

# PULLING & EXTRACTING

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# 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

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### CHOOSING A PULLER



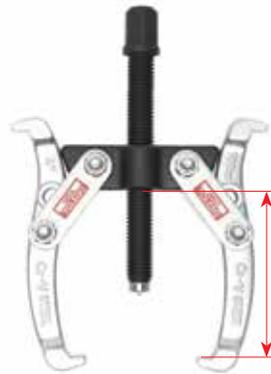
#### TWIN/TRIPLE LEG ASSEMBLY

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	Spread (Min - Max)	Reach (Max)	Forcing Screw		Leg Assembly (Each)		Twin Head		Triple Head	
					Spares	Size	Spares	Size	Spares	Size	Spares	Size
<b>222030</b>	<b>223030</b>	1 Tonne	35 - 75mm	75mm (3")	222031	125mm	222032	100mm	222033	75mm	223033	60mm
<b>222040</b>	<b>223040</b>	2 Tonnes	50 - 100mm	100mm (4")	222041	160mm	222042	138mm	222043	86mm	223043	75mm
<b>222060</b>	<b>223060</b>	5 Tonnes	65 - 150mm	150mm (6")	222061	240mm	222062	220mm	222063	110mm	223063	100mm
<b>222080</b>	<b>223080</b>	7 Tonnes	105 - 200mm	200mm (8")	222081	320mm	222082	300mm	222083	160mm	223083	145mm
<b>222100</b>	<b>223100</b>	9 Tonnes	125 - 250mm	250mm (10")	222101	330mm	222102	340mm	222103	210mm	223103	170mm
<b>222120</b>	<b>223120</b>	13 Tonnes	155 - 300mm	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
- Spares: 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

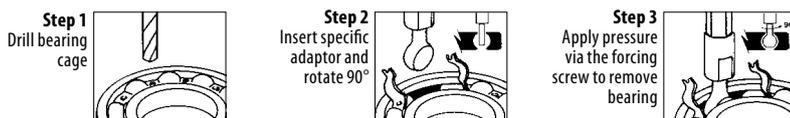
- Twin legs slide across the beam to produce varying spread sizes to suit various applications
- Legs are reversible to suit both internal and external applications
- Legs have locking screws to stabilise puller once desired size has been set
- Spares: All components available individually (Refer to 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**

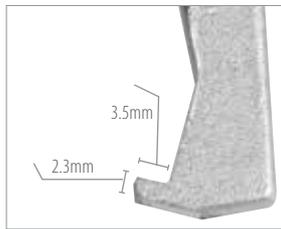
Part No.	Forcing Screw		Main Rod (Each)		Extension Rod (Each)		Thrust Nut	Twin Beam			Adaptors (each)					
	Spares	Size	Spares	Size	Spares	Size		Spares	Spares	Size	Spares	Diameter	Spares	Diameter	Spares	Diameter
<b>225000</b>	225011	125mm	225013	100mm	225014	90mm	225010	225016	100mm	225001	Ø 5mm	225002	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	

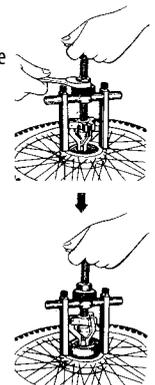


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**PILOT BEARING PULLER**  
MECHANICAL 3-JAW

- 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

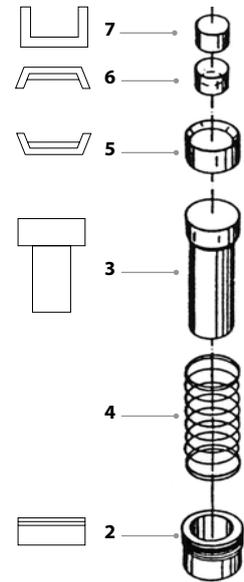
Pressure screw with finely pitched thread ensures seamless operation

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
- *Spare: 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

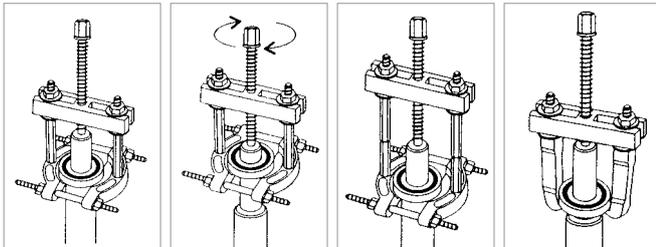
Part No.	Description	Separator Range	Threaded Hole
<b>245040</b>	Bearing separator 2 Jaw	20 - 40mm	3/8"
<b>245050</b>	Bearing separator 2 Jaw	30 - 50mm	3/8"
<b>245075</b>	Bearing separator 2 Jaw	50 - 75mm	3/8"
<b>245105</b>	Bearing separator 2 Jaw	75 - 105mm	1/2"
<b>245150</b>	Bearing separator 2 Jaw	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



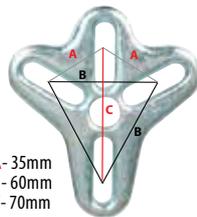


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**HARMONIC BALANCER PULLER SET**  
MASTER 46 PIECE

- 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

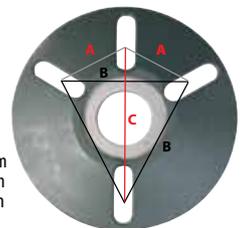
  

Description	Specifications	Length	Qty
Bolt	1/4" x 28 UNF	60mm	2
Bolt	3/8" x 16 UNC	110mm	2
Bolt	3/8" x 16 UNC	50mm	3
Bolt	3/8" x 16 UNC	75mm	3
Bolt	3/8" x 24 UNF	35mm	3
Bolt	5/16" x 18 UNC	150mm	2
Bolt	5/16" x 18 UNC	85mm	3
Bolt	5/16" x 24 UNF	75mm	2
Bolt	M8 x 1.25	90mm	2
Bolt	M8 x 1.25	65mm	2
Bolt	M8 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

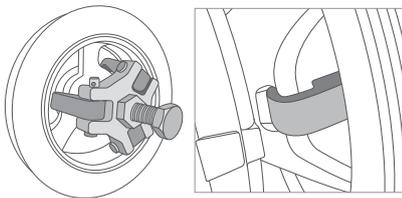


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**HARMONIC BALANCER PULLEY PULLER MASTER KIT**

- 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)



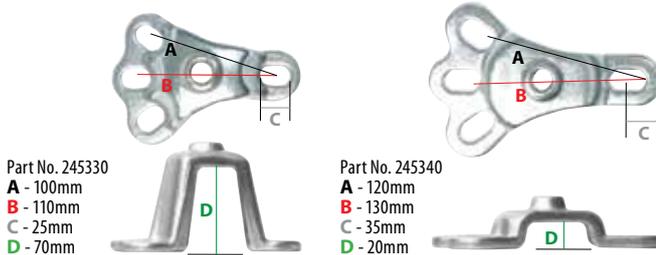


**HUB PULLER KIT**  
SLIDE HAMMER

- 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. 245330  
A - 100mm  
B - 110mm  
C - 25mm  
D - 70mm

Part No. 245340  
A - 120mm  
B - 130mm  
C - 35mm  
D - 20mm

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)



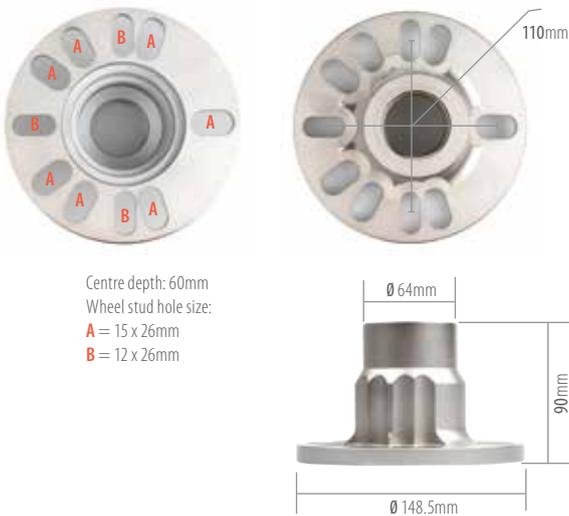
Part No.	Force	Reach	Pieces
<b>270000</b>	10 Tonne	190mm	11

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 (LBY) / A20DTJ (LBX) / A20DTC (LCD) and Fiat 1.9 JTD
Injector gripper	26mm	Opel Z19DT / Z19DTH / Z19DTL engines, A20DTH (LBS) / A20DTR (LBY) / A20DTJ (LBX) / A20DTC (LCD) and Fiat 1.9 JTD

Note: **OT** = Outside Thread, **IT** = Inside Thread



**HUB SEPARATOR KIT**  
UNIVERSAL HEAVY DUTY

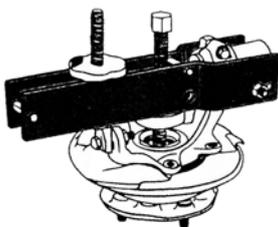
- Universal hub separator set for hub removal on popular front wheel drive vehicles
- Durable ACME threaded forcing and adjusting screws ensure long product life
- Spares: Available via special order only. Contact Tridon customer service

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

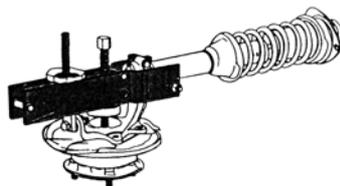
Part No.	Ref	Description	Specifications	Qty
-	<b>A</b>	Main body assembly	370mm	1
245440B	<b>B</b>	Forcing screw	220mm	1
-	<b>C</b>	Adaptor tube	Ø 37mm (l) x 89mm	1
245440D	<b>D</b>	Adaptor bracket	185mm	1
-	<b>E</b>	Adaptor legs (Saab)	65 x 25mm	2
-	<b>F</b>	Adaptor plates (Honda)	85 x 35mm	2
245440G	<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



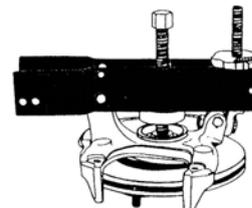
Honda (early models)



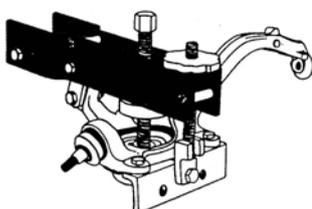
GM, Honda



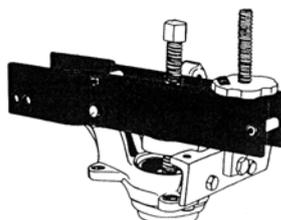
GM, VW, Fiat, Mazda



Honda (late model)



GM, Toyota



Saab, Renault

