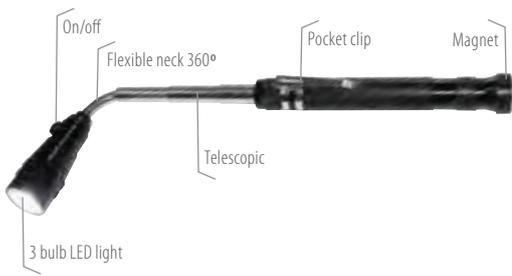


**INSPECTION MIRRORS**

- Professional range of inspection tools for visual access to otherwise inaccessible areas
- All feature a universal swivel joint head to enable complete 360° rotation and viewing

Part No.	Mirror Shape	Mirror Dimension	Telescopic Range	Handle
<b>301011</b>	Oval	25 x 50mm	200 - 520mm	Steel
<b>301012</b>	Square	50 x 88mm	215 - 490mm	PVC Dipped
<b>301016</b>	Circle	Ø 50mm	200 - 355mm	PVC Dipped

INSPECTION & PICK-UP



**INSPECTION LIGHT**  
TELESCOPIC W/MAGNET

- Durable and reliable LED flash light with telescopic extension and 360° flex head
- Magnetic body and head with pick-up capability of 1kg each
- Pocket size for easy transportation and ease of use
- Durable aluminium casing with pocket clip
- Batteries included (4 x LT44 batteries)

Part No.	Telescopic Range	Magnet Capacity
<b>321033</b>	170 - 550mm	1kg



**PICK-UP TOOL**  
FLEXIBLE SHAFT MAGNETIC

- Long and narrow flexible shaft/cord style pick up tool is essential for accessing confined and difficult to reach areas
- Stainless steel probe with ergonomic handle

Part No.	Shaft/Cord Diameter x Length	Magnet Capacity	Overall Length
<b>301017</b>	Ø 6.5 x 405mm	500g	510mm



301014



301298



301019



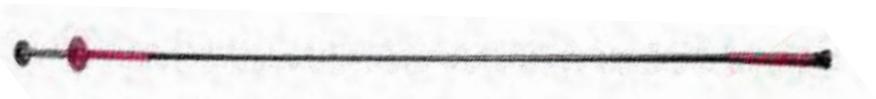
301299

**PICK-UP TOOLS**  
TELESCOPIC MAGNETIC

- Varying styles of pick-up tools with pocket clip and telescopic extension
- Strong magnetic force enables firm retrieval and pick-up of ferrous material
- All are manufactured from stainless steel



Part No.	Description	Handle	Telescopic Range	Magnet Diameter	Magnet Capacity
<b>301014</b>	Pick up tool w/scriber	Stainless steel	150 - 670mm	Ø 6mm	200g
<b>301019</b>	Pick up tool	PVC dipped	125 - 640mm	Ø 13mm	2.5kg
<b>301298</b>	Pick up tool	Rubber moulded	170 - 760mm	Ø 7mm	700g
<b>301299</b>	Pick up tool	Rubber moulded	170 - 760mm	Ø 13mm	3.6kg



**PICK-UP TOOL**  
CLAW TYPE

- Flexible shaft with spring loaded extendable retrieval claw function
- Pressing the button downward extends the spring loaded claw, as the button returns to rest position the claw closes and secures object

Part No.	Diameter (Probe Head)	Claw Opening (Max)	Magnet Capacity	Overall Length
<b>301697</b>	7 x 15mm	25mm	1kg	700mm



**PICK-UP TOOL**  
TELESCOPIC BROOM STYLE

- Designed as a heavy duty option for retrieving ferrous material from workshop floors and surrounding areas
- Broom style with telescopic handle is simple, efficient and easy to use
- Quick release function and in-built wheels to provide an easy way of manoeuvring the unit around the workshop or factory floor

Part No.	Telescopic Range	Head Width	Magnet Capacity	Overall Length
<b>301189</b>	650 - 960mm	385mm	9Kg	700mm





**MALLETS**  
RUBBER

- Ideal for applications that require soft blows
- Will not damage the work piece on impact
- Black natural rubber head provides enough force without causing damage

Part No.	Weight	Face Diameter	Overall Length
<b>321090</b>	16Oz/0.45kg	Ø 62mm	310mm
<b>321091</b>	24Oz/0.68kg	Ø 70mm	310mm



**HAMMERS**  
DEAD BLOW

- HOLLOW cylindrical heads containing steel pellets to achieve a dead blow during striking
- Manufactured from oil resistant Styrene-Butadiene Rubber (SBR) with a moulded rubber handle for superior comfort and grip
- Shock-less, non-bouncing, non-marring, non-sparking



Part No.	Weight	Face Diameter	Head Length	Overall Length
<b>301079</b>	14 oz/0.4kg	Ø 35mm	90mm	280mm
<b>301080</b>	20 oz/0.6kg	Ø 45mm	90mm	300mm
<b>301081</b>	37 oz/1.0kg	Ø 55mm	110mm	350mm
<b>301082</b>	54 oz/1.5kg	Ø 65mm	130mm	375mm



**HAMMER**  
SOFT FACE

- Ideal for fine bodywork adjustment or striking finely finished surfaces without causing damage
- Replaceable impact nylon and poly tips ensure damage free striking without the risk of chipping
- Made from durable zinc alloy steel with soft comfortable rubber grips
- Non-sparking and non-marring
- Spares: Replacement tip set 1 x Nylon & 1 x Poly (Part No. 321303A)

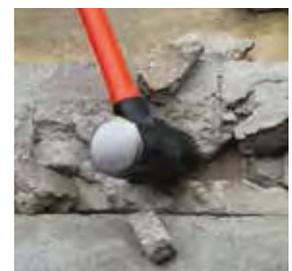
Part No.	Face Diameter	Overall Length	Spares
<b>321303</b>	Ø 35mm	300mm	321303A



**HAMMERS**

- Core range of premium essential hammers designed for the trade professional and commercial environment
- Made extra heavy duty to ensure maximum strength, durability and service life
- Ergonomically designed to ensure maximum comfort and grip
- Unique carbon fibre handles are lighter, more comfortable and result in 25% greater force concentration
- Fibreglass handles for the claw and sledge hammers are extra strong to cater for their rigorous applications

Part No.	Description	Handle	Weight	Overall Length
<b>321051</b>	Ball peen hammer - Alloy steel	Carbon fibre	16 oz/0.45 Kg	330mm
<b>321052</b>	Ball peen hammer - Alloy steel	Carbon fibre	24 oz/0.68 Kg	375mm
<b>321053</b>	Ball peen hammer - Alloy steel	Carbon fibre	32 oz/0.91 Kg	380mm
<b>321054</b>	Ball peen hammer - Alloy steel	Genuine hickory	16 oz/0.45 Kg	345mm
<b>321055</b>	Curved claw hammer - Alloy steel	Carbon fibre	20 oz/0.57 Kg	330mm
<b>321056</b>	Club hammer - Carbon steel	Fibreglass & rubber	3 Lb/1.36 Kg	265mm
<b>321057</b>	Sledge hammer - Carbon steel	Fibreglass & rubber	10 Lb/4.56 Kg	910mm



PLIERS



COMBINATION PLIERS

- Firm gripping combination pliers with heavy duty cutter
- Ergonomically designed dual component handles
- Serrated gripping zones for flat and round materials
- Suitable for cutting both soft and hard wire
- Manufactured from high grade chrome molybdenum with polished and black phosphate finish



DIAGONAL CUTTING PLIERS

- Heavy duty diagonal cutters for powerful, efficient and precise cutting
- Ergonomically designed dual component handles
- Suitable for cutting both soft and hard wire
- Manufactured from high grade chrome molybdenum with polished and black phosphate finish



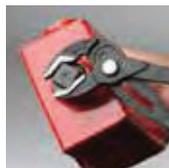
Part No.	Description	Jaw Opening (Max)	Overall Length
<b>301990</b>	Combination Pliers	40mm	180mm
<b>301991</b>	Combination Pliers	45mm	210mm
<b>301992</b>	Combination Pliers	32mm	230mm

Part No.	Description	Jaw Opening (Max)	Overall Length
<b>301993</b>	Diagonal cutting plier	22mm	160mm
<b>301994</b>	Diagonal cutting plier	22mm	180mm
<b>301995</b>	Diagonal cutting plier	20mm	200mm



MULTI-GRIP PLIERS

- Firm gripping, holding and clamping
- Ergonomically designed dual component handles
- Deep hardened teeth with gripping zones suitable for flat, round and obscure objects
- Manufactured from high grade chrome molybdenum with polished and black phosphate finish
- 301998: Seven position box joint allows for adjustable jaw opening
- 301999: Push-lock button with thirty two position adjustable jaw opening



LONG NOSE PLIERS

- Firm gripping, manipulating and cutting most types of components and wires
- Excellent control and reach in confined spaces
- Suitable for cutting both soft and hard wire
- Ergonomically designed dual component handles
- Manufactured from high grade chrome molybdenum with polished and black phosphate finish

Part No.	Description	Jaw Opening (Max)	Overall Length
<b>301998</b>	Multi-grip plier 7 position	35mm	250mm
<b>301999</b>	Multi-grip plier 32 position	70mm	300mm

Part No.	Description	Jaw Opening (Max)	Overall Length
<b>301996</b>	Long nose plier - Straight tip	85mm	210mm
<b>301997</b>	Long nose plier - Angled tip 45°	75mm	210mm



TPSA01

TPSA02

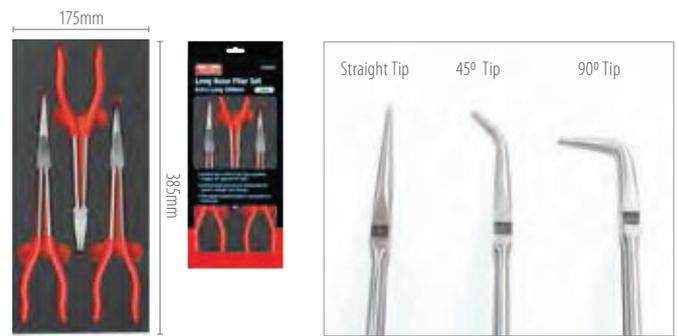
**WORKSHOP PLIER SETS**

4 PIECE

- Popular plier sets contain one each of the most common workshop pliers
- Available in either a reusable EVA storage tray or handy tool roll

*Note: Replacement tool roll available (Part No. TPSA02RL) Can be used to store up to four pliers maximum 250mm long*

Part No.	Description	Pieces	
<b>TPSA01</b>	Workshop plier set in EVA foam tray	4	
<b>TPSA02</b>	Workshop plier set in tool roll	4	
	<b>Contents</b>	<b>Description</b>	<b>Qty</b>
	301991	Combination plier 210mm	1
	301995	Diagonal cutter 200mm	1
	301996	Long nose plier 210mm	1
	310998	Multi-grip plier 250mm	1
TPSA02RL	Empty tool roll only		



**EXTRA LONG NOSE PLIER SET**

280MM 3 PIECE

- Three different tip styles including straight, 45° bent and 90° bent
- For firm gripping and manipulating of components and wires
- Extra-long for additional reach into otherwise inaccessible areas
- PVC dipped handles provide a comfortable and secure grip
- Serrated gripping zones grip firmly
- Thin profile jaws for improved access
- Manufactured from chrome molybdenum for superior strength and durability
- Supplied in EVA foam storage tray

Part No.	Description	Tip Style	Qty
<b>TPSA03</b>	Extra long nose plier	Straight Tip	1
	Extra long nose plier	45° Tip	1
	Extra long nose plier	90° Tip	1

**MERCHANDISERS - WORKSHOP PLIERS**

- In store wall mount merchandiser provides a compact point of sale solution for popular Toledo pliers



Part No.	Contents	Description	Qty
<b>TPMA01</b>	301991	Combination plier 210mm	3
	301995	Diagonal cutter 200mm	3
	301996	Long nose plier 210mm	3
	301997	Long nose plier - Bent tip 45° 210mm	3
	301998	Multi-grip plier 250mm	3



Part No.	Contents	Description	Qty
<b>TPMA02</b>	301990	Combination plier 180mm	3
	301992	Combination plier 230mm	3
	301993	Diagonal cutter 160mm	3
	301994	Diagonal cutter 180mm	3
	301999	Multi-grip plier 300mm	3

PLIERS



FP10



FP10H



FENCING PLIERS

COMBINATION

- For cutting, gripping and manipulating components and wires, commonly used in fencing and farming applications
- Combination pliers including three specially designed wire cutters
- Serrated gripping zones for flat and round material
- Manufactured from drop forged alloy steel for superior strength and durability
- PVC dipped handles

Part No.	Description	Jaw Opening (Max)	Jaw Width	Overall Length
<b>FP10</b>	Fencing plier 260mm	52mm	13mm	260mm
<b>FP10H</b>	Fencing plier 260mm w/holster	52mm	13mm	260mm
<b>FP12</b>	Fencing plier 300mm	60mm	14mm	300mm



FENCING PLIERS

PARROT BEAK

- Designed for cutting, crimping, swaging, hammering and gripping wire and staples commonly used in fencing and farming applications
- Features two specially designed wire cutters, parrot lever assembly, serrated hammer and gripping zone, swager and crimper
- Manufactured from drop forged alloy steel for superior strength and durability
- PVC dipped handles

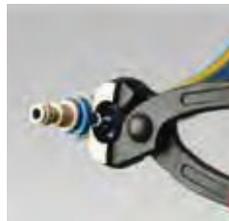
Part No.	Jaw Opening (Max)	Jaw Width	Overall Length
<b>HP10</b>	32mm	14.5mm	270mm



FCP-1



SCP-1



PINCING PLIERS

- Specialty tools in either "Top" or "Side & Top" join styles designed for use with Tridon double ear hose clamps
- Precision cutting edges for cutting, twisting or crimping
- Manufactured from drop forged alloy steel for superior strength and durability
- PVC dipped handles

Part No.	Description	Jaw Width	Jaw Opening (Max)	Overall Length
<b>FCP-1</b>	Side & top jaw pincer	Top: 18mm Side: 8mm	Top: 23mm Side: 19mm	220mm
<b>SCP-1</b>	Top join pincer	24mm	25mm	250mm

NIPPING PLIERS

END CUTTING/CONCRETE

- Precision cutting edges for cutting and twisting steel fixing wire
- Suitable for most soft, medium and hard wires
- Manufactured from drop forged alloy steel for superior strength and durability
- PVC dipped handles



Part No.	Jaw Opening (Max)	Jaw Width	Overall Length
<b>EN8</b>	14mm	31mm	200mm



**LOCK-GRIP PLIERS**

- Curved jaws for better contact on bolt heads, nuts and round work
- Permits user to apply extra pressure across four points of contact on any style nut/bolt head
- Adjusting screw and self locking with release lever
- Manufactured from chrome molybdenum with nickel plating



Part No.	Jaw Opening (Max)	Jaw Width	Overall Length
<b>VG180</b>	38mm	12mm	180mm
<b>VG250</b>	45mm	12mm	250mm



**LOCK-GRIP PLIERS SHEET METAL**

- Powerful jaws grip firmly across front edge
- Adjusting screw and self locking with release lever
- Applications include bending, forming, clamping and crimping sheet metal
- Manufactured from chrome molybdenum with nickel plating



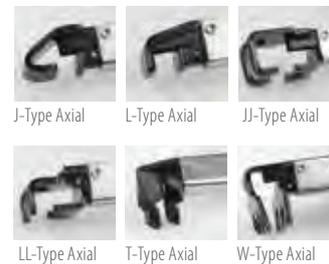
Part No.	Jaw Opening (Max)	Jaw Width	Overall Length
<b>301980</b>	55mm	100mm	250mm



**LOCK-GRIP PLIERS SLIDING HAMMER**

- Curved jaws for better contact on bolt heads, nuts and round work
- Permits user to apply extra pressure across four points of contact on any style nut/bolt head
- Slide hammer assembly allows for additional pulling force to remove extra stubborn items
- Ideal tool for the easy removal of rusty bolts, nails, staples, dowels and split pins
- Manufactured from chrome molybdenum with nickel plating

Part No.	Jaw Opening (Max)	Jaw Width	Slide Hammer	Plier Length	Overall Length
<b>VG210LP</b>	40mm	12mm	1Kg x 370mm	210mm	600mm

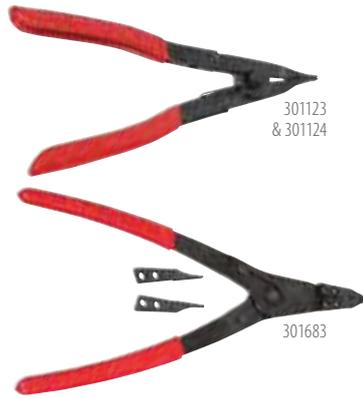


**LOCK-GRIP PLIER SET SHEET METAL & MULTI-GRIP**

- Comprehensive set of sheet metal gripping pliers designed for clamping all types of sheet metal for spot welding
- Contains six popular plier styles with quick release levers
- Manufactured from tempered steel body and chrome molybdenum head
- Supplied in custom moulded plastic hard case with jaw identification markings

Part No.	Style	Jaw Opening (Max)	Overall Length
<b>301279</b>	J-Type Axial	10mm	200mm
	L-Type Axial	15mm	200mm
	JJ-Type Axial	10mm	200mm
	LL-Type Axial	8mm	200mm
	T-Type Axial	15mm	200mm
	W-Type Axial	10mm	200mm

PLIERS



WIRE TWIST PLIERS

- For the twisting and installation of steel fixing wire using the inbuilt wire lock and twist return mechanism
- Serrated gripping zones firmly grab wire and robust cutter neatly cuts wire without distortion
- Manufactured from drop forged alloy steel for superior strength and durability



SNAP RING (LOCK RING) PLIERS

- Spreads snap lock-rings on brakes, transmissions, pedal shafts, clutch shafts and machine tools
- Externally serrated jaws to firmly grab the lock ring
- Black phosphate finished steel and PVC dipped handles
- Spares 301683: Replacement angled & straight tip set (Part No. 301683A)

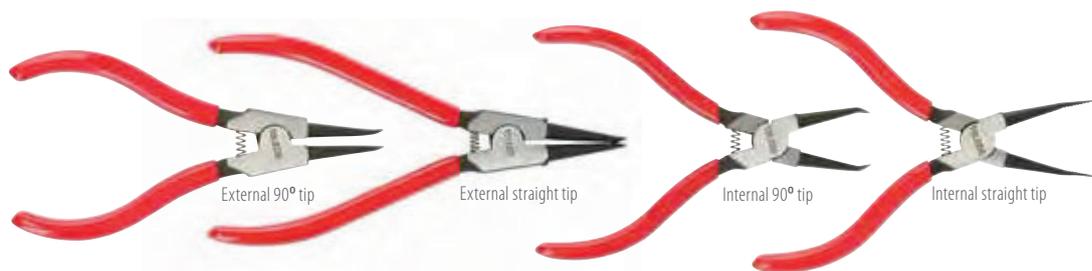


Part No.	Jaw Opening (Max)	Jaw Width	Overall Length
<b>301103</b>	21mm	10mm	170mm
<b>301102</b>	29mm	12mm	230mm

Part No.	Description	Jaw Opening	Jaw Width	Overall Length	Spares
<b>301123</b>	Angled tip	4-20mm	6.5mm	215mm	-
<b>301124</b>	Straight tip	4-20mm	6.5mm	215mm	-
<b>301683</b>	Angled & Straight tip	8-75mm	8mm	335mm	301683A

CIRCLIP PLIERS  
PVC DIPPED HANDLES

- Comprehensive range of circlip pliers to cover all sizes and applications
- Manufactured from heat treated, drop forged steel with PVC dipped handles



Part No.	Description	Jaw Opening	Tip Diameter	Tip Length (A)	Tip Length (B)	Overall Length
<b>301125</b>	Internal straight tip	4 - 20mm	Ø 1.2mm	32mm	-	130mm /5"
<b>301126</b>	Internal 90° tip	4 - 20mm	Ø 1.0mm	22mm	10mm	130mm /5"
<b>301127</b>	External straight tip	4 - 20mm	Ø 1.2mm	32mm	-	130mm /5"
<b>301128</b>	External 90° tip	4 - 20mm	Ø 1.0mm	22mm	10mm	130mm /5"
<b>301129</b>	Internal straight tip	4 - 35mm	Ø 1.4mm	40mm	-	180mm/7"
<b>301130</b>	Internal 90° tip	4 - 35mm	Ø 1.3mm	30mm	10mm	180mm/7"
<b>301131</b>	External straight tip	4 - 35mm	Ø 1.4mm	40mm	-	180mm/7"
<b>301132</b>	External 90° tip	4 - 35mm	Ø 1.3mm	30mm	10mm	180mm/7"
<b>301133</b>	Internal straight tip	6 - 40mm	Ø 1.8mm	50mm	-	230mm/9"
<b>301134</b>	Internal 90° tip	6 - 40mm	Ø 2.0mm	35mm	10mm	230mm/9"
<b>301135</b>	External straight tip	6 - 40mm	Ø 1.8mm	50mm	-	230mm/9"
<b>301136</b>	External 90° tip	6 - 40mm	Ø 2.0mm	35mm	10mm	230mm/9"





**CIRCLIP PLIER SET**  
PVC DIPPED HANDLES 4 PIECE

- Popular selection of circlip pliers supplied in Toledo tool roll with belt clip
- Four piece set contains straight tip pliers for internal and external circlip applications
- Replacement tool roll available (Part No. TPSA02RL)

Part No.	Description	Pieces	
<b>TCPR01</b>	Circlip plier set	4	
	Contents	Description Overall Length Qty	
	301125	Circlip Plier - Internal straight tip 130mm	1
	301127	Circlip Plier - External straight tip 130mm	1
	301133	Circlip Plier - Internal straight tip 230mm	1
301135	Circlip Plier - External straight tip 230mm	1	



**CIRCLIP PLIER 160MM**  
QUICK CHANGE MULTI-TIP

- Universal set features various straight and angled tip sets to cover internal and external circlip applications
- Contains four tip sets which can be quickly interchanged on the head of the plier
- Manufactured from heavy gauge tempered steel with plastic moulded handles
- Spares: Replacement tip sets available

Part No.	Description	Jaw Opening (Max)	Overall Length
<b>301141</b>	Circlip plier set - Multi tip	19mm	160mm
	Contents	Description Tip Diameter Qty	
	301144	Tip set - straight (pair) Ø 1.2mm	1
	301145	Tip set - straight (pair) Ø 1.5mm	1
	301146	Tip set - angled 90° (pair) Ø 1.5mm	1
301147	Tip set - angled 45° (pair) Ø 1.5mm	1	



301800

301850

**CIRCLIP PLIER SETS**  
HEAVY DUTY

- Heavy duty circlip plier sets to suit larger internal and external circlip applications
- Supplied with various straight and angled tips for universal applications
- Ratchet lock style mechanism to enable safe and easy removal and replacement of circlips
- Manufactured from heavy gauge tempered steel
- Supplied in custom moulded plastic hard case

Part No.	Description	Jaw Opening (Max)	Pieces	
<b>301800</b>	Heavy duty circlip plier set	75mm	18	
	Contents	Description Tip Diameter Qty		
	N/A	Heavy duty internal circlip plier 270mm	-	1
	N/A	Heavy duty external circlip plier 270mm	-	1
	301801	Straight tip set	Ø 2.75mm	1
	301802	Angled tip set 15° (Pair)	Ø 2.75mm	1
	301803	Angled tip set 45° (Pair)	Ø 2.75mm	1
	301804	Angled tip set 90° (Pair)	Ø 2.75mm	1
	301805	Straight tip set (Pair)	Ø 3.0mm	1
	301806	Angled tip set 15° (Pair)	Ø 3.0mm	1
	301807	Angled tip set 45° (Pair)	Ø 3.0mm	1
	301808	Angled tip set 90° (Pair)	Ø 3.0mm	1

Part No.	Description	Jaw Opening (Max)	Pieces	
<b>301850</b>	Heavy duty circlip plier set	85mm	14	
	Contents	Description Tip Diameter Qty		
	N/A	Heavy duty internal circlip plier 400mm	-	1
	N/A	Heavy duty external circlip plier 400mm	-	1
	301851	Straight tip set (Pair)	Ø 3.0mm	1
	301852	Angled tip set 45° (Pair)	Ø 3.0mm	1
	301853	Angled tip set 90° (Pair)	Ø 3.0mm	1

## PLIERS

### CIRCLIP PLIER SET

QUICK CONVERSION 10 PIECE

- Circlip pliers with quick conversion function to enable easy change over from internal to external circlip application
- Includes eight reversible circlip pliers and two pick tools
- Supplied in custom moulded plastic hard case

Part No.	Description	Pieces		
<b>301939</b>	Circlip plier set - Quick conversion	10		
	Description (N/A separately)	Tip Diameter	Overall Length	Qty
	Angled tip plier 90°	Ø 1.0mm	140mm	1
	Straight tip plier	Ø 1.0mm	150mm	1
	Angled tip plier 90°	Ø 1.2mm	140mm	1
	Straight tip plier	Ø 1.2mm	150mm	1
	Angled tip plier 90°	Ø 1.8mm	190mm	1
	Straight tip plier	Ø 1.8mm	200mm	1
	Angled tip plier 90°	Ø 2.3mm	215mm	1
	Straight tip plier	Ø 2.3mm	230mm	1
	Angled pick tool 90°	-	-	1
	Straight pick tool	-	-	1



321011

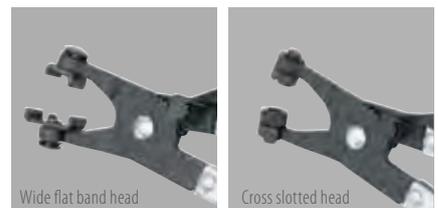


301030

301031



301171



Wide flat band head

Cross slotted head

### HOSE CLAMP PLIERS

CLIC TYPE

- Spring loaded pliers suitable for hose clamp installation and removal
- Suitable for CLIC, CLIC-R and Tridon SL series hose clamps
- Specially designed jaws allow a quick change from installation to removal by simply turning over pliers
- Manufactured from chrome treated alloy steel with PVC dipped handles

Part No.	Jaw Opening (Max)	Overall Length
<b>321011</b>	20mm	180mm

### HOSE CLAMP PLIERS

CONSTANT TENSION

- For the installation and removal of constant tension style hose clamps
- Locking mechanism holds clamp in position and spring return ensures ease of operation
- Spring return for ease of use and operation
- Manufactured from chrome treated alloy steel with PVC dipped handles

Part No.	Jaw Style	Jaw Opening (Max)	Jaw Width	Overall Length
<b>301030</b>	Angles 45°	68mm	17mm	215mm
<b>301031</b>	Straight	45mm	11mm	215mm

### HOSE CLAMP PLIER SET

CONSTANT TENSION 2 PIECE

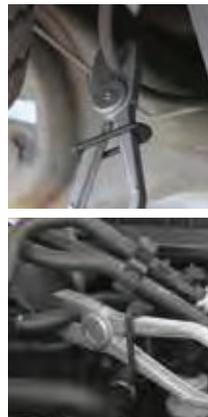
- Two piece set includes both cross slotted jaw and wide flat band jaw pliers to suit most ring and flat band type hose clamps
- Ratchet locking mechanism holds clamp in open position for easy installation and removal
- Suitable for use with Tridon CTC series clamps
- Manufactured from chrome treated alloy steel with PVC dipped handles

Part No.	Jaw Opening (Max)	Jaw Width	Overall Length
<b>301171</b>	64mm	12mm	215mm



**HOSE CLAMPING PLIER SET**  
ALUMINIUM 3 PIECE

- For shutting off (restricting) flow of fluid or vacuum
- Individual slide lock mechanism for one handed operation
- Robust design made from aluminium for extra long service life
- Completely resistant to common workshop fluids

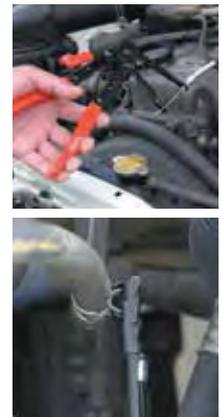


Part No.	Jaw Openings (Max)	Jaw Width	Overall Length
<b>321105</b>	16, 25, 64mm	9, 11, 12mm	150, 180, 250mm



**HOSE CLAMP PLIERS**  
CONSTANT TENSION FLEXIBLE CORD

- For the installation and removal of constant tension style hose clamps
- Locking mechanism holds clamp in position and spring return ensures ease of operation
- Flexible cable offers extensive reach and access to difficult areas
- Black phosphate finished body and PVC dipped handles
- Manufactured from chrome treated alloy steel with PVC dipped handles



Part No.	Body x Flexible Cord Length	Jaw Opening (Max)	Jaw Width
<b>301172</b>	210 x 630mm	53mm	21mm

**HOSE CLAMPING PLIERS**  
REINFORCED NYLON

- For shutting off (restricting) flow of fluid or vacuum
- Individual slide lock mechanism for one handed operation
- High visibility coloured non-conductive material
- Ideal for use on brakes, fuel, heaters, radiators, vacuum hoses
- Chemical resistant nylon is resistant to most automotive chemicals, brake fluid, fuel, mineral and synthetic oils etc.



321029

Part No.	Description	Jaw Opening Max	Jaw Width	Overall Length	Pieces
<b>301022</b>	Hose clamping plier	20mm	10mm	150mm	1
<b>301023</b>	Hose clamping plier	33mm	12mm	185mm	1
<b>301024</b>	Hose clamping plier	65mm	12mm	255mm	1
<b>321028</b>	Hose clamping plier w/quick release spring lock	40mm	12mm	220mm	1
<b>321029</b>	Hose clamping plier set - Angled tip 90° (n/a separately)	18, 22, 40mm	9, 12, 13mm	155, 165, 225mm	3
<b>301025A</b>	Hose clamping plier set - 4 x 301022	20mm	10mm	150mm	4
<b>301025</b>	Hose clamping plier set - 1 x 301022, 301023 & 301024	20, 33, 65mm	10 & 12mm	150, 185, 255mm	3



SCREWDRIVERS



SCREWDRIVER RANGE

- High quality range of professional screwdrivers
- Standard and Strike-Thru styles
- Maximum torquing and ergonomically designed
- 100% made in Japan

SPECIALTY MAGNETIC BLACK POINT TIPS

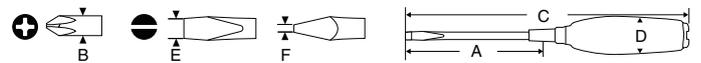
- Heavy duty, corrosion resistant long life tips
- Magnetic for easy fastener retention
- Precision fit for higher torque output
- Maintenance of fastener integrity

MATERIALS & WORKMANSHIP

- Premium Japanese chrome-molybdenum-vanadium steel
- Hardened and heat treated steel
- Polished chrome blade is corrosion resistant
- Japanese made and engineered
- Over 70 year history of screwdriver manufacturing

SCREWDRIVERS  
ERGONOMIC

- Ergonomically designed dual component handles are comfortable and strong
- Finger dimpled handles for additional grip
- Hex shoulder enables additional force to be applied if necessary
- Magnetic black point tips extend life and provide a precision fit
- Non-roll handles for safety and convenience
- Ring screw applicator built in to base of handle
- Made in Japan



Part No.	Fastener Type	Description	A	B	C	D	E	F
321940	+	Phillips #1 x 75mm	75	5.5	175	25		
321941	+	Phillips #2 x 100mm	100	6.3	230	32		
321942	+	Phillips #2 x 150mm	150	6.3	280	32		
321943	+	Phillips #2 x 200mm	200	6.3	330	32		
321944	+	Phillips #3 x 150mm	150	8.0	280	32		
321945	-	Slotted 5.5 x 75mm	75	5.5	175	25	5.5	0.7
321946	-	Slotted 6.0 x 100mm	100	6.3	230	32	6.0	0.9
321947	-	Slotted 6.0 x 150mm	150	6.3	280	32	6.0	0.9
321948	-	Slotted 6.0 x 200mm	200	6.3	330	32	6.0	0.9
321949	-	Slotted 8.0 x 150mm	150	8.0	280	32	8.0	1.0

SCREWDRIVER SETS

ERGONOMIC



Part No.	Description	Pieces	
<b>321980</b>	Ergonomic screwdriver master set in removable foam trays & storage box	12	
Contents	Fastener Type	Description	Qty
321940	+	Phillips #1 x 75mm	1
321941	+	Phillips #2 x 100mm	1
321942	+	Phillips #2 x 150mm	1
321943	+	Phillips #2 x 200mm	1
321944	+	Phillips #3 x 150mm	1
321945	⊖	Slotted 5.5 x 75mm	1
321946	⊖	Slotted 6.0 x 100mm	1
321947	⊖	Slotted 6.0 x 150mm	1
321948	⊖	Slotted 6.0 x 200mm	1
321949	⊖	Slotted 8.0 x 150mm	1
321971	+	Phillips #2 x 30mm (stubby)	1
321972	⊖	Slotted 6.0 x 30mm (stubby)	1

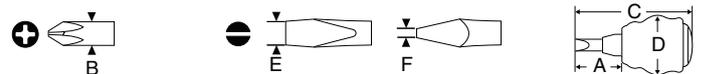
Part No.	Description	Pieces	
<b>321982</b>	Ergonomic screwdriver set in removable foam tray & storage box	8	
Contents	Fastener Type	Description	Qty
321940	+	Phillips #1 x 75mm	1
321941	+	Phillips #2 x 100mm	1
321944	+	Phillips #3 x 150mm	1
321945	⊖	Slotted 5.5 x 75mm	1
321946	⊖	Slotted 6.0 x 100mm	1
321949	⊖	Slotted 8.0 x 150mm	1
321971	+	Phillips #2 x 30mm (stubby)	1
321972	⊖	Slotted 6.0 x 30mm (stubby)	1

Part No.	Description	Pieces	
<b>321983</b>	Ergonomic screwdriver set with gearless stubby in foam tray	7	
Contents	Fastener Type	Description	Qty
321940	+	Phillips #1 x 75mm	1
321942	+	Phillips #2 x 150mm	1
321944	+	Phillips #3 x 150mm	1
321945	⊖	Slotted 5.5 x 75mm	1
321947	⊖	Slotted 6.0 x 150mm	1
321949	⊖	Slotted 8.0 x 150mm	1
321920	+	Gearless stubby w/bit set Phillips #1, #2, #3 Slotted 4.5, 6.0, 7.0mm	1

SCREWDRIVERS

STUBBY

- Range of stubby screwdrivers in differing style and design
- Essential for work in confined spaces and difficult access areas
- Made in Japan



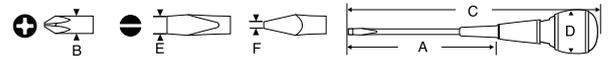
Part No.	Fastener Type	Description	A	B	C	D	E	F
<b>321971</b>	+	Stubby Phillips #2 x 30mm	30	6.3	76	38		
<b>321972</b>	⊖	Stubby Slotted 6.0 x 30mm	30	6.3	76	38	6.0	0.8
<b>301163</b>	+	Stubby Phillips #1 & #2 x 45mm, Stubby Slotted 5.0 & 6.0mm x 45mm (Acrylic handle 4 Pc.)						
<b>321920</b>	+	Stubby gearless screwdriver w/bit set Phillips #1, #2, #3x 45mm, Slotted 4.5, 6.0 & 7.0mm						

SCREWDRIVERS

SCREWDRIVERS

INSULATED 1000V

- Insulated screwdrivers for use on dangerous live electrical applications
- Ideal for all 240V applications in Australia and New Zealand and tested to 1000V
- Insulating blade sleeve and clear size markings on blade for easy identification
- High torqueing bulb handle generates greater torque output
- Made in Japan



Part No.	Fastener Type	Description	A	B	C	D	E	F
<b>321960</b>	⊕	Insulated Phillips #2 x 100mm	100	5.8	200	40		
<b>321961</b>	⊖	Insulated Slotted 5.0 x 100mm	100	5.8	200	40	5.0	0.8

SCREWDRIVERS

STRIKE-THRU HEAVY DUTY

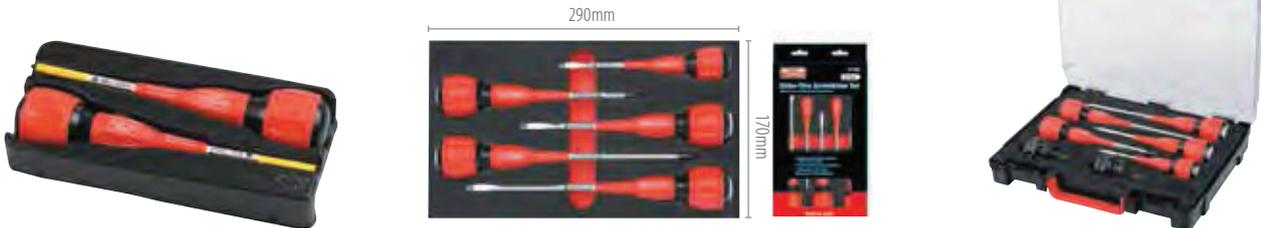
- Extra heavy duty, high torqueing range of strike thru screwdrivers
- The strongest strike-thru screwdrivers available featuring an extra large shatterproof striking face
- Specialty bulb style handles enhance grip and deliver increased torque output
- Magnetic black point tips extend life and provide a precision fit
- Dual component handle with single strike through blade
- Tried and tested extensively to withstand the most strenuous and rigorous work conditions
- Bulb handle also allows stabilising hand to be safely tucked in and protected from the impact zone
- Made in Japan



Part No.	Fastener Type	Description	A	B	C	D	E	F
<b>321954</b>	⊕	Strike-Thru Phillips #2 x 100mm	100	6.3	200	40	-	-
<b>321955</b>	⊕	Strike-Thru Phillips #2 x 150mm	150	6.3	240	40	-	-
<b>321950</b>	⊖	Strike-Thru Slotted 5.5 x 75mm	75	5.5	155	32	5.5	0.7
<b>321951</b>	⊖	Strike-Thru Slotted 6.0 x 100mm	100	6.3	200	40	6.0	0.8
<b>321952</b>	⊖	Strike-Thru Slotted 6.0 x 150mm	150	6.3	240	40	6.0	0.8

SCREWDRIVER SETS

STRIKE-THRU HEAVY DUTY & INSULATED 1000V



Part No.	Description	Pieces
<b>321990</b>	Insulated screwdriver set in plastic tray	2

Contents	Fastener Type	Description	Qty
321960	⊕	Insulated Phillips #2 x 100mm	1
321961	⊖	Insulated Slotted 5.0 x 100mm	1

Part No.	Description	Pieces
<b>321985</b>	Strike-thru screwdriver set in foam tray	5

Contents	Fastener Type	Description	Qty
321954	⊕	Strike-Thru Phillips #2 x 100mm	1
321955	⊕	Strike-Thru Phillips #2 x 150mm	1
321950	⊖	Strike-Thru Slotted 5.5 x 75mm	1
321951	⊖	Strike-Thru Slotted 6.0 x 100mm	1
321952	⊖	Strike-Thru Slotted 6.0 x 150mm	1

Part No.	Description	Pieces
<b>321984</b>	Strike-thru screwdriver set in removable foam tray & storage box	7

Contents	Fastener Type	Description	Qty
321954	⊕	Strike-Thru Phillips #2 x 100mm	1
321955	⊕	Strike-Thru Phillips #2 x 150mm	1
321950	⊖	Strike-Thru Slotted 5.5 x 75mm	1
321951	⊖	Strike-Thru Slotted 6.0 x 100mm	1
321952	⊖	Strike-Thru Slotted 6.0 x 150mm	1
321971	⊕	Stubby Phillips #2 x 30mm	1
321972	⊖	Stubby Slotted 6.0 x 30mm	1

**SCREWDRIVERS**

TAMPER-PROOF TORX

- Ergonomically designed range of tamperproof torx screwdrivers to suit six point torx fastener screws, common in late model vehicles
- Dimpled handles for comfort and grip with size markings on handle end for quick and easy identification
- Magnetic black point tips extend life and provide a precision fit
- Made in Japan



Part No.	Fastener Type	Description	A	B	C	D	E	G
<b>321911</b>		Tamperproof Torx T9 x 100mm	100	3.0	166	20	2.8	2.48
<b>321912</b>		Tamperproof Torx T10 x 125mm	125	4.0	213	30	3.0	2.72
<b>321913</b>		Tamperproof Torx T15 x 125mm	125	4.0	213	30	3.15	3.26
<b>321914</b>		Tamperproof Torx T20 x 125mm	125	5.0	213	30	4.0	3.84
<b>321915</b>		Tamperproof Torx T25 x 125mm	125	5.0	213	30	5.0	4.40
<b>321916</b>		Tamperproof Torx T27 x 125mm	125	6.3	234	34	5.5	4.96
<b>321917</b>		Tamperproof Torx T30 x 125mm	125	6.3	234	34	6.0	5.49
<b>321918</b>		Tamperproof Torx T40 x 125mm	125	7.0	249	38	7.0	6.60

**SCREWDRIVER SET**

TAMPER-PROOF TORX 8 PIECE

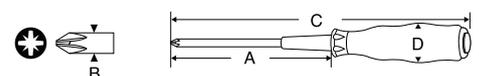
Part No.	Description	Pieces	
<b>321987</b>	Tamperproof torx master set in foam tray	8	
Part No.	Fastener Type	Description	Qty
321911		Tamperproof Torx T9 x 100mm	1
321912		Tamperproof Torx T10 x 125mm	1
321913		Tamperproof Torx T15 x 125mm	1
321914		Tamperproof Torx T20 x 125mm	1
321915		Tamperproof Torx T25 x 125mm	1
321916		Tamperproof Torx T27 x 125mm	1
321917		Tamperproof Torx T30 x 125mm	1
321918		Tamperproof Torx T40 x 125mm	1



**SCREWDRIVERS**

POZI-DRIVE

- Unique cross head tip provides a secure grip for Pozi-drive type fasteners
- Dimpled handles for comfort and grip with size markings on handle end for quick and easy identification
- Made in Japan



Part No.	Fastener Type	Description	A	B	C	D
<b>321919</b>		Pozi-drive screwdriver PZ2 x 150mm	150	6.3	261	34

SCREWDRIVERS

MERCHANDISERS

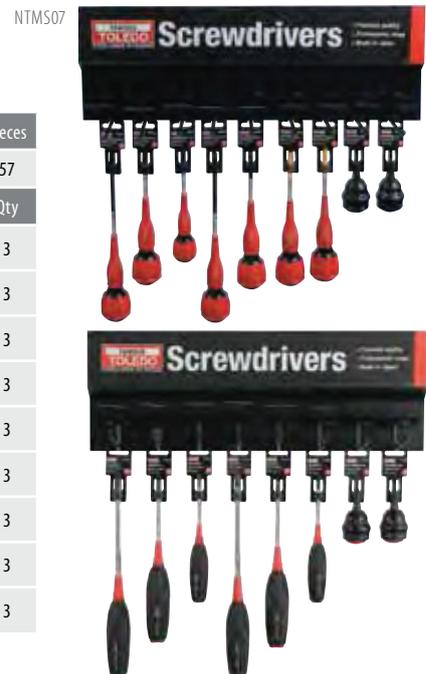
- Complete modular merchandising system can be customised to suit store requirements
- Tiered design maximises wall space
- Robust and professional finish
- Width: 450mm



Part No.	Description	Pieces		
<b>NTMS05</b>	Essential screwdriver merchandiser single tier	24		
	Contents	Fastener Type	Description	Qty
	321940	⊕	Phillips #1 x 75	3
	321941	⊕	Phillips #2 x 100	3
	321944	⊕	Phillips #3 x 150	3
	321945	⊖	Slotted 5.5 x 75	3
	321946	⊖	Slotted 6.0 x 100	3
	321949	⊖	Slotted 8.0 x 150	3
	321971	⊕	Stubby Phillips #2 x 30	3
	321972	⊖	Stubby Slotted 6.0 x 30	3

Part No.	Description	Pieces		
<b>NTMS06</b>	Strike-Thru screwdriver merchandiser single tier	21		
	Contents	Fastener Type	Description	Qty
	321954	⊕	Strike-Thru Phillips #2 x 100	3
	321955	⊕	Strike-Thru Phillips #2 x 150	3
	321950	⊕	Strike-Thru Slotted 5.5 x 75	3
	321951	⊖	Strike-Thru Slotted 6.0 x 100	3
	321952	⊖	Strike-Thru Slotted 6.0 x 150	3
	321971	⊖	Stubby Phillips #2 x 30	3
	321972	⊖	Stubby Slotted 6.0 x 30	3

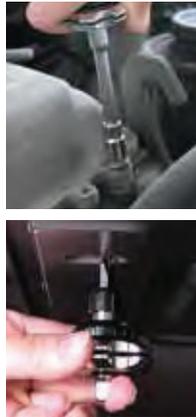
Part No.	Description	Pieces						
<b>NTMS07</b>	Master screwdriver merchandiser double tier	57						
	Contents	Fastener Type	Description	Qty	Contents	Fastener Type	Description	Qty
	321940	⊕	Phillips #1 x 75	3	321971	⊕	Stubby Phillips #2 x 30	3
	321941	⊕	Phillips #2 x 100	3	321972	⊖	Stubby Slotted 6.0 x 30	3
	321942	⊕	Phillips #2 x 150	3	321954	⊕	Strike-Thru Phillips #2 x 100	3
	321943	⊕	Phillips #2 x 200	3	321955	⊕	Strike-Thru Phillips #2 x 150	3
	321944	⊕	Phillips #3 x 150	3	321950	⊖	Strike-Thru Slotted 5.5 x 75	3
	321945	⊖	Slotted 5.5 x 75	3	321951	⊖	Strike-Thru Slotted 6.0 x 100	3
	321946	⊖	Slotted 6.0 x 100	3	321952	⊖	Strike-Thru Slotted 6.0 x 150	3
	321947	⊖	Slotted 6.0 x 150	3	321960	⊕	Insulated Phillips #2 x 100	3
	321948	⊖	Slotted 6.0 x 200	3	321961	⊖	Insulated Slotted 5.0 x 100	3
	321949	⊖	Slotted 8.0 x 150	3				



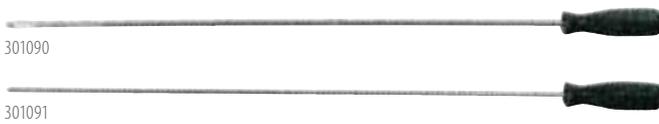


**SCREWDRIVER**  
STUBBY GEARLESS

- Unique gearless operation provides critically precise, accurate and acute adjustment
- Completely smooth and gearless operation
- Reversible operation with firm locking bit attachments and 1/4" square drive
- Made in Japan



Part No.	Fastener Type	Bit Set (Clip-On)	Square Drive
<b>321920</b>	+	Phillips #1, #2, #3	1/4"
	-	Slotted 4.5, 6.0, 7.0mm	



**SCREWDRIVERS**  
EXTRA LONG

- Extra long blade for extra reach into confined spaces and areas with restricted access
- Chrome vanadium blade and plastic comfort grip handles

Part No.	Fastener Type	Description
<b>301090</b>	-	Slotted 7.0 x 730mm
<b>301091</b>	+	Phillips #2 x 730mm

**NUT DRIVER SETS**  
HEX 6-POINT 9 PIECE

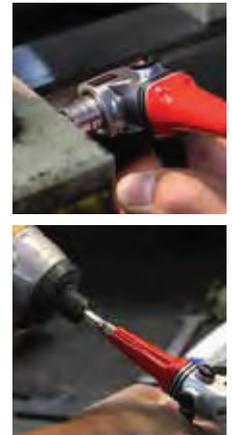
- For use on small nuts or bolts where quick installation or removal is required
- Ergonomic plastic handles with slip resistant inserts to produce greater torque
- Manufactured from chrome vanadium steel with chrome plated finish
- Supplied in custom moulded plastic storage tray

Part No.	Fastener Type	Description	Size	Pieces
<b>321007</b>	⊙	Metric	4, 5, 5.5, 7, 8, 9, 10, 11, 12mm	9
<b>321008</b>	⊙	Imperial	3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"	9



**SCREWDRIVER**  
RIGHT ANGLE DRILL ATTACHMENT

- Highest quality right angle drill attachment is compatible for use with both corded and cordless drills
- Angled 90° head provides easy access to tight and hard to reach applications
- Heavy duty aluminium construction with multi-positional stabilising handle which features an inbuilt storage compartment
- Made in Japan



Part No.	Fastener Type	Bits	Torque
<b>321921</b>	+	Phillips #1 & #2	49Nm



**IMPACT DRIVER SET**

- Specialty tool converts the impact of the hammer into powerful torque output
- Includes heavy duty impact driver and four bit set
- Manufactured from heat treated, high grade chrome molybdenum steel with chrome plating
- Supplied in heavy duty metal storage case
- Spares: Replacement bit set 4 Pc. (Part No. 301095A)



Part No.	Fastener Type	Description	Spares
<b>301095</b>	+	Impact driver w/ bit set Phillips #2 & #3, Slotted 9.0 & 11.0mm	301095A



PRYING



**PRY BAR SET**

STANDARD ANGLED TIP 4 PIECE

- Popular four piece set of pry bars for all prying applications
- Plastic handles with black phosphate finished square shanks

Part No.	Handle	Overall Lengths	Pieces
<b>301083</b>	Plastic	200, 300, 450, 600mm	4



**PRY BAR SET**

STRIKE-THRU ANGLED TIP 4 PIECE

- Popular four piece set of strike-thru pry bars for all prying applications
- Dual component plastic and rubber handles for comfort, grip and strength
- Black phosphate finished square shanks

Part No.	Handle	Overall Lengths	Pieces
<b>321027</b>	Dual component plastic & rubber	200, 300, 450, 600mm	4



**PRY BARS**

STRIKE-THRU EXTRA LONG

- Extra long and heavy duty pry bars with strike-thru heads are the ultimate solution for larger, industrial applications
- Strike-thru shank is hardened and tempered to endure the rigours of heavy duty applications

Part No.	Description	Handle	Overall Length
<b>301070</b>	Straight tip	Plastic	800mm
<b>321043</b>	Angled tip	Plastic & rubber	900mm



**PRY BAR**

ADJUSTABLE W/PODGER END

- Heavy duty pry bar with telescopic locking podger bar end
- Solid chrome vanadium steel construction with podger end for easy bolt hold alignment work

Part No.	Length Range
<b>301186</b>	540 - 810mm



**PRY BAR SET**

ROLLED HEAD 4 PIECE

- Hardened and machined rolled head (hook) and pointed end (podger) design
- Rolled head enables high leverage operation and tapered end is ideal for alignment of bolt holes
- Manufactured from chrome vanadium steel for strength and durability

Part No.	Overall Lengths	Pieces
<b>301673</b>	150, 300, 400, 500mm	4



**ROLLED HEAD PRY BAR SET**

ADJUSTABLE 3 PIECE

- High leverage design with smooth curved head
- Adjustable head 180° permits prying and lifting in confined area
- Push lock function for ease of use
- High strength chrome vanadium steel with black phosphate finish to resist corrosion

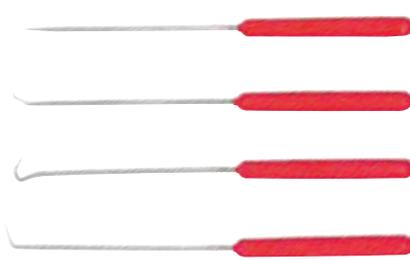
Part No.	Overall Lengths	Pieces
<b>321076</b>	200, 250, 330mm	3



301043

**PICK & HOOK SETS**  
MINI & EXTRA LONG 4 PIECE

- Ideal deal for scraping, scribing, marking, picking and seal removal
- Heat treated alloy steel blades feature knurling for additional gripping
- Ergonomic plastic handles



301072



**SCRAPER & HOOK SET**  
5 PIECE

- Multi-style set contains tools for scraping, scribing, marking, picking and seal removal
- Heat treated and black phosphate finished steel with ergonomic plastic handles



Part No.	Description	Pieces
<b>301043</b>	Mini pick & hook set	4
Description	Tip Style	Overall Length
Hook	Circular	130mm
Pick	Angled 45°	130mm
Pick	Angled 90°	130mm
Scratch awl	Straight	130mm

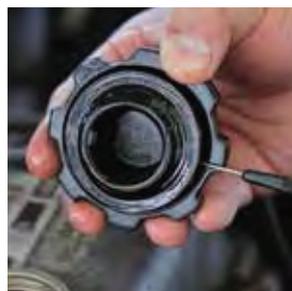
Part No.	Description	Pieces
<b>301072</b>	Extra long pick & hook set	4
Description	Tip Style	Overall Length
Hook	Round	270mm
Pick	Angled 45°	270mm
Pick	Angled 90°	270mm
Scratch awl	Straight	270mm

Part No.	Description	Pieces
<b>301008</b>	Scraper & hook set	5
Description	Tip Style	Overall Length
Cotter pin puller	Angled 90°	225mm
Scratch awl	Straight	200mm
Hose remover	Curved 90°	175mm
Scraper	Flat 20mm wide	210mm
Scraper	Flat 25mm wide	285mm



**PICK SET**  
OIL SEAL 2 PIECE

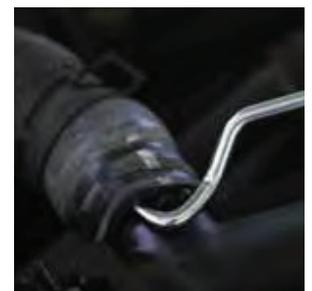
- Double ended two piece set designed for simple and efficient removal of oil seals and O-rings
- Stainless steel shaft with plastic knurled grip handles



Part No.	Tip Styles	Overall Length	Pieces
<b>301297</b>	45°, 90° angled hook, full hook and 90° elbow	410mm	2

**HOSE REMOVAL SET**  
2 PIECE

- Designed for manipulating the seal when removing or working with hoses
- Two hook designs reach into the hard to get areas where working space is limited
- Ergonomic moulded plastic handle for superior grip and manoeuvrability



Part No.	Overall Length	Pieces
<b>301151</b>	200mm	2

## SCRAPING

### SCRAPERS

#### RAZOR BLADE

- Professional scrapers with stainless steel blades
- Replacement blades suit 301162 and 301247



WSCR



301162



301247



301250



301248



301249

Part No.	Description	Blades	Blade Width	Overall Length
<b>WSCR</b>	Fixed body disposable scraper	1 x Stainless Steel	55mm	150mm
<b>301162</b>	Swivel body scraper	1 x Stainless Steel	40mm	200mm (open)
<b>301247</b>	Long reach scraper w/storage chamber	3 x Stainless Steel, 3 x Plastic	40mm	280mm
<b>301250</b>	Stainless steel blades	12 x Stainless Steel	40mm	–
<b>301248</b>	Stainless steel blades	100 x Stainless Steel	40mm	–
<b>301249</b>	Plastic safety blades	100 x Plastic	40mm	–



301007



301278



### SCRAPERS

#### GASKET

- For the removal of old gaskets, silicone sealants, gasket residue, carbon, ingrained dirt etc.
- Ideal tool for scraping cylinder heads, blocks, transmission cases, diff housings and metal surfaces
- Hardened and tempered carbon steel with satin chrome finish and plastic comfort grip handles

Part No.	Description	Blade Width	Overall Length
<b>301007</b>	Gasket scraper single	25mm	280mm
<b>301278</b>	Gasket scraper set 3 Pc.	20, 25, 40mm	280mm

### SCRAPER SET

#### STRIKE-THRU STAINLESS STEEL 3 PIECE

- General purpose stainless steel blade scrapers
- Heavy duty design with robust handle design and striking head
- Hang hole for easy storage

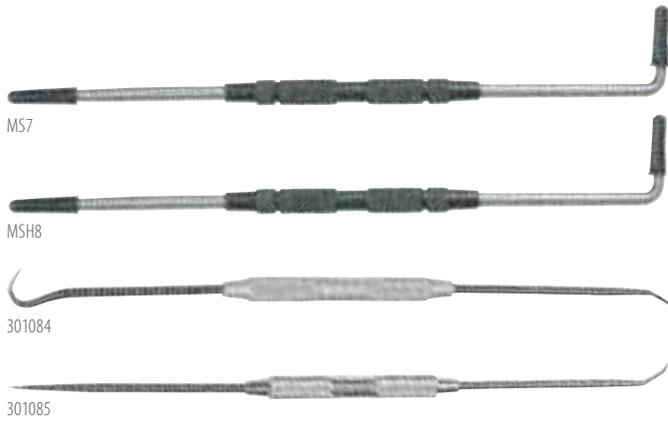
Part No.	Style	Blade Width	Overall Length
<b>301651</b>	Bent	30mm	220mm
	Straight	30mm	220mm
	Straight	50mm	220mm

### SCRAPER SET

#### NYLON GENERAL PURPOSE 4 PIECE

- General purpose nylon scrapers useful for delicate tasks such as removing badges, mouldings, decals, silicone gaskets, plastic parts, alloy wheel balancing weights etc.
- Manufactured from reinforced nylon for maximum strength and durability

Part No.	Style	Blade Width	Overall Length
<b>321031</b>	Straight flat	48mm	230mm
	Straight split	14 x 20 x 14mm	230mm
	Angled 45° flat	48mm	230mm
	Angled 45° split	14 x 20 x 14mm	230mm



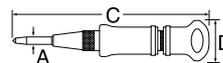
SCRIBERS

- Durable long lasting tools used for scribing and marking on common materials
- Suitable for use on metal, glass, plastic, O-rings and ceramics
- Solid metal construction with knurled centre grip handles
- Hardened tips perform better and last longer

Part No.	Description	Tip 1	Tip 2	Overall Length
<b>MS7</b>	Machinist's scribe	Straight	Angled 90°	190mm
<b>MSH8</b>	Machinist's scribe	Straight	Angled 90°	230mm
<b>301084</b>	Double point scribe	Hook	Angled 45°	220mm
<b>301085</b>	Engineer's scribe	Straight	Angled 45°	235mm

CENTRE PUNCH  
AUTOMATIC 6MM

- Highest quality centre punch for setting and marking screw or nail holes
- Adjustable spring loaded design for variable impact strength
- No hammer required for operation
- Extra heavy duty hardened tip for long lasting and superior performance
- Simple one hand operation; adjust handle to desired spring tension, press firmly against work piece until punch is achieved
- Made in Japan



Part No.	A: Tip Size	D: Handle	C: Overall Length
<b>321040</b>	6mm	34mm	160mm



PROFILE GAUGES

- Sliding plastic fingers provide a solid contour around an object to provide a profile of the desired shape
- Quick and easy way to copy profiles with graduated main body and magnets on reverse side for ease of use
- Connect units together to achieve greater length

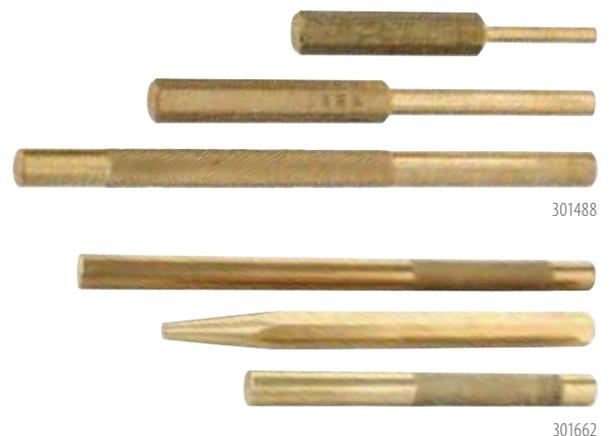


Part No.	Finger Dimensions	Overall Length	Magnets
<b>301890</b>	127 x 100 x 20 x 1.4mm	150mm	2
<b>301891</b>	257 x 100 x 20 x 1.4mm	280mm	4

PIN & DRIFT PUNCH SETS  
BRASS

- Non-sparking and non-marring brass is ideal for preventing damage to surface materials
- Feature either a hexagonal or knurled round shaft

Part No.	Description	Pin Size	Overall Length	Pieces
<b>301488</b>	Pin punch	1/4"	100mm	3
	Pin punch	3/8"	150mm	
	Drift punch	1/2"	200mm	
<b>301662</b>	Drift punch	3/4"	200mm	3
	Drift punch	3/4"	300mm	
	Starter punch	11/32"	250mm	



PIN PUNCH SETS

- Durable pin punch sets are manufactured from chrome molybdenum and feature either a black phosphate or polished chrome finish
- 301181, 301182 and 301183 are supplied in reusable tool rolls with easy mounting holes
- 301608 and 301620 supplied in storage magazine



Part No.	Pin Diameter	Pin Length	Overall Length	Pieces
<b>301181</b>	Ø 1.5mm (1/16")	20mm	100mm	7
	Ø 2.5mm (3/32")	20mm	106mm	
	Ø 3.0mm (1/8")	23mm	120mm	
	Ø 4.0mm (5/32")	25mm	125mm	
	Ø 5.0mm (3/16")	30mm	133mm	
	Ø 6.0mm (1/4")	30mm	146mm	
	Ø 8.0mm (5/16")	35mm	150mm	



Part No.	Pin Diameter	Pin Length	Overall Length	Pieces
<b>301182</b>	Ø 3.0mm (1/8")	90mm	200mm	5
	Ø 5.0mm (3/16")	90mm	200mm	
	Ø 6.0mm (1/4")	90mm	200mm	
	Ø 8.0mm (5/16")	90mm	200mm	
	Ø 10.0mm (3/8")	90mm	200mm	



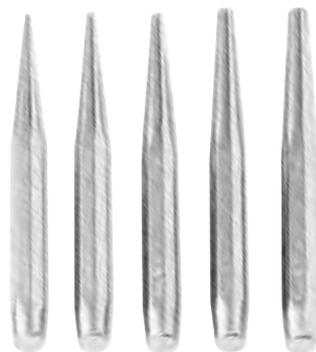
Part No.	Pin Diameter	Pin Length	Overall Length	Pieces
<b>301608</b>	Ø 2.0mm (1/13")	25mm	115mm	6
	Ø 3.0mm (1/8")	35mm	125mm	
	Ø 4.0mm (5/32")	40mm	150mm	
	Ø 5.0mm (3/16")	45mm	165mm	
	Ø 6.0mm (1/4")	50mm	180mm	
	Ø 8.0mm (5/16")	55mm	180mm	



CHISEL SET

- Six piece set of chisels for heavy duty industrial work
- Manufactured from hardened chrome molybdenum steel with black phosphate finish

Part No.	Size	Overall Length	Pieces
<b>301183</b>	6.0mm (1/4")	125mm	6
	8.0mm (5/16")	125mm	
	10.0mm (3/8")	140mm	
	13.0mm (1/2")	150mm	
	16.0mm (5/8")	165mm	
	19.0mm (3/4")	200mm	



TAPER PUNCH SET

- Durable taper punch set manufactured from chrome molybdenum with polished chrome finish

Part No.	Pin Diameter	Overall Length	Pieces
<b>301620</b>	Ø 2.0mm (1/13")	120mm	5
	Ø 3.0mm (1/8")	120mm	
	Ø 4.0mm (5/32")	120mm	
	Ø 5.0mm (3/16")	120mm	
	Ø 6.0mm (1/4")	120mm	



### CHISEL & PUNCH SET

- Spring loaded handle locks in chisel or punch attachment
- Safety striking handle features protective moulding to neatly tuck away and protect hand from the impact area
- Various chisel and punch attachments to serve as a comprehensive all in one kit
- Supplied in custom moulded plastic hard case

Part No.	Description	Size	Attachments
<b>301149</b>	Cape chisel	6mm	14
	Cold chisel (axe head)	40mm	
	Flat chisel	14, 17, 20, 23, 26, 60mm	
	Pin punch	5, 6mm	
	Tapered drift	3, 6mm	
	Tapered punch	3, 5mm	
	Safety handle	-	



### LETTER & NUMBER PUNCH SETS

- Letter and number punch sets in a range of sizes
- Compact sets supplied in plastic storage cases
- Manufactured from hardened chrome vanadium steel with special sand blasting finish to improve performance and longevity



Part No.	Description	Size	Contents	Pieces
<b>301626</b>	Letter punch set	3.0mm (1/8")	Letters "A to Z" and "&" symbol	27
<b>301627</b>	Letter punch set	5.0mm (3/16")	Letters "A to Z" and "&" symbol	27
<b>301628</b>	Letter punch set	6.0mm (1/4")	Letters "A to Z" and "&" symbol	27
<b>301629</b>	Letter punch set	8.0mm (5/16")	Letters "A to Z" and "&" symbol	27
<b>301630</b>	Letter punch set	10.0mm (3/8")	Letters "A to Z" and "&" symbol	27
<b>301615</b>	Number punch set	3.0mm (1/8")	Numbers "0-9" (6/9 reversible)	9
<b>301616</b>	Number punch set	5.0mm (3/16")	Numbers "0-9" (6/9 reversible)	9
<b>301617</b>	Number punch set	6.0mm (1/4")	Numbers "0-9" (6/9 reversible)	9
<b>301618</b>	Number punch set	8.0mm (5/16")	Numbers "0-9" (6/9 reversible)	9
<b>301619</b>	Number punch set	10.0mm (3/8")	Numbers "0-9" (6/9 reversible)	9



### LETTER & NUMBER PUNCH SET

#### AUTOMATIC PUNCH

- Adjustable spring loaded design for variable impact strength and hardened punches for long service life
- Simple one handed operation; adjust to desired spring tension, press firmly against work piece for automatic punch
- Punch tool made of brass with knurled body for extra grip
- Excellent for marking hand tools, equipment, workshop tools etc.
- Hammer not required for operation

Part No.	Description	Size	Pieces
<b>301943</b>	Automatic Punch Tool	3.0mm (1/8")	38
	Numbers "0-9" (6 / 9 Reversible)		
	& (Symbol)		
	" (Symbol)		
	Upper Case Letters "A-Z"		



STRIKING

HOLLOW WAD PUNCHES

- Precisely ground induction hardened and tempered cutting edges
- Uniquely designed tips prevent jamming of material inside the punch
- Manufactured from hardened chrome molybdenum steel with black phosphate finish



Part No.	Punch Diameter	Overall Length	Part No.	Punch Diameter	Overall Length
321205	Ø 5mm	100mm	321213	Ø 13mm	115mm
321206	Ø 6mm	100mm	321214	Ø 14mm	115mm
321208	Ø 8mm	105mm	321216	Ø 16mm	120mm
321209	Ø 9mm	105mm	321219	Ø 19mm	120mm
321210	Ø 10mm	105mm	321220	Ø 20mm	120mm
321211	Ø 11mm	115mm	321225	Ø 25mm	120mm
321212	Ø 12mm	115mm			

Part No.	Description	Pieces
321200	Hollow wad punch set	6
	Contents	Punch Diameter
	321205	Ø 5mm
	321206	Ø 6mm
	321208	Ø 8mm
	321210	Ø 10mm
	321211	Ø 11mm
	321212	Ø 12mm



301631



301337A

BRICKLAYER'S LINE PINS

- Hardened and ground alloy steel brick layer pins with chrome finish suitable for use with hardened mortar
- Used in conjunction with builder's lines for marking out positions or aligning brickwork etc.

Part No.	Overall Length	Qty
301631	150mm	2
301632	150mm	10

POWERBAR IMPACT WRENCH

1/2" SQUARE DRIVE

- Extra heavy duty impact wrench is designed specifically to loosen high torque and tight bolts using shock impact
- Amazing shock impact is very effective and generates up to 600 foot pounds of force from one blow
- Suitable for use on pulleys, fly wheels, couplings, flanges, lawn mower base plates
- Ideal for removal of harmonic balancer pulleys without the need for radiator removal
- Spares: Replacement bolt assembly (Part No. 301337A)

Part No.	Force	Overall Length	Spares
301337	600 Ft/lbs	560mm	301337A



**TORQUE WRENCHES**

REVERSIBLE CLICK-STOP

- Robust torque wrenches with reversible 24 tooth ratchet and security locking handle mechanism
- Click-stop design to alert user once the required torque has been achieved
- Slim style design with nickel chrome plated alloy finish
- Dual scale Ft/lb and Nm engravings on handle
- Each torque wrench is checked and calibrated before leaving the factory and is supplied with individual calibration certificate
- Suitable for use in difficult work conditions including dark, noisy, vibrating applications
- Individually supplied in custom moulded plastic hard case and hang sell packaging



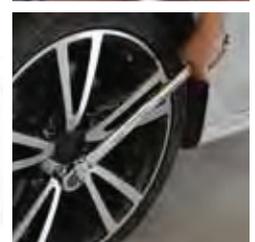
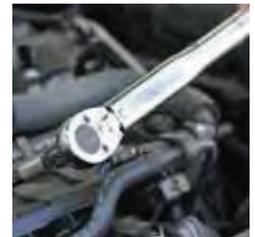
Part No.	Square Drive	Range (Dual Scale)	Overall Length
<b>301097</b>	1/4"	2 - 24Nm & 17 - 212 in. lbs.	280mm
<b>301098</b>	3/8"	7 - 108Nm & 5 - 80 ft. lbs.	370mm
<b>301099</b>	1/2"	14 - 203Nm & 10 - 150 ft. lbs.	470mm
<b>301349</b>	3/4"	68 - 406Nm & 50 - 300 ft / lbs.	675mm



Supplied with Calibration Certificate



Scan here for video



**TORQUE SCREWDRIVER**

MICRO 5Nm

- Torque metered 1/4" square drive screwdriver ideal for screws, bolts and hose clamps where a specific torque is required
- Ergonomic handle includes inbuilt torque meter viewing window to set, lock or adjust the torque unit
- Includes socket attachments: 6, 7 and 8mm
- Suitable for use on all Tridon worm drive hose clamps
- Supplied in custom moulded plastic hard case

Part No.	Square Drive	Range	Increments
<b>CTD-2</b>	1/4"	0 - 5Nm	0.5Nm



**TORQUE SETTING ANGLE GAUGE**

- Designed to measure the angle of rotation following pre-torque adjustment, where a torque angle adjustment is specified
- Full circle - measurement range of 0 - 360° in 2° increments and intervals of 10° and 30°
- Rotating housing used to zero the gauge and adjustable rod to secure gauge in position while in use
- Supplied with hex key

Part No.	Square Drive	Range	Increments/Graduation
<b>301101</b>	1/2"	360°	2°



**TYRE VALVE CORE TORQUE TOOLS**

- Specifically designed to torque the tyre valve core to the correct specifications as required in the tyre pressure monitoring systems (TPMS)
- Moulded handle allows for a secure grip
- Accuracy: +/- 6%

Part No.	Torque Setting	Overall Length
<b>309030</b>	25Ncm (2in. lbs.)	120mm
<b>309029</b>	45Ncm (4in. lbs.)	120mm

## TORQUE

### BREAKER BARS STANDARD & RATCHET HEAD

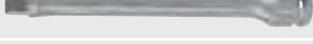
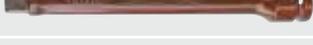
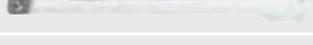
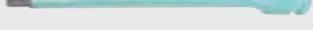
- Premium range of professional breaker bars in various styles
- Heavy duty design and built to withstand the rigours of a commercial work environment
- Spring loaded ball bearing in square drive securely locks and holds the socket and tool
- Ratcheting versions: Feature a heavy duty 24 tooth mechanism and a three position switch for easy locking and direction change
- Manufactured from heat treated, drop forged chrome vanadium steel with polished chrome finish and black phosphate heads for added corrosion resistance
- *Spare: Replacement heads available*

Part No.	Description	Square Drive	Overall Length	Spare Head
<b>301599</b>	Standard head breaker bar	3/8"	610mm (24")	301599A
<b>301245</b>	Standard head breaker bar	1/2"	610mm (24")	301293
<b>301246</b>	Standard head breaker bar	3/4"	610mm (24")	301292
<b>301822</b>	Standard head breaker bar extra HD	3/4"	1000mm (40")	301822A
<b>301831</b>	Ratcheting head breaker bar	3/8"	450mm (18")	301831A
<b>301935</b>	Ratcheting head breaker bar	1/2"	610mm (24")	301935A
<b>301936</b>	Ratcheting head breaker bar	3/4"	610mm (24")	301936A
<b>321250</b>	Ratcheting head adjustable length breaker bar	1/2"	420 - 610mm (16.5"-24")	321250A
<b>321251</b>	Ratcheting head adjustable length breaker bar	3/4"	610 - 915mm (24"-36")	321251A



### TORQUE EXTENSION BARS

- Designed to torque wheel nuts and bolts to the correct tension as specified by the vehicle manufacturer
- Colour coded extension bars with pre-tension torque rating and colour coded for quick reference
- Both ends feature a 1/2" square drive
- Overall length per bar: 195mm
- Available individually or as part of set
- Set supplied in custom moulded plastic hard case

Part No.	Description				Pieces
<b>309500</b>	Torque extension bar set				10
Contents	Description	Nm	Overall Length	Image	
309501	Torque extension bar - Green	90Nm	195mm		
309502	Torque extension bar - Black	100Nm	195mm		
309503	Torque extension bar - Yellow	110Nm	195mm		
309504	Torque extension bar - Red	120Nm	195mm		
309505	Torque extension bar - Dark Blue	135Nm	195mm		
309506	Torque extension bar - Orange	150Nm	195mm		
309507	Torque extension bar - Grey	160Nm	195mm		
309508	Torque extension bar - Brown	175Nm	195mm		
309509	Torque extension bar - White	190Nm	195mm		
309510	Torque extension bar - Light Blue	200Nm	195mm		



309500

### TORQUE MULTIPLIER NUT CRACKING SET

3200NM

- Heavy duty tool for removing stubborn wheel nuts on heavy vehicles, light commercial trucks, buses and vans
- Uses reduction gears to create a multiplication force
- Created progressive force instead of shock impact
- Ergonomic rotation handle provides ease of use and stability
- Manufactured from heavy duty chrome molybdenum for strength and durability
- Includes seven deep 75mm six point 1" square drive impact sockets, rotation handle and 200mm male extension bar
- Supplied in custom moulded plastic hard case with clip-lockable lid
- Available separately 41mm socket (Part No. 30903741)

Part No.	Specifications	
<b>309055</b>	Multiplication ratio	56 : 1
	Square drive	1"
	Socket sizes 1" Sq. Dr. Hex	24, 27, 30, 32, 33, 36 & 38mm
	Output force (Max)	3200Nm (2360 ft. lbs.)



### NUT CRACKER BAR

- For seized and stubborn nuts
- High leverage 180° rotating **strike-thru** head
- Unique design creates an additional twist force after impact to assist cracking the nut
- Heavy duty construction for ongoing shock impact applications
- Ergonomic rubber handle provides comfort and firm grip



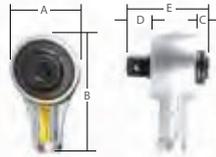
Part No.	Square Drive	Overall Length
<b>321032</b>	1/2"	410mm

### TORQUE MULTIPLIER

1500NM

- Heavy duty unit designed for use in applications where a higher than otherwise achievable torque rating is required
- Multiplication ratio of 3 to 1 with planetary gear design
- Ideal for breaking difficult or frozen fastener applications
- Head assembly features 1/2" square drive (female) for use with torque wrench, ratchet, breaker bar or power drive etc. and 3/4" square drive (male) for use with sockets
- Extension bar and stabiliser also included
- Manufactured from chrome molybdenum alloy steel



Part No.	Specifications		
<b>321009</b>	Multiplication ratio	3 : 1	
	Input drive	1/2" Sq. Dr. female	
	Input force (Max)	500Nm (365 ft. lbs.)	
	Output drive	3/4" Sq. Dr. male	
	Output force (Max)	1500Nm (1100 Ft.lbs)	
	Accuracy	+/- 4%	
	Dimensions		A: 73mm
			B: 127mm
			C: 10mm
			D: 25mm
		E: 83mm	
Weight	1.60kg		

SPANNERS & WRENCHES

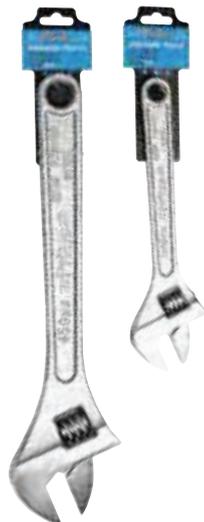


ADJUSTABLE WRENCHES

SHIFTERS

- Precision machined adjustable wrenches are manufactured to strict standards to ensure superior performance
- Four knurl jaws are precision made to ensure smooth operation
- Manufactured from drop forged chrome vanadium steel with nickel chrome plating to ensure corrosion resistance

Part No.	Overall Length	Jaw Opening (Max)	Jaw Width	Weight
<b>88100</b>	100mm (4")	15mm	5mm	53g
<b>88150</b>	150mm (6")	20mm	6mm	125g
<b>88200</b>	200mm (8")	25mm	8mm	240g
<b>88250</b>	250mm (10")	30mm	9mm	390g
<b>88300</b>	300mm (12")	35mm	11mm	587g
<b>88375</b>	375mm (15")	45mm	13mm	1164g
<b>88450</b>	450mm (18")	55mm	13mm	1775g
<b>88600</b>	600mm (24")	70mm	11mm	3000g



ADJUSTABLE WRENCHES

SHIFTERS

- Budget range of adjustable wrenches provide an economical option for DIY users
- Manufactured from drop forged carbon steel with chrome plating



Part No.	Overall Length	Jaw Opening (Max)	Jaw Width	Weight
<b>89150</b>	150mm (6")	20mm	7mm	125g
<b>89200</b>	200mm (8")	25mm	8mm	240g
<b>89250</b>	250mm (10")	30mm	9mm	390g
<b>89300</b>	300mm (12")	35mm	11mm	587g
<b>89375</b>	375mm (15")	45mm	14mm	1164g
<b>89450</b>	450mm (18")	55mm	15mm	1775g



MERCHANDISER

ADJUSTABLE WRENCHES

- In store wall mount merchandiser provides a compact point of sale solution
- Size: 450W x 755H (mm)

Part No.	Contents	Size	Qty	Contents	Size	Qty
<b>NTMW01</b>	88100	100mm (4")	2	88300	300mm (12")	3
	88150	150mm (6")	2	88375	375mm (15")	2
	88200	200mm (8")	2	88450	450mm (18")	1
	88250	250mm (10")	3	88600	600mm (24")	1



C-HOOK WRENCHES

PIN & HOOK STYLE

- Used to tighten, loosen or hold machinery components such as retaining rings, couplings, or any notched or multi-faced tool
- Range includes both **pin** and **hook** style
- Hinged jaws enable wrench to fit to parts within a specific size range
- Manufactured from drop forged chrome vanadium steel for longevity and durability
- Spares: Replacement pins available (each)

Part No.	Description	Size Range (Max)	Pin Size	Spare Pin
<b>315150</b>	Hook style	Ø 19 - 51mm (¾" - 2")	-	-
<b>315151</b>	Hook style	Ø 32 - 76mm (1 ¼" - 3")	-	-
<b>315152</b>	Hook style	Ø 51 - 121mm (2" - 4 ¾")	-	-
<b>315153</b>	Hook style	Ø 112 - 158mm (4 ½" - 6 ¼")	-	-
<b>315154</b>	Pin style	Ø 19 - 51mm (¾" - 2")	4mm	315154A (each)
<b>315155</b>	Pin style	Ø 32 - 76mm (1 ¼" - 3")	5mm	315155A (each)
<b>315156</b>	Pin style	Ø 51 - 121mm (2" - 4 ¾")	6mm	315156A (each)
<b>315157</b>	Pin style	Ø 112 - 158mm (4 ½" - 6 ¼")	8mm	315157A (each)

### C-HOOK WRENCH SET

PIN & HOOK STYLE INTERCHANGEABLE HEAD

- Professional workshop set to cater for an extended range of size requirements in both pin and hook style
- Interchangeable heads allow the wrench to be used on both hook and pin type applications
- Ideal kit for a variety of industries including automotive, industrial, plumbing and agriculture
- Manufactured from drop forged chrome vanadium steel for longevity and durability
- Spares: Replacement pins available (each). Refer to individual c-hook wrench spare part numbers

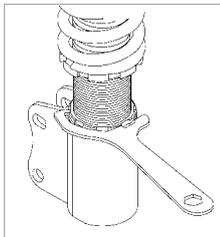


Part No.	Size Range	Pin Sizes
<b>315160</b>	35 - 60, 60 - 90, 90 - 120mm	5, 6, 8mm

### C-HOOK WRENCH SET RATCHETING

PIN & HOOK STYLE INTERCHANGEABLE HEAD

- Ratcheting feature allows for improved use in confined spaces
- Interchangeable heads allow the wrench to be used on both hook and pin type applications
- Manufactured from drop forged vanadium steel for longevity and durability
- Spares: Replacement two piece sets include both pin and hook style jaws



Part No.	Description	Spares	Image	Spares	Image	
<b>315161</b>	C-hook wrench set: 4 Jaw sizes, 4 Pin sizes	315161A		315161C		
	Description					Image
	Handle		Ø 19 - 51mm Hook Type		Ø 19 - 51mm Hook Type	
	Adaptor		Ø 19 - 51mm Pin Type (Ø 3mm)		Ø 19 - 51mm Pin Type (Ø 3mm)	
Adaptor		315161B		315161D		
			Ø 31 - 77mm Hook Type		Ø 31 - 77mm Hook Type	
			Ø 31 - 77mm Pin Type (Ø 4.5mm)		Ø 31 - 77mm Pin Type (Ø 4.5mm)	

SPANNERS & WRENCHES



FLARE NUT WRENCH SETS

3 PIECE

- Double ended flare nut wrench sets are particularly useful in automotive, hydraulic and refrigerant applications
- Manufactured from thick, drop forged vanadium steel to provide the strength and rigidity required to remove tight and stubborn pipe and flare nut applications



Part No.	Description	Size	Overall Length	Pieces
<b>301039</b>	Metric flare nut wrench set	10 x 12mm 13 x 14 mm 15 x 17mm	155mm 175mm 200mm	3
<b>301040</b>	Imperial flare nut wrench set	3/8" x 7/16" 1/2" x 9/16" 5/8" x 11/16"	155mm 175mm 200mm	3



WRENCH/SPANNER EXTENDERS

- Provides additional leverage and increased force for stubborn and tight nuts
- Increases length for access to otherwise unreachable and awkward areas
- Suitable for use with spanners/wrenches, Allen keys, ratchets, torque wrenches, multi grips
- Features 1/2" square drive socket for additional applications
- German engineered and manufactured from high quality drop forged and hardened, chrome vanadium steel
- Made in Germany

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Part No.	Suits Spanner Width (Max)	Overall Length
<b>321045</b>	26mm	340mm
<b>321047</b>	46mm	600mm



PIPE WRENCHES

- Serrated adjustable locking jaw design to enable quick and secure operation once force is applied
- Ideal for use on pipes or bolts where additional strength is required
- Manufactured from carbon steel with drop forged jaws for strength and durability

Part No.	Overall Length	Pipe Size (Max)
<b>301217</b>	250mm	38mm
<b>301218</b>	300mm	38mm
<b>301219</b>	350mm	51mm
<b>301220</b>	450mm	63mm



E-STAR SPANNER SET

- Double ended 'ring' style spanner set designed for the removal and installation of six point fasteners
- Ideal for late model automotive applications
- Manufactured from drop forged vanadium steel for superior strength and durability

Part No.	Size	Length
<b>301166</b>	E6 x E8	110mm
	E7 x E11	125mm
	E10 x E12	140mm
	E14 x E18	180mm
	E16 x E22	200mm
	E20 x E24	225mm



**CROWFOOT WRENCHES**

STRAIGHT JAW & FLARED JAW

- Manufactured from high grade industrial drop forged, heat treated chrome molybdenum steel
- Available individually or as a set



**CROWFOOT WRENCHES**

STRAIGHT JAW

Part No.	Jaw Style	Square Drive	Size
301432	Straight jaw	3/8"	10mm
301433	Straight jaw	3/8"	11mm
301434	Straight jaw	3/8"	12mm
301435	Straight jaw	3/8"	13mm
301436	Straight jaw	3/8"	14mm
301437	Straight jaw	3/8"	15mm
301438	Straight jaw	3/8"	16mm
301439	Straight jaw	3/8"	17mm
301440	Straight jaw	3/8"	18mm
301441	Straight jaw	3/8"	19mm
301442	Straight jaw	3/8"	21mm
301443	Straight jaw	3/8"	22mm
301444	Straight jaw	3/8"	23mm
301445	Straight jaw	3/8"	24mm
301446	Straight jaw	3/8"	26mm
301466	Straight jaw	1/2"	27mm
301467	Straight jaw	1/2"	29mm
301468	Straight jaw	1/2"	30mm

Part No.	Jaw Style	Square Drive	Size
301469	Straight jaw	1/2"	32mm
301470	Straight jaw	1/2"	33mm
301471	Straight jaw	1/2"	34mm
301472	Straight jaw	1/2"	35mm
301473	Straight jaw	1/2"	36mm
301474	Straight jaw	1/2"	38mm
301475	Straight jaw	1/2"	41mm
301476	Straight jaw	1/2"	43mm
301477	Straight jaw	1/2"	46mm
301478	Straight jaw	1/2"	48mm
301479	Straight jaw	1/2"	50mm
301421	Straight jaw	3/8"	3/8"
301422	Straight jaw	3/8"	7/16"
301423	Straight jaw	3/8"	1/2"
301424	Straight jaw	3/8"	9/16"
301425	Straight jaw	3/8"	5/8"
301426	Straight jaw	3/8"	11/16"
301427	Straight jaw	3/8"	3/4"

Part No.	Jaw Style	Square Drive	Size
301428	Straight jaw	3/8"	13/16"
301429	Straight jaw	3/8"	7/8"
301430	Straight jaw	3/8"	15/16"
301431	Straight jaw	3/8"	1"
321001A	Straight jaw	1/2"	1 <sup>1</sup> / <sub>16</sub> "
321001B	Straight jaw	1/2"	1 <sup>1</sup> / <sub>8</sub> "
321001C	Straight jaw	1/2"	1 <sup>3</sup> / <sub>16</sub> "
321001D	Straight jaw	1/2"	1 <sup>1</sup> / <sub>4</sub> "
321001E	Straight jaw	1/2"	1 <sup>5</sup> / <sub>16</sub> "
321001F	Straight jaw	1/2"	1 <sup>3</sup> / <sub>8</sub> "
321001G	Straight jaw	1/2"	1 <sup>7</sup> / <sub>16</sub> "
321001H	Straight jaw	1/2"	1 <sup>1</sup> / <sub>2</sub> "
321001I	Straight jaw	1/2"	1 <sup>5</sup> / <sub>8</sub> "
321001J	Straight jaw	1/2"	1 <sup>11</sup> / <sub>16</sub> "
321001K	Straight jaw	1/2"	1 <sup>3</sup> / <sub>4</sub> "
321001L	Straight jaw	1/2"	1 <sup>13</sup> / <sub>16</sub> "
321001M	Straight jaw	1/2"	1 <sup>7</sup> / <sub>8</sub> "
321001N	Straight jaw	1/2"	2"



301191



301465



301420



321001

**CROWFOOT WRENCH SETS**

STRAIGHT JAW

Part No.	Description	Size	Pieces
301191	Metric straight jaw crowfoot wrench set 3/8" Sq. Dr.	10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 26mm	15
301465	Metric straight jaw crowfoot wrench set 1/2" Sq. Dr.	27, 29, 30, 32, 33, 34, 35, 36, 38, 41, 43, 46, 48, 48, 50mm	14
301420	Imperial straight jaw crowfoot wrench set 3/8" Sq. Dr.	3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"	11
321001	Imperial straight jaw crowfoot wrench set 1/2" Sq. Dr.	1 <sup>1</sup> / <sub>16</sub> ", 1 <sup>1</sup> / <sub>8</sub> ", 1 <sup>3</sup> / <sub>16</sub> ", 1 <sup>1</sup> / <sub>4</sub> ", 1 <sup>5</sup> / <sub>16</sub> ", 1 <sup>3</sup> / <sub>8</sub> ", 1 <sup>7</sup> / <sub>16</sub> ", 1 <sup>1</sup> / <sub>2</sub> ", 1 <sup>5</sup> / <sub>8</sub> ", 1 <sup>11</sup> / <sub>16</sub> ", 1 <sup>3</sup> / <sub>4</sub> ", 1 <sup>13</sup> / <sub>16</sub> ", 1 <sup>7</sup> / <sub>8</sub> ", 2"	14

## SPANNERS & WRENCHES

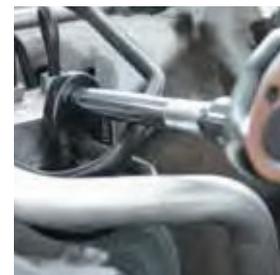
### CROWFOOT WRENCHES

#### FLARED JAW

- Manufactured from high grade industrial drop forged, heat treated chrome molybdenum steel
- Available individually or as a set



301669



Part No.	Jaw Style	Square Drive	Size	Part No.	Jaw Style	Square Drive	Size	Part No.	Jaw Style	Square Drive	Size
301383	Flared jaw	3/8"	8mm	301392	Flared jaw	3/8"	17mm	301373	Flared jaw	3/8"	1/2"
301384	Flared jaw	3/8"	9mm	301393	Flared jaw	3/8"	18mm	301374	Flared jaw	3/8"	9/16"
301385	Flared jaw	3/8"	10mm	301394	Flared jaw	3/8"	19mm	301375	Flared jaw	3/8"	5/8"
301386	Flared jaw	3/8"	11mm	301395	Flared jaw	1/2"	21mm	301376	Flared jaw	3/8"	11/16"
301387	Flared jaw	3/8"	12mm	301396	Flared jaw	1/2"	22mm	301377	Flared jaw	3/8"	3/4"
301388	Flared jaw	3/8"	13mm	301397	Flared jaw	1/2"	24mm	301378	Flared jaw	1/2"	13/16"
301389	Flared jaw	3/8"	14mm	301370	Flared jaw	3/8"	5/16"	301379	Flared jaw	1/2"	7/8"
301390	Flared jaw	3/8"	15mm	301371	Flared jaw	3/8"	3/8"	301380	Flared jaw	1/2"	15/16"
301391	Flared jaw	3/8"	16mm	301372	Flared jaw	3/8"	7/16"	301381	Flared jaw	1/2"	1"

### CROWFOOT WRENCH SETS

#### FLARED JAW

Part No.	Description	Size	Pieces
301574	Metric flared jaw crowfoot wrench set 3/8" Sq. Dr.	10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm	10
321086	Metric flared jaw crowfoot wrench & extension bar set 1/2" & 3/4" Sq. Dr. (Satin Chrome)	33, 36, 38, 41, 46, 50mm Extensions: 1/2" x 125mm, 3/4" x 100mm	8
301669	Imperial flared jaw crowfoot wrench set 3/8" & 1/2" Sq. Dr.	3/8", 7/16", 1/4", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16"	10



# WORKSHOP GENERAL

### FEELER GAUGES

- Ideal for precisely measuring clearances
- Easy to read etching on blades enables efficient referencing
- Manufactured from high quality steel for strength, durability and accuracy
- Suitable for automotive and engineering applications
- Extra long blade version available (Part No. 321669)



#### SUMMARY TABLE

SEE PAGE 53 - 54 FOR MORE INFORMATION

Part No.	Description	Size Range	Blade Length	Overall Length
301155	Feeler gauge straight 38 blade - metric & imperial	0.038mm (0.0015") - 0.889mm (0.035")	80mm	90mm
301156	Feeler gauge straight 22 blade dual step - metric & imperial	0.102mm (0.004") - 0.686mm (0.027")	80mm	90mm
301157	Feeler gauge straight cranked 26 blade - metric & imperial	0.127mm (0.005") - 0.762mm (0.030")	80mm	190mm
301158	Feeler gauge tapered 10 blade - imperial	0.0015" - 0.025"	100mm	105mm
301159	Feeler gauge tapered 10 blade - metric	0.04 - 0.63mm	100mm	105mm
301160	Feeler gauge tapered 16 blade - metric & imperial	0.05 (0.002") - 0.38mm (0.015")	100mm	105mm
321669	Feeler gauge straight (extra long) 25 blade - metric & imperial	0.038mm (0.0015") - 1.0mm (0.040")	300mm	305mm



**FEELER GAUGE STRAIGHT**  
METRIC/IMPERIAL 38 BLADE

Part No.	Blade Size: Metric (Imperial)			
<b>301155</b>	0.038 (0.0015)	0.254 (0.010) *B	0.457 (0.018)	0.711 (0.028)
	0.051 (0.002)	0.254 (0.010)	0.483 (0.019)	0.737 (0.029)
	0.076 (0.003)	0.279 (0.011)	0.508 (0.020)	0.762 (0.030)
	0.102 (0.004)	0.305 (0.012) *B	0.533 (0.021)	0.787 (0.031)
	0.127 (0.005)	0.305 (0.012)	0.559 (0.022)	0.813 (0.032)
	0.152 (0.006)	0.330 (0.013)	0.584 (0.023)	0.838 (0.033)
	0.178 (0.007)	0.356 (0.014)	0.610 (0.024)	0.864 (0.034)
	0.203 (0.008) *B	0.381 (0.015)	0.635 (0.025)	0.889 (0.035)
	0.203 (0.008)	0.406 (0.016)	0.660 (0.026)	
	0.229 (0.009)	0.432 (0.017)	0.686 (0.027)	

\*B = Brass



**FEELER GAUGE STRAIGHT**  
METRIC/IMPERIAL 22 BLADE DUAL STEP

Part No.	Blade Size: Metric (Imperial)	Blade Size: Metric (Imperial)
<b>301156</b>	0.102 (0.004) / 0.152 (0.006)	0.381 (0.015) / 0.432 (0.017)
	0.127 (0.005) / 0.178 (0.007)	0.406 (0.016) / 0.457 (0.018)
	0.152 (0.006) / 0.203 (0.008)	0.432 (0.017) / 0.483 (0.019)
	0.178 (0.007) / 0.229 (0.009)	0.457 (0.018) / 0.508 (0.020)
	0.203 (0.008) / 0.254 (0.010)	0.483 (0.019) / 0.533 (0.021)
	0.229 (0.009) / 0.279 (0.011)	0.508 (0.020) / 0.559 (0.022)
	0.254 (0.010) / 0.305 (0.012)	0.533 (0.021) / 0.584 (0.023)
	0.279 (0.011) / 0.330 (0.013)	0.559 (0.022) / 0.610 (0.024)
	0.305 (0.012) / 0.356 (0.014)	0.584 (0.023) / 0.635 (0.025)
	0.330 (0.013) / 0.381 (0.015)	0.610 (0.024) / 0.660 (0.026)
	0.356 (0.014) / 0.406 (0.016)	0.635 (0.025) / 0.686 (0.027)



**FEELER GAUGE STRAIGHT CRANKED**  
METRIC/IMPERIAL 26 BLADE

Part No.	Blade Size: Metric (Imperial)			
<b>301157</b>	0.127 (0.005)	0.305 (0.012)	0.483 (0.019)	0.660 (0.026)
	0.152 (0.006)	0.330 (0.013)	0.508 (0.020)	0.686 (0.027)
	0.178 (0.007)	0.356 (0.014)	0.533 (0.021)	0.711 (0.028)
	0.203 (0.008)	0.381 (0.015)	0.559 (0.022)	0.737 (0.029)
	0.229 (0.009)	0.406 (0.016)	0.584 (0.023)	0.762 (0.030)
	0.254 (0.010)	0.432 (0.017)	0.610 (0.024)	
	0.279 (0.011)	0.457 (0.018)	0.635 (0.025)	



**FEELER GAUGE TAPERED**  
METRIC/IMPERIAL 16 BLADE

Part No.	Blade Size: Metric		Blade Size: Imperial	
<b>301160</b>	0.05	0.20	0.002	0.008
	0.08	0.25	0.003	0.010
	0.10	0.30	0.004	0.012
	0.15	0.38	0.006	0.015



**FEELER GAUGE TAPERED**  
IMPERIAL 10 BLADE

Part No.	Blade Size: Imperial				
<b>301158</b>	0.0015	0.003	0.006	0.01	0.015
	0.002	0.004	0.008	0.012	0.025



**TAPERED FEELER GAUGE**  
METRIC 10 BLADE

Part No.	Blade Size: Metric				
<b>301159</b>	0.04	0.08	0.15	0.30	0.50
	0.06	0.10	0.20	0.40	0.63



**FEELER GAUGE STRAIGHT - EXTRA LONG**  
METRIC/IMPERIAL 25 BLADE

Part No.	Blade Size: Metric (Imperial)					
<b>321669</b>	0.038 (0.0015)	0.152 (0.005)	0.254 (0.009)	0.356 (0.013)	0.457 (0.017)	0.635 (0.025)
	0.051 (0.002)	0.178 (0.006)	0.279 (0.010)	0.381 (0.014)	0.438 (0.019)	0.686 (0.027)
	0.076 (0.003)	0.203 (0.007)	0.305 (0.011)	0.406 (0.015)	0.508 (0.020)	0.762 (0.030)
	0.102 (0.004)	0.229 (0.008)	0.330 (0.012)	0.432 (0.016)	0.533 (0.021)	1.016 (0.040)



321261



321262



301907



301908

**SECURITY SPRING HOOKS/SAFETY LANYARDS**

- Safely and securely keeps tools attached and prevents loss of tools especially when working at heights
- Effective protection against accidents caused by falling tools
- Reduce downtime retrieving fallen tools
- Nickel plated carabiner and ring end, includes additional tool belt loop for additional tethering versatility (Part No. 321261/321262)

Part No.	Description	Capacity	Rest Length	Extended Length
<b>321261</b>	Security spring hook S/S coil PU coated	1kg	230mm	1400mm
<b>321262</b>	Security spring hook S/S coil PU coated	3kg	460mm	1600mm
<b>301907</b>	Security spring hook Nylon bungee style	5kg	800mm	1500mm
<b>301908</b>	Security spring hook Nylon bungee style	10kg	800mm	1500mm





301295



321058



### DEBURRING TOOLS

- Designed for removing internal and external surface burrs following cutting or drilling
- Suitable for materials having spiral chips such as steel, aluminium, copper, and zinc
- Ergonomic handle and versatile swivel blade for manoeuvrability to work at any angle - 301295 is supplied with additional HSS M35 grade blade
- Spares: Replacement blade for 301295 (Part No. 301295A)



### TUBE BENDERS

- Workshop tube benders suitable for aluminium, brass, copper and mild steel tubing
- Knurled handles for maximum grip and comfort
- Simple yet effective operation with built in gauge to ensure accurate bending from 0 - 180° of movement
- Durable metal construction for superior toughness and longevity

Part No.	Description	Blade	Tube Size	Tube Diameter	Spares
<b>301295</b>	Deburring tool 150mm - universal	8mm	-	-	301295A (each)
<b>321058</b>	Deburring tool - master 6 in 1	1	14mm	Ø 2mm	
		2	16mm	Ø 2mm	
		3	18mm	Ø 2mm	
		4	20mm	Ø 2mm	
		5	26mm	Ø 3mm	
		6	32mm	Ø 3mm	

Part No.	Tube Capacity	Overall Length
<b>301034</b>	6, 8, 10mm	260mm
<b>301036</b>	4, 6, 8, 10mm	320mm



301941



301942

### GUARD COVERS

#### MAGNETIC

- Specifically designed to protect paint work and working area during maintenance and repairs
- Conforms to the shape of the vehicle and remains in place by fixing securely with magnets
- Inner skin is a soft, non-scratching PVC sponge leather. Outer skin is made from strong and durable non-scratching vinyl

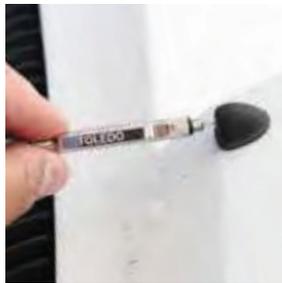


Part No.	Size
<b>301941</b>	800 x 600mm
<b>301942</b>	1050 x 580mm

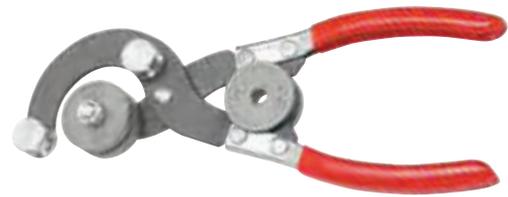


**WINDSCREEN WASHER NEEDLE**  
JET CLEANING

- Double ended windscreen washer cleaning and adjustment tool
- For cleaning and adjustment of windscreen washer nozzle jets
- Enables adjustment to the washer spray direction by using the needle
- Features dual tip with protective caps and handy pocket clip
- Manufactured from steel with knurled body



Part No.	Overall Length
<b>301164</b>	95mm



**TUBE BENDER**  
PLIER STYLE

- Plier style is easy to use and supplied with two roller adaptors
- Roller adaptors lock into place with locating pin
- Suitable for bending copper and steel without kinking or flattening
- Place tube between adaptor and stud then squeeze handle to make the necessary bend

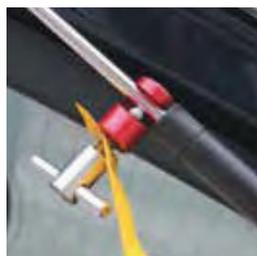


Part No.	Tube Capacity	Overall Length
<b>301698</b>	3/16", 1/4", 5/16", 3/8"	260mm



**GAS STRUT SUPPORT TOOL**  
PLASTIC TIPPED

- Supports and locks onto gas strut shafts to enable worn gas strut to be fixed in the extended position during service
- Features unique plastic moulded end cap to eliminate damage of the strut shaft during use
- Suitable for all gas struts on bonnets, boots or hatchbacks by clamping and locking to the shaft of the strut
- Manufactured with alloy body and brass screw



Part No.	Description
<b>301276</b>	Gas strut tool with safety tag



**WIPER ARM REMOVAL TOOL**

- Universal tool suitable for most light vehicles and commercial vehicles etc
- For the removal of windscreen wiper arms from both tapered and splined spigots
- Compact tool allows easy access in confined spaces
- Eliminates damage to surrounding paintwork and glass
- Prevents damage to wiper arm and spigot



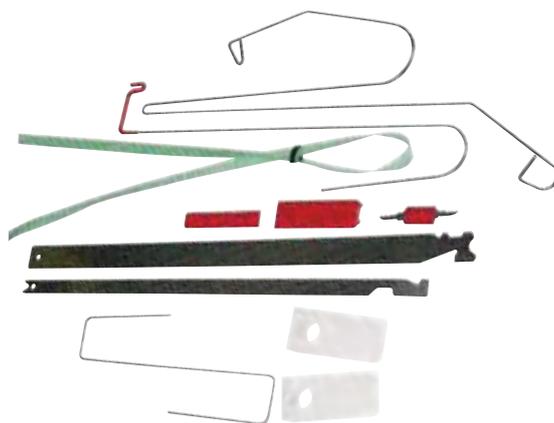
Part No.	Working Height	Jaw Opening	Jaw Depth
<b>301071</b>	26mm	16mm	24mm



**LEATHER PUNCH PLIER**

- For effortless hole punching of leather, plastic and fabrics
- Revolving head with 6 different punch sizes
- Spring loaded design for ease of use and ergonomically designed handles
- Locking latch for safe and easy storage

Part No.	Punch Sizes	Overall Length
<b>321104</b>	2, 2.5, 3, 3.5, 4, 4.5mm	235mm



**VEHICLE LOCK OUT KIT  
UNIVERSAL**

- Suitable for opening a wide range of vehicle makes
- Consult vehicle service, workshop repair instructions prior to use
- Comprehensive professional tool kit of specialty automotive lock out tools
- Supplied in vinyl carry wallet

Part No.	Pieces
<b>301161</b>	12



**TWEEZER SET**

- Set of six stainless steel tweezers varying in style, shape and size
- Suitable for all miscellaneous jobs and tasks around the workshop and in DIY applications



Part No.	Pieces
<b>301678</b>	6



**CAULKING GUN**

- Dispenses sealant, silicone and other popular cartridges in standard size
- Solid steel construction with heavy duty follower spring
- Comfortable grip skeleton style

Part No.	Cartridge Length	Overall Length
<b>301655</b>	Standard size - 232mm	350mm

TOOL STORAGE



301006



301398



301188

STORAGE TRAYS

MAGNETIC

- Magnetic storage trays are essential for all workshops and easily attach to hoists, scissor lifts, steel workbenches etc.
- Ideal for storing and holding small parts, nuts, bolts and screws neatly and securely during dismantle and reassembly

Part No.	Shape	Size	Tray Depth	Magnets
<b>301006</b>	Circle	Ø 150 mm	38mm	1 x Ø 80mm
<b>301398</b>	Rectangle	240 x 140mm	30mm	2 x Ø 80mm
<b>301188</b>	Rectangle	330 x 255mm	30mm	4 x Ø 80mm



301598



301597



301596

SOCKET RAILS

16 PIECE

- Suitable for holding up to 16 standard or deep sockets
- Manufactured from anodized aluminium for rust resistance and durability

Part No.	Socket Square Drive	Overall Length
<b>301598</b>	1/4"	410mm
<b>301597</b>	3/8"	410mm
<b>301596</b>	1/2"	410mm



301167



301108

SPANNER RACK ORGANISERS

- For neat and organised storage of open end, ring or combination spanners
- Built in eyelet mounting holes ideal for wall mounting, shadow boards or tool chest applications
- Manufactured from high impact plastic for superior strength and durability

Part No.	Spanner Capacity	Size
<b>301167</b>	12 Piece	230mm
<b>301108</b>	15 Pieces	300mm



RUBBER MATTING

- Durable non slip rubber mat ideal for lining tool chest drawers or for protection between top chest and roller cabinet
- Prevents tools from moving and causing damage to tools and tool chest surfaces
- Also ideal for applying under mats and rugs to stop any movement

Part No.	Size
<b>301169</b>	1950 x 600mm



# MECHANICAL SERVICE

<b>AIR CONDITIONING &amp; COOLING SYSTEM</b>	<b>60</b>
<b>BRAKE</b>	<b>68</b>
<b>BEARING</b>	<b>76</b>
<b>DRIVELINE &amp; TRANSMISSION</b>	<b>78</b>
<b>ENGINE</b>	<b>82</b>
<b>EXHAUST</b>	<b>92</b>
<b>FUEL</b>	<b>93</b>
<b>LUBRICATION</b>	<b>101</b>
<b>STEERING &amp; SUSPENSION</b>	<b>110</b>
<b>TYRE &amp; WHEEL</b>	<b>115</b>



**DRIVE PULLEY SPANNER SET**  
INTERCHANGEABLE HEAD METRIC & E-STAR

- Specially designed for holding, removing and tightening damper, crank, power steering pump, alternator, radiator fan and difficult to access pulleys
- The unique curved design enables access to hard to reach places that are otherwise inaccessible using normal spanners
- Interchangeable head with secure locking mechanism ensures the adaptor will never come apart while in use
- Manufactured from drop forged chrome vanadium steel with hard wearing matt rubber coated handle grip
- Includes thirteen popular metric hex and E-Star adaptors
- Supplied in custom moulded plastic hard case



Part No.	Description	Size
<b>304047</b>	E-star adaptors	E10, E12, E14, E16, E18
	Metric hex adaptors	12, 13, 14, 15, 16, 17, 18, 19mm
	Spanner	440mm



**WELCH PLUG INSTALLER & REMOVAL KIT**

- Removes stubborn, hard to reach welch plugs
- Eliminates having to remove head or manifolds
- Includes ball-type installing swivel tool for easy positioning
- Supplied in custom moulded plastic hard case



Part No.	Adaptor Sizes	Swivel Head Bar
<b>308010</b>	20, 25, 30, 35, 40, 45, 50mm	M27 x 1.5 x 400mm

**FAN CLUTCH SPANNER SET**  
MASTER

- Water pump pulley spanner and holder set
- Contains locknut spanners and fan belt service wrench for idler pulley tensioner nuts
- Covers most late model vehicles
- Supplied in custom moulded plastic hard case



Part No.	Description	Pieces
<b>308008</b>	Master fan clutch spanner set	10

Ref. code	Description	Application	Size	Overall Length
A	Hub securing bar (Mercedes OEM Part no. 113-0040)	<b>Mercedes-Benz Engines:</b> M111, M112, M113, M119	Ø 65mm	410mm
B	Fan removing tool Hex 8mm (Mercedes OEM Part no. 104 589 00 01 00)	<b>Mercedes-Benz:</b> 300E (1985 - 1992), 260E (1987 - 1990), 300CE (1988 - 1989), 300TE (1988 - 1991), 300E 2.6 (1990 - 1992), 300E 24 (1990 - 1993), 300CE 24 (1990 - 1993), 300E 24 (1990 - 1993), 300CE (1993 - 1994), 280E (1993 - 1994), 300E 2.8 (1993 - 1994), E280 (1994 - 1996), 320TE (1993 - 1994), E320 (1994 - 1996)	8mm	300mm
C	Wrench/Holding Bar with adaptor sizes: 6, 8, 10mm Hex (10mm hex used for adjusting A/C belt tension and removing idler pulley on 420 & 560 models with V8 from 1986)	<b>Mercedes-Benz Engines:</b> M130, M104, M111, M119, M120, OM602, OM603, OM605, OM606	6, 8, 10mm	490mm
D	Open end wrench 32mm	<b>BMW Engines:</b> M10, M10, M20, M40, M41, M42, M50, M60, M62, <b>FORD:</b> 6 Cylinder	Ø 32mm	375mm
E	Open end wrench 36mm	<b>GM, FORD:</b> 8 Cylinder	Ø 36mm	375mm
F	Water pump holding tool	<b>BMW Engines:</b> M10, M20, M40, M41, M42, M44, M50, M52, M52TU, M54, M56, M60, M62, M70, M73, S14, S38, S50B30, S50B32, S54, S62B50	45 x 60mm	380mm
G	Hub holding wrench	Universal open-end wrench to remove the thermofan clutch from most BMW & Mercedes-Benz. Suitable for fan-clutch replacement, water-pump service and other front-engine repair work. Opening width 65mm, opening length 40mm and thickness 5mm.	Ø 65mm	390mm



**BELT SERVICE KIT**  
SERPENTINE BELTS

- For easy removal and replacement of serpentine belts that require release of the spring tensioner on the tensioner pulley
- Innovative combination ratchet wrench and extension handle to allow for three dynamic angles of leverage
- Fifteen piece kit covers all major makes and models with serpentine belt configuration
- Supplied in custom moulded plastic hard case

Part No.	Description	Size
<b>304015</b>	Sockets	8, 12, 13, 14, 17, 18, 24mm, 5/8"
	Hex bits	8, 6 x 8, 8 x 10mm
	Adaptor square drive	3/8" & 1/2"
	Extension handle	410mm
	Ratchet wrench	230mm
304035	Socket 19mm (not included - available separately)	

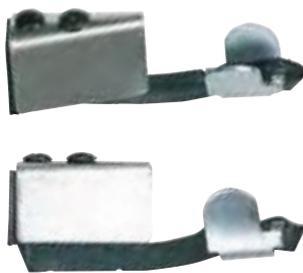


**STRETCH BELT TOOL KITS**  
UNIVERSAL

- For use during the installation of flexible multi ribbed drive belts
- Enables easy damage free stretching of drive belt into the correct position whilst turning the crankshaft pulley by hand
- Suitable for use on vehicles fitted without automatic drive belt tensioners
- Contains three specially designed installation tools
- Supplied in custom moulded EVA foam and steel case

Note: See Timing Tool section for further information

Part No.	Applications
<b>304775</b>	Refer page 186
<b>304776</b>	Refer page 186



**BELT INSTALLATION & REMOVAL TOOL**  
UNIVERSAL

- Designed to remove and replace V-belts quickly and safely
- Robust steel and neoprene construction derails and installs V-belts in a roll off, roll on motion
- Eliminates loosening bolts or stretching belts

Part No.	Application	Pieces
<b>301111</b>	SPA metric 13 x 10mm	2



308235



308236

**VISCIOUS FAN HUB SPANNERS**

- For the removal and installation of viscous fan hubs
- Extra length and thin width makes it manoeuvrable in the engine bay
- Hang hole for easy storage

Part No.	Application	Size	Overall Length
<b>308235</b>	Ford 6 cylinder	32mm	375mm
<b>308236</b>	GM, Ford 8 cylinder	36mm	375mm



**PULLEY REMOVER**  
VAG WATER PUMP

- Uniquely designed to lock deep-drawn water pump pulleys on VW and Audi engines with air conditioning
- Safely locking the water pump pulley allows quick and easy removal of pulley bolts
- Manufactured from drop forged chrome vanadium steel with hard wearing rubber grip

Part No.	Offset	Overall Length
<b>304013</b>	40mm	300mm



308001



308002

**THERMOMETERS**  
POCKET STYLE ANALOGUE

- Handy pocket style thermometers with easy reading dial faces
- Protective PVC dipped sleeve and pocket clip (308002 only)
- Ideal for refrigerant systems, air conditioning, coolant, oil temperatures etc.



Part No.	Range	Dial Diameter	Overall length
<b>308001</b>	-40 to 71°C / -40 to 160°F	Ø 45mm	140mm
<b>308002</b>	0 to 220°F	Ø 25mm	140mm



**WATER PUMP HOLDING TOOL**  
HOLDEN 2.2L

- Holds the timing chain sprocket in place to allow fast, efficient and easy removal of the water pump during service
- Prevents the timing chain sprocket from moving whilst changing the water pump

Part No.	Applications	Pieces
<b>308004</b>	<b>Holden</b> Astra TS 12/2001 - 01/2007 Vectra ZC 03/2003 - 12/2006 Zafira TT 06/2001 - 05/2006	4



**THERMOMETER**  
DIGITAL INFRARED

- Portable and easy to use digital thermometer designed specifically for point and shoot temperature taking
- Laser sighting for simple one hand operation, backlit LCD display, auto-hold function and auto power off
- Protective sleeve, cap and 9V battery (included)
- Ideal for automotive, engineering and industrial applications etc.

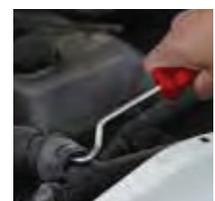


Part No.	Specifications		Specifications	
<b>321500</b>	Display	LCD	Weight	157g
	Auto power off	10 seconds	Laser	<1mW, Class 2 laser
	Battery	9v (NEDA 1604, IEC 6F22006p)	Range	-30°C to 550°C
	Battery life	9 hours (continuous use)	Accuracy	±2°C on -30°C to 100°C, ±2% on -101°C to 550°C
	Dimensions	148H x 105W x 42D (mm)		



**HOSE REMOVAL SET**

- Designed specifically for manipulating the seal when removing or working with hoses
- Two clever hook designs reach into hard to get areas where working space is limited
- Ergonomic plastic handles for superior grip and manoeuvrability



Part No.	Overall Length	Pieces
<b>301151</b>	200mm	2



**HOSE/PIPE CUTTERS**

- Straight blade cutting for common rubber and PVC tube and hose
- Heavy duty hardened and ground stainless steel blades provide a clean and precise cut
- Suitable for cutting heater hose, airline hose, fuel and vacuum hose, PVC tubing and more
- Not suitable for metal cutting
- Spares: Replacement blade set 2 piece (Part No. 321026A)



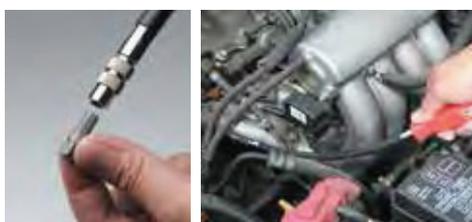
Part No.	Description	Body	Jaw Opening (Max)	Overall Length	Spares
<b>321026</b>	Precision angled cutter w/protractor & 3 blades	Plastic & steel	20mm	240mm	321026A
<b>308011</b>	Mini hose cutter E.g. A/C hose	Plastic	14mm	150mm	–
<b>301923</b>	Hose/pipe cutter	Plastic	25mm	150mm	–
<b>301028</b>	Hose/pipe cutter, ratcheting heavy duty	Steel	42mm	190mm	–
<b>321041</b>	Hose/pipe cutting mini saw (hardened alloy)	Plastic & rubber	–	220mm (open)	–



**HOSE CLAMP NUT DRIVERS**

- Designed for trouble free installation and removal of most modern hose clamps
- Flexible shaft enables access to hard to reach hose clamps
- Ergonomic handle offers comfort and a superior grip
- Includes socket attachments: 6, 7 and 8mm
- Suitable for use on all Tridon worm drive hose clamps

Part No.	Overall Length
<b>CND-1</b>	150mm
<b>CND-2</b>	300mm
<b>CND-3</b>	600mm
<b>CND-4</b>	900mm



**HOSE CLAMP PLIERS**  
CLIC TYPE

- Spring loaded pliers suitable for hose clamp installation and removal
- Suitable for CLIC, CLIC-R and Tridon SL series hose clamps
- Specially designed jaws allow a quick change from installation to removal by simply turning over pliers
- Manufactured from chrome treated alloy steel with PVC dipped handles



Part No.	Jaw Opening (Max)	Overall Length
<b>321011</b>	20mm	180mm



301030



301031



Wide flat band head



Cross slotted head

**HOSE CLAMP PLIERS**  
CONSTANT TENSION

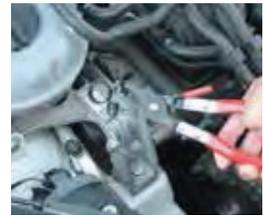
- For the installation and removal of constant tension style hose clamps
- Locking mechanism holds clamp in position and spring return ensures ease of operation
- Manufactured from chrome treated alloy steel with PVC dipped handles



Part No.	Jaw Style	Jaw Opening (Max)	Jaw Width	Overall Length
<b>301030</b>	Angled 45° (cups)	68mm	17mm	215mm
<b>301031</b>	Straight (cup & slot)	45mm	11mm	215mm

**HOSE CLAMP PLIER SET**  
CONSTANT TENSION

- Two piece set includes both cross slotted jaw and wide flat band jaw pliers to suit most ring and flat band type hose clamps
- Ratchet locking mechanism holds clamp in open position for easy installation and removal
- Suitable for use with Tridon CTC series clamps
- Manufactured from chrome treated alloy steel with PVC dipped handles



Part No.	Description	Jaw Opening (Max)	Jaw Width	Overall Length
<b>301171</b>	Cross slotted head	64mm	12mm	215mm
	Wide flat band head	64mm	25mm	215mm



**HOSE CLAMP PLIERS**  
CONSTANT TENSION  
FLEXIBLE CORD

- For the installation and removal of constant tension style hose clamps
- Locking mechanism holds clamp in position and spring return ensures ease of operation
- Flexible cable offers extensive reach and access to difficult areas
- Manufactured from chrome treated alloy steel
- Black phosphate finished body and PVC dipped handles



Part No.	Body x Flexible Cord Length	Jaw Opening (Max)	Jaw Width	Overall Length
<b>301172</b>	210 x 630mm	53mm	21mm	215mm

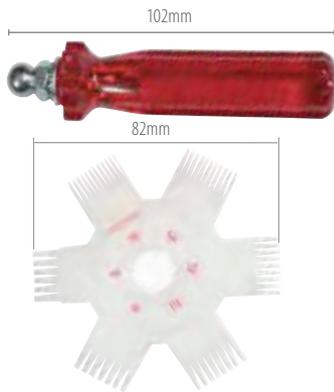


**COOLING SYSTEM VACUUM PURGE KIT**

- For quick, easy and mess free refilling of entire cooling system
- Eliminates need for bleeding and purging system to eliminate air pockets
- Quick connect to standard workshop air line
- Used in conjunction with adaptors from master cooling system tester kit (Part No. 308500)
- Includes universal adaptor for use on most cars and light commercial vehicles



Part No.	Air Pressure/Consumption	Air Inlet	Hose Length
<b>308552</b>	90psi/12cfm	1/4" BSP	900mm



**RADIATOR CAP TESTER ADAPTORS**  
MASTER SET 9 PIECE

- Master set of adaptors used to test the integrity of radiator caps
- Colour coded for quick and easy identification
- Manufactured from heavy duty ABS plastic



**RADIATOR FIN STRAIGHTENER**

- Multi sized tool used to clean and straighten condenser radiator and evaporator coil fins with gaps
- Small and compact unit with solid grip screwdriver style handle
- Nylon fin blades and acetate handle



Part No.	Size (fins/inch)
<b>308240</b>	8, 9, 10, 12, 14, 15

Part No.	Contents	Description	Applications
<b>308350</b>	308351	Bayonet - Blue (Japanese extra small)	Late model Japanese
	308352	Bayonet - Orange (Japanese small)	Ford, Honda, Nissan, Mitsubishi, Subaru & Toyota
	308353	Bayonet - Black	Standard 1 5/8"
	308354	M45 screw (external) - Orange	VAG, Renault
	308355	M48 screw (external) - Red	Citroen, Fiat, Peugeot, Renault & Volvo
	308356	M52 screw (external) - Yellow	BMW, GM, Ford, Landrover, VW
	308357	M44 screw (external) - Green	Renault & Volvo
	308358	M52 screw (external) - Black	BMW
	308359	M62 screw (external) - Black	Mercedes Benz



**COOLING SYSTEM PRESSURE TESTER**  
LCV & HGVS

- Similar kit to the 308500 but designed for light commercials and heavy goods vehicles
- Seven specialist adaptors to suit some popular makes in Australia and New Zealand
- Hand operated pressure testing pump which features a heavy duty flexible hose, quick coupler with pressure release valve and dual graduated gauge (35psi/2.5bar)
- Adaptor caps are provided to fit some Mercedes-Benz Sprinter, Volvo, MAN, Renault, DAF, Iveco, ERF and Scania
- Supplied in custom moulded foam tray in plastic hard case



Scan for application list

Part No.	Contents	Specifications	Image
<b>308390</b>	308553	Gauge & Pump 35psi/2.5bar	
		Hose with quick connect fittings	
308393	<b>Ref. 3</b>	Bayonet connector cap, Ø 38.5mm	
308394	<b>Ref. 4</b>	Fine threaded cap, Ø 43 mm	
308395	<b>Ref. 5</b>	Threaded cap, Ø 49 mm	
308396	<b>Ref. 6</b>	Coarse threaded cap, Ø 43 mm	
308397	<b>Ref.7</b>	Threaded cap, Ø 69 mm	
308398	<b>Ref. 8</b>	Threaded cap, Ø 39 mm	
308399	<b>Ref. 9</b>	Threaded cap, Ø 59 mm	



**COOLING SYSTEM PRESSURE TESTER**

UNIVERSAL TAPERED CONE ADAPTORS

- Tapered style adaptors are adjustable in size and can expand to meet the application requirement size, especially larger applications
- Gauge is colour coded and pump is constructed from polyoxymethylene (POM), a high impact substance stronger than steel, yet able to withstand the corrosive factors of inhibitors ensuring a long service life
- Suitable for Japanese, European and American style radiators
- Ideal for trucks, machinery, plant equipment etc.

Part No.	Description	
<b>308380</b>	Cooling system pressure tester - Truck	
Contents	Description	Image
308382	Expanding tapered adaptor 17 - 35mm	
308383	Expanding tapered adaptor 26.5 - 41mm	
308384	Expanding tapered adaptor 37 - 50mm	
308385	Expanding tapered adaptor 47 - 60mm	
308301	Pump & gauge assembly 0 - 35psi (0 - 2.5bar)	



**RADIATOR BACK FLUSHER**

- Simple and effective tool used to clean cooling systems and heater cores without the need to dismantle or use caustic cleaning solutions
- Connects to heater hoses as well as common garden hoses
- Manufactured from plastic and aluminium



Part No.	Size
<b>308237</b>	13mm (1/2"), 16mm (5/8") & 19mm (3/4")

**COOLING SYSTEM PRESSURE TESTER & VACUUM PURGE KIT**

MASTER 36 PIECE

- Comprehensive master kit enables cooling system pressure testing, radiator cap pressure testing and cooling system purge and refill
- Vacuum purge allows the evacuation of air pockets in cooling system after service or repairs
- Suitable for diagnosing coolant leaks and overheating issues on most passenger and light commercial vehicles
- Large easy to read colour coded dials for accuracy
- 22 test cap adaptors include identification numbers and colour code for quick referencing
- 90° elbow adaptor suitable for difficult or obscure positions
- Handy thermometer for checking heater and air conditioning temperature after service or repair
- Universal tapered cone adaptor enables testing on plant and agriculture machinery
- Includes user guide and full vehicle application list covering 95% of AUS/NZ Car parc
- Supplied in heavy duty storage case
- Spares: Replacement rubber seals for bayonet test cap 308503A, 308504A, 308505A



Scan for application list



Part No.	Description
<b>308500</b>	Cooling System Pressure Tester & Vacuum Purge Kit

COOLING SYSTEM PRESSURE TESTER & VACUUM PURGE KIT 308500 CONTENTS

<p>I.D. No. 0 308557</p>  <p>Thermometer 210mm -50 to +150 °C</p>	<p>I.D. No. 1 308553</p>  <p>Pressure pump 0 - 35psi (0 - 2.5bar) Pressure pump hose Length: 600mm</p>	<p>I.D. No. 2 308554</p>  <p>Radiator cap tester R123 &amp; R124 (Black)</p>	<p>I.D. No. 2 308555</p>  <p>Radiator cap tester R123 &amp; R125 (Blue)</p>	<p>I.D. No. 3 308503</p>  <p>Bayonet test cap Small</p>
<p>I.D. No. 4 308504</p>  <p>Bayonet test cap Medium</p>	<p>I.D. No. 5 308505</p>  <p>Bayonet test cap Large</p>	<p>I.D. No. 6 308506</p>  <p>Screw type test cap Orange</p>	<p>I.D. No. 7 308507</p>  <p>Screw type test cap Brown</p>	<p>I.D. No. 8 308508</p>  <p>Screw type test cap White (External thread)</p>
<p>I.D. No. 9 308509</p>  <p>Screw type test cap Pink (External thread)</p>	<p>I.D. No. 10 308510</p>  <p>Screw type test cap Grey</p>	<p>I.D. No. 11 308511</p>  <p>Screw type test cap Red</p>	<p>I.D. No. 12 308512</p>  <p>Screw type test cap Dark green</p>	<p>I.D. No. 13 308513</p>  <p>Screw type test cap Sky blue</p>
<p>I.D. No. 14 308514</p>  <p>Screw type test cap Yellow</p>	<p>I.D. No. 15 308515</p>  <p>Screw type test cap Coral</p>	<p>I.D. No. 16 308516</p>  <p>Screw type test cap Purple</p>	<p>I.D. No. 17 308517</p>  <p>Screw type test cap Light blue</p>	<p>I.D. No. 18 308518</p>  <p>Screw type test cap Turquoise</p>
<p>I.D. No. 19 308519</p>  <p>Screw type test cap Pink</p>	<p>I.D. No. 20 308520</p>  <p>Screw type test cap White</p>	<p>I.D. No. 21 308521</p>  <p>Screw type test cap Copper</p>	<p>I.D. No. 22 308522</p>  <p>Screw type test cap Green</p>	<p>I.D. No. 23 308523</p>  <p>Screw type test cap Pink/white (External thread)</p>
<p>I.D. No. 24 30851H</p>  <p>Screw type test cap Black</p>	<p>308559</p>  <p>Tapered cone adaptor universal 15 - 45mm</p>	<p>308558</p>  <p>Vacuum purge unit 0 to -76 cmHg (0 to -1bar) Vacuum purge hose 500mm</p>	<p>308562</p>  <p>Elbow connector 90°</p> <p>308556</p>  <p>Adaptor wrench Length: 94mm</p>	<p>308560</p>  <p>Coolant suction hose 1200mm Ø10mm Air bleeding hose 600mm Ø 8mm</p>

## BRAKE



### BRAKE CALIPER PISTON WIND BACK KIT MECHANICAL UNIVERSAL ADJUSTABLE ADAPTORS

- Universal brake caliper wind back tool for resetting the brake piston during brake pad service and repairs
- T-bar design and non-slip PVC moulded centre grip enables efficient operation and retraction
- Suitable for both left and right hand thread brake calipers and two/three pin brake caliper pistons
- Includes two and three pin adjustable adaptors, magnetic two pin standard adaptor, reaction plate, main tool body and t-handle
- Adaptors are adjustable in size to suit most common make and model applications
- Supplied in custom moulded plastic hard case



Part No.	Description	Size
<b>310378</b>	Main body ram	175mm
	T-bar	100mm
	Reaction plate	–
	Two pin adaptor	Range: 23 - 37mm Pin: Ø 4mm
	Three pin adaptor	Range: 22 - 33mm Pin: Ø 4mm
	Two pin magnetic adaptor	25mm



### DISC BRAKE PAD SPREADER

- Used to return the brake caliper piston to the resting position during removal, installation and service repairs on the disc brakes
- Threaded T-bar handle and reaction plate
- Suitable for front and rear calipers in universal applications



Part No.	Reaction Plate	Jaw Opening (Max)	Spread (Max)	Overall Length
<b>310265</b>	100 x 40 x 4mm	40mm	110mm	150mm



### BRAKE CALIPER PISTON WIND BACK KIT MECHANICAL

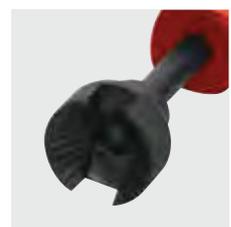
- Comprehensive kit for returning the brake piston to the resting position during removal, installation or carrying out service
- Large T-bar handle for high torque low effort operation
- Kit includes adaptors, forcing plate and forcing screw body
- Suits most popular modern vehicles including Ford, GM, Honda, Mazda, Mitsubishi, Nissan, Saab, Subaru, Toyota, VAG
- Supplied in custom moulded plastic hard case

Part No.	Description	Application
<b>310350</b>	Forcing plate	–
	Forcing screw body	–
	Adaptor - Wind back	Ford Fairlane ZJ, LTD FC, Falcon XB, XC, XD, GM Holden HJ, HX, HZ
	Adaptor - Wind back	Ford Falcon EA, EB, Fairlane NA, NB, LTD, DA
	Adaptor - Wind back	Ford Falcon - XE, XF, Fairlane ZK, LTD FD
	Adaptor - Wind back	Ford Telstar, Laser, Focus, Mazda 323, 626, Mitsubishi Starion, Scorpion, Galant, Lancer
	Adaptor - Wind back	Ford, Mazda, Saab
	Adaptor - Wind back	Ford, Nissan, Peugeot, Rover, Toyota, VAG
	Adaptor - Wind back	Mitsubishi Magna - TM, TN, Nissan Pulsar
	Adaptor - Wind back	Nissan Pintara, Syklone
	Adaptor - Push back	BMW, GM Commodore, Honda, Jaguar, Mitsubishi, Mercedes Benz, Nissan, Toyota



### BRAKE SPRING COMPRESSOR

- For removing and installing brake shoe retaining springs on vehicles with drum brakes
- Notched design for washers with ear tabs
- Ergonomic plastic handles



Part No.	Washer Size	Overall Length
<b>310256</b>	8 - 24mm	150mm



**BRAKE PISTON REMOVAL KIT**

- Designed for caliper piston removal to allow easy piston seal replacement
- Enables frozen or seized caliper pistons to be removed or freed from caliper
- Three adaptor sizes provided with various working ranges
- Simply insert tool into caliper, adjust adaptor to size and turn handle to release piston
- Supplied in custom moulded plastic hard case



Part No.	Description	Size Range	Overall Length	Jaw Opening (Max)
<b>310376</b>	Head	25 - 35mm	150mm	40mm
	Adaptor A	35 - 45mm		
	Adaptor B	45 - 55mm		



**BRAKE CALIPER PISTON WIND BACK KIT**  
PNEUMATIC

- Pneumatic operation enables easier wind back of caliper piston to resting position during removal, installation or service repairs on the disc brake pads
- Professional trade kit suitable for both left and right handed applications
- Suitable for both wind back and push back brake calipers
- Supplied in custom moulded plastic hard case



**BRAKE SPRING PLIERS**  
HEAVY DUTY

- Used to remove and install brake shoe retaining springs on drum brakes
- Socket end removes spring from anchor stud and notched end installs spring on anchor
- 310258: Provides the extra leverage as required for servicing hydraulic wedge type and "S" cam air brakes used on many trucks and trailers
- Manufactured from chrome plated vanadium steel
- Spares: Replacement pins to suit 310258  
(Part No. 310270 - Single hook & Part No. 310271 - Double hook)



Part No.	Description	Overall Length	Spares
<b>310257</b>	Brake spring pliers	300mm	-
<b>310258</b>	Brake spring pliers - Truck	660mm	310270 & 310271

Part No.	Application	Adaptors
<b>310375</b>	L & R hand piston & wind back calipers	15

Item Ref.	Application (F = Front, R = Rear)	Image	Item Ref.	Application	Image
0	GM most 2 1/2" diameter pistons		8	GM most 1 7/8" diameter pistons	
2	Citroen XM - Xantia (F&R), Honda		9	GM most 2 1/8" diameter pistons	
3	Audi (F), Fiat, Alfa Romeo (F), Ford Fiesta (F), Isuzu (F), Jaguar XJ6, XJ40 (F&R), BMW 318is, 320i, 325TD, 518i, 525i & 1x, 740i, 850ci, M5 (F), Mercedes Benz 190, 200, 300, 400, 500 series (F), Mitsubishi Colt (F), Toyota Camry (F), Volvo, Volkswagen Passat, Golf GTI (F)		A(Z)	Renault R21, Laguna (R)	
			E	Nissan Maxima, Ford	
4	Ford Australia & NZ, Mazda (R), Fiat, Toyota, Saab 9000 (R), Alfa Romeo 164 2.0 (R), Honda Prelude, CRS 16i		F(G)	Opel (R)	
5	3/8" adaptor		K	Ford Motors, Mini R68, Mazda 3	
6	Nissan Primera, Volkswagen Golf IV		M	SAAB, Honda, Alfa Romeo, VAG	
7	Audi 80, 90, V8 + 100, Coupe E (R), Subaru L + Z (R), Ford, Nissan Bluebird 1.8 Turbo, Silvia Turbo, Primera 2.0i LS/ GS/GSX (R), Peugeot, Toyota Celica, Corolla GT, MR2 (R), Volkswagen Golf Gti, Jetta Synchro, Jetta Gti 16v, Passat, Citroen, Alfa Romeo, Fiat, Honda, Jaguar, Renault, SAAB, Seat		N	Citroen	

**BRAKE**

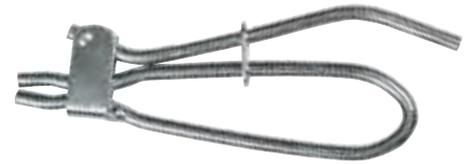


**BRAKE CALIPER SPREADER & RETRACTOR RATCHETING**

- Simple and efficient tool designed to easily retract the brake piston during brake pad replacement
- Quick change lever enables easy change from spreading to retracting
- Centred ratchet evenly distributes force to prevent misalignment of pistons
- Easy to use ratchet style rotates 360° so the tool can be placed in any position



Part No.	Description	Spread	Spreader Plates	Overall Length
<b>310377</b>	Individual spreader	40 - 65mm	115 x 60mm	270mm
<b>310380</b>	Spreader kit	40 - 65mm	90 x 60mm, 148 x 60mm, 180x 60mm	270mm



**BRAKE/FUEL LINE CRIMPING PLIERS**

- Designed to shut off (restrict) flow of fluid
- Rounded jaws provide a damage free secure grip, ring lock to hold the plier in the selected position
- Suitable for hydraulic brake and clutch lines, hydraulic oil lines and air lines etc.
- Manufactured from chrome treated alloy steel

Part No.	Hose Capacity	Jaw Opening (Max)	Jaw Width	Overall Length
<b>301026</b>	5-12mm	14mm	6mm	165mm

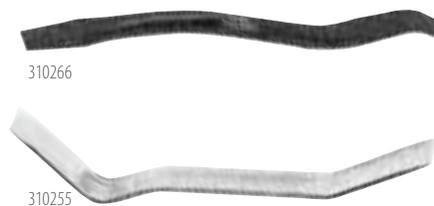


**DISC BRAKE PISTON CUBE REAR**

- Used to return the brake caliper piston to the resting position when removing, installing or carrying out service repairs to the disc brakes
- Rotates the parking brake-activated piston back into the caliper cylinder during replacement worn pads on vehicles
- Designed to fit five different cavity configurations and most popular vehicles
- Each face of the cube has a different pin configuration
- Manufactured from heavy duty carbon steel



Part No.	Square Drive	Size (Pins not included)
<b>310269</b>	3/8"	30 x 30mm



**BRAKE ADJUSTING TOOLS**

- For use when removing, installing or carrying out brake lining adjustment on drum brakes
- Perfectly shaped during manufacture to probe drum brake backing plates during adjustment
- Suitable for screw and start type adjusters

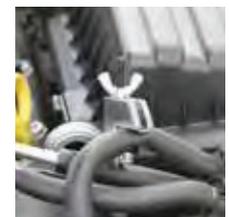


Part No.	Description	Width	Overall Length
<b>310266</b>	Standard	8.5mm	132mm
<b>310255</b>	Heavy duty	14mm	185mm

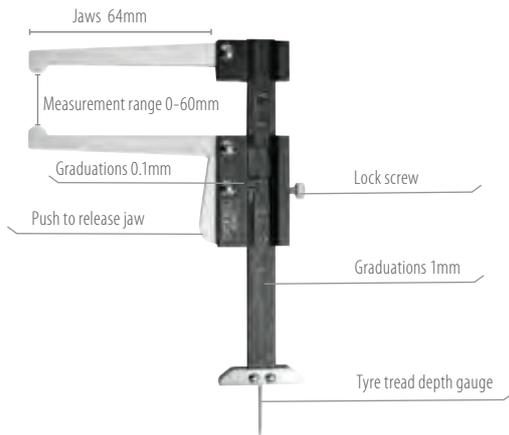


**HOSE PINCHERS ANVIL STYLE**

- Designed to allow variable adjustment, through wing nut and screw, to stop or restrict flow as required without damage
- Anvil style allows maximum clamping force without damaging hose
- Suitable for hydraulic brake and clutch lines, hydraulic oil lines and air lines etc.
- Manufactured from plated steel for strength and durability
- Simple, effective and safe



Part No.	Jaw Opening (Max)	Pieces
<b>301027</b>	22mm	2



**DISC BRAKE & TYRE DEPTH GAUGE**

- Simple and easy to use tool used to attain measurements of disc brake thickness and tyre tread depth
- Floating jaw assembly enables easy removal of caliper from disc while retaining the gauge reading
- Graduated main body and graduated sliding bar with locking screw
- Durable aluminium construction

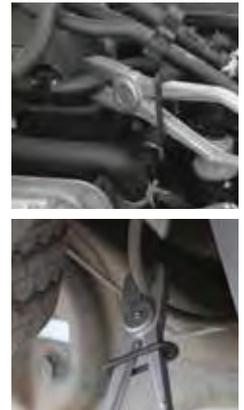


Part No.	Measuring Range	Graduated Body	Graduated Sliding Bar
<b>310020</b>	0 - 60mm	1mm	0.1mm



**HOSE CLAMPING PLIER SET  
ALUMINIUM 3PIECE**

- For shutting off (restricting) flow of fluid or vacuum
- Individual slide lock mechanism for one handed operation
- Robust design made from aluminium for a long service life
- Completely resistant to common workshop fluids



Part No.	Size	Jaw Opening (Max)	Jaw Depth	Overall Length	Qty
<b>321105</b>	Small	16mm	16mm	150mm	1
	Medium	26mm	31mm	180mm	1
	Large	65mm	71mm	245mm	1

**HOSE CLAMPING PLIERS  
REINFORCED NYLON**

- For shutting off (restricting) flow of fluid or vacuum
- Individual slide lock mechanism for one handed operation
- High visibility coloured non-conductive material
- Ideal for use on brakes, fuel, heaters, radiators, vacuum hoses
- Chemical resistant nylon is resistant to most automotive chemicals, brake fluid, fuel, mineral and synthetic oils etc.



301022



301024



301023



321028



321029



Part No.	Description	Jaw Opening Max	Jaw Width	Overall Length	Pieces
<b>301022</b>	Hose clamping plier	20mm	10mm	150mm	1
<b>301023</b>	Hose clamping plier	33mm	12mm	185mm	1
<b>301024</b>	Hose clamping plier	65mm	12mm	255mm	1
<b>321028</b>	Hose clamping plier w/quick release spring lock	40mm	12mm	220mm	1
<b>321029</b>	Hose clamping plier set - Angled tip 90° (n/a individually)	18, 22, 40mm	9, 12, 13mm	155, 165, 225mm	3
<b>301025A</b>	Hose clamping plier set - 4 x 301022	20mm	10mm	150mm	4
<b>301025</b>	Hose clamping plier set - 1 x 301022, 301023 & 301024	20, 33, 65mm	10 & 12mm	150, 185, 255mm	3

**BRAKE**



**FLUID QUICK LOCK FUEL SET**

- Multipurpose kit for clamping and sealing automotive pipes
- Supplied with 3 dies for pipe sizes 4-10mm and 1 specialty die for banjo pipes
- Suitable for brake lines, fuel lines, hydraulic lines etc.
- Supplied in custom foam tray and plastic storage case

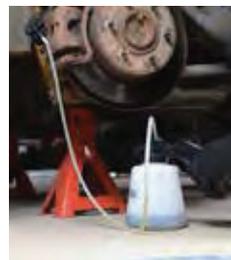


Part No.	Size Range	Clamps
<b>321034</b>	4 - 10mm	4



**BRAKE BLEEDER/FLUID EXTRACTOR KIT PNEUMATIC 1L**

- Air operated brake bleeder simplifies bleeding of brake and clutch systems in automotive applications
- Unique rubber adaptor provides a tight seal around the bleed nipple to ensure leak free operation
- Uses standard workshop air supply via 1/4" BSP airline fitting
- Perfect addition for any workshop or DIY use
- Spares: Replacement hose set (Part No. 305093A)



Scan here for video



Part No.	Capacity	Extraction Rate	Working Pressure	Air Inlet	Spares
<b>310005</b>	1L	1.6L/Min.	90 - 170 psi	1/4"	305093A

**BRAKE BLEEDER & AUTO FILLER KIT PNEUMATIC 2L**

- Turns brake and clutch system bleeding into an easy, quick task
- Includes both vacuum bleeder unit (2L) and auto filler unit (1L)
- Standalone brake bleeder that uses vacuum to "suck" the fluid out
- Fixing valve and safety cup for automatic cut-off extractor
- By "sucking" the fluid away the risk of sudden spillage is significantly reduced
- Suitable for bleeding hydraulic brake and clutch systems by gravity feeding the fluid and extracting old fluid from nipple
- No need to have a pressure tight seal on those difficult access master cylinder reservoirs
- Uses standard workshop compressed air supply to generate vacuum
- Light (<1Kg), portable and single handed operation
- Supplied with 1 metre silicone hose with universal rubber adaptor suitable for most vehicles brake oil bleeder fittings
- Auto Filler Unit: Handy unit attaches directly to the top of the reservoir (space permitting) ensuring the reservoir does not run dry during the bleeding process
- Spares: Replacement hose set (Part No. 305093A)



Part No.	Capacity	Working Pressure	Air Inlet	Spares
<b>305093</b>	2L	40 - 170psi	1/4"	305093A





**BRAKE BLEEDER KIT**  
ONE MAN MAGNETIC

- Designed for carrying out one man brake bleeding operation on passenger cars, light commercials and motorcycles
- Easy to use kit includes powerful magnet to secure bottle hands free, three nylon adaptors to fit all brakes and plastic bottle for discharged fluid collection
- One man operation with no assistance needed



Part No.	Capacity	Hoses
<b>310261</b>	60ml	2 x 160mm & 1 x 500mm

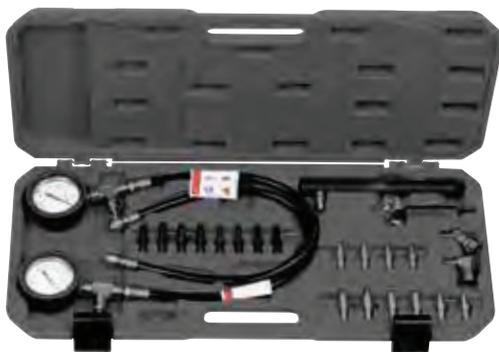


**BRAKE BLEEDER PUMP KIT**  
VACUUM

- Multi-purpose kit designed to test and service a number of automotive system functions including one-man brake bleeding, vacuum testing and pressure testing fuel systems
- Suitable for passenger vehicles and light commercials where testing for vacuum or fluid sealing is required
- Applicable for testing vacuum operated sensors and components including heater and air conditioning baffles, PCV & EGR valves etc.
- Supplied in custom moulded plastic hard case



Part No.	Description	Specifications	Qty
<b>310012</b>	Hand pump	Vacuum range: 0 to -30psi (0 to -1bar)	-
		Pressure range: 0 to 60psi (0 to 4bar)	-
	Bleeder Pack	Small nipples 30mm	4
		Cone 28mm	2
		Long nipple 50mm & 57mm	1
		Large cone 45mm	1
	Hose reducer adaptor	Ø 5mm & Ø 7mm	1
	Bleed nipple adaptors	Ø 6mm & Ø 8mm	3
	Hose pack	80mm	2
		95mm	2
	Connector pack content	Ø 10mm x Ø 6mm	1
		Ø 8mm x Ø 6mm	1
		Ø 7mm x Ø 7mm	1
		Ø 7mm x Ø 5mm	1
	Reservoir bottles	120ml	2



**BRAKE PRESSURE TEST KIT**  
UNIVERSAL

- Comprehensive universal brake system pressure test kit used for testing and diagnosing hydraulic system faults
- Tests for problems such as leaks and restrictions within the hydraulics of both anti-lock and conventional braking systems
- Applicable for non-ABS systems, ABS systems, Teves systems and Bosch systems
- Each gauge is equipped with easy to read dials and bleeder valve
- Includes swivel fitting 45° & 90°, pressure adaptor, Teves adaptor and metric and imperial bleeder screws
- Supplied in custom moulded plastic hard case



Part No.	Gauges	Hose Working Pressure	Bleeder Screws
<b>310400</b>	2 x 3000psi (200 bar)	4500psi	1/4", 5/16", 3/8", 7/16", M7 x 1.0, M8 x 1.25, M10 x 1.0, M10 x 1.5



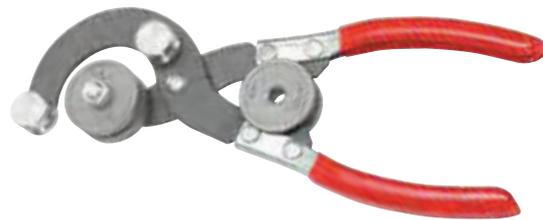
**BRAKE BLEEDER WRENCH SET**

- Compactly designed universal brake bleeder wrench set for simple and efficient bleeding of hydraulic clutch and brake systems without removing wheels
- Colour coded bleeder nipples for easy identification
- Comes with transparent silicon hose with one way check valve
- Suitable for passenger vehicles, light commercial vehicles, heavy vehicles, motorcycles
- Six-point socket at one end and bleeder nipples at opposing end
- Supplied in custom moulded foam tray in plastic hard case



Part No.	Fastener Type	Wrench Sizes	Wrench Length	Hose Length
<b>310007</b>		7, 8, 9, 10, 11mm	120mm	1.2m

**BRAKE**



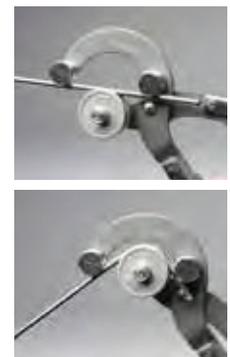
**TUBE BENDERS**

- Workshop tube benders suitable for aluminium, brass, copper and mild steel tubing
- Knurled handles for maximum grip and comfort
- Simple and efficient operation with built in gauge to ensure accurate bending from 0 - 180°
- Durable metal construction for superior toughness and longevity



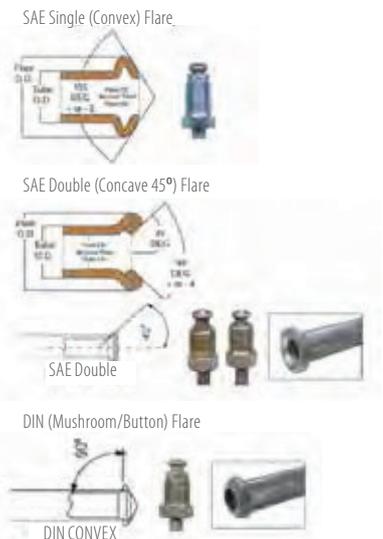
**TUBE BENDER  
PLIER STYLE**

- Plier style is easy to use and supplied with two roller adaptors
- Roller adaptors lock into place with locating pin
- Suitable for bending copper and steel without kinking or flattening
- Place tube between adaptor and stud then squeeze handle to make the necessary bend



Part No.	Tube Capacity	Overall Length
<b>301034</b>	6, 8, 10mm	260mm
<b>301036</b>	4, 6, 8, 10mm	300mm

Part No.	Tube Capacity	Overall Length
<b>301698</b>	3/16", 1/4", 5/16", 3/8"	260mm



**FLARING TOOL KIT  
MECHANICAL & HYDRAULIC**



- Professional hydraulic flaring tool kit provides high quality pipe flaring
- Suitable for various applications including brake and clutch lines, automatic transmission lines and plant hydraulic lines etc.
- Convenient and easy to use hand held unit with powerful 8T hydraulic ram
- Comprehensive all in one kit includes hydraulic flaring tool with dies and punches, deburr tool, tube bender and cutter
- Suits: aluminium, brass, copper and mild steel pipe
- Produces: Double /SAE 45° flared, DIN/ISO double flare, AN /JIC 37°single flare
- Automotive applications: There are two basic types of flares used on OEM automotive brake systems throughout the world. The SAE Double flare and the DIN flare. The SAE style is most commonly found in American and Asian car markets, while DIN is more common in European and British markets.
- Spares: Replacement die sets and punches (Part No. 310006A - 310006J)

Part No.	Die set	Image	Punch	Image
<b>310006</b>	310006A Die set 3/16", 4.75mm		310006E Punch 3/16", 4.75mm, 5.0mm (DIN)	
	310006B Die set 5mm		310006F Punch 3/16", 4.75mm, 5.0mm (OP 1)	
	310006C Die set 6mm		310006G Punch 1/4", 6mm (DIN)	
	310006D Die set 1/4"		310006H Punch 1/4", 6mm (OP 1)	
			310006J Punch 3/16", 4.75mm, 5.0mm, 6.0mm, 1/4" (OP 2)	

301701



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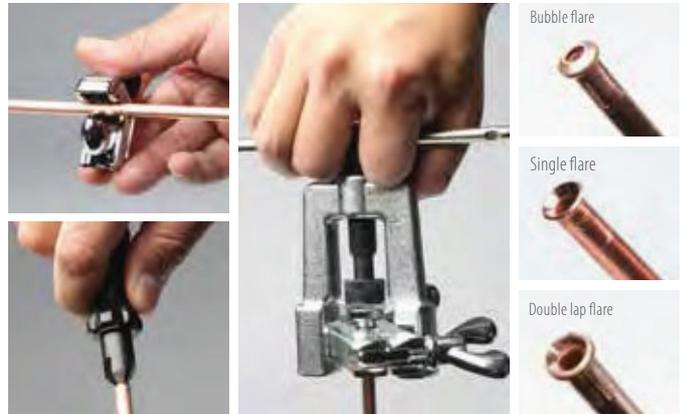
310008



## FLARING TOOL KITS MECHANICAL

- Extensive pipe and tubing manipulation kits for copper, brass, mild steel and aluminium type tubing
- For creating single, double lap and bubble flares on copper, brass, mild steel and aluminium tubing in metric and imperial sizes
- Suitable for hydraulic brake and clutch lines, transmission oil lines, high pressure hydraulic lines and air lines etc.
- Both kits include tube cutters and 310008 also includes a deburring tool
- Supplied in custom moulded plastic hard case

Part No.	Description	Tube Cutter (O.D.)	Flaring Adaptors
<b>301701</b>	Flaring tool kit - Metric	3 - 16mm (1/8" - 5/8")	4.75, 5, 6, 8, 10mm
<b>310008</b>	Flaring tool kit - Metric & Imperial	3 - 16mm (1/8" - 5/8")	4, 4.75, 6, 8, 10mm & 3/16", 1/4", 5/16", 3/8", 1/2"



## FLARING & SWAGING KIT

- Comprehensive kit includes drop forged vanadium steel yoke and die blocks for carrying out cold swaging and flaring
- Range of adaptors and two die blocks accommodate 3mm to 20mm tubing
- Suitable for use on copper, brass and aluminium tubing
- Supplied in custom moulded plastic hard case

Part No.	Application Sizes
<b>301300</b>	3mm 1/8" (flaring only), 5mm 3/16", 6mm 1/4", 8mm 5/16", 10mm 3/8", 16mm 5/8", 20mm 25/32"

301032



301033



## TUBE CUTTERS

- Wide dual wheel roller design for neat and square tube cutting
- Metal construction with hardened SK2 alloy steel cutting wheel
- Suitable for use on plastic, brass, copper, aluminium and mild steel tubing
- Ideal for automotive, plumbing, industrial and hardware applications
- Tapered burr remover to clean piping after cutting (301033 only)
- Spares: Replacement blade set 2 Pc. (Part No. 301142)

Part No.	Description	Size Range	Spares
<b>301032</b>	Mini tube cutters	3 - 15mm (1/8" - 9/16")	301142
<b>301033</b>	Tube cutters	3 - 30mm (1/8" - 1 1/8")	301142



## BRAKE

### DEBURRING TOOLS

- Designed for removing internal and external surface burrs following cutting or drilling
- Suitable for materials having spiral chips such as steel, aluminium, copper and zinc
- Ergonomic handle and versatile swivel blade for manoeuvrability to work at any angle - 301295 is supplied with additional HSS M35 grade blade
- Spares: Replacement blade for 301295 (Part No. 301295A)



301295



321058

Part No.	Description	Blade	Tube Size	Tube diameter	Spares
<b>301295</b>	Deburring tool 150mm - Universal	8mm	-	-	301295A (each)
<b>321058</b>	Deburring tool - master 6 in 1	1	14mm	Ø 2mm	
		2	16mm	Ø 2mm	
		3	18mm	Ø 2mm	
		4	20mm	Ø 2mm	
		5	26mm	Ø 3mm	
		6	32mm	Ø 3mm	



## BEARING



321084



321085

### BEARING RACE & SEAL DRIVERS ADJUSTABLE SIZING UNIVERSAL

- Aluminium all in one self contained precision drivers with rotating handle and expanding jaws to seat races/bearings or seals with ease
- Three stepped jaws quickly adjust eliminating the need for a driver and several different heads
- Lock bolt holds the jaws to the preferred diameter (allen key included)
- Simple to use: twist the head to adjust seal driver sizing
- Two options available covering different size ranges

Part No.	Size Range
<b>321084</b>	9.5 - 50mm (3/8" - 131/32")
<b>321085</b>	18 - 90mm (45/64" - 135/64")



### OIL SEAL REMOVER

- Specially designed tool enables a hook and lever action to dislodge oil and grease seals
- Different sized hook ends to cover a wide range of small and large seal applications
- Ergonomic plastic handle for comfort and manoeuvrability
- Suitable for removing seals in automatic and manual transmissions, differentials, wheel bearing seals etc.
- Includes spare hook tip and retaining screws

Part No.	Overall Length
<b>301042</b>	310mm



### BEARING & OIL SEAL INSTALLATION KIT

- Comprehensive kit covering various sizes to assist in the installation of bearings, race and oil seals
- Manufactured from aluminium for damage free bearing and oil seal replacement
- Supplied in custom moulded plastic hard case



Part No.	Tapered Cones	Driver Length
<b>301350</b>	9	140mm
Contents	Size Diameter	Qty
301351	Ø 40mm	1
301352	Ø 44mm	1
301353	Ø 50mm	1
301354	Ø 60mm	1
301355	Ø 63mm	1
301356	Ø 65mm	1
301357	Ø 72mm	1
301358	Ø 76mm	1
301359	Ø 80mm	1
301360	Driver shaft 140mm	1



### BEARING/HUB CAP REMOVER

- Tapered jaws are designed to sit behind the crimped edge of the bearing dust cap
- Also suitable as a hub cap remover via the inbuilt hub cap lug on the handle

Part No.	Jaw Opening (Max)	Overall Length
<b>301041</b>	20mm	200mm



305150



305230



305161

### BEARING PACKERS

- Range of bearing packers designed to flush out old grease from bearings without having to degrease bearings first
- Simple to use units - Insert bearing into the bearing packer, connect grease gun to nipple pump to expel grease and evenly replace with fresh grease
- Grease can be filled manually or with a grease gun
- Suitable for cars, trailers, light trucks and motorcycles

Part No.	Description	Bearing Capacity I.D. (Min)	Bearing Capacity O.D. (Max)	Working Height (Max)
<b>305150</b>	Portable bearing packer	10mm (25/64")	95mm (3 47/64")	50mm (1 31/32")
<b>305230</b>	Threaded centre bearing packer	12mm (15/32")	125mm (4 59/64")	50mm (1 31/32")
<b>305161</b>	Heavy duty bearing packer	30mm (1 3/16")	170mm (6 11/16")	50mm (1 31/32")



### WHEEL BEARING KIT FRONT WHEEL DRIVE HUB

- Comprehensive kit specifically designed for replacement of front wheel bearings on front wheel drive vehicles
- Allows removal and replacement of the front wheel bearings without removing the steering knuckle or strut assembly
- Eliminates the need for front end wheel alignment after bearing replacement
- Suitable for most common front wheel drive vehicles and some rear wheel hub applications
- Universal bearing and seal driver tools manufactured from heavy duty chrome-molybdenum for strength and durability
- Supplied in custom moulded plastic hard case

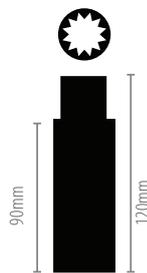
Part No.	Size Range	Pieces
<b>301260</b>	55.5 - 90mm	13

BEARING



WHEEL HUB NUT TOOL SET

- Suits front wheel hub fasteners on later model vehicles requiring longer sockets for hard to reach hub nuts
- Bi-Hex deep impact sockets are 120mm long with 91mm clearance
- Hardened sockets made from chrome vanadium and chrome molybdenum with black phosphate finish
- Supplied in custom moulded plastic hard case



Part No.	Sizes	Square Drive	Pieces
<b>311017</b>	14, 17, 19mm (Cr-Moly) 24, 27, 30, 32, 36mm (Cr-Van)	3/4"	8



WHEEL BEARING LOCK NUT WRENCH SET  
ADJUSTABLE

- Adjustable wrench tool kit for the removal of wheel bearing lock nuts
- Adjustable jaws to suit both 6 and 8 point wheel bearing lock nuts
- Locking mechanism ensures jaws are rigid to prevent slipping on narrow lock nuts
- Includes three pairs of pins for use on pin type locknuts
- Ideal for 4WD applications
- Supplied in custom moulded plastic hard case

Part No.	Size Range	Pin Diameter	Torque (Max)
<b>311014</b>	45 - 145mm	Ø 6 x 43mm (2 Pc.) Ø 8 x 43mm (2 Pc.) Ø 10 x 43mm (2 Pc.)	677nm (500ft. lb)

DRIVELINE & TRANSMISSION



CLUTCH ALIGNING TOOL  
UNIVERSAL

- Tapered cone design for quick and easy assembly, alignment and installation of clutch assemblies
- Designed to easily align clutch assembly during replacing on passenger and light commercial vehicles
- Applicable for single plate clutches with centre pilot bearing bush on flywheel
- Robust metal construction for strength and durability
- Not suitable for dual clutch assembly

Part No.	Adaptor Sizes
<b>306219</b>	15, 16, 17, 19, 20, 21, 25mm



CLUTCH ALIGNING TOOL  
FRONT WHEEL DRIVE

- Unique cone design for use on front wheel drive vehicles without a flywheel pilot bearing
- Allows the clutch plate and pressure plate to be assembled off car
- Supplied with expanding collets for adjustable sizes
- Suits most cars and LCVs up to 5 tonne
- Not suitable for dual clutch assembly
- Manufactured from chemical resistant ABS plastic

Part No.	Collet Size Range	Cone Size	Overall Length
<b>306218</b>	14 - 28mm	35 - 67mm	120mm



**CLUTCH ALIGNMENT MASTER KIT**  
SELF ADJUSTING

- Specialty tool kit designed for easy and damage free removal and installation of self-adjusting clutches
- Suitable for dismounting and mounting of 6 and 8 hole self-adjusting clutch applications
- Enables easy and correct alignment of the clutch plate by keeping everything centred during fitment
- Unique design enables efficient adjustment and resetting of the automatic adjuster
- Evenly applies pressure during fitting and features all the necessary tools to complete the clutch change without deforming or damaging the delicate clutch plate
- Suitable for vehicles that have a self-adjusting clutch fitted
- Common applications include BMW, Fiat Group, Mercedes, Opel, Renault, Volvo and VAG
- Supplied in custom moulded plastic hard case

Note: Not suitable for DSG transmissions



Part No.	Applications
<b>306002</b>	6 & 8 hole



**TRANSMISSION FILLING SYSTEM**  
UNIVERSAL

- Specialty tool system designed to easily and efficiently refill or top up transmissions
- Suitable for various transmission systems including DSG, steptronic, CVT, dual-clutch automated manual etc.
- Easy fill up port and smooth hand pump for controlled flow
- Convenient on/off tap to prevent spillage and overfilling
- Manufactured to withstand automatic transmission fluid
- Supplied with transparent hose 3/8" x 1.3m
- Includes 18 adaptors to cover the majority of the Australian car parc
- Spares: Replacement hose assembly (Part No. 306100A)



Scan for application list

Part No.	Description	Capacity	Spares
<b>306100</b>	Transmission filling system	7.5L	306100A

**ADAPTOR LISTING**

Contents	Ref.	Adaptor Specifications	Image	Contents	Ref.	Adaptor Specifications	Image
306101	AT113	M8 x 1.0		306110	AT108	M22 x 1.5	
306102	AT105	M10 x 1.0		306111	AT107	M24 x 1.5	
306103	AT112	M10 x 1.0		306112	AT111	M30 x 1.5	
306104	AT117	M10 x 1.5		306113	AT101	1/8" x 27NPT	
306105	AT118	M12 x 1.25		306114	AT109	5/16" x 24UNF	
306106	AT106	M12 x 1.5		306115	AT102	Universal	
306107	AT116	M14 x 1.5		306116	AT103	Universal	
306108	AT110	M18 x 1.5		306117	AT104	Universal	
306109	AT115	M18 x 1.5		306118	AT114	Universal	



**CV BOOT CLAMP INSTALLER**

- Installs low-profile clamps used to hold CV boots on most front wheel drive vehicles
- Ratcheting action and inbuilt cutter, fasten clamps swiftly and securely
- Also suitable for steering rack boot installation

Part No.	Band Width (Max)	Overall Length
<b>311288</b>	10mm	200mm



**CV BOOT CLAMP PLIERS**

- For fastening of clamps on CV boots, fuel hoses and water hoses without causing damage to spring band clamps and hoses
- Easily replace hoses and prevent them slipping off when opening the clamp
- Suitable for double ear clamps and other CV boot clamp types
- 1/2" square drive suitable for torque wrench attachment when specific torque settings are required
- Manufactured from chrome vanadium steel with black phosphate finish and PVC dipped handles



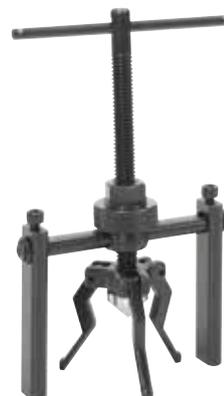
Part No.	Jaw Opening (Max)	Jaw Width	Overall Length
<b>311009</b>	12mm	11mm	240mm



**OIL SEAL PLUG SET**  
UNIVERSAL 5PC

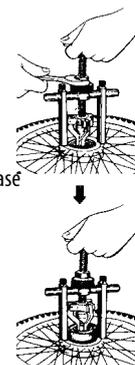
- Stops loss of transmission and transaxle fluids during service or repair
- Five stepped design to retain a positive seal
- HOLLOWED internal section plugs enable excess fluid to be captured and avoid spillage
- Manufactured from high quality plastic for strength and durability
- Includes side gear centring tool to suit Ford

Part No.	Description		
<b>312000</b>	Oil Seal Plug Set		
Description	Size 1	Size 2	Qty
Adaptor 1	25 - 27mm	28 - 30mm	1
Adaptor 2	33 - 35mm	36 - 38mm	1
Adaptor 3	40 - 42mm	44 - 46mm	1
Adaptor 4	48 - 50mm	52 - 54mm	1
Adaptor 5	Side gear centring tool to suit Ford		1



**PILOT BEARING PULLER**  
MECHANICAL 3-JAW

- Compact internal pilot bearing puller designed to extract flywheel, generator and spigot transmission pilot bearings and bushes without tilting the bearings or damaging the bearings race
- Also suitable for extracting bearings from motorcycle wheels, alternators and pumps without any distortion
- Adjustable support legs with locking screws
- Adjustable centre cone applies pressure on to jaws to grip on to bearing
- Small and handy unit supplied in custom moulded plastic hard case
- Applications include cars, trucks, motorcycles, bicycles and tractors
- For further information and specifications on this kit see the automotive pullers section page 273



Scan here for video



Part No.	Internal Diameter Range (Min - Max)	Overall Length
<b>245464</b>	Ø 13 - 45mm	240mm



**BANDING TOOLS WITH CUTTER**

- Crank handle with inbuilt cutting assembly to enable band style clamps to be tightened and cut-in during installation

Note: CT1 will not crimp the clamp or band. Crimping is achieved by using Tridon Uniband Buckles available in 3 types (UBL, UBF and UBS part numbers)

Part No.	Application	Capacity	Overall Length
<b>301104</b>	Band style clamps on CV boots	10mm (3/8")	230mm
<b>CT1</b>	Tridon uniband (UB) clamps & strapping	25mm (1")	420mm



**FLUID RETAINING TOOL AUTOMATIC TRANSMISSION**

- Designed to locate within the gearbox after tail shaft removal
- Prevents ATF and gearbox fluid spills or leaks
- Ideal for use during gearbox and drive train repairs and maintenance
- Suitable for most vehicle transmissions and gearboxes

Part No.	Depth A/B	Internal Diameter A/B	External Diameter A/B	Thickness	Overall Length
<b>306217</b>	85/51mm	∅ 32/36mm	∅ 37.5/42mm	3mm	138mm



**CV BOOT INSTALLATION TOOL PNEUMATIC**

- Specialised tool designed to stretch the CV boot over the CV joint without the need to dismantle the CV shaft
- Durable and lightweight construction with an inbuilt airflow controller allows complete portability and ease of use
- Not suitable for plastic type CV boots
- Air inlet: 1/4" BSP



Part No.	CV Boot Diameter	Working Pressure	Air Pressure (Max)
<b>311018</b>	25 - 110mm	72 - 113psi	125psi



**HUB PULLER KIT MECHANICAL & HYDRAULIC**

- Universal adjustable mechanical hub puller for various stud patterns up to five studs
- Free movement legs (5) on a raised yoke assembly allows quick and easy attachment to vehicle hubs
- Heavy duty striking handle allows the application of shock force for rapid removal of stubborn hubs
- Manufactured from drop forged high quality steel, heat treated for strength and durability
- Suitable for passenger cars and commercial vehicles
- Supplied in custom moulded plastic hard case
- For further information and specifications on this kit see the automotive pullers section page 273



Part No.	Reach	Spread	Capacity
<b>270000</b>	190mm	120 - 215mm	10 tonne



**HUB PULLER KIT**  
SLIDE HAMMER

- Multi-purpose design for the removal of front and rear hubs, bearing oil seal bushes and flange type axles
- Includes slide hammer with multiple attachments including 2 and 3 jaw internal and external puller, front and rear hub pullers and various accessories
- Supplied in custom moulded plastic hard case
- *For further information and specifications please see the automotive pullers section page 273*

Part No.	Slide Hammer Assembly	Twin/Triple Head Width
<b>245300</b>	2.3kg x 600mm	65/50mm



**HUB PULLER KIT**  
SLIDE HAMMER HEAVY DUTY

- Suitable for both mechanical slide hammer and hydraulic operation
- Truly universal design with ten slot positions to suit any stud pattern
- Pulls flange-type rear axles on most late model passenger cars and light trucks
- T-type hex head for either hand or torque wrench use
- Suitable for 4 and 5 stud axles
- Supplied in custom moulded plastic hard case
- *For further information and specifications please see the automotive pullers section page 274*

Part No.	Hydraulic Ram	Slide Hammer Assembly
<b>269013</b>	10T	2.8kg x 600mm



**HUB SEPARATOR KIT**  
UNIVERSAL HEAVY DUTY

- Universal hub separator set is designed for removing hubs on popular front wheel drive vehicles
- Durable ACME threaded forcing and adjusting screws ensure long product life
- *For further information and specifications please see the automotive pullers section page 276*

Part No.	Applications
<b>245440</b>	Daihatsu, Fiat, Ford, GM, Honda, Hyundai, Mazda, Mitsubishi, Nissan, Renault, Saab, Subaru, Suzuki, Toyota, Volkswagen

ENGINE



304181



304182



304183



304184

**VALVE SPRING COMPRESSORS**  
ADJUSTABLE LEVER CAM

- For use in the removal and servicing of engine valves and seals during cylinder head or engine repair
- Suitable for use on a wide range of OHC, OHV, CVH valve applications
- Available in various cam lock lever designs featuring adjustable capacity, locked and reversible jaws
- Premium quality steel construction ensures safe operation and tool longevity

Part No.	Description	Jaw Opening	Collet Size	Throat Clearance
<b>304181</b>	Valve spring compressor - Adjustable jaw	75 - 145mm	25 - 42mm	165mm
<b>304182</b>	Valve spring compressor - Straight & offset jaw	75 - 185mm	25mm	250mm
<b>304183</b>	Valve spring compressor - Dual size collet adaptors	25 - 120mm	25 & 30mm	250mm
<b>304184</b>	Valve spring compressor - Fixed jaw	75 - 130mm	25mm	150mm



304185



304186



304187



304039

**VALVE SPRING COMPRESSORS**  
PULLER TYPE

- For use in the removal and servicing of engine valves and seals during cylinder head or engine repair
- Puller type design allows access in confined space
- Suitable for use on a wide range of OHC, OHV, CVH valve applications



Part No.	Description	Spread	Reach (Max)	Overall Length
<b>304185</b>	Valve spring compressor - Side valve type	5 - 20mm	20mm	230mm
<b>304186</b>	Valve spring compressor - Puller type	100mm	60mm	130mm
<b>304187</b>	Valve spring compressor - Puller type	100mm	110mm	230mm
<b>304039</b>	Valve spring compressor - Puller type	50mm	60mm	140mm



**VALVE SPRING COMPRESSOR KIT**  
ON CAR

- Enables removal and replacement of valve stem oil seals and valve spring eliminating the need for cylinder head removal
- Universal kit features multi hole adjustable handle and interchangeable valve spring adaptors to enable unlimited setting combinations
- Collet size range: 19 - 33.5mm and universal adaptor



Part No.	Collet/Retainer Size	Pieces
<b>301486</b>	19 - 24, 19.2 - 25.5, 19.2 - 26, 27.5 - 33.5mm & 1 x universal adaptor	8



**VALVE SPRING COMPRESSOR KIT**  
HEAVY DUTY ON CAR

- Enables removal and replacement of valve stem oil seals and valve springs eliminating cylinder head removal
- Retaining flanges are rotatable to enable fixation to the cylinder head length ways, sideways or diagonally
- Adjustable spindles on the left and right side enable the correct height and angle to be achieved between the handle and the pressure piece for compressing the valve-spring
- Adjustable rests allow for infinite size adjustment of the tool length and therefore offer complete universal application for 1 - 12 cylinder engines
- Suitable for use on OHC and DOHC petrol or diesel engines and fits various size valve spring retainers
- Supplied in heavy duty custom moulded plastic hard case



Part No.	Description	Collet / Retainer Size	Application
<b>304050</b>	Valve spring compressor kit	21, 24, 25, 28, 32, 34, 35, 42mm	1 - 12 cylinder engines



**VALVE LAPPING TOOLS**

- For easy resurfacing of valve seats to a professional finish
- Four different size neoprene cups for varying valve diameters
- Resistant to grease, oil and petrol
- Use with appropriate valve lapping compound (not included)
- Manufactured with contoured hardwood handles for comfortable grip



Part No.	Cup Sizes	Overall Length	Pieces
<b>304192</b>	16 x 21, 28 x 35mm	200mm	2



**VALVE LIFTER PULLER**

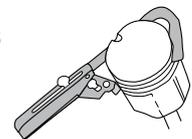
- For use in the removal of hydraulic valve lifters from the lifter bed
- Shaft diameter of 7.5mm to be inserted into the push rod cavity
- Design allows the tip to expand within the lifter and clamp strongly on tappet walls for safe and easy removal

Part No.	Size Range	Overall Length
<b>304188</b>	13 - 19mm	280mm



**PISTON RING GROOVE CLEANER**

- For cleaning accumulated carbon and material build up inside the piston ring groove
- Three six-sided cutters suitable for both metric and SAE pistons
- Suitable for use on pistons 51 - 127mm (2" - 5")



Part No.	Piston Size	
<b>304193</b>	SAE	1/16", 5/64", 1/8", 5/32", 3/16", 1/4"
	Metric 1	2.0, 2.5, 3.0, 4.0, 4.5mm
	Metric 2	1.2, 1.5, 1.8, 2.8, 5.0, 5.5mm



304189



304190

**PISTON RING COMPRESSORS**

- For quick and easy installation of pistons and rings into the engine cylinders
- Self-locking ratchet assembly and wide band design to enable all piston rings to be compressed in one easy operation
- Spring steel band wraps around the rings and piston
- Adjustable bore diameter using adjusting key provided
- Manufactured from high grade spring steel



Part No.	Description	Size Range	Height
<b>304189</b>	Small piston ring compressor	53 - 125mm (2" - 5")	75mm
<b>304190</b>	Large piston ring compressor	60 - 175mm (2 3/8" - 7")	100mm



**GLOW PLUG SOCKET SET**

UNIVERSAL JOINT 9 PIECE

- Firm gripping sockets for efficient removal and replacement of glow plugs
- Universal joint improves access to difficult and restricted areas
- Includes six sockets, two decarbonising drills and one puller unit
- Manufactured from high grade chrome vanadium steel
- Supplied in custom moulded plastic hard case

Part No.	Socket Size	Decarbonising Drills	Puller
<b>304044</b>	8, 9, 10, 12, 14, 16mm	M12 x 1.25 x 125mm M10 x 1.00 x 135mm	130mm



**GLOW PLUG TEST KIT**  
DIGITAL MULTI-VOLTAGE

- Diagnostic kit used to identify the condition of glow plugs without having to remove them from the vehicle
- Measures and displays resistance of the glow plug to compare against the glow plug specification and identify the condition of the glow plug
- Easy to read professional digital screen and shock resistant rubber moulded casing
- Uses 9v battery with auto switch off function to eliminate wastage
- Suitable for all types of glow plugs ranging from 4 - 24V
- Supplied in custom plastic hard case



**GLOW PLUG CONNECTOR PLIERS**  
ANGLED

- Specialty pliers used to remove stubborn, hard to reach glow plug connectors
- Suitable for most late model vehicles
- Ideal for removing and installing glow plug connectors on BMW, Mercedes-Benz, VAG

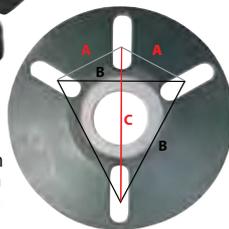
Part No.	Glow Plug Test Range	Battery
<b>304046</b>	4.0 - 24.0V	9V (not included)

Part No.	Jaw Opening	Overall Length
<b>304038</b>	10 - 95mm	235mm



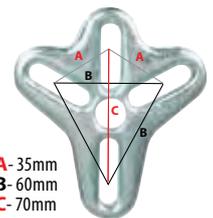
245400

- A** - 40mm
- B** - 75mm
- C** - 85mm



254230

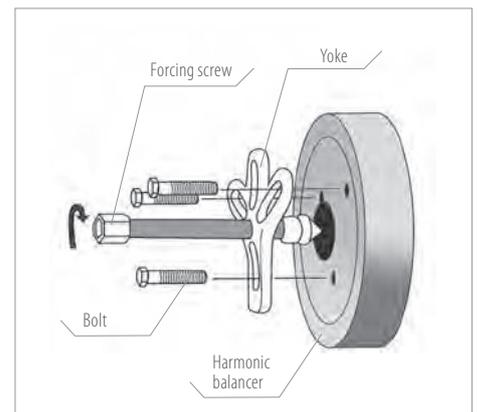
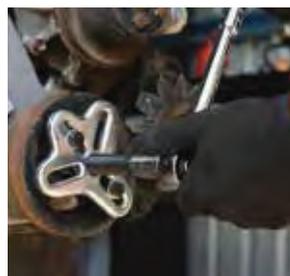
Scan here for video



- A** - 35mm
- B** - 60mm
- C** - 70mm

**HARMONIC BALANCER PULLER SETS**

- Designed for the removal of automotive harmonic balancers, pulleys and gears where access to tapped holes is available
- Varying styles to suit 2 and 3 hole configurations
- Comprehensive 14, 18 or 46 piece sets
- For further information and specifications please see the automotive pullers section page 271



Part No.	Description	Pieces
<b>245400</b>	Harmonic balancer puller & installer set	24
<b>254230</b>	Harmonic balancer master puller set	46

### CYLINDER HONING TOOLS

- Comprehensive range of varying cylinder honing tools for different applications and service work
- Centre spring uses variable spring tension to enable self centring and contact intensity variation with the bore
- Operated via a flexible drive shaft to ensure smooth honing
- All units are supplied with medium grit hone stones. Additional hones available separately
- *Spares: Replacement and additional hone stones available*



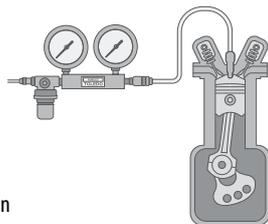
Part No.	Bore Capacity (I.D.)	Legs	Hone Stone Length	Overall Length	Spares - Fine (C#400)	Spares - Medium (C#220)	Spares - Coarse (C#100)
<b>301048</b>	19 - 50mm	3	28mm	210mm	-	301055	-
<b>301046</b>	19 - 64mm	3	50mm	225mm	301052	301053	301054
<b>301049</b>	20 - 64mm	2	28mm	210mm	301056	301057	301058
<b>301045</b>	32 - 85mm	3	50mm	225mm	-	301051	-
<b>301047</b>	32 - 89mm	3	28mm	210mm	-	301055	-
<b>301044</b>	50 - 135mm	3	100mm	365mm	-	301050	301062



### CYLINDER LEAK DOWN TEST KIT PETROL 35PSI & 2.4BAR



- Professional workshop kit provides critical information about the internal condition of a combustion engine
- Used to identify and detect a number of engine faults including: worn piston rings, worn valves, cracks in cylinder walls and blown head gaskets
- Simplifies carrying out leak down tests which can be more accurate than standard compression tests
- Dual gauges show percentage of cylinder leakage and cylinder pressure
- Set contains cylinder leak down tester, 14mm & 18mm adaptor hose and 14mm extension adaptor
- Industrial aluminium construction with heavy duty brass fittings
- Rubber boot on dual gauges to protect against shock impact breakage and cracking
- Supplied in custom moulded plastic hard case



*Note: The purpose of a cylinder leak down test is to determine the percentage of leakage in the cylinder bore indicated by the leakage gauge. This unit functions correctly at 35psi and the appropriate test can be carried out without fault at this pressure rating. At higher pressures (over 40psi) the orifice will become turbulent and non-linear causing the engine to rotate under pressure and subsequently produce inaccurate readings. To perform this test correctly there is no need to operate the unit at 100psi and by design it will not operate at 100psi, despite the dial face being marked to this level. The tool meets all the requirements to correctly and accurately carry out its designed test.*

Part No.	Specifications	
<b>304012</b>	Working pressure	35psi & 2.4bar
	Adaptor size (dual stepped hose)	14mm & 18mm x 1.25
	Flexible hose	600mm



### COMBUSTION GAS LEAKAGE TEST KIT UNIVERSAL

- Diagnose cylinder head and gasket leaks by detecting the presence of combustion gases in the cooling system
- Quick release connector allows easy and efficient use
- Blue liquid will turn yellow within 60 seconds with the presence of a combustion gas, subsequently meaning there is a combustion leak present, no matter the size of the leak
- Suitable for testing the cooling system in water-cooled engines (petrol, diesel & LPG)
- Supplied with tapered rubber cone for universal applications
- Supplied in custom moulded plastic hard case
- *Spares: Replacement detector fluid 250ml (Part No. 304000A)*



*Note: Compatible and recommended for use with Toledo cooling system pressure tester kit Part No. 308500 which features vehicle specific adaptors and a full application list*



Part No.	Fluid Capacity	Spares
<b>304000</b>	250ml	304000A



**OIL PRESSURE TESTER KIT**  
DUAL SCALE 140PSI & 10BAR

- Trade workshop testing unit provides the perfect solution for diagnosing worn oil pumps, pressure switches and oil warning indicators
- Snap coupling adaptors with shut-off valve allow for speed and safe operation
- Permanently primed, long flexible pressure hose (1300mm) and blow-off valve
- The 90° adaptor permits excellent subsidiary access to hard to reach areas
- Superior modern design, compact and organised
- Ideally suited for use by the trade on a wide range of vehicles and stationary motors
- Supplied in custom moulded plastic case



Part No.	Contents	Ref.	Specifications	Image
<b>304400</b>				
304403	1	1	Adaptor No. 1 3/8" x 28 NPT	
304401	2	2	Adaptor No. 2 R1/8 x 27 DIN 2999	
304402	3	3	Adaptor No. 3 1/8" x 18 NPT	
304404	4	4	Adaptor No. 4 3/8" x 20 UNF	
304405	5	5	Adaptor No. 5 1/2" x 20 UNF	
304406	6	6	Adaptor No. 6 M10 x 1.0	
304407	7	7	Adaptor No. 7 M12 x 1.5	
304408	8	8	Adaptor No. 8 M14 x 1.5	
304409	9	9	Adaptor No. 9 M16 x 1.5	
304410	10	10	Adaptor No. 10 M18 x 1.5	
304411	11	11	90° Elbow	
304415	Gauge & hose assembly		Dual scale 140 psi/ 16 bar Ø 60mm Pressure release valve Hose assembly 1300mm Female quick connect fitting	

**OIL PRESSURE SWITCH SOCKETS**

- Suitable for automotive and industrial oil pressure switch applications
- Manufactured from drop forged vanadium steel for maximum strength and longevity

301092

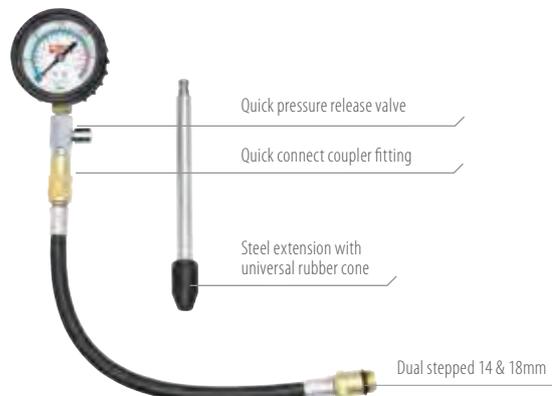


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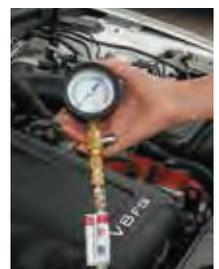


**PETROL COMPRESSION TESTER KIT**  
DUAL SCALE 300PSI & 21KG/CM<sup>2</sup>

- Petrol compression tester for diagnosis of compression related problems on petrol engines
- Gauge: Dual scale 0-300 psi (0-21kg/cm<sup>2</sup>) with pressure release valve
- Suitable for automotive, motorcycle and small engine work
- Each gauge is individually calibrated, checked and dated before leaving the factory



Calibrated dual graduated



Part No.	Hex Size	Square Drive	Overall Length
<b>301092</b>	25mm (1") & 27mm (1 1/16")	3/8"	60mm
<b>301093</b>	30mm (1 3/16")	1/2"	88mm

Part No.	Description	Specifications
<b>304198</b>	Gauge	Dual scale 300psi / 21kg/cm <sup>2</sup> Ø 58mm Pressure release valve Male quick connect coupler
	Flexible hose	Dual stepped thread M14 x 1.25 & M18 x 1.50 x 315mm long Female quick connect coupler
	Steel extension	Universal rubber tipped cone male quick connect coupler x 150mm long

### PETROL COMPRESSION TESTER KIT

DUAL SCALE 300PSI & 21KG/CM<sup>2</sup>

- Petrol compression tester for diagnosis of compression related problems on petrol engines
- Versatile kit provides a quick means of testing cylinder compression pressure on engines with deep, recessed spark plugs and difficult access
- Gauge: Dual scale 0 - 300 psi (0 - 2 1kg/cm<sup>2</sup>) with pressure release valve
- Set contains long flexible hoses to enable better access and eliminating the need to remove secondary equipment such as A/C, power brake, manifold and steering components
- Gauges are individually calibrated, checked and dated before leaving the factory
- Supplied in custom moulded plastic hard case



Part No.	Description	Specifications	Image
<b>304010</b>	Gauge & hose assembly	Digital dual scale 300psi/21kg/cm <sup>2</sup> Ø 55mm Flexible hose 420mm Female quick connect coupler	
	Quick-check gauge & hose assembly	Single scale 200psi Dual stepped thread M14 x 1.25 & M18 x 1.50 x 400mm long	
	Quick connect coupler	46mm	
	Adaptor	M10 x 1.0 x 42mm	
	Adaptor	M12 x 1.25 x 42mm	
	Adaptor	M18 x 1.50 x 64mm	
	Hose (Adaptor)	38mm	
	Flexible Hose	M14x1.25x300mm (short thread 10mm)	
	Flexible Hose	M14x1.25x300mm (long thread 18mm)	
	Flexible Hose	M18x1.50x300mm (short thread 10mm)	
	Service kit	Includes pressure relief valves and seals	



Calibrated dual graduated





**PETROL COMPRESSION TESTER KIT**  
DUAL SCALE 300PSI & 21KG/CM<sup>2</sup>

- Petrol compression tester for diagnosis of compression related problems on petrol engines
- Versatile kit provides a quick means of testing cylinder compression pressure on engines with deep, recessed spark plugs and difficult access
- Tapered cone adaptors for universal applications
- Gauge is individually checked and calibrated at factory
- Gauge: Dual scale 0 - 300 psi (0 - 21kg/cm<sup>2</sup>) with pressure release valve
- Supplied in custom moulded plastic hard case



Calibrated dual graduated



**PETROL COMPRESSION TESTER KIT**  
DUAL SCAL 300PSI & 21KG/CM<sup>2</sup>

- Compression tester for diagnosis of compression related problems on petrol engines
- Versatile kit provides a quick means of testing cylinder compression pressure on engines with deep, recessed spark plugs and difficult access
- Tapered cone adaptors for universal applications
- Gauge is individually checked and calibrated at factory
- Gauge: Dual scale 0 - 300 psi (0 - 21kg/cm<sup>2</sup>) with pressure release valve
- Supplied in custom moulded EVA foam tray in plastic hard case



Part No.	Description	Specifications	Image
<b>304009</b>	Gauge	Dual scale 300psi/21kg/cm <sup>2</sup> Ø 58mm Pressure release valve threaded fitting	
	Hose	Dual stepped thread M14x1.25 & M18x1.50 x 190mm long with threaded fitting	
	Adaptor	M10 x 1.0 x 38mm	
	Adaptor	M12 x 1.25 x 38mm	
	Adaptor	M14 x 1.25 x 38mm	
	Adaptor	Universal tapered rubber end straight x 85mm	
	Adaptor	Universal tapered rubber end angled 30° x 85mm	
	Extension	3/8" X 24 UNF (Used with universal adaptors) 100mm	
	Seal & valve kit	Includes pressure relief valves and seals	

Part No.	Description	Specifications	Image
<b>304175</b>	Gauge	Dual scale 300psi / 21kg/cm <sup>2</sup> Ø 58mm Pressure release valve Female quick connect coupler	
	Heavy duty, flexible high pressure hose	Dual stepped thread M14 x 1.25 & M18 x 1.50 300mm long Stainless steel braided Male quick connect fitting	
	Standard adaptor x 2	M10 x 1.00 x 38mm M12 x 1.25 x 38mm	
	Long reach adaptor	M14 x 1.25 x 60mm	
	Steel extension	Universal rubber tipped cone Male quick connect fitting 150mm long	
	Service kit	Includes pressure relief valves and seals	

### PETROL COMPRESSION TESTER KIT

TRIPLE SCALE DIGITAL 300PSI, 20BAR & 2000KPA

- Compression tester with digital read out for diagnosis of compression related problems on petrol engines
- Versatile kit provides a quick means of testing cylinder compression pressure on engines with deep, recessed spark plugs and difficult access
- Digital pressure gauge displays readouts in psi, BAR and KPA
- Set contains long flexible hose and adaptors, eliminating the need to remove secondary equipment such as A/C, power brake, manifold and steering components
- Measurement range digital gauge: 0-300psi
- Measurement range quick check standard gauge: 0 - 200psi
- Battery included 9v
- Supplied in custom moulded plastic hard case



Part No.	Description	Specifications	Image
<b>304180</b>	Gauge & hose assembly	Digital dual scale 300psi / 21kg/cm <sup>2</sup> Ø 450mm Flexible hose 420mm Female quick connect coupler	
	Quick-check gauge & hose assembly	Single scale 200psi Dual stepped thread M14 x 1.25 & M18 x 1.50 x 400mm long	
	Quick connect coupler	46mm	
	Adaptor	M10 x 1.0 x 42mm	
	Adaptor	M12 x 1.25 x 42mm	
	Adaptor	M18 x 1.50 x 64mm	
	Hose Adaptors	38mm	
	Flexible Hose	M14 x 1.25x 300mm (short thread 10mm)	
	Flexible Hose	M14 x 1.2 5x 300mm (long thread 18mm)	
	Flexible Hose	M18 x 1.50 x 300mm (short thread 10mm)	
	Service kit	Includes pressure relief valves, battery (9v) and seals	



**DIESEL COMPRESSION TESTER MASTER KIT**  
DUAL SCALE 1000PSI & 70BAR

- Comprehensive diesel compression tester kit for diagnosis of compression related problems on diesel engines
- Enables cylinder access through glow plug adaptors and dummy injectors
- Includes large shock proof, liquid filled, dual scale gauge (1000 psi/70 bar) with pressure release valve and high pressure coiled rubber hose assembly
- Suitable for high pressure common rail diesel applications
- Covers most of the Australian car parc including automotive, commercial and heavy industrial applications with both direct and indirect diesel injection systems
- Essential master kit for all professional workshops
- Supplied in custom moulded foam tray in plastic hard case
- User guide and full vehicle application list included



Scan here for application list



Part No.	Description	Pressure
<b>304600</b>	Diesel compression tester master kit	1000 psi/70 bar

Contents	Specifications
304600-1 Glow Plug No 1	L: 17.5mm M12x1.25P
304600-2 Glow Plug No 2	L: 20mm M12x1.25P
304600-3 Glow Plug No 3	L: 28.5mm M10x1.25P
304600-4 Glow Plug No 4	L: 42mm M10x1.25P
304600-5 Glow Plug No 5	L: 45mm M10x1.25P
304600-6 Glow Plug No 6	L: 44mm M10x1.25P
304600-7 Glow Plug No 7	L: 54mm M10x1.0P
304600-8 Glow Plug No 8	L: 43mm M10x1.0P
304600-9 Glow Plug No 9	L: 26mm M10x1.0P
304600-10 Glow Plug No 10	L: 39mm M10x1.25P
304600-11 Glow Plug No 11	L: 35mm M10x1.0P
304600-12 Glow Plug No 12	L: 59mm M12x1.25P
304600-13 Glow Plug No 13	L: 71mm M10x1.0P
304600-14 Glow Plug No 14	L: 59mm M10x1.0P

Contents	Specifications
304600-15 Glow Plug No 15	L: 51mm M8x1.0P
304600-16 Glow Plug No 16	L: 85mm M10x1.25P
304600-17 Glow Plug No 17	L: 90mm M10x1.0P
304600-18 Glow Plug No 18	L: 69mm
304600-19 Glow Plug No 19	L: 102mm M10x1.25P
304600-20 Glow Plug No 20	L: 88mm M8x1.0P
304600-21 Glow Plug No 21	L: 85mm M10x1.25P
304600-22 Glow Plug No 22	L: 73mm M10x1.0P
304600-23 Injector No 23	L: 43mm M22x1.5P
304600-24 Injector No 24	L: 28mm M24x1.5P
304600-25 Glow Plug No 25	L: 29mm M20x1.5P
304600-26 Injector No 26	L: 26mm M24x2.0P

Contents	Specifications
304600A Gauge assembly 1000psi/70bar & 90° connector	
304600B Clamp on spindle kit	
Clamp	
Clamp-On Spindle	
Internal Thread: M10 x 1.25P	

EXHAUST



EXHAUST/TAIL PIPE CUTTERS

- Force saving cutters specifically designed for cutting exhaust tubing efficiently
- Chain with fifteen in-built roller cutters slice into the exhaust pipe tubing easily and without distortion through just a 1/4 rotation
- Spares: Replacement cutter chain (Part No. 312296)



Part No.	Range	Spares
<b>312295</b>	20 - 82mm	312296



EXHAUST DONUT STRETCHER

- For removal and installation of ring type (donut) rubber hangers
- Simple tool used by slipping the tool hook through the rubber mounting ring and pushing or pulling to stretch, until the ring can be removed from the hook on the frame

Part No.	Overall Length
<b>312291</b>	310mm



OXYGEN SENSOR SOCKET

- Specialist tool designed for the removal and installation of oxygen sensors in automotive applications
- Manufactured from durable chrome molybdenum steel with black phosphate finish for superior strength and durability



Part No.	Size	Square Drive	Overall Length
<b>301094</b>	22mm (7/8")	3/8"	90mm



EXHAUST PIPE SERVICE KIT

- Professional exhaust pipe service kit for expanding, cutting, dent removal and fitting of steel pipe
- Supplied in custom moulded plastic hard case

Part No.	Contents
<b>321003</b>	Exhaust pipe cutter - lock grip type
	Exhaust pipe expander 38 - 64mm
	Exhaust pipe expander 54 - 89mm
	Exhaust donut stretcher
	Nut splitter 16 - 22mm



EXHAUST PIPE EXPANDERS

- Internal expanding tool which operates with wrench for all tailpipe expanding
- Internal hex nut is turned to expand the inside diameter of the tube
- Extra long hex rod for ease of use



Part No.	Description	Size Range
<b>312287</b>	Small expander	Ø 30 - 44mm
<b>312289</b>	Medium expander	Ø 38 - 64mm
<b>312288</b>	Large expander	Ø 54 - 89mm



**SENSOR SOCKET SET**

7 PIECE

- Specially designed sensor socket set for use in automotive engine management applications
- Suitable for removing oil pressure, vacuum and oxygen sensors as well as one for diesel injector socket
- Manufactured from hardened chrome molybdenum steel for strength and durability
- Supplied in custom moulded plastic hard case

Part No.	Description	Size	Length	Image
<b>301148</b>	Vacuum switch O <sub>2</sub> sensor socket 3/8" Sq. Dr.	7/8" (22mm)	80mm	
	Vacuum switch O <sub>2</sub> sensor socket offset 3/8" Sq. Dr.	7/8" (22mm)	30mm	
	Offset deep O <sub>2</sub> sensor socket 1/2" Sq. Dr.	7/8" (22mm)	49mm	
	Oil pressure sender unit socket 3/8" Sq. Dr.	1 1/16"	74mm	
	Diesel injector & thermal sensor switch socket 1/2" Sq. Dr.	27mm	78mm	
	Vacuum switch O <sub>2</sub> sensor socket 3/8" Sq. Dr.	7/8" (22mm)	90mm	
	Vacuum switch O <sub>2</sub> sensor socket 1/2" Sq. Dr.	29mm	90mm	



**FUEL LINE COUPLING RELEASE PLIER SET**

2 PIECE

- Services special quick connect couplings on fuel feed and return lines
- Place tool around the fuel line and push into the female connector to release the male connector
- Manufactured from chrome molybdenum with black phosphate finish and PVC moulded handles
- Two piece set covers two coupler sizes

Part No.	Coupler Sizes	Jaw Opening (Max)	Jaw Width	Overall Length
<b>307223</b>	8mm (5/16") & 10mm (3/8")	40mm	10mm	150mm



**FUEL LINE CONNECTOR PLIERS**

- Required for most in-line fuel filter replacements in petrol engines
- Common applications include: GM (Opel), Mercedes Benz (M-Class), VAG

Part No.	Jaw Opening (Max)	Jaw Width	Overall Length
<b>307005</b>	80mm	5mm	235mm



**FUEL & VACUUM LINE PLIERS**

- Designed to remove stubborn fuel or vacuum hoses promptly and safely without damaging components
- Sharpened "V" jaw for secure grip and spring return for easy operation
- Manufactured from heat treated alloy steel with chrome finish and PVC dipped handles



Part No.	Jaw Opening (Max)	Hose Size Range	Overall Length
<b>301173</b>	30mm	3 - 13mm	200mm



**FUEL LINE DISCONNECT TOOL SET**

- Designed for safe and easy removal of quick connect fuel lines without causing damage
- Essential tool and simple to use by clipping over the connector to release the spring lock
- Suitable for late model vehicle applications including Chrysler, Ford, GM-Astra, Commodore, Vectra, Mitsubishi

Part No.	Size
<b>307002</b>	Black 1/4", Red 5/16", Blue 3/8"



**A/C & FUEL LINE DISCONNECT SET**

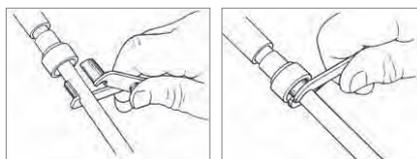
- Essential set of hose removal tools designed specifically for the removal of spring lock coupling type hose fittings
- Ideal for fuel lines and air conditioning system pipes found on Chrysler, Ford and GM applications
- Manufactured from moulded nylon ensuring flexibility and strength to withstand fuel and air conditioning chemicals
- Common applications include: Chrysler, Ford and GM

Part No.	Size
<b>301060</b>	6mm (1/4"), 8mm (5/16"), 10mm (3/8"), 12mm (1/2"), 16mm (5/8"), 20mm (3/4"), 22mm (7/8")



**FUEL LINE QUICK DISCONNECT TOOL**

- Scissor type operation for spring lock and fuel line locking couplings
- Durable, lightweight metal construction
- Common applications include: Chrysler, Ford, GM and Mazda



Part No.	Size
<b>307221</b>	5/16" & 3/8"



**A/C & FUEL LINE DISCONNECT TOOL SET**

- Essential four piece set for disconnecting most quick connect hose fittings
- Manufactured from fuel and chemical resistance materials
- Universal set, but common applications include: Chrysler, Ford and GM

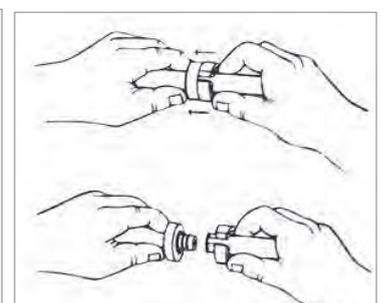
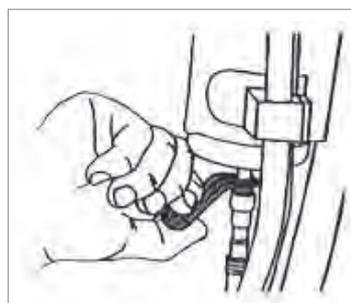
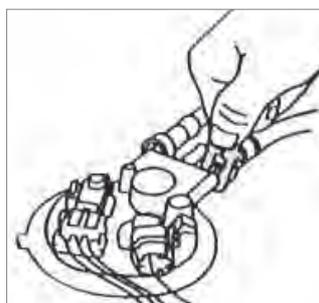
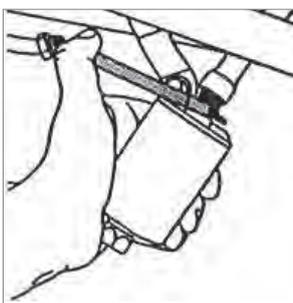
Part No.	Description
<b>307222</b>	A/C & fuel line spring lock coupling tool
	Fuel line disconnect tool - Chrysler, Ford, GM
	Fuel line coupling tool - Ford
	Quick disconnect coupler tool - Ford, GM



**A/C & FUEL LINE DISCONNECT TOOLS**  
MASTER SET 27 PIECE

- Master set covers most applications including fuel line couplings, air conditioning line couplings, clutch connectors, transmission cooler line connectors and air supply lines
- Disconnects air system lines on brakes, suspension and heavy-duty truck air systems
- Ideal for use on spring lock, quick connect and quick couplers and many other fittings
- Covers most vehicles including light commercial and heavy vehicles
- Spring loaded peg style angled disconnection tool set to ensure easy access and firm fitment
- Colour coded pieces for easy identification
- Manufactured from chemical resistant materials to withstand petrol, diesel, air conditioning gas, brake cleaner and other associated chemicals
- Supplied in custom moulded plastic hard case

Part No.	Description	Pieces
<b>307010</b>	A/C & Fuel line disconnect tool set	27
Description	Applications	Image
<p>Seven piece set of hose removal tools designed specifically for the removal of spring lock coupling type hose fittings</p> <p>Set includes sizes: 6mm (1/4"), 8mm (5/16"), 10mm (3/8"), 12mm (1/2"), 16mm (5/8"), 20mm (3/4"), 22mm (7/8")</p>	Fuel lines and air conditioning system pipes found on Chrysler, Ford and GM applications	<p>301060</p>
<p>Angled disconnect tool set: 8mm (5/16"), 9.5mm (3/8"), 13mm (1/2"), 16mm (5/8"), 19mm (3/4"), 22mm (7/8")</p> <p>Angled specific oil cooler disconnection set: 9.5mm (3/8") and 1/2"</p> <p>Angled specific cooler line set: 13mm (1/2"), 9.5mm (3/8")</p>	Angled head for fuel, oil and air conditioning lines in tight spaces	
GM fuel module disconnect tool	Disconnects the fuel module on GM applications	
Scissor style disconnect tool 3/8" and 5/16"	Most Ford, GM, Chrysler applications	<p>307221</p>
GM flex fuel disconnect tool, GM/Ford low profile fuel line disconnect set 3/8" and 5/16"	Suitable for the disconnection of GM flex fuel lines and quick connect fuel lines in hard to reach places. 3/8" suits GM and 5/16" suits Chrysler and Ford	
Coupler disconnect tool	Hairpin connectors	
Angled double ended disconnection tool set: 6mm (1/4"), 9mm (3/8"), 12mm (1/2"), 16mm (5/8")	Quick connect push-in connectors found on truck air lines and air suspension on light and heavy vehicles	





**NOID LIGHT & IAC TEST SET**  
10 PIECE

- The most economical way to check electronic fuel injection (EFI) and idle air control signals
- Efficiently checks Fleet PIN, Ford TBI, GEO TBI, Bosch PFI, Bosch 2, GM TBI, GM Multitech, GM PFI, GM SCPI and GM square 4 pin, GM Flat 4 pin
- Bright LED flash indicates signal operation

Part No.	Description	Image	Description	Image
<b>307226</b>	Noid light Bosch PFI (round pins)		Noid light GM SCPI	
	Noid light Ford TBI		Noid light Bosch 2	
	Noid light GEO TBI		Noid light GM Multitech	
	Noid light GM TBI		IAC signal test light Sq 4 Pin	
	Noid light GM PFI		IAC signal test light Flat 4 Pin	



Scan here for video



**FUEL & VACUUM PUMP PRESSURE TESTER**

- Simple and effective kit to test for worn or defective components in mechanical fuel pumps and vacuum systems
- Quickly diagnose fuel delivery systems, vacuum-operated components, intake and exhaust valves, piston rings, head gaskets
- Large, easy to read 90mm pressure and vacuum dial gauge supplied with 750mm heavy duty hose and four piece brass adaptor set including both 14 and 18mm manifold adaptors
- Suitable for testing and tuning carburettors and timing peak for maximum fuel economy
- Applicable for carburettor, EFI, turbo petrol engines
- Supplied in custom moulded plastic hard case

Part No.	Description	Specifications	Image
<b>307233</b>	Gauge	Ø 90mm 0 - 30Hg (0 - 70cmHg) 0 - 14.7 psi (0 - 1.1kg/cm <sup>2</sup> )	
	Heavy duty rubber hose	Length: 750mm	
	Manifold adaptor	1/4" NPT x 14mm	
	Manifold adaptor	3/8" NPT x 18mm	
	Stepped cone adaptor	1/8" NPT	
	Cone adaptor	Universal tapered	





**HOSE CLAMP PLIERS**  
CLIC TYPE

- Spring loaded pliers suitable for hose clamp installation and removal
- Specially designed jaws enable a quick change from installation to removal by simply turning over pliers
- Manufactured from chrome treated alloy steel with PVC dipped handles
- Suitable for CLIC, CLIC-R and Tridon SL series hose clamps

Part No.	Jaw Opening (Max)	Overall Length
<b>321011</b>	20mm	180mm



**FUEL TANK RETAINING RING REMOVER**

- Three legged fuel tank puller suitable for the removal and replacement of fuel tank retaining rings found on fuel tank sender units
- Designed to remove fuel tank retaining ring to access fuel sender or replace fuel pump/filter

Part No.	Working Range	Hex Drive
<b>307001</b>	75 - 160mm	24mm



**DIESEL INJECTOR SEAT CUTTER SET**

- Ideal for cleaning and/or refacing the diesel injector seat within the cylinder head
- Removes built up debris and provides a clean seating surface for the injector, which can eliminate blow by
- Suitable for standard and common rail diesel applications
- Supplied in custom moulded EVA foam tray in plastic hard case
- Spares: Replacement reamer set 5 Pc. (Part No. 304048A)



Part No.	Description	Size	Spares
<b>304048</b>	Flat reamer	15 x 19mm	304048A
	Flat reamer	17 x 17mm	
	Flat reamer	17 x 19mm	
	Angled reamer	17 x 17mm	
	Angled reamer	17 x 21mm	
	Extension	175mm	-
	T-Handle	150mm	-



**FUEL FILLING/EXTRACTION SYRINGE**

- Specialty syringe designed for petrol and diesel fuel filling and extraction
- Open/close twist valve is easy to use and prevents overfilling and spillage
- Safe and efficient way to handle fuel and features an anti-roll bar on main body to stabilise syringe when not in use
- Large diameter double seal plunger provides quick and efficient action
- Ideal for diesel fuel filter services and priming diesel fuel system
- Transparent canister to easily identify contaminants and fluid level
- Easy to dismantle for cleaning
- Supplied with quick release connectors to suit most vehicles
- Manufactured from fuel resistant materials including heavy duty seals
- Spares: Service kit available includes adaptors, seals and hose assembly (Part No. 305156A)



Part No.	Capacity	Adaptors	Spares
<b>305156</b>	1.5L	5/16" & 3/8" male, 5/16" & 3/8" female	305156A



**INJECTOR RETURN VOLUME TESTER**  
COMMON RAIL DIESEL 217PSI & 15BAR



- Test kit designed to measure fuel volume from the return side of common rail diesel systems for each injector
- Aids in the diagnosis of poor running engines, rough idling, fuel related issues and failed emissions etc.
- Comprehensive adaptor set to suit Bosch, Denso, Delphi and VDO/Siemens injectors
- Six glass bottles fitted on aluminium rail with hanging hook
- Enables comparison of up to six cylinders simultaneously
- Includes measuring tubes for crank only testing
- Manufactured from high quality brass and fuel resistant hoses
- Supplied in custom moulded plastic hard case



**FUEL PRESSURE TESTER KIT**  
MULTI-PORT PETROL 150PSI & 1000KPA



- Universal kit is suitable for performing running, residual, rail and flow rate pressure tests in multi-port systems
- Effectively diagnose rough idling, poor performance, high fuel consumption and starting issues etc.
- Suitable for Schrader valves including GM and Ford, T-piece adaptor, barb and screw type adaptors
- Drain with transparent hose allows testing of flow rate and monitoring of fuel condition
- Heavy duty brass main body and fittings
- Large easy to read dial gauge in a protective boot with hanging hook
- Supplied in custom moulded plastic hard case

Part No.	Ref No.	Description	Image	Qty
<b>307007</b>	1	Bosch injector adaptor		6
	2	VDO/Siemens injector adaptor		6
	3	Denso injector adaptor		6
	4	Delphi injector adaptor		6
	5	Measuring bottles -glass 10ml		1
	6	Manometer tubes -glass 10ml		6

Part No.	Ref No.	Description	Specification	Image
<b>307003</b>	1	Pressure gauge	0 - 150 psi (0 - 1000kPa) Ø 89mm	
	2	Ford schrader hose	0308 - 32 threads x1	
	3	GM schrader hose	7/16" - 20 threads	
	4	T-piece adaptor	5/16" & 3/8"	
	5	Barb adaptor	1/4", 5/16" & 3/8"	
	6	Quick connect threaded adaptor	6mm	



**INJECTOR RETURN FLOW TESTER**  
COMMON RAIL DIESEL 217PSI & 15BAR

- Heavy duty kit for testing the return flow of injectors in common rail diesel systems including Bosch, VDO/Siemens and Delphi injectors
- Efficiently diagnose rough idling, poor performance, failed emissions and increased fuel consumption etc
- Transparent body enables easy monitoring of fuel quality and air bubbles in system with drain valve to safely contain excess diesel
- Includes two pressure gauges:
  - Pressure gauge 1 - 3 bar is suitable for testing Delphi injectors
  - Pressure gauge 1 - 15 bar is suitable for testing Bosch and VDO/Siemen injectors
- Also suitable for testing the condition of a Piezo common rail injector (pass/fail statement)
- Manufactured from high quality brass and fuel resistant hoses
- Supplied in custom moulded plastic hard case

Part No.	Ref No.	Description	Specifications	Image
<b>307004</b>	1	Main body		
	2	Pressure gauge	Dual scale 1 - 3 bar (14 - 43psi)	
	3	Pressure gauge	Dual scale 1 - 15 bar (14 - 217psi)	
	4	Hose set 2pc	Suits VDO/Siemens injectors	
	5			
	6	Hose set 2pc	Suits BOSCH injectors	
	7			
	8	Hose set 2pc	Suits DELPHI injectors	
	9	Conical brass adaptor	to suit DELPHI injector	
	10	O-ring set 6 piece		



Scan for application list

**DIESEL INJECTOR PULLER**  
SLIDE HAMMER HEAVY DUTY

- Heavy duty puller kit suitable for the removal of the most stubborn and stuck diesel injectors
- For further information and specifications see the automotive pullers section p. 274 & 275

Part No.	Description	Adaptors	Slide Hammer
<b>304042</b>	Heavy duty diesel injector kit	M14 x 1.5, M16 x 1.0, M17 x 1.0, M20 x 1.0, M25 x 1.0, M27 x 1.0, Universal joint	4.8Kg
<b>304042A</b>	Diesel injector adaptor kit- Master		



**DIESEL INJECTOR TESTER**  
MECHANICAL 8700PSI & 600BAR

- Enables testing of diesel injectors by checking leakage, spray patterns, atomisation and cracking/opening pressure
- Suitable for most types of diesel mechanical injectors including common rail diesel injectors on passenger vehicles, light trucks, 4WD, SUV and stationary engines
- Large, easy to read 89mm diameter manometer with rubber protector boot
- Transparent spray guard enclosure circulates fluid back
- Manufactured from high grade aluminium steel
- Uses calibration fluid which complies with ISO4113 (not included)

Part No.	Description	Specifications
<b>307350</b>	Manometer/Gauge (Dual scale)	8700psi/600bar
	Main body	190 x1 25mm
	Pump lever	400mm
	Spray guard enclosure	100 x 160mm



**FUEL PRESSURE TESTER KIT**  
MASTER, FUEL INJECTION

- Comprehensive kit suitable for testing fuel delivery pressure on both mechanical and electronic fuel injection systems
- Used to pinpoint and identify problems in filters, lines and regulators
- Includes assorted range of hoses, banjo bolts, hose barb fittings and unions necessary to adapt to early and later model vehicles
- Suitable for petrol and low side diesel only
- Supplied in custom moulded plastic hard case with double tray lift out for easy access and identification to all parts
- Spares: Available via special order only. Price and availability upon request

Part No.	Description
<b>307300</b>	Fuel Pressure Tester Master Kit

Ref No.	Description	Specifications	Image	Qty
1	Pressure gauge	Dual scale 0 - 100 psi (0 - 7 bar) (Ø 56mm)		1
2	Pressure gauge	Dual scale 0 - 60 psi (0 - 4bar) (Ø 38mm)		1
3	Adaptor	1/4" NPT female T-piece with valve (40mm)		1
4	Adaptor	GM quick connect with valve (160mm)		1
5	Adaptor	GM 2.2K quick connect male - 5/8" x 18 female (150mm)		1
6	Adaptor	GM T.B.I (110mm)		1
7	Adaptor	Ford spring lock (270mm)		1
8	Adaptor	Ford hairpin lock (170mm)		1
9	Adaptor	M12 x 1.50p male		1
	Adaptor	M8 x 1.00p male		1
10	Pipe plug	1/4" x 1/4" (6 x 6mm)		1

Ref No.	Description	Specifications	Image	Qty
11	Hose	5/16" (55mm)		1
12	Hose	1/4" (55mm)		1
13(A)	Adaptor barb	M12 x 1.50 male 1/4", 5/16" & 3/8" (60mm)		1
14	Adaptor	M12 x 1.5 male & M8 x 1.0p male (76mm)		1
15(A)	Union	1/4" NPT (28mm)		1
16(A)	Union	M14 x 1.50 (28mm)		1
17(A)	Union	5/8" - 18 (30mm)		1
18(A)	Union	M16 x 1.50 (30mm)		1
19	Adaptor barb	5/16" x 1/4" NPT (40mm)		2
20	Adaptor barb	1/4" x 1/4" NPT (40mm)		2
21	Adaptor	Honda M6 x 1.00 with valve (40mm)		1
22	Adaptor banjo bolt	M8 x 1.00 with valve (45mm)		1
23	Adaptor banjo bolt	M10 x 1.00p with valve (45mm)		1
24	Adaptor banjo bolt	M12 x 1.25 with valve (45mm)		1
25	Adaptor banjo bolt	M12 x 1.50 with valve (50mm)		1
26(A)	Adaptor	M12 x 1.50 male & 5/8" x 18 male (40mm)		1
27(A)	Adaptor	M12 x 1.50 male & 1 6mm x 1.50 male (40mm)		1
28(A)	Adaptor	M12 x 1.50 male - 14mm x 1.50 male (40mm)		1
29(A)	Adaptor	M12 x 1.50 male & 1/4" NPT (40mm)		1
30	Adaptor	M12 x 1.50 male & M10 x 1.00 female (40mm)		1
31	Adaptor	12M x 1.50 male & M10 x 1.00 female (30mm)		1
32	Adaptor	M12 x 1.50 male & M8 x 1.00 female (20mm)		1
33	Hose clamps			4
-	Adaptor hose	Ford (350mm)		1
-	Adaptor	Bosch CIS/K Jetronic		1
-	Clear hose	1500mm		1



**TRANSFER GUN**

- Suction transfer gun enables efficient transfer of liquids from one container to another in a single stroke
- Suitable for use with a variety of liquids such as fuel oils, mineral oils, synthetic and biological oils, petrol, cooling liquids, antifreeze, spirits, brake fluids etc.
- Spares: Replacement hose - each (Part No. 305358)

Part No.	Capacity	Hose Length	Spares
<b>305229</b>	350ml	600mm x 2	305358



**SUCTION GUN**

- Designed to transfer gear oils in and out of gear boxes, transfer cases and differentials
- Lip seal provides maximum suction
- Powder coated, textured steel barrel for firm grip and supplied with 300mm (12") flexible vinyl hose
- No priming required
- Spares: Replacement hose - each (Part No. 305228)

Part No.	Capacity	Hose Length	Spares
<b>305227</b>	500ml	300mm	305228



**OIL MEASURING CONTAINER**

- Detachable threaded flexible spout 150mm and clip in cover lid for easy pouring
- Dual scale litres and quarts
- Manufactured from translucent high density polyethylene
- Spares: Replacement nozzle – each (Part No. 305264A)



Part No.	Capacity	Temp. Rating	Graduations	Spares
<b>305214</b>	1 litre/1 quart	60° C	500ml	305264A
<b>305264</b>	5 litre/5 quart	60° C	500ml	



305151

**FLUID CHANGE SYRINGES**

- For neat, clean and accurate fluid suction and dispensing
- Suitable for engine oil, gear oil, differential oil etc.
- Clear chamber allows for easy viewing and reduces cross contamination
- Made from a high quality composite plastic that is resistant to brake fluid and antifreeze
- In built hose end cap and anti-roll body stabiliser eliminates dripping and mess
- Critical components made from hi grade carbon fibre and internal seals made from high grade Viton to withstand most workshop chemicals and fluids
- Spares: Replacement seal kit (Part No. 305152A & 305151A)

**CHEMICAL RESISTANT VITON SEALS**



Part No.	Capacity	Extension Hose	Spares
<b>305152</b>	200ml	400mm	305152A
<b>305151</b>	1.5 litre	200mm	305151A



305153

305154

**CHEMICAL RESISTANT VITON SEALS**



**PRESSURE SPRAYERS**

**PUMP UP**

- Ideal for most workshop liquids and solvents such as brake cleaner, degreaser, tyre shine, detergents, acids and specialised lubricants
- Easy to fill with bulk liquids which saves money on spray cans and one off use bottles
- Durable plastic polyethylene bottle with moulded in measuring scale
- Easy to use pump action mechanism with top mounted thumb trigger
- Environmentally safe way of disbursing liquids in a controlled way
- Nozzle can be adjusted from a fine spray to a direct jet
- Critical components made from hi grade carbon fibre and internal seals made from high grade Viton to withstand most workshop chemicals and fluids
- Spares: Replacement seal kit to suit both 1L & 2L bottles (Part No. 305153A)



Part No.	Capacity	Working Pressure	Spares
<b>305153</b>	1 litre	50 - 70 psi	305153A
<b>304154</b>	2 litre	50 - 70 psi	305153A



305090 & 305091



305382



305053



305089

### OIL DRAIN PANS/CANS TRANSMISSION

- Range of oil drain pans/cans in varying styles for safe and efficient fluid catchment and storage work
- All feature a pouring spout to reduce spillage and mess
- All manufactured from durable, high density polyethylene with UV stabiliser which is resistant to most chemicals, solvents and hot oil
- Suitable for use with fuel, oils, mineral oils, synthetic oils, antifreeze, etc.
- Recessed castors provide easy mobility and transportation (305089 only)

Part No.	Description	Capacity	Size
<b>305090</b>	Universal drain pan & can	10L	580L x 330W x 140H (mm)
<b>305091</b>	Universal drain pan & can	17L	700L x 400W x 140H (mm)
<b>305382</b>	Universal drain pan	14L	Ø 450 x 150H (mm)
<b>305053</b>	Transmission & gearbox drain pan	17.3L	Ø 200 x 820L x 545W (mm)
<b>305089</b>	Low profile drain pan	20L	Ø 125 x 850L x 600W (mm)



Mess free pour

### WATERING CAN 10L

- Suitable for all refilling
- Plastic, curved spout pours precisely without spillage
- Ideal for under bonnet level refilling e.g. radiator, battery, windscreen washer etc.
- Neat mess free pour

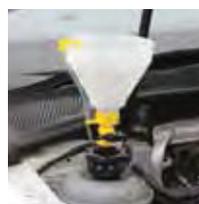


Part No.	Capacity
<b>305095</b>	10L



### FUNNEL SET COOLANT FILLER 8PC

- Universal set for easy, efficient and mess free refilling during cooling system bleed work
- Enables vehicle coolant filler point to be raised, assisting with coolant system bleeding and removal of air pockets common in modern passenger vehicle applications
- Includes five sized rubber seal adaptors to suit most vehicles and one rubber tapered cone adaptor for universal applications and multi-purpose use
- Spares: Replacement adaptor pack 6 Pc. (Part No. 305092A)



Part No.	Adaptors	Spares
<b>305092</b>	31, 35, 40, 42, 45mm & universal tapered cone	305092A



Plier lock latch

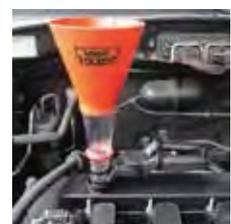
Strainer to filter media

Threaded cone for stability

Unique auto locking

### FUNNEL ADJUSTABLE PLIER UNIVERSAL

- Unique universal clamp design provides effective and mess free filling of fluids into engines, containers, drums and barrels
- Adjustable spring clamp locks into place, so there is no need to hold the funnel while filling
- Transparent lower chamber clearly shows fluid flow, minimising the risk of over filling and spillage
- Plier can be used with the supplied threaded funnel or any other normal funnel



Part No.	Adjustable Clamp Range
<b>305080</b>	28 - 74mm



**FUNNELS**

- Funnels designed with special contours in the funnel body for easy handling
- Anti splash and spill proof, with rim of funnel curved in
- Complete with wire mesh screen in funnel neck, dust cover and flexible spout
- Translucent white to give a clear view of fluid
- Manufactured from heavy duty polypropylene

Part No.	Description	Capacity	Diameter	Spout Length
<b>305388</b>	Funnel	1.7L	Ø 205mm	170mm
<b>305389</b>	Funnel w/2"bung adaptor	3L	Ø 240mm	245mm



**FUNNEL**  
FLEXIBLE & MOULDABLE

- Universal tool can be bent, folded and moulded into desired funnel shape
- Manufactured using a thin piece of aluminium encased in a thick coating of nitrile rubber
- Heavy duty construction and suitable for all fluids E.g. AdBlue®
- A simple and effective flexible rubber funnel for draining fluids from vehicles and equipment such as cars, trucks, motorcycles, aircraft, boats, generators etc.



Part No.	Size
<b>305094</b>	370 x 170 x 3mm



305300



305003

**DRAIN PLUG REMOVER SETS**

- Oil drain plug sets for the removal and installation of drain plugs on engine sumps, gearboxes and differentials
- Drain plugs feature a 3/4" hex body and 3/8" square drive
- Both sets include a 3/8" square drive T bar adaptor
- Supplied in custom moulded plastic hard case

Part No.	Description	Size	Pieces
<b>305300</b>	Drain plug removers - Hex	8, 9, 10, 12, 14, 17mm & 3/8"	12
	Drain plug removers - Sq. Dr.	8, 11, 13mm & 5/16", 3/8"	
	Sliding T bar adaptor	3/8" square drive	
<b>305003</b>	Drain plug removers - Hex	8, 9, 10, 12, 14, 17mm	17
	Drain plug removers - Sq. Dr.	8, 11, 13mm & 5/16", 3/8" & 3/8" x 10mm female	
	Drain plug removers - Triangle	10mm	
	Sliding T bar adaptor	3/8" square drive	



**MALE DRAIN PLUG REMOVER SET**

- Suitable for removing drain plugs on differentials, transmissions, oil sumps, barrels etc.
- Sizes: 8 x Metric and 9 x SAE

Part No.	Size	
<b>305216</b>	Metric	Sq. Dr. Size: 10, 11, 12, 13, 14, 15mm Hex Size: 14 & 17mm
	SAE	Sq. Dr. Size: 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4" Slot Size: 25 x 5mm Hex Size: 9/16"



305052



305074

**OIL FILTER REMOVAL PLIERS**  
ADJUSTABLE JAW

- For removing seized and stubborn filters
- Slip jointed adjustable jaws with “shark tooth” security grip to prevent slippage
- Manufactured from chrome vanadium steel with PVC dipped handles for strength and comfort



Part No.	Jaw Opening	Overall Length
<b>305052</b>	60 - 90mm	230mm
<b>305074</b>	85 - 115mm	260mm



**OIL FILTER REMOVER**  
SOCKET DRIVE CHAIN TYPE

- Specially designed chain style oil filter remover for filters in confined areas
- Services filters up to 110mm maximum diameter
- Suitable for use with 1/2” square drive extension bar and ratchet etc.

Part No.	Diameter Capacity	Square Drive
<b>305208</b>	Ø 110mm	1/2”

305203



305205



**OIL FILTER REMOVERS**  
SWIVEL HANDLE

- Universal tools for easy removal of stubborn oil filters
- Also suitable for removing spin on fuel and water separator filters
- Swivel neck allows handle to be used at various angles in confined spaces
- Heavy duty steel bands with dimples for a secure grip
- PVC dipped handle swivels to any position

Part No.	Description	Diameter Range	Band Width
<b>305203</b>	Small	Ø 60 - 73mm	25mm
<b>305204</b>	Medium	Ø 73 - 85mm	25mm
<b>305205</b>	Large	Ø 85 - 95mm	25mm
<b>305206</b>	Extra Large	Ø 95 - 111mm	25mm



**OIL FILTER REMOVERS**  
STEEL JAW TYPE

- Easily removes spin on oil filters in confined areas without slipping
- One way direction allows maximum grip during operation
- Not suitable for refitting oil filters
- Manufactured from hardened steel with black phosphate finish for maximum strength

Part No.	Diameter Range	Square Drive
<b>305022</b>	Ø 60 - 80mm	3/8”
<b>305002</b>	Ø 80 - 90mm	3/8”



Scan here for video



**OIL FILTER REMOVER**  
NYLON STRAP

- Sturdy non-slip nylon strap designed for spin-on type filters
- Suitable for oil filters, fuel and water separator filters etc.
- Heavy duty nylon strap with steel handle



Part No.	Diameter Range	Strap Width	Square Drive	Handle Length
<b>305211</b>	Ø 150mm	50mm	1/2"	150mm



**OIL FILTER REMOVER**  
WEBBED STRAP TYPE

- Heavy duty option suitable for larger applications
- Particularly suitable for commercial vehicle oil filters and fuel filters up to 150mm diameter
- Spares: Replacement webbing strap (Part No. 305073A)



Part No.	Diameter Range	Strap Width	Square Drive	Spares
<b>305073</b>	Ø 150mm	50mm	1/2"	305073A



305025



305026



305044

**OIL FILTER REMOVERS**  
STRAP TYPE

- Heavy duty strap wraps around the filter and adjusts to the required size to remove and replace the filter
- Available in heavy duty leather or rubber straps
- Conforms to irregular shapes for removal without damage



Part No.	Description	Diameter Range	Strap Width
<b>305025</b>	Leather strap oil filter remover - Small	Ø 25 - 160mm	19mm
<b>305026</b>	Leather strap oil filter remover - Large	Ø 40 - 240mm	25mm
<b>305044</b>	Rubber strap oil filter remover	Ø 150mm	20mm



305021



305209



305210

Scan here for video



**OIL FILTER REMOVERS**  
3 LEG TYPE

- Suitable for removing and fitting oil filters (do not over tighten)
- Removes stubborn oil filters where extra grip is required
- Heavy duty 3 leg style with 3/8" to 1/2" square drive adaptor included
- Manufactured from hardened steel



Part No.	Description	Diameter Range
<b>305021</b>	Oil filter remover - 3 jaw triangle body	Ø 60 - 125mm
<b>305209</b>	Oil filter remover - 3 leg round body	Ø 75 - 120mm
<b>305210</b>	Oil filter remover - 3 leg triangle body	Ø 60 - 120mm

### OIL FILTER CUP WRENCHES

#### INDIVIDUAL

- For the removal and installation of oil filters used in modern engine applications
- Fluted cup design firmly grips the corrugated end of the filter, reducing the possibility of filter damage during removal and installation
- Manufactured from either high quality alloy steel or aluminium for additional strength and durability
- Feature either 3/8" or 1/2" square drive
- Various flute designs from 6-45 flutes
- Size range: 24-108mm
- Full coverage of the Tridon oil cartridge cap range
- Vehicle application listing at [tridon.com.au](http://tridon.com.au)

Note: Dual stepped cups feature two sizes in one

Scan for application list



305103



305104 with  
oil filter housing



305104



305056

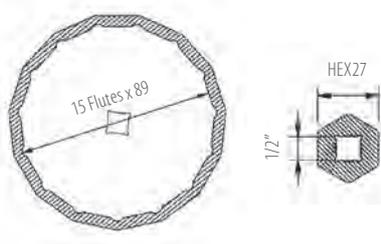
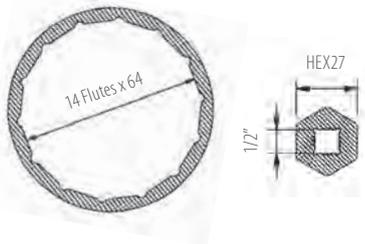
Part No.	Size	Flutes	Square Drive	Material
<b>305103</b>	24mm	6	1/2"	Aluminium - Anodized Blue
<b>305104</b>	27mm	6	3/8"	Aluminium - Chrome
<b>305105</b>	30mm	6	3/8"	Alloy steel - Black
<b>305801</b>	32.5mm	6	1/2"	Aluminium - Chrome
<b>305106</b>	32mm	6	3/8"	Aluminium - Chrome
<b>305107</b>	36mm	6	1/2"	Aluminium - Chrome
<b>305108</b>	38mm	6	3/8"	Alloy steel - Black
<b>305800-901-1</b>	Dual step 63 & 64mm	14	1/2"	Aluminium - Chrome
<b>305109</b>	64mm	14	3/8"	Alloy steel - Black
<b>305901</b>	64mm	14	1/2"	Aluminium - Chrome
<b>305133</b>	64.5mm	14	3/8"	Aluminium - Chrome
<b>305200</b>	64.5mm	14	3/8"	Aluminium - Chrome
<b>305054</b>	65mm	14	3/8"	Alloy steel - Black
<b>305056</b>	Dual step 65 & 67mm	14	3/8"	Alloy steel - Black
<b>305111</b>	66mm	6	3/8"	Alloy steel - Black
<b>305112</b>	66.5mm	14	3/8"	Alloy steel - Black
<b>305902</b>	67mm	14	1/2"	Aluminium - Chrome
<b>305055</b>	68mm	14	3/8"	Alloy steel - Black
<b>305060</b>	73mm	14	3/8"	Alloy steel - Black
<b>305905</b>	73mm	15	1/2"	Aluminium - Chrome
<b>305903-4</b>	73mm	14	1/2"	Aluminium - Chrome
<b>305903-5</b>	73mm	30	1/2"	Aluminium - Chrome
<b>305113</b>	74mm	15	3/8"	Alloy steel - Black
<b>305903</b>	74mm	14	1/2"	Aluminium - Chrome

Part No.	Size	Flutes	Square Drive	Material
<b>305903-2</b>	74mm	8	1/2"	Aluminium - Chrome
<b>305903-3</b>	74mm	15	1/2"	Aluminium - Chrome
<b>305057</b>	Dual step 74 & 76mm	15	3/8"	Alloy steel - Black
<b>305135</b>	74.2mm	14	3/8"	Aluminium - Chrome
<b>305061</b>	Dual step 75 & 77mm	15	3/8"	Alloy steel - Black
<b>305903-1</b>	75mm	15	1/2"	Aluminium - Chrome
<b>305114</b>	75.6mm	14	3/8"	Alloy steel - Black
<b>305058</b>	76mm	14	3/8"	Alloy steel - Black
<b>305059</b>	76mm	30	3/8"	Alloy steel - Black
<b>305115</b>	76mm	12	3/8"	Alloy steel - Black
<b>305117</b>	76mm	8	3/8"	Alloy steel - Black
<b>305911</b>	76mm	12	1/2"	Aluminium - Chrome
<b>305118</b>	76.5mm	14	3/8"	Alloy steel - Black
<b>305119</b>	78mm	15	3/8"	Alloy steel - Black
<b>305904</b>	79mm	15	1/2"	Aluminium - Chrome
<b>305063</b>	Dual step 80 & 82mm	15	3/8"	Alloy steel - Black
<b>305138</b>	84mm	14	1/2"	Aluminium - Chrome
<b>305906</b>	84mm	18	1/2"	Aluminium - Chrome
<b>305912</b>	86mm	14	1/2"	Aluminium - Chrome
<b>305120</b>	86mm	18	3/8"	Alloy steel - Black
<b>305121</b>	86mm	16	3/8"	Alloy steel - Black
<b>305136</b>	86.6mm	16	3/8"	Aluminium - Chrome
<b>305800-915</b>	87mm	16	1/2"	Aluminium - Chrome
<b>305123</b>	88.5mm	15	3/8"	Alloy steel - Black
<b>305134</b>	88.8mm	15	3/8"	Alloy steel - Black

MEASUREMENT OF CUPS

EVEN No. of Flutes (Flat to flat)

ODD No. of Flutes (Flat to point)



305200 with oil filter housing



305135 with oil filter housing

Scan here for video



Part No.	Size	Flutes	Square Drive	Material
305907	89mm	15	1/2"	Aluminium - Chrome
305064	90mm	15	3/8"	Alloy steel - Black
305908	91mm	15	1/2"	Aluminium - Chrome
305910-1	91mm	12	1/2"	Aluminium - Chrome
305124	92mm	10	1/2"	Aluminium - Chrome
305909	92mm	15	1/2"	Aluminium - Chrome
305065	93mm	15	3/8"	Alloy steel - Black
305066	93mm	36	3/8"	Alloy steel - Black
305125	93mm	45	3/8"	Alloy steel - Black
305800-0595	94.5mm	15	1/2"	Aluminium - Chrome
305127	95mm	15	3/8"	Alloy steel - Black
305910	95mm	15	1/2"	Aluminium - Chrome
305128	96mm	18	3/8"	Alloy steel - Black
305129	99mm	15	3/8"	Alloy steel - Black
305800-05101	100.5mm	15	1/2"	Aluminium - Chrome
305067	100mm	15	3/8"	Alloy steel - Black
305914	101mm	15	1/2"	Aluminium - Chrome
305130	106mm	15	3/8"	Alloy steel - Black
305992	106mm	15	1/2"	Aluminium - Chrome
305993	106mm	16	1/2"	Aluminium - Chrome
305131	108mm	15	3/8"	Alloy steel - Black
305132	108mm	18	3/8"	Alloy steel - Black
305994	108mm	16	1/2"	Aluminium - Chrome
305995	110mm	17	1/2"	Aluminium - Chrome
305996	118mm	18	1/2"	Aluminium - Chrome

### OIL FILTER CUP WRENCH SETS

- Popular kits to cover a wide range of vehicles
- More affordable black alloy cup sets through to professional high grade aluminium sets for the commercial workshop
- All kits are supplied in custom moulded plastic hard cases
- Cup sets are ideal for workshops to keep on hand to cover a wide range of vehicle applications

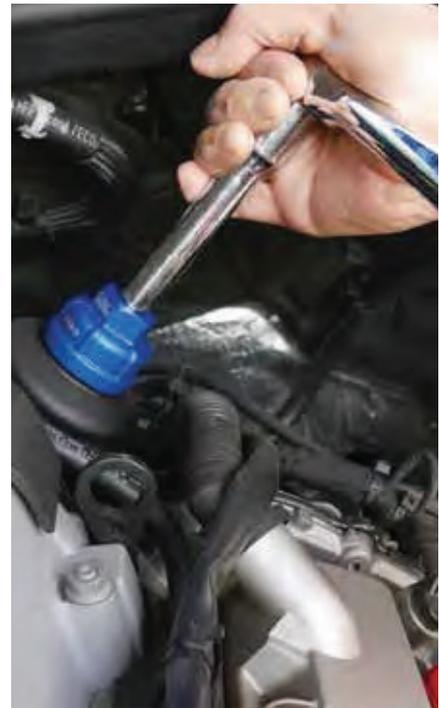
*Note: Some individual replacement cups may vary in style only, from what is supplied in kits (material, colour, design or square drive), however the actual size and number of flutes remains the same*



Scan for application list



Scan here for video



Part No.	Material	Square Drive	Pieces
<b>305004</b>	Alloy black	3/8"	15
Spares	Description		
305054	65mm x 14F x 3/8" Sq. Dr.		
305055	68mm x 14F x 3/8" Sq. Dr.		
305056	65 & 67mm (dual step) x 14F x 3/8" Sq. Dr.		
305057	74 & 76mm (dual step) x 15F x 3/8" Sq. Dr.		
305058	76mm (dual step) x 14F x 3/8" Sq. Dr.		
305059	76mm x 30F x 3/8" Sq. Dr.		
305060	73mm x 14F x 3/8" Sq. Dr.		
305061	75 & 77mm (dual step) x 15F x 3/8" Sq. Dr.		
305062	80mm x 15F x 3/8" Sq. Dr.		
305063	80 & 82mm (dual step) x 15F x 3/8" Sq. Dr.		
305064	90mm x 15F x 3/8" Sq. Dr.		
305065	93mm x 15F x 3/8" Sq. Dr.		
305066	93mm x 36F x 3/8" Sq. Dr.		
305067	100mm x 15F x 3/8" Sq. Dr.		
N/A	Adaptor 3/8" to 1/2" Sq. Dr.		

Part No.	Materials	Square Drive	Pieces
<b>305800</b>	Aluminium Chrome & Anodized Blue	1/2"	19
Spares	Description		
305103	24mm x 6F x 1/2" Sq. Dr.		
305104	27mm x 6F x 3/8" Sq. Dr.		
305105	30mm x 6F x 3/8" Sq. Dr.		
305801	32.5mm x 6F x 3/8" Sq. Dr.		
305107	36mm x 6F x 1/2" Sq. Dr.		
305108	38mm x 6F x 3/8" Sq. Dr.		
305800-901-1	63 & 64mm (dual step) x 14F x 1/2" Sq. Dr.		
305133	64.5mm x 14F x 3/8" Sq. Dr.		
305200	64.5mm x 14F x 3/8" Sq. Dr.		
305902	67mm x 14F x 1/2" Sq. Dr.		
305903	74mm x 14F x 1/2" Sq. Dr.		
305904	79mm x 15F x 1/2" Sq. Dr.		
305138	84mm x 14F x 1/2" Sq. Dr.		
305800-915	87mm x 16F x 1/2" Sq. Dr.		
305909	92mm x 15F x 1/2" Sq. Dr.		
305800-0595	94.5mm x 15F x 1/2" Sq. Dr.		
305800-05101	100.5mm x 15F x 1/2" Sq. Dr.		
N/A	Adjustable 3 jaw wrench 55-85mm		
N/A	Adaptor 3/8" to 1/2" Sq. Dr.		





Part No.	Material	Square Drive	Pieces
<b>305900</b>	Aluminium Chrome	1/2"	21
Spares	Description	Qty	
305901	64mm x 14F x 1/2" Sq. Dr.	1	
305902	67mm x 14F x 1/2" Sq. Dr.	1	
305903-4	73mm x 14F x 1/2" Sq. Dr.	1	
305905	73mm x 15F x 1/2" Sq. Dr.	1	
305903-5	73mm x 30F x 1/2" Sq. Dr.	1	
305903	74mm x 14F x 1/2" Sq. Dr.	1	
305903-3	74mm x 15F x 1/2" Sq. Dr.	1	
305903-2	74mm x 8F x 1/2" Sq. Dr.	1	
305903-1	75mm x 15F x 1/2" Sq. Dr.	1	
305911	76mm x 15F x 1/2" Sq. Dr.	1	
305911-1	79mm x 15F x 1/2" Sq. Dr.	2	
305906	84mm x 18F x 1/2" Sq. Dr.	1	
305912	86mm x 14F x 1/2" Sq. Dr.	1	
305907	89mm x 15F x 1/2" Sq. Dr.	1	
305910-1	91mm x 12F x 1/2" Sq. Dr.	1	
305908	91mm x 15F x 1/2" Sq. Dr.	2	
305909	92mm x 15F x 1/2" Sq. Dr.	1	
305910	95mm x 15F x 1/2" Sq. Dr.	1	
305914	101mm x 15F x 1/2" Sq. Dr.	1	
N/A	Cup wrench spanner		
305211	Nylon strap type universal		

Part No.	Material	Square Drive	Pieces
<b>305072</b>	Aluminium Chrome	3/8"	9
Spares	Description		
305104	27mm x 6F x 3/8" Sq. Dr.		
305106	32mm x 6F x 3/8" Sq. Dr.		
305107	36mm x 6F x 3/8" Sq. Dr.		
305133	64.5mm x 14F x 3/8" Sq. Dr.		
305200	64.5mm x 14F x 3/8" Sq. Dr.		
305135	74.2mm x 14F x 3/8" Sq. Dr.		
305136	86.6mm x 16F x 3/8" Sq. Dr.		
305134	88.8mm x 15F x 3/8" Sq. Dr.		
N/A	Adjustable jaw 63-83mm		

Part No.	Material	Square Drive	Pieces
<b>305990</b>	Aluminium Chrome	1/2"	7
Spares	Description		
305800-05101	100.5mm x 15F x 1/2" Sq. Dr.		
305992	106mm x 15F x 1/2" Sq. Dr.		
305993	106mm x 16F x 1/2" Sq. Dr.		
305994	108mm x 16F x 1/2" Sq. Dr.		
305995	110mm x 17F x 1/2" Sq. Dr.		
305996	118mm x 18F x 1/2" Sq. Dr.		
N/A	Cup wrench spanner		



## LUBRICATION

### LUBRICATION TOOLS FOR ADBLUE®

- Specialty range of lubrication tools designed for handling AdBlue® which is a urea based fluid
- All products are manufactured using materials resistant to urea based fluids
- Range includes funnels, syringe and transfer pump
- For further information and more detailed specifications see the lubrication section p.231
- AdBlue® is a registered trademark of the German Association of the Automobile Industry VDA (Verband der Automobilindustrie)



Part No.	Description	Capacity
<b>305400</b>	Funnel for AdBlue® - Straight neck	1.1L
<b>305401</b>	Funnel for AdBlue® - Angled neck	1.1L
<b>305402</b>	Syringe for AdBlue®	1.5L
<b>305158</b>	Transfer pump for AdBlue®	550ml



## STEERING & SUSPENSION



### BALL JOINT & TIE ROD END SEPARATORS FORK TYPE STRIKE THRU

- For simple and effective removal of ball joints and tie rod ends
- Ideal for work in limited space or when control arm does not permit use of fork impact type spreader
- Striking handles are extra strong and designed to achieve separation via the force impact
- 311282: Interchangeable head kit includes multiple heads, extension and air hammer handles

Part No.	Description	Fork Opening	Overall Length
<b>311271</b>	Fork type	17mm	200mm
<b>311273</b>	Fork type	24mm	300mm
<b>311272</b>	Fork type	18mm	400mm
<b>311282</b>	Fork type set - Interchangeable head	18, 24, 29mm	325mm



### BALL JOINT SEPARATORS UNIVERSAL

- For simple and effective removal of ball joints
- Ideal for use in limited working space or when the control arm does not permit use of fork impact type spreader
- Body and bolt manufactured from drop forged steel ensuring durability and extended service life

Part No.	Fork Opening	Reach	Jaw Range	Overall Length
<b>311274</b>	19mm	38mm	15- 48mm	135mm
<b>311275</b>	22mm	44mm	0 - 56mm	160mm
<b>311276</b>	17mm	30mm	Std: 35mm Ext: 70mm	265mm



**PITMAN ARM PULLERS**

- Specialised tools for the simple and trouble free removal of tie rod end and pitman arms
- Suitable for the removal of pitman and idler arms on vehicles fitted with linkage steering systems
- Ideal for passenger vehicles and light commercials
- Manufactured from drop forged steel to ensure durability and long service life

**STEERING WHEEL PULLER SET**

- Drop forged beam for increased rigidity and service life
- Suits 5/16" and 3/8" applications where access to threaded holes is available
- For further information and more detailed specifications see the automotive pullers section page 270

Part No.	Jaw Opening (Max)	Jaw Depth (Max)	Square Drive/Hex	Overall Length
<b>311279</b>	33mm	60mm	3/8"/19mm	105mm
<b>311281</b>	27mm	44mm	3/8"/19mm	115mm
<b>311280</b>	65mm	85mm	19mm Hex	150mm

Part No.	Spread	Reach
<b>250250</b>	40 - 80mm	65mm



**INNER TIE ROD TOOLS**

- Specialty tools for inner tie rods which are inaccessible to remove
- Long 1/2" square drive socket body is compatible with supplied sizes of open end drivers
- The inner tie rod is easily removed and replaced by slipping the socket over the tie rod end and connecting it to the open end driver
- 311287 & 311295 supplied in custom moulded plastic hard case
- Spares 311287: Replacement collar w/small tab to fit main body of tool (Part No. 311287A)



Part No.	Description	Metric	Imperial	Spares
<b>311290</b>	Inner tie rod tool - Universal	33 - 42mm	1 5/16" - 1 21/32"	-
<b>311287</b>	Inner tie rod tool set - 7pc	14, 17, 33.6mm	1 3/16", 1 1/4", 1 5/16", 1 7/16"	311287A
<b>311295</b>	Inner tie rod tool set - Truck 4pc	33.6, 38.4, 42mm	1 7/16"	-



**POWER STEERING & ALTERNATOR PULLEY REMOVER**

- Reversible two sided flange enables removal and installation of common alternator and power steering pump pulleys where access to a grooved hub is available
- Suitable for removing and installing press fit pulleys and alternator pulleys
- Applications include GM, Chrysler and Ford as well as Saginaw, Thompson and Ford C-2 power steering pumps
- *For further information and more detail, see the automotive puller section page 272*

Part No.	Suits Hub Diameter	Overall Length
<b>245370</b>	1 1/8" (28mm), 1 1/4" (32mm), 1 5/16" (34mm) and 1 3/8" (35mm)	90mm



**UNIVERSAL PRESS SUPPORT TOOL**

- For safe and easy shop press work, including mounting and demounting jobs
- Infinitely adjustable to suit a myriad of objects and applications E.g. wheel hub nuts
- Creates three contact points for maximum stability and security, without any swivelling
- Features press plate 200 x 240 x 40mm, swivel plate for complete versatility and adjustable anvil bolts
- Made in Germany

Part No.	Description
<b>311021</b>	Universal Press Support Tool

Scan here for video



Description	Size (mm)	Image	Qty
Press plate	200 x 240 x 40		1
Swivel plate	195 x 75 x 40		1
Heavy duty long studs	200		2
Heavy duty intermediate studs	160		2
Heavy duty short stud	100		1
Heavy duty washers	44 x 6		3
Heavy duty lock nuts	24		3
Swivel lock bolt & washer	20		1
Mounting plate	195 x 30 x 4.95		2
Mounting plate bolt & washer	-		6



**CAMBER GAUGE MAGNETIC**



- Innovative measurement set designed for simple and accurate measurement of camber in passenger and light commercial vehicles
- Two portable and magnetic camber bubble gauges to attach to the wheel hub, spindle or rotor
- Supplied in custom moulded plastic hard case

Part No.	Operating Range	Overall Length
<b>311289</b>	± 3°	123mm



**POWER STEERING PUMP PULLEY KIT MASTER**

- For quick and easy removal and installation of power steering pump pulleys
- Includes pulley remover, pulley installer and quick disconnect coupler tool
- Reliable kit provides ongoing service without distorting pump or pulley
- Suitable for most Chrysler, Ford and GM power steering pulleys including Ford Falcon AU & FG, Ford C111, Saginaw, Thompson, C2 power steering pumps
- Also suitable for removing pulleys on GM belt driven vacuum pumps and pressed on water pump pulleys of GM V6 engines
- *For further information and more detailed specifications see the automotive pullers section page 272*

Part No.	Pulley Hub Diameter	Pieces
<b>245380</b>	Ø 28 - 35mm	7

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311284



311285

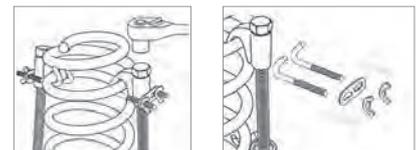


311286

### COIL SPRING COMPRESSORS

- Essential for all workshops these coil spring compressors are designed to ensure safe and effective compression of automotive coils springs
- Wrap around jaws clasp the coil spring firmly and ensure safe and effective repair and replacement of shock absorbers, struts and springs
- Features 1/2" square drive in hex head for use with suitable wrench
- Universal application units suitable for MacPherson struts and coil springs on passenger and light commercial vehicles
- Manufactured from drop forged carbon steel with heat treated lead screws for optimum durability and performance
- 311285: Supplied with safety hook assembly for additional safety and control
- 311286: Supplied in custom moulded plastic tray in metal storage case

Part No.	Jaw Width	Working Capacity	Overall Length
<b>311284</b>	85mm	260mm	300mm
<b>311285</b>	90mm	260mm	300mm
<b>311286</b>	85mm	300mm & 400mm	400mm



### TIE ROD END REMOVAL TOOL UNIVERSAL

- Used for simple and effective separation of tie rod ends
- Tool inserts between the tie rod end spindle and the tie rod
- When the forcing screw is tightened, pressure exerted on the spindle causes it to pull free of the tie rod
- May be used with tie rod ends in drag link and steering arm applications
- Suitable for use on most front wheel drive vehicle applications
- Body and bolt manufactured from durable drop forged steel to maximise service life



Part No.	Fork Opening	Reach	Hex Drive
<b>311278</b>	17mm	30mm	19mm



### COIL SPRING COMPRESSOR KIT HEAVY DUTY SHOE TYPE

- Essential tool kit for all workshops this heavy duty coil spring compressor is designed to ensure safe and effective compression of automotive coils springs
- Includes three interchangeable shoe sizes to support various coil spring diameters
- Features a heavy duty, shielded screw body for superior strength and safety
- Suitable for MacPherson struts and coil springs on standard passenger, utility and 4WD vehicles
- Supplied in heavy duty custom moulded plastic hard case



Part No.	Size Range	Overall Length
<b>311002</b>	65 - 215mm	450mm

### BEARING & BUSH/PRESS & PULL SLEEVE KIT UNIVERSAL

- Essential professional workshop kit for extracting and installing silent bearings, hydraulic bearings, bearing bushes, ball bearings, shaft seals, rubber bearings etc.
- Universal application kit – suitable for passenger, light commercial and heavy goods vehicles
- Suitable for ON vehicle and OFF vehicle use
- Kit includes five threaded rods (M10, M12, M14, M16, M18) with thrust nuts and washers and twenty two press on sleeves
- Supplied in custom moulded plastic hard case



Part No.	Contents	Description	Inside/Outside Diameter	Contents	Description	Inside/Outside Diameter	Contents	Description	Inside/Outside Diameter
<b>311020</b>	311020A	Sleeve	Ø 33/44mm	311020K	Sleeve	Ø 52/62mm	311020U	Sleeve	Ø 70/80mm
	311020B	Sleeve	Ø 36/46mm	311020L	Sleeve	Ø 54/64mm	311020V	Sleeve	Ø 72/82mm
	311020C	Sleeve	Ø 38/48mm	311020M	Sleeve	Ø 56/66mm	311020W	Sleeve	Ø 75/85mm
	311020D	Sleeve	Ø 40/50mm	311020N	Sleeve	Ø 58/68mm	311020X	Sleeve	Ø 80/90mm
	311020E	Sleeve	Ø 42/52mm	311020P	Sleeve	Ø 60/70mm	311020AA	Threaded rod	M10
	311020F	Sleeve	Ø 44/54mm	311020Q	Sleeve	Ø 62/72mm	311020BB	Threaded rod	M12
	311020G	Sleeve	Ø 46/56mm	311020R	Sleeve	Ø 64/74mm	311020CC	Threaded rod	M14
	311020H	Sleeve	Ø 48/58mm	311020S	Sleeve	Ø 66/76mm	311020DD	Threaded rod	M16
	311020J	Sleeve	Ø 50/60mm	311020T	Sleeve	Ø 68/78mm	311020EE	Threaded rod	M18

### BEARING & BUSH/PRESS & PULL SLEEVE MASTER KIT UNIVERSAL W/PRESS FRAME

- Master workshop kit for extracting and installing: silent bearings, hydraulic bearings, bearing bushes, ball bearings, shaft seals, rubber bearings etc.
- Includes press frame to enable complete portability
- Ten tonne hydraulic ram provides enough force to remove the most stubborn bushes or ball joints
- Contains 22 press sleeves that are suitable for most passenger, 4WD and light commercial vehicles
- Supplied in custom moulded heavy duty storage case with castor roller wheels and safety locking clips



Part No.	Contents	Description	Specifications	Qty
<b>311022</b>	265015A	Hydraulic Ram	10 Tonne	1
	311022A	Threaded rod	M10 x 1.5	1
	311022B	Threaded rod	M12 x 7.75	1
	311022C	Threaded rod	M14 x 2.0	1
	311022D	Threaded rod	M16 x 2.0	1
	–	Fixing spindle	M10 x 1.5, M12 x 7.75, M14 x 2.0, M16 x 2.0	4
	–	Pointed sleeve	28mm & 95mm	2
	–	Sleeve (Ø Inside/Outside)	26 x 18mm, 28 x 20mm, 30 x 32mm, 32 x 34mm, 34 x 26mm, 36 x 28mm, 38 x 30mm, 40 x 32mm, 42 x 34mm, 44 x 36mm, 46 x 38mm, 48 x 40mm, 50 x 42mm, 52 x 44mm, 54 x 46mm, 56 x 48mm, 58 x 50mm, 60 x 52mm, 62 x 54mm, 64 x 56mm, 66 x 58mm, 68 x 60mm	22



309040



309033



309034



309035

### TYRE LEVERS

- For removal and installation of tyres on rims
- Heavy duty tyre levers manufactured from hardened and tempered drop forged chrome vanadium steel



Part No.	Overall Length
<b>309040</b>	300mm
<b>309033</b>	400mm
<b>309034</b>	500mm
<b>309035</b>	600mm



### DIGITAL TYRE PRESSURE GAUGE

- Simple and accurate gauge gives a digital read out of tyre pressure
- Backlit LCD screen enables easy read out and illuminating light on bottom of unit for work in the dark
- Auto shut off function (25 seconds)
- Dual powered via solar panel and 3V lithium coin cell battery
- Multiple units of measurement: psi, bar, kPa, kg/c



Part No.	Range	Resolution	Accuracy
<b>309101</b>	5 - 150psi	0.1psi, 0.01bar, 1 kPa/0.01kg, cm <sup>2</sup>	5 - 100psi (+/-1psi), 101 - 150psi (+/-2psi)



Striking head

### NUT CRACKER BAR

- For seized and stubborn nuts
- High leverage 180° rotating "Strike-thru" head
- Unique design creates an additional twist force after impact to assist cracking the nut
- Heavy duty construction for ongoing shock impact applications
- Ergonomic rubber handle provides comfort and firm grip

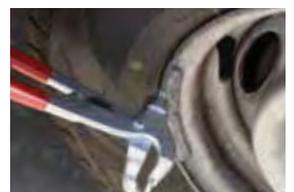


Part No.	Square Drive	Overall Length
<b>321032</b>	1/2"	410mm



### WHEEL WEIGHT PLIERS

- For the quick installation, removal, trim and tightening of wheel weights
- Balanced well enough to suit any operator but also heavy duty design and construction to be used as a hammer
- Makes wheel balance weight work simple and quick
- Manufactured from drop forged, heat treated steel with PVC dipped handles



Part No.	Jaw Opening (Max)	Jaw Length	Cutting Jaw	Face	Overall Length
<b>309243</b>	30mm	40mm	12mm	Ø 20mm	240mm

TYRE & WHEEL



TYRE VALVE CORE TORQUE TOOLS

- Specifically designed to torque the tyre valve core to the correct specification as required in the tyre pressure monitoring systems (TPMS)
- Moulded handle allows for a secure grip
- Accuracy: +/- 6%

Part No.	Torque Setting	Overall Length
<b>309030</b>	25Ncm (2in. lbs.)	120mm
<b>309029</b>	45Ncm (4in. lbs.)	120mm



TYRE VALVE REMOVER SET

- For the removal and installation of tyre valve cores
- Moulded plastic handles allow for a secure grip
- Regular reach unit for passenger vehicles and motorcycles
- Long reach unit ideal for trucks with deep dish wheels



Part No.	Overall Length	Pieces
<b>309246</b>	110mm/155mm	2

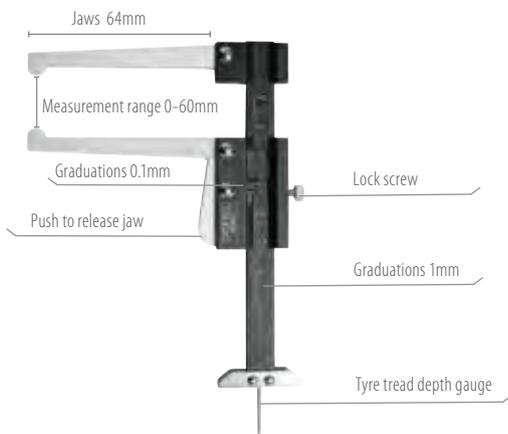


TYRE VALVE REMOVER & INSTALLER 180° HEAD

- Rubber bumper slides up and down the tool shaft in order to protect wheel rims from possible damage during valve removal or installation
- Ideal for use on tyres with snap-in valves



Part No.	Size	Overall Length
<b>309000</b>	5/16" x 32T	370mm

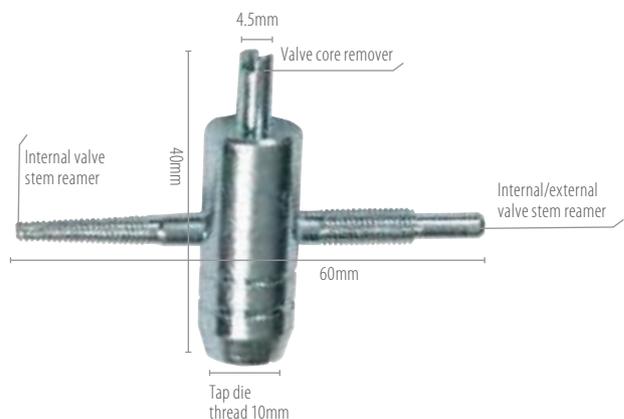


TYRE DEPTH & DISC BRAKE GAUGE

- Floating jaw assembly enables easy removal of caliper from disc while retaining the gauge reading
- Simple and easy to use tool used to attain measurements of disc brake thickness and tyre tread depth
- Graduated main body and graduated sliding bar with locking screw
- Durable aluminium construction

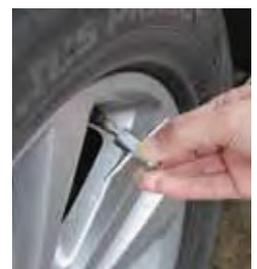


Part No.	Measuring Range	Graduated Body	Graduated Sliding Bar
<b>310020</b>	0 - 60mm	1mm	0.1mm



TYRE VALVE REMOVER 4 WAY

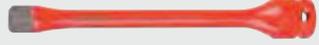
- For the removal and installation of tyre valves and valve cores on both tubed and tubeless tyres
- Tapped ends repair both inner and outer valve threads
- High grade tempered steel construction
- Suitable for standard valves



Part No.	Size (Length x Width x Thickness)
<b>309245</b>	34 x 49 x 15mm

### TORQUE EXTENSION BARS

- Designed to torque wheel nuts and bolts to the correct tension as specified by the vehicle manufacturer
- Colour coded extension bars for quick reference to size, designed with pre-tension torque rating
- Both ends feature a 1/2" square drive
- Overall length per bar: 195mm
- Available individually or part of a set
- Kit supplied in custom moulded plastic hard case

Part No.	Description				Pieces
<b>309500</b>	Torque extension bar set				10
Contents	Description	Nm	Overall Length	Image	
309501	Torque extension bar - Green	90Nm	195mm		
309502	Torque extension bar - Black	100Nm	195mm		
309503	Torque extension bar - Yellow	110Nm	195mm		
309504	Torque extension bar - Red	120Nm	195mm		
309505	Torque extension bar - Dark Blue	135Nm	195mm		
309506	Torque extension bar - Orange	150Nm	195mm		
309507	Torque extension bar - Grey	160Nm	195mm		
309508	Torque extension bar - Brown	175Nm	195mm		
309509	Torque extension bar - White	190Nm	195mm		
309510	Torque extension bar - Light Blue	200Nm	195mm		



309500

### WHEEL BEARING LOCK NUT SOCKETS

- Heavy duty wheel bearing lock nut sockets for the removal and installation of wheel bearing locking nuts
- Extra deep clearance and thin wall design to suit most applications
- Manufactured from high strength steel tube
- 3/4" square drive



309003

309004

309008

Part No.	Socket Type	Size
<b>309001</b>	Hexagon 6 point	2 3/32"
<b>309014</b>	Hexagon 6 point	2 1/4"
<b>309006</b>	Hexagon 6 point	2 3/8"
<b>309023</b>	Octagon 8 point	2 3/8"
<b>309015</b>	Hexagon 6 point	2 1/2"
<b>309002</b>	Hexagon 6 point	2 9/16"
<b>309021</b>	Hexagon Rounded 6 point	2 9/16"
<b>309016</b>	Hexagon 6 point	2 5/8"
<b>309017</b>	Hexagon 6 point	2 3/4"

Part No.	Socket Type	Size
<b>309018</b>	Octagon Rounded 8 point	2 3/4"
<b>309025</b>	Hexagon 6 point	2 7/8"
<b>309024</b>	Hexagon 6 point	3"
<b>309003</b>	Hexagon 6 point	3 1/4"
<b>309026</b>	Octagon 8 point	3 1/4"
<b>309004</b>	Hexagon 6 point	3 1/2"
<b>309005</b>	Octagon 8 point	3 1/2"
<b>309019</b>	Octagon 8 point	3 3/4"
<b>309027</b>	Octagon 8 point	3 13/16"

Part No.	Socket Type	Size
<b>309020</b>	Hexagon 6 point	3 7/8"
<b>309022</b>	Octagon 8 point	3 7/8"
<b>309008</b>	Hexagon 6 point	4"
<b>309009</b>	Hexagon 6 point	4 1/8"
<b>309010</b>	Hexagon 6 point	4 3/8"
<b>309011</b>	Octagon 8 point	4 3/8"
<b>309038</b>	Octagon 8 point	4 13/16"
<b>309012</b>	Hexagon 6 point	4 7/8"
<b>309013</b>	Octagon 8 point	4 7/8"

### WHEEL HANGER PIN SET

UNIVERSAL

- Ideal for fitting and removing heavy SUV and 4x4 wheels including wheels with spacers
- Reduces the chance of cross threading when tightening
- Includes one wheel hanger sleeve for wheel stud style
- Aligns brake disc and hub when fitting wheels
- Suitable for most European applications
- Manufactured from hardened steel for strength and durability
- Supplied in nylon storage wallet



Part No.	Description	Size	Application	Image
<b>309110</b>	Male	M12 x 1.5	Audi, Alfa Romeo, BMW, MB, Mini, Porsche, Volvo and VW	
	Male	M14 x 1.5	Audi, BMW, Citroen, Chrysler, Ferrari, Fiat, Ford, GM, Hyundai, Land Rover, Lamborghini, MB, Peugeot, Porsche, Renault, Saab, Seat, Skoda, Volvo and VW	
	Male	M14 x 1.25	Mini Cooper and BMW	
	Male	M16 x 1.5	Fiat, Land Rover and Peugeot	
	Female	M12 x 1.5	Lexus, Toyota and Volvo	



### WHEEL NUT SOCKETS

IMPACT NARROW THIN WALL

- Heavy duty impact sockets specifically designed for use on alloy and performance wheels, but also suitable for standard wheels
- Removable protective plastic shell protects the alloy wheel from damage
- Extra heavy duty and built to endure the rigours of a professional workshop
- All sockets are deep and feature a 1/2" square drive (except 19mm which is 3/4")
- Supplied in custom moulded plastic hard case



Part No.	Description	Size	Pieces
<b>309300</b>	Metric set	17, 19, 21mm	3
<b>309032</b>	Metric set - Extra Long 150mm	17, 19, 21mm	3
<b>309036</b>	Metric set	15, 17, 19, 21, 22mm	5
<b>309350</b>	Metric set	17, 19, 21, 22, 23, 24, 27mm	7
<b>309400</b>	Imperial set	3/4", 13/16", 7/8", 1", 1 1/16"	5

### INDIVIDUAL SIZES AVAILABLE SEPARATELY

Part No.	Size	Part No.	Sizes
309301	17mm	309305	23mm
309302	19mm	309306	24mm
309303	21mm	309307	27mm
309304	22mm		

### TORQUE MULTIPLIER NUT CRACKING SET

3200NM

- Heavy duty kit for removing stubborn wheel nuts on heavy vehicles, light commercial trucks, buses and vans
- Uses reduction gears to create a multiplication force
- Provides progressive build of force instead of shock impact
- Ergonomic rotation handle provides comfort and stability
- Manufactured from heavy duty chrome molybdenum for strength and durability
- Features seven deep 75mm six point 1" square drive impact sockets, rotation handle and 200mm male extension bar
- Supplied in custom moulded plastic hard case with clip-lockable lid

Part No.	Description	Specifications/Sizes
<b>309055</b>	Multiplication ratio	56 : 1
	Square drive	1" Sq. Dr.
	Socket sizes 1" Sq. Dr. Hex	24, 27, 30, 32, 33, 36 & 38mm
	Output force (Max)	3200Nm / 2360 ft. lbs.



### INDIVIDUAL SOCKETS AVAILABLE SEPARATELY (1" SQ. DR. X 6PT)

Part No.	Size	Part No.	Size
30903724	24mm	30903735*	35mm
30903727	27mm	30903736	36mm
30903730	30mm	30903738	38mm
30903732	32mm	30903741*	41mm
30903733	33mm		

\*Not included in 309055 kit



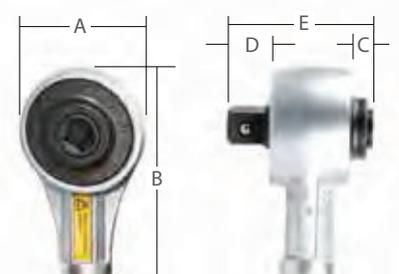
### TORQUE MULTIPLIER

1500NM

- Heavy duty unit designed for use in applications where a higher than otherwise achievable torque rating is required
- Multiplication ratio of 3 to 1 with planetary gear design
- Ideal for breaking difficult or frozen fastener applications
- Head assembly features 1/2" square drive (female) for use with torque wrench, ratchet, breaker bar or power drive etc. and 3/4" square drive (male) for use with sockets
- Extension bar and stabiliser also included



Part No.	Description	Specifications
<b>321009</b>	Multiplication ratio	3 : 1
	Input drive	1/2" Sq. Dr. female
	Input force (Max)	500Nm / 365 ft. lbs.
	Output drive	3/4" Sq. Dr. male
	Output force (Max)	1500Nm
	Accuracy	+/- 4%
	Dimensions	A: 73mm, B: 127mm, C: 10mm, D: 25mm, E: 83mm
	Weight	1.60Kgs





**WHEEL BEARING LOCK NUT WRENCH SET**  
ADJUSTABLE

- Adjustable wrench tool kit for the removal of wheel bearing lock nuts
- Adjustable jaws to suit both 6 and 8 point wheel bearing lock nuts
- Locking mechanism ensures jaws are rigid to prevent slipping on narrow lock nuts
- Includes three pairs of pins for use on pin type locknuts
- Ideal for 4WD applications

Part No.	Size Range	Pin Diameter	Torque (Max)
<b>311014</b>	45 - 145mm	Ø 6 x 43mm (2 Pc.), 8 x 43mm (2 Pc.), 10 x 43mm (2 Pc.)	677nm (500ft. lb)



**WHEEL CHOCK/PARKING STOPPER**

- Extra heavy duty wheel chock prevents car slide while acting as an additional safety measure
- Manufactured from polypropylene



Part No.	Size (Length x Width x Height)
<b>309041</b>	240 x 135 x 120mm



**WHEEL WRENCH**  
TELESCOPIC

- Innovative and versatile telescopic wrench used for the removal and installation of wheel nuts
- Telescopic extension provides generous leverage for removal of stubborn or rusted wheel nuts and bolts

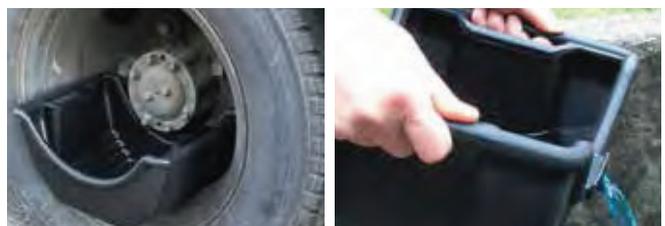


Part No.	Socket Sizes	Telescopic Extension
<b>309248</b>	17, 19, 21, 23mm	340 - 530mm

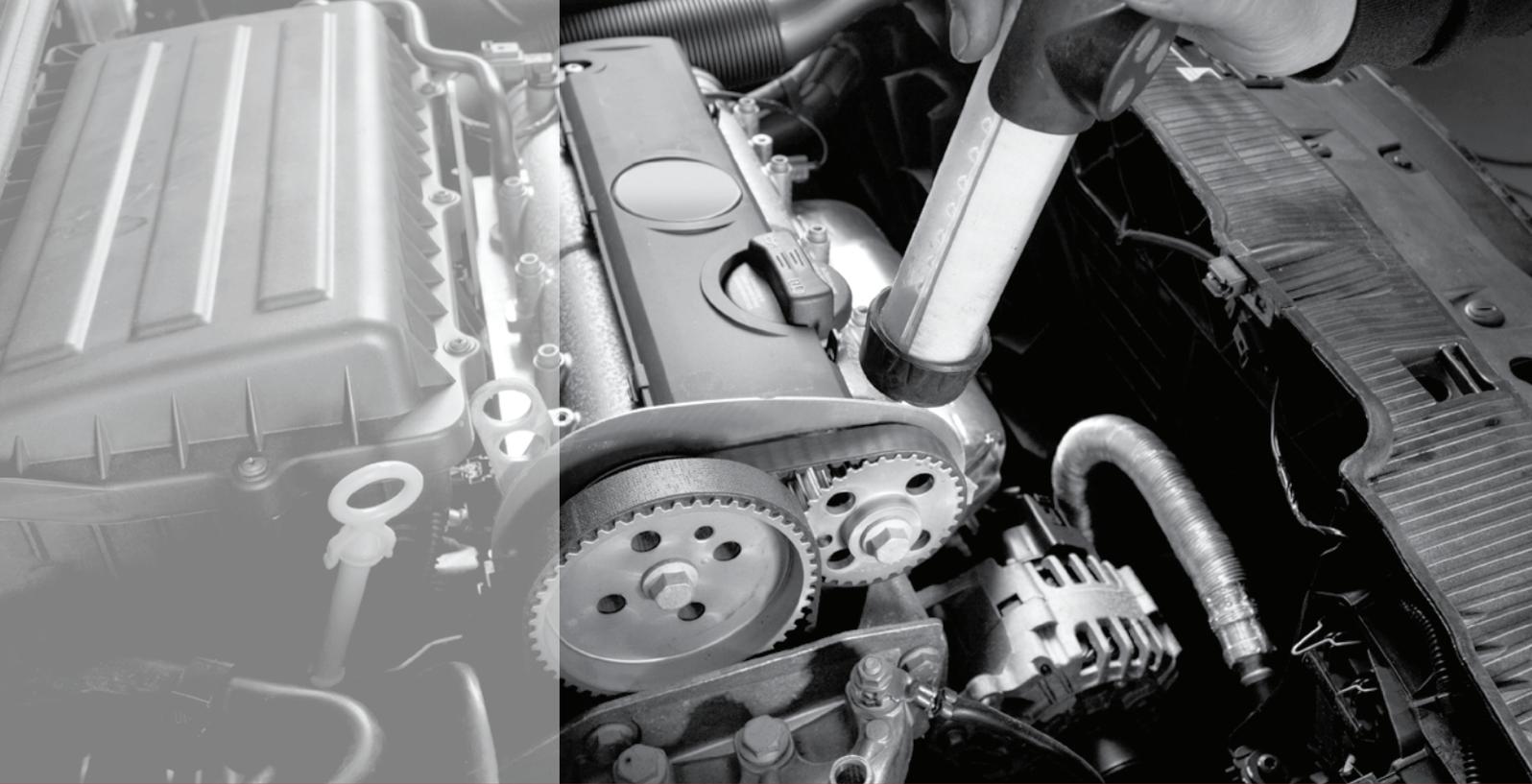


**TRUCK & TRAILER WHEEL PAN**

- Specifically designed for use during truck and trailer wheel repair
- Used to catch oil from wheel hubs after removing cap
- Easy pour evacuation mouth and ergonomic handles with storage capability for hub nuts
- Manufactured from polypropylene, non warping and durable



Part No.	Capacity	Rim Diameter Capacity
<b>309039</b>	3L	Ø 350mm



# TIMING TOOLS

<b>ALFA ROMEO</b>	122	<b>MINI</b>	167
<b>AUDI</b>	124	<b>MITSUBISHI</b>	168
<b>BMW</b>	134	<b>NISSAN</b>	170
<b>CHRYSLER/DODGE</b>	142	<b>PEUGEOT</b>	171
<b>CITROEN</b>	142	<b>PORSCHE</b>	174
<b>FIAT</b>	142	<b>RANGE ROVER</b>	174
<b>FORD</b>	143	<b>RENAULT</b>	174
<b>HOLDEN</b>	153	<b>SAAB</b>	176
<b>HONDA</b>	159	<b>SKODA</b>	176
<b>HYUNDAI</b>	159	<b>SSANGYONG</b>	177
<b>JAGUAR</b>	162	<b>SUBARU</b>	178
<b>JEEP</b>	161	<b>TOYOTA</b>	180
<b>KIA</b>	160	<b>UNIVERSAL</b>	184
<b>LAND ROVER</b>	161	<b>VOLKSWAGEN</b>	181
<b>MAZDA</b>	159, 163	<b>VOLVO</b>	183
<b>MERCEDES</b>	164		

# TIMING TOOLS

## INTRODUCTION

- The Toledo Timing Tool range consists of uniquely designed engine timing and locking tool kits required for the servicing and repairs of modern passenger vehicle engines for the Australian and New Zealand vehicle car parc.
- Each kit has been designed to provide maximum market coverage for petrol and/or diesel vehicle applications in the servicing of timing belts, timing chain, gears and other engine repairs. Kits are available in master, popular and universal applications.
- The range has been developed for use within original manufacturer's service specifications. As the timing tool kit must be compatible with the vehicle application, always refer to manufacturer's service notes or bulletins to ensure correct servicing instructions. Each kit features an OEM tool identification guide to enable correct tool selection.
- Each kit is individually supplied in custom moulded EVA foam and strong metal storage box

*NOTE: Incorrect tool use during repairs can lead to serious engine damage. Toledo recommends that repairs be carried out by a trained professional.*

## ALFA ROMEO

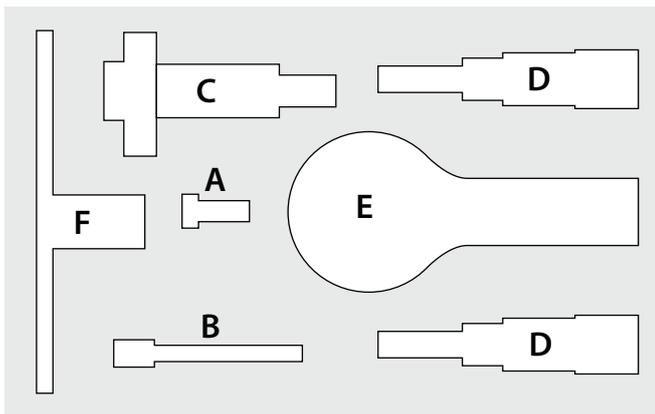
### TIMING TOOL KIT

- Suitable for popular 1.9L – 2.4L diesel engine applications
- For the locking and alignment of the camshafts, crankshaft and injection pump during the removal and installation of the engine timing belt and other engine servicing and repairs

#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304720</b>	<b>Alfa Romeo</b>		
	147	1.9L	2006 - 2009
	159	1.9L, 2.4L	2006 - 2012
	Giulietta (2.0 JTD-M)	2.0L	2012 - 2015
	<b>Fiat</b>		
	Bravo	1.9L	2007 - 2008
	Doblo (Maxi)	2.0L	2014 - 2018
	Freemont (Urban)	2.0L	2013 - 2017
	Multipla	1.9L	2000 - 2010
	Punto	1.9L	2006 - 2009
	Ritmo	1.9L	2008 - 2010
	<b>SAAB</b>		
	9-3 (1.9 TiD)	1.9L	2007 - 2012
	9-5 (2.0 TiD)	2.0L	2011 - 2012

#### TOOL REFERENCE



#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0067		Bolt
B	A0109	1 860 965 000	Injection Pump Timing Pin
C	A0181	1 860 846 001	Flywheel Locking Tool
D	A0184	1 870 896 900	Camshaft Locking Tools
E	A0333	1 860 905 000, 1 860 905 010, 2 000 003 000	Crankshaft Alignment Tool
F	A0422	1 860 898 000	Flywheel Locking Tool

#### Also suitable: Part No. 304712 TIMING TOOL MASTER KIT

- Suitable for popular Alfa 147, 159 & Giulietta, 1.9L - 2.4L (DOHC) diesel engine applications
- For full kit contents refer to page 154



Scan here for link to part finder

**TIMING & ALIGNMENT TOOL MASTER KIT**



- Suitable for popular 1.2L – 2.0L DOHC 16V petrol and 1.6L - 1.9L diesel engine applications
- For the locking and alignment of the camshaft and crankshaft during the removal and installation of the engine timing belt and other engine servicing and repairs



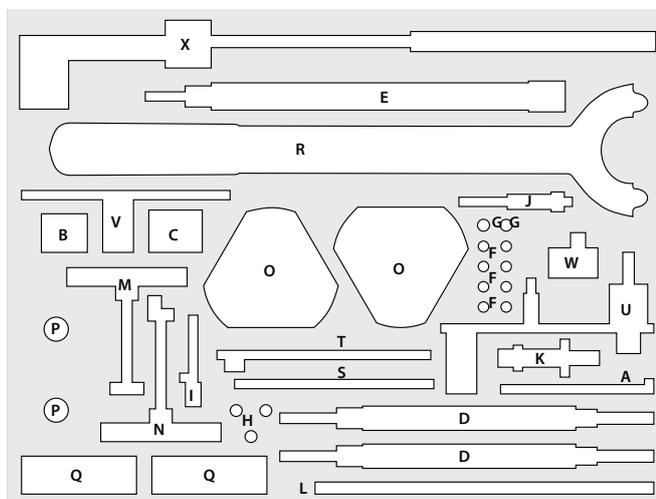
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304705</b>	<b>Abarth</b>		
	500	1.4L (312A)	2011 - 2014
	595	1.4L (312A)	2014 - 2018
	695	1.4L (312A)	2011 - 2016
	<b>Alfa Romeo</b>		
	147, 156	2.0L (AR32310)	1999 - 2009
	Giulietta (1.4)	1.4L (198A4)	2013 - 2015
	GTV (2.0)	2.0L (AR32301)	1998 - 2003
	Mito	1.4L (198A4 / 8)	2009 - 2011
	Spider	2.0L (AR32301)	1998 - 2002
	Spider (Velcoe)	2.0L (AR32310)	2002 - 2003
	<b>Fiat</b>		
	500	1.4L (169A3)	2008 - 2012
	Punto	1.4L (198A4)	2008 - 2010
	Punto	1.9L	2006 - 2009
	Ritmo	1.4L	2008 - 2010
	Ritmo	1.9L	2008 - 2010

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0014	1 860 987 000	Tensioner Tool
B	A0031	1 867 030 000	Flywheel Locking Tool
C	A0033	1 860 680 000, 1 860 771 000	Flywheel Locking Tool
D	A0040	1 860 992 000	Piston Position Tools
E	A0041	1 860 895 000	Adaptor-Tdc Indicator
F	A0056		Bolt
G	A0061		Bolt
H	A0067		Bolt
I	A0081	1 860 965 000	Injection Pump Timing Pin
J	A0175	6MM	Crankshaft Locking Tool and Bolt
K	A0183	1 860 876 000	Tensioning Tool
L	A0230	7004-TG	Camshaft Timing Pin
M	A0235	1.822.154.000	Balance Shaft Tension Tool
N	A0236	1.822.149.000	Tensioning Tool
O	A0251	1 860 874 000	Camshaft Locking Tools
P	A0287	1 860 985 000	Camshaft Locking Tools
Q	A0295	1.825.041.000	Camshaft Locking Caps
R	A0313	1 860 831 000	Camshaft Adjusting Wrench
S	A0333	1 860 905 000, 1 860 905 010, 2 000 003 000, 2 000 003 000	Crankshaft Alignment Tool
T	A0336	2 000 004 500	Crankshaft Locking Tool
U	A0347	1 860 876 000	Tensioning Tool
V	A0422	1 860 898 000	Flywheel Locking Tool
W	A0609	2 000 015 800	Camshaft Sprocket Locking Tool
X	A0614	1.822.146.000, 1.822.156.000, 1 860 831 000, 1 860 831 001	Camshaft Holding Tool

**TOOL REFERENCE**



### TIMING TOOL KIT

- Suitable for popular 1.6L – 2.0L petrol engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



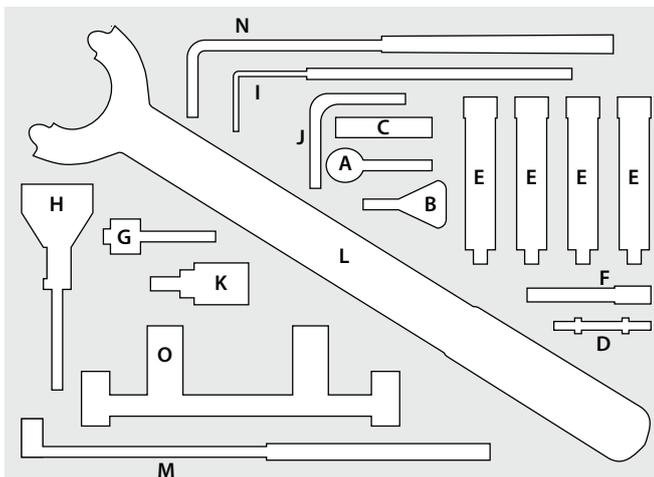
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304714</b>	<b>Audi</b>		
	A3 (8L, 8P)	1.6L - 2.0L	1997 - 2011
	A4 (B5, B6, B7)	1.8L, 2.0L	1995 - 2009
	A6 (C6)	2.0L (BPF)	2006 - 2008
	TT	1.8L, 2.0L	1999 - 2015
	<b>Skoda</b>		
	Octavia (1Z)	2.0L	2005 - 2009
	<b>Volkswagen</b>		
	Beetle	1.6L - 2.0L	2000 - 2011
	Bora (1J)	2.0L	1999 - 2005
	Caddy (2K)	1.6L	2004 - 2010
	EOS (1F)	2.0L (BWA)	2007 - 2008
	Golf	1.6L - 2.0L	1995 - 2013
	Jetta (1K)	2.0L	2005 - 2009
	Passat (3B, 3C)	1.8L, 2.0L	1997 - 2008
	Polo (9N)	1.8L (BJX)	2005 - 2010
	Scirocco (1S)	2.0L (CDLC)	2010 - 2017

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0002	T40011	Tensioner Bolt / Locking Pin
B	A0011	T10115	Chain Tensioner Locking Pin
C	A0013	T10008	Tensioner Locking Tool
D	A0043	M5 X 55mm	Stud & Nut
E	A0058	3369	Support Guides
F	A0083		Auxiliary Drive Belt Tensioner Locking Tool
G	A0163	T10092	Bolt & Nut (M5)
H	A0176	3366	Camshaft Sprocket Holding Tool
I	A0198	T40098	Auxiliary Drive Belt Tensioner Locking Pin
J	A0210	3204, T10060, T10060A	Auxiliary Drive Belt Tensioner Locking Pin
K	A0255	40080, T20079, T40080	Camshaft Adjuster Socket
L	A0313	3036	Camshaft Adjusting Wrench
M	A0317	T10020, U-30009, V159	Tensioner Pulley Adjusting Tool
N	A0318	3387, T10020, V159	Tensioner Pulley Adjusting Tool
O	A0350	T10252	Camshaft Alignment Tool

### TOOL REFERENCE



**TIMING TOOL MASTER KIT**  

- Suitable for various 1.4L – 2.0L petrol and diesel engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



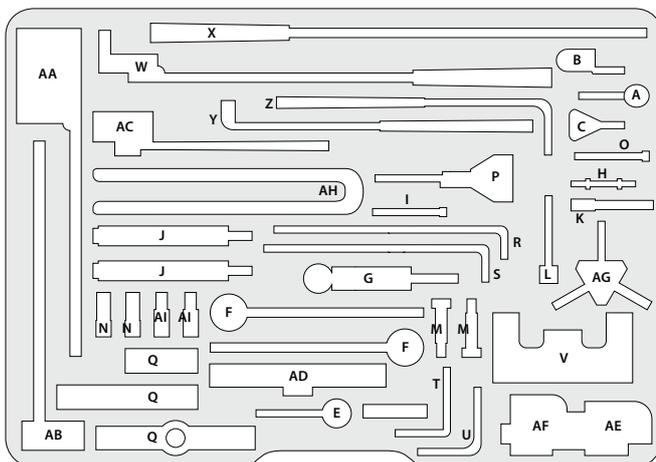
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304715</b>	<b>Audi</b>		
	A1, A3, A4, A6	1.6L - 2.0L	1995 - 2015
	A3, A4, A5, A6 (Diesel)	1.6L - 2.0L	2004 - 2015
	Q3	2.0L (CULB)	2015 - 2018
	Q3 (Diesel)	2.0L	2012 - 2018
	TT	1.8L, 2.0L	1999 - 2015
	<b>Skoda</b>		
	Fabia	1.4L (CGGB)	2013 - 2014
	Octavia, Roomster, Superb, Yeti (Diesel)	1.6L - 2.0L	2006 - 2018
	<b>Volkswagen</b>		
	Amarok (Diesel)	2.0L	2011 - 2018
	Beetle, Caddy, EOS, Golf, Jetta, Passat, Polo, Scirocco	1.4L - 2.0L	1995 - 2017
	Beetle, Caddy, EOS, Golf, Jetta, Passat, Polo, Tiguan (Diesel)	1.6L - 2.0L	1995 - 2016
	Multivan, Transporter (Diesel)	1.9L, 2.0L	2004 - 2018
	Transporter	2.0L (AXA)	2004 - 2010

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0002	T40011	Tensioner Bolt/Locking Pin
B	A0010		Locking Pin
C	A0011	T10115	Chain Tensioner Locking Pin
D	A0013	T10008	Tensioner Locking Tool
E	A0022	3359, MP1-301	Camshaft Locking Tool
F	A0023	3411	Support Guides
G	A0025	T10016, T10074	Camshaft Locking Tool
H	A0043	M5 X 55MM	Stud & Nut
I	A0044		Set Screw (M5 X 60mm)
J	A0059	3369	Support Guides
K	A0083		Auxiliary Drive Belt Tensioner Locking Tool
L	A0111		Timing Pin
M	A0116	3418, T10098	Camshaft Setting Bar
N	A0143	T10172-4	Camshaft Sprocket Holding Tool Pins
O	A0163	T10092	Bolt & Nut (M5)
P	A0176	3366	Camshaft Sprocket Holding Tool
Q	A0189	T40001	Camshaft Sprocket Puller
R	A0197	T10264	Tensioner Pulley Adjusting Tool
S	A0198	T10265	Auxiliary Drive Belt Tensioner Locking Pin
T	A0209	3204, T10060, T10060A	Auxiliary Drive Belt Tensioner Locking Pin
U	A0210	3204, T10060, T10060A	Auxiliary Drive Belt Tensioner Locking Pin
V	A0272	3418, T10098	Camshaft Setting Bar
W	A0313	3036	Camshaft Adjusting Wrench
X	A0314	T10172	Universal Flange Holding Wrench
Y	A0317	3387, 10020, T10004, T10020, U-30009, V159	Tensioner Pulley Adjusting Tool
Z	A0318	3387, 10020, T10004, T10020, U-30009, V159	Tensioner Pulley Adjusting Tool
AA	A0322	T10028	Crankshaft Pulley Holding Tool
AB	A0323	3415, T30004	Crankshaft Pulley Holding Tool
AC	A0325	3387, 10020, T10004, T10020, U-30009, V159	Tensioner Pulley Adjusting Tool
AD	A0351	3418, T10098	Camshaft Setting Bar
AE	A0380	T10050, T10100	Crankshaft Sprocket Locking Tool
AF	A0381	T10050, T10100	Crankshaft Sprocket Locking Tool
AG	A0408		Tensioner Adjusting Tool
AH	A0453	3212	Pulley Holding Tool
AI	A0454	T10172-2, T10172-4	Camshaft Sprocket Holding Tool Pins

**TOOL REFERENCE**



### TIMING TOOL KIT

- Suitable for popular 1.4L – 1.6L DOHC 16V petrol engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



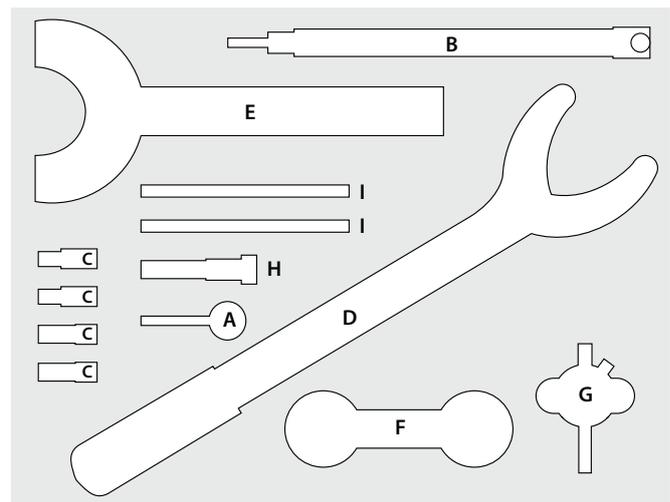
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304716</b>	<b>Audi</b>		
	A1	1.4L	2010 - 2015
	A3	1.4L	2008 - 2013
	<b>Skoda</b>		
	Fabia	1.4L	2010 - 2015
	Octavia	1.4L	2010 - 2013
	Rapid	1.4L (CAXA)	2013 - 2015
	Roomster	1.6L (BTS)	2007 - 2015
	Yeti	1.4L (CAXA)	2014 - 2018
	<b>Volkswagen</b>		
	Beetle	1.4L (CTHD)	2013 - 2018
	Golf	1.4L, 1.6L	2004 - 2014
	Jetta	1.4L	2004 - 2017
	Polo	1.4L, 1.6L	2006 - 2014
	Scirocco	1.4L	2009 - 2010
	Tiguan	1.4L	2011 - 2016

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0001	T40011	Tensioner Locking Pin
B	A0041	T10170	Adaptor - TDC Indicator
C	A0143	T10172-4	Camshaft Sprocket Holding Tool Pins
D	A0314	T10172	Universal Flange Holding Wrench
E	A0323	3415, T30004	Crankshaft Pulley Holding Tool
F	A0398	T10171, T10171A	Camshaft Alignment Tool
G	A0409	6079	Dial Gauge
H	A0631	T10340	Crankshaft Locking Tool
I	A0632	T10341	Tools - Guide Pins (2)

### TOOL REFERENCE



TIMING TOOL KIT  

- Suitable for popular 1.4L – 2.0L petrol and diesel engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



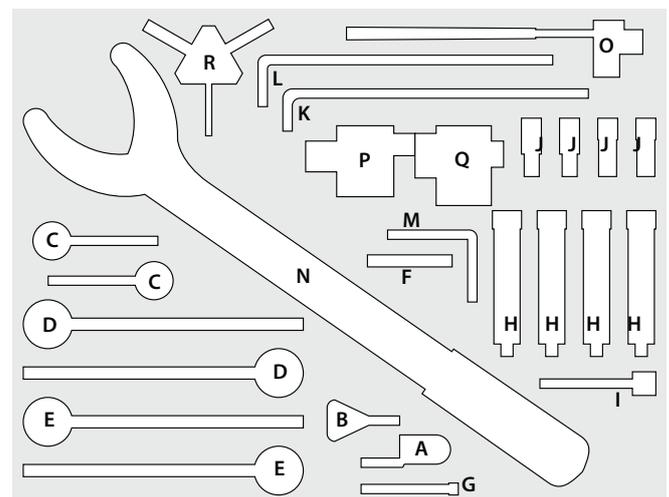
## APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304725</b>	<b>Audi</b>		
	A3, A4, A6	1.8L, 2.0L	1997 - 2009
	A3, A4, A5, A6 (Diesel)	2.0L	2004 - 2018
	Q3	2.0L	2015 - 2018
	Q3, Q5 (Diesel)	2.0L	2009 - 2018
	TT	2.0L	2006 - 2015
	<b>Skoda</b>		
	Octavia (Diesel)	1.6L - 2.0L	2006 - 2014
	Roomster (Diesel)	1.9L	2007 - 2010
	Superb (Diesel)	2.0L	2008 - 2018
	Yeti (Diesel)	2.0L	2010 - 2017
	<b>Volkswagen</b>		
	Amarok (Diesel)	2.0L	2011 - 2018
	Beetle, EOS, Golf, Jetta, Passat, Polo	1.6L - 2.0L	1997 - 2013
	Beetle, EOS, Golf, Passat, Polo, Tiguan (Diesel)	1.6L - 2.0L	1995 - 2016
	Caddy, Citivan	1.6L, 2.0L	2006 - 2010
	Caddy, Citivan (Diesel)	1.6L - 2.0L	2004 - 2015
Multivan, Transporter (Diesel)	2.0L	2004 - 2018	
Scirocco	2.0L	2010 - 2017	
Multivan	2.0L	2004 - 2010	

## CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0010		Locking Pin
B	A0011	T10115	Chain Tensioner Locking Pin
C	A0022	3359, MP 1-301	Camshaft Locking Tool
D	A0023	3411	Support Guides
E	A0024	T10093	Support Guides
F	A0043	M5 x 55mm	Stud and Nut
G	A0044		Set Screw M5 x 60mm
H	A0058	3369	Support Guides
I	A0111		Timing Pin
J	A0143	T10172-4	Camshaft Sprocket Holding Tool Pins
K	A0197	T10264	Tensioner Pulley Adjusting Tool
L	A0198	T10265, T40098	Auxiliary Drive Belt Tensioner Locking Pin
M	A0209	3204, T10060, T10060A	Auxiliary Drive Belt Tensioner Locking Pin
N	A0314	T10172	Universal Flange Holding Wrench
O	A0326	3387, 10020, T10004, T10020, U-30009, V159	Tensioner Pulley Adjusting Tool
P	A0380	T10100	Crankshaft Sprocket Locking Tool
Q	A0381	T10050	Crankshaft Sprocket Locking Tool
R	A0408		Tensioner Adjusting Tool

## TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for various 1.4L – 2.0L petrol engine models
- For the locking and alignment of the camshaft and crankshaft during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



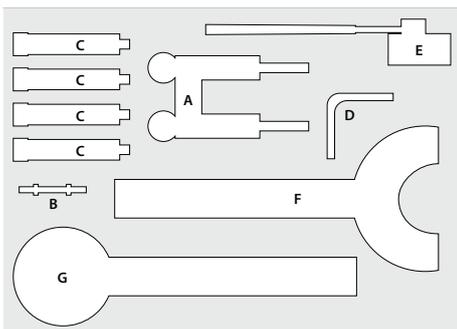
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304728</b>	<b>Audi</b>		
	A2	1.4L, 1.6L	2001 - 2004
	A4	1.8L - 2.0L	1995 - 2008
	<b>Volkswagen</b>		
	Beetle	1.6L	2001 - 2011
	Caddy	1.6L	2004 - 2010
	Citivan	2.0L	2006 - 2010
	Golf	1.6L	1995 - 2009
	Passat	1.8L - 2.0L	1997 - 2005
	Polo	1.4L - 1.8L	2000 - 2014
	Transporter	2.0L	2004 - 2010

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0025	T10016, T10074	Camshaft Locking Tool
B	A0043	M5 X 55MM	Stud and Nut
C	A0058	3369	Support Guides
D	A0210	3204, T10060, T10060A	Auxiliary Drive Belt Tensioner Locking Pin
E	A0322	T10028	Crankshaft Pulley Holding Tool
F	A0323	3415	Crankshaft Pulley Holding Tool
G	A0325	T10020	Two-Pin Wrench

#### TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for popular 2.7L & 3.0L (V6), 4.1L & 4.2L (V8) DOHC diesel engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



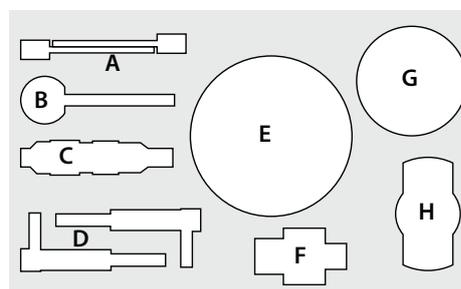
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304735</b>	<b>Audi</b>		
	A4	2.7L, 3.0L (TDI)	2005 - 2014
	A5	3.0L (TDI)	2008 - 2017
	A6	2.7L, 3.0L (TDI)	2004 - 2018
	A7	3.0L (TDI)	2011 - 2018
	A8	3.0L, 4.1L, 4.2L (TDI)	2006 - 2018
	Q5	3.0L (TDI)	2009 - 2016
	Q7	3.0L, 4.1L, 4.2L (TDI)	2006 - 2015
	SQ5	3.0L (TDI)	2013 - 2016
	<b>Porsche</b>		
	Cayenne	3.0L (TDI)	2010 - 2014
	<b>Volkswagen</b>		
	Touareg	3.0L, 4.2L (TDI)	2006 - 2018

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0644	40071	Tensioner Locking Pin (2 X 3.3mm)
B	A0022	3359	Camshaft Locking Tool
C	A0639	3242	Crankshaft TDC Locking Screw
D	A0212	T40060	Camshaft Locking Pin
E	A0641	T40049	Crankshaft Turning Tool
F	A0640	T40058	Crankshaft Pulley Bolt Adaptor
G	A0642	T40061	Camshaft Alignment Locking Tool
H	A0643	T40062	Camshaft Sprocket Holding Tool

#### TOOL REFERENCE



TIMING TOOL KIT 

- Suitable for various 1.8L and 2.0L DOHC 16V TFSi & 2.0L turbo petrol engine models
- For the locking and alignment of the camshaft, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



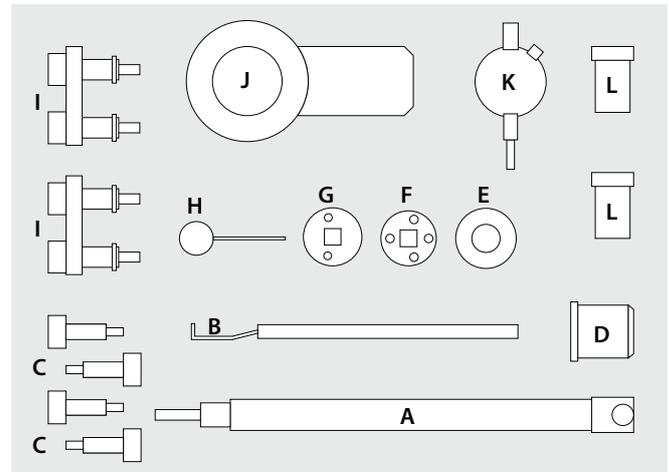
## APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304750</b>	<b>Audi</b>		
	A3, A4, A5, A6	1.8L - 2.0L	2007 - 2018
	Q3, Q5	2.0L	2009 - 2016
	TT	1.8L - 2.0L	2009 - 2018
	<b>Skoda</b>		
	Octavia	1.8L - 2.0L	2013 - 2018
	<b>Volkswagen</b>		
	Amarok	2.0L	2011 - 2016
	EOS	2.0L	2008 - 2016
	Golf	2.0L	2009 - 2018
	Jetta	2.0L	2009 - 2016
	Passat	1.8L - 2.0L	2008 - 2018
	Tiguan	2.0L	2008 - 2016

## CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0041	T10170/A/1	Dial Gauge Adapter
B	A0667	T40265	Oil Pump Tensioner Locking Tool
C	A0666	T40196	Drifts For Camshaft Slide
D	A0675	T40266	Camshaft Adjuster Holding/Turning Tool
E	A0668	T10368	Crankshaft Pulley Bolt Spacer
F	A0660	T10352/1	Camshaft Adjuster Control Valve Removal Tool
G	A0751	T10352/2	Camshaft Adjuster Control Valve Removal Tool
H	A0002	T40011	Tensioner Locking Tool
I	A0662	T40271/1/2	Camshaft Locking Tool
I	A0663	T40271/1/2	Camshaft Locking Tool
J	A0665	T10355	Crankshaft Pulley Holding Tool
K	A0409	VAS 6079	Dial Gauge
L	A0664	T40267	Tensioner Locking Tool

## TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for popular 2.3L – 6.0L DOHC V5, V6, W8, W12 petrol engine applications
- For the locking and alignment of the camshafts, crankshaft and fuel pump during the removal and installation of the engine timing chain and other engine servicing and repairs



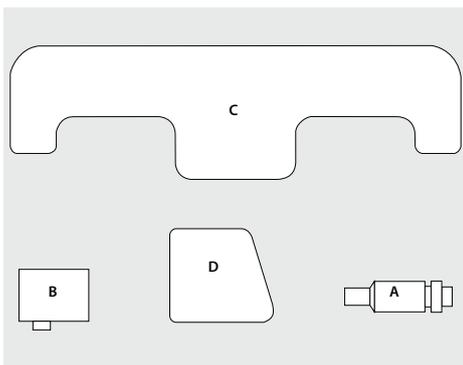
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304756</b>	<b>Audi</b>		
	A3 (8P)	3.2L	2004 - 2009
	Q7 (4L)	3.6L (BHK)	2006 - 2010
	TT	3.2L	2004 - 2010
	<b>Porsche</b>		
	Cayenne	3.6L (M55)	2007 - 2014
	<b>Volkswagen</b>		
	Bora (V5, V6)	2.3L - 2.8L	1999 - 2006
	Caravelle (V)	2.8L (AMV)	2002 - 2005
	Golf (IV)	2.8L - 3.2L	2001 - 2004
	Golf (V)	3.2L (BUB)	2006 - 2010
	Multivan (V)	3.2L (BKK)	2005 - 2008
	Passat (3B)	4.0L (BDN)	2002 - 2004
	Transporter (V)	3.2L (BKK)	2005 - 2008

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0639	3242	Crankshaft TDC Locking Screw
B	A0732	T10332	High-Pressure Fuel Pump Sprocket Locking Tool
C	A0733	T10068 A	Camshaft Alignment Tool
D	A0734	T10363	High-Pressure Fuel Pump Sprocket Locking Tool

#### TOOL REFERENCE



### CAMSHAFT ALIGNMENT TOOL KIT

- Suits 3.0L V6, DOHC 30V petrol engines
- For the locking and alignment of the camshafts, crankshaft and tensioner during engine servicing and repairs



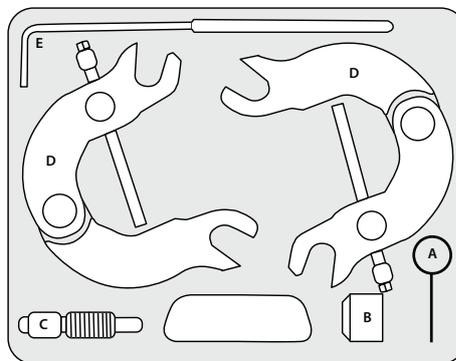
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304036</b>	<b>Audi</b>		
	A4 (V6)	3.0L (ASN)	2001 - 2004
	A4 (V6)	3.0L (BBJ)	2001 - 2005
	A6 (V6)	3.0L (ASN)	2001 - 2004
	A6 (V6)	3.0L (BBJ)	2002 - 2005

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0001	T40011	Tensioner Locking Pin
B	A0152	T40028	Camshaft Sprocket Adjusting Tool
C	A0173	T40026	Crankshaft Locking Tool
D	A0289	T40030	Camshaft Locking Tools
E	A0318	3387	Tensioner Pulley Adjusting Tool

#### TOOL REFERENCE



TIMING TOOL KIT 

- Suitable for popular VAG 1.0L, 1.2L and 1.4L petrol engine applications
- For the locking and alignment of the camshafts and crankshaft during the removal and installation of the engine timing belt and other engine servicing and repairs



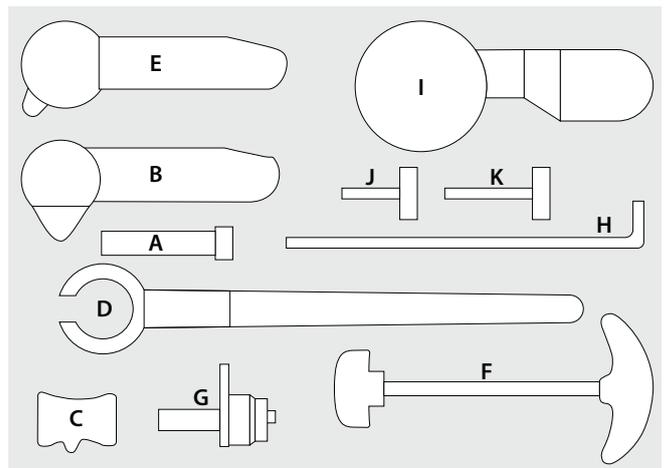
## APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304757</b>	<b>Audi</b>		
	A1	1.2L - 1.4L	2012 - 2018
	A3	1.4L (DOHC)	2013 - 2016
	Q3	1.4L (CHP, CZE)	2014 - 2018
	<b>Skoda</b>		
	Fabia	1.2L	2010 - 2018
	Octavia	1.4L (CHP)	2013 - 2015
	Yeti	1.2L (CBZB)	2011 - 2018
	<b>Volkswagen</b>		
	Caddy	1.2L (CBZ)	2010 - 2015
	Golf (VI)	1.2L (SOHC)	2010 - 2015
	Golf (VII)	1.4L (DOHC)	2013 - 2018
	Polo (6R)	1.2L	2010 - 2018
	UP!	1.0L (CHY)	2012 - 2018

## CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0631	T10340	Crankshaft Locking Bolt
B	A0691	T10477	Camshaft Setting Plate
C	A0692	T10476	Camshaft Sprocket Locking Tool
D	A0693	T10499	Tensioner Adjusting Wrench
E	A0694	T10494	Camshaft Setting Plate
F	A0695	T10487	Assembly Tool
G	A0669	T10414	Camshaft Alignment Tool
H	A0197	T10264	Tensioner Pulley Adjusting Tool
I	A0696	T10504	Camshaft Timing Tool
J	A0697	T10504/1	Camshaft Timing Tool Locking Pin
K	A0698	T10504/2	Camshaft Timing Check Pin

## TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for popular VAG 1.6L and 2.0L DOHC 16V diesel engine applications
- For the locking and alignment of the camshafts, crankshaft and fuel pump during the removal and installation of the engine timing belt and other engine servicing and repairs



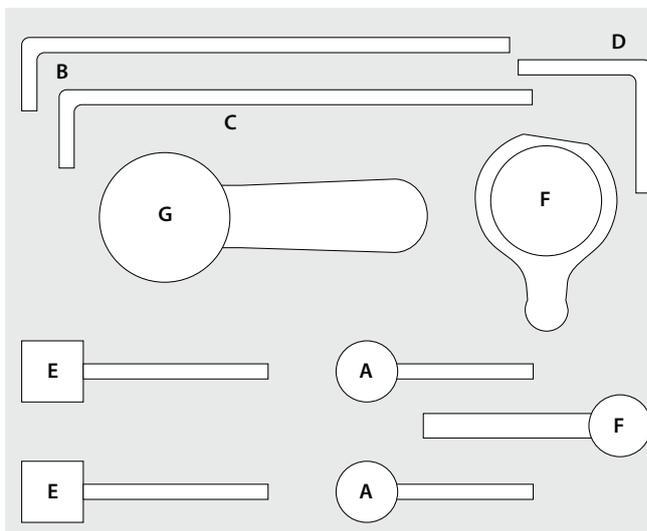
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304765</b>	<b>Audi</b>		
	A3 (8V)	1.6L (CLH)	2013 - 2014
	A3 (8V)	2.0L (CRBC)	2013 - 2016
	A3 (8V)	2.0L (CRLB)	2013 - 2016
	A4 (8K)	2.0L (CNH)	2014 - 2016
	<b>Skoda</b>		
	Octavia (NE)	1.6L (CLH)	2013 - 2018
	Octavia (NE)	2.0L (CKF)	2013 - 2018
	Octavia (NE)	2.0L (CUN)	2014 - 2018
	Octavia (NE)	2.0L (CUP)	2013 - 2018
	<b>Volkswagen</b>		
	Golf (VII)	1.6L (CLH)	2013 - 2018
Golf (VII)	2.0L (CRBC)	2013 - 2018	

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0022	3359	Camshaft Locking Tools
B	A0197	T10264, T10409	Tensioner Pulley Adjusting Tool
C	A0198	T10265, T40098	Auxiliary Drive Belt Tensioner Locking Pin
D	A0210	T10060A	Auxiliary Drive Belt Tensioner Locking Pin
E	A0207	T10492	Injection Pump Timing Pins
F	A0704	T10490	Crankshaft Sprocket Locking Tool
G	A0705	T10051	High-Pressure Fuel Pump Sprocket Holding Tool

### TOOL REFERENCE



TIMING TOOL KIT 

- Suitable for popular 2.5L – 5.2L DOHC 5, V6, V8, V10 petrol engine applications
- For the locking and alignment of the camshafts, crankshaft and fuel pump during the removal and installation of the engine timing chain and other engine servicing and repairs



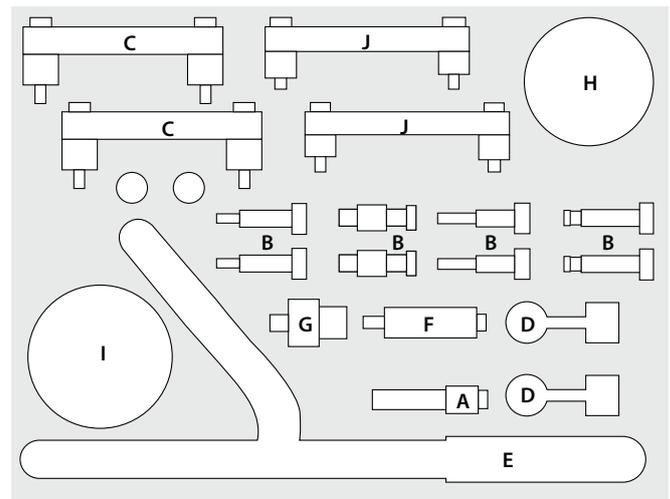
## APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304767</b>	<b>Audi</b>		
	A4 (B7)	3.1L (AUK)	2005 - 2009
	A4 (B8)	3.2L (CALA)	2008 - 2012
	A5 (8T)	3.2L (CALA)	2007 - 2012
	A6 (C6)	2.8L - 3.1L	2005 - 2011
	A8 (D3)	4.2L	2005 - 2013
	Q5 (8R)	3.2L (CALB)	2009 - 2012
	Q7 (4L)	4.2L (BAR)	2006 - 2010
	R8 (4.2 FSI Quattro)	4.2L (BYH)	2007 - 2018
	R8	5.2L	2009 - 2018
	RS Q3 (8U)	2.5L (CTSA)	2014 - 2015
	RS4 (B7)	4.2L (BNS)	2006 - 2008
	RS5 (8F)	4.2L (CFS)	2010 - 2018
	TT RS (8J)	2.5L (CEPA)	2009 - 2013

## CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0172	T40069	Crankshaft Locking Pin
B	A0454	T10172/2	Camshaft Sprocket Holding Tool Pins
C	A0455	T40070	Camshaft Locking Tools
D	A0456	T40071	Timing Chain Tensioner Locking Pins
E	A0618	T10172	Camshaft Sprocket Holding Tool
F	A0639	3242	Crankshaft TDC Locking Screw
G	A0640	T40058	Crankshaft Pulley Bolt Adaptor
H	A0641	T40049	Crankshaft Turning Tool
I	A0741	T40079	Camshaft Adjuster Holding Tool
J	A0742	T40133	Camshaft Locking Tools

## TOOL REFERENCE



### CAMSHAFT LOCKING KIT

- Suitable for popular 2.5L (N52) & 3.0L (N54 & N55) DOHC 24V engine applications with timing chains
- For the locking and alignment of the camshaft and crankshaft during the removal and installation of the engine timing chain and other engine servicing and repairs
- Required for dismantling, assembly and timing of the Vanos unit



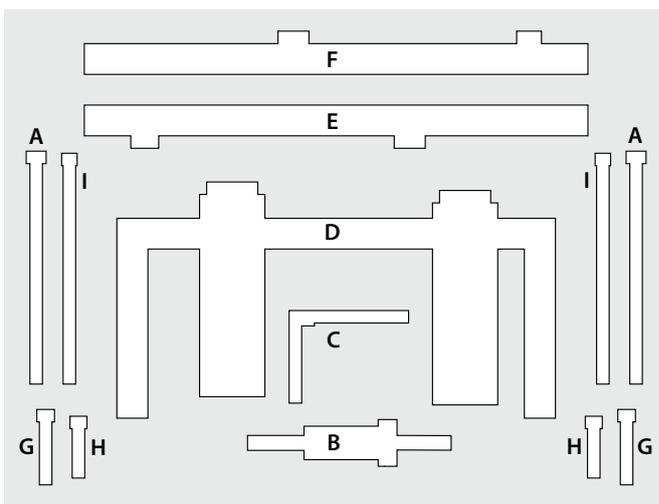
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304700</b>	<b>BMW</b>		
	1 Series (E82 - E88)	3.0L (N52, N54)	2005 - 2015
	3 Series (E90 - E93)	2.5L (N52B25)	2005 - 2014
	3 Series (E90 - E93)	3.0L (N52, N54, N55)	2005 - 2018
	435i (F32, F36)	3.0L (N55B30A)	2013 - 2016
	5 Series (E60 - E61)	2.5L, 3.0L (N52)	2004 - 2011
	5 Series (F07 - F11)	3.0L (N52, N55)	2010 - 2018
	M135i, M235i	3.0L (N55B30A)	2012 - 2018
	X1, X3, X5	3.0L (N52B30)	2006 - 2012
	X4, X5, X6	3.0L (N54, N55)	2008 - 2018
	Z4 (E85, E89)	2.5L, 3.0L (N52, N54)	2006 - 2018

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0054	Bolts	Camshaft Alignment Tool Bolts
B	A0170	11 9 340	Timing Chain Pre-Tensioning Tool
C	A0232	11 0 300	Flywheel Timing Pin
D	A0266	11 4 281, 11 4 282, 11 4 283	Camshaft Alignment Tool
E	A0399	11 4 290	Camshaft Position (CMP) Sensor Disc Setting Tool
F	A0634	11 8 520	Camshaft Position (CMP) Sensor Disc Setting Tool
G		Bolts	Camshaft Alignment Tool Bolts
H		Bolts	Camshaft Alignment Tool Bolts
I		Bolts	Camshaft Alignment Tool Bolts

### TOOL REFERENCE



## TIMING TOOL KIT

- Suitable for engine codes M42, M43, M44, M50, M52 & M54
- For the locking and alignment of the camshaft and crankshaft during the removal and installation of the engine timing chain and other engine servicing and repairs
- Required for dismantling, assembly and timing of the Vanos unit



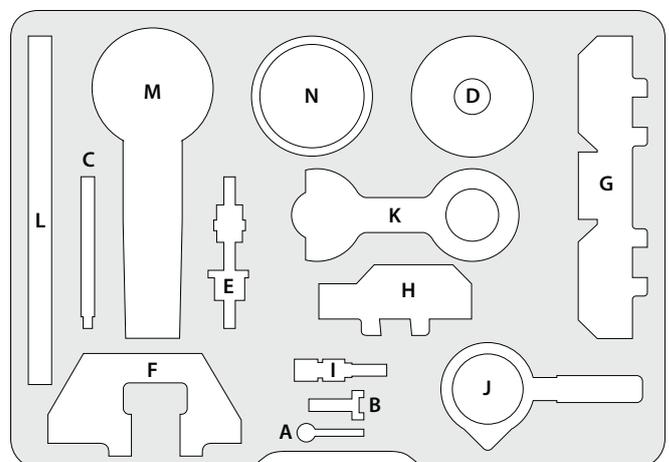
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304701</b>	<b>BMW</b>		
	3 Series (E36)	1.6L - 2.8L (M42, M43, M44, M50, M52)	1991 - 2001
	3 Series (E46)	1.9L - 3.0L (M43, M44, M52, M54)	1998 - 2007
	5 Series (E34)	2.0L, 2.5L (M50)	1990 - 1996
	5 Series (E39)	2.2L - 3.0L (M52, M54)	1996 - 2003
	5 Series (E60)	2.5L - 3.0L (M52, M54)	2003 - 2005
	7 Series (E38)	2.8L (M52B28)	1995 - 2001
	7 Series (E65)	3.0L (N52B30)	2002 - 2005

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0003	11 3 290, 11 3 292	Tensioner Locking Tool
B	A0009	11 3 310	Secondary Tensioner Locking Tool
C	A0042	11 2 300	Crankshaft Locking Pin
D	A0161	11 8 210	Crankshaft Pulley Hub Puller
E	A0167	11 3 390, 11 4 220	Timing Chain Pre-Tensioning Tool
F	A0267	11 3 190	Camshaft Alignment Tool
G	A0275	11 3 240, 11 3 244	Camshaft Alignment Tool
H	A0280	11 9 110	Camshaft Locking Fixture Add-On
I	A0334	11 3 450	Vanos Unit Checking Tool
J	A0337	11 5 490	Exhaust Camshaft Sprocket Tool
K	A0400	11 6 180	Camshaft Sprockets Alignment Tool
L	A0426	11 6 150	Camshaft Timing Setting Tool
M	A0603	11 8 190	Vibration Damper Holder
N	A0604	11 8 200	Vibration Damper Puller Head

### TOOL REFERENCE



### TIMING & ALIGNMENT TOOL KIT

- Suitable for popular 1.8L and 2.0L DOHC 16V N42 and N46 petrol engine applications
- For the locking and alignment of the camshaft and crankshaft during the removal and installation of the engine timing chain and other engine servicing and repairs
- Required for dismantling, assembly and timing of the Vanos unit



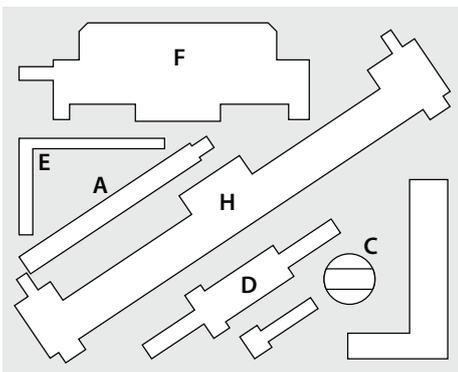
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304702</b>	<b>BMW</b>		
	1 Series (E87)	2.0L (N46B20)	2004 - 2011
	3 Series (E46)	1.8L (N42B18)	2001 - 2005
	3 Series (E46)	2.0L (N42B20)	2001 - 2005
	3 Series (E46)	2.0L (N46B20)	2001 - 2005
	3 Series (E90)	2.0L (N42B20)	2005 - 2007
	3 Series (E90 - E93)	2.0L (N46B20)	2005 - 2012

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0042	11 5 120	Crankshaft Locking Pin
B	A0115	11 9 293	Camshaft Alignment Tool Bolt (M8 X 25mm)
C	A0150	11 9 270	Inlet Camshaft Turning Tool
D	A0170	11 9 340	Timing Chain Pre-Tensioning Tool
E	A0214	11 5 120, 11 9 190	Flywheel Timing Pin
F	A0281	11 9 291	Camshaft Alignment Tool - Exhaust
G	A0354	11 9 292	Camshaft Alignment Tool - Inlet
H	A0424	11 9 350	Sensor Gear Alignment Tool

#### TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for popular 2.0L (N47 & N57) DOHC 16V diesel engine applications
- For the locking and alignment of the camshafts, crankshaft, tensioner and injection pump during the removal and installation



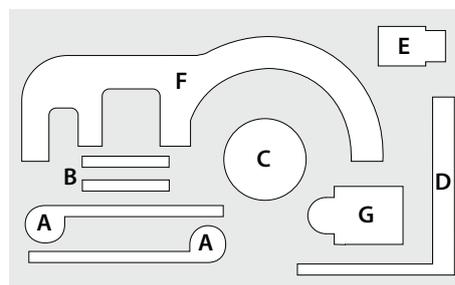
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304719</b>	<b>BMW</b>		
	118d, 120d, 123d	2.0L (N47)	2007 - 2015
	220d (F22)	2.0L (B47, N47)	2014 - 2018
	318d, 320d	2.0L (N47D)	2007 - 2017
	330d	3.0L (N57D30)	2009 - 2018
	420d	2.0L (N47D20C)	2013 - 2016
	520d	2.0L (N47)	2007 - 2018
	530d, 535d	3.0L (N57D30)	2009 - 2017
	640d, 730d	3.0L (N57D30)	2009 - 2018
	X1, X3, X5	2.0L (N47D20)	2007 - 2015
	X3, X4, X5, X6	3.0L (N57D30)	2010 - 2018
	<b>MINI</b>		
	Cooper (D)	1.6L, 2.0L (N47)	2010 - 2018
Countryman (D)	1.6L, 2.0L (N47)	2011 - 2018	

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0004	11 3 340	Chain Tensioner Lock Pin
B	A0053	11 3 340	Timing Chain Tensioner Locking Pin
C	A0457	11 6 480	Crankshaft Alignment Tool
D	A0458	11 5 320	Flywheel/Drive Plate Timing Pin
E	A0459	11 6 480	Socket
F	A0460	11 8 760	Camshaft Alignment Tool
G	A0612	11 8 740	High-Pressure Fuel Pump Sprocket Removal Tool

#### TOOL REFERENCE



**TIMING TOOL KIT** 

- Suitable for popular 2.0L (N43B20) DOHC 16V engine applications with timing chains.
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs
- Required for dismantling, assembly and timing of the Vanos unit



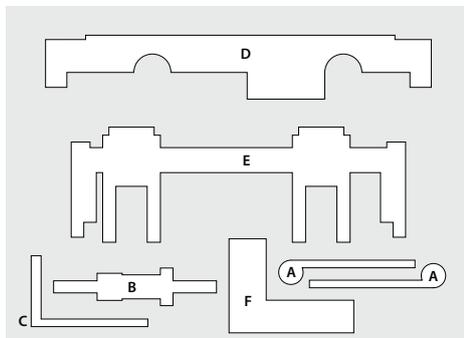
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304740</b>	<b>BMW</b>		
	118i (E87)	2.0L (N43B20)	2008 - 2010
	120i (E82)	2.0L (N43B20)	2011 - 2014
	120i (E87)	2.0L (N43B20)	2007 - 2011
	120i (E88)	2.0L (N43B20)	2007 - 2015

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0004	11 3 340	Chain Tensioner Lock Pin
B	A0170	11 9 340	Timing Chain Pre-Tensioning Tool
C	A0214	11 5 120	Flywheel Timing Pin
D	A0527	11 8 711, 11 8 712	Camshaft Position (CMP) Sensor Disc Setting Tool
E	A0528	11 8 690, 11 8 691, 11 8 962, 11 8 693	Camshaft Alignment Tool
F	A0529	11 8 700	Balancer Shaft Alignment Tool

**TOOL REFERENCE**



**TIMING TOOL KIT** 

- Suitable for popular BMW and Mini 1.6L DOHC 16V (N13 / N18) petrol engine applications
- For the locking and alignment of the camshafts and crankshaft during the removal and installation of the engine timing chain and other engine servicing and repairs



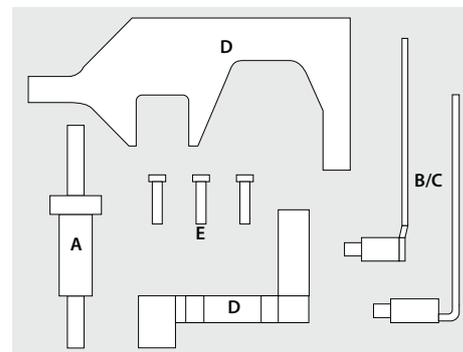
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304758</b>	<b>BMW</b>		
	116i, 118i, 120i (F20)	1.6L (N13)	2011 - 2018
	316i (F30)	1.6L (N13B)	2013 - 2018
	<b>MINI</b>		
	Cooper (JCW, S)	1.6L (N18B16A)	2012 - 2018
	Countryman (JCW, S)	1.6L (N18B16A)	2011 - 2017

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0170	11 9 340	Timing Chain Pre-Tensioning Tool
B	A0208	11 9 590, 0 496 709	Crankshaft Timing Pin
C	A0699	2 299 362	Crankshaft Timing Pin
D	A0700	11 7 440	Camshaft Alignment Tool
E			Bolts

**TOOL REFERENCE**



### TIMING TOOL KIT

- Suitable for popular 3.6L – 4.8L (V8) DOHC 32V and 6.0L (V12) DOHC 48V petrol engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



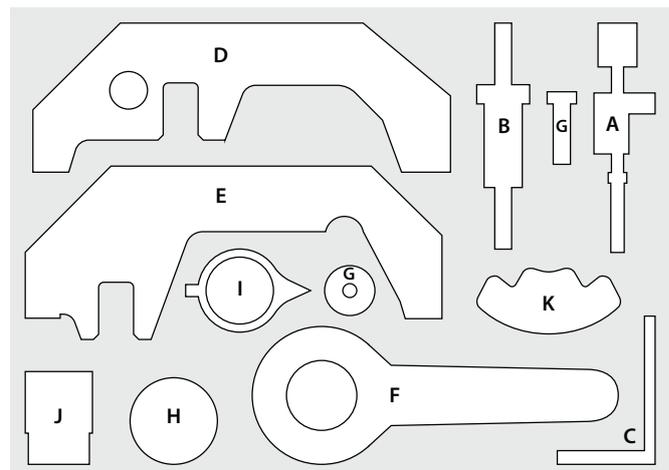
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304724</b>	<b>BMW</b>		
	540i (E60)	4.0L (N62B40)	2005 - 2008
	545i (E60)	4.4L (N62B44)	2003 - 2006
	550i (E60, E61)	4.8L (N62B48)	2005 - 2010
	645Ci (E63, E64)	4.4L (N62B44)	2004 - 2005
	650i (E63, E64)	4.8L (N62B48)	2005 - 2012
	735i, Li (E65, E66)	3.6L (N62B36)	2002 - 2005
	740i, Li (E65, E66)	4.0L (N62B40)	2005 - 2009
	745i, Li (E65, E66)	4.4L (N62B44)	2002 - 2005
	750i, Li (E65, E66)	4.8L (N62B48)	2005 - 2009

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0165	11 9 463	Camshaft Locking Tool
B	A0170	11 9 340, 11 9 341	Timing Chain Pre-Tensioning Tool
C	A0214	11 9 190	Flywheel Timing Pin
D	A0264	11 9 461	Inlet Camshaft Alignment Tool
E	A0265	11 9 462	Exhaust Camshaft Alignment Tool
F	A0605	11 9 451	Crankshaft Locking Tool
G	A0606	11 9 452	Crankshaft Locking Tool
H	A0635		Head Cylinder Socket
I	A0636		Angle Indicator
J	A0637		Socket (27mm)
K	A0638		Angle Gauge

### TOOL REFERENCE



TIMING TOOL KIT 

- Suitable for popular 2.0L (M47) DOHC 16V and 3.0L (M57) DOHC 24V diesel engine applications
- For the locking and alignment of the camshafts, crankshaft, tensioner and injection pump during the removal and installation of the engine timing chain and other engine servicing and repairs



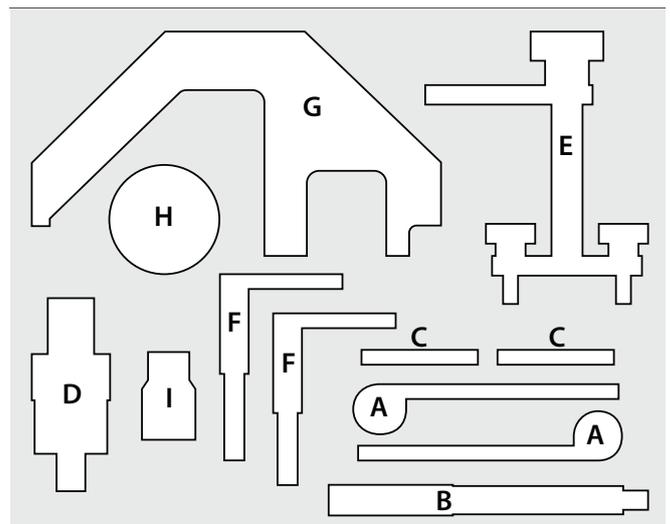
## APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304741</b>	<b>BMW</b>		
	120d (E87)	2.0L (M47TUD20)	2006 - 2007
	320d (E46, E90 - E91)	2.0L (M47D20)	1999 - 2008
	330d (E46, E90 - E91)	3.0L (M57D30)	2000 - 2008
	335d (E90 - E92)	3.0L (M57D30)	2007 - 2010
	525d (E60, E61)	3.0L (M57D30)	2007 - 2010
	530d (E39)	3.0L (M57D30)	2000 - 2003
	530d (E60)	3.0L (M57D30)	2008 - 2010
	530d (E60, E61)	3.0L (M57TUD30)	2003 - 2008
	535d (E60, E61)	3.0L (M57D30)	2004 - 2010
	X3 (E83)	2.0L (M47TUD20)	2005 - 2007
	X3 (E83)	3.0L (M57TUD30)	2005 - 2011
	X5 (E53)	3.0L (M57D30)	2001 - 2003
	X5 (E70)	3.0L (M57TU2D30)	2004 - 2010
	X6 (E71)	3.0L (M57TU2D30)	2008 - 2010

## CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0004	11 3 340	Chain Tensioner Lock Pin
B	A0042	11 2 300	Crankshaft Locking Pin
C	A0053	11 3 340	Timing Chain Tensioner Locking Pin
D	A0154	13 5 190, 13 5 191	High-Pressure Fuel Pump Sprocket Puller
E	A0177	11 6 320, 11 6 321	Camshaft Alignment Tool
F	A0212	11 5 180, 11 6 080	Camshaft Locking Pin
G	A0269	11 6 321, 11 6 322	Camshaft Alignment Tool
H	A0457	11 6 480	Crankshaft Alignment Tool
I	A0459	11 6 480	Socket

## TOOL REFERENCE



### CAMSHAFT LOCKING KIT

- Suitable for popular 2.0L (N20B20) DOHC 16V petrol engine applications with timing chains
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



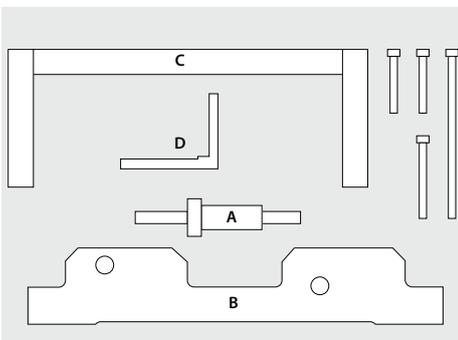
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304759</b>	<b>BMW</b>		
	125i (F20)	2.0L (N20B20A)	2012 - 2015
	220i, 228i (F22, F23)	2.0L (N20B20A)	2014 - 2018
	320i, 328i (F30, F31, F34)	2.0L (N20B20)	2012 - 2018
	420i, 428i (F32, F33, F36)	2.0L (N20B20B)	2013 - 2016
	520i (F10, F11)	2.0L (N20B20B)	2011 - 2017
	X1, X3, X4	2.0L (N20B20A)	2011 - 2018
	Z4 (E89)	2.0L (N20B20)	2011 - 2018

#### CONTENTS

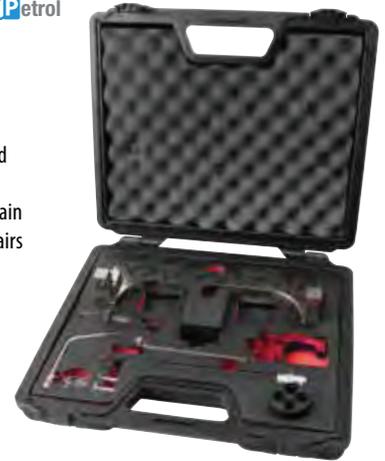
Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0170	11 9 340	Timing Chain Pre-Tensioning Tool
B	A0701	2 212 830	Sensor Gear Alignment Tool
C	A0702	2 212 831	Camshaft Alignment Tool
D	A0703	2 219 548	Flywheel/Drive Plate Timing Pin

#### TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for popular BMW & MINI 1.2L, 1.5L (B38) & 2.0L (B48) engine applications
- For the locking of the camshafts and crankshaft during the removal and installation of the engine timing chain and other engine servicing and repairs



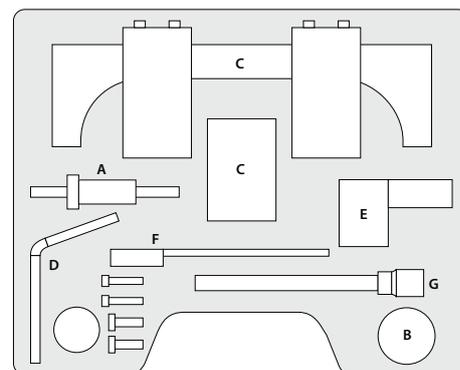
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304763</b>	<b>BMW</b>		
	218i (F45)	1.5L (B38A15M)	2014 - 2018
	i8 (I12)	1.5L (B38K15A)	2014 - 2018
	<b>MINI</b>		
	Cooper	1.5L (B38A15M)	2014 - 2018
	Cooper S	2.0L (B48A20A)	2014 - 2018
	One	1.2L (B38A12U)	2014 - 2018

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0170	11 9 340	Timing Chain Pre-Tensioning Tool
B	A0457	11 6 480	Crankshaft Alignment Tool
C	A0739	2 358 122	Camshaft Alignment Tool
D	A0740	2 288 380	Flywheel/Drive Plate Timing Pin
E	A0750	2 365 488	Drive Plate Timing Pin Adapter
F	A0759	2 360 895	Pin Wrench
G	A0760	11 8 580	Socket Wrench T60

#### TOOL REFERENCE



## FLYWHEEL LOCKING TOOL

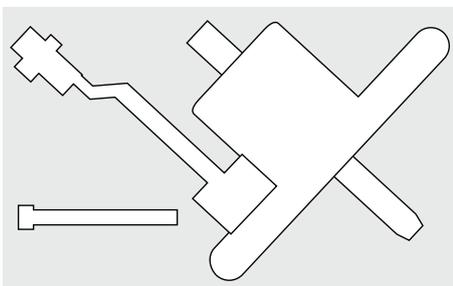
- Suitable for popular late model BMW applications
- For the locking the flywheel (crankshaft) during the removal and installation of the engine timing belt or other engine servicing and repairs



### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304774</b>	<b>BMW</b>		
	1 Series (E87)	1.6L (N45B16)	2005 - 2008
	1 Series (E87)	2.0L (M47, N46)	2004 - 2012
	1 Series (E82, E87)	3.0L (N52, N54)	2008 - 2012
	3 Series (E46, E90 - E93)	2.0L (N46)	2001 - 2012
	3 Series (E46, E90 - E93)	2.5L (N52)	2006 - 2012
	3 Series (E90 - E93)	3.0L (N52, N54)	2005 - 2012
	5 Series (E60)	2.5L (N52)	2005 - 2010
	5 Series (E60, E61, F10)	3.0L (M57, N52)	2003 - 2012
	7 Series (E65, F01 - F02)	3.0L (N52, N54)	2002 - 2012
	X1 (E84)	3.0L (N52B30)	2010 - 2012
	X3 (E83)	2.0L (M47TUD20)	2005 - 2007
	X3 (E83, F25)	2.5L, 3.0L (M57, N52B, N53B)	2005 - 2012
	X5 (E70)	3.0L (M57, N52)	2007 - 2010
	X6 (E71)	3.0L (N54B30)	2008 - 2012
	Z4 (E85, E89)	2.5L, 3.0L (N52B, N54B)	2006 - 2012

### TOOL REFERENCE



## FLYWHEEL LOCKING TOOL

- Suitable for popular late model BMW applications including, 1 to 6 Series models, as well various X Series applications 2007 – on
- For the locking the flywheel (crankshaft) during the removal and installation of the engine timing belt, chain and other engine servicing and repairs
- OEM reference No. 11 9 260



### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304785</b>	<b>BMW</b>		
	118d, 120d, 123d	2.0L (N47)	2007 - 2015
	318d, 320d	2.0L (N47)	2008 - 2015
	330d	3.0L (N57D30)	2009 - 2018
	420d, 520 d	2.0L (N47)	2007 - 2018
	X1, X3, X5	2.0L (N47)	2007 - 2015
	X3	2.0L (B47D40A)	2011 - 2018
	X3, X4, X5, X6	3.0L (N57)	2010 - 2018

## TIMING TOOLS

### CHRYSLER/DODGE

Also suitable: Part No. 304749

#### TIMING TOOL KIT



- Suitable for Chrysler Grand Voyager (RT) & Dodge Nitro (KA) 2.8L diesel engine applications
- For full kit contents refer to page 157



### CITROËN

Also suitable: Part No. 304704

#### TIMING TOOL KIT



- Suitable for popular Citroën 1.4L – 2.2L petrol and 1.5L – 2.2L diesel engine applications
- For full kit contents refer to page 171



Also suitable: Part No. 304718

#### TIMING TOOL KIT



- Suitable for popular Citroën C3, C4 and DS3, 1.4L – 1.6L (DOHC) petrol engine applications
- For full kit contents refer to page 173



Also suitable: Part No. 304721

#### TIMING TOOL KIT



- Suitable for popular Citroën C4, C5, Dispatch & Xsara 2.0L & 2.2L diesel engine applications
- For full kit contents refer to page 172



Also suitable: Part No. 304726

#### TIMING TOOL KIT



- Suitable for popular Citroën Berlingo, C2, C3 and C4 petrol engine applications
- For full kit contents refer to page 173



### FIAT

Also suitable: Part No. 304705

#### TIMING & ALIGNMENT TOOL MASTER KIT



- Suitable for popular Fiat 500, Punto, Ritmo applications
- For full kit contents refer to page 123



Also suitable: Part No. 304712

#### TIMING TOOL MASTER KIT



- Suitable for popular Fiat Bravo, Doblo, Freemont & Ritma diesel engine applications
- For full kit contents refer to page 154



Also suitable: Part No. 304720

#### TIMING TOOL KIT



- Suitable for popular Fiat Bravo, Doblo, Freemont, Multipla, Punto & Ritma diesel engine applications
- For full kit contents refer to page 122



Scan here for link to part finder

**TIMING TOOL KIT**  

- Suitable for popular 1.4L – 2.5L DOHC petrol and 1.6L – 2.0L diesel engine applications
- For the locking of the camshaft, crankshaft and tensioners during the removal and installation of the engine timing belt or chain along with other engine servicing and repairs



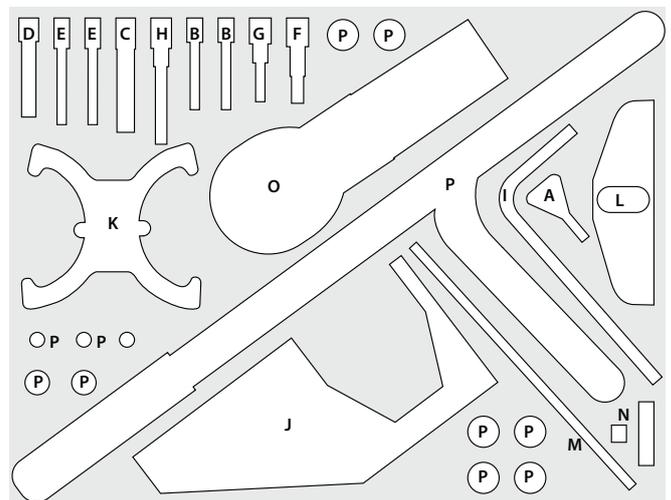
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304706</b>	<b>Ford</b>		
	Escape (ZB - ZD)	2.3L (L3)	2004 - 2012
	Escape (WS - WZ)	1.4L - 2.0L	2004 - 2014
	Focus (LR - LW)	1.6L - 2.0L	2000 - 2015
	Kuga (TF)	2.0L (TXMA)	2013 - 2016
	Mondeo (MA - MD)	2.0L, 2.3L	2007 - 2018
	Ranger (PX)	2.5L (DPAT)	2011 - 2015
	<b>Mazda</b>		
	CX-7 (ER)	2.3L, 2.5L	2006 - 2012
	Mazda 3 (BK - BL)	2.0L - 2.5L	2004 - 2014
	Mazda 6 (GG - GY)	2.0L - 2.5L	2002 - 2012
	MX5	2.0L (MZR)	2005 - 2015
	Tribute	2.0L, 2.3L	2001 - 2008

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0011	303-1054	Chain Tensioner Locking Pin
B	A0081		Locking Pin
C	A0089	21-262, 303-734, 999 7121	Crankshaft Locking Pin
D	A0092	21-263, 303-735, 999 7122	Camshaft Locking Pin
E	A0107	07744-0010400, 21-2160, 303-732, 999 7169, 999 7233	Camshaft Timing Pins
F	A0121	303-748	Crankshaft Alignment Pin
G	A0122	21-210, 303-507, 49 JE01 061	Camshaft Timing Pin
H	A0124	21-163, 303-620	Crankshaft Timing Pin
I	A0216	303-1059, 999 7121	Flywheel Timing Pin
J	A0257	303-1061, 49 UN30 310610	Camshaft Alignment Tool
K	A0361	303-1097	Camshaft Sprocket Locking Tool
L	A0406	303-393, 999 7119	Flywheel Locking Tool
M	A0418	21-162, 303-376, 49 JE01 054	Camshaft Setting Bar
N	A0435	303-393-01, 303-393-02, 999 7120	Flywheel Locking Tool Adaptors
O	A0608	49 B011 105	Crankshaft Pulley Holding Tool
P	A0618		Universal Sprocket Holding Tool

**TOOL REFERENCE**



### TIMING TOOL KIT



- Suitable for popular 1.4L – 2.5L DOHC petrol and 1.6L – 3.2L diesel engine applications
- For the locking of the camshaft, crankshaft and tensioners during the removal and installation of the engine timing belt or chain along with other engine servicing and repairs



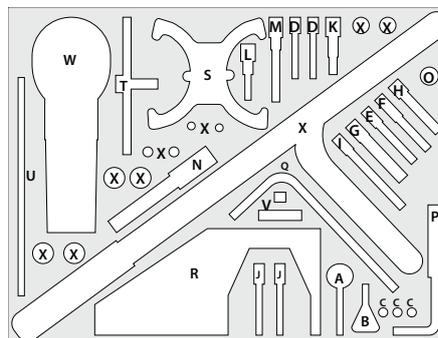
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304708</b>	<b>Ford</b>		
	Ecosport (BK)	1.5L (1.5)	2013 - 2017
	Escape (ZB - ZD)	2.3L (L3)	2004 - 2012
	Fiesta (WP - WZ)	1.5L - 2.0L	2004 - 2014
	Fiesta (WS - WT)	1.6L (Diesel)	2009 - 2013
	Focus (LR)	1.6L, 1.8L	2000 - 2005
	Focus (LR - LV)	2.0L	2000 - 2011
	Focus (LT - LV)	2.0L (D4204T)	2007 - 2011
	Focus (LW)	2.0L - 1.6L	2011 - 2015
	Kuga (TF)	2.0L (TXMA)	2013 - 2016
	Mondeo (HA - HE)	2.0L	1995 - 2000
	Mondeo (MA - MC)	2.3L	2007 - 2015
	Mondeo (MA - MD)	2.0L Diesel	2007 - 2018
	Ranger (PJ, PK)	2.5L (WL-AT)	2007 - 2011
	Ranger (PJ, PK)	3.0L (WE-AT)	2007 - 2011
	Ranger (PX)	2.2L (P4AT)	2011 - 2016
	Ranger (PX)	3.2L (P5AT)	2015 - 2018
	Transit (Diesel)	2.4L, 2.5L	1994 - 2012
	<b>Mazda</b>		
	BT50 (UN)	2.5L (WL-AT)	2006 - 2011
	BT50 (UN)	3.0L (WEAT)	2006 - 2011
	BT50 (UP, UR)	2.2L (P4AT)	2011 - 2016
	BT50 (UP, UR)	3.2L (P5AT)	2011 - 2018
	CX-7 (ER)	2.3L (MZR DISI / L3)	2006 - 2012
	CX-7 (ER)	2.5L (L5)	2009 - 2012
	Mazda 3 (BK - BL)	2.0L - 2.3L	2004 - 2014
	Mazda 3 (BL)	2.5L (L5)	2009 - 2014
	Mazda 6 (GG - GY)	2.3L (MZR/L3)	2002 - 2008
	Mazda 6 (GH)	2.5L (L5)	2008 - 2012
	MX5 (NC)	2.0L (MZR)	2005 - 2015
	Tribute (YU)	2.0L (YF)	2000 - 2004
	Tribute	2.3L (L3)	2004 - 2008

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0001		Tensioner Locking Pin
B	A0011	303-1054	Chain Tensioner Locking Pin
C	A0049		Locking Pins
D	A0081		Injection Pump Locking Pin
E	A0083	21-263, 303-735, 999 7122	Camshaft Locking Pin
F	A0084	21-263, 303-735, 999 7122	Camshaft Locking Pin
G	A0089	21-262, 303-734, 999 7121	Crankshaft Locking Pin
H	A0092	21-263, 303-735, 999 7122	Camshaft Locking Pin
I	A0103		Locking Pin
J	A0107	07744-0010400, 21-260, 303-732, 999 7169, 999 7233	Camshaft Timing Pins
K	A0121	303-748	Flywheel Locking Tool Adaptors
L	A0122	21-210, 303-507, 49 JE01 061	Crankshaft Timing Pin
M	A0124	21-163, 303-620	Crankshaft Timing Pin
N	A0132		Locking Pin
O	A0147		
P	A0193	21-234, 21-251, 303-675, 303-698	Flywheel Locking Pin
Q	A0216	303-1059, 999 7121	Flywheel Timing Pin
R	A0257	303-1061, 49 UN30 310610	Camshaft Alignment Tool
S	A0361	303-1097	Camshaft Sprocket Locking Tool
T	A0406	303-393, 999 7119	Flywheel Locking Tool
U	A0418	21-162, 303-376, 49 JE01 054	Camshaft Setting Bar
V	A0435	303-393-01, 303-393-02, 999 7120	Flywheel Locking Tool Adaptors
W	A0608	49 B011 105	Crankshaft Pulley Holding Tool
X	A0618		Flywheel Locking Tool Adaptors

### TOOL REFERENCE



**TIMING CHAIN KIT**  Petrol

- Suitable for popular Falcon 6 cylinder applications
- For use during the removal and installation of the timing chain, cylinder head and other engine servicing and repairs



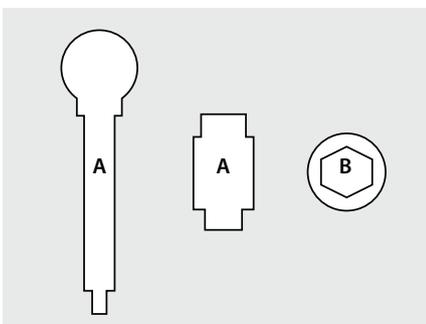
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304707</b>	<b>Ford</b>		
	Fairlane (NA - AU)	3.9L, 4.0L	1988 - 2002
	Falcon (EA - AU)	3.2L, 3.9L, 4.0L	1988 - 2002
	LTD (DA - AU)	3.9L, 4.0L	1988 - 2002

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0027	E9338, E9338A	Tensioner Locking Tools
B	A0615		Timing Chain Adjusting Tool

**TOOL REFERENCE**



**TIMING TOOL KIT**  Diesel

- Suitable for popular 1.6L DOHC 16V TDCi diesel engine applications
- For the locking of the camshafts and crankshaft during the removal and installation of engine timing belt



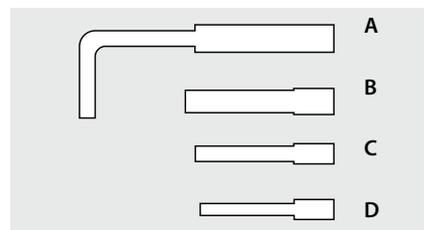
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304729</b>	<b>Ford</b>		
	Fiesta (WS)	1.6L (TDCi)	2009 - 2010
	Fiesta (WT)	1.6L (TDCi)	2010 - 2012
	<b>Volvo</b>		
	C30	1.6L (Diesel)	2009 - 2012

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0193	21-234, 21-251, 303-675, 303-698	Flywheel Locking Pin
B	A0083	21-263, 303-735, 999 7122	Camshaft Locking Pin
C	A0089	21-262, 303-734, 999 7121	Crankshaft Locking Pin
D	A0108	07744-0010400, 21-2160, 303-732, 999 7169, 999 7233	Camshaft Timing Pin

**TOOL REFERENCE**



### TIMING TOOL KIT

- Suitable for popular 1.8L – 2.5L DOHC 16V petrol engine applications
- For the locking of the camshaft and crankshaft during the removal and installation of the engine timing belt or chain

*NOTE: Not suitable for Turbo engine applications*



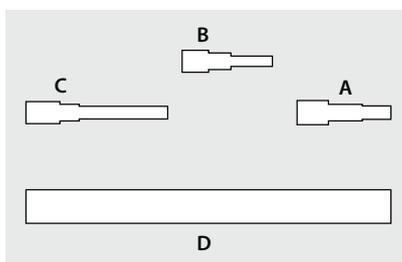
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304730</b>	<b>Ford</b>		
	Fiesta (WP - WQ)	1.6L - 2.0L	2004 - 2009
	Focus (LR - LV)	1.6L - 2.0L	2000 - 2011
	Mondeo (MA - MC)	2.3L	2007 - 2015
	<b>Mazda</b>		
	CX-7 (ER)	2.5L (L5)	2009 - 2012
	Mazda 3 (BK - BL)	2.0L, 2.5L	2004 - 2014
	Mazda 6 (GG - GY)	2.0L, 2.3L, 2.5L	2002 - 2012
	Tribute (YU)	2.0L (YF)	2001 - 2004
	Tribute	2.3L (L3)	2004 - 2008

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0121	21-259, 303-748, 49 JE02 061	Crankshaft Locking Pin
B	A0122	21-210, 303-507, 49 JE01 061	Crankshaft Locking Pin
C	A0124	21-163, 303-620	Crankshaft Timing Pin
D	A0418	21-162, 303-376, 49 JE01 054	Camshaft Setting Bar

#### TOOL REFERENCE



### CAMSHAFT LOCKING KIT

- Suitable for popular Explorer 4.6L V8 SOHC 16V petrol engine applications
- For the locking and alignment of camshafts during engine servicing and repairs



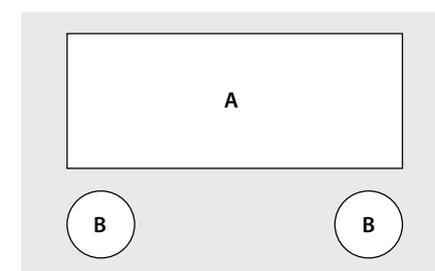
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304736</b>	<b>Ford</b>		
	Explorer (UT)	4.6L (V8)	2001 - 2003
	Explorer (UX)	4.6L (V8)	2003 - 2003
	Explorer (UZ)	4.6L (V8)	2003 - 2008

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0518	303-380 (T91P-6256-A)	Camshaft Alignment Tool
B	A0519	303-413 (T92P-6256-A)	Camshaft Alignment Tool - Adaptor

#### TOOL REFERENCE



**TIMING TOOL KIT** 

- Suitable for popular 4, 5 and 6 cylinder DOHC petrol engine applications
- For the locking of camshafts during the removal and installation of the engine timing belt and other engine servicing and repairs

*Note: Applications may require additional tools to complete repairs*



**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304737</b>	<b>Ford</b>		
	Focus XR5 Turbo (LS - LV)	2.5L (B5254T)	2006 - 2012
	Kuga (TE)	2.5L (Duratec)	2012 - 2013
	Mondeo XR5 Turbo (MA - MB)	2.5L (B5254T)	2007 - 2014
	<b>Volvo</b>		
	850, 850(T)	2.3L, 2.4L (B52)	1992 - 1997
	960	2.9L (B630)	1991 - 1997
	C30, C30(T)	2.4L, 2.5L (B52)	2007 - 2013
	C70, C70(T)	2.3L - 2.5L (B52)	1999 - 2015
	S40, S40(T)	1.9L - 2.5L (B41, B42, B52)	1997 - 2013
	S60, S60(T)	2.0L - 2.5L (B52)	2000 - 2009
	S70, S70(T)	2.3L, 2.4L (B52)	1997 - 2003
	S80, S80(T)	2.0L - 2.9L (B52, B62, B63)	1998 - 2006
	V40, V40(T)	1.8L, 2.0L (B41, B42)	1997 - 2004
	V50, V50(T)	2.4L, 2.5L (B52)	2004 - 2015
	V70, V70(T)	2.0L - 2.5L (B52)	1997 - 2008
	XC70, XC70(T)	2.3L - 2.5L (B52)	2000 - 2007
	XC90, XC90(T)	2.5L - 2.9L (B52, B62)	2003 - 2006

**BELT INSTALLATION KIT**  

- Suitable for popular 1.9L – 2.5L DOHC petrol and 2.5L DOHC diesel engine applications
- For locking the crankshaft during engine repairs, servicing and timing belt replacement

*Note: Applications may require additional tools to complete repairs*



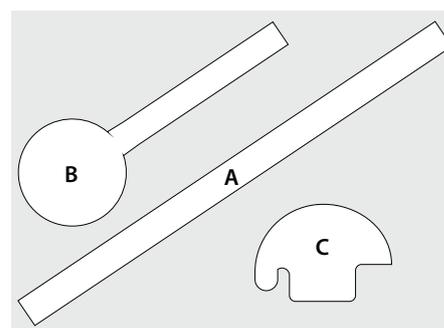
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304738</b>	<b>Ford</b>		
	Focus XR5 Turbo (LS - LV)	2.5L (B5254T)	2006 - 2012
	Kuga (TE)	2.5L (Duratec)	2012 - 2013
	Mondeo XR5 Turbo (MA - MB)	2.5L (B5254T)	2007 - 2014
	<b>Volvo</b>		
	850	2.5L (B5252S)	1993 - 1996
	C30, S70, V70	2.0L - 2.5L (B52, D52)	1997 - 2015
	S40, V40	1.8L - 2.5L (B41, B42, B52)	1997 - 2018
	S60, S60	2.0L - 2.5L (B52, D52)	2000 - 2018
	V50	2.4L, 2.5L (B52, D52)	2004 - 2015
	S80, S80(T)	2.0L - 2.8L (B52, B62 D52)	1998 - 2010
	XC60, XC70, XC90	2.0L - 2.5L (B52, D52)	2000 - 2018

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0645	999 7109	Auxiliary Drive Belt Tensioner Tool
B	A0646	999 5433	Crankshaft Pulley Holding Tool
C	A0647	303-1179	Auxiliary Drive Belt Installer

**TOOL REFERENCE**



### TIMING TOOL KIT

- Ford Falcon, Focus & Mondeo 2.0L DOHC 16V Ecoboost petrol engines
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



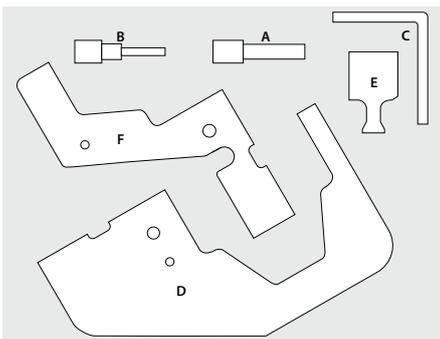
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304753</b>	<b>Ford</b>		
	Falcon (FG)	2.0L (Ecoboost)	2012 - 2016
	Focus (LW - LZ)	2.0L (Ecoboost)	2011 - 2018
	Mondeo (MC - MD)	2.0L (Ecoboost)	2011 - 2018

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0121	303-748	Crankshaft Timing Pin
B	A0122	303-507	Crankshaft Timing Pin
C	A0717	303-1054	Tensioner Pin 3mm
D	A0718	303-1504	Camshaft Alignment Plate
E	A0719	303-1521	Crankshaft Alignment Pin
F	A0720	303-1565	Camshaft Alignment Tool

#### TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for popular 1.5L – 2.5L DOHC 16V (including turbo) petrol engine applications.
- For the locking of the camshafts and crankshaft during the removal and installation of the engine timing belt or chain



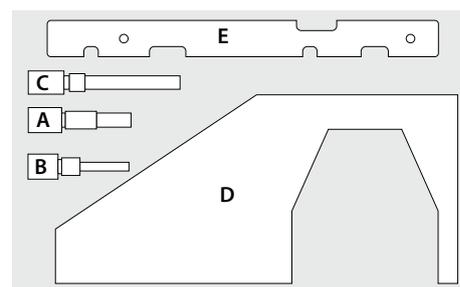
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304754</b>	<b>Ford</b>		
	Escape (ZB - ZD)	2.3L (L3)	2004 - 2012
	Fiesta (WP, WQ)	1.6L - 2.0L	2004 - 2008
	Focus (LR - LV)	1.6L - 2.0L	2000 - 2011
	Mondeo (MA - MC)	2.3L	2007 - 2015
	Ranger (PX)	2.5L (DPAT)	2011 - 2015
	<b>Mazda</b>		
	CX-3	2.0L	2015 - 2018
	CX-5, CX-7	2.0L - 2.5L	2006 - 2018
	Mazda2 (DE - DJ)	1.5L	2010 - 2017
	Mazda3 (BK - BM)	2.0L, 2.3L, 2.5L	2004 - 2017
	Mazda6 (GG - GJ)	2.0L, 2.3L, 2.5L	2002 - 2017
	Tribute	2.0L - 2.3L	2000 - 2008

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0121	21-259, 303-748, 49 JE02 061	Crankshaft Locking Pin
B	A0122	21-210, 303-507, 49 JE01 061	Crankshaft Locking Pin
C	A0124	21-163, 303-620	Crankshaft Timing Pin
D	A0257	303-1061, 49 UN30 310610	Camshaft Alignment Tool
E	A0418	21-162, 303-376, 49 JE01 054	Camshaft Setting Bar

#### TOOL REFERENCE



## TIMING TOOL KIT

- Suitable for popular Ford and FPV, Falcon and Territory 4.0L (6 Cyl incl Turbo) and 5.4L V8 DOHC 32V (BOSS 260 - 315) petrol engine applications only
- For the locking of the camshafts and crankshaft during the removal and installation of the engine timing chain and other engine servicing and repairs

**Note: Kit not suitable for Barra 5.4L V8 (24V) engine applications**



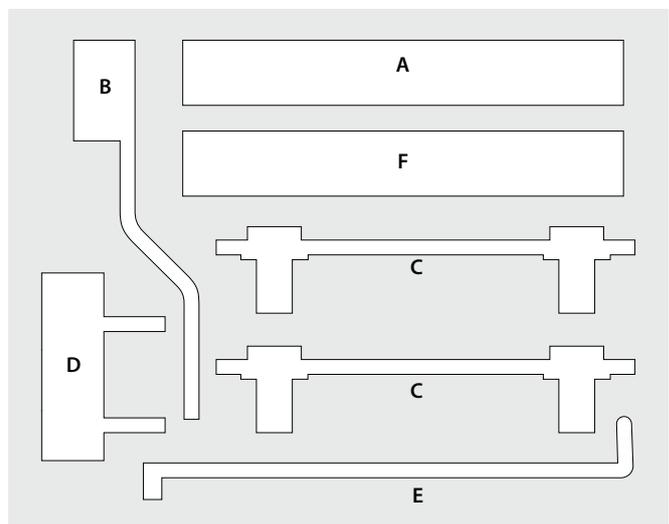
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304755</b>	<b>Ford</b>		
	Falcon (BA - FG)	4.0L (BARRA 182, 190, 195)	2002 - 2016
	Falcon (BA - FG) Turbo	4.0L (BARRA 240T, 270T)	2002 - 2016
	Falcon (BA - FG)	5.4L (BOSS 260, 290)	2003 - 2011
	Territory (SX - SZ)	4.0L (BARRA 182, 190, 195)	2004 - 2016
	Territory (SY) Turbo	4.0L (BARRA 245T)	2006 - 2010
	<b>FPV</b>		
	Falcon (BA - FG)	5.4L (BOSS 290, 302, 315)	2003 - 2010
	Falcon (BF) Turbo	4.0L (BARRA 240T, 270T)	2005 - 2008
	Territory (SY) Turbo	4.0L (BARRA 270T)	2008 - 2009

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0649	303-446 (T93P-6256-AHR)	Camshaft Holding Tool (8 Cyl)
B	A0650	303-448 (T93P-6303-A)	Crankshaft Alignment Tool
C	A0651	303-445 (T93P-6256-A)	Camshaft Alignment Tool
D	A0652	303-447 (T93P-6256-BH)	Timing Belt Tensioner
E	A0676	303-777	Timing Chain Tensioner Release Tool
F	A0677	303-778	Camshaft Holding Tool (6 Cyl)

### TOOL REFERENCE



**Also suitable: Part No. 304739**

### TIMING TOOL KIT



- Suitable for popular Falcon 5.4L V8 DOHC 32V (BOSS 260 and BOSS 290) petrol engine applications only



### TIMING TOOL KIT

- Suitable for popular Ford Volvo 1.3L - 1.6L DOHC 16V petrol engine models
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



### TIMING TOOL KIT

- Suitable for popular Ford Ranger and Transit, Landrover Defender and Mazda BT50 2.2L and 2.4L (4cyl) and 3.2L (5cyl) turbo diesel engine applications
- For the locking of the camshafts and crankshaft during the removal and installation of the engine timing chain and other engine servicing and repairs



#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304762</b>	<b>Ford</b>		
	Ecosport (BK)	1.5L	2013 - 2017
	Fiesta (WS - WZ)	1.6L	2009 - 2014
	Fiesta (WZ)	1.5L	2013 - 2014
	Focus (LW)	1.6L	2011 - 2015
	KA	1.3L	2002 - 2008
	Kuga (TF)	1.6L	2013 - 2015
	<b>Volvo</b>		
	S60, V60 (T4)	1.6L (B4164T)	2011 - 2017

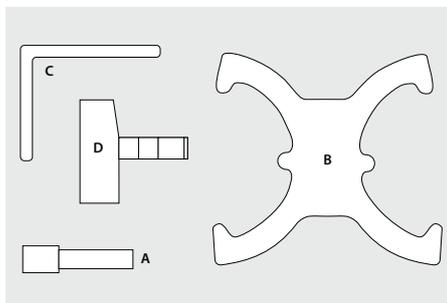
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304769</b>	<b>Ford</b>		
	Ranger (PX)	2.2L (P4AT)	2011 - 2018
	Ranger (PX)	3.2L (P5AT)	2014 - 2018
	Transit (VH)	2.4L	2001 - 2006
	Transit (VM)	2.2L (Duratorq)	2006 - 2012
	Transit (VM)	2.4L	2006 - 2012
	Transit (VN)	2.2L (2.2DT)	2013 - 2018
	<b>Land Rover</b>		
	Defender (90, 110, 130)	2.2L (DT244)	2012 - 2018
	Defender (90, 110, 130)	2.4L (244DT)	2007 - 2012
	<b>Mazda</b>		
	BT50 (UP)	2.2L (P4AT)	2011 - 2015
	BT50 (UP)	3.2L (P5AT)	2011 - 2015
BT50 (UR)	2.2L (P4AT)	2015 - 2018	
BT50 (UR)	3.2L (P5AT)	2015 - 2018	

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0121	303-748, 999 7406	Camshaft Alignment Pin
B	A0361	303-1097, 999 7429	Camshaft Sprocket Locking Tool
C	A0717	303-1054	Chain Tensioner Locking Pin
D	A0722	303-1550, 999 7431	Crankshaft Pulley Alignment Tool

#### TOOL REFERENCE



## TIMING TOOL & SEAL INSTALLATION KIT

- Suitable for popular Ford Ranger and Transit, Landrover Defender and Mazda BT50 2.2L and 2.4L (4cyl) and 3.2L (5cyl) turbo diesel engine applications
- For the locking of the camshafts and crankshaft during the removal and installation of the engine timing chain, crankshaft oil seal replacement and other engine servicing and repairs



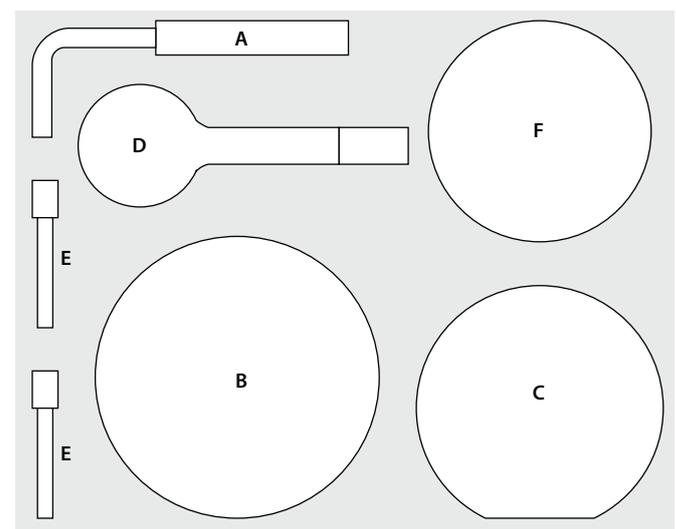
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304764</b>	<b>Ford</b>		
	Ranger (PX)	2.2L (P4AT)	2011 - 2018
	Ranger (PX)	3.2L (P5AT)	2014 - 2018
	Transit (VH)	2.4L	2001 - 2006
	Transit (VM)	2.2L (Duratorq)	2006 - 2012
	Transit (VM)	2.4L	2006 - 2012
	Transit (VN)	2.2L (2.2DT)	2013 - 2018
	<b>Land Rover</b>		
	Defender (90, 110, 130)	2.2L (DT244)	2012 - 2018
	Defender (90, 110, 130)	2.4L (244DT)	2007 - 2012
	<b>Mazda</b>		
	BT50 (UP)	2.2L (P4AT)	2011 - 2015
	BT50 (UP)	3.2L (P5AT)	2011 - 2015
	BT50 (UR)	2.2L (P4AT)	2015 - 2018
BT50 (UR)	3.2L (P5AT)	2015 - 2018	

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0192	303-675 303-698 22-251	Flywheel Locking Pin
B	A0383	303-1151	Fuel Injection Pump Locking Tool
C	A0384	303-679A	Crankshaft Oil Seal Removal/Installation Tool
D	A0753	303-1587	Crankshaft Sprocket Locking Tool
E	A0754	6mm x 2	2 x Camshaft Timing Pins (6mm)
F	A0755	303-682	Timing Cover Aligning Tool

### TOOL REFERENCE



### TIMING TOOL KIT Diesel

- Suitable for popular Ford Territory 2.7L TDI diesel engine applications
- For locking and alignment of the camshafts, crankshaft and tensioner during removal and installation of the engine timing belt and other engine servicing and repairs



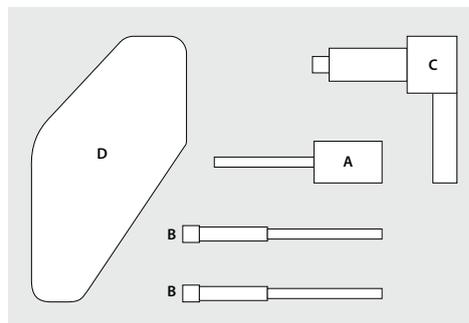
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304786</b>	<b>Ford</b>		
	Territory (SZ)	2.7L (276DT)	2011 - 2016

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0100	303-1132	Camshaft Sprocket Aligning Tool
B	A0101	303-1126	Camshaft Sprocket Alignment Pin
C	A0756	303-1585	Flywheel Locking Tool
D	A0757	303-1586	Flywheel Locking Tool

### TOOL REFERENCE



Also suitable: Part No. 304739

### TIMING TOOL KIT



- Suitable for popular FPV 5.4L V8 DOHC 32V (BOSS 260 - 315) engines



Also suitable: Part No. 304755

### TIMING TOOL KIT



- Suitable for popular Ford and FPV, Falcon and Territory 4.0L (6 Cyl incl Turbo) and 5.4L V8 DOHC 32V (BOSS 260 - 315)
- For full kit contents refer to page 149



**TIMING TOOL KIT** 

- Suitable for 1.8L Z18XER & F18D DOHC 16V petrol applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt and other engine servicing and repairs



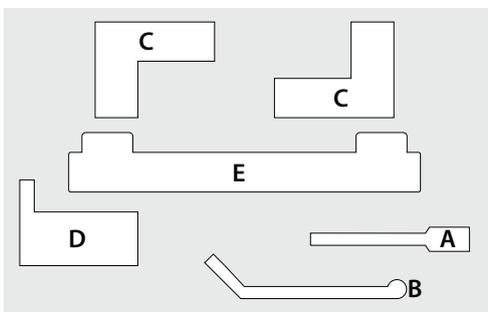
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304710</b>	<b>Holden</b>		
	Astra (AH)	1.8L (Z18XER)	2007 - 2010
	Barina (TM)	1.6L (F16D4)	2011 - 2018
	Cruze (JG - JH)	1.8L (F18D4)	2009 - 2018
	Cruze (JH)	1.6L (A16LET)	2013 - 2018
	<b>Opel</b>		
	Astra (1.6i)	1.6L (A16LET)	2012 - 2013
Corsa (OPC)	1.6L (A16LET)	2013 - 2013	

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0113	KM-6349	Auxiliary Drive Belt Tensioner Locking Tool
B	A0217	KM-6333	Cam Belt Tension Lock Pin
C	A0379	KM-6340	Camshaft Lock Tool
D	A0610	KM-6625	Flywheel Locking Tool
E	304710A	KM-6628(A)	Camshaft Setting Bar

**TOOL REFERENCE**



**Also suitable: Part No. 304710A CAMSHAFT SETTING BAR**



- Suitable for Holden Astra (AH) 1.8L Z18XER DOHC 16V petrol application
- Used in addition with 304710, 304710A to reset camshafts only



**TIMING TOOL KIT** 

- Suitable for popular 2.2L (Z22SE / Z22YH) DOHC 16V petrol engine applications
- For the locking and alignment of the camshaft, crankshaft, tensioner and water pump during the removal and installation of the engine timing chain and other engine servicing and repairs



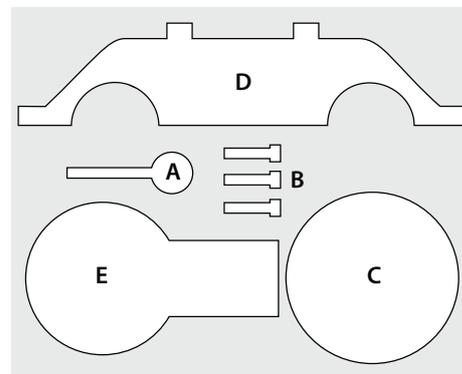
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304711</b>	<b>Holden</b>		
	Astra (TS)	2.2L (Z22SE)	2001 - 2007
	Astra (AH)	2.2L (Z22YH)	2006 - 2010
	Vectra (ZC)	2.2L (Z22SE)	2003 - 2006
	Zafira (TT)	2.2L (Z22SE)	2001 - 2006

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0001	KM-6077	Tensioner Locking Pin
B	A0064		Bolts
C	A0385	KM-J-43651	Water Pump Holding Tool
D	A0397	KM-6148	Camshaft Locking Tool
E	A0613	KM-956-1, KM-J-38122-A	Crankshaft Pulley Holder

**TOOL REFERENCE**



### TIMING TOOL KIT

- Suitable for popular 1.2L – 2.2L petrol and 1.9L diesel engine applications
- For the locking and alignment of the camshafts, crankshaft, tensioner and water pump during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



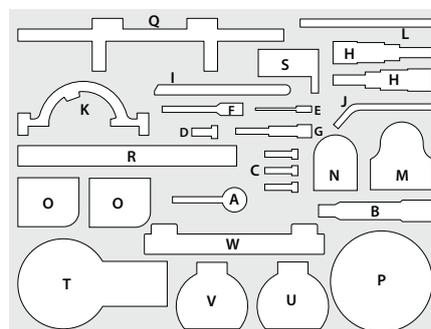
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304712</b>	<b>Alfa Romeo</b>		
	147, 159	1.9L (Diesel)	2006 - 2012
	159 (JTD)	2.4L (Diesel)	2006 - 2012
	Giulietta	2.0L (Diesel)	2012 - 2015
	<b>Fiat</b>		
	Bravo, Ritma	1.9L (Diesel)	2007 - 2009
	Doblo, Freemont	2.0L (Diesel)	2013 - 2018
	<b>Holden</b>		
	Astra (TS - AH)	1.8L (X18, Z18)	1998 - 2010
	Astra (TS - AH) Turbo	2.0L (Z20LER,T)	2003 - 2010
	Astra (TS - AH)	2.2L (Z22)	2001 - 2010
	Astra (AH) Diesel	1.9L (Z19DT)	2006 - 2010
	Barina, Combo (SB)	1.2L, 1.4L (C12, C14)	1994 - 2002
	Barina, Combo (XC)	1.4L - 1.8L (Z14, Z16, Z18)	2001 - 2013
	Barina (TM)	1.6L (F16D4)	2011 - 2018
	Cruze (JG - JH)	1.8L (F18D4)	2009 - 2018
	Cruze (JH)	1.6L (A16LET)	2013 - 2018
	Tigra (XC)	1.8L (Z18XE)	2005 - 2007
	Vectra (JR - JS)	2.0L, 2.2L (C20, C22SEL)	1998 - 2006
	Zafira (TT)	2.2L (Z22SE)	2001 - 2006
	<b>HSV</b>		
	VXR (AH)	2.0L (Z20LEH)	2006 - 2009
	<b>Opel</b>		
	Astra (1.6i)	1.6L (A16LET)	2012 - 2013
	Corsa (OPC)	1.6L (A16LET)	2013 - 2013
	Zafira (TGF75)	1.8L (X18XE)	2001 - 2004
	<b>Saab</b>		
	9-3 (1.9 TiD)	1.9L (Z19DTR)	2007 - 2012
	9-5 (1.9 TiD)	1.9L (Z19DTH)	2008 - 2009
	9-5 (2.0 TiD)	2.0L (A20DTH)	2011 - 2012

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0001	KM-6077	Tensioner Locking Pin
B	A0038	KM-952	Crankshaft Locking Pin
C	A0064		Bolts
D	A0067		Bolt
E	A0106	KM-955-1	Timing Chain Tensioner Locking Pin
F	A0113	KM-6130, KM-6349	Auxiliary Drive Belt Tensioner Locking Tool
G	A0175	EN-46788	Crankshaft Locking Tool And Bolt
H	A0184	1.870.986.900, EN-46789	Camshaft Locking Tools
I	A0196	KM-911	Flywheel Locking Tool
J	A0217	KM-6333	Cam Belt Tension Lock Pin
K	A0283	KM-954	Camshaft Position (CMP) Sensor Disc Setting Tool
L	A0333	1.860.905.000, 1.860.905.010	Crankshaft Alignment Tool
M	A0370	KM-853	Camshaft Locking Tool
N	A0371	KM-852	Camshaft Locking Tool
O	A0379	KM-6340	Camshaft Locking Tool
P	A0385	KM-J-43651	Water Pump Holding Tool
Q	A0397	KM-6148	Camshaft Locking Tool
R	A0418	21-162, 303-376, 49 JE01 054	Camshaft Setting Bar
S	A0610	KM-6625	Flywheel Locking Tool
T	A0613	KM-956-1, KM-J-38122-A	Crankshaft Pulley Holder
U	A0616	KM-421-A, KM-6283	Water Pump Wrench (41mm)
V	A0617	KM-421-B, KM-6283	Water Pump Wrench (46mm)
W	304710A	KM-6628(A)	Camshaft Setting Bar

### TOOL REFERENCE



**TIMING TOOL KIT** 

- Suitable for popular 2.5L – 3.2L DOHC 24V petrol engine applications
- For the locking and alignment of the camshafts and crankshaft during the removal and installation of the engine timing belt and other engine servicing and repairs



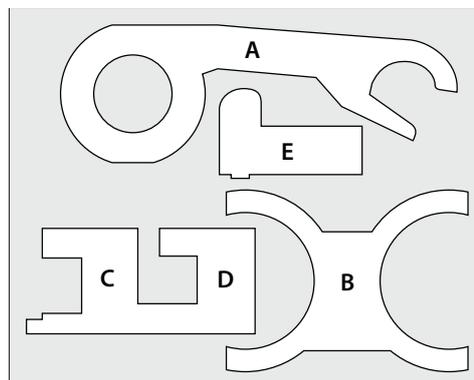
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304713</b>	<b>Holden</b>		
	Calibra	2.5L (C25XE)	1995 - 1998
	Vectra (JR - JS)	2.5L (X25XE)	1997 - 2000
	Vectra (JS)	2.6L (Y26SE)	2000 - 2001
	Vectra (ZC)	3.2L (Z32SE)	2003 - 2006

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0308	KM-800-10	Crankshaft Locking Tool
B	A0359	KM-800-20	Camshaft Timing Gauge
C	A0366	KM-800-1	Camshaft Lock Tool (RED)
D	A0367	KM-800-2	Camshaft Lock Tool (GREEN)
E	A0434	KM-800-30	Belt Holding Tool

**TOOL REFERENCE**



**Also suitable: Part No. 304712A**  
**WATER PUMP WRENCH**



- 41mm
- Suitable for Barina TK 1.6L applications



**TIMING TOOL KIT** 

- Suitable for 2.0L (Z20S1) SOHC 16V turbo diesel models
- For the locking of the camshaft and crankshaft during the removal and installation of the engine timing belt



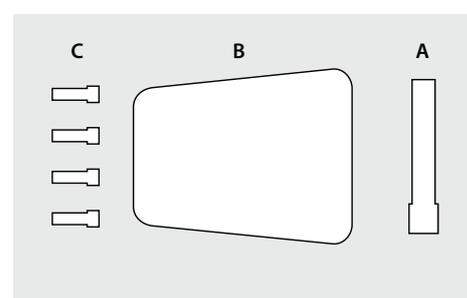
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304723</b>	<b>Holden</b>		
	Captiva (CG)	2.0L (Z20S1)	2007 - 2011
	Cruze (JG)	2.0L (Z20S1)	2009 - 2011
	Epica (EP)	2.0L (Z20S1)	2008 - 2011

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0089	EN-48246	Crankshaft Locking Pin
B	A0633	EN-48245	Camshaft Locking Tool
C			Bolts

**TOOL REFERENCE**



**Also suitable: Part No. 304712B**  
**WATER PUMP WRENCH**



- 46 mm
- Suitable for popular Holden 4 cylinder applications



### TIMING TOOL KIT

- Suitable for 3.6L (V6) DOHC 24V petrol engine applications
- For the locking of the camshafts during engine servicing and repairs

*NOTE: Not suitable for SIDI engine applications*



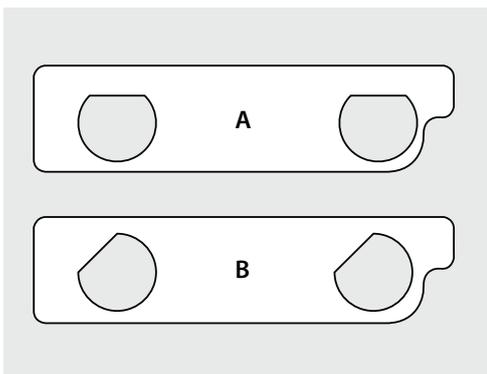
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304732</b>	<b>Holden</b>		
	Captiva (CG)	3.2L (LU1)	2006 - 2011
	Commodore (VZ)	3.6L (LE0, LY7)	2004 - 2006
	Commodore (VE)	3.6L (LE0, LY7)	2006 - 2009
	Rodeo (RA)	3.6L	2005 - 2008
	Statesman (WL)	3.6L (LY7)	2004 - 2006
	Statesman (WM)	3.6L (LY7)	2006 - 2009

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0624	EN-46105-1	Camshaft Alignment Tool 1 (RH Cam)
B	A0625	EN-46105-2	Camshaft Alignment Tool 2 (LH Cam)

#### TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for popular 1.4L, 1.8L, 2.0L and 2.2L DOHC 16V petrol applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt and other engine servicing and repairs



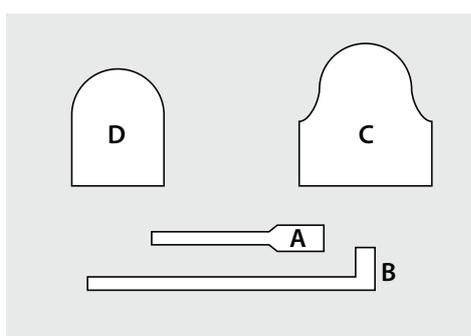
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304742</b>	<b>Holden</b>		
	Astra (TS)	1.8L (X18XE)	1998 - 2000
	Astra (TS)	1.8L (Z18XE)	2001 - 2004
	Astra (TS Ser. II)	2.0L (Z20LET)	2003 - 2004
	Astra (AH)	1.8L (Z18XE)	2004 - 2007
	Astra (AH)	2.0L (Z20LER)	2006 - 2010
	Barina (XC)	1.4L (Z14XE)	2001 - 2004
	Barina (XC)	1.8L (Z18XE)	2001 - 2005
	Tigra (XC)	1.8L (Z18XE)	2005 - 2007
	Vectra (JR, JS)	2.0L (C20SEL)	1997 - 2000
	Vectra (JS)	2.2L (C22SEL)	1998 - 2002

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0113	KM-6130	Auxiliary Drive Belt Tensioner Locking Tool
B	A0196	KM-911	Flywheel Locking Tool
C	A0370	KM-853	Camshaft Locking Tool
D	A0371	KM-852	Camshaft Locking Tool

#### TOOL REFERENCE



**TIMING TOOL KIT**



- Suitable for 2.8L, 3.0L and 3.6L (V6) DOHC 24V SIDI petrol engine applications only
- For the locking of the camshafts during engine servicing and repairs



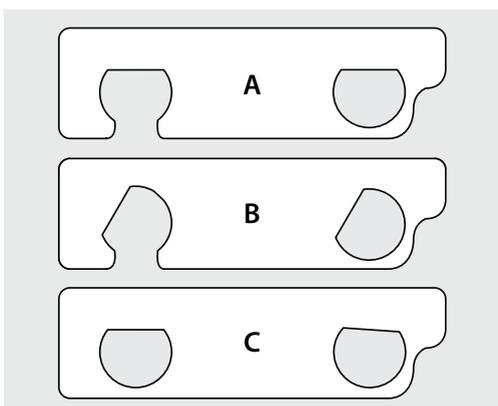
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304743</b>	<b>Holden</b>		
	Captiva (CG)	3.0L (LF1/LFW)	2011 - 2018
	Colorado (RC)	3.6L (H9)	2008 - 2012
	Commodore (VE - VF)	3.0L (SIDI LF)	2009 - 2017
	Commodore (VE - VF)	3.6L	2009 - 2017
	Insignia (GA)	2.8L (A28NER)	2015 - 2018
	<b>Opel</b>		
	Insignia (OPC)	2.8L (A28NER)	2013 - 2013
	<b>SAAB</b>		
	9-3 (Aero)	2.8L (B284)	2006 - 2010

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0654	EN-48383-1	Camshaft Alignment Tool 1 (LH Cam, Stage 1)
B	A0655	EN-48383-2	Camshaft Alignment Tool 2 (LH Cam, Stage 2)
C	A0656	EN-48383-3	Camshaft Alignment Tool 3 (RH Cam, Stage 2)

**TOOL REFERENCE**



**TIMING TOOL KIT**



- Suitable for popular Holden and Jeep 2.8L CRD Turbo Diesel engine applications
- Contains camshaft locking tools used in both early LWH (132kW) and later LWN (147kW) Colorado applications
- For the locking and alignment of the camshafts and crankshaft during the removal and installation of the engine timing belt and other engine servicing and repairs



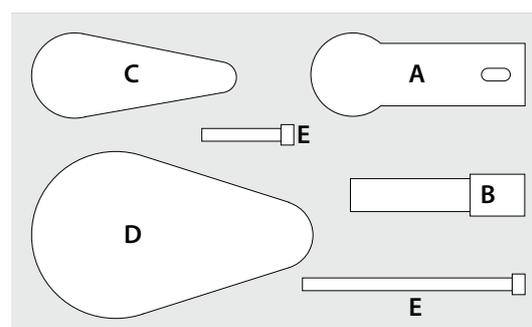
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304749</b>	<b>Chrysler</b>		
	Grand Voyager (RT)	2.8L (R428)	2008 - 2018
	<b>Dodge</b>		
	Nitro (KA)	2.8L (ENO)	2007 - 2010
	<b>Holden</b>		
	Colorado (RG)	2.4L (LVN)	2012 - 2018
	Colorado (RG - 132kW)	2.8L (LWH)	2012 - 2013
	Colorado (RG - 147kW)	2.8L (LWN)	2013 - 2018
	<b>Jeep</b>		
	Cherokee (KK)	2.8L (ENO/ENS)	2008 - 2013
	Wrangler (JK)	2.8L (ENS)	2007 - 2018

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0658	EN-50029, VM.9991	Exhaust Camshaft Locking Tool
B	A0659	EN-50030, VM.9992	Crankshaft Locking Tool
C	A0661	EN-51025	Exhaust Camshaft Locking Tool
D	A0690	EN-51104	Fuel Pump Sprocket Locking Tool
E			Bolts

**TOOL REFERENCE**



# TIMING TOOLS

## HOLDEN

### TIMING TOOL KIT

- Suitable for popular GM 1.4L DOHC 16V (A14) petrol engine models
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



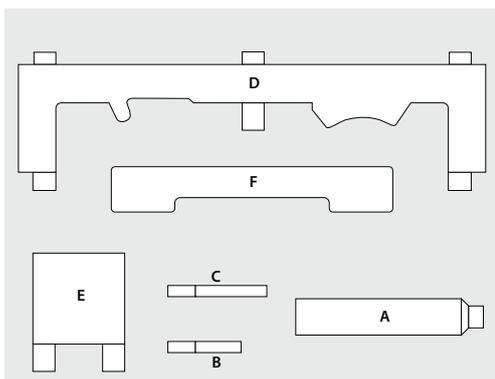
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304752</b>	<b>Holden</b>		
	Barina (TM)	1.4L (A14NET)	2013 - 2014
	Cruze (JH)	1.4L (A14NET)	2011 - 2015
	Trax (TJ)	1.4L (A14NET)	2014 - 2018
	Volt (EV)	1.4L (LUU)	2012 - 2018
	<b>Opel</b>		
	Astra	1.4L (A14NET)	2012 - 2013
Corsa	1.4L (A14XER)	2012 - 2013	

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0038	EN-952, KM-952	Crankshaft Locking Pin
B	A0106	EN-955-10, KM-955-2	Timing Chain Tensioner Locking Pin 4.0mm
C	A0108	KM-955-1	Timing Chain Tensioner Locking Pin 2.5mm
D	A0681	EN-49977-100	Camshaft Sensor Disc Setting Tool
E	A0682	EN-49977-200	Inlet Camshaft Adjuster Tool
F	A0715	EN-953-A, KM-953-A	Camshaft Lock Tool

#### TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for popular GM 2.0L (20NFT) and 2.4L (LE5/LE9) DOHC 16V turbo petrol engine models
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



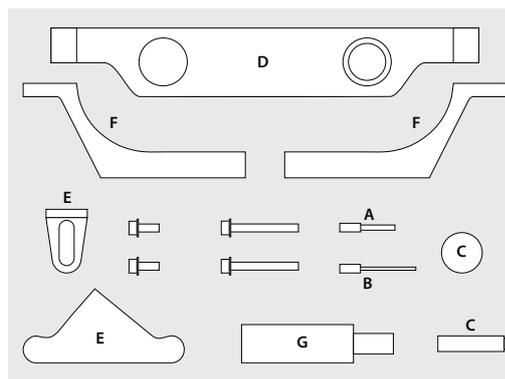
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304760</b>	<b>Holden</b>		
	Astra (PJ)	2.0L (A20NFT)	2015 - 2018
	Captiva (CG)	2.4L (LE5/LE9)	2011 - 2018
	Malibu (EM)	2.4L (LE9)	2013 - 2017
	<b>OPEL</b>		
	Astra (OPC)	2.0L (A20NFT)	2012 - 2013
	Insignia (2.0i)	2.0L (A20NFT)	2012 - 2013
	<b>SAAB</b>		
	9-5 (2.0T)	2.0L (A20NFT)	2011 - 2012

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0106	EN-955-20	Timing Chain Tensioner Locking Pin 4.0mm
B	A0108	EN-955-10	Timing Chain Tensioner Locking Pin 2.5mm
C	A0623	EN-45027	Tensioner Plunger Resetting Tool
D	A0706	EN-48953	Camshaft Adjuster Holding Tool
E	A0707	EN-43653	Flywheel/Drive Plate Holding Tool
F	A0728	EN-49212-1/2	Camshaft Adjuster Alignment Tool
F	A0729	EN-49212-1/2	Camshaft Adjuster Alignment Tool
G	A0730	EN-48585	Crankshaft Pulley Alignment Tool

#### TOOL REFERENCE



Scan here for link to part finder

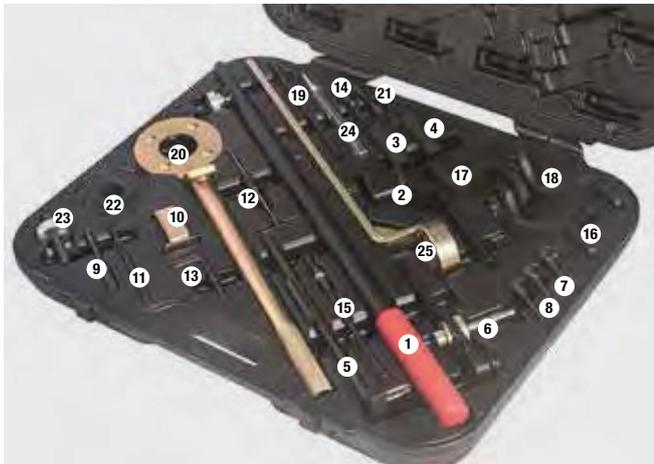
## TIMING TOOL KIT



- Universal timing tool kit contains a comprehensive range of pulley holding and pulling tools suitable for popular Australian, Japanese and Korean applications
- For the locking and alignment of the camshafts, crankshaft, tensioner during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



## TOOL REFERENCE



Part No.	Description
<b>304734</b>	Timing tool kit

## CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
1	07-JAB-001020B	Honda	Handle Holder Crank Pulley
2	07-MAB-PY-30100	Honda	Holder Attachment Crank Pulley
3	JAA0010100V17	Honda	17mm Socket
4	JAA0010100V19	Honda	19mm Socket
5	18G1521	Honda	Camshaft Holder Tool
6	JAB-0010100	Honda	Tool Holder
7	18G1523	Honda	Flywheel Fixed Pin
8	18G1717A	Honda	Injection Pump Pin
9	07 LAG-PT 20100	Honda	Balance Shaft Fixed Pin
10	14540-P13-003	Honda	Clamp
11	07744-0010400	Honda	Driver Pin (5.0mm)
12	18G1719	Honda	Fixed Bolt
13	09244-28100	Hyundai / Mitsubishi	Locking Pin 3 x 112mm
14	09244-28100	Hyundai / Mitsubishi	Connecting Pin 14 x 55mm
15	09244-28000	Hyundai	Belt Spanner
16	KM 42 A	Daewoo / Holden	Water Pump Wrench (SW41)
17	MKM 472	Daewoo / Holden	Water Pump Wrench (SW46)
18	J 42492	Daewoo / Holden	Water Pump Wrench (SW40)
19	49 JE 01064	Mazda	Camshaft Holder Tool
20	499977000	Subaru	Crankshaft Pulley Holder
21	49 JE 01061	Mazda	OT Fixed Pin
22	49 JE 01002	Mazda	Pulley Holder
23	49 JE 01062	Mazda	Crankshaft Pulley Tool
24	49 JE 01050	Mazda	Crankshaft Pin
25	49 DO 11102	Mazda	Crankshaft Holder Tool

### CAMSHAFT BELT TENSIONER LOCKING TOOLS

- Suitable for popular 1.6L – 3.8L petrol engine applications
- For the locking and alignment of the automatic tensioner during removal and installation of the engine timing belt



#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304748</b>	Hyundai		
	Lantra (J1 - J3)	1.6L - 1.8L (G4)	1991 - 2000
	Kia		
	Sorento (BL)	3.5L (G6CU)	2003 - 2009
	Mitsubishi		
	380 (DB)	3.8L (6G75)	2005 - 2008
	Express / Starwagon	2.0L - 3.0L	1994 - 2006
	Lancer (CG - CJ)	2.0L	2002 - 2015
	Magna (TS - TW)	3.0L - 3.5L	1994 - 2005
	Outlander (ZE - ZH)	2.4L	2003 - 2012
	Pajero (NL - NP)	3.5L - 3.8L	1997 - 2006
	Triton (MK - ML)	2.4L - 3.5L	1996 - 2011

### FUEL PUMP SPROCKET REMOVING TOOL

- Suitable for popular Hyundai and Kia 1.4L, 1.5L, 1.6L and 1.7L common rail diesel (CRD) engine applications
- For locking the high pressure fuel pump and removal of the pump sprocket required for removal and installation of the engine timing chain and other engine servicing and repairs
- Contains high pressure fuel pump sprocket holder and puller, mounting plate and forcing screw
- OEM reference No. 09331-2A000



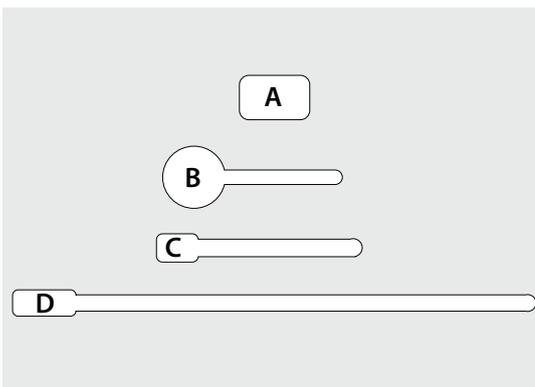
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304782</b>	Hyundai		
	Accent (RB)	1.6L (D4FB)	2012 - 2013
	Getz (TB)	1.5L (D4FA)	2006 - 2011
	i30 (FD, GD)	1.6L (D4FB)	2007 - 2017
	i40 (VF)	1.7L (D4FD)	2011 - 2017
	Kia		
	Cerato (AF, EF)	1.6L (D4FB)	2006 - 2009
	Rio (JB)	1.5L (D4FA)	2010 - 2011
	Rio (UB)	1.4L (D4FC)	2012 - 2017
	Rondo (RP)	1.7L (D4FD)	2013 - 2017
	Soul (AJ)	1.6L (D4FB)	2009 - 2014

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0555	MD998752, MB998767, 09241-28100	Tensioner Pulley Holding Tool
B	A0001		Tensioner Locking Pin
C	A0470		Locking Pin
D	A0556	MD998738, 09244-28000	Automatic Tensioner Tool Holding Screw

#### TOOL REFERENCE



**Also suitable: Part No. 304709**  
**TIMING TOOL KIT**



- Suitable for popular Jeep Grand Cherokee 2.7L diesel engine applications
- For full kit contents refer to page 164



**Also suitable: Part No. 304749**  
**TIMING TOOL KIT**



- Suitable for popular Jeep Cherokee & Wrangler 2.8L diesel engine applications
- For full kit contents refer to page 157



**CAMSHAFT LOCKING TOOL**

- Suitable for Land Rover 2.5L TD5 Diesel models
- For the locking of the camshafts and flywheel/drive plate during engine servicing and repairs



**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304744</b>	<b>Land Rover</b>		
	Defender (90, 110, 130)	2.5L (10P, 15P)	2011 - 2018
	Discovery II (TD5)	2.5L (10P, 16P)	1999 - 2005

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0533	LRT-12-058	Camshaft Timing Pin
B	A0534	LRT-12-158	Flywheel/Drive Plate Locking Tool

### TIMING TOOL KIT

- Suitable for popular 2.7L & 3.0L TDI diesel engine applications
- For locking and alignment of the camshafts, crankshaft and tensioner during removal and installation of the engine timing belt and other engine servicing and repairs



#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304746</b>	<b>Jaguar</b>		
	S Type (2.7 D)	2.7L (AJD27)	2006 - 2008
	XF (Luxury)	2.7L (AJD27)	2008 - 2009
	XF (X250)	3.0L (AJV6D)	2009 - 2018
	XJ6 (X350)	2.7L (ELD11)	2007 - 2010
	XJ (X351)	3.0L (306DT)	2010 - 2018
	<b>Land Rover</b>		
	Discovery III, IV	2.7L (276DT)	2005 - 2012
	Discovery IV	3.0L (306DT)	2009 - 2014
	<b>Range Rover</b>		
	Range Rover (LG, LW)	3.0L (306DT)	2013 - 2018
	Sport	2.7L (ELD11)	2005 - 2009
	Sport	3.0L (306DT)	2009 - 2013

### FUEL PUMP LOCKING TOOL

- High pressure fuel pump locking tool
- Suitable for popular 2.7L – 3.0L DOHC V6 diesel engine applications including XF, XJ, Discovery, Range Rover Sport\*
- Allows the high pressure fuel pump to be locked in the timed position during belt removal and installation and other engine servicing and repairs
- OEM reference No. 310-212



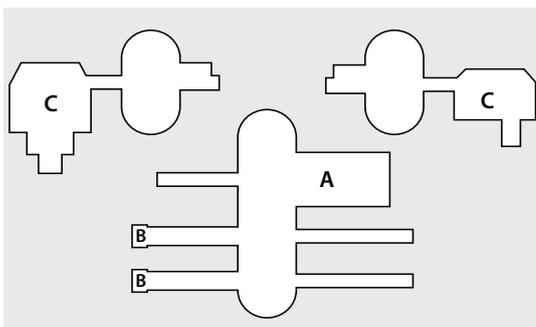
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304784</b>	<b>Jaguar</b>		
	XF (Luxury)	3.0L (AJV6D)	2008 - 2011
	XF (X250)	3.0L (AJV6D)	2009 - 2011
	XJ (X351)	3.0L (306DT)	2010 - 2016
	<b>Land Rover</b>		
	Discovery III (2.7 TDV6)	2.7L (276DT)	2005 - 2009
	Discovery IIII (2.7 TDV6)	2.7L (276DT)	2009 - 2012
	Discovery IIII (SDV6,TDV6)	3.0L (306DT)	2009 - 2014
	<b>Range Rover</b>		
	Range Rover (LG - LW)	3.0L (306DT)	2013 - 2018
	Sport	2.7L (ELD11)	2005 - 2009
	Sport	3.0L (306DT)	2009 - 2013

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0100	303-1132	Camshaft Sprocket Aligning Tool
B	A0101	303-1126	Camshaft Sprocket Timing Pins
C	A0288	303-1116, 303-1117	Flywheel Locking Tool

### TOOL REFERENCE



**Also suitable: Part No. 304706**

### TIMING TOOL KIT



- Suitable for popular Mazda CX-7, Mazda 3, Mazda 6 and Tribute petrol engine applications
- **For full kit contents refer to page 143**

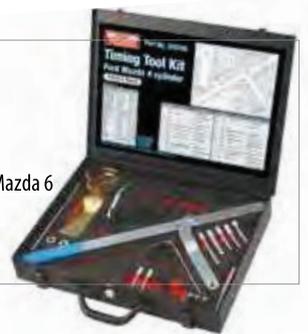


**Also suitable: Part No. 304708**

### TIMING TOOL KIT



- Suitable for popular Mazda CX-7, Mazda 3, Mazda 6 and Tribute petrol engine applications
- **For full kit contents refer to page 144**



**Also suitable: Part No. 304730**

### TIMING TOOL KIT



- Suitable for popular 1.8L – 2.5L DOHC 16V petrol engine applications
- For the locking of the camshaft and crankshaft during the removal and installation of the engine timing belt or chain
- Not suitable for Turbo models
- **For full kit contents refer to page 146**



**Also suitable: Part No. 304754**

### TIMING TOOL KIT



- Suitable for popular Mazda CX-3, CX-5, Mazda 2, Mazda 3, Mazda 6 and Tribute petrol engine applications
- **For full kit contents refer to page 148**



**Also suitable: Part No. 304764**

### TIMING TOOL KIT



- Suitable for popular Mazda BT50 diesel engine applications
- **For full kit contents refer to page 151**



### TIMING TOOL KIT



- Suitable for popular 1.4L – 6.0L (4, 6, V6, V8 & V12) petrol and 2.1L – 3.2L (4, 5, 6 & V6) diesel engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



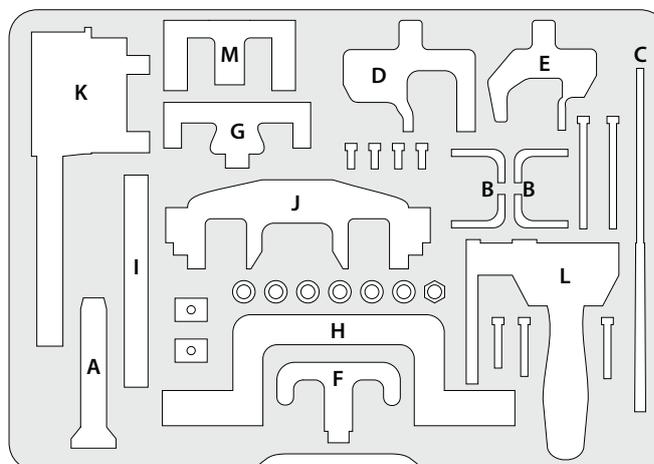
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304709</b>	<b>Mercedes</b>		
	A Class (A140 - A200)	1.4L - 2.0L	1998 - 2010
	B Series (B180 - B200)	1.7L - 2.0L	2005 - 2012
	C Class (C, CL, CLC, CLK, CLS)	1.8L - 6.0L	1994 - 2018
	E Class (E200 - E500)	1.8L - 5.5L	1993 - 2018
	G-Class (G, GL)	3.0L, 5.5L	2006 - 2018
	ML Class (ML270 - ML500)	2.7L - 5.5L	2000 - 2015
	R Class (R280 - R500)	3.5L - 5.5L	2006 - 2012
	S Class (S, SL, SLK)	1.8L - 6.0L	1993 - 2018
	Sprinter	2.1L - 3.0L	2000 - 2018
	Viano	2.1L - 3.0L	2005 - 2018
	Vito	2.1L - 3.0L	1998 - 2015
	<b>Ssangyong</b>		
	Actyon	2.0L, 2.3L	2007 - 2013
	Kyron	2.0L - 2.7L	2006 - 2012
	Rexton	2.7L (OM665)	2004 - 2013
	Stavic	2.7L (OM665)	2005 - 2008

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0104	271589001500	Chain Tensioner Drift
B	A0231	111589031500	Camshaft Locking Pin
C	A0248	112589000100	Camshaft Spanner
D	A0249	112589013200	LH Camshaft Locking Tool
E	A0250	112589003200	RH Camshaft Locking Tool
F	A0259	601589024000	Flywheel Locking Tool
G	A0260	602589004000	Flywheel Plate Locking Tool
H	A0270	271589014000	Timing Chain to Camshaft Sprocket Holder
I	A0271	271589003100	Tensioner Rail Wedge
J	A0282	271589006100	Camshaft Holding Tool
K	A0341	271589004000	Crankshaft Holding Tool
L	A0619		Balancer Shaft Chain Link Installer Die Kit
M	A0648	112589034000	Flywheel Locking Tool

### TOOL REFERENCE



**CAMSHAFT LOCKING KIT** 

- Suitable for 6.2L (M156) V8 DOHC 32V engine applications with timing chains
- For the locking and alignment of the camshafts and CMP unit during the removal and installation of the engine timing chain and other engine servicing and repairs



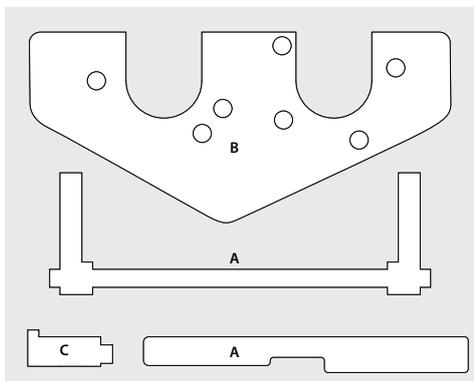
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304751</b>	<b>Mercedes</b>		
	C63 AMG	6.2L (M156)	2008 - 2015
	E63 AMG	6.2L (M156)	2006 - 2012
	ML63 AMG	6.2L (M156)	2006 - 2012
	S63 AMG	6.2L (M156)	2007 - 2011

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0678	156 589 00 61 00	Camshaft Holding & Alignment Tool
B	A0679	156 589 00 32 00	CMP Sensor Setting Tool
C	A0680	156 589 01 63 00	Camshaft Clamping Tool

**TOOL REFERENCE**



**CAMSHAFT LOCKING KIT** 

- Suitable for popular 1.6L & 2.0L (M133, M270 & M274) DOHC 16V direct injection petrol engine applications
- For the locking and alignment of the camshafts during the removal and installation of the engine timing chain and other engine servicing and repairs



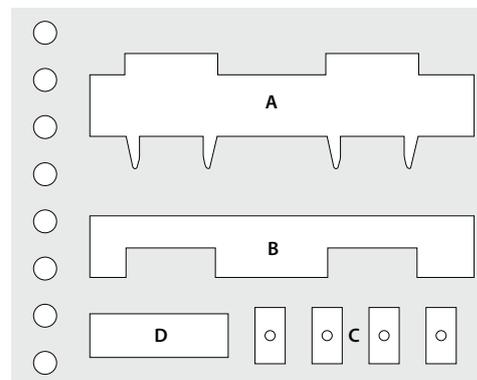
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304761</b>	<b>Mercedes</b>		
	A180, A200, A250	1.6L - 2.0L (M270)	2013 - 2018
	A45 AMG	2.0L (M133)	2013 - 2016
	B180, B200, B250	1.6L - 2.0L (M270)	2012 - 2018
	C180, C200, C250	1.6L - 2.0L (M274)	2013 - 2018
	CLA200, CLA250	1.6L - 2.0L (M270)	2013 - 2018
	CLA45 AMG	2.0L (M133)	2013 - 2016
	E200, E250	2.0L (M274.920)	2013 - 2018
	GLA180, GLA250	1.6L - 2.0L (M270)	2014 - 2018
	GLA45 AMG	2.0L (M133)	2014 - 2018

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0712	270 589 01 61 00	Camshaft Holding /Alignment Tool A
B	A0713	270 589 01 61 00	Camshaft Holding /Alignment Tool B
C	A0714	270 589 01 61 00	Camshaft Blocks x 4 (Small)
D			Security Bit Socket

**TOOL REFERENCE**



### TIMING TOOL KIT

- Suitable for Mercedes 1.8L - 2.1L (OM651) diesel engine applications
- For the locking and alignment of the camshafts during the removal and installation of the engine timing chain and other engine servicing and repairs



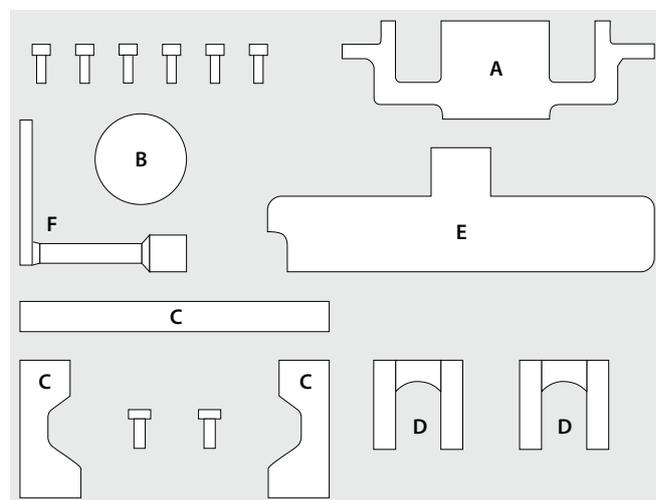
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304768</b>	<b>Mercedes</b>		
	A-Class (A200 CDI)	1.8L (OM651)	2013 - 2016
	B-Class (B200 CDI)	1.8L (OM651.901)	2012 - 2015
	C-Class (C200 CDI)	2.1L (OM651.913)	2011 - 2014
	C-Class (C250D)	2.1L (OM651)	2011 - 2018
	C-Class (C300H)	2.1L (OM651.921)	2014 - 2018
	CLA-Class (CLA200 CDI)	1.8L (OM651.901)	2014 - 2016
	CLS-Class (CLS250 CDI)	2.1L (OM651.924)	2012 - 2016
	E-Class (E220 CDI)	2.1L (OM651.924)	2009 - 2012
	E-Class (E250 CDI)	2.1L (OM651.924)	2009 - 2018
	E-Class (E300)	2.1L (OM651.924)	2013 - 2018
	GLA-Class (GLA200 CDI)	2.1L (OM651.930)	2014 - 2016
	ML-Class (ML250 CDI BLUETEC)	2.1L (OM651.960)	2012 - 2015
	Sprinter (313 - 516 CDI)	2.1L (OM651)	2010 - 2018
	Vito (110 - 116 CDI)	2.1L (OM651.940)	2011 - 2018

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0745	651589094000	Camshaft Alignment Tools
B	A0746	651589004000	Crankshaft Holding / Turning Tool
C	A0747	651589026300	Balancer Shaft Alignment Tool
D	A0748	651589014000	Camshaft Alignment Tools
E	A0749	651589034000	Timing Chain To Camshaft Sprocket Holder
F	A0758	651589104000	Crankshaft Holding / Turning Tool

### TOOL REFERENCE



**TIMING TOOL KIT** 

- Suitable for popular 1.6L SOHC 16V (W10 & W11) petrol engine applications
- For the locking of the camshaft during the removal and installation of the engine timing chain and other engine servicing and repairs



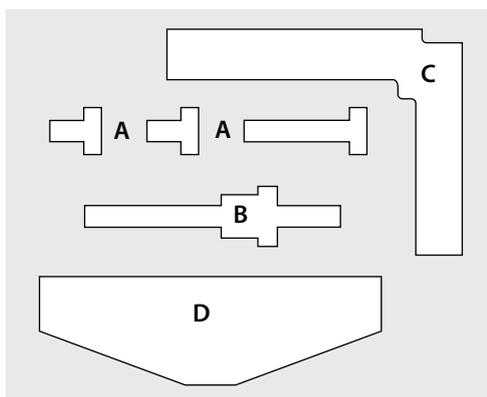
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304703</b>	<b>MINI</b>		
	Cooper (R50)	1.6L (W10 B16A)	2002 - 2007
	Cooper S (R50 - R53)	1.6L (W11 B16)	2002 - 2009
	One (R50)	1.6L (W10 B16A)	2001 - 2006

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0068		Engine Support Bracket Bolts
B	A0164	11 8 240	Tensioner Assembly Tool
C	A0195	11 8 370	Engine Support Bracket
D	A0261	11 8 250	Camshaft Sprocket Holding Tool

**TOOL REFERENCE**



**Also suitable: Part No. 304718**  
**TIMING TOOL KIT**



- Suitable for popular MINI 1.6L N12, N14 & N16 petrol engine applications
- **For full kit contents refer to page 173**



**Also suitable: Part No. 304719**  
**TIMING TOOL KIT**



- Suitable for popular 2.0L (N47 & N57) DOHC 16V diesel engine applications
- For the locking and alignment of the camshafts, crankshaft, tensioner and injection pump during the removal and installation
- **For full kit contents refer to page 136**



**Also suitable: Part No. 304758**  
**TIMING TOOL KIT**



- Suitable for popular Mini Cooper and Countryman, 1.6L petrol engine applications
- **For full kit contents refer to page 137**



**Also suitable: Part No. 304763**  
**TIMING TOOL KIT**



- Suitable for popular Mini Cooper S and One, 1.2L - 2.0L petrol engine applications
- **For full kit contents refer to page 140**



**Also suitable: Part No. 304785**  
**TIMING TOOL KIT**



- Suitable for popular Mini Cooper S and One, 1.2L - 1.5L engine applications
- **For full kit contents refer to page 141**



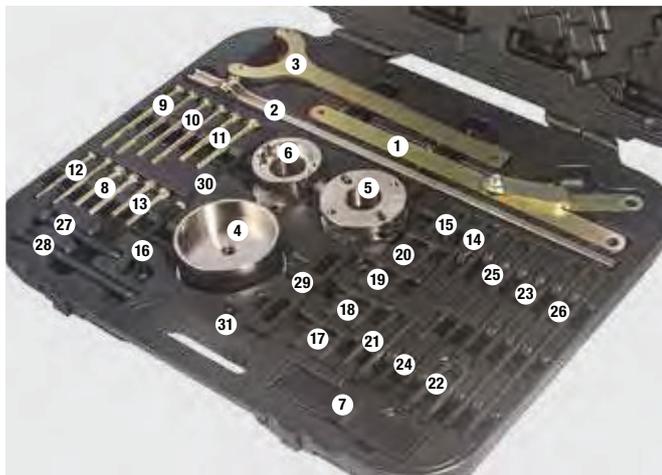
### TIMING TOOL KIT



- Universal timing tool kit contains a comprehensive range of pulley holding and pulling tools suitable for popular Mitsubishi and Toyota applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



### TOOL REFERENCE



Part No.	Description
<b>304733</b>	Timing tool kit

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
1	XB 990757	Mitsubishi	Crankshaft Pulley Holder Tool
2	09330-0021	Toyota	Companion Flange Holding Tool
3	09278-54012	Toyota	Variable Pin Wrench
4	09223-15030	Toyota	Crankshaft Rear Oil Seal Replacer
5	09213-54015	Toyota	Crankshaft Pulley Holding Tool
6	09213-14010	Toyota	Camshaft Pulley Holding Tool
7	09951-05010	Toyota	Hanger 150

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
7, 14-29	09951-50013	Toyota	SST Pullers
8			Bolts - M8 x 65 (x2)
9			Bolts - M8 x 116 (x2)
10			Bolts - M8 x 106 (x2)
11			Bolts - M8 x 88 (x2)
12			Bolts - M8 x 80 (x2)
13			Bolts - M8 x 55 (x2)
14	09954-05561	Toyota	Bolts - M6 x 100 (x2)
15	09954-05551	Toyota	Bolts - M6 x 30 (x2)
16	09957-04010	Toyota	Attachment
17	09555-05010	Toyota	Adapter Screw M10 x 1.25 (x2)
18	09555-05020	Toyota	Adapter Screw M10 x 1.5 (x2)
19	09555-05030	Toyota	Adapter Screw M12 x 1.25 (x2)
20	09555-05040	Toyota	Adapter Screw M12 x 1.5 (x2)
21	09954-05070	Toyota	Bolts - M8 x 75 (x2)
22	09954-05521	Toyota	Bolts - M8 x 50 (x2)
23	09954-05541	Toyota	Bolts - M8 x 150 (x2)
24	09954-05011	Toyota	Bolts - M5 x 100 (x2)
25	09954-05531	Toyota	Bolts - M8 x 100 (x2)
26	09954-05080	Toyota	Bolts - M8 x 225 (x2)
27	09953-05010	Toyota	Centre Bolt 100mm
28	09953-05020	Toyota	Centre Bolt 150mm
29	09952-05010	Toyota	Slide Arm
30	XD 998738	Mitsubishi	Spanner Tool Belt Adjustment Screw
31	XD 998767	Mitsubishi	Camshaft Pulley Holder Tool



CAMSHAFT BELT TENSIONER LOCKING TOOLS 

- Suitable for popular 1.6L – 3.8L petrol engine applications
- For the locking and alignment of the automatic tensioner during removal and installation of the engine timing belt



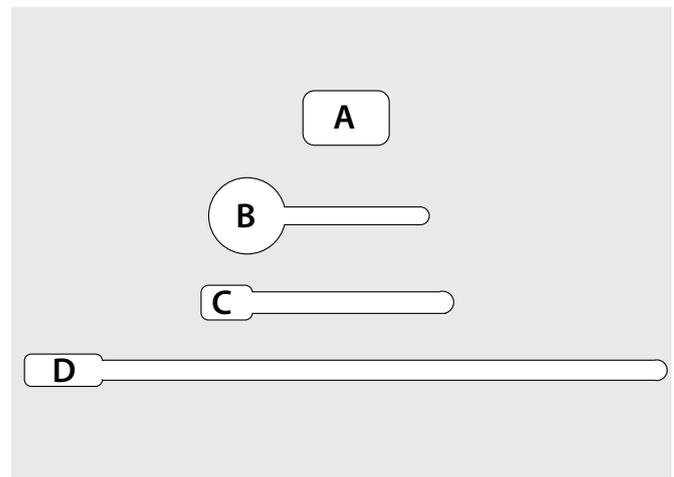
## APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304748</b>	<b>Hyundai</b>		
	Lantra (J1 - J3)	1.6L - 1.8L (G4)	1991 - 2000
	<b>Kia</b>		
	Sorento (BL)	3.5L (G6CU)	2003 - 2009
	<b>Mitsubishi</b>		
	380 (DB)	3.8L (6G75)	2005 - 2008
	Express / Starwagon	2.0L - 3.0L	1994 - 2006
	Lancer (CG - CJ)	2.0L	2002 - 2015
	Magna (TS - TW)	3.0L - 3.5L	1994 - 2005
	Outlander (ZE - ZH)	2.4L	2003 - 2012
	Pajero (NL - NP)	3.5L - 3.8L	1997 - 2006
	Triton (MK - ML)	2.4L - 3.5L	1996 - 2011

## CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0555	MD998752, MB998767, 09241-28100	Tensioner Pulley Holding Tool
B	A0001		Tensioner Locking Pin
C	A0470		Locking Pin
D	A0556	MD998738, 09244-28000	Automatic Tensioner Tool Holding Screw

## TOOL REFERENCE



### TIMING TOOL KIT

- Suitable for popular 2.0L (M9R) and 2.3L (YS23) diesel engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation



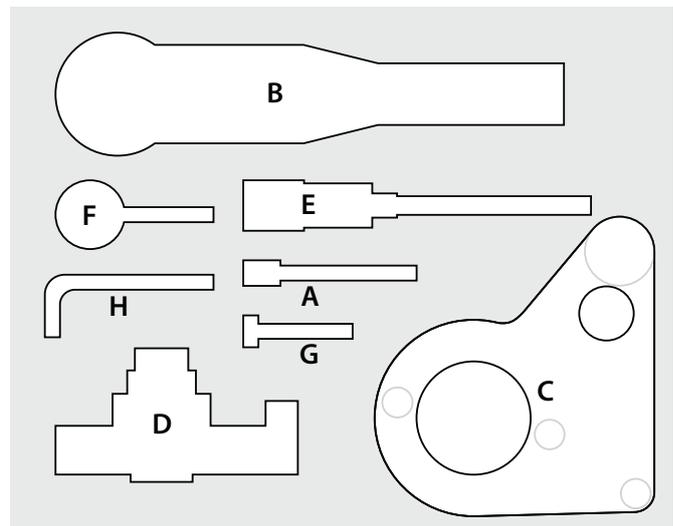
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304745</b>	<b>Nissan</b>		
	Navara (D23, NP300)	2.3L (YS23DDT)	2015 - 2018
	Navara (D23, NP300)	2.3L (YS23DDTT)	2015 - 2018
	X-Trail (T31)	2.0L (M9R)	2008 - 2014
	<b>Renault</b>		
	Koleos (H45)	2.0L (M9R)	2008 - 2016
	Koleos (H45)	2.5L (2TR 70)	2008 - 2016
	Laguna	2.0L (M9R)	2008 - 2011
	Latitude (X43)	2.0L (M9RM)	2011 - 2016
	Master (X62)	2.3L (M9T)	2011 - 2018
	Megane (Sport dCi)	2.0L (M9RC)	2007 - 2015

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0109	-	Auxiliary Belt Tensioner Locking Pin
B	A0535	MOT1770/EN48334	Crankshaft Pulley Holding Tool
C	A0536	MOT1769/EN48332	Camshaft Setting Tool
D	A0537	MOT1773/EN48331	Camshaft Gear Alignment Bracket
E	A0538	MOT1766/EN48330	Crankshaft Locking Pin
F	A0539	-	Tensioner Locking Pin
G	A0540	-	Bolt
H	A0541	-	Hex Key

### TOOL REFERENCE



TIMING TOOL KIT  

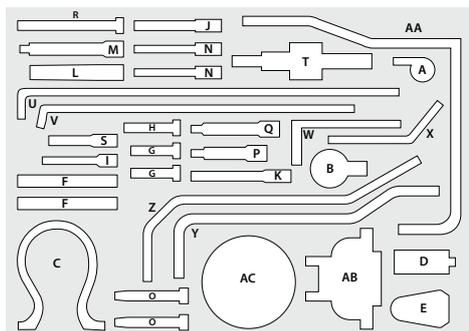
- Suitable for popular 1.4L – 2.2L petrol and 1.5L – 2.2L diesel engine applications
- For the locking of the camshafts and crankshaft during the removal and installation of the engine timing belt and other engine servicing and repairs



## APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304704</b>	<b>Citroen</b>		
	Berlingo, C2, C3, C4	1.6L (TU5JP4)	2003 - 2014
	C4, C5, Xsara	2.0L (EW10)	2001 - 2010
	C4, C5	2.0L (DW10BTED4)	2005 - 2012
	C5 (2.0 HDI 110)	2.0L (DW10ATED)	2001 - 2005
	C5 (2.2 HDI)	2.2L (DW12BTED4)	2007 - 2008
	Dispatch (G9C)	2.0L (DW10UTED4)	2008 - 2011
	Xsara	1.6L (TU5JP4)	2001 - 2005
	<b>Peugeot</b>		
	206 (XR)	1.4L (TU3JP)	1999 - 2007
	206, 307	1.6L (TU5JP)	1999 - 2008
	206 GTi, 307	2.0L (EW10J4,S)	1999 - 2009
	207 (XR)	1.4L (ET3J4)	2007 - 2010
	306 (NS)	1.8L (XU7JP)	1997 - 2001
	306, 406	2.0L (XU10J4)	1996 - 2004
	307 (XS HDi)	1.6L (DV6TED4)	2005 - 2008
	307 (NS)	2.0L (DW10TD)	2001 - 2005
	307, 308, 407, Expert	2.0L (DW10BTED4)	2004 - 2014
	308, 407, 5008, Expert, RCZ	2.0L (DW10CTED4)	2008 - 2018
	3008 (2.0 HDi)	2.0L (DW10CTED4)	2010 - 2018
	406 (D9)	2.0L (DW10ATED)	1999 - 2004
	407 (ST)	2.2L (EW12J4)	2004 - 2009
	4007 (ST, SV)	2.2L (DW12MTED4)	2009 - 2014
	508 (GT HDi)	2.2L (DW12)	2011 - 2015
	Partner	1.6L (TU5JP4B)	2008 - 2018

## TOOL REFERENCE



## CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0007	4200-TH	Tensioner Pulley Locking Pin
B	A0008	0188-AH	Crankshaft Sprocket Centralizing Tool
C	A0019	0189-K, 4533-TAD	Timing Belt Retaining Clip
D	A0029	0134-Q	Flywheel Locking Tool
E	A0031	0153-A, 6012-T, 9765 54, D86	Flywheel Locking Tool
F	A0050	0132-R, 0153-AB, 0153-G, 4507-TB	Camshaft & Flywheel Timing Pins
G	A0070	M8 x 1.25 x 30mm	Bolt
H	A0071	M8 x 1.25 x 40mm	Bolt
I	A0081	0132-AJ1, 0178-C, 0188-H, 0195C, 4533-TAC1	Camshaft Timing Pin
J	A0083	0194-B, 21-263, 303-735, 999 7122	Camshaft Sprocket Locking Pin
K	A0087	4533-TAC1, 4533-TAC2	Camshaft Locking Pin
L	A0089	21-262, 303-734, 999 7121	Crankshaft Locking Pin
M	A0090	0189-L, 0189-AZ	Camshaft Timing Pin
N	A0107	0132-AB, 0194-A, 07744-0010400, 21-260, 303-732, 999 7169, 999 7233	Crankshaft Locking Pins
O	A0117	0178-C, 0178-D	Injection Pump Timing Pins
P	A0119	0189-A	Camshaft Timing Pin
Q	A0120	0189-AZ	Camshaft Timing Pin
R	A0126	M8 x 1.25	Bolt
S	A0135	0132-RZ	Camshaft Timing Pin
T	A0182	0189-R	Flywheel Locking Tool
U	A0199	0189-S2	Tensioner Pulley Locking Tool
V	A0200	0189-S2	Tensioner Pulley Locking Tool
W	A0202	0132-X, 4507-TJ	Auxiliary Belt Tensioner Setting Tool
X	A0224	0132-Q, 4507-TA	Crankshaft Timing Pin
Y	A0227	0153-N, 7004-TG, 7014-TJ, 7017-TR, 9767 34	Crankshaft Timing Pin
Z	A0228	7017-TR	Flywheel Timing Pin
AA	A0229	0153-N, 7099-TM, 7017-TR, 9767 34	Flywheel Timing Pin
AB	A0256	7015-T (0174)	Crankshaft Pulley Puller
AC	A0386	0189-S1	Tensioner Pulley Adjusting Tool

### TIMING TOOL KIT

- Suitable for popular 2.0L (DW10) diesel engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



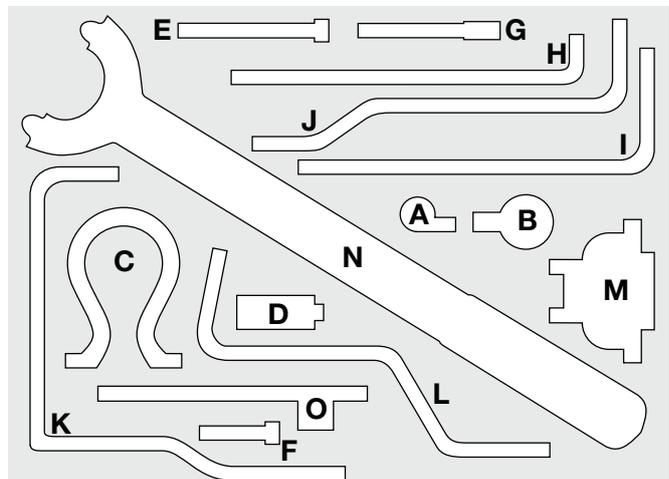
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304721</b>	<b>Citroen</b>		
	C4, C4 Picasso, C5 (2.0 HDi)	2.0L (DW10)	2001 - 2018
	C5 (2.2 HDi)	2.2L (DW12)	2005 - 2018
	Dispatch (G9C)	2.0L (DW10UTED4)	2008 - 2011
	DS5 (Dsport HDi)	2.0L (DW10CTED4)	2013 - 2015
	Xsara	2.0L (DW10TD)	2000 - 2005
	<b>Peugeot</b>		
	307, 308, 3008 (2.0 HDi)	2.0L (DW10)	2001 - 2018
	406, 407 (2.0 HDi)	2.0L (DW10)	1999 - 2011
	4007 (2.2 HDi)	2.2L (DW12MTED4)	2009 - 2014
	508 (2.0 HDi)	2.0L (DW10CTED4)	2011 - 2018
	508 (2.2 HDi)	2.2L (DW12)	2011 - 2015
	RCZ (2.0 HDi)	2.0L (DW10CTED4)	2010 - 2015
	4007 (HDi)	2.2L (DW12MTED4)	2009 - 2012
	RCZ (HDi)	2.0L (DW10CTED4)	2010 - 2012

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0007	0153-AL	Tensioner Pulley Locking Pin
B	A0008	0188-AH	Crankshaft Sprocket Centralizing Tool
C	A0019	0188-K	Timing Belt Retaining Clip
D	A0029	0188-F	Crankshaft Locking Tool
E	A0047	M8 x 1.25	M8 x 70mm Set screw
F	A0071	M8 x 1.25 x 40mm	Bolt
G	A0087	0188-M	Camshaft Locking Pin
H	A0201	0188-Q1, 0188-Q2, 0188-Z	Cambelt Tensioner
I	A0215	0188-X	Crankshaft Timing Pin
J	A0227	0188-Y	Flywheel Timing Pin
K	A0229	0153-N, 0188-D, 0288-D, 7099-TM	Flywheel Timing Pin
L	A0230	7004-TG	Camshaft Timing Pin
M	A0256	0188-P	Crankshaft Pulley Puller
N	A0313	0132-AA, 6016-T	Camshaft Adjusting Wrench
O	A0345	0188-J2	Tensioning Tool

### TOOL REFERENCE



**TIMING TOOL KIT** 

- Suitable for 1.6L (EP6, N12 & N14) DOHC 16V petrol engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs



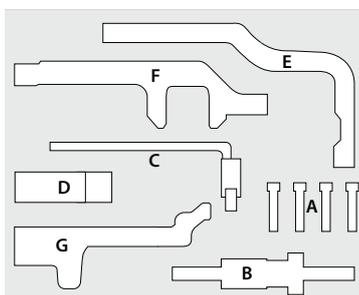
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304718</b>	<b>Citroen</b>		
	C3, DS3	1.4L, 1.6L (EP3, EP6)	2010 - 2015
	C4, DS4, C5, DS5	1.6L (EP6)	2009 - 2018
	<b>MINI</b>		
	Cooper	1.6L (N12, N16)	2007 - 2018
	Cooper (S, JCW)	1.6L (N14)	2007 - 2018
	Countryman	1.6L	2011 - 2017
	<b>Peugeot</b>		
	207, 308	1.4L (EP3)	2010 - 2013
	207, 208, 2008, 308	1.6L (EP6)	2007 - 2017
	207 (GT), 207CC, 308, 3008, 508	1.6L (EP6DT)	2007 - 2018
	508 (ACTIVE)	1.6L (EP6FDT)	2015 - 2018
	5008 (1.6T)	1.6L (EP6CDT)	2013 - 2015
	RCZ	1.6L (EP6CDT)	2010 - 2015

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0072		Camshaft Alignment Kit (Bolts)
B	A0170	11 9 340	Timing Chain Pre-Tensioning Tool
C	A0208	0197-B, 11 9 590	Crankshaft Timing Pin
D	A0429	11 9 552	Camshaft Alignment Kit
E	A0450	0197-A3, 11 9 540	Camshaft Alignment Tool
F	A0451	0197-A2, 0197-A3, 11 9 550	Camshaft Alignment Tool
G	A0452	0197-A1, 11 9 540, 11 9 550	Camshaft Alignment Tool

**TOOL REFERENCE**



**TIMING TOOL KIT** 

- Suitable for popular 1.4L – 2.0L SOHC 8V and DOHC 16V petrol engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt and other engine servicing and repairs



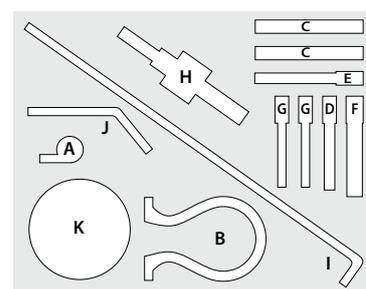
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304726</b>	<b>Citroen</b>		
	Berlingo, C2, C3, C4	1.4L - 2.0L	2003 - 2010
	<b>Ford</b>		
	Fiesta	1.6L (TDCi)	2009 - 2012
	<b>Peugeot</b>		
	307, 307CC	2.0L (EW10A)	2005 - 2009
	<b>Volvo</b>		
	C30	1.6L (Diesel)	2009 - 2012

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0007	4200-TH	Tensioner Pulley Locking Pin
B	A0019	0189-K, 4533-TAD	Timing Belt Retaining Clip
C	A0050	0132-R, 0153-AB, 0153-G, 4507-TB	Camshaft Timing Pin
D	A0083	0194-B, 21-263, 303-735, 999 7122	Camshaft Timing Pin
E	A0087	4533-TAC1, 4533-TAC2	Camshaft Timing Pin
F	A0089	21-262, 303-734, 999 7121	Flywheel Locking Tool
G	A0107	0132-AB, 0194-A, 07744-0010400, 21-260, 303-732, 999 7169, 999 7233	Camshaft Timing Pins
H	A0182	0189-R	Flywheel Locking Tool
I	A0199	0189-S2	Tensioner Pulley Locking Tool
J	A0224	0132-Q, 4507-TA	Flywheel Locking Tool
K	A0386	0189-S1	Tensioner Pulley Adjusting Tool

**TOOL REFERENCE**



## TIMING TOOLS

### PORSCHE

Also suitable: Part No. 304735

#### TIMING TOOL KIT



- Suitable for popular Porsche Cayenne 3.0L diesel engine applications
- For full kit contents refer to page 128



Also suitable: Part No. 304756

#### TIMING TOOL KIT



- Suitable for popular Porsche Cayenne 3.6L (M55) petrol engine applications
- For full kit contents refer to page 130



### RANGE ROVER

Also suitable: Part No. 304746

#### TIMING TOOL KIT



- Suitable for popular Range Rover, Sport 2.7L & 3.0L diesel engine applications
- For full kit contents refer to page 162



Also suitable: Part No. 304784

#### FUEL PUMP LOCKING TOOL



- Suitable for popular Range Rover, Sport 2.7L & 3.0L diesel engine applications
- For full kit contents refer to page 162



### RENAULT

Also suitable: Part No. 304745

#### TIMING TOOL KIT



- Suitable for popular 2.0L (M9R) and 2.3L (YS23) diesel engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation
- For full kit contents refer to page 170



Scan here for link to part finder

TIMING TOOL MASTER KIT 

- Suitable for popular 1.4L – 2.0L DOHC 16V petrol engine applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt and other engine servicing and repairs



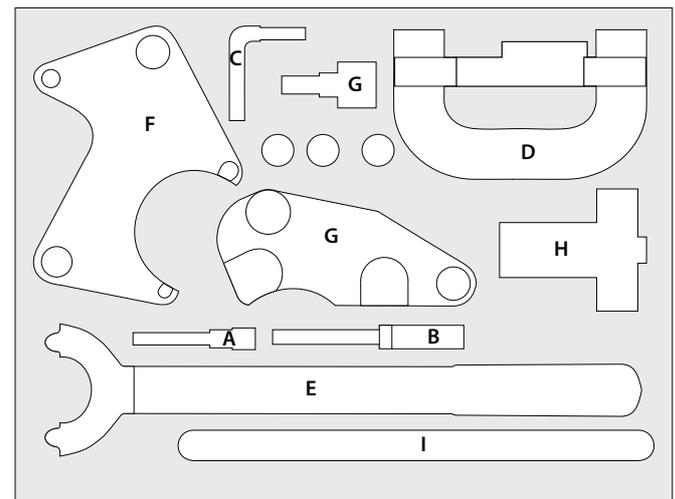
## APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304727</b>	<b>Renault</b>		
	Clio	1.4L (K4J)	2000 - 2008
	Clio	1.6L (K4M)	2002 - 2008
	Clio	2.0L (F4R)	2000 - 2018
	Grand Scenic	2.0L (F4R)	2005 - 2010
	Kangoo	1.6L (K4M)	2004 - 2018
	Laguna	2.0L (F4R)	2002 - 2011
	Megane	1.6L (K4M)	1999 - 2007
	Megane	2.0L (F4R)	2003 - 2018
	Scenic	1.6L (K4M)	2001 - 2002
	Scenic	2.0L (F4R)	2001 - 2007

## CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0095	MOT 1054	Crankshaft Locking Pin
B	A0136	MOT 1489	Crankshaft Timing Pin
C	A0191		Guide Pin
D	A0243	MOT 1496, MOT 1750	Camshaft Setting Bar
E	A0313	MOT 799-01	Camshaft Adjusting Wrench
F	A0360	MOT 1490-01	Camshaft Sprocket Locking Tool
G	A0437	MOT 1509-01, MOT 1801	Camshaft Locking Tool
H	A0607	1 895 751 000, 1 895 751 023, A 95751, MOT 1273, MOT 1505, MOT 1638, MOT 1715	Auxiliary Drive Belt Tension Gauge
I	A0620	MOT 1368	Guide Pulley Wrench

## TOOL REFERENCE



### CAMSHAFT LOCKING KIT

- Suitable for SAAB 2.0L turbo engine applications
- For the locking and alignment of the camshafts and crankshaft during the removal and installation of the engine timing chain and other engine servicing and repairs



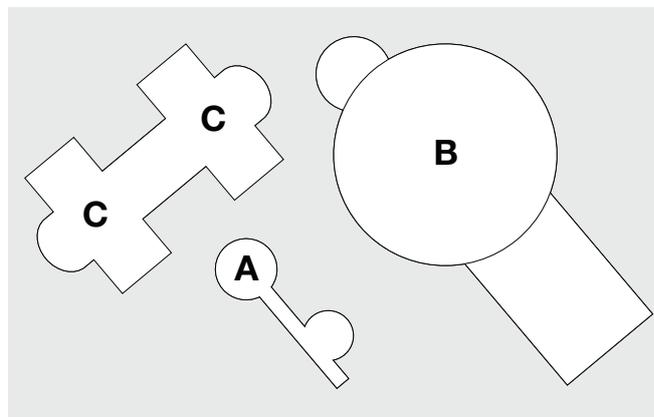
#### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304766</b>	<b>SAAB</b>		
	9-3 (2.0)	2.0L (B207)	2004 - 2005
	9-3 (2.0T)	2.0L (B207E)	2005 - 2007
	9-3 (2.0T)	2.0L (B207L)	2002 - 2010
	9-3 (Bio Power)	2.0L (B207L)	2007 - 2010
	9-3 (Linear Sport)	2.0L (B207E)	2008 - 2009
	9-3 (Linear, Arc, Vector)	2.0L (B207)	2002 - 2007

#### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0001	83 96 392	Tensioner Locking Pin
B	A0613	83 96 210	Crankshaft Pulley Holder
C	A0752	83 96 046, EN-48366	Camshaft Lock Tools

#### TOOL REFERENCE



#### Also suitable: Part No. 304714 TIMING TOOL KIT



- Suitable for popular Skoda Octavia 2.0 petrol engine applications
- For full kit contents refer to page 124



#### Also suitable: Part No. 304715 TIMING TOOL KIT

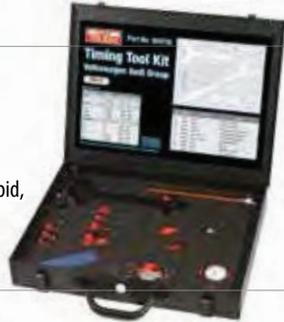


- Suitable for popular Skoda Octavia, Roomster, Superb, Yeti applications
- For full kit contents refer to page 125



**Also suitable: Part No. 304716****TIMING TOOL KIT**

- Suitable for popular Skoda Fabia, Octavia, Rapid, Roomster & Yeti applications
- For full kit contents refer to page 126

**Also suitable: Part No. 304725****TIMING TOOL KIT**

- Suitable for popular Skoda Octavia, Roomster, Superb & Yeti diesel engine applications
- For full kit contents refer to page 127

**Also suitable: Part No. 304728****TIMING TOOL KIT**

- Suitable for popular Skoda Fabia & Octavia applications
- For full kit contents refer to page 128

**Also suitable: Part No. 304750****TIMING TOOL KIT**

- Suitable for popular Skoda Octavia 1.8L & 2.0 petrol engine applications
- For full kit contents refer to page 129

**Also suitable: Part No. 304757****TIMING TOOL KIT**

- Suitable for popular Skoda Octavia, Roomster, Superb & Yeti petrol engine applications
- For full kit contents refer to page 131

**Also suitable: Part No. 304765****TIMING TOOL KIT**

- Suitable for popular Skoda Octavia 1.6L & 2.0 diesel engine applications
- For full kit contents refer to page 132

**Also suitable: Part No. 304709****TIMING TOOL KIT**

- Suitable for popular Actyon, Kyron, Rexton & Stavic applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing chain and other engine servicing and repairs
- For full kit contents refer to page 164

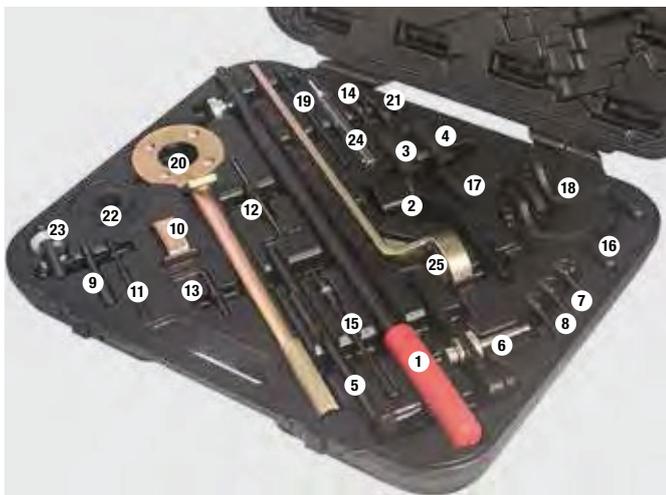


### TIMING TOOL KIT

- Universal timing tool kit contains a comprehensive range pulley holding and pulling tools suitable for popular Australian, Japanese and Korean applications
- For the locking and alignment of the camshafts, crankshaft, tensioner during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



### TOOL REFERENCE



Part No.	Description
<b>304734</b>	Timing tool kit

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
1	07-JAB-001020B	Honda	Handle Holder Crank Pulley
2	07-MAB-PY-30100	Honda	Holder Attachment Crank Pulley
3	JAA0010100V17	Honda	17mm Socket
4	JAA0010100V19	Honda	19mm Socket
5	18G1521	Honda	Camshaft Holder Tool
6	JAB-0010100	Honda	Tool Holder
7	18G1523	Honda	Flywheel Fixed Pin
8	18G1717A	Honda	Injection Pump Pin
9	07 LAG-PT 20100	Honda	Balance Shaft Fixed Pin
10	14540-P13-003	Honda	Clamp
11	07744-0010400	Honda	Driver Pin (5.0mm)
12	18G1719	Honda	Fixed Bolt
13	09244-28100	Hyundai / Mitsubishi	Locking Pin 3 x 112mm
14	09244-28100	Hyundai / Mitsubishi	Connecting Pin 14 x 55mm
15	09244-28000	Hyundai	Belt Spanner
16	KM 42 A	Daewoo / Holden	Water Pump Wrench (SW41)
17	MKM 472	Daewoo / Holden	Water Pump Wrench (SW46)
18	J 42492	Daewoo / Holden	Water Pump Wrench (SW40)
19	49 JE 01064	Mazda	Camshaft Holder Tool
20	499977000	Subaru	Crankshaft Pulley Holder
21	49 JE 01061	Mazda	OT Fixed Pin
22	49 JE 01002	Mazda	Pulley Holder
23	49 JE 01062	Mazda	Crankshaft Pulley Tool
24	49 JE 01050	Mazda	Crankshaft Pin
25	49 DO 11102	Mazda	Crankshaft Holder Tool



## CAMSHAFT LOCKING TOOL

- Suitable for popular Subaru 2.0L & 2.5L petrol engine applications
- For locking the camshafts during the removal and installation of the engine timing belt and other engine servicing and repairs
- Manufactured from high quality aluminium
- OEM reference No. 499207300 (12 point hex)



Part No.	Description
<b>304780</b>	Camshaft Locking Tool

## CAMSHAFT LOCKING TOOL

- Suitable for popular Subaru 2.0L and 2.5L DOHC Turbo petrol engine applications
- For locking the camshafts during the removal and installation of the engine timing belt and other engine servicing and repairs



Part No.	Description
<b>304781</b>	Camshaft Locking Tool

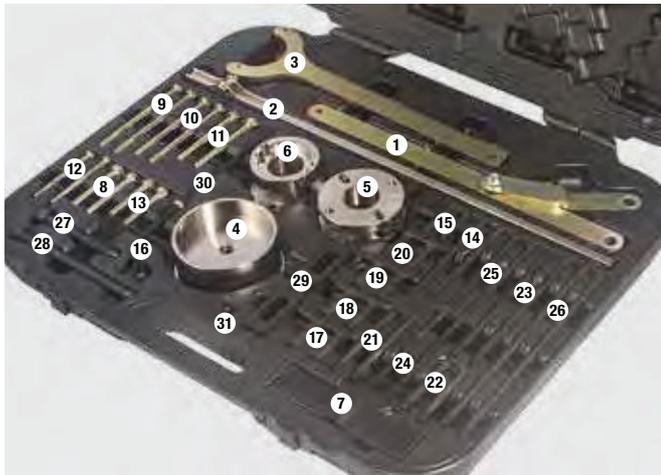
### TIMING TOOL KIT



- Universal timing tool kit contains a comprehensive range of pulley holding and pulling tools suitable for popular Mitsubishi and Toyota applications
- For the locking and alignment of the camshafts, crankshaft and tensioner during the removal and installation of the engine timing belt, chain and other engine servicing and repairs



### TOOL REFERENCE



Part No.	Description
<b>304733</b>	<b>Timing tool kit</b>

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
1	XB 990757	Mitsubishi	Crankshaft Pulley Holder Tool
2	09330-0021	Toyota	Companion Flange Holding Tool
3	09278-54012	Toyota	Variable Pin Wrench
4	09223-15030	Toyota	Crankshaft Rear Oil Seal Replacer
5	09213-54015	Toyota	Crankshaft Pulley Holding Tool
6	09213-14010	Toyota	Camshaft Pulley Holding Tool
7	09951-05010	Toyota	Hanger 150

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
7, 14-29	09951-50013	Toyota	SST Pullers
8			Bolts - M8 x 65 (x2)
9			Bolts - M8 x 116 (x2)
10			Bolts - M8 x 106 (x2)
11			Bolts - M8 x 88 (x2)
12			Bolts - M8 x 80 (x2)
13			Bolts - M8 x 55 (x2)
14	09954-05561	Toyota	Bolts - M6 x 100 (x2)
15	09954-05551	Toyota	Bolts - M6 x 30 (x2)
16	09957-04010	Toyota	Attachment
17	09555-05010	Toyota	Adapter Screw M10 x 1.25 (x2)
18	09555-05020	Toyota	Adapter Screw M10 x 1.5 (x2)
19	09555-05030	Toyota	Adapter Screw M12 x 1.25 (x2)
20	09555-05040	Toyota	Adapter Screw M12 x 1.5 (x2)
21	09954-05070	Toyota	Bolts - M8 x 75 (x2)
22	09954-05521	Toyota	Bolts - M8 x 50 (x2)
23	09954-05541	Toyota	Bolts - M8 x 150 (x2)
24	09954-05011	Toyota	Bolts - M5 x 100 (x2)
25	09954-05531	Toyota	Bolts - M8 x 100 (x2)
26	09954-05080	Toyota	Bolts - M8 x 225 (x2)
27	09953-05010	Toyota	Centre Bolt 100mm
28	09953-05020	Toyota	Centre Bolt 150mm
29	09952-05010	Toyota	Slide Arm
30	XD 998738	Mitsubishi	Spanner Tool Belt Adjustment Screw
31	XD 998767	Mitsubishi	Camshaft Pulley Holder Tool



Also suitable: Part No. 304714

**TIMING TOOL KIT**



- Suitable for popular Volkswagen Beetle, Bora, Caddy, EOS, Golf, Jetta, Passat, Scirocco Transporter petrol engine applications
- For full kit contents refer to page 124



Also suitable: Part No. 304715

**TIMING TOOL KIT**



- Suitable for popular Volkswagen Amarok, Beetle, Bora, Caddy, EOS, Golf, Jetta, Passat, Polo & Transporter applications
- For full kit contents refer to page 125



Also suitable: Part No. 304716

**TIMING TOOL KIT**



- Suitable for popular Volkswagen Beetle, Golf, Jetta, Polo & Tiguan 1.4L & 1.6L petrol engine applications
- For full kit contents refer to page 126



Also suitable: Part No. 304725

**TIMING TOOL KIT**



- Suitable for popular Volkswagen Amarok, Beetle, Caddy, EOS, Golf, Jetta, Passat, Polo, Scirocco & Transporter applications
- For full kit contents refer to page 127



Also suitable: Part No. 304728

**TIMING TOOL KIT**

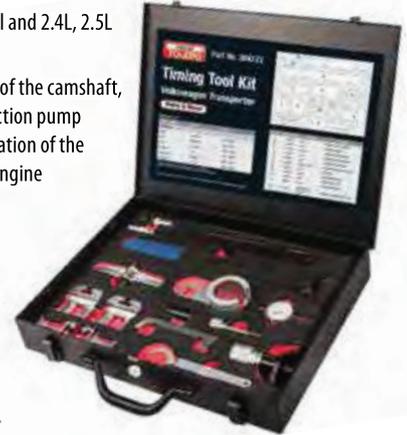


- Suitable for Volkswagen popular Beetle, Caddy, Citivan, Golf, Polo and Transporter petrol engine applications
- For full kit contents refer to page 128



**TIMING TOOL KIT**

- Suitable for popular 2.5L petrol and 2.4L, 2.5L diesel engine applications
- For the locking and alignment of the camshaft, crankshaft, tensioner and injection pump during the removal and installation of the engine timing belt and other engine servicing and repairs



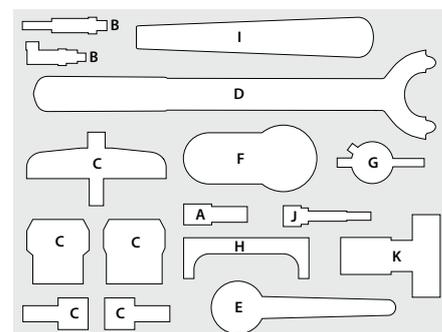
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304722</b>	<b>Volkswagen</b>		
	Caravelle (IV)	2.5L	1993 - 2003
	Caravelle (IV)	2.5L (TDi)	2000 - 2005
	Crafter	2.5L (TDi)	2007 - 2012
	Kombi (IV)	2.5L	2003 - 2004
	LT 35	2.5L (TDi)	2003 - 2006
	LT 46	2.5L (TDi)	2003 - 2006
	Transporter (IV)	2.5L	1993 - 2004
	Transporter (IV)	2.4L, 2.5L (TDi)	1994 - 2006

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0141	2064	Injection Pump Setting Pin
B	A0178	3313	Dial Gauge Adaptor
C	A0189	40001	Camshaft Sprocket Puller
D	A0313	3036	Camshaft Adjusting Wrench
E	A0320	3355	Tensioner Pulley Spanner
F	A0342	3248A, T10025	Crankshaft Damper Holding Tool
G	A0409	3313	Dial Gauge
H	A0425	2065A	Camshaft Setting Bar
I	A0453	3212	Pulley Holding Tool
J	A0468	50009	Crankshaft Timing Pin
K	A0607	1 895 751 000, 1 895 751 023, A 95751	Auxiliary Drive Belt Tension Gauge

**TOOL REFERENCE**



### TIMING TOOL KIT

- Suitable for popular 2.5 & 4.9L TDI diesel engine applications
- For locking and alignment of the camshaft and crankshaft gears during servicing of the engine valve timing and other engine repairs



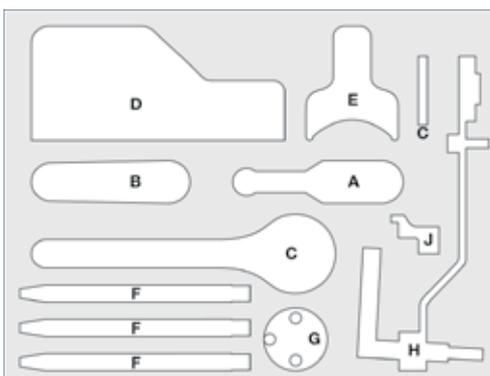
### APPLICATION LIST\*

Part No.	Make & Model	Engine	Year
<b>304747</b>	<b>Volkswagen</b>		
	Caravelle	2.5L (AXE, BNZ, BPC)	2004 - 2010
	Kombi (V)	2.5L (BNZ)	2006 - 2009
	Multivan (V)	2.5L (AXE, BPC)	2005 - 2010
	Phaeton	4.9L (AJS)	2004 - 2007
	Touareg	2.5L (BAC, BPE)	2004 - 2009
	Touareg	4.9L (AYH, BLE, CBW)	2004 - 2010
	Transporter	2.5L (AX, BNZ, BPC)	2004 - 2010

### CONTENTS

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0546	T10193	Camshaft Locking Tool 1
B	A0547	T10194	Camshaft Locking Tool 2
C	A0548	T10195	Crankshaft Locking Tool
D	A0549	T10199	Camshaft Gear Retaining Tool 1
E	A0550	T10199/1	Camshaft Gear Retaining Tool 2
F	A0551	T10200	Guide Pin
G	A0552	T10225	Crankshaft Alignment Tool
H	A0553	T10226	Crankshaft Locking Tool
J	A0554	T10234	Camshaft Compensation Gear Pre-Tensioning Tool

### TOOL REFERENCE



**Also suitable: Part No. 304735**

### TIMING TOOL KIT



- Suitable for popular Volkswagen Touareg 3.0L & 4.2L diesel engine applications
- For full kit contents refer to page 128



**Also suitable: Part No. 304750**

### TIMING TOOL KIT



- Suitable for popular Volkswagen Amarok, EOS, Golf, Jetta, Passat & Tiguan 1.8L & 2.0L petrol engine applications
- For full kit contents refer to page 129



**Also suitable: Part No. 304756**

### TIMING TOOL KIT



- Suitable for popular Volkswagen Bora, Caravelle, Golf, Multivan, Passat & Transporter petrol engine applications
- For full kit contents refer to page 130



**Also suitable: Part No. 304757**

### TIMING TOOL KIT



- Suitable for popular Volkswagen Caddy, Golf, Polo & UP 1.0L - 1.4L petrol engine applications
- For full kit contents refer to page 131



**Also suitable: Part No. 304765**

### TIMING TOOL KIT



- Suitable for popular Volkswagen Golf 1.6L diesel engine applications
- For full kit contents refer to page 132



**Also suitable: Part No. 304767**

### TIMING TOOL KIT



- Suitable for popular Volkswagen Touareg 4.2L petrol engine applications
- For full kit contents refer to page 133



Scan here for link to part finder

\* Abbreviated applications to be used as a guide only, for complete vehicle application listings go to website [tridon.com.au/partfinder](http://tridon.com.au/partfinder)

**TIMING TOOL KIT** 

- Suitable for popular 4, 5 and 6 cylinder DOHC petrol engine applications
- For the locking of camshafts during the removal and installation of the engine timing belt and other engine servicing and repairs

*Note: Applications may require additional tools to complete repairs*



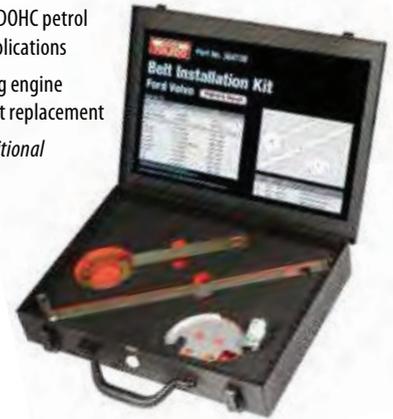
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304737</b>	<b>Ford</b>		
	Focus XRS Turbo (LS - LV)	2.5L (B5254T)	2006 - 2012
	Kuga (TE)	2.5L (Duratec)	2012 - 2013
	Mondeo XRS Turbo (MA - MB)	2.5L (B5254T)	2007 - 2014
	<b>Volvo</b>		
	850, 850(T)	2.3L, 2.4L (B52)	1992 - 1997
	960	2.9L (B630)	1991 - 1997
	C30, C30(T)	2.4L, 2.5L (B52)	2007 - 2013
	C70, C70(T)	2.3L - 2.5L (B52)	1999 - 2015
	S40, S40(T)	1.9L - 2.5L (B41, B42, B52)	1997 - 2013
	S60, S60(T)	2.0L - 2.5L (B52)	2000 - 2009
	S70, S70(T)	2.3L, 2.4L (B52)	1997 - 2003
	S80, S80(T)	2.0L - 2.9L (B52, B62, B63)	1998 - 2006
	V40, V40(T)	1.8L, 2.0L (B41, B42)	1997 - 2004
	V50, V50(T)	2.4L, 2.5L (B52)	2004 - 2015
	V70, V70(T)	2.0L - 2.5L (B52)	1997 - 2008
	XC70, XC70(T)	2.3L - 2.5L (B52)	2000 - 2007
	XC90, XC90(T)	2.5L - 2.9L (B52, B62)	2003 - 2006

**BELT INSTALLATION KIT**  

- Suitable for popular 1.9L – 2.5L DOHC petrol and 2.5L DOHC diesel engine applications
- For locking the crankshaft during engine repairs, servicing and timing belt replacement

*Note: Applications may require additional tools to complete repairs*



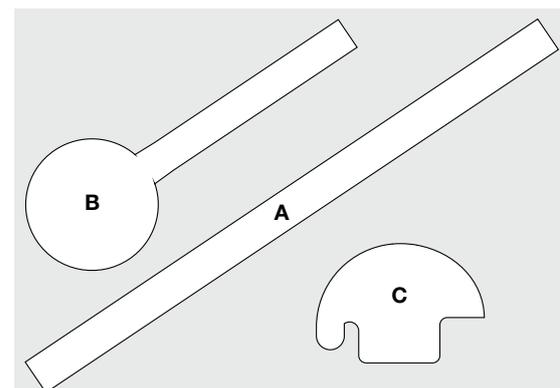
**APPLICATION LIST\***

Part No.	Make & Model	Engine	Year
<b>304738</b>	<b>Ford</b>		
	Focus XRS Turbo (LS - LV)	2.5L (B5254T)	2006 - 2012
	Kuga (TE)	2.5L (Duratec)	2012 - 2013
	Mondeo XRS Turbo (MA - MB)	2.5L (B5254T)	2007 - 2014
	<b>Volvo</b>		
	850	2.5L (B5252S)	1993 - 1996
	C30, S70, V70	2.0L - 2.5L (B52, D52)	1997 - 2015
	S40, V40	1.8L - 2.5L (B41, B42, B52)	1997 - 2018
	S60, S60	2.0L - 2.5L (B52, D52)	2000 - 2018
	V50	2.4L, 2.5L (B52, D52)	2004 - 2015
	S80, S80(T)	2.0L - 2.8L (B52, B62, D52)	1998 - 2010
	XC60, XC70, XC90	2.0L - 2.5L (B52, D52)	2000 - 2018

**CONTENTS**

Tool Ref.	Toledo Tool No.	OEM Tool No.	Description
A	A0645	999 7109	Auxiliary Drive Belt Tensioner Tool
B	A0646	999 5433	Crankshaft Pulley Holding Tool
C	A0647	303-1179	Auxiliary Drive Belt Installer

**TOOL REFERENCE**



**Also suitable: Part No. 304762**  
**TIMING TOOL KIT**  


- Suitable for popular Volvo S60 & V60 1.6L petrol engine applications
- For full kit contents refer to page 150



## UNIVERSAL

### DIAL GAUGE TIMING KIT

- Ideal for use in diesel injection pump timing and universal petrol engine applications
- Set includes special purpose adaptors, extensions and dial gauge



Part No.	Description
<b>304772</b>	Dial Gauge Timing Kit

### INJECTOR PUMP TIMING KIT

- For use in the removal and installation of timing chains and cylinder heads
- Suitable for use on Bosch EP and VE Rotary, Lucas, CAV Rotodiesel, Peugeot, Nippon Denso, Kikki diesel injector pumps
- Set includes special purpose adaptors, extensions and dial gauge



Part No.	Description
<b>304771</b>	Injector Pump Timing Tool Kit

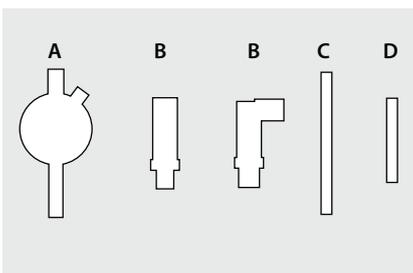
### CONTENTS

Tool Ref.	Toledo Tool No.	Description
A	A0409	Dial Gauge
B	A0178	Dial Gauge Adaptors
C	A0052	Extension 100mm
D	A0051	Extension 40mm

### APPLICATION LIST\*

Make	A	B	C	D	E	F	G	H	I	J	Make	A	B	C	D	E	F	G	H	I	J	
Alfa Romeo			•			•	•		•	•	Landrover			•				•	•		•	•
Audi			•	•		•	•		•	•	Mazda			•				•	•		•	•
BMW			•			•	•		•	•	Mitsubishi			•				•	•		•	•
Citroën	•	•			•	•					Nissan			•				•	•		•	•
Daihatsu			•			•	•		•	•	GM			•				•	•			
Fiat			•	•		•	•		•	•	Peugeot	•	•					•	•			
Ford			•	•	•	•	•		•	•	Renault			•	•	•	•	•	•		•	•
Isuzu			•			•	•		•	•	Seat			•				•	•		•	•
Iveco			•			•	•		•	•	VW			•	•			•	•		•	•
Lancia			•			•	•		•	•	Volvo			•				•	•		•	•

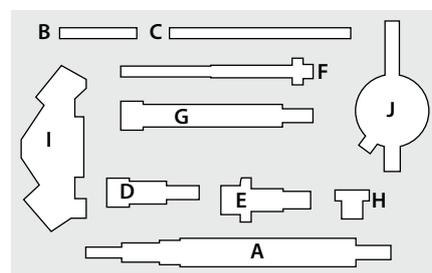
### TOOL REFERENCE



### CONTENTS

Tool Ref.	Toledo Tool No.	Description
A	A0039	TDC Adaptor Assembly
B	A0051	Extension 40mm
C	A0052	Extension 100mm
D	A0078	M10 Adaptor Short
E	A0079	M8 Adaptor Short
F	A0128	Probe
G	A0140	M8 Adaptor Long
H	A0149	Threaded M8-M12 Adaptor
I	A0407	Mounting Bracket
J	A0409	Dial Gauge

### TOOL REFERENCE



CAMSHAFT LOCKING TOOL  

- For the locking of camshaft sprockets and belts during engine servicing and repairs
- Adjustable design featuring belt holders and universal sprocket wedge tools
- Suitable for universal use including SOHC and DOHC cam applications

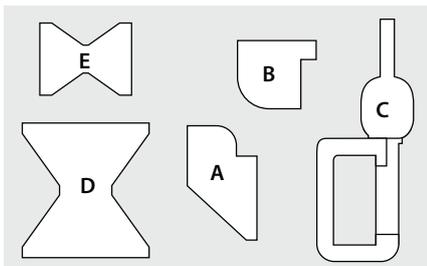


Part No.	Description
<b>304770</b>	Camshaft locking tool

## CONTENTS

Tool Ref.	Toledo Tool No.	Description
A	A0187	Belt Tool
B	A0188	Belt Tool
C	A0242	Timing Belt Clamp
D	A0401	Timing Belt Clamp (Jaws)
E	A0402	Timing Belt Clamp (Jaws)

## TOOL REFERENCE

CAMSHAFT HOLDING TOOL  

- Designed to hold and manoeuvre the camshaft sprocket on OHC and DOHC engines
- Tool pins locate into the camshaft sprocket spokes to enable sprocket adjustment for accurate alignment and bolt tension
- Assists with camshaft timing belt alignment
- Overall length: 380mm



Part No.	Description
<b>304195</b>	Camshaft Holding Tool

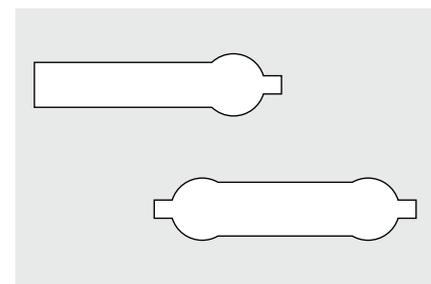
CAMSHAFT LOCKING TOOL  

- Suitable for locking camshafts during engine servicing and repairs
- Adjustable design for universal vehicle applications



Part No.	Description
<b>304773</b>	Camshaft Locking Tool

## TOOL REFERENCE

CAMSHAFT HOLDING & LOCKING TOOL  

- Fully adjustable locking tool for toothed pulleys with spread ranging from 0mm to 60mm apart
- Ensures camshaft pulleys maintain fixed position during repair or timing belt replacement
- Universal design applicable for a large range of twin cam petrol or diesel engines
- Includes single cam sprocket holding tool
- Supplied in custom moulded plastic hard case



Part No.	Description
<b>304037</b>	Camshaft Holding & Locking Tool

### BELT INSTALLATION KIT

- For use in the installation of flexible multi ribbed drive belts
- Suitable for use on vehicles fitted without automatic drive belt tensioners
- Enables easy damage free stretching of drive belt into the correct position whilst turning the crankshaft pulley by hand
- Contains 3 specially designed installation tools
- Applications include; BMW, Chrysler, Citroën, Ford, Mazda, Peugeot, Volvo

**CAUTION** Extreme care to be taken during use of this kit. Always refer to the vehicle manufacturer's specifications for correct installation procedures.

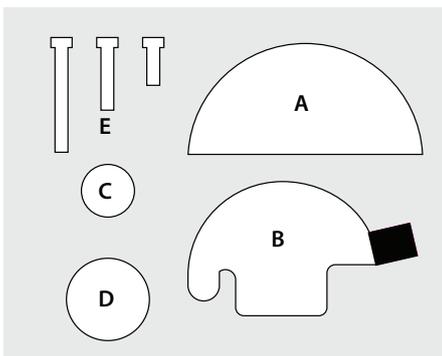


Part No.	Description
<b>304775</b>	Belt Installation Kit - Flexible Drive Belt Stretcher

#### CONTENTS

Tool Ref.	Description
A	Belt Tool
B	Belt Tool
C	Belt Tool
D	Belt Tool
E	Bolts

#### TOOL REFERENCE



### BELT INSTALLATION KIT

- For use in the installation of flexible multi ribbed drive belts
- Suitable for use on vehicles fitted without automatic drive belt tensioners
- Enables easy damage free stretching of drive belt into the correct position whilst turning the crankshaft pulley by hand
- Contains 2 specially designed installation tools

**CAUTION** Extreme care to be taken during use of this kit. Always refer to the vehicle manufacturer's specifications for correct installation procedures

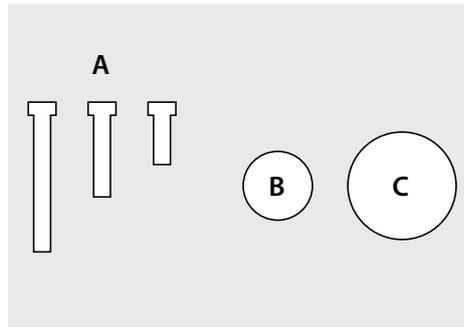


Part No.	Description
<b>304776</b>	Belt Installation Kit - Flexible Drive Belt Stretcher

#### CONTENTS

Tool Ref.	Description
A	Bolts
B	Belt Tool
C	Belt Tool

#### TOOL REFERENCE

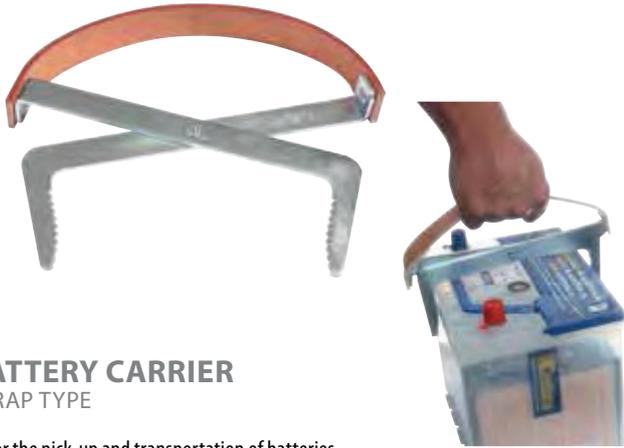




# ELECTRICAL & IGNITION

<b>BATTERY</b>	<b>188</b>
<b>CIRCUIT TESTING</b>	<b>189</b>
<b>SOLDERING</b>	<b>191</b>
<b>PLIERS &amp; CUTTERS</b>	<b>193</b>
<b>INTERIOR &amp; DASHBOARD</b>	<b>198</b>
<b>IGNITION</b>	<b>200</b>

**BATTERY**



**BATTERY CARRIER**  
STRAP TYPE

- For the pick-up and transportation of batteries
- Designed to transfer lifting force to ensure a secure hold on the battery
- Scissor lock type jaws with serrated teeth ensure a positive grip on the side of the battery
- Reinforced, acid resistant and non-conductive vinyl strap
- Zinc plated carbon steel frames
- Fully adjustable for battery size
- Suitable for most top and side terminal batteries

Part No.	Jaw Opening (Max)	Load Capacity
<b>303180</b>	175mm	20kg



**BATTERY CARRIER**  
FIXED HANDLE TYPE

- For the pick-up and transportation of batteries
- Tubular steel handle with ergonomic grip enables fast and safe handling of batteries
- Acid resistant serrated grip pads and non-slip ribbed vinyl handle ensure secure grip and firm hold
- Carrying arm extends to a maximum of 195mm via ratcheting tooth adjuster
- Fully adjustable zinc plated steel frames
- Suitable for most top and side terminal batteries

Part No.	Gripping Pads	Jaw Opening (Max)	Load Capacity
<b>303181</b>	80 x 35mm	195mm	20kg



**BATTERY HYDROMETER**

- Professional use hydrometer which takes ambient temperature into account when assessing specific gravity readings
- Built-in thermometer and float gauge compensates for temperature variations to provide more accurate reading of battery fluid condition and its state of charge
- Graduated scale on in-built meter advises the operator to add or subtract certain values above or beyond 26.6°C (80°F)
- Glass tube construction with acid resistant rubber moulded housing
- Determines specific gravity from 1.100 - 1.300

Part No.	Range	Overall Length
<b>303183</b>	1.100 to 1.300	340mm



**BATTERY POST & TERMINAL CLEANERS**

- Handy cleaning tools for battery maintenance
- Ideal for removing build-up of corrosion and rust
- Suitable for all applications including automotive, trucks, motorcycles, plant equipment etc.

Part No.	Description
<b>303004</b>	Double sided brass cleaning brush with 5/16" hex
<b>303178</b>	Battery post & terminal cleaner - 3 way
<b>303177</b>	Battery post & terminal cleaner - stainless steel



### BATTERY TERMINAL RATCHET WRENCH

- Terminal bolt ratchet wrench
- Designed for use on 5/16" battery terminal bolts

Part No.	Size	Overall Length
<b>303001</b>	5/16" (8mm)	140mm



### BATTERY TERMINAL SPREADING PLIERS

- For efficient cleaning and spreading of battery cable terminals and clamps
- Sharp teeth effectively clean corrosion from terminal
- Reinforced hardened jaws to avoid breakage

Part No.	Jaw Opening	Overall Length
<b>303179</b>	16 - 19mm	160mm



### BATTERY TERMINAL PULLER

- For the removal of battery terminals, small gears, pulleys and bearings on electric motors
- Suitable for removing battery terminal clamps, including corroded spring type, without damaging the battery post

Part No.	Spread	Reach
<b>303175</b>	33mm	25mm

### BATTERY & ALTERNATOR TESTER

- For testing battery condition and alternator charging voltage (13–14V)
- LED lights indicate battery and alternator charging voltage conditions
- For use on 12V vehicle applications only
- Plastic casing with magnet on reverse side for easy attachment and storage

Part No.	Range
<b>302147</b>	Battery: 5–12.5V / Alternator: 13–14V



## CIRCUIT TESTING



### POLARITY TESTER CORDLESS

- Professional cordless circuit testing tool designed to test polarity on any DC electrical circuits from 6–28V
- Computer safe, ideal for use around ECM's, sensors, air bags, transducers etc.

Part No.	Voltage	Overall Length
<b>302146</b>	6 - 28V (DC)	115mm



### WIRE PIERCING GUIDE

- Specially for use in testing/piercing insulated wire
- Three wire locators, suitable for 1–4mm insulated wire

Part No.	Jaw Opening	Application Range	Overall Length
<b>302003</b>	16 - 19mm	1 - 4mm	160mm

CIRCUIT TESTING

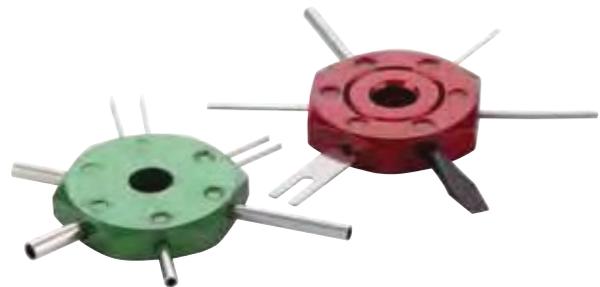


CIRCUIT TESTERS  
STANDARD

- Circuit tools for testing low voltage DC electrical currents
- High impact resistant transparent body with steel probe (302148 - steel body)
- Crocodile clip
- Replaceable bulb (not available through Toledo)



Part No.	Description	Probe Length	Lead Length
<b>302145</b>	Standard circuit tester, retractable coil 6-24V (DC)	80mm	700 - 2500mm
<b>302001</b>	Extra-long circuit tester, retractable coil 6-24V (DC)	170mm	1000 - 3000mm
<b>302144</b>	Heavy duty circuit tester 6-24V (DC)	100mm	1500mm
<b>302148</b>	Metal body circuit tester 4-24V (DC)	12mm	185mm



CONTINUITY TESTER

- For the detection of open circuits in fuses, diodes, switches, sockets and wires
- Handy time saving tool suitable for all automotive electrical work on 6, 12 and 24 volt systems
- High impact transparent acetate handle with replaceable bulb (not available through Toledo)

WIRE TERMINAL SET

- Designed for easy and efficient removal of wires from connectors while eliminating any wire or connector damage
- Rectangular blades for pack-com terminals, flat blade to open connectors, fork for ALDL connector
- Prongs depress the "barbs" on conventional terminals
- Universal design suitable for most common vehicles



Part No.	Voltage	Probe Length	Lead Length	Overall Length
<b>302190</b>	6 - 48V (DC)	45mm	1200mm	200mm

Part No.	Prongs	Pieces
<b>302027</b>	6 per tool	2



### CIRCUIT TESTER COMPUTER SAFE LED

- Computer safe LED testing tool is ideal for use on circuits where sensitive testing is required
- Suitable for testing injector pulse, automotive computer circuits and all primary automotive electrical circuits
- High impedance protects computer
- Impact resistant transparent acetate handle, stainless steel probe, LED polarity indicator, long lead and crocodile clip

Part No.	Voltage	Probe Length	Lead Length
<b>302014</b>	3 - 12V (DC)	75mm	1200mm



### CIRCUIT TESTERS DIGITAL LCD

- Circuit testers for the trade professional with digital LCD display read out
- In-built LCD display within transparent shock proof plastic body
- Provides accurate voltage values to one decimal place
- Heavy duty flexible spring cord 700-3000mm

Part No.	Voltage	Resolution	Probe Length	Overall Length
<b>302191</b>	6 - 24V (DC)	0.1V (DC)	90mm	210mm
<b>302192</b>	12 - 48V (DC)	0.1V (DC)	90mm	210mm



### DE-SOLDERING TOOL (SOLDER SUCKER)

- For the safe and easy removal of molten solder during soldering repair work
- Spring loaded action efficiently removes solder with powerful vacuum force
- Hold pump over molten solder and press release button to effectively suck up the targeted solder. The solder will enter the chamber and immediately be cooled and hardened for removal and disposal
- ESD safe conductive metal housing and Teflon nozzle
- Ideal for circuit boards
- Spares: Replacement nozzle set 5pc (Part No. 302121A)

Part No.	Overall Length x Diameter	Spares
<b>302121</b>	190 x Ø 20mm	302121A



### SOLDERING AID TOOL PLIER STYLE

- Assists by holding wires together to enable them to be soldered together
- Insulated PVC dipped handles with click type lever for opening and closing jaws
- Simple to use - insert wires under holding clips and manoeuvre together until correct distance is achieved for soldering

Part No.	Jaw Opening	Overall Length
<b>302120</b>	10 - 62mm	250mm

**SOLDERING**



Bench mounting metal stand

**SOLDERING IRONS**

- Professional range of soldering irons to suit all requirements from small DIY hobby projects to more industrial heavy duty applications
- Robust Bakelite handle for strength and durability
- Ergonomic design with rubber grip handle which is comfortable, non-conductive and heat resistant
- Nichrome with sheet mica covered elements and long life tip
- Includes bench mounting metal stand for safe storage of iron while not in use
- Supplied with user guide detailing correct operation, proper care and maintenance
- SAA approved range is extensively tested
- *Spare: Three piece tip sets include a standard tip, straight flat tip and 45° angled flat tip*



Part No.	Description	Voltage	Heat Range	Tip Set Part No.	Image (Tip Set)
<b>302100</b>	Soldering iron 25W	240V AC	390-420°C	302100A	
<b>302101</b>	Soldering iron 40W	240V AC	450-480°C	302100A	
<b>302102</b>	Soldering iron 60W	240V AC	460-500°C	302102A	
<b>302103</b>	Soldering iron 80W	240V AC	500-550°C	302103A	
<b>302104</b>	Soldering iron 100W	240V AC	500-550°C	302104A	
<b>302110</b>	Soldering iron 30W	12V DC	420-450°C	302100A	

**MERCHANDISER - SOLDERING IRONS**

15 PIECE

- In store wall mount merchandiser provides a compact point of sale solution for soldering products
- Metal powder coated display rack
- Suits most common in store displays including pegboard and slat wall

Part No.	Contents	Description	Qty
<b>NTMS01</b>	302101	40 Watts (240V AC)	3
	302103	80 Watts (240V AC)	3
	302104	100 Watts (240V AC)	3
	302110	30 Watts (12V DC)	3
	302121	Desolder pump/solder sucker	3





**ELECTRONICS CUTTERS**

**MINI**

- Mini electronics cutters for small and delicate jobs
- Hardened precision cutting edges for cutting and twisting soft wire
- Ergonomically designed with spring loaded jaws and durable rubber or PVC dipped handles
- Ideal for work with limited space and in confined areas, handling small objects, components and wires
- Not suitable for live electrical work



Part No.	Description	Handles	Cut Type	Jaw Opening (Max)	Jaw Length	Overall Length
<b>EEC110</b>	Mini electronics end cutter	Rubber moulded	Bevel	9mm	13mm	110mm
<b>302041</b>	Mini electronics end cutter	Rubber moulded	Flush	9mm	13mm	125mm
<b>321006</b>	Mini electronics precision cutter/Oblique end cutter	Rubber/Plastic moulded	Flush	15mm	11mm	135mm
<b>PC6</b>	Precision cutter	PVC dipped	Flush	20mm	20mm	150mm



**ELECTRICAL MINI SERIES**

- Handy pocket sized range of electrical tools including a crimper, cutter and stripper
- Ideal size for mobile use and accessing hard to reach applications
- CNC machined blades are precision ground
- Ergonomic PVC dipped handles
- Manufactured from durable SK5 carbon steel with black phosphate finish for durability



**CRIMPER  
HEAVY DUTY  
CABLE LUG**

- Professional heavy duty hand crimper for cable lugs
- One stroke operation provides complete single crimp
- Easy sized adjustment using screw function
- Heat treated components for extra strength and durability



Part No.	Description	Application Range	Overall Length
<b>302036</b>	Mini wire STRIPPER	0.5 - 6.0mm <sup>2</sup> /10-20 AWG	140mm
<b>302037</b>	Mini wire CUTTER	Ø 3.2mm	140mm
<b>302038</b>	Mini wire CRIMPER	0.5 - 6.0mm <sup>2</sup> /10-22 AWG	140mm

Part No.	Crimp Range	Overall Length
<b>302024</b>	10 - 120mm <sup>2</sup>	650mm

PLIERS & CUTTERS



**CUTTER & STRIPPER**  
CABLE

- Cable cutter and stripper with adjustable stripping knife in handle for longitudinal stripping
- Curved blade and dual ground cutting blades
- SK5 carbon steel stripping knife in handle with adjustable knob for depth enables removal of insulation longitudinally without damaging the cables
- Composite rubber and plastic handle provides comfort during extended use
- Manufactured from high grade carbon steel with black phosphate finish and SK5 steel blade in handle



Part No.	Stripping Range	Cutting Capacity (Max)	Overall Length
<b>302035</b>	0.5, 1.0, 1.5, 2.5, 4.0, 6.0mm <sup>2</sup>	11mm	160mm



**ELECTRONICS PLIERS**  
MINI

- Mini electronics pliers for small and delicate jobs
- Ergonomically designed with spring loaded jaws and durable rubber handles
- Ideal for work with limited space and in confined areas, handling small objects, components and wires
- Not suitable for live electrical work



Part No.	Description	Handles	Jaw Opening (Max)	Overall Length
<b>EBN130</b>	Mini long nose - angled tip 45°	Rubber dipped	26mm	130mm
<b>302042</b>	Mini long nose - angled tip 45°	Rubber moulded	26mm	150mm



**CUTTER & STRIPPER**  
WIRE RAPID ACTION

- Designed for ultimate efficiency in wire cutting and stripping
- Self-adjusting hardened steel stripping blade that automatically selects the proper position
- Narrow reinforced fibreglass and nylon construction ensures long service life and easy access into confined spaces
- Lightweight and ergonomic design makes for easy stripping and cutting work
- Suitable for solid or stranded wires



Part No.	Stripping Range	Cutting Range	Overall Length
<b>302039</b>	0.2 - 6.0mm <sup>2</sup> /10 to 24 AWG	2.0mm <sup>2</sup> /14 AWG	190mm



**CUTTER & STRIPPER**  
WIRE QUICK ACTION

- Quick-Action stripping tool designed to remove the insulation in one single motion without damaging the wire
- Unique clamp design holds wire in place while the lever action strips away the insulation
- Composite rubber and plastic handle provides comfort during extended use
- Zinc alloy die cast stripping head and S45C carbon steel body for maximum service life
- SK5 stripping and cutting blades ensure smooth operation every use



Part No.	Stripping Range	Cutting Range	Overall Length
<b>302040</b>	0.5 - 8.0mm <sup>2</sup>	6mm <sup>2</sup> /10 AWG	170mm

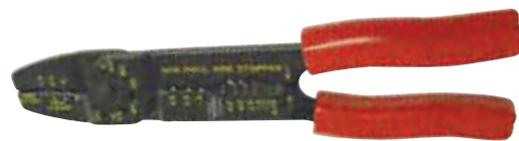
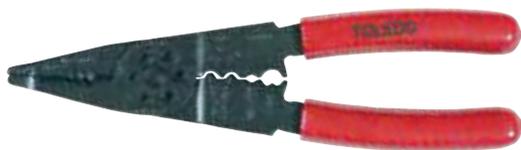


**CRIMPERS**  
RATCHETING

- Heavy duty ratcheting crimpers for fast, efficient and professional crimp work
- Designed to achieve correct compression and superior electrical connection
- Manufactured from durable alloy steel with black phosphate finish for strength and durability



Part No.	Description	Handle	Crimp Range	Overall Length
<b>302021</b>	Plier style ratcheting crimper for insulated terminals	Plastic moulded	0.5 – 1.0mm <sup>2</sup> (Red), 1.5 – 2.5mm <sup>2</sup> (Blue), 4 – 6mm <sup>2</sup> (Yellow) - 22 – 18, 16 – 14, 12 – 10 (AWG)	220mm
<b>302023</b>	Plier style ratcheting crimper	Plastic moulded	10mm <sup>2</sup> (8 B&S) , 16mm <sup>2</sup> (6 B&S) , 25mm <sup>2</sup> (3 B&S)	200mm
<b>CT16</b>	High leverage ratcheting crimper	PVC dipped	1–2mm <sup>2</sup> , 6mm <sup>2</sup> , 10mm <sup>2</sup> (8 B&S) , 16mm <sup>2</sup> (6 B&S)	280mm
<b>302020</b>	High leverage ratcheting crimper	Rubber moulded	10mm <sup>2</sup> (8 B&S) , 16mm <sup>2</sup> (6 B&S) , 25mm <sup>2</sup> (3 B&S) , 35mm <sup>2</sup> (2 B&S)	325mm



**CRIMPER, CUTTER & STRIPPER**  
7 FUNCTION TOOL

- Multi-function tool handy for DIY use, covering a range of jobs and applications
- Manufactured from durable alloy steel with black phosphate finish for strength and durability
- PVC dipped handles with black phosphate finished alloy steel main body

Part No.	Overall Length
<b>302155</b>	210mm
Application	Size
Crimper	Insulated & non-insulated terminals
Crimper	Auto crimp 7-8mm
Screw cutter	Machine screw sizes 4 – 40, 5 – 40, 6 – 32, 8 – 32, 10 – 24 & 10 – 32
Wire stripper	10 – 22 AWG/0.6 – 2.6mm <sup>2</sup>
Long nose pliers	–
Side cutter	–
Wire cutter	–

**CRIMPER, CUTTER & STRIPPER**

- Multi-application tool for wire cutting, crimping insulated and non-insulated terminals, screw cutting and wire stripping
- Clearly marked applications on main body to assist in operation
- Ergonomically designed PVC moulded handles
- Manufactured from durable alloy steel with black phosphate finish for strength and durability



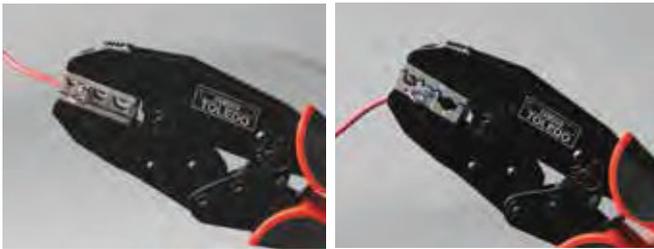
Part No.	Overall Length
<b>CT2010</b>	240mm
Application	Size
Insulated crimping range	1.5mm <sup>2</sup> (Red), 2.0mm <sup>2</sup> (Blue), 6.0mm <sup>2</sup> (Yellow)
Non-insulated crimping range	1.5mm <sup>2</sup> , 2.5mm <sup>2</sup> , 4.0mm <sup>2</sup> , 6.0mm <sup>2</sup>
Wire stripping range	0.75mm <sup>2</sup> , 1.0mm <sup>2</sup> , 2.5mm <sup>2</sup> , 4.0mm <sup>2</sup> , 6.0mm <sup>2</sup>
Screw cutting range	2.6mm, 3.0mm, 3.5mm, 4.0mm, 5.0mm

## PLIERS & CUTTERS

### CRIMPING KIT

#### RATCHETING INTERCHANGEABLE MULTI-HEAD

- Multi-head crimping kit with seven interchangeable jaws to suit different applications
- Ratchet crimping tool design with quick release, for high leverage superior terminal crimp work
- Heavy duty construction with hardened steel body and comfort rubber grip handles
- Supplied in custom moulded plastic hard case with jaw identification markings



Part No.	Heads	Overall Length
<b>302018</b>	7 x Interchangeable	220mm

Description	Size	Image
Multi-head ratcheting crimper 	Overall Length: 220mm Weight: 258g	
Die A: Insulated terminals 	22 – 18/16 – 14/12 – 10 (AWG) 0.5 – 1/1.5 – 2.5/4 – 6 (mm <sup>2</sup> )	
Die B: Non-insulated terminals 	20 – 18/16 – 14/12 – 10/8 (AWG) 1.5/2.5/6/10 (mm <sup>2</sup> )	
Die C: Open barrel terminals 	20 – 18/16 – 14/12 – 10 (AWG) 0.5 – 1/1.5 – 2.5/4 – 6 (mm <sup>2</sup> )	

Description	Size	Image
Die D: Cord end terminals (Small AWG) 	22/20/18/16/14/12 (AWG) 0.5/0.75/1/1.5/2.5/4 (mm <sup>2</sup> )	
Die E: RG type coaxial cable connectors 	0.255/0.213/0.100/0.068/0.324 (inch) 6.48/5.41/2.54/1.73/8.23 (mm <sup>2</sup> ) 58, 59, 62, 6 (RG)	
Die F: Cord end terminal (Large AWG) 	10/8/6 (AWG) 6/10/16 (mm <sup>2</sup> )	
Die H: Open barrel terminal & D-Sub, V3.5 	14/22/8 – 6 (AWG) 2.5/0.5/8/10 (mm <sup>2</sup> )	

### CRIMPERS

#### D-SUB DEUTSCH 4 WAY INDENT

- Specialty crimpers for round barrel contacts, pins or sockets
- Built in locator ensures accurate positioning of the pin and socket prior to crimping
- Full cycle ratchet ensures consistent, reliable crimping action
- Superior pull strength with an adjustable pin height locator
- PVC dipped handles with black phosphate finished alloy steel main body
- Particularly common and useful in Harley Davidson and Caterpillar applications



321024

321025

Part No.	Description	Size	Overall Length
<b>321024</b>	D-Sub Deutsch 4 way indent crimper	AWG 26 - 20, 0.14 - 0.5 mm <sup>2</sup> , RS232 D-sub 35 - 465	160mm
<b>321025</b>	D-Sub Deutsch 4 way indent crimper	AWG 20 - 12, 0.5 - 4.0 mm <sup>2</sup> , Deutsch 16 pin contact	160mm

**CRIMPER, CUTTER & STRIPPER**

- Most popular in the range
- Simple, efficient and reliable units produce professional work
- Dual component plastic and rubber moulded ergonomic handles provide maximum strength, comfort and grip
- Manufactured from alloy steel with black phosphate finish for strength and durability
- Two options available - standard and heavy duty
- Part no. WS665 is designed for more intense and demanding use with a more robust design and dual spring head to ensure longevity and reliability
- Spares: Replacement spring set 4pc (Part No. WS665A)



WS210



WS665



Part No.	Description	Overall Length
<b>WS210</b>	Crimper, cutter, stripper - standard	210mm
Application	Sizing	Spares
Wire stripper	0.2 - 6mm <sup>2</sup> /24 - 10 AWG	WS665A
Insulated terminals	0.5 - 6mm <sup>2</sup> /22 - 10 AWG	
Non-insulated terminals	0.5 - 2.5mm <sup>2</sup> and 4 - 6mm <sup>2</sup> /12 - 10, 22 - 14 AWG	
Auto ignition terminals	7 - 8mm	

Part No.	Description	Overall Length
<b>WS665</b>	Crimper, cutter, stripper - heavy duty	210mm
Application	Sizing	Spares
Wire Stripper	0.2 - 6mm <sup>2</sup> /24 - 10 AWG	WS665A
Insulated terminals	0.5 - 6mm <sup>2</sup> /22 - 10 AWG	
Non-insulated terminals	0.5 - 2.5mm <sup>2</sup> and 4 - 6mm <sup>2</sup> /12 - 10, 22 - 14 AWG	
Auto ignition terminals	7 - 8mm	

**CABLE TIE CUTTERS**

PLASTIC & METAL

- Automatic tensions and cuts off cable ties to produce a safe, neat and professional finish
- Two options to cater for both plastic/nylon and metal cable ties



302500



CTC2065

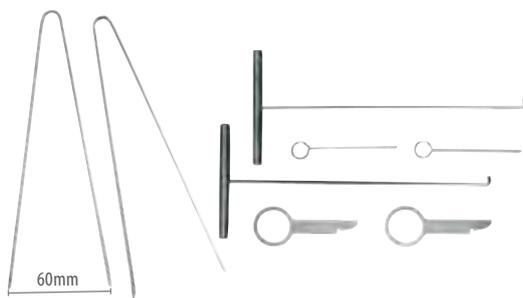
Part No.	Description	Cutting Capacity (Width x Thickness)	Overall Length x Width
<b>302500</b>	Cable tie cutter - Plastic	5 x 2mm	160 x 20mm
<b>CTC2065</b>	Cable tie cutter - Metal (including S/S)	12 x 0.3mm	220 x 100mm



**AIR BAG REMOVAL KIT**  
EUROPEAN

- Workshop airbag removal kit suitable for many makes and models, but in particular European models
- Refer to workshop manual for tool requirements and specifications

Part No.	Description	Application	Qty	Code
<b>313026</b>	Airbag removal tools	Volkswagen Passat, Polo, Golf, Bora ( late model) Audi A4 and A6	2	1
		Volkswagen Golf, Beetle (late model) Seat	2	2
		Volkswagen Golf (1998-2004), Passat (1997), Bora (1999)	1	3
		Volkswagen Passat 2000	1	4
		Volkswagen Passat, Jetta, Golf and Beetle (1999-2004)	1	5
	1/4" Sq. Dr. sockets	6 point T25 BMW	1	6
		6 point T30 Audi, GM, Renault, Volkswagen	1	6
		6 point tamperproof T25H BMW	1	6
		6 point tamperproof T30H Audi, BMW, Mercedes-Benz, GM	1	6
		Hex 5mm Audi	1	6



**DASHBOARD SERVICE KIT**  
MERCEDES-BENZ

- Range of specialty tools designed for dashboard and auxiliary service work
- Ideal for removal and service work of meters, gauges, radios, locks and accessories
- Covers most Mercedes-Benz applications



Part No.	Description	Application
<b>302153</b>	Ignition lock removal tool	W124, W201
	Radio removal tools	MB vehicles 1992 onwards
	Instrument cluster removal hooks	W107, W116, W123, W124, W126, W140, W201



**RADIO REMOVAL SET**  
EUROPEAN

- Specialty tool for radio removal and service work on European makes and models
- Handy and compact set of pocket sized tools supplied in tailored tool roll



Part No.	Description	Application	Size	Length	Qty
<b>302178</b>	U-Hooks	Ford/VW/Audi	3.2mm (Ø)	85mm	2
	Hex tip	BMW	2.3mm (hex)	85mm	1
	Key blade	New Beetle/Audi	9mm (width)	77mm	2
	Key blade	Mercedes-Benz	9mm (width)	67mm	2
	Key blade	VW	9mm (width)	61mm	2



## RADIO REMOVAL & DASHBOARD SERVICE MASTER KIT

- Master specialty kit covers majority of Australian and New Zealand car parc
- Supplied in custom moulded plastic hard case with tool identification markings
- Vehicle application listing included
- Contains 52 pieces

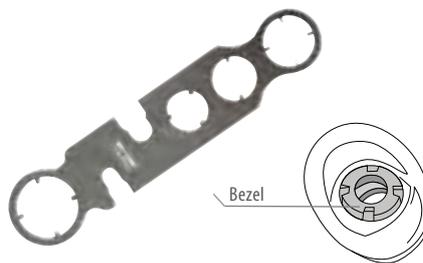
Part No.	Description	Qty	Description	Qty	Description	Qty
<b>302017</b>	No. 1 Keys	4	Long V-Hooks	2	E-4 Keys (Sony up to 2001)	2
	No. 2 Keys	2	Small Pin Keys	2	E-5 Keys (Panasonic)	2
	No. 3 Keys	2	U-Hooks	2	E-6 Keys (Panasonic up to 2006)	2
	No. 4 Keys	2	Pioneer & JVC Keys	2	E-7 Keys (Kenwood up to 1998)	2
	No. 5 Keys	2	BMW Pentagon Keys	1	E-8L Keys (Kenwood Mask)	2
	Double DIN Keys	2	Flat keys	2	E-9 Keys (Clarion late model)	2
	Allen keys	1	E-1 Keys (kenwood 98-01)	2	E-10 Keys (Clarion Double DIN)	2
	Bent U-Hooks	2	E-2 Keys (Sony up to 2002)	2	E-15 Keys (Sony up to 2005)	2
	T-Bar Hooks	2	E-3 Keys (Kenwood up to 2002)	2		



## RADIO REMOVAL SET U-HOOKS

- Common radio removal tools consisting of two simple U-hooks for proper and efficient radio removal on popular vehicles
- Easy to use - simply insert U-hooks (2.5mm) into holes of radio face plate to release retaining clips, once retaining clips have been released, pull out the instrument panel using the U-hooks as handles

Part No.	Pin Distance x Pin Diameter
<b>302156</b>	35mm x 2.5mm



## AERIAL/ANTENNA REMOVAL TOOL

- For the efficient, safe and damage free removal of aerials and antennas
- Tool removes the bezel that holds the antenna in place
- Suitable for most vehicles in the Australian car parc

Part No.	Overall Length
<b>302175</b>	185mm



## IGNITION LOCK RELEASE TOOL

BMW & MINI

- A must have tool for any workshop carrying out BMW and MINI work
- Insert tool into the small hole on the lock cylinder. This will release the spring loaded lock and allow removal of the cylinder
- Plastic handle and angled metal prong for easy release

Part No.	Overall Length
<b>302030</b>	108mm



## MEMORY RETAINING TOOL

- Memory retaining tool stores settings of radios, clocks and computer functions when vehicle battery is disconnected
- Used in conjunction with a standard 9V battery, produces enough charge to satisfy the relative components
- Easy to use - simply attach 9 volt battery and plug tool into 12V/cigarette lighter port to create charge

Part No.	Memory	Battery
<b>302154</b>	Up to 4 hours	9 volt



**ALTERNATOR BIT SET**  
UNIVERSAL

- Comprehensive set of tools for alternator service work
- Enables efficient removal of “over running” alternator pulleys either ON or OFF the vehicle
- Specialty tools lock the alternator shaft into position while pulley retainer is removed
- Supplied in custom moulded plastic hard case



Part No.	Description	Specifications	Description	Specifications
<b>302005</b>	Alternator nut	4-point & 17mm hex tip	Hex alternator nut	33 tooth x 22mm
	Alternator combination bit socket	1/2" Sq. Dr. M10 (Spline 12 point) x 113mm	Hex bit adaptor	1/2" SQ. Dr. x 10mm
	Alternator combination bit socket	1/2" Sq. Dr. T50 (Torx 6 point) x 113mm	Torx bit	T40, T50
	Hex alternator nut	22mm	Spline bit	M8, M10
	Hex alternator nut	33 tooth x 17mm	Hex bit	8mm, 10mm



**SPARK PLUG STARTER**  
UNIVERSAL

- Specialty tool to assist with easy installation and removal of spark plugs
- Flexible rubber design improves access to applications with limited space and in difficult locations
- Designed to hold the spark plug firmly during use

Part No.	Overall Length
<b>302157</b>	200mm

**SPARK PLUG GAP GAUGE**  
METRIC & IMPERIAL

- For setting accurate spark plug gaps with easy to read markings to set gaps quickly
- Tapered hole for adjustment of electrode
- Simple to use - place spark plug onto the tapered gauge and turn until correct gap setting is obtained

Part No.	Specifications
<b>302163</b>	Metric: 0.5 - 2.5mm, Imperial: 0.020" - 0.100"

**SPARK PLUG LEAD PLIERS**  
EXTRA LONG 200MM

- For the removal and replacement of recessed spark plug leads or deep seated spark plug boots
- Ergonomically designed and insulated rubber moulded handles are comfortable and firm gripping
- Manufactured from alloy steel

Part No.	Overall Length
<b>302015</b>	200mm



**SPARK PLUG LEAD PLIERS**  
HEAVY DUTY NYLON

- Safe and efficient removal of spark plugs by gripping the spark plug wire boot to prevent possible wire damage

Part No.	Jaw Opening (Max)	Overall Length
<b>302161</b>	15mm	155mm



**SPARK PLUG TESTER**  
FIXED JAW

- Professional spark plug testers check for non-start conditions and spark strength by simulating spark plug under compression load

*Note: Markings on 302165 are measurements of kilowatt from 2 - 4kV. This is relevant for when testing coils*

Part No.	Range	Lead Length
<b>302165</b>	2 - 4kV	Fixed



**SPARK PLUG TESTER**  
FLEXIBLE LEAD

- Professional spark plug testers check for non-start conditions and spark strength by simulating spark
- Features large adjustment screw

Part No.	Range	Lead Length
<b>302167</b>	2 - 4kV	500mm



**SPARK PLUG BOOT PLIERS**

- Insulated pliers to protect against high voltage shocks when removing spark plug boots

Part No.	Jaw Opening	Overall Length
<b>302160</b>	15 - 25mm	210mm



**DISTRIBUTOR CLAMP WRENCH SET**  
OFFSET

- Specially designed wrenches with eccentric shape enable access to hard to reach areas around the distributor

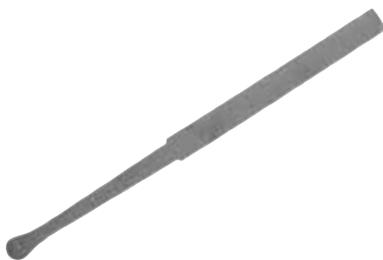
Part No.	Size
<b>302173</b>	1/2" & 9/16"



**SPARK PLUG THREAD CHASER**

- Tapered, double ended thread chaser to dress or repair 14mm and 18mm spark plug thread

Part No.	Sizes	Overall Length
<b>302168</b>	M14 x 1.25mm & M18 x 1.5mm	75mm



**MULTI-PURPOSE ELECTRICAL FILE**

- Ideal for ignition points and electrode cleaning

Part No.	Width	Thickness	Overall Length
<b>301069</b>	8mm	1.2mm	80mm



**BULB PLIERS**

- Specialty tool designed for proper maintenance and handling of automotive bulbs and fuses

Part No.	Jaw Opening (Max)	Overall Length
<b>302022</b>	30mm	160mm



IGNITION



**IGNITION TESTER**  
IN-LINE HT LEAD/INDUCTIVE PICK-UP

- Inductive pick-up design to connect on to ignition (HT) lead to enable easy and safe ignition spark testing and problem diagnosis

Part No.	Probe Length	Lead Length
<b>302166</b>	100mm	1200mm



**SPARK PLUG TESTER**  
IN-LINE HT

- Spark plug tester tool designed to connect between spark plug and ignition (HT) lead to enable quick and easy ignition spark testing and problem diagnosis

Part No.	Lead Length	Weight
<b>302026</b>	110mm	63g



**SPARK PLUG TESTER SET**  
IN-LINE HT

- Special four piece set designed to connect to spark plug and ignition (HT) lead
- Enables checking of cylinder firing sequence simultaneously

Part No.	Length	Pieces
<b>302158</b>	72mm	4



**SPARK PLUG THREAD INSERT KITS**

- Spark plug thread insert kits for the repair and service of stripped spark plug holes in aluminium cylinder heads

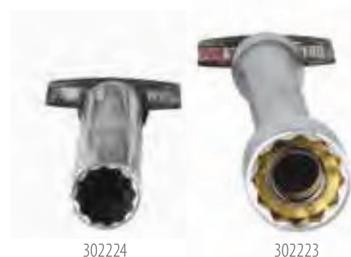
Part No.	Size
<b>302176</b>	Tap 14mm, Inserts 10, 11, 13, 19mm
<b>302300</b>	Tap 18mm, Inserts 11, 13, 16, 21mm



**SPARK PLUG SOCKETS**  
BI-HEX

- For easy removal and installation of spark plugs in deep recesses with limited or difficult access including wider ceramic high performance type plugs
- Knurled barrel for non-slip grip and inbuilt heavy duty rubber spark plug retainer to hold plug in socket

Part No.	Description	Square Drive x Size x Length
<b>302225</b>	Bi-hex 14mm short	3/8" x 14mm x 90mm
<b>302224</b>	Bi-hex 14mm long	3/8" x 14mm x 250mm
<b>302222</b>	Bi-hex 16mm (5/8") long	3/8" x 16mm x 250mm
<b>302223</b>	Bi-hex 21mm long	3/8" x 21mm x 250mm



Bi-Hex Design provides increased strength compared to a traditional hex design, allowing for a more compact spark plug socket without compromising strength requirements.

Traditional Hex Design      Bi-Hex Design



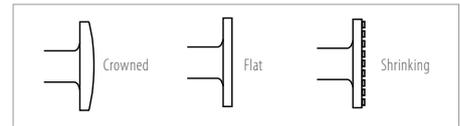
# BODY & INTERIOR

PANEL & BODY	204
TRIM & INTERIOR	208
WINDSCREEN & WINDOWS	212

PANEL BEATING HAMMERS

- Professional panel beating hammers with octagonal designed genuine hickory handles and polished forged induction hardened heads
- Heads are designed to cope with the everyday rigours of a professional workshop and will not crack or chip
- Double wedge design fastens the head and handle together through interlocking steel and wood
- Ergonomic design specifically balanced to ensure force concentration

Note: Crowned hammers feature red highlights, Flat & Shrinking hammers feature dark blue highlights



Part No.	Description	Type	Face 1 (Round)	Face 2	Length	Weight
313055	Pein and finishing	Crowned	Ø 40mm	Straight pein	330mm	420g
313056	Pein and finishing	Crowned	Ø 40mm	Curved pein	330mm	430g
313057	Pick and finishing	Crowned	Ø 40mm	Pick	330mm	410g
313058	Bumping - standard	Flat	Ø 40mm	Square 38mm	330mm	450g
313059	Bumping - light	Crowned	Ø 40mm	Square 28mm	330mm	410g
313060	Shrinking	Flat - round, Shrinking - square	Ø 40mm	Square 38mm	330mm	430g
313061	Shrinking - heavy duty	Shrinking - round, Shrinking - square	Ø 40mm	Square 38mm	330mm	430g

PANEL BEATING DOLLIES & SPOONS

- Professional panel beating dollies ground and polished to a mirror finish
- Heat treated forged steel ensures high durability and strength which is paramount for effectiveness and safety
- Comprehensive range to cater for all requirements of the professional workshop

Part No.	Description	Length	Width	Height	Weight	Image	Part No.	Description	Length	Width	Height	Weight	Image
313004	Curved dolly	130mm	60mm	40mm	1085g		313050	Angle dolly	110mm	60mm	20mm	625g	
313005	Toe dolly	120mm	55mm	25mm	1400g		313051	Shrinking dolly	120mm	57mm	25mm	1400g	
313006	Thin toe dolly	120mm	55mm	25mm	925g		313052	Utility dolly	70mm	70mm	65mm	1400g	
313007	Grid dolly	120mm	57mm	25mm	1400g		313003	HD mould spoon	240mm	50mm	60mm	1200g	
313009	Dual hand dolly	65mm	60mm	75mm	1200g		313049	HD pry spoon	290mm	50mm	35mm	710g	



**PANEL BEATING KIT**  
7 PIECE

- Professional seven piece set supplied in custom moulded plastic hard case
- Contains popular panel beating hammers and dollies

Part No.	Contents	Description	Qty
<b>313002</b>	313055	Pein & finishing hammer	1
	313058	Standard bumping hammer	1
	313060	Shrinking hammer	1
	313004	Curved dolly	1
	313005	Toe dolly	1
	313009	Double end hand dolly	1
	-	Heel dolly (N/A Separately)	1



**DOLLY SET**  
PLASTIC, 12 PIECE

- For use when working with aluminium due to its high abrasion resistance and non-corrosive contact with aluminium
- Cushions impact for less metal stretch and paint damage
- Ideal for door skins and thinner metal panels
- Polyoxymethylene (POM) is an engineered thermoplastic which is high in stiffness, but low in friction and has excellent dimensional stability

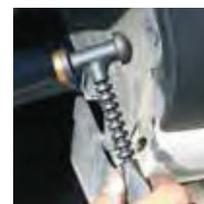
Part No.	Description	Qty	Description	Qty
<b>313090</b>	Bolster head dolly	1	Curved head chisel dolly	1
	Crease alignment tool	1	Double end dolly	1
	Curved dolly	1	Double end head dolly	1
	General purpose dolly	1	Toe dolly	1
	Heel dolly	1	Utility dolly	1
	Round head chisel dolly	1	Wedge dolly	1



**PRECISION HAMMER 8 OZ**  
MINI DUAL FACE

- Fitted with one steel face and one rubber face that delivers precise force
- Handle features built in pry bar to remove trim without damage
- Lightweight and compact design enables use in confined areas
- Ideal for delicate interior and exterior applications

Part No.	Face (Round)	Overall Length	Weight
<b>321039</b>	Ø 24mm	170mm	8 oz



**PRECISION HAMMER SET 8 OZ**  
MULTI-HEAD

- Precision hammer set with six interchangeable screw on heads - brass (round & flat) stainless steel, aluminium, rubber and polyurethane
- Unique neck design for a controlled strike and force centralisation
- Handy wedge handle is suitable for use as a trim remover
- For various applications where force is required without damaging the surface
- Ideal for delicate interior and exterior applications
- Supplied in custom moulded plastic hard case

Part No.	Description	Image	Description	Image
<b>321046</b>	Brass round (flat)		Aluminium round (convex)	
	Brass round (convex)		Rubber round (convex)	
	Stainless steel round (convex)		Polyurethane (flat)	
	Hammer Overall length: 170mm, Face (Round): Ø 24mm			



**DENT REMOVAL KIT**  
SLIDE HAMMER

- Slide hammer dent puller kit designed for pulling out dents and creases from panels with ease
- Comprehensive kit is suitable for the professional workshop
- Not suitable for DIY use, trained professionals use only
- Supplied in heavy duty steel storage case

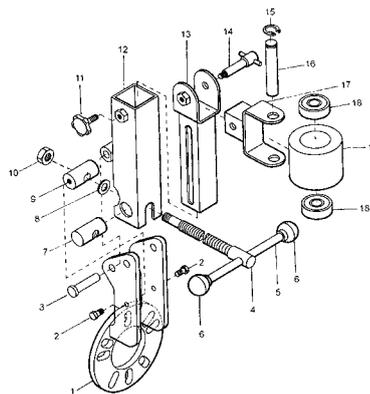
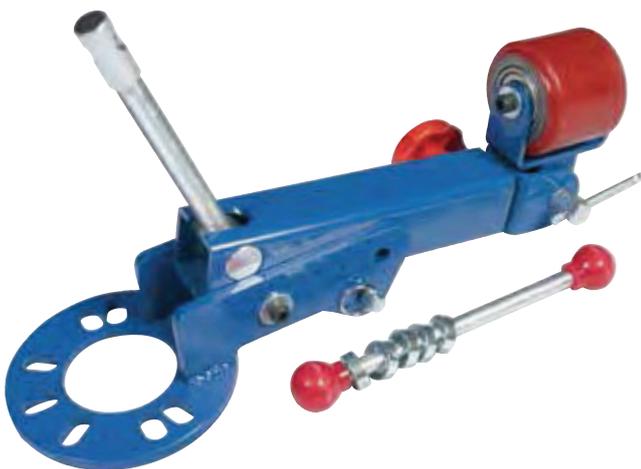
Part No.	Weight
<b>313036</b>	Slide hammer 6Kg



**DENT REMOVAL KIT**  
SLIDE HAMMER, MANUAL VACUUM

- Heavy duty and durable suction dent puller with slide hammer to assist in panel reshaping
- Maintains a solid and secure grip without damaging the painted surface of the panel, while the 2.5kg slide hammer eases out the dent
- Manual vacuum pump for complete portability
- Three varied sizes of suction pads and one hook
- Supplied in custom moulded plastic hard case

Part No.	Description	Specifications
<b>313028</b>	Slide hammer assembly	2.5Kg x 730mm
	Suction cup small	Ø 75mm
	Suction cup medium	Ø 100mm
	Suction cup large	Ø 125mm
	Hook	Ø 70mm



**WHEEL ARCH REFORMER TOOL**

- Designed to reform or enlarge mudguards without having to remove body panels from vehicle
- Robust steel construction, built to withstand the rigours of heavy duty use
- Wheel adaptor hub plate suits three, four or five stud wheels
- Suitable for use on front or rear panel modifications and repairs
- Full list of spares available to ensure this tool can maintain a lifetime of operation
- Supplied in plastic hard case

Part No.	Description
<b>313400</b>	Wheel arch reformer tool
Item No.	Description
1	Hub plate
2	Screw
3	Locating pin
4	Propelling screw
5	Screw long
6	Acorn nut
7	Fixed guide rod
8	Washer
9	Link
10	Locking nut
11	Adjustment screw
12	Swivel arm
13	Support adjustment
14	Locking screw
15	C-Clamp
16	Axle pivot
17	Frame bearing
18	Bearing
19	Roller



**SANDER/ABRASIVE HOLDER**  
SPRING RETAINING CLIPS

- Sand paper holder uses a pair of heavy duty spring clips to easily and firmly grasp the sand paper
- Use gliding technique to efficiently shape the work piece
- Ergonomically designed with comfortable handle and hand rest
- Polished wooden finish ideal for use in marine applications

Part No.	Pad Size (L x W)	Overall Length
<b>313063</b>	400 x 70mm	400mm



**BODY BLADES & HOLDER**  
FLEXIBLE

- Suitable for forming and shaping fillers and metal during repair body work
- Double sided flexible blades to suit a wide range of metals and plastic
- Body blade holder featuring knurled centre nut is used to adjust holder for flat, convex or concave applications
- Aluminium body with steel adjusters

Part No.	Description	Specifications
<b>313064</b>	Body blade holder - metal	355mm
<b>313086</b>	Double sided body blade for plastic body fillers	6.5 TPI
<b>313085</b>	Double sided body blade for soft metals	9 TPI
<b>313084</b>	Double sided body blade for metal body panels	12 TPI



**BODY BUMPING FILE**

- Professional body bumping file with curved serrated steel blade
- Ideal for flattening bumps and dents and for semi-finishing work on body
- Milled serrated teeth help prevent metal stretch
- PVC dipped handle

Part No.	Width	Overall Length
<b>313082</b>	35mm	350mm



**PANEL CLAMP PACK**  
BODY WELDING

- Holds panels in place during welding and repairs
- Ideal for aligning and gripping panels for precision butt welds

Part No.	Jaw Width	Pieces
<b>313303</b>	15mm	5



**SPOT WELD REMOVER**  
SINGLE 10MM

- For efficient removal of spot welds on car panels
- Double ended blade for reversal
- Arbour 1/4" with retractable pilot
- Use with 1/4" or larger variable-speed drills
- Manufactured from alloy steel
- Spares: Replacement blade set 3 Pc. (Part No. 313302)

Part No.	Arbour x Blade	Spares
<b>313301</b>	1/4" x 10mm	313302

## BODY & INTERIOR

### PANEL & BODY

#### BODY REPAIR KIT HYDRAULIC 10 TONNE

- Multipurpose kit contains 15 adaptors and accessories for all body repair, construction and general automotive work
- Comprehensive kit makes light work of straightening, bending, pressing or spreading steel
- Hydraulic porta power jack style with quick connect design makes operation fast and efficient
- Supplied in heavy duty custom mould plastic case with castor wheels for easy portability



Part No.	Description
<b>313029</b>	Hydraulic Body Repair Kit



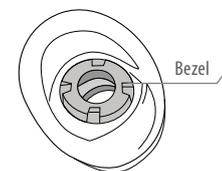
#### Spares

313029A  Hydraulic Ram	313029B  Hydraulic Hand Pump	313029C  Hose	313029D  Hydraulic Spreader Ram	313029E  V-Base 90°	313029F  Male Connector	313029G  Flat Base	313029H  Spreader Ram Toe	
313029J  Spreader Plunger Toe	313029K  Rubber Head 80mm	313029L  Serrated Saddle	313029M  Wedge Head	313029N  Extension Tube 610mm	313029P  Extension Tube 530mm	313029Q  Extension Tube 255mm	313029R  Extension Tube 125mm	313029S  Small black component

## TRIM & INTERIOR REMOVAL WORK

#### AIR BAG REMOVAL KIT EUROPEAN

- Workshop airbag removal kit suitable for many makes and models, but in particular European models
- Refer to workshop manual for tool requirements and specifications
- Supplied in custom moulded plastic hard case



Part No.	Description	Application	Ref No.	Pieces
<b>313026</b>	Airbag removal tools	Volkswagen Passat, Polo, Golf, Bora ( late model) Audi A4 and A6	1	2
		Volkswagen Golf, Beetle (late model) Seat	2	2
		Volkswagen Golf (1998-2004), Passat (1997), Bora (1999)	3	1
		Volkswagen Passat 2000	4	1
		Volkswagen Passat, Jetta, Golf and Beetle (1999-2004)	5	1
	1/4" Sq.Dr. sockets	 6 point T25 Suits BMW	6	1
		 6 point T30 Suits Audi, GM, Renault, Volkswagen	6	1
		 6 point tamperproof T25H Suits BMW	6	1
		 6 point tamperproof T30H suits Audi, BMW, Mercedes-Benz, GM	6	1
		 Hex 5mm suits Audi	6	1

#### AERIAL/ANTENNA REMOVAL TOOL

- Specialty tool for the efficient, safe and damage free removal of aerials and antennas
- Removes the bezel that holds the antenna in place
- Suitable for most vehicles on the Australian car parc
- Made of steel

Part No.	Overall Length	Weight
<b>302175</b>	185mm	77g

TRIM & INTERIOR REMOVAL WORK

**RADIO REMOVAL & DASHBOARD SERVICE MASTER KIT**

52 PIECE

- All in one specialty tool kit for servicing the majority of vehicles on the Australian car parc
- Supplied in custom moulded plastic hard case with tool identification markings
- Supplied with vehicle application listing
- Universal kit to suit majority of Australian car parc



**RADIO REMOVAL SET U-HOOKS**

- Common radio removal tools consisting of two simple U-hooks for proper and efficient radio removal on popular vehicles
- Simple to use: Insert U-hooks (2.5mm) into holes of radio face plate to release retaining clips, once retaining clips have been released, pull out the instrument panel using the U-hooks as handles

Part No.	Description		
<b>302017</b>	No. 1 Keys	Long V-Hooks	E-4 Keys (Sony up to 2001)
	No. 2 Keys	Small Pin Keys	E-5 Keys (Panasonic)
	No. 3 Keys	U-Hooks	E-6 Keys (Panasonic up to 2006)
	No. 4 Keys	Pioneer & JVC Keys	E-7 Keys (Kenwood up to 1998)
	No. 5 Keys	BMW Pentagon Keys	E-8L Keys (Kenwood Mask)
	Double DIN Keys	Flat keys	E-9 Keys (Clarion late model)
	Allen keys	E-1 Keys (kenwood 98-01)	E-10 Keys (Clarion Double DIN)
	Bent U-Hooks	E-2 Keys (Sony up to 2002)	E-15 Keys (Sony up to 2005)
	T-Bar Hooks	E-3 Keys (Kenwood up to 2002)	

Part No.	Pin Distance x Pin Diameter	Weight
<b>302156</b>	35 x 2.5mm	28g



**DASHBOARD SERVICE KIT MERCEDES-BENZ**

- Professional tool kit of specialty tools designed for dashboard and auxiliary service work
- Ideal for removal and service work of meters, gauges, radios, locks and accessories
- Covers most Mercedes-Benz applications



Part No.	Description	Application
<b>302153</b>	Ignition lock removal tool	Include: W124, W201
	Radio removal tools	MB vehicles 1992 onwards
	Instrument cluster removal hooks	W107, W116, W123, W124, W126, W140, W201



**RADIO REMOVAL SET EUROPEAN**

- Tailored set for radio removal and service work on European makes and models
- Handy and compact set of pocket sized tools supplied in tailored tool roll



Part No.	Description	Application	Size	Length	Qty
<b>302178</b>	U-Hooks	Ford/VW/Audi	3.2mm	85mm	2
	Hex tip	BMW	2.3mm (hex)	85mm	1
	Key blade	New Beetle/Audi	9mm (width)	77mm	2
	Key blade	Mercedes-Benz	9mm (width)	67mm	2
	Key blade	VW	9mm (width)	61mm	2

TRIM & INTERIOR REMOVAL WORK



PRYING & SMOOTHING KIT

- For light duty prying small plastic trim clips, interior bezels, woodgrain trims and key fobs etc
- Ergonomic centre grip provides a comfortable grip
- Three piece set with six different ends
- Suitable for smoothing epoxy adhesives or silicone uniformly, removing or installing O-rings and gaskets
- Manufactured from nylon fibres which is lightweight but strong
- Supplied in storage wallet

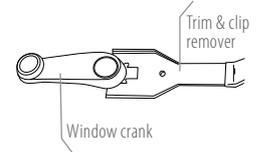
Part No.	Overall Length	Weight
<b>313313</b>	108mm	12g



BELT MOULDING REMOVAL TOOL

- Handy tool for quick and easy belt moulding removal
- Designed to remove the belt mould without damaging the painted surface of the door
- Insert between window glass and door, engage moulding clips with tool blade and pull up to release clips
- Plastic and rubber dual composite handle for strength and comfort
- Manufactured from chrome vanadium steel with dual component rubber and plastic handle

Part No.	Overall Length
<b>313027</b>	250mm



DOOR HANDLE REMOVAL TOOL

- Easily removes window crank retainer clip and door handle clip, without damaging trims
- Extra length and offset body for the removal of internal handles
- Durable light weight steel construction
- Apply tool to the handle clip for instant removal without damage to upholstery

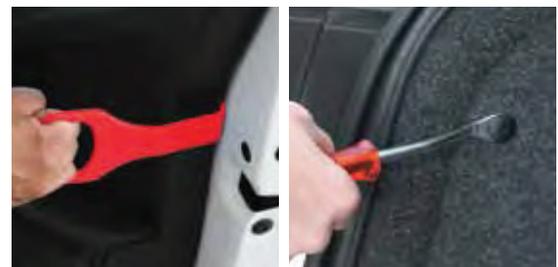
Part No.	Jaw Opening	Overall Length
<b>313295</b>	26mm	180mm



TRIM & CLIP REMOVAL TOOLS

- A mix of different tools used for all types of damage free removal of trims, mouldings, dashboards, fascia's, roof linings, air bags, window cranks, door panels and clips etc.
- Essential tools for work which involves the removal and re-fit of interior and exterior trims
- Comprehensive range covers the majority of applications in passenger vehicles and light commercials

Note - Most popular options are part numbers 313030 & 313311



Part No.	Description	Material	Size	Overall Length	Pieces
<b>313000</b>	Trim & clip remover 3 in 1	Steel w/ powder coating	10 & 15mm	230mm	1
<b>313030</b>	Trim & clip remover set - Premium made in Japan	Plastic handle & steel body	5 - 7 & 6 - 9mm	165 & 200mm	2
<b>313293</b>	Trim & clip remover 2 in 1	Steel w/ powder coating	15 & 20mm	220mm	1
<b>313294</b>	Trim & clip remover 10 in 1	Steel w/ PVC dipped body	-	250mm	1
<b>313297</b>	Trim & clip remover U-Notch	Plastic handle & steel body	10mm	290mm	1
<b>313311</b>	Trim & clip remover set	Plastic	-	170 - 180mm	5

TRIM & INTERIOR REMOVAL WORK



PANEL WEDGES

- For the removal of door panels, wood grain trims, dashboard fascia, emblems etc.
- Tool for removal without causing damage to paintwork or dash etc.
- Smooth tapered design enables easy insertion
- High impact resistant nylon



Part No.	Size
<b>313031</b>	30 x 190mm
<b>313032</b>	60 x 200mm



HINGE PIN EXTRACTOR SET

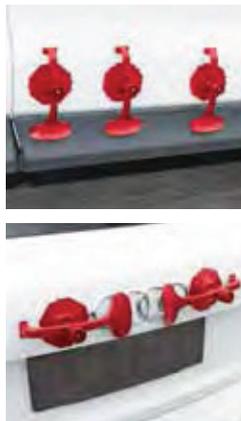
- Essential tool set used for safe and accurate installation and removal of hinge pins
- Ergonomic design with PVC dipped centre body
- Includes three different sized hinge pins
- Suitable for pin removal and installation
- Spare parts: Replacement hinge pin set 3 Pc. (Part No. 313299)

Part No.	Specifications	Spares
<b>313298</b>	3, 5 & 5.5 x 110mm	313299



SUCTION PAD CLAMP SET  
PLASTIC 6 PIECE

- Ideal for holding down trims, badges, windcreens, rain and light sensors on windcreens etc. during repair or whilst waiting for adhesives to set
- Adjustable suction clamps will not mark after being removed
- Manufactured from durable plastic with octagonal rubber suction pads
- Suitable on most non-porous surfaces such as metal or glass



Part No.	Pad Size ( Octagonal)	Pieces
<b>321106</b>	80mm (flat to flat)	6

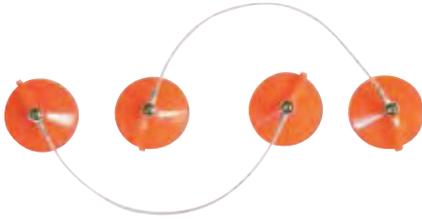


SCRAPER SET  
NYLON GENERAL PURPOSE 4 PIECE

- General purpose nylon scrapers useful for delicate tasks such as removing badges, mouldings, decals, silicone gaskets, plastic parts, alloy wheel balancing weights etc.
- Manufactured from reinforced nylon for maximum strength and durability

Part No.	Description
<b>321031</b>	Scraper straight flat 48mm
	Scraper angled 45° flat 48mm
	Scraper angled split 14 x 20 x 14mm
	Scraper straight split 14 x 20 x 14mm

WINDSCREEN & WINDOWS



**SUCTION CUPS**  
WINDOW HOLDERS

- Used for safe removal and replacement of vehicle windscreens
- Also suitable for use when working on window regulators to retain door glass
- Used by looping cables over door frame and attaching suction cups to each side of the glass
- Set contains two pairs of suction cups (4) attached via a flexible steel cable

Part No.	Pad Size	Load Capacity
<b>313307</b>	Ø 62mm	20kg



**WINDSCREEN REMOVAL TOOL**

- For the removal of bonded windscreens
- Precision cut blade and knurled grips
- Blade can be reshaped and sharpened for further use
- Cuts through the windscreens rubber surround using the hardened carbon steel blade
- Supplied with one blade only
- Spares: Replacement blade 3 Pc. Set (Part No. 313310)

Part No.	Spares
<b>313309</b>	313310



**WINDSCREEN INSTALLATION & REMOVAL KIT**

- Complete tool kit for the installation and removal of rubber screens including commercial vehicle screens
- Includes rope insert tools, assorted tips for the insert tool, curved hook tool, straight hook tool and cleaning tool for the removal of broken glass pieces trapped in the side runners (preventing the need to remove the side runners)
- Reinforced composite handles with heat treated, chromed steel shafts
- Handles include hanging eyes for storage

Part No.	Pieces
<b>313308</b>	11



313074



313075

**SUCTION CUPS**  
ALUMINIUM BODY

- For safe and easy handling of windscreens
- Firm locking function securely grabs window during removal and transportation
- Robust aluminium construction with heavy duty rubber pads
- Applicable on most non-porous surfaces such as metal or glass



Part No.	Description	Pad Size	Load Capacity
<b>313074</b>	Single suction cup	Ø 120mm	20kg
<b>313075</b>	Double suction cup	Ø 115mm	25kg



**PANEL/SLAB CARRYING SET**  
HEAVY DUTY PAIR

- Trade professional set ideal for carrying glass and windscreens
- Ergonomic handles with large rubber pads firmly secure glass
- Light weight and robust aluminium construction
- Also suitable for carrying stone slabs, counter tops and other sheet goods
- Supplied in heavy duty carry case



Part No.	Load Capacity	Pad Size	Jaw Opening (Max)
<b>321107</b>	160kg	80 x 200mm	40mm



# LUBRICATION SERVICE

<b>GREASE GUN INFORMATION &amp; TROUBLE SHOOTING</b>	214
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Toledo grease guns are a premium quality option. This market leading range is manufactured using highest grade materials to ensure maximum safety, strength and durability. The comprehensive range covers a wide range of styles to cater for all industries including automotive, industrial, marine, mining and DIY applications. The Toledo grease gun range will satisfy any minor or major jobs with their outstanding performance.

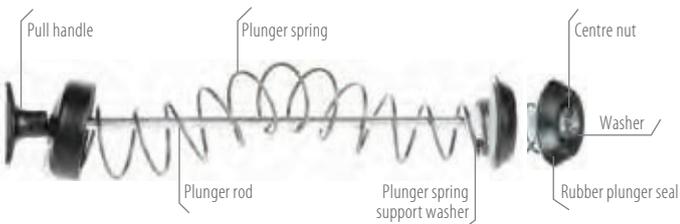
### MAINTENANCE

1. Thoroughly clean grease gun BEFORE and AFTER use. A lint free cloth to wipe the grease gun will ensure a good grip while operating, and will extend the life of your grease gun. A suitable degreaser can be used if required to assist clean up
2. Store the grease gun in a cool dry place and out of sunlight. Heat and contaminants can alter the condition of the grease
3. Check grease flow before use. It is recommended to squeeze a small amount of grease onto a rag to check flow and condition of grease
4. Prevent grease contamination. Always label grease guns with grease contents. If different grease types are required, it is always advised to use separate grease guns for each type of grease (Incorrect grease for application can result in significant damage or failure)

### PLUNGER ASSEMBLY (BULK VS CARTRIDGE)

The configuration of the plunger assembly varies depending on whether or not the gun is being used with a cartridge or bulk fill grease. Plunger adjustment/reassembly is required if application is varying between the two. Plunger reassembly instructions are detailed below

**Caution:** The plunger spring of the grease gun is under tension when assembled. Always take caution when switching plunger assembly. Do not aim plunger assembly at yourself or another person and eye protection should always be worn for safety



**Note:** Toledo grease guns are supplied ready for cartridge use. If the gun is to be used with a cartridge it is pre-primed and ready for immediate use

1. Unscrew barrel from grease gun head
- 2a. Secure grease gun in vice. Do not over tighten
- 2b. If you are unable to stabilise with a vice, have another person hold the barrel with the pull handle firmly pressed against the bench and plunger facing upwards
3. Push down the rubber plunger just enough to enable the release of tension on the centre nut

**CAUTION:** The rubber plunger is under load due to the pressure of the plunger spring, loosening the centre nut without pushing plunger down will cause the parts to accelerate rapidly from barrel. Take extra time and care when carrying out this step

4. Continuing to hold down the plunger spring, carefully undo the centre nut with a wrench
5. Once the centre nut is removed slowly release tension back out to enable the removal of the plunger seal
6. Flip over the plunger seal to the required position and refit it to the coil spring
7. Once again apply enough downward pressure on the plunger seal to enable the reapplication of the centre nut by screwing it into place

### PLUNGER ROD LOCKING

#### LEVER LOCK STYLE

- **To LOCK** the grease gun - Pull the plunger rod all the way back until it automatically locks into position
- The lever lock will automatically hold the plunger rod
- **To RELEASE** the lock - Slightly pull the plunger rod back a bit further, press and hold the lever lock to slowly release



#### NOTCHED LOCK STYLE

- **To LOCK** the grease gun - Pull and hold back plunger rod until the recess on rod passes the notch and then manipulate the rod into the smaller notch recess where it will engage and hold
- **To RELEASE** the lock - Slightly pull the plunger rod back a bit further and manipulate the rod back into the larger notch and release slowly



#### EAR LOCK STYLE

- **To LOCK** the grease gun - Pull and hold back plunger rod until ears on rod pass through the notch
- Once it passes through the notch turn plunger rod to lock in position (Note: You may be required to pull and turn simultaneously to locate the notch)
- **To RELEASE** the lock - Slightly pull plunger rod back and align the ears with notch opening and slowly release



### LOADING



**Cartridge**  
plunger assembly  
(supplied like this)



**Bulk fill**  
plunger assembly

#### PUMP FILL

- Plunger must be assembled for **bulk fill**
- Ensure the bulk loader valve is compatible for use with the filler pump
- Attach grease gun to filler pump
- Initiate filling and only stop once it becomes difficult to pump any more grease in
- Wipe off any excess grease
- Bleed air as necessary



*Note: The number of strokes required to completely fill the grease gun will vary between pumps*

#### SUCTION FILL

- Unscrew barrel from gun
- Plunger must be assembled for **bulk fill**
- Place barrel into grease bucket 3/4 deep
- Pull back plunger rod very slowly, to minimise any air intake, and begin sucking in the grease
- Wipe away any excess grease before screwing back on and reattaching to grease gun head
- Bleed air as necessary



## HAND FILL

- Unscrew barrel from gun
- Plunger must be assembled for **bulk fill**
- Pull plunger rod back and move to locked position
- Use a spatula to fill barrel with grease
- Wipe away any excess grease before screwing back on and reattaching to grease gun head
- Bleed air as necessary



## CARTRIDGE FILL

- Unscrew barrel from gun
- Plunger must be assembled for **cartridge fill**
- Pull plunger rod back and move to locked position
- Remove end caps from cartridge and insert into barrel
- Screw barrel back on to grease gun head and release plunger rod
- Bleed air as necessary



## AIR BLEEDING

## GREASE GUNS WITHOUT BLEEDER VALVE

- After filling with grease, but before returning plunger rod, reapply barrel to grease gun head by screwing it back in but **ONLY 2 - 3 turns**
- Release plunger rod. This will automatically result in gradual bleeding (Note: some grease may be expelled out of threads)
- Wait several minutes until re-tightening barrel all the way and wipe off any excess grease
- Pump a few times until grease comes out of nozzle steadily



## GREASE GUNS WITH PUSH TYPE BLEEDER VALVE

- After filling with grease, but before returning plunger rod, reapply barrel to grease gun head by screwing it back in completely
- Release plunger rod and depress air valve to bleed air
- Plunger rod may not fully return first time, repeat process until plunger rod is fully returned
- Pump a few times until grease comes out of nozzle steadily



## GREASE GUNS WITH AUTOMATIC BLEEDER VALVE

- There is no need to take any action. The air bleeder valve does not have a spring and remains open which results in automatic bleeding once the plunger is released from locked position. The natural pressure will result in the rise of the bleeder valve and any air will be dispensed through two holes in the bleeder valve which also results in faster more efficient bleeding



## CORRECT GREASE FLOW

- Grease should discharge smoothly, steadily and consistently

## TROUBLESHOOTING

Issue	Cause	Solution
<b>Little or no grease being dispensed</b>	Air lock/pockets in grease	Ensure grease gun is correctly primed by following the air bleeding procedures for the respective grease gun
	Thickened grease due to cold weather	Heat up cartridge with heat source. Do not use an open flame as this could result in injury and damage to the grease gun
	Blocked nozzle/extension	Remove extension and inspect for blockage or obstruction
	Rubber plunger not sealing correctly	Unscrew cartridge and inspect plunger condition. Ensure the plunger is set up correctly for either bulk or cartridge use
	Grease gun is empty	Refill canister with new cartridge or bulk fill
	Kinked or split hose extension	Inspect rubber hose for damage and replace if necessary
	Damaged air release valve	Requires repair or replacement
	Rubber plunger did not engage cartridge correctly	Always try to use plastic body cartridges over paper style as they give a firmer edge for the rubber plunger to engage with. It may require some manipulation and manoeuvring of the plunger rod to achieve success
<b>Leaking grease from rear of gun</b>	Incorrect plunger assembly	Reassemble plunger to correct position for bulk or cartridge use
	Contaminated grease	Immediately remove remaining grease from the gun and thoroughly clean. Some types of grease may produce a film of oil when in storage for a period of time
	Grease is too thin & potentially mixed with oil	Use thicker NLGI grade 2 grease
<b>Leaking grease from front of gun</b>	Loose or damaged threads	Inspect threads and tightness of nozzle. Tighten further if required. It is highly recommended to use Teflon thread tape to assist proper operation. Replace/Apply thread tape
	Canister not properly secured	Remove and inspect threads and seal on cartridge and re-tighten
<b>Lever/trigger difficult to operate</b>	Seized internals	Inspect pivot points on lever for damage and seizure. If found damaged, it is recommended to replace the gun
	Obstruction in nozzle	Clean nozzle and remove obstruction. Inspect grease nipple for fault
<b>Handle seizure resulting in loss of function and operation</b>	Major failure of the grease gun	Grease gun needs to be replaced

## GREASE GUN COUPLERS

- Clean grease nipple before connecting grease gun
- For a positive connection, push grease coupler straight on

*Note: Do not use excessive force. If it is difficult to connect, check for any obstruction and if coupler is suitable for the nipple*

- To safely disconnect, tilt coupler to one side, gently twist and pull simultaneously
- Wipe off any excess grease



## GREASE GUNS

### LEVER GREASE GUNS

- Reliable range of lever style grease guns for general purpose lubrication in automotive, agricultural, industrial, mining and DIY applications
- Head assembly incorporates a single bleeding vent hole with lock nut
- Air release is achieved by a single half turn of the grease gun head
- Durable powder coated finish



305217



6,000 psi  
(413 bar)



CARTRIDGE  
LOADING



FILLER PUMP  
LOADING



SUCTION  
FILL

Part No.	Description	Includes	Bulk Capacity	Pressure	Output	Thread
<b>305102</b>	Lever style 400g	Steel extension 150mm, 4 jaw coupler	500cm <sup>3</sup>	6000 psi (413 bar)	1g/stroke (1oz/28 strokes)	1/8" BSPT
<b>305217</b>	Lever style 450g	Steel extension 150mm, 4 jaw coupler	650cm <sup>3</sup>	6000 psi (413 bar)	1g/stroke (1oz/28 strokes)	1/8" BSPT

### LEVER GREASE GUNS

#### HEAVY DUTY

- High quality range of heavy duty lever style grease guns for general purpose lubrication in automotive, agricultural, construction and industrial applications
- Robust thick barrel, heavy duty follower spring, CNC machined heads and large rolled threads for fast, efficient and reliable reloading
- Inbuilt variable stroke function is ideal for applications in confined spaces
- Incorporates a bulk loader and automatic air release valve
- Grease gun bleeding is automatic or can be achieved by a simple half turn of the grease gun head
- Durable powder coated finish



Heavy duty head and  
air bleeder valve

305098



Non slip  
textured finish

Ergonomically  
designed rubber grip

305219

Unique lock lever mechanism  
allows user to easily lock  
plunger rod in any position

Rugged and robust zinc  
plated lever handle



10,000 psi  
(690 bar)



CARTRIDGE  
LOADING



FILLER PUMP  
LOADING



VARIABLE  
STROKE



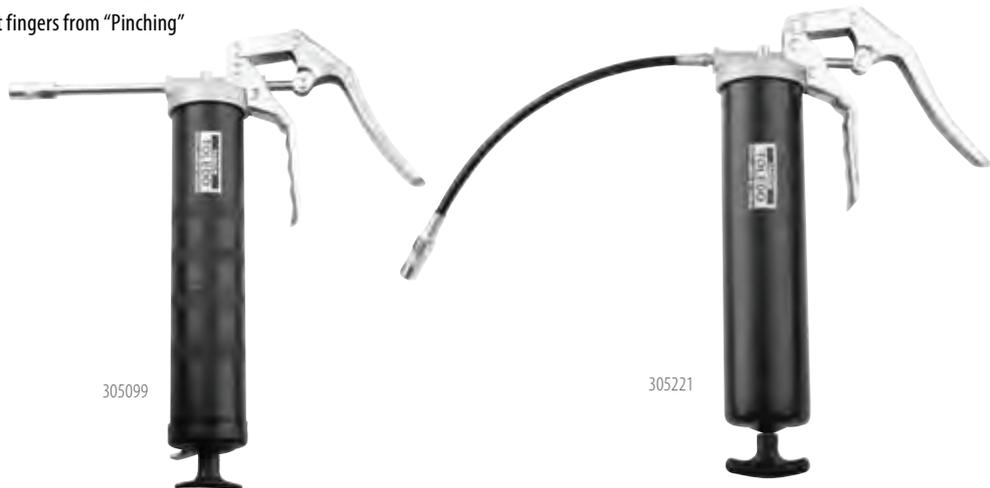
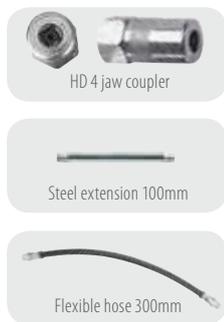
SUCTION  
FILL

Part No.	Description	Includes	Bulk Capacity	Pressure	Output	Thread
<b>305098</b>	Lever style - Heavy duty 400g	Steel extension 150mm, flexible hose 300mm, HD 4 jaw coupler	500cm <sup>3</sup>	10,000 psi (690 bar)	1g/stroke (1oz/28 strokes)	1/8" BSPT
<b>305219</b>	Lever style - Heavy duty 450g	Steel extension 150mm, flexible hose 300mm, HD 4 jaw coupler	650cm <sup>3</sup>	10,000 psi (690 bar)	1g/stroke (1oz/28 strokes)	1/8" BSPT

**PISTOL GREASE GUNS**

HEAVY DUTY

- High quality range of heavy duty pistol grip grease guns for general purpose lubrication in automotive, construction and industrial applications
- Most popular one hand operated grease gun designed for use in confined spaces or where access to grease nipple is restricted
- Robust thick barrel, heavy duty follower spring, CNC machined heads and large rolled threads for fast, efficient and reliable reloading
- Heavy duty aluminium die cast head and super strong pistol grip handle
- Pistol handle designed to prevent fingers from "Pinching"
- Durable powder coated finish



Part No.	Description	Includes	Bulk Capacity	Pressure	Output	Thread
<b>305099</b>	Pistol style - Heavy duty 400g	Steel extension 100mm, flexible hose 300mm, HD 4 jaw coupler	500cm <sup>3</sup>	5000 psi (345 bar)	0.5g/stroke (0.7oz/40 strokes)	1/8" BSPT
<b>305221</b>	Pistol style - Heavy duty 450g	Steel extension 100mm, flexible hose 300mm, HD 4 jaw coupler	650cm <sup>3</sup>	5000 psi (345 bar)	0.5g/stroke (0.7oz/40 strokes)	1/8" BSPT

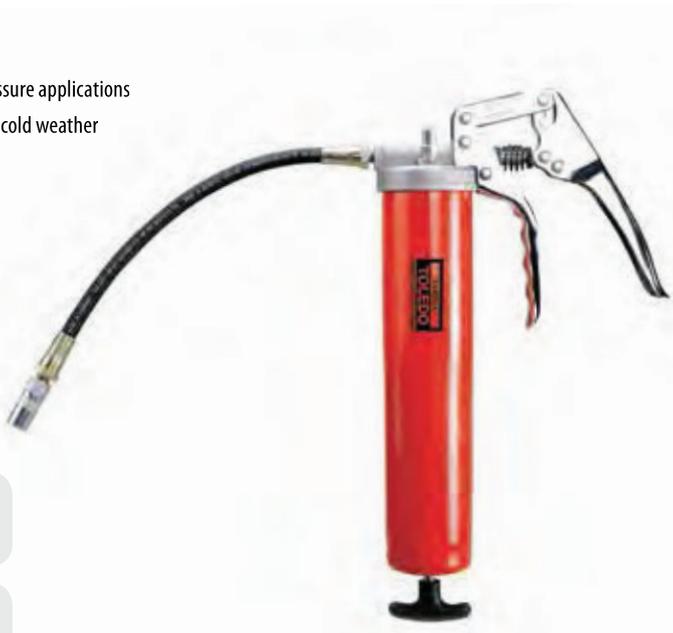
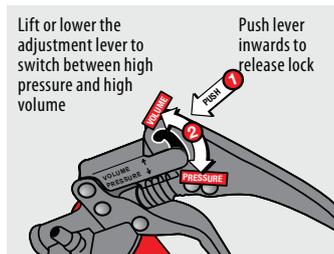
**PISTOL GREASE GUN**

PROFESSIONAL EXTRA HEAVY DUTY

- The ultimate grease gun and the highest specification option in the range
- Designed for heavy duty daily use and built to last a lifetime
- Ergonomically designed grease gun for one handed operation
- Unique adjustable stroke mechanism for both high volume and high pressure applications
- High volume enables faster greasing and high pressure for ease of use in cold weather
- Change in stroke achieved through simple press of the movable handle
- Solid 11mm diameter piston for more grease discharge per stroke
- Robust aluminium die cast grease gun head with bulk filler
- Rolled cylinder threads offer maximum strength

**UNIQUE ADJUSTABLE MECHANISM HIGH PRESSURE / HIGH VOLUME**

High pressure for use in cold weather  
High volume for faster greasing



Part No.	Description	Includes	Bulk Capacity	Pressure	Output	Thread
<b>305385</b>	Pistol style - professional extra heavy duty 450g	Flexible hose 300mm, HD 4 jaw coupler	650cm <sup>3</sup>	7000 psi (480 bar)	0.84g/stroke (1oz/36 strokes)	1/8" BSPT

### MINI GREASE GUNS

- High quality range of mini grease guns for general purpose lubrication in automotive, agriculture and DIY applications
- Compact mini grease guns are ideal for “on the go” use and are easily stored away in tool boxes
- Pistol version features a discharge port on both the front and top of gun head
- Double powder coated finish



305222



305444



CARTRIDGE LOADING

Part No.	Description	Includes	Pressure	Output	Thread	Thread
<b>305222</b>	Pistol style - Mini 85g	Steel extension 100mm, 4 jaw coupler	3500 psi (240 bar)	0.40g/stroke (0.6oz/40 strokes)	1/8" BSPT	1/8" BSPT
<b>305444</b>	Lever style - Mini 85g	Steel extension 150mm, 4 jaw coupler	6000 psi (413 bar)	0.55g/stroke (0.8oz/40 strokes)	1/8" BSPT	1/8" BSPT

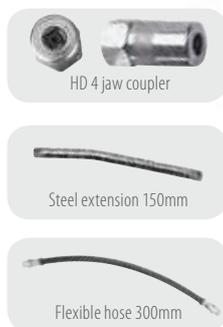
### CLEAR CANISTER GREASE GUNS

- High quality range of clear canister guns for general purpose lubrication in automotive, defence, food and beverage, industrial and marine applications
- Unique concept and design that allows quick and clear lubricant identification, thus eliminating the risk of cross contamination or mixing of incompatible lubricants
- Tough, impact resistant and drop resistant polycarbonate tube with aluminium die cast adaptors
- High tolerance aluminium die cast head with bulk loader and air release valve
- Pinpoint if air pockets exist and their location
- Lever style features variable stroke function for ease of use in confined spaces



**DESIGNED FOR USE WITH GREASE ONLY**

Do not use with ESTER based Greases, Synthetic Greases such as Aeroshell 33 Grease, Aeroshell 7 Grease, Skydrol Products etc. These have an adverse effect on the clear polycarbonate tube & can cause fogging, cracking & fracturing of the tube.



305141  
305101



305140  
305100



SUCTION FILL



CARTRIDGE LOADING

Part No.	Description	Extension	Bulk Capacity	Pressure	Output	Thread
<b>305140</b>	Lever style - Clear canister 400g	Steel extension 150mm, HD 4 jaw coupler	500cm <sup>3</sup>	10000 psi (413 bar)	1g / stroke (1oz / 28 strokes)	1/8" BSPT
<b>305100</b>	Lever style - Clear canister 450g	Steel extension 150mm, flexible hose 300mm, HD 4 jaw coupler	650cm <sup>3</sup>	10000 psi (413 bar)	1g / stroke (1oz / 28 strokes)	1/8" BSPT
<b>305141</b>	Pistol style - Clear canister 400g	Steel extension 100mm, flexible hose 300mm, HD 4 jaw coupler	500cm <sup>3</sup>	5000 psi (345 bar)	0.50g / stroke (0.70oz / 40 strokes)	1/8" BSPT
<b>305101</b>	Pistol style - Clear canister 450g	Steel extension 100mm, flexible hose 300mm, HD 4 jaw coupler	650cm <sup>3</sup>	5000 psi (345 bar)	0.50g / stroke (0.70oz / 40 strokes)	1/8" BSPT

**PNEUMATIC GREASE GUNS**

- Pneumatic operated grease guns ideal for use in factory maintenance, agricultural applications, fleet service or for use on trucks connected to vehicle air brake compressors
- 305041: Delivers automatic action, continuous grease discharge with the trigger pressed
- 305223: Intermittent operation, a single shot of grease is discharged with every press of the trigger
- Ergonomic pistol grip and acute angle design allows for ease of operation, especially in narrow spaces
- Heavy duty aluminium die cast head with internal bore precision honed for rapid action
- Air inlet threaded 1/4" NPT and supplied with a male quick connect coupler fitting
- Head casting fitted with bulk loader valve
- Double powder coated finish



Part No.	Description	Includes	Bulk Capacity	Operating Range	Compressor Volume	Output	Thread
<b>305041</b>	Pistol style pneumatic - Continuous 450g	Steel extension 150mm, HD 4 jaw coupler	650cm <sup>3</sup>	40-120 psi (3-8 bar)	1 cfm/0.026m <sup>3</sup>	≥ 400g/min (14oz / min)	1/8" BSPT
<b>305223</b>	Pistol style pneumatic - Intermittent 450g	Flexible hose 300mm, HD 4 jaw coupler	650cm <sup>3</sup>	40-120 psi (3-8 bar)	1 cfm/0.026m <sup>3</sup>	≥ 0.90g / shot (1oz / 32 shots)	1/8" BSPT

**PUSH TYPE GREASE GUN**

BULK ONLY

- Push type grease gun is for bulk grease and suitable for Industrial and DIY applications
- Compact toolbox size, ideal for greasing impact wrenches, lawn mowers, chain saws, trailers, ATV's, autos & trucks etc.
- Black powder coated finish and supplied with universal connector that adapts to most grease fittings
- Compatible for use with hydraulic coupler



Part No.	Description	Includes	Pressure	Output	Output	Thread
<b>305224</b>	Push type - 125cm <sup>3</sup>	Rigid steel 30mm	1,000 psi (69 bar)	0.90g / shot (1oz / 32 shots)	0.84g/stroke (1oz/36 strokes)	1/8" BSPT

# LUBRICATION

## GREASE GUNS

### PUSH TYPE GREASE GUN

MINI

- Ideal for greasing in hard to reach areas in model planes, toys, fishing reels, automotive and marine parts
- Supplied with grease tube
- Spares: Replacement grease tube 100g (Part No. 305029)



Part No.	Description	Overall Length	Replacement Grease Tube
<b>305028</b>	Push type - Mini 100g	180mm	305029

## GREASING ACCESSORIES

### GREASE GUN HOSES

FLEXIBLE HEAVY DUTY

- High performance hoses improve reach to nipples with limited access
- Superior construction - inner tubing is polyamide with polyurethane sheathing, reinforced diagonally in highly tear resistant polyester
- Heavy duty zinc plated end connections hydraulically crimped to the hose
- Rolled threads for extra strength and available in varying lengths
- Large inner diameter makes them ideal for use in cold weather



WORKING PRESSURE  
3,500 psi (240 bar)  
BURST PRESSURE  
11,600 psi (800 bar)



SUITABLE FOR HAND AND AIR OPERATED  
GREASE GUNS

**NEVER USE BEYOND RECOMMENDED WORKING PRESSURE**

Part No.	Description	Diameter (Inner/Outer)	Working Pressure / Burst Pressure	Thread	Useful Tips
<b>305234</b>	Flexible heavy duty hose 300mm	Ø 4.1/10.8mm	5,800 psi (400 bar) / 13,775 psi (950 bar)	1/8" BSPT	Always buy a good quality hose. Accidents caused by poor quality hose can cause fatal injury
<b>305235</b>	Flexible heavy duty hose 450mm	Ø 4.1/10.8mm	5,800 psi (400 bar) / 13,775 psi (950 bar)	1/8" BSPT	
<b>305236</b>	Flexible heavy duty hose 500mm	Ø 4.1/10.8mm	5,800 psi (400 bar) / 13,775 psi (950 bar)	1/8" BSPT	



### QUICK CONNECT GREASE GUN HOSE

- The quick connect hose converts a steel extension coupler assembly on grease guns to a flexible hose and allows the gun to be used for greasing hard to reach fittings
- Spring guard fitted on the coupling end provides rigidity making the coupling end snap easily onto grease fittings
- Grease fitting on the opposite end of the hose snaps conveniently onto all couplers



WORKING PRESSURE  
3,500 psi (240 bar)

Part No.	Description	Working Pressure
<b>305244</b>	Flexible quick connect hose 410mm	3,500 psi (240 bar)

### STEEL EXTENSIONS

RIGID

- Rigid steel extensions with bright zinc plated finish
- High strength rolled threads on both ends



FOR HAND OPERATED  
GREASE GUNS



6,000 psi  
(413 bar)

Part No.	Description	Working Pressure	Thread
<b>305233</b>	Straight type 100mm	6,000 psi (413 bar)	1/8" BSPT
<b>305357</b>	Bent type 150mm	6,000 psi (413 bar)	1/8" BSPT

### HYDRAULIC COUPLERS

4 JAW

- Heat treated, fully hardened spring steel jaws for longer service life
- Spring loaded ball check mechanism to assist retaining pressure
- Hexagonal nut allows easy tightening

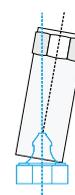


305231 Coupler:  
Hardened body withstands high pressures without deformation. Hexagonal nut allows easy tightening



305232 HD Coupler:  
Hardened body with double wall thickness withstands very high pressures without deformation. Hexagonal nut allows easy tightening

Double wall thickness



3 JAW DESIGN



4 JAW DESIGN

Advantage:  
4 jaws allow greater working angle

WITH BALL CHECK

Part No.	Description	Overall Length	Diameter	Working Pressure	Thread	Qty
<b>305231</b>	Hydraulic coupler (hand operated g/g)	37.5mm	Ø 15mm	6,000 psi (423 bar)	1/8" BSPT	1
<b>305360</b>	Hydraulic coupler (hand operated g/g)	37.5mm	Ø 15mm	6,000 psi (423 bar)	1/8" BSPT	10
<b>305232</b>	Hydraulic coupler (hand & pneumatic operated g/g)	37.5mm	Ø 15mm	10,000 psi (690 bar)	1/8" BSPT	1

### NEEDLE NOSE ADAPTORS

- Professional narrow needle design for greasing flush or hard to reach hydraulic type fittings in inaccessible areas
- Used to dispense a fine line of grease



FOR HAND OPERATED GREASE GUNS

Part No.	Description	Needle Length	Needle Diameter	Tip Diameter
<b>305237</b>	Grease injector needle w/plastic protector	38mm	Ø 18 gauge	Ø 1.02mm
<b>305238</b>	Grease injector needle w/plastic protector	38mm	Ø 21 gauge	Ø 0.71mm
<b>305246</b>	Needle nose adaptor - quick connect	100mm	Ø 6.40mm	Ø 1.16mm
<b>305247</b>	Needle nose adaptor - quick connect	38mm	Ø 4.00mm	Ø 1.16mm
<b>305241</b>	Needle nose dispenser	150mm	Ø 3.96mm	Ø 1.17mm
<b>305239</b>	Needle nose dispenser	15mm	Ø 5.56mm	Ø 1.17mm
<b>305240</b>	Needle nose dispenser	38mm	Ø 3.96mm	Ø 1.17mm
<b>305242</b>	Needle nose dispenser with shroud	15mm	Ø 5.56mm	Ø 1.17mm
<b>305245</b>	Recessed lube adaptor - quick connect	81.5mm	Ø 8.00mm	Ø 5.80mm



**GREASE GUN LIGHT**

- For illumination in dark areas and hard to reach places to enable easy location of grease fittings
- An extremely useful mini accessory to attach onto all grease gun steel extensions and flexible hoses
- Allows technician to monitor the process to ensure that the grease fitting is not over lubricated
- Slim construction with a very powerful LED with plastic bracket assembly to easily click onto extension
- Batteries included



Part No.	Batteries (Included)	Weight
<b>305505</b>	Button cell LR41 x 3	12g



**GREASE GUN HOLDER**  
HEAVY DUTY

- Heavy duty grease gun holder suitable for automotive, industrial, construction and farm applications
- Sturdy all steel construction with four bolt mounting suitable for workshop or mobile van or trailer
- Suitable for most 400g and 450g grease guns with body diameters from 57 - 63.5 mm



Part No.	Dimensions	Range
<b>305001</b>	65 x 180mm	57 - 63.5mm



**BEARING PACKER**  
THREADED CENTRE

- Bearing packer with threaded centre post for use with grease guns
- Designed to flush out old grease from bearing without having to degrease bearings first
- Suitable for regular greasing applications as well as in conjunction with a flexible hose
- Suitable for cars, trailers, light trucks and motorcycles

Part No.	Range (I.D. x O.D. x H)
<b>305230</b>	12 x 125 x 6 - 50mm



**BEARING PACKER**  
PORTABLE



- Handy tool for quickly packing bearings
- Simple to use - Insert bearing in the bearing packer, connect grease gun to nipple and old grease is forced out and evenly replaced with fresh grease
- Unique design allows for mess free operation
- Suitable for cars, trailers and light trucks

Part No.	Range	Size
<b>305150</b>	50 - 95mm	Ø 95 x 130mm



**BEARING PACKER**  
HEAVY DUTY

- Heavy duty bearing packer suitable for heavy vehicle and industrial applications
- Simple to use - Apply pressure and old grease will be easily forced out and evenly replaced by fresh grease
- Unique design allows for mess free operation
- Grease can be filled manually or with a grease gun
- Made from high quality durable aluminium alloy

Part No.	Range	Weight
<b>305161</b>	120 - 170mm	5.8kg



**GREASE FILLER DISPENSER**  
HEAVY DUTY

- Forces out old grease from bearings and evenly replaces with fresh grease
- Simple operation and sits on top of a 20 litre grease drum for mess free operation
- Inbuilt cover keeps grease free from contaminants
- Ideal for all heavy vehicle, industrial and agricultural applications

Part No.	Range	Application
<b>305155</b>	100 - 200mm	20L drums

## GREASING ACCESSORY KIT

- Kit includes a range of quick connect lube accessories, suitable for the most difficult greasing jobs
- Effective lubrication of grease plugs, sealed bearings, push on greasing of recessed fittings or fittings in shoulders, low height areas or an extension for reaching deep areas
- Quick connect hose converts steel extension coupler assembly on grease guns to a flexible hose and allows the gun to be used for greasing hard to reach fittings
- Supplied in custom moulded plastic hard case

Part No.	Description	
<b>305030</b>	Needle nose grease dispenser	Grease hose 500mm
	Extension coupler	Grease hose with spring 500mm
	Angle lube adaptor	Grease hose 300mm
	Lockable swivel coupler	Needle nozzle



## PUMPS & ACCESSORIES

### ROTARY DRUM PUMP

#### HEAVY DUTY

- Heavy duty industrial self priming pump suitable for automotive, construction, industrial applications that require a robust and strong pump to endure harsh working conditions
- Solid cast iron construction, Computer Numerical Control (CNC) machined
- Pump handle rotates a sintered powder metal 3 vein rotor inside a pumping chamber
- Graphite veins are self lubricating and non-wearing
- Graphite seals allows the pump to be used with a wide variety of fluids including diesel and petrol with up to a 15% ethanol blend
- Supplied complete with 2" bung, telescopic suction tube with strainer, 2000mm anti-static hose, nozzle, nozzle holder, flame arrester and vacuum bleeder
- Not recommended for use with water based media
- For use with class 1 and 2 flammable and combustible liquids such as Petrol, Naphtha, Alcohols and other solvents
- Wetted components: Cast Iron, Steel, Graphite, Paper, Polypropylene

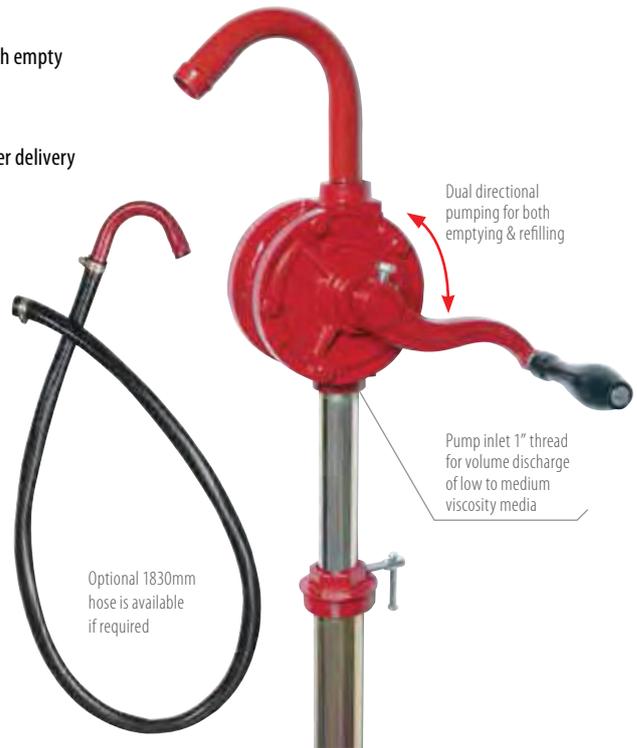


Part No.	Output	Application	Bung Size
<b>305019</b>	38L/Minute	50 - 205L drums (15 - 55 gallons)	50.8mm (2")

ROTARY DRUM PUMP

- Very popular and versatile pump offers dual directional operation which allows the pump to both empty and refill containers
- Extremely heavy duty construction built to endure all requirements of a professional workshop
- Sturdy cast iron pump housing with two heavy duty cast iron vanes for better draw and smoother delivery
- Internals feature high grade nitrile seals to ensure long term, reliable performance
- Includes telescopic suction tube with bung adaptor and locking screw
- Ideal for use in agricultural, automotive, construction and professional workshop applications
- Suitable for transfer of diesel, kerosene, heating oils, motor oils, lubricating oils (up to SAE 90) and non-corrosive fluids of light to medium viscosity
- Not suitable for water based media, antifreeze, solvents, acids and gasoline etc.
- Optional hose assembly 1830mm available Part No. 305359

*Note: When using with low viscosity media, the pump can be primed by adding 30ml of the media into the pump outlet*



Part No.	Application	Output	Bung Size	Weight
<b>305251</b>	50 - 205L drums (15 - 55 gallons)	5L/20 Turns	50.8mm (2")	6.6kg

LEVER DRUM PUMPS

HEAVY DUTY

- Most popular pump style with level function designed for the transfer of fluids such as lubricants
- A floating steel check valve allows liquids to drain back from pump when not in use
- Premium powder coated steel pump body with ribbed section aluminium die cast pump head for maximum strength
- Includes curved metal spout and telescopic suction tube, 38mm (1½") and 50.8mm (2") bung adaptors
- Built-in 1½" & 2" bung for use on drums with either openings
- Plated steel lever handle with rubber grip for convenience
- Wear resistant brass piston rings fitted onto zinc die cast piston
- Not suitable for use with water based fluids, corrosive media, gasoline etc.

■ Wetted components: Steel, Aluminium, Zinc, Brass, NBR & Viton\*

*NOTE: Certain fluids have a tendency to build a coating on the surface when dry, it is recommended that the lever be left in the upright position when the pump is not in use*

**305252:** Suitable for oil based fluids, heating oils, motor oil, light and heavy oils, diesel and kerosene. Non return seal is NBR rubber

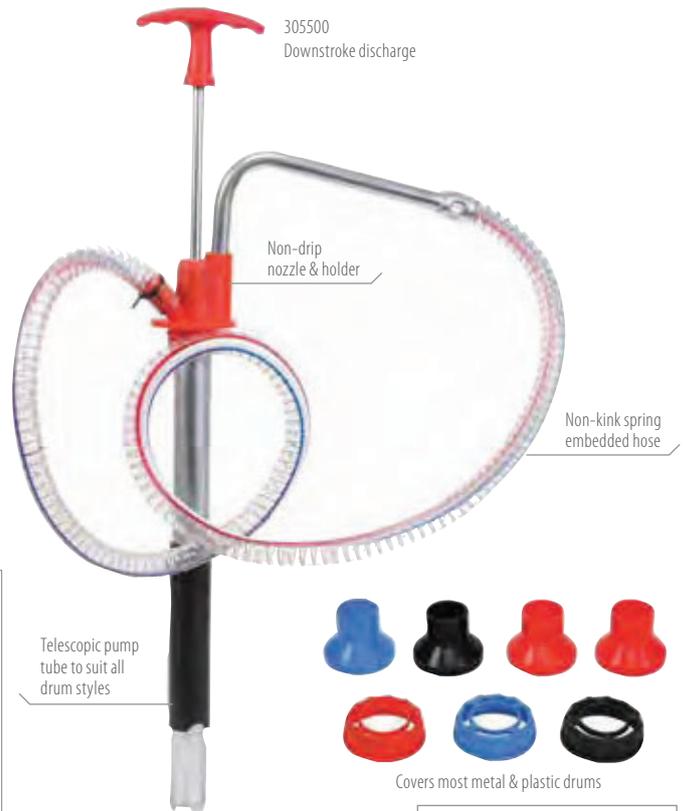
**305253:** Suitable for 100% antifreeze, solvents, thinners, automotive additives, industrial chemicals, oil based fluids and other non-corrosive liquids. Non return seal is Viton rubber



Part No.	Description	Application	Output	Bung Size
<b>305252</b>	Oil barrel pump HD	50 - 205L drums (15 - 55 gallons)	300ml/stroke	38mm (1½") & 50.8mm (2")
<b>305253</b>	Anti-freeze barrel pump HD	50 - 205L drums (15 - 55 gallons)	300ml/Stroke	38mm (1½") & 50.8mm (2")



305255  
Upstroke discharge



305500  
Downstroke discharge



Rieke Adaptor  
Standard Bung Adaptor  
Increase pump length by 19mm for deeper containers



The Rieke adaptor conveniently screws on the plastic pull out Rieke spout

Telescopic pump tube to suit all drum styles

### VERTICAL LIFT PUMPS "EZEE FLO"

- Versatile hand lift pumps engineered for trouble free use with plastic pull out (Rieke® spout) or regular openings with 2" external threads
- Heavy duty steel suction tube and high density polyethylene pump head
- Pump head incorporates nozzle holder and option to drain back over flown fluid into the container
- Supplied with spring embedded non-kink discharge hose fitted with a non-drip curved metal spout which locates into the built in nozzle holder in the pump head
- Suitable for transferring engine oils, gear oils, diesel, 100% antifreeze and light fuels
- Not recommended for use with water based and other corrosive materials
- Wetted components: Steel, Aluminium, Polyethylene, Polypropylene Co Polymer, High Nitrile Rubber, PVC & Acetal

#### 305255

- Upstroke operation with fluid discharge when pulling the handle up

#### 305500

- Downstroke operation with fluid discharge when pushing the handle down which provides better ease of use especially when pumping heavy fluids, and also reduces pull out stress on the pump bung
- Variable length suction tube to cater for all shapes of containers. Pump length can be extended by over 100mm for use with high depth containers, or shortened to cater for shorter and wider drums
- Includes seven adaptors to enable use with most metal and plastic containers

### INTERCHANGEABLE ADAPTORS



**Standard bung**  
can be slid over the pump, when using on containers with external threading

**Rieke adaptor**  
is used on containers with plastic Rieke spout

**Extension**  
Increase pump length by 19mm for deeper containers

Part No.	Description	Application	Output	Pump Length	Adaptors
305255	Upstroke discharge	20L drums	1L/15 Strokes	325mm	3 (1 standard, 1 Rieke, 1 extension)
305500	Downstroke discharge	20 - 25L drums	1L/18 Strokes	325 - 435mm	7 (3 standard, 4 Rieke Adaptors)



**VERTICAL LIFT PUMP**

- Self priming high volume lift pump for use with petroleum based media
- Steel construction with aluminium die cast head, steel plunger rod and PTFE seals
- Piston is made from zinc with wear resistant brass piston rings
- Comes with steel discharge spout and 2" cast iron bung adaptor
- Not recommended for use with Petrol, water based or other corrosive media
- Wetted components: Steel, Aluminium, Zinc, Brass, PTFE

Part No.	Application	Output	Bung Size
<b>305256</b>	205L drums (55 gallons)	750ml/stroke	50.8mm (2")



**SYPHON PUMPS**

- Simple and easy to use polyethylene pumps syphon liquids to lower levels than the height the pump is installed
- To dispense media at levels higher than the pump, the pump below needs to be continuously operated
- Easy to prime and start within 6-7 strokes. Pump requires no further operation and keeps working in Auto position
- All pumps are equipped with a vent cap, opening the cap stops the discharge
- Supplied with flexible corrugated discharge tube
- Recommended for water-based fluids, detergents, waxes, soaps, antifreeze, some mild acids and other liquids compatible with pump materials of construction
- Pump should only be used with light weight and non inflammable liquids
- Do not use with fluids not compatible with materials used in the pump construction. These pumps must never be used with concentrated acids, Acetone, Benzene etc.

*WARNING: Pumps must not be used with hot fluids at temperatures above 60°C or with concentrated acids, Acetone, Benzene etc.*

Part No.	Application	Output	Bung Adaptor	Hose Length
<b>305390</b>	5 - 20L pails	6.5L/Minute	1 1/2"	551mm
<b>305392</b>	205L drums	21L/Minute	2"	1212mm



**DRUM LID WRENCH**

- An easy and convenient tool to open almost all types of drums
- Ends of the wrench are designed to fit perfectly onto most 3/4" and 2" drum plugs
- Manufactured from cast aluminium (LM25)
- Wrench is hardened and tempered for increased strength
- Compact design for easy storage

Part No.	Application
<b>305248</b>	3/4" & 2"



**DRUM TAP**

- Facilitates convenient dispensing of media under gravity flow with drum laid horizontally
- Lockable with built in bucket hanger
- Not suitable for use with corrosive media



Part No.	Application	Thread
<b>305071</b>	20 - 65L drums	3/4" Male



## DRIP PAN UNIVERSAL

- Popular accessory for every drum pump; the drip pan fits into any 2" threaded opening on a drum, barrel or tank
- Used as a drain for returning overflow media back into the drum
- Fits any 2" threaded opening on a drum and any pump with a 2" bung adaptor
- Cast aluminium body with 2" external and internal threads
- Bung adaptor with strainer for dispensing clean media back into the drum
- Also works as a base for holding a container during dispensing

Part No.	Thread ( Internal & External)	Plate Size
<b>305020</b>	2"	175x175mm



305383

305265

## DRUM DOLLIES

- Heavy duty drum dollies with welded steel sheet (3mm/11 gauge) construction
- Extra heavy-duty design, wide steel in premium powder coated finish
- Design incorporates strong steel braces and removable castors for use in professional workshop conditions
- Adjustable clamping bolt design allows the dolly to be adjusted easily for varying barrel/pail diameters

Part No.	Application	Castors	Capacity
<b>305383</b>	60L/16 gallon drums	Phenolic	90kg/400mm wide
<b>305265</b>	205L/54 gallon drums	Cast iron	545kg/580mm wide



305261

305258

305260

## OIL CANS

- Professional range of oil dispensing cans in traditional design for daily workshop use
- All steel construction with seamless, heavy gauge tin sheet with a powder coated finish
- Brass suction pumps with two ball valves for large volume delivery per stroke
- Suction valve at base of pump is without spring, which prevents malfunctioning because of sticking valve due to resinous oil
- Supplied with either rigid steel extension or wire braided flexible hose spout (or both)



Part No.	Description	Capacity	Rigid Spout Length	Flexible Spout Length
<b>305257</b>	Lever type rigid spout	200ml	125mm	-
<b>305258</b>	Lever type rigid & flexible spout	300ml	125mm	150mm
<b>305259</b>	Lever type rigid & flexible spout	500ml	150mm	175mm
<b>305260</b>	Lever type rigid & flexible spout	700ml	175mm	200mm
<b>305261</b>	Pistol grip rigid & flexible spout	125ml	100mm	125mm



**TRANSFER GUN**

- Suction transfer gun enables efficient transfer of liquids from one container to another in a single stroke
- Suitable for use with a variety of liquids such as fuel oils, mineral oils, synthetic and biological oils, petrol, cooling liquids, antifreeze, spirits, brake fluids etc.
- *Spares: Replacement hose - each (Part No. 305358)*

Part No.	Capacity	Hose Length	Spares
<b>305229</b>	350ml	600mm x 2	305358



**SUCTION GUN**

- Designed to transfer gear oils in and out of gear boxes, transfer cases and differentials
- Lip seal provides maximum suction
- Powder coated, textured steel barrel for firm grip and supplied with 300mm (12") flexible vinyl hose
- No priming required
- *Spares: Replacement hose - each (Part No. 305228)*

Part No.	Capacity	Hose Length	Spares
<b>305227</b>	500ml	300mm	305228



**OIL MEASURING CONTAINER**

- Detachable threaded flexible spout 150mm and clip in cover lid for easy pouring
- Dual scale litres and quarts
- Manufactured from translucent high density polyethylene
- *Spares: Replacement nozzle - each (Part No. 305264A)*



Part No.	Capacity	Temp. Rating	Graduations	Spares
<b>305214</b>	1 litre/1 quart	60° C	500ml	305264A
<b>305264</b>	5 litre/5 quart	60° C	500ml	

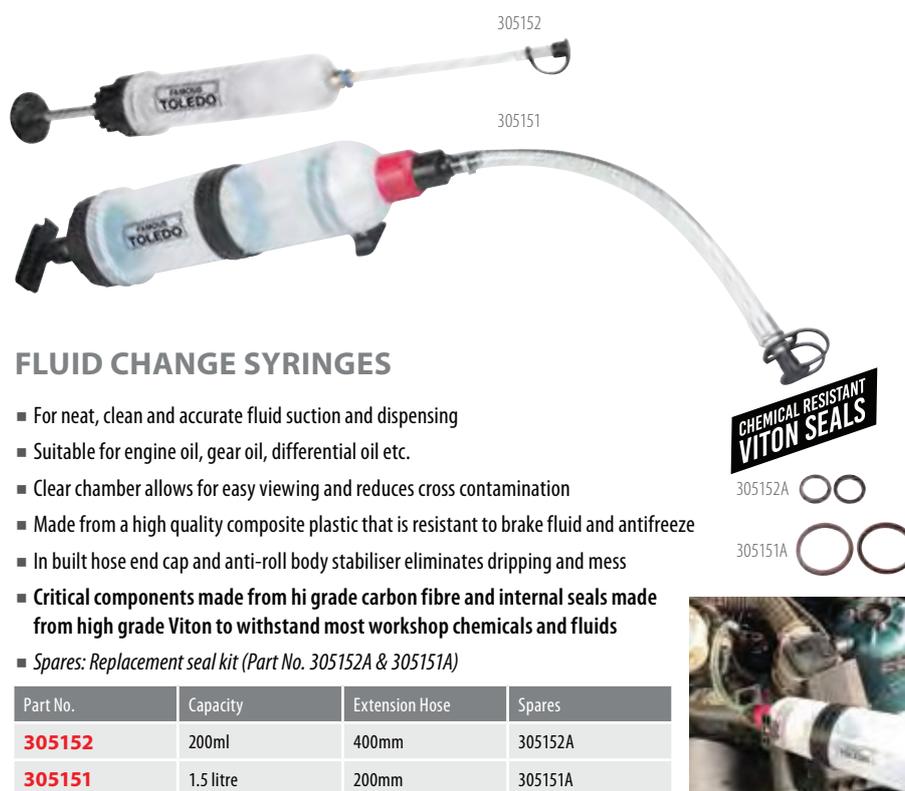


**PRESSURE SPRAYERS**  
PUMP UP

- Ideal for most workshop liquids and solvents such as brake cleaner, degreaser, tyre shine, detergents, acids and specialised lubricants
- Easy to fill with bulk liquids which saves money on spray cans and one off use bottles
- Durable plastic polyethylene bottle with moulded in measuring scale
- Easy to use pump action mechanism with top mounted thumb trigger
- Environmentally safe way of disbursing liquids in a controlled way
- Nozzle can be adjusted from a fine spray to a direct jet
- **Critical components made from hi grade carbon fibre and internal seals made from high grade Viton to withstand most workshop chemicals and fluids**
- *Spares: Replacement seal kit to suit both 1L & 2L bottles (Part No. 305153A)*



Part No.	Capacity	Working Pressure	Spares
<b>305153</b>	1 litre	50-70 psi	305153A
<b>304154</b>	2 litre	50-70 psi	305153A



### FLUID CHANGE SYRINGES

- For neat, clean and accurate fluid suction and dispensing
- Suitable for engine oil, gear oil, differential oil etc.
- Clear chamber allows for easy viewing and reduces cross contamination
- Made from a high quality composite plastic that is resistant to brake fluid and antifreeze
- In built hose end cap and anti-roll body stabiliser eliminates dripping and mess
- **Critical components made from hi grade carbon fibre and internal seals made from high grade Viton to withstand most workshop chemicals and fluids**
- *Spares: Replacement seal kit (Part No. 305152A & 305151A)*

Part No.	Capacity	Extension Hose	Spares
<b>305152</b>	200ml	400mm	305152A
<b>305151</b>	1.5 litre	200mm	305151A



### WATERING CAN 10L

- Suitable for all refilling
- Plastic, curved spout pours precisely without spillage
- Ideal for under bonnet level refilling e.g. radiator, battery, windscreen washer etc.
- Neat mess free pour



Part No.	Capacity
<b>305095</b>	10L



### OIL DRAIN PANS/CANS TRANSMISSION

- Range of oil drain pans/cans in varying styles for safe and efficient fluid catchment and storage work
- All feature a pouring spout to reduce spillage and mess
- All manufactured from durable, high density polyethylene with UV stabiliser which is resistant to most chemicals, solvents and hot oil
- Suitable for use with fuel, oils, mineral oils, synthetic oils, antifreeze, etc.
- Recessed casters provide easy mobility and transportation (305089 only)

Part No.	Description	Capacity	Size
<b>305090</b>	Universal drain pan & can	10L	580L x 330W x 140H (mm)
<b>305091</b>	Universal drain pan & can	17L	700L x 400W x 140H (mm)
<b>305382</b>	Universal drain pan	14L	Ø 450 x 150H (mm)
<b>305053</b>	Transmission & gearbox drain pan	17.3L	Ø 200 x 820L x 545W (mm)
<b>305089</b>	Low profile drain pan	20L	Ø 125 x 850L x 600W (mm)





**FUNNEL SET**  
COOLANT FILLER

- Universal set for easy, efficient and mess free refilling during cooling system bleeding work
- Enables vehicle coolant filler point to be raised, assisting with coolant system bleeding and removal of air pockets common in modern passenger vehicle applications
- Includes five sized rubber seal adaptors to suit most vehicles and one rubber tapered cone adaptor for universal applications and multi-purpose use
- Spares: Replacement adaptor pack 6 Pc. (Part No. 305092A)



Part No.	Adaptors	Pieces	Spares
<b>305092</b>	31, 35, 40, 42, 45mm & universal tapered cone	8	305092A



**FUNNEL**  
ADJUSTABLE PLIER UNIVERSAL

- Unique universal clamp design enables effective and mess free filling of fluids into engines, containers, drums and barrels
- Adjustable spring clamp locks into place, so there is no need to hold the funnel while filling
- Transparent lower chamber clearly shows fluid flow, minimising the risk of over filling and spillage
- Compatible with the supplied threaded funnel or any other normal funnel



Part No.	Adjustable Clamp Range
<b>305080</b>	28 - 74mm



**FUNNELS**

- Funnels designed with special contours in the funnel body for easy handling
- Anti splash and spill proof, with rim of funnel curved in
- Complete with wire mesh screen in funnel neck, dust cover and flexible spout
- Translucent white to give a clear view of fluid
- Manufactured from heavy duty polypropylene

Part No.	Description	Capacity	Opening	Spout Length
<b>305388</b>	Funnel	1.7L	Ø 205mm	170mm
<b>305389</b>	Funnel w/2" bung adaptor	3L	Ø 240mm	245mm



**FUNNEL**  
FLEXIBLE & MOULDABLE

- A simple and effective flexible rubber funnel for draining fluids from vehicles and equipment such as cars, trucks, motorcycles, aircraft, boats, generators etc.
- Completely universal tool can be bent, folded and moulded into desired funnel shape
- Manufactured using a thin piece of aluminium encased in a thick coating of nitrile rubber
- Heavy duty construction means it is suitable for any fluid E.g. AdBlue®



Part No.	Size (LxWxT)
<b>305094</b>	370 x 170 x 3mm

# AdBlue®

Note: AdBlue® is a registered trademark of the German Association of the Automobile Industry VDA (Verband der Automobilindustrie)

## FUNNELS

ADBLUE®

- Specialty funnels designed for use with AdBlue®
- Manufactured from materials resistant to urea based fluids
- Transparent chamber for an accurate fill, without overflowing or spilling
- Supplied with lid for mess and contaminant free storage
- Available in straight or angled spout, suitable for most passenger vehicles and light commercial vehicles with AdBlue® filler necks

*Note: It is recommended to thoroughly clean funnel after each use as AdBlue® will crystallise when dry. Straight neck and angled neck units are not compatible and cannot be interchanged*

Part No.	Description	Capacity
<b>305400</b>	Straight neck	1.1L
<b>305401</b>	Angled neck	1.1L



## FILLER/EXTRACTION SYRINGE

ADBLUE®

- Specialty syringe designed for the filling and extraction of AdBlue®
- Manufactured from materials resistant to urea based fluids
- Open/close twist valve is easy to use and prevents overflowing and spillage
- Safe and efficient way to handle AdBlue® and features an anti-roll bar on main body to stabilise syringe when not in use
- Large double seal diameter plunger provides quick and efficient action
- Transparent body is easy to dismantle for cleaning and features level markings
- Suitable for all vehicles fitted with AdBlue® tanks such as passenger vehicles, LCV, heavy vehicles etc.

*Note: It is recommended to dismantle and thoroughly clean syringe after each use as AdBlue® will crystallise when dry*

- Spares: Replacement seal kit Part No. 305402A

Part No.	Capacity	Extension Hose	Spares
<b>305402</b>	1.5L	410mm	305402A



## TRANSFER PUMP

ADBLUE®

- Specialty transfer pump syringe designed for AdBlue® filling and extraction
- Manufactured from materials to resist urea based fluids such as AdBlue®
- Transparent body with level markings
- Compact design allows for easy storage and easy to disassembly for cleaning
- Suitable for all vehicles fitted with AdBlue® tanks such as passenger vehicles, LCV, heavy vehicles etc.
- One way valve transfers Adblue® fluid from the bottom hose and dispenses from the top hose, use in reverse for extraction
- Supplied with PVC hose and nylon tube

*Note: It is recommended to dismantle and thoroughly clean pump after each use as AdBlue® will crystallise when dry*

Part No.	Capacity	Extension Hose
<b>305158</b>	550ml	500 & 1000mm



# AdBlue®

**GREASE NIPPLES & ACCESSORIES**

**GREASE NIPPLES**

- Available in EN-1A steel with yellow zinc coating or 303 stainless steel
- Manufactured to the most stringent quality standards – QS9000 approved manufacturing
- Accurately controlled, conforming to the SAE, DIN, BS, JIS and IS standards
- Grease nipples are heat treated to SAE J534 specifications

*Note: Stainless steel nipples have stainless steel ball*

Images	Description	Hex Size	Steel Part No.	Qty	Stainless Steel Part No.	Qty	
	1/4" – 28 SAE LT Taper Thread	Short Straight	5/16"	<b>305319</b>	10	<b>305375</b>	10
		Short 45°	3/8"	<b>305320</b>	5	<b>305376</b>	10
		Short 65°	3/8"	<b>305321</b>	5	–	–
		Short 90°	3/8"	<b>305322</b>	5	<b>305377</b>	10
	R 1/8" x 28 BSPT Taper Thread	Straight	7/16"	<b>305323</b>	5	–	–
		45°	7/16"	<b>305324</b>	5	–	–
		90°	7/16"	<b>305325</b>	4	–	–
	R 1/4" x 19 BSPT Taper Thread	Straight	0.60"	<b>305326</b>	2	–	–
		45°	0.60"	<b>305327</b>	2	–	–
90°		0.60"	<b>305328</b>	2	–	–	
	UNF Parallel Thread	Straight 1/4" 28	5/16"	<b>305329</b>	10	–	–
		Straight 5/6" 24	7/16"	<b>305330</b>	6	–	–
		Straight 3/8" 24	7/16"	<b>305331</b>	6	–	–
	BSF Parallel Thread	Straight 1/4" 26	7mm	<b>305332</b>	8	–	–
		Straight 5/16" 22	9mm	<b>305333</b>	5	–	–
		Straight 3/8" 20	11mm	<b>305334</b>	3	–	–
	1/8" – 27 Pipe Threads PTF – Special Short	Short Straight	7/16"	<b>305335</b>	7	<b>305370</b>	10
		Short 30°	7/16"	<b>305336</b>	5	<b>305371</b>	10
		Short 45°	7/16"	<b>305337</b>	5	<b>305372</b>	10
		Short 65°	7/16"	<b>305338</b>	4	<b>305373</b>	10
		Short 90°	7/16"	<b>305339</b>	4	<b>305374</b>	10
	6.0mm x 1.0mm Taper Thread	Short Straight	7mm	<b>305340</b>	10	<b>305361</b>	10
		Short 45°	9mm	<b>305341</b>	5	<b>305362</b>	10
		Short 90°	9mm	<b>305342</b>	5	<b>305363</b>	10
	8.0mm x 1.0mm Taper Thread	Short Straight	9mm	<b>305343</b>	8	<b>305364</b>	10
		Short 45°	9mm	<b>305344</b>	5	<b>305365</b>	10
		Short – 90°	9mm	<b>305345</b>	5	<b>305366</b>	10
	10.0mm x 1.0mm Taper Thread	Short Straight	11mm	<b>305346</b>	6	<b>305367</b>	10
		Short 45°	11mm	<b>305347</b>	5	<b>305368</b>	10
		Short 90°	11mm	<b>305348</b>	5	<b>305369</b>	10
	Drive Fittings	For 3/16" Drill	Dia 5/16"	<b>305349</b>	10	–	–
		For 5/16" Drill	Dia 3/8"	<b>305350</b>	8	–	–
		For 1/4" Drill	Dia 11/32"	<b>305351</b>	10	–	–
	Button Head Grease Fittings Parallel Thread	1/4" x 19 BSP	0.6"	<b>305352</b>	3	–	–
		1/8" x 28 BSP	0.6"	<b>305353</b>	3	–	–
	Button Head Grease Fittings Taper Thread	1/8" 27 PTF SAE spl Short	5/8"	<b>305354</b>	3	–	–
		3/8" 18 NPTF	3/4"	<b>305355</b>	1	–	–
		1/4" 18 NPTF	5/8"	<b>305356</b>	2	–	–

GREASE NIPPLES & ACCESSORIES

GREASE NIPPLE SETS

IMPERIAL & METRIC

- Assorted grease nipples in various sizes
- Manufactured from EN-1A zinc plated steel and heat treated to QS9000 quality standards
- Suitable for various applications including automotive, industrial, agricultural etc
- Includes handy storage case with partitions for quick identification



Part No.	Description	Hex Size	Qty	
<b>305266</b>	SAE	27 NPT Straight	1/8"	30 pcs
		27 NPT 45° Angle	1/8"	15 pcs
		27 NPT 90° Angle	1/8"	15 pcs
		28 SAE LT Straight	1/4"	20 pcs
		28 SAE LT 45° Angle	1/4"	15 pcs
		28 SAE LT 90° Angle	1/4"	15 pcs



Part No.	Description	Hex Size	Qty	
<b>305267</b>	Metric	6 x 1.0mm Straight	7mm	30 pcs
		6 x 1.0mm 90° Angle	7mm	20 pcs
		8 x 1.0mm Straight	9mm	20 pcs
		8 x 1.0mm 90° Angle	9mm	20 pcs
		10 x 1.0mm Straight	11mm	20 pcs
		10 x 1.0mm 90° Angle	11mm	10 pcs



GREASE NIPPLE HANDY PACKS

IMPERIAL & METRIC

- Assorted grease nipple handy packs
- Available in SAE and Metric
- Suitable for various applications including automotive, industrial, agricultural etc
- Manufactured from EN-1A zinc plated steel and heat treated to QS9000 quality standards

Part No.	Description	Hex Size	Qty	
<b>305212</b>	SAE	1/4" 28 Straight	1/4"	4 pcs
		1/4" 28 45° Angle	1/4"	2 pcs
		1/4" 28 90° Angle	1/4"	2 pcs
<b>305213</b>	Metric	6 x 1.0mm Straight	7mm	4 pcs
		6 x 1.0mm 45° Angle	7mm	2 pcs
		6 x 1.0mm 90° Angle	7mm	2 pcs



STAINLESS STEEL GREASE NIPPLE SET

METRIC

- Assorted grease nipples in various sizes
- Manufactured from 303 stainless steel with stainless steel ball to QS9000 quality standards
- Suitable for marine applications
- Includes handy storage case with partitions for quick identification

Part No.	Description	Hex Size	Qty	
<b>305378</b>	Metric	6 x 1.0mm Straight	7mm	30 pcs
		6 x 1.0mm 45° Angle	7mm	15 pcs
		6 x 1.0mm 90° Angle	7mm	15 pcs
		8 x 1.0mm Straight	9mm	20 pcs
		8 x 1.0mm 45° Angle	9mm	15 pcs
		8 x 1.0mm 90° Angle	9mm	15 pcs

## GREASE NIPPLES & ACCESSORIES

### GREASE NIPPLE PROTECTIVE CAPS

- Protects lubricating grease nipples from contaminant such as dirt, saltwater etc.
- Colour coding suitable for grease style identification
- In-built collar slides onto the fitting, keeping the cap safely attached
- Caps fit all standard fittings for use with jaw type grease nipples
- Handy pack of 10 assorted caps also available (Part No. 305396)



Part No.	Colour	Qty
<b>305393</b>	Black	50
<b>305394</b>	Red	50
<b>305394B</b>	Red	1000
<b>305395</b>	Yellow	50
<b>305396</b>	Assorted (4 Black, 3 Red, 3 Yellow)	10

### GREASE NIPPLE EASY OUT TOOL

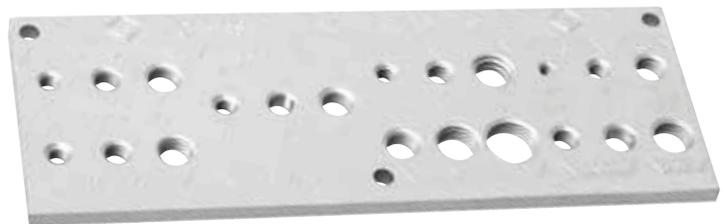
- Handy, dual-purpose tools for removing worn and broken grease fittings
- Can be used to re-tap holes to install new grease fittings
- Works with straight and angled fittings

Part No.	Description	Hex Size	Tap Re-threads
<b>305249</b>	Small easy out tool	7mm (5/16") & 9mm (3/8")	1/4" - 28
<b>305250</b>	Large easy out tool	9mm (3/8") & 11mm (7/16")	1/8" - 27



### GREASE NIPPLE THREAD GAUGE

- Aluminium construction with mounting holes
- Designed to check 21 of the most popular thread types
- Handy tool box accessory
- Grease nipple identification made easy
- Size: 207 x 75mm



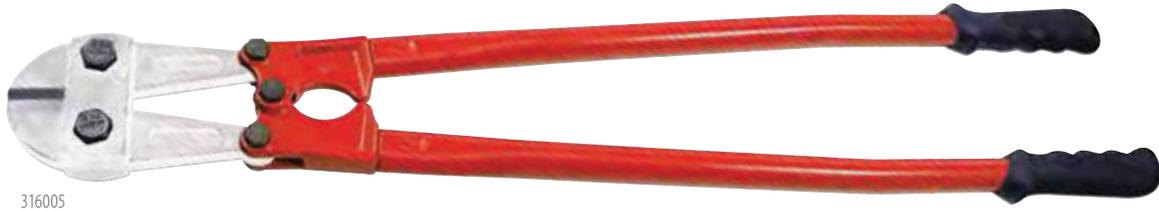
Part No.	Thread Type	Size	Thread Type	Size
<b>305016</b>	<b>NPT</b>	1/8"	<b>BSPT</b>	1/8"
	<b>METRIC</b>	M6 x 1	<b>UNF/ANF</b>	1/4"
	<b>METRIC</b>	M8 x 1	<b>BSW</b>	1/2"
	<b>METRIC</b>	M10 x 1	<b>BSF</b>	3/16"



# CUTTING & SHAPING

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## CUTTERS



316005

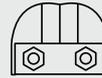
### BOLT CUTTERS PROFESSIONAL HEAVY DUTY

- Professional range of bolt cutters feature extra heavy duty jaws manufactured from special Chrome-Molybdenum steel for extra durability and reliable ongoing use
- Jaws can be adjusted by loosening nuts and rotating cam bolts
- Slim head centre cut jaw design enables close surface cutting
- Suitable for general purpose use with soft and medium metal applications
- Spare: Heavy duty replacement jaws available (per pair)

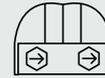
Part No.	Soft Metal	Medium Metal	Overall Length	Spare Jaws (pair)
<b>316002</b>	8mm (5/16")	6mm (1/4")	450mm	316002A
<b>316004</b>	13mm (1/2")	8mm (5/16")	750mm	316004A
<b>316005</b>	16mm (5/8")	10mm (7/16")	900mm	316005A



#### ADJUSTMENT OF BLADES



1. Loosen nuts on cam bolts about one complete turn (360°)



2. Align cutter jaws by rotating the cam bolts. Move arrows on cam bolt inward to close jaw. Tighten nuts.

**WARNING:** Do not cut over HRC 35 mild carbon steel or exceed the cutting capacity of this tool. Do not twist or pry with the tool while cutting.



316010



CC60A

### CABLE CUTTERS

- Curved blade design delivers a clean cut without causing distortion of the cable or frayed ends
- Manufactured from drop forged alloy steel with PVC dipped handles
- Not suitable for steel wire or wire ropes



Part No.	Cutting Capacity	Overall Length
<b>316009</b>	22mm <sup>2</sup>	150mm
<b>316010</b>	38mm <sup>2</sup>	200mm
<b>CC60A</b>	70mm <sup>2</sup>	230mm

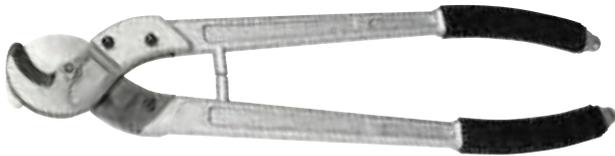


### CABLE CUTTERS HEAVY DUTY

- Heavy duty ratcheting cable cutter is spring loaded with plastic non-slip handles
- Ratcheting function enables efficient cutting of large cables
- Curved blade design delivers a clean cut without causing distortion of the cable or frayed ends
- Suitable for cutting single and multiple wires up to 32mm diameter
- Not suitable for steel wire or wire ropes



Part No.	Cutting Capacity	Overall Length
<b>316023</b>	32mm <sup>2</sup>	225mm



**CABLE CUTTERS**  
HEAVY DUTY LARGE

- Heavy duty large cable cutters with hardened and tempered chrome molybdenum blades
- Curved blade design delivers a clean cut without causing distortion of the cable or frayed ends
- Not suitable for steel wire or wire ropes

**CABLE TIE CUTTERS**  
PLASTIC & METAL

- Automatic tensioning and cut-off of cable ties to produce a safe, neat and professional finish
- Two options to cater for both plastic/nylon and metal cable ties



Part No.	Cutting Capacity	Overall Length
<b>316015</b>	60mm <sup>2</sup>	320mm
<b>316017</b>	250mm <sup>2</sup>	600mm
<b>316018</b>	400mm <sup>2</sup>	700mm

Part No.	Cutting Capacity (Width x Thickness)	Overall (Length x Width)
<b>302500</b>	5 x 2mm	160 x 20mm
<b>CTC2065</b>	12 x 0.3mm	220 x 100mm



**CUTTING | CRIMPING | SWAGING**

- For swaging copper or aluminium sleeves on to wire cables
- Features swaging, cutter and crimper head design to enable complete crimp and cut operation
- Heavy duty chrome vanadium jaws



Part No.	Length	Hole No.	Crimping Capacity	
			Metric	SAE
<b>316007</b>	350mm	1	1.58mm	1/16"
			2.00mm	5/64"
		2	2.38mm	3/32"
			2.78mm	7/64"
		3	3.00mm	1/8"
			3.50mm	9/64"



Part No.	Length	Hole No.	Crimping Capacity	
			Metric	SAE
<b>316008</b>	600mm	1	1.58mm	1/16"
			2.00mm	5/64"
		2	2.38mm	3/32"
			2.78mm	7/64"
		3	3.00mm	1/8"
			3.50mm	9/64"
		4	4.00mm	5/32"
			5.00mm	3/16"



# CUTTING & SHAPING

## CUTTERS



301120



301121



301122



### CUTTING SNIPS

AVIATION - LEFT, STRAIGHT & RIGHT CUT

- Serrated cutting blades are heat treated for superior strength, toughness and durability
- Suitable for use on cold rolled sheet steel up to 18 gauge
- Latch lock and hang hole for safe and easy storage
- Non-slip design with handle tabs
- Manufactured from chrome molybdenum

Part No.	Description	Handles	Jaw Opening	Overall Length
<b>301120</b>	Left cut	Red	8.5mm	250mm
<b>301121</b>	Straight cut	Yellow	8.5mm	250mm
<b>301122</b>	Right cut	Green	8.5mm	250mm



321026



301923



301028



308011



321041

### HOSE/PIPE CUTTERS

- Straight blade cutting for common rubber and PVC tube and hose
- Heavy duty hardened and ground sharp cutting stainless steel blades provide a clean and precise cut
- Suitable for cutting heater hose, airline hose, fuel and vacuum hose, PVC tubing and more
- Not suitable for metal cutting
- Spares: Replacement blade set 2 Pc. (Part No. 321026A)



Part No.	Description	Body	Cutting Capacity	Overall Length	Spares
<b>321026</b>	Precision angled cutter w/protractor & 3 blades	Plastic & steel	–	240mm	321026A
<b>308011</b>	Mini hose cutter E.g. A/C hose	Plastic	14mm	150mm	–
<b>301923</b>	Hose/pipe cutter	Plastic	25mm	210mm	–
<b>301028</b>	Hose/pipe cutter, ratcheting heavy duty	Steel	42mm	–	–
<b>321041</b>	Hose/pipe cutting mini saw (hardened alloy)	Plastic & rubber	–	220mm (open)	–



**EXHAUST PIPE CUTTERS**

- Specialty plier style cutters used to cut exhaust tubing easily without the need to exert pressure
- Chain with in-built roller cutters slice into the exhaust pipe tubing
- Spares: Replacement cutter chain (Part No. 312296)



Part No.	Handles	Cutting Capacity	Spares
<b>312295</b>	PVC dipped	82mm	312296



**NIPPERS**  
END CUTTING/CONCRETE

- Precision cutting edges for cutting and twisting steel fixing wire
- Suitable for most soft, medium and hard wires
- Manufactured from drop forged alloy steel for superior strength and durability



Part No.	Handles	Jaw Opening (Max)	Jaw Width	Overall Length
<b>EN8</b>	PVC dipped	14mm	31mm	200mm



301032



301033

**TUBE CUTTERS**

- Wide dual wheel roller design for neat and square tube cutting
- Metal construction with hardened SK2 alloy steel cutting wheel
- Suitable for use on plastic, brass, copper, aluminium and mild steel tubing
- Ideal for automotive, plumbing, industrial and hardware applications
- Tapered burr remover to clean piping after cutting (301033 only)
- Spares: Replacement blade set 2 Pc (Part No. 301142)



Part No.	Size Range	Spares
<b>301032</b>	3 - 15mm (1/8" - 9/16")	301142
<b>301033</b>	3 - 30mm (1/8" - 1 1/8")	301142



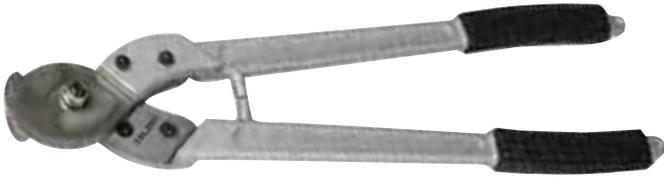
**POCKET CUTTERS**  
GENERAL PURPOSE

- Universal application cutters for general use on mild and hard steel applications
- Slim head centre cut jaw design enables close surface cutting
- Spring return for single handed operation and locking ring on handles
- Plastic handles with hardened and tempered jaws for superior strength and durability

Part No.	Cut Type	Mild Steel (HRC)	Mild Steel (HRC 40)	Overall Length
<b>316006</b>	Centre cut	4mm (5/32")	1.6mm (4/64")	200mm

# CUTTING & SHAPING

## CUTTERS



### WIRE ROPE CUTTERS

#### HEAVY DUTY

- Heavy duty wire rope cutters with curved blade design deliver a clean cut without causing distortion of the cable or frayed ends
- Robust construction with hardened and tempered chrome molybdenum cutting blades for superior strength and durability
- Suitable for use on wire rope and other multi-strand cable applications

Part No.	Steel Wire Rope	Aluminium & Copper	Mild Steel Rod	Overall Length
<b>316012</b>	7mm	60mm <sup>2</sup>	5mm	300mm
<b>316013</b>	10mm	100mm <sup>2</sup>	7mm	400mm

### WIRE ROPE & SPRING WIRE CUTTERS

- Triangular cutting blade design delivers a clean cut without causing distortion of the cable or frayed ends
- Spring return and locking latch for single handed operation
- Hardened and tempered cutting blades



Part No.	Handles	Jaw Opening (Max)	Steel Wire Rope	Aluminium & Copper	Overall Length
<b>316022</b>	PVC dipped	8mm	5mm	6mm <sup>2</sup>	190mm

## ELECTRICAL CUTTING



### CUTTER & STRIPPER

#### WIRE RAPID ACTION

- Handy specialised tool designed to strip wires quickly and efficiently
- Self-adjusting hardened steel stripping blade that automatically selects the proper position
- Narrow reinforced fibreglass and nylon construction ensures long service life and easy access into confined spaces
- Lightweight and ergonomic design makes for easy stripping and cutting work
- Suitable for solid or stranded wires



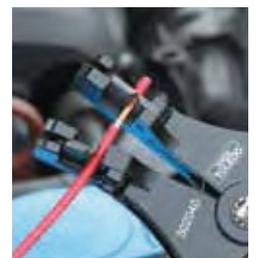
Part No.	Stripping Range	Cutting Range	Overall Length	Weight
<b>302039</b>	0.2 - 6mm <sup>2</sup> /10 to 24 AWG	2mm <sup>2</sup> /14 AWG	190mm	123g



### CUTTER & STRIPPER

#### WIRE QUICK ACTION

- Quick-action stripping tool designed to remove the insulation in one single motion without damaging the wire
- Unique clamp design holds wire in place while the lever action strips away the insulation
- Composite rubber and plastic handle provides comfort during extended use
- Zinc alloy die cast stripping head and S45C carbon steel body for maximum service life
- SK5 stripping and cutting blades ensure smooth operation every use



Part No.	Stripping Range	Cutting Range	Overall Length
<b>302040</b>	0.5 - 8mm <sup>2</sup>	6mm <sup>2</sup> /10 AWG	170mm



**ELECTRONICS CUTTERS**

MINI

- Mini electronics cutters for small and delicate jobs
- Hardened precision cutting edges for cutting and twisting soft wire
- Ergonomically designed with spring loaded jaws and durable rubber or PVC dipped handles
- Ideal for work with limited space and in confined areas, handling small objects, components and wires
- Various styles and sizes available
- Not suitable for live electrical work



Part No.	Description	Handles	Cut Type	Jaw Opening (Max)	Jaw Length	Overall Length
<b>EEC110</b>	Mini electronics end cutter	Rubber moulded	Bevel	9mm	13mm	110mm
<b>302041</b>	Mini electronics end cutter	Rubber moulded	Bevel	9mm	13mm	125mm
<b>321006</b>	Mini electronics precision cutter/Oblique end cutter	Rubber/Plastic moulded	Flush	15mm	11mm	135mm
<b>PC6</b>	Precision cutter	PVC dipped	Flush	20mm	20mm	150mm



**CUTTER & STRIPPER**

CABLE

- Cable cutter and stripper with adjustable stripping knife in handle for longitudinal stripping
- Curved blade and dual ground cutting blades
- SK5 carbon steel stripping knife in handle with adjustable knob for depth enables removal of insulation longitudinally without damaging the cables
- Composite rubber and plastic handle provides comfort during extended use
- Manufactured from high grade carbon steel with black phosphate finish and SK5 steel blade in handle



Part No.	Stripping Range	Cutting Capacity	Overall Length
<b>302035</b>	0.5, 1.0, 1.5, 2.5, 4.0, 6.0mm <sup>2</sup>	11mm	160mm

# CUTTING & SHAPING

## DRILL ACCESSORIES



321035



321036



321037



321038

### COUNTERSINK DRILL BITS

- Provides flush mount for countersunk screws
- Ultra heavy duty for longevity
- Manufactured from hardened and tempered Japanese carbon steel
- Made in Japan

Part No.	Description	Applications	Head Diameter	Shank Diameter	Overall Length
<b>321035</b>	Light duty countersink	Plastics & wood	Ø 12.5mm	Ø 6mm	38mm
<b>321036</b>	Heavy duty countersink	Plastics, mild steel, wood & aluminium	Ø 13mm	Ø 6mm	53mm

### ROUTER & ROTARY FILE DRILL BITS

- Router drill bit: Specialty tool for enlarging and shaping holes, scroll cutting and smoothing
- Rotary file drill bit: Specialty tool for milling, filing and shaping metal
- Made of solid carbide for 30 times longer life than a normal steel bit
- Made in Japan

Part No.	Description	Shank Diameter	Overall Length
<b>321037</b>	Router drill bit	Ø 6mm	95mm
<b>321038</b>	Rotary file drill bit	Ø 6mm	95mm

## KNIVES



321301



SK4



TTK1



SK3



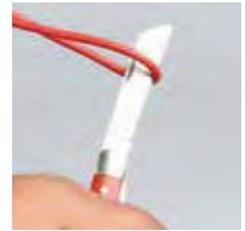
SK5



AIK35



2BKZ



### PROFESSIONAL KNIVES RANGE

- Professional range of knives to suit all heavy duty applications
- Handy compact sized knives with stainless steel blades and blade lock functions

Part No.	Description	Handle x Length	Blade 1 (Length x Thickness)	Blade 2	Blade 3	Weight
<b>321301</b>	Pocket knife - single blade lock back	S/S x 90mm	Drop point: 60 x 2.0mm	-	-	60g
<b>SK3</b>	Stock knife - triple blade slip joint lock	Wood x 85mm	Clip point: 65 x 2mm	Sheep foot: 50 x 1mm	Pen blade: 45 x 1mm	51g
<b>SK4</b>	Stock knife - single blade lock back w/leather pouch	Wood x 110mm	Clip point: 80 x 2.5mm	-	-	104g
<b>SK5</b>	Stock knife - single blade lock back w/leather pouch	Wood x 127mm	Clip point: 100 x 3.0mm	-	-	230g
<b>TTK1</b>	Technician's single blade folding knife	Wood x 115mm	70 x 2.5mm	-	-	100g
<b>AIK35</b>	Technician's single blade folding knife	Zytel x 115mm	70 x 2.0mm	-	-	90g
<b>2BKZ</b>	Stock knife - twin blade slip joint lock	Wood x 88mm	Clip point: 60 x 2.5mm	Spey point: 65 x 2.5mm	-	75g



Part No.	Description	Handle x Length	Blade (Length x Thickness)	Weight
<b>BMK3B</b>	Bootmaker's knife	Wood x 100mm	110 x 0.4mm	39g
<b>BMK4B</b>	Food processor's knife	Plastic x 100mm	110 x 0.4mm	45g
<b>FHK1S</b>	Outdoor knife w/plastic sheath	Plastic x 110mm	150 x 1.5mm	128g

SCISSORS



**SCISSORS**  
GENERAL PURPOSE

■ Various general purpose scissors for miscellaneous cutting work

Part No.	Description	Blades	Handle	Blade Length	Overall Length
<b>8045BU</b>	Household scissors (bulk)	Forged steel nickel plated	Steel	50mm	120mm
<b>8045CD</b>	Household scissors (Individual carded)	Forged steel nickel plated	Steel	50mm	120mm
<b>806BU</b>	Household scissors	Forged steel nickel plated	Steel	65mm	158mm
<b>807BU</b>	Household scissors	Forged steel nickel plated	Steel	75mm	175mm
<b>TSH160CD</b>	Household scissors	Stainless steel	Acrylic	75mm	160mm
<b>TSE120CD</b>	Embroidery scissors w/sharp pointed blades	Stainless steel	Acrylic	40mm	125mm
<b>AKS130BU</b>	Children's scissors - semi sharp w/graduations	Stainless steel	Plastic	45mm	130mm
<b>36375BU</b>	Hairdresser's scissors w/finger rest	Forged steel nickel plated	Steel	75mm	200mm

## CUTTING & SHAPING

### SCISSORS



1008BU



1068BU



10610BU



10612BU



10610BU

### SCISSORS/SHEARS DRESSMAKERS & TAILORS

- Professional range designed for cutting through a wide range of materials
- Offset handles from the blades to allow cutting of fabric etc. against flat surfaces without distortion
- Large bowed bottom handle for easy shearing and glide cutting

Part No.	Description	Blades	Handle	Blade Length	Overall Length
<b>1008BU</b>	Dressmaker's shears	Forged steel nickel plated	Steel	90mm	200mm
<b>1068BU</b>	Dressmaker's shears	Forged steel nickel plated	Steel, black finished	90mm	200mm
<b>10610BU</b>	Dressmaker's shears	Forged steel nickel plated	Steel, black finished	100mm	250mm
<b>10612BU</b>	Dressmaker's shears	Forged steel nickel plated	Steel, black finished	150mm	300mm
<b>TLSD210CD</b>	Tailor's scissors, left handed	Stainless steel	Acrylic	85mm	215mm

### SCRAPERS & BLADES



301007



301278

### GASKET SCRAPERS

- For the removal of old gaskets, silicone sealants, gasket residue, carbon, ingrained dirt etc.
- Ideal tool for scraping cylinder heads, blocks, transmission cases, diff housings and metal surfaces
- Hardened and tempered carbon steel with satin chrome finish and plastic comfort grip handles

Part No.	Description	Blade Width	Overall Length
<b>301007</b>	Gasket scraper single	25mm	280mm
<b>301278</b>	Gasket scraper set 3 Pc.	20, 25, 40mm	280mm



**SCRAPER SET**  
STRIKE-THRU STAINLESS STEEL 3 PIECE

- General purpose stainless steel blade scrapers
- Heavy duty design with robust handle design and striking head
- Hang hole for easy storage



Part No.	Contents	Blade Width	Overall Length
<b>301651</b>	Scraper - Bent	30mm	220mm
	Scraper - Straight	30mm	220mm
	Scraper - Straight	50mm	220mm

**SCRAPER SET**  
NYLON GENERAL PURPOSE 4 PIECE

- General purpose nylon scrapers useful for delicate tasks such as removing badges, mouldings, decals, silicone gaskets, plastic parts, alloy wheel balancing weights etc.
- Manufactured from reinforced nylon for maximum strength and durability

Part No.	Contents	Blade Width	Overall Length
<b>321031</b>	Scraper - Straight flat	48mm	230mm
	Scraper - Straight split	14 x 20 x 14mm	230mm
	Scraper - Angled 45° flat	48mm	230mm
	Scraper - Angled 45° split	14 x 20 x 14mm	230mm

**SCRAPERS**  
RAZOR BLADE

- Professional scrapers with stainless steel blades
- Replacement blades suit 301162 & 301247



Part No.	Description	Blades	Blade Width	Overall Length
<b>WSCR</b>	Fixed body disposable scraper	1 x Stainless Steel	55mm	150mm
<b>301162</b>	Swivel body scraper	1 x Stainless Steel	40mm	200mm (open)
<b>301247</b>	Long reach scraper w/storage chamber	3 x Stainless Steel, 3 x Plastic	40mm	280mm
<b>301250</b>	Stainless steel blades	12 x Stainless Steel	40mm	-
<b>301248</b>	Stainless steel blades	100 x Stainless Steel	40mm	-
<b>301249</b>	Plastic safety blades	100 x Plastic	40mm	-

# CUTTING & SHAPING

## TOLEDO FILES & RASPS

- Premium range of high quality files and rasps suitable for the trade professional
- Long history of manufacturing with all items made in Portugal and Austria since 1856
- Better gripping, longer lasting files made using advanced technologies and superior workmanship
- Manufactured from high quality chromium alloy steel, individually hardened up to 64 HRC
- Feature a unique anti-rust protective oil coating to ensure the integrity of the file regardless of how long it is stored
- Comprehensive range delivers outstanding results while maximising efficiency
- Stock available in either bulk with no handles, or hang sell carded with handles and various sets and merchandising options

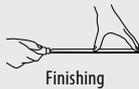
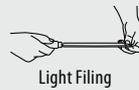
### FILE GRADES

- Smooth: Fine
- Second Cut: Medium
- Bastard Cut: Coarse

### FILE HINTS FOR BEST RESULTS

- Select the correct file for the material and surface finish required
  - For harder surfaces** use second cut or smooth cut files
  - For softer surfaces** use coarse cut or bastard cut files
- Grip the file firmly. Exert pressure for filing on the forward stroke only. Do not use the file during backward movement
- Protect file teeth from uneven striking against hard surfaces
- To prolong the life of the file, clean the file teeth between jobs with a suitable wire brush (or file card) and store in a dry place
- Be safe. Always wear safety goggles

#### Suggested Grips



#### File Techniques



### FILE & RASP HANDLES

- Toledo handles have been developed with extra focus on matching the quality of the file and rasp
- Toledo handles are extra durable, bi-component for strength and comfort, ergonomically designed, oil resistant and feature specially tapered hang holes for a firm, secure and safe grip with specified file
- Always refer to handle reference for correct handle application
- Toledo file handles are made in France

Part No.	Plug Hole Specifications (Diameter x Depth x Diameter)	Handle Ref.	Image
<b>BFHNDLR1</b>	Ø 4.0 x 45 x Ø 2.8mm	1	
<b>BFHNDLR3</b>	Ø 5.4 x 45 x Ø 2.5mm	3	
<b>BFHNDLR4</b>	Ø 6.5 x 50 x Ø 2.8mm	4	
<b>BFHNDLR5</b>	Ø 7.7 x 60 x Ø 4.0mm	5	
<b>BFHNDLR8</b>	Ø 9.3 x 50 x Ø 5.1mm	8	
<b>BFHNDLR9</b>	Ø 10.6 x 60 x Ø 5.7mm	9	
<b>BFHNDLHRR</b>	Specialty Horse Rasp Handle- plastic	HRR	

## ENGINEER'S FLAT FILES

- Rectangular files, double cut on both faces and single cut on edges
- Tapered in width and thickness at the point to enable better access to confined and tight spot areas
- Suitable for use on flat and curved external surfaces
- Ideal for smoothing, removing burrs and sharp edges

Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Width (A)	Thickness (B)	Handle Ref.
Part No.	Qty	Part No.	Qty						
<b>06FL01CD</b>	1	<b>06FL01BU</b>	12	Flat file	Bastard	150mm	15mm	3.5mm	1
<b>06FL02CD</b>	1	<b>06FL02BU</b>	12	Flat file	Second cut	150mm	15mm	3.5mm	1
<b>06FL03CD</b>	1	<b>06FL03BU</b>	12	Flat file	Smooth	150mm	15mm	3.5mm	1
<b>08FL01CD</b>	1	<b>08FL01BU</b>	12	Flat file	Bastard	200mm	20mm	4.5mm	5
<b>08FL02CD</b>	1	<b>08FL02BU</b>	12	Flat file	Second cut	200mm	20mm	4.5mm	5
<b>08FL03CD</b>	1	<b>08FL03BU</b>	12	Flat file	Smooth	200mm	20mm	4.5mm	5
<b>10FL01CD</b>	1	<b>10FL01BU</b>	12	Flat file	Bastard	250mm	24mm	6.0mm	8
<b>10FL02CD</b>	1	<b>10FL02BU</b>	12	Flat file	Second cut	250mm	24mm	6.0mm	8
<b>10FL03CD</b>	1	<b>10FL03BU</b>	12	Flat file	Smooth	250mm	24mm	6.0mm	8
<b>12FL01CD</b>	1	<b>12FL01BU</b>	6	Flat file	Bastard	300mm	29mm	6.5mm	9
<b>12FL02CD</b>	1	<b>12FL02BU</b>	6	Flat file	Second cut	300mm	29mm	6.5mm	9
<b>12FL03CD</b>	1	<b>12FL03BU</b>	6	Flat file	Smooth	300mm	29mm	6.5mm	9
<b>14FL02CD</b>	1	<b>14FL02BU</b>	6	Flat file	Smooth	350mm	33.5mm	7.5mm	9
<b>16FL02CD</b>	1	<b>16FL02BU</b>	6	Flat file	Smooth	400mm	37.5mm	8.5mm	9



## ENGINEER'S SQUARE FILES

- Square files, double cut on all four sides
- Tapered in width for better access to confined and tight spot areas
- Suitable for use on internal flats and surface work
- Ideal for filing keyways, slots, square and rectangular holes

Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Thickness	Handle Ref.
Part No.	Qty	Part No.	Qty					
<b>04SQ01CD</b>	1	<b>04SQ01BU</b>	12	Square file	Bastard	100mm	3.8mm	1
<b>04SQ02CD</b>	1	<b>04SQ02BU</b>	12	Square file	Second cut	100mm	3.8mm	1
<b>04SQ03CD</b>	1	<b>04SQ03BU</b>	12	Square file	Smooth	100mm	3.8mm	1
<b>06SQ01CD</b>	1	<b>06SQ01BU</b>	12	Square file	Bastard	150mm	5.6mm	1
<b>06SQ02CD</b>	1	<b>06SQ02BU</b>	12	Square file	Second cut	150mm	5.6mm	1
<b>06SQ03CD</b>	1	<b>06SQ03BU</b>	12	Square file	Smooth	150mm	5.6mm	1
<b>08SQ01CD</b>	1	<b>08SQ01BU</b>	12	Square file	Bastard	200mm	7.5mm	4
<b>08SQ02CD</b>	1	<b>08SQ02BU</b>	12	Square file	Second cut	200mm	7.5mm	4
<b>08SQ03CD</b>	1	<b>08SQ03BU</b>	12	Square file	Smooth	200mm	7.5mm	4
<b>10SQ01CD</b>	1	<b>10SQ01BU</b>	12	Square file	Bastard	250mm	9.5mm	5
<b>10SQ02CD</b>	1	<b>10SQ02BU</b>	12	Square file	Second cut	250mm	9.5mm	5
<b>10SQ03CD</b>	1	<b>10SQ03BU</b>	12	Square file	Smooth	250mm	9.5mm	5
<b>12SQ01CD</b>	1	<b>12SQ01BU</b>	6	Square file	Smooth	300mm	11.5mm	8
<b>12SQ02CD</b>	1	<b>12SQ02BU</b>	6	Square file	Smooth	300mm	11.5mm	8
<b>12SQ03CD</b>	1	<b>12SQ03BU</b>	6	Square file	Smooth	300mm	11.5mm	8
<b>14SQ03CD</b>	1	<b>14SQ03BU</b>	6	Square file	Smooth	350mm	14.5mm	9



## ENGINEER'S THREE SQUARE FILES

- Three square files, equal sectioned, double cut on all three sides
- Sharp corners are slightly set and cut
- Suitable for filing acute angles, internal corners, clearing out square corners
- Ideal for filing internal angles more acute than a right angle

Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Thickness	Handle Ref.
Part No.	Qty	Part No.	Qty					
<b>04TSQ01CD</b>	1	<b>04TSQ01BU</b>	12	Three square file	Bastard	100mm	7.0mm	1
<b>04TSQ02CD</b>	1	<b>04TSQ02BU</b>	12	Three square file	Second cut	100mm	7.0mm	1
<b>04TSQ03CD</b>	1	<b>04TSQ03BU</b>	12	Three square file	Smooth	100mm	7.0mm	1
<b>06TSQ01CD</b>	1	<b>06TSQ01BU</b>	12	Three square file	Bastard	150mm	10.0mm	3
<b>06TSQ02CD</b>	1	<b>06TSQ02BU</b>	12	Three square file	Second cut	150mm	10.0mm	3
<b>06TSQ03CD</b>	1	<b>06TSQ03BU</b>	12	Three square file	Smooth	150mm	10.0mm	3
<b>08TSQ01CD</b>	1	<b>08TSQ01BU</b>	12	Three square file	Bastard	200mm	14.0mm	5
<b>08TSQ02CD</b>	1	<b>08TSQ02BU</b>	12	Three square file	Second cut	200mm	14.0mm	5
<b>08TSQ03CD</b>	1	<b>08TSQ03BU</b>	12	Three square file	Smooth	200mm	14.0mm	5
<b>10TSQ01CD</b>	1	<b>10TSQ01BU</b>	12	Three square file	Bastard	250mm	17.0mm	8
<b>10TSQ02CD</b>	1	<b>10TSQ02BU</b>	12	Three square file	Second cut	250mm	17.0mm	8
<b>10TSQ03CD</b>	1	<b>10TSQ03BU</b>	12	Three square file	Smooth	250mm	17.0mm	8
<b>12TSQ01CD</b>	1	<b>12TSQ01BU</b>	6	Three square file	Bastard	300mm	20.0mm	9
<b>12TSQ02CD</b>	1	<b>12TSQ02BU</b>	6	Three square file	Second cut	300mm	20.0mm	9
<b>12TSQ03CD</b>	1	<b>12TSQ03BU</b>	6	Three square file	Smooth	300mm	20.0mm	9
<b>14TSQ02CD</b>	1	<b>14TSQ02BU</b>	6	Three square file	Second cut	350mm	23.0mm	9

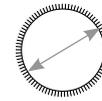


## ENGINEER'S FILES

### ENGINEER'S ROUND FILES

- Round files with double spiral cut
- Tapered towards point to enable use on variable sized holes
- Suitable for internal and external concave surfaces
- Ideal for enlarging circular holes or rounded grooves which are too small for a half round file

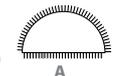
Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Diameter	Handle Ref.
Part No.	Qty	Part No.	Qty					
04RD01CD	1	04RD01BU	12	Round file	Bastard	100mm	0 4.0mm	1
04RD02CD	1	04RD02BU	12	Round file	Second cut	100mm	0 4.0mm	1
04RD03CD	1	04RD03BU	12	Round file	Smooth	100mm	0 4.0mm	1
06RD01CD	1	06RD01BU	12	Round file	Bastard	150mm	0 5.5mm	1
06RD02CD	1	06RD02BU	12	Round file	Second cut	150mm	0 5.5mm	1
06RD03CD	1	06RD03BU	12	Round file	Smooth	150mm	0 5.5mm	1
08RD01CD	1	08RD01BU	12	Round file	Bastard	200mm	0 7.5mm	4
08RD02CD	1	08RD02BU	12	Round file	Second cut	200mm	0 7.5mm	4
08RD03CD	1	08RD03BU	12	Round file	Smooth	200mm	0 7.5mm	4
10RD01CD	1	10RD01BU	12	Round file	Bastard	250mm	0 9.5mm	5
10RD02CD	1	10RD02BU	12	Round file	Second cut	250mm	0 9.5mm	5
10RD03CD	1	10RD03BU	12	Round file	Smooth	250mm	0 9.5mm	5
12RD01CD	1	12RD01BU	6	Round file	Bastard	300mm	0 11.5mm	8
12RD02CD	1	12RD02BU	6	Round file	Second cut	300mm	0 11.5mm	8
12RD03CD	1	12RD03BU	6	Round file	Smooth	300mm	0 11.5mm	8
14RD02CD	1	14RD02BU	6	Round file	Second cut	350mm	0 14.5mm	9
16RD02CD	1	16RD02BU	6	Round file	Second cut	400mm	0 17.5mm	9



### ENGINEER'S HALF ROUND FILES

- Half round files, double cut on both sides
- Tapered in width and thickness at the point to allow for better access to confined and tight spot areas
- Spiral cut enables rapid removal of metal while leaving a smooth finish
- Suitable for use in concave surfaces, crevices, rounding of holes and flat filing

Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Width (A)	Thickness (B)	Handle Ref.
Part No.	Qty	Part No.	Qty						
04HR01CD	1	04HR01BU	12	Half round file	Bastard	100mm	10mm	3.0mm	1
04HR02CD	1	04HR02BU	12	Half round file	Second cut	100mm	10mm	3.0mm	1
04HR03CD	1	04HR03BU	12	Half round file	Smooth	100mm	10mm	3.0mm	1
06HR01CD	1	06HR01BU	12	Half round file	Bastard	150mm	15mm	4.0mm	3
06HR02CD	1	06HR02BU	12	Half round file	Second cut	150mm	15mm	4.0mm	3
06HR03CD	1	06HR03BU	12	Half round file	Smooth	150mm	15mm	4.0mm	3
08HR01CD	1	08HR01BU	12	Half round file	Bastard	200mm	20mm	5.5mm	5
08HR02CD	1	08HR02BU	12	Half round file	Second cut	200mm	20mm	5.5mm	5
08HR03CD	1	08HR03BU	12	Half round file	Smooth	200mm	20mm	5.5mm	5
10HR01CD	1	10HR01BU	12	Half round file	Bastard	250mm	24mm	7.0mm	8
10HR02CD	1	10HR02BU	12	Half round file	Second cut	250mm	24mm	7.0mm	8
10HR03CD	1	10HR03BU	12	Half round file	Smooth	250mm	24mm	7.0mm	8
12HR01CD	1	12HR01BU	6	Half round file	Bastard	300mm	29mm	8.2mm	9
12HR02CD	1	12HR02BU	6	Half round file	Second cut	300mm	29mm	8.2mm	9
12HR03CD	1	12HR03BU	6	Half round file	Smooth	300mm	29mm	8.2mm	9
14HR02CD	1	14HR02BU	6	Half round file	Second cut	350mm	34mm	9.5mm	9
16HR02CD	1	16HR02BU	6	Half round file	Second cut	400mm	34mm	11.0mm	9



ENGINEER'S FILE SETS

- File sets consist of one half round, round, flat and square file
- Supplied in hang sell boxes with custom plastic tray inserts
- Refer table for full contents listing and details



Description	Engineers' File Set 200mm - 4PC			Engineers' File Set 250mm - 4PC			Engineers' File Set 300mm - 4PC			Automotive Set 250mm - 4PC	
Part No.	TFR2001	TFR2002	TFR2003	TFR2501	TFR2502	TFR2503	TFR3001	TFR3002	TFR3003	TFR250B	
	Contents			Contents			Contents			Contents	
Cut	Bastard	Second	Smooth	Bastard	Second	Smooth	Bastard	Second	Smooth	Bastard	Second
Flat	08FL01CD	08FL02CD	08FL03CD	10FL01CD	10FL02CD	10FL03CD	12FL01CD	12FL02CD	12FL03CD	10FL01CD	–
Round	08RD01CD	08RD02CD	08RD03CD	10RD01CD	10RD02CD	10RD03CD	12RD01CD	12RD02CD	12RD03CD	–	10RD02CD
Square	08SQ01CD	08SQ02CD	08SQ03CD	10SQ01CD	10SQ02CD	10SQ03CD	12SQ01CD	12SQ02CD	12SQ03CD	–	10SQ02CD
Half Round	08HR01CD	08HR02CD	08HR03CD	10HR01CD	10HR02CD	10HR03CD	12HR01CD	12HR02CD	12HR03CD	–	10HR02CD

MERCHANDISERS

- Toledo file merchandisers are fully adjustable to suit common in-store displays including peg board and slat wall
- Featuring a series of 10"/250mm or 12"/300mm in popular styles, total of 24 files per merchandiser



Part No.	TFM01				TFM02			
File Length	250mm				300mm			
	Contents				Contents			
Cut	Second	Qty	Smooth	Qty	Second	Qty	Smooth	Qty
Flat files	10FL02CD	3	10FL03CD	3	12FL02CD	3	12FL03CD	3
Half round files	10HR02CD	3	10HR03CD	3	12HR02CD	3	12HR03CD	3
Round files	10RD02CD	3	10RD03CD	3	12RD02CD	3	12RD03CD	3
Triangular files	10ST02CD	3	–	–	10ST02CD	3	–	–
Square files	10SQ02CD	3	–	–	12SQ02CD	3	–	–

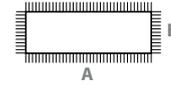


# CUTTING & SHAPING

## WARDING FILES

### WARDING FILES

- Double cut, thinner than ordinary files tapered inwards towards point
- Ideal for use on internal surfaces where traditional file widths are too wide
- Commonly used by locksmiths in filing the wards in locks and keys
- Also used for narrow slotting and working on detailed and complex shapes
- Suitable for light and delicate tasks, especially in tool and mould making



Individual (Carded - With Handle)		Bulk (Boxed - No Handle)							
Part No.	Qty	Part No.	Qty	Description	Cut	Length	Width (A)	Thickness (B)	Handle Ref.
<b>04WF01CD</b>	1	<b>04WF01BU</b>	6	Warding file	Bastard	100mm	11mm	1.4mm	1
<b>04WF02CD</b>	1	<b>04WF02BU</b>	6	Warding file	Second cut	100mm	11mm	1.4mm	1
<b>04WF03CD</b>	1	<b>04WF03BU</b>	6	Warding file	Smooth	100mm	11mm	1.4mm	1
<b>06WF01CD</b>	1	<b>06WF01BU</b>	6	Warding file	Bastard	150mm	16mm	2.0mm	3
<b>06WF02CD</b>	1	<b>06WF02BU</b>	6	Warding file	Second cut	150mm	16mm	2.0mm	3
<b>06WF03CD</b>	1	<b>06WF03BU</b>	6	Warding file	Smooth	150mm	16mm	2.0mm	3
<b>08WF01CD</b>	1	<b>08WF01BU</b>	6	Warding file	Bastard	200mm	20mm	2.5mm	5
<b>08WF02CD</b>	1	<b>08WF02BU</b>	6	Warding file	Second cut	200mm	20mm	2.5mm	5
<b>08WF03CD</b>	1	<b>08WF03BU</b>	6	Warding file	Smooth	200mm	20mm	2.5mm	5

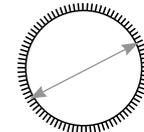


## SAW FILES

### CHAIN SAW FILES

#### ROUND

- Round chainsaw files for manual sharpening of chain saws
- Provides fast score free sharpening of chain saw teeth by removing stock sparingly
- Precision spiral cut design and shaping for efficient filing
- Evenly toothed spacing to maximise cutting performance and service life



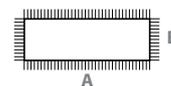
Individual (Carded - With Handle)		Bulk (Boxed - No Handle)					
Part No.	Qty	Part No.	Qty	Description	Length	Diameter	Handle Ref.
<b>06CH1002CD</b>	1	<b>06CH1002BU</b>	12	Chain saw file	200mm	Ø 4.0mm	1
<b>08CH1202CD</b>	1	<b>08CH1202BU</b>	12	Chain saw file	200mm	Ø 4.8mm	1
<b>08CH1402CD</b>	1	<b>08CH1402BU</b>	12	Chain saw file	200mm	Ø 5.5mm	1
<b>08CH1602CD</b>	1	<b>08CH1602BU</b>	12	Chain saw file	200mm	Ø 6.3mm	1



### MILL SAW FILES

#### TAPERED, DUAL SQUARE EDGE

- Rectangular files with single cut for use in both engineering and sharpening applications
- Suitable for applications where a smooth finish is important
- Ideal for draw and fine filing, polishing and deburring work including sharpening circular, felling and gang saws and other tools that require a fine finish

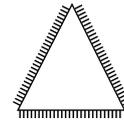


Individual (Carded - With Handle)		Bulk (Boxed - No Handle)							
Part No.	Qty	Part No.	Qty	Description	Cut	Length	Width (A)	Thickness (B)	Handle Ref.
<b>060302CD</b>	1	<b>060302BU</b>	12	Tapered mill saw file	Second cut	150mm	15mm	2.5mm	3
<b>080302CD</b>	1	<b>080302BU</b>	12	Tapered mill saw file	Second cut	200mm	20mm	3.5mm	5
<b>100302CD</b>	1	<b>100302BU</b>	12	Tapered mill saw file	Second cut	250mm	24mm	4.0mm	8
<b>120302CD</b>	1	<b>120302BU</b>	6	Tapered mill saw file	Second cut	300mm	29mm	5.5mm	9



TAPER SAW FILES

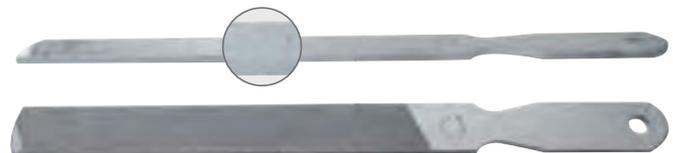
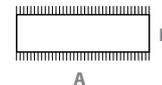
- Single cut, triangular in shape and tapered towards the point
- Commonly used for sharpening cross-cut and buck saws, handsaws, circular saws and narrow band
- Regular taper saw files are commonly used to sharpen narrow band saw teeth and maintain round gullets
- Slim taper saw files are commonly used for sharpening small circular saws, buck saw blades and cross-cut saws
- Extra slim taper files are designed to dress-out wide band saw gullets after gumming
- Double extra slim files are primarily used for sharpening handsaws, circular saws, narrow band, cross-cut and buck saws
- Available in four cross sections: Regular, slim, extra slim and double extra slim



Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Thickness	Handle Ref.
Part No.	Qty	Part No.	Qty					
04ST02CD	1	04ST02BU	12	Slim taper saw	Second cut	100mm	5.0mm	3
06STR02CD	1	06STR02BU	6	Regular taper saw	Second cut	150mm	12.3mm	3
10STR02CD	1	10STR02BU	6	Regular taper saw	Second cut	250mm	17.0mm	8
06ST02CD	1	06ST02BU	12	Slim taper saw	Second cut	150mm	9.0mm	3
10ST02CD	1	10ST02BU	12	Slim taper saw	Second cut	250mm	13.5mm	8
06EX02CD	1	06EX02BU	6	Extra slim taper saw	Second cut	150mm	7.0mm	1
08EX02CD	1	08EX02BU	6	Extra slim taper saw	Second cut	200mm	9.8mm	8
06EXX02CD	1	06EXX02BU	6	Double extra slim taper saw	Second cut	150mm	6.5mm	1

FARMER'S OWN SAW FILES

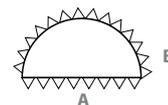
- Special files designed specifically for use in farming, gardening, rural and DIY applications
- Single and double cut for varying applications and incorporates inbuilt handle with hanging hole
- Single cut: Suitable for filing of flat surfaces and fine sharpening of tools requiring a smoother finish
- Double cut: Suitable for flat surfaces and rough sharpening of edges on varying tools and implements E.g. spades, mower blades, axes, hoes etc.



Built in handle		Description	Cut	Length	Width (A)	Thickness (B)
Part No.	Qty					
08FW02BU	6	Farmers own file	Second cut	200mm	25mm	4.5mm
10FW02BU	6	Farmers own file	Second cut	250mm	25mm	4.5mm

CABINET RASPS

- Half round tapered rasp with rasp cut on both faces
- Flatter and wider than a half round rasp
- Suitable for work with soft materials such as wood, plywood, fibreglass, soft metals, plastic, wallboard etc.



Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Width (A)	Thickness (B)	Handle Ref.
Part No.	Qty	Part No.	Qty						
101502CD	1	101502BU	12	Cabinet rasp	Second cut	250mm	24mm	5.0mm	8
121502CD	1	121502BU	12	Cabinet rasp	Second cut	300mm	50mm	6.0mm	8

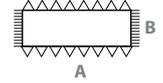
## RASPS

### FLAT RASPS

- Rectangular tapered rasp with rasp cut on both faces and file cut on both edges
- Suitable for work with soft materials such as wood, plywood, fibreglass, soft metals, plastic, wallboard etc.



Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Width (A)	Thickness (B)	Handle Ref.
Part No.	Qty	Part No.	Qty						
<b>131502CD</b>	1	<b>131502BU</b>	6	Flat rasp	Second cut	250mm	24mm	5.0mm	8

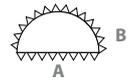


### HALF ROUND RASPS

- Half round tapered rasp with rasp cut on both faces
- Suitable for work with soft materials such as wood, plywood, fibreglass, soft metals, plastic, wallboard etc.

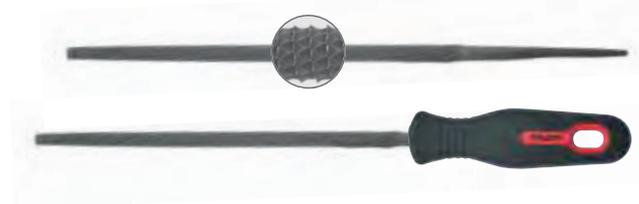


Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Width (A)	Thickness (B)	Handle Ref.
Part No.	Qty	Part No.	Qty						
<b>141502CD</b>	1	<b>141502BU</b>	6	Half round rasp	Second cut	250mm	24mm	7.0mm	8

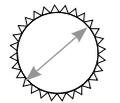


### ROUND RASPS

- Round rasp tapered towards tip with spiral rasp cut
- Suitable for work with soft materials such as wood, plywood, fibreglass, soft metals, plastic, wallboard etc.



Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Diameter	Handle Ref.
Part No.	Qty	Part No.	Qty					
<b>151502CD</b>	1	<b>151502BU</b>	6	Round rasp	Second cut	250mm	Ø 10.0mm	1

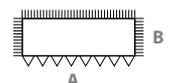


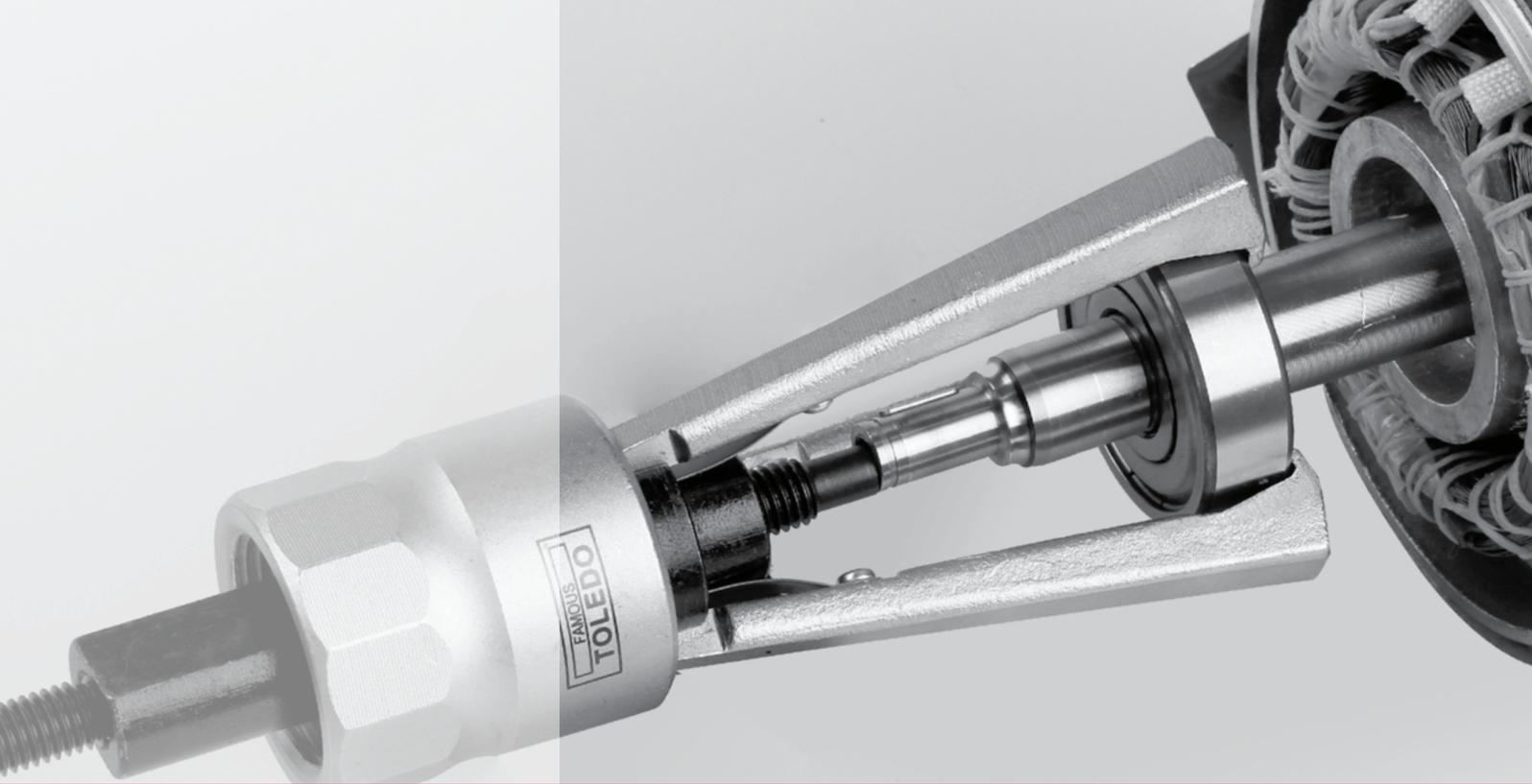
### HORSE RASPS

- Rectangular file double ended rasp teeth on side with file teeth on opposite side
- Also suitable for work with soft materials such as wood, plywood, fibreglass, soft metals, plastic, wallboard etc.
- Superior craftsmanship, know how and a long history make Toledo horse rasps a market leading option
- Manufactured with a state of the art DST (Diamond Speed Tech) system which provides superior sharpening delivering better grip, outstanding finishing and long lasting performance



Individual (Carded - With Handle)		Bulk (Boxed - No Handle)		Description	Cut	Length	Width (A)	Thickness (B)	Handle Ref.
Part No.	Qty	Part No.	Qty						
<b>1416CD</b>	1	<b>1416BU</b>	6	Plain thin horse rasp	Very coarse	350mm	45mm	6.0mm	5 or HRR





# PULLING & EXTRACTING

<b>PULLER SELECTION</b>	<b>254</b>
<b>MECHANICAL PULLERS</b>	<b>256</b>
<b>HYDRAULIC PULLERS</b>	<b>264</b>
<b>BEARING SEPARATORS</b>	<b>268</b>
<b>AUTOMOTIVE PULLERS</b>	<b>270</b>

# PULLING & EXTRACTING

## TOLEDO PULLERS

- Toledo offers a market leading range of mechanical and hydraulic pullers which are well recognised and respected for their high quality and reliability
- The comprehensive range covers a wide range of styles and sizes to cater for most applications and requirements, whether big or small
- Toledo pullers are precisely manufactured from drop forged and hardened specialty chrome-vanadium steel with unique properties which increase strength and corrosion resistance
- Toledo pullers undergo stringent checks and far exceed their stated capacities for added safety and superior performance

Scan here for video



### CHOOSING A PULLER



#### TWIN/TRIPLE LEG ASSEMBLY

Wherever possible, always try to incorporate a 3 leg set up which will enable better load distribution and safer operation.



#### SPREAD SIZE (WIDTH)

Determine the SPREAD required by measuring the width of the application. This must be greater than the diameter of the part being pulled.



#### REACH LENGTH (DEPTH)

Determine the REACH required by measuring the depth of the application. This must be greater than distance from end of the shaft to behind the part being pulled.



#### FORCE REQUIRED (PULLING POWER)

Estimate the amount of FORCE required to complete the job. It is recommended to select a higher rating force to easily complete task. Undercompensating on force can lead to damage of part and puller and incompletion of the task.

### IT IS GOOD PRACTICE TO ALWAYS HAVE A TOLEDO PULLER ON HAND



#### DOWNTIME & PRODUCTIVITY

Time is Money. Machine breakdowns result in downtime which reduces productivity. It is imperative to get restarted as soon as possible. Be ready for a breakdown by having a Toledo puller on hand at all times.



#### POWER & FORCE

A high quality puller is the best way in some cases to shift a component. Toledo pullers generate the force required in a progressive way to ensure smooth and safe job success.



#### SAFETY & O.H.S

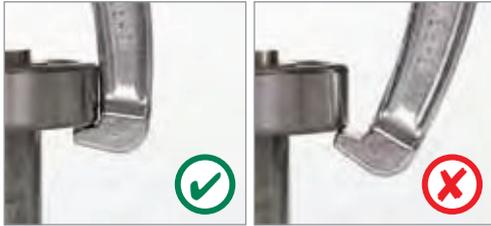
Precisely machined and manufactured from superior steels to ensure ongoing safe performance. Failure and breakage can result in injury.



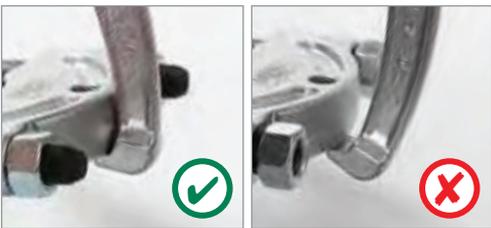
#### INVESTMENT & INSURANCE

A Toledo puller is a sound investment and will minimise down time and enable machinery repairs, instead of replacement. Always keep a Toledo puller kit on hand as insurance in case of a breakdown.

## TIPS & ADVICE



Align legs correctly to prevent damage to bearing and tool



Firmly affix bearing separator and align legs



Align bearing separator as close as possible to shaft



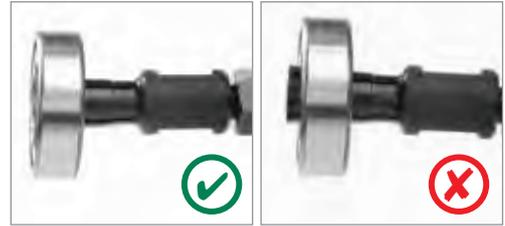
It is not recommended to use an extension bar for extra leverage



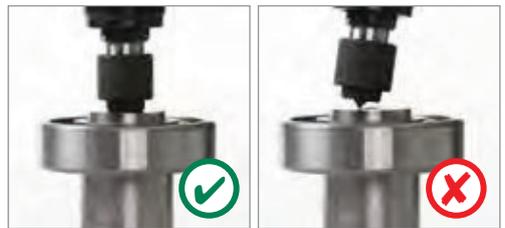
Keep hands away from contact area while slide hammer is in use



Hand operation only should be used to achieve force



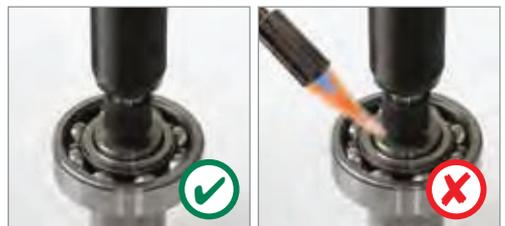
Select correct size and keep tool square when extracting



Misalignment of ram can cause damage to tool and shaft



Maintain hydraulic ram to ensure maximum performance



Heating up bearing will cause heat to transfer and damage tool



Frequently lubricate and inspect forcing screw for damage



The use of air tools is not recommended

MECHANICAL PULLERS



**TWIN LEG PULLERS**  
MECHANICAL REVERSIBLE

- Twin leg pullers feature double ended reversible legs to enable both internal and external applications
- Designed for easy removal of bearings, pulleys, gears and sprockets
- Manufactured from specialty high grade chrome-vanadium steel
- *Spare: All components available individually (Refer to table below)*



**TRIPLE LEG PULLERS**  
MECHANICAL REVERSIBLE

- Triple leg pullers feature double ended reversible legs to enable both internal and external applications
- Designed for easy removal of bearings, pulleys, gears and sprockets
- It is always advised to use a triple leg puller over a twin leg to ensure better force distribution which results in safer and more efficient operation
- Manufactured from specialty high grade chrome-vanadium steel
- *Spare: All components available individually (Refer to table below)*

Twin Head Part No.	Triple Head Part No.	Force	Twin Head		Reach (Max)	Forcing Screw		Leg Assembly (Each)		Twin Head		Triple Head	
			Spread (Min - Max)	Spares		Size	Spares	Size	Spares	Size	Spares	Size	
<b>222030</b>	<b>223030</b>	1 Tonne	35 - 75mm	222031	75mm (3")	222031	125mm	222032	100mm	222033	75mm	223033	60mm
<b>222040</b>	<b>223040</b>	2 Tonnes	50 - 100mm	222041	100mm (4")	222041	160mm	222042	138mm	222043	86mm	223043	75mm
<b>222060</b>	<b>223060</b>	5 Tonnes	65 - 150mm	222061	150mm (6")	222061	240mm	222062	220mm	222063	110mm	223063	100mm
<b>222080</b>	<b>223080</b>	7 Tonnes	105 - 200mm	222081	200mm (8")	222081	320mm	222082	300mm	222083	160mm	223083	145mm
<b>222100</b>	<b>223100</b>	9 Tonnes	125 - 250mm	222101	250mm (10")	222101	330mm	222102	340mm	222103	210mm	223103	170mm
<b>222120</b>	<b>223120</b>	13 Tonnes	155 - 300mm	222121	300mm (12")	222121	380mm	222122	380mm	222123	250mm	223123	210mm



### TWIN & TRIPLE LEG PULLER KITS

MECHANICAL REVERSIBLE

- Combination twin and triple leg puller kits Kits include three legs and both twin and triple heads to allow for either twin or triple leg assembly
- Supplied in custom moulded foam tray for safe and secure storage
- Manufactured from specialty high grade chrome-vanadium steel



Part No.	Force	Spread (Min - Max)	Reach (Max)	Forcing Screw		Leg Assembly (Each)		Twin Head		Triple Head	
				Spares	Size	Spares	Size	Spares	Size	Spares	Size
<b>224030</b>	1 Tonne	35 - 75mm	75mm (3")	222031	125mm	222032	100mm	222033	75mm	223033	60mm
<b>224040</b>	2 Tonnes	50 - 100mm	100mm (4")	222041	160mm	222042	138mm	222043	86mm	223043	75mm
<b>224060</b>	5 Tonnes	65 - 150mm	150mm (6")	222061	240mm	222062	220mm	222063	110mm	223063	100mm

MECHANICAL PULLERS



**TWIN & TRIPLE LEG SELF GRIP PULLERS**  
AUTOMATIC MECHANICAL REVERSIBLE

- Unique quick change head design allows for 2 or 3 jaw internal or external assembly
- Self-gripping, self-centring and spring loaded design ensures maximum grip for all pulling applications
- Supplied in custom moulded foam tray for safe and secure storage
- Manufactured from specialty high grade chrome-vanadium steel with black phosphate finish for additional corrosion resistance



Part No.	Force	Spread (Min - Max)	Reach (Max)
<b>225040</b>	10 Tonnes	76 - 102mm	90mm
<b>225070</b>	20 Tonnes	76 - 178mm	135mm



**TWIN & TRIPLE LEG CONCENTRIC PULLERS**  
MECHANICAL

- Screw operated concentric action and self adjusting legs make this range of pullers easy to use and offer an extra safe option by eliminating the danger of puller legs slipping under load
- Self-locking, self positioning legs and forcing screw
- Self positioning and self centring action prevents damage to gears or bearing shafts
- Combination twin and triple heads enable either twin or triple leg operation
- Ease of use saves operating time and concentric action results in longer service life
- Manufactured from specialty high grade chrome-vanadium steel with black phosphate finish for additional corrosion resistance

Part No.	Force	Spread (Min - Max)	Reach (Max)
<b>246100</b>	2 Tonnes	25 - 120mm	80mm
<b>246101</b>	3 Tonnes	30 - 140mm	120mm
<b>246102</b>	5 Tonnes	35 - 270mm	160mm
<b>246103</b>	8 Tonnes	50 - 300mm	210mm
<b>246104</b>	10 Tonnes	60 - 380mm	250mm



### TWIN & TRIPLE LEG SLIDING BEAM PULLER KIT

MECHANICAL REVERSIBLE

- Twin and triple leg sliding beam master kit with various length legs and both dual and triple head assembly
- Legs slide across the beam to produce varying spread sizes to suit various applications
- Reversible legs suitable for internal and external applications
- Thin jaw design, particularly useful in applications with limited space
- Supplied in custom moulded plastic hard case
- *Spare: All components available individually (Refer to table below)*

Part No.	Force	Spread External (Min - Max)	Spread Internal (Min - Max)	Reach (Max)
<b>221007</b>	2 Tonnes	30 - 110mm	70 - 90mm	260mm

Contents	Description	Size
221009	Forcing screw	160mm
221010	Twin beam	175mm
221011	Triple beam	150mm
221012	Leg assembly (each)	100mm
221013	Leg assembly (each)	210mm
221014	Leg assembly (each)	260mm



### LONG JAW PULLER

MECHANICAL REVERSIBLE

- Extra long mechanical puller for difficult access applications where extended reach is required
- Forcing screw features a convenient T-bar handle with 13mm hex drive
- Adjustable three position reversible legs designed for internal and external pulling applications
- Self centring and includes two centring pins



Part No.	Spread External (Min - Max)	Spread Internal (Min - Max)	Reach (Max)
<b>245460</b>	10 - 50mm	27 - 50mm	225mm
Leg Setting Length		Pin Overall Length	
Lower setting - 150mm (6")		Pin 1: 30mm	
Middle setting - 200mm (8")		Pin 2: 80mm	
High setting - 250mm (10")			

## MECHANICAL PULLERS

### ARMATURE BEARING PULLERS

#### MECHANICAL

- Designed to remove the main bearing on armatures in automotive, electrical and industrial applications
- Thin profile jaws enable a tight and secure grip around the bearing
- Supplied in custom moulded EVA foam tray for safe and secure storage



226100



226101



226102



Part No.	Capacity	Spread External (Min - Max)	Spread Internal (Min - Max)	Reach (Max)	Forcing Screw Diameter	ISO Bearing Designation
<b>226100</b>	1 Tonne	25 - 45mm	19 - 35mm	50mm	Ø 6mm	607,608, 609, 626, 627, 628, 629, 636, 637, 638, 639, 6000, 6001, 6002, 6003, 6200, 6201, 6202, 6300, 6900, 6901, 6902, 6903
<b>226101</b>	1.3 Tonne	30 - 60mm	24 - 55mm	100mm	Ø 8mm	609, 628, 629, 638, 639, 6000, 6001, 6002, 6003, 6004, 6005, 6006, 6200, 6201, 6202, 6203, 6204, 6205, 6300, 6301, 6302, 6303, 6304, 6901, 6902, 6903, 6904, 6905, 6906, 6907
<b>226102</b>	1.8 Tonne	40 - 85mm	35 - 80mm	160mm	Ø 10mm	6003, 6004, 6005, 6006, 6007, 6008, 6009, 6010, 6202, 6203, 6205, 6206, 6207, 6208, 6302, 6303, 6304, 6305, 6306, 6307, 6403, 6404, 6405, 6904, 6905, 6906, 6907, 6908, 6909, 6910

### TWIN LEG SLIDING BEAM PULLERS

#### MECHANICAL REVERSIBLE

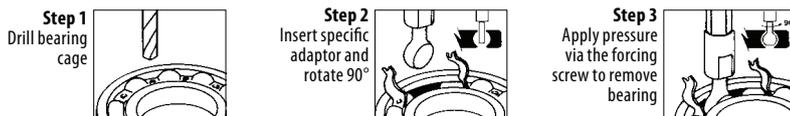
- Twin legs slide across the beam to produce varying spread sizes to suit various applications
- Legs are reversible to suit both internal and external applications
- Legs have locking screws to stabilise puller once desired size has been set
- Spares: All components available individually (Refer to table below)



Part No.	Force	Spread External (Min - Max)	Spread Internal (Min - Max)	Reach (Max)	Forcing Screw		Leg Assembly (Each)		Twin Head	
					Spares	Size	Spares	Size	Spares	Size
<b>232080</b>	2 Tonnes	50 - 80mm	75 - 130mm	90mm	232081	180mm	232082	100mm	232083	140mm
<b>232120</b>	2 Tonnes	50 - 140mm	75 - 150mm	90mm	232121	180mm	232082	100mm	232123	170mm
<b>232160</b>	6 Tonnes	60 - 160mm	100 - 180mm	140mm	232161	260mm	232162	160mm	232163	220mm
<b>232200</b>	6 Tonnes	70 - 200mm	100 - 240mm	140mm	232201	265mm	232162	160mm	232203	260mm

**TWIN PULL PULLERS**  
MECHANICAL

- Specialty pullers designed for the removal of blind housing bearings without the need to dismantle machinery or remove the running shaft
- Positive seating allows even tension on inner and outer bearing rings, reducing resistance
- Stabilisers reduce sideways movement and self centre the puller
- Ideal for cage-type ball bearings
- Three kits cover a wide range of ISO bearings. To identify kit for bearings without an ISO reference refer to puller spread and adaptor diameter
- *Spares: all component available individually (Refer to table below)*



Part No.	Description	Spread (Min - Max)	Reach (Max)	Adaptor Size Diameter	ISO Bearing Designation
<b>225000</b>	Twin pull puller kit - Small	20 - 95mm	125mm	Ø 5, 6, 8mm	6004-6010, 6299-6205, 6300-6302
<b>226000</b>	Twin pull puller kit - Medium	45 - 120mm	200mm	Ø 9, 11, 12.5mm	6207-6211, 6305-6308, 6403-6405
<b>227000</b>	Twin pull puller kit - Large	60 - 200mm	500mm	Ø 16, 19, 22, 25, 28, 32mm	6021-6032, 6309-6321, 6212-6230, 6406-6417

**SPARES**

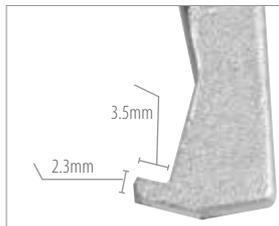
Part No.	Forcing Screw		Main Rod (Each)		Extension Rod (Each)		Thrust Nut	Twin Beam			Adaptors (each)					
	Spares	Size	Spares	Size	Spares	Size		Spares	Spares	Size	Spares	Diameter	Spares	Diameter	Spares	Diameter
<b>225000</b>	225011	125mm	225013	100mm	225014	90mm	225010	225016	100mm	225001	Ø 5mm	225002	Ø 6mm	225003	Ø 8mm	
<b>226000</b>	226011	200mm	226013	160mm	-	-	-	226016	140mm	226001	Ø 9mm	226002	Ø 11mm	226003	Ø 12.5mm	
<b>227000</b>	227011	270mm	227013	250mm	227014	250mm	-	227016	240mm	227001	Ø 16mm	227002	Ø 19mm	227003	Ø 22mm	
										227004	Ø 25mm	227005	Ø 28mm	227006	Ø 32mm	

MECHANICAL PULLERS



**TRIPLE LEG MICRO-ADJUSTABLE BEARING PULLER**  
MECHANICAL 3-JAW

- Designed for the rapid easy removal of small bearings and similar assemblies
- Self centring under load and can be used with the attached "T" bar or 13mm hexagon drive
- Three legs with independent leaf springs
- Securing collar tightens under load for positive, non-slip pulling action
- Applications include alternators/generators, domestic appliances, power tools and pumps



Part No.	Force	Spread External (Min - Max)	Reach (Max)
<b>246600</b>	1 Tonne	19 - 45mm	73mm
Jaw Thickness	Jaw Inset	ISO Bearing Designation	
2.3mm	3.5mm	6800 6201 6002 6003 606 627 668 609 6900 6301 6202 6200 626 637 628 629 6801 6802 6803 6300 636 688 638 639 6901 6902 6302 697 698 689 6001 6903 607 699	

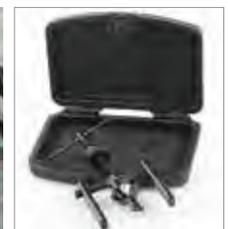
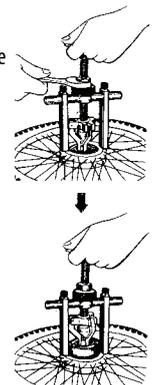


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**PILOT BEARING PULLER**  
MECHANICAL 3-JAW

- Compact internal pilot bearing puller designed to extract flywheel, generator and spigot transmission pilot bearings and bushes without tilting the bearings or damaging the bearings race
- Adjustable support legs with locking screws
- Adjustable centre cone applies pressure onto jaws to grip onto bearing
- Applications include cars, trucks, motorcycles, bicycles and tractors
- Internal diameter bearing range 13 - 45mm
- Also suitable for extracting bearings from motorcycle wheels, alternators and pumps without any distortion
- Small and handy unit supplied in plastic hard case



Part No.	Internal Diameter	Reach (Max)
<b>245464</b>	Ø 13 - 45mm	75mm



### SLIDE HAMMER GEAR/BEARING PULLER KIT

MECHANICAL 3-JAW

- Slide hammer puller kit includes one external and two internal puller assemblies which firmly clamp inside/outside the gear or bearing
- Tapered cone adaptors are used to support legs when adjusting pullers in position for easy operation
- Supplied in custom moulded plastic hard case
- *Spare: all component available individually (Refer to table below)*

Note: Compatible with slide hammer assembly Part No. 245351



Part No.	Spread External (Min - Max)	Spread Internal (Min - Max)	Reach (Max)
<b>269000</b>	15 - 80mm	15 - 80mm	340mm

Contents	Description	Specifications
269001	T-Bar 5/8" UNF	420mm
269002	Hammer head (1.1kg)	100mm
269003	Internal/external cone	-
269004	Centre screw	90mm
269005	Lock washers	-
269006	Internal puller assembly	15 - 80mm
269007	Internal puller assembly	30 - 80mm
269008	External puller assembly	15 - 80mm
269009	External cone adaptor	Large
269010	External cone adaptor	Small
269011	Triple head	60mm
269012	Spare bolts & nuts (8pc)	-



### SLIDE HAMMER SPLIT COLLET EXTRACTOR SET

MECHANICAL

- Extract components quickly and efficiently when conventional pullers cannot be used
- Removes bearings, oil seals etc. without damaging housing
- Supplied in custom moulded plastic hard case
- Collet size range: Ø 8 - 32mm
- *Spare: All components available individually (Refer to table below)*



Part No.	Collet Size Range (Min - Max)	Reach (Max)
<b>246300</b>	Ø 8 - 32mm	330mm

Contents	Description	Size
246301	Split collet	8 - 10mm
246302	Split collet	10 - 12mm
246303	Split collet	12 - 14mm
246304	Split collet	15 - 17mm
246305	Split collet	17 - 20mm
246306	Split collet	20 - 24mm
246307	Split collet	25 - 29mm
246308	Split collet	30 - 32mm
246320	Slide hammer assembly (1kg)	390mm

## HYDRAULIC PULLERS

### HYDRAULIC RAM 10 TONNE

- Famous Toledo hydraulic ram is a premium option well known for its quality and reliability
- A cornerstone of the brand and pulling range
- Supplied in custom moulded EVA foam storage tray
- Repair kit available Part No. 265001



1 Heavy duty 130mm T-bar ensures maximum power output with minimal effort

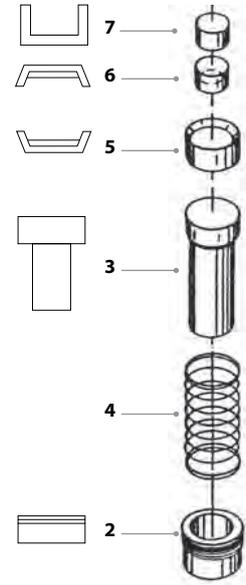
Pressure screw with finely pitched thread ensures seamless operation

Knurled collar improves grip when positioning ram and applying initial load

1 1/2" - 16 TPI offers precise adjustment to obtain maximum force

Heavy duty body construction applies direct force which eliminates twisting and improves stability under load

10 Tonne of force ensures light work of the hardest application



#### Reference

- 1 T-Bar
- 2 Threaded Nose Retainer
- 3 Piston
- 4 Spring
- 5 Large Tapered Seal
- 6 Small Tapered Seal
- 7 T-Bar Seating Positioner Cup
- 8 Ram Body



Hand operation only should be used to achieve force



Maintain hydraulic ram to ensure maximum performance



Misalignment of ram can cause damage to tool and shaft



Heating up bearing will cause heat to transfer and damage tool

Part No.	Description	Repair Kit Part No.
<b>265100</b>	Hydraulic Ram 10T	265001

### REPAIR KIT INSTRUCTIONS

#### Step 1

Unwind T-bar completely and remove it from ram

#### Step 2

Remove threaded nose retainer and drain oil from ram

#### Step 3

Using a screwdriver, force out internal components of ram by inserting it into the threaded T-bar hole

#### Step 4

Inspect and clean all internal components

#### Step 5

With the T-bar hole facing down, half fill the T-bar seating positioner cup with general-purpose grease and carefully insert into ram

#### Step 6

Insert small tapered seal, with the rubber seal facing up, into the chamber

#### Step 7

Refill ram with supplied hydraulic oil until level is slightly above the larger chamber

#### Step 8

Insert large tapered seal, with the rubber seal facing down, into chamber

#### Step 9

Insert piston and spring into chamber and refit threaded nose retainer

#### Step 10

Refit T-bar to ram

NOTE: If an air lock occurs during assembly, use a short length of fishing line by inserting it into the cut out of the large tapered seal and pull out slowly to draw bubbles to surface and then reassemble.



**TWIN & TRIPLE LEG PULLER & BEARING SEPARATOR COMBINATION KIT**

HYDRAULIC

- This is the most popular puller kit in the Toledo range and is a complete pulling, extracting and separating solution
- Comprehensive kit includes twin and triple heads, multiple sized legs for twin and triple puller assembly, the famous Toledo 10 tonne hydraulic ram, twin beam, bearing separator and related main and extension rods
- An essential kit to have on hand to cater for many applications in various industries including agricultural, automotive, industrial, marine and mining
- Twenty one piece kit supplied in custom moulded heavy duty plastic case
- Spares: All components available individually including ram repair kit Part No. 265001



Part No.	Force	Spread (Max)	Reach (Max)	Separator Range
<b>265000</b>	10 Tonne	180mm	425mm	75 - 105mm

Contents	Description	Specifications	Image	Qty
245105	Bearing separator	75 - 105mm		1
265002	Twin head	135mm		1
265003	Triple head	135mm		1
265004	Centre nut threaded (inserts into twin & triple head)			1
265008	Nose piece extension (3pc set)	25, 35, 85mm		1 Set
265009	Sliding twin beam	200mm		1

Contents	Description	Specifications	Image	Qty
265010	Main rod (1/2")	200mm		2
265011	Extension rod (1/2")	225mm		2
265041	Leg (each)	100mm		3
265061	Leg (each)	150mm		3
265081	Leg (each)	200mm		3
265100	Hydraulic ram	10 Tonne		1

HYDRAULIC PULLERS



**HYDRAULIC PULLER SET**  
TWIN & TRIPLE LEG 200MM

- A compact and economical hydraulic puller kit for users who do not require a comprehensive kit, but need a hydraulic puller to keep on hand for miscellaneous jobs and emergencies
- Twin and triple leg combination kit includes both twin and triple heads and centre nut, three legs, hydraulic ram and nose piece
- Supplied in a high grade custom moulded EVA foam tray for safe and easy storage
- Spares: All components available individually including ram repair kit Part No. 265001



Part No.	Force	Spread (Min - Max)	Reach (Max)
<b>265050</b>	10 Tonne	100 - 200mm	200mm

Contents	Description	Specifications	Image	Qty
265100	Hydraulic ram & nose piece	10 Tonne		1
265002	Twin head	135mm		1
265003	Triple head	135mm		1
265004	Centre nut threaded (inserts into twin & triple head)			1
265081	Leg (each)	200mm		3

**TWIN & TRIPLE LEG PULLER & BEARING SEPARATOR COMBINATION MASTER KIT**  
MECHANICAL & HYDRAULIC

- Master kit includes a comprehensive range of components to make up both mechanical and hydraulic puller assemblies
- Includes forcing screw and convertor to provide quick and easy conversion from hydraulic to mechanical operation
- Complete with components to construct varying two and three leg puller assemblies as well as a rear access bearing separator set up
- Thirty one piece kit supplied in a heavy duty steel storage box
- Spares: All components available individually including ram repair kit Part No. 265001

Part No.	Force	Spread (Max)	Reach (Max)	Separator Range
<b>265030</b>	10 Tonne	180mm	425mm	75 - 150mm

Contents	Description	Specifications	Qty
245105	Bearing separator	75 - 105mm	1
245150	Bearing separator	105 - 150mm	1
265002	Twin head	135mm	1
265003	Triple head	135mm	1
265004	Centre nut threaded (inserts into twin & triple head)	-	1
265009	Sliding twin beam	200mm	1
266009	Sliding twin beam	250mm	1
265010	Main rod 1/2" (each)	200mm	2
265011	Extension rod 1/2" (each)	225mm	2
266004	Main rod 5/8" (each)	200mm	2
266003	Extension rod 5/8" (each)	225mm	2
265021	Forcing screw & convertor	290mm	1
265041	Leg (each)	100mm	3
265061	Leg (each)	150mm	3
265081	Leg (each)	200mm	3
265100	Hydraulic ram & nose piece	10 Tonne	1
265008	Nose piece extension set (3 Pc.)	25, 35, 85mm	1 set



**BEARING SEPARATOR KIT**  
MECHANICAL & HYDRAULIC

- Comprehensive bearing separator kit contains all the components for mechanical and hydraulic assembly
- Designed for removing stubborn bearings, gears, sprockets and pulleys effortlessly without damaging shaft and surrounding components
- Suitable for automotive, industrial and engineering applications
- Includes heavy duty 10 tonne hydraulic ram and 210mm forcing screw with centre nut, triple beam, various extension rods, puller leg set and three jaw bearing separator
- Universal three jaw bearing separator design provides three positive contact points and distributes the load across the surface when force is applied, knife edges ensure a secure grip in limited areas and avoids distortion
- Manufactured from drop forged high grade steel, heat treated for strength and durability
- Capacity: 35 - 105mm
- Supplied in two tier custom foam trays and heavy duty storage case



Part No.	Force	Spread (Max)	Reach (Max)	Separator Range
<b>265015</b>	10 Tonne	170mm	900mm	35 - 105mm

Contents	Description	Specification	Image	Qty
245000	Universal 3 jaw bearing separator	35 - 105mm		1
265015A	Hydraulic ram	10 Tonne		1
265015B	Triple beam	170mm		1

Contents	Description	Specification	Image	Qty
265015C	Forcing screw	210mm		1
265015D	Centre nut (Mechanical)	-		1
265015E	Puller jaw (3 piece set)	165mm		3
265015F	Main rod 3/8" (3 piece set)	60mm		3
265015G	Main rod 3/8" (3 piece set)	120mm		3
265015H	Extension rod 3/8" (3 piece set)	300mm		3
265015J	Extension rod 3/8" (3 piece set)	365mm		3

# PULLING & EXTRACTING

## HYDRAULIC PULLERS



### TRIPLE LEG EXTRA HEAVY DUTY PULLER KIT HYDRAULIC 22 TONNE REVERSIBLE

- Heavy duty triple leg puller kit for internal and external pulling work in large applications
- Twenty two tonne ram produces a significant amount of force which may be required for large applications
- Supplied in a heavy duty storage case with castor wheels and locking clips for safe and easy transportation and storage
- *Spares: All components available individually including ram repair kit Part No. 265026*

Part No.	Force	Spread External (Min - Max)	Spread Internal (Min - Max)	Reach
<b>265022</b>	22 Tonne	270 - 570mm	250 - 500mm	300mm

Contents	Description	Specification	Qty
265023	Hydraulic ram	22 Tonne	1
265024	Triple head	300mm	1
265025	Leg assembly	500mm	1
265027	Nose piece extension	45mm	1
265028	Nose piece extension	100mm	1
265029	Nose piece extension	150mm	1
265026	Ram repair kit	Not included	

## BEARING SEPARATORS

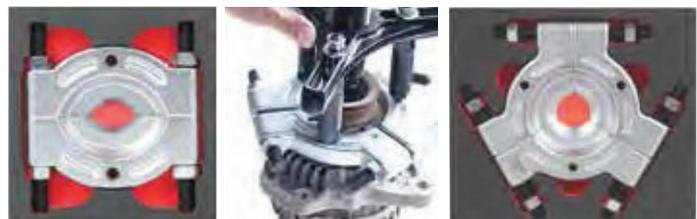
### BEARING SEPARATORS BEARING SEPARATORS

- Designed for removing gears and bearings where access is available behind the item
- Drop forged hardened alloy steel, used in conjunction with two leg mechanical pullers, hydraulic pullers or sliding beam applications
- Two knife edges ensure a secure pulling surface
- Supplied in custom moulded EVA form storage tray
- 245000: New style universal 3 jaw style offers better load distribution and covers a wider size range



245000

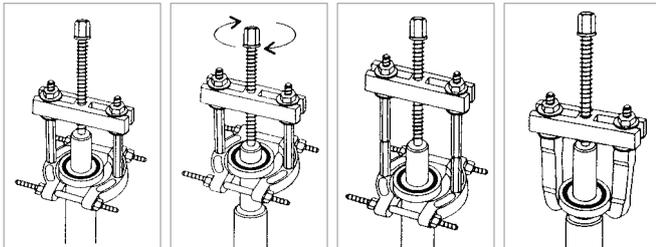
Part No.	Description	Separator Range	Threaded Hole
<b>245040</b>	Bearing separator 2 Jaw	20 - 40mm	3/8"
<b>245050</b>	Bearing separator 2 Jaw	30 - 50mm	3/8"
<b>245075</b>	Bearing separator 2 Jaw	50 - 75mm	3/8"
<b>245105</b>	Bearing separator 2 Jaw	75 - 105mm	1/2"
<b>245150</b>	Bearing separator 2 Jaw	105 - 150mm	5/8"
<b>245000</b>	Bearing separator 3 Jaw	35 - 105mm	3/8"





**COMBINATION PULLER KIT**  
MECHANICAL

- Popular combination puller kit includes components for twin beam sliding leg and rear access bearing separator applications
- Ideal kit to keep on hand for the removal of small bearings in applications such as alternators, generators, domestic appliances, power tools and pumps
- Suitable for applications where standard legs cannot gain access
- Manufactured from drop forged chrome vanadium alloy steel to ensure strength and rigidity to maximise service life
- Supplied in custom moulded plastic hard case
- *Spare: all component available individually (Refer to table below)*



Part No.	Spread External (Min - Max)	Spread Internal (Min - Max)	Reach (Max)	Separator Range
<b>224000</b>	25 - 40mm	40 - 60mm	50mm	20 - 40mm

Contents	Description	Specifications	Qty
224001	Forcing screw	75mm	1
224002	Leg (each)	50mm	2
224003	Main rod (each)	45mm	2
224004	Extension rod (each)	25mm	2
225006	Sliding twin beam	60mm	1
245040	Bearing separator	20 - 40mm	1



**BEARING SEPARATOR PULLER KIT**  
MECHANICAL

- Unique puller kit is designed to enable efficient single point size adjustment and additional security and stability during operation
- Ideal for difficult applications and extra tough pulling jobs where additional strength is required
- Ideal for applications where access is only available behind the bearing
- Extra stable and safe puller kit designed to provide extra force while offering ultimate stability during use
- Includes variable rod lengths
- Tapered separator edge design enables insertion behind close fitting bearings, gears etc.
- Bearing separators offer better all round support and stability
- Supplied in custom moulded plastic hard case
- *Spare: all component available individually (Refer to table below)*



Part No.	Spread (Min - Max)	Reach (Max)	Separator Range
<b>221000</b>	30 - 75mm	300mm	30 - 50mm 50 - 75mm

Contents	Description	Specifications	Qty
221001	Forcing screw	150mm	1
221002	Sliding twin beam	150mm	1
221003	Main rod - 3/8" (each)	60mm	2
221004	Extension rod - 3/8" (each)	90mm	2
221005	Main rod - 3/8" (each)	80mm	2
221006	Extension rod - 3/8" (each)	110mm	2
245050	Bearing separator	30 - 50mm	1
245075	Bearing separator	50 - 75mm	1

**BEARING SEPARATORS**



**BEARING SEPARATOR PULLER KIT**  
MECHANICAL SINGLE ADJUSTMENT POINT

- Unique puller kit is designed to enable efficient single point size adjustment and additional security and stability during operation
- Ideal for difficult applications and extra tough pulling jobs where additional strength is required
- Ideal for applications where access is only available behind the bearing
- Extra stable and safe puller kit designed to provide extra force while offering ultimate stability during use
- Includes variable rod lengths
- Tapered separator edge design enables insertion behind close fitting bearings, gears etc.
- Bearing separators offer better all round support and stability
- Supplied in custom moulded plastic hard case



Part No.	Spread (Min- Max)	Reach (Min- Max)	Separator Range
<b>222001</b>	30 - 75mm	100 - 170mm	30 - 50mm 50 - 75mm

**AUTOMOTIVE PULLERS**

**STEERING WHEEL PULLER SET**

- Steering wheel puller suitable for 5/16" and 3/8" sized applications where access to threaded holes is available
- Drop forged beam for increased rigidity and service life

Part No.	Spread (Min - Max)	Reach (Max)
<b>250250</b>	40 - 80mm	65mm

Description	Specifications	Length	Qty
Beam	-	95mm	1
Bolts	5/16" x 24 UNF	85mm	2
Bolts	5/16" x 18 UNC	85mm	2
Bolts	3/8" x 16 UNC	85mm	2
Flat Tip	17.5mm	12.5mm	1
Forcing screw	1/2" x 20 UNF	95mm	1
Washers	-	-	2



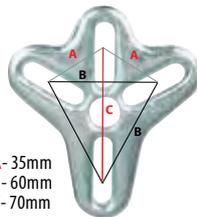
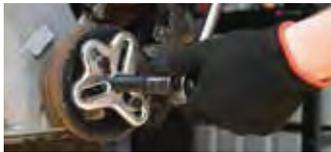


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**HARMONIC BALANCER PULLER SET**  
MASTER 46 PIECE

- Comprehensive multi-purpose puller set designed for the removal of harmonic balancers, timing gears and pulleys where access to 2 or 3 tapped holes is available
- Drop forged 4 slot flange with a range of capped bolts
- Includes 3 different style tips
- Most popular set supplied in custom moulded plastic tray



A- 35mm  
B- 60mm  
C- 70mm

Part No.	Description	Pieces
<b>254230</b>	Master harmonic balancer puller set	46

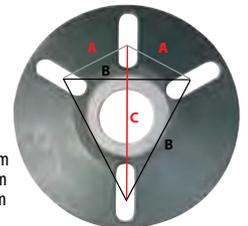
  

Description	Specifications	Length	Qty
Bolt	1/4" x 28 UNF	60mm	2
Bolt	3/8" x 16 UNC	110mm	2
Bolt	3/8" x 16 UNC	50mm	3
Bolt	3/8" x 16 UNC	75mm	3
Bolt	3/8" x 24 UNF	35mm	3
Bolt	5/16" x 18 UNC	150mm	2
Bolt	5/16" x 18 UNC	85mm	3
Bolt	5/16" x 24 UNF	75mm	2
Bolt	M8 x 1.25	90mm	2
Bolt	M8 x 1.25	65mm	2
Bolt	M8 x 1.25	45mm	3
Bolt	M10 x 1.50	35mm	3
Flat tip	Ø 22mm	9mm	1
Pointed tip	Ø 15mm	15mm	1
Pointed tip	Ø 20mm	17mm	1
Washers	8mm (5/16") I.D.	–	6
Washers	6mm (1/4") I.D.	–	2
Washers	10mm (3/8") I.D.	–	3
Forcing screw	3/4" x 16 UNF	130mm	1
Yoke	–	–	1



**HARMONIC BALANCER PULLER KIT**  
REMOVER & INSTALLER

- For easy removal of most harmonic balancers and drive pulleys which are press-fitted onto the crankshaft
- Unique disc design enables trouble free removal and installation of harmonic balancers
- Varying range of metric and imperial sized bolts and adaptors provide wide coverage
- Heavy duty forcing screw is internally threaded to fit adaptors
- Includes eight adaptors which maintain a common thread on one end to fit into the forcing screw
- Suitable for 2 or 3 way applications
- Centre bearing provides smooth operation
- Supplied in custom moulded plastic hard case
- *Spares: All components available individually (Refer to table below)*



A- 40mm  
B- 75mm  
C- 85mm

Part No.	Description	Pieces
<b>245400</b>	Harmonic balancer remover & installer kit	46

Contents	Description	Specifications	Length	Qty
245430	Body puller	Ø 125mm x 18mm	–	1
245431	Forcing screw	M22 x 1.75	150mm	1
245432	Adaptor	7/16" x 20 UNF	56mm	1
245433	Adaptor	M12 x 1.5	56mm	1
245434	Adaptor	1/2" x 20 UNF	56mm	1
245435	Adaptor	M14 x 1.5	56mm	1
245436	Adaptor	9/16" x 18 UNF	56mm	1
245437	Adaptor	5/8" x 18 UNF	56mm	1
245438	Adaptor	M16 x 2.0	56mm	1
245439	Adaptor	3/4" x 16 UNF	56mm	1
–	Bolt	M8 x 1.25	60mm	3
–	Bolt	3/8" x 16 UNC	55mm	3
–	Bolt	3/8" x 24 UNF	55mm	3
–	Cone adaptor	65mm	56mm	1
245429	Washer set (4 Pc.)	10.5mm	–	1 set

**AUTOMOTIVE PULLERS**

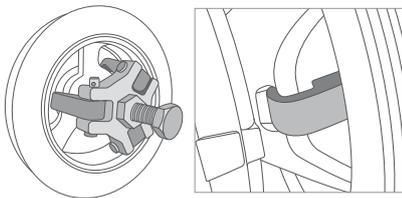


Scan here for video



**HARMONIC BALANCER PULLEY PULLER MASTER KIT**

- Harmonic balancer puller kit supports various length crankshafts via three forcing rods of 90mm 135mm and 190mm
- Three adjustable compact arms with hook ends cater for tri-spoke harmonic balancers with minimal access
- Ideal for harmonic balancers where access from behind is required
- Suitable for Chrysler, Ford, GM V8 engines, and Mitsubishi
- Legs are manoeuvrable and easy to disassemble in confined engine bay
- Suitable for Holden V8 LS engines
- Supplied in custom moulded plastic hard case



Part No.	Force	Leg Lengths	Forcing Screw
<b>304199</b>	8 Tonne	72mm	88mm

**POWER STEERING PUMP PULLEY KIT**

- For quick and easy removal and installation of power steering pump pulleys
- Includes pulley remover, pulley installer and quick disconnect coupler tool
- Reliable kit provides ongoing service without distorting pump or pulley
- Suitable for most Chrysler, Ford and GM power steering pulleys including Ford Falcon AU & FG, Ford C111, Saginaw, Thompson, C2 power steering pumps
- Also suitable for removing pulleys on GM belt driven vacuum pumps and pressed on water pump pulleys of GM V6 engines



Part No.	Range	Pieces
<b>245380</b>	28 - 35mm	7

**POWER STEERING & ALTERNATOR PULLEY REMOVER**

- Reversible two sided flange enables removal and installation of common alternator and power steering pump pulleys where access to a grooved hub is available
- Suitable for use on pulleys with grooved hub diameters
- Applications include GM, Chrysler and Ford as well as Saginaw, Thompson and Ford C-2 power steering pumps



Part No.	Suits Hub Diameter
<b>245370</b>	Ø 11/8" (28mm), Ø 11/4" (32mm), Ø 15/16" (34mm) and Ø 13/8" (35mm)



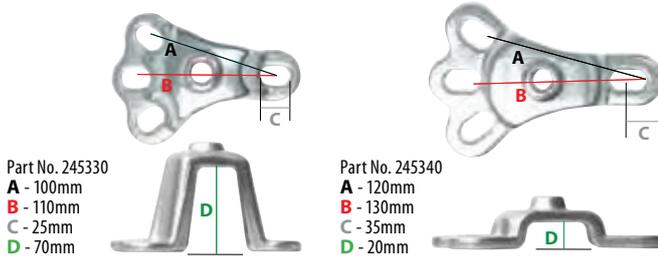


**HUB PULLER KIT**  
SLIDE HAMMER

- Multi-purpose design for removal of front and rear hubs, bearing oil seal bushes and flange type axles
- Includes slide hammer with multiple attachments including 2 and 3 jaw internal and external puller, front and rear hub pullers and various accessories
- Supplied in custom moulded plastic hard case
- Spares: All components available individually (Refer to table below)



Note: See page 00 for "to scale" trace of product



Part No.	Slide Hammer Assembly	Twin/Triple Head Spread
<b>245300</b>	2.3kg x 600mm	100, 110, 115, 130mm

Contents	Description	Specifications	Image	Qty
245302	Leg assembly (3pc set)	120mm		1 set
245304	Triple head	50mm		1
245306	Twin head	65mm		1
245308	Cone & accessories	-		1 set
245330	Front hub puller	70mm (Depth)		1
245340	Rear axle puller	20mm (Depth)		1
245351	Slide hammer assembly (2.3kg)	600mm		1



**HUB PULLER KIT**  
MECHANICAL & HYDRAULIC

- Universal adjustable hub puller for various stud patterns up to five studs
- Free movement legs (5) on a raised yoke assembly allows quick and easy attachment to vehicle hubs
- Heavy duty striking handle used in conjunction with the forcing screw the use of shock force for rapid removal of stubborn hubs
- Manufactured from drop forged high quality steel, heat treated for strength and durability
- Suitable for passenger cars and commercial vehicles
- Spares: all component available individually (Refer to table below)

Note: kit supplied with only 2 nose piece extension (Replacement set is 3pc)



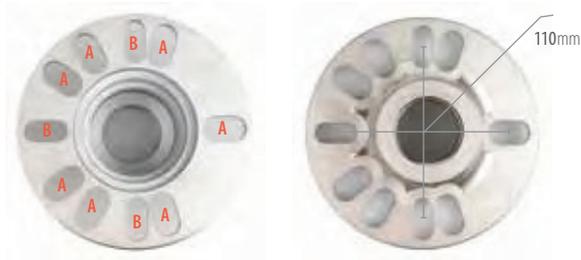
Part No.	Force	Reach	Pieces
<b>270000</b>	10 Tonne	190mm	11

Contents	Description	Specifications	Qty
252001	Forcing screw	200mm	1
252002	Striking handle	200mm width	1
252003	Body plate	-	1
252004	Leg (each)	110mm (hole Ø 17mm)	5
265008	Nose piece extension set	25, 35mm	2
265100	Hydraulic ram	10 Tonne	1



**HUB PULLER KIT**  
HYDRAULIC & SLIDE HAMMER

- Suitable for both mechanical slide hammer and hydraulic operation
- Truly universal design with ten slot positions to suit any stud pattern
- Pulls flange-type rear axles on most late model passenger cars and light trucks
- T-type hex head for either hand or torque wrench use
- Suitable for 4 and 5 stud axles
- Supplied in custom moulded plastic hard case
- Spares: Replacement yoke assembly (Part No. 269013A)



Centre depth: 60mm  
Wheel stud hole size:  
A = 15 x 26mm  
B = 12 x 26mm



Part No.	Hydraulic Ram	Slide Hammer	Plate Size	Spares
<b>269013</b>	10 Tonne	2.8Kg x 600mm	148.5mm	269013A
Description	Specifications	Qty		
Slide hammer assembly 2.8kg (Hammer)	600mm	1		
Hydraulic ram (10 Tonne)	M38 x 16T	1		
Plate	Ø 148.5mm x 90mm (height)	1		
Adaptor	–	1		



**DIESEL INJECTOR PULLER KIT**  
SLIDE HAMMER HEAVY DUTY

- A heavy duty puller kit suitable for the removal of the most stubborn and stuck diesel injectors
- Includes universal joint to permit greater access to restricted areas
- Suitable for use on Bosch and Delphi diesel injectors
- Adaptor kit available to extend the kit (Part No. 304042A)

*Note: Master adaptor add on kit also recommended to ensure maximum vehicle coverage*



Part No.	Adaptors	Slide Hammer (Weight x Length)
<b>304042</b>	9	4.8kg x 580mm
Description	Specifications	Application
Slide hammer assembly	4.8kg hammer	–
Universal joint	M18 x 1.6	Universal
Special bit insert hex	10mm x Ø 7.6	1 x special hex SW10 with 7.6 mm bore, 1/2 Square drive, to remove the fixing ring on Bosch injectors at MB CDI and PSA HDI
Special bit insert hex	10mm x Ø 6.6	Remove the internal screw of the common rail injectors
Pull Spindle	OT M14 x 1.5	Mercedes-Benz CDI, Ford TDCI, BMW M47
Pull Spindle	OT M16 x 1.0	Denso injectors
Pull Spindle	OT M17 x 1.0	Bosch injectors
Pull Spindle	OT M20 x 1.0	Denso injectors
Pull Spindle	OT M25 x 1.0	Siemens injectors
Pull Spindle	OT M27 x 1.0	Siemens injectors

Note: OT = Outside Thread



Scan for application list

**DIESEL INJECTOR PULLER ADAPTOR SET**  
MASTER 21 PIECE

- Universal adaptor set to suit kit Part No. 304042 - Slide hammer diesel injector puller kit (Part No. 304042)
- Easily removes stubborn injectors without damaging injector seat
- Application list included and covers the majority of the Australian car parc
- Suitable for common rail diesel
- Supplied in custom moulded plastic hard case



Part No.	Suits	Pieces
<b>304042A</b>	Diesel injector puller kit part no. 304042	21
Description	Specifications	Application
Universal joint	M18 x 1.6	Universal
Special bit insert hex	10mm x Ø 7.6	1 x special hex SW10 with 7.6 mm bore, 1/2" drive to remove the fixing ring on Bosch injectors at MB CDI and PSA HDI
Special bit insert hex	10mm x Ø 6.6	Remove the internal screw of the common rail injectors
Pull spindle	OT M16 x 1.0	Denso injector (Toyota 2.2D)
Pull spindle	OT M17 x 1.0	Bosch injectors (Alfa, BMW, Fiat, MB, PSA, Renault)
Pull spindle	OT M20 x 1.0	Denso injectors
Pull spindle	OT M25 x 1.0	Siemens injectors. Suitable for PSA (DW10) engines Citroen Xsara/Xanita, Peugeot 304/406/206
Pull spindle	OT M27 x 1.0	Siemens injectors. Suitable for PSA (DW10) engines Citroen Xsara/Xanita, Peugeot 304/406/207
Pull spindle	IT M14 x 1.5	Internal thread for Bosch / Delphi Injectors MB (OM 629/642/646), PSA (DV4/DW12), VW (CBD), BMW (M47)
Pull spindle	IT M16 x 1.5	Pull Adapter for M16 x1.5 thread, such as used in Facom tools
Pull spindle	IT M25 x 0.5	Denso injectors
Pull spindle	IT M25 x 0.75	Denso injectors
Pull spindle	IT M27 x 1.0	Siemens e.g. Citroen C5 / Jumpy / Xsara, Fiat Ducato JTD, Peugeot 206/307/406 / Boxer (2.0 / 2.2 / 2.3 HDI) Mercedes-Benz CDI (except A-Class (Sprinter / Vito)
Special socket	25mm	Siemens Injectors - 2.0 Hdi (DW Series) As found on PSA, Ford, Toyota etc
Special socket	27mm	Siemens Piezo Injectors - 2.0 Hdi Piezo (DW Series) As found on PSA etc
Special socket	29mm	Bosch injectors - Bosch Cdi / Hdi engines
Special socket	30mm	Bosch injectors - Bosch Renault / Nissan 1.9dCi
Injector gripper	12mm	Mercedes-Benz CDI-engines, except Sprinter, Vito and A-class
Injector gripper	13.5mm	GM/Opel, Renault F9Q
Injector gripper	16mm	Fiat Ducato JTD, Citroen C5, Xsara, Jumpy and Jumper HDI and Peugeot 206, 307, 406, Boxer HDI (2.0, 2.2, 2.3l)
Injector gripper	26mm	Opel Z19DT / Z19DTH / Z19DTL engines, A20DTH (LBS) / A20DTR (LBV) / A20DTJ (LBX) / A20DTC (LCD) and Fiat 1.9 JTD
Injector gripper	26mm	Opel Z19DT / Z19DTH / Z19DTL engines, A20DTH (LBS) / A20DTR (LBV) / A20DTJ (LBX) / A20DTC (LCD) and Fiat 1.9 JTD

Note: **OT** = Outside Thread, **IT** = Inside Thread

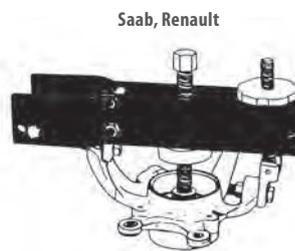
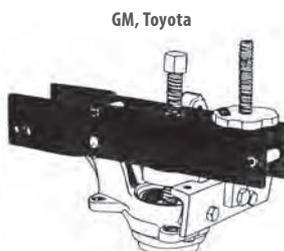
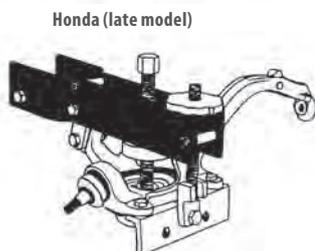
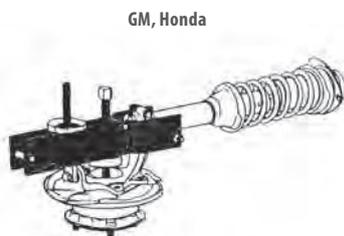
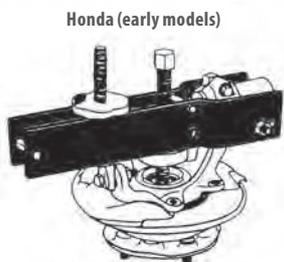


**HUB SEPARATOR KIT**  
UNIVERSAL HEAVY DUTY

- Universal hub separator set for hub removal on popular front wheel drive vehicles
- Durable ACME threaded forcing and adjusting screws ensure long product life
- Spares: Available via special order only. Contact Tridon customer service

Part No.	Applications
<b>245440</b>	Daihatsu, Fiat, Ford, GM, Honda, Hyundai, Mazda, Mitsubishi, Nissan, Renault, Saab, Subaru, Suzuki, Toyota, Volkswagen

Part No.	Ref	Description	Specifications	Qty
-	<b>A</b>	Main body assembly	370mm	1
245440B	<b>B</b>	Forcing screw	220mm	1
-	<b>C</b>	Adaptor tube	Ø 37mm (l) x 89mm	1
245440D	<b>D</b>	Adaptor bracket	185mm	1
-	<b>E</b>	Adaptor legs (Saab)	65 x 25mm	2
-	<b>F</b>	Adaptor plates (Honda)	85 x 35mm	2
245440G	<b>G</b>	Adjusting screw	200mm	1
-	<b>H</b>	Mounting bolts	M12 x 1.75 (117mm)	1
-	<b>I</b>	Mounting bolts	M10 x 1.50 (31mm)	2
-	<b>J</b>	Mounting bolts	7/16" 14 UNC (80mm)	2
-	<b>K</b>	Mounting bolts	M12 x 1.75 (58mm)	2
-	<b>L</b>	Adaptor bracket bolt	M12 x 1.75 (32mm)	1





# MEASURING & PRECISION

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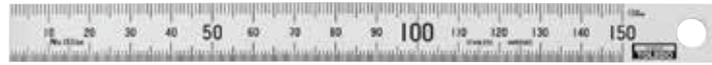
## STAINLESS STEEL RULES

- Market leading range of trade quality stainless steel rules, famous for their long history and superior quality
- Photographically etched markings provide the highest precision and accuracy
- Black chrome plated graduations ensure long term visibility and protection against scuff marks and damage
- Fully heat treated and hardened Japanese stainless steel
- Satin chromed for quick and easy reading
- Accurate to Japanese Industrial Standard B7516 – grade one specifications
- The only rules that are certified by both JIS (Japan Industrial Standards) and JCSS (Japan Calibration Service System)
- Individually supplied in protective vinyl storage sleeve
- Made in Japan



### METAL RULES GRADE 1 OF JIS B7516 - 2005 (ABSTRACT)

Standard	Grade 1 of JIS B7516-2005						
Material	SUS420 J2 of JIS G 4305 or that equivalent or superior to this in quality						
Hardness of Material	Hv400 min						
Size 	Nominal Size	Overall Length (L)		Thickness (T)		Width (W)	
		Size	Tolerance	Size	Tolerance	Size	Tolerance
	150mm	175mm	+/-5mm	0.5mm	+/-10%	15mm	+/-2%
	300mm	335mm		1.0mm		25mm	
	600mm	640mm		1.2mm		30mm	
	1000mm	1050mm		1.5mm		35mm	
	1500mm	1565mm		2.0mm		40mm	
2000mm	2065mm	2.0mm	40mm				
Flatness of scale face	The scale face shall be flat to a level of no hindrance to measurements						
Straightness of scale side face	Nominal Size	Straightness		Nominal Size	Straightness		
	150mm	max 0.23mm		1000mm	max 0.40mm		
	300mm	max 0.26mm		1500mm	max 0.50mm		
600mm	max 0.32mm		2000mm	max 0.60mm			
Straightness of scale side face	The squareness of the scale end face of a rule in respect of its scale side shall be 0.035mm max per 10mm length of the end face						
Tolerance of length Temperature at 20°C	Length			Tolerance			
	max 500mm			+/- 0.15mm			
	over 500mm - max 1000 mm			+/- 0.20mm			
	over 1000 mm - max 1500mm			+/- 0.25mm			
over 1500mm - max 2000mm			+/- 0.30mm				



150BM



300M

### SINGLE SIDED RULES

METRIC

- Graduations on both upper and lower edges with numerical markings in centre only
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan



Part No.	Length	Width	Thickness	Graduations	
				Upper Edge	Lower Edge
<b>150BM</b>	150mm	15mm	0.5mm	1mm	0.5mm
<b>300M</b>	300mm	25mm	1.0mm	1mm	0.5mm
<b>600M</b>	600mm	30mm	1.2mm	1mm	0.5mm
<b>1000M</b>	1000mm	35mm	1.5mm	1mm	0.5mm



2000M



### SINGLE SIDED RULES

METRIC

- Graduations and numerical markings on both upper and lower edges
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan



Part No.	Length	Width	Thickness	Graduations	
				Upper Edge	Lower Edge
<b>1500M</b>	1500mm	40mm	2.0mm	0 – 100: 0.5mm, 100 – 1500: 1mm	1mm
<b>2000M</b>	2000mm	40mm	2.0mm	0 – 100: 0.5mm, 100 – 2000: 1mm	1mm
<b>3000M</b>	3000mm	40mm	3.0mm	0 – 100: 0.5mm, 100 – 3000: 1mm	1mm
<b>4000M</b>	4000mm	40mm	3.0mm	0 – 100: 0.5mm, 100 – 4000: 1mm	1mm

## STAINLESS STEEL RULES



### SINGLE SIDED EASY PICK-UP RULES

METRIC

- Graduations on both upper and lower edges with numerical markings in centre only
- Easy pick-up rules feature a bent edge at one end to enable easy pick-up off flat surfaces
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan



Part No.	Length	Width	Thickness	Graduations	
				Upper Edge	Lower Edge
<b>301956</b>	150mm	15mm	0.5mm	1mm	0.5mm
<b>301957</b>	300mm	25mm	1.0mm	1mm	0.5mm



321900

### SINGLE SIDED FLEXIBLE RULES

METRIC

- Graduations on both upper and lower edges with numerical markings in centre only
- Toledo flexible rules are thinner in width and thickness to allow for damage free bending
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan



Part No.	Length	Width	Thickness	Graduations	
				Upper Edge	Lower Edge
<b>321900</b>	300mm	15mm	0.5mm	1mm	0.5mm
<b>321901</b>	600mm	15mm	0.5mm	1mm	0.5mm
<b>321059</b>	1000mm	15mm	0.5mm	1mm	1mm
<b>321060</b>	2000mm	15mm	0.5mm	1mm	1mm



150MSE Front



150MSE Back

### DOUBLE SIDED RULES

METRIC

- Front & Back: Graduations on both upper and lower edges with numerical markings in centre only
- No quiet space - complete rule is graduated, two square ends
- Manufactured from stainless steel
- Made in Japan



Part No.	Length	Width	Thickness	Graduations Front		Graduations Back	
				Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>150MSE</b>	150mm	20mm	1.0mm	0.5mm	1mm	0.5mm	1mm
<b>300MSE</b>	300mm	28mm	1.0mm	0.5mm	1mm	0.5mm	1mm



ST150M Front

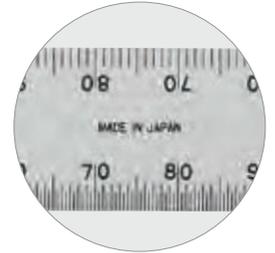


ST150M Back

**DOUBLE SIDED RULES**

METRIC

- **Front & Back:** Graduations and numerical markings on both upper and lower edges. Numerical markings on lower edge counting left to right and upper edge counting right to left
- No quiet space - complete rule is graduated, two square ends
- Manufactured from stainless steel
- Made in Japan



Part No.	Length	Width	Thickness	Graduations Front		Graduations Back	
				Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>ST150M</b>	150mm	20mm	1.0mm	1mm	0.5mm	1mm	0.5mm
<b>ST300M</b>	300mm	28mm	1.0mm	1mm	0.5mm	1mm	0.5mm



150SP Front



150SP Back

**DOUBLE SIDED RULES**

METRIC

- **Front & Back:** Graduations on both upper and lower edges
- Numerical markings on front side in centre counting from left to right
- Numerical markings on back in centre beginning in middle and counting outwards
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan



Part No.	Length	Width	Thickness	Graduations Front		Graduations Back	
				Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>150SP</b>	150mm	15mm	0.5mm	1mm	0.5mm	1mm	0.5mm
<b>300SP</b>	300mm	25mm	1.0mm	1mm	0.5mm	1mm	0.5mm

**DOUBLE SIDED POCKET CLIP RULE**

METRIC

- **Front:** Graduations on both upper and lower edges with numerical markings in centre only
- **Back:** 'Inch' to 'mm' conversion table
- Rule with pocket clip for easy storage
- One square end and one round end
- Manufactured from stainless steel
- Made in Japan



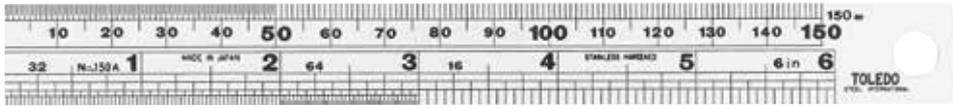
150PCM Front



150PCM Front

Part No.	Length	Width	Thickness	Graduations Front		Back
				Upper Edge	Lower Edge	
<b>150PCM</b>	150mm	20mm	0.5mm	0.5mm	1mm	Conversion table

## STAINLESS STEEL RULES



150A6



150060

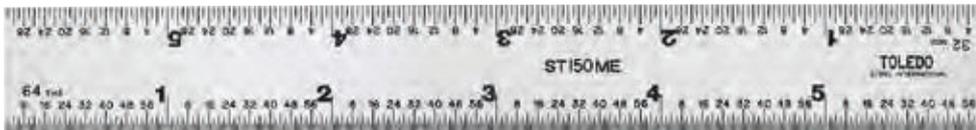
### SINGLE SIDED RULES

METRIC & IMPERIAL

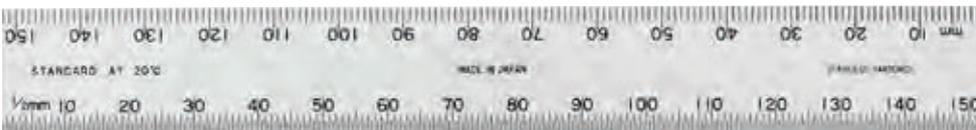
- Graduations and numerical markings on both upper and lower edges
- One square end and one round end with hanging hole
- Manufactured from stainless steel
- Made in Japan

Part No.	Length	Width	Thickness	Graduations	
				Upper Edge	Lower Edge
<b>150A6</b>	150mm/6"	19mm	0.8mm	0 - 50: 0.5mm, 50 - 150: 1mm	0 - 2": 1/32", 2 - 3": 1/64", 3 - 6": 1/16"
<b>150060</b>	1500mm/60"	40mm	2.0mm	1mm	1/16"
<b>200078</b>	2000mm/78"	40mm	2.0mm	1mm	1/16"
<b>3000118</b>	3000mm/118"	40mm	3.0mm	1mm	1/16"

ST150ME6 Front



ST150ME6 Back

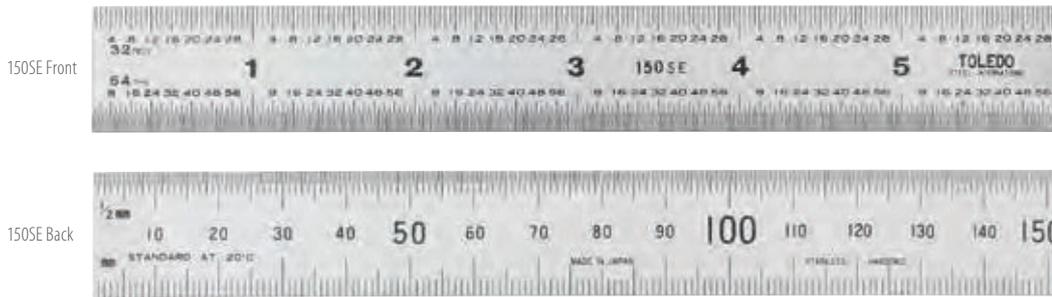


### DOUBLE SIDED RULES

METRIC & IMPERIAL

- Imperial Front & Metric Back: Graduations on both upper and lower edges. Numerical markings in transverse order with lower edge counting left to right and upper edge counting right to left
- Two square ends
- No quiet space - complete rule is graduated
- See images for further explanation of markings and graduations
- Manufactured from stainless steel
- Made in Japan

Part No.	Length	Width	Thickness	Graduations Front		Graduations Back	
				Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>ST150ME6</b>	150mm/6"	20mm	1.0mm	1/32"	1/64"	1mm	0.5mm
<b>ST300ME12</b>	300mm/12"	28mm	1.0mm	1/32"	1/64"	1mm	0.5mm



**DOUBLE SIDED RULES**

METRIC & IMPERIAL

- **Imperial Front:** Graduations on both upper and lower edges. Numerical markings on both upper and lower edge and in centre
- **Metric Back:** Graduations on both upper and lower edges with numerical markings in centre only
- Two square ends
- No quiet space - complete rule is graduated
- See images for further explanation of markings and graduations
- Manufactured from stainless steel
- Made in Japan

Part No.	Length	Width	Thickness	Graduations Front		Graduations Back	
				Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>150SE</b>	150mm/6"	20mm	1.0mm	1/32"	1/64"	0.5mm	1mm
<b>300MESE</b>	300mm/12"	28mm	1.0mm	1/32"	1/64"	0.5mm	1mm



30012 Front



30012 Back

**DOUBLE SIDED RULES**

METRIC & IMPERIAL

- **Metric Front & Imperial Back:** Graduations on both upper and lower edges with numerical markings in centre only
- One square end and one rounded end with hanging hole
- Manufactured from stainless steel
- Made in Japan



Part No.	Length	Width	Thickness	Graduations Front		Graduations Back	
				Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>150B6</b>	150mm/6"	15mm	0.5mm	0.5mm	1mm	0 - 2": 1/20", 2 - 3": 1/50", 3 - 6": 1/10"	0 - 2": 1/32", 2 - 3": 1/64", 3 - 6": 1/16"
<b>30012</b>	300mm/12"	25mm	1.0mm	0.5mm	1mm	0 - 3": 1/20", 3 - 4": 1/50", 4 - 12": 1/10"	0 - 3": 1/32", 3 - 4": 1/64", 4 - 12": 1/16"
<b>60024</b>	600mm/24"	30mm	1.2mm	0.5mm	1mm	0 - 3": 1/20", 3 - 4": 1/50", 4 - 24": 1/10"	0 - 3": 1/32", 3 - 4": 1/64", 4 - 24": 1/16"
<b>100036</b>	1000mm/36"	35mm	1.5mm	0.5mm	1mm	0 - 3": 1/20", 3 - 4": 1/50", 4 - 36": 1/10"	0 - 3": 1/32", 3 - 4": 1/64", 4 - 36": 1/16"

## STAINLESS STEEL RULES

### RULE SET

- Contains two popular 150mm and 300mm rules
- Manufactured from stainless steel
- Supplied in foam storage tray suitable for all tool boxes
- Made in Japan



Part No.	Contents	Length	Width	Thickness	Graduations Front		Graduations Back	
					Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>TRS01</b>	150BM	150mm	15mm	0.5mm	1/2mm	1mm	Blank	Blank
	30012	300mm	25mm	1.0mm	1/2mm	1mm	0 - 3": 1/20", 3 - 4": 1/50", 4 - 12": 1/10"	0 - 3": 1/32", 3 - 4": 1/64", 4 - 12": 1/16"



321903



321904

### PROFESSIONAL MEASURING SETS

- Professional measuring sets for ultimate precision and accuracy
- Heat treated and hardened Japanese stainless steel with photographically etched markings
- Satin chromed for easy reading and identification
- Accurate to Japanese Industrial Standard B 7516 – Grade 1 specifications
- Supplied in foam storage trays suitable for all tool boxes
- Made in Japan

Part No.	Contents	Description	Size
<b>321903</b>	150B6	Rule - Metric & Imperial	150mm/6"
	301959	Square - Metric	150 x 75mm
	700A	Taper Gauge - Metric	0 - 15mm

Part No.	Contents	Description	Size
<b>321904</b>	301955	Protractor with Rule	180° / 100mm
	300M	Rule - Metric	300mm
	50150	Spring Divider - Solid Nut	150mm
	321015	Square - Metric	300 x 150mm
	700A	Taper Gauge - Metric	0 - 15mm
	-	Scriber - Pen Style with Pocket Clip	135mm

**RULE STOPS**

- Handy tool increases the practicality of Toledo stainless steel rules
- Provides an easy way to make repeated accurate measurements
- Attaches to rule with locking screw to enable easier measurement work and additional applications such as depth taking, drafting and lay out work
- Precision machined jaws allow for complete accuracy
- Note: Suitable only for Toledo rules with one square and one round end (not suitable for dual square end rules)
- Made in Japan



Part No.	Suits Rules	Rule Part No.
<b>321061</b>	150mm	150A6, 150B6, 150BM, 150SP, 301956
<b>321062</b>	300mm & Flexible rules	300M, 300SP, 30012, 301957, 321059, 321060, 321900, 321901,
<b>321063</b>	600mm	600M, 60024
<b>321064</b>	1000mm	1000M, 100036
<b>321065</b>	1500 - 4000mm	1500M, 2000M, 3000M, 4000M, 150060, 200078, 3000118



**ALUMINIUM CUTTING RULES**



**SINGLE SIDED CUTTING RULES**

METRIC

- Inbuilt handle provides ease of use and maximum safety when cutting
- Lightweight aluminium construction
- Handy for all drafting and marking out applications on walls, ceilings and floors
- Wear resistant UV cured screen printing
- Accuracy: 0.7mm per metre



Part No.	Length	Width	Thickness		Graduations Back	
			Blade Only	Overall with Handle	Upper Edge	Lower Edge
<b>322001</b>	500mm	60mm	6.5mm	46mm	1mm	1mm
<b>322002</b>	600mm	60mm	6.5mm	46mm	1mm	1mm
<b>322003</b>	800mm	60mm	6.5mm	46mm	1mm	1mm
<b>322004</b>	1000mm	60mm	6.5mm	46mm	1mm	1mm
<b>322005</b>	1200mm	60mm	6.5mm	46mm	1mm	1mm

ALUMINIUM CUTTING RULES



SE600

**SINGLE SIDED STRAIGHT EDGE RULES**  
METRIC

- Features one straight edge and one graduated edge
- Two square ends with one hanging hole
- Manufactured from aluminium
- Made in Japan



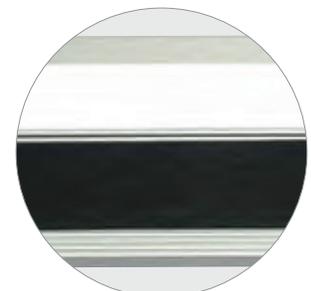
Part No.	Length	Tolerance	Width	Tolerance	Thickness	Tolerance	Graduations	
							Upper Edge	Lower Edge
<b>SE600</b>	600mm	+/- 0.28mm	50mm	+/- 0.30mm	5.0mm	+/- 0.20mm	1mm	Blank
<b>SE1000</b>	1000mm	+/- 0.40mm	50mm	+/- 0.30mm	5.0mm	+/- 0.20mm	1mm	Blank
<b>SE1500</b>	1500mm	+/- 0.55mm	50mm	+/- 0.30mm	5.0mm	+/- 0.20mm	1mm	Blank
<b>SE2000</b>	2000mm	+/- 0.70mm	50mm	+/- 0.30mm	5.0mm	+/- 0.20mm	1mm	Blank



AR300

**SINGLE SIDED STRAIGHT EDGE RULES - SPONGE BACK**  
METRIC

- Sponge back provides anti-slip performance making measuring and alignment drawing easy and accurate. Sponge back also protects against possible damage to the work surface
- Features one straight edge and one graduated edge
- Two square ends with one hanging hole
- Manufactured from aluminium
- Made in Japan



Reverse side. Sponge back

Part No.	Length	Width	Thickness	Graduations	
				Upper Edge	Lower Edge
<b>AR300</b>	300mm	35mm	5.0mm	1mm	Blank
<b>AR600</b>	600mm	35mm	5.0mm	1mm	Blank
<b>AR1000</b>	1000mm	35mm	5.0mm	1mm	Blank

TAPER GAUGES

- Used to measure internal diameters
- Ideal for measuring gaps, slot widths, hole or bore sizes and flange face to face dimensions
- Photographically etched markings ensure the greatest precision and accuracy
- Satin chrome for easy reading and identification
- Accuracy:  $\pm 0.05\text{mm}$
- Manufactured from stainless steel
- Made in Japan



Part No.	Size Range	Description
<b>700A</b>	1 - 15mm	Taper gauge with hanger hole
<b>700B</b>	15 - 30mm	Taper gauge with hanger hole
<b>700C</b>	30 - 45mm	Taper gauge with hang hole
<b>700D</b>	45 - 60mm	Taper gauge with hang hole
<b>700AD</b>	1 - 15mm	Taper gauge with 150mm rule & clearance gauge
<b>700AM</b>	1 - 15mm	Taper gauge with hanger hole, metal case & pocket clip
<b>700AR</b>	1 - 15mm	Taper gauge with 150mm rule



## SQUARES

- Squares are important for setting and performing accurate measurements and cuts as well as checking the square fit of glue joints and frames
- Also essential for ensuring tool faces, blades, fences and sanding blocks are accurately square
- Complete range available including carpenter's, combination, engineer's and mini squares



### CARPENTER'S MITRE SQUARES

METRIC & IMPERIAL

- Used for producing right angles in carpentry
- Stainless steel blade with reinforced plastic handle
- Graduated blade with metric and imperial markings
- Features hanger hole in blade for easy storage
- Suitable for use as inner or outer try square, mitre square, horizontal and 45° marking gauge and rule
- Manufactured from stainless steel
- Made in Japan

Part No.	Length	Thickness	Graduations	
			Upper Edge	Lower Edge
<b>MS150</b>	150mm/6"	1.0mm	1mm	1/16"
<b>MS200</b>	200mm/8"	1.0mm	1mm	1/16"
<b>MS250</b>	250mm/10"	1.0mm	1mm	1/16"
<b>MS300</b>	300mm/12"	1.0mm	1mm	1/16"

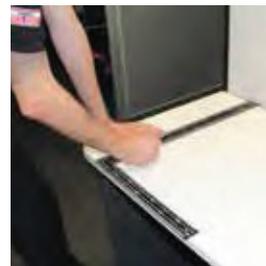
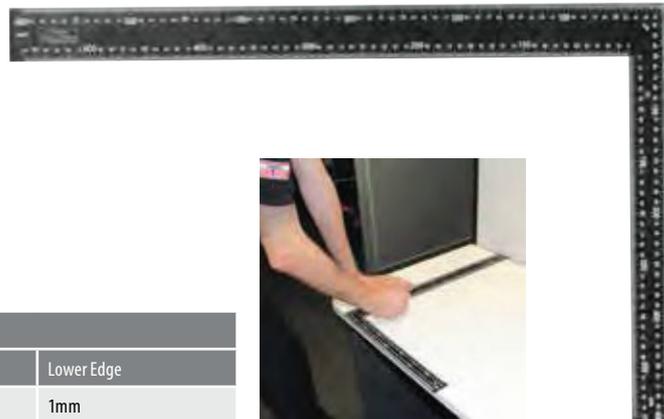


### CARPENTER'S/ FRAMING SQUARE 600X400MM

METRIC

- Heavy duty carbon steel frame with black painted coating
- Durable high visibility easy-read silkscreen printing
- Single punch easy hang hole
- Double sided markings

Part No.	Dimensions	Graduations Front	
		Upper Edge	Lower Edge
<b>322453</b>	600 x 400mm	1mm	1mm



### T-BEVEL WITH LEVEL

- Two in one tool - handy level in handle and graduated stainless steel bevel
- Easy-to-read vial in handle
- Built-in 3/16" (5mm) trim gauge on side and bottom
- Angle markings on handle (15°, 30°, 45°, 60°)
- Double sided, etched stainless steel blade and bolt with metric and imperial graduations

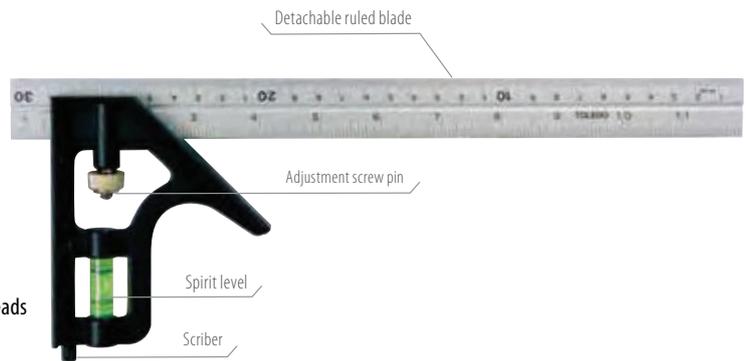
Part No.	Blade Graduations	Blade Thickness	Overall Thickness	Overall Length (Open)
<b>322016</b>	180mm x 7"	1.2mm	27mm	335mm



**COMBINATION SQUARE**

METRIC & IMPERIAL

- Popular multi-application tool with versatile functionality
- Suitable for use as inner or outer try square, mitre square, horizontal, 45° and plumb level, depth and marking gauge and rule
- Detachable ruled blade (300mm / 12")
- Spirit level for checking level and plumb
- Lidded scriber for marking work
- Suitable for multiple interchangeable heads including protractor and centring heads
- Useful tool for transferring duplicate measurements



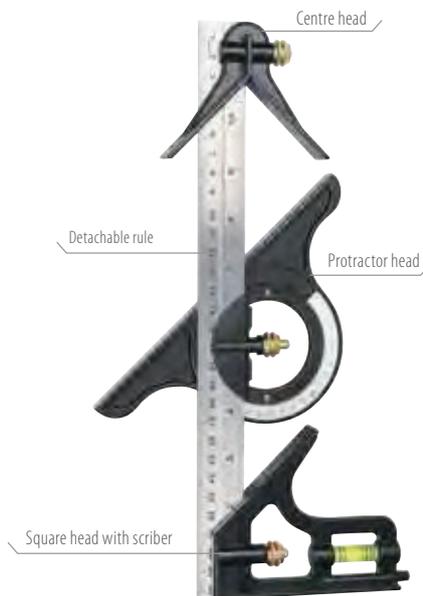
Part No.	Graduations Front		Graduations Back	
	Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>CS30012</b>	1mm	1/16"	1mm	1/32"

**COMBINATION SQUARE SET**

METRIC & IMPERIAL

- Versatile and useful multi-application set for a wide range of measuring and lay out jobs
- Suitable for use as a rule, spirit level, plumb level, 45° level, try square (internal and external), height/depth gauge, marking gauge and scriber
- Common applications include jobs in woodworking, metal working and stonemasonry
- Black baked enamel finish (except rule)
- Stainless steel graduated rule
- Supplied in high grade EVA foam storage tray

Part No.	Graduations		
	Rule	Square	Protractor
<b>322210</b>	300mm/12"	45° & 90°	180°



**FEATURES & APPLICATIONS**

**Detachable Rule**

- All traditional length and dimension measurements
- Hardened stainless steel with precision milled edges
- Double sided metric and imperial 300mm/12"
- Metric graduation: 1mm
- Imperial graduation: 1/32" & 1/16"

**Square Head with Scriber & Spirit Level**

- Lay out and checking of 45° and 90° angles
- Checking level and plumb
- Locking bolt for firm attachment to blade
- Detachable scriber for marking

**Protractor Head with Spirit Level**

- Setting, measuring and checking of angles
- Double 180° scale
- Locking bolt for firm attachment to blade

**Centre Head**

- Allows centre lines to be obtained
- Checking the centre of round jobs
- Enables depth measurement
- Locking bolt for firm attachment to blade



**T-SQUARES**

- Ideal tool for all measuring and technical drawings
- Ideal for applications requiring accurate horizontal or vertical lines
- Aluminium construction with special UV resistant ink printed graduations and durable powder coated T-head

Part No.	Length	Width	Thickness	Graduations	
				Upper Edge	Lower Edge
<b>322215</b>	450mm	38mm	1.2mm	1mm	1mm
<b>322216</b>	900mm	38mm	1.2mm	1mm	1mm

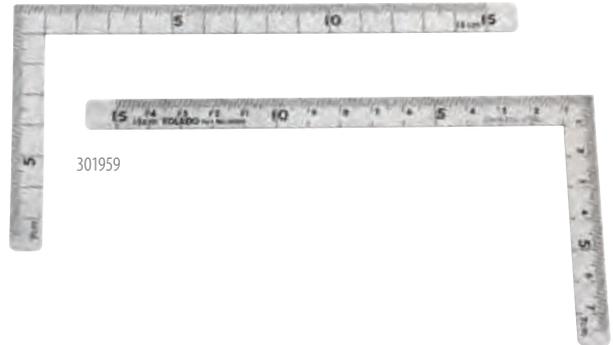
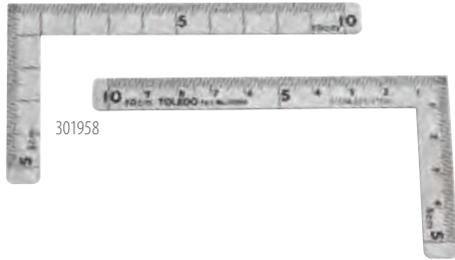


## SQUARES

### MINI SQUARES

METRIC

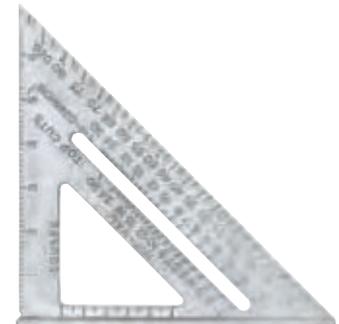
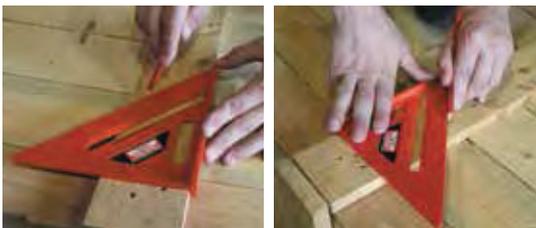
- Handy mini-squares for various small and medium measuring jobs
- Simple and light "L" squares
- Double sided photographically etched markings for ultimate accuracy and precision
- Manufactured from quality stainless steel to the strict standards of all Toledo rules



Part No.	Size	Width	Thickness	Graduations Front		Graduations Back	
				Upper Edge	Lower Edge	Upper Edge	Lower Edge
<b>301958</b>	100 x 50mm	10mm	1.2mm	1mm	Blank	1mm	10mm
<b>301959</b>	150 x 75mm	10mm	1.2mm	1mm	10mm	1mm	10mm
<b>321015</b>	300 x 150mm	15mm	1.2mm	1mm	5mm	1mm	5mm

### RAFTER SQUARES 7"

- Ideal for marking and cutting of rafters, stairs or any basic angle
- Tri-square, mitre square, protractor, line scribe and saw guide all in one tool
- Moulded-in conversion tables that never fade or rub off
- Marked with degree graduations for fast, easy layout
- Square body has a flat base on one side for easy 90° vertical measuring
- Commonly used in carpentry applications

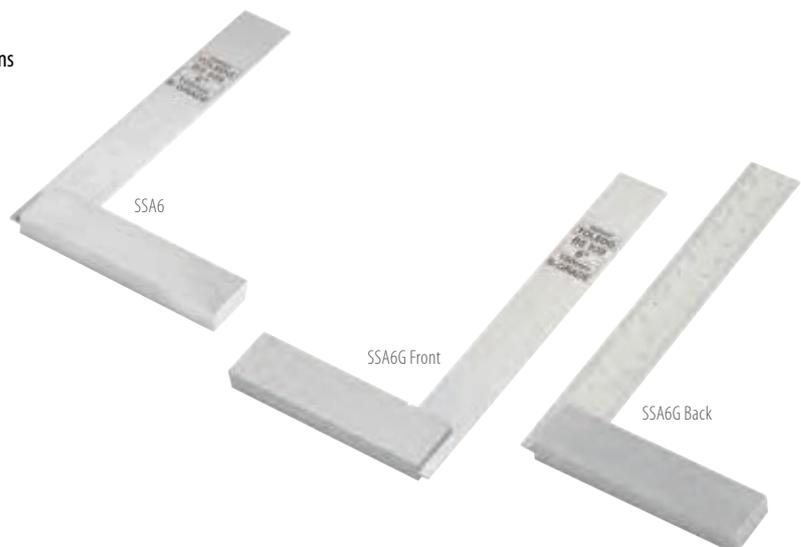


Part No.	Material
<b>322015</b>	'Ergocast' plastic
<b>322017</b>	Aluminium

### ENGINEERING SQUARES

- Used for producing right angles in carpentry and engineering applications
- Available with blade lengths of 50mm/2 inch to 300mm/12 inch
- Spring steel blade and handle

Part No.	Style	Blade Length
<b>SSA2</b>	Non-Graduated	50mm
<b>SSA3</b>	Non-Graduated	75mm
<b>SSA4</b>	Non-Graduated	100mm
<b>SSA6</b>	Non-Graduated	150mm
<b>SSA8</b>	Non-Graduated	200mm
<b>SSA10</b>	Non-Graduated	250mm
<b>SSA12</b>	Non-Graduated	300mm
<b>SSA4G</b>	Graduated	100mm
<b>SSA6G</b>	Graduated	150mm



**ENGINEERING SQUARES - HIGH PRECISION**

JIS PRECISION CLASS 2

- High precision squares are manufactured to strict Japanese Industrial Standards (JIS)
- The professionals choice for their high quality, precision and accuracy
- Manufactured from high grade Japanese carbon steel (S50C)
- Manufactured to JIS B 7526:1995
- Made in Japan

Part No.	Style	Blade Length
<b>321115</b>	Non-Graduated	50mm
<b>321116</b>	Non-Graduated	75mm
<b>321117</b>	Non-Graduated	100mm
<b>321118</b>	Non-Graduated	150mm
<b>321119</b>	Non-Graduated	200mm
<b>321120</b>	Non-Graduated	250mm
<b>321121</b>	Non-Graduated	300mm



321118

**MEASURING WHEELS**

**MEASURING WHEEL**

10,000M

- Small and compact unit with aluminium telescopic handle is easy to transport and ideal for “on the go” use
- Easy to read 5 digit counter with 10cm and 1m increments
- Column 1 (white) gives 10cm read outs, while the others (black) give 1m increment read outs
- High traction dual tyres (small and large) for steady and firm glide measurement
- Heavy duty ABS plastic housing
- Ideal for construction, plumbing works, engineering works, measurement of properties, measurement of interior works and landscaping



Part No.	Wheel Diameter	Range	Telescopic Handle	Accuracy	Weight
<b>322551</b>	∅ 100mm	10,000m	450 - 950mm	±1cm per 100cm	0.345kg

**DIGITAL MEASURING WHEEL**

10,000M

- The most innovative and precise measuring wheel with digital read out in increments of 1cm
- Displays metric (Centimetre/Metre) or imperial measurements (Inches/Feet)
- Six key control functions with five memory data storage
- Large dust and splash proof backlit LCD display with ergonomic design and easily placed buttons for one handed operation
- Dual component ABS and TPR moulded pistol handle is ergonomic and strong
- Patented with locking fold design and carry handle to allow compact storage and easy transportation
- Heavy duty wheel design is ideal for movement through rough surfaces
- Operated with a 9v battery (supplied)
- Supplied in heavy duty nylon bag



Part No.	Wheel Diameter	Range	Overall Length	Weight
<b>322552</b>	13”(330mm)	10,000m	980mm	1.8kg

## MEASURING TAPES

### TAPE MEASURE

METRIC & IMPERIAL 2 METRE SINGLE SIDED

- Graduations and numerical on both upper and lower edges
- Mini tape measure is very handy to keep on hand at all times
- Strong and robust design with ABS and TPE shock-proof casing
- Ergonomic design with handy keychain ring
- High visibility nylon coated blade
- Shock absorbing bumper to dampen down recall



Part No.	Length	Blade Thickness	Blade Width	Overall Dimension	Graduations	
					Upper	Lower
<b>321922</b>	2 metres / 6 feet	0.5mm	12.2mm	45mm x 45mm	1/32"	1mm

### TAPE MEASURE

METRIC 10 METRE DOUBLE SIDED

- Heavy duty tape measure designed for heavy use with extra long non-kink blade stand out
- Strong and robust design with ABS and TPE shock-proof casing
- Double sided metric graduations
- Automatic blade lock function provides easy set up allowing one person operation
- Ergonomic design with belt clip and hanging tether
- High visibility nylon coated blade with long stand out
- Shock absorbing bumper to dampen down recall



Hanger tether    Double sided    Belt clip    Auto blade locking    Upper & lower hooks    Shockproof casing

Part No.	Length	Blade Thickness	Blade Width	Overall Dimension	Graduations Front & Back	
					Upper	Lower
<b>321910</b>	10 metres	0.5mm	27mm	91mm x 42mm	1mm	1mm

### MEASURING TAPE STEEL LONG

METRIC 30 METRE SINGLE SIDED

- Extra heavy duty steel tape option is designed for heavy duty industrial use
- Strong and robust design with ABS and TPE shock-proof casing
- Robust rewind function is designed to last
- Nylon coated blade features a fold out hook and D ring anchor
- Belt clip for easy transportation and storage



HD steel tape    Robust reel    Shockproof casing    Fold out hook    Belt clip

Part No.	Length	Tape Thickness	Tape Width	Overall Dimension	Graduations
<b>322018</b>	30 metres	0.15mm	9.4mm	110mm x 25mm	1mm

**MEASURING TAPE FIBREGLASS LONG**  
METRIC & IMPERIAL DOUBLE SIDED

- Reinforced, double coated fibreglass tape resistant to markings and abrasions
- Flat lay 13mm wide blade ensures ease of use
- Heavy duty fibreglass will not rot, corrode or distort
- Non-conductive/sparking fibreglass protects user against electrical shock and is suitable for any worksite
- Quick rewind function for fast and easy tape retraction
- Double sided graduation markings



Part No.	Description	Length	Width	Thickness	Graduations	
					Upper Edge	Lower Edge
<b>TF30M</b>	Metric	30mm	13mm	0.5mm	2mm	2mm
<b>322220</b>	Metric & Imperial	50mm	13mm	0.5mm	2mm	1/8"

FOLDING RULES

**DOUBLE SIDED FOLDING RULE FIBREGLASS**  
METRIC

- **Front & Back: Graduations in millimetres on lower and upper edges with numerical markings in centre only**
- Broken into 220mm segments connected via a reliable and sturdy fix joint mechanism which enables extensions of 90° or 180° to firmly lock into place
- Manufactured from light, durable and insulating fibreglass
- Ideal for electrical work
- Made in Switzerland



Part No.	Overall Length
<b>321902</b>	2000mm

**SINGLE SIDED FOLDING RULE**  
METRIC

- **Graduations on both upper and lower edges with numerical markings in centre only**
- Folding rules are precisely manufactured to maximise reliability and smooth operation
- Blades are locked into place when straightened via an accurately machined rivet function
- Blades straighten and align perfectly to maintain accurate graduations and measurements
- One square end and one round end when not fully extended. Square end to square end at full extension
- Manufactured from stainless steel
- Made in Japan



Part No.	Description	Overall Length	Width	Thickness	Graduations	
					Upper Edge	Lower Edge
<b>600FM</b>	2 blade/1 fold	600mm	20mm	0.7mm	1mm	0.5mm

## CALIPERS & DIVIDERS

### CALIPERS & DIVIDERS

- Spring calipers and dividers designed for reliable, quick and accurate measurements during layout procedures and jobs
- Manufactured in Japan to strict standards to ensure accuracy and precision
- Legs pivot on a roller and are tensioned via bow spring
- Manufactured from stainless steel and feature a spring joint via a solid screw nut
- Solid nut requires progressive twisting to wind in and out via the threaded tension bar
- Made in Japan



#### INSIDE CALIPERS

Part No.	Length	Jaw Opening (Max)
<b>51100</b>	100mm	100mm
<b>51150</b>	150mm	150mm
<b>51200</b>	200mm	200mm
<b>51250</b>	250mm	250mm
<b>51300</b>	300mm	300mm
<b>51350</b>	350mm	350mm
<b>51400</b>	400mm	400mm
<b>51450</b>	450mm	450mm

#### OUTSIDE CALIPERS

Part No.	Length	Jaw Opening (Max)
<b>52100</b>	100mm	100mm
<b>52150</b>	150mm	150mm
<b>52200</b>	200mm	200mm
<b>52250</b>	250mm	250mm
<b>52300</b>	300mm	300mm
<b>52350</b>	350mm	350mm
<b>52400</b>	400mm	400mm
<b>52450</b>	450mm	450mm

#### DIVIDERS

Part No.	Length	Jaw Opening (Max)
<b>50100</b>	100mm	100mm
<b>50150</b>	150mm	150mm
<b>50200</b>	200mm	200mm
<b>50250</b>	250mm	250mm
<b>50300</b>	300mm	300mm
<b>50350</b>	350mm	350mm
<b>50400</b>	400mm	400mm
<b>50450</b>	450mm	450mm

### FIRM JOINT CALIPERS

- Precision measuring tools for obtaining quick and accurate measurements during layout procedures and jobs
- Firm joint allows for quick and efficient measuring
- Firm joint is stable and stiff to hold measurements
- Manufactured from hardened Japanese carbon steel
- Made in Japan



#### INSIDE CALIPERS

Part No.	Length	Jaw Opening (Max)
<b>321070</b>	165mm	150mm
<b>321071</b>	210mm	200mm

#### OUTSIDE CALIPERS

Part No.	Length	Jaw Opening (Max)
<b>321072</b>	160mm	150mm
<b>321073</b>	210mm	200mm

**FIXED JOINT CALIPER (JENNY)**

- Fixed joint caliper also known as a 'Jenny' caliper
- Used to locate the centre of a round or square section of steel
- Suitable for setting a constant distance from an edge
- One leg holds an adjustable point and the other end a locating lug
- Made in Japan



Part No.	Size
<b>321074</b>	150mm

**LEVELS**

**BOX LEVELS MAGNETIC**

- Reinforced aluminium frame
- Epoxy locked shockproof vials
- Precision milled surfaces for accuracy (up to 1200mm)
- Enlarged easy read horizontal vial (33% bigger)
- Unique side-view vial provides accurate plumb reading
- Removable shockproof end caps
- Powerful rare earth magnets
- V-groove for pipes and curved surfaces
- Non-scratching wall grab tabs
- High accuracy of 0.5mm/m



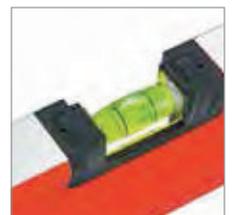
NTMM08  
Merchandise 9Pc.



Wall Grab Tabs



Side-View Vial



Enlarged Vial



Part No.	Length	Thickness	Height
<b>322060</b>	600mm	31mm	66mm
<b>322090</b>	900mm	31mm	66mm
<b>322120</b>	1200mm	31mm	66mm
<b>322180</b>	1800mm	31mm	66mm
<b>322240</b>	2400mm	31mm	66mm



Shockproof Vial



V-Groove

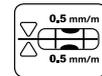
## LEVELS

### BOX LEVELS DIGITAL MAGNETIC

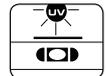
- Precision angle measurement to 0.05 degrees
- Individually calibrated high accuracy vials 0.5mm/m
- Hold function
- Memory store and recall (9 measurements)
- Mode selection: Degree/Percentage/Pitch
- Easy user-recalibration
- Flip screen for upright read out
- Buzzer at 0°, 45°, 90°
- Rainproof and dust resistant
- Battery indicator
- Tilted LCD screen with LED backlight
- Auto-Off (10 minutes)
- Battery operated: 9V (not included)



NTMM08  
Merchandise 9Pc.



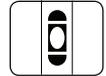
Accuracy



UV Resistant



Shockproof



Side-View



Magnetic



Battery Operated  
9V  
Not included



Shockproof  
Vial



Conforms to CE  
safety regulations



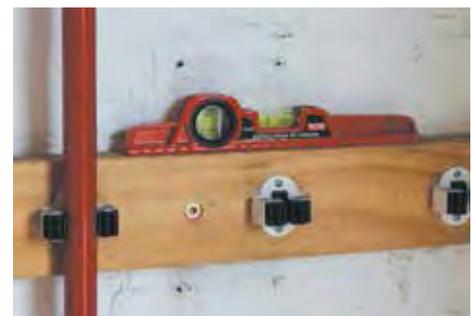
Part No.	Length	Resolution	Width	Height
<b>322050</b>	600mm	0.05°	25mm	60mm
<b>322051</b>	1200mm	0.05°	25mm	60mm



### TORPEDO LEVEL MAGNETIC

- Handy portable lightweight level ideal for all big and small measuring jobs
- Features two solid shockproof horizontal and vertical acrylic vials
- UV resistant material that endures the effects of direct sunlight
- Small portable size fits perfectly into tool boxes, belts, drawers and pockets
- Precision milled flat surface with dual magnets
- Accuracy: < 0.5mm/m (0.0005 in/in.)

NTMM07  
Merchandise 12Pc.



Part No.	Length	Width	Thickness
<b>322010</b>	250mm	45mm	22mm

**PIPE LEVEL SET**

5 PIECE

- Handy five piece pipe level set suitable for standard metal, copper and plastic PVC pipes
- Perfect for all plumbing and electrical pipe/conduit work
- Features a spring loaded design for easy click on attachment
- Flexible polymer construction ensures the tool maintains shape and provides a tight and secure fit every time
- Two easy to read injection moulded acrylic vials - one horizontal and one vertical
- Covers pipe sizes 1/2" to 2"



Part No.	Sizes
<b>322011</b>	1/2", 3/4", 1", 1 1/4"-1 1/2", 2"

Nominal Sizes	IPS Steel Stainless Steel PVC Plastic		CTS Copper		PP Plastic
	Inches	mm	Inches	mm	mm
1/2"	1/2"	15	3/4"	20	25
3/4"	3/4"	20	1"	25	32
1"	1"	25	1 1/4"-1 1/2"	32-40	40
1 1/4" - 1 1/2"	1 1/4"-1 1/2"	32-40	-	-	50
2"	2"	50	-	-	63

**EXACTA POST LEVEL**

MAGNETIC & ELASTIC STRAP

- Handy tool designed to check the level for all posts, pipes and signs
- Folds closed and opens flat with a click-lock every 15°
- Four powerful magnets for metal surfaces
- Inbuilt adjustable elastic strap for all non-magnetic surfaces

NTMM05  
Merchandise 6Pc.



Part No.	Length	Width	Thickness
<b>322012</b>	130mm	190mm	30mm

## LEVELS

### MINI LEVEL

MAGNETIC

- Small, lightweight and durable magnetic level perfect for a wide range of applications
- Shockproof solid acrylic vial enables quick and accurate reading
- Lightweight aluminium box profile fits easily into any tool belt or pocket
- Rubber shockproof end caps
- Rare earth magnets
- Accuracy: 0.5mm/m



NTMM06  
Merchandise 10Pc.



Part No.	Length	Width	Thickness
<b>322013</b>	20mm	100mm	7mm

### CROSS LEVEL MINI

MAGNETIC

- Handy multi-purpose magnetic level for various applications
- Solid acrylic horizontal and vertical vials
- Pre-cast holes for easy attachment to anything
- Sensitivity: 30arc/min.



Part No.	Height	Width	Thickness
<b>322014</b>	60mm	53mm	15mm

### BULLS-EYE LEVEL MINI

- Multi-purpose general level provides measurement in all directions
- Pre-cast holes for easy attachment to a range of various objects
- Lightweight easy to use with clear vial
- Useful for many applications including home appliances  
E.g. desk, fridge, washer, dryer etc.

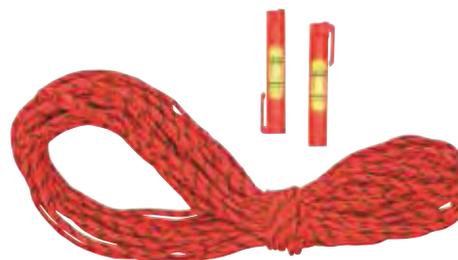


Part No.	Diameter	Thickness	Sensitivity
<b>322451</b>	42mm	12mm	30 arc/min

### LINE LEVEL

20 METRES

- Includes two line levels with pocket clips and 20 metre line
- Lightweight levels eliminate sag
- V-groove for pipe work



Part No.	Line Length	Line Thickness
<b>322455</b>	20m	3.5mm

**LASER DISTANCE MEASURER**  
DIGITAL

- Professional distance measurer for simple, quick and precise distance reading with the push of a button
- Capable of measuring distance up to 70 metres
- Calculates volume/area, tracking and indirect height measurements
- Small, compact and lightweight design for easy transportation and storage
- Includes carry pouch with velcro
- Measures in metres, inches and feet
- Precision Class II laser is accurate to  $\pm 1.5\text{mm}$
- Bright backlit LCD screen increases visibility and allows easy reading
- Easy to follow and concise user guide clearly explains all functions and features for easy operation

**KEY FEATURES & FUNCTIONS**

- 6 measuring applications
- Auto-Off
- Backlight
- LCD digital screen
- Variable measurement units
- Countdown mode
- Indirect measurements
- Velcro carry case
- Safety strap
- Batteries included

Part No.	Description
<b>322053</b>	Laser Distance Measurer
Specification	
Accuracy	$\pm 1.5\text{mm}$
Auto Off	Laser - 30 sec. Unit - 180 sec.
Backlight	Yes
Battery Life	10,000 Measurements
Battery Type	2 x AA
Beam Size	25mm @ 30m
Dimensions	114 x 47 x 32mm
Laser Type	650Nm, Class II <1mW
Measure Units	Metres / Inches / Feet
Measuring Speed	0.5 Seconds
Operation Temperature	-5°C to 40°C
Range	0.05 - 70 Metres
Resolution	0.001 Metres
Storage Temperature	-20°C - 60°C

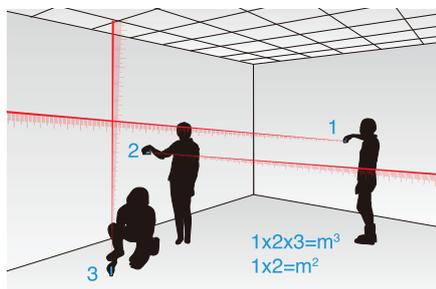


Includes marking crayon

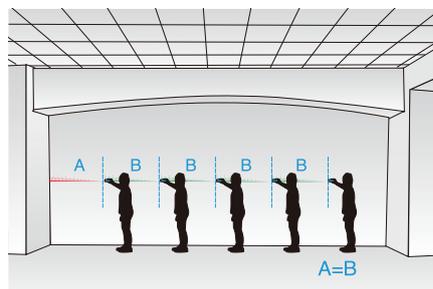


Includes carry pouch

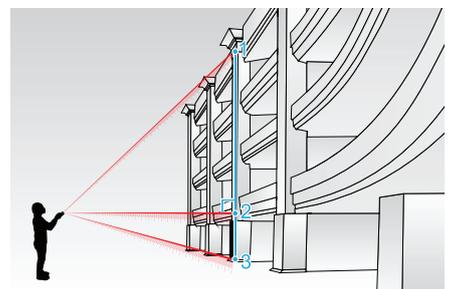
Hang cell packaging



Area & Volume Measurement



Tracking Measurement



Indirect Height Measurement

## LASERS

### CROSS LASER DIGITAL

WITH TRIPOD & CASE

- Suitable for all measuring and marking out work
- Intersecting horizontal and vertical lines at 90°
- "Tilt" mode for angular layout/markings
- Strong folding legs for angle mounting and height adjustment up to 120cm
- Visual and audible "out of level" warning
- Legs fold closed against the unit to protect the laser while not in use
- Shock resistant rubber casing
- Includes protective belt pouch for laser and protective bag for tripod
- Suitable for: Hanging shelves, pictures and cabinets  
Aligning tiles, borders, mouldings and trims  
Building decks and other construction jobs

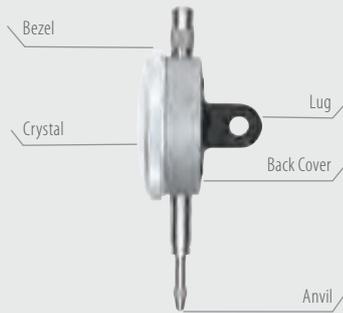


Specification	
Accuracy	0.2mm/m
Batteries Included	No
Beam Angle	120° ±5°
Laser Carry Case Included	Yes
Laser Line Width	2mm ±0.5mm/5m
Laser Range Indoor	30m
Laser Range Outdoor	50m (with detector)
Laser Type	Class II
Number of Laser Beams	2
Power Supply	3 AA Batteries
Self-Levelling Range	±5°
Tripod Carry Case Included	Yes
User Guide Included	Yes
Water & Dust Proof	IP54
Wavelength	635 ±5nm

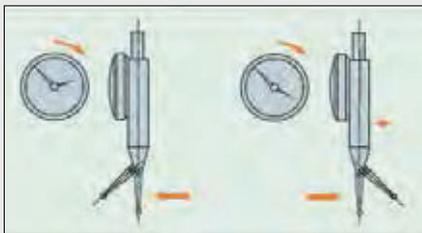


Part No.	Tripod	Laser	Output Power	Wavelength
<b>322055</b>	Up to 1200mm	Class II	<1 mW	630 - 660nm

- Expert range of professional quality, function and accuracy
- 100% made in Japan using superior Japanese materials and workmanship
- Provided with calibration certificates and user guides
- Manufactured to Japanese Industrial Standard B 7503 (Metric Only)
- Made in Japan



**Dial Indicator Automatic Inverse**

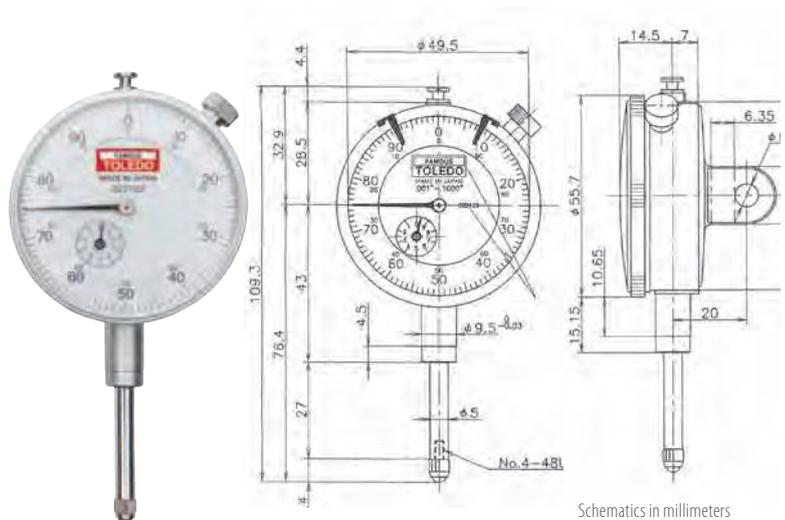


No change lever required. Automatic inverse function provides constant clock-wise read out

**DIAL GAUGE**

IMPERIAL

- High precision expert dial gauge for precision measuring work
- Waterproof and dustproof dial face features O-ring and additional internal housing sealing
- Shock-proof mechanism prevents damage to the internal gears if the spindle is pushed abruptly
- Hardened SK quenched steel stem is specially fastened to eliminate failure
- Superior quality spindle rack, pinions and gear trains ensure longevity
- Easy read design incorporates white dial face with black graduations and pointer needle
- Knurled bezel provides a firm and secure grip
- Meets applicable US federal specifications and conforms to American Gauge Design #2 (AGD #2) Specifications
- Made in Japan



Schematics in millimeters



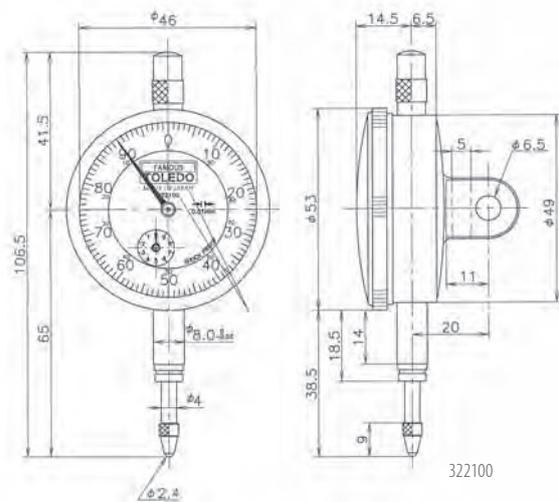
Part No.	Type	Graduation x Range	Reading	Wide Range Forward Accuracy	Retrace Error	Measuring Force
<b>322102</b>	Imperial	0.001 x 1"	±0 -50- 100	0.002"	0.0004"	< 2.0 N

PRECISION MEASURING

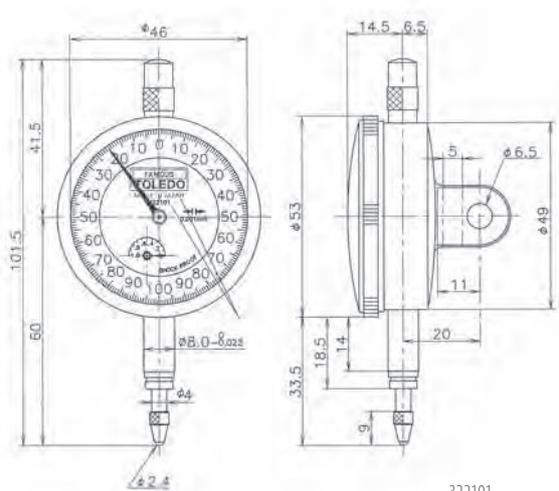
DIAL GAUGES

METRIC

- High precision expert dial gauges for precision measuring work
- Dial face with O-ring and internal housing sealing ensures unit is waterproof and dustproof
- Shock-proof mechanism prevents damage to the internal gears if the spindle is pushed abruptly
- Hardened SK quenched steel stem with specialty fastening to eliminate failure
- Superior quality spindle rack, pinions and gear trains ensure longevity
- Easy read design incorporates white dial face with black graduations and pointer needle
- Knurled bezel provides a firm and secure grip
- Securely fitted back cover with four locking screws enables lug to rotate at 90° angles
- Manufactured to JIS B 7503
- Made in Japan



Schematics in millimeters



Schematics in millimeters

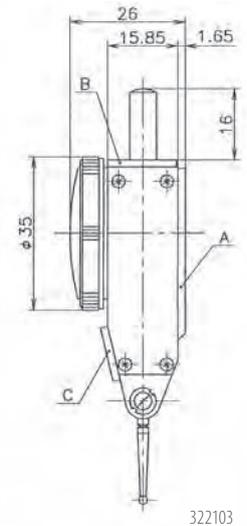
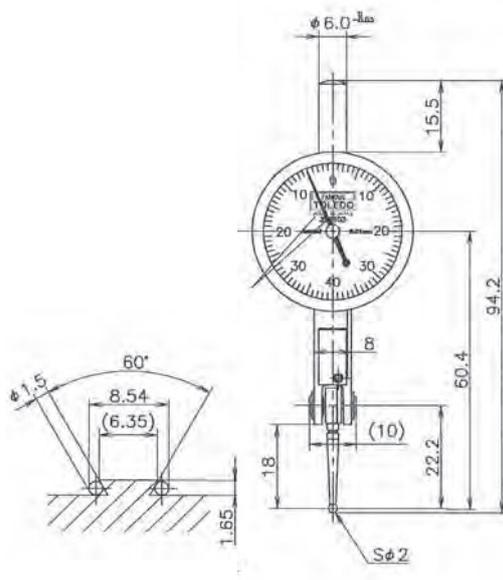


Part No.	Type	Graduation x Range	Reading	Indication error					Retrace Error	Repeatability	Measuring Force
				Revolutions				Full Measuring Range			
				1/10	1/2	One	Two				
<b>322100</b>	Metric	0.01 x 10mm	±0-50-100	6 μm	±7 μm	±8 μm	±10 μm	±10 μm	4	5 μm	< 1.4 N
<b>322101</b>	Metric	0.001 x 1mm	0 - 100 - 0	2 μm	±2 μm	±3 μm	±3 μm	±3 μm	2	0.5 μm	< 1.5 N

DIAL TEST INDICATORS

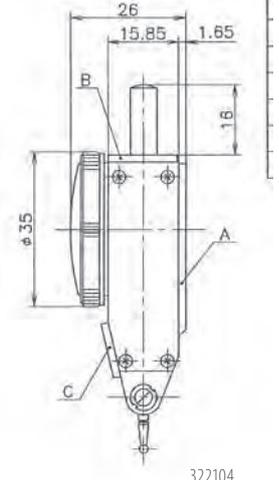
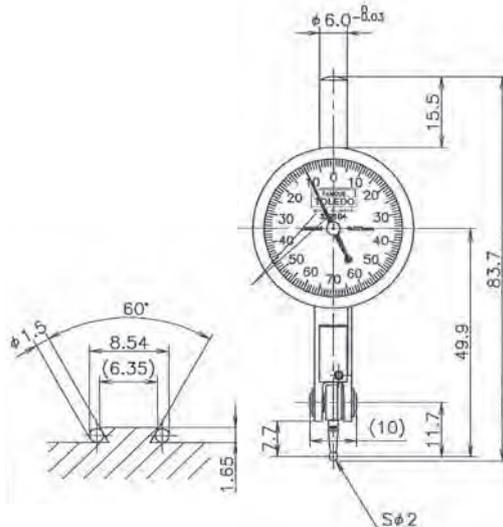
METRIC

- High precision expert dial test indicators for precision measuring work
- Automatic needle pointer – inverts automatically with change of direction of the contact point to provide constant clock-wise readings and measuring efficiency and accuracy
- Miniature bearing at the pivot point optimises accuracy of micro adjustments and eliminates any rod play
- Waterproof and dustproof dial face features O-ring and additional internal housing sealing
- Superior quality spindle rack, pinions and gear trains ensure longevity
- Easy read design incorporates white dial face with black graduations and pointer needle
- Knurled bezel provides a firm and secure grip
- Manufactured to JIS B 7503
- Made in Japan



322103

Schematics in millimeters



322104

Schematics in millimeters

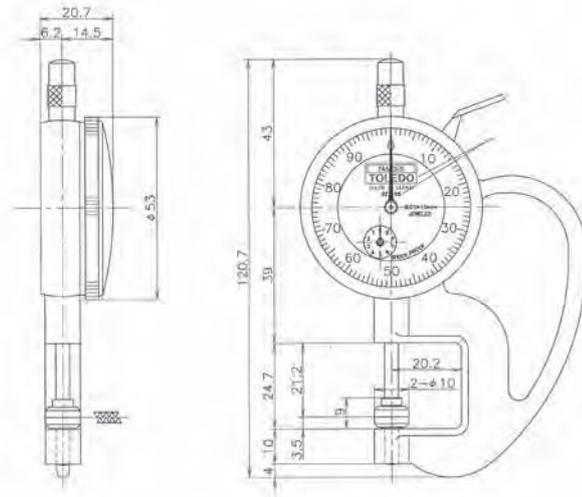


Part No.	Type	Graduation x Range	Reading	Accuracy			Measuring Force
				Wide Range Forward	Adjacent Error	Backward Error	
322103	Metric	0.01 x 0.8mm	0 - 40 - 0	8 µm	5 µm	3 µm	< 0.3 N
322104	Metric	0.001 x 0.14mm	0 - 70 - 0	3 µm	2 µm	2 µm	< 0.3 N

**THICKNESS GAUGES LEVER TYPE**

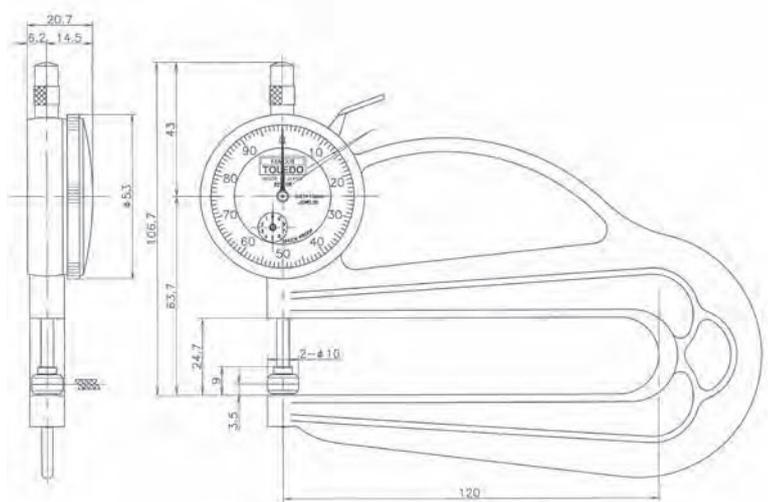
METRIC

- High precision expert thickness gauges for precision measuring work
- Quick and accurate measurement of small dimensions
- Simple lever operation used to clamp onto object to be measured
- Ideal for measuring the thickness of small parts, metal, glass, plastic, rubber, vinyl, foil and other sheet material
- Ceramic body available in standard and deep throat depth
- Made in Japan



322105

Schematics in millimeters



322108

Schematics in millimeters

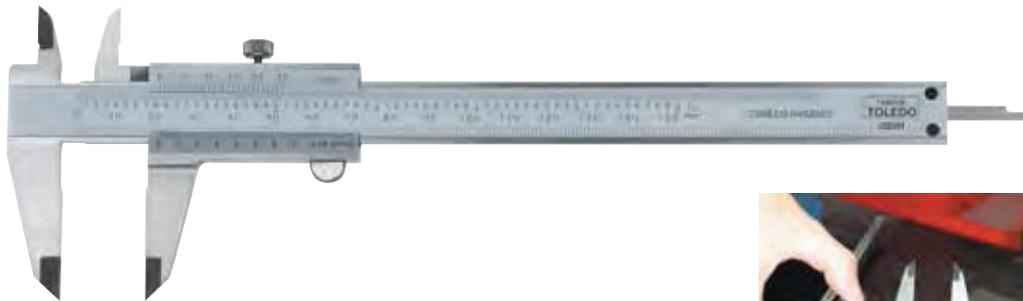


Part No.	Type	Graduation x Range	Throat Depth	Accuracy	Contact Point		Measuring Force
					Diameter	Parallelism	
<b>322105</b>	Metric - Standard	0.01 x 10mm	20mm	± 20 µm	10mm	5 µm	< 1.8 N
<b>322108</b>	Metric - Deep	0.01 x 10mm	120mm	± 20 µm	10mm	5 µm	< 1.8 N

### VERNIER CALIPER 150MM

METRIC & IMPERIAL

- High precision expert vernier caliper features metric and imperial graduations
- Ideal for taking precise Outer Diameter (O.D.), Inner Diameter (I.D.), Depth and Step measurements
- Features locking screw for firm fixation and micro adjustment sliding carriage
- Angled carriage is easy to read
- Hardened stainless steel with satin chrome finish
- Supplied in custom moulded EVA foam tray and wooden storage box



Part No.	Type	Range	Graduation
<b>322201</b>	Metric & Imperial	0 - 150mm/0 - 6"	0.05mm/ 1/128"

### VERNIER CALIPER DIGITAL 150MM

METRIC & IMPERIAL

- High precision expert digital vernier caliper provides metric and imperial read outs
- Ideal for taking precise Outer Diameter (O.D.), Inner Diameter (I.D.), Depth and Step measurements
- Features locking screw for firm fixation and micro adjustment sliding carriage
- Hardened stainless steel with satin chrome finish
- Includes mini screwdriver for battery replacement
- Factory calibrated unit ready to use
- Supplied in custom moulded EVA foam tray and wooden storage box
- Battery included



Part No.	Type	Range	Graduation
<b>322200</b>	Digital Metric & Imperial	0 - 150mm/0 - 6"	0.01mm/0.0005"

PRECISION MEASURING

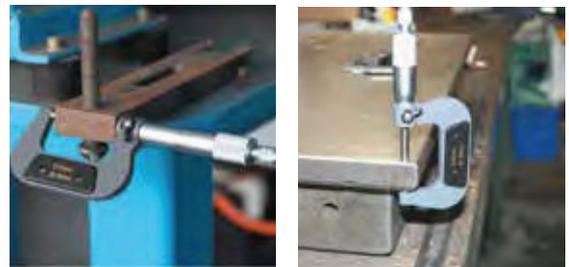
MICROMETERS

- High precision micrometers for precision measuring work
- Robust C/U-Frame design with carbide tipped measuring faces and knurled thimble and ratchet knob
- Features positive locking level and ratchet stop
- Satin chromed sleeve and thimble for easy glare free reading
- Includes micro-spanner for fine adjustment
- Part No. 322206 supplied with calibrated 25mm gauge block
- Manufactured to GB/T 1216
- Supplied in custom moulded EVA foam tray in plastic hard case

322205  
C-Frame



322206  
U-Frame



Part No.	Graduation x Range	Force
<b>322205</b>	0.01 x 0 - 25mm	5 - 10 N
<b>322206</b>	0.01 x 25 - 50mm	5 - 10 N

MAGNETIC BASE

8MM

- Traditional piece of measuring equipment with 8mm diameter indicator/gauge mount hole
- Cast iron base with ON/OFF permanent magnetic function to provide shock free and vibration free measurement
- Dual pivot joints provide good versatility and functionality
- Fine adjustment clamp for micro measurement work
- Attach to flat or round surfaces and keep work in perfect alignment
- Ideal for use with milling machines, lathes etc.

Part No.	Mounting Hole Diameter
<b>322110</b>	8.1mm



**BLUETOOTH® PRECISION MEASURING**

- Premium high precision range with **Bluetooth®** wireless technology features built-in Bluetooth® Smart Data Transmission to enable direct data transfer to synchronised devices e.g. PC, Smart Phone, Tablet
- Eliminate human data taking errors with direct data transfer at the click of a button
- Increase productivity by reducing manual data taking
- Patented inductive measuring system is insensitive to magnetic fields and liquids on the sensor or on the measuring scale
- Patented software enables up to 16 individual instruments to be simultaneously synchronised with the same device. This enables multiple units to be set up on one project and deliver data simultaneously
- Toledo software provides a platform to store, view and analyse data as well as export results into excel
- Toledo software and license is supplied on the USB key dongle. This dongle provides set up details and directions for use
- Manufactured entirely in Switzerland



For further information use the QR codes or consult the Toledo website. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc., and any use of such marks by The Tridon Group is under license. Other trademarks and trade names are those of their respective owners.

**DEFINITIONS**



**SIS** Smart Inductive System

Smart Inductive Sensor (S.I.S.) with an extremely low power sleeping mode, which keeps it's origin (last zero setting) and automatically wakes up when a movement is detected

**IP67**

Protected against liquids. The IPXX degree defines the protection rating according to IEC 60529.  
 IP54 : Protected against dust. Protected against water spray from all directions  
 IP65 : Completely sealed against dust, protected against water jets from all directions  
 IP67 : Completely sealed against dust, protected against temporary total immersion

**TOLEDO BLUETOOTH® SOFTWARE**

- To enable Bluetooth® wireless connectivity between instrument and device, software installation and receiving dongle is required. The basic version enables one precision tool to be connected at one time, the full version enables 16 unique precision tools to be connected.
- Note - one dongle is required per 8 precision tools. To use 16 precision tools simultaneously with the full software version it will require two dongles (2 x 322404)
- Compatible with precision instruments 322400, 322401, 322402, 322403



**322404 Receiving dongle & CD**

- Includes dongle and free software installation CD
- Enables 1 instrument to be synchronised

**322405 Full Version Software (also requires purchase of 322404)**

- Enables up to 16 instruments to be synchronised simultaneously
- Includes security protected USB Key with full software version
- Does not include receiving dongle (Part No. 322404 required)
- One dongle per 8 instruments

Part No.	Description
<b>322404</b>	Basic version - receiving dongle & software CD
<b>322405</b>	Full version - installation USB key with software



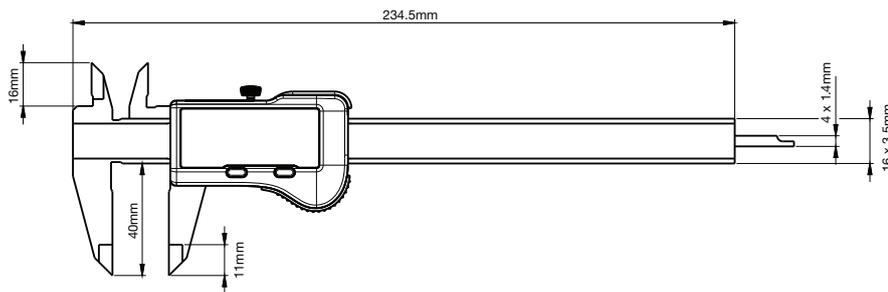
## BLUETOOTH® PRECISION MEASURING

### VERNIER CALIPER DIGITAL 150MM METRIC & IMPERIAL

- Integrated Bluetooth® Smart Data Transmission (Built in Bluetooth® v4.0 Transmitter)
- Extra-large and bright digital display
- Programmable button according to your needs
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529
- Automatic wake-up by moving carriage
- Sleeping mode after 20 min. of no use
- Position memorised in sleeping mode
- Maximum speed of displacement : 2.5 m/sec
- Hardened and ground, stainless steel frame
- Ergonomically designed for maximum comfort
- Supplied in heavy duty storage case with foam insert and firm locking clip
- Bluetooth® software sold separately
- Made in Switzerland



Scan for further information



Specifications	
Max Error	0-100: 20 µm >100: 30 µm (DIN 862)
Depth Rod	4 x 1.4mm
Protection rating (IEC 60529)	IP 67
Connection: Built-In Bluetooth®	Version 4.0
Smart Inductive Sensor (S.I.S.)	Yes



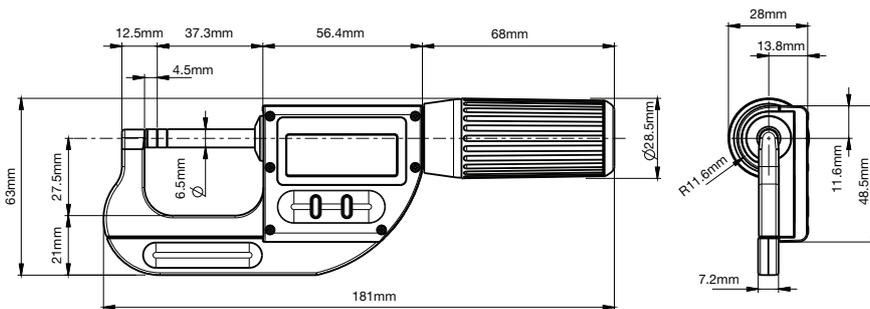
Part No.	Type	Range	Resolution
<b>322400</b>	Digital Metric & Imperial	0-150mm/0-6"	0.01mm/0.0005"

**MICROMETER DIGITAL 0-30MM**  
METRIC & IMPERIAL



Scan for further information

- Integrated Bluetooth® Smart Data Transmission (Built in Bluetooth® v4.0 Transmitter)
- Automatic wake-up by moving the measuring spindle
- Sleeping mode after 20 min. of no use
- Position memorised in sleeping mode
- Water protected for heavy-duty work with coolants and lubricants, protection rating IP67 according to IEC 60529
- Quick displacement of the measuring spindle 12 mm / rotation
- Adjustable measuring force 5N / 10N
- Thimble in polyacetal-copolymer
- Supplied in heavy duty storage case with foam insert and firm locking clip
- Bluetooth® software sold separately
- Made in Switzerland



Specifications	
Max Error	3 µm (DIN 863)
Repeatability	1 µm
Anvils	Ø 6.5 mm
Protection rating (IEC 60529)	IP 67
Connection: Built-In Bluetooth®	Version 4.0
Smart Inductive Sensor (S.I.S.)	Yes
Adjustable Measuring Force	5N/10N
Setting by PC	Yes
Non-Rotating Spindle	Yes
Fast Movement	Yes



Part No.	Type	Range	Resolution
<b>322401</b>	Digital Metric & Imperial	0-30mm/0.1-2"	0.01mm/0.0001"

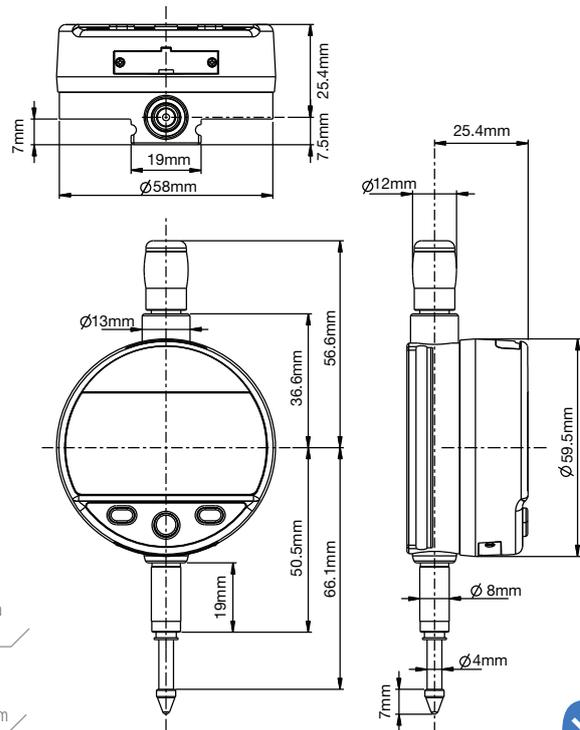
## BLUETOOTH® PRECISION MEASURING

### DIAL INDICATORS DIGITAL METRIC & IMPERIAL

- Integrated Bluetooth® Smart Data Transmission (Built in Bluetooth® v4.0 Transmitter)
- Robust construction
- Water and coolant resistant
- New technology with configurable menus
- Broad choice of functions (MIN/MAX/DELTA, TOL, Factor, PRESET, AUTO OFF, etc.)
- Automatic wake-up and sleeping mode
- Maximum error of 3 µm
- Supplied in heavy duty storage case with foam insert and firm locking clip
- Bluetooth® software sold separately
- Made in Switzerland



Scan for further information



Specifications	
Max Error	0-100: 20 µm >100: 30 µm (DIN 862)
Depth Rod	4 x 1.4mm
Protection rating (IEC 60529)	IP 67
Connection: Built-In Bluetooth®	v4.0
Smart Inductive Sensor (S.I.S.)	Yes



Part No.	Type	Range	Resolution
<b>322402</b>	Digital Metric & Imperial	0-12.5mm/0-1/2"	0.001mm/0.0001"
<b>322403</b>	Digital Metric & Imperial	0-12.5mm/0-1/2"	0.0001mm/0.00001"

### DIAL INDICATOR LUG BACK

- Lug back to suit Toledo Bluetooth® dial indicators only (Part No. 322402, 322403)
- Required when mounting to magnetic base (Part No. 322110)
- Manufactured from high grade industrial aluminium
- Made in Switzerland

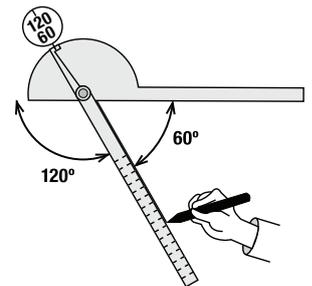


Part No.	Size	Weight
<b>322410</b>	16 x 16mm	6g

### SPECIALTY MEASURING

### PROTRACTOR 180°

- For accurate angle, depth and length measurements
- Photographically etched markings for ultimate precision and accuracy
- Deep etched with black chrome plating for long term visibility and service life
- Stainless steel with satin chrome finish which is non-glare and easy to read
- Made in Japan



321955



321112



Part No.	Description
<b>301955</b>	Protractor 180° & 100mm Rule
<b>321110</b>	Protractor 180° & 300mm Rule
<b>321111</b>	Protractor 180° & 600mm Rule
<b>321112</b>	Protractor 180° & 1000mm Rule

321068



321069



### RADIUS & DIAMETER SCALES

- Unique precision tools designed to measure the radius and diameter of objects
- Centre cut out to measure diameter, side cuts to measure radius and 150mm metric rule for length
- Pocket size available in two different size ranges
- Manufactured from hardened Japanese stainless steel
- Made in Japan



Part No.	Radius Range	Radius Graduations	Diameter Range	Diameter Graduations	Rule Range	Rule Graduations	Overall Thickness	Overall Width	Overall Length
<b>321068</b>	0.5 - 7mm	1mm	0.5 - 6mm	0.1mm	0 - 150mm	0.5mm	0.5mm	15mm	175mm
<b>321069</b>	8 - 15mm	1mm	0.5 - 6mm	0.1mm	0 - 150mm	0.5mm	0.5mm	15mm	175mm

## SPECIALTY MEASURING

### POCKET BALANCES/SPRING SCALES

- Traditional spring balance design
- Manufactured in Germany they represent premium quality for the professional
- Protective coated brass face and glossy nickel plated hook and ring ensures corrosion resistance and long service life
- Dual scale readings in kilograms and pounds
- Made in Germany



Part No.	Capacity	Scale
<b>100A</b>	12.5kg (25Lbs)	250g (0.5Lbs)
<b>100B</b>	23.0kg (50Lbs)	500g (1.0Lbs)
<b>100C</b>	46.0kg (100Lbs)	500g (1.0Lbs)

### MULTI-SCAN STUD FINDER

DIGITAL

- Ideal tool for all electrical, plumbing, building and DIY household work
- Powerful inbuilt electronic sensors detect live AC wires, metal, studs and wood located behind gyprock and other common wall materials
- Differentiates between wood, metal and live wires
- Easy to read back lit LCD screen marks exact position
- Inbuilt detection buzzer
- Automatic scan function



Part No.	Length	Width	Thickness	Detection Depth Range				
				Live AC wires	Metal	Wood	Metal pipes	Copper pipes
<b>322054</b>	160mm	68mm	30mm	75mm	75mm	18mm	38mm	30mm

### CRACK MEASURE GAUGE

- Handy tool designed to check the width of cracks in concrete walls and foundations
- Small pocket size allows easy portability
- Built in 80mm rule
- Manufactured from hardened stainless steel
- Made in Japan



Part No.	Crack Width Range	Rule Length	Rule Graduation	Overall Width	Overall Thickness
<b>321066</b>	0.1 - 1.4mm	80mm	0.5mm	55mm	0.3mm

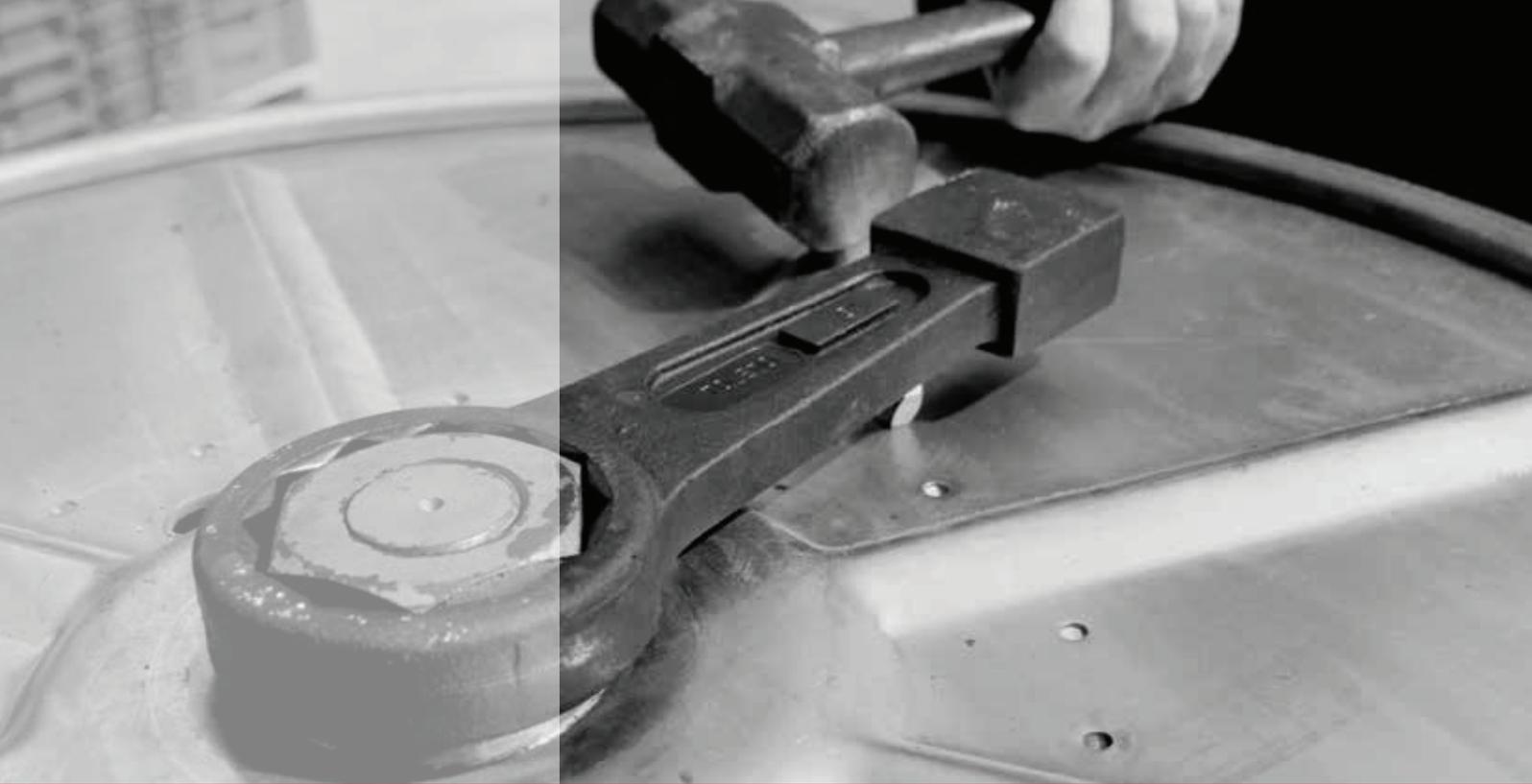
### RULE & CRACK MEASURE

METRIC DOUBLE SIDED

- High grade stainless steel metric rule with crack scale on reverse side
- Front: Upper and lower graduations with numeric measurement in centre
- Back: Crack scale is suitable for measuring cracks on walls, wood and plastic etc
- One Square edge with round edge hanging hole
- Photographically etched markings for ultimate precision and accuracy
- Made in Japan



Part No.	Rule Length	Crack Width Range	Width	Thickness
<b>321079</b>	150mm	0.10 - 2.20mm	15mm	0.2mm



# PODGERS & SLOGGERS

PODGERS	314
SLOGGING WRENCHES	317

## PODGERS

### RATCHET PODGERS

#### DUAL SOCKET METRIC

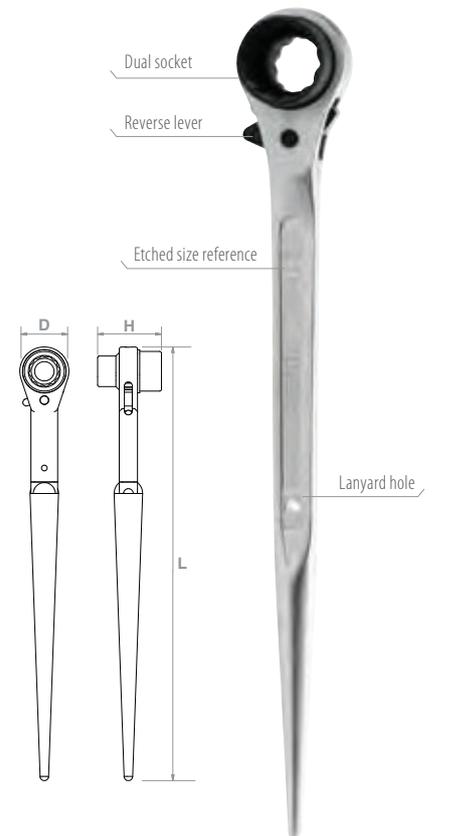
- Ratchet podger wrenches built for heavy duty use particularly in industrial and construction applications
- Dual sized twelve point ratcheting socket for efficient fastener tightening
- Reliable in-built reverse ratcheting lever function for easy direction change
- Tapered end design for easy bolt hole alignment
- Built-in safety lanyard/security spring hook hole
- Ideal for applications where extra leverage, size and strength is required
- Manufactured from premium quality drop forged chrome vanadium steel
- Toledo podgers conform to ISO 9001:2000 quality standards

Note: Individually supplied in professional hang sell packaging boxes



Bi-Hex

Part No.	Size	Depth (D)	Height (H)	Overall Length (L)	Weight
301223	10 x 12mm	31mm	37.5mm	240mm	200g
301224	13 x 17mm	34mm	45mm	280mm	230g
301225	14 x 15mm	34mm	45mm	280mm	230g
301226	16 x 18mm	42mm	50mm	315mm	450g
301227	17 x 19mm	42mm	50mm	315mm	450g
301228	18 x 24mm	42mm	50mm	315mm	450g
301229	19 x 21mm	42mm	50mm	315mm	450g
301230	19 x 24mm	42mm	50mm	315mm	450g
301231	21 x 24mm	42mm	50mm	315mm	450g
301232	21 x 26mm	52mm	56mm	360mm	800g
301633	22 x 23mm	42mm	50mm	315mm	450g
301233	22 x 24mm	52mm	56mm	360mm	800g
301235	24 x 27mm	52mm	56mm	360mm	800g
301234	24 x 30mm	65mm	63mm	450mm	1250g
301244	26 x 32mm	65mm	63mm	450mm	1250g
301236	27 x 32mm	65mm	63mm	450mm	1250g
301237	30 x 32mm	65mm	63mm	450mm	1250g
301238	32 x 36mm	65mm	67mm	450mm	1250g
321016	34 x 36mm	65mm	67mm	450mm	1250g
301239	36 x 41mm	65mm	67mm	450mm	1250g
301240	41 x 46mm	88mm	74mm	500mm	2300g
301241	41 x 55mm	88mm	74mm	500mm	2300g
301242	46 x 50mm	88mm	74mm	500mm	2300g
301243*	21 x 24mm	40mm	50mm	240mm	200g
321042*	12 x 17mm 13 x 19mm	40mm	50mm	250mm	200g



\* Scaffolders versions have a unique short cranked podger end design for easier use in confined spaces



Bolt hole alignment



In-built reverse lever function



Ratcheting socket (two sizes)



Ratchet Podger Packaging

RING PODGERS

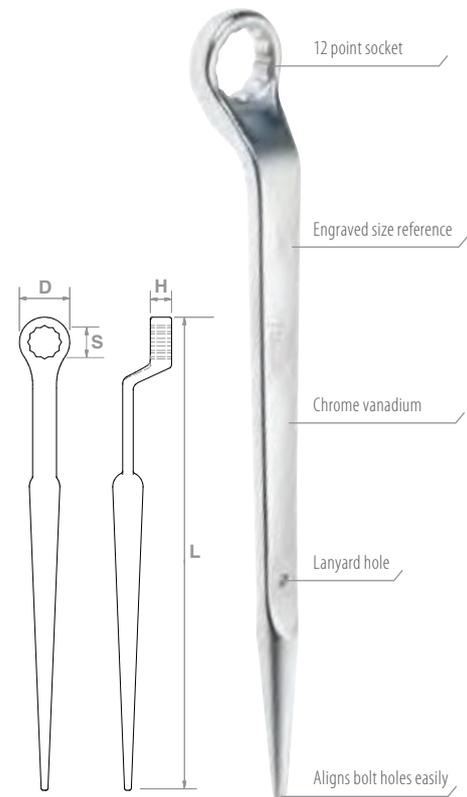
- Ring podger wrenches built for heavy duty use particularly in industrial and construction applications
- Twelve point socket end for efficient fastener tightening
- Tapered end design for easy bolt hole alignment
- Built-in safety lanyard/security spring hook hole
- Ideal for applications where extra leverage, size and strength is required
- Manufactured from premium quality drop forged chrome vanadium steel
- Toledo podgers conform to ISO 9001:2000 quality standards

METRIC

Part No.	Socket Size (S)	Depth (D)	Height (H)	Overall Length (L)	Weight
RPM17	17mm	28mm	10.4mm	324mm	340g
RPM19	19mm	28mm	10.4mm	324mm	340g
RPM22	22mm	36mm	12.4mm	368mm	542g
RPM24	24mm	40mm	12.9mm	380mm	678g
RPM27	27mm	47mm	13.4mm	393mm	762g
RPM30	30mm	50mm	14.9mm	409mm	870g
RPM32	32mm	50mm	14.9mm	409mm	870g
RPM36	36mm	57mm	16.7mm	465mm	1422g
RPM41	41mm	62.5mm	18.3mm	490mm	1676g
RPM46	46mm	68mm	19.9mm	519mm	2030g
RPM50	50mm	78mm	24.4mm	594mm	3200g
RPM55	55mm	78mm	24.4mm	594mm	3200g
RPM60	60mm	92mm	29mm	616mm	4860g



Bi-Hex



IMPERIAL

Part No.	Socket Size (S)	Depth (D)	Height (H)	Overall Length (L)	Weight
RP687	11/16"	28mm	10.4mm	324mm	340g
RP750	3/4"	28mm	10.4mm	324mm	340g
RP812	13/16"	36mm	12.4mm	368mm	542g
RP875	7/8"	36mm	12.4mm	368mm	542g
RP937	15/16"	40mm	12.9mm	380mm	678g
RP1000	1"	40mm	12.9mm	380mm	678g
RP1062	1 1/16"	47mm	13.4mm	393mm	762g
RP1125	1 1/8"	47mm	13.4mm	393mm	762g
RP1250	1 1/4"	50mm	14.9mm	409mm	870g
RP1312	1 5/16"	50mm	14.9mm	409mm	870g
RP1437	1 7/16"	57mm	16.7mm	465mm	1422g
RP1500	1 1/2"	62.5mm	18.3mm	490mm	1676g
RP1625	1 5/8"	62.5mm	18.3mm	490mm	1676g
RP1687	1 11/16"	62.5mm	18.3mm	490mm	1676g
RP1750	1 3/4"	68mm	19.9mm	519mm	2030g
RP1812	1 13/16"	68mm	19.9mm	519mm	2030g
RP1875	1 7/8"	78mm	24.4mm	594mm	3100g
RP2000	2"	78mm	24.4mm	594mm	3200g
RP2062	2 1/16"	78mm	24.4mm	594mm	3200g
RP2187	2 3/16"	92mm	29mm	616mm	4860g
RP2250	2 1/4"	92mm	29mm	616mm	4860g
RP2375	2 3/8"	92mm	29mm	616mm	4860g



Bi-Hex



Where extra leverage on tough fasteners is required

## PODGERS

### SQUARE DRIVE PODGERS

#### DUAL DRIVE

- Dual square drive podgers designed and manufactured specifically for heavy duty and industrial use where extra leverage, size and strength is required
- Dual sized square drives with opposing tapered podger end for easy bolt hole alignment
- Reliable in-built reverse ratcheting lever function for easy direction change
- Built-in safety lanyard/security spring hook hole
- Universal applications, ideal for scaffolding and steel work
- Manufactured from chrome vanadium steel with black phosphate finish for additional corrosion resistance and durability

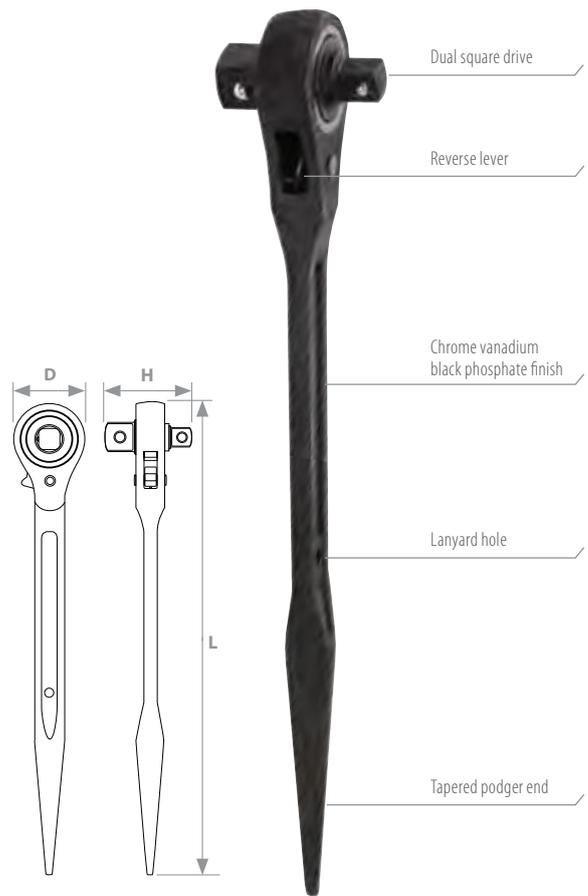
Part No.	Square Drive	Depth (D)	Height (H)	Overall Length (L)	Weight
<b>321020</b>	1/4" x 3/8"	34mm	35mm	280mm	300g
<b>321021</b>	3/8" x 1/2"	42mm	47mm	315mm	500g
<b>321022</b>	1/2" x 3/4"	52mm	64mm	360mm	900g
<b>321023</b>	3/4" x 1"	55mm	71mm	450mm	1500g



Ratcheting head & reverse lever



Dual square drive heads



### SECURITY SPRING HOOKS/SAFETY LANYARDS

- Safely and securely keeps tools attached and prevents loss of tools especially when working at heights
- Effective protection against accidents caused by falling tools
- Reduce downtime retrieving fallen tools
- Nickel plated carabiner and ring end
- Includes additional tool belt loop for additional tethering versatility



321261



321262



301907

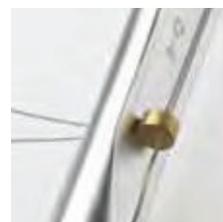


301908

Part No.	Description	Load Capacity	Rest Length	Extended Length
<b>321261</b>	Security spring hook S/S coil PU coated	1Kg	230mm	1400mm
<b>321262</b>	Security spring hook S/S coil PU coated	3Kg	460mm	1600mm
<b>301907</b>	Security spring hook Nylon bungee style	5Kg	800mm	1500mm
<b>301908</b>	Security spring hook Nylon bungee style	10Kg	800mm	1500mm



Nickel plated carabiner & ring end



Tool belt loop for added versatility



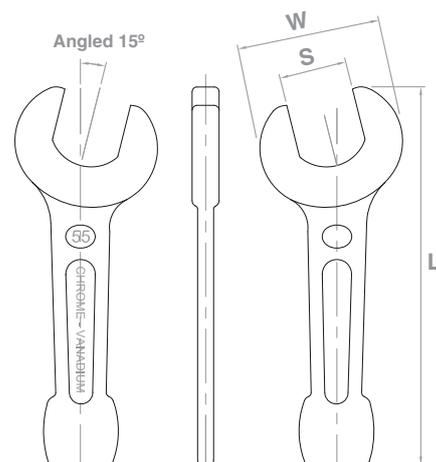
Quick tighten elastic carabiner

**SLOGGING WRENCHES**

OPEN JAW METRIC

- Large striking wrenches with an open jaw wrench and striking handle at opposing end for heavy duty shock impact
- The shock of the striking impact assists in both cracking of stubborn existing fasteners and tightening of newly applied ones
- Superior quality to ensure there is no splintering or breakage, which can lead to serious damage or injury
- Suitable for various applications such as ship maintenance, mining, piping and industrial applications where extra force is required to tighten or loosen large nuts, bolts and other fasteners
- Manufactured from premium quality drop forged chrome vanadium with black phosphate finish
- Toledo sloggers conform to ISO 9001:2000 quality standards

Part No.	Jaw Size (S)	Width (W)	Overall Length (L)	Weight
<b>SWOM22</b>	22mm	52mm	160mm	315g
<b>SWOM24</b>	24mm	56mm	170mm	380g
<b>SWOM27</b>	27mm	57mm	180mm	380g
<b>SWOM30</b>	30mm	65mm	185mm	450g
<b>SWOM32</b>	32mm	65mm	190mm	485g
<b>SWOM34</b>	34mm	65mm	190mm	485g
<b>SWOM36</b>	36mm	73mm	220mm	690g
<b>SWOM38</b>	38mm	73mm	220mm	700g
<b>SWOM41</b>	41mm	84mm	235mm	820g
<b>SWOM42</b>	42mm	84mm	235mm	820g
<b>SWOM46</b>	46mm	96mm	255mm	1130g
<b>SWOM50</b>	50mm	103mm	275mm	1450g
<b>SWOM55</b>	55mm	114mm	300mm	1860g
<b>SWOM60</b>	60mm	126mm	320mm	2250g
<b>SWOM65</b>	65mm	135mm	340mm	2925g
<b>SWOM70</b>	70mm	149mm	375mm	4400g
<b>SWOM75</b>	75mm	151mm	375mm	4270g
<b>SWOM80</b>	80mm	171mm	408mm	5670g
<b>SWOM85</b>	85mm	171mm	408mm	5670g
<b>SWOM90</b>	90mm	192mm	438mm	7630g
<b>SWOM95</b>	95mm	192mm	438mm	7100g
<b>SWOM100</b>	100mm	211mm	478mm	9250g
<b>SWOM105</b>	105mm	211mm	478mm	9250g
<b>SWOM110</b>	110mm	231mm	502mm	11750g
<b>SWOM115</b>	115mm	231mm	502mm	12300g
<b>SWOM120</b>	120mm	251mm	502mm	12615g



When using any slogging wrench always wear protective eye and head wear

## SLOGGING WRENCHES

### FLAT SLOGGING WRENCHES

METRIC, WHITWORTH & IMPERIAL

- Large striking wrenches feature a twelve point socket at one end and striking handle at opposing end for heavy duty shock impact
- The shock of the striking impact assists cracking the most stubborn fasteners or tightening newly applied ones
- Toledo sloggers are far superior in quality to competitor products which is critically important to ensure there is no splintering or breakage which can lead to serious damage or injury
- Suitable for various applications such as ship maintenance, mining, piping and industrial applications where extra force is required to tighten or loosen large nuts, bolts and other fasteners
- Manufactured from premium quality drop forged chrome vanadium with black phosphate finish
- Toledo sloggers conform to ISO 9001:2000 quality standards



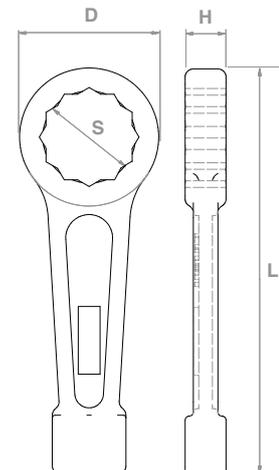
Bi-Hex

#### METRIC

Part No.	Socket Size (S)	Depth (D)	Height (H)	Overall Length (L)	Weight
<b>SWRM24</b>	24mm	47mm	17mm	185mm	390g
<b>SWRM27</b>	27mm	47mm	17mm	185mm	390g
<b>SWRM30</b>	30mm	54mm	17mm	190mm	430g
<b>SWRM32</b>	32mm	54mm	17mm	190mm	430g
<b>SWRM36</b>	36mm	60mm	17mm	190mm	650g
<b>SWRM41</b>	41mm	66mm	22mm	215mm	800g
<b>SWRM46</b>	46mm	74mm	23mm	240mm	1000g
<b>SWRM50</b>	50mm	74mm	23mm	240mm	1000g
<b>SWRM55</b>	55mm	86mm	25mm	270mm	1800g
<b>SWRM60</b>	60mm	94mm	25mm	270mm	1800g
<b>SWRM65</b>	65mm	102mm	30mm	300mm	2500g
<b>SWRM70</b>	70mm	115mm	33mm	330mm	3400g
<b>SWRM75</b>	75mm	115mm	33mm	330mm	3400g
<b>SWRM80</b>	80mm	125mm	36mm	360mm	3900g
<b>SWRM85</b>	85mm	125mm	36mm	360mm	3900g
<b>SWRM90</b>	90mm	142mm	40mm	390mm	3900g
<b>SWRM95</b>	95mm	142mm	40mm	390mm	3900g
<b>SWRM100</b>	100mm	155mm	45mm	420mm	6100g



Ideal for loosening large nuts when extra force is required





Bi-Hex

WHITWORTH

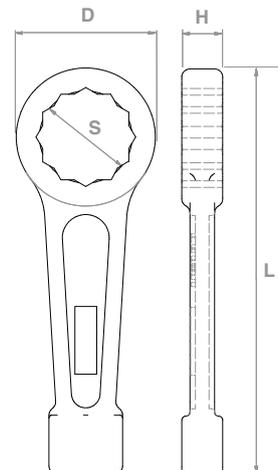
Part No.	Socket Size (S)	Depth (D)	Height (H)	Overall Length (L)	Weight
SWR1200	1 <sup>1</sup> / <sub>16</sub> " Whitworth	54mm	17mm	190mm	430g
SWR1300	3/4" Whitworth	54mm	17mm	190mm	430g
SWR2580	1 <sup>5</sup> / <sub>8</sub> " Whitworth	66mm	22mm	215mm	800g
SWR3150	2" Whitworth	86mm	25mm	270mm	1800g



Bi-Hex

IMPERIAL

Part No.	Socket Size (S)	Depth (D)	Height (H)	Overall Length (L)	Weight
SWR1062	1 <sup>1</sup> / <sub>16</sub> "	47mm	17mm	185mm	390g
SWR1125	1 <sup>1</sup> / <sub>8</sub> "	54mm	17mm	190mm	430g
SWR1187	1 <sup>3</sup> / <sub>16</sub> "	54mm	17mm	190mm	430g
SWR1250	1 <sup>1</sup> / <sub>4</sub> "	54mm	17mm	190mm	430g
SWR1312	1 <sup>5</sup> / <sub>16</sub> "	54mm	17mm	190mm	430g
SWR1375	1 <sup>3</sup> / <sub>8</sub> "	60mm	17mm	190mm	650g
SWR1437	1 <sup>7</sup> / <sub>16</sub> "	66mm	22mm	215mm	800g
SWR1500	1 <sup>1</sup> / <sub>2</sub> "	66mm	22mm	215mm	800g
SWR1562	1 <sup>9</sup> / <sub>16</sub> "	66mm	22mm	215mm	800g
SWR1625	1 <sup>5</sup> / <sub>8</sub> "	66mm	22mm	215mm	800g
SWR1687	1 <sup>11</sup> / <sub>16</sub> "	74mm	23mm	240mm	1000g
SWR1750	1 <sup>3</sup> / <sub>4</sub> "	74mm	23mm	240mm	1000g
SWR1812	1 <sup>13</sup> / <sub>16</sub> "	74mm	23mm	240mm	1000g
SWR1875	1 <sup>7</sup> / <sub>8</sub> "	74mm	23mm	240mm	1000g
SWR2000	2"	86mm	25mm	270mm	1800g
SWR2062	2 <sup>1</sup> / <sub>16</sub> "	86mm	25mm	270mm	1800g
SWR2125	2 <sup>1</sup> / <sub>8</sub> "	86mm	25mm	270mm	1800g
SWR2187	2 <sup>3</sup> / <sub>16</sub> "	94mm	25mm	270mm	1800g
SWR2250	2 <sup>1</sup> / <sub>4</sub> "	94mm	25mm	270mm	1800g
SWR2312	2 <sup>5</sup> / <sub>16</sub> "	94mm	25mm	270mm	1800g
SWR2375	2 <sup>3</sup> / <sub>8</sub> "	102mm	30mm	300mm	2500g
SWR2437	2 <sup>7</sup> / <sub>16</sub> "	102mm	30mm	300mm	2500g
SWR2500	2 <sup>1</sup> / <sub>2</sub> "	102mm	30mm	300mm	2500g
SWR2562	2 <sup>9</sup> / <sub>16</sub> "	102mm	30mm	300mm	2500g
SWR2625	2 <sup>5</sup> / <sub>8</sub> "	102mm	30mm	300mm	2500g
SWR2750	2 <sup>3</sup> / <sub>4</sub> "	115mm	33mm	330mm	3400g
SWR2875	2 <sup>7</sup> / <sub>8</sub> "	115mm	33mm	330mm	3400g
SWR2937	2 <sup>15</sup> / <sub>16</sub> "	115mm	33mm	330mm	3400g
SWR3000	3"	115mm	33mm	330mm	3400g
SWR3125	3 <sup>1</sup> / <sub>8</sub> "	125mm	36mm	360mm	3900g
SWR3875	3 <sup>7</sup> / <sub>8</sub> "	155mm	45mm	420mm	7000g



When using any slogging wrench always wear protective eye and head wear

**SLOGGING WRENCHES**

**OFFSET/CRANKED SLOGGING WRENCHES**

METRIC & IMPERIAL

- Large striking wrenches with an offset/cranked end with twelve point socket and striking handle at opposing end for heavy duty shock impact
- The shock of the striking impact assists cracking the most stubborn fasteners or tightening newly applied ones
- **Safety version:** Features an inbuilt eight point star slot to fit safety handle (Part No. 321999). This style enables user to apply the safety handle to stabilise the slogger and take the user away from the danger impact zone
- Superior quality to ensure there is no splintering or breakage which can lead to serious damage or injury
- Suitable for various applications such as ship maintenance, mining, piping and industrial applications where extra force is required to tighten or loosen large nuts, bolts and other fasteners
- Manufactured from premium quality drop forged chrome vanadium with black phosphate finish
- Toledo sloggers conform to ISO 9001:2000 quality standards



**SLOGGING WRENCH SAFETY HANDLE**

- Safety handle that neatly slots into an eight point hole which has been cut into the top of the bridge of the offset slogging wrench
- Features a 1/2" square drive insert and is 400mm long, one size fits all
- Reduces the chance of injury around the striking area
- Offers the user the chance to stabilise the slogger whilst having their hands away from the impact zone



Part No.	Square Drive	Overall Length	Weight
<b>321999</b>	1/2"	400mm	568g

**METRIC**

Part No.	Safety Version Part No.	Socket Size (S)	Depth (D)	Height (H)	Overall Length (L)	Weight
<b>SWRM24/C</b>	<b>SWRM24/CS</b>	24mm	52mm	21mm	304mm	1980g
<b>SWRM27/C</b>	<b>SWRM27/CS</b>	27mm	52mm	21mm	304mm	1980g
<b>SWRM30/C</b>	<b>SWRM30/CS</b>	30mm	52mm	21mm	304mm	1980g
<b>SWRM32/C</b>	<b>SWRM32/CS</b>	32mm	52mm	21mm	304mm	1980g
<b>SWRM36/C</b>	<b>SWRM36/CS</b>	36mm	52mm	21mm	304mm	1980g
<b>SWRM41/C</b>	<b>SWRM41/CS</b>	41mm	66mm	27mm	314mm	2400g
<b>SWRM46/C</b>	<b>SWRM46/CS</b>	46mm	66mm	27mm	314mm	2400g
<b>SWRM50/C</b>	<b>SWRM50/CS</b>	50mm	78mm	32mm	378mm	3950g
<b>SWRM55/C</b>	<b>SWRM55/CS</b>	55mm	78mm	32mm	378mm	3950g
<b>SWRM60/C</b>	<b>SWRM60/CS</b>	60mm	110mm	42mm	406mm	5930g
<b>SWRM65/C</b>	<b>SWRM65/CS</b>	65mm	110mm	42mm	406mm	5930g
<b>SWRM70/C</b>	<b>SWRM70/CS</b>	70mm	110mm	42mm	406mm	5930g
<b>SWRM75/C</b>	<b>SWRM75/CS</b>	75mm	110mm	42mm	406mm	5930g

**IMPERIAL**

Part No.	Safety Version Part No.	Socket Size (S)	Depth (D)	Height (H)	Overall Length (L)	Weight
<b>SWR1062/C</b>	<b>SWR1062/CS</b>	1 1/16"	52mm	21mm	304mm	1980g
<b>SWR1125/C</b>	<b>SWR1125/CS</b>	1 1/8"	52mm	21mm	304mm	1980g
<b>SWR1187/C</b>	<b>SWR1187/CS</b>	1 3/16"	52mm	21mm	304mm	1980g
<b>SWR1250/C</b>	<b>SWR1250/CS</b>	1 1/4"	52mm	21mm	304mm	1980g
<b>SWR1312/C</b>	<b>SWR1312/CS</b>	1 5/16"	52mm	21mm	304mm	1980g
<b>SWR1375/C</b>	<b>SWR1375/CS</b>	1 3/8"	52mm	21mm	304mm	1980g
<b>SWR1437/C</b>	<b>SWR1437/CS</b>	1 7/16"	52mm	21mm	304mm	1980g
<b>SWR1500/C</b>	<b>SWR1500/CS</b>	1 1/2"	66mm	27mm	314mm	2400g
<b>SWR1562/C</b>	<b>SWR1562/CS</b>	1 9/16"	66mm	27mm	314mm	2400g
<b>SWR1625/C</b>	<b>SWR1625/CS</b>	1 5/8"	66mm	27mm	314mm	2400g
<b>SWR1687/C</b>	<b>SWR1687/CS</b>	1 11/16"	66mm	27mm	314mm	2400g
<b>SWR1750/C</b>	<b>SWR1750/CS</b>	1 3/4"	66mm	27mm	314mm	2400g
<b>SWR1812/C</b>	<b>SWR1812/CS</b>	1 13/16"	66mm	27mm	314mm	2400g
<b>SWR1875/C</b>	<b>SWR1875/CS</b>	1 7/8"	78mm	32mm	378mm	3950g
<b>SWR2000/C</b>	<b>SWR2000/CS</b>	2"	78mm	32mm	378mm	3950g
<b>SWR2062/C</b>	<b>SWR2062/CS</b>	2 1/16"	78mm	32mm	378mm	3950g
<b>SWR2125/C</b>	<b>SWR2125/CS</b>	2 1/8"	78mm	32mm	378mm	3950g
<b>SWR2187/C</b>	<b>SWR2187/CS</b>	2 3/16"	78mm	32mm	378mm	3950g
<b>SWR2250/C</b>	<b>SWR2250/CS</b>	2 1/4"	110mm	42mm	406mm	5930g
<b>SWR2312/C</b>	<b>SWR2312/CS</b>	2 5/16"	110mm	42mm	406mm	5930g
<b>SWR2375/C</b>	<b>SWR2375/CS</b>	2 3/8"	110mm	42mm	406mm	5930g
<b>SWR2437/C</b>	<b>SWR2437/CS</b>	2 7/16"	110mm	42mm	406mm	5930g
<b>SWR2500/C</b>	<b>SWR2500/CS</b>	2 1/2"	110mm	42mm	406mm	5930g
<b>SWR2562/C</b>	<b>SWR2562/CS</b>	2 9/16"	110mm	42mm	406mm	5930g
<b>SWR2625/C</b>	<b>SWR2625/CS</b>	2 5/8"	110mm	42mm	406mm	5930g
<b>SWR2750/C</b>	<b>SWR2750/CS</b>	2 3/4"	110mm	42mm	406mm	5930g
<b>SWR2875/C</b>	<b>SWR2875/CS</b>	2 7/8"	110mm	42mm	406mm	5930g
<b>SWR2937/C</b>	<b>SWR2937/CS</b>	2 15/16"	110mm	42mm	406mm	5930g
<b>SWR3000/C</b>	<b>SWR3000/CS</b>	3"	110mm	42mm	406mm	5930g
<b>SWR3500/C</b>	<b>SWR3500/CS</b>	3 1/2"	130mm	55mm	450mm	11850g



# MERCHANDISING

<b>ADJUSTABLE WRENCHES</b>	<b>322</b>
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## TOLEDO MERCHANDISING SOLUTION

- Toledo has a comprehensive range of point of sale merchandising options which can be tailored to suit any shop front and display
- Toledo merchandisers offer many features and benefits including:
  - Improved use of space and ROI
  - Better customer experience
  - Increased chance of sale
  - Discounted stock
  - Aesthetic improvement
  - Supplied with all merchandiser components including stands, hooks, reorder tags and signage



## ADJUSTABLE WRENCHES

### ADJUSTABLE WRENCHES

SINGLE TIER 16 PIECE

- Heavy duty adjustable “shifter” wrenches made from chrome vanadium with nickel and chrome plating
- Four thread knurl offering smooth, uninhibited opening and closing of jaws
- Includes eight popular sizes
- Size: 450W x 770H (mm)

Part No.	Description	Pieces
<b>NTMW01</b>	Adjustable wrench merchandiser - single tier	16
Contents	Size	Qty
88100	100mm/4"	2
88150	150mm/6"	2
88200	200mm/8"	2
88250	250mm/10"	3
88300	300mm/12"	3
88375	375mm/12"	2
88450	450mm/18"	1
88600	600mm/24"	1



**SCREWDRIVERS**  
SINGLE & DOUBLE TIER

- Premium range of screwdrivers made in Japan
- Single tier options or double tier master merchandiser solution
- **NTMS05:** Ergonomic traditional screwdrivers merchandiser, size: 450W x 485H (mm)
- **NTMS06:** Strike-thru screwdrivers merchandiser, size: 450W x 445H (mm)
- **NTMS07:** Screwdrivers merchandiser - master, size: 450W x 940H (mm)



Part No.	Description	Pieces	
<b>NTMS05</b>	Essential screwdriver merchandiser - single tier	24	
Contents	Style	Description	Qty
321940	⊕	Phillips #1 x 75	3
321941	⊕	Phillips #2 x 100	3
321944	⊕	Phillips #3 x 150	3
321945	⊖	Slotted 5.5 x 75	3
321946	⊖	Slotted 6.0 x 100	3
321949	⊖	Slotted 8.0 x 150	3
321971	⊕	Stubby Phillips #2 x 30	3
321972	⊖	Stubby Slotted 6.0 x 30	3

Part No.	Description	Pieces	
<b>NTMS06</b>	Strike-thru screwdriver merchandiser - single tier	21	
Contents	Style	Description	Qty
321954	⊕	Strike-Thru Phillips #2 x 100	3
321955	⊕	Strike-Thru Phillips #2 x 150	3
321950	⊖	Strike-Thru Slotted 5.5 x 75	3
321951	⊖	Strike-Thru Slotted 6.0 x 100	3
321952	⊖	Strike-Thru Slotted 6.0 x 150	3
321971	⊕	Stubby Phillips #2 x 30	3
321972	⊖	Stubby Slotted 6.0 x 30	3

Part No.	Description	Pieces	
<b>NTMS07</b>	Master screwdriver merchandiser - double tier	57	
Contents	Style	Description	Qty
321940	⊕	Phillips #1 x 75	3
321941	⊕	Phillips #2 x 100	3
321942	⊕	Phillips #2 x 150	3
321943	⊕	Phillips #2 x 200	3
321944	⊕	Phillips #3 x 150	3
321945	⊖	Slotted 5.5 x 75	3
321946	⊖	Slotted 6.0 x 100	3
321947	⊖	Slotted 6.0 x 150	3
321948	⊖	Slotted 6.0 x 200	3
321949	⊖	Slotted 8.0 x 150	3
321954	⊕	Strike-Thru Phillips #2 x 100	3
321955	⊕	Strike-Thru Phillips #2 x 150	3
321950	⊖	Strike-Thru Slotted 5.5 x 75	3
321951	⊖	Strike-Thru Slotted 6.0 x 100	3
321952	⊖	Strike-Thru Slotted 6.0 x 150	3
321960	⊕	Insulated Phillips #2 x 100	3
321961	⊖	Insulated Slotted 5.0 x 100	3
321971	⊕	Stubby Phillips #2 x 30	3
321972	⊖	Stubby Slotted 6.0 x 30	3



CHUCK KEYS & PLIERS

CHUCK KEYS

SINGLE BOARD 35 PIECE

- Comprehensive range of chuck keys to cover most applications in Australia and New Zealand
- All units are presented in handy “try before you buy” packaging
- Includes six specialty sized keys and one multi sized ratcheting option
- Application listing available upon request
- Size: 450W x 650H (mm)

Part No.	Description	Pieces
<b>NTMC01</b>	Chuck key merchandiser - single board	35
Contents	Size	Qty
T404034	10/13mm (No.34)	5
T404010	10mm (No.10)	5
T404036	10mm (No.36)	5
T404030	13mm (No.30)	5
T404038	13mm (No.38)	5
T404003	16mm (No.03)	5
T404000	Master chuck key - Ratcheting (4 in 1)	5



PLIERS & CUTTERS

SINGLE TIER 15 PIECE

- Heavy duty workshop plier and cutter merchandisers
- Core coverage of all the most common plier requirements
- Manufactured from chrome molybdenum for maximum strength and durability
- Ergonomic dual piece handles are designed for comfort and strength
- **TPMA01**: Combination of common pliers - most popular lengths 450W x 390H (mm)
- **TPMA02**: Combination of common pliers 450W x 500H (mm)



Part No.	Description	Pieces
<b>TPMA01</b>	Plier & cutter merchandiser option 1 - single tier	15
Contents	Description	Qty
301991	Combination plier 210mm	3
301995	Diagonal cutting plier 200mm	3
301996	Long nose plier 210mm - Straight	3
301997	Long nose plier 210mm - Angled 45°	3
301998	Multi-grip plier 250mm	3

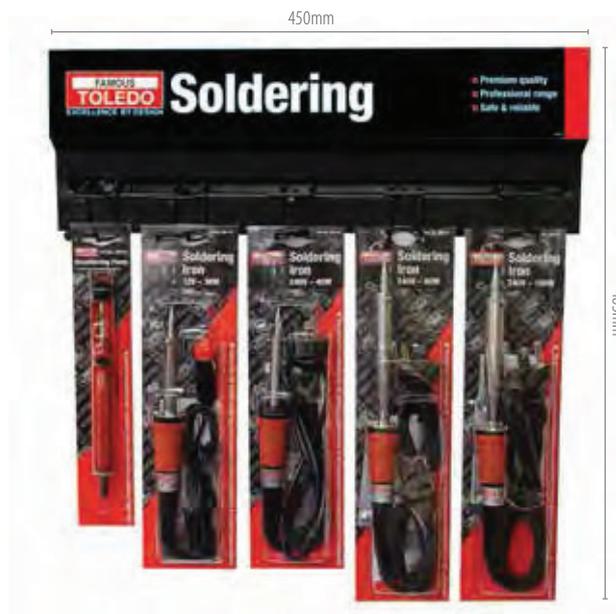
Part No.	Description	Pieces
<b>TPMA02</b>	Plier & cutter merchandiser option 2 - single tier	15
Contents	Description	Qty
301990	Combination plier 180mm	3
301992	Combination plier 230mm	3
301993	Diagonal cutting plier 160mm	3
301994	Diagonal cutting plier 180mm	3
301999	Multi-grip plier 300mm	3

**SOLDERING IRONS**

SINGLE TIER 15 PIECE

- In store wall mount merchandiser provides a compact point of sale solution for soldering products
- Size: 450W x 485H (mm)

Part No.	Description	Pieces
<b>NTMS01</b>	Soldering iron merchandiser - single tier	15
Contents	Description	Qty
302101	40 Watts (240V AC)	3
302103	80 Watts (240V AC)	3
302104	100 Watts (240V AC)	3
302110	30 Watts (12V DC)	3
302121	Desolder pump/solder sucker	3



**ENGINEERING FILES**

**ENGINEERING FILES**

SINGLE TIER 24 PIECE

- Premium range of high quality files for the trade professional
- Better gripping, longer lasting files made using advanced technologies and superior workmanship
- Unique anti-rust hardened oil finish for increased longevity and service life
- Manufactured from high quality chromium alloy steel, individually hardened up to 64 HRC
- Made in Portugal
- **TFM01** Size: 450W x 625H (mm)
- **TFM02** Size: 450W x 685H (mm)



Part No.	Description	Pieces
<b>TFM01</b>	File merchandiser option 1 - 250mm series	24
Contents	Description	Qty
10FL02CD	Flat file second cut 250mm	3
10FL03CD	Flat file smooth 250mm	3
10HR02CD	Half Round file second cut 250mm	3
10HR03CD	Half Round file smooth 250mm	3
10RD02CD	Round file second cut 250mm	3
10RD03CD	Round file smooth 250mm	3
10ST02CD	Slim taper saw second cut 250mm	3
10SQ02CD	Square file second cut 250mm	3

Part No.	Description	Pieces
<b>TFM02</b>	File merchandiser option 2 - 300mm series	24
Contents	Description	Qty
12FL02CD	Flat file second cut	3
12FL03CD	Flat file smooth	3
12HR02CD	Half Round file second cut	3
12HR03CD	Half Round file smooth	3
12RD02CD	Round file second cut	3
12RD03CD	Round file smooth	3
12ST02CD	Slim taper saw second cut	3
12SQ02CD	Square file second cut	3

RATCHET PODGERS

RATCHET PODGERS - METRIC  
SINGLE TIER 14 PIECE

- Heavy duty ratchet podgers are built to last and designed for applications where extra leverage, size and strength is required
- Reliable in-built reverse ratcheting lever function for easy direction change
- Manufactured from premium quality drop forged chrome vanadium steel
- Toledo podgers conform to ISO 9001:2000 quality standards

- **NTMP01:** Most popular sizes
- **NTMP02:** Popular sizes
- Size: 450W x 640H (mm)



Part No.	Description	Pieces
<b>NTMP01</b>	Ratchet podger merchandiser option 1 - single tier	14
Contents	Size	Qty
301228	Metric 18 x 24mm	2
301230	Metric 19 x 24mm	2
301243	Metric 21 x 24mm	2
301235	Metric 24 x 27mm	2
301234	Metric 24 x 30mm	2
301236	Metric 27 x 32mm	2
301239	Metric 36 x 41mm	2

Part No.	Description	Pieces
<b>NTMP02</b>	Ratchet podger merchandiser option 2 - single tier	14
Contents	Size	Qty
301223	Metric 10 x 12mm	2
301224	Metric 13 x 17mm	2
301227	Metric 17 x 19mm	2
301229	Metric 19 x 21mm	2
301231	Metric 21 x 24mm	2
301237	Metric 30 x 32mm	2
301238	Metric 32 x 36mm	2

MAGNETIC LEVELS

EXACTA-POST LEVELS  
COUNTERTOP 6 PIECE

- Countertop display contains six exacta-post levels
- Exacta post levels are handy tools for checking the level of posts, pipes, signs etc.
- Magnetic and also features elastic strip for securing
- Size: 180W x 240D x 350H (mm)



Part No.	Description	Pieces
<b>NTMM05</b>	Exacta-post level merchandiser - countertop	6
Contents	Description	Size
322012	Exacta-post level magnetic	130 x 190mm



**MAGNETIC MINI LEVELS**  
COUNTERTOP

- Suitable for hanging or countertop display
- Contains 10 mini magnetic levels
- Size: 105W x 55D x 280H (mm)



Part No.	Description	Pieces
<b>NTMM06</b>	Mini magnetic level merchandiser - countertop	10
Contents	Description	Size
322013	Mini magnetic level	100mm



**MAGNETIC TORPEDO LEVELS**  
COUNTERTOP

- Countertop display contains twelve torpedo levels
- Size: 270W x 320D x 230H (mm)



Part No.	Description	Pieces
<b>NTMM07</b>	Magnetic torpedo level merchandiser - countertop	12
Contents	Description	Size
322010	Magnetic torpedo level	250mm

**CALIPERS & DIVIDERS**  
SINGLE TIER

- Popular range of professional calipers and dividers
- Manufactured from Japanese stainless steel
- Premium quality range made in Japan
- Size: 450W x 900H (mm)

Part No.	Description	Pieces
<b>NTMD01</b>	Caliper & divider merchandiser - Twin backing board	24
Contents	Size	Qty
50150	Spring divider 150mm	2
50200	Spring divider 200mm	3
50300	Spring divider 300mm	3
51150	Inside caliper 150mm	2
51200	Inside caliper 200mm	3
51300	Inside caliper 300mm	3
52150	Outside caliper 150mm	2
52200	Outside caliper 200mm	3
52300	Outside caliper 300mm	3



## STAINLESS STEEL RULES

### STAINLESS STEEL RULES

SINGLE TIER & TWIN BACKING BOARD

- Industry leading range of stainless steel rules in the most popular sizes
- All rules are manufactured from Japanese stainless steel, photographically etched and are accurate to Japanese Industrial Standard (JIS) B 7516 - level 1
- Made in Japan
- Size: 450W x 1655H (mm)



Part No.	Description	Pieces
<b>NTMM01</b>	Stainless steel rule merchandiser option 1 - single tier	38
Contents	Description	Qty
SE1000	Straight edge single sided - Metric 1000mm (Aluminium)	1
100036	Double sided - Metric & Imperial 1000mm/36"	2
301956	Single sided easy pick-up rule - Metric 150mm	3
1000M	Single sided - Metric 1000mm	2
150BM	Single sided - Metric 150mm	5
300M	Single sided - Metric 300mm	3
600M	Single sided - Metric 600mm	3
150SP	Double sided - Metric 150mm	5
300SP	Double sided - Metric 300mm	3
150B6	Double sided - Metric & Imperial 150mm/6"	5
30012	Double sided - Metric & Imperial 300mm/12"	3
60024	Double sided - Metric & Imperial 600mm/24"	3

Part No.	Description	Pieces
<b>NTMM02</b>	Stainless steel rule merchandiser option 2 - twin backing board	61
Contents	Description	Qty
150BM	Single sided - Metric 150mm	5
300M	Single sided - Metric 300mm	3
600M	Single sided - Metric 600mm	3
1000M	Single sided - Metric 1000mm	2
301956	Single sided easy pick-up - Metric 150mm	5
301957	Single sided easy pick-up - Metric 300mm	3
600FM	Single sided folding - Metric 600mm	3
321901	Single sided flexible - Metric 600mm	2
150A6	Single sided - Metric & Imperial 150mm/150B6	5
150SP	Double sided - Metric 150mm	5
300SP	Double sided - Metric 300mm	3
150B6	Double sided - Metric & Imperial 150mm/6"	5
30012	Double sided - Metric & Imperial 300mm/12"	3
60024	Double sided - Metric & Imperial 600mm/24"	3
100036	Double sided - Metric & Imperial 1000mm	2
ST150ME6	Double sided - Metric & Imperial 150mm/6"	5
ST300ME12	Double sided - Metric & Imperial 300mm/12"	3
SE1000	Straight edge single sided - Metric 1000mm (Aluminium)	1



BOX LEVELS & CUTTING RULES



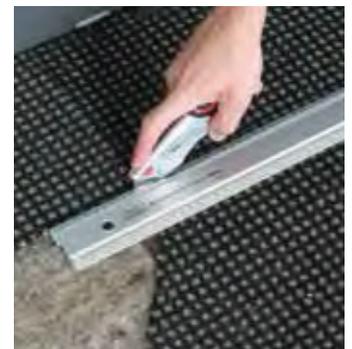
**MAGNETIC BOX LEVELS**  
SINGLE TIER 9 PIECE

- Single tier merchandiser contains nine magnetic box levels of different lengths in standard and digital style
- Size: 450W x 1455H (mm)



**CUTTING RULES**  
SINGLE TIER 15 PIECE

- Single tier merchandiser contains fifteen aluminium cutting rules in different lengths
- Size: 450W x 1410H (mm)



Part No.	Description	Pieces
<b>NTMM08</b>	Box level merchandiser - single tier	9
Contents	Description	Qty
322060	Magnetic box level 600mm	3
322090	Magnetic box level 900mm	1
322120	Magnetic box level 1200mm	3
322050	Magnetic digital box level 600mm	1
322051	Magnetic digital box level 1200mm	1

Part No.	Description	Pieces
<b>NTMM09</b>	Cutting rule merchandiser - aluminium	15
Contents	Description	Qty
322001	Aluminium cutting rule 500mm	3
322002	Aluminium cutting rule 600mm	3
322003	Aluminium cutting rule 800mm	3
322004	Aluminium cutting rule 1000mm	3
322005	Aluminium cutting rule 1200mm	3

**AUTOMOTIVE TOOL BAY SOLUTIONS**

**AUTOMOTIVE TOOL BAY SOLUTIONS**

SINGLE, DOUBLE, TRIPLE BAY

- Three varying options of pre-selected automotive tools to cater for both professional and DIY users
- **Option 1 Single Bay:** Fast moving and predominately lower dollar product mix
- **Option 2 Double Bay:** A mix of fast moving lower dollar items and some higher dollar popular products
- **Option 3 Triple Bay:** The ideal automotive tool bay solution for any professional tool store. Includes a specially selected mix of popular automotive tools including low dollar fast moving lines and more comprehensive professional workshop kits
- All merchandisers are supplied with stands, hooks, reorder tags and signage
- These automotive bays are already planogrammed and a Tridon sales representative will provide set up in store

*Note: These bays do not have assigned overall part numbers. Contact Tridon about how to order, and further inquiries*



Option 1 - Single bay

Description	Size
Automotive tool bay option 1 - single bay	1230W x 2100H x 490D (mm)

Contents	Description	Qty	Contents	Description	Qty	Contents	Description	Qty
224040	Mech puller set 2&3 leg 4"/100mm	1	301156	Feeler gauge 22 blade met/imp	2	305259	Oil can 500ml lever type	2
245464	Pilot bearing puller 3 jaws	1	301164	Windscreen washer needle	2	305264	Oil measure 5l with flex spout	1
254230	Harmonic balancer puller set 46pc	2	301276	Gas strut support tool	2	305382	Oil drain pan 14L	1
301003	Brush set 3pc	2	301297	Oil seal pick set 2pc	2	307002	Fuel disconnect tool set	2
301004	Parts cleaning brush	2	301596	Socket holding rail 1/2"	2	307221	Fuel line quick disconnect tool	2
301006	Magnetic s/s tray (150mm)	1	301597	Socket holding rail 3/8"	2	308240	Radiator fin straightener	2
301007	Gasket scraper	2	301608	Pin punch set 6pc	1	309035	Tyre lever 600mm	2
301009	Stethoscope	2	301923	Rubber hose pipe cutter	2	310005	Brake bleeder/fluid extractor 1L	1
301014	Telescopic magnetic pick up tool	2	302014	Computer safe circuit tester led	2	310020	Disc brake & tyre depth gauge	1
301016	Telescopic inspection mirror	2	302144	Heavy duty circuit tester 6 - 24v	2	310261	One-man brake bleeder kit	2
301017	Flexible magnetic pick up tool	2	302147	Battery & alternator tester	2	310265	Disc pad spreader	2
301022	Hose crimping tool small 150mm	2	302154	Memory retainer power supply	1	310266	Brake adjusting tool 132mm	2
301032	Mini tube cutter 3 - 15mm	2	302167	HD spark plug firing tester	2	310269	Rear disc brake piston cube	2
301042	Oil seal remover	2	302225	Spark plug socket 14mm bi-hex	2	310377	Brake caliper press ratcheting	1
301043	Pick & hook set miniature 4pc	2	304192	Valve lapper 16/21/28/35mm 2pc	2	311279	Pitman arm puller	2
301060	A/c & fuel line disconnect set	2	304198	Petrol engine compression tester	1	311284	Drop forged coil spring comp	1
301075	Screw extractor set 6pc	2	305021	Oil filter remover 3 jaw 60 - 125mm	2	312000	Oil sealing plug set	1
301083	Pry bar set 4pc	1	305152	Fluid change syringe 0.2L/0.211Qt	2	313311	Trim remover set 5pc	2
301098	Torque wrench 3/8" sq.dr.	1	305153	Pressure sprayer pump action 1L	2	321085	Bearing/seal driver tool 18 - 90mm	1
301099	Torque wrench 1/2" sq.dr.	1	305204	Oil filter remover swivel 73 - 85mm	2	PC6	Plastic cutter	2
301151	Hose remover set 2pc	1	305205	Oil filter remover swivel 85 - 95mm	2	WS665	Wire stripper/crimper 2 colour	1
301155	Feeler gauge 38 blade met/imp	2	305211	Oil filter remover nylon strap	2			

2100mm

**AUTOMOTIVE TOOL BAY SOLUTIONS**



Option 2 - Double bay

Description	Size
Automotive tool bay option 2 - double bay	2460W x 2100H x 490D (mm)

Contents	Description	Qty	Contents	Description	Qty
224030	Mech puller set 2&3 leg 3"/75mm	1	301157	Feeler gauge 26 blade cranked met/imp	2
224040	Mech puller set 2&3 leg 4"/100mm	1	301159	Feeler gauge 10 blade metric	2
224060	Mech puller set 2&3 leg 6"/150mm	1	301160	Feeler gauge 16 blade met/imp	2
245464	Pilot bearing puller 3 jaws	2	301164	Windscreen washer needle	2
254230	Harmonic balancer puller set 46pc	2	301172	Flexible hose clamp plier cd	1
265000	Hyd gear puller set	1	301245	Breaker bar 610mm 1/2" sq.dr.	2
301001	Steel cleaning brush set 2pc	2	301246	Breaker bar 610mm 3/4" sq.dr.	1
301003	Brush set 3pc	2	301276	Gas strut support tool	2
301004	Parts cleaning brush	2	301297	Oil seal pick set 2pc	2
301006	Magnetic s/s tray (150mm)	1	301337	Powerbar impact wrench	1
301007	Gasket scraper	2	301596	Socket holding rail 1/2"	3
301009	Stethoscope	2	301597	Socket holding rail 3/8"	3
301014	Telescopic magnetic pick up tool	2	301608	Pin punch set 6pc	2
301016	Telescopic inspection mirror	2	301923	Rubber hose pipe cutter	2
301022	Hose crimping tool small 150mm	4	302014	Computer safe circuit tester led	2
301025	Hose/brake line crimping pliers	1	302021	Ratchet crimping tool	2
301026	Hose crimping tool 150mm	2	302144	Heavy duty circuit tester 6 - 24v	2
301032	Mini tube cutter 3 - 15mm	2	302147	Battery & alternator tester	2
301042	Oil seal remover	2	302154	Memory retainer power supply	2
301043	Pick & hook set miniature 4pc	3	302167	HD spark plug firing tester	2
301060	A/c & fuel line disconnect set	2	302225	Spark plug socket 14mm bi-hex	2
301067	Thread pitch gauge 2pc	2	303004	Battery terminal cleaning brush	2
301075	Screw extractor set 6pc	2	304012	Leak down tester	1
301098	Torque wrench 3/8" sq.dr.	2	304192	Valve lapper 16/21/28/35mm 2pc	2
301099	Torque wrench 1/2" sq.dr.	2	304198	Petrol engine compression tester	2
301151	Hose remover set 2pc	3	305004	Oil filter remover set - 15pc	1
301155	Feeler gauge 38 blade met/imp	2	305021	Oil filter remover 3 jaw 60 - 125mm	2
305090	Portable oil drain pan & can 10L	1			
305150	Portable bearing packer 50 - 95mm	1			
305151	Fluid change syringe 1.5L/1.59Qt	2			
305152	Fluid change syringe 0.2L/0.211Qt	2			
305153	Pressure sprayer pump action 1L	2			
305203	Oil filter remover swivel 60 - 73mm	2			
305204	Oil filter remover swivel 73 - 85mm	2			
305205	Oil filter remover swivel 85 - 95mm	2			
305206	Oil filter remover swivel 95 - 111mm	1			
305210	Oil filter remover 3leg 60- 120mm 1/2"	2			
305211	Oil filter remover nylon strap	3			
305259	Oil can 500ml lever type	2			
306217	Transmission fluid retaining tool	2			
306218	Universal clutch aligning tool	2			
307002	Fuel disconnect tool set	2			
307221	Fuel line quick disconnect tool	2			
307233	Vacuum & fuel pump tester	1			
308235	Viscous fan hub spanner 32mm	1			
308236	Viscous fan hub spanner 36mm	1			
308240	Radiator fin straightener	2			
308600	Cooling system test master kit 36pc	1			
309035	Tyre lever 600mm	3			
310005	Brake bleeder/fluid extractor 1L	2			
310020	Disc brake & tyre depth gauge	2			
310261	One-man brake bleeder kit	3			
310265	Disc pad spreader	2			
310266	Brake adjusting tool 132mm	3			
310269	Rear disc brake piston cube	2			
310350	Piston wind back tool kit	1			
311273	Ball joint separator 300mm	2			
311279	Pitman arm puller	2			
311284	Drop forged coil spring comp	2			
311290	Inner tie rod tool 33 - 42mm	2			
312000	Oil sealing plug set	2			
313298	Hinge pin remover	2			
313301	Spot weld remover 10mm	2			
313309	Windscreen remover	3			
313311	Trim remover set 5pc	3			
315160	Adjustable c-hook wrench set 8pc	1			
321027	Strike thru pry bar set 4pc	2			
321085	Bearing/seal driver tool 18-90mm	1			
321100	Air blow gun safety h/flow 100mm	2			
321101	Air blow gun safety h/flow 355mm	2			
321500	Infrared laser thermometer	1			
CND-2	Hose clamp nut driver 300mm	2			
PC6	Plastic cutter	2			
TFR250B	File set - auto 4pc	1			
TPSA03	Long nose plier set 3pc foam tray	1			
WS665	Wire stripper/crimper 2 colour	3			

**AUTOMOTIVE TOOL BAY SOLUTIONS**



Option 3 - Triple bay

Description			Size			Contents		Description		Qty
Automotive tool bay option 3 - triple bay			3690W x 2100H x 490D (mm)			301598		Socket holding rail 1/4"		1
Contents	Description	Qty	Contents	Description	Qty	301608		Pin punch set 6pc		1
224030	Mech puller set 2&3 leg 3"/75mm	1	301044	Engine cyl hone med 3leg 50 - 135mm	1	301651		S/steel scraper set 3pc		1
224040	Mech puller set 2&3 leg 4"/100mm	1	301046	Brake cylinder hone med 3 19-64mm	1	301923		Rubber hose pipe cutter		2
224060	Mech puller set 2&3 leg 6"/150mm	1	301060	A/c & fuel line disconnect set	3	301935		Ratch head breaker bar 1/2" sq.dr.		1
245380	Power steering pump puller kit	1	301064	Universal thread gauge set	1	301942		Magnetic fender cover 1050 x 580mm		1
245464	Pilot bearing puller 3 jaws	2	301067	Thread pitch gauge 2pc	1	302014		Computer safe circuit tester LED		3
246600	Micro bearing puller	1	301075	Screw extractor set 6pc	3	302021		Ratchet crimping tool		2
254230	Harmonic balancer puller set 46pc	3	301090	Extra long screwdriver 7mm slot	1	302026		In-line ignition spark tester		2
265000	Hyd gear puller set	1	301091	Extra long screwdriver phillips no 2	1	302027		Wire terminal tool set 2pc		1
301001	Steel cleaning brush set 2pc	3	301098	Torque wrench 3/8" sq.dr.	1	302144		Heavy duty circuit tester 6/12/24		3
301003	Brush set 3pc	3	301099	Torque wrench 1/2" sq.dr.	1	302145		Professional circuit tester 6/12		3
301004	Parts cleaning brush	3	301151	Hose remover set 2pc	3	302147		Battery & alternator tester		3
301006	Magnetic s/s tray (150mm)	1	301155	Feeler gauge 38 blade met/imp	3	302148		Car light tester 6-24 volt brass		3
301007	Gasket scraper	3	301157	Feeler gauge 26 blade cranked met/imp	3	302154		Memory retainer power supply		2
301008	Scraper & hook set 5pc	1	301160	Feeler gauge 16 blade met/imp	2	302167		HD spark plug firing tester		3
301009	Stethoscope	3	301161	Universal lockout tool	1	302191		Circuit tester digital lcd 6-24v		1
301014	Telescopic magnetic pick up tool	2	301164	Windscreen washer needle	3	302224		Spark plug tool 14mm bi-hex		2
301016	Telescopic inspection mirror	3	301172	Flexible hose clamp plier cd	1	302225		Spark plug socket 14mm bi-hex		2
301017	Flexible magnetic pick up tool	2	301245	Breaker bar 610mm 1/2" sq.dr.	1	303004		Battery terminal cleaning brush		2
301022	Hose crimping tool small 150mm	4	301246	Breaker bar 610mm 3/4" sq.dr.	1	303177		Battery post & terminal cleaner		2
301025	Hose/brake line crimping pliers	1	301248	Safety razor blades 100pk	1	304000		Combustion leak test kit		1
301026	Hose crimping tool 150mm	1	301276	Gas strut support tool	3	304012		Leak down tester		1
301032	Mini tube cutter 3 - 15mm	2	301297	Oil seal pick set 2pc	3	304175		Compression tester kit petrol 300psi		1
301033	Tube cutter 3 - 30mm	1	301337	Powerbar impact wrench	1	304189		Piston ring comp 53 - 125mm		1
301042	Oil seal remover	3	301350	Bearing & seal installer kit 10pc	1	304192		Valve lapper 16/21/28/35mm 2pc		2
301043	Pick & hook set miniature 4pc	4	301596	Socket holding rail 1/2"	2	304198		Petrol engine compression tester		2
			301597	Socket holding rail 3/8"	2	304600		Compression tester master kit diesel		1

**AUTOMOTIVE TOOL BAY SOLUTIONS**



Contents	Description	Qty
305004	Oil filter remover set - 15pc	1
305021	Oil filter remover 3 jaw 60 - 125mm	2
305080	Universal plier-grip oil funnel	1
305090	Portable oil drain pan & can 10L	1
305092	Universal coolant filling set	1
305133	Oil filter wrench 64.5mm 14 flute	2
305150	Portable bearing packer 50 - 95mm	2
305151	Fluid change syringe 1.5L/1.59Qt	2
305152	Fluid change syringe 0.2L/0.211Qt	3
305153	Pressure sprayer pump action 1L	2
305154	Pressure sprayer pump action 2L	1
305156	Fuel syringe/extraction 1.5L	1
305200	Oil filter wrench 64.5mm 14 flute	3
305203	Oil filter remover swivel 60 - 73mm	2
305204	Oil filter remover swivel 73 - 85mm	2
305205	Oil filter remover swivel 85 - 95mm	2
305206	Oil filter remover 95 - 111mm	2
305210	Oil filter remover 3leg 60- 120mm 1/2"	2
305211	Oil filter remover nylon strap	3
305259	Oil can 500ml lever type	2
306217	Transmission fluid retaining tool	1
306218	Universal clutch aligning tool	1
307002	Fuel disconnect tool set	4
307221	Fuel line quick disconnect tool	3
307226	Noid light & iac signal test set	1
307233	Vacuum & fuel pump tester	1
308002	Thermometer 0 - 220 deg fahrenheit	2

Contents	Description	Qty
308235	Viscous fan hub spanner 32mm	2
308236	Viscous fan hub spanner 36mm	1
308240	Radiator fin straightener	3
308600	Cooling system tester master kit 36pc	1
309035	Tyre lever 600mm	3
309040	Tyre lever 300mm 12"	1
310020	Disc brake & tyre depth gauge	3
310255	Brake adjusting tool	4
310261	One-man brake bleeder kit	4
310265	Disc pad spreader	3
310266	Brake adjusting tool 132mm	3
310269	Rear disc brake piston cube	3
310350	Piston wind back tool kit	1
310375	Brake piston wind back kit	1
310377	Brake caliper press ratcheting	2
311018	Cv boot install tool pneumatic	1
311273	Ball joint separator 300mm	1
311279	Pitman arm puller	2
311284	Drop forged coil spring comp	2
311290	Inner tie rod tool 33 - 42mm	2
312000	Oil sealing plug set	2
313028	Vacuum dent puller manual 2.5Kg	1
313030	Trim removal set 2pc	3
313056	Curved pein & finishing hammer	1
313057	Pick & finishing hammer	1
313293	Trim remover 2 in 1	2
313298	Hinge pin remover	3

Contents	Description	Qty
313301	Spot weld remover 10mm	3
313309	Windscreen remover	2
313311	Trim remover set 5pc	4
315160	Adjustable c-hook wrench set 8pc	1
321024	Dsub deutsch 4way indent crimper	1
321027	Strike thru pry bar set 4pc	2
321085	Bearing/seal driver tool 18 - 90mm	1
321100	Air blow gun safety h/flow 100mm	2
321101	Air blow gun safety h/flow 355mm	2
321105	Hose crimp set aluminium 3pc	1
321500	Infrared laser thermometer	1
321921	Drill unit right angle 90deg	1
CND-2	Hose clamp nut driver 300mm	2
CT2010	Combination crimping tool	2
PC6	Plastic cutter	2
TFR250B	File set - auto 4pc	1
TPSA03	Long nose plier set 3pc foam tray	1
WS665	Wire stripper/crimper 2 colour	3

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## Servicing the Automotive, Industrial and Hardware Markets



### Hose Clamps

- Perforated Band Clamps
- Solid Band Clamps
- T-Bolt Clamps
- Double Ear & Rubber Lined Clamps
- Spring Lock Clamps
- Irrigation Clamps
- Preform Band & Uniband Clamps
- Vinyl Coated Clamps
- Specialised Clamping Solutions

### Thermostat

- Thermostat & Gaskets

### Automotive Caps

- Radiator, Oil, Oil Filter & Fuel Caps

### Ignition Parts

- Ignition Coils & Modules
- Crank & Cam Angle Sensors

### Engine Management

- Knock Sensors
- Throttle Position Sensors
- Idle Air Control Valves
- Mass Air Flow Sensors
- Manifold Absolute Pressure Sensors
- Oxygen Sensors
- Glow Plugs

### Switches and Sensors

- Oil Pressure Senders & Sensors
- Water Temperature Senders
- Coolant Temperature Sensors
- Thermo Fan Switches
- Stop Light Switches
- Reverse Light Switches
- Power Steering Switches
- A/C Switches

### Windscreen Wipers

- FlexBlade® Wiper Blades
- FlexConnect® Wiper Blades
- CurveBlade® Wiper Blades
- Complete Front & Rear Wiper Blades
- Plastic & Metal Wiper Refills

### Electrical

- Electronic & Thermal Flashers
- General Relays
- Battery Terminals
- Heater Fan Resistors
- Light Control Modules

### Cable Ties

- Nylon & Stainless Steel

### Driveway Service Products

- Mallory Window Squeegees



### Workshop Tools

- Banding, Clamping & Hose
- Cleaning, Cutting & Shaping
- Diagnostic & Inspection
- Files, Knives & Scissors
- Impact & Striking
- Organisers, Identifiers & Storage
- Panel & Trim
- Pliers, Scrapers & Wrenches
- Screwdrivers, Sockets & Bits
- Sloggers & Podgers

### Mechanical Service Tools

- A/C, Brake & Bearing
- Clutch & Transmission
- Cooling System
- Engine & Exhaust
- Fuel, Hose & Pipe
- Suspension & Steering
- Tyre & Wheel
- Timing Tools

### Measuring & Precision

- Rules, Tapes & Wheels
- Squares, Calipers & Dividers
- Balances, Scales, Specialty Gauges
- Levels, Lasers & Digital Instruments
- Verniers, Dial Indicators, Micrometers
- Bluetooth Measuring

### Electrical Service Tools

- Battery, Circuit & Voltage
- Dashboard & Radio
- Ignition & Spark Plug

### Lubrication Tools

- Cans, Funnels, Pans, Pumps & Syphons
- Grease Guns & Nipples

### Pulling & Extracting

- Automotive, Bearing & Split Collet
- Mechanical & Hydraulic



- Battery Accessories



- Motorcycle Service Tools



- Chisels & Punches
- Scrapers & Wrecking Bars
- Screw Extractors
- Cable & Connector Tools



- Sockets & Spanners



MADE IN GERMANY

- Combination Pliers
- Circlip Pliers
- Water Pump Pliers
- Cutting Nippers
- Carpenter's Pincers
- Concreter's Nippers
- Gripping Pliers
- Cable & Wire Rope Cutters
- Pipe Wrenches
- Tweezers
- Insulated Tools (1000V), Photovoltaic Tools
- Electronics Pliers



### Powertrain Tools

- Engine & Transmission
- Cooling, Fuel & Exhaust

### Chassis Tools

- Brakes, Steering & Suspension
- Wheel & Tyre

### Body Tools

- Body Repair Tools, Hole Cutters
- Sheet Metal & Edge Setters

### Workshop Tools

- Electrical, Inspection
- Stud & Nut

### Torque Tools

- Wrenches, Angle Gauges
- Multipliers, Screwdrivers

### Pullers

- Mechanical, Hydraulic
- Loadstar Heavy Duty
- Slide Hammer, Hub & Stud
- Puller Boards

### Hydraulics

- Pumps, Cylinders
- Jack & Press Kits



- Bolt Cutters, Angular Cutters
- Rod Cutters & Benders
- Cable Cutters
- Concrete Mesh Cutters
- Swaging/Crimping
- Pocket Cutters
- Wire Rope Cutters
- Pipe Wrenches

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