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# ENGINE SERVICE

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**KEY** 

DO NOT USE AIR TOOLS

P

D

FOR USE WITH PETROL ENGINES



FOR USE WITH BELT DRIVEN ENGINES





FOR USE WITH CHAIN DRIVEN ENGINES



#### **Diesel Glow Plug Removal Kits**

- Sets of specialist drills and taps for the safe and effective removal of broken / damaged heater plugs
- Four kits available, covering the most popular sizes of heater plugs: - M8 x 1.0 / M9 x 1.0 / M10 x 1.0 / M10 x 1.25
- Each set contains precision engineered components, allowing for the removal of broken parts, without damaging the engine block and leaving a clean cut thread for fitting of the replacement heater plug
- Full instructions supplied with each kit

#### **Each Kit Contains:**

- 1. Extractor Socket Set
- 2. LH Fluted Drill 2 step
- 3. LH Threaded Tap
- 4. Threaded Tap
- 5. Removal Tool & Impact Adaptor

#### **Available Kits:**

	Part Number	Size (mm)	Popular Applications	
	08591000	M8 x 1.0	HDi 1.4 / 1.6, TDV6, New Mercedes CDi	
	08591500	M9 x 1.0	JTD 1.9 - CDTi 1.9	
08592000 M10 x 1.0 HD		M10 x 1.0	HDi 2.0 / 2.2 BMW / Mercedes / VW	
	08592500	M10 x 1.25	Japanese	







#### 08591000 Spare Parts:

- 085910-01 Extractor Socket Set (Sizes 0,1,2)
- 085910-02 Special LH 2 step drill 7mm x 150mm
- 085910-03 LH Spiral Point Tap M6
- 085910-04 Glow Plug Thread Tap M8
- 085910-05 LH Extractor M6

#### 08591500 Spare Parts:

- 085915-01 Extractor Socket Set (Sizes 0,1,2)
- 085915-02 Special LH 2 step drill 8mm x 180mm
- 085915-03 LH Spiral Point Tap M6
- 085915-04 Glow Plug Thread Tap M9
- 085915-05 LH Extractor M6

#### 08592000 Spare Parts:

- 085920-01 Extractor Socket Set (Sizes 0,1,2)
- 085920-02 Special LH 2 step drill 9mm x 180mm
- 085920-03 LH Spiral Point Tap M7
- 085920-04 Glow Plug Thread Tap M10
- 085920-05 LH Extractor M7

#### 08592500 Spare Parts:

- 085925-01 Extractor Socket Set (Sizes 0,1,2)
- 085925-02 Special LH 2 step drill 9mm x 180mm
- 085925-03 LH Spiral Point Tap M7
- 085925-04 Glow Plug Thread Tap M10 x 1.25
- 085925-05 LH Extractor M7

### Glow Plug Removal Kit 08593000

- For removing damaged and broken glow plugs from cylinder heads
- Ideal for use where a glow plug has sheared off just below the hex, or flush with the cylinder head
- Removes 8mm & 10mm glow plugs (M8 x 1.0 thread or M10 x 1.0 thread)
- Comprehensive kit includes all necessary adaptors, centering and thread cleaning tools to safely remove the damaged glow plug without damaging the cylinder head



#### **Spare Parts:**

- 085930-01 Ratchet T-Bar
- 085930-02 Drill Holding Adaptor
- 085930-03 Puller Outer Housing
- 085930-04 Force Screw
- 085930-05 Force Nut
- 085930-06 Star Socket
- 085930-07 Allen Key
- 085930-08 Dual Size Step Drill M8
- 085930-09 Dual Size Step Drill M10
- 085930-10 Pilot Drill Centering Sleeves
- 085930-11 Pilot Drill 3.5mm
- 085930-12 Tap 1/4"
- 085930-13 Tap M8
- 085930-14 Tap M10
- 085930-15 Puller Adaptor Mandrel





### Vibro Impact Glow Plug Remover Kit 085900V2

- For the safe, effective removal of 8mm, 9mm, 10mm, 11mm & 12mm glow plugs
- Uses controlled impact torque to create vibration in order to loosen seized glow plugs
- The Vibro-Impact tool 'loosens' the seized glow plug, making it safe and easy to remove without the risk of broken plugs, and / or damaged cylinder heads
- Includes 4 low-torque settings for controlled torque vibration (10, 20, 30, 40Nm)
- Supplied with special long-reach 8, 9, 10, 11 & 12mm glow plug sockets, long and short extensions and universal joint for ease of access
   This kit is also effective for:
- The removal of any small threaded fixings (up to 12mm thread size) e.g.
  - Spark Plugs (particularly useful for Ford and Alfa Romeo Twin Spark engines)
  - Exhaust manifold studs
  - Engine sump fixings





Square Drive	1/4"	
Max Torque - Right	40Nm	
Max Torque - Left	10 / 20 / 30 / 40Nm	
Air Inlet	1/4"	
Air Consumption	250 ltrs / min	
Speed	12,000 per min	
Air Supply	6.3bar / 90psi	

#### **Spare Parts:**

- 08590170 1/4" Impact Gun
- 08590270 Universal Joint
- 08590370 Impact Socket 8mm
- 08590470 Impact Socket 10mm
- 08590570 Impact Socket 12mm
- 08595170 Impact Socket 9mm
- 08595270 Impact Socket 11mm
- 08595370 Short Extension
- 08595470 Long Extension

### Glow Plug Socket Set 08593500

- Specially designed sockets for gaining access to the glow plug where the cable restricts access
- Sockets have a lateral slot which goes over the cable attached to the glow plug - No need to disconnect wires from glow plug
- 8mm / 9mm / 10mm sockets
- Applications include: Alfa, Fiat, Saab, Vauxhall / Opel also some PSA models





### Extra Long Glow Plug Socket Set 08597500

- Extra Long Glow Plug sockets (150mm) with universal joint for restricted access
- · Designed to grip plug being extracted
- Sizes: 8mm, 9mm, 10mm, 12mm, 14mm, 16mm
- Extra long 150mm & 3/8" Drive
- Includes universal joint for restricted access



### Mercedes Diesel Fuel Injection Socket 01515500

- 33 tooth ½" sq dr
- Special socket for removing and mounting the pressure valve holder on the Diesel Injection Pump
- Outside Diameter 23.9 mm
   Length 55 mm
- Internal measurement across the inside of the teeth (Bolt Head Measurement) approx 19.45mm

#### Applications:

Mercedes Diesel Engine Series: 601, 602, 603, 605, 606, 615, 616, 617











### Valve Spring Compressor - Heavy Duty 03800000

- Suitable for use on a wide range of medium and heavy commercial vehicles, buses, agricultural, marine and industrial plant engines
- Reinforced frame made from rust-proofed steel
- Geared hand wheel adjustment
- Supplied with straight & cranked off-set jaws



#### **Spare Parts:**

- 03801100 Straight Jaws
- 03801200 Cranked Offset Jaws

### Valve Spring Compressor - OHC Engines 66043000

- For OHC petrol & diesel engines
- Will also fit a wide variety of smaller OHV engines
- Cam action provides parallel lift
- Open collet type jaw provides good visibility for difficult access applications





### Valve Spring Compressor - Multivalve Engines 03950000

- For the removal of valves on multivalve petrol & diesel engines
- Reinforced frame made from rust-proofed steel
- Supplied with 23mm & 28mm valve spring adaptors



#### **Spare Parts & Optional Adaptors:**

- 03950100 Multivalve VSC Adaptor: 28mm (OD) 21mm (ID)
- 03950200 Multivalve VSC Adaptor: 23mm (OD) 18mm (ID)
- 03950400 Multivalve VSC Adaptor: 30mm (OD) 18mm (ID)
  - Restricted Access & BMW
- 03950500 Multivalve VSC Adaptor: 21mm (OD) 15mm (ID) VW Group & Motorcycle

### Valve Spring Compressor - OHV Engines 66021000

- For the removal of valves on small / medium OHV engines
- Cam action provides parallel lift
- Automatic locking action
- Supplied with straight adjustable width jaws

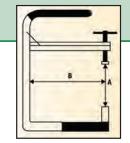


#### Valve Spring Compressors Technical Specifications

	A - Jaw (mm)		B - Throat (mm)	
	Min	Max		
03800000				
Cranked Offset Jaws	75mm	165mm	245mm	
Straight Jaws	95mm	186mm	245mm	

Note: Dimensions quot	ted are with to	ol fully compressed

A - Jaw (mm)		B - Throat (mm)	
Min	Max		
35mm	142mm	150mm	
70mm	135mm	150mm	
63mm	129mm	158mm	
	Min 35mm 70mm	Min         Max           35mm         142mm           70mm         135mm	



#### **Valve Grinding Sticks**

• Wooden handled valve sticks for grinding and lapping valves

Part Number	Description	Size	
66090200 Large Cup - Ideal for HGV, agricultural and industrial plant engines		Single-Ended - 32mm x 224mm	
66090300 Medium Cup - Ideal for cars and light commercial vehicles		Single-Ended - 22mm x 224mm	
66090400 Small Cup - Ideal for cars, motorcycles and generator engine		Single-Ended - 19mm x 224mm	
66090500 Small / Medium Cup		Double-Ended - 19 / 22mm x 224mm	







### Cylinder Honing Set (13 - 89mm) 02800000

 Complete honing and deglazing set for 13 - 89mm diameter cylinder bores

• Flexible drive shaft for use with air or electric drills

 Supplied with a set of medium grade 220 grit stones

 Suitable for use on brake and clutch cylinders, small bore engine cylinders, motorcycle engines etc





#### **Replacement Stone Sets:**

02800100 - Grade: Fine Grit: 400
 02800200 - Grade: Medium Grit: 220
 02800300 - Grade: Course Grit: 100

Note: Each Stone Set consists of 3  $\times$  19mm stones / 3  $\times$  29mm stones / 3  $\times$  50mm stones and 9  $\times$  replacement spring clips

### **Cylinder Honing Set (50 - 180mm)** 02810000

Large diameter honing and deglazing tool

 Flexible drive shaft for use with air or electric drills

 Supplied with a set of medium grade 220 grit stones

 Suitable for use on large bore engine cylinders from 50 -180mm



#### **Replacement Stone Sets:**

02810100 - Grade: Fine Grit: 400
 02810200 - Grade: Medium Grit: 220
 02810300 - Grade: Course Grit: 100

Note: Each Stone Set consists of 3 x 100mm stones and 3 x replacement cotter pins

### Piston Ring Compressor - Ratchet Action 66037000

- Medium capacity piston ring compressor suitable for cars and LCVs
- Spring assisted ratchet type lock complete with square drive key
- Standard 80mm depth, 57 125mm capacity





### Piston Ring Compressor - Ratchet Action - Large Capacity 66037300

- Large capacity piston ring compressor
- Spring assisted ratchet type lock complete with square drive key
- Standard 80mm depth, 90 175mm capacity
- Suitable for Commercial Vehicles, industrial and agricultural engines

## Piston Ring Compressor - Ratchet Action - Large Capacity - Long Reach 03220000

- Large capacity, long reach, piston ring compressor
- Spring assisted ratchet type lock, complete with square drive key
- Double-Depth 165mm, 90 175mm capacity
- Suitable for Heavy Commercial Vehicles, industrial and agricultural engines

### Seal Removal & Replacement Kit 08529500

- Remove & install awkward seals as found on engines, gear boxes, power steering pumps etc
- Reduces risk of surface damage
- Universal coverage for seals 27-58mm diameter
- Includes seal puller, short extracting hooks for easily accessed seals e.g. on camshafts, long extracting hooks for deep set seals or ones sat on protruding shafts e.g. crankshafts, seals, selection of bushes, sleeves and mandrels for installing new seals

#### **Spare Parts:**

• 085295-01 - Leg Set (Set of 4, 2 x large and 2 x small)









### Alternator Free Wheel Pulley Set - 29 Piece 016795V2

- Special set of Spline & Torx Socket Bits for the removal of free-wheel alternator pulleys
- Locks the alternator, allowing the central locking bolt of the pulley to be released
- Selection of 33 tooth reaction nuts and additional adaptors
- Updated 29 piece set covers a wide range of popular applications including:
- BMW, Citroën, Fiat, Ford, Mercedes, Opel, Peugeot, Porsche, Renault, Toyota, VW Group, Vauxhall, Volvo
- Applications list included Visit www.sykes-pickavant.com for full details

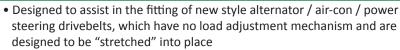


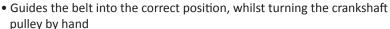
#### **Spare Parts:**

- 016795-01 1/2" Bit Socket x M10 Spline 10 (200mm)
- 016795-02 1/2" Bit Socket x M10 Spline 10 (140mm)
- 016795-03 1/2" Bit Socket x M10 Spline 10 + 33 teeth (110mm)
- 016795-04 3/8" Bit Socket x M10 Spline 10 + 31 teeth (90mm)
- 016795-05 1/2" Bit Socket x T50 Torx 50 + 33 teeth (110mm)
- 016795-06 1/2" Bit Socket x T50 (140mm)
- 016795-07 1/2" Bit Socket x T50 (200mm)
- 016795-08 3/8" Bit Adaptor x 10mm (30mm)
- 016795-09 1/2" Bit Adaptor x 10mm (35mm)
- 016795-10 Hex 10mm bit x M8 Spline 8 (75mm)
- 016795-11 Hex 10mm bit x M10 Spline 10 (75mm)
- 016795-12 Hex 10mm bit x H8 Hexagon 8 (75mm)
- 016795-13 Hex 10mm bit x H10 Hexagon 10 (75mm)
- 016795-14 Hex 10mm bit x T40 (75mm)
- 016795-15 Hex 10mm bit x T50 (75mm)

- 016795-16 Hex 12mm bit x T50 (64mm)
- 016795-17 Hex 12mm bit x M10 Spline 10 (64mm)
- 016795-18 Multipoint Hex 15mm x 33 teeth (30mm)
- 016795-19 Multipoint Hex 17mm x 33 teeth (30mm)
- 016795-20 Multipoint Hex 22mm x 33 teeth (30mm)
- 016795-21 Hexagon Adaptor Hex 17mm (35mm)
- 016795-22 Hexagon Adaptor Hex 22mm (30mm)
- 016795-23 Hexagon Adaptor Hex 21mm x Hex 28mm (35mm)
- 016795-24 Hexagon Adaptor Hex 19mm x Hex 28mm (35mm)
- 016795-25 Hexagon Adaptor Hex 22mm x Hex 28mm (30mm)
- 016795-26 Hexagon Adaptor Hex 17mm x Hex 21mm (30mm)
- 016795-27 Hexagon Adaptor Hex 15mm x Hex 28mm (30mm)
- 016795-28 Hexagon Adaptor Hex 38mm x 3 pin (17mm)
- 016795-29 Round Socket Hex 15mm 4 pin (30mm)

## Flexible Auxiliary Drive Belt Fitting Tool 07740000





• Steel guide pins help lock the tool in-situ, whilst the alloy body guides the belt over the edge of the pulley, and supports the load on the belt during the fitting process





### Stretch Belt Fitting Tool – Dual Size Pulleys 07744400

- Stretch Belt Tool for Double Pulley applications
- Specially designed two-piece tool for installing and dismounting stretch belts on double pulleys where the two pulleys are of different diameters
- Allows the belt to be installed in one operation
- Ideal tool for Ford Focus applications with double pulley







### Sliding Ribbed Pulley Puller 07743500

- Pulley puller for grooved belt pulleys
- Pulling arms slide and lock in position for safety and security
- Designed for both servicing and engine rebuild operations
- Universal Applications







### Self Adjusting Clutch (SAC) Installer Kit 01360000

- For dis-mounting and mounting SAC assemblies to the flywheel
- Approved Clutch Manufacturer's method for SAC assemblies
- Applications include: Alfa Romeo, Audi, BMW, Fiat, Ford, Mercedes, VW and more
- Wide applications coverage for 120° (3 screw) SAC assemblies
- Allows Pressure Plate to be pre-tensioned before removal and re-fitting of clutch
- Avoids clutch plate distortion and accidental damage due to incorrect fitting and subsequent vibration and shortening of clutch life



### Dual Mass Flywheel – Special Tool 081100SP

- Developed in conjunction with LUK, to allow accurate testing of the Dual Mass Flywheels (DMF) unit, whilst it is still mounted on the vehicle, with the gear box removed
- DMF units are designed to dampen out unwanted engine vibration, particularly important on modern high speed diesel engines
- By dampening unwanted vibration, engine and transmission components can be made lighter, in order to maximise the higher power outputs available from the modern diesel engine
- DMF units are designed to last the life of 2 clutch units, assuming correct vehicle usage and normal load conditions
- Includes all the components required to test the DMF including the LUK specific DMF data, instructional CD and Data Wheel which are vital to the correct operation of the kit
- The Data Wheel, provides the specific data, per application, to allow the technician to correctly evaluate the DMF

#### **Spare Parts:**

- 081100-01 Slotted Bar
- 081100-02 Ring Gear Locking Dogs
- 081100-03 Ring Gear Locking Dogs Spacers
- 081100-04 Adaptors & Nuts Set
- 081100-05 Degree Gauge
- 081100-06 Degree Gauge Locking Bar
- 081100-07 DTI Gauge
- 081100-08 DTI Stand

### 5th Gear Puller - Ford 08550500

- Fast and simple method of removing the fifth gear on Ford front wheel drive transmissions before carrying out internal repairs
- The split collar and retaining sleeve ensures a safe and positive location

#### Applications:

• B5 Gearboxes:

Manual 5 speed fifth gear puller (pre -1995)

• IB5 from 1995 – present:

Fiesta to date / Ka 1 1996 - 2008 / Focus 1

• MTX-75:

Focus 1, 2 & 3 from Zetec onwards to date (inc C Max 1) / Mondeo / Jaguar X Type

• VXT-75:

Galaxy 1 1995 – 2006 / Transit FWD & Transit Connect to date









### **Universal Engine & Gearbox Support** 38360000

- Designed to support the engine or gearbox when the engine mountings have been removed - e.g. When replacing timing / drive belts, water pumps etc
- Removes the need for using cranes, transmission jacks etc
- Universal tool designed for all makes of vehicle No need for costly model specific brackets
- The unit is suspended from the chassis via the support hooks, the engine / gearbox is supported by the support pad and is counter-balanced against the underside of the vehicle by the support arms
- Fully adjustable in all dimensions:
  - Extension: Min 630mm / Max 960mm
  - Support Plate Adjustment: 190mm



Scan the QR code to watch a video of the Universal Engine & Gearbox Support



#### Spare Parts:

• 38360000-01 - Support Pad & Adjustable Bar

### Oxygen (Lambda) Sensor Socket Set 01690000

 Set of 7 specialist sockets for the removal and installation of all common sizes of Oxygen Sensors and Pressure / Vacuum Sensors & Switches

Suitable for both heated and unheated oxygen sensors

	Part Number	Size (mm)	Depth (mm)	Slot (mm)	Offset (mm)
1	01690100	29	90	8	-
2	01690200	22	90	21	-
3	01690300	27	85	27 (window)	-
4	01690400	22	80	8	-
5	01690500	1 1/16	75	-	-
6	01690600	22	50	10	30
7	01690700	22	30	8	55



### Exhaust Pipe Cutter 02180000

- Chain type pipe cutter, ideal for use with exhausts
- Suitable for aluminium, copper, brass, steel
- Capacity:

28 - 68mm diameter



#### **Spare Parts:**

• 02180100 - Replacement chain

### Professional Feeler Gauges 01640000

- 26 blades cranked
- Thickness Range: 0.005mm - 0.762mm
- 45° angle off-set allows for use where access is restricted



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### Glow Plug & Spark Plug Thread Recovery Set 01419000

- For the repair of plug threads within the cylinder head
- Repairs thread from the bottom, to minimise the risk of debris entering the engine
- Made from hardened and tempered steel
- Contents: (all sizes have hex drive)
- M8 x 1.00 117mm length M10 x 1.0 117mm length
- M12 x 1.25 140mm length M12 x 1.25 268mm length
- M14 x 1.25 140mm length M14 x 1.25 268mm length
- M18 x 1.50 89mm length



### Spark Plug Thread Chaser - 14 / 18mm 01410000

 Cleans and reforms threads in cylinder heads



### Spark Plug Thread Chaser - 10 / 12mm 01440000

 Cleans and reforms threads in cylinder heads



### Magnetic Extra Long Slim Spark Plug Socket - 14mm 03341600

- 250mm Long Bi-Hex 3/8 Sq Dr
- For deep-seated spark plugs as found on: Citroën, Mini, Nissan, Peugeot and Toyota vehicles
- Ideal for use on Bi-Hex spark plugs



### Injector Removal Socket – 21mm 01510100

- For the removal of 21mm Injectors
- Commonly found on Ford Duratorq engines



### Injector Alignment Tool 01511500

### A set of tools for aligning

- A set of tools for aligning the injectors to the fuel lines following repair work
- Specifically required for Ford Duratorq 2.0 / 2.2 / 2.4 Diesel Engines



#### **Applications:**

Ford Mondeo / Ford Transit / Jaguar X Type



## **Electronic Diesel Injector Removal Socket Set** 01513500

- Hexagonal socket set for removal of the electrical solenoid from modern diesel injectors
- 1/2" sq dr. x 78mm length
- In most cases, it is necessary to remove the solenoid before attempting to remove the injector body
- Includes 4 x sockets:
  - 25mm Hex Siemens Injectors 2.0 Hdi (DW Series) As found on PSA, Ford, Toyota etc
  - 27mm Hex Siemens Piezo Injectors 2.0 Hdi Piezo (DW Series) As found on PSA etc
  - 29mm Hex Bosch type injectors Bosch Cdi / Hdi engines
  - 30mm Hex Bosch type injectors Bosch Renault / Nissan 1.9dCi



• 01512500 - 25mm Hex

• 01512700 - 27mm Hex

• 01512900 - 29mm Hex

• 01513000 - 30mm Hex









### Diesel Injector Washer Extractor 08581000

- Designed specially to remove the copper injector base seal when it has become stuck in the cylinder head
- Traditionally done using a 'pick' this tool allows safe and easy removal without risk of damage to the head
- Simple to use utilises SP's well known "split collet" technology to grip the seal and allow it to be pulled out from the head
- Simple adjustment expands from 6.5mm to 8.0mm
- No need to use picks, hooks etc when trying to retrieve stuck seals & washers







#### **Spare Parts:**

• 09580900 - Split Collet 6.5 - 8.0mm

### Heavy Duty Diesel Injector Washer Extractor 08581500

- Tapered threaded rod with Slide Hammer, for retrieving washers from the injector seat once the injector has been removed
- Suitable for both modern common rail applications and older applications
- Car / LCV / HGV
- 350mm in length 500gm Slide Hammer Weight
- The tapered threaded end is screwed into the washer which is stuck in the Injector Seat
- Once the washer 'bites', the tool is then used as a slide hammer to remove the washer
- Ideal for use when carbon deposits have completely enclosed the injector seat washer



### Diesel Injector Seat Cleaner Set 017500V2

- Cleans injector seats and chambers when changing or reconditioning diesel injectors
- Helps to avoid blow-back due to poorly seated injectors
- Now includes:
  - Removal tool for copper washers
  - Injector blanking plugs to avoid debris entering the cylinders
  - Wire brush cleaning set for chamber walls
  - Centralising stem to improve correct cleaning seating angle



#### **Spare Parts:**

- 01750170 Seat Cleaner No. 1
- 01750270 Seat Cleaner No. 2
- 01750370 Seat Cleaner No. 3
- 01750470 Seat Cleaner No. 4
- 01750570 Seat Cleaner No. 5
- 017500-02 Top Cone & Spring Shaft Set
- 017500-03 Pin & Plug Set
- 017500-04 Brush Set

### **Injector Seat Re-Surfacing Tools**

- A range of high quality, specialist reamers for injector seat resurfacing
- Each tool features a unique centering probe to ensure correct fitment to the injector seat, is adjustable for depth and has a 17mm hex drive
- Damage to the injector seat and injector edge is avoided

Part Number	Applications
01760200	17mm dia for Delphi injectors
01760300	17mm dia for Siemens injectors
01760400	15.5mm dia for Bosch injectors
01760500	17–19mm dia for Bosch injectors





### Diesel Injector Puller 085700V2

- For use with Lucas & Bosch type clamp-down injectors
- Slide hammer mechanism c/w M8, M12 & M14 adaptors
- Universal tool with a wide variety of Car, LCV & HGV applications
- Includes M17 adaptor for GM Vauxhall / Opel injectors (X20DTH / Y20DTH series engines)

#### **Spare Parts:**

- 08570370 Adaptor M12 / M14
- 08570470 Adaptor M8
- 08570770 Adaptor M17

### Injector Puller - Mercedes CDi Engines 08550000

- Injector puller designed for Bosch type (CDi) injectors
- Slide Hammer with special CDi puller
- Specially designed contact area on the puller to centre the impact of the slide hammer, maximise the impact force and minimise the risk of damage



#### **Spare Parts:**

- 08550170 CDi Injector Puller
- 08550270 Slide Hammer Assembly

### Combined FSI / PD / Common Rail Injector Puller & Service Tool Kit for VW Group 08565000

Designed for the quick and safe extraction of injection nozzles and unit injector (PD) elements from diesel engines

- Suitable for VW, Audi, Seat and Skoda with direct injection engines and engines with pump-injector units
- For assembling and removal of FSI injectors
- Equivalent to VW OEM T10133 + T10163
- Knurled grips on the puller & assembling tools
- Packed in blow moulded case

#### **Applications:**

- 1.4 SDI / TDI
- 1.9 D / SDI / TDI / TDI (PD)
- 2.0 TDI (PD) & (PD 4-Valves)
- 2.5 TDI / TDI (PD)
- 2.7
- 2.8 TDI (PD)
- 3.0 TDI (Common Rail)
- 4.2 TDI (Common Rail)
- 1.4, 1.6, 2.0, 3.0, 4.2 FSI



#### **Spare Parts:**

- 085650-01 CRD Injector Removal Tool
- 085650-02 PD Injector Removal Attachments
- 085650-03 FSi Injector Removal Attachments
- 085650-04 Teflon Seal Adaptors

- 085650-05 Injector Re-fit Tool
- 085650-06 Slide Hammer Kit









### **Heavy Duty Slide Hammer Injector Remover Kit** 08585000

- Heavy Duty Slide Hammer puller for removal of Bosch, Delphi, Denso and Siemens injectors
- Features a flexible u-joint adaptor for access in restricted areas
- Contains:
- 6 x Injector adaptors:

M14 x 1.5, M16 x 1.0, M17 x 1.0, M20 x 1.0, M25 x 1.0, M27 x 1.0

4 x Injector Solenoid removers:
 M25, M27, M29, M30

- 2 x Nozzle Extractors:

6mm Tamperproof: 10mm hex - 7mm Tamperproof: 10mm hex

- Heavy Duty Slide Hammer Hammer Weight: 5.0kg (Total Weight: 8.0kg)
- Supplied in blow-moulded case



#### **Spare Parts:**

#### **Injector Adaptors:**

- 08581470 M14 x 1.5
- 08581670 M16 x 1.0
- 08581770 M17 x 1.0
- 08582070 M20 x 1.0
- 08582570 M25 x 1.0
- 08582770 M27 x 1.0

#### Flexible Adaptor:

- 08582870 Flexible Adaptor
- **Injector Solenoid Removers:**
- 01512500 M25
- 01512700 M27
- 01512900 M29
- 01513000 M30

#### **Nozzle Extractors:**

- 08585670 6mm tamperproof 10mm hex
- 08585770 7mm tamperproof 10mm hex
- 08585870 Slide Hammer Assembly

### Diesel Injector Remover Kit For Common Rail Diesel Engines 08580000

- Heavy Duty Slide Hammer Kit c/w Injector Removal Adaptor Set
- Designed for use with Common Rail Diesel Engines
- Heavy Duty Slide Hammer (10lbs / 4.5kg) for fast and effective removal of stubborn injectors
- Contains:
  - Injector Removal Adaptors: M14, M16, M17, M20, M25, M27
  - Injector Dismantling Tool: M10 x 1/2" with hole
  - Slide hammer adaptor with locknut (M18)
  - Dismantling tool for removing internal parts of the injector where necessary
- Injector removal adaptors have a special hex design (M27) to allow use of an Impact Wrench to create vibration sufficient to break the injector seal
- Slide hammer adaptor has a 5/8" UNF internal thread for attaching to slide hammer shaft



Scan the QR code to watch a video of the Diesel Injector Remover Kit



N.B. 5/8"UNF is the thread pattern used on most SP slide hammer shafts and the majority of US market slide hammer shafts. Adaptor kit 08580500 (below) is for users who already possess a slide hammer with a 5/8"UNF threaded shaft.

#### **Spare Parts:**

#### **Injector Adaptors:**

- 08581470 M14 x 1.508582070 M20 x 1.0
- 08581670 M16 x 1.0
  08582570 M25 x 1.0
- 08581770 M17 x 1.0
- 08582770 M27 x 1.0

• 18580970 - Dismantling Tool

### Injector Removal Set - Adaptor Kit only 08580500

- For use with an existing slide hammer with 5/8" UNF threaded shaft
- Contains:
  - Injector Removal Adaptors: M14, M16, M17, M20, M25, M27
  - Injector Dismantling tool:
     M10 x 1/2" with hole
  - Slide hammer adaptor with locknut (M18)







### **Hydraulic Injector Puller System Kit** 18580000

- A unique concept for the removal of stubborn injectors
- Provides controlled force to aid the removal of seized injectors, where there is insufficient access for traditional slide hammers
- Uses a multi-position frame, with adjustable legs of different lengths, and a selection of mounting adaptors, to allow alignment of the tool with the injectors on a wide variety of modern diesel engines

 The combination of variable leg lengths, and selection of the appropriate adaptor for the cylinder head, allows the tool to be correctly positioned on most cylinder heads

 Supplied with injector adaptors for most modern injector types:
 M14, M16, M17, M20, M25, M27

• Includes instructional CD





Scan the QR code to watch a video of the Hydraulic Injector Puller System Kit



#### **Spare Parts:**

- 08581470 M14 Injector Adaptor
- 08581670 M16 Injector Adaptor
- 08581770 M17 Injector Adaptor
- 08582070 M20 Injector Adaptor
- 08582570 M25 Injector Adaptor
- 08582770 M27 Injector Adaptor
- 18580170 Mounting Frame
- 18580270 Support Legs 50mm (4)
- 18580370 Support Legs 100mm (4)
- 18580470 Support Legs 200mm (4)
- 18580570 17mm Hex Head Bolt Mountings (4)
- 18580670 19mm Hex Head Bolt Mountings (4)
- 18580770 Concave Head Bolt Mountings (4)
- 18580870 Tapered Cone Head Bolt Mountings (4)
- 18580970 Hex Injector Strip Down Tool
- 18581070 Centre Spindle Short M18
- 18581370 Centre Spindle Long M18

### M9R Renault Kit for Hydraulic Injector Puller (above) 18582500

- Useful additional plate and posts when working on M9R engines
- Allows direct application of pulling force
- Applications:
   Renault /
   Nissan / GM –
   Dci 2 litre engines (M9R)





### PSA Adaptor Plate for Hydraulic Injector Puller (above) 18583000

- A bespoke add on kit for use on PSA 2.0 & 2.2 litre HDi diesel engines
- Allows precise and speedy set up ensuring correct tool alignment for the tricky task of injector release on troublesome engines
- Contents:
- Plate and Support Legs





### Hydraulic Hand Pump 20017000

- Lightweight aluminium bodied hand pump fitted with gauge, hydraulic hose and ¾" hydraulic coupler
- 2 Speed, 10,000psi
- Supplied in steel storage case



#### 'Vibro-Impact' Air Hammer 90206000

- A unique concept to aid the removal of seized parts
- The 'Vibro-Impact' system allows for the controlled application of force via an air powered Impact Hammer
- Allows the operator to control and gradually increase the force being applied, in order to loosen seized components
- Ideal as a starting procedure before using the Hydraulic Injector Puller - 18580000 (above) as loosens carbon deposits around the injector

Refer to Page 133 for further details









### Strap Type Oil Filter Remover - For all filters up to 300mm diameter 03860000

- Multi-purpose strap wrench, ideal for all oil filters up to 300mm circumference
- Range: 20 to 300mm diameter
- Strap Length: 1 metre long & 40mm wide
- Strong steel shank and polyester strap
- Self tightening band designed for fast and secure filter removal
- Double ended 13/16" hex c/w 3/8" & 1/2" sq. dr

#### **Spare Parts:**

• 03860500 - Replacement Strap



03810000



### **Heavy Duty Strap Wrench** 015500V2

- Multipurpose, heavy duty strap wrench, ideal for HGV oil filter removal and industrial applications
- Range: 50 to 275mm diameter
- Strong cast iron handle for exerting high leverage, with polyester webbing strap



#### **Spare Parts:**

03830000

• 015512V2 - Replacement Strap

# Adjustable Band Type Oil Filter Remover - Car / LCV

• Band type, adjustable, non-stretch steel band with die-cast screw mechanism

Adjustable Oil Filter Remover - 3 leg

• Spider-type wrench, c/w geared legs which

• 3/8" sq. dr c/w with adaptor for 1/2 sq.dr.

• Range: 62 to 93mm diameter

and/or 19mm hex

automatically tighten as the force is applied

Range: 66 to 100mm diameter for Car / LCV applications



### with die-cast screw mechanism • Range: 110 to 155mm diameter for LCV / HGV

• Band type, adjustable, non-stretch steel band

Range: 110 to 155mm diameter for LCV / HGV applications



Adjustable Band Type Oil Filter Remover - LCV / HGV

#### **Spare Parts:**

• 03830100 – LCV / HGV Replacement Band

#### Spare Parts:

03840000

• 03840100 - Car / LCV Replacement Band

### Heavy Duty Chain Type Oil Filter Remover 03890000

- Heavy duty leaf type chain
- Range: 25 to 150mm diameter
- Ideal for HGV, plant and industrial applications, as well as Cars / LCV's etc
- 1" hex or 1/2" sq. dr



### Oil Filter Wrench - Belt Type 03875000

- Twist mechanism to adjust belt
- Range: 65 to 105mm diameter
- Soft grip handle





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#### Low Profile Oil Filter Socket Set 03905000

- Set of six oil filter sockets covering a wide range of manufacturers including those fitted with Mann, Mahle and Knecht oil filters
- Chrome Vanadium sockets 3/8 sq dr
- Includes sizes: 24, 27, 32, 36, 38, 42mm
- Applications include:
  - BMW Mini, BMW, Mercedes-Benz A Class, Vauxhall Vectra 2.0, Astra-G, Corsa-B, Zafira, Ford, Volkswagen VR6, Audi
- VW Group diesel engines fitted with Mann, Mahle & Knecht filters



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#### Sump Plug Key Set - 21 Piece 01485000

- Suitable for sump plug, engine, gear box, back axle applications
- Contents include:
- 10mm (XS10) Square female (BMW, Ford, Renault, Toyota Gearbox / Differential)
- M16 Spline tamperproof (VW Group Gearbox)
- 10mm Triangular (Renault)
- T45 Torx
- 3/8" sq drive c/w sliding T-Bar
- Supplied in moulded plastic case

#### **Spare Parts:**

- 014850-01 7mm square
- 014850-02 8mm square
- 014850-03 10mm square
- 014850-04 11mm square
- 014850-05 12mm square
- 014850-06 13mm square
- 014850-07 14mm square
- 014850-08 10mm square female
- 014850-09 5/16" square
- 014850-10 3/8" square
- 014850-11 8mm hex
- 014850-12 9mm hex
- 014850-13 10mm hex
- 014850-14 12mm hex

#### • 014850-15 - 13mm hex

- 014850-16 14mm hex
- 014850-17 17mm hex
- 014850-18 M16 spline
- 014850-19 10mm triangular
- 014850-20 T45 torx
- 014850-21 3/8" sq drive t-bar

#### **Sump & Gasket Joint Separator** 01487500

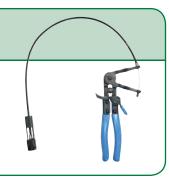
- Breaks seals on engine sumps, transmissions or any difficult to separate gasket joints easily
- Blade width 48mm manufactured from specially hardened steel
- Insert the knurled handle into the separator and tap into joint with a hammer



#### **Flexible Hose Clamp Tool** 03240000

- Universal hose clamp tool for installation and removal of 'elastic' hose clamp collars
- Remote operation with rigid cable
- Suitable for self-tightening collars from 18 54mm (length)
- Patented micro-tooth ratchet and pawl mechanism





#### **Heavy Duty Hose Clamp Plier** 03250000

• Specially designed for releasing and refitting re-usable hose clips



#### **Protective Seat Cover - Black** 05162600

- 100% Nylon Seat Cover for protection of seats during service / maintenance work
- Grease and water resistant
- Fully washable
- Universal size Fits most car / van seats











# HYDRAULIC INJECTOR PULLER SYSTEM KIT

UNIQUE CONCEPT FOR THE REMOVAL OF STUBBORN INJECTORS

**SEE PAGE 55** 

