



High-Quality Special Tools...
...durable, safe and innovative

KIS

Klann Information System

The new Klann Information System "KIS"

Almost everyone has at some time experienced problems when it came to converting OEM Tool Numbers to the tool they needed.

You have the OEM Tool Number from the repair manual and are now looking for the KLANN Special Tool.

Converting OEM numbers to KLANN Special Tools has been so far very time-consuming for both garages and wholesalers.

In order to solve this problem, we are now offering the Klann Information System "KIS" on "www.klann-online.de"

This extensive OEM Part Number Data Base is designed to help you find the corresponding KLANN Part Number. Our system allows garages to quickly and easily identify the relative KLANN Special Tool they are looking for - for example, for the replacement of a timing belt.

The forward-looking Klann Information System "KIS" is constantly being updated and enhanced by new product ranges, thus always providing the latest information on the full range of the high-quality special tools and services from KLANN. Easy determination of the right tool for the professional and trouble-free repair thanks to KIS - keeping it simple.



KIS
Klann Information System

KLANN Artikel Nr.
Vergleiche Artikel Nr. Richtige Schreibweise beachten

KL-0280-1082 A | Nockenwellenretterdorn (2 St.)
Werkzeug ist ein: Alternativwerkzeug
ist Bestandteil von Klann-Satz: [KL-0280-108 KA](#)

Converting OEM Tool Numbers to
KLANN Part Numbers

Partner in the **GEDORE** // Group



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KL-0124-60

Cooling System Pressure Tester

(Universal)



The Pressure Tester **KL-0124-60** made of metal features a quick clutch, a pressure relief valve and a flexible hose for connections that are hard to access. This tool is designed to control the sealing of the cooling systems on vehicles. The precision manometer is protected by a rubber cap. A wide range of adaptors for different radiators and compensating tanks.

Advantages:

- Pump and adaptor made of metal (brass), as a result suitable for continuous use even at high temperatures.
- High precision of pump and adaptor.
- Safety valve for pressure relief.

Technical Data:

Max pressure of the hand pump:	(36 psi) 2.5 bar
Weight of the pump with tube:	1.1 kg
Weight KL-0124-60 (complete):	7.9 kg
Weight of the empty storage case:	2.5 kg

Scope of Delivery:**KL-0124-60 Cooling System Pressure Tester**

Part No.	Description	Qty.
KL-0124-600	Pump	1
KL-0124-601	Flexible Tube	1
KL-0124-620	Adaptor Universal Bajonet Joint Ø 60	1
KL-0124-621	Adaptor M48x3	1
KL-0124-622	Adaptor M44x3	1
KL-0124-624	Adaptor M52x3	1
KL-0124-625	Adaptor M52x4	1
KL-0124-626	Adaptor Jap Vehicles	1
KL-0124-627	Adaptor M54x4	1
KL-0124-633	Adaptor S48x3	1
KL-0124-634	Adaptor Tr63x3	1
KL-0124-6090	Case empty	1

6

KL-0124-602

Pump with Hose



The pump **KL-0124-602** is designed to build up the specified pressure in the cooling system. It can also be used to test the cooling system for leak tightness and discharge of water.

Scope of Delivery:**KL-0124-602 Pump with Hose**

Part No.	Description	Qty.
KL-0124-600	Pump	1
KL-0124-601	Flexible hose	1

KL-0124-6009

Repair Kit Pump



KL-0124-6001

Manometer with Rubber Cap



Thermal Switch Socket Size (waf) 29 mm, 1/2"

KL-0123-9029

Suitable for Opel/Vauxhall e.g. Corsa B, Omega, Vectra etc.

For removing or installing almost all types of thermal switches with plug or non-detachable cable.

Technical Data:

Drive:	1/2"
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Reaction Wrench

KL-0284-8

Suitable for VW Polo, Golf, Passat and Audi A4, etc.

For locking the pulley on the servo-pump.

Advantages:

- The 1/2" drive in the tool handle enables the tool to be extended, for example by a ratchet.
- Easy loosening of stubborn screws on the water-pump pulley.

Technical Data:

Length:	Height:	Inner-Ø:	Screw retaining Ø:	Weight:
250 mm	17 mm	31 mm	14 mm	450 g



Reaction Wrench

KL-0284-11

Suitable for VW-Audi etc.

For locking deep-drawn water-pump pulleys that are used when, for example, an air conditioning is also built in.

Advantages:

- Safe locking of the water-pump pulley via the fixing screws.
- Easy loosening of stubborn fixing screws at the water-pump pulley.

Technical Data:

Length:	Height:	Inner-Ø:	Screw retaining Ø:	Weight:
300 mm	40 mm	31 mm	14 mm	450 g



6

Special Socket

KL-0581-1

Suitable for BMW etc.

For BMW hose clamps.

Used for loosening and tightening the safety clamp on fuel lines of BMW vehicles.

Tightening the clamps prevents leakage. Thanks to the special socket

KL-0581-1, the clamps can be reused.



Hose Clip Screwdriver 6 / 7 mm (width across flats) hex

KL-0121-82

For the quick and easy loosening and tightening of worm-drive hose clips with 6 mm and 7 mm (width across flats) hex - e.g. on fuel-lines, oil-coolers, radiator-hoses and heater-hoses. Even hose clips that are hard to access can be reached easily due to the long, flexible shaft.

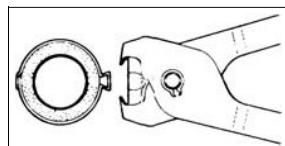
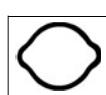
Technical Data:

Size (width across flats):	6 / 7 mm
Screwdriver length :	325 mm
Shaft length :	205 mm
Weight:	160 g



KL-0121-90

Hose Band Pliers



Intended for use on Audi, BMW, Chrysler, Ford, GM, Honda, Mazda, Mercedes, Nissan, Opel/Vauxhall, VW, etc.

For the tightening of clamps (system Oetiker) on cv boots, radiator and fuel hoses.

Advantages:

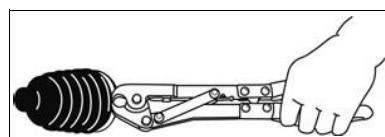
- No damage to clamps.
- No damage to hoses.
- Easy and quick replacement of hoses.

Technical Data:

Length:	240 mm
Weight:	492 g

KL-0121-93

Hose Band Pliers



Suitable for Audi, BMW, Chrysler, Ford, GM, Honda, Mazda, Mercedes, Nissan, Opel/Vauxhall, VW etc.

With power transmission and 2 working stages.

For the tightening of clamps (system Oetiker) on cv boots, radiator and fuel hoses.

Technical Data:

Length:	280 mm
Weight:	475 g

KL-0121-24

Hose Clip Pliers (90° off-set tips) with locking ratchet

6



Suitable for Alfa Romeo, Audi, Citroën, Fiat, Ford, Hyundai, Lancia, MAN, Mercedes, Opel/Vauxhall, Peugeot, Porsche, Renault, Seat, Toyota, VW, Volvo, etc.

Designed for the replacement of fuel lines, oil lines, radiator and water hoses, which are not retained by „Jubilee“ type clips, but by reusable, self-tensioning hose clips. Special design of the pliers allows the hose clips to be securely gripped and safely expanded.

The following clips can be opened with the Hose Clip Pliers: Norma, ABA (AWAB), MIKALOR, MUBEA from Ø 18 - 53 mm.

Technical Data:

Clip-Ø:	18 - 53 mm
Length:	225 mm
Clamp Angle:	90°
Weight:	403 g

KL-0121-22

Hose Clip Pliers (straight design) with locking ratchet



Suitable for Alfa Romeo, Audi, Citroën, Fiat, Ford, Hyundai, Lancia, MAN, Mercedes, Opel/Vauxhall, Peugeot, Porsche, Renault, Seat, Toyota, VW, Volvo, etc.

Designed for the replacement of fuel lines, oil lines, radiator and water hoses, which are not retained by „Jubilee“ type clips, but by reusable, self-tensioning hose clips. Special design of the pliers allows the hose clips to be securely gripped and safely expanded.

The following clips can be opened with the Hose Clip Pliers: Norma, ABA (AWAB), MIKALOR, MUBEA from Ø 18 - 53 mm.

Technical Data:

Clip -Ø:	18 - 53 mm
Length:	273 mm
Weight:	390 g

Hose Clip Pliers (110° off-set tips) with locking ratchet

KL-0121-23

Suitable for Alfa Romeo, Audi, Citroën, Fiat, Ford, Hyundai, Lancia, MAN, Mercedes, Opel/Vauxhall, Peugeot, Porsche, Renault, Seat, Toyota, VW, Volvo, etc.

Designed for the replacement of fuel lines, oil lines, radiator and water hoses, which are not retained by „Jubilee“ type clips, but by reusable, self-tensioning hose clips. Special design of the pliers allows the hose clips to be securely gripped and safely expanded.

The following clips can be opened with the Hose Clip Pliers: Norma, ABA (AWAB), MIKALOR, MUEBA from Ø 18 - 53 mm.

**Technical Data:**

Clip-Ø:	18 - 53 mm
Length:	285 mm
Clamp Angle:	110°
Weight:	425 g

Hose Clip Pliers with remote operation (Bowden Cable with flexible tube)

KL-0121-21

With automatic locking ratchet

For the removal and replacement of fuel-lines, oil-lines, radiator hoses and heater hoses which are not retained by 'jubilee' type of clips, but fitted with space-saving, re-usable, self-clamping spring hose clips. The special design of the hose clamp ensures that the compressed clips are safely and securely retained.

The flexible tube ensures that even positions that are hard to access can be reached easily and quickly.

Technical Data:

Clip-Ø:	18 - 53 mm
Weight	450 g
Length	225 mm

**Bowden Cable with flexible tube**

KL-0121-2101



6

Hose Clip Pliers with remote operation and locking ratchet

KL-0121-25

Suitable for Alfa Romeo, Audi, Citroën, Fiat, Ford, Hyundai, Lancia, MAN, Mercedes, Opel/Vauxhall, Peugeot, Porsche, Renault, Seat, Toyota, VW, Volvo, etc.

This tool is designed to open self-tensioning hose clips when replacing fuel lines, oil-lines, radiator hoses and heater hoses.

Remote operation enables even hard-to-access areas to be reached quickly and without any trouble.

Special design of the pliers allows the hose clips to be securely gripped and safely expanded.

Technical Data:

Clip -Ø:	18 - 53 mm
Length:	225 mm
Clamp Angle:	90°
Weight:	403 g



KL-0121-2501

**Replacement Bowden Cable**

KL-0121-2501

KL-0121-181

Hose Clip Pliers with remote operation

**Suitable for VW-Audi vehicles.**

With automatic locking ratchet.

This tool is meant to quickly and easily open the newly developed turbo hose clips without the risk of damage to the clip.

Without this tool it is almost impossible to open a hose clip without damaging the hose.

Thanks to its remote operation it is especially suitable for positions that are hard to access such as the charge cooling-hose coupling under the battery box on VW Passat 2.0 TDI. With the aid of this tool it is not necessary to remove the battery box.

Advantage

- Universal application.
- The tool is easy to operate.
- Does not damage the hose.

Technical Data:

Length	240 mm
Weight:	650 g

KL-0121-1811 Replacement Bowden Cable

KL-0284-82 K

Water Pump Tool Set VW T5, Touareg

6

**Suitable for 2.5 L 5-Cylinder VW TDI engines (Engine code: AXD). e.g. VW T5, Touareg.**The tool set **KL-0284-82 K** is designed to twist the crankshaft, for example, to TDC position, to lock the crankshaft, for example, when loosening the crankshaft central retaining bolt or the water pump sprocket retaining bolt. It can also be used for the removal and/or extraction of the water pump sprocket and the water pump.**Advantages**

- Easy and quick extraction of the water pump.
- Accurate and professional working.
- Substantial time savings.

Technical Data:

Weight:	1,4 kg
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Scope of Delivery:**KL-0284-82 K Water Pump Tool Set VW T5, Touareg**

Part No.	Description	Quantity
KL-0284-821	Puller for water pump sprocket (Fig. 3) To remove the toothed water pump wheel. Necessary to remove the water pump.	1
KL-0284-822 A	Water Pump Puller (Fig. 4) Required to remove the water pump.	1
KL-0284-823	Wrench for Crankshaft T5 (Fig. 2) To twist or counterhold the crankshaft. Necessary e.g. to adjust the motor shafts on top dead centre (TDC), or to loosen the toothed wheel fastening screw e.g. on the water pump.	1
KL-0284-8290	Plastic storage case (empty)	1



Hose Clip Set (4 pieces)

KL-0121-20

Used to clamp hoses during repairs.
For fuel-, brake- and water-lines with Ø from 10 to 45 mm.

Scope of Delivery:

KL-0121-20 Hose Clip Set (4 pieces)

Part No.	Description
KL-0121-1	Clip for hose-Ø of up to 10 mm
KL-0121-2	Clip for hose-Ø of up to 15 mm
KL-0121-3	Clip for hose-Ø of up to 24 mm
KL-0121-4	Clip for hose-Ø of up to 45 mm



Hose Clip Set (3 pieces)

KL-0121-10

Used to clamp hoses during repairs.
For fuel-, brake- and water-lines.

Scope of Delivery:

KL-0121-10 Hose Clip Set (3 pieces)

Part No.	Description
KL-0121-1	Clip for hose-Ø of up to 10 mm
KL-0121-2	Clip for hose-Ø of up to 15 mm
KL-0121-3	Clip for hose-Ø of up to 24 mm



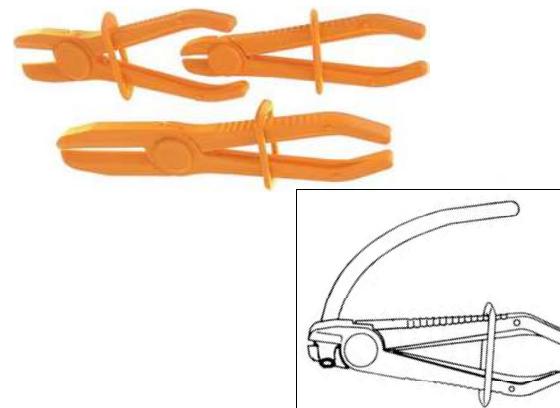
Set of Hose Clip Pliers (3 pieces)

KL-0121-50

Made of plastic. For clamping hoses such as: radiator hoses, heater hoses, fuel hoses, etc. with Ø up to 60 mm.

Technical Data:

Weight:	300 g
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Hose Clip Pliers

KL-0121-51

With automatic locking ratchet. Loosening of the clamping takes place

automatically while opening the pliers; unlocking is not necessary.

Thanks to the special design of the flexible clamping jaws, damage to the hose is avoided during the clamping process.

For the quick and easy clamping of hoses such as water-hoses, fuel-lines etc. with Ø up to approx. 35 mm.

Technical Data:

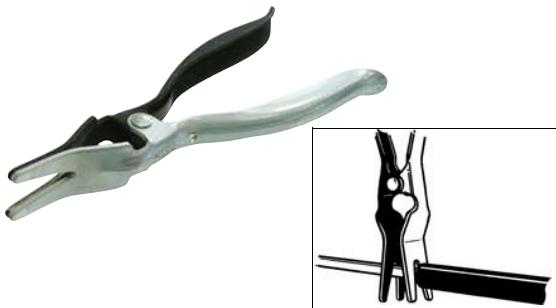
Weight	334 g
Length	245 mm
For hose Ø	up to approx. 35 mm



Pliers positioning,
hose clamping

KL-0121-70

Hose Removal Pliers



For Easy Removal of 4 mm to 13 mm Vacuum and Fuel hoses.
Engage the tube (line) with the black jaw. This sharpened jaw actually "DIGS" into the tube to grip it! Squeeze and the hose is easily pushed off by the silver jaw.

Technical Data:

Length:	200 mm
Weight:	227 g

KL-0121-26

Hose Clip Pliers with Locking Ratchet

(German Utility Model)



Suitable for Alfa Romeo, Citroën, Fiat, Ford, Hyundai, Lancia, Mercedes, Opel/Vauxhall, Peugeot, Porsche, Renault, Seat, Skoda, Toyota, Volvo, etc. especially for the new Clips on fuel-lines on VW-Audi.

For the removal and replacement of fuel lines, oil lines, radiator hoses and heater hoses fitted with space-saving, re-usable, self-clamping spring hose clips. Special design of the pliers ensures that the compressed clips are safely and securely retained. Following makes of hose clips require these pliers: Norma, ABA (AWAB), MIKALOR and MUBEA etc.

KL-0121-28

Hose Clip Pliers with Locking Ratchet (angled)

(German Utility Model)



Suitable for Alfa Romeo, Citroën, Fiat, Ford, Hyundai, Lancia, Mercedes, Opel/Vauxhall, Peugeot, Porsche, Renault, Seat, Skoda, Toyota, Volvo, etc. especially for the new Clips on fuel-lines on VW-Audi.

For the removal and replacement of fuel lines, oil lines, radiator hoses and heater hoses fitted with space-saving, re-usable, self-clamping spring hose clips. Special design of the pliers ensures that the compressed clips are safely and securely retained. Following makes of hose clips require these pliers: Norma, ABA (AWAB), MIKALOR and MUBEA etc.

6

KL-0121-29

Hose Clip Pliers with Locking Ratchet

(German Utility Model)



Suitable for Alfa Romeo, Citroën, Fiat, Ford, Hyundai, Lancia, Mercedes, Opel/Vauxhall, Peugeot, Porsche, Renault, Seat, Skoda, Toyota, Volvo, etc. especially for the new Clips on fuel-lines on VW-Audi.

For the removal and replacement of fuel lines, oil lines, radiators hoses and heater hoses fitted with space-saving, re-usable, self-clamping spring hose clips. Special design of the pliers ensures that the compressed clips are safely and securely retained.

Version with vertically mounted drive slots.
Following makes of hose clips require these pliers: Norma, ABA (AWAB), MIKALOR and MUBEA etc.

KL-0121-36

Set of Release Clips



Suitable for Chrysler, Ford, GM, Opel/Vauxhall, Saab, VW etc.

The set of release-clips KL-0121-36 is designed to unlock the CLIC-hose-clips on air-conditioning systems and fuel lines.

The various connector sizes are released from the front.
Sizes: 7.9 mm (5/16"), 9.5 mm (3/8"), 12.7 mm (1/2"), 15.9 mm (5/8"), 19 mm (3/4"), 22.2 mm (7/8").

Hose Clip Pliers

KL-0121-94

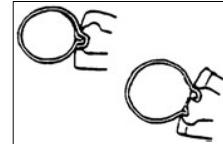
For CLIC-clips

Suitable for Audi, Citroën, Fiat, Mercedes, Opel/Vauxhall, Peugeot, Renault, VW etc.

Used to open and close the reusable hose clips, types CLIC and CLIC-R (Caillau/Serflex).

Technical Data:

Weight:	270 g
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Hose Clip Pliers (left-hand jaws)

KL-0121-91

Suitable for VW-Audi, Citroën, Mercedes, Opel/Vauxhall, Peugeot, Renault, etc.

Used to open and close the reusable hose clips, types CLIC and CLIC-R (Caillau/Serflex).

Technical Data:

Length:	170 mm
Weight:	160 g



Hose Clip Pliers (right-hand jaws)

KL-0121-92

Suitable for VW-Audi, Citroën, Mercedes, Opel/Vauxhall, Peugeot, Renault, etc.

Used to open and close the reusable hose clips, types CLIC and CLIC-R (Caillau/Serflex).

Technical Data:

Length:	170 mm
Weight:	160 g



6

Set of 3 Fuel-Line Pliers

KL-0121-340

Pliers to open connectors on fuel-lines. Suitable for Chrysler, Chevrolet, Citroën, Fiat, Ford, Opel/Vauxhall, Peugeot, Pontiac, Renault, VW etc.

On fuel-lines connected by "snap-fit" connections, the connectors may be released using Pliers KL-0121-32 for Ø 8 mm and KL-0121-33 for Ø 10 mm fuel-lines. (The release segments are to be found on the reverse side of the connector in the axis of the line).

For connectors on Vauxhall/Opel GM, Fiat, etc. where the release segments are activated from the side, Pliers KL-0121-34 (2 tips 6.5 x 6 mm) are required.

KL-0121-32	KL-0121-33	KL-0121-34
8 mm	10 mm	GM-Opel
110 mm	110 mm	115 mm
75 g	75 g	70 g



Scope of Delivery:

KL-0121-340 Set of 3 Fuel-Line Pliers

Part no.	Description	Qty.
KL-0121-32	Pliers for Fuel-lines Ø8	1
KL-0121-33	Pliers for Fuel-lines Ø10	1
KL-0121-34	Pliers for Fuel-lines GM-Opel/Vauxhall	1

KL-0121-35

Clamp



Suitable for Opel/Vauxhall, GM, Fiat, etc.

Clamp **KL-0121-35** for unlocking quick release connections, which can be reached from the side.

Advantages:

- No damage to quick release connections or clamps.
- No damage to fuel lines or hoses.
- Easy and quick separation of fuel lines.

Technical Data:

Fuel Line-Ø	universal
Length:	124 mm
Weight:	45 g

KL-0121-37

Fuel Line Pliers



Suitable for Opel/Vauxhall, Fiat, GM, VW etc.

For loosening quick-release connections on fuel feed pipe lines where the unlocking segments can be reached from the side.

Technical Data:

Weight:	190 g
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KL-0192-22

Safety Clip Pliers bended



Suitable for all Audi A3, VW Golf IV fitted with petrol engines.

To release the fuel line unions. Needed for example when the fuel filter is changed.

Suitable for Mercedes W124, W140 and W202.

For installing retaining clips to secure the chrome strip on the bumper of the Mercedes W124, W140 and W202

Therefore, the pliers is equipped with special clip retaining notches.

Technical Data:

Length:	210 mm
Weight:	200 g

6

KL-0121-38

Fuel Line Pliers



Unlocking the connector
(open locking)



Locking the connector
(close locking)

Suitable for VW-Audi, Fiat, GM, Opel/Vauxhall, Mercedes etc. e.g.

Mercedes M-Class fitted with petrol engines.

This tool is used for unlocking and locking fuel line connectors on fuel filters. Required when replacing a fuel filter or during engine repairs.

Removal of Connector: Pull the connector backwards with the Pliers.

Replacing the Connector: Slide the connector forwards with the Pliers.

Technical Data:

Length:	170 g
Weight:	225 mm

KL-0121-19

Hose Clip Pliers



Suitable for hose clips with a built-in lock in the open position e.g. Chrysler etc.

For opening and closing hose clips with a lock in the open position.

Operating Instructions:

- 1 To open the hose clip, place it in the locating groove so that it is fully in contact with the surface marked "ON". Operate the pliers. The hose clip will be held in the open position.
- 2 To close the hose clip, place it in the locating groove so that it is fully in contact with the surface marked "OFF". Operate the pliers. The hose clip will be unlocked and can be positioned as required on the hose clip.

Diesel Suction Pump Opel/Vauxhall

KL-0482-42

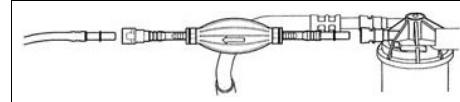
Suitable for Vauxhall/Opel 2.0 and 2.2 Ecotec diesel engines (X20DTL, X20DTH, X22DTH) with VP 44 injection pump.

This pump is needed to bleed the fuel system if it has been opened, for example, for a fuel filter replacement or for an engine repair.



Technical Data:

Length:	335 mm
Line-Ø:	9.5 mm



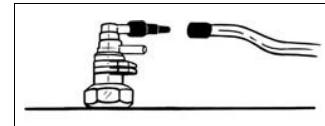
Vacuum Hose Cap Set

KL-0121-75

Identifies Vacuum Hoses and Fittings for Proper Installation.

It is used for disconnecting vacuum lines and other hoses from fittings.

Colour coded, 48-piece set fits all vacuum application from 1/8" (3,2 mm) to 1/2" (12,7 mm).



Socket Insert 13 mm hex

KL-4021-3113

Suitable for VW-Audi, Seat, Škoda 4 Cylinder TDI PD engines.

The special socket **KL-4021-3113** allows quick and trouble-free loosening and tightening of the central retaining bolt of the Fuel Cooling Unit - for example when replacing the Fuel Filter.

This special socket may also be used to remove and replace the brass insert on Injector Valves on Audi petrol engines 1990 - onwards.



Technical Data:

Drive:	1/2"
Profile:	Hex.
Length:	100 mm
Size:	13 mm

6

Fuel Sensor Spanner Set (adjustable)

KL-0120-80

Universal application.

For loosening and tightening the plastic locking ring on the fuel sensor on fuel tanks.

**Scope of Delivery:****KL-0120-80 Fuel Tank Sender Spanner Set adjustable**

Part No.	Description	Range:	Drive:
KL-0120-801	Fuel Sensor Spanner Ø80 mm - Ø120 mm	80 - 120 mm	24 mm
KL-0120-802	Fuel Sensor Spanner Ø110 mm - Ø170 mm	110 - 170 mm	24 mm

Fuel Filter Key 27 mm

KL-0122-56

Suitable for Peugeot e.g. 307 SW 2,0 HDI etc.

The fuel filter key is required to remove and install the fuel filter cap when replacing the fuel filter cartridge.



Technical Data:

Drive:	1/2"
Length:	85 mm
Size:	27 mm

1/2"

KL-0122-701

Fuel Filter Key Ø 108 mm

(German Utility Model)



3/8"

**Suitable for Peugeot, Citroen, Renault e.g. with HDI diesel engines.**

The fuel filter key is required to remove and install the fuel filter cap when replacing the fuel filter cartridge.

Technical Data:

Profile:	Ø 108 mm, 46 Ribs
Drive (square):	3/8"

KL-0122-608

Fuel Filter Key Ø 109 mm



3/8"

**Suitable for Peugeot, Citroen, Renault etc.**

For Fuel Filter with Ø 109 mm and 8 Ribs.

This fuel filter key is required to remove and install the fuel filter cap when replacing the fuel filter cartridge.

Technical Data:

Drive (square):	3/8"
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KL-0122-610

Fuel Filter Key Ø 109 mm, 6 grooves

Suitable for 'new generation' Opel/Vauxhall vehicles.

For Fuel Filter with Ø 109 and 6 Ribs.

This fuel filter key is required to remove and install the fuel filter cap when replacing the fuel filter cartridge.

Technical Data:

Drive (square):	3/8"
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6

KL-0124-41 K

Pressure- and Vacuum-Pump



Universally applicable for the quick and easy check of pressure- and vacuum systems as well as for the suction of liquids such as fuels, brake fluids etc., (e.g. when bleeding brakes).

Especially required for checking the following:

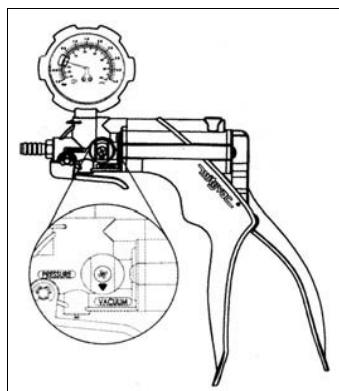
- Fuel-System,
- Vacuum Diaphragm,
- Vacuum Sensor,
- Exhaust Gas Recirculation Valve,
- Fuel Pressure Regulator,
- Vacuum Modulator on Automatic Transmission,
- Brake Booster,
- Turbo Charger Valves,
- Fuel Pump Diaphragm,
- Leak tightness check on lines etc.

Technical Data:

Vacuum measuring range	from 0 - 1.0 bar
Pressure measuring range	from 0 - 4.0 bar
Display	Pressure gauge
Max volume of drain bottle	500 ml
Weight	1.4 kg

Specification:**KL-0124-41 K Pressure- and Vacuum Hand Pump**

Part No.	Description	Qty.
KL-0124-4100	Hand Pump with pressure gauge	1
KL-0124-4101	Bleeding adaptor set	1
KL-0124-4102	Vacuum cap set	1
KL-0124-4103	Diagnostic adaptor set	1
KL-0124-4104	Drain bottle set	1
KL-0124-4105	Hose (2 pieces)	1
KL-0124-4106	Hose connector	1
KL-0124-4190	Plastic storage case	1



KL-0125-1 A

Universal Valve Spring Compressor Tool

(Universal)

Applicable for 1-12 cylinder engines - two up to four-valve technology, in-line-engines or V-engines

This tool permits renewal of valve-stem oil-seals with the cylinder head removed or cylinder head assembled.

The retaining flanges are rotatable, so that they may be affixed to the cylinder head lengthways, sideways or diagonally.

The correct height of the supporting rod may be adjusted due to the adjustment spindles on the left and right side, to achieve the correct angle between handle and the pressure piece for compressing the valve-spring.

Moveable rests allow infinitely adjustment of the tool length and therefore an universal application for 1-12 cylinder engines.

Advantages:

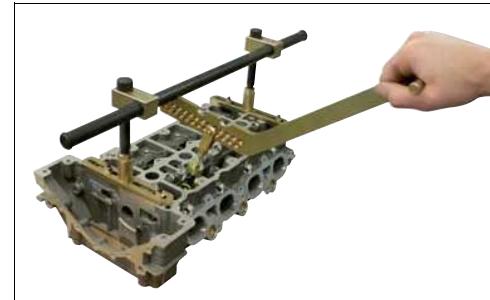
- Substantial job time saving due to the possibility of repairing both the valve stem oil seals and valve springs with the cylinder head still assembled.
- Universal application due to different installation and adjustment possibilities.

Note:

The pressure piece KL-0125-1015 is part of the tool KL-0125-1 A.

**Scope of Delivery:****KL-0125-1 A Universal Valve Spring Compressor Tool**

Part No.	Description	Qty.
KL-0125-100	Stand	2
KL-0125-1006	Rod	1
KL-0125-1007	O-Ring Ø17 x 4	2
KL-0125-1008	Pressure lever	1
KL-0125-1009	Threaded pin M8 x 50 mm	1
KL-0125-1010-A	Fork head with spring-loaded bolt M8 x 32 mm	1
KL-0125-1011	Nut	4
KL-0125-1015	Press piece (standard) 34 mm	1
KL-0035-0003	Hex nut M8	2



6

Pressure Pieces for KL-0125-1 A

Part-No.	Description	Application	Outer-Ø
KL-0125-1035	Pressure Piece	Peugeot/Citroën HDI	21 mm
KL-0125-1033	Pressure Piece	Opel, Seat, VW-Audi	24 mm
KL-0125-1034	Pressure Piece	Hyundai	25 mm
KL-0125-1022	Pressure Piece	Toyota, Ford 16V	28 mm
KL-0125-1023	Pressure Piece	Nissan	30 mm
KL-0125-1021	Pressure Piece	Toyota	31 mm
KL-0125-1024	Pressure Piece	Opel; Peugeot	32 mm
KL-0125-1025	Pressure Piece	Renault 19 u. Clio	33 mm
KL-0125-1015	Pressure Piece	BMW; VW; Peugeot Diesel	34 mm
KL-0125-1026	Pressure Piece	Renault; Mazda; Peugeot 106; Mercedes M102, M104	35 mm
KL-0125-1027	Pressure Piece	Fiat	37 mm
KL-0125-1028	Pressure Piece	Peugeot; Citroën	38 mm
KL-0125-1031	Pressure Piece	Mercedes OM 601; 602; 603	40 mm
KL-0125-1029	Pressure Piece	Ford	42 mm
KL-0125-1030	Pressure Piece	Fiat Diesel	44 mm
KL-0125-1032	Special Pressure Piece, open	BMW-M40,	34 mm

KL-0125-61.. Series Pressure Pieces

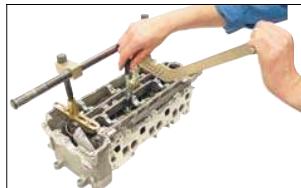
Available Press Pieces (including fork head):



Part-No.	Description	Application	Outer-Ø
KL-0125-6121	Pressure Piece Ø 21	Peugeot/Citroën HDI	21 mm
KL-0125-6122	Pressure Piece Ø 22	Mercedes, Smart	22 mm
KL-0125-6124	Pressure Piece Ø 24	VW-Audi, Seat, Smart, Opel	24 mm
KL-0125-6125	Pressure Piece Ø 25	Hyundai	25 mm
KL-0125-6126	Pressure Piece Ø 26	Mercedes, VW	26 mm
KL-0125-6128	Pressure Piece Ø 28	Toyota, Ford	28 mm
KL-0125-6130	Pressure Piece Ø 30	Nissan	30 mm
KL-0125-6131	Pressure Piece Ø 31	Toyota	31 mm
KL-0125-6132	Pressure Piece Ø 32	Opel; Peugeot	32 mm

KL-0125-60

Valve Collet Assembly Tool Set



For installing valve collets.

Re-installing valve collets with three grooves can be difficult if space is restricted, the valve springs are located deep inside the cylinder head or the valve springs are recessed deeply into bucket tappet guides.

The new **KL-0125-6.. series** of valve collets assembly tools, together with the matching thrust block from the **KL-0125-61.. series** and the **KL-0125-1 A** valve assembly bridge, makes the assembly of single- and three-groove valve collets safe and easy, whether the cylinder head is on the engine or removed. This is particularly important if valve stem seals have to be renewed without removing the cylinder head.

Scope of Delivery:

KL-0125-60 Valve Collet Assembly Tool Set

Part No.	Description	Application	\varnothing
KL-0125-601	Valve Collet Assembly Tool	Opel/Vauxhall, VW-Audi	$\varnothing 5$ mm
KL-0125-602	Valve Collet Assembly Tool	Smart, VW-Audi	$\varnothing 6$ mm
KL-0125-603	Valve Collet Assembly Tool	Mercedes	$\varnothing 7/8$ mm

KL-0126-205

Telescopic Magnetic Lifter with Scriber



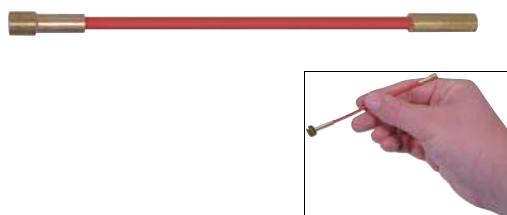
This telescopic magnet lifter can be used to remove metallic objects or particles from positions that cannot easily be reached by other means. The **KL-0126-205** magnetic lifter is particularly suitable for lifting valve collars.

Technical Data:

Magnetic head - \varnothing	7.5 mm
Magnet power	300 g
Length	150 - 670 mm
Weight	28 g

KL-0126-221

Magnetic Valve Collet Lifter (flexible)



With this flexible mini magnetic lifter, metallic objects can be removed from the smallest crack.

Magnetic lifter **KL-0126-221** is particularly suitable for lifting/removing valve collets.

Technical Data:

Length:	200 mm
Weight:	6 g
Magnet- \varnothing 3 mm power:	150 g
Magnet- \varnothing 4 mm power:	270 g

KL-0127-1

Compressed-Air Adaptor



For connecting to spark plug thread holes.

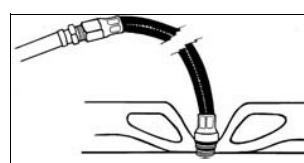
The compressed-air adaptor allows compressed air to be applied to the cylinder being repaired. This is required to keep the valves up and closed during replacement of the valve stem oil seals without removal of the cylinder-head.

Technical Data:

Connection Threads:	M12x1.25 and M14x1.25
Length:	170 mm

KL-0127-20

Compressed-Air Adaptor (M14x1.25 / M18x1.5)



For connecting to spark plug thread holes.

This flexible hose allows compressed-air supply into the determined cylinder even under confined space conditions. This is required to keep the valves up and closed during replacement of the valve stem oil seals without removal of the cylinder-head.

Technical Data:

Connection Threads:	M14x1.25 and M18x1.5
Length:	305 mm
Compressed Air side:	1/4"-18 NPT
Weight:	120 g

Compressed-Air Adaptor for Glow Plug Bore M8x1

KL-1383-118

Universally suitable for Citroën, Fiat, Ford, Lancia, Mercedes, Opel/Vauxhall, Suzuki, Volvo etc. for example, Mercedes: OM639, OM640, OM642, OM651
PSA: 2.7 HDI engine: DT17, 3.0 HDI engine: DT20

Screwing in the compressed-air adaptor **KL-1383-118** into the glow plug bore and injecting air into the combustion chamber prevent impurities from entering the combustion chamber.

Technical Data:

Thread:	M8x1
Length:	178 mm
Pipe-Ø:	Ø12 x 80 mm



Compressed-Air Adaptor for Glow Plug Bore

KL-0369-55 B

Universally suitable for e.g. BMW, Mercedes, Chrysler, Opel/Vauxhall, Nissan Renault etc.

Screwing the compressed-air adaptor **KL-0369-55 B** into the glow plug bore and injecting air into the combustion chamber prevent impurities from entering the combustion chamber.

Technical Data:

Thread:	M10x1
Length:	178 mm
Pipe-Ø:	15 x 110 mm



Compressed-Air Adaptor for Glow Plug Bore M10x1.25

KL-0186-1631

Universally suitable, for example for Toyota, Lexus etc.

Screwing in the compressed-air adaptor **KL-0186-1631** into the glow plug bore and injecting air into the combustion chamber prevent impurities from entering the combustion chamber.

Technical Data

Thread:	M10x1.25
Length:	207 mm
Pipe-Ø:	15 mm



6

Valve Depressor VW-Audi

KL-0280-2

Suitable for VW Golf, Jetta, Caddy, Scirocco, Passat, Santana, Audi 80/100 up to 1982 and Ford 1.8 l.

For bucket tappets on 4-cylinder engines. Used in conjunction with valve shim pliers **KL-0280-1**.

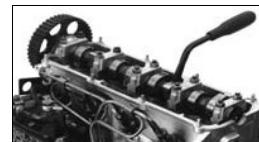


Valve Depressor VW-Audi

KL-0280-3

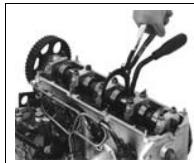
Suitable for the VW-Audi 4-cylinder engines as from 1983 onwards and all other 5- and 6-cylinder engines with bucket tappets

Intended for valve timing. Used in conjunction with valve shim pliers **KL-0280-1**.



KL-0280-1

Valve Shim Pliers

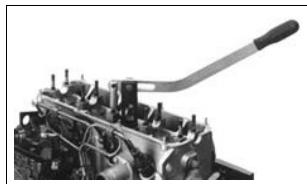


Suitable for VW-Audi engines as from 1.3 l and Ford 1.8 l.

For changing the valve shims while the bucket tappet is being held depressed.

KL-0281-2

Valve Spring Compressor



Suitable for VW-Audi engines from 1.3 l, up to 1993.

Fitted with a fork head for 8 mm Cylinder Head Studs. Applicable for removal and installation of valve springs.

Pressure piece **KL-0125-1015**, metal design.

Scope of Delivery:

KL-0281-2 Valve Spring Compressor

Part No.	Description	Qty.
KL-1381-2003	Lever with safety handle	1
KL-0125-1010-A	Fork head with spring-loaded bolt M8 x 32 mm	2
KL-0125-1009	Threaded pin M8 x 50 mm	1
KL-0035-0003	Hex nut M8	2
KL-0125-1015	Press piece (standard 34 mm)	1

6

KL-0281-2001

Fork Head for Cylinder-Head with 7 mm studs

Suitable for VW Polo, (Golf II und III) with 1.4 l and 1.6 l engines.



KL-1381-2

Valve Spring Compressor Peugeot

Intended for use on Peugeot.

For valve springs with a bucket tappet-Ø of 38 mm.

The valve depressor enables the removal and installation of valve springs both with the cylinder head being removed or installed. The press pieces are interchangeable depending on the bucket tappet-Ø.

Please see tool **KL-0125-1 A**.

Scope of Delivery:

KL-1381-2 Valve Spring Compressor

Part No.	Description	Qty.
KL-1381-2001	Bar	1
KL-1381-2002	Hex screw M6 x 20 mm	3
KL-1381-2003	Lever with safety handle	1
KL-1381-2005	Hex screw M8 x 60	1
KL-0125-1010	Fork head with spring-loaded bolt M8 x 16 mm	2
KL-1381-2006	Threaded pin M8 x 60	1
KL-0035-0003	Hex nut M8	2
KL-0125-1028	Press piece for Peugeot 38 mm	1

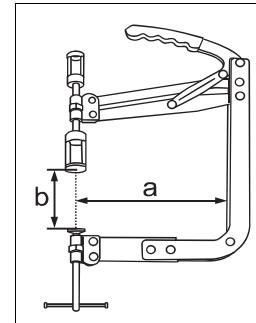
Valve Spring Compressor

KL-0125-93

This valve spring compressor is universally suitable for use on almost any engines due to its wide compression range.

Technical Data:

Pressure Piece-Ø	25 / 30 mm
a:	240 mm
b:	20 - 250 mm
Weight:	2.5 kg



Valve Seal Removal Slide Hammer

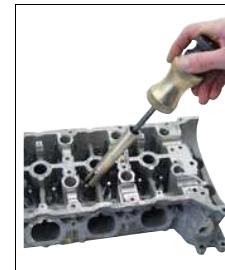
KL-0049-16

For Valve Stem Sealing Rings.

For bucket-tappets with diameters from 15 mm to 18 mm.

The valve seal removal slide hammer **KL-0049-16** can be used universally.

The special design and construction allows quick and easy removal of the valve-stem-oil-seals without any risk of damage to the inner walls of the cylinder-head in the area of the bucket-tappets.



6

Valve Seal Removal Slide Hammer

KL-0049-13

For Valve Stem Sealing Rings.

For bucket-tappets with diameters from 23 mm to 26 mm (e.g. Audi engines 5 valves per cylinder).



Scope of Delivery:

KL-0049-13 Valve Seal Removal Slide Hammer

Part No.	Description	Qty.
KL-0049-130	Collet chuck for Valve Stem Sealing Rings (small)	1
KL-0049-100	Slide Hammer Basic Tool	1
KL-0049-1205	Plastic sleeve	1

Valve Seal Removal Slide Hammer

KL-0049-12

For Valve Stem Sealing Rings.

For bucket-tappets with diameters from 26 mm upwards.



Scope of Delivery:

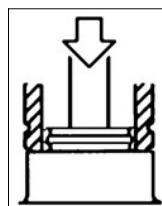
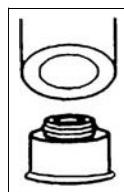
KL-0049-12 Valve Seal Removal Slide Hammer

Part No.	Description	Qty.
KL-0049-120	Collet chuck for Valve Stem Sealing Rings	1
KL-0049-100	Slide Hammer Basic Tool	1
KL-0049-1205	Plastic sleeve	1

KL-0126-91 K

Valve Stem Seal Tool Set

(Universal)



For Valve Stem Sealing Rings.

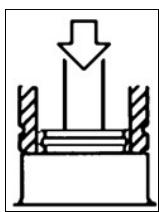
This tool set allows the removal and replacement of valve shaft sealing rings.

Scope of Delivery: KL-0126-91 K Valve Stem Seal Tool Set

Part no.	Description	Qty.
KL-0126-905	Press-on pin Ø9.5 mm	1
KL-0126-906	Press-on pin Ø10 mm	1
KL-0126-907	Press-on pin Ø10.5 mm	1
KL-0126-908	Press-on pin Ø11 mm	1
KL-0126-909	Press-on pin Ø11.5 mm	1
KL-0126-910	Press-on pin Ø12 mm	1
KL-0126-911	Press-on pin Ø12.5 mm	1
KL-0126-912	Press-on pin Ø13 mm	1
KL-0126-913	Press-on pin Ø13.5 mm	1
KL-0126-914	Press-on pin Ø14 mm	1
KL-0126-916	Press-on pin Ø15 mm	1
KL-0049-120	Collet chuck for valve seal ring	1
KL-0049-130	Collet chuck for valve seal ring (small)	1
KL-0049-100	Slide hammer; basic tool	1
KL-0126-9001	Plastic storage case	1
KL-0126-61	Removal Pliers for valve seal ring (extra long)	1
KL-0049-1205	Plastic sleeve	1

KL-0126-9 K

Valve Stem Seal Installer Set



For Valve Stem Sealing Rings.

The tool set **KL-0126-9 K** allows quick and precise installation of valve-stem-oil-seals on petrol and diesel engines with 2-valve or multi-valve technology. The installation tools are made from special plastic which ensures that damage to the new oil-seals and the valve-guides is eliminated. (Outer-Ø 20 mm).

Scope of Delivery: KL-0126-9 K Valve Stem Seal Installer Set

Part No.	Description	Qty.
KL-0126-905	Press-on pin Ø9.5 mm	1
KL-0126-906	Press-on pin Ø10 mm	1
KL-0126-907	Press-on pin Ø10.5 mm	1
KL-0126-908	Press-on pin Ø11 mm	1
KL-0126-909	Press-on pin Ø11.5 mm	1
KL-0126-910	Press-on pin Ø12 mm	1
KL-0126-911	Press-on pin Ø12.5 mm	1
KL-0126-912	Press-on pin Ø13 mm	1
KL-0126-913	Press-on pin Ø13.5 mm	1
KL-0126-914	Press-on pin Ø14 mm	1
KL-0126-916	Press-on pin Ø15 mm	1
KL-0126-9001	Plastic storage case	1

KL-0126-9

Valve Stem Seal Installer Set

For Valve Stem Sealing Rings.

The tool set **KL-0126-9** allows quick and precise installation of valve-stem-oil-seals on petrol and diesel engines with 2-valve or multi-valve technology. The installation tools are made from special plastic which ensures that damage to the new oil-seals and the valve-guides is eliminated. (Outer-Ø 20 mm).

Scope of Delivery: KL-0126-9 Valve Stem Seal Installer Set

Part No.	Description	Qty.
KL-0126-905	Press-on pin Ø9.5 mm	1
KL-0126-906	Press-on pin Ø10 mm	1
KL-0126-907	Press-on pin Ø10.5 mm	1
KL-0126-908	Press-on pin Ø11 mm	1
KL-0126-909	Press-on pin Ø11.5 mm	1
KL-0126-910	Press-on pin Ø12 mm	1
KL-0126-911	Press-on pin Ø12.5 mm	1
KL-0126-912	Press-on pin Ø13 mm	1
KL-0126-913	Press-on pin Ø13.5 mm	1
KL-0126-914	Press-on pin Ø14 mm	1
KL-0126-916	Press-on pin Ø15 mm	1

Valve Stem Sealing Ring Installation Driver Ø5

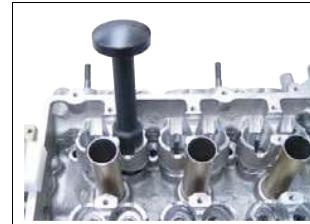
KL-0126-991

Suitable for Smart 3 / 4 cyl. petrol engines.

Valve stem sealing rings can be installed without risk of damage when the valves have been removed, using assembly tool **KL-0126-991**. The driver is located in the valve guide by the guide pin.

Technical Data:

Pin-Ø:	5 mm
Pin Length:	29 mm
Seal ring-Ø:	11 mm
Tool outside-Ø:	30 mm



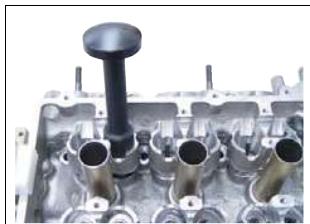
Valve Stem Sealing Ring Installation Driver Ø6

KL-0126-992

Suitable for VW 5-Cyl. engines.

Technical Data:

Pin-Ø:	6 mm
Pin Length:	29 mm
Seal ring-Ø:	11 mm
Tool outside-Ø:	24 mm



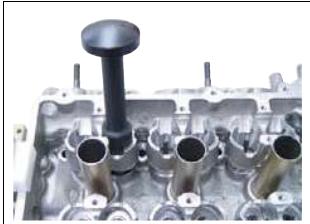
Valve Stem Sealing Ring Installation Driver Ø6

KL-0126-993

Suitable for Mercedes OM 642.

Technical Data:

Tip-Ø:	6 mm
Tip Length:	15 mm
Seal ring-Ø:	11 mm
Tool outside-Ø:	19.5 mm



6

Valve Lapper 29 / 35 mm

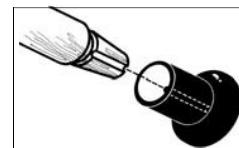
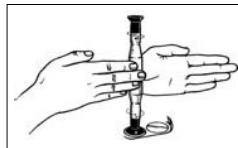
KL-0125-71

For Hand Lapping Valves.

Thick Hardwood handles for easy lapping.

Technical Data:

Valve disk-Ø:	29 / 35 mm
Length:	225 mm
Weight:	60 g



Valve Lapper 16 / 21 mm

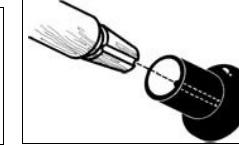
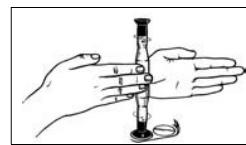
KL-0125-70

For Hand Lapping Valves.

Thick Hardwood handles for easy lapping.

Technical Data:

Valve disk-Ø:	16 / 21 mm
Length:	210 mm
Weight:	25 g

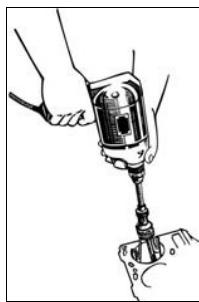


KL-0199-12

Hone Tool Ø 51 - 175 mm



KL-0199-12



Controlled pressure assures positive, adjustable contact through full range.
Operates with any electric drill.

The hone arms are self-spreading and tensioning.
Suitable for Bores, Cylinders, Bearing Housings, etc.

Technical Data:

Hone Tool:	Cylinder-Ø:	51-175 mm	Weight:	570 g
Hone Stone:	Length:	100 mm		

KL-0199-125 Hone Stones Set (3 Pcs.)

Technical Data:

Measure:	11 mm x 100 mm
Weight:	57 g

KL-0199-126 Hone Stones Set (hard, 3 Pcs.)

Technical Data:

Measure:	11 mm x 100 mm
Weight:	57 g

KL-0199-121 Hone Stone (3 Pcs.)

Hone Stones for „old Version“.

Technical Data:

Length:	9 mm x 76 mm
Weight:	57 g

KL-0199-122 Hone Stone Set (hard, 3 Pcs.)

Hone Stones for „old Version“.

Technical Data:

Length:	9 mm x 76 mm
Weight:	57 g

KL-0126-Series

Piston Ring Compressor

6



KL-0126-44

Infinitely adjustable, made of special spring steel.

KL-0126-44 Piston Ring Compressor

Technical Data:

Height:	39 mm
Ø:	57 - 125 mm
Weight:	170 g

KL-0126-45 Piston Ring Compressor

Technical Data:

Height:	52 mm
Ø:	40 - 785 mm
Weight:	115 g

KL-0126-46 Piston Ring Compressor

Technical Data:

Height:	89 mm
Ø:	57 - 125 mm
Weight:	315 g

KL-0126-47 Piston Ring Compressor

Technical Data:

Height:	89 mm
Ø:	90 - 175 mm
Weight:	400 g

KL-0126-48 Piston Ring Compressor

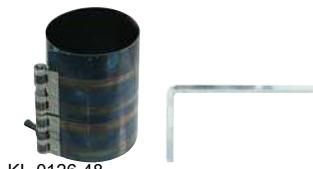
Technical Data:

Height:	178 mm
Ø:	90 - 175 mm
Weight:	765 mm

KL-0126-47



KL-0126-48



Piston Ring Pliers

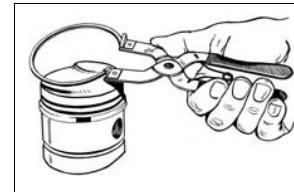
KL-0126-43

Suitable for the most passenger cars and vans.

Tapered jaws to remove and install piston rings from 1.2 - 6.3 mm.

Technical Data:

Weight:	115 g
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Stud Tool 3/8 "

(Universal)

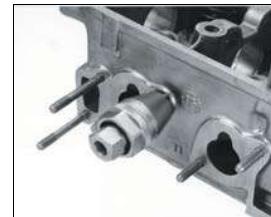
KL-0181-1

Universal tool, infinitely adjustable.

For studs with diameter 6 - 12 mm.

Advantages:

- Infinitely adjustable.
- Operates in the most confined space.
- Ideal also for bolts with rusted or stripped threads
- Also for bolts with undersize.

**Technical Data:**

Drive:	3/8"
Clamping range:	6 - 12 mm
Weight:	450 g

6

Stud Extractor and Inserting Tool Set

KL-0181-6

For removal and replacement of threaded studs. Right- or Left-Hand Thread.

Technical Data:

Drive outer:	21 mm
Drive inner:	1/2"
Weight:	1.15 kg

Scope of Delivery:**KL-0181-6 Stud Extractor and Inserting Tool Set**

Part No.	Description	Qty.
KL-0181-51	Stud Extractor and Inserting Tool for Ø 6 mm	1
KL-0181-52	Stud Extractor and Inserting Tool for Ø 7 mm	1
KL-0181-53	Stud Extractor and Inserting Tool for Ø 8 mm	1
KL-0181-54	Stud Extractor and Inserting Tool for Ø 10 mm	1
KL-0181-55	Stud Extractor and Inserting Tool for Ø 12 mm	1
KL-4940-1004	Plastic storage case	1



KL-0181-72 K

Screw Extractor Set (Turbo Nuts)



Used to extract screws, nuts and bolts when locating threads or hexagons are damaged.

Due to the special insert design (tapered and special left section) screws, nuts and bolts can be easily loosened and removed.

Technical Data:

Drive:	3/8"
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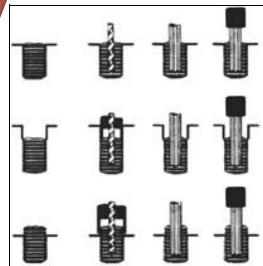
Scope of Delivery:

KL-0181-72 K Screw Extractor Set (Turbo Nuts)

Part No.	Description	Qty.
KL-0181-7201	Screw extractor 6.3mm (1/4")	1
KL-0181-7202	Screw extractor 8mm (5/16")	1
KL-0181-7203	Screw extractor 9.5mm (3/8")	1
KL-0181-7204	Screw extractor 11mm (7/16")	1
KL-0181-7205	Screw extractor 12.5mm (1/2")	1
KL-0181-7206	Screw extractor 14mm (9/16")	1
KL-0181-7207	Screw extractor 16mm (5/8")	1
KL-0181-7208	Screw extractor 19mm (3/4")	1
KL-0181-7209	Screw extractor 10mm	1
KL-0181-7210	Screw extractor 12mm	1
KL-0181-7211	Screw extractor 13mm	1
KL-0181-7212	Screw extractor 17mm	1
KL-0181-7213	Screw extractor 17.5mm (11/16")	1
KL-0181-7214	Mandrel	1
KL-0181-7290	Plastic storage case	1

KL-0181-21 K

Screw Drill Set (with HSCO drills)



Used to remove broken screws and thread bolts with thread M5 - M16.

Procedure:

1. Open the broken bolt (or screw) by drilling (use boring bush if necessary).
2. Drive in the pin.
3. Place the nut on the pin and extract by means of a screw-wrench.

6

KL-0181-2112

Set of Drill-Out Pins 1/8" (5 units)



KL-0181-2112

Set of Drill-Out Pins 1/8" (5 units)

Technical Data:

Drill-Ø:	3.2 mm
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KL-0181-2142

Set of Drill-out Pins 5/16"(5 units)

Technical Data:

Drill-Ø:	8.0 mm
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KL-0181-2152

Set of Drill-Out Pins 11/32" (5 units)

Technical Data:

Drill-Ø:	8.0 mm
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KL-0181-2122

Set of Drill-Out Pins 3/16" (5 units)

Technical Data:

Drill-Ø:	4.8 mm
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KL-0181-2132

Set of Drill-Out Pins 1/4" (5 units)

Technical Data:

Drill-Ø:	6.4 mm
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Drilling Guide Set (small)

KL-0185-1

Suitable on VW and Audi 4 and 5 cylinder water-cooled engines. (Male Thread M8).

For the accurate removal of broken manifold studs in-situ on the vehicle.

Advantages:

- Substantial savings in time approximately 2-3 hours as the cylinder head has not to be removed.
- Accurate drilling out of the old stud.
- The drilling guide avoids the risk of damage to the cylinder head.

Technical Data:

Overall Weight:	1.6 kg
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Scope of Delivery:**KL-0185-1 Drilling Guide Set small**

Part No.	Description	Qty.
KL-0185-1001	Base plate	1
KL-0185-1002	Shoulder screw M6	2
KL-0185-1003/2	Drill limit stop 6.5 mm, with hexagon socket screws	1
KL-0185-1005/2	Drill bush 6.5 mm, with dowel pin	1
KL-0185-1008	Guide nut M8	1
KL-0185-1007/2	Guide sleeve M8	1
KL-0185-1015	Hex shoulder nut M8	2
KL-0185-1020	Plastic storage case	1



Drilling Guide Set (medium)

KL-0185-2

Indispensable for the accurate drilling out of broken exhaust manifold studs directly on the vehicle. Used to pre-drill to Heli Coil threaded inserts and tap for Heli Coil insert.

Advantages:

- Substantial savings in time approximately 2-3 hours as the cylinder head has not to be removed.
- Accurate drilling out of the old stud.
- The drilling guide avoids the risk of damage to the cylinder head.

Technical Data:

Overall Weight:	1.7 kg
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Scope of Delivery:**KL-0185-2 Drilling Guide Set (medium)**

Part No.	Description	Qty.
KL-0185-1001	Base plate	1
KL-0185-1002	Shoulder screw M6	2
KL-0185-1003/1	Drill limit stop 4.0 mm, with hexagon socket screws	1
KL-0185-1003/3	Drill limit stop 8.5 mm, with hexagon socket screws	1
KL-0185-1005/1	Drill bush 4.0 mm, with dowel pin	1
KL-0185-1005/3	Drill bush 8.5 mm, with dowel pin	1
KL-0185-1007/1	Guide sleeve for Heli threaded sleeve	1
KL-0185-1008	Guide nut M8	1
KL-0185-1009	Twist drill Ø4.0 mm	1
KL-0185-1011	Twist drill Ø8.5 mm	1
KL-0185-1012	Thread tap M8 for Heli-Coil inserts	1
KL-0185-1015	Hex shoulder nut M8	2
KL-0185-1020	Plastic storage case (empty)	1
KL-0185-1019	Instruction manual	1



6

KL-0185-3

Drilling Guide Set big



Indispensable for the accurate drilling out of broken exhaust manifold studs directly on the vehicle. Used to pre-drill to Heli Coil threaded inserts and tap for Heli Coil insert.

Supplied with Heli Coil insertion tools and 25 threaded inserts (Bolt thread M8)

Advantages:

- Substantial savings in time approximately 2-3 hours as the cylinder head has not to be removed.
- Accurate drilling out of the old stud.
- The drilling guide avoids the risk of damage to the cylinder head.

Technical Data:

Overall Weight:	2.3 kg
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Scope of Delivery:
KL-0185-3 Drilling Guide Set big

Part No.	Description	Qty.
KL-0185-1001	Base plate	1
KL-0185-1002	Shoulder screw M6	2
KL-0185-1003/1	Drill limit stop 4.0 mm, with hexagon socket screws	1
KL-0185-1003/3	Drill limit stop 8.5 mm, with hexagon socket screws	1
KL-0185-1005/1	Drill bush 4.0 mm, with dowel pin	1
KL-0185-1005/3	Drill bush 8.5 mm, with dowel pin	1
KL-0185-1007/1	Guide sleeve for Heli threaded sleeve	1
KL-0185-1008	Guide nut M8	1
KL-0185-1009	Twist drill Ø4.0 mm	1
KL-0185-1011	Twist drill Ø8.5 mm	1
KL-0185-1012	Thread tap M8 for Heli-Coil inserts	1
KL-0185-1015	Hex shoulder nut M8	2
KL-0185-1016	Heli-Coil tang break-off tool M8	1
KL-0185-1017	Heli-Coil installation tool M8	1
KL-0185-1018	Heli-Coil threaded inserts M8x12 (25 pcs.)	1
KL-0185-1020	Plastic storage case	1
KL-0185-1019	Instruction manual	1

KL-0185-5

Drilling Guide Set

(Universal)

6



This universal adjustable drilling guide set allows broken or sheared studs - especially on cylinder-heads or exhaust manifolds- to be quickly and accurately extracted, without the need to remove the cylinder-head. (Male Thread M8 and M10)

Advantages:

- Time savings of between 2 and 4 hours can be achieved as the cylinder head has not to be removed from the vehicle.

Scope of Delivery:
KL-0185-5 Drilling Guide Set

Part No.	Description	Qty.
KL-0185-5001	Drill template	1
KL-0185-5002	Centring pin (conical)	3
KL-0185-5003	Guide sleeve Ø8	3
KL-0185-5004	Guide sleeve Ø10	3
KL-0185-1015	Hex shoulder nut M8	2
KL-0185-5005	Hex shoulder nut M10	2
KL-0185-1005/1	Drill bush 4.0 mm, with dowel pin	1
KL-0185-1005/2	Drill bush 6.5 mm, with dowel pin	1
KL-0185-1005/3	Drill bush 8.5 mm, with dowel pin	1
KL-0185-1007/2	Guide nut M8	1
KL-0185-5007	Guide sleeve M10	1
KL-0185-1003/1	Drill limit stop 4.0 mm, with hexagon socket screws	1
KL-0185-1003/2	Drill limit stop 6.5 mm, with hexagon socket screws	1
KL-0185-1003/3	Drill limit stop 8.5 mm, with hexagon socket screws	1
KL-0185-5008	Hexagon socket key 2 mm	1
KL-0050-0023	Hexagon socket key 4 mm	1
KL-0185-5010	Hexagon socket key 5 mm	1
KL-0185-1009	Twist drill Ø4.0 mm	1
KL-0185-1010	Twist drill Ø6.5 mm	1
KL-0185-1011	Twist drill Ø8.5 mm	1
KL-0185-5020	Plastic storage case (empty)	1

Support

KL-1381-3

Suitable for wet cylinder liner on Citroën, Peugeot, Renault engines.

In order to prevent the cylinder liners from lifting off from their seats during the cylinder head repair, it is essential to keep these under tension on the engine block by means of the holding plates. This avoids leakage between the cylinder liners and engine block.

**Technical Data:**

Hole pitch:	75 - 106 mm
Hole-Ø:	12 mm

Lever for Cylinder Head (pair)

KL-1381-4

For removal of cylinder heads on engines with wet cylinder liner.**Applicable on Citroën, Peugeot, Renault.**

In order to prevent the cylinder liners from lifting off from their sealing seat in the engine block when removing the cylinder head, the cylinder head should not be lifted, but only tilted sideways with the levers **KL-1381-4** and secured with holding plates **KL-1381-3**.

**Technical Data:**

Pin-Ø:	12 mm
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Precision Straightedge 500 mm

KL-0140-60

Suitable for fitting Cylinder Heads up to 4 Cylinders.

Hair-edges hardened, ground, lapped, with heat-insulated handle.



Accessory: KL-0140-6101
Wooden case for
precision straightedge

Technical Data:

Length:	500 mm
Quality Description:	Stainless steel
Cross section:	40 x 7 mm
Weight:	960 g

Precision Straightedge 600 mm

KL-0140-61

Suitable for fitting Cylinder Heads up to 6 Cylinders.

Edges hardened, ground, lapped, with heat-insulated handle.



Accessory: KL-0140-6101
Wooden case for
Precision-Hair-Edges

Technical Data:

Length:	600 mm
Quality Description:	Stainless steel
Cross section:	40 x 7 mm
Weight:	1200 g

Dial Gauge Stand with Dial Gauge

KL-0128-31

Designed to measure the wobble of the brake disc as well as for fine adjustment when repairing the engine and transmission. Strong rods of bright steel, with fine adjustment for the dial gauge clamp, prismatic magnetic base which can be switched off.

Scope of Delivery:**KL-0128-31 Dial Gauge Stand with Dial Gauge**

Part No.	Description	Qty.
KL-0128-1	Dial gauge Ø 58 mm	1
KL-0128-3	Support stand without dial gauge	1

Dial Gauge Ø 58 mm

KL-0128-1

Spindle and clamping shank made of stainless steel, design and measurement accuracy according to DIN 878-A.

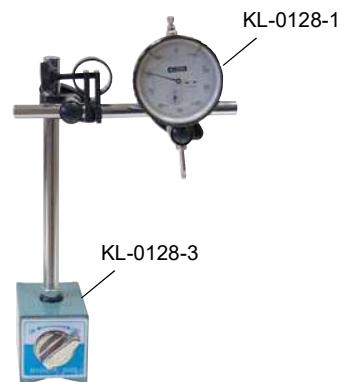
Technical Data:

Reading:	0.01 mm
Measuring Range:	10 mm
Housing -Ø:	58 mm
1 pointer revolution:	1 mm
Clamping shank-Ø:	8 mm

Dial Gauge Stand without Dial Gauge

KL-0128-3

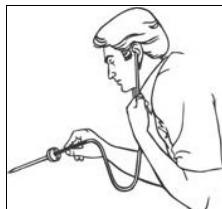
Strong rods of bright steel, with fine adjustment for dial-gauge-clamp, prismatic magnetic base which can be switched off.



6

KL-0140-95

Stethoscope



Quickly pinpoints the source of noises in engines, transmissions, differentials and bearings.

Technical Data:

Length:	1100 mm
Weight:	115 g

KL-4021-3111

Socket Insert Size (width across flats) 11 mm, 100 mm, 1/2"

Suitable for VW- Audi, Seat, Škoda petrol engines.

The special socket insert **KL-4021-3111** allows the removal and replacement of the plastic insert for injector valves on VW- Audi petrol engines..



1/2"

Technical Data:

Size:	11 mm
Profile:	Hex.
Drive:	1/2"
Length:	100 mm

KL-4021-3113

Socket Insert 13 mm hex

Suitable for VW-Audi, Seat, Škoda 4 Cylinder TDI PD engines.

The special socket **KL-4021-3113** allows quick and trouble-free loosening and tightening of the central retaining bolt of the fuel cooling unit - for example when replacing the fuel filter.

This special socket may also be used to remove and replace the brass insert on injector valves on Audi petrol engines 1990 - onwards.



1/2"

Technical Data:

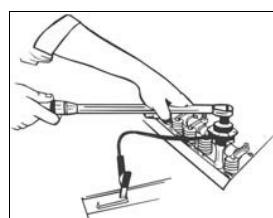
Drive:	1/2"
Profile:	Hex.
Length:	100 mm
Size.	13 mm

KL-4090-302

Degree Gauge

Used for screw tightening with angle degree indication.

The degree gauge **KL-4090-302** used in conjunction with a 1/2"-torque wrench enables the accurate tightening of screws and nuts according to tightening torques (Nm) and angular degrees (°).



Technical Data:

Drive:	1/2"
Weight:	340 g

Socket Set, Torx® E10 / E12 / E14 / E18, long, 1/2"

KL-4046-362

Suitable for BMW, Mercedes CDI engines, etc.

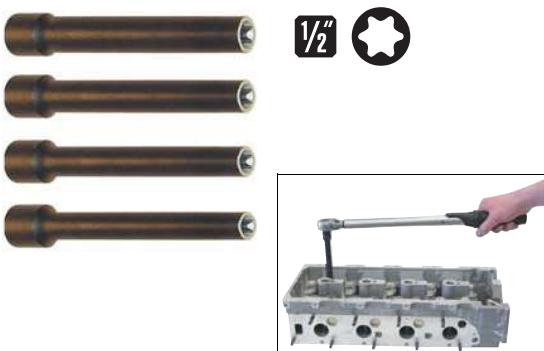
These Torx® Sockets in extended version with built-in magnet enable loosening and tightening cylinder-head bolts with outer-Torx® profiles.

Scope of Delivery:

KL-4046-362 Socket Set, Torx® E10 / E12 / E14 / E18, long, 1/2"

Part No.	Torx®	Drive	Length	Weight
KL-4046-3610	E10	1/2"	150 mm	200 g
KL-4046-3612	E12	1/2"	150 mm	225 g
KL-4046-3614	E14	1/2"	150 mm	250 g
KL-4046-3618	E18	1/2"	150 mm	415 g

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Open-ended Spanner Socket Set

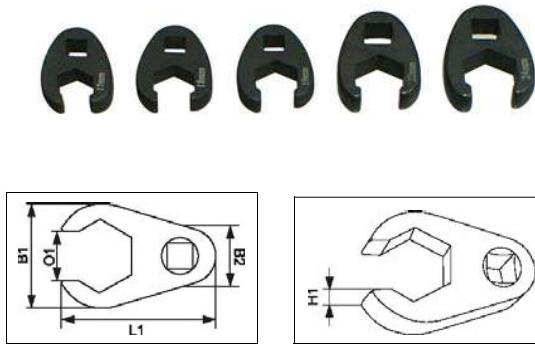
KL-4076-301

The exceptionally compact and solid shape of the open-ended spanners enables screws and nuts to be loosened and tightened, even if they are very tight-fitting or hard to access; for example on injection lines, hydraulic lines or compressed-air lines.

Scope of Delivery:

KL-4076-301 Open-ended Spanner Socket Set

Part No.	Size (waf)	Length [L1]	Height [H1]	Width 1 [W1]	Width 2 [W2]	Opening [O1]	Drive
KL-4076-3017	17 mm	49 mm	10 mm	35 mm	27 mm	13 mm	3/8"
KL-4076-3018	18 mm	49 mm	10 mm	35 mm	27 mm	14 mm	3/8"
KL-4076-3019	19 mm	49 mm	10 mm	36 mm	27 mm	15 mm	3/8"
KL-4076-3022	22 mm	57 mm	12 mm	40 mm	32 mm	17 mm	1/2"
KL-4076-3024	24 mm	60 mm	12 mm	43 mm	33 mm	19 mm	1/2"



Open-ended Spanner Socket Set

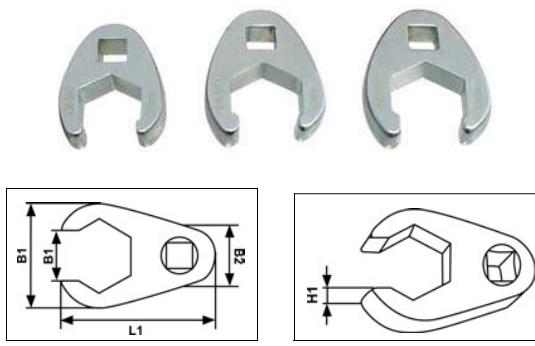
KL-4076-302

The exceptionally compact and solid shape of the open-ended spanners enables screws and nuts to be loosened and tightened, even if they are very tight-fitting or hard to access; for example on injection lines, hydraulic lines or compressed-air lines.

Scope of Delivery:

KL-4076-302 Open-ended Spanner Socket Set

Part No.	Size (waf)	Length [L1]	Height [H1]	Width 1 [W1]	Width 2 [W2]	Opening [O1]	Drive
KL-4076-3027	27 mm	62 mm	12 mm	48 mm	34 mm	23 mm	1/2"
KL-4076-3030	30 mm	68 mm	12 mm	52 mm	37 mm	24 mm	1/2"
KL-4076-3032	32 mm	72 mm	13 mm	56 mm	39 mm	26 mm	1/2"



Open-ended Spanner Socket Set

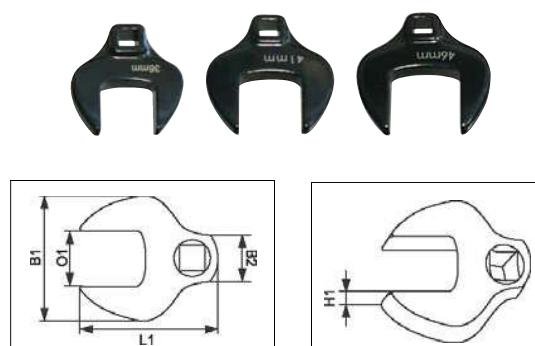
KL-4076-401

The exceptionally compact and solid shape of the open-ended spanners enables screws and nuts to be loosened and tightened, even if they are very tight-fitting or hard to access; for example on injection lines, hydraulic lines or compressed-air lines.

Scope of Delivery:

KL-4076-401 Open-ended Spanner Socket Set

Part No.	Size (waf)	Length [L1]	Height [H1]	Width 1 [W1]	Width 2 [W2]	Opening [O1]	Drive
KL-4076-3036	36	81 mm	12 mm	75 mm	29 mm	280 g	1/2"
KL-4076-3041	41	89 mm	13 mm	88 mm	30 mm	380 g	1/2"
KL-4076-3046	46	91 mm	13 mm	92 mm	32 mm	400 g	1/2"



KL-4075-321 K

Jointed Ring Spanner Socket Set (open-ended)



Universally suitable for screwed connections e.g. on brake systems, injection systems etc.

This tool is required for loosening and tightening screwed connections. Thanks to the special design of the ring spanners, even screwed connections that are difficult to access can be reached quickly and without any trouble.

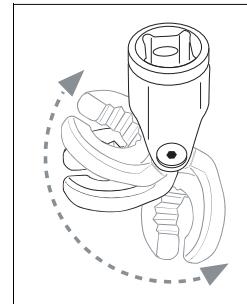
Technical Data:

Profile:	Double Hex
Drive:	3/8"

Scope of Delivery:

KL-4075-321 K Jointed Ring Spanner Socket Set (open-ended)

Part No.	Description	Quantity
KL-4075-3214	Jointed Ring Spanner Socket Size (width across flats) 14 mm, bi-hex, 3/8"	1
KL-4075-3216	Jointed Ring Spanner Socket Size (width across flats) 16 mm bi-hex, 3/8"	1
KL-4075-3217	Jointed Ring Spanner Socket Size (width across flats) 17 mm bi-hex, 3/8"	1
KL-4075-3218	Jointed Ring Spanner Socket Size (width across flats) 18 mm bi-hex, 3/8"	1
KL-4075-3219	Jointed Ring Spanner Socket Size (width across flats) 19 mm bi-hex, 3/8"	1
KL-4074-3190	Plastic storage case	1



6



Universally suitable for screwed connections e.g. on brake systems, injection systems etc.

This tool is required for loosening and tightening screwed connections. Thanks to the special design of the ring spanners, even screwed connections that are difficult to access can be reached quickly and without any trouble.

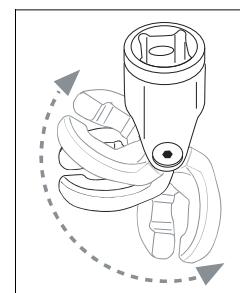
Technical Data:

Profile:	Hex
Drive:	3/8"

Scope of Delivery:

KL-4074-311 KA Jointed Ring Spanner Socket Set (open-ended)

Part No.	Description	Quantity
KL-4074-3111	Jointed Ring Spanner Socket Size (width across flats) 11 mm hex, 3/8"	1
KL-4074-3112	Jointed Ring Spanner Socket Size (width across flats) 12 mm hex, 3/8"	1
KL-4074-3114	Jointed Ring Spanner Socket Size (width across flats) 14 mm hex, 3/8"	1
KL-4074-3116	Jointed Ring Spanner Socket Size (width across flats) 16 mm hex, 3/8"	1
KL-4074-3117	Jointed Ring Spanner Socket Size (width across flats) 17 mm hex, 3/8"	1
KL-4074-3118	Jointed Ring Spanner Socket Size (width across flats) 18 mm hex, 3/8"	1
KL-4074-3119	Jointed Ring Spanner Socket Size (width across flats) 19 mm hex, 3/8"	1
KL-4074-3190	Plastic storage case	1



Socket Insert Set Drive 1/2", Torx®, 32 pcs.

KL-4041-300 K

Scope of Delivery:

KL-4041-300 K Socket Insert Set Drive 1/2", Torx®, 32 pcs.

Part No.	Size
KL-4041-3020	T20
KL-4041-3025	T25
KL-4041-3027	T27
KL-4041-3030	T30
KL-4041-3040	T40

Part No.	Size
KL-4041-3045	T45
KL-4041-3050	T50
KL-4041-3055	T55
KL-4041-3060	T60
KL-4041-3070	T70

Socket Insert, Drive 1/2", Length 55 mm

KL-4041-3120	T20
KL-4041-3125	T25
KL-4041-3127	T27
KL-4041-3130	T30
KL-4041-3140	T40

KL-4041-3145	T45
KL-4041-3150	T50
KL-4041-3155	T55
KL-4041-3160	T60
KL-4041-3170	T70



1/2"

KL-4041-30..

KL-4041-31..



KL-4041-33..



KL-4041-34..



Socket Insert, Drive 1/2", Length 100 mm

KL-4041-3340	T40
KL-4041-3345	T45
KL-4041-3350	T50

KL-4041-3355	T55
KL-4041-3360	T60
KL-4041-3370	T70

Socket Insert, Drive 1/2", Length 140 mm

KL-4041-3340	T40
KL-4041-3345	T45
KL-4041-3350	T50

KL-4041-3455	T55
KL-4041-3460	T60
KL-4041-3470	T70

Socket Insert, Drive 1/2", Length 200 mm

KL-4041-3440	T40
KL-4041-3445	T45
KL-4041-3450	T50

KL-4041-3455	T55
KL-4041-3460	T60
KL-4041-3470	T70

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Socket Insert Set Drive 1/2", hex, 30 pcs.

KL-4021-300 K

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Scope of Delivery:

KL-4021-300 K Socket Insert Set Drive 1/2", hex, 30 pcs.

Part No.	Size
KL-4021-3005	hex 5 mm
KL-4021-3006	hex 6 mm
KL-4021-3007	hex 7 mm
KL-4021-3008	hex 8 mm
KL-4021-3010	hex 10 mm

Part No.	Size
KL-4021-3012	hex 12 mm
KL-4021-3014	hex 14 mm
KL-4021-3017	hex 17 mm
KL-4021-3019	hex 19 mm

Socket Insert, Drive 1/2", Length 100 mm

KL-4021-3105	hex 5 mm
KL-4021-3106	hex 6 mm
KL-4021-3107	hex 7 mm
KL-4021-3108	hex 8 mm

KL-4021-3110	hex 10 mm
KL-4021-3111	hex 11 mm
KL-4021-3112	hex 12 mm
KL-4021-3113	hex 13 mm

Socket Insert, Drive 1/2", Length 140 mm

KL-4021-3305	hex 5 mm
KL-4021-3306	hex 6 mm
KL-4021-3307	hex 7 mm
KL-4021-3308	hex 8 mm

KL-4021-3310	hex 10 mm
KL-4021-3312	hex 12 mm
KL-4021-3314	hex 14 mm

Socket Insert, Drive 1/2", Length 200 mm

KL-4021-3405	hex 5 mm
KL-4021-3406	hex 6 mm
KL-4021-3407	hex 7 mm

KL-4021-3408	hex 8 mm
KL-4021-3410	hex 10 mm
KL-4021-3412	hex 12 mm



1/2"

KL-4021-30..

KL-4021-31..

KL-4021-33..

KL-4021-34..



KL-4021-34..

KL-4021-34..



KL-4031-300 K

Socket Insert Set Drive 1/2", XZN, 26 pcs.



1/2"

KL-4031-30..



KL-4031-31..



KL-4031-33..



KL-4031-34..



Scope of Delivery:

KL-4031-300 K Socket Insert Set Drive 1/2", XZN, 26 pcs.

Part No.	Size	Part No.	Size
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Socket Insert, Drive 1/2", Length 55 mm

KL-4031-3005	M5	KL-4031-3010	M10
KL-4031-3006	M6	KL-4031-3012	M12
KL-4031-3008	M8	KL-4031-3014	M14
KL-4031-3009	M9	KL-4031-3016	M16

Socket Insert, Drive 1/2", Length 100 mm

KL-4031-3105	M5	KL-4031-3110	M10
KL-4031-3106	M6	KL-4031-3112	M12
KL-4031-3108	M8	KL-4031-3114	M14
KL-4031-3109	M9		

Socket Insert, Drive 1/2", Length 140 mm

KL-4031-3305	M5	KL-4031-3310	M10
KL-4031-3306	M6	KL-4031-3312	M12
KL-4031-3308	M8	KL-4031-3314	M14
KL-4031-3309	M9		

Socket Insert, Drive 1/2", Length 200 mm

KL-4031-3408	M8	KL-4031-3412	M12
KL-4031-3410	M10	KL-4031-3414	M14

KL-4051-300 K

Socket Insert Set Drive 1/2", RIBE®, 32 Pcs.

6



1/2"

KL-4051-30..



KL-4051-31..



KL-4051-33..



KL-4051-34..



Scope of Delivery:

KL-4051-300 K Socket Insert Set Drive 1/2", RIBE®, 32 Pcs.

Part No.	Size	Part No.	Size
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Socket Insert, Drive 1/2", Length 55 mm

KL-4051-3005	M5	KL-4051-3010	M10
KL-4051-3006	M6	KL-4051-3012	M12
KL-4051-3007	M7	KL-4051-3013	M13
KL-4051-3008	M8	KL-4051-3014	M14
KL-4051-3009	M9		

Socket Insert, Drive 1/2", Length 100 mm

KL-4051-3105	M5	KL-4051-3110	M10
KL-4051-3106	M6	KL-4051-3112	M12
KL-4051-3107	M7	KL-4051-3113	M13
KL-4051-3108	M8	KL-4051-3114	M14
KL-4051-3109	M9		

Socket Insert, Drive 1/2", Length 140 mm

KL-4051-3308	M8	KL-4051-3312	M12
KL-4051-3309	M9	KL-4051-3313	M13 (FIAT)
KL-4051-3310	M10 (VW)	KL-4051-3314	M14
KL-4051-3311	M10 (FIAT)		

Socket Insert, Drive 1/2", Length 200 mm

KL-4051-3408	M8	KL-4051-3412	M12
KL-4051-3409	M9	KL-4051-3413	M13 (FIAT)
KL-4051-3410	M10 (VW)	KL-4051-3414	M14
KL-4051-3411	M10 (FIAT)		

® = reg. trademark of Richard Bergner GmbH & Co. KG

Socket Insert Set RIBE®, 1/2" 8 pieces

KL-4051-331 B

Suitable for FIAT engines with RIBE® screws.

For loosening and tightening RIBE® screws on cylinder head valve drive housings etc.

Technical Data:

Drive	1/2"
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Scope of Delivery:

KL-4051-331 A Socket Insert Set RIBE®, 1/2" 8 pieces

Part No.	Description	Qty.
KL-4051-3007	Screwdriver Socket Insert RIBE®-M7, 55 mm, 1/2"	1
KL-4051-3008	Screwdriver Socket Insert RIBE®-M8, 55 mm, 1/2"	1
KL-4051-3311	Screwdriver Socket Insert RIBE®-M10, 140 mm, 1/2"	1
KL-4051-3312	Screwdriver Socket Insert RIBE®-M12, 140 mm, 1/2"	1
KL-4051-3313	Screwdriver Socket Insert RIBE®-M13, 140 mm, 1/2"	1
KL-4051-3314	Screwdriver Socket Insert RIBE®-M14, 140 mm, 1/2"	1
KL-4051-3406	Screwdriver Socket Insert RIBE®-M6, 200 mm, 1/2"	1
KL-4051-3408	Screwdriver Socket Insert RIBE®-M8, 200 mm, 1/2"	1



® = registered trademark of Richard Bergner GmbH & Co. KG

Socket Insert RIBE® M10

KL-4051-3310

Ideal to remove and re-tighten cylinder-head retaining bolts on VW-Audi engines with RIBE similar profile.

Technical Data:

Drive:	1/2"
Length:	140 mm
Weight:	100 g



Socket Insert Set RIBE® with plastic case

KL-4054-701 K

Consists of:

Bit-Holder, carrier of the screwdriver Inserts, 10 mm hex; Drive 1/2" square

Bit-Holder, carrier of the screwdriver Inserts, 10 mm hex; Drive 3/8" square

Part No.	Size
KL-4054-7004	M 4
KL-4054-7005	M 5
KL-4054-7006	M 6
KL-4054-7007	M 7
KL-4054-7008	M 8
KL-4054-7009	M 9
KL-4054-7010	M 10
KL-4054-7012	M 12
KL-4054-7013	M 13
KL-4054-7014	M 14

Part No.	Size
KL-4054-7104	M 4
KL-4054-7105	M 5
KL-4054-7106	M 6
KL-4054-7107	M 7
KL-4054-7108	M 8
KL-4054-7109	M 9
KL-4054-7110	M 10
KL-4054-7112	M 12
KL-4054-7113	M 13
KL-4054-7114	M 14



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Socket Insert XZN-M9, 140 mm, 1/2"

KL-4031-3309

Applicable for: Japanese cars such as Daihatsu, Toyota fitted with petrol engines etc.

Ideal for slackening and tightening cylinder head bolts, e.g. on Japanese passenger car engines with XZN M9 thread profile.

The 140 mm length is sufficient for removing and inserting even recessed, hard-to-reach XZN-M9 cylinder head bolts without difficulty.



1/2"

KL-4064-601 K

Screwdriver Bit Insert Set (5-point), 1/4"



1/4"



Suitable e.g. for:

- Mass Air Flow Sensor VW-Audi, Mercedes.
- Mercedes outside mirror.
- Immobiliser control unit (EWS3) on Rover 75 and MG ZT.
- Pumps in pump-line-injection systems on Mercedes commercial vehicles (e.g. Atego, Actros).

9 Screwdriver Bit Inserts in a plastic storage case.

For loosening and tightening the new 5 point tamper-proof bolts.

Consists of:

- 9x Bit-Insert, Drive: hex 1/4".
- 1x Bit-Holder (for retaining screwdriver bit inserts) hex 1/4"; Drive square 1/4"
- 1x Plastic storage case

Technical Data:

Size:	10, 15, 20, 25, 27, 30, 40, 45, 50
Drive (Bit-Insert):	hex 1/4"
Drive (Bit-Holder):	1/4"
Length (Bit-Insert):	25 mm
Weight:	100 g

KL-4064-602 K

Screwdriver Bit Insert Set (5-point) with ratchet in a storage case



For loosening and tightening the 5-point tamper-proof screws with bore.

Screwdriver Bit Inserts (9 pieces):

1/4" hex Drive; size 10, 15, 20, 25, 27, 30, 40, 45, 50

Bit-reversible ratchet:

hex 1/4"; fine toothed, left-/right reversible

Plastic storage case

Technical Data:

Size:	10, 15, 20, 25, 27, 30, 40, 45, 50
Drive (Bit-Insert):	SK 1/4"
Drive (Bit-Holder):	SK 1/4"
Length (Bit-Insert):	25 mm
Length (ratchet):	94 mm
Overall height (ratchet), incl. bit:	28 mm
Weight:	140 g

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KL-0369-10

Injector Socket (width across flats 22 mm hex)



1/2"

Suitable for diesel engines from : VW-Audi, BMW, Ford, Opel/Vauxhall, Rover, Mercedes, Seat, Volvo, etc.

Special cut-out hex socket for removing and installing diesel injectors without damage to fuel return lines.

Technical Data:

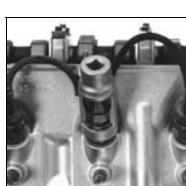
Size:	22 mm
Drive:	1/2"

KL-0511-1

Injector Socket (width across flats 27 mm bi-hex)



1/2"



Suitable for: BMW (e.g. M21, M41, M51) as well as Ford, VW and Mercedes diesel engines.

Special cut-out hex socket for removing and installing diesel injectors without damage to fuel return lines.

Technical Data:

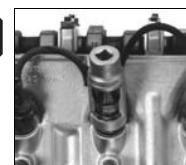
Size:	27 mm
Drive:	1/2"

KL-0511-2

Injector Socket (28 mm, bihex)



1/2"



Suitable for: Alfa Romeo; Chrysler; Rover; MAN 2.5 TD

Special cut-out hex socket for removing and installing diesel injectors without damage to fuel return lines.

Technical Data:

Size (bi-hex):	28 mm
Drive:	1/2"

Puller for Cylinder Pin

(German Utility Model)

KL-0181-90

Removing pins from engine blocks (Aluminium or Steel), Crankshafts, Flywheels, etc. is a real problem for the Mechanic, and even impossible if the pin is hardened. The newly-developed KLANN Puller **KL-0181-90** is the solution to this well-known problem. By using the appropriate Chuck both hardened and unhardened pins can be removed within a few seconds.

Scope of Delivery:

KL-0181-90 Puller for Cylinder Pin

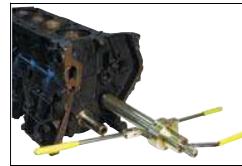
Part No.	Description	Qty.
KL-0181-900	Puller for Cylinder Pin Basic Tool	1
KL-0181-9915	Plastic distance plate 5 mm	1
KL-0181-9916	Plastic distance plate 10 mm	1
KL-0181-9917	Plastic distance plate 20 mm	1
KL-0181-9918	Plastic Support Ring	1
KL-0181-901	Chuck Set Ø6/8/10 mm for unhardened pins	1
KL-0181-911	Chuck Set Ø6/8/10 mm for hardened pins	1



KL-0181-90



KL-0181-920



Support ring / Chucks

KL-0181...

KL-0181-9203 **Support ring 18 mm**
 KL-0181-9204 **Chuck Ø4 for unhardened pins (6 mm enlarged)**
 KL-0181-9209 **Chuck Ø9 for unhardened pins (5 mm enlarged)**
 KL-0181-9214 **Chuck Ø14 for oil injection nozzles MB**



KL-0181-9203


 KL-0181-9204
 KL-0181-9209
 KL-0181-9214

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Puller for Oil Injection Nozzles with Support Frame (German Utility Model)

KL-0181-93

Mercedes CDI engines OM611, OM612, OM613.

Designed for pulling the oil injection nozzle out of the crankcase. By using the appropriate chuck both hardened and unhardened pins can be removed within a few seconds.



oil injection nozzle

Guide Sleeve Puller

(German Utility Model)

KL-0181-80

Guide sleeves can be pulled out and knocked in without incurring any damage. The puller works on the principle of an internal collet chuck. In engine and gearbox engineering, so-called guide sleeves are used for accurate fixing of the housing halves. These guide sleeves should therefore not be installed or removed with tongs or a hammer.

Scope of Delivery:

KL-0181-80 Guide Sleeve Puller

Part No.	Description
KL-0181-800	Slide hammer
KL-0181-8005	Internal collet chuck Ø 5 mm
KL-0181-8006	Internal collet chuck Ø 6 mm
KL-0181-8007	Internal collet chuck Ø 7 mm
KL-0181-8008	Internal collet chuck Ø 8 mm
KL-0181-8009	Internal collet chuck Ø 9 mm
KL-0181-8010	Internal collet chuck Ø 10 mm



KL-0178-21 K

Sealing Ring Mounting Tool



Suitable for almost all VW-Audi engines.

This tool enables the quick and professional installation of a sealing ring on the crankshaft or camshaft without the need to dismantle the engine.

Scope of delivery:

KL-0178-21 K Sealing Ring Mounting Tool

Part No.	Description	Quantity
KL-0178-211	Housing	1
KL-0178-2121	Guide sleeve Ø 12.5 mm	1
KL-0178-2122	Guide Sleeve Ø 14.5 mm	1
KL-0178-2123	Guide Sleeve Ø 16.5 mm	1
KL-0178-2124	Guide Sleeve Ø 18.5 mm	1
KL-0178-2131	Pressure ring Ø 32 mm	1
KL-0178-2132	Pressure ring Ø 35 mm	1
KL-0178-2133	Pressure ring Ø 37 mm	1
KL-0178-2141	Conical sleeve Ø 32 mm	1
KL-0178-2142	Conical sleeve Ø 35 mm	1
KL-0178-2143	Conical sleeve Ø 35 mm	1
KL-0178-2144	Conical sleeve Ø 35 mm	1
KL-0178-2145	Conical sleeve Ø 37 mm	1
KL-0178-2190	Plastic storage case	1

KL-0178-30 K

Mounting Tool for Sealing Flange with Integrated Sender Wheel



Suitable for VW-Audi, Seat, Mitsubishi engines.

Essential tool for the quick and professional mounting of a crankshaft sealing ring with integrated sender wheel (gearbox side).

Scope of Delivery:

KL-0178-30 Mounting tool for sealing flange with integrated sender wheel

Part No.	Description	Quantity
KL-0178-3010	Housing with nut	1
KL-0178-3020	Pressure plate	1
KL-0178-3030	Flange with spindle	1
KL-0178-3040	Guide bolt Ø7 mm	3
KL-0178-3050	Guide bolt Ø8 mm	3
KL-1681-111	Adaptor M14x1.25 for TDC adjustment	1
KL-0128-1	Dial gauge Ø 58 mm	1
KL-0178-3090	Plastic storage case	1

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KL-0282-50

Puller for Timing Belt Sprocket (Crankshaft)



Suitable for VW-Audi 4 and 5-cylinder engines.

Designed to remove the crankshaft timing belt sprocket.

KL-0282-39

Puller Tool Set PD (Unit Injector)



Suitable for VW-Audi, Ford, Seat, Škoda 3- and 4-cylinder (1.2; 1.4; 1.9 and 2.0 L) TDI PD-engines.

This tool enables the easy and professional removal of the camshaft hub. It is required, for example, when replacing the cylinder head gasket on 1.9 L engines, when removing and replacing the camshaft or used in the repair of engines or cylinder heads.

The reaction wrench **KL-0282-391** enables the camshaft hub fixing screw to be loosened and tightened accurately.

The puller **KL-0282-392** enables the accurate removal of the camshaft hub from the taper of the camshaft.

Scope of Delivery:

KL-0282-39 Puller Tool Set PD (Unit Injector)

Part No.	Description	Qty.
KL-0282-391	Reaction wrench	1
KL-0282-392	Puller for camshaft hub	1

Cleaning Tool for Injection Nozzle Seal Seat

(German Utility Model)

KL-0186-50

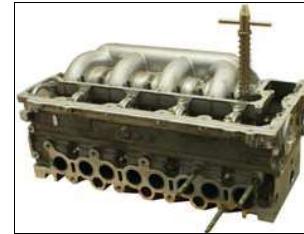
Universally suitable for engines with an injection nozzle seat diameter of 17 mm.

The cleaning tool KL-0186-50 enables the quick and professional cleaning of the injection nozzle seat. Indispensable before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.

The spring-loaded centring cone sleeve ensures accurate guiding of the cleaning tool into the injection nozzle bore, thus enabling the seal seat to be cleaned accurately and without any trouble.

Technical Data:

Drive:	T-Handle
Length:	238 mm
Cleaning tool Ø:	7.5 / 17 mm



Extension (150 mm)

KL-0186-501

Extension KL-0186-501 is specially designed for very deep-seated injector nozzles. It is used in conjunction with the universal cleaning tool KL-0186-50.



Cleaning Tool for Injector Nozzle Seat

KL-0583-102

Suitable for BMW Common-Rail Diesel engines M47TU, M57 and M57TU.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.

Technical Data:

Drive:	T-handle
Length:	296 mm
Cleaning tool Ø:	7.5 / 17 / 23.7 mm



Cleaning Tool for Injector Nozzle Seat

KL-0583-1031

Suitable for BMW Common-Rail Diesel engines M47.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.

Technical Data:

Drive:	T-handle
Length:	290 mm
Cleaning tool Ø:	7.5 / 17 mm



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Cleaning Tool for Injection Nozzle Seat

KL-0369-20 A

Suitable for the Common-Rail Diesel engines

Mercedes OM611, OM612, OM613, OM639, OM640, OM642, OM646, OM647, OM648, OM651, OM668, Smart R660

PSA 2.7 HDI / engine: DT17 and 3.0 HDI engine: DT20

Chrysler 2.5 crd / engine: OM664

Toyota 3.0 D-4D / engine: 1 KD-FTV

Toyota 2.2 D-4D / engine: 2 AD-FHV, 2 AD-FTV

Lexus 2.2 Diesel / engine: 2 AD-FHV

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole and the nozzle seat.

Important before reinstalling an injection nozzle to prevent leakage between the cylinder head and the injector.



Technical Data:

Drive:	T-handle
Length:	261 mm
Cleaning tool Ø:	7.5 / 17 / 19.1 mm

KL-1683-103

Cleaning Tool for Injector Nozzle Seat



Suitable for Common-Rail Diesel engines on Vauxhall/Opel, Fiat, Lancia, Suzuki 1.3 JTD, 1.3 CDTi, 1.3 JTD / engine: Z13DT, 188A9.000.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.

Technical data

Drive:	T-handle
Length:	261 mm
Cleaning tool Ø:	7.5 / 17 / 17.6 mm

KL-1283-112

Cleaning Tool for Injector Nozzle Seat



Suitable for the Common-Rail Diesel engines F9Q on Renault, Nissan, Vauxhall/Opel, Suzuki, Mitsubishi 1.9 dTi, 1.9 dCi, 1.9 CDTi, 1.9 Di, 1.9 DDis, 1.9 Di-D.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.

Technical data

Drive:	T-handle
Length:	245 mm
Cleaning tool Ø:	7.5 / 17.4 / 19 mm

KL-1283-122

Cleaning Tool for Injector Nozzle Seat



Suitable for the Common-Rail Diesel engines K9K on Renault, Suzuki, Nissan, Dacia 1.5 dCi, 1.5 DDis.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.

Technical data

Drive:	T-handle
Length:	265 mm
Cleaning tool Ø:	7.5 / 17 / 20.1 mm

KL-1383-104

Cleaning Tool for Injection Nozzle Seal Seat



Suitable for the Common-Rail Diesel engines on Peugeot, Citroën, Fiat, Lancia, Suzuki 2.0 HDI, 2.0 JTD; engine code: DW10

- Mercedes; engine code: OM646 EVO
- Renault, Nissan, Vauxhall/Opel 2.2 DTI, CDTI, CDI; engine code: G9T
- Renault, Nissan, Vauxhall/Opel 2.5 DTI, CDTI, CDI; engine code: G9U

The special design of this cleaning tool enables the injection nozzle bore, the seal seat and the injector channel to be cleaned in one single operation.

Important! Before any re-installation of an injector, it is essential to clean the seal seat in the cylinder head from deposits such as carbon deposits in order to prevent leakage between cylinder head and injector.

Technical Data:

Drive:	T-handle
Length:	261 mm
Cleaning tool Ø:	7.5 / 17 mm

Cleaning Tool for Injector Nozzle Seat

KL-1383-119

Suitable for the Common-Rail Diesel engines DW12 on Peugeot, Citroën, Fiat, Lancia 2.2 HDI, 2.2 JTD.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.



Cleaning Tool for Injector Nozzle Seat

KL-1383-1311

Suitable for the 1.6l PSA Common-Rail Diesel engines on

- Fiat 1.6l HDI; engine code: DV6, 9HX, 9HY, 9HZ
- Ford 1.6l TDCi; engine code: G8DA, G8DB, HHDA, HHJA, HHJB
- Volvo 1.6l D; engine code: D4164T
- Mazda 1.6l D; engine code: Y6

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.



Technical Data:

Drive:	T-handle
Length:	295 mm
Cleaning tool-Ø:	7.5 / 17 / 17.6 / 18.7 mm

Compressed-Air Adaptor for Glow Plug Bore M8x1

KL-1383-118

Universally suitable for Citroën, Fiat, Ford, Lancia, Mercedes, Opel/Vauxhall, Suzuki, Volvo etc. such as Mercedes: OM639, OM640, OM642, OM651; PSA: 2.7 HDI engine: DT17, 3.0 HDI engine: DT20

Screwing in the compressed-air adaptor **KL-1383-118** into the glow plug bore and injecting air into the combustion chamber prevent impurities from entering the combustion chamber.



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Technical Data:

Thread:	M8x1
Length:	178 mm
Pipe-Ø:	Ø12 x 80 mm

Compressed-Air Adaptor for Glow Plug Bore

KL-0369-55 B

Universally suitable for e.g. BMW, Mercedes, Chrysler, Opel/Vauxhall, Nissan Renault etc.

Screwing the compressed-air adaptor **KL-0369-55 B** into the glow plug bore and injecting air into the combustion chamber prevents impurities from entering the combustion chamber.



Technical Data:

Thread:	M10x1
Length:	178 mm
Pipe-Ø:	15 x 110 mm

Compressed-Air Adaptor for Glow Plug Bore M10x1.25

KL-0186-1631

Universally suitable, for example for Toyota, Lexus etc.

Screwing the compressed-air adaptor **KL-0186-1631** into the glow plug bore and injecting air into the combustion chamber, prevents impurities from entering the combustion chamber.

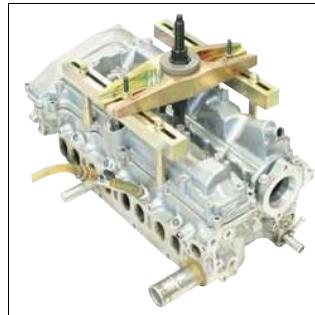


Technical data

Thread:	M10x1.25
Length:	207 mm
Pipe-Ø:	15 mm

KL-0186-14 K

Injector Nozzle Puller Set (Universal) with Accessories (German Utility Model)



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Universally suitable for diesel engines with injector nozzle connecting thread M 14x1.5 (external thread) or M 17x1 (internal thread) e. g. on:

- Mercedes: OM611, OM612, OM613, OM 628*, OM 629*; OM 642*, OM646, OM647, OM648
- Peugeot, Citroen, Fiat, Lancia, Suzuki: DV6, DW10, DW12
- Ford: 1.6 TDCi (G8DA, G8DB, HHDA, HJA, HHJB)
- VW-Audi: 2.5 / 2.7 / 3.0 V6 Tdi
- Volvo: 1.6 D (D4164T), 2.2 D
- Mazda: Y6 (DV6)

***Note:**

V-engines might require the removal of the engine due to space constraints.

The injector nozzle puller **KL-0186-14 K** enables the removal of very tight-fitting injector nozzles directly on the vehicle without having to remove the cylinder head from the vehicle.

The use of the special extraction bridge and pull spindle enables quick and easy removal of the injector nozzle.

The extraction bridge is supported either by the support bolts that are screwed into the supporting bores of the valve cover screws or by the support bars that are positioned on an even surface on the cylinder head. The spacer nuts allow the supporting surfaces to be levelled out, as well as the support bolts in holes with insufficient depth to be adjusted.

Note: Thanks to the various upgrade kits which are available as an option, the injector nozzle puller is suitable for many other Common-Rail Diesel engines such as **PSA 2.7 and 3.0 Hdi (DT17, DT20)** **Fiat Ducato and Iveco 2.3, 2.4 and 3.0 L JTD**, **Mercedes CDI (OM651)**, **Renault, Nissan, Vauxhall/Opel 2.2, 2.5 and 3.0 L dci (G9T, G9U and ZD3)** as well as **Toyota 2.2 L (2AD-FHV, 2AD-FTV)**.

Scope of Delivery:

KL-0186-14 K Injector Nozzle Puller Set (Universal) with accessories

Artikel-Nr	Description	Quantity
KL-0186-121	Extraction bridge without spindle	1
KL-0583-1005	Pull spindle M17x1, 200mm long	1
KL-0186-1215	Shoulder nut M16x1.5	1
KL-1383-1113	Pull spindle M14x1.5; 127mm long	1
KL-0369-4505 A	Special bit insert size 10mm	1
KL-0369-461 A	Special socket size 29mm 1/2" drive	1
KL-0186-122	Support bar set (2 pieces)	1
KL-0186-1251	Spacer nut set 5 mm (4 pieces)	1
KL-0186-1252	Spacer nut set 10mm (4 pieces)	1
KL-0186-1253	Spacer nut set 15mm (4 pieces)	1
KL-0014-0030	Molybdenum disulphide paste 50g	1
KL-0186-1290	Plastic storage case	1

KL-0186-1232

Set of Support Bolts M8



The set of bolts **KL-0186-1232** enables the injector puller set **KL-0186-14 K** also to be used for **Fiat Ducato and Iveco 2.3; 2.4 and 3.0 JTD** Common-Rail Diesel engines.

Upgrade Kit for KL-0186-14 K (to form KL-0186-161 K)

KL-0186-1610

The upgrade kit **KL-0186-1610** enables the injector nozzle puller **KL-0186-14 K** also to be used for **Toyota 2.2 L Common-Rail Diesel engines (engine code 2AD-FHV, 2AD-FTV)**

Scope of Delivery:

KL-0186-1610 Upgrade Kit for KL-0186-14 K (to form KL-0186-161 K)

Part No.	Description	Qty.
KL-0186-1611	Pull spindle M20x1, 145 mm long	1
KL-0186-1612	Pull spindle M16 x 1, 145 mm long	1
KL-4417-17	Open-end spanner socket, size 17mm	1



Upgrade kit for KL-0186-14 K (to form KL-0186-17 K)

(German Utility Model)

KL-0186-170

In conjunction with the upgrade kit **KL-0186-170**, the injector nozzle puller **KL-0186-14 K** also is suitable for the **Mercedes CDI engines OM651** such as **C-Class (W204 model 2007 onwards), E-Class (W212 model 2009 onwards), E-Class Coupe / Cabriolet (W207 model 2009 onwards), GLK (X204 model 2008 onwards and Sprinter (II 906 model 2006 onwards).**

Scope of Delivery:

KL-0186-170 Upgrade kit for KL-0186-14 K (to form KL-0186-17 K)

Part No.	Description	Qty.
KL-0186-1233	Set of support bolts M6	1
KL-0186-1711	Pull spindle M18, 145 mm long	1
KL-0369-420	Injector nozzle puller	1
KL-0369-511	Thread tap M7 with drill-bit	1



Set of Support Bolts M6

KL-0186-1234

Used in conjunction with the set of bolts **KL-0186-1234**, the injector nozzle puller set **KL-0186-14 K** also is suitable for **Renault, Nissan, Vauxhall/Opel 2.2 L and 2.5 L dci Diesel engines (engine code: G9T and G9U)** such as **Renault: Avantime, Espace III, Espace IV, Laguna II, Master II, Master III, Traffic II, Vel Satis; Nissan: Interstar, Primastar and Vauxhall/Opel: Movano, Vivaro.**

Scope of Delivery:

KL-0186-1234 Set of support bolts M6

Part No.	Description	Qty.
KL-0186-1234-1	Support bolt with set-screw, 113.5mm	2
KL-0186-1234-2	Support bolt with set-screw 150mm	2



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Upgrade kit for KL-0186-14 K (to form KL-0186-19 K)

KL-0186-190

The upgrade kit **KL-0186-190** enables the injector nozzle puller **KL-0186-14 K** also to be used for **Renault, Nissan, Vauxhall/Opel 3.0L Common Rail Diesel engines (engine code: ZD3)** such as **Renault: Master II, Master III, Master Maxi; Nissan: Cabstar III, Instar, Patrol III, Patrol GR II, Terano and Vauxhall/ Opel: Movano II.**

Scope of Delivery:

KL-0186-190 Upgrade kit for KL-0186-14 K (to form KL-0186-19 K)

Part No.	Description	Qty.
KL-0186-1235	Set of support bolts M6	1
KL-0186-1611 H	Pull spindle M20x1, 250 mm long	1



KL-0186-100

Injector Nozzle Puller for M12x1 without Slide Hammer (German Utility Model)

Suitable for BMW (M47 / M57); Mercedes (OM611, OM612, OM613, OM646, OM647, OM648) and PSA (DW10) diesel engines.

This puller allows professional extraction of injectors without having to open or dismantle them. A slide hammer with connecting thread M18 such as **KL-0369-4100** (1.5 kg) or **KL-0049-300** (4.8 kg) is required to drive the tool.

Indispensable, for example, when changing a timing chain or removing and replacing a valve cover/valve cover seal.

The injector nozzle puller has to be fixed to the fuel connection bore hole (M12x1) by means of a special screw and enables, thanks to its special design, optimum power transmission without the risk of damaging the valve cover or the injector nozzle.

Stabilising screws enable the tool to be individually adjusted to the nozzle head whilst ensuring the greatest possible stability of the injector nozzle puller.

Scope of Delivery:**KL-0186-100 Injector Nozzle Puller for M12x1 without Slide Hammer**

Part No.	Description	Qty.
KL-0186-1001	Injector nozzle pullerBase body for M12x1	1
KL-0186-1002	Special screw M12x1	1
KL-0186-1003	Special screw M12x1 long	1
KL-0186-1004	Sleeve	1

KL-0186-101

Injector Nozzle Puller for M12x1 with slide hammer 1.5 kg

(German Utility Model)

Suitable for BMW (M47 / M57); Mercedes (OM611, OM612, OM613, OM646, OM647, OM648) and PSA (DW10) diesel engines.

This puller allows professional extraction of injectors without having to open or dismantle them. Indispensable, for example, when changing a timing chain or removing and replacing a valve cover/valve cover seal.

The injector nozzle puller has to be fixed to the fuel connection bore hole (M12x1) by means of a special screw and enables, thanks to its special design, optimum power transmission without the risk of damaging the valve cover or the injector nozzle.

Stabilising screws enable the tool to be individually adjusted to the nozzle head whilst at the same time ensuring the greatest possible stability of the injector nozzle puller.

Scope of Delivery:**KL-0186-101 Injector Nozzle Puller for M12x1 with Slide Hammer 1.5 kg**

Part No.	Description	Quantity
KL-0186-100	Injector nozzle puller for M12x1 without slide hammer	1
KL-0369-4100	Slide hammer 1.5 kg, base tool	1

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KL-0186-102

Injector Nozzle Puller for M12x1 with slide hammer 4.8 kg

(German Utility Model)

Suitable e.g. for BMW (M47, M57); Mercedes (OM 611, 612, 613, 646, 647, 648) and PSA (DW10) diesel engines.

This puller allows professional extraction of injectors without having to open or dismantle them. Indispensable, for example, when changing a timing chain or removing and replacing a valve cover/valve cover seal.

The injector nozzle puller has to be fixed to the fuel connection bore hole (M12x1) by means of a special screw and enables, thanks to its special design, optimum power transmission without the risk of damaging the valve cover or the injection nozzle.

Stabilising screws enable the tool to be individually adjusted to the nozzle head whilst ensuring the greatest possible stability of the injector nozzle puller.

Scope of Delivery:**KL-0186-102 Injector Nozzle Puller for M12x1 with Slide Hammer 4.8 kg**

Part No.	Description	Qty.
KL-0186-100	Injector nozzle puller for M12x1 without slide hammer	1
KL-0049-300	Slide hammer 4.8 kg, Base tool	1

**Injector Nozzle Puller for M14x1.5 without Slide Hammer
(German Utility Model)**

KL-0186-110

Suitable for 2.8 L JTD diesel engines e.g. Fiat Ducato, IVECO Daily, etc.

This tool enables the professional removal of injection nozzles without having to open or dismantle them. The slide hammer **KL-0369-4100** (1.5 kg) or **KL-0049-300** (4.8 kg) is needed to drive this tool.

Indispensable, for example, when changing a timing chain or removing and replacing a valve cover/valve cover seal.

The injector nozzle puller has to be fixed to the fuel connection bore hole (M14x1.5) by means of a special screw and enables, thanks to its special design, optimum power transmission without the risk of damaging the valve cover or the injection nozzle.

Stabilising screws enable the tool to be individually adjusted to the nozzle head whilst ensuring the greatest possible stability of the injector nozzle puller.



Scope of Delivery:

KL-0186-110 Injector Nozzle Puller for M14x1.5 without slide hammer

Part No.	Description	Qty.
KL-0186-1101	Injector nozzle puller base body for M14x1.5	1
KL-0186-1102	Special screw M14x1.5	1

**Injector Nozzle Puller for M14x1.5 with Slide Hammer 1.5 kg
(German Utility Model)**

KL-0186-111

Suitable for the 2.8 L JTD Diesel engines such as Fiat Ducato, IVECO Daily, etc.

This puller allows professional extraction of injectors without having to open or dismantle them.

Indispensable tool when changing a timing chain or removing the valve cover/ replacing the valve cover seal.

The injector nozzle puller has to be fixed to the fuel connection bore hole (M14x1.5) by means of a special screw and enables, thanks to its special design, optimum power transmission without the risk of damaging the valve cover or the injection nozzle.

Stabilising screws enable the tool to be individually adjusted to the nozzle head whilst ensuring the greatest possible stability of the injector nozzle puller.



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Scope of Delivery:

KL-0186-111 Injector Nozzle Puller for M14x1.5 with Slide Hammer 1.5 kg

Part No.	Description	Qty.
KL-0186-110	Injector nozzle puller for M14x1.5 without slide hammer	1
KL-0369-4100	Slide hammer 1.5 kg (base tool)	1

**Injector Nozzle Puller for M14x1.5 with Slide Hammer 4.8 kg
(German Utility Model)**

KL-0186-112

Suitable for the 2.8 L JTD Diesel engines such as Fiat Ducato, IVECO Daily, etc.

This puller allows professional extraction of injectors without having to open or dismantle them.

Indispensable tool when changing a timing chain or removing the valve cover/ replacing the valve cover seal.

The injector nozzle puller has to be fixed to the fuel connection bore hole (M14x1.5) by means of a special screw and enables, thanks to its special design, optimum power transmission without the risk of damaging the valve cover or the injection nozzle.

Stabilising screws enable the tool to be individually adjusted to the nozzle head whilst ensuring the greatest possible stability of the injector nozzle puller.



Scope of Delivery:

KL-0186-112 Injector Nozzle Puller for M14x1.5 with Slide Hammer 4.8 kg

Part No.	Description	Qty.
KL-0186-110	Injector nozzle puller for M14x1.5 without slide hammer	1
KL-0049-300	Slide hammer 4.8 kg (base tool)	1

KL-1383-1113

Pull Spindle M14x1.5



Suitable for injection nozzles with M14x1.5 external thread, e.g. Bosch- or Delphi-injection nozzles built-in in Mercedes, PSA and VW diesel engines e.g. engine code: OM 629, 642, 646; DV4 DW12 and CBD etc.

Technical Data:

Connecting thread injector nozzle:	M14x1.5
Connecting thread slide hammer:	M16x1.5
Length:	127 mm

KL-0369-4606

Pull Spindle M17x1



Suitable for injection nozzles with M17x1 internal thread, e.g. Bosch-injection nozzles built-in in Alfa Romeo, BMW, Fiat, Mercedes, PSA and Renault diesel engines.

Technical Data:

Connecting thread injection nozzle:	M17x1
Connecting thread slide hammer:	M16x1.5
Length:	127 mm



Note:
Special socket KL-0369-461 A or KL-1283-103 as well as bit insert KL-0369-4505 are required to remove the nozzle head and the threaded ring.

KL-1383-1021

Pull Spindle M25x1



Suitable for injection nozzles with M25x1 internal thread, e.g. Siemens-injection nozzles built-in in PSA diesel engines (DW10) etc.

Technical Data:

Connecting thread injection nozzle:	M25x1
Connecting thread slide hammer:	M16x1.5
Length:	127 mm



Note:
Special socket KL-1383-1022 is required to remove the nozzle head.

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KL-1383-1221

Pull Spindle M27x1



Suitable for injection nozzles with M27x1 internal thread, e.g. Siemens-injection nozzles built-in in PSA diesel engines (DW10) etc.

Technical Data:

Connecting thread injection nozzle:	M27x1
Connecting thread slide hammer:	M16x1.5
Length:	127 mm



Note:
Special socket KL-1383-1222 is required to remove nozzle head.

KL-0369-412

Injector Nozzle Puller with Slide Hammer 1.5 kg



This tool enables the extraction of tightly fitting injector nozzles. It is used in conjunction with the pull spindle KL-0369-4606 (outer connecting thread M17x1), KL-1383-1021 (outer connecting thread M25x1), KL-1383-1221 (outer connecting thread M27x1) or KL-1383-1113 internal connecting thread M14x1.5).

Consists of slide hammer KL-0369-4100 and adaptor KL-0369-4111.

Technical Data:

Thread:	M16x1.5
Overall length:	195 mm
Hammer weight:	1.5 kg

Injector Nozzle Puller with Slide Hammer 4.8 kg

KL-0369-411

This tool enables the extraction of tightly fitting injection nozzles. It is used in conjunction with the pull spindle **KL-0369-4606** (outer connecting thread M17x1), **KL-1383-1021** (outer connecting thread M25x1), **KL-1383-1221** (outer connecting thread M27x1) or **KL-1383-1113** (internal connecting thread M14x1.5).

Consists of slide hammer **KL-0049-300** and adaptor **KL-0369-4111**.

Technical Data:

Connecting thread:	M16x1,5
Length overall:	710 mm
Hammer weight:	4,8 kg



Special Socket s

KL-1383-..

Necessary to loosen and remove the nozzle head, e.g. on Siemens-injector nozzles installed in 2.0 L DW10 HDI engines etc.

Special Socket Size (waf) 25 mm, 1/2" drive

KL-1383-1022

Technical Data:

Size (width across flats):	25 mm
Drive:	1/2"
Length:	100 mm

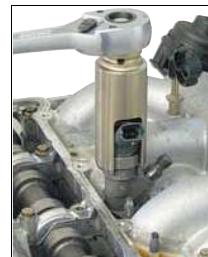


Special Socket Size (waf) 27 mm; 1/2" drive

KL-1383-1222

Technical Data:

Size (width across flats):	27 mm
Drive:	1/2"
Length:	100 mm



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Special Socket Size (waf) 29 mm; 1/2" drive

KL-0369-461 A

Technical Data:

Size (width across flats):	29 mm
Drive:	1/2"
Length:	100 mm

Special Socket Size (waf) 30 mm, 1/2" drive

KL-1283-103

Technical Data:

Size (width across flats):	30 mm
Drive:	1/2"
Length:	100 mm



Special-Bit-Insert Size (width across flats) 10 mm

KL-0369-4505 A

Necessary to remove the threaded ring, e.g. on Bosch-injector nozzles installed in CDI and HDI engines etc.

Technical Data:

Size:	10 mm
Drive:	10 mm
Length:	38 mm



KL-0283-60 K

Injector Nozzle Puller Set VW



Suitable for VW-Audi diesel engines e.g.:

- 1.4 SDI / TDI
- 1.9 D / SDI / TDI / TDI (PD)
- 2.0 TDI (PD)
- 2.0 TDI (PD 4-valves)
- 2.5 TDI
- 2.5 TDI (PD)
- 2.8 TDI (PD)
- 2.7 / 3.0 TDI (Common-Rail)
- 4.2 TDI (Common-Rail)

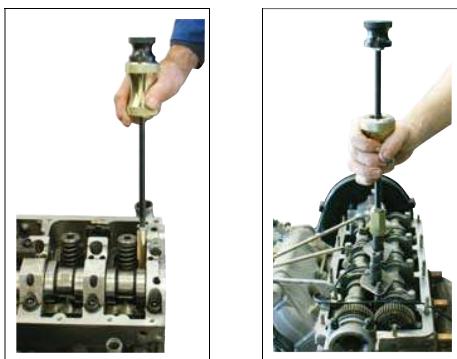
This tool is designed for the quick and professional extraction of injection nozzles and unit-injector (PD) elements from diesel engines.

Advantages

- Its special composition makes this VW injector nozzle puller set the ideal tool for garages.
- Substantial time savings and professional working.

Scope of Delivery:

KL-0283-60 K Injector Nozzle Puller Set VW



Part No.	Description	Qty.
KL-0283-6011	Injector nozzle puller adaptor	1
KL-0283-6012	Injector nozzle puller adaptor M14x1.5	1
KL-0283-6013	Injector nozzle puller adaptor M10	1
KL-0283-6014	Injector nozzle puller adaptor VW	1
KL-0283-602	Injector nozzle puller VW PD 2.0l 16 V without slide hammer	1
KL-0049-101	Slide hammer; base tool	1
KL-0049-1003	Hex nut M10	1
KL-0283-6090	Plastic storage case	1

KL-0283-600 K

Injector Nozzle Puller Set VW without Slide Hammer

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Suitable for VW-Audi diesel engines e.g.:

- 1.4 SDI / TDI
- 1.9 D / SDI / TDI / TDI (PD)
- 2.0 TDI (PD)
- 2.0 TDI (PD 4-valves)
- 2.5 TDI
- 2.5 TDI (PD)
- 2.8 TDI (PD)
- 2.7 / 3.0 TDI (Common-Rail)
- 4.2 TDI (Common-Rail)

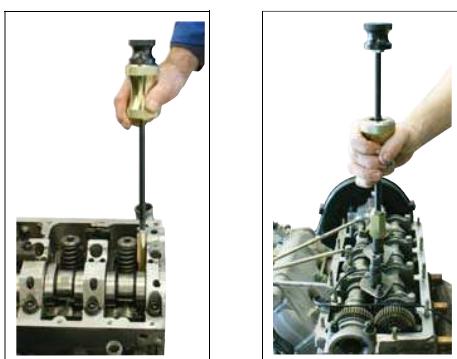
This tool is designed for the quick and professional extraction of injection nozzles and unit-injector (PD) elements from diesel engines. Set is used in conjunction with slide hammer **KL-0049-100**.

Advantages

- Substantial time savings and professional working.

Scope of Delivery:

KL-0283-600 K Injector Nozzle Puller Set VW without slide hammer



Part No.	Description	Qty.
KL-0283-6011	Injector nozzle puller adaptor VW	1
KL-0283-6012	Injector nozzle puller adaptor M14x1.5	1
KL-0283-6013	Injector nozzle puller adaptor M10	1
KL-0283-6014	Injector nozzle puller adaptor VW	1
KL-0283-602	Injector nozzle puller VW PD 2.0l 16 V without slide hammer	1
KL-0283-6090	Plastic storage case	1

KL-0583-10 K

Injector Nozzle Puller BMW

(German Utility Model)

Suitable for BMW Common-Rail diesel engines e.g.: M47TU, M57 and M57TU.

The injector nozzle puller **KL-0583-10 K** enables the removal of very tight-fitting injection nozzles directly on the vehicle without having to remove the cylinder head. Also intended for cleaning the injector nozzles receiving bore and the injector seat.

The use of the special extraction bridge and of the pull spindle enables the quick and easy removal of the injection nozzle. (For this purpose the injection nozzle has to be opened.) The compressed-air adaptor prevents impurities from entering the combustion chamber during the cleaning process.

Application:

Unscrew nozzle head, screw in pull spindle, unscrew valve cover screws (4 pieces.), mount extraction bridge and screw on shoulder nut. Then, pull out the nozzle by turning the shoulder nut.

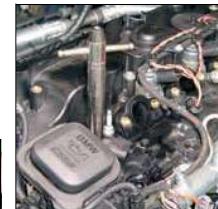
Technical Data:

Weight:	7.2 kg
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Scope of Delivery:

KL-0583-10 K Injector Nozzle Puller Set BMW

Part No.	Description	Qty.
KL-0583-101	Base puller tool	1
KL-0583-102	Cleaning tool for injection nozzle seat and hole	1
KL-0369-55 A	Compressed air adaptor for glow plug bore M10x1	1
KL-0369-461 A	Special socket 29 mm hex 1/2 Drive	1
KL-0369-4505 A	Special bit socket 10 mm hex	1
KL-0583-1090	Plastic storage case	1



KL-0583-103

Upgrade Kit BMW

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Suitable for BMW Turbo diesel engine M47.

The upgrade kit used in conjunction with the injector nozzle puller **KL-0583-10 K**, enables the professional and precise removal of injection nozzles.

Scope of Delivery:

KL-0583-103 Upgrade Kit BMW

Part No.	Description	Qty.
KL-0583-1031	Cleaning tool for injection nozzle seat and hole	1
KL-0583-1032	Pull spindle 200 mm long for M14x1.5	1

KL-0583-104

Upgrade Kit Landrover Freelander 2.0 TD4



The upgrade kit **KL-0583-104** enables the injector nozzle puller set **KL-0583-10 K** also to be used for Landrover Freelander 2.0 TD4.

Scope of Delivery:

KL-0583-104 Upgrade Kit Landrover Freelander 2.0 TD4

Part No.	Description	Qty.
KL-0583-1041	Socket pin 155 mm long with setscrew	2
KL-0583-1042	Socket pin 180 mm long with setscrew	2
KL-0583-1005 H	Pull spindle M17x1, 315mm long	1

Toothed Socket for pre-combustion chamber MB

KL-0057-1

Suitable for Mercedes engines OM615, OM616 and OM617.

Used to remove the locking ring on the diesel pre-combustion chamber.

Scope of Delivery:

KL-0057-1 Toothed Socket for pre-combustion chamber MB

Part No.	Description	Qty.
KL-0057-0001	Screw	1
KL-0057-0002	Toothed nut	1



Spline Nut

KL-0369-3

Mercedes engines OM601, OM602, OM603 OM604, OM605 and OM606.

Used to remove the locking ring on the diesel pre-combustion chamber.

Technical Data:

Drive:	1/2"
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Slide Hammer for Pre-Combustion Chamber MB

KL-0049-25

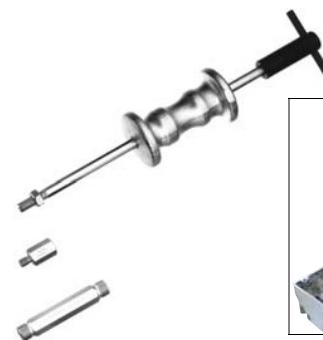
Suitable for Mercedes engines OM615, OM616, OM617, OM601, OM602, OM603 OM604, OM605 and OM606.

Designed to remove stuck diesel pre-combustion chambers.

Scope of Delivery:

KL-0049-25 Slide Hammer for Pre-Combustion Chamber MB

Part No.	Description	Qty.
KL-0049-2001	Tie rod for KL-0049-2	1
KL-0049-2002	Hammer weight 2.4 kg	1
KL-0049-2004	Hex nut M14	1
KL-0049-2006	T-handle (metal)	1
KL-0049-2008	Adaptor M14 to M12	1
KL-0369-4	Puller bolt for pre-combustion chamber MB	1



6

Cleaning Tool for Injector Nozzle Seat

KL-0369-11

Mercedes diesel engines OM601, OM602, OM603, OM604, OM605 and OM606

Indispensable for the quick and professional cleaning of the pre-combustion chamber sealing area of the injector nozzle seat.

Technical Data:

Length:	218 mm
Cleaning tool-Ø:	33 mm

Scope of Delivery:

KL-0369-11 Cleaning Tool for Injector Nozzle Seat

Part No.	Description	Qty.
KL-0369-1101	Housing	1
KL-0369-1102	Spindle (Drive 1/2")	1
KL-0369-1103	Cleaning tool Ø33 mm	1
KL-0369-1104	Screw M8 x 20	1
KL-0369-1105	Washer	1
KL-0369-1106	Circlip	1
KL-0369-1107	Protection sleeve	1



KL-0369-45 K

Injector Nozzle Tool Set Mercedes CDI

(Pat. e.g. US-Patent 7,832,071)



Suitable for Mercedes CDI engines OM 611, 612, 613, 628, 646*, 647, 648 etc. (*not suitable for OM 646 EVO)

The injector nozzle tool set **KL-0369-45 K** (consisting of injector nozzle puller **KL-0369-41**, injector nozzle puller **KL-0369-45**, cleaning tool **KL-0369-20 A**, compressed-air adaptor **KL-0369-55 A**, thread tap **KL-0369-51**, and plastic storage case **KL-0369-4590**) enables the professional removal of injector nozzles.

The injector nozzle puller with slide hammer **KL-0369-41** is designed for the removal of tightly fitting injection nozzles without having to dismantle them. The injector nozzle puller with pull spindle **KL-0369-45** enables the removal of very tight-fitting injector nozzles directly on the vehicle. It is not necessary to remove the cylinder head from the vehicle using either of the pullers. The cleaning tool **KL-0369-20 A** allows the injection nozzle mounting hole, the nozzle seat, and the small aperture leading to the combustion chamber to be cleaned in a single operation. Screwing in the compressed-air adaptor **KL-0369-55 A** into the glow plug bore and injecting air into the combustion chamber prevents impurities from entering the combustion chamber.

The thread tap with drill bit **KL-0369-51** is designed for rethreading and cleaning the tapped hole for the nozzle holder. This procedure is important before the installation of the injector nozzle.

Scope of Delivery:

KL-0369-45 K Injector Nozzle Tool Set Mercedes CDI

Part No.	Description	Qty.
KL-0369-20 A	Cleaning tool for injection nozzle mounting bore and nozzle seat	1
KL-0369-41	Injector nozzle puller with slide hammer	1
KL-0369-45	Injector nozzle puller with pull spindle	1
KL-0369-51	Thread tap M6 with drill bit	1
KL-0369-55 A	Compressed-air adaptor for glow plug bore M10x1	1
KL-0369-4590	Plastic storage case	1



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KL-0369-46 K

Injector Nozzle Puller Mercedes CDI

(German Utility Model)

Suitable for Mercedes CDI engine OM 668 e.g. A-Class

The **KL-0369-46 K** injector nozzle puller allows the removal of even stubborn injector nozzles without removing the cylinder head from the vehicle.

The removal of injector nozzles is particularly difficult on A Class engines, as two injector nozzles are always held by a single retaining clip, so that if one of the injector nozzle has to be removed, the second nozzle must be pulled out in parallel with it.

By using the special extraction bridge and inserting the two pull spindles, the injector nozzles can be removed in a fast and easy way.

Procedure for the removal of the injector nozzles:

Unscrew the injector nozzle heads by means of the special sockets included in the set. Screw pull spindles into injector nozzles, place pre-assembled extraction bridge onto valve cover and screw in shoulder nuts. Extract injector nozzles by evenly rotating the shoulder nuts.

Scope of Delivery:

KL-0369-46 K Injector Nozzle Puller

Part No.	Description	Qty.
KL-0369-460 K	Injector nozzle puller upgrade kit	1
KL-0369-461 A	Special socket size 29mm 1/2" drive	1
KL-0369-4505 A	Special bit insert size 10mm	1



Injector Nozzle Puller Set Mercedes CDI

(German Utility Model)

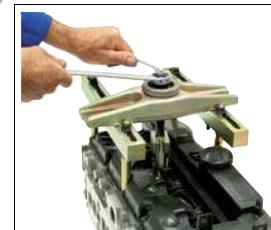
KL-0186-17 K

Suitable for Mercedes CDI engines OM651, for example, C-Class (W204 2007 onwards), E-Class (W212 2009 onwards), E-Class Coupe / Cabriolet (W207 2009 onwards), GLK (X204 2008 onwards) and Sprinter (II 906 2006 onwards).

The injector nozzle puller set **KL-0186-17 K** enables the professional removal of very tight-fitting injector nozzles in situ on the vehicle without having to remove the cylinder head. Due to the special design of the puller, the injector nozzle is fixed via the holder in the fork. As a result, it is not necessary to open or dismantle the injector. Using the extraction bridge, pull spindle, and holder ensures the quick and trouble-free removal of the injector nozzle.

Scope of Delivery:**KL-0186-17 K Injector Nozzle Puller Set Mercedes CDI**

Part No.	Description	Qty.
KL-0186-171	Extraction bridge without spindle	1
KL-0186-1711	Pull spindle M18, 145 mm long	1
KL-0186-1215	Shoulder nut M16x1.5	1
KL-0369-420	Injector nozzle puller	1
KL-0369-511	Thread tap M7 with drill-bit	1
KL-0014-0030	Molybdenum disulphide paste 50g	1
KL-0186-1290	Plastic storage case	1

**Upgrade Kit for KL-0186-14 K (to form KL-0186-17 K)**

(German Utility Model)

KL-0186-170

In conjunction with the upgrade kit **KL-0186-170**, the injector nozzle puller **KL-0186-14 K** also is suitable for the Mercedes CDI engines OM651 such as C-Class (W204 model 2007 onwards), E-Class (W212 model 2009 onwards), E-Class Coupe / Cabriolet (W207 model 2009 onwards), GLK (X204 model 2008 onwards and Sprinter (II 906 model 2006 onwards).

Scope of Delivery:**KL-0186-170 Upgrade kit for KL-0186-14 K (to form KL-0186-17 K)**

Part No.	Description	Qty.
KL-0186-1233	Set of support bolts M6	1
KL-0186-1711	Pull spindle M18, 145 mm long	1
KL-0369-420	Injector nozzle puller	1
KL-0369-511	Thread tap M7 with drill-bit	1

**Injector Nozzle Puller with Slide Hammer 1.5 kg**

(German Utility Model)

KL-0369-42

Suitable for Mercedes CDI engines OM651 (Vehicles: C-Class (W/S204) 2007-, E-Class (W 212) 2009-, E-Class Coupe / Convertible (A/C 207) 2009-, GLK (X204) 2008- and Sprinter II (906) 2006-).

Puller allows removal of tightly fitting injector nozzles without having to remove the cylinder head. (Note: The injector nozzle can not be dismantled)

Due to the special design of the puller, the injector nozzle is fixed via the holder in the fork. This prevents the puller from tilting during the loosening process and ensures, at the same time, optimum power transmission.

Technical Data:

Total Length:	200 mm
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Scope of Delivery:**KL-0369-42 Injector Nozzle Puller with Slide Hammer 1.5 kg**

Part No.	Description	Quantity
KL-0369-420	Injector Nozzle Puller	1
KL-0369-4100	Slide hammer 1.5 kg, base tool	1

**Injector Nozzle Puller with Slide Hammer**

(German Utility Model)

KL-0369-41

Suitable for Mercedes CDI engines OM 611, 612, 613, 628, 646*, 647, 648 etc. (*not suitable for OM 646 EVO)

Puller enables removal of tightly fitting injection nozzles without having to dismantle them or having to remove the cylinder head from the vehicle.

Scope of Delivery:

Injector nozzle puller without slide hammer, pull rod M18, Slide hammer 1.5 kg, Hex Nut M18.



KL-0369-45

Injector Nozzle Puller with Pull Spindle (Pat. e.g. US-Patent 7,832,071)



Suitable for Mercedes CDI engines OM 611, 612, 613, 646, 647 and 648 etc.
(not suitable for 646 EVO)

Essential tool for the removal of very tight-fitting injector nozzles in-situ on the vehicle. No need to remove the cylinder head from the vehicle.

Procedure:

Unscrew nozzle head, screw in pull spindle, insert the support rings, push support sleeve over the spindle and screw on shoulder nut. Then, pull out nozzle by turning shoulder nut.

Scope of delivery:

Support sleeve, pull spindle, shoulder nut M16x1.5, Support ring, Special bit insert 10 mm hex, axial bearing, circlip SB35, special socket insert 29 mm hex.

Technical Data:

Overall length	150 mm
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KL-0369-20 A

Cleaning Tool for Injection Nozzle Seat



Suitable for the Common-Rail Diesel engines

Mercedes OM611, OM612, OM613, OM639, OM640, OM642, OM646, OM647, OM648, OM651, OM668, Smart R660

PSA 2.7 HDI / engine: DT17 and 3.0 HDI engine: DT20

Chrysler 2.5 crd / engine: OM664

Toyota 3.0 D-4D / engine: 1 KD-FTV

Toyota 2.2 D-4D / engine: 2 AD-FHV, 2 AD-FTV

Lexus 2.2 Diesel / engine: 2 AD-FHV

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole and the nozzle seat.

Important before reinstalling an injection nozzle to prevent leakage between the cylinder head and the injector.

Technical Data:

Drive:	T-handle
Length:	261 mm
Cleaning tool-Ø:	7.5 / 17 / 19.1 mm

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KL-0369-55 B

Compressed air adaptor for glow plug bore



Universal. Suitable for e.g. BMW, Mercedes, Chrysler, Opel/Vauxhall, Nissan Renault etc.

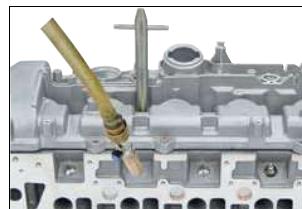
Screwing the compressed-air adaptor **KL-0369-55 B** into the glow plug bore and injecting air into the combustion chamber prevent impurities from entering the combustion chamber.

Technical Data:

Thread:	M10x1
Length:	178 mm
Pipe-Ø:	15 x 110 mm

KL-0369-462 K

Cleaning Tool for Injector Nozzle Seal Seat with Compressed-air Adaptor



Suitable for Mercedes CDI engines OM 611, 612, 613, 646, 647, 648 and 668
(not suitable for 646 EVO)

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Screwing the compressed-air adaptor **KL-0369-55 A** into the glow plug bore hole and injecting air into the combustion chamber prevent impurities from entering the combustion chamber.

Scope of Delivery:

KL-0369-462 Cleaning Tool for Injector Nozzle Seal Seat

Part No.	Description	Qty.
KL-0369-20 A	Cleaning Tool for Injector Nozzle Seal Seat	1
KL-0369-55 A	Compressed-air adaptor for glow plug bore M10x1	1
KL-1383-1329	Plastic storage case	1

Cleaning Tool Set for Injector Nozzle Seat with Compressed-Air Adaptor

KL-1383-132 K

Suitable for:

Mercedes: OM639, OM640, OM642, OM651

PSA: 2.7 HDI engine: DT17, 3.0 HDI engine: DT20

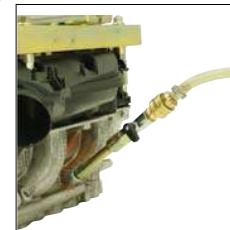
The special design of the cleaning tool **KL-0369-20 A** allows the injector nozzle mounting hole, the nozzle seal seat, and the small aperture leading to the combustion chamber to be cleaned in a single operation.

Screwing in the compressed-air adaptor **KL-1383-118** into the glow plug bore and injecting air into the combustion chamber prevent impurities from entering the combustion chamber.

Scope of Delivery:

KL-1383-132 K Cleaning Tool Set for Injector Nozzle Seat

Part No.	Description	Qty.
KL-1383-118	Compressed-air adaptor for glow plug bore M8x1	1
KL-0369-20 A	Cleaning tool for injector nozzle seat	1
KL-1383-1329	Plastic storage case	1



Puller for Sealing Ring

KL-0369-59

Suitable for sealing rings with internal diameter 4 - 16 mm, e.g. injector nozzle sealing rings on **Mercedes CDI engines**.

The **KL-0369-59** puller extracts the sealing rings correctly, for example from between the injector nozzle and the cylinder head.

To pull out the sealing ring, screw the taper point of the tool into it, then remove with the slide hammer.

Technical Data:

Slide Hammer:	0.9 kg
Length:	385 mm
Sealing ring inner-Ø:	4 - 16 mm



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Thread tap M6 with drill-bit tip

KL-0369-51

Suitable for **Mercedes CDI engines OM 611, 612, 613, 646, 647 and 648** etc.
(not suitable for 646 EVO)

Intended for recutting and cleaning the tapped hole to retain the injector nozzle holder. Essential before re-installing the injector nozzle.

Technical Data:

Length:	100 mm
Thread:	M6



Thread Tap M7 with Drill-Bit

KL-0369-511

Suitable for **Mercedes CDI engines OM 651**

Tool designed to rethread and clean the tapped holes for fixing the nozzle holder assembly. Important procedure before re-installing an injector nozzle.

Technical Data:

Length:	100 mm
Thread:	M7



KL-0192-21

Clip Pliers



Suitable for Mercedes diesel engines OM604, OM605, OM606 with 4-valve technology.

For removal of the fuel return line from injectors on diesel engines.

KL-0192-23

Fuel Return Line Pliers



Especially applicable on Mercedes OM601, OM602, OM603 and VW Audi vehicles, where the injection nozzles are located very deep in the cylinder head.

For removal of the fuel return line from injectors on diesel engines.

KL-0489-10

Injector Nozzle Puller with Slide Hammer



Suitable for Opel/Vauxhall Diesel engines, e.g. 2.2 L.

The injector nozzle puller **KL-0489-10** enables the removal of tightly fitting injectors within just a few minutes.

Technical Data:

Slide Hammer Weight:	0,9 kg
Connecting thread (injector nozzle):	M17x0,75 mm
Length:	185 mm

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KL-0489-11

Injector Nozzle Puller with Pull Spindle



Suitable for Opel/Vauxhall Diesel engines, e.g. 2.2 L.

For the accurate removal of injector nozzles without risk of damage. If the bridge-type puller and spindle are used, even injector nozzles that are a extremely tight-fitting can be removed within just a few minutes.

Technical Data:

Connecting thread (injector nozzle):	M17x0.75 mm
Width (puller bridge):	136 mm

KL-1683-103

Cleaning Tool for Injector Nozzle Seat



Suitable for Common-Rail Diesel engines on Vauxhall/Opel, Fiat, Lancia, Suzuki 1.3 JTD, 1.3 CDTi, 1.3 JTD, 1.3 DDis / engine: Z13DT, 188A9.000.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.

Technical Data

Drive:	T-handle
Length:	261 mm
Cleaning tool Ø:	7.5 / 17 / 17.6 mm

Injector Nozzle Puller Set

(German Utility Model)

KL-0186-13 K

Suitable for Fiat Ducato and Iveco 2.3 L, 2.4 L and 3.0 L JTD Common-Rail Diesel engines.

The injector nozzle puller **KL-0186-13 K** enables the professional removal of very tight-fitting injection nozzles directly on the vehicle without having to dismantle the cylinder head.

Injection nozzles can be quickly and easily removed by using a special extraction bridge and the pull spindle.

For this purpose the injection nozzle has to be opened.

Scope of Delivery:**KL-0186-13 K Injector Nozzle Puller Set**

Part No.	Description	Qty.
KL-0186-131	Extraction bridge without spindle	1
KL-0583-1005	Pull spindle M17x1, 200 mm long	1
KL-0186-1215	Shoulder nut M16x1.5	1
KL-0369-4505 A	Special bit insert 10 mm hex	1
KL-0369-461 A	Special Socket 29 mm hex $\frac{1}{2}$ " drive	1
KL-0186-1290	Plastic storage case	1



Set of Support Bolts M8

KL-0186-1232

The set of bolts **KL-0186-1232** enables the injector puller set **KL-0186-14 K** also to be used for Fiat Ducato and Iveco 2.3; 2.4 and 3.0 JTD Common-Rail Diesel engines.



Injector Nozzle Puller Set

(German Utility Model)

KL-1683-10 K

Suitable for Fiat, Opel/Vauxhall, Suzuki 1.3 L Common-Rail diesel engines (engine code: Z13 DT, etc.)

This tool set enables the professional removal of very tight-fitting injection nozzles without having to dismantle the cylinder head.

The removal of injection nozzles from such kind of engines is particularly difficult due to the fact that two injection nozzles are always held by a single retaining clip. Therefore, when removing one of the injection nozzles, the second nozzle has to be pulled out in parallel with the first one.

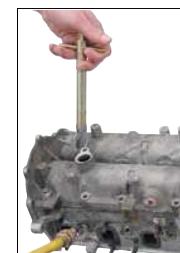
Injection nozzles can quickly and easily be removed by using the special extraction bridge and the two pull spindles.

Injection nozzle removal:

Unscrew injection nozzle heads with the special socket included in the set. Screw pull spindles into the injection nozzles, place pre-installed extraction bridge onto the valve cover and screw in shoulder nuts. Pull out nozzles by evenly turning the shoulder nuts. The compressed air supply prevents impurities from entering the combustion chamber.

Scope of Delivery:**KL-1683-10 K Injector Nozzle Puller Set**

Part No.	Description	Qty.
KL-1683-105	Extraction bridge with spindle	1
KL-0369-4505 A	Special bit insert hex 10 mm	1
KL-0369-461 A	Special socket insert hex 29 mm; 1/2" Drive	1
KL-1383-118	Compressed-air adaptor for glow plug bore M8x1	1
KL-1683-103	Cleaning tool for injection nozzle seat	1
KL-1683-1090	Plastic storage case	1



KL-0186-110

Injector Nozzle Puller for M14x1.5 without slide hammer (German Utility Model)



Suitable for 2.8 L JTD diesel engines e.g. Fiat Ducato, IVECO Daily, etc.

This tool enables the professional removal of injection nozzles without having to open or dismantle them. The slide hammer **KL-0369-4100** (1.5 kg) or **KL-0049-300** (4.8 kg) is needed to drive this tool.

By means of a special screw the injector nozzle puller is fixed to the fuel connection of the injector (M14x1) and enables, thanks to its special design the best possible power transmission without risking damage to the valve cover or the injection nozzle.

The stabilizing screws ensure that the tool can be adjusted individually to the nozzle head while providing at the same time the highest possible stability to the slide hammer.

Scope of Delivery:

KL-0186-110 Injector Nozzle Puller for M14x1.5 without slide hammer

Part No.	Description	Qty.
KL-0186-1101	Injector nozzle puller base body for M14x1.5	1
KL-0186-1102	Special screw M14x1.5	1

KL-0186-15 K

Injector Nozzle Puller Set PSA 2.7 and 3.0 HDI

(German Utility Model)

Suitable for PSA 2.7 L (DT17) and 3.0 L (DT20) Hdi diesel engines.

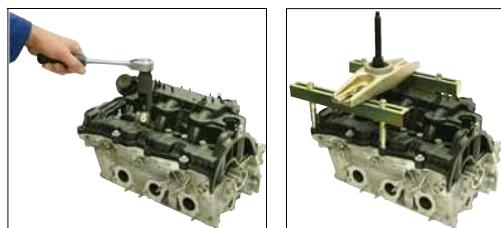
The injector nozzle puller **KL-0186-15 K** enables the extraction of very tight-fitting injector nozzles directly on the vehicle without having to remove the cylinder head.

Injector nozzles can quickly and easily be removed by using the special extraction bridge and the pull spindle. (The injector nozzle has to be opened for this)

Procedure: Unscrew nozzle head, screw in pull spindle, unscrew valve cover screws (4 units), assemble extraction bridge and screw on shoulder nut. Extract injector by turning shoulder nut.

Scope of Delivery:

KL-0186-15 K Injector Nozzle Puller Set PSA 2.7 and 3.0 HDI

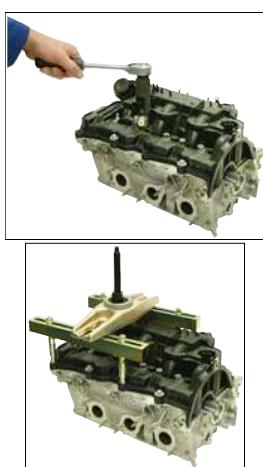


Part No.	Description	Qty.
KL-0186-121	Extraction bridge without spindle	1
KL-0186-1254	Set of spacer nuts 20mm (4 pieces)	1
KL-0186-1215	Shoulder nut M16x1.5	1
KL-1383-1021 H	Pull spindle M25x1, 240mm long	1
KL-1383-1022	Special socket size 25 mm, 1/2" drive	1
KL-0014-0030	Molybdenum disulphide paste 50g	1
KL-0186-1290	Plastic storage case	1

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KL-0186-150

Upgrade Kit (HDI) for KL-0186-14 K



The upgrade kit **KL-0186-150** allows the injector nozzle puller **KL-0186-14 K** also to be used for PSA 2.7 Hdi engines.

Scope of Delivery:

KL-0186-150 Upgrade Kit (HDI) for KL-0186-14 K

Part No.	Description	Qty.
KL-0186-1254	Set of spacer nuts 20mm	1
KL-1383-1021 H	Pull spindle M25x1, 240mm long	1
KL-1383-1022	Special socket size 25 mm, 1/2" drive	1

Injector Nozzle Puller Set

KL-1383-11 K

Suitable for PSA 2.0 L (110 PS, 135 PS) [DW10] and 2.2 L [DW12] HDI TwinCam engines e.g. Peugeot, Citroën etc.

Designed for the professional removal of very tight-fitting injector nozzles without removing the cylinder head from the vehicle.

The injector nozzle puller **KL-1383-11 K** enables the accurate extraction of very tight-fitting injector nozzles as well as the cleaning of the injector nozzle receiving bore and the injector seal seat.

Removal of the cylinder head is not necessary.

The special design of the extraction bridge ensures safe and accurate support, even if the injector nozzles are extremely tight-fitting.

Procedure injector nozzle removal:

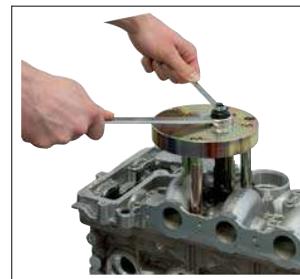
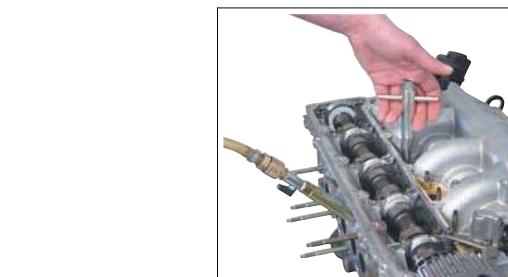
Unscrew injection nozzle head by means of the special socket included in the set. (DW10). Screw pull spindle into the injector nozzle, place pre-installed base tool onto cylinder head and screw in shoulder nut. Extract injector nozzle by evenly rotating shoulder nut. Injecting compressed-air into the combustion chamber prevents impurities from entering it.

**Scope of Delivery:****KL-1383-11 K Injector Nozzle Puller Set**

Part No.	Description	Qty.
KL-1383-118	Compressed-air adaptor for glow plug bore M8x1	1
KL-1383-119	Cleaning tool for injection nozzle seat	1
KL-1383-104	Cleaning tool for injection nozzle seat	1
KL-0369-55 A	Compressed-air adaptor for glow plug bore M10x1	1
KL-1383-110 K	Injector nozzle puller set Peugeot / Citroën 2.0 HDi + 2.2 HDi	1

**Scope of Delivery:****KL-1383-110 K Injector Nozzle Puller Set / Citroën 2.0 HDi + 2.2 HDi**

Part No.	Description	Qty.
KL-1383-1111	Base plate with axial bearing	1
KL-1383-1112	Shoulder nut M16x1.5	1
KL-1383-1113	Pull spindle M14x1.5; 127mm long	1
KL-1383-1114	Centring bolt Ø6.8 mm	2
KL-1383-1115	Support bolt Ø8.9 mm	2
KL-1383-1116	Support bolt Ø16x89.5 mm	1
KL-1383-1131	Brace support bolt Ø16x73.5	2
KL-1383-1001	Supporting plate	1
KL-1383-1021	Pull spindle M25x1, 127mm long	1
KL-1383-1022	Special socket hex 25 mm; ½" drive	1
KL-0369-4505 A	Special bit insert size 10mm	1
KL-0369-4606	Pull spindle M17x1, 127mm long	1
KL-0369-461 A	Special socket size 29mm ½" drive	1
KL-1283-1016	Hexagon socket screw M8x30 mm	4
KL-1383-1119	Plastic storage case	1



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KL-1383-110 K

Injector Nozzle Puller Set / Citroën 2.0 HDi + 2.2 HDi

Suitable for PSA 2.0 L (110, 135 PS) [DW10] and 2.2 L [DW12] HDI TwinCam engines such as Peugeot, Citroën etc.



Indispensable for the professional removal of very tight-fitting injector nozzles without removing the cylinder head from the vehicle.

The injector nozzle puller KL-1383-110 K enables accurate extraction of very tight-fitting injector nozzles. Removal of the cylinder head is not necessary.

The special design of the extraction bridge ensures safe and accurate support, even if the injector nozzles are extremely tight-fitting.

Procedure injector nozzle removal:

Unscrew injection nozzle head by means of the special socket included in the set. (DW10). Screw pull spindle on or into the injector nozzle, place pre-installed base tool onto cylinder head and screw in shoulder nut. Extract injector nozzle by evenly rotating shoulder nut.

Scope of Delivery: KL-1383-110 K Injector Nozzle Puller Set

Part No.	Description	Qty.
KL-1383-1111	Base plate with axial bearing	1
KL-1383-1112	Shoulder nut M16x1.5	1
KL-1383-1113	Pull spindle M14x1.5; 127mm long	1
KL-1383-1114	Centring bolt Ø6.8 mm	2
KL-1383-1115	Support bolt Ø8.9 mm	2
KL-1383-1116	Support bolt Ø16x89.5 mm	1
KL-1383-1131	Brace support bolt Ø16x73.5	2
KL-1383-1001	Supporting plate	1
KL-1383-1021	Pull spindle M25x1, 127mm long	1
KL-1383-1022	Special socket hex 25 mm; 1/2" drive	1
KL-0369-4505 A	Special bit insert size 10mm	1
KL-0369-4606	Pull spindle M17x1, 127mm long	1
KL-0369-461 A	Special socket size 29mm 1/2" drive	1
KL-1283-1016	Hexagon socket screw M8x30 mm	4
KL-1383-1119	Plastic storage case	1

KL-1383-113 K

Injector Nozzle Puller Set Peugeot / Citroën 2.0 HDi

Suitable for PSA 2.0 L (110, 135 PS) [DW10] TwinCam engines such as Peugeot, Citroën etc.

Indispensable for the professional removal of very tight-fitting injector nozzles without removing the cylinder head from the vehicle.

The injector nozzle puller KL-1383-113 K enables accurate extraction of very tight-fitting injector nozzles as well as cleaning the injector nozzle bore and injector seal seat. Removal of the cylinder head is not necessary.

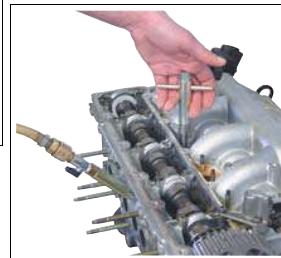
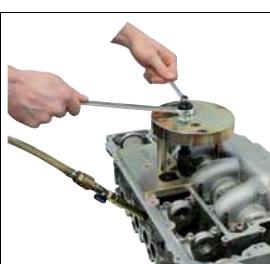
The special design of the extraction bridge ensures safe and accurate support, even if the injector nozzles extremely very tight-fitting.

Procedure of the injector nozzle removal:

Unscrew injector nozzle head by means of the special socket included in the set. Screw pull spindle into the injector nozzle, place pre-installed base tool onto cylinder head and screw in shoulder nut. Extract injector nozzle by evenly rotating shoulder nut. Injecting compressed-air into the combustion chamber prevents impurities from entering it.

Scope of Delivery: KL-1383-113 K Injector Nozzle Puller Set

Part No.	Description	Qty.
KL-1383-1111	Base plate with axial bearing	1
KL-1383-1112	Shoulder nut M16x1.5	1
KL-1383-1114	Centring bolt Ø6.8 mm	1
KL-1383-1131	Brace support bolt Ø16x73.5	2
KL-1383-1001	Supporting plate	1
KL-1383-1021	Pull spindle M25x1, 127mm long	1
KL-1383-1022	Special socket hex 25 mm; 1/2" drive	1
KL-1383-104	Cleaning tool for injection nozzle seat and bore	1
KL-0369-4505 A	Special bit insert size 10mm	1
KL-0369-4606	Pull spindle M17x1, 127mm long	1
KL-0369-461 A	Special socket size 29mm 1/2" drive	1
KL-0369-55 A	Compressed-air adaptor for glow plug bore M10x1	1
KL-1283-1016	Hexagon socket screw M8x30 mm	3
KL-1383-1119	Plastic storage case	1



Injector Nozzle Puller Set Peugeot / Citroën 2.0 HDi

KL-1383-114 K

Suitable for PSA 2.0 L (110, 135 PS) [DW10] TwinCam engines such as Peugeot, Citroën etc.

Indispensable for the professional removal of very tight-fitting injector nozzles without removing the cylinder head from the vehicle.

The injector nozzle puller **KL-1383-114 K** enables the accurate extraction of very tight-fitting injector nozzles. Removal of the cylinder head is not necessary. The special design of the extraction bridge ensures safe and accurate support, even if the injector nozzles are extremely tight-fitting.

Procedure of the injector nozzle removal:

Unscrew injector nozzle head by means of the special socket included in the set. Screw pull spindle into the injector nozzle, place pre-installed base tool onto cylinder head and screw in shoulder nut. Extract injector nozzle by evenly rotating shoulder nut.

Scope of Delivery:

KL-1383-114 K Injector Nozzle Puller Set Peugeot / Citroën 2.0 HDi

Part No.	Description	Qty.
KL-1383-1111	Base plate with axial bearing	1
KL-1383-1112	Shoulder nut M16x1.5	2
KL-1383-1114	Centring bolt Ø6.8 mm	1
KL-1383-1131	Brace support bolt Ø16x73.5	2
KL-1383-1001	Supporting plate	1
KL-1383-1021	Pull spindle M25x1, 127mm long	1
KL-1383-1022	Special socket hex 25 mm; 1/2" drive	1
KL-0369-4505 A	Special bit insert size 10mm	1
KL-0369-4606	Pull spindle M17x1, 127mm long	1
KL-0369-461 A	Special socket size 29mm 1/2" drive	1
KL-1283-1016	Hexagon socket screw M8x30 mm	3
KL-1383-1119	Plastic storage case	1



Injector Nozzle Puller with Slide Hammer 4,8 kg

KL-1383-12

Suitable for PSA 2.0 L (90PS) [DW10 TD]HDI single-camshaft-engines e.g. Peugeot, Citroën etc.

This tool is designed for the removal of tightly fitting injection nozzles.

Scope of Delivery:

KL-1383-12 Injector Nozzle Puller with Slide Hammer 4,8 kg

Part No.	Description	Qty.
KL-1383-121	Pull spindle set M17x1 [for Bosch injection nozzles]	1
KL-1383-122	Pull spindle set M27x1 [for Siemens injection nozzles]	1
KL-0369-411	Injector nozzle puller with slide hammer 4.8kg (without pull spindle)	1



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Cleaning Tool for Injection Nozzle Seal Seat

KL-1383-104

Suitable for the Common-Rail Diesel engines on Peugeot, Citroën, Fiat, Lancia, Suzuki 2.0 HDI, 2.0 JTD; engine code: DW10

- Mercedes; engine code: OM646 EVO
- Renault, Nissan, Vauxhall/Opel 2.2 DTI, CDTI, CDI; engine code: G9T
- Renault, Nissan, Vauxhall/Opel 2.5 DTI, CDTI, CDI; engine code: G9U

The special design of this cleaning tool enables the injection nozzle bore, the seal seat and the injector channel to be cleaned in one single operation.

Important! Before any re-installation of an injector, it is essential to clean the seal seat in the cylinder head from deposits such as carbon deposits in order to prevent leakage between cylinder head and injector.

**Technical Data:**

Drive:	T-handle
Length:	261 mm
Cleaning tool-Ø:	7.5 / 17 mm

KL-1383-111 K

Injector Nozzle Puller Set Peugeot / Citroën 2.2 HDi



Suitable for PSA 2.2 L [DW12] HDI TwinCam engines such as Peugeot, Citroën etc.

Indispensable for the professional removal of very tight-fitting injector nozzles without removing the cylinder head from the vehicle.

The injector nozzle puller **KL-1383-111 K** enables the accurate extraction of very tight-fitting injector nozzles as well as cleaning the injector nozzle bore and injector seal seat.

Removal of the cylinder head is not necessary.

The special design of the extraction bridge ensures safe and accurate support, even if the injector nozzles are extremely tight-fitting.

Procedure of the injector nozzle removal:

Screw pull spindle onto the injector nozzle, place pre-installed base tool onto cylinder head and screw in shoulder nut. Extract injector nozzle by evenly rotating shoulder nut. Injecting compressed-air into the combustion chamber prevents impurities from entering it.



Scope of Delivery:

KL-1383-111 K Injector Nozzle Puller Set Peugeot / Citroën 2.2 HDi

Part No.	Description	Qty.
KL-1383-1111	Base plate with axial bearing	1
KL-1383-1112	Shoulder nut M16x1.5	1
KL-1383-1113	Pull spindle M14x1.5; 127mm long	1
KL-1383-1114	Centring bolt Ø6.8 mm	2
KL-1383-1115	Support bolt Ø8.9 mm	2
KL-1383-1116	Support bolt Ø16x89.5 mm	1
KL-1383-118	Compressed-air adaptor for glow plug bore M8x1	1
KL-1383-119	Cleaning tool for injection nozzle seat and bore	1
KL-1283-1016	Hexagon socket screw M8x30 mm	4
KL-1383-1119	Plastic storage case	1

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KL-1383-112 K

Injector Nozzle Puller Set Peugeot / Citroën 2.2 HDi



Suitable for PSA 2.2 L [DW12] HDI TwinCam engines such as Peugeot, Citroën etc.

Indispensable for the professional removal of very tight-fitting injector nozzles without removing the cylinder head from the vehicle.

The injector nozzle puller **KL-1383-112 K** enables the accurate extraction of very tight-fitting injector nozzles. Removal of the cylinder head is not necessary. The special design of the extraction bridge ensures safe and accurate support, even if the injector nozzles are extremely tight-fitting.

Procedure of the injector nozzle removal:

Screw pull spindle onto the injector nozzle, place pre-installed base tool onto cylinder head and screw in shoulder nut. Extract injector nozzle by evenly rotating shoulder nut.

Scope of Delivery:

KL-1383-112 K Injector Nozzle Puller Set Peugeot / Citroën 2.2 HDi

Part No.	Description	Qty.
KL-1383-1111	Base plate with axial bearing	1
KL-1383-1112	Shoulder nut M16x1.5	1
KL-1383-1113	Pull spindle M14x1.5; 127mm long	1
KL-1383-1114	Centring bolt Ø6.8 mm	2
KL-1383-1115	Support bolt Ø8.9 mm	2
KL-1383-1116	Support bolt Ø16x89.5 mm	1
KL-1283-1016	Hexagon socket screw M8x30 mm	4
KL-1383-1119	Plastic storage case	1



Cleaning Tool for Injector Nozzle Seat

KL-1383-119

Suitable for the Common-Rail Diesel engines DW12 on Peugeot, Citroën, Fiat, Lancia 2.2 HDI, 2.2 JTD.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.



Cleaning Tool for Injector Nozzle Seat

KL-1383-1311

Suitable for the 1.6l PSA Common-Rail Diesel engines on

- Fiat 1.6l HDI; engine code: DV6, 9HX, 9HY, 9HZ
- Ford 1.6l TDCi; engine code: G8DA, G8DB, HHDA, HHJA, HHJB
- Volvo 1.6l D; engine code: D4164T
- Mazda 1.6l D; engine code: Y6

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.



Technical Data:

Drive:	T-Handle
Length:	295 mm
Cleaning tool-Ø	7.5 / 17 / 17.6 / 18.7 mm

Cleaning Tool Set for Injector Nozzle Seat with Compressed-air Adaptor

KL-1383-131 K

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Suitable for:

- PSA, Fiat 1.6l HDI engines: DV6, 9HX, 9HY, 9HZ
- Ford 1.6l TDCi engines: G8DA, G8DB, HHDA, HHJA, HHJB
- Volvo 1.6l D engines: D4164T
- Mazda 1.6l D engines: Y6

The special design of the cleaning tool **KL-1383-1311** allows the injector nozzle mounting hole, the nozzle seal seat, and the small aperture leading to the combustion chamber to be cleaned in a single operation. Screwing in the compressed-air adaptor **KL-1383-118** into the glow plug bore and injecting air into the combustion chamber prevent impurities from entering the combustion chamber.

Scope of Delivery:

KL-1383-131 K Cleaning Tool Set for Injector Nozzle Seat with compressed-air adaptor

Part No.	Description	Qty.
KL-1383-118	Compressed-air adaptor for glow plug bore M8x1	1
KL-1383-1311	Cleaning tool for injector nozzle seat	1
KL-1383-1329	Plastic storage case	1



KL-1383-132 K

Cleaning Tool Set for Injector Nozzle Seat with compressed-air Adaptor



Suitable for:

Mercedes: OM639, OM640, OM642, OM651

PSA: 2.7 HDI engine: DT17, 3.0 HDI engine: DT20

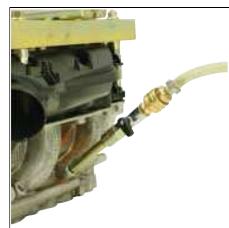
The special design of the cleaning tool **KL-0369-20 A** allows the injector nozzle mounting hole, the nozzle seal seat, and the small aperture leading to the combustion chamber to be cleaned in a single operation.

Screwing in the compressed-air adaptor **KL-1383-118** into the glow plug bore and injecting air into the combustion chamber prevent impurities from entering the combustion chamber.

Scope of Delivery:

KL-1383-132 K Cleaning Tool Set for Injector Nozzle Seat with compressed-air adaptor

Part No.	Description	Qty.
KL-1383-118	Compressed-air adaptor for glow plug bore M8x1	1
KL-0369-20 A	Cleaning tool for injector nozzle seat	1
KL-1383-1329	Plastic storage case	1



KL-1283-13 K

Injector Nozzle Puller Set Renault 1.5 + 1.9 dCi

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Suitable for 1.5 dCi (engine code: K9K) and 1.9 dCi (engine code: F9Q) Common Rail-Diesel engines.

On Renault, Dacia, Nissan, Vauxhall/Opel, Suzuki, etc.

This puller enables professional extraction of very tight-fitting injector nozzles as well as cleaning the injector nozzle bore hole and seal seat without having to remove the cylinder head from the vehicle.

The special design of the extraction bridge ensures safe and accurate support, even if the injectors are extremely tight-fitting.

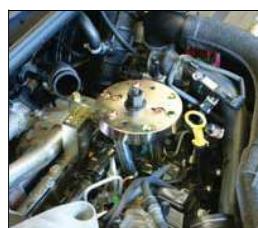
Alternatively, hydraulic cylinder 17t **KL-0040-170** in conjunction with a special pull spindle and a hydraulic pump such as **KL-0215-35 M25** can be used instead of a mechanical drive.

The injector nozzle puller set **KL-1283-13 K** includes the tools of the injector nozzle puller set **KL-1283-11 K** (1.9 dCi; F9Q) and of injector nozzle puller set **KL-1283-12 K** (1.5 dCi; K9K).

Scope of Delivery:

KL-1283-13 K Injector Nozzle Puller Set Renault 1.5 + 1.9 dCi

Part No.	Description	Qty.
KL-1283-115	Extraction bridge with spindle 1.9 dCi	1
KL-1283-112	Cleaning tool for injector nozzle seat	1
KL-0369-4505 A	Special bit insert dim. 10mm	1
KL-0369-55 B	Compressed-air adaptor for glow plug bore M10x1	1
KL-1283-103	Special socket dim. 30 mm, 1/2" drive	1
KL-1283-1211	Support plate	1
KL-1283-1212	Support bolt with pin	1
KL-1283-1213	Shaped plate	1
KL-1383-1113	Pull spindle M14x1.5; 127mm long	1
KL-1283-122	Cleaning tool for injector nozzle seat	1
KL-0014-0030	Molybdenum disulphide paste 50g	1
KL-1283-1290	Plastic storage case	1



Injector Nozzle Puller Set

KL-1283-11 K

Suitable for 1.9 dCi engines (engine code: F9Q) e.g. Renault, Nissan, Opel/Vauxhall, Suzuki,etc.

For the professional removal of very tight-fitting injection nozzles without having to remove the cylinder head.

The injector nozzle puller **KL-1283-11 K** enables the precise extraction of very tight-fitting injection nozzles as well as cleaning the injector nozzle mounting bore and seat.

It is not necessary to remove the cylinder head from the vehicle.

The special shape of the extraction bridge ensures safe and precise support even if the injector nozzles are extremely tight-fitting.

Injector nozzle removal:

Unscrew injection nozzle head with the special socket included in the set. Screw pull spindle into the injection nozzle, place pre-installed base tool onto the cylinder head and screw in shoulder nut. Pull out nozzle by turning the shoulder nut. Compressed air supply prevents impurities from entering the combustion chamber.



Injector Nozzle Puller Set

KL-1283-110 K

Suitable for 1.9 dCi engines (engine code: F9Q) e.g. Renault, Nissan, Opel/Vauxhall, Suzuki,etc.

Indispensable for the professional removal of very tight-fitting injection nozzles without having to remove the cylinder head.

The injector nozzle puller **KL-1283-110 K** enables the precise extraction of very tight-fitting injection nozzles as well as cleaning the injector mounting bores and seats.

It is not necessary to remove the cylinder head from the vehicle.

The special shape of the extraction bridge ensures safe and precise support even if the injector nozzles are extremely tight-fitting.

Injector nozzle removal:

Unscrew injection nozzle head with the special socket included in the set. Screw pull spindle into the injection nozzle, place pre-installed base tool onto the cylinder head and screw in shoulder nut. Pull out nozzle by evenly turning the shoulder nut.



Scope of Delivery:
KL-1283-110 K Injector Nozzle Puller Set

Part No.	Description	Qty.
KL-1283-115	Extraction bridge with spindle 1.9 dCi	1
KL-1283-112	Cleaning Tool for injection nozzle seat	1
KL-0369-4505 A	Special Bit Insert Size (width across flats) 10	1
KL-0369-55 B	Compressed-air adaptor for glow plug bore M10x1	1
KL-1283-103	Special Socket Size (width across flats) 30, Drive $\frac{1}{2}$	1
KL-1283-1190	Plastic storage case	1

KL-1283-12 K

Injector Nozzle Puller Set Renault 1.5 dCi



**Suitable for 1.5 dCi (engine code: K9K) Common Rail-Diesel engines.
On Renault, Dacia, Nissan, Vauxhall/Opel, Suzuki, etc.**

Indispensable tool for the professional removal of very tight-fitting injector nozzles in-situ on the vehicle without having to remove the cylinder head.

The injector nozzle puller set **KL-1283-12 K** enables accurate extraction of very tight-fitting injector nozzles as well as cleaning the injector nozzle bore and the seal seat.

Removal of the cylinder head is not necessary. The special design of the extraction bridge ensures safe and accurate support, even if the injector nozzles are extremely tight-fitting.

Scope of Delivery:

KL-1283-12 K Injector Nozzle Puller Set Renault 1.5 dCi

Part No.	Description	Quantity
KL-1283-125	Extraction bridge with spindle 1.5 dCi	1
KL-1283-122	Cleaning tool for injector nozzle seat	1
KL-0369-55 B	Compressed-air adaptor for glow plug bore M10x1	1
KL-0014-0030	Molybdenum disulphide paste 50g	1
KL-1283-1290	Plastic storage case	1

KL-0186-18 K

Injector Nozzle Puller Set Renault 2.2 L and 2.5 L dci (German Utility Model)



Suitable for Renault, Nissan, Vauxhall/Opel 2.2 L and 2.5 L dci Diesel engines (Engine code: G9T and G9U), for example, Renault: Avantime, Espace (III), Espace (IV), Laguna (II), Master (II), Master (III), Traffic (II), Vel Satis; Nissan: Interstar, Primastar and Vauxhall/Opel: Movano, Vivaro.

The injector nozzle puller set **KL-0186-18 K** enables the professional removal of very tight-fitting injector nozzles in situ on the vehicle without having to remove the cylinder head.

The special extraction bridge and the pull spindle allow the user to quickly and easily extract the injector nozzle. (The injector nozzle has to be opened for this) Procedure: Unscrew nozzle head, screw in pull spindle, unscrew valve cover screws (4 units), assemble extraction bridge and screw on shoulder nut. Extract injector nozzle by turning shoulder nut.

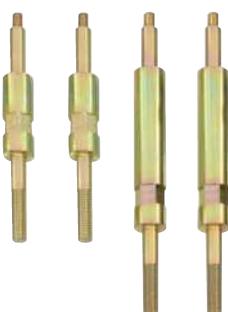
Scope of Delivery:

KL-0186-18 K Injector Nozzle Puller Set Renault 2.2 L and 2.5 L dci

Part No.	Description	Quantity
KL-0186-181	Extraction bridge without spindle	1
KL-0583-1005	Pull spindle M17x1, 200mm long	1
KL-0186-1215	Shoulder nut M16x1.5	1
KL-0369-4505 A	Special bit insert size 10mm	1
KL-0369-461 A	Special socket dim. 29mm 1/2" drive	1
KL-0014-0030	Molybdenum disulphide paste 50g	1
KL-0186-1290	Plastic storage case	1

KL-0186-1234

Set of Support Bolts M6



Used in conjunction with the set of bolts **KL-0186-1234**, the injector nozzle puller set **KL-0186-14 K** also is suitable for Renault, Nissan, Vauxhall/Opel 2.2 L and 2.5 L dci Diesel engines (engine code: G9T and G9U) such as Renault: Avantime, Espace III, Espace IV, Laguna II, Master II, Master III, Traffic II, Vel Satis; Nissan: Interstar, Primastar and Vauxhall/Opel: Movano, Vivaro.

Scope of Delivery:

KL-0186-1234 Set of support bolts M6

Part No.	Description	Qty.
KL-0186-1234-1	Support bolt with set-screw, 113.5mm	2
KL-0186-1234-2	Support bolt with set-screw 150mm	2

Injector Nozzle Puller Set Renault 3.0 dci

(German Utility Model)

KL-0186-19 K

Suitable for Renault, Nissan, Vauxhall/Opel 3.0L Common Rail Diesel engines (engine code: ZD3) such as Renault: Master (II and III), Master Maxi; Nissan: Cabstar (III), Instar, Patrol (III), Patrol GR (II), Terano and Vauxhall/Opel: Movano (II).

The injector nozzle puller **KL-0186-19 K** enables the removal of very tight-fitting injector nozzles in-situ on the vehicle without the need to remove the cylinder head from the vehicle.

By using the special extraction bridge and pull spindle, the injector nozzle can be extracted quickly and easily. (The injector nozzle has to be opened for this.) Procedure: Unscrew nozzle head, screw in pull spindle, unscrew valve cover screws (4 units), assemble extraction bridge and screw on shoulder nut. Extract injector nozzle by turning shoulder nut.

**Scope of Delivery: KL-0186-19 K Injector Nozzle Puller Set Renault 3.0 dci**

Part No.	Description	Qty.
KL-0186-191	Extraction Bridge without spindle	1
KL-0186-1611 H	Pull spindle M20x1, 250 mm long	1
KL-0186-1215	Shoulder nut M16x1.5	1
KL-0583-1005	Pull spindle M17x1, 200mm long	1
KL-0369-4505 A	Special bit insert size 10mm	1
KL-0369-461 A	Special socket size 29mm 1/2" drive	1
KL-0014-0030	Molybdenum disulfide paste 50 g	1
KL-0186-1290	Plastic storage case	1

Upgrade kit for KL-0186-14 K (to form KL-0186-19 K)

KL-0186-190

The upgrade kit **KL-0186-190** enables the injector nozzle puller **KL-0186-14 K** also to be used for Renault, Nissan, Vauxhall/Opel 3.0L Common Rail Diesel engines (engine code: ZD3) such as Renault: Master II, Master III, Master Maxi; Nissan: Cabstar III, Instar, Patrol III, Patrol GR II, Terano and Vauxhall/ Opel: Movano II.



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Cleaning Tool for Injector Nozzle Seat

KL-1283-112



Suitable for the Common-Rail Diesel engines F9Q on Renault, Nissan, Vauxhall/Opel, Suzuki, Mitsubishi 1.9 dTi, 1.9 dCi, 1.9 CDTI, 1.9 Di, 1.9 DDis, 1.9 Di-D.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.

Cleaning Tool for Injector Nozzle Seat

KL-1283-122



Suitable for the Common-Rail Diesel engines K9K on Renault, Suzuki, Nissan, Dacia 1.5 dCi, 1.5 DDis.

In a single machining operation, the specially shaped cleaning tool produces a clean finish on the injector mounting hole, the nozzle seal seat and the small aperture leading to the combustion chamber.

Indispensable procedure before re-installing an injection nozzle to avoid leakage between cylinder head and injection nozzle.

Technical data

Drive	T-handle
Length:	265 mm
Cleaning tool Ø:	7.5 / 17 / 20.1 mm

KL-0186-161 K

Injector Nozzle Puller Set Toyota 2.2 L

(German Utility Model)

Suitable for Toyota 2.2 L Common-Rail Diesel engines (engine code 2AD-FHV, 2AD-FTV)



The injector nozzle puller **KL-0186-161 K** enables the extraction of very tight-fitting injector nozzles directly on the vehicle without having to remove the cylinder head.

Injector nozzles can quickly and easily be removed by using the special extraction bridge and the pull spindle. (The injector nozzle has to be opened for this.)

Procedure: Unscrew nozzle head, screw in pull spindle, unscrew valve cover screws (4 units), assemble extraction bridge and screw on shoulder nut. Extract injector by turning shoulder nut.

Scope of Delivery:

KL-0186-161 K Injector Nozzle Puller Set Toyota 2.2 L

Part No.	Description	Quantity
KL-0186-1231	Support bolt set (4 pieces)	1
KL-0186-1211	Base plate	1
KL-0186-1212	Support bar	2
KL-0186-1213	Screw for T-slot M8	2
KL-0186-1214	Adaptor with axial bearing	1
KL-0186-1215	Shoulder nut M16x1.5	1
KL-0206-1011	Shoulder nut M8	6
KL-0186-1251	Set of spacer nuts 5mm (4 pieces)	1
KL-0014-0030	Molybdenum disulphide paste 50g	1
KL-0186-1611	Pull spindle, M20x1, 145 mm long	1
KL-0186-1612	Pull spindle M16 x 1, 145 mm long	1
KL-4417-17	Open-ended spanner size 17 mm	1
KL-0186-1290	Plastic storage case	1

KL-0186-1610

Upgrade Kit for KL-0186-14 K (to form KL-0186-161 K)



The upgrade kit **KL-0186-1610** enables the injector nozzle puller **KL-0186-14 K** also to be used for Toyota 2.2 L Common-Rail Diesel engines (engine code 2AD-FHV, 2AD-FTV)

Scope of Delivery:

KL-0186-1610 Upgrade Kit for KL-0186-14 K (to form KL-0186-161 K)

Part No.	Description	Qty.
KL-0186-1611	Pull spindle M20x1, 145 mm long	1
KL-0186-1612	Pull spindle M16 x 1, 145 mm long	1
KL-4417-17	Open-end spanner socket, size 17mm	1

KL-0186-163 K

Cleaning Tool for Injector Nozzle Seat with Compressed-air Adaptor

Suitable for Toyota 2.2 und 3.0 L Common-Rail Diesel engines (engine code 2AD-FHV, 2AD-FTV and 1KD-FTV)



In a single operation, the specially shaped cleaning tool **KL-0369-20 A** produces a clean finish on the injector mounting hole, the nozzle seat and the small aperture leading to the combustion chamber.

Screwing in the compressed-air adaptor **KL-0186-1631** into the glow plug bore and injecting air into the combustion chamber, prevent impurities from entering the combustion chamber.

Scope of Delivery:

KL-0186-163 K - Cleaning Tool for injector nozzle seat with compressed-air adaptor

Part No.	Description	Qty.
KL-0186-1631	Compressed-air adaptor for glow plug bore M10x1.25	1
KL-0369-20 A	Cleaning tool for injector nozzle seat	1
KL-1383-1329	Plastic storage case	1

Hydraulic Cylinder 17 t (short) with shoulder nut M16x1.5

KL-0040-170

This tool enables the controlled, professional and safe extraction of very tight-fitting injection nozzles. It is used in conjunction with a special pull spindle, a KLANN-injector nozzle puller with extraction bridge and a KLANN hydraulic pump with manometer.

The hydraulic cylinder with shoulder nut **KL-0040-170** in conjunction with a special pull spindle (with ending H) is placed onto the extraction bridge instead of a mechanical drive. The special dial gauge (**KL-0040-2529 / KL-0040-2528**) of the hydraulic pump **KL-0215-35 M25** or **KL-0215-37 M25** ensures that the applied force can be checked during the extraction process.

Note: Injector nozzle puller **KL-0369-46 K** and **KL-1383-10 K** additionally require the spacer ring **KL-0040-1751**.

Technical Data:

Maximum force:	170 KN (17t)
Maximum stroke:	15 mm
Maximum volume of oil:	41 cm ³
Max. oil pressure:	700 bar
Piston area:	27 cm ²
Cylinder outer diameter:	79 mm
Cylinder overall height, (piston retracted):	89 mm
Cylinder overall height, (piston extended):	104 mm
Passage bore in tubular piston	Ø16.5 mm
Hydraulic oil connection:	3/8"-18 NPT
Weight:	2.7 kg

Scope of Delivery:

KL-0040-170 Hydraulic Cylinder 17 t (short) with shoulder nut M16x1.5

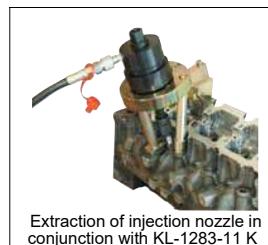
Part No.	Description	Qty.
KL-0040-1700	Hydraulic Cylinder 17 t (short)	1
KL-0040-1741-2	Shoulder nut M16x1.5	1



Extraction of injection nozzle in conjunction with KL-1383-11 K



Extraction of injection nozzle in conjunction with KL-0583-10 K



Extraction of injection nozzle in conjunction with KL-1283-11 K



Extraction of injection nozzle in conjunction with KL-1383-11 K

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Hydraulic Hand Pump

KL-0215-35 M25

The hydraulic hand pump **KL-0215-35 M25** is used to drive the hydraulic cylinder (17 t) **KL-0040-2500** or **KL-0040-170**.

The hydraulic pressure and necessary force can be checked while operating the pump at pressure gauge **KL-0040-2529** (supplied with the tool set). The pressure gauge features an additional drum-type tonne scale matched to our **KL-0040-2500** hydraulic cylinder (17 t).

Technical Data:

Weight:	7.5 kg
Max. Pressure:	700 bar

Note:

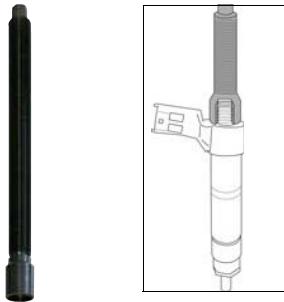
A hydraulic hand pump with a pressure gauge matching the hydraulic cylinder **KL 0040 2200** (10 t) or **KL-0040-2800** (28 t) is optionally available upon request.



Scope of Delivery:

KL-0215-35 M25 Hydraulic Hand Pump

Part No.	Description	Qty.
KL-0215-33	Hydraulic hand pump (without hose)	1
KL-0215-31	Hydraulic hose 1.8 m with hose-side connector	1
KL-0215-322	Cylinder-side connector 1/4" NPT	1
KL-0040-2520	Adaptor 3/8" NPT to 1/4" NPT	1
KL-0040-2529	Pressure Gauge	1

Pull spindle M14x1.5


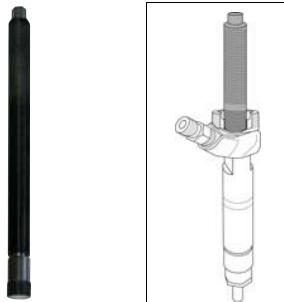
Suitable for injection nozzles with M14x1.5 external thread.

KL-1383-1113 H Pull spindle M14x1.5
Technical Data:

Connecting thread	M14x1.5
Length:	240mm

KL-0583-1032 H Pull Spindle M14x1.5
Technical Data:

Connecting thread	M14x1.5
Length:	315mm

Pull Spindle M17x1


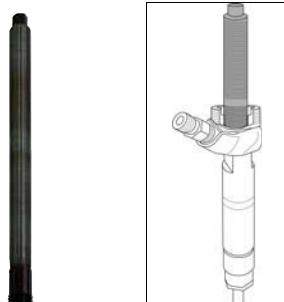
Suitable for injection nozzles with M17x1 internal thread.

KL-0369-4606 H Pull Spindle M17x1
Technical Data:

Connecting thread	M17x1
Length:	240mm

KL-0583-1005 H Pull Spindle M17x1
Technical Data:

Connecting thread	M17x1
Length:	315mm

KL-0186-1711 H Pull spindle M18


This tool is needed if the hydraulic cylinder **KL-0040-170** is used as a drive for the injector nozzle puller **KL-0186-17 K**.

Technical Data:

Connecting thread:	M18
Length:	250 mm

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KL-1383-1021 H Pull Spindle M25x1


Suitable for injection nozzles with M25x1 internal thread.

Technical Data:

Connecting thread	M25x1
Length:	240mm

KL-0040-1751 Distance ring


This tool is needed if the hydraulic cylinder **KL-0040-170** is used as a drive for the injector nozzle puller **KL-0369-46 K** or **KL-1383-10 K**.

Glow Plug Tool Set (Universal)

KL-0132-52 K

Suitable for glow plug thread M10x1 e.g. VW-Audi, Mercedes, Opel/Vauxhall, Peugeot, Renault etc.

This universal tool set **KL-0132-52 K** enables the quick and easy drilling out of damaged or broken off glow plugs.

The glow plug head is drilled out or drilled up by means of the core-hole drill. The original thread is recut and cleaned using the special tap for threaded inserts. The remaining glow plug body can then be extracted using the special tap or a puller bolt in conjunction with a slide hammer such as **KL-0049-100**. The tool set additionally contains two special guide sleeves for VW Audi V6 TDI and Mercedes CDI engines which ensure accurate alignment and guidance as well as precise drilling depth.

Scope of Delivery:

KL-0132-52 K Glow Plug Tool Set (Universal)

Part No.	Description	Qty.
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-0283-7003	Guide sleeve Ø 13 mm	1
KL-0132-5201	Guide sleeve for Mercedes	1
KL-0283-7021	Core-hole drill Ø 9.1 mm for M10x1	1
KL-0283-7022	Thread tap M10x1	1
KL-0369-306	Tool holder with square socket 2.4 – 5.5 mm	1
KL-0369-3056	Thread tap 1/4"-20 UNC with bit	1
KL-0132-5202	Puller bolt 1/4"-20 UNC for slide hammer puller	1
KL-0132-5290	Plastic storage case	1



Slide Hammer Puller Basic Tool

KL-0049-100

This tool is designed to extract tightly fitting and seized components such as glow plugs, spindles etc. Used in conjunction with the specified adaptors or puller bolts.

Scope of Delivery:

KL-0049-100 Slide Hammer Puller Basic Tool

Part No.	Description	Qty.
KL-0049-1503	Tie rod	1
KL-0049-1012	Handle	1
KL-0049-1013	Hammer weight	1
KL-0049-1003	Hex nut M10	2



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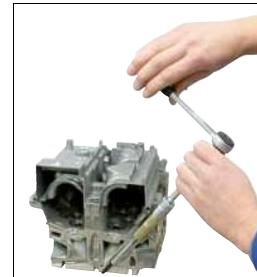
Drum-type Turning Tool

KL-0369-300 A

Designed to twist off electrode heads or protruding central electrodes.

Technical Data:

Electrode Ø:	2.5 - 4.5 mm
Length:	70 mm



KL-0283-70 K

Glow Plug Tool Set VW-Audi



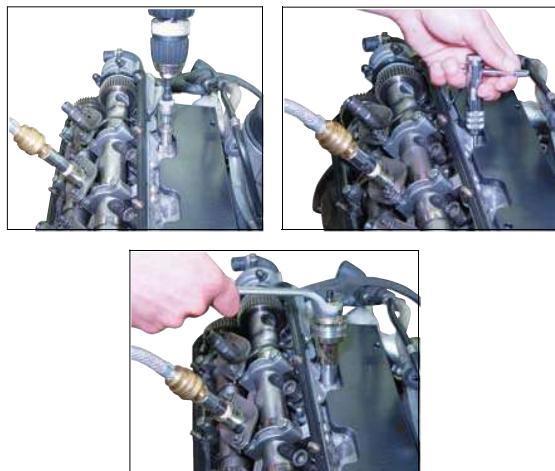
Suitable for glow plug thread M10x1 e.g. VW-Audi 2.5; 2.7 and 3.0 L V6 TDI engines.

The glow plug tool set **KL-0283-70 K** enables the quick, accurate and professional drilling out of damaged or torn off glow plugs as well as recutting, cleaning and even repairing glow plug retaining threads and cleaning glow plug bores.

The glow plug head is drilled out or drilled up by means of the core-hole drill. Then, the original thread is recut and cleaned using the special thread tap. Damaged glow plug retaining threads are rethreaded to M12x1 with the special thread tap.

The centring / guide sleeves included in this tool set, ensure accurate and correct centring and guidance as well as the exact drilling depth whilst drilling out and during the thread repair. The remaining glow plug body can then be extracted with the puller.

Finally the glow plug hole, the sealed seat and the glow plug channel can be cleaned with the reamer.



Scope of Delivery:

KL-0283-70 K Glow Plug Tool Set VW-Audi

Part No.	Description	Qty.
KL-0283-7001	Cover plate	1
KL-0369-300 A	Drum-type turning tool	1
KL-0283-7002	Guide sleeve Ø13 mm long	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-1383-203	Milling cutter for glow plug electrode	1
KL-0283-7003	Guide sleeve Ø 13 mm	1
KL-0283-7021	Core-hole drill Ø9.1 mm for M10x1	1
KL-0283-7022	Thread tap M10x1	1
KL-0283-704	Compressed air adaptor for injection nozzle bore	1
KL-0369-306	Tool holder with square socket 2.4 – 5.5 mm	1
KL-0283-705	Puller tool for glow plug body	1
KL-0283-7061	Reamer, (long)	1
KL-0283-7062	Reamer, (short)	1
KL-0283-7063	Guide sleeve for reamer	1
KL-0283-7031	Core-hole drill Ø 11.1 mm for M12x1	1
KL-0283-7032	Thread tap M12x1	1
KL-0369-3023	Threaded sleeve set M10x1, 17 mm long (10 pieces)	1
KL-0283-7090	Plastic storage case	1

KL-0283-70-1 K

Upgrade Kit (TDI) for KL-0369-30 K (to form KL-0283-70 K)

By using the upgrade kit **KL-0283-70-1 K**, the glow plug tool set **KL-0369-30 K** also is suitable for VW-Audi V6 TDI engines.

Scope of Delivery:

KL-0283-70-1 K Upgrade Kit (TDI) for KL-0369-30 K (to form KL-0283-70 K)

Part No.	Description	Qty.
KL-0283-7001	Cover plate	1
KL-0283-7002	Guide sleeve Ø13 mm, long	1
KL-0369-300 A	Drum-type turning tool	1
KL-1383-203	Milling cutter for glow plug electrode	1
KL-0283-7003	Guide sleeve Ø13 mm	1
KL-0283-704	Compressed-air adaptor for injection nozzle bore	1
KL-0283-7050	Puller tool (base tool)	1
KL-0283-7052	Support sleeve	1
KL-0283-7061	Reamer (long)	1
KL-0283-7062	Reamer (short)	1
KL-0283-7063	Guide sleeve for reamer	1
KL-0283-7090	Plastic storage case	1



Glow Plug Tool Set CDI

(Pat. e.g. US-Patent 7,484,281)

KL-0369-30 K

Suitable for Mercedes CDI engines OM 611, 612, 613, 646*, 647 and 648 etc.
(not suitable for 646 EVO)

Designed for the accurate and professional removal of seized glow plugs without removing the cylinder head from the vehicle.

The glow plug tool set **KL-0369-30 K** enables a damaged glow plug to be removed or drilled out and the original M10x1 thread to be recut accurately. It also allows the repair of a damaged glow plug thread M10x1 by drilling up to M12x1. The new glow plug is then screwed with a threaded sleeve (M12x1 to M10x1) into the cylinder head.

Glow plugs or glow plug bodies seized in the glow plug channel can be extracted with the puller included in the tool set.

Scope of Delivery:**KL-0369-30 K Glow Plug Tool Set CDI**

Part No.	Description	Qty.
KL-0369-300 A	Drum-type turning tool	1
KL-0369-3011	Core-hole drill Ø 9.1 mm for M10x1	1
KL-0369-3012	Thread tap M10x1	1
KL-0369-3021	Core-hole drill Ø 11.1 mm for M12x1	1
KL-0369-3022	Thread tap M12x1	1
KL-0369-3023	Set of threaded sleeves M10x1, 17 mm long (10 units.)	1
KL-0369-3013	Guide sleeve for drill	1
KL-0369-3014	Centring sleeve	1
KL-0369-303	Mounting / Dismounting tool for centring sleeve	1
KL-0369-3041	Guide sleeve for reamer	1
KL-0369-3042	Reamer	1
KL-0369-305	Puller for glow plug body	1
KL-0369-2013	Collet chuck	1
KL-0369-306	Tool holder with square socket 2.4 – 5.5 mm	1
KL-0369-55	Compressed-air adapter for injector nozzle bore CDI	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-0369-3090	Plastic storage case	1



Glow Plug Tool Set CDI

(Pat. e.g. US-Patent 7,484,281)

KL-0369-31 K

Suitable for Mercedes CDI engines OM 611, 612, 613, 646*, 647 and 648 etc.
(*not for 646 EVO)

Designed for the accurate and professional removal of seized glow plugs without removing the cylinder head from the vehicle.

The glow plug tool set **KL-0369-31 K** enables the accurate removal or drilling out of damaged glow plugs as well as recutting the original M10x1 thread.

Glow plugs or glow plug bodies seized in the glow plug channel can be extracted with the puller included in the tool set.

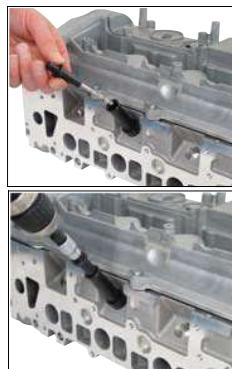
Scope of Delivery:**KL-0369-31 K Glow Plug Tool Set CDI**

Part No.	Description	Qty.
KL-0369-300 A	Drum-type turning tool	1
KL-0369-3011	Core-hole drill Ø 9.1 mm for M10x1 thread	1
KL-0369-3012	Thread tap M10x1	1
KL-0369-3013	Guide sleeve for drill	1
KL-0369-3014	Centring sleeve	1
KL-0369-303	Fitting/removing tool for centring sleeve	1
KL-0369-3041	Guide sleeve for reamer	1
KL-0369-3042	Reamer	1
KL-0369-305	Puller for glow plug body	1
KL-0369-306	Tool holder with square socket 2.4 – 5.5	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-0369-3090	Plastic storage case	1



KL-0369-307 K

Milling Cutter for Glow Plug Electrode



Suitable for Mercedes CDI engines OM 611, 612, 613, 646, 647 and 648.

This tool complements our glow plug tool sets **KL-0369-30 K** and **KL-0369-31 K** respectively. The milling cutter enables milling off the centre electrode of torn off glow plugs in conjunction with the glow plug tool set **KL-0369-30 K** and **KL-0369-31 K**.

Scope of Delivery:

KL-0369-307 K Milling Cutter for Glow Plug Electrode

Part No.	Description	Qty.
KL-0369-3071	Guide sleeve Ø 17x75 mm	1
KL-0369-3072	Guide sleeve Ø 17x60 mm	1
KL-0369-3073	Guide sleeve Ø 17x41 mm	1
KL-0369-3031 A	Base body 75 mm long	1
KL-1383-203	Milling cutter for glow plug electrode	1
KL-0369-3079	Plastic storage case	1

KL-0369-30-1 K

Upgrade Kit (CDI) for KL-0369-32 K (to form KL-0369-30 K)

(Pat. e.g. US-Patent 7,484,281)



By using the upgrade kit **KL-0369-30-1 K**, the glow plug tool set **KL-0369-32 K** also is suitable for the Mercedes CDI engines OM 611, 612, 613, 628, 646*, 647, 648 etc. (*not suitable for 646 EVO).

Scope of Delivery:

KL-0369-30-1 K Upgrade kit (CDI) for KL-0369-32 K (to form KL-0369-30 K)

Part No.	Description	Qty.
KL-0369-3013	Guide sleeve for drill	1
KL-0369-3014	Centring sleeve	1
KL-0369-303	Mounting / Dismounting tool for centring sleeve	1
KL-0369-3041	Guide sleeve for reamer	1
KL-0369-3042	Reamer	1
KL-0369-2013	Collet chuck	1
KL-0369-3090	Plastic storage case	1

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KL-0369-30-2 K

Upgrade Kit (CDI) for KL-0369-33 K (to form KL-0369-30 K)

(Pat. e.g. US-Patent 7,484,281)



By using the upgrade kit **KL-0369-30-2 K**, the glow plug tool set **KL-0369-33 K** also is suitable for the Mercedes CDI engines OM 611, 612, 613, 628, 646*, 647, 648 etc. (*not suitable for 646 EVO).

Scope of Delivery:

KL-0369-30-2 K Upgrade kit (CDI) for KL-0369-33 K (to form KL-0369-30 K)

Part No.	Description	Qty.
KL-0369-3013	Guide sleeve for drill	1
KL-0369-3014	Centring sleeve	1
KL-0369-3021	Core-hole drill Ø11.1 mm for M12x1	1
KL-0369-3022	Thread tap M12x1	1
KL-0369-3023	Set of threaded sleeve M10x1, 17 mm long (10 units)	1
KL-0369-303	Mounting / Dismounting tool for centring sleeve	1
KL-0369-3041	Guide sleeve for reamer	1
KL-0369-3042	Reamer	1
KL-0369-2013	Collet chuck	1
KL-0369-305	Puller for glow plug body	1
KL-0369-3090	Plastic storage case	1

Upgrade Kit (CDI) for KL-0283-70 K (to form KL-0369-30 K)
(Pat. e.g. US-Patent 7,484,281)

KL-0369-30-3 K

By using the upgrade kit **KL-0369-30-3 K**, the glow plug tool set **KL-0283-70 K** also is suitable for the Mercedes CDI engines OM 611, 612, 613, 628, 646*, 647, 648 etc. (*not suitable for 646 EVO)

Scope of Delivery:

KL-0369-30-3 K Upgrade kit (CDI) for KL-0283-70 K (to form KL-0369-30 K)

Part No.	Description	Qty.
KL-0369-56 A	Compressed-air adaptor for injector nozzle bore CDI	1
KL-0369-3013	Guide sleeve for drill	1
KL-0369-3014	Centring sleeve	1
KL-0369-303	Mounting / Dismounting tool for centring sleeve	1
KL-0369-3041	Guide sleeve for reamer	1
KL-0369-3042	Reamer	1
KL-0369-2013	Collet chuck	1
KL-0369-3050	Puller (base tool)	1
KL-0369-3090	Plastic storage case	1



Glow Plug Tool Set Mercedes CDI

KL-0369-32 K

Suitable for Mercedes CDI engines OM 668 e.g. A-Class.

Indispensable tool set for the professional removal of burned-in, heavily corroded or broken-off glow plugs and repair of glow plug retaining threads without removing the cylinder head.

The tool set **KL-0369-32 K** enables broken-off glow plugs to be drilled out accurately and the original M10x1 thread to be recut. It also allows the repair of a damaged glow plug retaining thread M10x1 by drilling it up to M12x1. The new glow plug is then screwed with a threaded insert (M12x1 to M10x1) into the cylinder head.

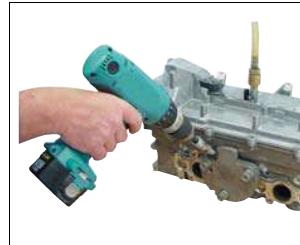
Scope of Delivery:

KL-0369-32 K Glow Plug Tool Set Mercedes CDI

Part No.	Description	Qty.
KL-0369-56	Compressed-air adapter for injector nozzle bore CDI	1
KL-0369-322	Base plate with nuts	1
KL-0369-323	Set of drilling tools for glow plug bore	1
KL-0369-305	Puller for glow plug body	1
KL-0369-306	Tool holder with square socket 2.4 – 5.5	1
KL-0369-324	Reaming tool set for glow plug channel	1
KL-0369-300 A	Drum-type turning tool	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-0369-3290	Plastic storage case	1

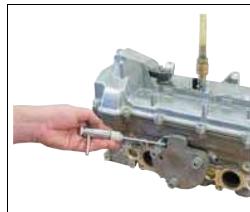


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KL-0369-320 K

Glow Plug Tool Set Mercedes A-Class



Suitable for the Mercedes CDI engine OM 668 on A-Class etc.

Indispensable for the accurate and professional removal of seized or broken glow plugs without the need to remove the cylinder head from the vehicle.

The glow plug tool set **KL-0369-320 K** enables the accurate drilling out of broken glow plugs as well as recutting and cleaning the original M10x1 thread. Glow plugs or glow plug bodies seized in the glow plug channel can be extracted with the puller included in the tool set.

Scope of Delivery:

KL-0369-320 K Glow Plug Tool Set Mercedes A-Class

Part No.	Description	Qty.
KL-0369-322	Base plate with nuts	1
KL-0369-3231	Guide sleeve for drill	1
KL-0369-3011	Core-hole drill Ø 9.1 mm for M10x1 thread	1
KL-0369-3012	Thread tap M10x1	1
KL-0369-305	Puller for glow plug body	1
KL-0369-306	Tool holder with square socket 2.4 – 5.5	1
KL-0369-324	Reaming tool set for glow plug channel	1
KL-0369-300 A	Drum-type turning tool	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-0369-3290	Plastic storage case	1

KL-0369-308 K

Milling Cutter for Glow Plug Electrode



Suitable for Mercedes CDI engine OM 668.

This tool complements our glow plug tool set **KL-0369-32 K**. The milling cutter enables milling off the centre electrode of torn off glow plugs in conjunction with the glow plug tool set **KL-0369-32 K**.

Scope of Delivery:

KL-0369-308 K Milling Cutter for glow plug electrode

Part No.	Description	Qty.
KL-0369-3071	Guide sleeve Ø 17x76 mm	1
KL-0369-3072	Guide sleeve Ø 17x60 mm	1
KL-0369-3073	Guide sleeve Ø 17x41 mm	1
KL-0369-3081	Locating sleeve for Ø 17 mm	1
KL-1383-203	Milling cutter for glow plug electrode	1
KL-0369-3079	Plastic storage case	1

KL-0369-32-1 K

Upgrade Kit (CDI) for KL-0369-30 K

By using the upgrade kit **KL-0369-32-1 K**, the glow plug tool set **KL-0369-30 K** also is suitable for the CDI engine OM 668 on A-Class-etc.

Scope of Delivery:

KL-0369-32-1 K Upgrade Kit (CDI) for KL-0369-30 K

Part No.	Description	Qty.
KL-0369-322	Base plate with nuts	1
KL-0369-3231	Guide sleeve for drill	1
KL-0369-3241	Reamer Ø 5.8 mm	1
KL-0369-3242	Guide sleeve for reamer Ø 5.8 mm	1
KL-0369-3290	Plastic storage case	1



Upgrade Kit (CDI) for KL-0369-33 K (to form KL-0369-32 K)

KL-0369-32-2 K

By using the upgrade kit KL-0369-32-2 K, the glow plug tool set KL-0369-33 K also is suitable for the Mercedes CDI engine OM 668 on A-Class etc.

Scope of Delivery:

KL-0369-32-2 K Upgrade Kit (CDI) for KL-0369-33 K (to form KL-0369-32 K)

Part No.	Description	Qty.
KL-0369-322	Base plate with nuts	1
KL-0369-3231	Guide sleeve for drill	1
KL-0369-3021	Core-hole drill Ø11.1mm for M12x1	1
KL-0369-3022	Thread tap M12x1	1
KL-0369-3023	Set of threaded sleeves M10x1, 17 mm long (10 units)	1
KL-0369-305	Puller for glow plug body	1
KL-0369-3241	Reamer Ø5.8 mm	1
KL-0369-3242	Guide sleeve for reamer Ø5.8 mm	1
KL-0369-3290	Plastic storage case	1



Glow Plug Tool Set M8x1

KL-0369-33 K

Suitable for Mercedes CDI diesel engines OM640 and OM642 with glow plug thread M8x1.

The glow plug tool set KL-0369-33 K enables the quick, accurate and professional drilling out of damaged or snapped off glow plugs, as well as recutting, cleaning and repairing glow plug retaining threads. It can also be used to clean glow plug bores.

The glow plug head is drilled out/drilled up by means of the core-hole drill. The original thread is recut and cleaned using the thread tap. Damaged glow plug retaining threads are rethreaded to M10x1 using the special thread tap.

The centring / guide sleeves, used in conjunction with the base plate, ensure accurate and correct centring and guidance as well as the exact drilling depth whilst drilling out and during the thread repair. The remaining glow plug body can be extracted with the puller.

Then, the glow plug bore hole, the sealed seat, and the glow plug channel (the small aperture leading to the combustion chamber) can be cleaned with the reamer.

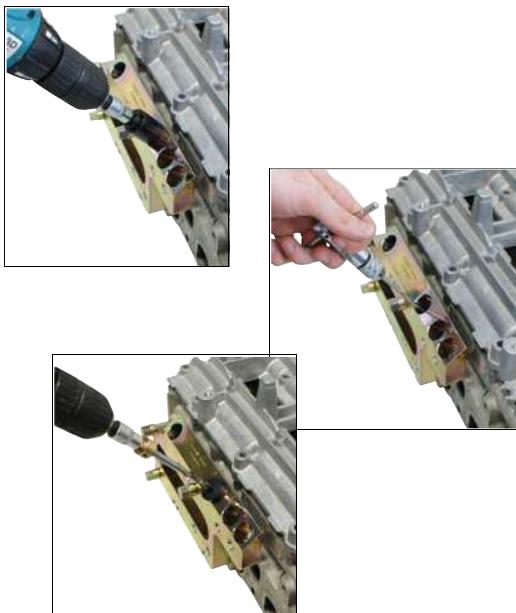
Scope of Delivery:

KL-0369-33 K Glow Plug Tool Set M8x1

Part No.	Description	Qty.
KL-0369-300 A	Drum-type turning tool	1
KL-0369-3311	Base plate	1
KL-0369-3312	Special screw M7	3
KL-0369-3313	Setting bolt	1
KL-0369-3321	Guide sleeve for milling cutter	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-1383-203	Milling cutter for glow plug electrode	1
KL-0369-3331	Guide sleeve for drill	1
KL-1383-2231	Core-hole drill Ø7.1mm for M8x1	1
KL-1383-2232	Thread tap M8x1	1
KL-0283-7021	Core-hole drill Ø9.1mm for M10x1	1
KL-0283-7022	Thread tap M10x1	1
KL-1383-2234	Set of threaded sleeves M8x1, 16 mm long (10 units)	1
KL-0369-306	Tool holder with square socket 2.4 – 5.5 mm	1
KL-0369-334	Puller for glow plug body	1
KL-0369-56 A	Compressed-air adaptor for injector nozzle bore CDI	1
KL-0369-3361	Guide sleeve for reamer	1
KL-0369-3362	Reamer Ø7 mm, Ø4.8 mm	1
KL-0369-3390	Plastic storage case	1

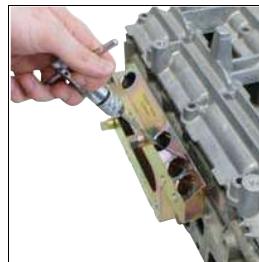


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KL-0369-330 K

Glow Plug Tool Set M8x1



Suitable for the Mercedes CDI Diesel engines OM640 and OM642 with glow plug thread M8x1.

The glow plug tool set **KL-0369-330 K** enables the quick, accurate and professional drilling out of damaged or snapped off glow plugs as well as recutting, cleaning and repairing glow plug retaining threads. It can also be used to clean glow plug bores.

The glow plug head is drilled out or drilled up by means of the core-hole drill. The original thread is recut and cleaned using the thread tap.

The centring / guide sleeves, used in conjunction with the base plate, ensure accurate and correct centring and guidance as well as the exact drilling depth whilst drilling out and during the thread repair. The remaining glow plug body can be extracted with the puller.

Then, the glow plug bore hole, the seal seat, and the glow plug channel (the small aperture leading to the combustion chamber) is cleaned with the reamer.

Scope of Delivery:

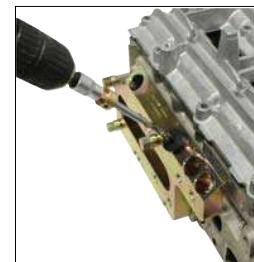
KL-0369-330 K Glow Plug Tool Set M8x1

Part No.	Description	Qty.
KL-0369-300 A	Drum-type turning tool	1
KL-0369-331	Base tool	1
KL-0369-3321	Guide sleeve for milling cutter	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-1383-203	Milling cutter for glow plug electrode	1
KL-0369-3331	Guide sleeve for drill	1
KL-1383-2231	Core-hole drill Ø 7.1 mm for M8x1	1
KL-1383-2232	Thread tap M8x1	1
KL-0369-306	Tool holder with square socket 2.4 – 5.5	1
KL-0369-334	Puller for glow plug body	1
KL-0369-3361	Guide sleeve for reamer	1
KL-0369-3362	Reamer Ø7mm, Ø4.8 mm	1
KL-0369-3390	Plastic storage case	1

6

KL-0369-33-1 K

Upgrade Kit (CDI) for KL-0369-30 K / KL-0369-32 K



Suitable for Mercedes CDI Diesel engines OM640 and OM642 with glow plug thread M8x1.

By using the upgrade kit **KL-0369-33-1 K**, the glow plug tool sets **KL-0369-30 K** and **KL-0369-32 K** also are suitable for the Mercedes CDI Diesel engines OM640 and OM642 respectively, with glow plug thread M8x1.

Scope of Delivery:

KL-0369-33-1 K Upgrade kit (CDI) for KL-0369-30 K / KL-0369-32 K

Part No.	Description	Qty.
KL-0369-331	Base tool	1
KL-0369-3321	Guide sleeve for milling cutter	1
KL-1383-203	Milling cutter for glow plug electrode	1
KL-0369-3331	Guide sleeve for drill	1
KL-1383-2231	Core-hole drill Ø 7.1 mm for M8x1	1
KL-1383-2232	Thread tap M8x1	1
KL-1383-2234	Set of threaded sleeves M8x1, 16 mm long (10 units)	1
KL-0369-334	Puller for glow plug body	1
KL-0369-56 A	Compressed-air adapter for injector nozzle bore CDI	1
KL-0369-3361	Guide sleeve for reamer	1
KL-0369-3362	Reamer Ø7mm, Ø4.8 mm	1
KL-0369-3390	Plastic storage case	1

Glow Plug Tool Set

KL-1383-20 K

Suitable for PSA 2.0 (110PS, 135PS) [DW10] HDI TwinCam-engines e.g. Peugeot, Citroën etc.

The glow plug tool set **KL-1383-20 K** is essential for the accurate removal and drilling out of damaged glow plugs and rethreading the original M10x1 thread. It also allows the repair of a damaged glow plug retaining thread M10x1 by drilling up to M12x1. The new glow plug can then be screwed together with an threaded sleeve (M12x1 to M10x1) into the cylinder head.

Scope of Description:

KL-1383-20 K Glow Plug Tool Set

Part No.	Description	Qty.
KL-1383-201	Compressed-air adaptor for injector nozzle bore Ø 17.1 mm	1
KL-1383-202	Setting plate with nuts	1
KL-1383-203	Milling tool for glow plug electrode	1
KL-1383-204	Set of drilling tools for glow plug bore	1
KL-1383-205	Puller for glow plug body	1
KL-1383-206	Reamer tool set for glow plug channel	1
KL-0369-300 A	Drum-type turning tool	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-1383-2090	Plastic storage case	1



Glow Plug Tool Set

KL-1383-21 K

Suitable for Peugeot, Citroën (2.0 HDI [110, 135 PS]) etc.

The glow plug tool set **KL-1383-21 K** enables the accurate removal or drilling out of damaged glow plugs as well as recutting the original M10x1 thread. The new glow plug is then screwed with a threaded sleeve (M12x1 to M10x1) into the cylinder head.

Scope of Delivery:

KL-1383-21 K Glow Plug Tool Set

Part No.	Description	Qty.
KL-1383-202	Base plate with nuts	1
KL-1383-203	Milling cutter for glow plug electrode	1
KL-1383-2041	Guide sleeve for drill	1
KL-0369-3011	Core-hole drill Ø 9.1 mm for M10x1 thread	1
KL-0369-3012	Thread tap M10x1	1
KL-1383-205	Puller for glow plug body	1
KL-1383-206	Reaming tool set for glow plug channel	1
KL-0369-300 A	Drum-type turning tool	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-1383-2090	Plastic storage case	1



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Guide Sleeve Set

KL-0369-309 K

Suitable for PSA 2.0 L (110PS, 135PS) [DWE10] HDI TwinCam-engines e.g. Peugeot, Citroën etc.

This set complements our glow plug tool sets **KL-1383-20 K** and **KL-1383-21 K**. The guide sleeve set enables milling off the central electrode of broken off glow plugs in conjunction with the glow plug tool set **KL-1383-20 K** or **KL-1383-21 K**.

Scope of Delivery:

KL-0369-309 K Guide Sleeve Set

Part No.	Description	Qty.
KL-0369-3071	Guide sleeve Ø 17 x 76 mm	1
KL-0369-3072	Guide sleeve Ø 17 x 60 mm	1
KL-0369-3073	Guide sleeve Ø 17 x 41 mm	1
KL-0369-3081	Receiving sleeve for Ø 17 mm	1
KL-0369-3079	Plastic storage case with insert	1



KL-1383-20-1 K

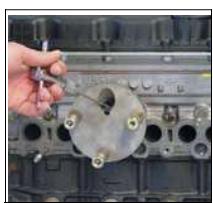
Upgrade kit for KL-1383-22 K to form KL-1383-20 K

By using the upgrade kit **KL-1383-20-1 K**, the glow plug tool set **KL-1383-22 K** also is suitable for the PSA 2.0 (110, 135 PS) HDI engines; for example, Peugeot, Citroën, Fiat, Lancia etc. (engine code: DW10).

Scope of Delivery:

KL-1383-20-1 K Upgrade kit for KL-1383-22 K to form KL-1383-20 K

Part No.	Description	Quantity
KL-1383-201	Compressed-air adaptor for injector nozzle bore Ø17.1 mm	1
KL-1383-202	Base plate with nuts	1
KL-1383-2041	Guide sleeve for drill	1
KL-1383-2042	Set of threaded sleeves M10x1, 26 mm long (10 units)	1
KL-0369-3021	Core-hole drill Ø11.1 mm for M12x1	1
KL-0369-3022	Thread tap M12x1	1
KL-1383-2051	Guide sleeve for puller	1
KL-1383-2052	Puller bolt 1/4"-20 UNC, (185mm long)	1
KL-0369-3050	Puller (base tool)	1
KL-0369-3056	Thread tap 1/4"-20 UNC with drill-bit	1
KL-1383-2061	Reamer Ø5.8 mm	1
KL-1383-2062	Guide sleeve for reamer (Ø5.8 mm)	1
KL-1383-2090	Plastic storage case	1



KL-1383-22 K

Glow Plug Tool Set PSA 2.2I

(German Utility Model)

Suitable for PSA 2.2 L [DW12] HDI TwinCam engines e.g. Peugeot, Citroën, Fiat, Lancia etc.

The glow plug tool set **KL-1383-22 K** enables the precise removal and drilling out of damaged glow plugs and rethreading the original thread M8x1, as well as the repair of a damaged glow plug retaining thread M8x1 by drilling up to M10x1. The new glow plug can then be screwed together with a threaded sleeve (M10x1 to M8x1) into the cylinder head. The compressed-air adaptor, included in the set, prevents impurities from entering the combustion chamber.

Scope of Delivery:

KL-1383-22 K Glow Plug Tool Set PSA 2.2I

Part No.	Description	Qty.
KL-0369-300 A	Drum-type turning tool	1
KL-1383-221	Base plate with bolt	1
KL-1383-2221	Guide sleeve long for milling cutter	1
KL-1383-2222	Guide sleeve for milling cutter	1
KL-4007-2510	Adaptor for power drill 3/8" square socket	1
KL-1383-203	Milling cutter for glow plug electrode	1
KL-1383-2233	Guide sleeve for drill	1
KL-1383-2231	Core-hole drill Ø 7.1 mm for M8x1	1
KL-1383-2232	Thread tap M8x1	1
KL-0283-7021	Core-hole drill Ø 9.1 mm for M10x1	1
KL-0283-7022	Thread tap M10x1	1
KL-1383-2234	Threaded sleeve set M8x1, 16 mm long (10 pieces)	1
KL-0369-306	Tool holder with square socket 2.4 - 5.5 mm	1
KL-1383-224	Puller tool for glow plug body	1
KL-1383-225	Compressed-air adaptor for injection nozzle bore PSA 2.2 L	1
KL-1383-2261	Guide sleeve for reamer	1
KL-1383-2262	Reamer Ø 6.8 mm, Ø 5.2 mm	1
KL-1383-2290	Plastic storage case	1



Upgrade Kit (HDI) for KL-1383-20 K

(German Utility Model)

KL-1383-22-1 K

Suitable for PSA 2.2 L [DW12] HDI TwinCam Diesel engines on Peugeot, Citroën, Fiat, Lancia etc.

The upgrade kit **KL-1383-22-1 K** used in conjunction with glow plug tool set **KL-1383-20 K** enables the precise removal and drilling out of damaged glow plugs and rethreading the original M8x1 thread. It also allows the repair of a damaged glow plug retaining thread M8x1 by drilling up to M10x1. The new glow plug is then screwed together with a threaded sleeve (M10x1 to M8x1) into the cylinder head. The compressed-air adaptor included in the set prevents impurities from entering the combustion chamber.

Scope of Delivery:**KL-1383-22-1 K - Upgrade kit (HDI) for KL-1383-20 K**

Part No.	Description	Qty.
KL-1383-221	Base plate with bolts	1
KL-1383-2221	Guide sleeve (long) for milling cutter	1
KL-1383-2222	Guide sleeve for milling cutter	1
KL-1383-2231	Core-hole drill Ø7.1 mm for M8x1	1
KL-1383-2233	Guide sleeve for drill	1
KL-1383-2232	Thread tap M8x1	1
KL-1383-2234	Set of threaded sleeves M8x1, 16 mm long (10 units)	1
KL-1383-2241	Thread tap no.12-24 UNC with drill-bit	1
KL-1383-2242	Puller bolt no.12-24 UNC, 165mm long	1
KL-0283-7050	Puller (base tool)	1
KL-1383-225	Compressed-air adaptor for injector nozzle bore PSA 2.2 L	1
KL-1383-2261	Guide sleeve for reamer	1
KL-1383-2262	Reamer Ø6.8 mm, Ø5.2 mm	1
KL-1383-2290	Plastic storage case	1

**Jointed Glow Plug / Spark Plug Socket Set 6 pieces**

KL-0369-900 K

6

With built-in O-ring. This tool is specially designed for the easy removal and replacement of glow plugs and spark plugs.

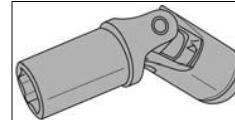
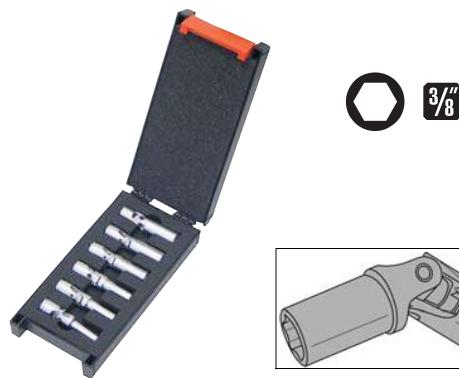
The long and slim design of the sockets enables quick and easy removal of glow plugs and spark plugs that are deep-seated or hard to reach.

Technical Data:

Size:	8, 9, 10, 12, 14, 16 mm
Drive:	3/8"
Length:	80 mm
Weight:	560 g

Scope of Delivery:**KL-0369-900 K Jointed Glow Plug / Spark Plug Socket Set 6 pieces**

Part No.	Description	Qty.
KL-0369-9001	Jointed glow plug socket hex 8 mm, long	1
KL-0369-9002	Jointed glow plug socket hex 9 mm, long	1
KL-0369-9003	Jointed glow plug socket hex 10 mm, long	1
KL-0369-9004	Jointed glow plug socket hex 12 mm, long	1
KL-0369-9005	Jointed glow plug socket hex 14 mm, long	1
KL-0369-9006	Jointed glow plug socket hex 16 mm, long	1
KL-0369-9090	Plastic storage case	1



KL-0369-201 A

Glow Plug Puller



Suitable for glow plugs with size 10 mm across flats on Mercedes CDI engines OM 611, 612, 613, 646, 647 and 648 etc. (not suitable for 646 EVO)

For pulling out glow plugs after they have been unscrewed but are still located firmly in their holes.

Technical Data:

Length:	135 mm
Drive:	width across flats 19 mm

KL-0132-53 K

Thread Repair Kit for Glow Plug Thread M8x1

Suitable e.g. for VW-Audi, BMW, Mercedes, Nissan, Renault etc.

If the thread in the cylinder head is damaged, special threaded inserts (internal thread M8x1) can be inserted by means of the thread repair kit **KL-0132-53 K**.

Scope of Delivery:

KL-0132-53 K Thread Repair Kit for glow plug thread M8x1



Part No.	Description	Qty.
KL-0132-5301	Cleaning tool for thread M8x1	1
KL-0132-5304	Threaded inserts M8x1, 10 mm long (10 pieces)	1
KL-0132-5302	Special drill for threaded inserts M8x1	1
KL-0132-5303	Special tap for threaded inserts M8x1	1
KL-0132-123	Square bit holder hex 10mm, 3/8" drive	1
KL-0132-1290	Plastic storage case	1

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KL-0132-51 K

Thread Repair Kit for Glow Plug Thread M10x1

Suitable e.g. for VW-Audi, BMW, Mercedes, Nissan, Renault etc.

This thread repair kit **KL-0132-51 K** is designed to insert special threaded inserts (internal thread M10x1) if the thread in the cylinder head is damaged.

Technical Data:

Size:	8, 9, 10, 12, 14, 16 mm
Drive:	3/8"
Length:	80 mm
Weight:	560 g

Scope of Delivery:

KL-0132-51 K Thread Repair Kit for glow plug thread M10x1



Part No.	Description	Qty.
KL-0132-511-1	Thread cleaning tool M10x1	1
KL-0132-512 A	Threaded inserts M10x1 Length 10 mm (10 pieces)	1
KL-0132-513-1	Special drill for threaded inserts M10x1	1
KL-0132-514-1	Special tap for threaded inserts M10x1	1
KL-0132-123	Square bit holder Hex 10 mm, 3/8" Drive	1
KL-0132-1290	Plastic storage case	1

Thread Repair Kit for Glow Plug Thread M10x1.25

KL-0132-54 K

This tool set allows fast and easy cleaning or repair of glow plug threads on aluminium cylinder heads.

A dirty thread can be cleaned and recut using our thread cleaning tool. The damaged thread can be drilled up using the special drill. Then, a new thread M12x1.25 is recut to retain threaded inserts with an internal thread of M10x1.25.

Scope of Delivery:

KL-0132-54 K Thread Repair Kit for Glow Plug Thread M10x1.25

Part No.	Description	Qty.
KL-0132-5401	Thread Cleaning Tool M10x1.25	1
KL-0132-5402	Special drill for threaded inserts M10x1.25	1
KL-0132-5403	Special tap for threaded inserts M10x1.25	1
KL-0132-5404	Threaded inserts M10x1.25, 10 mm long (10 pcs.)	1
KL-0132-123	Square Bit Holder Size 10 mm, 3/8" Drive	1
KL-0132-1290	Plastic case	1



Thread Repair Kit for Glow Plug Threads M12x1.25

KL-0132-5 K

Suitable e.g. for VW-Audi, Mercedes, Toyota etc.

If the thread in the cylinder head is damaged, special threaded inserts (internal thread M12x1.25) can be inserted by means of the thread repair kit KL-0132-5 K.

Scope of Delivery:

KL-0132-5 K Thread Repair Kit for Glow Plug Threads M12x1.25

Part No.	Description	Qty.
KL-0132-501-1	Special drill for threaded inserts M12x1.25	1
KL-0132-502-1	Special tap for threaded inserts M12x1.25	1
KL-0132-412	Threaded inserts M12x1.25 Length 11 mm (10 pieces)	1
KL-0132-123	Square bit holder Size 10 mm, 3/8" drive	1
KL-0132-1290	Plastic storage case	1



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Thread Repair Kit for Spark Plug Threads M12x1.25

KL-0132-41 K

This thread repair kit is intended for the repair of spark plug threads on aluminium cylinder heads. By using the included special tap, the damaged thread can be drilled out and a new thread M14x1.25 can be recut at the same time to retain threaded inserts with an internal-thread of M12x1.25.

Scope of Delivery:

KL-0132-41 K Thread Repair Kit for Spark Plug Threads M12x1.25

Part No.	Description	Qty.
KL-0132-411-1	Special tap (for M12x1.25)	1
KL-0132-412	Threaded inserts M12x1.25 Length 11 mm (10 pieces)	1
KL-0132-413	Threaded inserts M12x1.25, Length 17.5 mm (10 pieces)	1
KL-0132-123	Square bit holder Size 10 mm, 3/8" drive	1
KL-0132-1290	Plastic storage case	1



KL-0132-42 K

Thread Repair Kit for Spark Plug Threads M14x1.25



This thread repair kit is intended for the repair of spark plug threads on aluminium cylinder heads. By using the included special tap, the damaged thread can be drilled out and a new thread M16x1.25 can be recut at the same time to retain threaded inserts with an internal-thread of M14x1.25.

Scope of Delivery:

KL-0132-42 K Thread Repair Kit for spark plug threads M14x1.25

Part No.	Description	Qty.
KL-0132-421-1	Special tap for M14x1.25	1
KL-0132-422	Threaded inserts M14x1.25 Length 11 mm (10 pieces)	1
KL-0132-423	Threaded inserts M14x1.25 Length 17.5 mm (10 pieces)	1
KL-0132-123	Square bit holder hex 10 mm, 3/8" drive	1
KL-0132-1290	Plastic storage case	1

KL-0132-590 KA

Thread Repair Kit



Suitable for glow plug threads M10x1 and M12x1.25 as well as for oil sump plug thread M14x1.5 and M16x1.5; also suitable for injector nozzle fixing screw thread M6.

This tool set is indispensable for the quick and easy cleaning or repair of threads on aluminium cylinder heads and aluminium oil sums.

Field of application Aluminium Cylinder Head:

Glow plug thread: The dirty thread M10x1 is cleaned and recut using the thread cleaning tool. The damaged thread is drilled up with the special drill. Then, using the special tap, a new thread with M12x1 or M14x1.25 is recut to retain the threaded inserts with an internal thread of M10x1 or M12x1.25.

Injector nozzle fixing screw thread: The threaded inserts M6 are screwed into the injector nozzle fixing screw thread that previously has been drilled up to M8x1 for repair.

Field of application Aluminium Oil Sump:

With the special tap (M14x1.5 or M16x1.5) the old thread is drilled out and a new thread is being recut at the same time to retain the sump screw plug.

Scope of Delivery:

KL-0132-590 KA Thread Repair Kit

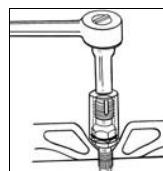
Part No.	Description	Qty.
KL-0132-583	Set of threaded sleeves M6, 20 mm long (10 units)	1
KL-0132-123	Square bit-holder 10 mm, 3/8" drive	1
KL-0132-481-1	Special tap for M14x1.5	1
KL-0132-482	Set of sump screw plugs (5 units)	1
KL-0132-484	Set of sealing rings (aluminium) Ø15 x Ø20 x 1.3 mm (5 pcs.)	1
KL-0132-4901	Special tap for M16x1.5	1
KL-0132-4902	Sump screw plug set M17x1.5 (5 units)	1
KL-0132-4903	Set of sealing rings (aluminium) Ø24 x Ø17.1 x 1.5 (5 pcs.)	1
KL-0132-501-1	Special drill for threaded inserts (M12x1.25)	1
KL-0132-502-1	Special tap for threaded inserts M12x1.25	1
KL-0132-412	Threaded inserts M12x1.25 x 11 (10 units)	1
KL-0132-511-1	Thread cleaning tool M10x1	1
KL-0132-512 A	Threaded inserts M10x1 x 10 (10 units)	1
KL-0132-513-1	Special drill for threaded inserts M10x1	1
KL-0132-514-1	Special tap for threaded inserts M10x1	1
KL-0132-5990	Plastic storage case	1

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KL-0127-2206

Thread Tap



Designed to clean plug threads with dimensions M10x1.0 and M12x1.25.

Sensor Socket Size (width across flats) 22 mm

KL-0132-2

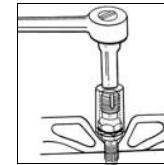
Indispensable tool for the easy removal and replacement of Lambda sensors that are hard to reach.



Thread Tap

KL-0127-2207

Designed to clean plug threads with dimensions M14x1.25 and M18x1.5.



Reamer Set for Glow Plug Channel (adjustable)

(German Utility Model)

KL-0369-25 K

Universally suitable for diesel engines with M8x1, M9x1 or M10x1 glow plug threads.

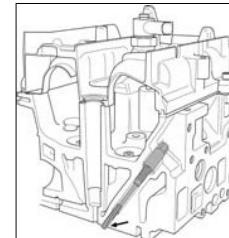
This tool is designed to clean the glow plug channel.

The possibilities to combine the different holders (glow plug threads) with the reamers (glow plug bore-Ø) and to adjust the length of the reamers accurately, make this reamer set almost universal in its field of application with accurately adjusted reamers for the respective engine.

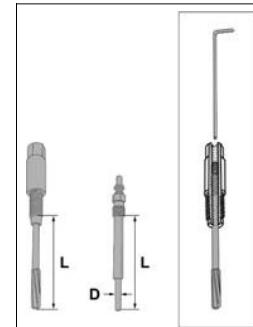
Scope of Delivery:

KL-0369-25 K Reamer Set for Glow Plug Bore

Part No.	Description	Qty.
KL-0369-2510	Holder M8x1 with setscrew	1
KL-0369-2610	Holder M9x1 with setscrew	1
KL-0369-2710	Holder M10x1 with setscrew	1
KL-0369-2512	Reamer Ø 4.8 mm (Glow plug-Ø D = Ø 4.0 mm)	1
KL-0369-2522	Reamer Ø 5.2 mm (Glow plug-Ø D = Ø 4.4 mm)	1
KL-0369-2732	Reamer Ø 5.8 mm (Glow plug-Ø D = Ø 5.0 mm)	1
KL-0369-2590	Plastic storage case	1



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Reamer Ø4.8mm with Holder M8x1 (adjustable)

(German Utility Model)

KL-0369-251

For example, suitable for the Fiat 2.3 L JTD (F1AE0481C), 1.3 L JTD (188 A9 000); Opel/Vauxhall 1.3 L (Z13DT); Mercedes (OM 642, OM640); Smart (OM639); Volvo 2.4D (D 5244 T2); VW AG 2.0 L TDI (AZV, BKD, BDJ); PSA 2.7 L HDI (DT 17) diesel engines.

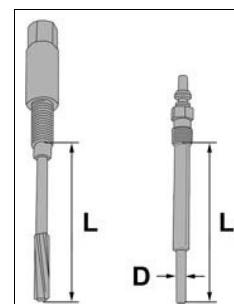
Technical Data:

Length L:	70mm up to 108mm
D measured (at the glow plug)	Ø 4mm

Scope of Delivery:

KL-0369-251 Reamer Ø 4.8 mm; M8x1 adjustable

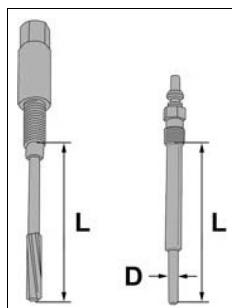
Part No.	Description	Qty.
KL-0369-2510	Holder M8x1 with setscrew	1
KL-0369-2512	Reamer Ø 4.8 mm	1



KL-0369-252

Reamer Ø5.2 mm, with Holder M8x1 (adjustable)

(German Utility Model)



For example, suitable for the PSA 1.4 L HDI (DV4), PSA 1.6 L HDI (DV6), PSA 2.2 L HDI (DW12), Ford 1.6 L (F6J) diesel engines.

Technical Data:

Length L:	50mm up to 83mm
D measured (at the glow plug):	Ø 4,4mm

Scope of Delivery:

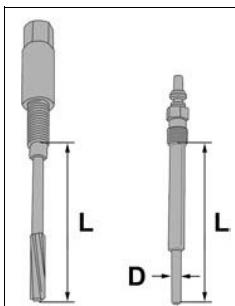
KL-0369-252 Reamer Ø 5.2 mm; M8x1 adjustable

Part No.	Description	Qty.
KL-0369-2510	Holder M8x1 with setscrew	1
KL-0369-2522	Reamer Ø 5.2 mm	1

KL-0369-261

Reamer Ø4.8 mm with Holder M9x1 (adjustable)

(German Utility Model)



For example, suitable for the Alfa, Fiat, Lancia 1.9i JTD (192 A 5000); Opel/ Vauxhall 1.9i CDTi (Z19DT) diesel engines.

Technical Data:

Length L:	70mm up to 108mm
D measured (at glow plug):	Ø 4mm

Scope of Delivery:

KL-0369-261 Reamer Ø 4.8 mm; M9x1 adjustable

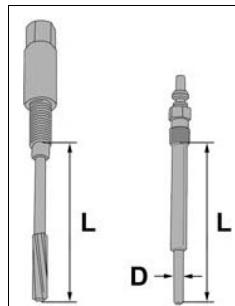
Part No.	Description	Qty.
KL-0369-2610	Holder M9x1 with setscrew	1
KL-0369-2512	Reamer Ø 4.8 mm	1

KL-0369-271

Reamer Ø4.8 mm with Holder M10x1 (adjustable)

(German Utility Model)

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For example, suitable for the VW-Audi 2.7 L TDI V6 (BPP, BSG), 3.0 TDI V6 (BKN, BKS, BMK, BNG, BUN, BUG) diesel engines.

Technical Data:

Length L:	60mm up to 105mm
D measured (at glow plug):	Ø 4mm

Scope of Delivery:

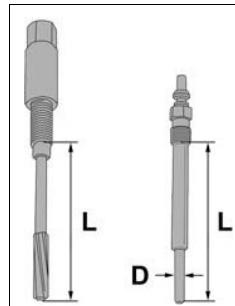
KL-0369-271 Reamer Ø 4.8 mm; M10x1 adjustable

Part No.	Description	Qty.
KL-0369-2710	Holder M10x1 with setscrew	1
KL-0369-2512	Reamer Ø 4.8 mm	1

KL-0369-272

Reamer Ø5.2 mm with Holder M10x1 (adjustable)

(German Utility Model)



For example, suitable for the PSA 2.0 L HDI (DW10 [110PS, 135PS]) diesel engines.

Technical Data:

Length L:	41 mm up to 83 mm
D measured (at glow plug):	Ø 4.4 mm

Scope of Delivery:

KL-0369-272 Reamer Ø 5.2 mm; M10x1 adjustable

Part No.	Description	Qty.
KL-0369-2710	Holder M10x1 with setscrew	1
KL-0369-2522	Reamer Ø 5.2 mm	1

Reamer Ø5.8 mm with Holder M10x1 (adjustable)

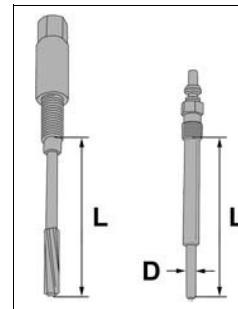
(German Utility Model)

KL-0369-273

For example, suitable for the VW-Audi 2.5 L TDI V6 (AKE, AKN, AYM, BAU, BCZ, BDG, BDH, BFC, AFB), 3.0 TDI V6 (ASB); Mercedes CDI (OM611, OM612, OM613, OM646, OM647, OM648, OM668), Alfa Romeo, Fiat, Lancia 1.9 L JTD (182 B4.000), 2.4 L JTD (839 A5.000) diesel engines.

Technical Data:

Length L:	40 mm up to 85 mm
D measured (at glow plug):	Ø 5.0 mm



Scope of Delivery:

KL-0369-273 Reamer Ø 5.8 mm; M10x1 adjustable

Part No.	Description	Qty.
KL-0369-2710	Holder M10x1 with setscrew	1
KL-0369-2732	Reamer Ø 5.8 mm	1

Reamer

KL-0369-15

Suitable for the Mercedes CDI engines OM 611, 612, 613, 628, 646*, 647, 648 etc. (*not suitable for 646 EVO) and Smart CDI engine (R660) with glow plug thread M10x1.

Used to clean the bore hole between glow plug and combustion chamber.

Important if the engine is difficult to start.



Technical Data:

Drive:	10 mm
Reamer-Ø:	6 mm

Reamer for Glow Plug

KL-0369-13

Suitable for Mercedes 4-Valve-engines OM604, OM605, OM606 with glow plug threads size M12x1,25.

To ream out and clean the bore between the Glow Plug and pre-combustion chamber.



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Technical Data:

Drive:	13 mm
Reamer Ø:	7 mm

Glow-Plug Connector Pliers (straight)

KL-0369-18

For example, suitable for Mercedes, BWM, VW-Audi etc.

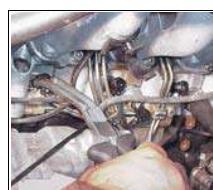
Designed to remove stubborn and hard-to-reach glow plug connectors installed on the latest-generation engines.



Glow-Plug Connector Pliers (angled)

KL-0369-19

Designed to remove stubborn and hard-to-reach glow plug connectors installed on the latest-generation engines.



KL-0127-800 K

Ignition Coil Puller Set (4 pieces)



Suitable for VW / Audi petrol injection engines.

This tool is used to remove and install spark plug coils (with power final stage) on VW / Audi petrol injection engines.

Scope of Delivery:

KL-0127-800 K Ignition coil puller set (4 pieces)

Part No.	Description	Qty.
KL-0127-81	Ignition coil puller	1
KL-0127-82	Ignition coil puller	1
KL-0127-83	Ignition coil puller	1
KL-0127-84	Ignition coil puller	1
KL-0127-8090	Plastic storage case	1

KL-0127-41

Spark Plug Socket Size (width across flats) 14 mm

Suitable for Renault Clio 1.2 16V; Twingo 1.2 16V etc.



Technical Data:

Size (width across flats):	14 mm
Drive:	3/8"
Length:	230 mm

KL-0127-43

Spark Plug Socket Size (width across flats) 14 mm

Suitable for BMW 3 series (E90 [N53B]); Citroën C5 (HPI); Peugeot 207 (1.6 16V), 406 (HPI); Mini One (1.4 l) etc.



Technical Data:

Length:	90 mm
Size (width across flats):	14 mm
Drive:	3/8"

KL-0127-44

Spark Plug Socket Size (width across flats) 14 mm

Suitable for Citroën C5 (HPI); Peugeot 207 (1.6 16V); 406 (HPI); Mini One 1.4 l etc.



Technical Data:

Length:	250 mm
Size (width across flats):	14 mm
Drive:	3/8"

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KL-0127-45

Spark Plug Socket Size (width across flats) 16 mm

Technical Data:



Length:	90 mm
Size (width across flats):	16 mm
Drive:	3/8"

KL-0127-46

Spark Plug Socket Size (width across flats) 16 mm

Technical Data:



Length:	250 mm
Size (width across flats):	16 mm
Drive:	3/8"

KL-4015-2016

Spark Plug Socket Size (width across flats) 16 mm

Technical Data:



Length:	65 mm
Size (width across flats):	16 mm
Drive:	3/8"

KL-4015-2021

Spark Plug Socket Size (width across flats) 21 mm

Technical Data:



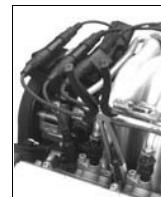
Length:	65 mm
Size (width across flats):	21 mm
Drive:	3/8"

Spark Plug Connector Pliers

KL-0127-7

Suitable for VW, Audi, Opel/Vauxhall, Porsche etc.

Forged and with offset jaws for pulling off or putting on spark plug connectors, especially suitable for heat protection connectors.



Spark Plug Connector Pliers

KL-0127-5

Suitable for on almost any vehicle.

With 30° angled sleeve jaws for the careful and safe removal of spark plug connectors having a silicon coating.



Spark Plug Connector Pliers

KL-0127-6

Suitable for almost any vehicle.

10° angled, long sleeve jaw. Grooves in the jaw prevent the pliers from slipping off. Long pliers shanks enable deep-seated spark plug connectors to be pulled off and additionally offer extended safety distance to the hot engine.

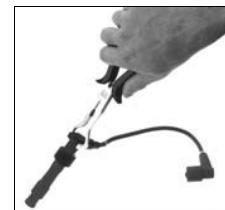


Spark Plug Connector Pliers

KL-0127-9

Universally suitable for Audi, BMW, Mercedes, Vauxhall/Opel, VW etc.

Indispensable for pulling off and putting on spark plug connectors that are hard to reach. Can also be used on hot engines.



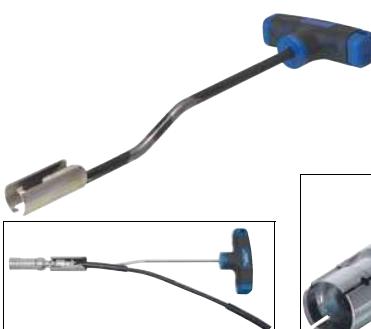
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Spark Plug Connector Puller

KL-0127-92

Suitable for metal spark plug connectors on VW-Audi, Mercedes, Smart etc.

Indispensable tool for removing and installing hard-to-reach spark plug connectors.

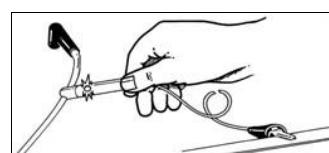


Ignition Wire Tester

KL-0127-39

Allows you to quickly locate faulty ignition wires.

In order to check the ignition wire, the tester is placed directly on the insulation. Enables testing the ignition wire without having to pierce the insulation. Thus, contact with the current-carrying lead is eliminated. Light flashes indicate correct functioning of the ignition wire.



KL-0180-2 K

Locking Tool Set Multi- / Uni-Lock

(Universal)



Universally applicable tool set for locking timing belt sprockets such as camshaft sprockets (TwinCam and single camshaft engines) injection pump sprockets, etc.

Scope of Delivery:**KL-0180-2 K Locking Tool Set Multi- / Uni-Lock**

Part No.	Description	Qty.
KL-0180-20	Locking Tool Set	1
KL-0180-201	Rail (extended design)	1
KL-0180-21	Unilock	1
KL-0180-2090	Storage case	1

KL-0180-20

Locking Tool

**Universally adjustable and applicable tool.**

Suitable for timing belt sprockets spaced apart between approximately 5 mm to 60 mm.

Intended for use on TwinCam engines (e.g. Citroën, Fiat, Ford, Honda, Hyundai, Lancia, Mazda, Mitsubishi, Nissan, Opel/Vauxhall, Peugeot, Renault, Rover, Saab, Subaru, Toyota, Volvo etc.) and Diesel engines to lock the camshaft relative to the injection pump sprocket (e.g. VW-Audi, Ford, Seat, Škoda, etc.) Inserting the **KL-0180-20** locking tool into the engine shaft timing belt sprockets, ensures their correct positions relative to the crankshaft while replacing a timing belt or during an engine repair.

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KL-0180-201 A

Rail (extended design)



Designed to be used with the **KL-0180-20** locking tool for timing belt sprockets with a clearance of approx. 60 mm to 125 mm, e.g. when locking the injection pump sprocket relative to the camshaft.

KL-0183-21

Belt Mounting Tool

**Universal application.**

This tool is essential for the easy and trouble-free positioning of a V-ribbed belt on the pulleys. Specially designed for use in confined spaces.

Technical Data:

Overall length:	720 mm
Weight:	330 g

Locking Pin Set (Universal) for engine shafts

KL-0180-100 K

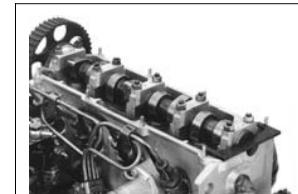
Suitable for: VW-Audi, BMW, Citroën, Ford, Peugeot, Renault, etc.

Field of application: Locking engine shafts.

The insertion of the appropriate locking pins into the engine housing, camshaft sprocket, injection pump sprocket, and flywheel and the insertion of the setting gauge **KL-0280-9** into the camshaft slot guarantee the correct positioning of camshaft and pump shaft relative to the crankshaft when replacing the timing belt, removing or installing the injection pump, etc. (Correct timing adjustment) Only then will the optimal engine power be achieved and damage to the engine be prevented.

Scope of Delivery: KL-0180-100 K Locking Pin Set

Part No.	Description	Qty.
KL-0280-10	Locking pin (Audi V6)	1
KL-0280-8	Locking pin Ø15.5 mm (VW-Audi, Seat)	1
KL-0280-9	Setting gauge (VW-Audi, Seat)	1
KL-0580-10	Locking pin Ø11.8 / Ø8 (BMW)	1
KL-0580-11	Locking pin Ø9.9 (BMW)	1
KL-0680-10	Locking pin for crankshaft (Ford)	1
KL-0680-11	Locking pin Ø8.3 (Renault, Ford)	1
KL-0680-12	Locking pin Ø9.5 (Ford)	1
KL-0680-13	Locking pin Ø12.9 (Ford)	1
KL-0680-14	Locking pin Ø6 (Ford)	2
KL-1280-10	Locking pin Ø8 / Ø12 (Renault)	1
KL-1280-11	Hex screw M5 x 50 (Renault)	2
KL-1280-12	Hex screw M7 x 50 (Renault)	3
KL-1380-10	Locking pin A Ø8 (Peugeot)	1
KL-1380-11	Locking pin B Ø9.5 mm (Peugeot)	1
KL-1380-12	Locking pin C Ø6 (Peugeot)	1
KL-1382-1	Adjuster for timing belt tensioner (Peugeot)	1
KL-1480-10	Locking pin (angled) Ø6.8 (Peugeot)	1
KL-1480-11	Locking pin (angled) Ø6 (Peugeot)	1
KL-1480-12	Locking pin Ø6 short (Peugeot)	2
KL-1480-13	Locking pin M8 / Ø6.7 (Citroën, Peugeot)	1
KL-1480-14	Locking pin Ø10 / Ø8 (Peugeot)	1
KL-1480-15	Locking pin (angled) Ø7.8 (Citroën, Peugeot)	1
KL-1480-16	Locking pin Ø6 long (Peugeot)	2
KL-1480-17	Hex screw M8 x 30 (Peugeot)	2
KL-1480-18	Hex screw M8 x 40 (Peugeot)	1
KL-0180-1020	Plastic storage case (empty)	1



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Locking Tool Set

KL-0180-105 KA

Suitable for 16V TwinCam petrol engines such as:

Ford (Zetec) Fiesta 1.25, 1.4 (95-), 1.6i, XR2, RS, 1.8i, Puma 1.4, 1.7, Focus 1.4, 1.6 (97-), Escort / Orion 1.6, 1.8i 16V (92) Mondeo 1.6, 1.8 & 2.0 16V. (93-98)

Honda Civic, Accord, Prelude, Integra & Shuttle 1.6, 2.0, 2.2, 2.3 & 2.4

Land Rover Discovery 2.0 MPi, Freelander 1.8i 16V.

Mazda 121 1.25 16V.

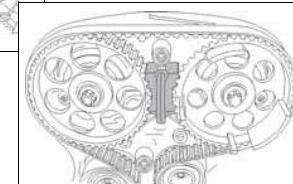
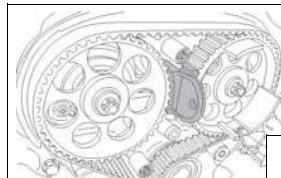
Rover Metro, Gta/Gti, 114, 214, 216, 218, 414, 416, 220, 420, 618, 620, 623, 820 / Vitesse (92-), MGF

Vauxhall/Opel Corsa, Tigra, Meriva, Astra, Cavalier, Calibra, Vectra, Omega, Frontera & Sintra 1.4, 1.6, 1.8, 2.0 & 2.2 16V.

Designed for locking and/or positioning engine shafts such as camshafts, balancer shafts and crankshaft.

Scope of Delivery: KL-0180-105 K Locking Tool Set

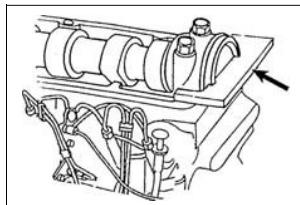
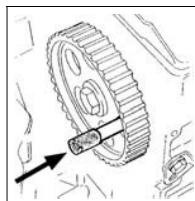
Part No.	Description	Qty.
KL-1780-103 A	Locking pin Ø6.7 mm	2
KL-1780-104 A	Locking pin Ø4.9 mm	2
KL-0680-1051 A	Setting gauge for camshafts	1
KL-0482-313 A	Locking tool for camshafts	1
KL-1780-105 A	Locking tool for camshafts	1
KL-1780-106 A	Locking tool for camshafts	1
KL-0482-314 A	Locking tool for camshafts	1
KL-0482-311	Locking tool for camshafts Opel/Vauxhall 1.8 L and 2.0 L	1
KL-0482-312	Locking tool for camshafts Opel/Vauxhall 1.4 L and 1.6 L	1
KL-1780-107 A	Locking pin Ø8 mm	1
KL-0680-17	Locking pin for crankshaft	1
KL-0180-1059 A	Plastic storage case	1



KL-0180-106 K

Locking Tool Set

(Universal)



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Universally suitable e.g. for:

- Audi: 1.9D/TDI (1Y, 1Z, AAZ, AHU, AFN, AFF & AVG engines)
- Citroën/Peugeot: 1.4D, 1.7D/TD, 1.8D/TD, 1.9D/TD, 2.1 & 2.2TD (TUD & XUD engines)
- Fiat/FSO: 1.9D/TD (PSA engines)
- Ford: 1.6D, 1.8D/TD (88-02), 1.9TD (-00)
- LDV /Mazda: (PSA & Ford engines)
- Rover: Metro, 114D, 218/418SD, Maestro & Montego 2.0D
- Seat: 1.3D, 1.4D, 1.7SDi, 1.9D Turbo, 1.9SDi/TDi (MN, 1W, AAZ, AEY, AFN, AHU, AKW & AVG engines)
- Skoda: Felicia 1.9D (AEF engine)
- Vauxhall/Opel: 1.6D, 1.7D/DR/DTL+ Isuzu engines 1.5D - 3.1TD
- Volkswagen: 1.6D, 1.7D, 1.9DT, 1.9SDi/TDi & 2.4D (MN, 1W, 1Y, 1Z, AEY, AFN, AHB, AHU, AKW, ALE, AHH, AZZ, AVG, ACL & ACT engines)
- Volvo: 240, 740, 760, 940, 960D/Turbo
- Bosch VE, Diesel Kiki, Nippondenso & CAV/ RotoDiesel injection pumps.

For locking and/or positioning engine shafts such as camshaft, crankshaft and injection pump shaft, as well as for adjusting the injection pump.

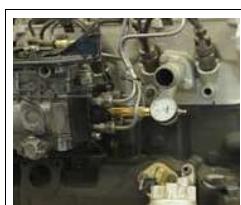
Scope of Delivery:

KL-0180-106 K Locking Tool Set

Part No.	Description	Qty.
KL-0129-210	Adjusting tool for Bosch VE injection pump	1
KL-0482-210	Camshaft adjusting plate	1
KL-0129-200	Adjusting tool for Lucas CAV injection pump	1
KL-0680-1051	Adjusting gauge for camshaft	1
KL-0481-8	Adjusting gauge for crankshaft	1
KL-0481-9	Locking pin for crankshaft	1
KL-0128-0	Dial gauge Ø 40 mm	1
KL-1480-15	Locking pin angled Ø7.8 mm	1
KL-1480-11	Locking pin angled Ø6	1
KL-1480-18 S	Hex. bolt M8x40 (3 pcs.)	1
KL-0481-611	Hex. bolt M6 x 50 (2 pcs.)	1
KL-0280-9	Adjusting gauge	1
KL-0680-1052	Locking pin for crankshaft, long	1
KL-0680-1054	Locking pin Ø6 (2 pcs.)	1
KL-1780-101	Locking pin Ø6.6 (2 pcs.)	2
KL-0680-1055	Locking pin Ø9.5	1
KL-0280-801	Locking pin Ø15.5	1
KL-0680-111	Locking pin Ø8.3	1
KL-0680-131	Locking pin Ø12.7	1
KL-0180-1069	Case with insert	1

KL-0129-1 A

Adjustment Tool Set (Universal)



This tool set KL-0129-1 A is designed to adjust the **BOSCH VE fuel injection pump** on Diesel engines e.g. VW-Audi, BMW etc.

Advantages:

- Accurate adjustment of the BOSCH VE injection pump.
- Easy to use.
- Suitable for all diesel vehicles equipped with a BOSCH VE fuel injection pump.

Scope of Delivery:

KL-0129-1 A - Universal Tool Set

Part No.	Description	Qty.
KL-0129-10	Adaptor 35 mm M8x1 with extension KL-0128-07 (30 mm)	1
KL-0129-11	Adaptor 65 mm M8x1	1
KL-0129-12	Adaptor 120 mm M8x1	1
KL-0129-13	Adaptor M12x1.25 to M8x1 for VW-Audi TDI	1
KL-0129-14	Adaptor 85 mm M10x1 for VW-Audi TDI engines etc.	1
KL-0280-8	Dial gauge Ø 40 mm with extension KL-0128-03 (10 mm)	1
KL-0280-9	Locking pin Ø15.5 for VW-Audi	1
KL-0129-1020	Setting gauge for camshaft VW-Audi, Ford etc.	1
	Plastic storage case (empty)	1

Adjusting Tool for Lucas CAV-Roto- Diesel Injection Pumps

KL-0129-20 K

This tool set **KL-0129-20 K** is designed to adjust injection pumps on diesel vehicles with Lucas-CAV-Roto-Diesel Pumps.

Scope of Delivery **KL-0129-20 K** Adjusting Tool

Part No.	Description	Qty.
KL-0129-200	Adjusting Tool	1
KL-0128-0	Dial gauge	1
KL-0129-2090	Plastic case with insert	1

Adjusting Tool for Lucas CAV-Roto- Diesel Injection Pumps
(without dial gauge) **KL-0129-200 K**

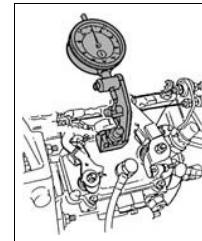
The tool set **KL-0129-200 K** is designed to adjust injection pumps on diesel vehicles with Lucas-CAV-Roto-Diesel Pumps.



Scope of Delivery:

KL-0129-200 K - Adjusting Tool for Lucas CAV-Roto- Diesel Injection Pumps
(without dial gauge)

Part No.	Description	Qty.
KL-0129-2001	Base body	1
KL-0129-2002	Lever	1
KL-0129-2003	Tracer pin	1
KL-0129-2004	Dial gauge extension 23mm	1
KL-0129-2005	Knurled screw	1
KL-0129-2090	Storage case	1



Socket (3 flat) 24 mm for VE-Injection Pump

KL-0129-22

Suitable for VE-diesel injection pumps, for example Bosch, Delphi etc.

For removal and replacement of the distributor plunger screw plug on the high-pressure pump.

Technical Data:

Width across flats 3-point:	24 mm
Length:	38 mm
Drive:	1/2"
Weight:	130 g



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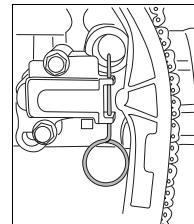
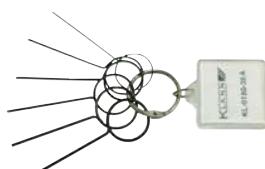
Retaining Pin Set 0.8 mm - 1.9 mm

KL-0180-30 A

Designed for locking the automatic timing belt tensioner when replacing a timing belt.

Consists of:

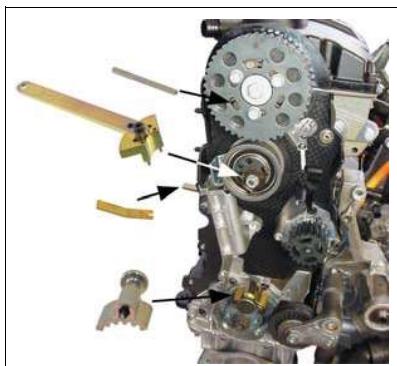
Key fob with ring and retaining pins (6 pieces) with Ø0.8 mm; Ø1.2 mm; Ø1.4 mm; Ø1.5 mm; Ø1.7 mm; Ø1.9 mm.



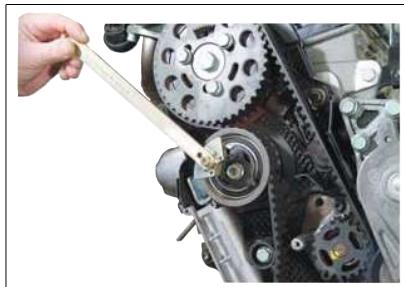
KL-0280-107 K

Locking Tool Set

(German Utility Model)



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Universally suitable for the most common VW-Audi, Seat and Škoda vehicles.

This tool is designed for locking and/or positioning engine shafts such as camshafts, injection pump shafts and crankshafts when changing a timing belt or during an engine repair.

Its special composition makes the locking tool set KL-0280-107 K the ideal tool for workshops.

Scope of Delivery:

KL-0180-30 Retaining pin set 0.8 mm - 1.9 mm

For locking the automatic timing belt tensioner when replacing a timing belt.

KL-0280-10 Locking pin Audi V6

For locking crankshafts e.g. on VW-Audi V6 Petrol and V6 / V8 Diesel engines. E.g. 2.5 and 3.3 TDI etc.

KL-0280-16 Fixture

For locking the timing belt tensioner in the starting position. e.g. suitable for VW-Audi, Ford, Seat, Škoda TDI PD (unit-injector) engines.

KL-0280-17 Locking tool for camshaft VW / Audi

For locking the two camshaft sprockets. Suitable for VW- Audi 1.4 / 1.6 petrol engines e.g. VW Lupo, Polo, Golf (IV), Bora / Audi A2.

KL-0280-19 Locking tool for crankshaft

For locking the crankshaft. e.g. suitable for VW-Audi, Ford, Seat, Škoda 3- and 4-cyl. TDI PD-engines (unit injector) e.g. 1.2; 1.4; 1.9 and 2.0 L (crankshaft sprocket with marking left to the locking screw)

KL-0280-20 Locking tool for crankshaft 2.0 TDI PD

For locking the crankshaft. Suitable for VW-Audi 2.0 L TDI engines with oval crankshaft timing belt sprocket e.g. with engine code: BDK, BKE, BLB, BMA, BMM, BMP, BMR, BNA, BPW, BRE, BRF, BRC, BUZ, BVE etc. (crankshaft sprocket with marking right to the locking screw)

KL-0280-21 Locking tool for camshaft

For locking the two camshaft sprockets. Suitable for VW- Audi 1.4 / 1.6 L petrol engines e.g.. VW Lupo, Polo, Golf (IV), Bora; Audi A2.

KL-0280-8 Locking pin Ø15.5 mm

For locking the injection pump sprocket, e.g. suitable for VW-Audi, Seat, Škoda, etc.

KL-0280-91 Setting gauge for camshaft

For locking the camshaft e.g. suitable for VW-Audi, Seat, Škoda 1.9 D; SD; SDI; TD and TDI engines Ford 1.6 D; 1.9 TD and 1.9 TDI engines. Volvo Diesel-engines D24, D24T, D24TIC etc.

KL-0280-92 Setting gauge for camshafts

For locking camshafts and crankshaft. Suitable for VW-Audi 2.5 TDI V6 and Audi A8 3.3 TDI V8 engines.

KL-0280-93 Setting gauge for camshaft A3 / Golf IV TDI

For locking camshafts without having to remove the aluminium valve cover or the intake manifold. Suitable for VW-Audi, Seat, Škoda 4 Zyl. 1.9 TDI / SDI engines (not PD). Especially suitable for e.g. VW Golf (IV) 1.9 TDI (110 PS) with aluminium valve cover.

KL-0282-31 Reaction wrench

With exchangeable tips and different pitches. To lock pulleys on the camshaft, injection pump etc. e.g. when loosening the fixing screw. Suitable for all punched pulleys with a hole Ø of minimum 12 mm. e.g. VW-Audi, Ford, Opel/Vauxhall, Peugeot, Renault, Citroën, Rover, Volvo, Jap. vehicles, etc.

KL-0284-91 Reaction wrench 240 mm long

With adjustable tension lever for tensioning timing belts on VW-Audi engines. Due to the adjustable tension lever, the tensioner can be operated even in confined spaces.

KL-0286-11 Guide pin set for front-end carrier

When changing timing belts or during engine repairs it is necessary to pull the front carrier on the guide pins forwards. Removal of the front carrier is not required. Suitable for VW-Audi A4, A6 and Passat model '97 onwards.

KL-1480-16 Locking Pin Ø 6 x 60 mm (2 pieces)

For locking the injection pump sprocket e.g. suitable for VW-Audi, Seat, Škoda, 1.9 D; SD; SDI; TD, TDI and 2.5 TDI. For positioning the camshaft e.g. suitable for VW-Audi, Ford, Seat, Škoda TDI PD-engines.

KL-0280-1070 Plastic storage case

Locking Tool Set VW-Audi

(German Utility Model)

KL-0280-109 K

Suitable for VW-Audi, Seat and Škoda vehicles.

This tool is designed to lock and/or position engine shafts, such as camshafts and crankshafts when replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-0180-30 A Retaining pin set 0.8 mm - 1.9 mm

For locking the automatic timing belt tensioner when replacing a timing belt.

KL-0280-16 Fixture

For locking the timing belt tensioner in the starting position. e.g. suitable for VW-Audi, Ford, Seat, Škoda TDI PD (unit-injector) engines.



KL-0280-17 Locking tool for camshaft VW / Audi

For locking both cam wheels. Suitable for VW-Audi 1.4 / 1.6 petrol engines e.g. VW Lupo, Polo, Golf IV, Bora / Audi A2.

KL-0280-19 Locking tool for crankshaft

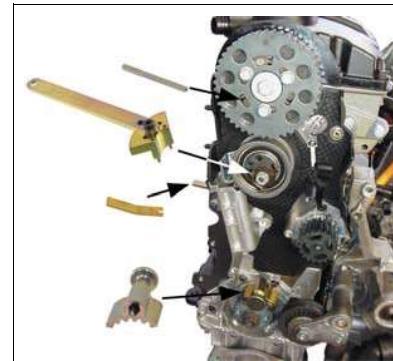
For locking crankshafts. E.g. suitable for VW-Audi, Ford, Seat, Škoda 3- and 4-Cyl. TDI PD (unit injector) engines e.g. 1.2; 1.4; 1.9 and 2.0 L (crankshaft sprocket with marking left to the locking screw)

KL-0280-20 Locking tool for crankshaft 2.0 TDI PD

For locking crankshafts. Suitable for VW-Audi 2.0 L TDI engines with oval crankshaft timing belt sprocket, e.g. with engine code: BDK, BKE, BLB, BMA, BMM, BMP, BMR, BNA, BPW, BRE, BRF, BRC, BUZ, BVE etc. (crankshaft sprocket with marking right to the locking screw)

KL-0280-21 Locking tool for camshaft (2 pieces)

For locking both camshaft sprockets. Suitable for VW-Audi 1.4 / 1.6 L petrol engines e.g. VW Lupo, Polo, Golf IV, Bora / Audi A2.



KL-0284-91 Adjuster for timing belt tensioner 240 mm long

With adjustable tension lever for tensioning timing belts on VW-Audi engines. Due to the adjustable tension lever, the tensioner can be operated even in a confined space.

KL-0286-11 Guide Pin Set for front-end carrier

When changing timing belts or during engine repairs it is necessary to pull the front carrier on the guide pins forwards. Removal of the front carrier is not required. Suitable for VW-Audi A4, A6 and Passat model '97 onwards.

KL-1480-16 Locking pin Ø 6 x 60 mm (2 pieces)

For locking the injection pump wheel; suitable for VW-Audi, Seat, Škoda, 1.9 D; SD; SDI; TD, TDI and 2.5 TDI. For positioning camshafts; suitable for VW-Audi, Ford, Seat, Škoda TDI PD-engines.

KL-0280-1070 Plastic storage case

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KL-0280-61 K

Locking Tool Set VW

(German Utility Model)



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Suitable for the most common VW-Audi, Seat and Škoda vehicles with: 1.2; 1.4; 1.9 and 2.0 L TDI 3- and 4-cylinder diesel engines; 1.2 L 3-cylinder petrol engines; 1.4; 1.6; 1.8 and 1.8 L Turbo petrol engines; 1.4 and 1.6 L FSI petrol engines. Installed on VW Lupo, Polo, Golf, Passat and Audi A3, A4 etc.

This tool is designed to lock or position engine shafts such as camshafts, injection pump shafts and crankshafts. It can also be used for locking and/or positioning as well as adjusting the timing belt tensioner. This tool is indispensable when replacing a timing belt or performing an engine repair.

Scope of Delivery:

KL-0180-30 A Retaining pin set Ø 0.8 mm - Ø 1.9 mm

For locking the automatic timing belt tensioner when replacing a timing belt.

KL-0180-3026 Retaining Pin Ø 2.6 mm

For locking the automatic timing belt tensioner when replacing a timing belt.

KL-0280-1081 A Locking pin for camshafts

Suitable for VW, Seat, Škoda 1.2 L 3-cylinder petrol engines with single camshaft. Engine code: AWY, BMD, e.g. VW Polo; Seat Ibiza, Cordoba and Škoda Fabia.

KL-0280-1082 A Locking pin for camshafts

Suitable for VW, Seat, Škoda 1.2 L 3-cylinder petrol engines with double camshaft. Engine code: AZQ, BME.

KL-0280-1083 A Locking pin for crankshaft

Suitable for VW, Seat, Škoda 1.2 L 3-cylinder petrol engines Engine code: AWY, BMD, AZQ, BME.

KL-0280-16 Fixture

For locking the timing belt tensioner in the starting position. e.g. suitable for VW-Audi, Ford, Seat, Škoda TDI PD (unit-injector) engines. Engine code: AJM, ALT, AMF, ANU, ANY, ARL, ASZ, ATD, ATJ, AUY, AVB, AVF, AWT, AWX, AXR

KL-0280-17 Locking tool for camshaft VW-Audi

Suitable for VW-Audi 1.4 / 1.6 L petrol engines e.g. VW Lupo, Polo, Golf (IV), Bora / Audi A2. Engine code: AFK, AHW, APE, AQQ, AUA, AUB, AUS, AXP, AZD, BBY, BBZ, BCA, BCB.

KL-0280-19 Locking Tool for crankshaft 1.2/1.4/1.9 TDI/SDI PD

Suitable for VW-Audi, Ford, Seat, Škoda 3- and 4-cyl. TDI PD (unit injector) engines.

KL-0280-20 Locking Tool for crankshaft 1.9/2.0 TDI PD

Suitable for VW-Audi 1.9/2.0 L TDI engines with oval crankshaft timing-belt pulley, e.g. with engine code: BDK, BKE, BLB, BMA, BMM, BMP, BMR, BNA, BPW, BRE, BRF, BRC, BUZ, BVE etc.

KL-0280-2201 A Locking pin Ø 2.5 mm angled

For locking and/or positioning the timing belt tensioner. Suitable for VW Golf, Touran, Sharan, Caddy models '04 onwards, 4-cyl. diesel engines with modified engine mounting Engine code: AZV.

KL-0280-2202 A Special hexagon socket key, 6 mm hex

For locking and/or positioning the timing belt tensioner. Suitable for VW Golf, Touran, Sharan, Caddy models '04 onwards, 4-cyl. diesel engines with modified engine mounting Engine code: AZV.

KL-0280-6013 A Clamping screw with sleeve For adjusting the timing belt tensioner.

KL-0280-6021 A Setting gauge for camshaft

Suitable for VW-Audi 1.4 and 1.6 FSI petrol engines. Engine code: AXU, BAG, BKG, BLF, BLN, BLP.

KL-0280-6101 Locking pin Ø 4 mm For adjusting the tensioner.

KL-0280-6102 Locking pin Ø 7 mm For adjusting the tensioner.

KL-0280-6103 Locking pin Ø 8 mm For adjusting the tensioner.

KL-0280-8 Locking pin Ø 15.5 mm

Suitable for VW-Audi, Seat, Škoda, etc. For locking the injection pump sprocket.

KL-0280-91 Setting gauge for camshaft

Suitable for VW-Audi, Seat, Škoda 1.9 D; SD; SDI; TD and TDI engines. Engine code: AGP, AGR, AHF, ALH, AQM, ASV, AYQ; Ford 1.6 D; 1.9 TD and 1.9 TDI engines; Volvo diesel engines D24, D24T, D24TIC etc.

KL-0280-93 Setting gauge for camshaft

To lock camshafts without having to remove the aluminium valve cover or the intake manifold. Suitable for VW-Audi, Seat, Škoda 4 cyl. 1.9 TDI / SDI engines (not for PD). specially suitable for 1.9 TDI (110 PS) with aluminium valve cover e.g. VW Golf (IV).

KL-0284-91 Adjuster for timing belt tensioner 240 mm long

For tensioning the tensioner. Suitable for VW-Audi engines.

KL-0286-11 Guide Pin Set for front-end carrier

When changing timing belts or during engine repairs it is necessary to pull the front carrier on the guide pins forwards. Removal of the front carrier is not required. Suitable for VW-Audi A4, A6 and Passat from '97.

KL-1480-16 Locking pin Ø 6 mm, long

For locking the injection pump sprocket. Suitable for VW-Audi, Seat, Škoda, 1.9 D; SD; SDI; TD and TDI. For positioning the camshaft. Suitable for VW-Audi, Ford, Seat, Škoda TDI PD-engines.

KL-1681-111 Adaptor M14x1.25 for TDC adjusting

Suitable for VW-Audi 1.4 and 1.6 FSI petrol engines. Engine code: AXU, BAG, BKG, BLF, BLN, BLP

KL-0280-6190 Plastic storage case

Locking Tool Set VW Basic Set

(German Utility Model)

KL-0280-611 K

Suitable for the most common VW-Audi, Seat und Škoda vehicles with 1.2, 1.4, 1.9 L 3- and 4-cylinder TDI diesel engines, 1.4, 1.6, 1.8 petrol engines and 1.8 Turbo petrol engines.

Built-in to e.g. VW Lupo, Polo, Golf, Passat and Audi A3, A4 etc.

This tool is designed to lock or position engine shafts such as camshafts, injection pump shafts, and crankshafts when replacing a timing belt or during engine repairs.

Scope of Delivery:**KL-0180-30 A Retaining Pin Set Ø 0.8 mm - Ø 1.9 mm**

For locking the automatic timing belt tensioner when replacing a timing belt.

KL-0180-3026 Retaining pin Ø 2.6 mm

For locking the automatic timing belt tensioner when replacing a timing belt.

KL-0280-16 Fixture

For locking the timing belt tensioner in the starting position. e.g. suitable for VW-Audi, Ford, Škoda TDI PD (unit-injector) engines. Engine code: AJM, ALT, AMF, ANU, ANY, ARL, ASZ, ATD, ATJ, AUY, AVB, AVF, AWT, AWX, AXR

KL-0280-17 Locking tool for camshaft VW-Audi

Suitable for VW-Audi 1.4 / 1.6 L petrol engines e.g. VW Lupo, Polo, Golf IV, Bora / Audi A2. Engine code: AFK, AHW, APE, AQQ, AUA, AUB, AUS, AXP, AZD, BBY, BBZ, BCA, BCB

KL-0280-19 Locking tool for crankshaft 1.2/1.4/1.9 TDI PD

Suitable for VW-Audi, Ford, Škoda 3- and 4-cyl. TDI PD (unit injector) engines.

KL-0280-6013 A Clamping screw M5 with sleeve

For adjusting the timing belt tensioner.

KL-0280-6101 Locking pin Ø 4 mm

For adjusting the tensioner.

KL-0280-6102 Locking pin Ø 7 mm

For adjusting the tensioner.

KL-0280-6103 Locking pin Ø 8 mm

For adjusting the tensioner.

KL-0280-8 Locking pin Ø 15.5 mm

For locking the injection pump sprocket. Suitable for VW-Audi, Škoda, etc.

KL-0280-91 Setting gauge for camshaft

Suitable for VW-Audi, Škoda 1.9 D; SD; SDI; TD and TDI engines. Engine code: AGP, AGR, AHF, ALH, AQM, ASV, AYQ; Ford 1.6 D; 1.9 TD and 1.9 TDI engines; Volvo diesel engines D24, D24T, D24TIC etc..

KL-0280-93 Setting gauge for camshaft

For locking the camshaft without having to remove the aluminium valve cover or the intake manifold. Suitable for VW-Audi, Škoda 4-cyl. 1.9 TDI / SDI engines (not for PD). Especially suitable for 1.9 TDI (110 PS) with aluminium valve cover e.g. VW Golf IV.

KL-0284-91 Adjuster for timing belt tensioner 240 mm long

For tensioning the tensioner. Suitable for VW-Audi engines.

KL-0286-11 Guide Pin Set for front-end carrier

When replacing a timing belt or during engine repairs it is necessary to pull the front-end carrier on the guide pins forwards. Removal of the front carrier is not required. Suitable for VW-Audi A4, A6 and Passat from '97.

KL-1480-16 Locking pin Ø 6 mm, long

For locking the injection pump sprocket. Suitable for VW-Audi, Škoda, 1.9 D; SD; SDI; TD and TDI. For positioning the camshaft. Suitable for VW-Audi, Ford, Škoda TDI PD- engines.

KL-1681-111 Adaptor M14x1.25 for TDC adjusting

Suitable for VW-Audi 1.4 and 1.6 FSI petrol engines. Engine code: AXU, BAG, BKG, BLF, BLN, BLP

KL-0280-6190 Plastic storage case

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KL-0280-612

Locking Tool Set VW Supplementary Set

(German Utility Model)



Suitable for the most common VW-Audi, Seat und Škoda vehicles with:
1.2 L 3-cylinder petrol engines, for ex. VW Polo, Fox; Škoda, Fabia; Seat Ibiza, Cordoba,
1.4 L and 1.6 L FSI petrol engines, for ex. Audi A3; Škoda Octavia; VW Polo, Golf, Touran,
as well as 1.9 and 2.0 L TDI diesel engines, for ex. Audi A3, A4; VW Golf, Passat.

Scope of delivery:

KL-0280-1081 A Locking pin for camshafts

Suitable for VW, Seat, Škoda 1.2 L 3-cylinder petrol engines with single camshaft.
 Engine code: AWY, BMD. e.g. VW Polo; Seat Ibiza, Cordoba and Škoda Fabia.

KL-0280-1082 A Locking pin for camshafts

Suitable for VW, Seat, Škoda 1.2 L 3-cylinder petrol engines with double camshaft.
 Engine code: AZQ, BME

KL-0280-1083 A Locking pin for crankshaft

Suitable for VW, Seat, Škoda 1.2 L 3-cylinder petrol engines. Engine code: AWY, BMD, AZQ, BME

KL-0280-20 Locking tool for crankshaft 2.0 L TDI PD

Suitable for VW-Audi 2.0 L TDI engines with oval crankshaft timing belt sprocket, e.g. with engine code: BDK, BKE, BLB, BMA, BMM, BMP, BMR, BNA, BPW, BRE, BRF, BRC, BUZ, BVE etc.

KL-0280-2201 A Locking pin Ø 2.5 mm angled

For locking and/ or positioning the timing belt tensioner. Suitable for VW Golf, Touran, Sharan, Caddy models '04 onwards,
 4-cyl. diesel engines with modified engine mounting Engine code: AZV

KL-0280-2202 A Special hexagon socket key, width across flats 6 mm

For locking and/ or positioning the timing belt tensioner. Suitable for VW Golf, Touran, Sharan, Caddy models '04 onwards,
 4-cyl. diesel engines with modified engine mounting Engine code: AZV

KL-0280-6021 A Setting gauge for camshaft

Suitable for VW-Audi 1.4 and 1.6 FSI petrol engines. Engine code: AXU, BAG, BKG, BLF, BLN, BLP

KL-1681-111 Adaptor M14x1.25 for TDC adjusting

Suitable for VW-Audi 1.4 and 1.6 FSI petrol engines. Engine code: AXU, BAG, BKG, BLF, BLN, BLP

KL-0280-62 K

Locking Tool Set VW 1.2, 1.4, 1.6, 1.9 and 2.0 TDI

(German Utility Model)

Suitable for the most common VW-Audi, Seat and Škoda vehicles with: 1.2, 1.4, 1.6, 1.9 and 2.0 L 3- and 4-Cylinder TDI diesel engines.

Installed in VW Lupo, Polo, Golf, Passat and Audi A3, A4 etc.

This tool is designed to lock or position engine shafts such as camshafts, injection pump shafts and crankshafts. It can also be used for locking and/ or positioning pulley tensioners as well as for adjusting the timing belt tensioner. The guide pins included in the set are required to pull the front-end carrier forwards. As a result, the removal of the front-end carrier is no longer necessary.

Scope of Delivery:

KL-0280-62 K Locking Tool Set VW 1.2, 1.4, 1.6, 1.9 and 2.0 TDI



Part No.	Description	Quantity
KL-0180-3024	Retaining pin Ø2.4 mm	1
KL-0280-16	Fixture	1
KL-0280-19	Locking tool 1.2/1.4/1.9 l. TDI PD	1
KL-0280-20	Locking tool 2.0 l. TDI PD	1
KL-0280-2201 A	Locking pin Ø2.5 mm angled	1
KL-0280-2202 A	Special hexagon socket key, size 6 mm	1
KL-0280-222	Locking pin Ø4 mm angled	1
KL-0280-6101	Locking pin Ø4 mm	1
KL-0280-6102	Locking pin Ø7 mm	1
KL-0280-8	Locking pin Ø15.5 mm	1
KL-0280-91	Setting gauge for camshaft	1
KL-0284-91	Adjuster for timing belt tensioner 240 mm in length	1
KL-0286-11	Guide Pin Set for front-end carrier VW-Audi	1
KL-1480-16	Locking pin Ø6 mm, long	2
KL-0280-6290	Plastic storage case	1

Locking Tool Set VW Basic Set

(German Utility Model)

KL-0280-621 K

Suitable for the most common VW-Audi, Seat and Škoda vehicles with: 1.2, 1.4, 1.6, 1.9 and 2.0 L TDI 3- and 4-cylinder Diesel engines.

Tool set for locking and/or positioning engine shafts such as camshaft, injection pump shaft and crankshaft. It can also be used to lock and /or position the timing belt tensioner.

Indispensable when replacing a timing belt or performing an engine repair.

Scope of Delivery:

KL-0280-621 K Locking Tool Set VW Basic Set

Part No.	Description	Quantity
KL-0180-3024	Retaining pin Ø2.4 mm	1
KL-0280-19	Locking tool 1.2/1.4/1.9 l. TDI PD	1
KL-0280-20	Locking tool 2.0 L TDI PD	1
KL-0280-2201 A	Locking pin Ø2.5 mm angled	1
KL-0280-2202 A	Special hexagon socket key, size 6 mm	1
KL-0280-6102	Locking pin Ø7 mm	1
KL-0280-8	Locking pin Ø15.5 mm	1
KL-0280-91	Setting gauge for camshaft	1
KL-1480-16	Locking pin Ø6 mm, long	2
KL-0280-6290	Plastic storage case	1



Locking Tool Set VW Upgrade Kit

KL-0280-622

Suitable for the most common VW-Audi, Seat and Škoda vehicles with: 1.2, 1.4, 1.6, 1.9 and 2.0 L TDI 3- and 4-cylinder Diesel engines.

This tool set is designed to lock, position and adjust the timing belt tensioner. It can also be used to lock the tensioning element when removing a V-ribbed belt. Indispensable when replacing a timing belt or performing an engine repair. The guide pins included in the set are required to pull the front-end carrier forwards. As a result, the removal of the front-end carrier is not necessary.

Scope of Delivery:

KL-0280-622 Locking Tool Set VW Upgrade Kit

Part No.	Description	Quantity
KL-0280-16	Fixture	1
KL-0280-222	Locking pin Ø4 mm, angled	1
KL-0280-6101	Locking pin Ø4 mm	1
KL-0284-91	Adjuster for timing belt tensioner 240 mm in length	1
KL-0286-11	Guide Pin Set for front-end carrier VW-Audi	1



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Puller Tool Set PD (Unit Injector)

KL-0282-39

Suitable for VW-Audi, Ford, Seat, Škoda 3- and 4-cylinder (1.2; 1.4; 1.9 and 2.0 L) TDI PD-engines.

This tool enables the easy and professional removal of the camshaft hub. It is required, for example, when replacing the cylinder head gasket on 1.9 L engines, when removing and replacing the camshaft or used in the repair of engines or cylinder heads.

The reaction wrench **KL-0282-391** enables the camshaft hub fixing screw to be loosened and tightened accurately.

The puller **KL-0282-392** allows the accurate removal of the camshaft hub from the taper of the camshaft.

Scope of Delivery:

KL-0282-39 Puller Tool Set PD (Unit Injector)

Part No.	Description	Qty.
KL-0282-391	Reaction wrench	1
KL-0282-392	Puller for camshaft hub	1



KL-0280-63 K

Locking Tool Set



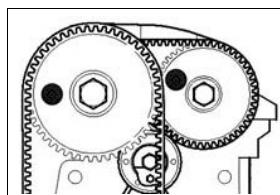
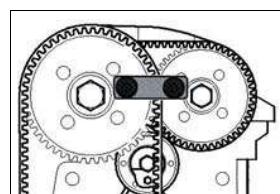
Suitable for VW-Audi 1.4 16V, 1.4 FSI, 1.6, 1.6 16V, 1.6 FSI, 1.8 Turbo, 1.8 Turbo 20V, 2.0, 2.0 16V, 2.0 FSI / TFSI, 2.4, 2.7 Turbo and 2.8 petrol engines.

Tool set for locking and/or positioning engine shafts such as camshafts and crankshaft. It can also be used to lock, position and adjust the timing belt tensioner as well as to lock the tensioning element of the V-ribbed belt. The guide pins included in the set are required to pull the front-end carrier forwards. As a result, the removal of the front-end carrier is not necessary.

Scope of Delivery:

KL-0280-63 K Locking Tool Set

Part No.	Description	Quantity
KL-0180-3012	Retaining pin Ø1.2 mm	1
KL-0149-131	Pin-type face spanner Ø14 -100 mm, pin Ø5mm	1
KL-0280-10	Locking pin Audi V6	1
KL-0280-16	Fixture	1
KL-0280-17	Locking tool for camshaft VW-Audi	1
KL-0280-21	Locking tool for camshaft (2 pcs.)	1
KL-0280-221	Locking pin Ø4 mm, angled	1
KL-0280-222	Locking pin Ø4 mm, angled	1
KL-0280-6013 A	Tension screw with sleeve	1
KL-0280-6101	Locking pin Ø4 mm	1
KL-0280-6103	Locking pin Ø8 mm	1
KL-0284-91	Adjuster for timing belt tensioner 240 mm in length	1
KL-0286-11	Guide Pin Set for front-end carrier VW-Audi	1
KL-0280-6390	Plastic storage case	1



KL-0280-631 K

Locking Tool Set VW Basic Set



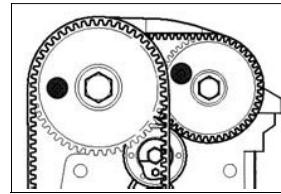
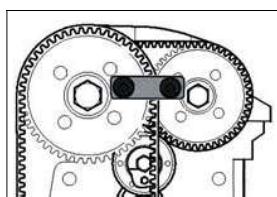
Suitable for VW-Audi 1.4 16V, 1.4 FSI, 1.6 16V, 1.6 FSI, 1.8 Turbo, 1.8 Turbo 20V, 2.4, 2.7 Turbo and 2.8 petrol engines.

Tool set for locking and or positioning engine shafts such as camshafts and crankshaft. It can also be used to lock, position and adjust the timing belt tensioner. The guide pins included in the set are required to pull the front-end carrier forwards. As a result, the removal of the front-end carrier is not necessary.

Scope of Delivery:

KL-0280-631 K Locking Tool Set VW Basic Set

Part No.	Description	Quantity
KL-0180-3012	Retaining pin Ø1.2 mm	1
KL-0149-131	Pin-type face spanner Ø14 -100 mm, pin Ø5mm	1
KL-0280-10	Locking pin Audi V6	1
KL-0280-17	Locking tool for camshaft VW-Audi	1
KL-0280-21	Locking tool for camshaft (2 pcs.)	1
KL-0280-221	Locking pin Ø4 mm, angled	1
KL-0280-6013 A	Tension screw with sleeve	1
KL-0280-6103	Locking pin Ø8 mm	1
KL-0280-6390	Plastic storage case	1



Locking Tool Set for VW-Audi

(German Utility Model)

KL-0280-106 A

Universal Diesel tool set designed to lock or position engine shafts such as camshafts, crankshaft as well as the injection pump sprocket when replacing a timing belt or during engine repairs.

Scope of Delivery:

KL-0280-8 Locking Pin Ø 15.5 mm

For locking injection pump sprockets. Suitable e.g. for VW-Audi, Seat, Škoda, etc.



KL-0280-16 Fixture

For locking the timing belt tensioner in the starting position. e.g. suitable for VW-Audi, Ford, Seat, Škoda TDI PD (unit injector) engines.



KL-1480-16 Locking pin Ø 6 x 60 mm

For locking the injection pump sprocket; suitable for VW-Audi, Seat, Škoda, 1.9 D; SD; SDI; TD, TDI and 2.5 TDI. For positioning camshafts; suitable for VW-Audi, Ford, Seat, Škoda TDI PD-engines.



KL-0280-19 Locking tool for crankshaft (German Utility Model)

For locking crankshafts. Suitable for VW-Audi, Ford, Seat, Škoda 3- and 4-Cyl. TDI PD (unit injector) engines e.g. 1.2; 1.4; 1.9 and 2.0 L (crankshaft sprocket with marking left to the locking screw)



KL-0280-91 Setting gauge for camshaft

For locking camshafts. Suitable for VW-Audi, Seat, Škoda 1.9 D; SD; SDI; TD and TDI engines Ford 1.6 D; 1.9 TD and 1.9 TDI engines. Volvo Diesel-engines D24, D24T, D24TIC etc.

Locking Tool Set

(German Utility Model)

KL-0280-102 A

Suitable for the VW-Audi, Ford, Seat, Škoda 3 and 4 cyl. (1.2; 1.4; 1.9 and 2.0) TDI PD engines (PD=unit injector)

Used for locking the crankshaft and the automatic timing belt tensioner. This tool is required when replacing a timing belt or for engine repairs.



Scope of Delivery:

KL-0280-102 A Locking Tool Set VW-Audi PD

Part No.	Description	Qty.
KL-0280-19	Locking tool 1.2/1.4/1.9 l. TDI PD	1
KL-0280-16	Fixture	1

⚠ Note:

The expanding mandrel ensures that the tool is accurately locked in the housing borehole. Basic body made of tensional steel.



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Locking Tool with Expanding Mandrel for Crankshaft

(German Utility Model)

KL-0280-20

Suitable for the VW-Audi 1.9 and 2.0 L TDI engines with oval crankshaft timing belt sprocket (engine code: BDK, BJB, BKE, BLB, BMA, BMM, BMP, BMR, BNA, BPW, BRE, BRF, BRC, BUZ, BVE, BXE) e.g. (Caddy 06/2005 onwards), Touran etc.

Used for locking the crankshaft in position.

This tool is required when replacing a timing belt or for engine repairs.



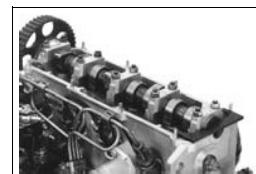
Setting Gauge

KL-0280-9

Suitable for VW-Audi, Ford, Seat, Škoda, Volvo, etc.

e.g. VW LT, Crafter (Engine code: BJJ, BJK, BJL, BJM).

This tool is designed to lock or position camshafts. It is required when changing a timing belt or during an engine repair.



KL-0280-101

Locking Tool Set



Suitable for the VW- Audi, Seat, Škoda TDI engines.

When replacing a timing belt or during an engine repair, it is necessary to lock the injection pump sprocket using locking pin **KL-1480-16**. The camshaft has to be locked by means of setting gauge **KL-0280-91**.

Adaptors **KL-0129-13** and **KL-0129-14** in conjunction with tool set **KL-0129-1** enable the adjustment of the injection pump relative to the crankshaft (start-of-delivery setting of injection pump).

Technical Data:

Weight:	263 g
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KL-0280-103

Locking Tool Set



Suitable for VW- Audi, Seat, Skoda 4 cylinder 1,9 TDI/SDI engines (not PD). Especially suitable (for example) for VW Golf (IV 1.9 TDI [110 PS]) with aluminium valve cover.

Required to lock engine shafts such as camshaft and injection pump shaft when replacing a timing belt or performing an engine repair.

The **KL-0280-103** tool set enables replacement of a timing belt without having to remove the aluminium valve cover or the intake manifold.

Technical Data:

Weight:	400 g
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 **Note:**

The valve cover seal has been vulcanised to the valve cover and can, therefore, only be replaced in combination with the valve cover. The seal is not available separately.

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KL-0280-220 A

Tensioning Tool Set (2 pieces)



Suitable for VW Golf, Touran, Sharan, Caddy model 2004 onwards, 4-cylinder diesel engines with modified engine mountings.

This tool set is designed to lock and/or position timing belt tensioners. It is required when replacing a timing belt or performing an engine repair.

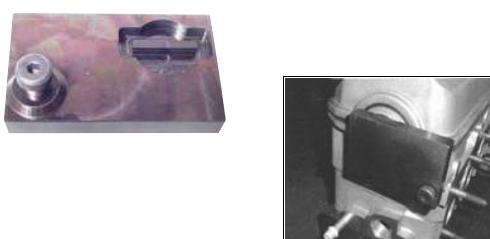
Scope of Delivery:

KL-0280-220 A Tensioning Tool Set (2 pieces)

Part No.	Description	Qty.
KL-0280-2201 A	Locking pin Ø 2.5 mm, angled	1
KL-0280-2202 A	Special hexagon socket key (ball end), 6 mm hex	1

KL-0280-94

Setting Gauge for Camshaft



Suitable for VW/Audi 5 cylinder TDI engines e.g. LT, T4

This setting gauge enables the locking of the camshaft without having to remove the valve cover.

Required when replacing a timing belt or performing an engine repair.

Technical Data:

Weight:	680 g
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Locking Tool Set VW 2.5 TDi

(German Utility Model)

KL-0280-26

Suitable for 2.5 SDi, 2.5 TDi and 2.5 Tdi Common Rail engines (e.g. BJJ, BJK, BJL, BJM) VW Transporter, LT and Crafter.

For locking camshafts and crankshaft.

Essential tool set when replacing a timing belt or performing an engine repair.



Scope of Delivery:

KL-0282-52 Puller for Timing Belt Sprocket

Suitable for VW-Audi e.g. Audi A4, A6, A8 and VW Passat etc. with 4-, 6- and 8-cylinder engines. For removing 5- and 6-spoke camshaft sprockets.

KL-0284-61 Reaction Wrench

Suitable for VW-Audi 4 and 5-cylinder engines, both with or without vibration damper. For locking the crankshaft pulley whilst loosening or tightening the crankshaft central screw.



KL-0280-9 Setting Gauge

Guarantees the correct position of camshaft and pump shaft relative to the crankshaft when replacing a timing belt or when removing and installing an injection pump. (Correct timing adjustment).



KL-0280-8 Locking Pin Ø15.5 mm

for VW-Audi, Seat, Škoda, etc. Used to lock the injection pump sprocket.

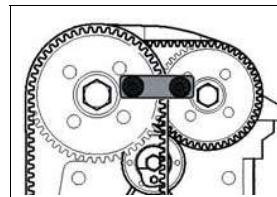
KL-0280-2601 Locking Pin Ø16, Ø10, Ø7.5

Used to lock the crankshaft.



KL-0284-17 Adjuster for Timing Belt Tensioner size (width across flats) 32 mm

For tensioning and relieving the tension on the automatic tension pulley on Audi A6 5-cylinder TDI engines (also for Volvo etc.).



6

Locking Tool Set

KL-0280-105

Suitable for VW-Audi 2.5 TDI V6 and Audi A8 3.3 TDI V8 engines. (Engine code: AFB, AKE, AKN, AMY, BAU, BCZ, BFC, BDG, BDH)

For locking camshafts and crankshaft.

Required when replacing a timing belt or performing an engine repair.



Scope of Delivery:

KL-0280-105 Locking Tool Set

Part No.	Description	Qty.
KL-0280-92	Setting Gauge for Camshafts	2
KL-0280-10	Locking Pin for crankshaft	1



KL-0280-25 K

Locking Tool Set VW-Audi 2.5 TDI V6

**Suitable for the VW-Audi 2.5 TDI V6 diesel engines.**

This tool is designed to lock or position engine shafts such as camshafts, injection pump shafts and crankshafts. It can also be used for locking and adjusting the timing belt tensioner while replacing a timing belt or during an engine repair. The guide pins included in the set are required to pull the front carrier forwards. As a result, the removal of the front carrier is no longer necessary.

Scope of Delivery:

KL-0280-10 Locking pin For locking the crankshaft.

KL-0280-92 Setting gauge (2 units) For locking the camshafts.

KL-0286-11 Guide Pin Set for front-end carrier

When changing a timing belt or during an engine repair it is necessary to pull the front carrier on the guide pins forwards. As a result, the removal of the front carrier is no longer required.

**KL-1480-16 Locking pin Ø 6 mm x 60 mm**

For locking the injection pump sprocket.

KL-0180-3012 Retaining pin Ø 1.2 mm

For locking the automatic timing belt tensioner .

KL-0369-10 Socket 22 mm hex

For tightening the tensioner of the injection pump pulley.

KL-0280-2501 Locking pin Ø 4.4 mm

For locking the V-ribbed belt tensioner tool.

KL-0280-27 K

Locking Tool Set VW 2.5 TDI

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**Suitable for:**

- VW Transporter (2004 onwards) 2.5 TDI (engine: AXD, BNZ)
- VW Touareg (2003 onwards) 2.5 TDI (engine: BAC, BPE)

This tool set is designed to rotate the crankshaft as well as to lock and position camshaft and crankshaft.

Scope of Delivery:

KL-0280-27 K Locking Tool Set VW 2.5 TDI

Part No.	Description	Quantity
KL-0280-271	Locking tool for crankshaft	1
KL-0280-272	Locking pin Ø16 mm, Ø10.3 mm	1
KL-0280-273	Locking tool for camshaft	1
KL-0284-823	Wrench for crankshaft	1
KL-0280-2790	Plastic storage case	1

KL-0280-108 KA

Locking Tool Set VW 3-cylinder

**Suitable for VW, Seat, Skoda 1.2 L 3-cylinder petrol engines with SingleCam or TwinCams (AWY, BMD; AZQ, BME) e.g. VW Polo; Seat Ibiza, Cordoba and Škoda Fabia.**

This tool is designed for locking and/or positioning camshafts and crankshafts. It is required when replacing a timing chain or during an engine repair.

Technical Data:

Weight:	600 g
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Scope of Delivery:

KL-0280-108 KA Locking Tool Set VW 3-cylinder

Part No.	Description	Qty.
KL-0280-1081 A	Locking pin for camshaft	1
KL-0280-1082 A	Locking pin for camshaft	2
KL-0280-1083 A	Locking pin for crankshaft	1
KL-0280-1089	Plastic storage case	1

Locking Tool for camshaft

KL-0280-17

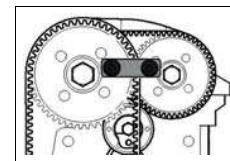
Suitable for the VW- Audi 1.4 / 1.6 L petrol engines (Engine code: AKQ, AUA, BCA, BXW) e.g. on VW Lupo, Polo, Golf (IV), Bora; Audi A2.

Used for locking both camshaft sprockets.

Required when replacing a timing belt or during an engine repair.

Technical Data:

Weight:	340 g
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Locking Pin Set

KL-0280-21

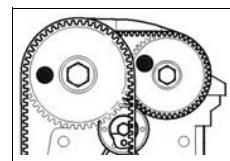
Suitable for VW- Audi 1.4 / 1.6 L petrol engines (ARC, ARR, AVY, AZD, BAD) e.g. on VW Lupo, Polo, Golf (IV), Bora / Audi A2

Used for locking both camshaft sprockets.

Required when replacing a timing belt or during an engine repair.

Technical Data:

Weight:	160 g
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Locking Tool Set

KL-0280-601 A

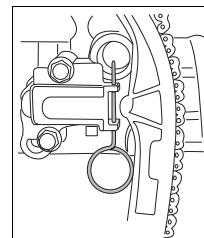
Suitable for the VW-Audi, Seat, Skoda 1.8 and 1.8 T TwinCam petrol engines (engine code: ADR, AEB, AFY, AGN, AGU, AJH, AJL, AJP, AJQ, AMK, ANB, APG, APP, APT, APU, APX, APY, AQA, AQX, ARG, ARX, ARY, ARZ, AUM, AUQ, AVC, AWC, AWP, AWU, AWV, AYP and BAM) as well as 2.4; 2.7 and 2.8 V6 petrol engines (engine code: AGA, AGB, AGE, AJG, AJK, ALF, ALG, ALW, AML, AMM, AMX, APC, APR, APS, APZ, AQD, ARE, ARJ, ARN, ASJ, ASM, AZA, AZR, BDV and BES) e. g. Audi A3, A4, A6, TT, S3; Seat Ibiza, Cordoba, Leon, Toledo, Alhambra; Skoda Octavia; VW Beetle, Golf, Bora, Passat, Sharan.

This tool is designed to adjust camshaft timing chains and timing belt tensioners. It is required when changing a timing belt or a timing chain, or during an engine repair.

Scope of Delivery:

KL-0280-601 Locking Tool Set

Part No.	Description	Qty.
KL-0280-6011 A	Holding tool for timing chain tensioner	1
KL-0180-3026	Retaining pin	1
KL-0280-6013 A	Tension screw with sleeve	1



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Locking Tool Set VW

KL-0280-602 KB

Suitable for the VW-Audi 1.4 and 1.6 FSi petrol engines

Engine code: AXU, BAG, BKG, BLF, BLN, BLP, BMY

e.g. Audi A3; Skoda Octavia; VW Polo, Golf, Golf Plus, Touran

This tool is used for locking and positioning camshafts, crankshaft and timing chain tensioners. It is required for checking and adjusting the camshaft timing, for example, when replacing a timing chain or during an engine repair.

Scope of Delivery:

KL-0280-602 KB Locking Tool Set VW

Part No.	Description	Qty.
KL-0280-6021 A	Setting gauge for camshaft	1
KL-0180-3026	Retaining pin Ø2.6 mm	1
KL-1681-111	Adaptor M14x1.25 for TDC Adjustment	1
KL-0280-6022	Locating screw for crankshaft	1
KL-0280-6029 A	Plastic storage case	1



KL-0280-951 A

Setting Gauge for camshafts



Suitable for VW-Audi 2.3; 2.8 and 2.9 petrol engines (engine code: AAA, ABV, AES, AMY [VR6] and AGZ [VR5]) e.g. VW Golf, Bora, Vento, Corrado, Passat, Sharan, Transporter; Seat Leon, Toledo, Alhambra; Ford Galaxy

This tool is designed for locking and/or positioning camshafts. It is required when replacing timing chains or during engine repairs.

KL-0280-23 K

Locking Tool Set



Suitable for the VW-Audi 3.0 L V6 TwinCam petrol engines (engine code: ASN, AVK, BBJ) e.g. on Audi A4, A6, A8.

This tool is used for locking and/or positioning engine shafts such as camshafts and crankshafts, as well as for locking, positioning and adjusting timing belt tensioners.

It is required when replacing a timing belt or during an engine repair.

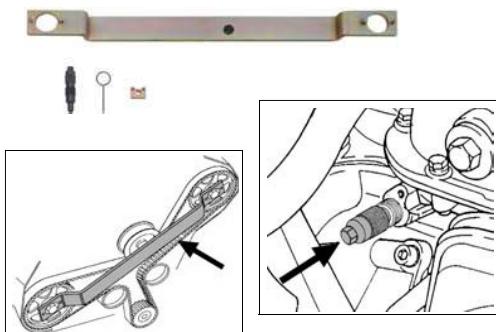
Scope of Delivery:

KL-0280-23 K Locking Tool Set

Part No.	Description	Qty.
KL-0280-2301	Setting gauge for camshafts (pair)	1
KL-0280-2302	Locking pin for crankshaft	1
KL-0280-2303	Adjusting Tool for camshaft sprocket	1
KL-0280-2304	Adjuster for timing belt tensioner	1
KL-0180-3026	Retaining pin Ø2.6 mm	1
KL-0280-2390	Storage Case with inlay	1

KL-0280-24

Locking Tool Set



Suitable for VW-Audi 3.7 / 4.2 V8 petrol engines (engine code: ABZ, AKC, ANK, AQF, AQG, AQJ, ARS, ARU, ASG, AUW, AVN, AWN, AXQ, BGH, BGJ und BHX) e.g. on Audi A6, S6, A8; VW Touareg, Phaeton.

This tool is used for locking and/or positioning engine shafts such as camshafts and crankshafts, as well as for locking, positioning and adjusting the timing belt tensioner.

It is required when replacing a timing belt or during an engine repair.

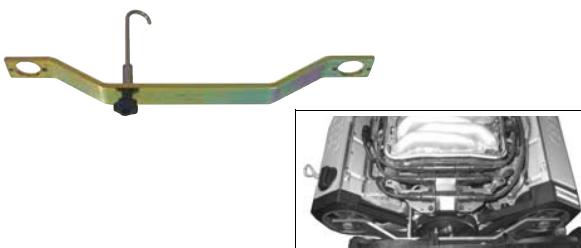
Scope of Delivery:

KL-0280-24 Locking Tool Set

Part No.	Description	Qty.
KL-0280-2401	Locking device for camshafts	1
KL-0280-2402	Adjuster for timing belt tensioner	1
KL-0280-10	Locking pin Audi V6	1
KL-0180-3026	Retaining pin Ø2.6 mm	1

KL-0280-11

Locking Tool



Suitable for the Audi V6 petrol engines (Engine code: ABC) with 2 valves per cylinder.

Designed to lock the camshafts e.g. when replacing a timing belt or performing an engine repair.

Technical Data:

Weight:	1.9 kg
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KL-0280-13

Locking Tool



Suitable for the Audi V6 2.4; 2.7 and 2.8 L (5 valve) petrol engines. Engine code: ALF, AMM, BDV

Designed to lock the camshafts e.g. when replacing a timing belt or performing an engine repair.

Technical Data:

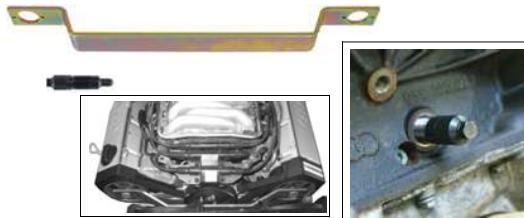
Weight:	2.2 kg
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Locking Tool Set Audi 2.4 / 2.7 / 2.8 V6

KL-0280-130

Suitable for Audi V6 2.4; 2.7 and 2.8 L (5-valve) petrol engines. Engine code: ALF, AMM, BDV

Used for locking engine shafts such as camshafts and crankshaft. This tool is required when replacing a timing belt or during an engine repair..

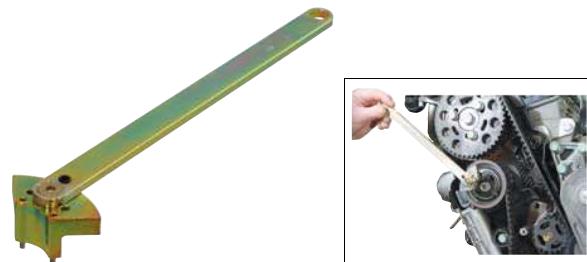


Spanner wrench

KL-0284-91

Suitable for VW-Audi engines.

Adjustable multi-position head tension lever for tensioning timing belts. Allows the tensioner idler pulley to be adjusted even in confined spaces.



Adjuster for Timing Belt Tensioner

KL-0284-10

Suitable for VW-Audi engines.

For tensioning timing belts. The tool can be activated from a variety of angles to enable it to be used in confined spaces.



Torx® Universal Joint Socket T45

KL-0284-14

Suitable for VW-Audi vehicles especially on:

- VW Golf (III), petrol engines as from 85 kW (115 PS) onwards and any diesel engines.
- Audi 80; A4, petrol engines with 85 kW (115 PS) and double fan.
- Audi 80; A4, diesel engines with double fan.



Suitable for loosening the timing belt tensioner clamping screw on timing belts.

Timing Belt Tension Test Gauge

KL-0126-10

Ideal for Audi, Ford, Opel/Vauxhall, VW, etc.

Mechanical control

The belt tension test gauge **KL-0126-10** enables controlled adjustment of the belt pre-tension on combustion engines.

The tool is applicable on any vehicle with available specifications and data of admitted belt deflexion in mm at a specified force in N or kp.

Advantages:

- Easy to use.
- Compact metal-based design.
- Controlled adjustment of the timing belt pre-tension.
- Double reading possibility (on front and rear side).



Technical Data:

Measuring range / Graduated scale	0 - 20 mm
Graduation of the scale	in mm
Measurement method	mechanical (spring)
360° revolution of adjusting knob	1 mm
graduation of adjusting knob (Nonius)	1/10 mm
Load capacity of the piston by the spring force at 1 revolution of the adjusting knob	10 N (1 kp)
Weight	0.344 kg

KL-0282-40

Camshaft Sprocket Removal Drift



Suitable for the VW/Audi 4 cylinder 1.9 TDI engine (110 PS)

Used to remove the camshaft sprocket from the conical seat on the camshaft. The special profile of the drift ensures that the impact force is delivered in the correct axial direction onto the front part of the camshaft sprocket.

KL-0282-52 K

Puller for Timing Belt Sprockets



Suitable for VW-Audi; e.g. Audi A4, A6, A8 and VW Passat etc. with 4-, 6- and 8-cylinder engines.

The puller KL-0282-52 K is particularly suitable for removing 5- and 6-spoke camshaft sprockets. A selection of hooks is included to make the puller almost universal in its range of application.

Technical Data:

Drive:	17 mm
Max. pulling width:	100 mm
Max. pulling height :	38 mm
Max. load capacity:	2 t
Weight:	1.3 kg

KL-0282-1

Extractor



Suitable for VW-Audi, Seat, Škoda, etc.

Used to remove the injection pump sprocket from the distributor-type fuel injection pump.

KL-0282-31

Reaction Wrench (420 mm long, adjustable)



Suitable for all perforated timing belt sprockets with a hole-Ø of minimum 12 mm; e.g. on VW-Audi, Ford, Vauxhall/Opel, Peugeot, Renault, Citroën, Rover, Volvo, Japanese vehicles, etc.

With inter-changeable pins and different hole pitches.

Designed to prevent timing belt sprockets on camshafts, injection pumps, etc. from rotating, for example, when loosening the central fastening bolt.

Due to the different pin-Ø and hole pitches, this wrench is almost universal in its range of application.

Technical Data:

Pin distance:	45 mm to 75 mm
Pin-Ø:	12 mm and 16 mm
Pin height:	61 mm
Overall tool length:	420 mm

KL-0282-35 A

Reaction Wrench Set (515 mm long, adjustable)



Universally suitable for perforated timing belt sprockets with a hole-Ø of minimum 8 mm; e.g. on VW-Audi, Fiat, Ford, Vauxhall/Opel, Peugeot, Renault, Citroën, Rover, Volvo, Japanese vehicles, etc.

Designed to prevent timing belt sprockets on camshafts, injection pumps, etc. from rotating, for example, when loosening or tightening the central fastening bolt. Due to the different inter-changeable pins and the adjustable lever for variable adjustment of the hole diameter and the hole pitches, this tool is almost universal in its range of application.

Technical Data:

Pin distance:	from 14 mm to 130 mm
Pin-Ø:	7.5 mm, 12 mm, 18 mm
Pin height:	25 mm / 42 mm
Overall tool length:	515 mm

Scope of Delivery: KL-282-35 A Reaction Wrench Set

Part No.	Description	Qty.
KL-0282-35	Reaction wrench, adjustable	1
KL-0282-311	Bolt Set Ø18 mm	1
KL-0282-312	Bolt Set Ø7.5 mm	1

Reaction Wrench

KL-0284-63

Universal application.

Particularly required for VW-Audi, Seat, and Škoda 1.4 and 1.6 L petrol engines with 2- or 4-valve system.

This tool is designed to lock pulleys, timing belt sprockets etc.

It is required for loosening and tightening the fastening bolt.

The locking takes place either via the pins with a diameter of 11.5 mm which engage the holes of the pulleys / timing belt sprockets, or by fixing the reaction wrench to the crankshaft timing belt sprocket by means of the bolt M8.

Thanks to the tool length of 700 mm, even very tight-fitting fastening bolts can easily be loosened by using this tool.



Reaction Wrench

KL-0284-64

Suitable for VW 1.4 16V / 1.6 16V petrol engines. Engine code: ARC, ATN, AUS, AVY, AZD, BCB.

At Lupo, Polo, Polo Classic, Golf, Bora, Beetle, Caddy etc.

This tool is used to counter-hold belt pulley while loosening and tightening the crankshaft central screw.



Locking Tool for Crankshafts

KL-0280-12

Suitable for VW engines e.g. VW T4 Van with 5-cylinder diesel engine

Designed to lock the crankshaft (crankshaft pulley) when loosening or tightening the central retaining bolt (for example when replacing a timing belt).



Reaction Wrench for Vibration Damper / Crankshaft

(German Utility Model)

KL-0284-61

Suitable for the VW-Audi 4- and 5-cylinder engines both with and without vibration damper; e.g. VW T4.

Designed to lock the crankshaft pulley when loosening or tightening the crankshaft central retaining bolt. This tool is indispensable when replacing timing belts, oil-seals or flywheels, as well as during engine repairs.

Advantages:

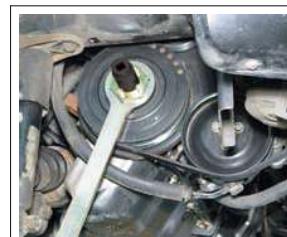
Thanks to the 2 extension handles, the locking, loosening and tightening of the crankshaft retaining bolt can be performed by a single mechanic.

**Technical Data:**

Total Length (incl. 2 extensions):	1800 mm
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Scope of Delivery:**KL-0284-61 Reaction Wrench for Vibration Damper / Crankshaft**

Part No.	Description	Qty.
KL-0284-61	Adaptor	1
KL-0284-6102	Special cylinder bolt	4
KL-0284-6103	Special Ring Spanner Size (width across flats) 60	1
KL-0284-6104	Extension	2
KL-0284-6105	Hex screw M8 x 28	4
KL-0035-0003	Hex nut M8	4
KL-0284-6106	Cylinder bolt M8 x 65	4
KL-0284-62	Hex socket wrench Size (width across flats) 27	1



KL-0282-51

Puller for Vibration Damper

(German Utility Model)



Suitable for VW 5-cylinder engines with V-ribbed belt e.g. T4, LT etc.

Used to remove the vibration damper whilst the timing belt sprocket is being pushed back at the same time. The **KL-0282-51** puller is absolutely indispensable if the shoulder of the crankshaft sprocket is seized corroded onto the vibration damper.

This tool can also be used when the engine is still in the vehicle.

Advantages:

- **No damage to the vibration damper.**
- **Substantial time savings.**

KL-0284-17

Adjuster for Timing Belt Tensioner Size (width across flats) 32 mm



Suitable for VW-Audi 5-cylinder TDI engines, for example on Audi A6, VW T4, also suitable for Volvo etc.

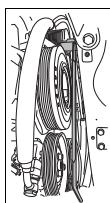
For tensioning and relieving the tension on the automatic timing belt idler pulley.

Technical Data:

Length:	175 mm
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KL-0284-12

Tension Lever for V-ribbed belts



Suitable for V-ribbed belts on e.g. VW Polo, Golf, Passat, T4 and Audi.

The tension lever **KL-0284-12** enables the automatic idler pulley to be loosened when replacing a V-ribbed belt.

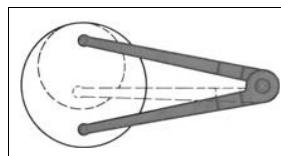
Advantages:

The lever head is variably attachable and can be interchanged.

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KL-0149-131

Pin-Type Face Spanner Ø14 -100, Pin Ø5 mm



Suitable for example for Audi A4, A6, A8 and VW Passat.

Designed to keep the fan-belt pulley in position when removing and installing the Visco-Fan on Audi A4, A6, A8 and VW Passat etc.

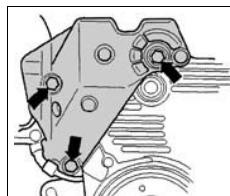
It can also be used to remove the pre-tension ring when installing a new SAC-clutch on Audi, Fiat etc.

Technical Data:

Ø:	14 -100 mm
Pins Ø:	5 mm
Pins height:	6 mm
Overall Length:	215 mm
Weight:	300 g

KL-0286-10

Socket Set (width across flats) 16mm (2 pcs.)



Suitable for VW Golf IV.

The sockets **KL-0286-10** with a width across flats of 16 mm (bi-hex) are indispensable for removal and installation of a aluminium engine mount due to restricted space conditions.

Required when replacing a timing belt or performing an engine repair.

Technical Data:

Drive:	1/2"
Length:	30 / 47.5 mm
Size (width across flats):	16 (bi-hex)

KL-0286-11

Guide Bolt Set



Suitable for VW- Audi A4, A6, Passat (3B) and T5.

When replacing a timing belt or performing an engine repair it is necessary to pull the front-end carrier on the guide bolts forwards. As a result, the removal of the front-end carrier is not necessary.

Technical Data:

Length:	190 mm
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Locking Tool Set BMW

KL-0580-102 K

Suitable for the BMW 6-cylinder diesel engine 2.5 L (M51) in BMW 325 td/tds (E36), BMW 525 td/tds (E34/39) and Vauxhall/Opel Omega 2.5 TD as well as for the 4-cylinder diesel engine (M41) in BMW 318 tds (E36).

This tool set is designed to remove the injection pump sprocket, to lock and position the chain tensioner, the flywheel and engine shafts such as camshafts, injection pump shafts and crankshafts. It can also be used to relieve the tension on the timing chain tensioner. Indispensable tool set when replacing a timing chain, removing an injection pump or for engine repairs.

Scope of Delivery:**KL-0580-10 Locking pin Ø11.8 / Ø8 mm**

Suitable for BMW engines M21, M40, M41, M42, M43, M43TU, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M60, M62, M70, M73, S50B30, S50B32, S54, S62. Used to lock the flywheel e.g. when replacing a timing chain or during an engine repair.

**KL-0580-11 Locking pin Ø9.9 mm**

Suitable for BMW 4-cylinder diesel engine (M41), 6-cylinder diesel engine-2.5 l (M51) as well as for Vauxhall/Opel Omega 2.5 TD. Used to lock the flywheel and injection-pump sprocket when replacing a timing chain or during an engine repair.

KL-0580-1201 Retaining pin Ø4

Suitable for BMW 4-cylinder diesel engine (M41), 6-cylinder diesel engine-2.5 l (M51) as well as for Vauxhall/Opel Omega 2.5 TD. Designed to lock the chain tensioner that has been relieved by means of reaction wrench **KL-0580-15**.

KL-0580-15 Hook wrench for chain tensioner BMW

Suitable for BMW 4-cylinder diesel engine (M41), 6-cylinder diesel engine-2.5 l (M51) as well as for Vauxhall/Opel Omega 2.5 TD. Designed to relieve the tension on the automatic timing chain tensioner, while replacing a timing chain or during an engine repair.

KL-0580-2 Puller for Injection Pump

Suitable for BMW 4-cylinder diesel engine (M41), 6-cylinder diesel engine-2.5 l (M51) as well as for Vauxhall/Opel Omega 2.5 TD. For loosening the injection pump sprocket from the shaft when dismantling an injection pump.

KL-0580-3 Locking Tool BMW M21

Suitable for the BMW 6-cylinder diesel engine 2,4 l (M21) in 324 td (E30) Ensures the correct position of the camshaft when replacing a timing chain or performing an engine repair.

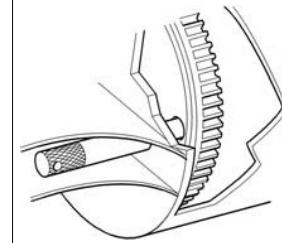
KL-0580-4 Locking Tool BMW M42/M50

Suitable for the BMW 4-cylinder 4-valve engine M42, M44 as well as for 6-cylinder 4-valve engines M50, M52, M52TU and M54 in den Typen E 30 (318), E36 (318, 318is, 320, 325 and 328), E46 (320, 325, 328 and 330), E34 (520, 525 and 530), E39 (520, 525 and 528) and E38 (720, 725 and 728).

This tool is indispensable to locking the two camshafts in TDC-Position while replacing a timing chain or during an engine repair. For this, the tool is pulled across the square camshaft and then should be flush on the cylinder head edge.

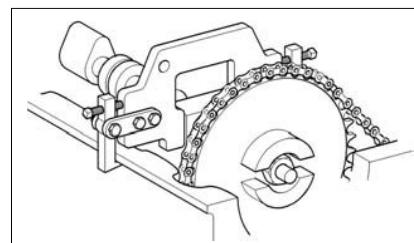
KL-0580-5 Locking Tool Set BMW M40, M43

Suitable for the BMW 4-cylinder engines 1.8 l and 1.6 l [M40 in E30, E36 (316, 318) and E34 (516, 518); M43 in E36 (316, 318) and E34 (516, 518)]. As well as for 12-cylinder engines [M70 in E32 (750) and E31 (850); M73 in E38 (750) and E31 (850)]. Ensures the correct position of the camshafts while replacing a timing chain or performing an engine repair.

**KL-0580-6 Locking Tool Set BMW M51**

Suitable for BMW 4-cylinder diesel engine (M41), 6-cylinder diesel engine 2.5 l (M51) as well as for Vauxhall/Opel Omega 2.5 TD.

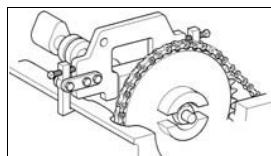
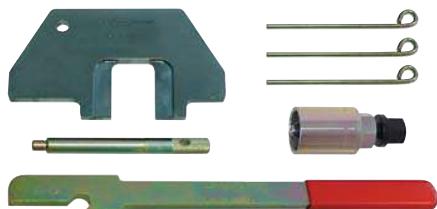
Guarantees the correct position of the camshaft and pump shaft relative to the crankshaft when replacing a timing chain or when removing or installing an injection pump. (Accurate timing adjustment).

**KL-0580-1090 Plastic Storage Case****Technical Data:**

Weight:	6.4 kg
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KL-0580-101

Locking Tool Set



Suitable for the BMW 6-cylinder diesel engines 2.5 L (M51) on BMW 325 tds/tds (E36), BMW 525 tds/tds (E34/39) and Vauxhall/Opel Omega 2.5 TD, as well as for the 4-cylinder diesel engines (M41) on BMW 318 tds (E36).

Designed to lock the camshaft in correct position when replacing a timing chain.

Technical Data:

Weight:	3.0 kg
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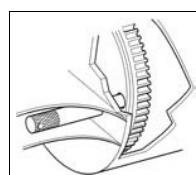
Scope of Delivery

KL-0580-101 Locking Tool Set BMW

Part No.	Description	Qty.
KL-0580-2	Puller for injection pump	1
KL-0580-6	Locking tool (M41/M51 camshaft)	1
KL-0580-10	Locking pin Ø11.8 / Ø8 mm (flywheel)	1
KL-0580-15	Tensioner tool for timing chain	1
KL-0580-1201	Locating pin Ø4 mm (chain tensioner)	3
KL-0580-1090	Plastic storage case	1

KL-0580-100

Locking Pin Set BMW



Suitable for the BMW 4-cylinder diesel engines (M41), 6-cylinder diesel engines 2.5 L (M51) as well as for Opel/Vauxhall Omega 2.5 TD.

Used to lock the flywheel and injection-pump sprocket when replacing a timing chain or during an engine repair.

Scope of Delivery

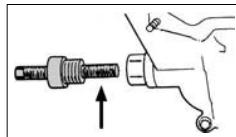
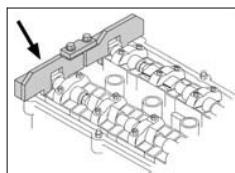
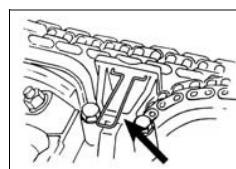
KL-0580-100 Locking Pin Set BMW

Part No.	Description	Qty.
KL-0580-10	Locking pin Ø11.8 / Ø8 mm	1
KL-0580-11	Locking pin Ø9.9	1

KL-0580-43 K

Locking Tool Set

6



Suitable for the BMW 4- and 6-cylinder TwinCam engines M42, M44, M50 and M52 with VANOS-System.

This tool is used for locking and/or positioning motor shafts such as camshafts and crankshafts, as well as for pretensioning timing chains when adjusting camshaft timings. It is required, for example, when replacing a timing chain, during the removal and replacement of the VANOS-System, or during an engine repair.

Scope of Delivery:

KL-0580-43 K Locking Tool Set

Part No.	Description	Qty.
KL-0580-431	Pretensioning tool for timing chain	1
KL-0580-432	Retaining pin for chain tensioner	1
KL-0580-4	Locking tool BMW M42 / M50	1
KL-0580-10	Locking pin Ø11.8 mm / Ø8 mm	1
KL-4990-1004	Plastic storage case with foam insert	

KL-0580-41

Adjusting Wrench



Suitable for BMW 4- and 6-cylinder TwinCam engines M42, M44, M50 and M52 with VANOS Unit.

Required for removing and installing the VANOS adjusting unit with disc spring.

Tool Set for Double-VANOS-Adjusting Units

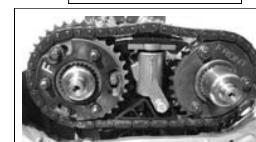
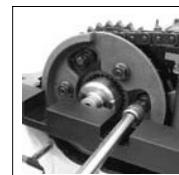
KL-0580-42 K

Suitable for BMW TwinCam petrol engines M52TU, M54 and M56 (206S4, 226S1, 256S4, 256S5, 286S2, 306S3) e.g. 3-series (E46, Z3); 5-series (E39, E60, E61); 7-series (E38, E65, E66); X3 (E83); X5 (E53); Z4 (E85).

This tool is required for the trouble-free and professional removal and replacement of Double-VANOS-Adjusting Units as well as for checking and adjusting camshaft timings in conjunction with the locking tool set **KL-0580-43 K**.

Specification: KL-0580-42 K Tool Set for Double-VANOS

Part No.	Description	Qty.
KL-0580-4201	Compressed-air adaptor	1
KL-0580-4202	Setting gauge (VANOS)	1
KL-0580-4203	Mounting plate	1
KL-0580-4290	Plastic storage case	1



Locking Tool Set BMW M47

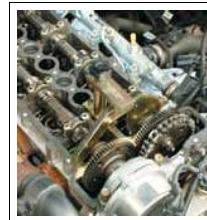
KL-0580-7 KA

Suitable for BMW 4 cylinder diesel engine (M47, M47TU) and 6 cylinder diesel engine (M57, M57TU) e.g. in Series E46 (318d, 320d, 330d) and E39 (525d, 530d).

Designed to lock and/or position the tensioner as well as engine shafts such as camshafts and crankshaft. This set is required when performing an engine repair or replacing a timing chain.

Scope of Delivery: KL-0580-7 KA Locking Tool Set BMW M47

Part No.	Description	Qty.
KL-0580-701 A	Locking plate	1
KL-0580-702 A	Support for locking plate	1
KL-0580-10	Locking pin Ø11.8 / Ø8 mm	1
KL-0580-1201	Retaining pin Ø4 mm	2
KL-0580-7090 A	Plastic storage case	1

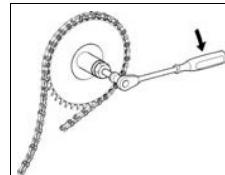


Puller for Injection Pump Sprocket

KL-0580-2

Suitable for: BMW 4-cylinder diesel engines (M41), 6-cylinder diesel engines 2.5L (M51) also for Opel/Vauxhall Omega 2.5 TD.

For loosening the injection pump sprocket from the shaft when dismounting an injection pump.



6

Puller for Injection Pump Sprocket

KL-0580-21

Suitable for BMW M47, M47TU, M57, M57TU engines.

Tool for retaining the injection pump sprocket and pushing out the injection pump shaft.

Required when removing an injection pump.



Locking Tool Set BMW 2.0d

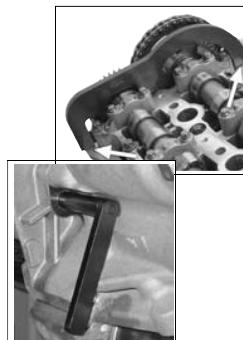
KL-0580-82 K

Suitable for BMW N47 / N47S 2.0 diesel engines on 1-Series (E81 / E82 / E87); 3-Series (E90 / E91, E92); 5-Series (E60 / E69 and X3 (E83).

For locking and positioning camshafts and crankshaft as well as for rotating the crankshaft. This tool set is required when performing an engine repair or changing a timing chain.

Scope of Delivery: KL-0580-82 K Locking Tool Set BMW 2.0d

Part No.	Description	Quantity
KL-0580-821	Locking pin Ø11.9 mm; Ø8 mm	1
KL-0580-822	Locking tool for camshafts	1
KL-0580-823	Key for crankshaft	1
KL-0580-8290	Storage case	1



KL-0580-83 K

Locking Tool Set BMW 1.4 and 1.6 16v



Suitable for Mini 1.4 and 1.6 (engine code: N12 / N14) and PSA engines (engine code: EP3, EP6, EP6DT / DTS) on Mini Cooper (R55, R56), Mini Cooper S (R55, R56), Mini One (R56), Citroen C4, C4 Picasso and Peugeot 207, 308.

For locking and positioning camshafts and crankshaft as well as for adjusting VANOS-Adjusting-Units. It can also be used to pre-tension the timing chain tensioner.

This tool set is indispensable when replacing a timing chain, removing and installing VANOS-Adjusting-Units or performing an engine repair.

Scope of Delivery:**KL-0580-83 K Locking Tool Set BMW 1.4 and 1.6 16v**

Part No.	Description	Quantity
KL-0580-831	Locking pin for flywheel	1
KL-0580-832	Locking tool for camshaft	1
KL-0580-833	Locking tool for camshaft	1
KL-0580-834	Locking tool for camshaft	1
KL-0580-8113	Pretensioning tool for timing chain	1
KL-0580-8390	Storage case	1

KL-0580-44 K

Locking Tool Set BMW N40 and N45



Suitable for BMW 1.6 TwinCam petrol engines (engine code: N40 and N45) on 1-Series (E81 / E87) and 3-Series (E46 / E90).

For locking and positioning camshafts and crankshaft, for pretensioning timing chain tensioners, as well as for adjusting the VANOS-Adjusting-Units. This tool is required when replacing a timing chain, for removal and replacement of VANOS-Adjusting-Units or for engine repairs.

Scope of Delivery:**KL-0580-44 K Locking Tool Set BMW N40 and N45**

Part No.	Description	Quantity
KL-0580-441	Locking tool for camshaft (inlet)	1
KL-0580-442	Locking tool for camshaft (exhaust)	1
KL-0580-443	Setting gauge (Vanos)	1
KL-0580-8111	Retaining pin for flywheel	1
KL-0580-8113	Pretensioning tool for timing chain	1
KL-0580-8115-3	Knurled screw	1
KL-0580-4490	Storage case	1

6

KL-0580-45 K

Locking Tool Set BMW N51, N52, N52K, N53 and N54



Suitable for BMW 2.5 and 3.0 petrol engines with Valvetronic (engine code: N51, N52, N52K, N55) or with direct injection (engine code: N53, N54) on 1-Series (E81 / E82 / E87); 3-Series (E90 / E91 / E92 / E93); 5-Series (E60 / E61); 6-Series (E63 / E64); 7-Series (E65 / E64); X3 (E83); X5 (E70); Z4 (E85 / E86).

For locking and positioning camshafts and crankshaft, as well as for pretensioning the timing chain tensioner. It can also be used to adjust the VANOS-Adjusting-Units.

This tool is required when replacing a timing chain, for removal and replacement of VANOS-Adjusting-Units or for engine repairs.

Scope of Delivery:**KL-0580-45 K Locking Tool Set BMW N51, N52, N52K, N53 and N54**

Part No.	Description	Quantity
KL-0580-451	Locking pin for flywheel	1
KL-0580-452	Locking tool for camshafts	1
KL-0580-453	Setting gauge (Vanos) blue	1
KL-0580-454	Setting gauge (Vanos) red	1
KL-0580-8113	Pretensioning tool for timing chain	1
KL-0580-4590	Storage case	1

Locking Tool Set

KL-0580-810 K

Suitable for the BMW 1.6, 1.8 and 2.0 TwinCam petrol engines (engine code: N42 [B18, B20], N46 [B20]) e.g. 1-Series (E87) 118i, 120i (04-); 3-Series (E46) 316i/316ti, 318i/318ti (01-), 318i/320i (E90/E91) and Z4 2.0 (E85).

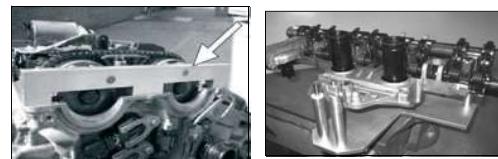
This tool is used for locking and/or positioning engine shafts such as camshafts and crankshaft as well as for adjusting the VANOS-Adjusting-Unit.

It is required when replacing a timing chain, for the removal and replacement of camshafts and VANOS-Adjusting-Units, or for engine repairs.

Scope of Delivery:

KL-0580-810 K Locking Tool Set

Part No.	Description	Qty.
KL-0580-811 K	Locking tool set	1
KL-0580-812 K	Locking tool set	1



Locking Tool Set

KL-0580-811 K

Suitable for the BMW 1.6, 1.8 and 2.0 TwinCam petrol engines (engine code: N42 [B18, B20], N46 [B20]) e.g. 1-Series (E87) 118i, 120i (04-); 3-Series (E46) 316i/316ti, 318i/318ti (01-), 318i/320i (E90/E91) and Z4 2.0 (E85).

Designed for checking and adjusting camshaft timings as well as for the removal, replacement, and adjusting of VANOS-Adjusting-Units.

Scope of Delivery:

KL-0580-811 K Locking Tool Set

Part No.	Description	Qty.
KL-0580-8111	Locking pin for flywheel	1
KL-0580-8112	Camshaft twist pin	1
KL-0580-8113	Pretension tool for timing chain	1
KL-0580-8114	Setting gauge (VANOS)	1
KL-0580-8115	Locking tool for camshafts	1
KL-0580-8119	Storage case with insert	1



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Locking Tool Set

KL-0580-812 K

Suitable for the BMW 1.6, 1.8 and 2.0 TwinCam petrol engines (engine code: N42 [B18, B20], N46 [B20]) e.g. 1-Series (E87) 118i, 120i (04-); 3-Series (E46) 316i/316ti, 318i/318ti (01-), 318i/320i (E90/E91) and Z4 2.0 (E85).

Used in conjunction with KL-0580-811 K for the removal and replacement of camshafts.

Scope of Delivery:

KL-0580-812 K Locking Tool Set

Part No.	Description	Qty.
KL-0580-8121	Torsion spring removal/installation tool	1
KL-0580-8122	Locking tool for camshafts	1
KL-0580-8123	Locking tool for camshafts	1
KL-0580-8124	Clips (8 pieces)	1
KL-0580-8125	Retaining tool for bearing bridge	1
KL-0580-8129	Storage case with insert	1



KL-0580-813 K

Locking Tool Set BMW



Suitable for BMW TwinCam petrol engines N40, N42, N45 and N46.

Tool set for locking and positioning balancer shafts, for locking the timing chain tensioner as well as for holding the crankshaft in position while loosening or tightening the crankshaft central screw.

Scope of Delivery: KL-0580-813 K Locking Tool Set BMW

Part No.	Description	Quantity
KL-0580-8131	Setting gauge for balancer shaft	1
KL-0580-8132	Setting gauge for balancer shaft	1
KL-0580-8133	Reaction wrench	1
KL-0580-1201	Locating pin for chain tensioner Ø4 mm	1
KL-0580-8139	Storage case	1

KL-0582-1

Reaction Wrench for Visco-Fan



Suitable for BMW engines e.g. M20 and M30.

Designed to lock the fan drive shaft when removing the Visco-Fan.

Technical Data:

Hole pitch:	38 mm
Weight:	500 g

KL-0582-2

Reaction Wrench for Visco-Fan



Suitable for BMW engines e.g. M10, M20, M21, M30, M50, M51, M52, M52TU, M54, M56, M70, M73, S14 and S38.

Designed to lock the fan drive shaft when removing the Visco-Fan.

Technical Data:

Hole pitch:	44.5 mm
Weight:	400 g

KL-0123-1

Reaction Wrench 32 mm

6



Designed to lock the Visco-coupling drive shaft, when removing or installing the Visco-coupling on **BMW and Ford** vehicles.

Technical Data:

Size (width across flats):	32 mm
Length:	280 mm

KL-0312

Puller for Chain Slider Bolts



Suitable for chain slider bolts on Mercedes and BMW; puller bolts and adaptor disc included.

Scope of delivery: KL-0312 Puller for Chain Slider Bolts

Part No.	Description	Qty.
KL-0312-100	Puller (base tool with spindle)	1
KL-0312-0010	Puller bolt M6 x 30	1
KL-0312-0011	Puller bolt M8 x 30	1
KL-0312-0012	Puller bolt M8 x 60	1
KL-0312-0013	Adaptor disc	1

KL-0312-2

Puller for Chain Slider Bolts



Suitable for chain slider bolts on Mercedes and BMW; puller bolts and adaptor disc included.

This short version is required for repairs where the radiator has not to be removed from the vehicle.

Scope of Delivery: KL-0312-2 Puller for Chain Slider Bolts

Part No.	Description	Qty.
KL-0312-200	Puller; base tool	1
KL-0312-0010	Puller bolt M6 x 30	1
KL-0312-0011	Puller bolt M8 x 30	1
KL-0312-0012	Puller bolt M8 x 60	1
KL-0312-0013	Adaptor disc	1

Mounting Device for Timing Chain M111

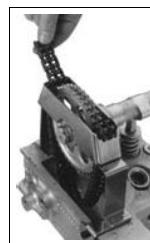
KL-0342-2

For the 4-cylinder Mercedes petrol engine M111.

The use of this mounting device allows a single mechanic to replace a timing chain quickly and without any trouble.

Advantages:

- Substantial time savings, only one mechanic required.
- No risk of the timing chain falling or skipping a tooth.
- Additional time savings on some vehicles when it is not necessary to remove the Radiator, Cooling Fan, etc.



Mounting Device for Timing Chain

KL-0342

Specially designed for the 4-cylinder Mercedes petrol engine M102.

The use of this mounting device allows a single mechanic to replace a timing chain quickly and without any trouble.



Mounting Device for Timing Chain

KL-0343

Suitable for the 4- and 5-cylinder Mercedes diesel engines OM615, OM616 and OM617 without level control.

The use of this mounting device allows a single mechanic to replace a timing chain quickly and without any trouble.



Mounting Device for Timing Chain

KL-0348

Suitable for Mercedes petrol engine M103.

The use of this mounting device allows a single mechanic to replace a timing chain quickly and without any trouble.



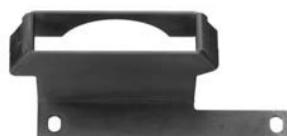
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Mounting Device for Timing Chain

KL-0344-2

Suitable for 4-, 5-, and 6-cylinder Mercedes diesel engines OM604, OM605 and OM606.

The use of this mounting device allows a single mechanic to replace a timing chain quickly and without any trouble.



Mounting Device for Timing Chain

KL-0344

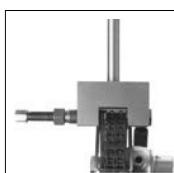
Suitable for 4-, 5-, and 6-cylinder Mercedes diesel engines OM601, OM602 and OM603.

The use of this mounting device allows a single mechanic to replace a timing chain quickly and without any trouble.



KL-0340-2K

Timing Chain Tool Set



Suitable for Mercedes petrol and diesel engines.

The separating tool **KL-0340-20** and the riveting tool **KL-0340-21** allow a quick, easy and safe splitting, installing and riveting of timing chains - both Simplex and Duplex roller chains as well as the double sleeve-type chains featuring a chain stud Ø of 4 mm that are built-in to Mercedes engines. On these chains, the roller chain plate is pressed-on.

For riveting the Simplex roller chains, the tool **KL-0341-2** is required, which is not supplied as part of the **KL-0340-2 K** kit.

Scope of Delivery: KL-0340-2K Timing Chain Tool Set

Part No.	Description
KL-0340-20	Separating Tool for Timing Chains
KL-0340-203	Clipping Punch Set (2 Pieces Ø4 x 50)
KL-0340-21	Riveting Tool for Timing Chains
KL-0340-2020	Plastic Storage Case (empty)

KL-0341-2

Riveting Tool Set for Simplex Timing Chains

Suitable for the Mercedes Simplex Timing Chains.

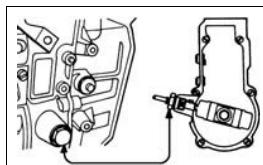


Scope of Delivery: KL-0341-2 Riveting Tool Set for Simplex Timing Chains

Artikel-Nr	Beschreibung
KL-0340-0012	Pressure Piece No. 2 with Magnet for Simple Timing Chain
KL-0340-0011	Guiding Piece No. 2 for Simple Timing Chain

KL-0343-3

Locking Screw



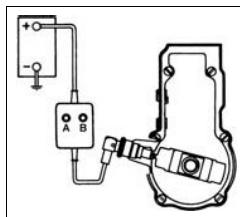
Suitable for the Mercedes engines OM601, OM602 and OM603.

Injection pump locking screw, allows the injection pump to be removed without loss of pump timing.

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KL-0343-4

Injection Timing Tool



Suitable for Mercedes engines OM601, OM602 and OM603.

The electrical tester **KL-0343-4** is used for the accurate control and start-of-delivery-setting.

The crankshaft position is displayed via LED.

KL-0384-10

Locking Tool



Suitable for Mercedes Diesel engines (engine code: M104, M111) and petrol engines with 4-valve-technology (engine code: OM611, OM612, OM613, OM640, OM646, OM646 EVO, OM647, OM648).

Designed to block the camshafts when removing the cylinder head.

Technical Data:

Ø:	5.8 / 6.0 mm
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KL-0343-5

Locking Screw



Suitable for the Mercedes engines OM602, OM604, OM605 and OM606 fitted with a Lucas Injection Pump.

The injection pump locking screw allows the injection pump to be removed without the loss of pump timing.

Technical Data:

Weight:	27 g
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Locking Tool Set Ford

KL-0680-28 K

Universally suitable for the most common Ford vehicles e.g. with 1.4 & 1.6 HDi (PSA) and 1.4 & 1.6 TDCi (Ford) engines (Citroën: Xsara, C2, C3, C4, C5; Ford: Fiesta, Fusion, Focus, Focus C-Max; Peugeot: 206, 307) and 1.8 TDI / TDDi / TDCi, 2.0 / 2.4 16V TDDi / TDCi Diesel engines, (Fiesta/Courier, Focus/C-Max, Tourneo Connect, Mondeo, S-Max, Galaxy and Transit Connect).

This tool set is designed to lock or position engine shafts such as camshaft, crankshaft, and injection pump shaft as well as the timing belt tensioner.

Essential tools when replacing a timing belt or performing an engine repair.

Scope of Delivery:

KL-0180-30 A Retaining pin set 0.8 mm - 1.9 mm

For locking the automatic timing belt tensioner when replacing a timing belt..

Consists of:

Key fob with ring and 6 retaining pins with Ø 0.8 mm; Ø 1.2 mm; Ø 1.4 mm; Ø 1.5 mm; Ø 1.7 mm; Ø 1.9 mm.

KL-0680-10 Locking pin Ø 6mm for crankshaft

Suitable for 1.8 D / TD / TDDi / TDCi Diesel engines

Engine code: BHDA/B, BHPA, C9DA/B/C, F9DA/B, HCPA, KKDA, RFA, RFK, RFL, RFN, RTC, RTJ, RTK

KL-0680-1058 A Locking tool for flywheel with adaptor 1.8 Diesel

Suitable for 1.8 D / TD / TDCi Diesel engines.

Engine code: RTN, RTQ, RTP, BHDB, BHPA, C9DA, C9DB, C9DC, F9DA, F9DB, FFBA, FFDA, FFWA, G6DA, G6DB, G6DC, HPCA, HPCB, P7PA, P9PA, QYBA, QYWA, R2PA, R3PA, RWPA, KKDA

KL-0680-11 A Locking pin Ø8.3 mm for camshaft

Suitable for 2.5 D / TD / TCI Diesel engines.

Engine code: 4EB, 4EC, 4ED, 4FA, 4FB, 4FC, 4FD, 4GA, 4GB, 4GC, 4GD, 4GE, 4HB, 4HC

KL-0680-12 A Locking pin Ø9.5 mm for injection pump

Suitable for 1.8 D / TD and 2.5 DI / Turbo / TCI Diesel engines.

Engine code: 4EB, 4EC, 4ED, 4FA, 4FB, 4FC, 4FD, 4GA, 4GB, 4GC, 4GD, 4GE, 4HB, 4HC, RFD, RFK, RFN, RKD, RTC, RTH, RTJ, RTK, RVA

KL-0680-13 A Locking pin Ø12.9 mm for flywheel

Suitable for 2.5 DI / Turbo / TCI Diesel engines.

Engine code: 4EB, 4EC, 4ED, 4FA, 4FB, 4FC, 4FD, 4GA, 4GB, 4GC, 4GD, 4GE, 4HB, 4HC

KL-0680-14 A Locking pin Ø6 mm for camshaft and injection pump

Suitable for 1.8 D / TD Diesel engines.

Engine code: C9DC, RFA, RFD, RFK, RFL, RFN, RTB, RTC, RTH, RTJ, RTK

KL-0680-15 A Setting gauge for camshafts

Suitable for TwinCam petrol engines 1.25, 1.4, 1.6, 1.7, 1.8, 2.0 and 1.8 D / TD Diesel engines.

Engine code: C9DC, MHA, RFA, RFD, RFK, RFL, RFN, RTC, RTH, RTJ, RTK, Zetec DHA/ DHB

KL-0680-16 Locking pin Ø7.9 mm for crankshaft

Suitable for 1.6; 1.8; 2.0 16V petrol engines.

Engine code: L1F, L1J, NGA, RKA, RKB, Zetec

KL-0680-17 Locking pin Ø5 mm for crankshaft

Suitable for 1.25; 1.4; 1.6; 1.7 16V petrol engines.

Engine code: Zetec DHA, DHB, DHC, DHD, DHE, DHF, DHG, FHA, FHE, L1T, L1V, MHA

KL-0680-18 Locking pin Ø7.95 mm for crankshaft

Suitable for Ford petrol engines (1.25i Zetec-SE [Sigma, 1.4i Duratec-16V [Sigma, 1.6i Duratec-16V [Sigma, 2.0i Duratec-RS [Zetec, 1.4i Zetec-SE [Sigma, 1.6i Zetec-SE [Sigma, 2.0i Duratec-ST [Zetec])

Engine code: F8JA, F8JB, FUJA, FXDA/C, FXDB/D, FXJA, FXJB, FYDA/C, FYDB/D, FYDH, FYJA, FYJB, HWDA, HXDA

KL-0680-2101 A Locking pin Ø14 mm for flywheel

Suitable for Ford 2.0 / 2.4 16V TDCi engines.

KL-0680-2102 A Locking pin Ø13.5 mm; Ø9.5 mm for flywheel

Suitable for Ford 2.0 / 2.4 16V TDDi engines.

KL-0680-2103 A Locking pin Ø6 mm for camshafts and injection pump

Suitable for Ford 2.0 / 2.4 16V TDDi / TDCi engines.

Engine code: FMBA/B, D5BA, ABFA, D3FA, F3FA, D2FA, D4FA, F4FA

KL-0680-2201 A Locking pin Ø11 mm for flywheel

Suitable for 1.4 & 1.6 HDi (PSA) and 1.4 & 1.6 TDCi (Ford) engines.

Engine code: 8HV, 8HW, 8HX, 9HX, 9HZ DV4TD, DV4TED4, DV6ATED4, DV6TED4 and F6JA, F6JB, F6JC, G8DA, G8DB, HHDA

KL-0680-2202 A Locking pin Ø4.5 mm for crankshaft and injection pump

Suitable for as KL-0680-2201 A.

KL-0680-2203 A Locking pin Ø7.5 mm for camshaft

Suitable for as KL-0680-2201 A.

KL-0680-2501 A Adaptor 2.0 TDCi for KL-0680-1058 A

Engine code: AZWA, G6DA, G6DB, G6DC, QXWA

KL-0680-2502 A Adaptor 1.6 Ti-VCT for KL-0680-1058 A

Engine code: HXDA

KL-0680-2890 Plastic storage case



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KL-0680-100 B

Locking Tool Set Ford



For locking and/or positioning engine shafts such as camshafts, crankshaft as well as the injection pump sprocket while replacing a timing belt or during an engine repair.

The correct position of the engine shafts such as camshaft and injection pump shaft relative to the crankshaft (accurate timing adjustment) is essential when replacing a timing belt or during an engine repair.

Only then will the optimal engine power be achieved and any risk of engine damage be eliminated!

Scope of Delivery: KL-0680-100 A Locking Tool Set Ford

Part No.	Description	Qty.
KL-0680-10	Locking pin for crankshaft	1
KL-0680-11 A	Locking pin Ø8.3 mm	1
KL-0680-12 A	Locking pin Ø9.5 mm	1
KL-0680-13 A	Locking pin Ø12.9 mm	1
KL-0680-14 A	Locking pin Ø6 mm	2
KL-0680-15 A	Setting gauge for camshafts	1
KL-0680-16	Locking pin for crankshaft	1

KL-0680-23 KA

Locking Tool Set Ford



Suitable for Ford 1.4 / 1.6 TDCi; 1.8 Di / TDdi / TDCi and 2.0 TDCi Diesel engines e.g. Ford Fiesta / Courier, Fusion, Focus, Focus C-Max, Mondeo, S-Max, Galaxy, Tourneo Connect, Transit Connect and Mazda 2 / 3.

This tool is used for extracting the camshaft timing belt sprocket as well as for locking and/or positioning engine shafts such as camshafts and crankshafts. Essential tool set when replacing a timing belt or performing an engine repair.

Scope of Delivery: KL-0680-23 KA Locking Tool Set Ford

Part No.	Description	Qty.
KL-0680-15 A	Setting gauge for camshafts	1
KL-0680-2302 A	Locking pin (angled) Ø8 mm	1
KL-0680-1058 A	Locking tool for flywheel with adaptor 1.8 diesel	1
KL-0680-2501 A	Adaptor 2.0 TDCi	1
KL-0680-1053 A	Extractor for camshaft pulley	1
KL-0680-10	Locking pin for crankshaft	1
KL-0680-2202 A	Locking pin Ø 4.5 mm	2
KL-0680-2201 A	Locking pin Ø 11 mm	1
KL-0680-2203 A	Locking pin Ø 7.5 mm	1
KL-0680-1090 A	Plastic storage case	1

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KL-0680-101

Locking Tool Set Ford



Suitable for the ZETEC SE engines. e.g. on: Fiesta 1996 onwards; Focus 1998 onwards; Puma 1997 onwards

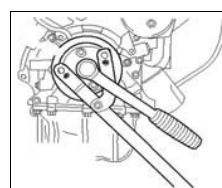
This tool is used for extracting the camshaft timing belt sprocket as well as for locking and/or positioning engine shafts such as camshafts and crankshafts. It is required when replacing a timing belt or for engine repairs.

Scope of Delivery: KL-0680-101 Locking Tool Set Ford

Part No.	Description	Qty.
KL-0680-15 A	Setting gauge for camshafts	1
KL-0680-16	Locking pin for crankshafts	1

KL-0680-20

Vibration Damper Installation and Removal Tool Ford Zetec



Suitable for Ford Zetec engines e.g. on Ford Fiesta 1.25; 1.4; 1.6 L 16V, Puma 1.4; 1.6; 1.7 L 16V and Mazda 121 1.25 L 16V.

Designed for removal and installation of the vibration damper. Required for engine repairs or when replacing a timing belt.

Scope of Delivery:

KL-0680-20 Vibration Damper Installation and Removal Tool Ford Zetec

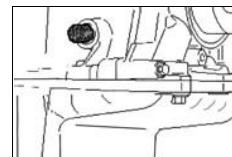
Part No.	Description	Qty.
KL-0680-201	Reaction wrench	1
KL-0680-202	Extracting plate for camshaft pulley	1
KL-0680-203	Mounting tool for crankshaft pulley	1

Locking Pin Set for Crankshaft (3 pcs.)

KL-0680-103

Suitable for Ford 1.25; 1.4; 1.6; 1.7; 1.8 and 2.0 L petrol and 1.8L diesel engines.

Used for locking the crankshaft when replacing a timing belt or during an engine repair.



Scope of Delivery: KL-0680-103 Locking Pin Set for Crankshaft (3 pcs.)

Part No.	Description	Qty.
KL-0680-10	Locking Tool for crankshaft Ø 6 mm	1
KL-0680-16	Locking Tool for crankshaft Ø 7.9 mm	1
KL-0680-17	Locking Tool for crankshaft Ø 5 mm	1

Locking Tool Set Ford

KL-0680-105 KA

Suitable for the Ford 1.8 D/TD/TDCi diesel and 1.25 – 2.0 L 16V Zetec petrol engine e.g. on Ford Fiesta, Escort/Orion, Focus, Puma, Sierra, Mondeo, Cougar, Courier/estate car, P100 and Mazda 121.

Designed for pulling off the camshaft timing belt sprocket as well as for locking or positioning engine shafts such as camshaft and crankshaft. Required when replacing a timing belt or for engine repairs.



Scope of Delivery: KL-0680-105 K Locking Tool Set

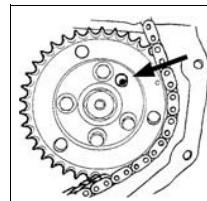
Part No.	Description	Qty.
KL-0680-15 A	Setting gauge for camshafts	1
KL-0680-10	Locking pin for crankshaft	1
KL-0680-1053 A	Extractor for camshaft sprocket	1
KL-0680-14 A	Locking pin Ø6 mm	2
KL-0680-12 A	Locking pin Ø9.5 mm	1
KL-0680-17	Locking pin for crankshaft	1
KL-0680-16	Locking pin for crankshaft	1
KL-0680-1058 A	Locking tool for flywheel with adaptor 1.8 Diesel	1
KL-0680-1090 A	Plastic storage case	1

Locking Tool Set Ford 2.0 / 2.4 TDCi

KL-0680-21 K

Suitable for Ford 2.0 / 2.4 16V TDDi/TDCi engines e.g. on Mondeo, Transit ('01-'04) etc. (Engine code: FMBA/B, D5BA, ABFA, D3FA, F3FA, D2FA, D4FA, F4FA)

Indispensable tool when locking and/or positioning engine shafts such as camshafts, injection pump shafts and crankshaft while replacing a timing belt or during an engine repair. It can also be used to remove and replace the injection pump.



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Scope of Delivery: KL-0680-21 K Locking Tool Set Ford 2.0 / 2.4 TDCi

Part No.	Description	Qty.
KL-0680-2100	Mounting / Dismounting Tool for injection pump	1
KL-0680-210 A	Locking Pin Set Ford 2.0 / 2.4 TDCi	1
KL-0680-2190	Plastic storage case	1

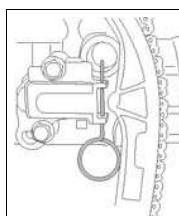
Locking Pin Set Ford 2.0 / 2.4 TDCi

KL-0680-210 A

Suitable for Ford 2.0 / 2.4 16V TDDi/TDCi engines e.g. on Mondeo, Transit ('01-'04) etc.

(Engine code: FMBA/B, D5BA, ABFA, D3FA, F3FA, D2FA, D4FA, F4FA)

Used for locking and/or positioning engine shafts such as camshaft, injection pump shaft and crankshaft while replacing a timing chain or during an engine repair.



Scope of Delivery: KL-0680-210 Locking Pin Set Ford 2.0 / 2.4 TDCi

Part No.	Description	Qty.
KL-0680-2101 A	Locking pin Ø14 mm	1
KL-0680-2102 A	Locking pin Ø13.5; Ø9.5 mm	1
KL-0680-2103 A	Locking pin Ø6 mm	3
KL-0180-3019	Retaining pin Ø1.9 mm	1

Reaction Wrench Ford

KL-0680-261

Suitable for Ford 1.8 and 2.0 16v. TwinCam petrol engines e.g. on Ford Focus/C-Max, Mondeo, S-Max and Galaxy.

This tool is designed to lock the crankshaft pulley in position while loosening and tightening the crankshaft central screw. It is required when replacing a timing belt or for engine repairs.



KL-0680-262

Tensioner Tool



Suitable for Ford 2.0 / 2.2 L TDdi / TDCi Duratorq diesel engines e.g. Ford Mondeo (2000-2007).

The tensioner tool **KL-0680-262** is required to pretension the tensioner when removing or installing the auxiliary belt.

KL-0680-27 A

Locking Tool Set Ford



Suitable for the 1.25, 1.4, 1.6, 1.7, 1.8 and 2.0 L TwinCam Duratec petrol engines (timing belt or timing chain) e.g. on : Ford (C-Max, Courier, Cougar, Fiesta, Fusion, Focus, Galaxy, Mondeo, Puma, S-Max, Tourneo Connect and Transit Connect); Mazda: (121, 2, 3, 6 and Tribute).

This tool is used for locking and/or positioning engine shafts such as camshafts, crankshafts or timing belt tensioners. It is required when replacing a timing belt or a timing chain or for engine repairs.

Scope of Delivery: KL-0680-27 A Locking Tool Set Ford

Part No.	Description	Qty.
KL-0680-15 A	Setting gauge for camshafts	1
KL-0680-17	Locking pin for crankshaft	1
KL-0680-16	Locking pin for crankshaft	1
KL-0680-2401 A	Locking pin Ø7.9 mm	1
KL-0180-3024	Retaining pin Ø2.4 mm	1

KL-0680-220 B

Locking Pin Set



Suitable for Citroën 1.4 / 1.4 Hdi / 1.6 Hdi / 2.0; Fiat 1.6 JTD; Ford 1.4 TDCi / 1.6 TDCi; Mazda 1.4 TDCi / 1.6 D / 1.6 MZ-CD; Peugeot 1.4 Hdi / 1.6 Hdi; Suzuki 1.4 DDIS; Toyota 1.0 VVT / 1.4 Di / 1.4 HDI; Volvo 1.6 D etc.

Engine Code: 8HV; 8HW; 8HX; 8HY; 9HX; 9HY; 9HZ; D4164T; DV4TD; DV4TED; DV4TED4; DV6; DV6TED4; F6J4; F6JA; F6JB; F6JC; G8DA; G8DB; HHDA; HHJA; HHJB; Y6.

Used for locking and/or positioning engine shafts such as camshafts, injection pump shafts and crankshaft while replacing a timing belt or during an engine repair.

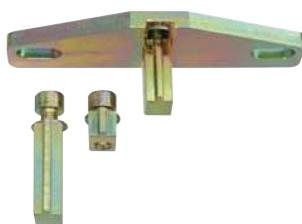
Scope of Delivery: KL-0680-220 B Locking Pin Set

Part No.	Description	Qty.
KL-0680-2201 A	Locking pin Ø 11 mm	1
KL-0680-2202 A	Locking pin Ø 4.5 mm	2
KL-0680-2203 A	Locking pin Ø 7.5 mm	1

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KL-0680-25 A

Locking Tool Set for crankshaft Ford



Suitable for Ford 1.6 Ti-VC TwinCam Duratec petrol engines and 1.8 TDi / TDci / TDCi as well as for 2.0 TDCi diesel engines e.g. Ford Fiesta / Courier, Focus / C-Max, Tourneo Connect, Mondeo, S-Max, Galaxy and Transit Connect.

This tool is designed to lock the flywheel in position while loosening or tightening the crankshaft pulley fixing screws. It can also be used for locking and/or positioning the crankshaft while replacing a timing belt or during an engine repair.

Scope of Delivery: KL-0680-25 A Locking Tool Set for crankshaft Ford

Part No.	Description	Qty.
KL-0680-2501 A	Adaptor 2.0 TDCi	1
KL-0680-2502 A	Adaptor 1.6 Ti-VCT	1
KL-0680-1058 A	Locking tool for flywheel with adaptor 1.8 Diesel	1

KL-0680-24 K

Locking Tool Set Ford 1.6 16V Ti-VTC



Suitable for the Ford 1.6 16v. Ti-VCT TwinCam Duratec petrol engines (HXDA) e.g. on Ford Focus, C Max and Mondeo.

This tool set is used for locking and/or positioning engine shafts such as camshaft and crankshaft as well as the timing belt tensioner. It can also be used to adjust the VTC-Unit. Indispensable tool when replacing a timing belt or performing an engine repair.

Scope of Delivery: KL-0680-24 K Locking Tool Set Ford 1.6 16V Ti-VTC

Part No.	Description	Qty.
KL-0680-2401 A	Locking pin Ø7.9 mm	1
KL-0680-2402	Locking pin for tensioner	1
KL-0680-2403	Setting gauge (VTC)	1
KL-0680-2404	Locking tool for flywheel	1
KL-0680-15 A	Setting gauge for camshafts	1
KL-0680-2490	Storage case with insert	1

Locking Tool Set Opel/Vauxhall

KL-0482-47 K

Universally suitable for the most common Opel/Vauxhall vehicles.

This tool is designed to lock or position engine shafts such as camshafts, crankshafts, and injection pump shafts as well as the timing belt tensioner. Essential tool set when replacing a timing belt or performing an engine repair.

Scope of Delivery:**KL-0482-411 A Setting gauge for camshaft**

Suitable for Opel/Vauxhall 2.0 and 2.2 Ecotec diesel engines (X20DTL, X20DTH, Y20DTH, X22DTH) e.g. Opel/Vauxhall Astra, Astra Caravan, Zafira, Vectra, Omega, Sintra and Frontera.

KL-0482-412 A Locking pin for crankshaft

Suitable for as KL-0482-411 A

KL-0482-413 A Locking pin for injection pump

Suitable for as KL-0482-411 A

KL-0482-414 A Adjusting tool for camshaft sprocket

Suitable for as KL-0482-411 A

KL-0482-432 A Locking pin for crankshaft

Suitable for Opel/Vauxhall TwinCam 1.0 12V; 1.2 and 1.4 16V petrol engines (X10XE, Z10XE, Z10XEP, X12XE, Z12XE and Z14XEP e.g. Corsa, Agila, Astra and Meriva etc.

KL-0482-433 A Setting gauge for camshaft pulse generator

Suitable for as KL-0482-432 A

KL-0680-15 A Setting gauge for camshaft

Suitable for as KL-0482-432 A

KL-0482-450 A Locking tool for camshaft (4 pieces)

Suitable for Opel/Vauxhall 1.3 CDTi diesel engines (Z13DT) e.g. Corsa etc.

KL-0482-451 A Locking Tool for crankshaft Ø6 mm

Suitable for as KL-0482-450 A

KL-0482-461 A Locking pin for camshaft (2 pieces)

Suitable for Opel/Vauxhall 1.9 CDTi diesel engines (Z19DT, Z19DTH) e.g. Opel Astra H, Vectra C, Signum, Zafira B etc.

KL-0482-462 A Locking pin Ø3.7

Suitable for as KL-0482-461 A

KL-1682-202 A Locking Tool for crankshafts

Suitable for as KL-0482-461 A

KL-0481-71 A Locking tool for flywheel

Suitable for Opel/Vauxhall 1.4 and 1.6 Eco-Tec 16 V; 1.2 - 1.6 OHC (with aluminium oil sump) and 1.8 16V (X18E1, X18XE1).

KL-0180-3024 Retaining pin Ø2.4

Designed to lock the automatic timing belt tensioner when replacing timing belts

KL-0482-301 Locking tool for camshafts 1.8; 2.0

Suitable for 1.8 16V and 2.0 16V

KL-0482-302 Locking tool for camshafts 1.4; 1.6

Suitable for 1.4 16V and 1.6 16V

KL-0482-4790 Plastic storage case

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Locking Tool Set Opel 1.3 CDTi

KL-0482-45 KA

Suitable for Vauxhall/Opel 1.3 CDTi diesel engines (Z13DT) e.g. on Corsa etc.

This tool set is used for locking and/or positioning engine shafts such as camshaft and crankshaft as well as the timing chain tensioner while replacing a timing chain or during an engine repair.

Scope of Delivery: KL-0482-45 K Locking Tool Kit Opel 1.3 CDTi

Part No.	Description	Qty.
KL-0482-450 A	Locking tool for camshaft (2 pcs.)	1
KL-0482-451 A	Locking pin for crankshaft Ø 6 mm	1
KL-0482-434	Retaining pin Ø 2.4 mm	1
KL-0482-4590 A	Plastic storage case	1



KL-0482-46 KA

Locking Tool Set Opel/Vauxhall 1.9 CDTi



Suitable for

- Fiat 1.6 Multijet (198 A 3000, 350 A 2000, 955 A 3000) e.g. on 110- Linea, 135- Idea, 199- Grande Punto and
- Opel/Vauxhall 1.9 CDTi diesel engines (Z19DT, Z19DTH) e.g. on Opel Vectra, Signum etc

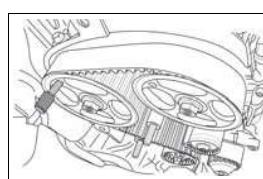
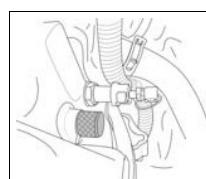
Designed to lock and/or position engine shafts such as camshaft and crankshaft as well as to hold the timing belt tensioner in position when replacing a timing belt or during an engine repair.

Scope of Delivery: KL-0482-46 KA Locking Tool Set

Part No.	Description	Qty.
KL-1682-202 A	Locking tool for crankshafts 1.9 JTD / 2.4 JTD	1
KL-0482-461 A	Locking pin for camshaft (2 pcs.)	1
KL-0482-462 A	Locking pin Ø 4 mm	1
KL-0482-4690 A	Plastic storage case (not ill.)	1

KL-1280-24 KB

Locking Tool Set Renault



Suitable for the Renault, Opel/Vauxhall and Nissan 1.5, 1.9, 2.2, and 2.5 dCi Common Rail diesel engines (K9K, F9Q, G9T, G9U) e.g. on Renault Clio, Modus, Twingo, Megane/Scenic, Laguna, Espace, Avantime, Kangoo, Trafic and Master; Opel/Vauxhall Vivaro and Movano; Nissan Micra, Almera, Note, Qashqai, Primera, Kubistar, Primaster and Interstar.

This tool is designed to lock and/or position engine shafts such as camshafts and crankshafts, as well as to adjust the timing belt tensioner while replacing a timing belt or during an engine repair.

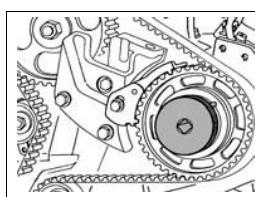
Scope of Delivery: KL-1280-24 KB Locking Tool Set Renault

Part No.	Description	Qty.
KL-1280-234 B	Locking pin M10, Ø7.9 mm	1
KL-1280-233 B	Locking pin Ø7.9 mm; Ø11.9 mm	1
KL-1280-240 B	Timing belt tensioning tool	1
KL-1280-241 A	Hexagon socket screw M6 x 60	1
KL-1280-242 A	Locking tool for camshafts	1
KL-1280-243 B	Locking pin Ø7 mm	1
KL-1280-2490 B	Plastic storage case	1

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KL-1280-21

Injection Pump Adjusting Tool Renault 1.9 D



Suitable for the Renault, Mitsubishi, Opel/Vauxhall and Volvo 1.9 L direct-injection diesel engines (F8Q and F9Q) with adjustable injection pump sprocket; e.g. on Renault Megane/Scenic, Kangoo; Mitsubishi Carisma; Opel Arena and Volvo S40/V40.

This injection pump adjusting tool used in conjunction with tool set KL-0129-1 A and the specified locking tools allows the adjustment of the injection pump timing relative to the crankshaft (start-of-delivery setting).

Scope of Delivery: KL-1280-21 Injection Pump Adjusting Tool

Part No.	Description	Qty.
KL-1280-211	Adjusting Tool (3 Pins)	1
KL-1280-212	Special Screwdriver Bit Socket Size (width across flats) 27	1
KL-1280-213	Adaptor for Bosch pumps M10x1 to M8x1	1

KL-0482-41 KA

Injection Pump Adjusting Tool Opel/Vauxhall 2.0 D, 2.2 D



Suitable for the Opel/Vauxhall 2.0 and 2.2 ECOTEC diesel engines (X20DTL, X20DTH, X22DTH) e.g. on Opel/Vauxhall Astra, Astra Caravan, Zafira, Vectra, Omega, Sintra and Frontera.

Designed to lock and/or position engine shafts such as camshaft, crankshaft as well as the injection pump and camshaft sprocket while adjusting the timing. Required when replacing a timing chain or during an engine repair.

Scope of Delivery: KL-0482-41 KA Injection Pump Adjusting Tool

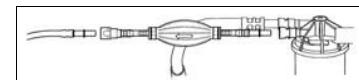
Part No.	Description	Qty.
KL-0482-411 A	Setting gauge for camshaft	1
KL-0482-412 A	Locking pin for crankshaft	1
KL-0482-413 A	Locking pin for injection pump	1
KL-0482-414 A	Adjusting tool for camshaft sprocket	1
KL-0482-4190 A	Plastic storage case	1

Diesel Suction Pump

KL-0482-42

Suitable for the Opel/Vauxhall 2.0 and 2.2 Ecotec diesel engines (X20DTL, X20DTH, X22DTH) with VP 44 injection pump.

This pump is needed to bleed the fuel system if it has been opened, for example, for a fuel filter replacement or for an engine repair.



Technical Data:

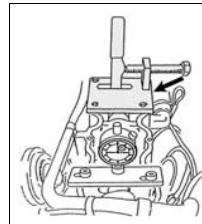
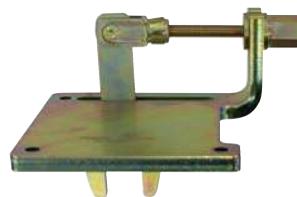
Length:	335 mm
Line-Ø:	9.5 mm

Camshaft Adjusting Tool

KL-0482-2

Suitable for the Opel/Vauxhall 1.6 D and Vauxhall/Opel 1.7 D 1987 onwards.

Using the adjusting tool **KL-0482-2** ensures the correct position of the camshaft relative to the crankshaft (TDC-Position). The adjusting screw additionally enables fine adjustment.



Camshaft Adjusting Set

KL-0482-21

Suitable for Opel/Vauxhall 1.6 D and Opel/Vauxhall 1.7 D 1987 onwards.

Required to check the correct position of the camshaft while setting the TDC position by means of adjusting tool **KL-0482-2**.

Scope of Delivery:

KL-0482-21 Camshaft Adjusting Set

Part No.	Description	Qty.
KL-0128-0	Dial gauge Ø 40 mm	1
KL-0482-210	Adjustment plate for camshafts	1



Extractor

KL-0482-1

Suitable for Vauxhall/Opel 1.6 diesel engines.

Designed to remove the injection pump sprocket from the distributor-type fuel injection pump.



Locking Tool Set Opel/Vauxhall 1.0 12V, 1.2 16V

KL-0482-43 KA

Suitable for the Opel/Vauxhall TwinCam petrol engines 1.0 12V (X10XE), 1.2 16V (X12XE) and 1.4 16V (Z14XEP) e.g. on Opel Corsa, Agila etc.

Designed to lock and/or position the timing chain tensioner as well as engine shafts such as camshafts and crankshaft when replacing a timing chain or during an engine repair.

The set is supplied in a plastic storage case and consists of a setting gauge for camshafts, a setting gauge for the camshaft rpm-sensor pulse generator disc, a locking pin for crankshafts, and a locking pin for timing chain tensioners.

Scope of Delivery:

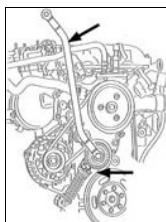
KL-0482-43 K Locking Tool Set Opel/Vauxhall 1.0 12V, 1.2 16V

Part No.	Description	Qty.
KL-0482-432 A	Locking pin for crankshaft	1
KL-0482-433 A	Setting gauge for camshaft rpm-sensor pulse generator	1
KL-0180-3024	Retaining pin Ø2.4 mm	1
KL-0680-15 A	Setting gauge for camshaft	1
KL-0482-4390 A	Storage case	1



KL-0484-11

V-belt Tensioner Tool Opel/Vauxhall 1.0 / 1.2 / 1.4 Torx E18 / E14



Suitable for Opel/Vauxhall TwinCam 1.0 12V; 1.2 and 1.4 16V petrol engines (X10XE, Z10XE, Z10XEP, X12XE, Z12XE and Z14XEP) e.g. on Corsa, Agila, Astra and Meriva etc.

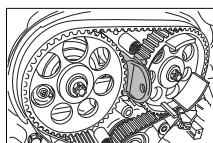
When removing the auxiliary belt, it is necessary to set the belt tensioner to zero position using spanner wrench **KL-0484-110** and to lock it in place by means of retaining pin **KL-0484-111**.

Scope of Delivery:**KL-0484-11 V-belt Tensioner Tool Opel/Vauxhall**

Part No.	Description	Qty.
KL-0484-110	V belt tensioner spanner Torx E18 / E14	1
KL-0484-111	Retaining pin Ø 4 mm	1

KL-0482-32 K

Locking Tool Set Opel



Suitable for the 1.4, 1.6, 1.8, and 2.0 16V Vauxhall / Opel TwinCam petrol engines.

This set is used for locking and/or positioning engine shafts such as camshafts and crankshaft. It can also be used to fix the idler pulley of the V-ribbed belt. Indispensable tool when replacing a timing belt or performing an engine repair.

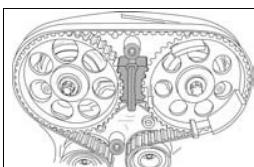
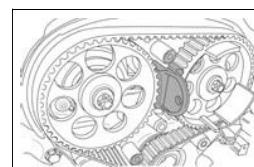
Scope of Delivery:**KL-0482-32 K Locking Tool Set Vauxhall/Opel**

Part No.	Description	Qty.
KL-0481-71 A	Locking tool for flywheel	1
KL-0482-30	Locking tool set Opel/Vauxhall 1.4 / 1.6 / 1.8 / 2.0 16V	1
KL-0482-462 A	Locking pin Ø 4 mm	1
KL-0482-3290	Plastic storage case	1

KL-0482-33 K

Locking Tool Set Vauxhall/Opel 1.4, 1.6, 1.8, 2.0 and 2.2 L

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Suitable for the 1.4, 1.6, 1.8, 2.0, 2.2 TwinCam petrol engines

Built-in to e.g. Opel/Vauxhall: Corsa C, Astra G, Vectra B, Vectra C, Meriva, Zafira A, Zafira B, Combo C, Corsa D, Astra H, Signum, Tigra B, Zafira, Speedster, VX220, Omega B, Sintra A, Frontera B, Alfa: 159, Chevrolet: Aveo, Cruze, Fiat: Croma.

Tool for locking and/or positioning engine shafts such as camshaft and crankshaft. Can also be used to lock and position the timing belt tensioner. Indispensable tool when replacing a timing belt or performing an engine repair.

Scope of Delivery:**KL-0482-33 K Locking Tool Set Vauxhall/Opel 1.4, 1.6, 1.8, 2.0 and 2.2 L**

Part No.	Description	Quantity
KL-0482-331	Locking tool set Vauxhall/Opel 1.6	1
KL-0482-332	Locking device for flywheel	1
KL-0180-3019	Retaining pin Ø 1.9 mm	1
KL-0481-71 A	Locking tool for flywheel	1
KL-0482-301	Locking tool for camshafts Vauxhall /Opel 1.8 L and 2.0 L	1
KL-0482-302	Locking tool for camshafts Vauxhall / Opel 1.4 L and 1.6 L	1
KL-0482-440 A	Locking tool set Vauxhall/Opel 2.2 16V	1
KL-0482-462 A	Locking pin Ø 4 mm	1
KL-0680-15 A	Setting gauge for camshafts	1
KL-0482-3390	Plastic storage case	1

KL-0482-331

Locking Tool Set Vauxhall/Opel 1.6



Suitable for the Vauxhall/Opel 1.6 / 1.8 TwinCam petrol engines (engine code: A 16 LET, A 16 XER, Z 16 LEL, Z 16 LER, Z 16 LET, Z 16 XE, Z 16 XE1, Z 16 XEP, Z 16 XER, A 18 XER, Z 18 XE, Z 18 XER)

on Astra-G, Astra-H, Corsa-C, Corsa-D, Insignia, Meriva, Signum, Tigra-B Roadster, Vectra-B, Vectra-C, Zafira-A, Zafira-B etc.

This tool ensures that the position of the two camshaft sprockets to one another remains fixed, thus preventing any rotation of the camshaft whilst changing the timing belt.

Locking Tool Set Opel/Vauxhall 1.4, 1.6, 1.8 and 2.0

KL-0482-330 K

Suitable for the 1.4, 1.6, 1.8, 2.0, TwinCam petrol engines

Built-in on e.g. Vauxhall/Opel: Corsa C, Astra G, Vectra B, Vectra C, Meriva, Zafira A, Zafira B, Combo C, Corsa D, Astra H, Signum, Tigra B, Zafira, Speedster, VX220, Omega B, Sintra A, Frontera B, Alfa: 159, Chevrolet: Aveo, Cruze, Fiat: Croma.

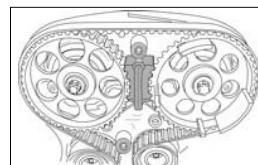
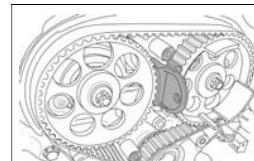
Tool for locking and/or positioning engine shafts such as camshaft and crankshaft. Can also be used to lock and position the timing belt tensioner.

Indispensable tool when replacing a timing belt or performing an engine repair.

Scope of Delivery:

KL-0482-330 K Locking Tool Set Opel/Vauxhall 1.4, 1.6, 1.8 and 2.0

Part No.	Description	Quantity
KL-0482-331	Locking tool set Vauxhall/Opel 1.6	1
KL-0482-332	Locking device for flywheel	1
KL-0180-3019	Retaining pin Ø1.9 mm	1
KL-0481-71 A	Locking tool for flywheel	1
KL-0482-301	Locking tool for camshafts Vauxhall /Opel 1.8 L and 2.0 L	1
KL-0482-302	Locking tool for camshafts Vauxhall / Opel 1.4 L and 1.6 L	1
KL-0482-462 A	Locking pin Ø4 mm	1
KL-0680-15 A	Setting gauge for camshafts	1
KL-0482-3390	Plastic storage case	1



Locking Tool Set Opel 1.4 / 1.6 / 1.8 / 2.0

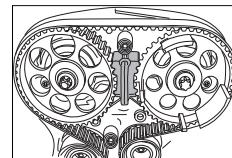
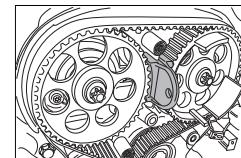
KL-0482-30

This tool ensures that the position of the two camshaft sprockets to one another remains fixed, so preventing any rotation of the camshafts whilst changing the timing belt.

Scope of Delivery:

KL-0482-30 Locking Tool Set Opel 1.4 / 1.6 / 1.8 / 2.0

Part No.	Description	Suitable for
KL-0482-301	Locking tool for camshafts	Opel 1.8 L 16V; Opel 2.0 L 16V
KL-0482-302	Locking tool for camshafts	Opel 1.4; Opel 1.6 L 16V



Locking Tool Set Vauxhall/Opel 2.2 16V

KL-0482-440 A

Suitable for the Opel/Vauxhall TwinCam 2.2 16V petrol engines (Z22SE)

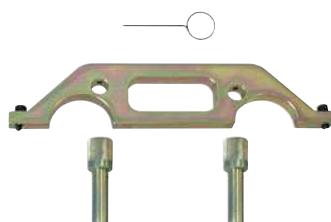
e.g. on Astra, Signum, Speedster, Vectra and Zafira etc.

For locking or positioning the camshafts and the timing chain tensioner during an engine repair.

Scope of Delivery:

KL-0482-440 A Locking Tool Set Vauxhall/Opel 2.2 16V

Part No.	Description	Qty.
KL-0482-4401 A	Locking tool for camshafts Vauxhall/Opel 2.2 16V	1
KL-0180-3012	Retaining pin Ø1.2 mm	1



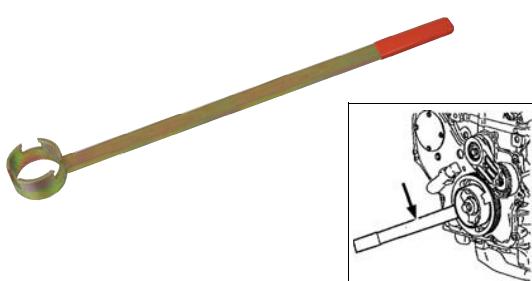
Reaction Wrench for crankshaft Opel 2.2 16 V

KL-0482-441

Suitable for the Opel/Vauxhall TwinCam 2.2 16V petrol engines (Z22SE)

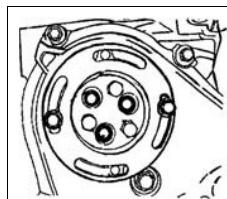
e.g. on Astra, Signum, Speedster, Vectra and Zafira etc.

For locking the crankshaft pulley while loosening and tightening the crankshaft central screw (for example during an engine repair).



KL-0482-442 A

Locking Tool for Water Pump Opel/Vauxhall 2.2 16V

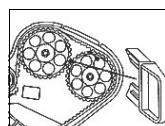


Suitable for Opel/Vauxhall TwinCam 2.2 16V petrol engines (Z22SE) e.g. on Astra, Signum, Speedster, Vectra and Zafira etc.

To remove and install the water pump it is necessary to lock the water pump belt pulley by means of tool **KL-0482-442 A**.

KL-0482-400

Locking Tool Set Opel/Vauxhall V6

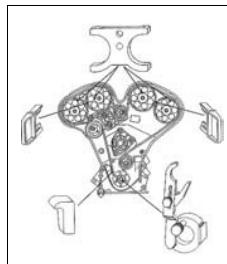


Suitable for Opel/Vauxhall V6 engines. (Engine code: X25XE, X26SE, X30XE, Y32SE)

Ensures that the position of the two camshaft sprockets to one another remains fixed, so preventing any rotation of the camshaft whilst changing the timing belt.

KL-0482-40 K

Locking Tool Opel V6 engine



The locking tool **KL-0482-40 K** (for Opel/Vauxhall V6 engines) contains all the necessary tools required for locking crankshaft and camshaft sprockets during service work. For example for the removal and replacement of the timing belt on the Ecotec V6 multi-valve engine. This tool set is indispensable for the accurate positioning of the camshaft sprockets relative to the TDC (top dead centre) position of the crankshaft while installing a timing belt.

Scope of Delivery:

KL-0482-40 K Locking Tool Opel V6 engine

Part No.	Description	Qty.
KL-0482-401	Locking Tool for crankshaft Opel/Vauxhall V6	1
KL-0482-402	Setting gauge for camshaft Opel/Vauxhall V6	1
KL-0482-403	Holding tool for timing belt Opel/Vauxhall V6	1
KL-0482-404	Locking tool for camshafts (red) Opel/Vauxhall V6	1
KL-0482-405	Locking tool for camshafts (green) Opel/Vauxhall V6	1
KL-0482-4090	Plastic case with insert	1

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KL-0481-71 A

Flywheel Locking Tool

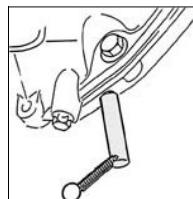
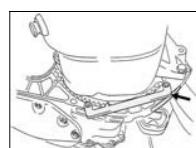


Suitable for: Opel/Vauxhall engines: 1.4 and 1.6 Eco-Tec 16 V; 1.2 – 1.6 OHC (with aluminium oil sump) and 1.8 16V (X18E1, X18XE1).

This tool is used for locking the flywheel.

KL-0481-90

Locking Tool Set Opel/Vauxhall Diesel



Suitable for the Opel/Vauxhall diesel engines (Isuzu) with 1.5 L and 1.7 L and for Vauxhall/Opel petrol engines (OHC) from 1.2 L to 2.0 L.

This tool set enables the crankshaft on the flywheel to be set to TDC-Position.

Scope of Delivery:

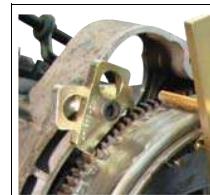
KL-0481-90 Locking Tool Set Opel/Vauxhall Diesel

Part No.	Description	Suitable for
KL-0481-8	TDC-Setting Tool for Crankshaft/ Flywheel	Astra 1.7 D until '97
KL-0481-9	Locking Pin for Flywheel/ Crankshaft	Astra 1.7 D '98 onwards
KL-0481-4	Flywheel Holding Tool	1.5 l and 1.7 l diesel (Isuzu); 1.2 l to 2.0 l petrol engines

Flywheel Locking Tool

KL-0481-70

For locking the flywheel when the gearbox has been removed from the vehicle.
Universal range of application.

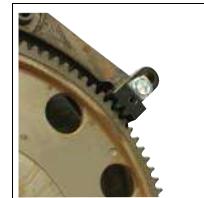


Flywheel Locking Tool

(Universal)

KL-0182-1 A

For locking the flywheel when the gearbox has been removed from the vehicle.
Universal range of application.



Reaction Wrench Size (width across flats) 36 mm

KL-0123-2

Suitable for Ford, Opel/Vauxhall and GM vehicles.

Designed to lock the Visco-clutch drive shaft, when removing or installing the Visco-clutch.

Technical Data:

Size (width across flats):	36 mm
Length:	280 mm
Height:	11 mm
Weight:	340 g



Reaction Wrench Size (width across flats) 46 mm

KL-0483-1

Suitable for Opel/Vauxhall and GM OHC-engines.

Required to twist the water pump, so enabling the driving belt to be tensioned.

Technical Data:

Size (width across flats):	46 mm
Drive:	1/2"
Length:	125 mm
Height:	55 mm
Weight:	270 g



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Reaction Wrench Size (width across flats) 41 mm

KL-0483-2

Suitable for Opel/Vauxhall and GM, e.g. 1.2 / 1.3 / 1.4 / 1.6 OHC-engines.

Required to twist the water pump, so enabling the driving belt to be tensioned.

Advantages:

- Safe locking of the Visco-clutch.
- No damage to the Visco-clutch.
- The wrench is manufactured according to a special process ensuring a very high quality of the product.

Technical Data:

Size (width across flats):	41 mm
Drive:	1/2"
Length:	125 mm
Height:	55 mm
Weight:	275 g



Locking Tool

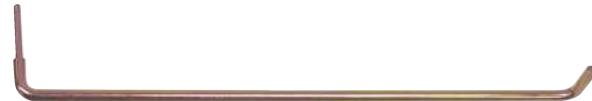
KL-0484-10

This tool is used for locking the automatic idler pulley for the V-ribbed belts and timing belts on **VW-Audi** engines.

Also suitable for the automatic idler pulley for the V-ribbed belt on **Opel/Vauxhall** vehicles fitted with EcoTec-engines.

Technical Data:

Ø:	4,0 / 6,0 mm
Weight:	70 g



KL-1682-30 K

Locking Tool Set Fiat, Lancia, Alfa



Suitable for: Alfa Romeo vehicles with 1.4, 1.6, 1.8, 2.0, 2.5, 3.0 and 3.2 L 4- and 6-cylinder engines; such as: 145, 146, 147, 155, 156, 164, 166, GTA, GTV, Spider, Spider GT etc. and Fiat / Lancia vehicles with 1.2, 1.4, 1.6, 1.8, 2.0 L 4- and 5-cylinder engines such as: Fiat Panda, Punto, Palio, Siena, Bravo, Brava, Stilo, Marea, Multipla, Barchetta, Coupe etc. Lancia Dedra, Delta, Kappa, Lybra etc.

When performing repairs to cylinder heads or engines, or when replacing a timing belt, the **KL-1682-30 K** locking tool set is needed to determine the TDC position (power stroke) of cylinder 1, hold the camshafts in this position and so permitting adjustment of the idler pulley.

Advantages:

- Safe, accurate positioning and locking of the camshafts.
- Substantial time savings.

Scope of Delivery:**KL-1682-301 Locking tool set for camshafts (2 pieces)**

Suitable for Alfa 1.4 / 1.6 / 1.8 4-cylinder 16V TS engines. Engine code: AR322.01, AR335.03, AR671.06, AR676.01, AR372.03, AR321.04

KL-1682-302 Locking tool set for camshafts (2 pieces)

Suitable for Alfa 2.0 4-cylinder 16V TS engines. Engine code: AR323.01, AR672.04, AR162.01, AR323.10, AR341.01, AR322.01, AR363.01

KL-1682-303 Locking tool set for camshafts (2 pieces)

Suitable for Alfa 1.6 4-cylinder 16V engines. Engine code: AR321.04

KL-1682-304 Locking tool set for camshafts (2 pieces)

Suitable for Alfa 2.0 4-cylinder 16V JTS engines. Engine code: 937A1.000, 932A2.000

KL-1682-305 Locking tool set for camshafts (4 pieces)

Suitable for Alfa 2.5/3.0 V6 engines with 24 valves. Engine code: 161.02, 324.01, 343.01

KL-1682-306 Locking tool set for camshafts (4 pieces)

Suitable for Alfa 3.2 V6 engines with 12 and 24 valves. Engine code: 932A.000, 936A.000

KL-1682-311 Locking tool set for camshafts (1 piece)

Suitable for Fiat/Lancia 1.4 4-cylinder 12V engines. Engine code: 182 A5.000, 182A3.000

KL-1682-312 Locking tool set for camshafts (2 pieces)

Suitable for Fiat/Lancia 1.8 4-cylinder 16V engines. Engine code: 182A2.000 (1. Series), 183A1.000 (1. Series)

KL-1682-313 Locking tool set for camshafts (2 pieces)

Suitable for Fiat/Lancia 1.8 4-cylinder 16V engines. Engine code: 182A2.000, 183A1.000

KL-1682-314 Locking tool set for camshafts (2 pieces)

Suitable for Fiat/Lancia 1.8 4-cylinder 16V engines. Engine code: 188A6.000, 192A4.000, 839A7.000, 839A9.000, 183A1.000

KL-1682-315 Locking tool set for camshafts (2 pieces)

Suitable for Fiat/Lancia 2.0 5-cylinder 20V engines. Engine code: 838A6.000

KL-1682-316 Locking tool set for camshafts (2 pieces)

Suitable for Fiat/Lancia 2.0 5-cylinder 20V engines. Engine code: 175A3.000

KL-1682-3511 Setting gauge for camshafts

Suitable for Fiat/Lancia 1.2 4-cylinder 8V engines. Engine code: 188A4.000

KL-1682-3512 Setting gauge for camshafts

Suitable for Fiat/Lancia 1.2 4-cylinder 8V engines. Engine code: 188A4.000

KL-1682-352 Setting gauge set for camshafts (2 pieces)

Suitable for Fiat/Lancia 1.6 4-cylinder 16V engines. Engine code: 182A4.000, 182A6.000, 182B6.000

KL-1682-383 Socket for phase shifter

Suitable for Fiat/Lancia 1.8/2.0 4/5-cylinder 16/20V engines.

KL-1682-121 Adjusting tool for tensioner

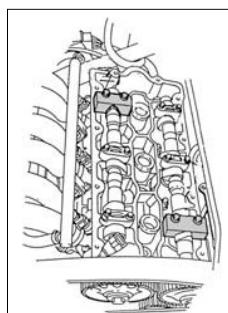
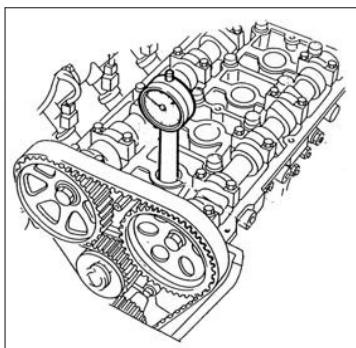
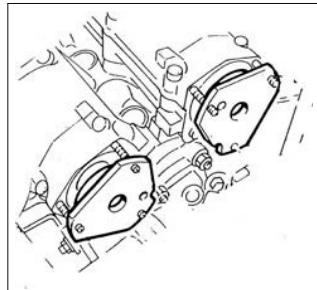
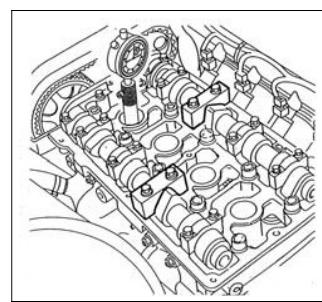
Suitable for Fiat/Lancia 1.6 4-cylinder 16V engines. Engine code: 182A4.000, 182A6.000, 182B6.000

KL-1681-111 Adaptor M14x1,25 for TDC adjusting

Suitable for Fiat/Lancia 1.6/2.0 4/5-cylinder 16/20V engines. Engine code: 932A2.000, 937A1.000, 182A4.000, 182A6.000, 182B6.000

KL-1682-381 Adaptor for TDC adjusting

Suitable for Fiat/Lancia 1.2 4-cylinder 8V engines.

KL-182-3090 Plastic Storage Case

Locking Tool Set Fiat, Lancia

KL-1682-31 K

Suitable for: Fiat / Lancia vehicles with 1.2, 1.4, 1.6, 1.8, 2.0 L 4- and 5-cylinder engines such as: Fiat Panda, Punto, Palio, Siena, Bravo, Brava, Stilo, Marea, Multipla, Barchetta, Coupe etc. Lancia Dedra, Delta, Kappa, Lydra etc.

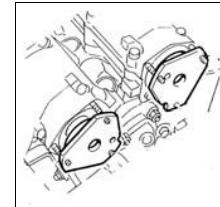
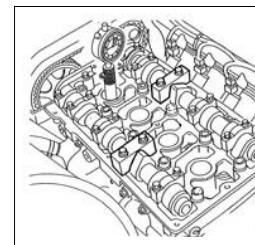
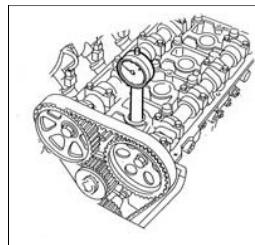
When performing repairs to cylinder heads or engines, or when replacing a timing belt, the **KL-1682-31 K** locking tool set is needed to determine the TDC position (power stroke) of cylinder 1, hold the camshafts in this position and so permitting adjustment of the idler pulley.

Advantages:

- Safe, accurate positioning and locking of the camshafts.
- Substantial time savings.

Scope of Delivery:**KL-1682-31 K Locking Tool Set Fiat, Lancia**

Part No.	Description	Qty.
KL-1682-311	Locking Tool for (inlet) Camshaft (black)	1
KL-1682-312	Locking tool set for camshafts (white)	1
KL-1682-313	Locking tool set for camshafts (grey)	1
KL-1682-314	Locking tool set for camshafts (dark blue)	1
KL-1682-315	Locking tool set for camshafts (dark green)	1
KL-1682-316	Locking tool set for camshafts (light-green)	1
KL-1682-3511	Setting gauge for camshafts	1
KL-1682-3512	Setting gauge for camshafts	1
KL-1682-352	Setting gauge set for camshafts	1
KL-1682-383	Socket for phase shifter	1
KL-1682-121	Adjusting Tool for tensioner	1
KL-1681-111	Adaptor M14x1.25 for TDC adjusting	1
KL-1682-381	Adaptor for TDC adjusting	1
KL-1682-3090	Plastic storage case	1



Locking Tool Set Alfa

KL-1682-32 K

Suitable for: Alfa Romeo vehicles with 1.4, 1.6, 1.8, 2.0, 2.5; 3.0 and 3.2 L 4- and 6-cylinder engines such as: 145, 146, 147, 155, 156, 164, 166, GTA, GTV, Spider etc.

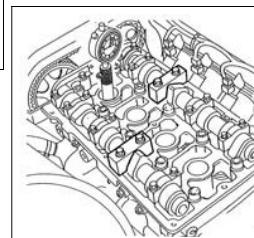
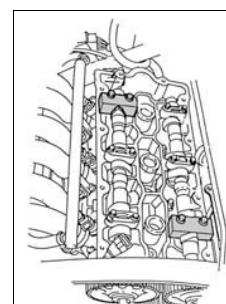
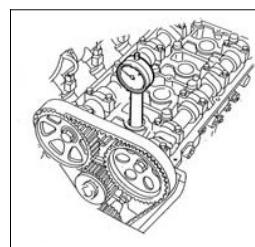
When performing repairs to cylinder heads or engines, or when replacing a timing belt, the **KL-1682-32 K** locking tool set is needed to determine the TDC position (power stroke) of cylinder 1 and hold the camshafts in position.

Advantages:

- Safe, accurate positioning and locking of the camshafts.
- Substantial time savings.

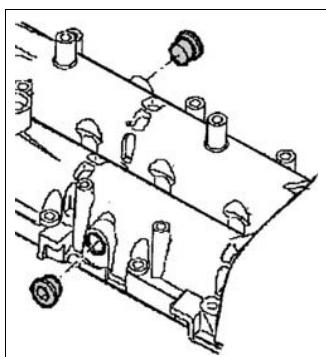
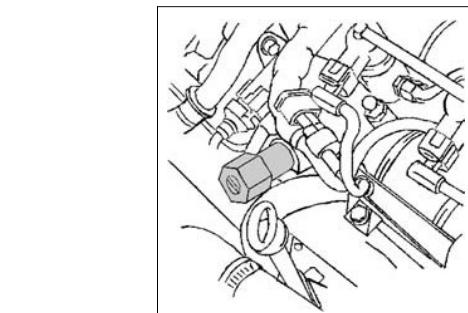
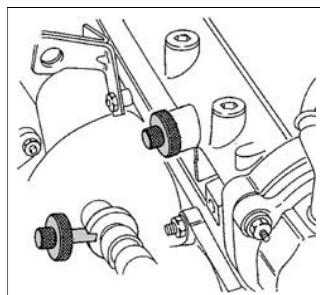
Scope of Delivery:**KL-1682-32 K Locking Tool Set Alfa**

Part No.	Description	Qty.
KL-1682-301	Locking tool set for camshafts (golden)	1
KL-1682-302	Locking tool set for camshafts (light-yellow)	1
KL-1682-303	Locking tool set for camshafts (bronze coloured)	1
KL-1682-304	Locking tool set for camshafts (red)	1
KL-1682-305	Locking tool set for camshafts (violet)	1
KL-1682-306	Locking tool set for camshafts (light-blue)	1
KL-1681-111	Adaptor M14x1.25 for TDC adjusting	1
KL-1682-3090	Plastic storage case	1



KL-1682-40 K

Locking Tool Set Alfa Romeo, Fiat, Lancia



Suitable for Alfa Romeo, Fiat and Lancia 1.7 and 1.9 D/TD; 1.3, 1.9, 2.3 and 2.4 JTD Diesel engines, such as on:

- **Alfa:** 145, 146, 147, 155, 156, 166, GT
- **Fiat:** Bravo, Brava, Doblo, Doblo Cargo, Ducato, Fiorino, Idea, Marea, Palio, Panda (latest model), Punto, Punto (latest model), Siena, Stilo, Talento, Tempra, Tipo, Uno,
- **Lancia:** Dedra, Delta, Kappa, Musa, Palio, Siena, Ypsilon

Essential tool set for locking or positioning engine shafts such as camshafts and crankshaft when replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1682-181 Locking Tool for camshaft

Suitable for Fiat 1.9 D engines

Engine code: 160A7.000, 230A2.000

KL-1682-171 Locking Tool for camshaft

Suitable for Fiat 1.7 D/TD engines

Engine code: 176A5.000, 176B3.000

KL-1682-191 Locking Tool for camshaft

Suitable for Alfa/Fiat/Lancia 1.9 TD engines

Engine code: 160A6.000, 160B6.046, 230A4.000

KL-1682-170 Locking Tool for crankshaft

Suitable for Alfa/Fiat/Lancia 1.9 D/TD engines

Engine code: 160A6.000, 160A7.000, 160B6.046, 176A5.000, 176B3.000, 230A4.000, 230A2.000

KL-1682-202 A Locking Tool for crankshaft

Suitable for Alfa/Fiat/Lancia/Opel/Vauxhall 1.9/2.4 D/TD/JTD/CDTi engines

Engine code: 182A7.000, 182B4.000, 182B9.000, 186A9.000, 188A2.000, 188A3.000, 188B2.000, 192A1.000, 192A3.000, 192A5.000, 192B1.000, 223A7.000, 342.02, 323.02, 325.01, 839A5.000, 839A6.000, 841C.000, 841G.000, 841H.000, 937A2.000, 937A4.000, 937A5.000, Z19DTH, Z19DTJ

KL-1682-433 Locking Tool for crankshaft

Suitable for Fiat/Lancia/Opel/Vauxhall 1.3 JTD/CDTi engines

Engine code: 188A8.000, 188A9.000, Z13DT

KL-1682-410 A Locking tool for camshaft (2 pieces)

Suitable for Citroen/Fiat/Iveco/Peugeot 2.3/3.0 JTD engines

Engine code: F1AE0481A, F1AE0481B, F1AE041C, F1AE0481D, F1AE0481F, F1AE0481G, F1AE0481H, F1AE0481N, F1C, F1CE0481A (HPI), F1CE0481B (HPT), F1CE0481F (HPI), F1CE0481H (HPT), F30DT

KL-0482-461 A Locking tool for camshaft (2 pieces)

Suitable for Alfa/Fiat/Opel 1.9 D/JTD/CDTi engines

Engine code: 192A5.000, 937A5.000, 939A1.000, 939A2.000, 939A7.000, 939A8.000, Z19DTH, Z19DTJ

KL-0482-450 A Locking tool for camshaft (2 pieces)

Suitable for Fiat/Lancia/Opel/Vauxhall 1.3 JTD/CDTi engines

Engine code: 188A8.000, 188A9.000, Z13DT

KL-1682-411 A Locking Tool for crankshaft

Suitable for Citroen/Fiat/Iveco/Peugeot 2.3/3.0 JTD engines

Engine code: F1AE0481A, F1AE0481B, F1AE041C, F1AE0481D, F1AE0481F, F1AE0481G, F1AE0481H, F1AE0481N, F1C, F1CE0481A (HPI), F1CE0481B (HPT), F1CE0481F (HPI), F1CE0481H (HPT), F30DT

KL-1682-4090 Plastic storage case (with insert)

Locking Tool Set Alfa Romeo, Fiat

KL-1682-521 K

Universally suitable for Alfa Romeo and Fiat TwinCam petrol engines (new generation) e.g. on Alfa Romeo 145, 146, 147, 155, 156, 166, Spider, GT, GTV; Fiat Punto, Brava, Bravo, Marea, Marea Weekend, Stilo, Barchetta, Coupe.

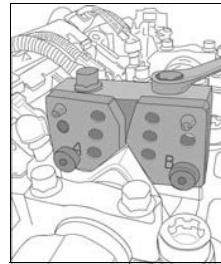
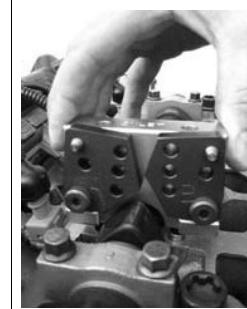
This tool is used for locking and/or positioning camshafts when replacing a timing belt or during an engine repair.

Thanks to the base tool and the different camshaft plates, this tool set enables camshafts to be locked or positioned without having to use all the many different camshaft locking tools that are normally required.

Scope of Delivery:

KL-1682-521 K Locking Tool Set Alfa Romeo, Fiat

Part No.	Description	Qty.
KL-1682-501	Base tool (inlet and exhaust)	1
KL-1682-502	Camshafts plates A-D Alfa Romeo	1
KL-1682-503	Camshafts plates E-H Fiat 1.8i 16V	1
KL-1682-504	Camshafts plates J-M Fiat 2.0i / 2.4i 20V	1
KL-1682-5016	Hexagon socket key Size (width across flats) 4	1
KL-1682-5219	Plastic case with insert	1



Locking Tool Set Alfa Romeo

KL-1682-522 K

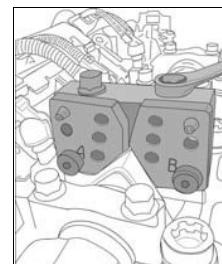
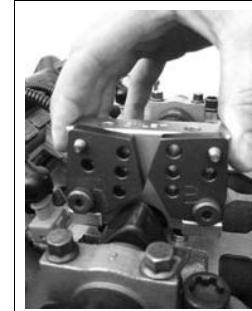
Universally suitable for Alfa Romeo TwinSpark TwinCam petrol engines 1.4; 1.6; 1.8; 2.0 and 2.0 JTS (engine code: 162.01, 321.02, 321.03, 321.04, 322.01, 322.05, 372.03 [105HP], 323.01, 323.10, 335.03, 341.03, 363.01, 672.04, 676.01, 671.06, 932A2.000, 937A1.000) e.g. Alfa Romeo 145, 146, 147, 155, 156, 166, Spider, GT, GTV.

This tool is designed for locking and/or positioning camshafts and for adjusting the timing belt tensioner when replacing a timing belt or during an engine repair. Thanks to the base tool and the different camshaft plates, this tool set enables camshafts to be locked or positioned without having to use all the many different camshaft locking tools that are normally required.

Scope of Delivery:

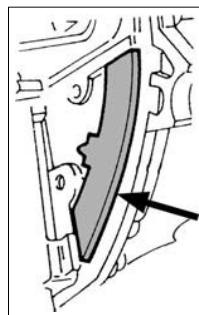
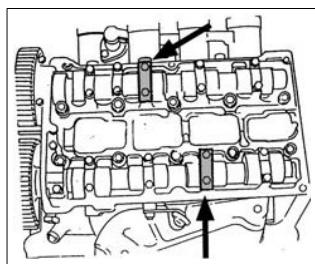
KL-1682-522 K Locking Tool Set Alfa Romeo

Part No.	Description	Qty.
KL-1682-501	Base tool (inlet and exhaust)	1
KL-1682-502	Camshafts plates A-D Alfa Romeo	1
KL-1682-213	Tensioner tool for tensioner pulley timing belt	1
KL-1682-214	Tensioner tool for tensioner pulley balancer shafts	1
KL-1682-5016	Hexagon socket key Size (width across flats) 4	1
KL-1682-5229	Plastic case with insert	1



KL-1682-523 K

Locking Tool Set Alfa Romeo, Fiat



Suitable for Alfa Romeo Twin Spark petrol engines 1.4; 1.6; 1.8; 2.0 and 2.0 JTS

(engine code: 335.03, 321.02, 321.03, 321.04, 372.03 [105 PS], 676.01, 322.01, 322.05, 671.06, 162.01, 323.01, 323.10, 341.03, 363.01, 672.04, 932A2.000, 937A1.000)

e.g. Alfa Romeo 145, 146, 147, 155, 156, 166, Spider, GTV, GT and Fiat TwinCam petrol engines 1.8 16v.; 2.0 20v.; 2.4 20v.

(engine code: 182A2.000, 183A1.000, 183A6.000, 188A6.000, 192A4.000, 175A3.000, 182.A1.000, 182B3.000, 182B7.000, 192A.000) e.g. Punto, Brava, Bravo, Marea, Weekend, Barchetta, Coupe, Stilo.

This tool is designed for locking and/or positioning engine shafts such as camshafts and crankshafts as well as for locking, positioning and adjusting timing belt tensioners.

It is required when replacing a timing chains or for performing an engine repair. Thanks to the base tool and the different camshaft plates, this tool set enables camshafts to be locked or positioned without having to use all the many different camshaft locking tools that are normally required.

Specification:

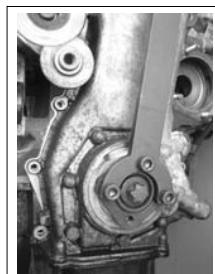
KL-1682-523 K Locking Tool Set Alfa Romeo, Fiat

Part No.	Description	Qty.
KL-1682-501	Base tool (inlet and exhaust)	1
KL-1682-502	Camshafts plates A-D Alfa Romeo	1
KL-1682-5016	Hexagon socket key Size (width across flats) 4	1
KL-1682-503	Camshafts plates E-H Fiat 1.8i 16V	1
KL-1682-213	Tensioner tool for tensioner pulley timing belt	1
KL-1682-504	Camshafts plates J-M Fiat 2.0i / 2.4i 20V	1
KL-1682-214	Tensioner tool for tensioner pulley balancer shafts	1
KL-1682-5231	Locking Tool for crankshafts	1
KL-1682-131	Flywheel holding tool	1
KL-1681-111	Adaptor M14x1.25 for TDC adjusting	1
KL-1682-5239	Plastic storage case	1

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KL-1682-43 K

Locking Tool Set



Suitable for Fiat 1.3 JTD Multi-Jet 16 V diesel engines (engine code: 188A8.000, 188A9.000) e.g. Fiat (Panda, Punto, Idea, Doblo, Doblo / Cargo).

This tool is designed to lock the crankshaft while loosening or tightening the crankshaft central screw. It can also be used to lock and/or position engine shafts such as camshafts and crankshafts when replacing a timing chain or during an engine repair.

Scope of Delivery:

KL-1682-43 K Locking Tool Set

Part No.	Description	Qty.
KL-1682-431	Reaction wrench for crankshaft	1
KL-1682-432	Reaction wrench for timing chain tensioner	1
KL-1682-433	Locking tool for crankshaft	1
KL-1682-434	Locking bolt for flywheel	1
KL-0482-450 A	Locking tool for camshaft (2 pieces)	1
KL-1682-4390	Storage case with insert	1

Locking Tool Set

KL-1682-42 K

Suitable for Alfa Romeo and Fiat 1.6 Multijet; 1.6 16V Multijet; 1.9 JTD 8/16 V und 2.4 JTD 10/20 V Common-Rail diesel engines.

1.6 Multijet - 110 Linea; 199 Grande Punto

1.6 16V Multijet - 135 Idea

1.9 JTD (8V) - 323.02, 371.01, 182B4.000, 182B9.000, 186A6.000, 188A2.000, 188A7.000188B2.000, 192A1.000, 192A3.000, 937A2.000, 939A1.000;

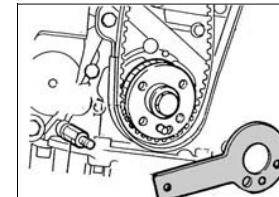
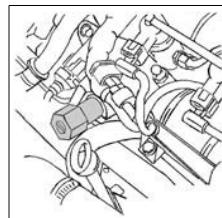
1.9 JTD (16V) - 192A5.000, 192B1.000, 937A5.000, 939A2.000;

2.4 JTD (10V) - 325.01, 342.02, 362.02, 185A6.000, 841C.000;

2.4 JTD (20V) - 841G.000, 939A3.000)

e.g. Alfa Romeo: 145, 146, 147, 156, 159, 166, GT; Fiat: Punto, Grande Punto, Brava/Bravo, Marea/Weekend, Stilo, Doblo/Cargo, Multipla.

This tool is used for locking and/or positioning engine shafts such as camshafts and crankshafts while changing a timing belt or during an engine repair.



Scope of Delivery:

KL-1682-42 K Locking Tool Set

Part No.	Description	Qty.
KL-1682-202	Locking tool for crankshaft	1
KL-0482-461	Locking pin for camshaft (2 pieces)	1
KL-1682-131	Locking tool for flywheel	1
KL-1682-4290	Storage case with insert	1

Locking Tool Set for Timing Belt Fiat 1.9 D / TD / JTD, 2.1 TD, 2.4 TD

KL-1682-20 KA

Suitable for Fiat 1.9 D/TD/JTD; 2.4 TD/JTD and PSA 1.9 D/TD, 2.1 TD diesel engines (engine code: 160 A7.000, 182 A7.000, 182 A8.000, 182 B4.000, 185 A2.000, 185 A6.000, 188 A2.000 and 188 A3.000) e.g. Fiat Brava, Bravo, Marea, Marea Weekend, Multipla, Punto, Scudo, Ulysse.

For locking and/or positioning flywheels and engine shafts such as camshaft, injection pump shaft and crankshaft when replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1682-20 KA Locking Tool Set for Timing Belt

Part No.	Description	Qty.
KL-1380-2211 A	Locking pin Ø6 mm	1
KL-1380-2215 A	Locking pin (angled) for flywheel Ø7.7 mm	1
KL-1480-18	Hex screw M8 x 40	3
KL-1682-201 A	Flywheel holding tool 1.9 D	1
KL-1682-202 A	Locking Tool for crankshaft 1.9 JTD / 2.4 JTD	1
KL-1682-2090 A	Plastic storage case	1



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Locking Tool Set 2.8 JTD, HDI

KL-1682-24 KA

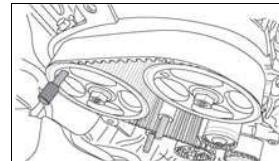
Suitable for 2.8 D / 2.8 TDI / 2.8 HDI / 2.8 TD / 2.8 JTD diesel engines (e.g. Citoen Jumper, Fiat Ducato, Ducato 244, Iveco Daily, Peugeot Boxer (Engine code: 8140.43, 8140.43S, 8140.63); 2.5 DTI / 2.5 TD / 2.5 D (Citoen Jumper, Fiat Ducato, Ducato 244, Iveco Daily, Peugeot Boxer (Engine code: S8U 770/772, S8U); 2.8 D / 2.8 DTI / 2.8 TD / 2.8 dci (Opel Movano, Master III, Master, Mascott (Engine code: S9W 700/702, S9W, S9W 206/208/212).

This tool is designed to lock and /or position injection pump shafts and crankshafts as well as to lock the timing belt tensioner. It is required when replacing a timing belt or for engine repairs.

Scope of Delivery:

KL-1682-24 KA Locking Tool Set 2.8 JTD, HDI

Part No.	Description	Qty.
KL-1682-2401	Distance sleeve for timing belt	1
KL-1380-2213 A	Locking pin Ø4.9 mm	1
KL-1280-203 A	Locking pin Ø4.9 mm	1
KL-1280-204 A	Locking pin Ø4.9 / 3.9 mm	1
KL-1280-233 B	Locking pin Ø7.9; Ø11.9 mm	1
KL-0680-2201 A	Locking pin Ø11 mm	1
KL-1682-2490	Plastic storage case	1



KL-1681-11 K

TDC Adjusting Tool



Universally suitable for vehicles with M12x1.25 or M14x1.25 spark plug thread, e.g. Alfa Romeo, Fiat, Porsche etc.

This tool is needed to determine the TDC position on cylinder 1.

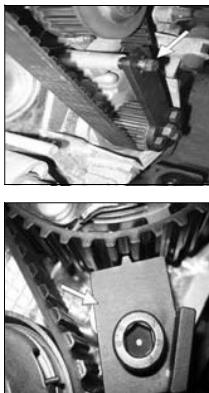
Scope of Delivery:

KL-1681-11 K TDC Adjusting Tool

Part No.	Description	Quantity
KL-1681-111	Adaptor M14x1.25 for TDC adjustment	1
KL-1681-112	Adaptor M12x1.25 for TDC adjustment	1
KL-0128-0	Dial gauge Ø 40 mm	1
KL-1681-1190	Plastic storage case	1

KL-1682-10 KA

Locking Tool Set Fiat 1.2 16 V



Suitable for Fiat 1.2 L 16 V TwinCam petrol engines (engine code: 176 B9.000, 182 B2.000 und 188 A5.000) and 1.4 L 16V TwinCam petrol engines (engine code: 843A1.000, 169A3.000 192B2.000, 198A1.000, 198A4.000, 199A6.000 e.g. on Fiat New 500, Punto, Brava and Bravo.

This tool set is designed to determine the TDC position on cylinder 1, to lock and/or position engine shafts such as camshafts and crankshaft as well as to adjust the timing belt tensioner. It is required when replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1682-10 K - Locking Tool Set Fiat 1.2 16 V

Artikel-Nr	Beschreibung	Menge
KL-1682-101	TDC adjusting tool (2 pcs.)	1
KL-1682-102	Locking tool for camshaft (2 pcs.)	1
KL-1682-103	Tensioner wrench	1
KL-1682-104	Locking tool for crankshaft	1
KL-1682-105	Locking tool for camshafts	1
KL-1682-1090 A	Plastic storage case	1

KL-1682-25 K

Locking Tool Set Fiat 1.2; 1.4 8v

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Suitable for Fiat 1.2 L (169A4.000, 188A4.000 (EVO2), 199A4.000) and 1.4 L (350A1.000) 8-valve petrol engines e.g. New 500, Idea, Grande Punto, Linea, Doblo, Panda.

This tool set is used for locking and/or positioning camshaft and crankshaft, as well as for adjusting the timing belt tensioner and aligning the camshaft sensor cap. Essential tools when changing a timing belt or performing an engine repair.

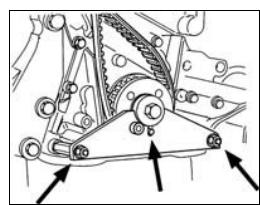
Scope of Delivery:

KL-1682-25 K Locking Tool Set Fiat 1.2; 1.4 8v

Part No.	Description	Quantity
KL-1682-251	Setting gauge for camshaft sensor cap	1
KL-1682-252	Retaining tool for camshaft sprocket	1
KL-1682-253	Setting gauge for camshaft	1
KL-1682-103	Tensioner wrench	1
KL-1682-104	Locking tool for crankshaft	1
KL-1682-2590	Storage case	1

KL-1682-11 K

Locking Tool Set Fiat 1.4 12V



Suitable for Fiat 1.4 L 12 V petrol engines (182 A3.000, 182 A5.000) e.g. on Fiat Brava, Bravo, Marea, Marea Weekend.

This tool set is used for locking and/or positioning engine shafts such as camshaft and crankshaft when replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1682-11 K Locking Tool Set Fiat 1.4 12V

Part No.	Description	Qty.
KL-1682-111	Fixing tool for camshafts	1
KL-1682-112	Locking Tool for crankshaft	1
KL-1682-1190	Plastic storage case	1

Locking Tool Set Fiat 1.6 16 V

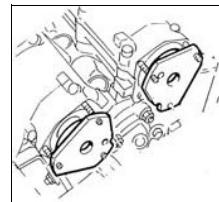
KL-1682-12 K

Suitable for Fiat 1.6 L 16 V TwinCam petrol engines (182 A4.000, 182 A6.000) e.g. on Fiat Brava, Bravo, Marea, Marea Weekend, Multipla, Palio and Stilo.

This tool set is used for locking and/or positioning flywheels, engine shafts such as camshaft and crankshaft, as well as for adjusting the tensioner pulley when replacing a timing belt or during an engine repair.

Scope of Delivery: KL-1682-12 K Locking Tool Set

Part No.	Description	Qty.
KL-1682-123/1	Setting gauge for camshafts (inlet)	1
KL-1682-123/2	Setting gauge for camshafts (exhaust)	1
KL-1682-122	Flywheel holding tool	1
KL-1682-121	Adjusting Tool for tensioner	1



Locking Tool Set Alfa Romeo V6 2.5 24 V

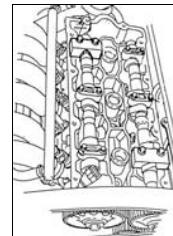
KL-1682-22 K

Suitable for Alfa Romeo 3.0 L; 2.5 L V6 24V TwinCam engines (AR324.01) e.g. on Alfa Romeo 156 (97-).

Designed to lock and position the camshaft and timing belt tensioner when replacing a timing belt or during an engine repair.

Scope of Delivery: KL-1682-22 K Locking Tool Set

Part No.	Description	Qty.
KL-1682-221	Locking tool set for camshafts (4 pieces)	1
KL-1682-222	Tensioning Tool (11 pieces)	1
KL-1682-2290	Plastic storage case	1



Locking Tool Set

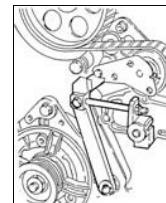
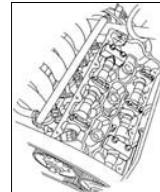
KL-1682-23 K

Suitable for Alfa Romeo 3.2 V6 24 V TwinCam petrol engines (engine code 932A.000 and 936A.000) e.g. 147, 156, 166, Spider, GT, GTV.

This tool is used to lock and/or position camshafts as well as for adjusting the timing belt tensioner. It is required when replacing a timing belt or for engine repairs.

Scope of Delivery: KL-1682-23 K Locking Tool Set

Part No.	Description	Qty.
KL-1682-222	Tensioning Tool Set (11 pieces)	1
KL-1682-231	Locking tool for camshaft (4 pieces)	1
KL-1682-232	Hexagon socket screw M8x45 (8 pieces)	1
KL-1682-2390	Storage case with insert	1

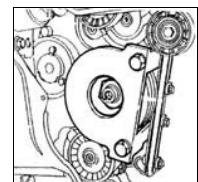


Crankshaft Locking Tool

KL-1682-235

Suitable for Alfa Romeo 3.2 V6 24 V TwinCam petrol engines (engine code 932A.000 and 936A.000) e.g. 147, 156, 166, Spider, GT, GTV.

This tool is designed to lock the crankshaft (crankshaft pulley) while loosening and tightening the crankshaft central screw. It is required when replacing a timing belt or for engine repairs.



Injection Pump Locking Tool Fiat 1.7 D, 1.9 D

KL-1682-16

Suitable for Fiat 1.7 and 1.9 L diesel/turbodiesel engines with a non-adjustable camshaft timing belt sprocket e.g. on Fiat Croma 1.9TD; Ducato 1.9D (94); Duna 1.7D; Fiorino 1.7D (-94); Punto 1.7D/TD (93-95); Regata 1.7D; Ritmo/Strada 1.7D; Talento 1.9D; Tempra 1.9D; Tipo 1.7D, Tipo 1.9D/TD; Uno 1.7D.

For locking and/or positioning the injection pump sprocket when replacing a timing belt. It can also be used to pull off the injection pump sprocket while removing the injection pump or during an engine repair.



KL-1380-101 K

Locking Tool Set Citroën, Peugeot, Renault

Universally suitable for the following Citroën, Peugeot, Renault petrol and diesel engines.

Also installed on Fiat, FSO, LDV, Nissan, Rover & Tata etc. vehicles.

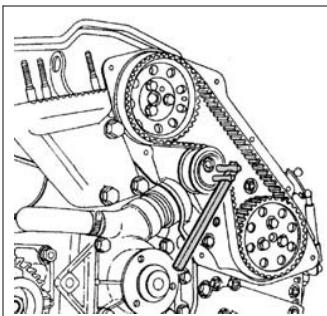
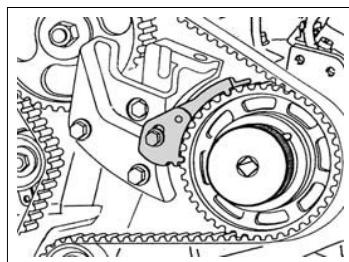
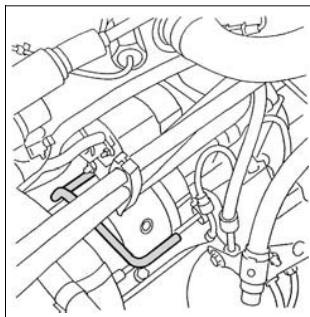
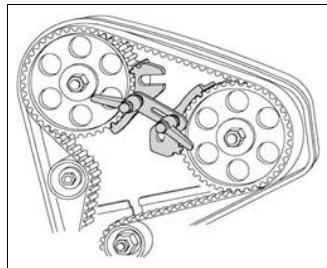
- Renault Diesel engines: 1.6D, 1.9D/TD (F8M, F8Q, F9Q); 2.1TD (J8S); 2.2D/TD (G8T); 2.5D/TD, 2.8D (S8U, S9U, S9W).
- Renault petrol engines: 1.2 (D7F); 1.4 (E5F, E6J, E7F & E7J); 1.6 (K7M); 1.7, 1.8 (F1N, F2N, F3N, F2R, F3P); 2.0 (F3R); 2.0, 2.2 (J5T, J6R, J7R, J7T); and 1.8, 2.0 16V (F7P, F7R), 2.0, 2.5 16V (N7Q, N7U).
- Citroën / Peugeot Diesel engines: 1.4D (TUD3); 1.5D (TUD5); 1.7D/TD, 1.8D/TD, 1.9D/TD (XUD7, XUD9); 2.5D/TD/TDi (DKATE, DJ5, DJ5T, DJ5TED); 2.1D/TD, 2.2D (XUD11).
- Citroën / Peugeot petrol engines: 1.0, 1.1, 1.4, 1.6 (TU9, TU1, TU3, TU5JP); 1.6, 1.8, 1.9, 2.0 (XU5, XU7, XU9, XU10J2) and 1.6 16V (TU5J4); 1.8 16V (XU7JP4); 2.0 16V (XU9J4, XU10J4).

This tool set is designed to lock and/or position engine shafts such as camshafts, injection pump shafts or crankshaft when replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1380-101 K Locking Tool Set Citroën, Peugeot, Renault

Part No.	Description	Qty.
KL-1380-1011	Timing belt tensioner tool	1
KL-1280-201	Locking tool for camshafts	1
KL-1280-221	Locking tool for camshafts	1
KL-1280-222	Locking pin for crankshaft	1
KL-1380-2210	Locking pin for injection pump Ø 9.4 mm	1
KL-1682-203	Locking pin for injection pump 1.9 TD	1
KL-1380-2212	Locking pin for balancer shaft Ø 5.9 mm	1
KL-1380-2213	Locking pin for injection pump Ø 4.9 mm	1
KL-1380-2214	Locking pin for camshaft M8	1
KL-1380-2215	Locking pin (angled) for flywheel Ø 7.7 mm	1
KL-1480-15	Locking pin (angled) Ø 7.8 mm	1
KL-1380-2216	Locking pin (angled) for flywheel Ø 7.8 mm	1
KL-1380-2225	Hex. screw M8 x 40 (3 pieces)	1
KL-1380-2217	Locking pin for camshaft/crankshaft (P1) Ø 9.9 mm	1
KL-1380-2218	Locking pins for camshaft (P2) Ø 8.3 mm / 6.4 mm	1
KL-1380-2219	Locking pins for camshaft (P3) Ø 7.9 mm	1
KL-1380-2220	Locking pin for camshaft/crankshafts (P4) Ø 7.9 mm	1
KL-1380-2221	Locking pin for camshaft (P5) Ø 5.9 mm	1
KL-1380-2222	Locking pin for camshaft/crankshaft (P6) Ø 9.9 mm	1
KL-1380-2223	Locking pin for crankshaft (P7) Ø 9.9 mm / 7.9 mm	1
KL-1380-2224	Locking pin (angled) for flywheel Ø 5.8 mm	1
KL-1280-233	Locking pin Ø 7.9 mm	1
KL-1280-202 A	Locking pin for crankshaft Ø 6.9 mm	1
KL-1280-203	Locking pin for injection pump Ø 4.9 mm	1
KL-1280-204	Locking pin for crankshaft Ø 4.9 mm / 3.9 mm	1
KL-1280-2226	Locking pin for tensioner Ø 1.5 mm	1
KL-1280-2223	Retaining pin for hydraulic tensioner pulley Ø 1.9 mm	1
KL-1280-205	Hex screw M6 x 45	1
KL-1380-2227	Mandrel for auxiliary belt, angled Ø 6.7 mm	1
KL-1380-2228	Locking pin for tensioner Ø 3 mm	1
KL-1280-206	Timing belt spanner wrench (2 Pins)	1
KL-1380-2229	Adjuster for timing belt tensioner 7 mm Square	1
KL-1380-2230	Adjuster for timing belt tensioner 8 mm Square	1
KL-1280-211	Adjusting Tool (3 Pins)	1
KL-1280-212	Special Special Screwdriver Bit Socket Size (width across flats) 27 mm	1
KL-1280-213	Adaptor for Bosch pumps M10x1 to M8x1	1
KL-1380-1012	Locking pin for injection pump Ø 3.5	1
KL-1380-1090	Plastic storage case	1



Locking Tool Set

KL-1380-29 K

Suitable for Peugeot, Citroën, Land Rover and Jaguar 2.7 V6 TwinCam diesel engines (engine code: 276DT, DT17TED4, UHZ, TDV6) e.g. on Land Rover Discovery 3, Range Rover Sport; Jaguar S Type, XJ Serie; Citroën C6; Peugeot 407/Coupe and 607.

This tool is designed to lock and/or position engine shafts such as camshafts, crankshafts and water pump shafts while replacing a timing belt or during an engine repair.

Scope of Delivery: KL-1380-29 K Locking Tool Set

Part No.	Description	Qty.
KL-1380-2901	Locking pin for camshafts (2 pieces)	1
KL-1380-2902	Locking pin for camshafts	1
KL-1380-2903	Locking pin for cooling water pump	1
KL-1380-2904	Locking tool for flywheel	1
KL-1380-2905	Locking tool for flywheel	1
KL-1380-2906	Locking tool for flywheel	1
KL-1380-237	Timing belt fixing clip	1
KL-1380-2990	Storage case with insert	1



Locking Tool Set

KL-1380-26 KA

Suitable for Citroën / Peugeot 1.4; 1.6; 2.0 and 2.2 HDI diesel engines (engine code: DV4, DV6, DW10 and DW12) e.g. Citroën (Xsara / Picasso, C2, C3; C4, C5, Xantia, Evasion / Synergie, Berlingo, Dispatch / Jumpy, Relay / Jumper.); Peugeot (206, 306, 307, 406 / Coupe, 607, 807, Expert, Partner, Boxer); Fiat (Ulysse, Scudo, Ducato 2.0 JTD) and Ford 1.6 TDCi (F6J).

This tool is designed to lock and/or position engine shafts such as camshaft, crankshaft, and injection pump shafts, as well as to adjust the timing belt tensioner while replacing a timing belt or during an engine repair.

Scope of Delivery: KL-1380-26 K Locking Tool Set

Part No.	Description	Qty.
KL-1380-234 A	Puller for crankshaft pulley	1
KL-1380-231 A	Locking tool for flywheel	1
KL-1380-2215 A	Locking pin (angled) for flywheel Ø7.7 mm	1
KL-1380-2216 A	Locking pin (angled) for flywheel Ø7.9 mm	1
KL-1380-233 A	Locking pin (angled) with spring for flywheel Ø7.7 mm	1
KL-0680-2201 A	Locking pin Ø11 mm	1
KL-0680-2202 A	Locking pin Ø4.5 mm	2
KL-0680-2203 A	Locking pin Ø7.5 mm	1
KL-1380-2220 A	Locking pin Ø7.9 mm	1
KL-1380-2228 A	Retaining Pin for tensioner Ø3 mm	1
KL-1380-2601 A	Locking Tool for crankshafts	1
KL-1380-2602 A	Locking Tool for crankshafts	1
KL-1382-1	Adjuster for timing belt tensioner for Peugeot	1
KL-1382-2	Adjuster for timing belt tensioner for Peugeot	1
KL-1380-237 A	Timing belt fixing clip	1
KL-1380-2690 A	Plastic storage case	1



6

Locking Tool Set

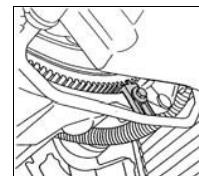
KL-1380-27 K

Suitable for Citroën / Peugeot 1.9 diesel engines (engine code: DW8) e.g. Citroën (Xsara, C15, Berlingo, Dispatch/Jumpy); Peugeot (206, 306, Expert, Partner).

This tool is designed to lock and/or position engine shafts such as camshafts, crankshafts, and injection pump shafts, as well as to adjust timing belt tensioners while replacing timing belts or during engine repairs.

Scope of Delivery: KL-1380-27 K Locking Tool Set

Part No.	Description	Qty.
KL-1380-2216	Locking pin, angled for flywheel Ø 7.8 mm	1
KL-1380-2215	Locking pin, angled for flywheel Ø 7.7 mm	1
KL-1380-232	Hex bolt M8 x 80	1
KL-1380-2211	Locking pin for injection pump (C2) Ø 5.9 mm	1
KL-1380-231	Fixing tool for flywheel	1
KL-1380-237	Timing belt fixing clip	1
KL-1380-235	Timing belt reaction wrench 8 mm square	1
KL-1380-2790	Storage case with insert	1



KL-1380-24 KB

Locking Tool Set



Suitable for Citroën and Peugeot TwinCam 16 V petrol engines with engine code "EW" (EW7J4, EW10J4, EW10J4S, EW10D-HPi, EW12J4) z.B. Citroën: Xsara / Picasso, C4, C5, Evasion / Synergie, C8, Jumpy / Dispatch; Fiat Ulysee; Peugeot: 206, 307, 406 / Coupe, 607, 806, 807, Expert.

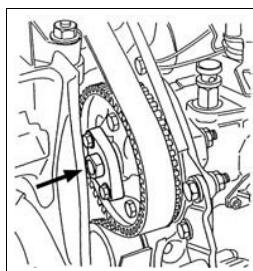
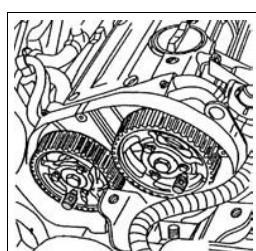
This tool is designed to lock and/or position engine shafts such as camshaft and crankshaft as well as to adjust the timing belt tensioner while replacing a timing belt or performing an engine repair.

Scope of Delivery:**KL-1380-24 KB Locking Tool Set**

Part No.	Description	Qty.
KL-1380-242 A	Locking pin set for camshaft	1
KL-1380-244 A	Locking pin for crankshaft Ø8 mm	1
KL-1380-243 A	Locking pin for camshaft Ø9.9 mm / 5.9 mm with flats	1
KL-1380-245 A	Locking pin for flywheel Ø28.5 mm / Ø8 mm	1
KL-1380-246 A	Adjusting pin for tensioner Ø 7.9 mm	1
KL-0680-2202 A	Locking pin Ø4.5 mm	2
KL-1380-237 A	Timing belt fixing clip	1
KL-1380-2471 A	Locking pin for crankshaft Ø30 / Ø15 / Ø8.95 mm	1
KL-1380-2472 A	Timing belt tensioner	1
KL-1380-2473 A	Locking tool for tensioner	1
KL-1380-2490 A	Plastic storage case with insert	1

KL-1380-22 K

Locking Tool Set



Suitable for Citroën and Peugeot diesel engines (TUD/XUD) and petrol engines (TU/XU). Installed e.g. on Citroën, Fiat, FSO, LDV, Nissan, Peugeot, Rover and TATA vehicles etc.

For locking and/or positioning engine shafts such as camshafts and crankshaft while replacing a timing belt or during an engine repair.

Scope of Delivery:**KL-1380-22 K Locking Tool Set**

Part No.	Description	Qty.
KL-1380-2210	Locking pin for injection pump (C1) Ø 9.4 mm	1
KL-1380-2211	Locking pin for injection pump (C2) Ø 5.9 mm	1
KL-1380-2212	Locking pin for balancer shaft (C3) Ø 5.9 mm	2
KL-1380-2213	Locking pin for injection pump (C4) Ø 4.9 mm	1
KL-1380-2214	Locking pin for camshaft (C5) M8	1
KL-1380-2215	Locking Pin for Flywheel (angled) Ø 7.7 mm	1
KL-1380-2216	Locking Pin for Flywheel (angled) Ø 7.8 mm	1
KL-1380-2217	Locking pin for crankshaft/camshaft (P1) Ø 9.9 mm	1
KL-1380-2218	Locking pin for camshaft (P2) Ø 8.3 mm / 6.4 mm	2
KL-1380-2219	Locking pin for camshaft (P3) Ø 7.9 mm	2
KL-1380-2220 A	Locking pin Ø7.9	1
KL-1380-2221	Locking pin for camshaft (P5) Ø 5.9 mm	2
KL-1380-2222 A	Locking pin Ø9.9	1
KL-1380-2223	Locking Tool for crankshaft (P7) Ø 9.9 mm / 7.9 mm	1
KL-1380-2224	Locking Pin for Flywheel (angled) Ø 5.8 mm	1
KL-1380-2225	Hex screw M8 x 40 (3 pieces)	1
KL-1380-2226	Locking pin for tensioner Ø 1.5 mm	1
KL-1380-2227	Mandrel for auxiliary belt, angled Ø 6.7 mm	1
KL-1380-2228	Locking pin for tensioner Ø 3.0 mm	1
KL-1380-2229	Adjuster for timing belt tensioner 7 mm	1
KL-1380-2230	Adjuster for timing belt tensioner 8 mm	1
KL-1380-2290	Plastic storage case	1

Locking Tool Set Peugeot, Citroën 1.4 16v

KL-1380-28 A

Suitable for Citroën and Peugeot 1.4 L 16V TwinCam petrol engines (engine code: KFU, KFV, KFW) e.g. on Citroën C2, C3/Pluriel, C4; Peugeot 107, 206, 207, 307 and Berlingo.

This tool is designed to lock and/or position camshafts, crankshaft and timing belt tensioner while replacing a timing belt or during an engine repair.

Scope of Delivery:**KL-1380-28 A Locking Tool Set Peugeot, Citroën 1.4 16v**

Part No.	Description	Qty.
KL-1380-2220 A	Locking pin Ø7.9 mm	1
KL-1380-2222 A	Locking pin Ø9.9 mm	1
KL-1380-2801 A	Locking pin (angled) Ø6 mm	1
KL-1380-2228 A	Locking pin for tensioner Ø3 mm	1
KL-1380-237 A	Timing belt fixing clip	1
KL-0680-2202 A	Locking pin Ø4.5 mm	1
KL-1480-11	Locking pin (angled) Ø6 mm	1



Locking Tool Set for Timing Belt Peugeot, Citroën V6 3.0i

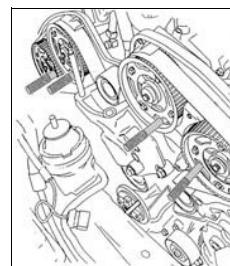
KL-1380-25 K

Suitable for Citroën (XFZ), Peugeot (ES9J4) and Renault (L7X) 3.0 V6 petrol engines e.g. on Citroën Xantia, XM; Peugeot 406, 605 and Renault Laguna, Safrane and Espace.

For locking and/or positioning engine shafts such as camshaft and crankshaft while replacing a timing belt or performing an engine repair.

Scope of Delivery: KL-1380-25 K Locking Tool Set Peugeot, Citroën V6 3.0i

Part No.	Description	Qty.
KL-1380-251	Locking pin for camshaft / crankshaft Ø 7.9 mm (5 pcs.)	1
KL-1380-252	Camshaft Timing Test Pin Ø 7.9 mm / 5.9 mm	1
KL-1380-253	Camshaft Holding Tool	1
KL-1380-254	Timing belt fixing clip	1
KL-1380-255	Hex bolt M8 x 40	1
KL-1380-256	Hex bolt M8 x 80	1
KL-1380-2590	Plastic case	1



Locking Tool Set Citroën

KL-1380-100

Used to lock the engine shafts, for example, while replacing a timing belt or during an engine repair.

Scope of Delivery: KL-1380-100 Locking Tool Set Citroën

Part No.	Description	Qty.
KL-1480-13	Locking pin M8 / Ø6.7 mm	1
KL-1480-15	Locking pin (angled) Ø7.8 mm	1



6

Locking Tool Set Peugeot

KL-1480-100 K

Suitable for Citroën and Peugeot engines e.g. 1.4 D, 1.5 D, 1.9 TD for example on Citroën AX, Jumper, Jumpy, Evasion; Peugeot 106 etc.

This tool set is designed to lock and/or position flywheel as well as engine shafts such as camshaft and crankshaft. It can also be used to adjust the timing belt tensioner. Indispensable tool when replacing a timing belt or performing an engine repair.

Scope of Delivery KL-1480-100 Locking Tool Set Peugeot

Part No.	Description	Qty.
KL-1480-10	Locking pin (angled) Ø6.8 mm	1
KL-1480-11	Locking pin (angled) Ø6 mm	1
KL-1480-12	Locking pin Ø6 mm (short)	2
KL-1480-13	Locking pin M8 / Ø6.7 mm	1
KL-1480-14	Locking pin Ø10 / Ø8 mm	1
KL-1480-15	Locking pin (angled) Ø7.8 mm	1
KL-1480-16	Locking pin Ø6 mm (long)	2
KL-1480-17	Hex screw M8 x 30	2
KL-1480-18	Hex screw M8 x 40	1
KL-1380-10	Locking pin A, Ø8 mm	1
KL-1380-11	Locking pin B, Ø9.5 mm	1
KL-1380-12	Locking pin C, Ø6 mm	1
KL-1382-1	Adjuster for timing belt tensioner for Peugeot	1
KL-0580-11	Locking pin Ø9.9 mm	1
KL-0180-1020	Plastic storage case	1



**KL-1382-...****Adjuster for Timing Belt Tensioner**

For tensioning timing belt.

**KL-1382-1****Adjuster for Timing Belt Tensioner**

Suitable for Peugeot and Toyota engines.

Technical Data:

Square:	7 mm
Length:	157 mm

KL-1382-2**Adjuster for Timing Belt Tensioner**

Suitable for Peugeot 206 diesel DW8 etc.

Technical Data:

Square:	8 mm
Length:	157 mm

KL-0182-17**Flywheel Locking Pin**

Suitable for Citroën, Peugeot (TUD5) diesel engines e.g. on Citroën AX, Saxo, Xsara; Peugeot 106; Nissan Micra and Rover 115.

Used for locking the flywheel.

**KL-1380-231 A****Flywheel Locking Tool**

Suitable for Citroën, Peugeot diesel and petrol engines.

Used for locking the flywheel.

**6****KL-0182-19 A****Flywheel Locking Tool**

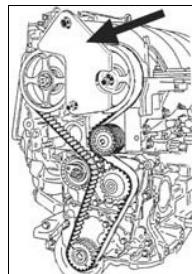
Suitable for Renault 2.2 L diesel engines (G8T) e.g. on Renault Laguna, Safrane and Espace.

For locking the flywheel when the gearbox has been removed from the vehicle.

**KL-1280-28 K****Locking Tool Set Renault**

Suitable for Renault 1.4 / 1.6 16V [K4J / K4M] and 1.8 / 2.0 16V [K4P / F4R(t)] TwinCam petrol engines.

This tool set is designed to prevent camshaft sprockets from turning while loosening or tightening the camshaft central screws, as well as to lock camshafts and crankshaft. It can also be used for the removal and replacement of the deflection pulley. Indispensable tool set when replacing a timing belt or performing an engine repair.

Scope of Delivery:**KL-1280-28 K Locking Tool Set Renault**

Part No.	Description	Quantity
KL-1280-231 B	Setting gauge for camshafts	1
KL-1280-234 B	Locking pin M10, Ø7.9 mm	1
KL-1280-235	Special key for deflection pulley	1
KL-1280-236	Locking plate for camshaft sprockets	1
KL-1280-233 B	Locking pin Ø7.9 mm, Ø11.9 mm	1
KL-1280-281	Locking plate for camshaft sprockets	1
KL-1280-2890	Storage case	1

Locking Tool Set

KL-1280-101 K

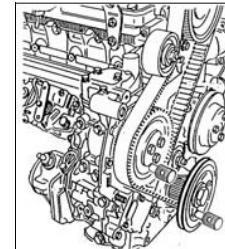
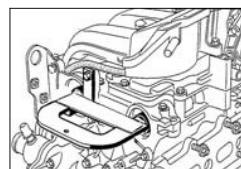
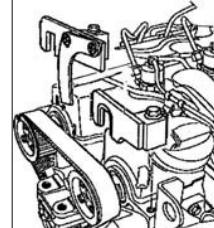
Suitable for the most common Renault vehicles:

- fitted with the petrol engines: 1.2, 1.4, 1.6, 1.8, 2.0 16 V and 2.5 20 V etc.
- e.g. Twingo, Clio, Megane, Scenic, Express, Rapid, Laguna, Spider, Espace, R19, Safrane, Kangoo, Trafic, Master etc.
- fitted with the diesel engines: 1.9, 2.2, 2.5, 2.8 D/TD/dTi; 1.5, 1.9, 2.2, 2.5 dCi - e.g. Clio, Megane, Scenic, Express, Rapid, Laguna, Espace, R19, Safrane, Kangoo, Trafic, Master etc.

This tool is designed to lock and/or position engine shafts such as camshaft, injection pump shaft, and crankshaft as well as to adjust the timing belt tensioner while replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1280-101 K Locking Tool Set



Part No.	Description	Qty.
KL-1280-221	Locking tool - For locking camshafts.	1
KL-1280-231 B	Setting gauge - For locking camshafts.	1
KL-1280-242	Locking tool - For locking camshafts.	1
KL-1280-222	Locking pin - For locking the crankshaft.	1
KL-1280-233	Locking pin Ø7.9 mm - For locking the crankshaft.	1
KL-1280-202 A	Locking pin for Ø6.9 mm - For locking the crankshaft	1
KL-1280-204	Locking pin Ø4.9 / 3.9 mm - For locking the crankshaft.	1
KL-1280-234	Locking pin - For locking the crankshaft	1
KL-1280-243	Locking pin - For locking the crankshafts	1
KL-1280-203	Locking pin Ø4.9 mm - For locking the injection pump	1
KL-1280-205	Hex screw M6 x 45 - For adjusting tensioner pulleys.	1
KL-1280-206	Tensioner wrench with 2 pins - For adjusting the tensioners.	1
KL-1280-1011	Adjuster for timing belt tensioner - For adjusting tensioners.	1
KL-1280-240	Adjuster for timing belt tensioner - For adjusting tensioners.	1
KL-1280-1090	Plastic storage case	1

Locking Tool Set for Timing Belt Renault 1.4, 1.6, 1.8, 2.0 16 V and 1.5 dCi

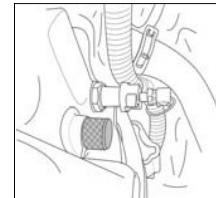
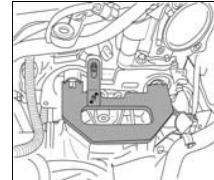
KL-1280-23 KB

Suitable for Renault TwinCam petrol engines 1.4 / 1.6 16V (K4J/K4M [98-]), 1.8 / 2.0 16V (F4P/F4R [98-]) and diesel engines 1.5 dCi (K9K) e.g. on Renault Clio, Clio Sport, Modus, Megane / Scenic, Kangoo, Espace, Laguna and Nissan Micra, Almera, and Kubistar.

For locking and/or positioning engine shafts such as camshafts and crankshaft while replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1280-23 K Locking Tool Set for Timing Belt



6

Part No.	Description	Qty.
KL-1280-231 B	Setting gauge for camshafts	1
KL-1280-233 B	Locking pin Ø7.9 mm; Ø11.9 mm	1
KL-1280-234 B	Locking pin M10, Ø7.9 mm	1
KL-1280-2390 B	Plastic storage case	1

Torx®-Special Spanner T50

KL-0366-12

Suitable for Renault 1.4 / 1.6 L TwinCam petrol engines (engine code: K4J, K4M) such as Clio III, Megane / Scenic II, Laguna II, Modus and Kangoo.

This tool is required for the removal and installation of the deflection pulley, e.g. while replacing a timing belt or during an engine repair.



Scope of Delivery:

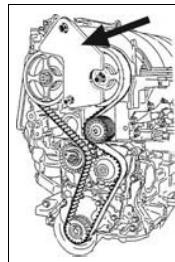
KL-0366-12 Torx®-Special Spanner T50

Part No.	Description	Qty.
KL-0366-121	Torx® insert T50	1
KL-0366-100	Special spanner 8 mm drive	1

® = reg. trademark of Acument Intellectual Properties, LLC. USA

KL-1280-236

Locking Plate for Camshaft Sprockets



Suitable for Renault 1.4 / 1.6 L TwinCam petrol engines (engine code: K4J, K4M) e.g. Clio III, Megane / Scenic II, Laguna II, Modus and Kangoo.

This tool is used to lock camshaft sprockets while loosening and tightening the camshaft central screw e.g. when replacing a timing belt or during an engine repair.

KL-1280-237

Set of Mounting Tools



Suitable for Renault 1.4; 1.6 and 2.0 L 16V TwinCam petrol engines (Engine code: K4J, F4P, F4R; F4RT, F5R) e.g. on Clio, Laguna, Megane, Scenic, Kangoo and Espace.

These tools enable quick and easy installation of camshaft plugs. Required when replacing a timing belt or performing an engine repair.

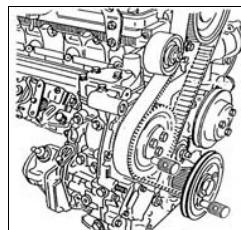
Scope of Delivery:

KL-1280-237 Set of Mounting Tools

Part No.	Description	Quantity
KL-1280-2371	Mounting Tool Ø43 mm	1
KL-1280-2372	Mounting Tool Ø57.5 mm	1

KL-1280-20 K

Locking Tool Set Renault



Suitable for Renault, Opel/Vauxhall and Volvo vehicles:

- fitted the petrol engines 1.2 (D7F) e.g. on Clio, Twingo; 1.2, 1.4, 1.6 (E5 - E7F/E7J/K7M) e.g. on Clio, Megane, Scenic, Kangoo; 1.7, 1.8, 2.0 (F1N - F3N/F3P/F2R - F3R) e.g. on Clio, Megane, Scenic; 1.8, 2.0 16V (F7P/F7R) e.g. on Clio Williams, Megane, Spider, R19; 2.0, 2.2 (J5R - J7R, J5T) e.g. on Safrane, Espace, Master, Trafic; and Volvo petrol engines (B16/B18/B20) e.g. 440, 460, 480.
- fitted the diesel engines 1.9 / 2.5 / 2.8 (F8M/F8Q/G8T/J8S/ F9Q/S8U/S9U/ S9W) e.g. Renault Clio, Laguna, Megane, Espace, Master, Trafic; Opel Arena, Movano; Volvo S40, V40 etc.

Tool set for locking and/or positioning camshafts, crankshaft and injection pump shaft. It can also be used to tension the timing belt. Indispensable when replacing a timing belt or performing an engine repair.

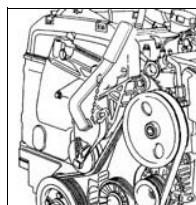
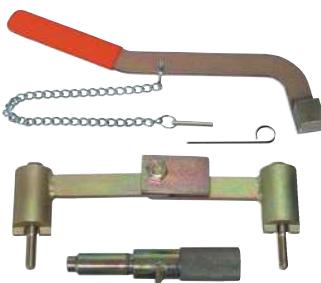
Scope of Delivery:

KL-1280-20 K Locking Tool Set Renault

Part No.	Description	Qty.
KL-1280-201	Locking tool for camshafts	1
KL-1280-233	Locking pin for crankshaft Ø 7.9 mm	1
KL-1280-202 A	Locking pin for crankshaft Ø 6.9 mm	1
KL-1280-203	Locking pin for injection pump Ø 4.9 mm	1
KL-1280-204	Locking pin for crankshaft Ø 4.9 / Ø 3.9 mm	1
KL-1280-206	Adjuster for timing belt tensioner (with 2 pins)	1
KL-1280-205	Hex screw M6 x 45	1
KL-1280-2090	Plastic storage case	1

KL-1280-22

Locking Tool Set for Timing Belt Renault 2.0l, 2.5l



Suitable for Renault TwinCam petrol engines 2.0 16V (N7Q) and 2.5 20V (N7U) e.g. on Renault Laguna and Safrane.

For locking and/or positioning engine shafts such as camshafts and crankshaft while replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1280-22 Locking Tool Set for Timing Belt Renault 2.0l, 2.5l

Part No.	Description	Qty.
KL-1280-221	Locking tool for camshafts	1
KL-1280-222	Locking pin for crankshaft	1
KL-1280-223	Retaining pin for hydraulic tensioner pulley Ø 1,9	1
KL-1280-224	Tensioner wrench with retaining pin for auxiliary belt	1

Locking Tool Set

KL-1280-25 K

Suitable for the Renault 2.0 IDE TwinCam petrol engines (engine code: F5R 700, 701, 740) e.g. on Renault Megane, Laguna etc.

This tool is designed to lock and/or position engine shafts such as camshafts and crankshafts while replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1280-25 K Locking Tool Set

Part No.	Description	Qty.
KL-1280-2501	Setting gauge for camshafts	1
KL-1280-233 B	Locking pin Ø7.9 mm; Ø11.9 mm	1
KL-1280-2590	Storage case	1



Set of Locking Pins

KL-0680-220 B

Suitable for Citroën 1.4 / 1.4 Hdi / 1.6 Hdi / 2.0; Fiat 1.6 JTD; Ford 1.4 TDCi / 1.6 TDCi; Mazda 1.4 TDCi / 1.6 D / 1.6 MZ-CD; Peugeot 1.4 Hdi / 1.6 Hdi; Suzuki 1.4 DDIS; Toyota 1.0 VVT / 1.4 Di / 1.4 HDI; Volvo 1.6 D etc.

Engine Code: 8HV; 8HW; 8HX; 8HY; 9HX; 9HY; 9HZ; D4164T; DV4TD; DV4TED; DV4TED4; DV6; DV6TED4; F6J4; F6JA; F6JB; F6JC; G8DA; G8DB; HHDA; HHJA; HHJB; Y6.

Used for locking and/or positioning engine shafts such as camshafts, injection pump shafts and crankshaft while replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-0680-220 B Set of Locking Pins

Part No.	Description	Qty.
KL-0680-2201 A	Locking pin Ø 11 mm	1
KL-0680-2202 A	Locking pin Ø 4.5 mm	2
KL-0680-2203 A	Locking pin Ø 7.5 mm	1



Locking Tool Set Renault 2.0 dCi

KL-1280-27 K

Suitable for Renault, Nissan, Vauxhall / Opel 2.0 L dci Diesel engines

(Engine code: M9R) e.g. Renault: Espace IV, Laguna II, Master II, Scenic III, Traffic II, Vel Satis; Nissan: Primastar and Vauxhall / Opel: Vivaro.

Tool set for locking and positioning camshaft, crankshaft and timing belt tensioner. Indispensable when replacing a timing belt or performing an engine repair.

Scope of Delivery:

KL-1280-27 K Locking Tool Set Renault 2.0 dCi

Part No.	Description	Qty.
KL-1280-271	Locking tool for camshaft	1
KL-1280-272	Locking pin M10, Ø7.5 mm	1
KL-0180-3026	Retaining pin Ø2.6 mm	1
KL-0182-19 A	Flywheel Locking Tool	1
KL-0482-462 A	Locking pin Ø4 mm	1
KL-1280-2790	Plastic storage case	1



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Reaction Wrench

KL-1280-273

Suitable for Renault, Nissan, Vauxhall / Opel 2.0 L dci Diesel engines

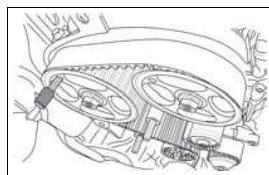
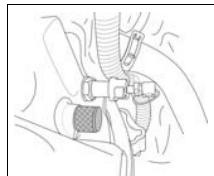
(Engine code M9R).

This tool is used to lock the crankshaft belt pulley while loosening and tightening the crankshaft central screw. Required when replacing a timing belt or performing an engine repair.



KL-1280-24 KB

Locking Tool Set Renault



Suitable for Renault, Opel/Vauxhall and Nissan 1.5, 1.9, 2.2, and 2.5 dCi Common Rail diesel engines (K9K, F9Q, G9T, G9U) e.g. on Renault Clio, Modus, Twingo, Megane/Scenic, Laguna, Espace, Avantime, Kangoo, Trafic and Master; Opel/Vauxhall Vivaro and Movano; Nissan Micra, Almera, Note, Qashqai, Primera, Kubistar, Primaster and Interstar.

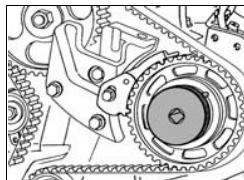
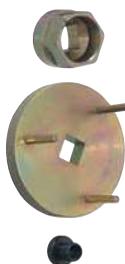
This tool is designed to lock and/or position engine shafts such as camshafts and crankshafts, as well as to adjust the timing belt tensioner while replacing a timing belt or during an engine repair.

Scope of Delivery:**KL-1280-24 KB Locking Tool Set Renault**

Part No.	Description	Qty.
KL-1280-234 B	Locking pin M10, Ø7.9 mm	1
KL-1280-233 B	Locking pin Ø7.9 mm; Ø11.9 mm	1
KL-1280-240 B	Timing belt tensioning tool	1
KL-1280-241 A	Hexagon socket screw M6 x 60	1
KL-1280-242 A	Locking tool for camshafts	1
KL-1280-243 B	Locking pin Ø7 mm	1
KL-1280-2490 B	Plastic storage case	1

KL-1280-21

Injection Pump Adjusting Tool Renault 1.9 D



Suitable for the Renault, Mitsubishi, Opel/Vauxhall and Volvo 1.9 L direct-injection diesel engines (F8Q and F9Q) with adjustable injection pump sprocket; e.g. on Renault Megane/Scenic, Kangoo; Mitsubishi Carisma; Opel Arena and Volvo S40/V40.

This injection pump adjusting tool together with tool set **KL-0129-1 A** and the specified locking tools allow adjustment of the injection pump timing relative to the crankshaft (start-of-delivery setting).

Scope of Delivery:**KL-1280-21 Injection Pump Adjusting Tool Renault 1.9 D**

Part No.	Description	Qty.
KL-1280-211	Adjusting Tool (3 Pins)	1
KL-1280-212	Special Screwdriver Bit Socket Size (waf) 27 mm	1
KL-1280-213	Adaptor for Bosch pumps M10x1 to M8x1	1

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KL-1780-16 K

Locking Tool Set Honda



Suitable for the Honda / Rover 1.6 Vti / VTEC, 1.8, 2.0, 2.2, 2.2 VTEC & 2.3i petrol engines and 2.0 TD, 2.0 Tdi diesel engines. e.g. on Honda Civic, Integra R, Accord, Prelude & Shuttle (87-04); Rover 216/416GTi & 600 Series and Landrover Freelander.

For locking and/or positioning engine shafts such as camshaft and crankshaft, as well as for locking and adjusting the timing belt tensioner. This tool is required when replacing a timing belt or for engine repairs.

Scope of Delivery:**KL-1780-16 K Locking Tool Set Honda**

Part No.	Description	Qty.
KL-1780-102 A	Locking pin for injection pump Ø9.4 mm	1
KL-1780-103 A	Locking pin Ø6.7 mm	1
KL-1380-2213 A	Locking pin Ø4.9 mm	2
KL-1780-107 A	Locking pin Ø8 mm	1
KL-1780-108 A	Tensioner spindle for timing belt	1
KL-1780-140 A	Fixing clip for tensioning element	1
KL-1780-1690	Plastic storage case	1

Locking Tool Set Rover / Honda 1.6, 1.8, 2.0, 2.2, 2.3

KL-1780-14 KA

Suitable for the Honda / Rover 1.6 VTi/VTEC, 1.8, 2.0, 2.2 VTEC & 2.3i petrol engines (B, D, F & H series) e.g. Honda Civic, Integra R, Accord, Prelude & Shuttle (87-04); Rover 216/416GTi & 600 series and Landrover Freelander.

Tool for locking and/or positioning engine shafts such as camshaft/balancer shaft as well as the timing belt tensioner when replacing a timing belt or performing an engine repair.

Scope of Delivery: KL-1780-14 KA Locking Tool Set

Part No.	Description	Qty.
KL-1780-140 A	Fixing clip for tensioning element	1
KL-1280-205	Hex screw M6 x 45	1
KL-1780-107 A	Locking pin Ø8 mm	1
KL-1380-2213 A	Locking pin Ø4.9 mm	2
KL-1780-1690	Plastic storage case	1



Locking Tool Set for Timing Belt Rover

KL-1780-10 K

Suitable for the Rover diesel and petrol engines (inclusive of Di and 16V). Installed e.g. in Citroën, Honda, Fiat, LDV, Land Rover, Peugeot, TATA vehicles.

For locking and/or positioning engine shafts such as camshafts and crankshaft while replacing a timing belt or during an engine repair.

Scope of Delivery: KL-1780-10 K Locking Tool Set for Timing Belt Rover

Part No.	Description	Qty.
KL-1780-101	Locking pins Ø6,6 (2 pieces)	1
KL-1780-102	Locking pin for injection pump Ø9,4 mm	1
KL-1380-2211	Locking pin for injection pump (C2) Ø5,9 mm	1
KL-1380-2215	Locking pin (angled) for flywheel Ø7,7 mm	1
KL-1380-2224	Locking pin (angled) for flywheel (P8) Ø5,8 mm	1
KL-1380-2225	Hex screw M8 x 40 (3 pieces)	1
KL-1780-103	Locking pin Ø6,8 mm	2
KL-1780-104	Locking pins Ø5,0 (2 pieces)	1
KL-1780-105	Locking tool for camshafts (orange)	1
KL-1780-106	Locking tool for camshafts (black)	1
KL-1780-107	Locking pin for balancer shaft Ø7,3 mm / 6,1 mm	1
KL-1280-205	Hex screw M6 x 45	1
KL-1380-2230	Timing belt tensioner spanner 8 mm square	1
KL-1780-108	Tensioner spindle for timing belt	1
KL-1780-1090	Case with insert	1



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Locking Tool Rover 2.0 I

KL-1780-11 A

Suitable for Rover 2.0 diesel engines (20T2N / 20T2R "L Series") e.g. on Rover 220D / 420D / 620D, Land Rover Freelander and Honda Civic / Accord 2.0TD.

For locking and/or positioning engine shafts such as camshafts and crankshaft. This tool is required when replacing a timing belt or during an engine repair.

Scope of Delivery: KL-1780-11 A Locking Tool Rover 2.0 I

Part No.	Description	Qty.
KL-1780-102 A	Locking pin for injection pump Ø9,4 mm	1
KL-1780-103 A	Locking pin Ø6,7 mm	1
KL-1780-108 A	Tensioner spindle for timing belt	1



Locking Tool Set Rover 45 V6, 75 V6

KL-1780-12 KA

Suitable for Rover 2.0 and 2.5 V6 TwinCam engines (KV6) e.g. on Rover 45, 75 and Land Rover Freelander.

For locking and/or positioning camshafts or the timing belt tensioner when replacing a timing belt or during an engine repair.

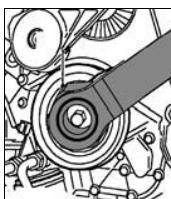
Scope of Delivery: KL-1780-12 KA Locking Tool Set Rover 45 V6, 75 V6

Part No.	Description	Qty.
KL-1780-12 K	Locking Tool Set for Timing Belt Rover 45 V6, 75 V6	1
KL-1780-127	Locking pin Ø7,5 mm	1



KL-1780-13

Reaction Wrench for Crankshaft



Suitable for the Rover 2.0 and 2.5 V6 TwinCam engines (KV6) e.g. on Rover 45, 75 and Land Rover Freelander.

Used to lock the crankshaft pulley while loosening or tightening the crankshaft central screw (for example when replacing a timing belt).

KL-1780-15 A

Reaction Wrench Set



Suitable for the Honda 1.2 / 1.4 / 1.7 / 1.8 / 2.0 / 2.2 / 2.3 / 3.5 L and 2.2 L CDTi engines e.g. Honda Jazz, Civic Accord, Legend, S2000, FR V, Stream, Shuttle / Odyssey and CR-V.

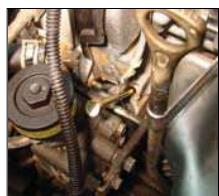
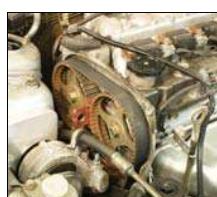
This tool set is designed to lock the crankshaft pulley while loosening or tightening the crankshaft central screw e.g. during engine repairs.

Scope of Delivery:**KL-1780-15 A Reaction Wrench Set**

Part No.	Description	Qty.
KL-1780-1501 A	Lever	1
KL-1780-1502 A	Reaction wrench hex 50 mm, angled	1
KL-1780-1503 A	Reaction wrench hex 50 mm	1

KL-2480-10 K

Locking Tool Set Mitsubishi / Hyundai



Suitable for the Mitsubishi / Hyundai 4-cylinder 2.0 16V and V6 2.5 and 3.0 24V TwinCam petrol engines.

Indispensable tool when locking camshafts as well as when tensioning and adjusting a timing belt tensioner.

Scope of Delivery:**KL-2480-10 K Locking Tool Set Mitsubishi / Hyundai**

Part No.	Description	Qty.
KL-2480-101	Locking Tool Set Mitsubishi 2.0 GTI	1
KL-2480-102	Locking Tool Set Mitsubishi 2.5 24 V and 3.0 24 V	1
KL-2480-103	Locking tool for camshafts Mitsubishi	1
KL-2480-110	Locking pin for tensioner pulley	1
KL-2480-120	Adjuster for timing belt tensioner	1
KL-2480-1090	Plastic storage case	1

KL-2480-11

Locking Tool Set (Small Set) Mitsubishi / Hyundai



Suitable for the Mitsubishi / Hyundai 4-cylinder 2.0 16V and V6 2.5 and 3.0 24V TwinCam petrol engines.

Designed to tension and adjust timing belt tensioners.

Scope of Delivery:**KL-2480-11 Locking Tool Set (Small Set) Mitsubishi / Hyundai**

Part No.	Description	Qty.
KL-2480-110	Locking pin for tensioner pulley	1
KL-2480-120	Adjuster for timing belt tensioner	1

Locking Tool Set for Camshafts Mitsubishi

KL-2480-100 K

Suitable for Mitsubishi / Hyundai Vierzylinder 2.0 16V and V6 2.5 and 3.0 24V TwinCam petrol engines.

Designed to lock camshafts.

Scope of Delivery:

KL-2480-100 K Locking Tool Set for Camshafts Mitsubishi

Part No.	Description	Qty.
KL-2480-101	Locking Tool Set Mitsubishi 2.0 GTI	1
KL-2480-102	Locking Tool Set Mitsubishi 2.5 24 V and 3.0 24 V	1
KL-2480-103	Locking tool for camshafts Mitsubishi	1
KL-2480-1090	Plastic storage case	1



Locking Tool Set Mazda

KL-2580-10 K

Suitable for the Mazda 1.25, 1.4, 1.6, 1.8, 2.0 16V TwinCam petrol engines and 2.0 D / TD diesel engines.

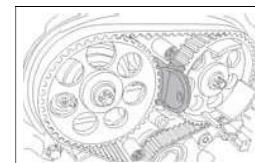
This tool is designed to lock and/or position camshafts, crankshaft, injection pump shaft, as well as the timing belt tensioner.

Essential tool set when replacing a timing belt or performing an engine repair.

Scope of Delivery:

KL-2580-10 K Locking Tool Set Mazda

Part No.	Description	Qty.
KL-0680-10	Locking pin for crankshaft	1
KL-0680-14 A	Locking pin Ø6	2
KL-0680-15 A	Setting gauge for camshafts	1
KL-0680-17	Locking pin for crankshaft	1
KL-0680-2201 A	Locking pin Ø11	1
KL-0680-2202 A	Locking pin Ø4.5	2
KL-0680-2203 A	Locking pin Ø7.5	1
KL-0680-2401 A	Locking pin Ø7.9	1
KL-1380-2226 A	Locking pin for tensioner pulley Ø1.5 mm	1
KL-2580-101	Locking tool for camshafts Mazda 1.8 and 2.0	1
KL-1480-17	Hex screw M8 x 30	3
KL-2580-1090	Plastic storage case	1



6

Reaction Wrench

KL-2282-10

Suitable for Subaru e.g. Impreza (1.6; 1.8; 2.0), Impreza GT etc.

This tool is designed to lock the camshaft pulley while loosening or tightening the camshaft central screw. It is required when replacing a timing belt or for engine repairs.



Locking Tool Set Toyota 1.9 D

KL-1980-100

Suitable for Toyota 1.9 D etc.

For locking engine shafts, for example, while replacing a timing belt or during an engine repair.

Scope of Delivery:

KL-1980-100 Locking Tool Set Toyota 1.9 D

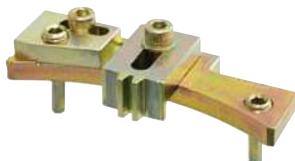
Part No.	Description	Qty.
KL-1980-11	Locking pin Ø5.5 mm	1
KL-1980-12	Locking pin angled Ø7.6 mm	1
KL-1980-13	Hex screw M8 x 50	1
KL-1382-1	Adjuster for timing belt tensioner for Peugeot	1



KL-0182-10 A

Flywheel Locking Tool (adjustable)

(German Utility Model)



This tool is required for locking the flywheel when the gearbox has been removed. The tool can be adjusted axially and radially and can, therefore, be used almost universally by screwing in different stud bolts.

Technical Data:

Bolt-Ø:	8.5 mm
Bolt distance:	92 - 107 mm

KL-0110 A

Holding Wrench

(Universal)



Universal application.

For locking the flywheel.

Technical Data:

Length:	250 mm
Weight:	0.5 kg

KL-0183-50

Timing Belt Sprocket Extractor and Reaction Tool (Univ.)

(Pat.)



Universal application - Two tools in one

Tool for loosening the central fixing screw and removing the sprocket
Suitable for all perforated timing belt sprockets with a pitch circle diameter of from 70 mm - 100 mm. Suitable for hole diameters as from 20 mm minimum.

Used to hold the pulley in position while loosening or tightening the central fixing screw. It also prevents the pulley from rotating while removing the sprocket. Any standard $\frac{1}{2}$ " ratchet or $\frac{1}{2}$ " sliding T-Bar can be used as a holding tool.

Scope of Delivery:

KL-0183-50 Timing Belt Sprocket Extractor and Reaction Tool

Part No.	Description	Qty.
KL-0183-510	Perforated puller disc	1
KL-0183-531	Hook Ø 20 mm	3
KL-0183-532	Hook Ø 26	3
KL-0008-0009	Shoulder Nut M10	3
KL-0183-540	Pressure unit	1

Scope of Delivery:

KL-0183-51 A Pulley-Extractor and reaction tool with 2 hooks

Part No.	Description	Qty.
KL-0183-510	Perforated puller disc	1
KL-0183-533	Hook Ø 16.5	2
KL-0008-0009	Shoulder nut M10	2
KL-0183-540 A	Pressure unit	1

Accessories:

KL-0183-531 Hook Ø 20 mm

KL-0183-532 Hook Ø 26 mm

KL-0183-550

Upgrade Kit



Required, for example, to hold the injection pump sprocket in position on VW T4, Transporter and LT with 2.3, 2.4 and 2.5 L 5-cylinder diesel engines.

Designed to complement our timing belt sprocket extractors KL-0183-50 and KL-0183-51.

Scope of Delivery:

KL-0183-550 Upgrade Kit

Part No.	Description	Qty.
KL-0183-533	Hook Ø 16.5 mm	2
KL-0183-5404	Press piece	1

Supporting Device with Adaptors 1 and 2

KL-0146-10

Suitable for VW-Audi, Ford, Seat, Skoda, (e.g.: Audi A3 (8L1, 8P1); VW Golf IV, New Beetle, Sharan; Ford Galaxy; Seat Alhambra, Leon (1M1), Toledo II (1M2); Skoda Oktavia (1U2,1U5).

This tool is designed to support the engine when removing the side engine mount. It is required, for example, when replacing timing belts, water pumps or engine mounts.

Due to the support given to the engine by the supporting device **KL-0146-10** it is possible to work on the valve train (synchronous belt drive), without using an engine crane or a transmission jack.

The supporting device consists of the base tool **KL-0146-100** and of an adaptor different for each kind of vehicle.

By changing the adaptor, the field of application of this supporting device is almost universal.

Scope of Delivery: **KL-0146-10 Supporting Device with Adaptor 1 and 2**

Part No.	Description	Quantity
KL-0146-100	Supporting device, Base tool	1
KL-0146-101	Adaptor 1 (VW Sharan / Ford Galaxy / Seat Alhambra)	1
KL-0146-102	Adaptor 2 (VW Golf IV, New Beetle / Audi A3 / Skoda Oktavia / Seat Leon, Toledo)	1



Supporting Device for VW-Audi

KL-0146-11 A

Suitable for VW-Audi, Ford, Seat, Skoda, (e.g.: Audi A3 (8L1, 8P1); VW Golf IV, V, Lupo, New Beetle, Polo (9N), Sharan; Ford Galaxy; Seat Alhambra, Altea, Ibiza (6L1), Leon (1M1), Toledo II (1M2); Skoda Fabia, Oktavia (1U2,1U5, 1Z3).

This tool is designed to support the engine when removing the side engine mount. It is required, for example, when replacing timing belts, water pumps or engine mounts.

Due to the support given to the engine by the supporting device **KL-0146-11 A** it is possible to work on the valve train (synchronous belt drive), without using an engine crane or a transmission jack.

The supporting device consists of the base tool **KL-0146-100** and of an adaptor different for each kind of vehicle.

By changing the adaptor, the field of application of this supporting device is almost universal.

Scope of Delivery: **KL-0146-11 A Supporting Device VW-Audi**

Part No.	Description	Quantity
KL-0146-100	Supporting device, Base tool	1
KL-0146-101	Adaptor 1 (VW Sharan / Ford Galaxy / Seat Alhambra)	1
KL-0146-102	Adaptor 2 (VW Golf IV, New Beetle / Audi A3 / Skoda Oktavia / Seat Leon, Toledo)	1
KL-0146-108	Adaptor 8 (VW Golf V / Audi A3 / Seat Altea, Toledo / Skoda Oktavia)	1
KL-0146-118	Adaptor 18 VW Polo	1
KL-0146-129	Adaptor 29 VW T5	1
KL-0146-144	Adaptor 44 VW Passat 2.0 TDI	1



6

Supporting device, Base tool

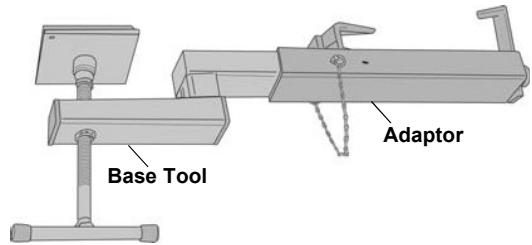
KL-0146-100

This tool is designed to support the engine when removing the side engine mount. It is required, for example, when replacing timing belts, water pumps or engine mounts. Due to the support given to the engine by the supporting device **KL-0146-... Series** it is possible to work on the valve train (synchronous belt drive), without using an engine crane or a transmission jack.

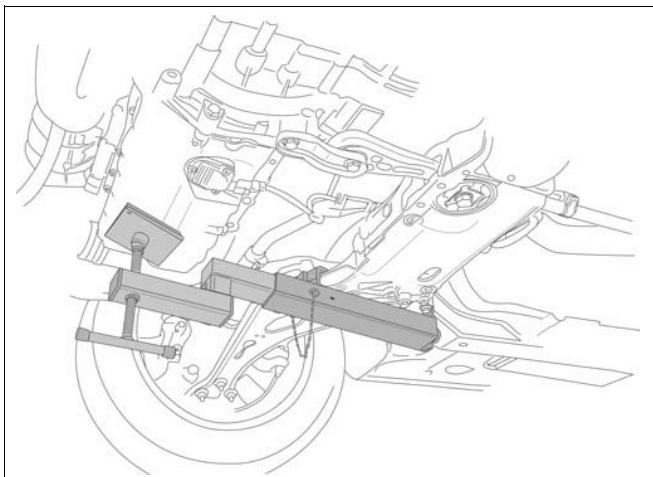
The supporting device consists of the base tool **KL-0146-100** and of an adaptor different for each kind of vehicle.

By changing the adaptor, the field of application of this supporting device is almost universal.



**KL-0146-1005****Protective Rubber Plate****KL-0146...****Adaptors****Supporting device**

These adaptors are used with the base tool to support the engine when removing the side engine mount. They are required, for example, when replacing timing belts, water pumps or engine mounts. Due to the support given to the engine by the supporting device it is possible to work on the valve train (synchronous belt drive), without using an engine crane or a transmission jack. By changing the adaptors, the field of application of the supporting device is almost universal.

**6****KL-0146-101****Adaptor 1 VW Sharan**

Suitable for VW Sharan (7M) model 05/95 onwards; Ford Galaxy (WGR) model 03/95-05/06; Seat Alhambra (7V8.9) model 04/96 onwards; VW Sharan (1.9 Tdi) model 00 onwards.

KL-0146-103**Adaptor 3 Ford Focus**

Suitable for Ford Focus I model 10/98-11/04.

KL-0146-105**Adaptor 5 Citroën Berlingo**

Suitable for Citroën Berlingo model 07/96-04/08; Peugeot Partner model 06/96 onwards.

KL-0146-107**Adaptor 7 Ford Fusion, Fiesta**

Suitable for Ford Fusion model 08/02 onwards, Ford Fiesta V model 11/01-10/08.

KL-0146-111**Adaptor 11 Citroën C4**

Suitable for Citroën C4 model 11/04 onwards.

KL-0146-113**Adaptor 13 Peugeot 407**

Suitable for Peugeot 407 model 05/04 onwards.

KL-0146-115**Adaptor 15 Citroën XsaraPicasso**

Suitable for Citroën XsaraPicasso (N68) model 12/99 onwards.

KL-0146-102**Adaptor 2 VW Golf IV**

Suitable for VW Golf IV (1J1) model 08/97-06/05; Audi A3 (8L1) model 06/96-09/04; Skoda Octavia (1U2, 1U5) model 09/96-06/04; Seat Leon (1M1) model 11/99-09/05; Seat Toledo II (1M2) model 04/99-05/06.

KL-0146-104**Adaptor 4 Peugeot 2,6, 307**

Suitable for Peugeot 206 model 09/98 onwards; Peugeot 307 model 08/00 onwards; Peugeot 307 SW 135 Premium model 03/03 onwards.

KL-0146-106**Adaptor 6 Ford Focus, C-Max**

Suitable for Ford Focus II model 11/04 onwards; Ford C-Max model 10/03 onwards; Volvo S 50 model 04 onwards; Volvo V 50 model 04 onwards; Volvo S 40 model 04 onwards; Mazda 3 model 05/09 onwards.

Adaptor 8**Adaptor 8 VW Golf V**

Suitable for VW Golf V (1K1) model 10/03-10/08; VW Touran model 02/03 onwards; VW Caddy III (2K) model 03/04 onwards; Audi A3 Sportback (8PA) model 09/04 onwards; Audi A3 (8P1) model 05/03 onwards; Seat Altea model 03/04 onwards; Seat Toledo III (5P2) model 10/04 onwards; Skoda Octavia II (1Z3) model 02/04 onwards.

KL-0146-112**Adaptor 12 Citroën C4**

Suitable for Citroën C4 model 11/04 onwards.

Adaptor 14**Adaptor 14 Citroën Jumpy**

Suitable for Citroën Jumpy model 06/94 onwards.

KL-0146-116**Adaptor 16 Peugeot 807**

Suitable for Citroën C8 model 07/02 onwards; Peugeot 807 (E) model 08/02 onwards.

Adaptor 17 Peugeot 607 **KL-0146-117**

Suitable for Peugeot 607 (9P) model 02/00 onwards.

Adaptor 19 Ford Fiesta **KL-0146-119**

Suitable for Ford Fiesta (Diesel) model 05 onwards.

Adaptor 21 Opel Vectra C (Diesel) **KL-0146-121**

Suitable for Opel/Vauxhall Vectra C (Diesel) model 01/02 onwards; Opel/Vauxhall Vectra C (Petrol) model 01/02 onwards; Opel/Vauxhall Signum (Diesel) model 05/03 onwards; Opel/Vauxhall Signum (Petrol) model 05/03 onwards; Saab 9-3 (Diesel) model 05 onwards.

Adaptor 23 Signum, Opel Vectra C **KL-0146-123**

Suitable for Opel/Vauxhall Vectra C (1.6-1.8 Petrol) model 02 onwards; Opel/Vauxhall Signum (Petrol) model 03 onwards.

Adaptor 25 Fiat Stilo **KL-0146-125**

Suitable for Fiat Stilo 192 (1.6 Petrol) model 10/01 onwards.

Adaptor 27 Opel Zafira A / Astra G **KL-0146-127**

Suitable for Opel/Vauxhall Zafira A (Petrol, F75) model 04/99-06/05; Opel/Vauxhall Astra G (1.6 Petrol) model 02/98-12/04.

Adaptor 29 VW T5 **KL-0146-129**

Suitable for VW T5 model 01/03 onwards.

Adaptor 31 Citroën C2 / 3 **KL-0146-131**

Suitable for Citroën C2 (1.4 Petrol) model 03 onwards; Citroën C3 (1.4 Petrol) model 02 onwards.

Adaptor 33 Fiat Multipla **KL-0146-133**

Suitable for Fiat Multipla (186) model 04/99 onwards.

Adaptor 36 Suzuki Swift **KL-0146-136**

Suitable for Suzuki Swift model 04 onwards.

Adaptor 39 Renault Espace III **KL-0146-139**

Suitable for Renault Espace III model 96-02.

Adaptor 41 Renault Megane **KL-0146-141**

Suitable for Renault Megane I model 09/96-08/03.

Adaptor 43 Renault Scenic II **KL-0146-143**

Suitable for Renault Scenic II model 99-03.

Adaptor 45 Renault Megane II **KL-0146-145**

Suitable for Renault Clio III model 05 onwards; Renault Megane II model 02 onwards; Renault Laguna II model 02 onwards.

Adaptor 48 Toyota 1.0 i Aygo **KL-0146-148**

Suitable for Peugeot 107 model 05 onwards; Citroën C1 model 05 onwards; Toyota Aygo (1.0, KR-FE) model 07/05 onwards; Toyota Aygo (1.4 Diesel) model 05 onwards.

Adaptor 50 Ford Fiesta VI **KL-0146-150**

Suitable for Ford Fiesta VI (Diesel) model 10/08 onwards.

Adaptor 53 Opel Corsa D **KL-0146-153**

Suitable for Ford Ka model 02/09 onwards; Fiat 500 model 07 onwards; Fiat Panda 1200 model 09/03 onwards.

Adaptor 18 VW Polo **KL-0146-118**

Suitable for VW Polo (9N) model 10/01-06/09; Skoda Fabia I (6Y) model 12/99-02/07; Seat Ibiza IV (6L1) model 02/02-03/08; Seat Cordoba (6L2) model 10/02 onwards; VW Fox (5Z1) model 04 onwards.

Adaptor 20 Opel Astra H **KL-0146-120**

Suitable for Opel Zafira II (1.9 cdti) model 07/05 onwards; Opel Astra H model 03/04-12/09.

Adaptor 22 Fiat Ducato **KL-0146-122**

Suitable for Fiat Ducato model 12/06 onwards; Fiat Ducato 250 (2.3 JTD 120 PS) model 12/06 onwards; Peugeot Boxer II (270/310) model 02-06; Citroën Jumper model 02-06.

Adaptor 24 Fiat Punto ab Bj. 2006 **KL-0146-124**

Suitable for Fiat Punto model 06 onwards.

Adaptor 26 Alfa Romeo 159 **KL-0146-126**

Suitable for Alfa Romeo 159 (Diesel) model 09/05 onwards.

Adaptor 28 Fiat Doblo **KL-0146-128**

Suitable for Fiat Doblo (1,3 JTD) model 05 onwards; Fiat Doblo (1.9 JTD) model 01 onwards; Fiat Doblo (1.6) model 02 onwards.

Adaptor 30 Ford S Max, Galaxis **KL-0146-130**

Suitable for Ford Galaxy (Petrol/Diesel) model 06 onwards; Ford S-Max (Petrol/Diesel) model 06 onwards; Ford Mondeo (Petrol) model 07 onwards.

Adaptor 32 Fiat Punto **KL-0146-132**

Suitable for Fiat Punto (188) model 98-05.

Adaptor 35 Renault Traffic II **KL-0146-135**

Suitable for Opel/Vauxhall Vivaro model 01 onwards; Renault Traffic II model 03/01 onwards; Renault Scenic II model 99-03.

Adaptor 38 Peugeot Boxer **KL-0146-138**

Suitable for Peugeot Boxer model 04/06 onwards.

Adaptor 40 Renault Kangoo **KL-0146-140**

Suitable for Renault Kangoo (1.4) model 97-08; Renault Clio II (1.2) model 04 onwards.

Adaptor 42 Renault Laguna **KL-0146-142**

Suitable for Renault Laguna II (1.8 Petrol) model 03/01-10/07.

Adaptor 44 VW Passat 2.0 TDi **KL-0146-144**

Suitable for VW Passat (2.0 TDI, 3C) model 08/05 onwards; VW Tiguan model 07 onwards; Skoda Octavia (2.0 tdi, 1Z) model 07 onwards.

Adaptor 47 Peugeot 308 **KL-0146-147**

Suitable for Peugeot 308 (1.6 Petrol, EP6) model 09/07 onwards.

Adaptor 49 Peugeot 207 **KL-0146-149**

Suitable for Peugeot 207 (1.4 HDI, 1.6 HDI) model 02/06 onwards; Peugeot 207 (1.4 16V Petrol) model 02/06 onwards.

Adaptor 51 Ford Ka, Fiat Panda **KL-0146-151**

Suitable for Ford Ka model 02/09 onwards; Fiat 500 model 07 onwards; Fiat Panda 1200 model 09/03 onwards.

KL-0183-70 K

Belt Tool Set



Suitable for BMW, Chevrolet, Citroën, Fiat, Ford, Peugeot, Skoda etc.

This tool set is required for the quick and easy removal and replacement of the newly developed flexible V-ribbed belts.

A professional removal and replacement is almost impossible without this tool as the belt guide has no tensioning element and, therefore, a relief of the belt is not possible.

Scope of Delivery:

KL-0183-70 K Belt Tool Set

Part No.	Description
KL-0183-701	Belt dismounting tool
KL-0183-702	Belt mounting tool
KL-0183-7090	Plastic storage case

KL-0284-18

Alternator Combination Socket



Suitable for: Alternators with freewheel pulley. Application: VW-Audi, BMW, Ford, Skoda, Mercedes, Opel/Vauxhall, Porsche, Renault etc.

This two-part alternator combination socket allows easy removal and installation of the freewheel pulley when replacing an alternator or a pulley. As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shaft has to be locked by means of the socket insert size 10 mm XZN multi-spline insert during the loosening process.

Technical Data:

Socket Insert:	XZN - M10
Drive:	1/2" square
Union nut with 33 teeth outer Ø:	19,5 mm
Drive (Union nut):	hex. 21 mm
Length:	110 mm
Weight:	156 g

KL-0284-19

Alternator Combination Socket

6



Suitable e.g. for Mercedes A-Class, Renault 1,9 DTI.

This two-part alternator combination socket allows easy removal and installation of the freewheel pulley when replacing an alternator or a pulley. As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shaft has to be locked by means of the Torx® T50 multi-spline insert during the loosening process.

Technical Data:

Socket Insert:	Torx® T50
Drive (Socket Insert):	1/2"
Union nut with 33 teeth outer Ø :	19,5 mm
Drive (Union nut):	21 mm
Length:	110 mm
Weight:	156 g

KL-0284-37

Alternator Combination Socket



Suitable for Bosch alternators with free-wheel drive pulley.

Application: Renault etc.

This two-part alternator combination socket allows easy removal and installation of the freewheel pulley when replacing an alternator or a pulley. As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shaft has to be locked by means of the 10 mm XZN multi-spline insert during the loosening process.

Technical Data:

Socket Insert:	XZN - M10,
Drive (Socket Insert):	1/2"
Union nut:	28 mm hexagonal
Drive (Union nut):	hex. 21 mm
Length:	110 mm
Weight:	110 g

Alternator Combination Socket T50

KL-0284-40

Suitable for alternators with freewheel pulley, for example.: Opel/Vauxhall, Fiat, Alfa.

This alternator combination socket allows easy removal and installation of the freewheel pulley when replacing an alternator or a pulley. As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shafts have to be locked by means of the socket insert size Torx® T50 during the loosening process.

Technical Data:

Socket insert:	Torx® T50
Drive (Socket insert):	1/2"
Union nut with 31 teeth outer-Ø:	14 mm
Drive (Union nut):	21 mm
Length:	110 mm
Weight:	140 g



Alternator Combination Socket XZN-M10

KL-0284-41

Suitable for alternators with freewheel pulley, for example.: Opel, Fiat, Alfa.

This alternator combination socket allows easy removal and installation of the freewheel pulley when replacing an alternator or a pulley. As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shaft has to be locked by means of the socket insert size XZN-M 10 during the loosening process.

Technical Data:

Socket insert:	XZN-M10
Drive (Socket insert):	1/2"
Union nut with 31 teeth outer-Ø:	14 mm
Drive (Union nut):	21 mm
Length:	110 mm
Weight:	140 g



Alternator Combination Socket

KL-0284-28

Suitable for alternators with freewheel pulley. Application: VW-Audi, BMW, Ford, Skoda, Mercedes, Opel/Vauxhall, Porsche, Renault, etc.

This short two-part alternator combination socket allows easy removal and installation of a freewheel pulley in-situ on the vehicle without the need to remove the alternator. As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shaft has to be locked by means of the 10 mm XZN multi-spline insert during the loosening process.

Technical Data:

Socket insert:	XZN - M10
Drive Size (width across flats):	12 mm
Union nut with 33 teeth, outer-Ø:	19.5mm
Drive (Union nut):	21 mm
Length:	64 mm
Weight:	95 g



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Alternator Combination Socket

KL-0284-29

For example, suitable for Mercedes A-Class, Renault 1.9 DTI.

The short two-part alternator socket allows easy removal and replacement of the Free-wheel pulley required when either the alternator or pulley must be replaced. Without the need to remove the radiator.

The tool allows the alternator to be locked by the 10 mm XZN multi-spline insert, which allows the central locking bolt of the pulley to be loosened or tightened.

Technical Data:

Socket Insert:	XZN - M10,
Drive (Socket Insert):	12 mm
Union nut:	with 33 teeth outer-Ø 19,5mm,
Drive (Union nut):	hex. 21 mm
Length:	64 mm
Weight:	95 g



KL-0284-26

Alternator Combination Socket hex10 mm



Suitable for: Alternators with free-wheel drive pulley e.g. on Volvo etc.

This tool is required for the removal and replacement of freewheel pulleys in-situ on the vehicle. No need to remove the alternator from the vehicle.

As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shaft has to be locked by means of the 10 mm hexagonal socket insert during the loosening process.

Technical Data:

Socket insert (Internal hexagon):	10 mm
Drive (Socket insert):	10 mm
Union nut with 33 teeth outer-Ø	Ø 19.5mm
Drive (Union nut):	hex 21 mm
Length:	49 mm
Weight:	95 g

KL-0284-27

Alternator Combination Socket



Suitable for e.g. Renault etc.

This short two-part alternator combination socket allows easy removal and installation of a freewheel pulley in-situ on the vehicle without the need to remove the alternator. As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shaft has to be locked by means of the 10 mm XZN multi-spline insert during the loosening process.

Technical Data:

Socket Insert:	XZN - M10
Drive (Socket Insert):	hex 12 mm
Union nut with 33 teeth, outer-Ø:	28 mm
Drive (Union nut):	hex 21 mm
Length:	64 mm
Weight:	95 g

KL-0284-38

Alternator Combination Socket

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Suitable for alternators featuring freewheel pulleys such as on: VW-Audi, BMW, Ford, Skoda, Mercedes, Opel/Vauxhall, Porsche, Renault etc.

Essential tool for pulleys that are hard to reach.

This two-part alternator combination socket allows easy removal and installation of the freewheel pulley when replacing an alternator or a pulley.

As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shaft has to be locked by means of the 10 mm XZN multi-spline insert during the loosening process.

Technical Data:

Socket Insert:	XZN - M10
Drive (Socket Insert):	1/2"
Union nut with 33 teeth, outer-Ø:	19,5 mm
Drive (Union nut):	21 mm
Length:	140 mm
Weight:	156 g

KL-0284-39

Alternator Combination Socket Size (width across flats) 10 mm



Suitable for alternators with free-wheel drive pulley, for example, Toyota.

This three-part alternator combination socket allows easy removal and installation of the freewheel pulley when replacing an alternator or a pulley.

As the pulley cannot be locked from the outside while loosening or tightening the central nut, the pulley shafts have to be locked by means of the socket insert size 10 during the loosening process.

Technical Data:

Socket insert (Internal hexagon):	10 mm	Drive (Socket insert):	10 mm
Union nut with 3 pins:	21 mm	Drive (union nut):	21 mm
Union nut with size (waf) 17:	17 mm	Drive (union nut):	21 mm

Scope of Delivery:

KL-0284-39 Alternator Combination Socket

Part No.	Description	Quantity
KL-0284-3901	Union nut size (width across flats) 17 mm	1
KL-0284-3902	Union nut with 3 pins	1
KL-0284-2601	Socket insert size (width across flats) 10 mm	1

V-ribbed Belt Tensioner Tools

KL-0183-301

Universally suitable for, e.g. VW-Audi, Ford, Seat, Skoda etc. Particularly required for Audi A4, VW Passat '97 onwards TDI (incl. PD) (PD=unit-injector).

This tool is required for pre-tensioning the auxiliary belt tensioner when removing and installing the belt directly on the vehicle. It can be used even in very confined spaces. The V-ribbed belt tensioner tool enables the auxiliary belt to be removed and replaced on VW-Audi vehicles without the need to position the front panel into service-position.



V-ribbed Belt Tensioner Tool Size (waf) 15 mm KL-0183-3015

Technical Data:

Size (width across flats):	15 mm
Length:	550 mm
Weight:	390 g

V-ribbed Belt Tensioner Tool Size (waf) 16 mm KL-0183-3016

Technical Data:

Size (width across flats):	16 mm
Length:	550 mm
Weight:	390 g

V-ribbed Belt Tensioner Tool Size (waf) 17 mm KL-0183-3017

Technical Data:

Size (width across flats):	17 mm
Length:	550 mm
Weight:	390 g

V-ribbed Belt Tensioner Tool Size (waf) 19 mm KL-0183-3019

Technical Data:

Size (width across flats):	19 mm
Length:	550 mm
Weight:	390 g



V-ribbed Belt Tensioner Tools

KL-0183-...

These tools are required for pretensioning the auxiliary belt tensioner when removing and installing the belt directly on a vehicle. Specially designed for use in very confined spaces.

6

V-ribbed Belt Tensioner Tool E10 KL-0183-3110

Tool is universally suitable.

Technical Data:

Weight:	420 g
Size:	Torx® E10
Length:	550 mm

Torx® = registered trademark of Acument Intellectual Properties, LLC. USA



V-ribbed Belt Tensioner Tool E14 KL-0183-3114

Tool is universally suitable, for example for Vauxhall/Opel 1.0 12V, 1.2 and 1.4 16 V TwinCam petrol engines.

Technical Data:

Weight:	420 g
Size:	Torx® E14
Length:	550 mm

Torx® = reg. trademark of Acument Intellectual Properties, LLC. USA



V-ribbed Belt Tensioner Tool E18 KL-0183-3118

Tool is universally suitable, for example for Vauxhall/Opel 1.0 12V, 1.2 and 1.4 16 V TwinCam petrol engines.

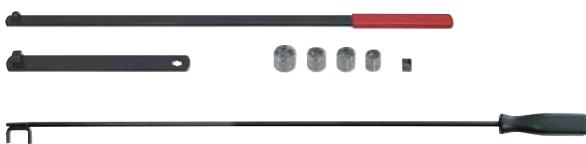
Technical Data:

Weight:	420 g
Size:	Torx® E18
Length:	550 mm

Torx® = reg. trademark of Acument Intellectual Properties, LLC. USA

KL-0183-2

Wrench Set



Universal application

Consists of:

KL-0183-20 Special Socket Wrench with Socket Set

Indispensable tools when removing and replacing V-belts and timing belts that are tensioned via an automatic idler pulley.

The socket wrench set **KL-0183-20** enables the spring-loaded idler pulley to be tensioned and, consequently, the tension on the V-belt or the timing belt to be released.

This tool can be used for hard-to-reach areas where ratchets and spanners will not reach.

Suitable for idler pulleys with 13 mm, 15 mm, 16 mm, 18 mm hex and both 3/8" and 1/2" square drive sizes.

KL-0183-21 - Belt Mounting Tool

This tool is required for the easy and trouble-free positioning of a V-ribbed belt on the pulleys. Specially designed for use in confined spaces.

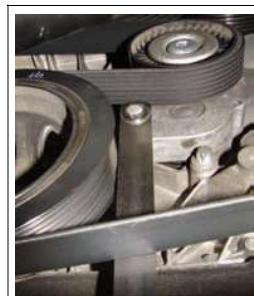
Scope of Delivery: KL-0183-2 Wrench Set

Part No.	Description	Qty.
KL-0183-20	Special Socket Wrench with socket set	1
KL-0183-21	Belt Mounting Tool	1

KL-0366-15

Special Wrench Set

6



Universal application

Designed for loosening and tightening hard-to-reach screws on the fan clutch, pulley, tensioner etc.

Application examples:**By means of the internal hex socket insert 10 mm KL-0366-10**

Suitable for the Mercedes engines M102, M103, OM601, OM602, OM603, OM605 and OM606. Used to loosen the screws on the compressor pulley.

By means of the internal hex socket insert 8 mm KL-0366-20

Suitable for the Mercedes engines M102, M103, OM601, OM602, OM603, OM605 and OM606. Used to loosen and tighten the fan clutch and pulley at the water pump.

By means of Torx® socket insert T45 KL-0366-30

Suitable for the Renault 2.2 L diesel engines (G8T), e.g. Espace, Laguna, Safrane etc. In order to remove and install the V-belt, the automatic idler pulley has to be tensioned by means of the KL-0366-15 thus reducing the pressure on the V-belt.

By means of Torx® socket insert T60 KL-0366-110

Suitable for the BMW 5-Series (E60) 2.0 (M54) petrol engines and Mercedes C-Class (W203) 1.8 (OM271) petrol engines etc. In order to remove and install the V-ribbed belt, the automatic idler pulley has to be tensioned by means of the KL-0366-15 thus reducing the pressure on the V-ribbed belt.

By means of Torx® socket insert T50 KL-0366-121

Suitable for the Renault 1.4 / 1.6 L TwinCam petrol engines (engine code: K4J, K4M) z.B. Clio III, Megane / Scenic II, Laguna II, Modus and Kangoo. Used to remove and install the deflection pulley, for example, when replacing a timing belt or performing an engine repair.

Scope of Delivery: KL-0366-15 Special Wrench Set

Part No.	Description	Qty.
KL-0366-100	Special wrench 8 mm drive	1
KL-0366-10	Insert internal hex 10 mm	1
KL-0366-20	Insert internal hex 8 mm	1
KL-0366-30	Torx® insert T45	1
KL-0366-111	Torx® insert T60	1
KL-0366-121	Torx® insert T50	1

® = reg. trademark of Acument Intellectual Properties, LLC. USA

Special Hexagon Socket Spanner 8 mm

KL-0366-2

Suitable for the Mercedes engines M102, M103, OM601, OM602, OM603, OM605 and OM606.

Designed to loosen and tighten the fan clutch and pulley at the water pump.

Technical Data:

Hexagon socket:	8 mm
Length:	450 mm



Special Hexagon Socket Spanner 10 mm

KL-0366-1

Suitable for the Mercedes engines M102, M103, OM601, OM602, OM603, OM605 and OM606.

Designed to loosen the screws at the compressor pulley.



Technical Data:

Hexagon socket:	10 mm
Length:	450 mm

Torx®-Special Spanner T60

KL-0366-11

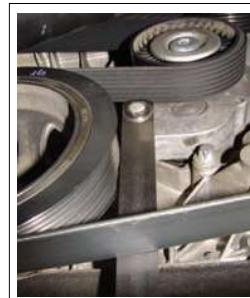
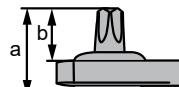
Suitable for the BMW 5-Series (E60) 2.0 (M54) petrol engines and Mercedes C-Class (W203) 1.8 (OM271) petrol engines etc.

When removing and replacing a V-ribbed belt, it is necessary to tension the automatic idler pulley using the special spanner KL-0366-11 in order to reduce the pressure on the V-ribbed belt.



Technical Data:

Length:	450 mm
Total height of insert a:	25 mm
Height of insert as from lever:	15 mm



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Torx®-Special Spanner T50

KL-0366-12

Suitable for Renault 1.4 / 1.6 L TwinCam petrol engines (engine code: K4J, K4M) such as Clio III, Megane / Scenic II, Laguna II, Modus and Kangoo.

This tool is required for the removal and installation of the deflection pulley, e.g. when replacing a timing belt or during an engine repair.



Scope of Delivery:

KL-0366-12 Torx-Special Spanner T50

Part No.	Description	Qty.
KL-0366-121	Torx® insert T50	1
KL-0366-100	Special spanner 8 mm drive	1

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Torx®-Special Spanner T45

KL-0366-3

Suitable for the Renault 2.2 L diesel engines (G8T) e.g. Espace, Laguna, Safrane etc.

When removing or installing a V-belt, the automatic idler pulley has to be tensioned using the special spanner KL-0366-3 in order to reduce the pressure on the V-belt.



Technical Data:

Size:	T45
Length:	450 mm

KL-0183-60

Holding Tool for V-Belt Pulleys



Suitable for V belt pulleys.

Tool for holding the V-belt pulley in position, for example, while loosening the pulley retaining screws.

Technical Data:

Lever length:	280 mm
Load max.:	150 Nm

KL-0183-6001

Replacement belt



KL-0183-61

Holding Tool for V-ribbed Belt Pulleys



Suitable for V-ribbed belt pulleys.

For holding the V-ribbed belt pulley in position, for example, while loosening the pulley retaining screws.

Technical Data:

Lever length:	380 mm
Load max.:	100 Nm

KL-0183-6101

Replacement belt



6

KL-0366-4

Pulley Spinning Tool



Suitable for Mercedes, VW-Audi, BMW, Ford, Opel, Peugeot, Renault, Rover, Volvo, Japanese cars

Used for turning the engine. Tool can be adjusted to the specified dimension of the pulley.

Technical Data:

Length:	325 mm
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⚠ Attention:

The KL-0366-4 is not a counter-holding wrench for shafts.

KL-0282-31

Reaction Wrench (420 mm long, adjustable)



Suitable for all perforated timing belt sprockets with a hole-Ø of minimum 12 mm; e.g. on VW-Audi, Ford, Vauxhall/Opel, Peugeot, Renault, Citroën, Rover, Volvo, Japanese vehicles, etc.

With inter-changeable pins and different hole pitches.

Designed to prevent timing belt sprockets on camshafts, injection pumps, etc. from rotating, for example, when loosening the central fastening bolt.

Due to the different pin-Ø and hole pitches, this wrench is almost universal in its range of application.

Technical Data:

Pin distance:	45 mm to 75 mm
Pin-Ø:	12 mm and 16 mm
Pin height:	61 mm
Overall tool length:	420 mm

Reaction Wrench Set (515 mm long, adjustable)

KL-0282-35 A

Universally suitable for perforated timing belt sprockets with a hole-Ø of minimum 8 mm; e.g. on VW-Audi, Fiat, Ford, Vauxhall/Opel, Peugeot, Renault, Citroën, Rover, Volvo, Japanese vehicles, etc.

Designed to prevent timing belt sprockets on camshafts, injection pumps, etc. from rotating, for example, when loosening or tightening the central fastening bolt.

Due to the different interchangeable pins and the adjustable lever for variable adjustment of the hole diameter and the hole pitches, this tool is almost universal in its range of application.

Technical Data:

Pin distance:	from 14 mm to 130 mm
Pin-Ø:	7,5 mm, 12 mm, 18 mm
Pin height:	25 mm / 25 mm / 42 mm
Overall tool length:	515 mm



Scope of Delivery:

KL-282-35 A Reaction Wrench Set (515 mm long, adjustable)

Part No.	Description	Qty.
KL-0282-35	Reaction wrench, adjustable	1
KL-0282-311	Bolt Set Ø18 mm	1
KL-0282-312	Bolt Set Ø7.5 mm	1

Reaction Wrench

KL-0284-63

Universal application.

Particularly required for VW-Audi, Seat, and Skoda 1.4 and 1.6 L petrol engines with 2- or 4-valve system.

This tool is designed to lock pulleys, timing belt sprockets etc.

It is required for loosening and tightening the fastening bolt.

The locking takes place either via the pins with a diameter of 11.5 mm which engage the holes of the pulleys / timing belt sprockets, or by fixing the reaction wrench to the crankshaft timing belt sprocket by means of the bolt M8.

Thanks to the tool length of 700 mm, even very tight-fitting fastening bolts can easily be loosened by using this tool.

Technical Data:

Length:	700 mm
Pin-Ø:	11.5 mm
Pin distance:	99.5 mm
Pin height:	31.5 mm
Bolt thread:	M8
Bolt distance:	45.5 mm
Bolt length:	18 mm



6

V-Belt Pulley Puller

(German Utility Model)

KL-0155-42

Universally suitable for all perforated V-ribbed belt pulleys with diameters of from 120 to 180 mm

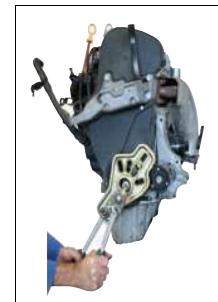
Two tools in one.

This tool is designed to hold the pulley in position while loosening the central fixing screw as well as to remove the V-ribbed belt pulley, for example, at the crankshaft, servo pump etc.. Any standard 1/2" ratchet or sliding T bar can be used as a holding tool.

Scope of Delivery:

KL-0155-42 V-Belt Pulley Puller

Part No.	Description	Quantity
KL-0155-4201	Bridge	1
KL-0155-4202	Press piece with O-ring and balls	1
KL-0183-5401	Housing	1
KL-0183-5402	Spindle M16x1.5 x 60 mm	1
KL-0155-4203	Clamping jaw R70	2
KL-0155-4204	Bolt Ø6 mm	2
KL-0155-4205	Bolt Ø12 mm	2
KL-0155-4206	Slide bush	2
KL-0155-4207	Flat-head screw M10 x 30	2
KL-0008-0009	Shoulder nut M10	2



KL-0183-50

Timing Belt Sprocket Extractor and Reaction Tool

(Univ.)

(Pat.)

**Universal application - Two tools in one**

Tool for loosening the central fixing screw and removing the sprocket
Suitable for all perforated timing belt sprockets with a pitch circle diameter of from 70 mm - 100 mm. Suitable for hole diameters as from 20 mm minimum.

Used to hold the pulley in position while loosening or tightening the central fixing screw. It also prevents the pulley from rotating while removing the sprocket. Any standard $\frac{1}{2}$ " ratchet or $\frac{1}{2}$ " sliding T-Bar can be used as a holding tool.

Scope of Delivery:**KL-0183-50 Timing Belt Sprocket Extractor and Reaction Tool**

Part No.	Description	Qty.
KL-0183-510	Perforated puller disc	1
KL-0183-531	Hook Ø 20 mm	3
KL-0183-532	Hook Ø 26 mm	3
KL-0008-0009	Shoulder Nut M10	3
KL-0183-540	Pressure unit	1

KL-0183-51 A Timing Belt Sprocket Extractor and Reaction Tool with 2 hooks (Pat.)**Scope of Delivery:****KL-0183-51 A Pulley-Extractor and reaction tool with 2 hooks**

Part No.	Description	Qty.
KL-0183-510	Perforated puller disc	1
KL-0183-533	Hook Ø 16.5 mm	2
KL-0008-0009	Shoulder nut M10	2
KL-0183-540 A	Pressure unit	1

Accessories:

KL-0183-531 Hook Ø 20 mm

KL-0183-532 Hook Ø 26 mm

KL-0149-131

Pin-Type Face Spanner Ø14 -100, Pin Ø5 mm

6

**Suitable for example for Audi A4, A6, A8 and VW Passat.**

Designed to keep the fan-belt pulley in position when removing and installing the Visco-Fan on Audi A4, A6, A8 and VW Passat etc.

It can also be used to remove the pre-tension ring when installing a new SAC-clutch on Audi, Fiat etc.

Technical Data:

Ø:	14 -100 mm
Pin Ø:	5 mm
Pin height:	6 mm
Overall Length:	215 mm
Weight:	300 g

KL-0282-39

Puller Tool Set PD (Unit Injector)

**Suitable for VW-Audi, Ford, Seat, Škoda 3- and 4-cylinder (1.2; 1.4; 1.9 and 2.0 L) TDI PD-engines.**

This tool enables the easy and professional removal of the camshaft hub. It is required, for example, when replacing the cylinder head gasket on 1.9 L engines, when removing and replacing the camshaft or used in the repair of engines or cylinder heads.

The reaction wrench **KL-0282-391** enables the camshaft hub fixing screw to be loosened and tightened accurately.

The puller **KL-0282-392** enables the accurate removal of the camshaft hub from the taper of the camshaft.

Scope of Delivery:**KL-0282-39 Puller Tool Set PD (Unit Injector)**

Part No.	Description	Qty.
KL-0282-391	Reaction wrench	1
KL-0282-392	Puller for camshaft hub	1

Puller for Timing Belt Sprocket (Crankshaft)

KL-0282-50

Suitable for VW-Audi 4 and 5-cylinder engines.

Designed to remove the crankshaft timing belt sprocket.



Reaction Wrench for Vibration Damper / Crankshaft

(German Utility Model)

KL-0284-61

Suitable for VW-Audi 4- and 5-cylinder engines both with and without vibration damper; e.g. VW T4.

Designed to lock the crankshaft pulley when loosening or tightening the crankshaft central retaining bolt.

This tool is indispensable when replacing timing belts, oil-seals or flywheels, as well as during engine repairs.

Advantages:

Thanks to the 2 extension handles, the locking, loosening and tightening of the crankshaft retaining bolt can be performed by a single mechanic.

Technical Data:

Total Length (incl. 2 extensions):	1800 mm
------------------------------------	---------

Scope of Delivery:**KL-0284-61 Reaction Wrench for Vibration Damper / Crankshaft**

Part No.	Description	Qty.
KL-0284-61	Adaptor	1
KL-0284-6102	Special cylinder bolt	4
KL-0284-6103	Special Ring Spanner Size (width across flats) 60	1
KL-0284-6104	Extension	2
KL-0284-6105	Hex screw M8 x 28	4
KL-0035-0003	Hex nut M8	4
KL-0284-6106	Cylinder bolt M8 x 65	4
KL-0284-62	Hex socket wrench Size (width across flats) 27	1



6

Tension Tool

KL-0284-16

Suitable for VW Polo, Golf, Passat, T4 and Audi.**For V-ribbed belts.** When changing the V-ribbed belt, the automatic idler pulley can be loosened by means of tension tool **KL-0284-16**.**Technical Data:**

Drive:	1/2"
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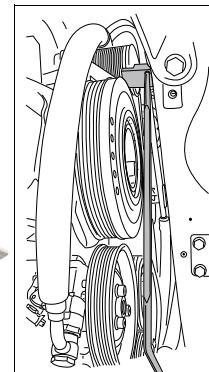


Tension Lever for V-ribbed Belt

KL-0284-12

Suitable for V-ribbed belts on e.g. VW Polo, Golf, Passat, T4 and Audi.The tension lever **KL-0284-12** enables the automatic idler pulley to be loosened when replacing a V-ribbed belt.**Advantages:**

The lever head is variably attachable and can be interchanged.



KL-0284-15

Alternator Tension Tool



Suitable for VW-engines on which the V-ribbed belt can only be tightened at the spring-loaded alternator.

Tool features strengthened and milled pins which allow the tension on the V-ribbed belt to be released. The milled pins are designed not to slip out of the holes in the alternator.

Technical Data:

Drive:	1/2"
Diameter (pin to pin):	157 mm

KL-0284-8

Reaction Wrench



Suitable for VW Polo, Golf, Passat and Audi A4, etc.

For locking the pulley on the servo-pump.

Advantages:

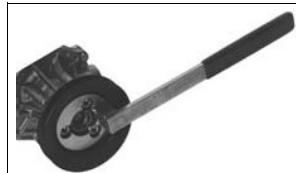
- The $1\frac{1}{2}$ " drive in the tool handle enables the tool to be extended, for example by a ratchet.
- Easy loosening of stubborn screws on the water-pump pulley.

Technical Data:

Length:	Height:	Inner-Ø:	Screw retaining Ø:	Weight:
250 mm	17 mm	31 mm	14 mm	450 g

KL-0284-11

Reaction Wrench



Suitable for VW-Audi etc.

For locking **deep-drawn** water-pump pulleys that are used when, for example, an air conditioner is also built in.

Advantages:

- Safe locking of the water-pump pulley by the fixing screws.
- Easy loosening of stubborn fixing screws at the water-pump pulley.

Technical Data:

Length:	Height:	Inner-Ø:	Screw retaining Ø	Weight:
300 mm	40 mm	31 mm	14 mm	450 g

6

KL-0284-81

Reaction Wrench



Suitable for VW Passat (1997 onwards) and Audi A4 (1999 onwards) etc.

When loosening and tightening the fixing screw at the servo-pump pulley, it is necessary to lock the latter by means of reaction wrench **KL-0284-81**.

Advantages:

- The $1\frac{1}{2}$ " -drive in the tool handle enables the tool to be extended, for example by a ratchet
- Easy loosening of stubborn screws at the servo-pump pulley.

Technical Data:

Length:	Height:	Inner-Ø:	Screw retaining Ø:	Weight:
250 mm	17 mm	31 mm	14 mm	450 g

KL-0582-1

Reaction Wrench for Visco-Fan



Suitable for BMW engines e.g. M20 and M30.

Designed to lock the fan shaft when removing the Visco-Fan.

Technical Data:

Hole pitch:	38 mm
Weight:	500 g

Reaction Wrench for Visco-Fan

KL-0582-2

Suitable for BWM engines e.g. M10, M20, M21, M30, M50, M51, M52, M52TU, M54, M56, M70, M73, S14 and S38.

Designed to lock the fan shaft when removing the Visco-Fan.

Technical Data:

Hole pitch:	44.5 mm
Weight:	400 g



Reaction Wrench Size (width across flats) 32 mm

KL-0123-1

Designed to lock the Visco-coupling drive shaft, when removing or installing the Visco-coupling on **BMW** and **Ford** vehicles.

Technical Data:

Size (with across flats):	32 mm
Length:	280 mm



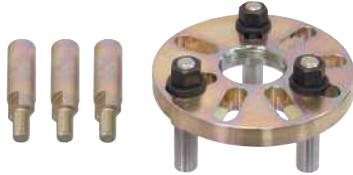
Reaction Tool

KL-0366-81

Suitable for Mercedes engines e.g. M112, M113 and OM642, etc.

This tool is designed to lock the crankshaft pulley while loosening or tightening the crankshaft central screw.

It is required when replacing belts pulleys or for engine repairs.



Locking Tool

KL-0367-1

Suitable for Mercedes engines e.g. M103.

This tool allows loosening the Visco fan pulley (locking the fan pulley).



Special Opend-End Wrench size (waf) 36 mm

KL-0366-5

Suitable for the Mercedes engines M111, OM604, OM605 and OM606 (C- and E-Class).

This special open-end wrench is designed to loosen the screwed connection of the fan.

Technical Data:

Length:	350 mm
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Reaction Wrench

KL-0366-7

Suitable for the Mercedes C- and E-Class engines M111 (4-cylinder 4-valve), OM604, OM605 and OM606.

With 3 holes

In order remove the cooling fan hub, the reaction wrench is bolted to the front face of the hub. The V-ribbed belt is not in place during this operation and cannot be used to lock the hub.

Technical Data:

Length:	410 mm
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KL-0366-6

Special Open-Ended Wrench Size (waf) 65 mm



Suitable for the Mercedes engines M103 (6-cylinder), M104 (6-cylinder 4-valve), M119 (8-cylinder 4-valve), M120 (12-cylinder 4-valve).

Special open-ended wrench to allow removal and replacement of the cooling fan hub.

Technical Data:

Length:	400 mm
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KL-0384-1

Tension Tool



Suitable for Mercedes Transporters series 208 D to 410 D with engines types OM601 and OM602 and also for Mercedes passenger cars with hydraulic pump for self-levelling suspension.

To relieve pressure on the timing belt by compressing the automatic tension roller.

Due to extremely limited space, in particular on Transporter models it is very difficult to hold back the automatic tension-pulley, in order to change the Poly-V belts.

The **KL-0384-1** Tension Tool makes light work of this difficult job.

The Tension Tool is operated by a normal 3/8" Socket Wrench.

KL-0484-10

Locking Tool



This tool is used for locking the automatic idler pulley for the V-ribbed belts and timing belts on **VW-Audi** engines.

Also suitable for the automatic idler pulley for the V-ribbed belt on **Opel/Vauxhall** vehicles with EcoTec-engines.

Technical Data:

Ø:	4,0 / 6,0 mm
Weight:	70 g

KL-0123-2

Reaction Wrench Size (width across flats) 36 mm



Suitable for Ford, Opel, Vauxhall and GM vehicles.

Designed to lock the Visco-clutch drive shaft, when removing or installing the Visco-clutch.

Technical Data:

Size (width across flats):	36 mm
Length:	280 mm
Height:	11 mm
Weight:	340 g

KL-0483-1

Reaction Wrench Size (width across flats) 46 mm



Suitable for Opel, Vauxhall and GM OHC-engines.

Required to twist the water pump, so enabling the driving belt to be tensioned.

Technical Data:

Size (width across flats):	46 mm
Drive:	1/2"
Length:	125 mm
Height:	55 mm
Weight:	270 g

KL-0483-2

Reaction Wrench Size (width across flats) 41 mm



Suitable for Opel, Vauxhall and GM, e.g. 1,2 / 1,3 / 1,4 / 1,6 OHC-engines.

Required to twist the water pump, so enabling the driving belt to be tensioned.

Technical Data:

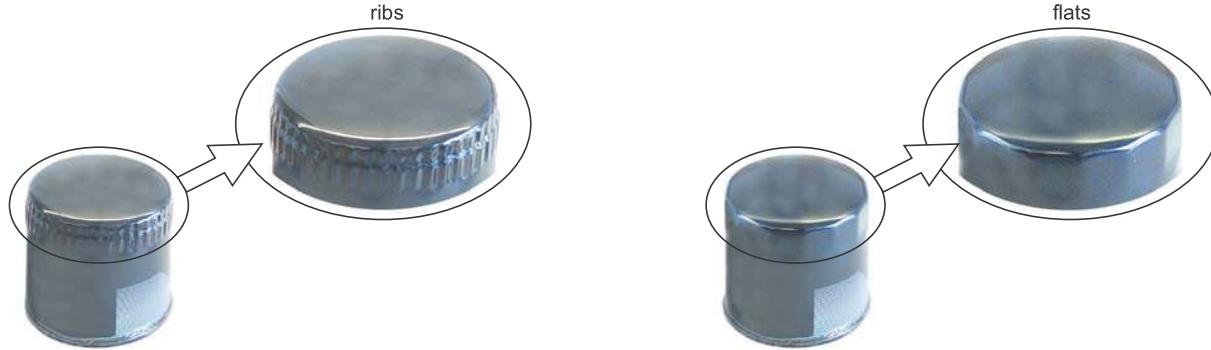
Size (width across flats):	41 mm
Drive:	1/2"
Length:	125 mm
Height:	55 mm
Weight:	275 g

Oil Filter Key

KL-0122-Serie

To identify the suitable oil filter key perform the following steps:

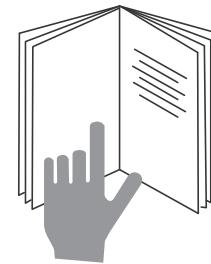
1. Verify whether the filter has flats or ribs.
2. Count the number of ribs or flats..



3. Measure the wrench opening by means of a vernier caliper.



4. Choose the suitable oil filter key from the table on Chapter 6.8.



6

Oil Filter Key Table:

Size	Size (width across flats)	Part-No.	Description
27 mm	27 mm	KL-0122-52	Oil Filter Key
32 mm	32 mm	KL-0122-51	Oil Filter Key
36 mm	36 mm	KL-0122-5	Oil Filter Key
64 mm	64 mm 14 flats	KL-0122-308	Oil Filter Key
65 mm	65 mm 14 flats	KL-0122-309	Oil Filter Key
66 mm	Ø66 6 ribs	KL-0122-318	Oil Filter Key
66 mm	Ø66 6 ribs	KL-0122-601	Oil Filter Key
67 mm	67 mm 14 flats	KL-0122-311	Oil Filter Key
72 mm	72 mm 14 flats	KL-0122-310	Oil Filter Key
73 mm	73 mm 10 flats	KL-0122-612	Oil Filter Key
74 mm	74 mm 14 flats	KL-0122-301	Oil Filter Key
74 mm	74 mm 14 flats	KL-0122-3	Oil Filter Key
74 mm	74 15 flats	KL-0122-302	Oil Filter Key
74 mm	74 mm 30 ribs	KL-0122-306	Oil Filter Key
74 mm	74 mm 8 flats	KL-0122-323	Oil Filter Key
76 mm	Ø76 12 ribs	KL-0122-219	Oil filter key (aluminium)
76 mm	Ø76 12 ribs	KL-0122-319	Oil Filter Key
76 mm	Ø76 12 ribs	KL-0122-7	Oil Filter Key
76 mm	76 mm 15 ribs	KL-0122-303	Oil Filter Key
78 mm	78 mm 15 flats	KL-0122-332	Oil Filter Key
79 mm	79 mm 15 flats	KL-0122-305	Oil Filter Key
82 mm	82 mm 15 flats	KL-0122-314	Oil Filter Key

Size	Size (width across flats)	Part-No.	Description
84 mm	84 mm	KL-0122-609	Oil Filter Key
86 mm	Ø86 18 ribs	KL-0122-312	Oil Filter Key
86 mm	Ø86 18 ribs	KL-0122-212	Oil filter key (aluminium)
86 mm	86 mm 16 flats	KL-0122-326	Oil Filter Key
86 mm	86 mm 16 flats	KL-0122-426	Oil filter key (reinforced design)
89 mm	89 mm 15 flats	KL-0122-315	Oil Filter Key
91 mm	91 mm 15 flats	KL-0122-304	Oil Filter Key
92 mm	92 mm 10 flats	KL-0122-324	Oil Filter Key
92 mm	92 mm 36 ribs	KL-0122-307	Oil Filter Key
93 mm	Ø93 45 ribs	KL-0122-317	Oil Filter Key
93 mm	Ø93 45 ribs	KL-0122-217	Oil filter key (aluminium)
95 mm	95 mm 15 flats	KL-0122-334	Oil Filter Key
96 mm	Ø96 18 ribs	KL-0122-313	Oil Filter Key
96 mm	Ø96 18 ribs	KL-0122-213	Oil filter key (aluminium)
99 mm	99 mm 15 flats	KL-0122-335	Oil Filter Key
100 mm	100 mm 15 flats	KL-0122-316	Oil Filter Key
103 mm	103 mm 14 flats	KL-0122-611	Oil Filter Key
106 mm	106 mm 15 flats	KL-0122-322	Oil Filter Key
108 mm	Ø108 18 ribs	KL-0122-321	Oil Filter Key
108 mm	Ø108 18 ribs	KL-0122-602	Oil Filter Key
108 mm	108 mm 15 flats	KL-0122-327	Oil Filter Key

KL-0122-31 K

Set of Oil Filter Keys

The strengthened and profiled oil filter keys correspond to the oil filter cartridges.

Scope of delivery:

KL-0122-301 - Oil Filter Key Size 74 mm 14 Flats

Width across flats 74 mm • 14 Flats • 1 Step

Suitable for Audi e.g. A3 (TDI); BMW 3-Series (E36 with 4-cylinder engines), Citroën; Fiat; Ford; Lancia; Mazda; Mercedes (e.g. CDI engines, C- and E-Class (with 4- and 6-cylinder petrol engines); Nissan; Opel/Vauxhall; Peugeot; Porsche; Renault; Toyota; VW e.g. Golf (IV TDI), etc.

KL-0122-302 - Oil Filter Key Size 74 mm 15 Flats

74 mm • 15 Flats • 2 Steps

Suitable for Ford, Opel/Vauxhall, etc.

KL-0122-303 - Oil Filter Key Size 76 mm 15 Flats

Width across flats 76 mm • 15 Flats • 2 Steps

Suitable for VW-Audi, Mercedes, Opel/Vauxhall, etc.

KL-0122-304 - Oil Filter Key Size 91 mm 15 Flats

Width across flats 91 mm • 15 Flats • 1 Step

Suitable for Alfa Romeo, Fiat, Ford, Honda, Mazda, Mitsubishi, Nissan, Opel/Vauxhall, Porsche, Renault, Volvo, VW-Audi, etc.

KL-0122-305 - Oil Filter Key Size 79 mm 15 Flats

Width across flats 79 mm • 15 Flats • 1 Step

Suitable for Ford, Honda, Isuzu, Mazda, Nissan, Opel/Vauxhall, Subaru, Toyota, etc.

KL-0122-306 - Oil Filter Key Size 74 mm 30 Ribs

Ø 74 mm • 30 Ribs • 1 Step

Suitable for Ford, etc.

KL-0122-307 - Oil Filter Key Size 92 mm 36 Ribs

Ø 92 mm • 36 Ribs • 1 Step

Suitable for Ford, etc.

KL-0122-308 - Oil Filter Key Size 64 mm 14 Flats

Width across flats 64 mm • 14 Flats • 1 Step

Suitable for Fiat, Daihatsu, Nissan, Toyota, etc.

KL-0122-309 - Oil Filter Key Size 65 mm 14 Flats

Width across flats 65 mm • 14 Flats • 2 Steps

Suitable for Daihatsu, Toyota, etc.

KL-0122-310 - Oil Filter Key Size 72 mm 14 Flats

Width across flats 72 mm • 14 Flats • 1 Step

Suitable for Toyota, Mini Diesel, etc.

KL-0122-311 - Oil Filter Key Size 67 mm 14 Flats

Width across flats 67 mm • 14 Flats • 1 Step

Suitable for Mazda, Ford, etc.

KL-0122-314 - Oil Filter Key Size 82 mm 15 Flats

Width across flats 82 mm • 15 Flats • 2 Steps

Suitable for Honda, Mazda, Nissan, Subaru, Toyota, etc.

KL-0122-315 - Oil Filter Key Size 82 mm 15 Flats

Width across flats 89 mm • 15 Flats • 1 Step

Suitable for Honda, Isuzu, Mitsubishi, etc.

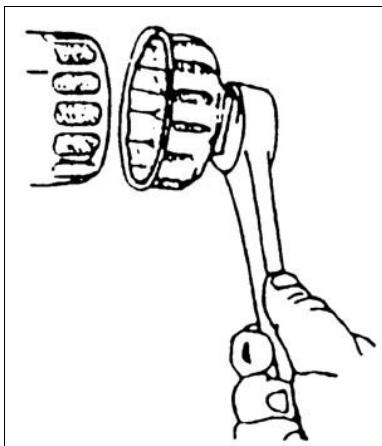
KL-0122-316 - Oil Filter Key Size 100 mm 15 Flats

Width across flats 100 mm • 15 Flats • 1 Step

Suitable for Isuzu, Mitsubishi, etc.

KL-0122-329 - Adaptor 1/2" to 3/8"

KL-0122-320 - Plastic storage case



6

Technical Data:

Drive:	3/8"
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Set of Oil Filter Keys

KL-0122-32 K

The strengthened and profiled oil filter keys correspond to the oil filter cartridges.

Scope of delivery:

KL-0122-312 - Oil Filter Key Ø86 18 Ribs

Ø 86 mm • 18 Ribs • 1 Step

Suitable for VW e.g. Golf (III), Passat ('96-onwards with TDI-engine); Audi e.g. A6 (-'96 with TDI-engine 115 hp) Renault e.g. Clio, Rapid and Laguna (1;9 D), Safrane, Espace (III 2,1 D) etc.

KL-0122-313 - Oil Filter Key Ø96 mm 18 Ribs

Ø 96 mm • 18 Ribs • 1 Step

Suitable for Audi e.g. A4 (with TDI-engines); VW e.g. Touareg (with V 10 TDI engines), Passat ('97-onwards with TDI-engines); Renault e.g. Master (2.5 and 2.8 D / TD), Laguna, Safrane, Espace (III 2,2 D), R19, Rapid and Megane (1.9 and 2.1 D / TD); Opel/Vauxhall e.g. Movano (2.5 and 2.8 D / TD), etc.

KL-0122-317 - Oil Filter Key Ø93 mm 45 Ribs

Ø 93 mm • 45 Ribs

Suitable for VW-Audi (diesel, TDI 2.4 / 2.6 and 2.8 L engines), etc.



KL-0122-318 - Oil Filter Key Ø66 mm 6 Ribs

Ø 66 mm • 6 Ribs

Suitable for Fiat e.g. Punto (1,2); Renault e.g. Clio (1.2), Express, Kangoo, Rapid, Twingo, etc.

3/8"

KL-0122-319 - Oil Filter Key Ø76 mm 12 Ribs

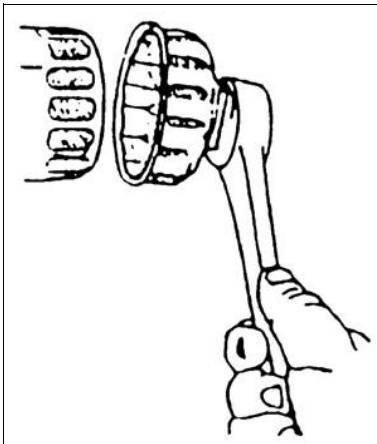
Ø 76 mm • 12 Ribs

Suitable for Fiat e.g. Ducato, Scudo, Ulysee; Mercedes (all with Purflux Filter LS 918); Renault e.g. Megane, Laguna Espace (III), Trafic (1.9 diesel), Master (1.9 diesel); Peugeot e.g. 307; Honda e.g. Prelude (BA4 2.0 16V engine); Opel/Vauxhall e.g. Vivaro, etc.

KL-0122-321 - Oil Filter Key Size 108 mm 18 Ribs

Width across flats 108 mm • 18 Ribs

Suitable for Renault e.g. Espace, Laguna, Master, Safrane, Traffic (2.4 and 2.5 / 2.8 D / TD), etc.



KL-0122-322 - Oil Filter Key Size 106 mm 15 Flats

Width across flats 106 mm • 15 Flats

Suitable for Fiat e.g. Ducato (2.5 D / TD), etc.

6

KL-0122-323 - Oil Filter Key Size 74 mm 8 Flats

Width across flats 74 mm • 8 Flats

Suitable for Fiat e.g. Marea; Lancia e.g. Delta, etc.

KL-0122-324 - Oil Filter Key Size 92 mm 10 Flats

Width across flats 92 mm • 10 Flats

Suitable for Fiat e.g. Cinquecento, Coupé, Croma, Panda, Regata, Ritmo, Seicento, Tempra and Tipo; Lancia e.g. Beta, Dedra, Kappa, Monte Carlo, Prisma, Thema and Trevi, etc.

KL-0122-326 - Oil Filter Key Size 86 mm 16 Flats

Width across flats 86 mm • 16 Flats

Suitable for BMW e.g. 316i and 318i ('01-onwards etc); Volvo e.g. S40, S70 etc, etc.

KL-0122-327 - Oil Filter Key Size 108 mm 15 Flats

Width across flats 108 mm • 15 Flats

Suitable for Volvo e.g. C70, S70, V70 (TDI Turbo diesel), 850 (TDI Turbo Diesel), etc.

Technical Data:

Drive:	3/8"
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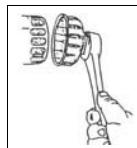
KL-0122-329 - Adaptor 1/2" to 3/8"

KL-0122-15 - 3-legged Oil Filter Tool Ø 65 - 120 mm

KL-0122-330 - Plastic storage case

KL-0122-332

Oil Filter Key Size (waf) 78 mm



3/8"

Suitable for Ford, Mitsubishi, Nissan, Toyota, etc.

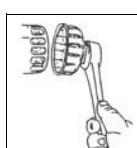
For Oil Filter with 78 mm and 15 Flats.

Technical Data:

Drive:	3/8"
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KL-0122-334

Oil Filter Key Size (waf) 95 mm



3/8"

Suitable for Alfa Romeo, Chrysler, Ford, Toyota etc.

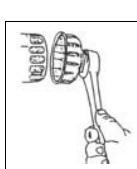
For Oil Filter with 95 mm and 15 Flats

Technical Data:

Drive:	3/8"
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KL-0122-335

Oil Filter Key Size (waf) 99 mm



3/8"

Suitable for Toyota diesel etc.

For Oil Filter with 99 mm and 15 Flats.

Technical Data:

Drive:	3/8"
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KL-0122-426

Oil Filter Key Size (waf) 86 mm 16-Flats bonded



3/8"

Ideal tool for Volvo vehicles, e.g. S40, S70 etc, etc.

Suitable for oil filters with size (width across flats) 86mm and 16 flats.

Necessary to remove and install the oil filter cover when replacing the oil filter cartridge.

Technical Data:

Drive:	3/8"
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6

KL-0122-3

Oil Filter KeySize (waf) 74 mm



Suitable for VW-Audi, BMW, Citroën, Fiat, Ford, Lancia, Mazda, Mercedes, Nissan, Opel/Vauxhall, Peugeot, Porsche, Renault, Suzuki, Toyota, etc.
 Ideal for Audi A3 (TDI); VW Golf (IV TDI), LT; BMW 3 series (E36 with 4-cylinder engines); Porsche Cayenne, Boxster, 911; Mercedes CDI engines, as well as C- and E-Class (with 4- and 6-cylinder petrol engines).
 Intended for use on oil filters size (width across flats) 74mm and 14 flats.

Technical Data:

Drive:	22 mm
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KL-0122-212

Oil Filter Key (Aluminium) Ø 86 mm 18 ribs



3/8"

Suitable for VW-Audi, Seat, Škoda etc.

Ideal for VW e.g. Golf (III), Passat (up to 1996 with TDI-engine) • Audi e.g. A6 (up to 1996 with TDI-engine 115 PS) • Renault e.g. Clio, Rapid and Laguna (1.9 D), Safrane; Espace (III / 2.1 D) • etc

Intended for use on oil filters with Ø 86mm and 18 ribs.

Technical Data:

Drive:	3/8"
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Oil Filter Key (Aluminium) Ø86 mm 18 ribs

KL-0122-213

Suitable for VW-Audi, Seat, Škoda etc.

Ideal for Audi e.g. A4 (with TDI-engine) • VW e.g. Touareg (with V 10 TDI engine), Passat (1997-onwards with TDI-engine) • Renault e.g. Laguna, Safrane, Espace (III 2.2 D), R19, Rapid and Megane (1.9 and 2.1 D / TD), Master (2.5 and 2.8 D / TD) • Opel/Vauxhall e.g. Movano (2.5 and 2.8 D / TD), etc.

Intended for use on oil filters with Ø 96mm and 18 ribs.

Technical Data:

Drive:	3/8"
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Oil Filter Key (Aluminium) Ø93 mm 45 ribs

KL-0122-217

Suitable for VW-Audi, Seat, Škoda etc.

Ideal for VW-Audi (Diesel, TDI 2.4 / 2.6 and 2.8 engines), etc.

Intended for use on oil filters with Ø 93mm and 45 ribs.

Technical Data:

Drive:	3/8"
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Oil Filter Key (Aluminium) Ø 76 mm 12 ribs

KL-0122-219

Suitable for VW-Audi, Mercedes, Seat, Škoda etc. (with Purflux Filter LS 918). Ideal for Mercedes with 6-cylinder petrol engine M102 and M103.

Intended for use on oil filters with Ø 76mm and 12 ribs.

Due to the particularly compact oil filter key design, the oil filter on Mercedes M102 and M103 engines can be exchanged without the need to remove the induction pipe.

Technical Data:

Drive:	3/8"
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Oil Filter Key Ø 66 mm

KL-0122-601

Suitable for Renault vehicles such as Twingo, Clio (mit D-petrol engines and filter no. 77 00 869 029).

Intended for use on oil filters with Ø 66 mm und 6 ribs. This key allows quick and easy removal of seized oil filters.

Technical Data:

Drive:	3/8"
Weight:	191 g



3/8"

6

Oil Filter Key Ø 108 mm

KL-0122-602

Suitable for Renault vehicles such as Trafic, Master, Safrane (with S8U-engines and filter no. 77 00 860 823).

Suitable for oil filters with Ø 108 mm and 18 ribs

This key allows quick and easy removal of seized oil filters.

Technical Data:

Drive:	3/8"
Weight:	289 g



3/8"

Oil Filter Key Size (waf) 73mm 10 flats

KL-0122-612

Suitable for Alfa Romeo GTA.

Suitable for oil filters and oil filter housings with 10 flats and size (width across flats) 73 mm.

This oil filter key is intended for the removal and installation of the oil filter cover when replacing the oil filter cartridge.

Technical Data:

Drive:	3/8"
Weight:	270 g



3/8"

KL-0122-609

Oil Filter Key Size (waf) 84 mm with 14 flats



3/8"



Suitable for oil filters and/or oil filter housings with 14 flats and size (waf) 84 mm e.g. on Mercedes OM 642 CDI engines: C-Class (320), CLS (320), E-Class (280, 320), S-Class (320), ML (280, 320), etc.

Intended for use on oil filters with size (width across flats)Ø 84 mm with 14 flats. This oil filter key is intended for the removal and installation of the oil filter cover when replacing the oil filter cartridge.

Technical Data:

Size:	84mm, 14 flats
Drive:	3/8"
Weight:	500 g

KL-0122-611

Oil Filter Key Size (waf) 103 mm, 14 flats



3/8"

Suitable for 3,0l diesel e. g. Opel Signum (Z30DT; Y30DT) and Renault Espace (IV), VEL Satis etc.

For oil filters or oil filter housings with width across flats of 103 mm and 14 flats. This key is required to remove and install the oil filter cover when replacing the oil filter cartridge.

Technical Data:

Drive:	3/8"
Weight:	560 g

KL-0122-7

Oil Filter Key with Handle Ø76 mm 12 ribs



6

Suitable for:

- Ford with 1.8 diesel-engines and motorcraft-filter EFL 344
- Peugeot with Purflux-filter
- Renault e.g. R5, Twingo, Rapid (with C-Petrol engines); Clio, Kangoo (with E-Petrol engines); R19, Espace (III), Laguna (with F-Petrol engines); Megane, Kangoo (with K-Petrol engines and filter-No. 77 00 873 583); R21, Espace (I + II with F-Petrol engine); Trafic (with J-Petrol engine and filter-No. 77 00 720 978)
- Honda e.g. Prelude (BA4 2,0 16V), etc.
- Land Rover Defender 2,5 l Diesel (DD5) with filter-No. LPX 100 590, etc.

For Oil Filter Key with Ø 76 mm and 12 Ribs.

Allows quick and easy removal of stubborn Oil Filters.

Technical Data:

Lenght:	326 mm
Weight:	293 g

KL-0122-12

Oil Filter Key Ø 60-125 mm



3/8"



Intended for use on oil filters with Ø 60-125 mm

Allows the user to quickly and safely loosen the oil filter. Retaining segments prevent from slipping off. The ideal tool for use in very confined spaces.

Technical Data:

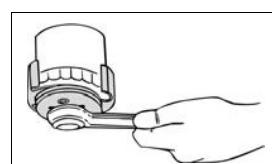
Drive:	3/8"
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KL-0122-13

Oil Filter Key Ø64 - 80 mm



3/8"



The key allows quick and safe loosening of oil filters on European vehicles. Steel jaws grip filter without the risk of slipping off. Specially designed for use in confined spaces.

Technical Data:

Clamping range:	Ø 64-80 mm
Weight:	400 g
Drive:	3/8"

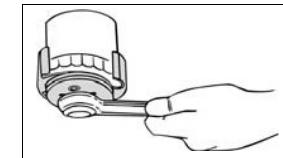
Oil Filter Key Ø80 - 98 mm

KL-0122-14

The key allows quick and safe loosening of oil filters on European vehicles. Steel jaws grip filter without the risk of slipping off. Specially designed for use in confined spaces.

Technical Data:

Clamping range:	Ø 80-98 mm
Weight:	400 g
Drive:	3/8"



3/8"

Oil Filter Key Size (waf) 22 mm

KL-0122-2

Suitable for the VW-Audi diesel engines with MANN-, Mahle- or Knecht-filter.

This tool is essential for the removal of oil filters in confined spaces.

Technical Data:

Size:	22 mm
Drive:	1/2"



1/2"



Oil Filter Key Size (waf) 36 mm

KL-0122-5

Suitable for e.g. for BMW 1 series; Mini One, Cooper, Cooper S and VW Touareg, T5 as well as Mercedes Diesel engines OM604, OM605, OM606 the BMW engines M52 (6-cyl.), M60 (8-cyl.), M70 (12 cyl), and the VW VR6 engine.

This oil filter key is intended for the removal and installation of the oil filter cover when replacing the oil filter cartridge.

Technical Data:

Drive:	3/8"
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3/8"



6

Oil Filter Key Size (waf) 32 mm

KL-0122-51

Suitable for Opel/Vauxhall e.g. on X10XE, X12XE, Y17DT, Y17DTL engines, Mercedes lorry such as OM364, OM366 engines and Skoda Superb.

This oil filter key is intended for the removal and installation of the oil filter cover when replacing the oil filter cartridge.

Technical Data:

Drive:	3/8"
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3/8"



Oil Filter Key Size (waf) 27 mm

KL-0122-52

Suitable for Mercedes e.g. A-Class (W169) and Smart.

This oil filter key is intended for the removal and installation of the oil filter cover when replacing the oil filter cartridge.

Technical Data:

Drive:	3/8"
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3/8"



KL-0122-3300 K

Set of Oil Filter Keys in Plastic Storage Case

**Universally applicable e.g. for:**

- VW-Audi e.g.: TDI - Golf (III), Passat, A4; TDI PD - A2, A3, A4, A6, TT, Lupo, Polo, Golf (IV and V), Passat, Sharan, Touareg, T4, T5;
- BMW e.g.: 1-Series (E87), 3-Series (E36, E46), 5-Series (E39, E60), 7-Series (E38, E65), Z3, Z4, X3, X5;
- Mini e.g.: Mini One, Cooper, Cooper S;
- Mercedes e.g.: A-, C-, E- and S-Class as well as Sprinter;
- Opel/Vauxhall e.g.: Agila, Astra (G and H), Corsa C, Meriva, Signum, Vectra (B and C), Zafira.

Universally suitable to most of the vehicles with paper oil filters and plastic or metal screw cap.

When installing the oil filter, the plastic or metal screw cap must be tightened to a given torque. Non-observance can lead to damage to the plastic screw cap. The new set of oil filter keys **KL-0122-3300 K** with its 6 oil filter keys, together with the torque wrench **4549 05** (accessory) offers the ideal solution to this problem.

**Scope of Delivery:****KL-0122-3300 K Set of Oil Filter Keys in plastic case**

Part No.	Description
KL-0122-301	Oil filter key 74 mm 14 flats
KL-0122-313	Oil filter key Ø96 mm 18 ribs
KL-0122-326	Oil filter key 86 mm 16 flats
KL-0122-5	Oil filter key 36 mm
KL-0122-51	Oil filter key 32 mm
KL-0122-52	Oil filter key 27 mm
KL-0122-3390	Plastic case (empty)

6

**GEDORE 4549-05****Torque Wrench TORCOFIX K**

3/8"



- Controlled screw tightening in the range of 5 - 50 Nm
- Adjustable torque wrench with square drive and integrated ratchet-head function.
- For controlled bi-directional tightening
- 3/8" interchangeable mushroom head square drive with ball-locking mechanism DIN 3120 - A 6,3, ISO 1174
- In accordance with DIN EN ISO 6789, traceable to national norms
- Lever-breaking mechanism with a castor guarantee tactile-impulse and audible actuation signals
- Actuation accuracy: +/- 3% tolerance of the scale set torque
- Robust, satin-matt chrome-plated steel tube construction with chrome-plated ratchet and high-quality plastic components.
- Double scale N·m and lbf·ft underneath a window with a magnifying-glass effect
- Additional micrometer scale with a N·m-graduation of 0.25 N·m
- Ergonomically shaped handy black plastic handle
- Handle with an indentation in the middle of the handgrip as a calibration aid

"Swivel Grip" Oil Filter Wrench**KL-0122...**

Designed to loosen oil filters.

Self-adjusting mechanism allows the stainless steel band to re-adjust itself while loosening the filter. Swivel handle can be angled up to 90°. Ideal tool for use in confined spaces.

**"Swivel Grip" Oil Filter Wrench Ø60 - 66 mm****KL-0122-801****Technical Data:**

Range:	Ø 60 – 66 mm
Weight:	310 g

"Swivel Grip" Oil Filter Wrench Ø73 - 82 mm**KL-0122-802****Technical Data:**

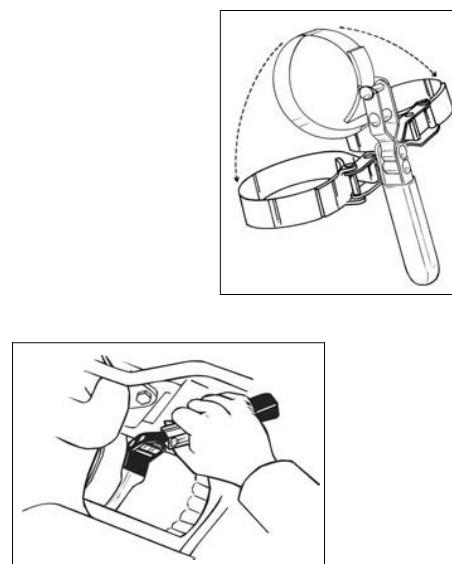
Range:	Ø 73 – 82 mm
Weight:	370 g

"Swivel Grip" Oil Filter Wrench Ø89 - 98 mm**KL-0122-803****Technical Data:**

Range:	Ø 89 – 98 mm
Weight:	370 g

"Swivel Grip" Oil Filter Wrench Ø105 - 112 mm**KL-0122-804****Technical Data:**

Range:	Ø 105 - 112 mm
Weight:	400 g

**Oil Filter Belt up to Ø152 mm****KL-0122-40****Suitable for filters featuring a diameter up to 152 mm.**

Adjusts itself infinitely to fit any oil filter up to 152 mm diameter.

Technical Data:

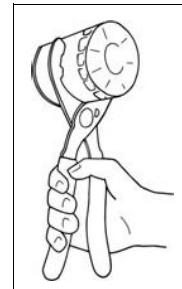
Drive:	1/2"
Weight:	280 g



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Oil Filter Pliers**KL-0122...****Suitable for HGV, tractor, etc.**

The tool features 2 adjusting steps allowing a wide operating range from 57 to 100 mm. For better handling, the jaws are angled by 20°. Hardened teeth prevent the tool from slipping off.

**Oil Filter Pliers Ø 57-100 mm****KL-0122-851****Suitable for HGV's, Tractors, etc.****Technical Data:**

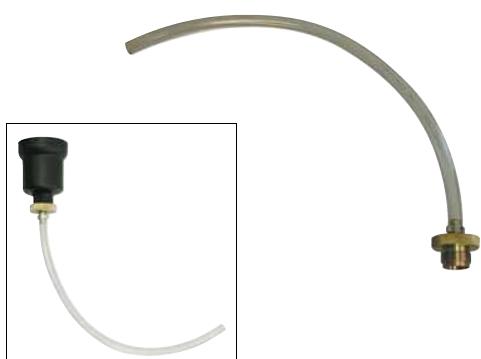
Range:	Ø 57-100 mm
Weight:	560 g

Oil Filter Pliers Ø 92-152 mm**KL-0122-852****Suitable for HGV's, Tractors, etc.****Technical Data:**

Range:	Ø 92-152 mm
Weight:	760 g

KL-0288-10

Oil Drain Adaptor for Oil Filter



Suitable for VW-Audi 1.8 L and 2.0 L engines e.g.
Audi A3 (8P1, 8PA), A4 (8EC, 8ED, 8H7, 8HE), A6 (4F2, 4F5), TT (8J3, 8J9)
Seat Altea (5P1, 5P5), Leon (1P1), Toledo (III (5P2))
Škoda Octavia (1Z3, 1Z5)

VW Eos, Golf (V (1K1, 5M1)), Jetta (III (1K2)), New Beetle (9C1, 1C1, 1Y7), Passat (3C2, 3C5), Touran (1T1, 1T2)

Engine code: AXW, BGB, BLX, BLR, BLY, BVX, BVY, BVZ, BWE

Allows the user to professionally drain the engine oil out of the oil filter housing. Then, the empty oil filter housing can be removed without any trouble. Screwing in the oil filter adaptor causes a valve in the oil filter housing to open so that the oil will be drained in a controlled way.

Technical Data:

Length of hose:	800 mm
Connecting thread:	S32x2

KL-0288-11

Oil Filler Adaptor for VW DSG Gearbox

**Suitable for VW-Audi DSG gear boxes.**

This tool is indispensable for the quick, easy and clean filling and re-filling of DSG gearboxes. The oil filler adaptor is screwed directly to the 1-Litre oil container.

The built-in shut-off valve ensures accurate filling and professional working.

Technical Data:

Hose length:	2 m
Gearbox connecting thread:	M24x1.5

KL-0231-1

Jointed Hex Nut Size (width across flats) 17 mm



Intended for use on gearbox oil control plugs on manual transmissions on VW and Audi. Also ideal for use on VW Golf II and III and Audi vehicles with automatic transmission, where the oil control plug at the gearbox is hard to access.

Technical Data:

Drive:	3/8"
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KL-0231-2

Special Socket Insert XZN M16

**Suitable for Audi A3, A4, A6; VW Fox, Golf (IV), LT.**

This multi-teeth socket features an inner bore and is therefore the ideal tool for oil drain plugs and oil control plugs on gearboxes.

Technical Data:

Drive:	1/2"
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KL-0122-902

Oil Service Tool Size (waf) 8 mm / 10 mm (square)

**Suitable for e.g. Citroën, Renault, Peugeot etc.**

Designed to loosen and tighten the oil drain plug at the engine. Also intended for use on the control plug at the gearbox / differential.

Technical Data:

Length:	220 mm
Weight:	350 g
Socket size (outer square):	8 and 10 mm

KL-4041-3045

Special Socket Insert T45

**Suitable for Opel/Vauxhall.**

Designed to loosen and tighten oil drain plug Torx® T45.

Technical Data:

Drive:	1/2"
Length:	55 mm
Weight:	85 g

® = reg. trademark of Acument Intellectual Properties, LLC. USA

Oil Service Tool Set

KL-0122-901 K

Set of Oil Service Tools (12 pieces) in a plastic storage case for loosening and tightening the common oil drain plugs.

Technical Data:

Description	Qty.
T-Bar with 3/8" Drive	1
Drain Plug Socket-Hex 3/8"	1
Drain Plug Socket-Hex 8 mm	1
Drain Plug Socket-Hex 9 mm	1
Drain Plug Socket-Hex 10 mm	1
Drain Plug Socket-Hex 12 mm	1
Drain Plug Socket-Hex 14 mm	1
Drain Plug Socket-Hex 17 mm	1
Drain Plug Socket 5/16"	1
Drain Plug Socket 3/8"	1
Drain Plug Socket 11 mm	1
Drain Plug Socket 13 mm	1
Plastic storage case	1



Socket Insert Set "Ball head"

KL-4022-241

Extra-long design with ball head.

Ideal for loosening and tightening internal hex socket screws that sit very deep or are hard to access e.g. on the oil pan, cylinder head, engine, drive, etc.

Application examples:

- KL-4022-2405 - For oil sump bolts in VW T4 5-cylinder engines.
- KL-4022-2408 - Removal and installation of knock sensor on Audi V6 engines.

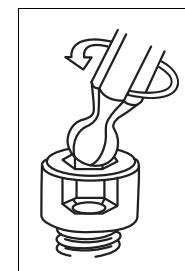
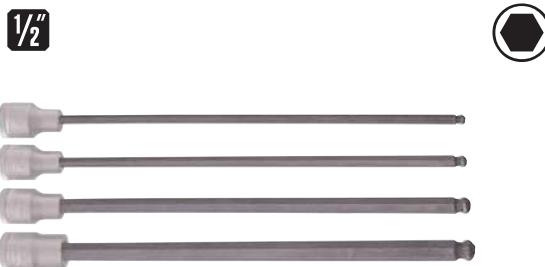
Technical Data:

Drive:	1/2"
Length:	288 mm

Scope of Delivery:

KL-4022-241 Socket Insert Set "Ball head"

Part No.	Description	Qty.
KL-4022-2405	Socket Insert, „Ball Head“, Size (width across flats) 5	1
KL-4022-2406	Socket Insert, „Ball Head“, Size (width across flats) 6	1
KL-4022-2408	Socket Insert, „Ball Head“, Size (width across flats) 8	1
KL-4022-2410	Socket Insert, „Ball Head“, Size (width across flats) 10	1



Extension, Length 600 mm

KL-0100-6

This tool is essential when performing work at the gearbox, engine and exhaust system.



Technical Data:

Drive:	1/2" to 3/8"
Length:	600 mm

KL-0132-47 K

Repair Kit for Oil Drain Thread M12x1.25

Suitable for Alfa Romeo, Fiat and Lancia 1.4I Turbo such as Alfa Romeo Mito, Giulietta; Fiat Nuova 500 Abarth, Grande Punto, Nuova Bravo and Lancia Nuova Delta.

This thread repair kit is designed to repair the oil drain plug thread (M12x1.25) at the oil sump. By means of the special tap included in the kit, the old thread is drilled out and a new thread (M14x1.5) is being recut at the same time to retain the sump screw plug.



Scope of delivery:

KL-0132-47 K Repair Kit for oil drain thread M12x1.25

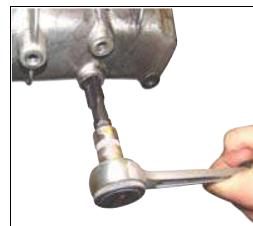
Part No.	Description	Qty.
KL-0132-4701	Special tap for M12x1.5	1
KL-0132-4702	Sump screw plug set M14 x 1.5 (5 pieces)	1
KL-0132-4703	Sealing ring set aluminium Ø14 x Ø18 x 1.5 (5 pieces)	1
KL-0132-123	Square bit-holder Size (width across flats) 10, 3/8" drive	1
KL-0132-1290	Plastic storage case	1

KL-0132-48 K

Repair Kit for Oil Drain Plug Thread M14x1.5

This repair kit is designed to repair the oil drain plug thread (M14x1.5) at the oil sump. By means of the special tap included in the kit, the old thread is drilled out and a new thread (M15x1.5) is being recut at the same time to retain the sump screw plug.

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Scope of Delivery:

KL-0132-48 K Repair Kit for oil drain thread M14x1.5

Part No.	Description	Qty.
KL-0132-481-1	Special tap M14x1.5	1
KL-0132-482	Sump screw plug set (5 pcs.)	1
KL-0132-484	Sealing ring set (5 pcs.)	1
KL-0132-123	Square bit-holder hex 10, 3/8" drive	1
KL-0132-1290	Plastic storage case	1

Repair Kit for oil drain thread M16x1.5

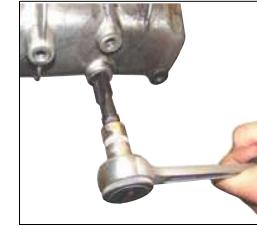
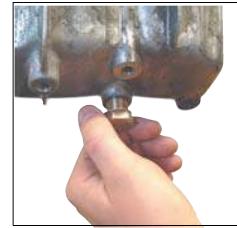
KL-0132-49 K

This repair kit is designed to repair the oil drain plug thread (M16x1.5) at the oil sump. By means of the special tap included in the kit, the old thread is drilled out and a new thread (M17x1.5) is being recut at the same time to retain the sump screw plug.

Scope of Delivery:

KL-0132-49 K Repair Kit for oil drain thread M16x1.5

Part No.	Description	Quantity
KL-0132-4901	Special tap for M16x1.5	1
KL-0132-4902	Sump screw plug set M17x1.5 (5 pieces)	1
KL-0132-4903	Sealing ring set (5 pieces)	1
KL-0132-123	Square bit holder hex 10 mm, 3/8"drive	1
KL-0132-1290	Plastic storage case	1



Thread Repair Kit

KL-0132-590 KA

Suitable for glow plug threads M10x1 and M12x1.25 as well as for oil sump plug thread M14x1.5 and M16x1.5; also suitable for injector nozzle fixing screw thread M6.

This tool set is indispensable for the quick and easy cleaning or repair of threads on aluminium cylinder heads and aluminium oil sums.

Field of application Aluminium Cylinder Head:

Glow plug thread: The dirty thread M10x1 is cleaned and recut using the thread cleaning tool.

The damaged thread is drilled out with the special drill. Then, using the special tap, a new thread with M12x1 or M14x1.25 is recut to retain the threaded inserts with an internal thread of M10x1 or M12x1.25.

Injector nozzle fixing screw thread: The threaded inserts M6 are screwed into the injector nozzle fixing screw thread that previously has been drilled to M8x1 for repair.

Field of application Aluminium Oil Sump:

With the special tap (M14x1.5 or M16x1.5) the old thread is drilled out and a new thread is being recut at the same time to retain the sump screw plug.

Scope of Delivery:

KL-0132-590 KA Thread Repair Kit

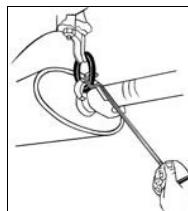
Part No.	Description	Qty.
KL-0132-583	Set of threaded sleeves M6, 20 mm long (10 units)	1
KL-0132-123	Square bit-holder 10 mm, 3/8" drive	1
KL-0132-481-1	Special tap for M14x1.5	1
KL-0132-482	Set of sump screw plugs (5 units)	1
KL-0132-484	Set of sealing rings (aluminium) Ø15 x Ø20 x 1.3 mm (5 pcs.)	1
KL-0132-4901	Special tap for M16x1.5	1
KL-0132-4902	Sump screw plug set M17x1.5 (5 units)	1
KL-0132-4903	Set of sealing rings (aluminium) Ø24 x Ø17.1 x 1.5 (5 pcs.)	1
KL-0132-501-1	Special drill for threaded inserts (M12x1.25)	1
KL-0132-502-1	Special tap for threaded inserts M12x1.25	1
KL-0132-412	Threaded inserts M12x1.25 x 11 (10 units)	1
KL-0132-511-1	Thread cleaning tool M10x1	1
KL-0132-512 A	Threaded inserts M10x1 x 10 (10 units)	1
KL-0132-513-1	Special drill for threaded inserts M10x1	1
KL-0132-514-1	Special tap for threaded inserts M10x1	1
KL-0132-5990	Plastic case	1



6

KL-0130-1

Hook Puller



Suitable for VW-Audi, Mercedes, Opel, Jap. vehicles, etc.

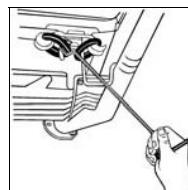
For quick and easy removal and replacement of the exhaust mounting rubbers.

Technical Data:

Hook length:	17 mm
Return angle:	110°
Tool overall length:	205 mm
Weight:	90 g

KL-0130-2

Hook Puller



Suitable for Ford, BMW, etc.

For removal and replacement of exhaust mounting rubbers.

Technical Data:

Hook length:	40 mm
Return angle:	100°
Tool overall length:	200 mm
Weight:	95 g

KL-0284-21

Exhaust Spring Compressor, short Length 145 mm



Intended for use on the exhaust steel clamps of VW Golf, Passat, etc.

For removal and replacement of steel clamps on the flange on exhaust manifolds, as built in to **VW, Audi, Seat and Škoda**.

6



Intended for use on the exhaust steel clamps of VW Transporter T4 Van.

This spring compressor is indispensable for the removal and replacement of steel clamps at the flange on exhaust manifolds, as built-in to **VW, Audi, Seat and Škoda**.

The usual tools currently available on the market require big efforts and a job time of at least 2-3 hours when it comes to the installation of these steel clamps for gear, clutch or exhaust repairs, especially on **VW T4 with 5-cylinder diesel engines**. The spring compressor **KL-0284-22** allows the user to install the steel clamp within 3 minutes.

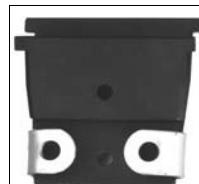
The length of the tool makes it possible to reach, expand, install and remove the steel clamps from the gearbox mountings.

Advantages:

- Substantial time savings (2 hours and more).
- High level of safety, no uncontrolled release of the steel clamps.

KL-0284-3

Wedge Set



For removal and replacement of steel clamps with and without locating hole on the flange on VW-Audi exhaust manifolds.

Technical Data:

Weight:	650 g
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Note:

Not intended for use on VW Transporter T4!

Hose Clip Pliers with Remote Operation

KL-0121-181

Suitable for VW-Audi vehicles.

With automatic locking ratchet.

This tool is meant to quickly and easily open the newly developed turbo hose clips without the risk of damage to the clip.

Without this tool it is almost impossible to open a hose clip without damaging the hose. Thanks to its remote operation it is especially suitable for positions that are hard to access such as the charge cooling-hose coupling under the battery box on VW Passat 2.0 TDI. With the aid of this tool it is not necessary to remove the battery box.

Advantage

- Universal application.
- The tool is easy to operate.
- Does not damage the hose.

Technical Data:

Weight:	650 g
Length	240 mm

Replacement Bowden Cable

KL-0121-1811



Exhaust Manifold Clamp Pliers with Locking Lever

KL-0121-171

Suitable for Citroën, Renault, Peugeot etc.

The pliers KL-0121-171 enable the easy and trouble-free opening out of exhaust manifold clamps e.g. on the silencer. The built-in locking lever ensures safe keeping open the widened exhaust manifold clamp.

Technical Data:

Weight:	600 g
Length	300 mm



6

Special Socket 17 mm hex

KL-0132-8

Particularly suitable for the Mercedes M111, for instance.

For removing and installing lambda sensors with a deep-seated hexagon.

Technical Data:

Hex:	17 mm
Drive:	1/2" -axial
Length:	100 mm
Weight:	260 g



Special Socket 22 mm hex

KL-0132-81

Particularly suitable for the Mercedes M111, for instance.

For removing and installing lambda sensors with a deep-seated hexagon.

Technical Data:

Hex:	22 mm
Drive:	1/2" -axial
Length:	110 mm
Weight:	300 g



Socket 22mm Hex

KL-0132-84

Suitable for Ford Fiesta VI (models up from 07/2008) 1.25 Zetec S DOHC EFI; 1.4 Zetec DOHC EFI and 1.6 Zetec DOHC EFI engines.

This tool is required for the quick and trouble-free removal and replacement of Lambda sensors. Due to its special design, this socket is particularly suitable for Lambda sensors with a very deeply seated hexagon or fitted with a heat shield.

Technical Data:

Hex.	22 mm
Drive:	1/2"
Length:	110 mm

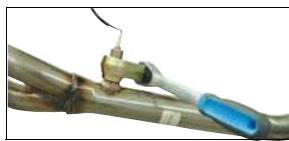


KL-0132-2

Angled Socket 22 mm hex



1/2"



Indispensable tool for the easy removal and replacement of Lambda sensors that are hard to reach.

Technical Data:

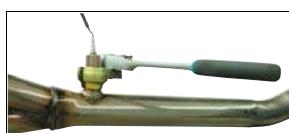
Hex.	22 mm
Drive:	1/2" -axial
Length:	35 mm
Weight:	328 g

KL-0132-6

Angular Socket 22 mm hex



1/2"



Suitable for VW-Audi, BMW, Mercedes, Ford, Opel/Vauxhall, Peugeot, Citroën, Renault, Seat, Skoda, Japanese cars, etc

For easy removal and replacement of hard-to-reach Lambda sensors.

Technical Data:

Hex:	22 mm
Drive:	1/2" -axial
Length:	110 mm
Weight:	234 g

KL-0132-7

Angular Socket Size 22 mm



1/2"



For easy removal and replacement of hard-to-reach Lambda sensors.

Technische Daten:

Size (width across flats):	22 mm
Drive:	1/2" -radial and 90 degrees radial shift
Length:	35mm
Weight:	328 g

KL-0132-82 A

Angled Socket Wrench 22 mm



This tool is designed for the quick and easy removal and replacement of Lambda sensors that are hard to access, e.g. when the Lambda sensor is located directly in front of the splashboard.

The pivot head features a hexagonal socket on one side and a bihexagonal socket on the other side.

Technical Data:

Hex (hexagonal / bihexagonal):	22 mm
Length	280 mm
Weight	480 g

KL-0132-12 K

Lambda Tool Kit



Suitable for Lambda sensor threads M18x1.5.

If damage occurs to the thread of the exhaust manifold when replacing the Lambda Probe, this thread can be recut with the Thread Tap **KL-0132-120-1** applicable for M18x1.5 threads. If this is not possible, the damaged thread can be drilled out with the Special Thread Tap **KL-0132-121-1** and a new thread M20x1.5 can be recut at the same time, to retain the Threaded Inserts **KL-0132-122** with an internal thread of M18x1.5.

Technical Data:

Lambda-Probe Thread:	149 x 123 x 32 mm
Weight:	498 g

Scope of Delivery:

KL-0132-12 Lambda Tool Kit

Part No.	Description	Qty.
KL-0132-120-1	Thread Tap M18x1.5	1
KL-0132-121-1	Special Thread Tap M20x1.5 to M18x1.5	1
KL-0132-122	Threaded Inserts M20x1.5 to M18x1.5 (10 pcs.)	1
KL-0132-123	Square Bit Holder Hex 10mm, 3/8" drive	1
KL-0132-1290	Plastic case	1

Chain Pipe Cutter

KL-0131-5

Universal.

Allows the professional cutting of exhaust pipes up to a diameter of 85 mm at only 90° rotation.

Big cutting wheels with a Ø of 19 mm enable trouble-free separation of even corroded exhaust pipes up to a thickness of 3.0 mm.

**Technical Data:**

Weight:	490 g
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Replacement Chain

KL-0131-5001



Chain Pipe Cutter

KL-0131-51

Allows quick and clean cutting of exhaust pipes up to a thickness of 2,5 mm and a diameter of 70 mm.

Also applicable for V2A-steel.

This tool allows easy handling during use and the thumb screw allows adjustment while cutting.

**Technical Data:**

Length:	250 mm
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Note: The addition of another chain allows the cutter to be used on pipes with larger diameters.

Replacement Chain

KL-0131-5101

**Techncial Data:**

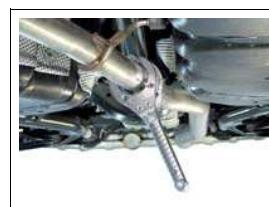
Length:	270 mm
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Ratchet Pipe Cutter niro CODE 1600885

GEDORE 224021

Body in zinc-plated pressure-cast aluminium, for pipes 35 - 66 mm Ø, cutting wheel made from high-alloy stainless steel, especially for cutting stainless steel pipes with high service life. Easy handling via ratchet feed with automatic infeed of the cutting wheel with every rotation, even in confined spaces.

**Technical Data:**

Length:	275 mm
Weight:	580 g

Replacement Cutting Wheel

224213

Stud Tool 3/8 "

(Universal)

KL-0181-1

Universal tool, infinitely adjustable.

For studs with diameter 6 - 12 mm.

Advantages:

- Infinitely adjustable.
- Operates in the most confined space.
- Ideal also for bolts with rusted or stripped threads
- Also for bolts with undersize.

**Technical Data:**

Drive:	3/8"
Clamping range:	6 - 12 mm
Weight:	450 g

KL-0181-6

Stud Extractor and Inserting Tool Set



1/2"



For removal and replacement of threaded studs (setscrews). Right- or left-hand thread.

Technical Data:

Drive outer:	21 mm
Drive inner:	1/2"
Weight:	1.15 kg

Scope of Delivery:

KL-0181-6 Stud Extractor and Inserting Tool Set

Part No.	Description	Qty.
KL-0181-51	Stud Extractor and Inserting Tool for Ø 6 mm	1
KL-0181-52	Stud Extractor and Inserting Tool for Ø 7 mm	1
KL-0181-53	Stud Extractor and Inserting Tool for Ø 8 mm	1
KL-0181-54	Stud Extractor and Inserting Tool for Ø 10 mm	1
KL-0181-55	Stud Extractor and Inserting Tool for Ø 12 mm	1
KL-4940-1004	Plastic case	1

KL-0181-72 K

Screw Extractor Set (Turbo Nuts)



3/8"



Used to extract screws, nuts and bolts when locating threads or hexagons are damaged.

Due to the special insert design (tapered and special left section) screws, nuts and bolts can be easily loosened and removed.

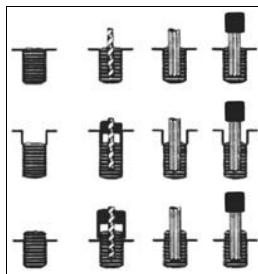
Technical Data:

Drive:	3/8"
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KL-0181-21 K

Screw Drill Set (with HSCO drills)

6



Used to remove broken screws and thread bolts with thread M5 - M16.

Procedure:

1. Open the broken bolt (or screw) by drilling (use boring bush if necessary).
2. Drive in the pin.
3. Place the nut on the pin and extract by means of a screw-wrench.

KL-0181-Serie Set of Drill-Out Pins 1/8" (5 units)

KL-0181-2112 Set of Drill-Out Pins 1/8" (5 units)

Technical Data:

Drill-Ø:	3.2 mm
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KL-0181-2122 Set of Drill-Out Pins 3/16" (5 units)

Technical Data:

Drill-Ø:	4.8 mm
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KL-0181-2132 Set of Drill-Out Pins 1/4" (5 units)

Technical Data:

Drill-Ø:	6.4 mm
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KL-0181-2142 Set of Drill-out Pins 5/16"(5 units)

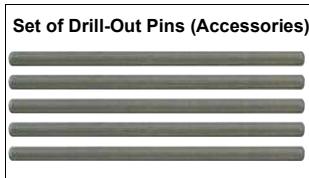
Technical Data:

Drill-Ø:	8.0 mm
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KL-0181-2152 Set of Drill-Out Pins 11/32" (5 units)

Technical Data:

Drill-Ø:	8.0 mm
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Drilling Guide Set (small)

KL-0185-1

Suitable on VW and Audi 4 and 5 cylinder water-cooled engines. (Male Thread M8).

For the accurate removal of broken manifold studs in-situ on the vehicle.

Advantages:

- Great savings in time approximately 2-3 hours because cylinder head has not to be removed.
- Accurate removal of the old stud and cutting of the new thread.
- The drilling guide avoids the risk of damage to the cylinder-head.

Technical Data:

Overall Weight:	1.6 kg
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**Drilling Guide Set (middle)**

KL-0185-2

Indispensable for the accurate drilling out of broken exhaust manifold studs directly on the vehicle. Used to pre-drill to Heli Coil threaded inserts and tap for Heli Coil insert.

Advantages:

- Great savings in time approximately 2-3 hours because cylinder head has not to be removed.
- Accurate removal of the old stud and cutting of the new thread.
- The drilling guide avoids the risk of damage to the cylinder-head.

Technical Data:

Overall Weight:	1.7 kg
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**Drilling Guide Set (big)**

KL-0185-3

Indispensable for the accurate drilling out of broken exhaust manifold studs directly on the vehicle. Used to pre-drill to Heli Coil threaded inserts and tap for Heli Coil insert.

Supplied with Heli Coil insertion tools and 25 threaded inserts (Bolt thread M8)

Advantages:

- Great savings in time approximately 2-3 hours because cylinder head has not to be removed.
- Accurate removal of the old stud and cutting of the new thread.
- The drilling guide avoids the risk of damage to the cylinder-head.

Technical Data:

Overall Weight:	2.3 kg
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**Drilling Guide Set**

(Universal)

KL-0185-5

This new universal adjustable drilling guide allows broken or sheared studs - especially on cylinder-heads or exhaust manifolds- to be quickly and accurately extracted, without the need to remove the cylinder-head. (Male Thread M8 and M10)

Advantages:

- Time savings of between 2 and 4 hours can be achieved.





++ AUTOMOTIVE TOOLS ON REQUEST:
MOBILE TOOL CABINET AND TOOL CHEST WITH MOTORCYCLE TOOL SET

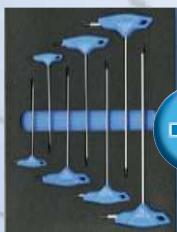
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- ▶ Ideal for service, maintenance and repair work
- ▶ Developed from everyday workshop routine
- ▶ Universal multi-use kit
- ▶ Metric and/or imperial tools
- ▶ With Check-Tool-system

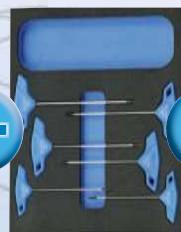
**365-PIECE
2005-2430 MOT**



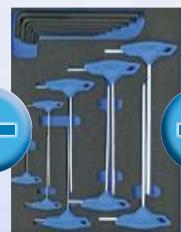
2005...



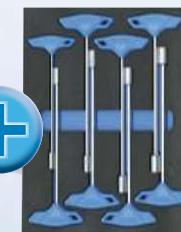
CT-43 KTX



CT-42 TX



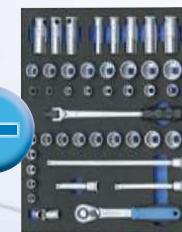
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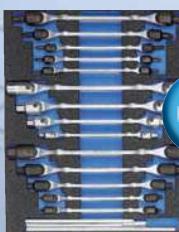
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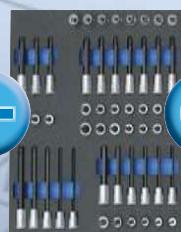
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CT-D 30



CT-TX



CT-30 TX



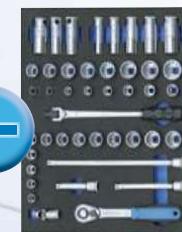
CT-D 19



CT 7-7R



CT 8000



CT 8000