

Chapter 6 overview

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Chapter 6 Overview

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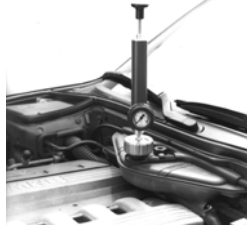
KL-0124-60



Pump directly on Cooling System



Pump indirectly on Cooling System



Contents:

KL-0124-60 Cooling System Pressure Tester (Universal)

consists of:

Part No.	Description
KL-0124-600	Pump
KL-0124-601	Flexible Tube
KL-0124-620	Adaptor No. 20 Universal Bajonet Joint Ø 60
KL-0124-621	Adaptor No.21 M48×3
KL-0124-622	Adaptor No.22 M44×3
KL-0124-624	Adaptor No.24 M52×3
KL-0124-625	Adaptor No.25 M52×4
KL-0124-626	Adaptor No.26 Jap Vehicles
KL-0124-627	Adaptor No. 27 M54×4
KL-0124-633	Adaptor No.33 S48×3
KL-0124-634	Adaptor No.34 Tr63×3
KL-0124-6090	Case empty

KL-0124-602 Pump with the Tube Adaptor



Spare Parts

- KL-0124-6009 Set for repairing the pump
- KL-0124-6001 Manometer for rubber cap

Note: More sets for HGV's see HGV Chapter-Sites.

KL-0124-60 Cooling System Pressure Tester

The Pressure Tester KL-0124-60 is made from metal. It consists of a quick clutch, a pressure relief valve and a flexible tube. This tool was developed to control the sealing of the cooling systems on vehicles. The precision manometer is protected by a rubber cap. There is a wide range of adaptors for different radiators and compensating tanks.

Advantages:

- Applicable in the long run and with a high temperature while the pump and the adaptor are made of metal (brass).
- There is also a high precision of pump and adaptor.
- A safety valve is included.
- It is possible to put the pump on the cooling system directly or otherwise to connect the pump to the cooling system with the flexible tube.

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 case:..... 2,5 kg

Other Sets for vehicles

KL-0124-714 Cooling System Pressure Tester for BMW

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 25, 25 and 29

KL-0124-716 Cooling System Pressure Tester for Peugeot/Citroën/Fiat

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20 and 22.

KL-0124-722 Cooling System Pressure Tester for Nissan/Subaru

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20 and 26.

KL-0124-726 Cooling System Pressure Tester for Ford

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20, 24, 26, 32 and 33.

KL-0124-728 Cooling System Pressure Tester for Honda

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20, 22 and 26.

KL-0124-744 Cooling System Pressure Tester for Mazda

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 24, 26 and 30.

KL-0124-746 Cooling System Pressure Tester for Mercedes

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20, 36, 37 and 38.

KL-0124-750 Cooling System Pressure Tester for Mitsubishi/Toyota

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20, 26 and 30.

KL-0124-754 Cooling System Pressure Tester for Opel

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20, 24, 26, 31 and 38.

KL-0124-758 Cooling System Pressure Tester for Porsche

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20 and 21.

KL-0124-760 Cooling System Pressure Tester for Renault

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 22 and 23.

KL-0124-762 Cooling System Pressure Tester for Rover

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20, 22, 24, 25 and 26.

KL-0124-764 Cooling System Pressure Tester for Saab

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20, 23 and 24.

KL-0124-768 Cooling System Pressure Tester for Seat

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20 and 27.

KL-0124-780 Cooling System Pressure Tester for VW / Audi

consists of: pump KL-0124-600, tube KL-0124-601 and adaptors No. 20, 21, 27, 33 and 34.

Adaptor Application List by Part No:

The Part No. of individual Adaptors is given in Column 1.

No.	Part No.	Manufacturer	Model or Type
10	KL-0124-610	MAN, Krupp	General
11	KL-0124-611	Mercedes	HGV
		Mini	Cooper
12	KL-0124-612	Ford	Australian, Explorer
13	KL-0124-613	Scania	General (e.g. 93, 113, 143)
		Volvo	HGV
14	KL-0124-614	Scania	General
16	KL-0124-616	Mercedes	Bus, Sprinter CDI
17	KL-0124-617	Scania	HGV Type 94, 114, 124, 144
18	KL-0124-618	DAF	HGV '92 and '95
19	KL-0124-619	Büssing	General
		Fendt	General
		Iveco	General
		MAN, Krupp	General
		Mercedes	HGV, Unimog
		Scania	General
20	KL-0124-620	Alfa Romeo	General
		Audi	General
		Autobianchi	General
		BMW	Old Models
		Chrysler	185 hp engines '91-onwards
		Citroën	XM, Evasion, Xantia
		DAF	General
		Daihatsu	General
		Fendt	General
		Ferrari	General
		Fiat	General
		Ford	General (e.g. Scorpio)
		Honda	General
		Isuzu	General
		Iveco	General
		Jaguar	General
		Kia	General
		Lamborghini	General
		Lancia	General
		Mercedes	Cars general
		Mercedes	Vito
		Mercedes	HGV; Bus
		Mercedes	SLK, SLC, CLK
		Mini	Cooper
		Mitsubishi	General
		Nissan	General
		Opel	Omega, '87
		Peugeot	General
		Porsche	General
		Rover	General (e.g. Mini)
		Saab	General
		Scania	General
		Seat	General
		Subaru	General
		Suzuki	General
		Toyota	General
		Triumph	General
		VW	General (e.g. Polo '96, Passat '87-'96, T4, Transporter '89 -onwards)
21	KL-0124-621	Audi	General (e.g. A4 up to '96)
		Porsche	Boxster
		VW	Golf II
22	KL-0124-622	Alfa Romeo	General
		Chrysler	171 hp engine '89,
		Dacia	Logan
		Renault	General (e.g. Safrane, Laguna)
		Citroën	General
		Peugeot	General (e.g. 206, 307, 407)
		Fiat	General
		Honda	Concerto

No.	Part No.	Manufacturer	Model or Type
22	KL-0124-622	Rover	Metro, 115, 200, 400
		Simca	Generell
23	KL-0124-623	Alfa Romeo	164
		Mini	Cooper S
		Renault	Espace
		Saab	General (e.g. 900 and 9000 up to '93)
		Volvo	General (e.g. 850, 960)
		Volvo	HGV FH 12
24	KL-0124-624	Daewoo	General
		Ford	General (e.g. Scorpio, Transit, Ka '96-onwards, Mondeo '94-onwards)
		Jaguar	XJ4 / XJ6
		Mazda	121 Header Tank
		Opel	General (e.g. Frontera)
		Rover	Metro Diesel, Range Rover
		Saab	900 '94-onwards (Opel)
		Škoda	General
		BMW	E90
25	KL-0124-625	BMW	Models with header tanks (e.g. 3-series, 5-series and 7-series, 524 Turbo Diesel, E36, E46, E39, E65, E38)
		Rover	Models from 2,5 l Diesel engines
26	KL-0124-626	Daihatsu	General
		Ford	Probe, Maverick
		Honda	General, Accord, Civic, Legend, Accord '92- onwards, Civic Coupe '93-onwards
		Hyundai	General
		Isuzu	General
		Kia	General
		MAN, Krupp	General
		Mazda	General
		Mitsubishi	General (e.g. Sigma)
		Nissan	General (e.g. Galant, Terrano '96-onwards)
		Opel	Monterey (jap. Vehicles)
		Rover	600
		Subaru	General (e.g. Justy)
		Suzuki	General
		Toyota	General (e.g. Celica, Camry '96-onwards)
		VW	Taro
27	KL-0124-627	Seat	General (e.g. Arosa)
		VW	Golf II, Golf III '93-onwards, Lupo, T4 '99
28	KL-0124-628	MAN, Krupp	HGV F90-F2000
		Mercedes	HGV [heavy Class], Actros
29	KL-0124-629	BMW	BMW E30, E36, E38, E39, E46, E65
30	KL-0124-630	Mazda	121
		Mitsubishi	Space Wagon, Pajero
		Toyota	Celica, Starlett, Corolla
31	KL-0124-631	Opel	Omega, B-Series '96, Vectra A
		Scania	General
32	KL-0124-632	Ford	Scorpio from '95, Transi '95-onwards
33	KL-0124-633	Ford	Galaxy
		VW	Sharan
34	KL-0124-634	Audi	A3, A4, A6 '97-onwards, TT
		Škoda	Oktavia, Superb
		VW	Passat '97-onwards, Golf IV / V, Bora, T5
35	KL-0124-635	Volvo	HGV FH 12
36	KL-0124-636	Mercedes	W210 [E-Class]
37	KL-0124-637	Mercedes	A-Class
38	KL-0124-638	Mercedes	M-Class
		Opel	Sintra '97
39	KL-0124-639	Renault	HGV Midliner
40	KL-0124-640	Renault	HGV Premium, HGV Magnum

Adaptor Application List by Vehicle Type

The part No. of the appropriate Adaptor is given in Column 4.

Make	Model or Type	Part No.	No.
Alfa Romeo	General	KL-0124-620	20
	General	KL-0124-622	22
	164	KL-0124-623	23
Audi	General	KL-0124-620	20
	General (e.g. A4 up to '96	KL-0124-621	21
	A3, A4, A6 '97 -onwards, TT)	KL-0124-634	34
Autobianchi	General	KL-0124-620	20
BMW	Old Models	KL-0124-620	20
	E90	KL-0124-624	24
	Models with Header Tanks (e.g. 3, 5 and 7 Series, 524 Turbo diesel, E36, E46, E39, E65, E38)	KL-0124-625	25
	3 Series, BMW E30, E36, E38, E39 E46, E65	KL-0124-629	29
Büssing	General	KL-0124-619	19
Chrysler	185 hp engines '91 -onwards	KL-0124-620	20
	171 hp engines '89 -onwards	KL-0124-622	22
Citroën	XM, Evasion, Xantia	KL-0124-620	20
	General	KL-0124-622	22
Dacia	Logan	KL-0124-622	22
Daewoo	General	KL-0124-624	24
DAF	HGV '92 and '95	KL-0124-618	18
	General	KL-0124-620	20
Daihatsu	General	KL-0124-620	20
	General	KL-0124-626	26
Fendt	General	KL-0124-619	19
Ferrari	General	KL-0124-620	20
	General	KL-0124-622	22
Fiat	General	KL-0124-620	20
	General	KL-0124-622	22
Ford	Australian, Explorer	KL-0124-612	12
	General (e.g. Scorpio)	KL-0124-620	20
	General (e.g. Scorpio, Transit, Ka from '96, Mondeo '94 -onwards)	KL-0124-624	24
	Probe, Maverick	KL-0124-626	26
	Scorpio '95-onwards, Transit '95-onwards	KL-0124-632	32
	Galaxy	KL-0124-633	33
Honda	General	KL-0124-620	20
	Concerto	KL-0124-622	22
	General (e.g. Accord, Civic, Legend, Accord '92-onwards, Civic Coupé '93-onwards)	KL-0124-626	26
Hyundai	General	KL-0124-626	26
Isuzu	General	KL-0124-620	20
	General	KL-0124-626	26
Iveco	General	KL-0124-619	19
	General	KL-0124-620	20
Jaguar	General	KL-0124-620	20
	XJ4 / XJ6	KL-0124-624	24
Kia	General	KL-0124-620	20
	General	KL-0124-626	26
Lamborghini	General	KL-0124-620	20
Lancia	General	KL-0124-620	20
MAN, Krupp	General	KL-0124-610	10
	General	KL-0124-619	19
	General	KL-0124-626	26
	HGV F90-F2000	KL-0124-628	28
Mazda	121 with header tank	KL-0124-624	24
	General	KL-0124-626	26
	121	KL-0124-630	30
Mercedes	HGV	KL-0124-611	11
	Bus, Sprinter CDI	KL-0124-616	16
	HGV, Unimog	KL-0124-619	19
	Cars general, Vito	KL-0124-620	20
	HGV, Bus	KL-0124-620	20
	SLK, SLC, CLK	KL-0124-620	20

Make	Model or Type	Part No.	No.
Mercedes	HGV [heavy class], Actros	KL-0124-628	28
	W210 [E-class]	KL-0124-636	36
	A-Class	KL-0124-637	37
	M-Class	KL-0124-638	38
Mini	Cooper	KL-0124-611	11
	Cooper	KL-0124-620	20
	Cooper S	KL-0124-623	23
Mitsubishi	General	KL-0124-620	20
	General (e.g. Sigma)	KL-0124-626	26
	Space Wagon, Pajero	KL-0124-630	30
Nissan	General	KL-0124-620	20
	General (e.g. Galant, Terrano '96 -onwards)	KL-0124-626	26
Opel	Omega, '87	KL-0124-620	20
	General (e.g. Frontera)	KL-0124-624	24
	Monterey [jap. Vehicles]	KL-0124-626	26
	Omega, B-Series '96, Vectra A	KL-0124-631	31
	Sintra '97	KL-0124-638	38
Peugeot	General	KL-0124-620	20
	General (e.g. 206, 307, 407)	KL-0124-622	22
Porsche	General	KL-0124-620	20
	Boxster	KL-0124-621	21
Renault	General (e.g. Safrane, Laguna)	KL-0124-622	22
	Espace	KL-0124-623	23
	HGV Midliner	KL-0124-639	39
	HGV Premium, HGV Magnum	KL-0124-640	40
Rover	General (e.g. Mini)	KL-0124-620	20
	Metro, 115, 200, 400	KL-0124-622	22
	Metro Diesel, Range Rover	KL-0124-624	24
	Models from 2,5 l diesel engines	KL-0124-625	25
	600	KL-0124-626	26
Saab	General	KL-0124-620	20
	General (e.g. 900 and 9000 up to '93)	KL-0124-623	23
	900 '94 -onwards [Opel]	KL-0124-624	24
Scania	General (e.g. 93, 113, 143)	KL-0124-613	13
	General	KL-0124-614	14
	HGV Type 94, 114, 124, 144	KL-0124-617	17
	General	KL-0124-619	19
	General	KL-0124-620	20
	General	KL-0124-631	31
Seat	General	KL-0124-620	20
	General (e.g. Arosa)	KL-0124-627	27
Simca	General	KL-0124-622	22
Škoda	General	KL-0124-624	24
	Oktavia, Superb	KL-0124-634	34
Subaru	General	KL-0124-620	20
	General (e.g. Justy)	KL-0124-626	26
Suzuki	General	KL-0124-620	20
	General	KL-0124-626	26
Toyota	General	KL-0124-620	20
	General (e.g. Celica, Camry '96 -onwards)	KL-0124-626	26
	Celica, Starlett, Corolla	KL-0124-630	30
Triumph	General	KL-0124-620	20
Volvo	HGV	KL-0124-613	13
	General (e.g. 850, 960)	KL-0124-623	23
	HGV FH 12	KL-0124-623	23
	HGV FH 12	KL-0124-635	35
VW	General (e.g. Polo '96, Passat '87-'96, T4 '99, Transporter '89 -onwards)	KL-0124-620	20
	Golf II	KL-0124-621	21
	Taro	KL-0124-626	26
	Golf II, Golf III '93 -onwards	KL-0124-627	27
	Lupo	KL-0124-633	33
	Sharan	KL-0124-633	33
Passat '97-onwards Golf IV / V, Bora, T5	KL-0124-634	34	

KL-0123-9029



Opel/Vauxhall



KL-0123-9029 Socket wrench insert 29 mm

For removing or installing almost all types of thermostat with plug or *non-detachable* cable. Drive: 1/2"□

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

KL-0284-8



VW-Audi



KL-0284-8 Reaction Wrench

For locking the pulley on the water-pump on **VW Polo, Golf, Passat and Audi 80/A4**. Length: 250 mm

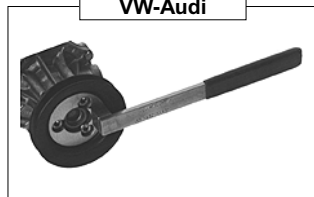
Advantages:

- The 1/2" □ drive in the tools handle enables an extension of the tool by e.g. a ratchet.
- Easy loosening of stubborn bolts on the water-pump pulley.

KL-0284-11



VW-Audi



KL-0284-11 Reaction Wrench

For locking of deep-drawn water-pump pulleys on **VW and Audi** engines, as they are used when e.g. an air conditioning is also built in. Length: 298 mm

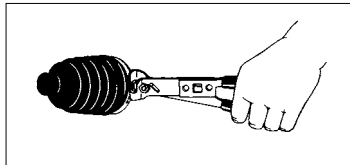
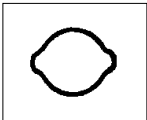
Advantages:

- Safe locking of the water-pump pulley.
- Easy loosening of stubborn bolts on the water-pump pulley.

Technical Data:

Part No.	KL-0284-8	KL-0284-11
Overall length	250 mm	300 mm
Width	80 mm	65 mm
Height	8 mm	40 mm
Weight	450 g	450 g
Drive	1/2"□ or by hand	by hand

KL-0121-90



KL-0121-90 Hose Band Pliers

For tightening of clamps (system OETIKER) on cv boots, water and fuel hoses.

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

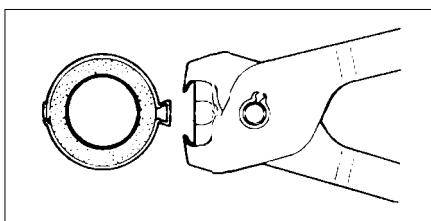
Advantages:

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

Length: 240 mm

Weight: 492 g

KL-0121-93



KL-0121-93 Hose Band Pliers

With Power Transmission an 2 Working-Stages.

For tightening of clamps (system OETIKER) on cv boots, water and fuel hoses. With toggle joint.

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

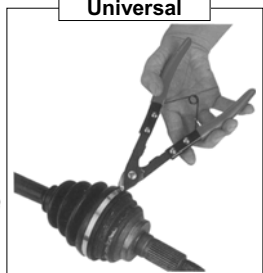
Length: 280 mm

Weight: 475 g

KL-0121-83



Universal



KL-0121-83 Hose Band Cutter straight

To open or cut "earless" Clamp-Bands on CV-Joints, Drive-Shafts, Radiator Hoses, Fuel-lines, etc.

Universal application.

Length: 220 mm

Weight: 340 g

KL-0121-84 Hose Band Cutter angled (not ill.)

As KL-0121-83.

But with angled head for inaccessible locations.

KL-0121-22



KL-0121-23



KL-0121-24

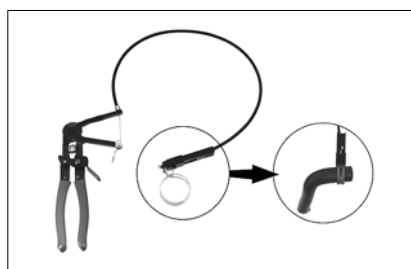


KL-0121-25



Spare Part:

KL-0121-2501



KL-0121-22, KL-0121-23, KL-0121-24, KL-0121-25 Hose Clip Pliers with locking ratchet

For replacement of hose-clips on Fuel-lines, Oil-pipes and water-hoses, which are not retained by „Jubilee“ type clips, but re-usable, self-tensioning spring-clips. Special design allows the spring hose clips to be securely gripped and safely expanded.

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

Following clips may be replaced with the Hose Clip Pliers: Norma, ABA (AWAB), MIKALOR, MUBEA from Ø 18 - 53 mm.

KL-0121-22 Hose Clip Pliers straight with ratchet

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

KL-0121-23 Hose Clip Pliers 110° off-set tips with ratchet

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

KL-0121-24 Hose Clip Pliers 90° off-set tips with ratchet

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

KL-0121-25 Hose Clip Pliers with remote operation and ratchet

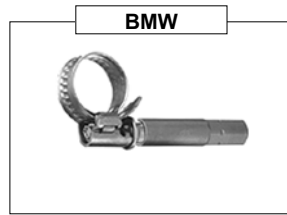
With remote operation and ratchet.

Application as KL-0121-22 - 24, but with remote control especially for difficult to reach positions.

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

KL-0121-2501 Replacement Bowden Cable

KL-0581-1



KL-0581-1 Special Socket

For **BMW** hose clamps, 2 flats, oval 5.2×6.1

Drive:.....1/4"□

For removal, replacement or tightening the safety clamp on fuel lines, the BMW fuel-lines may be tightened to prevent leakage.

KL-0121-82



6 / 7 mm
hex



KL-0121-82 Hose Clip Tool 6 / 7 mm hex

Quick and easy loosening and tightening worm-drive hose clips with 6 mm and 7 mm hex drives - e.g. on fuel-lines, oil-coolers, radiator-hoses and heater-hoses. Inaccessible hose-clips easily handled due to long, flexible Shaft.

Technical Data:

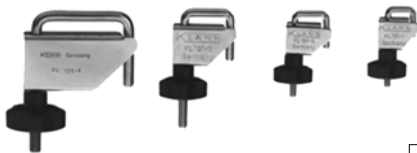
Length Overall : 325 mm

Length Shaft : 205 mm

Drives : 6 / 7 mm hex

Weight : 160 g

KL-0121-20



KL-0121-20 Hose Clamp Set (4 Pcs.)

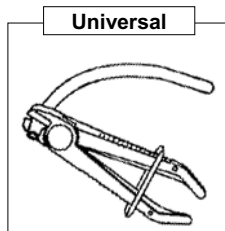
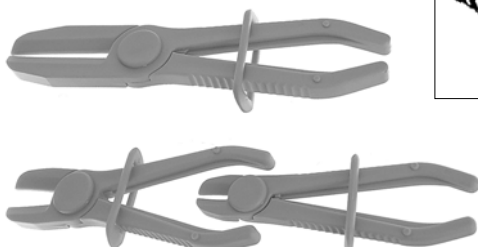
To clamp hoses during repairs.

For fuel-, brake- and water-lines

consists of:

Part No.	Description
KL-0121-1	Hose Clamp for up to 10 mm line diameter
KL-0121-2	Hose Clamp for up to 15 mm line diameter
KL-0121-3	Hose Clamp for up to 24 mm line diameter
KL-0121-4	Hose Clamp for up to 45 mm line diameter

KL-0121-50



KL-0121-10 Hose Clamp Set (3 Pcs.)

As **KL-0121-20**, however

consists of:

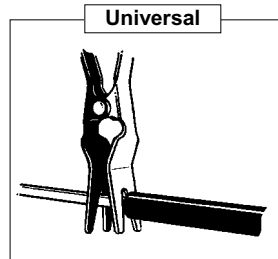
Part No.	Description
KL-0121-1	Hose Clamp for up to 10 mm line diameter
KL-0121-2	Hose Clamp for up to 15 mm line diameter
KL-0121-3	Hose Clamp for up to 24 mm line diameter

KL-0121-50 Hose Clamp Set (3 Pcs.)

Made of plastic. For clamping hoses such as: Radiator hoses, Heater hoses, Fuel hoses, etc. with Ø up to 60 mm.

Weight:..... 300 g

KL-0121-70



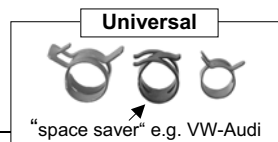
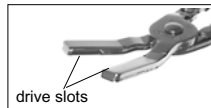
KL-0121-70 Hose Removal Pliers

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.

Length:.....200 mm
Weight:227 g

KL-0121-26



KL-0121-26 Hose Clip Pliers with locking ratchet

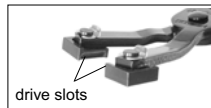
(German Utility Model)

For 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 ensures that the compressed clips are safely and securely retained.

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.

Following makes of Hose Clips require these Pliers: Norma, ABA (AWAB), MIKALOR and MUBEA etc.

KL-0121-27



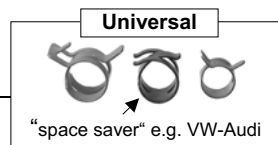
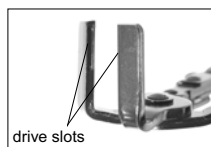
KL-0121-27 Hose Clip Pliers with locking ratchet

(German Utility Model)

As KL-0121-26.
but with pivoting tips.

Due to the pivoting tips, the compression forces are always parallel to the ears of the hose-clips offering increased security.

KL-0121-28

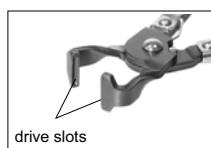


KL-0121-28 Hose Clip Pliers with locking ratchet angled

(German Utility Model)

As KL-0121-26.
Version angled at 90° and has offset drive slots at the sides.

KL-0121-29



KL-0121-29 Hose Clip Pliers

(German Utility Model)

As KL-0121-26.
Version with vertically mounted drive slots, without locking lever.

KL-0121-36



KL-0121-36 Set of Release Clips

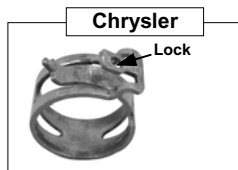
Application: Chrysler, Ford, GM, Opel/Vauxhall, Saab, VW etc.

The set of release-clips **KL-0121-36** consists of six sizes of nylon-clips for unlocking of CLIC-hose-clips on air-conditioning systems and fuel lines.

The various sizes of Connectors are released from their end face.

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").

KL-0121-19



KL-0121-19 Hose Clip Pliers

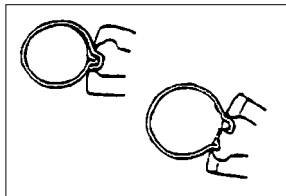
For opening and closing hose clips with a lock in the open position.

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.

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

KL-0121-94



KL-0121-94 Hose Clip Pliers

For CLIC-clips

For releasing and re-fitting reusable hose clips, types CLIC and CLIC-R (Caillau/Serflex).

Application: Audi, Citroën, Fiat, Mercedes, Opel/Vauxhall, Peugeot, Renault, VW etc.

Weight: 270 g

KL-0121-91



KL-0121-91 / -92 Hose Clip Pliers

For releasing and re-fitting the re-usable hose clips types CLIC and CLIC-R (Caillau/Serflex).

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

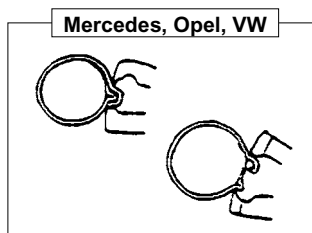
KL-0121-91 - for left hand jaws.

KL-0121-92 - for right hand jaws.

Technical Data:

Part No.	KL-0121-91	KL-0121-92
Length	170 mm	170 mm
Weight	160 g	160 g

KL-0121-92



KL-0121-340

KL-0121-32



Peugeot, Renault

KL-0121-33



KL-0121-34



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

Pliers to open connectors on fuel-lines.

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.

Contents:

KL-0121-32 Pliers for Fuel-lines Ø8

KL-0121-33 Pliers for Fuel-lines Ø10

KL-0121-34 Pliers for Fuel-lines GM-Opel/Vauxhall

KL-0121-35 Clamp

Applications: 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:

Part No.	KL-0121-32	KL-0121-33	KL-0121-34	KL-0121-35
Fuel Line-Ø	8 mm	10 mm	GM-Opel	universal
Length	110 mm	110 mm	115 mm	124 mm
Weight	75 g	75 g	70 g	45 g

KL-0121-35



Opel



KL-0121-37



Fiat, GM



KL-0121-37 Fuel Feed Pipe Pliers

Application: Opel/Vauxhall, Fiat, GM, VW etc.

For undoing quick release connections on fuel feed pipe lines.

Weight: 190 g

KL-0192-22



VW-Audi, Mercedes



KL-0192-22 Safety Clip Pliers bended

Suitable for all Audi A3, VW Golf IV 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.

Length:..... 210 mm

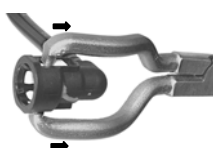
Weight: 200 g

KL-0121-38

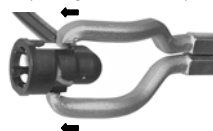


Mercedes

Removal of Connector
(opening the line)



Replacing the Connector
(locking the connector)



KL-0121-38 Fuel Line Pliers

Suitable for VW-Audi, Fiat, GM, Opel, Mercedes etc. e.g. Mercedes M-Class with Petrol engines.

For removal and replacement of the connections on the in-line Fuel Filter. Required when replacing the Fuel Filter or during engine repairs.

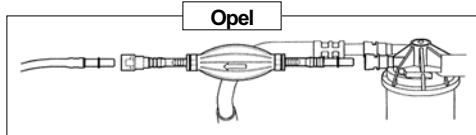
Removal of Connector:

Pull the connector backwards with the Pliers.

Replacing the Connector:

Slide the connector forwards with the Pliers.

KL-0482-42

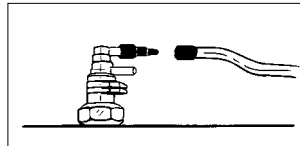


KL-0482-42 Diesel suction pump

Suitable for 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, for example if it has been opened for fuel filter renewal or engine repair work.

KL-0121-75

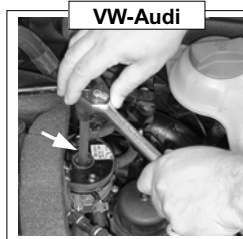


KL-0121-75 Vacuum Hose Cap Set

Identifies Vacuum Hoses and Fittings for Proper Installation. Use when 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).

Weight:..... 200 g

KL-4021-3113



KL-4021-3113 Socket Insert 13 mm hex

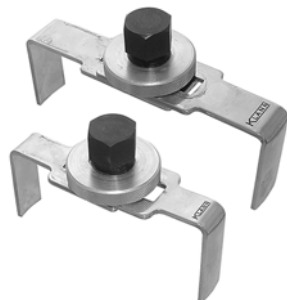
Suitable for: **VW-Audi, Seat, Škoda 4 Cylinder TDI PD engines**

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

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

KL-0120-80



KL-0120-80 Fuel Tank Sender Spanner Set adjustable

Universal application.

For removing and replacing the Plastic Retaining Ring on the Sender Unit on Fuel Tanks.

Consists of:

KL-0120-801 Tank Sender Spanner Ø80 mm - Ø120 mm

Range:..... 80 - 120 mm Drive:..... Hex 24

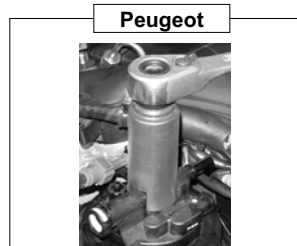
KL-0120-802 Tank Sender Spanner Ø110 mm - Ø170 mm

Range:..... 110 - 170 mm Drive:..... Hex 24

KL-0122-56



1/2"



KL-0122-56 Fuel Filter Key 27 mm

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

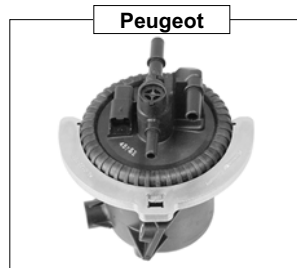
The fuel filter key is required to remove and install the fuel filter cap when replacing the fuel filter cartridge.

Drive:..1/2" Length:..85 mm Socket size:..27 mm

KL-0122-701



3/8"



KL-0122-701 Fuel Filter Key Ø 108 mm (German Utility Model)

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

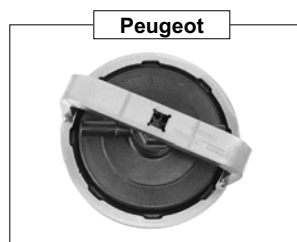
The fuel filter key is required to remove and install the fuel filter cap when replacing the fuel filter cartridge.

Drive:..... 3/8" Profile:Ø 108 mm, 46 Rillen

KL-0122-608



3/8"



KL-0122-608 Fuel Filter Key Ø 109 mm

Suitable for Peugeot, Citroen, Renault etc.

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

Drive:..... 3/8" Profile:Ø 109 mm, 8 Rillen

KL-0124-4



KL-0124-4 Pressure- and Vacuum-Pump

With plastic storage case for checking of pressure and vacuum lines.

Recommended from following manufacturers:

VW-Audi, Porsche, Chrysler, Daihatsu, Nissan, Toyota, Peugeot, Citroën, Renault, etc.

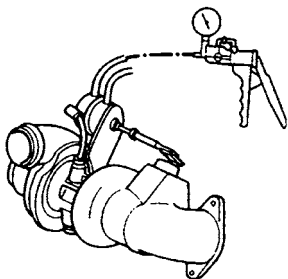
Also applicable for:

BMW, Mercedes, GM Opel/Vauxhall, Rover, Saab, Volvo, etc.

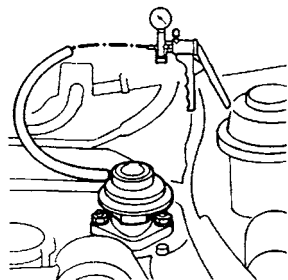
Following units can be tested with the pressure/ vacuum pump:

- Fuel-system,
- Distributor vacuum adjustment curve,
- Distributor vacuum membrane,
- Vacuum sensor,
- Exhaust gas recirculation valve,
- Cleavage measure at carburetor throttle valve,
- Float needle on carburetor,
- Fuel pressure regulator,
- Vacuum modulator on automatic transmission,
- Brake booster,
- Turbo charger valves,
- Fuel pump membrane,
- Removal of small fluid quantities, e.g. hydraulic oil, fuel, etc.

Controlling the Turbo Charger Valve



Controlling the EGR-Valve



Technical Data:

- KL-0124-4000 Two-way metalastic pump
- Vacuum range von 0 - 1,0 bar
- Pressure range von 0 - 1,5 bar
- Scale Pressure gauge
- Weight 1,4 kg
- Package in Plastic Storage Case

KL-0124-4 consists of:

Pos.	Part No.	Description
1	KL-0124-4000	Press/Vacuum pump
2	KL-0124-3001	Connecting Hose
3	KL-0124-4001	Adaptors for brake system
4	KL-0124-4002	Adaptors for engine
5	KL-0124-4003	Adaptor for economizer valve on Ford
6	KL-0124-4004	Container
7	KL-0124-4005	Cover for Container
-	-	Plastic Storage Case

Accessory:

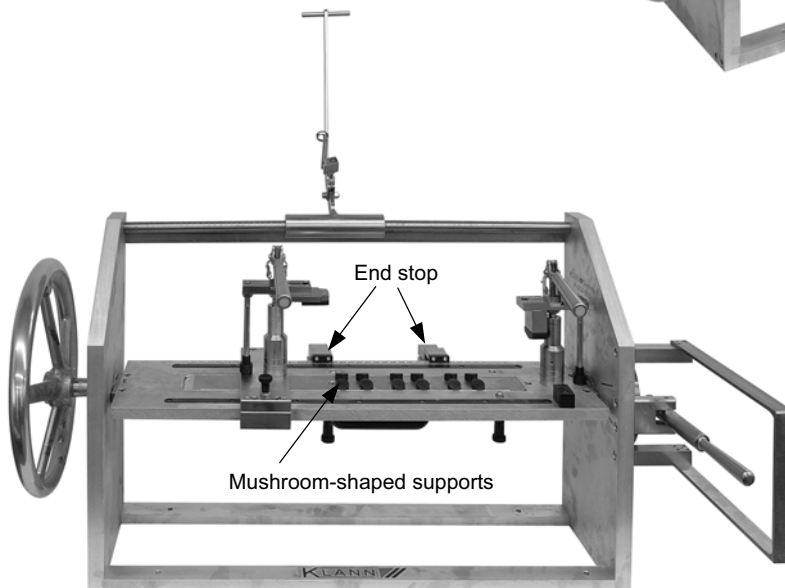
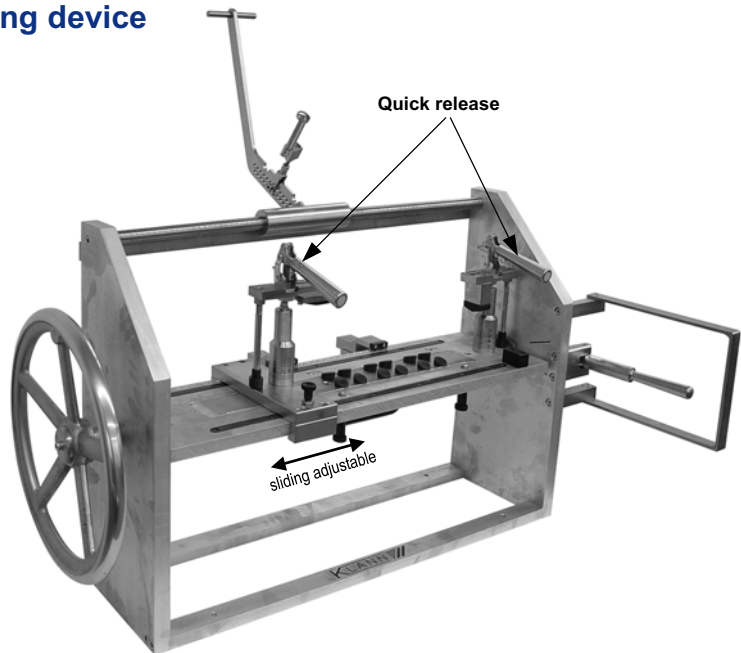
Part No.	Description
KL-0124-3010	Press/Vacuum Repair Kit
KL-0124-3002	Thermometer
KL-0124-3003	Adaptor



Cylinder head assembly and dismantling device

The cylinder head is fixed to the device through quick releases.

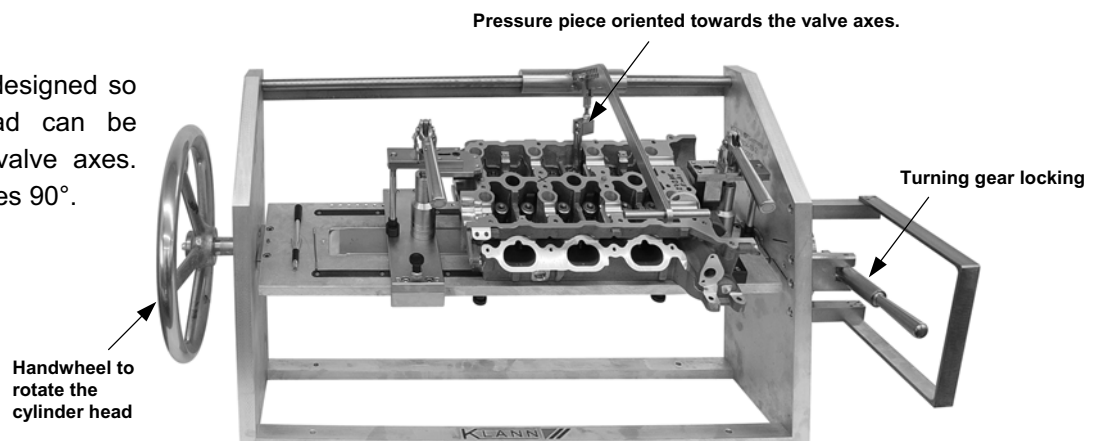
In order to fix different cylinder heads e.g. 4, 5 to 6 cylinder engines, one of the two quick releases is placed on a sliding table.



As valve support a replaceable slide in panel provided with mushroom-shaped supports especially suitable for the valve discs has been inserted in the base plate.

6

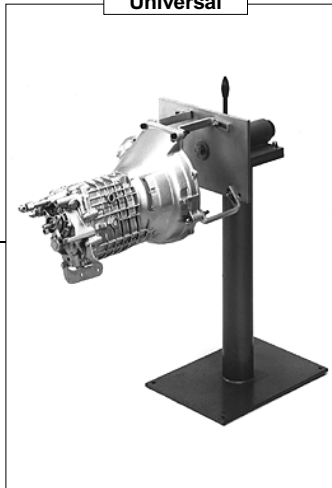
The device has been designed so that the cylinder head can be oriented towards the valve axes. The cylinder head rotates 90°.



KL-0061-1



Universal



KL-0062



KL-0061 Swivel Mounting (not ill.)

Without Support Shaft

To fix on Repair stand **KL-0062**.

Weight: 12,6 kg

KL-0061-1 Swivel Mounting \varnothing 60 mm

With Support Shaft \varnothing 60 mm.

To fix on Repair stand **KL-0062**.

Weight: 19,6 kg

KL-0062 Repair Stand

To support **KL-0061** or **KL-0061-1**.

Upper Plate: 260 x 180 mm

Height: 820 mm

Lower Plate: 350 x 500 mm

Weight: 33 kg

KL-0063 Repair Stand Complete

consists of:

Part No.	Description
KL-0061	Swivel Mounting
KL-0062	Repair Stand

To support **KL-0060** and **KL-0066**. The Stand can also be used with the Matra engine and gearbox holder.

Weight: 45 kg

KL-0063



KL-0060



KL-0060 Cylinder Head Overhaul Kit

Suitable for most vehicles. The pressure piece **KL-0125-1015** is part of the tool **KL-0060**. Further pressure pieces see next page.

To use with **KL-0063**.

Weight: 58,2 kg

KL-0064 Cylinder Head Overhaul Stand

consists of:

Part No.	Description
KL-0061	Swivel Mounting
KL-0062	Repair Stand
KL-0060	Cylinder Head Overhaul Kit

Applications:

- For dismounting/mounting of camshaft and valves.
- For cleaning of cylinder head including combustion chamber, inlet and outlet channels from oil-carbon deposits.
- For checking lubrication holes for oil passage.
- For inspecting of cylinder head with straight edge for warping (**KL-0140-60** or **KL-0140-61**).
- For checking of valve guides and springs.
- For refacing and grinding of valve seats.
- For testing of valves for tightness.

Weight: 103 kg

KL-0064



Universal



KL-0066



KL-0066 Holding Fixture

For engines/transmissions.

To use with **KL-0063**.

Weight: 19 kg

KL-0067



KL-0067 Engine And Gearbox Stand

consists of:

Part No.	Description
KL-0061	Swivel Mounting
KL-0062	Repair Stand
KL-0066	Holding Fixture

Load max.: 500 kg

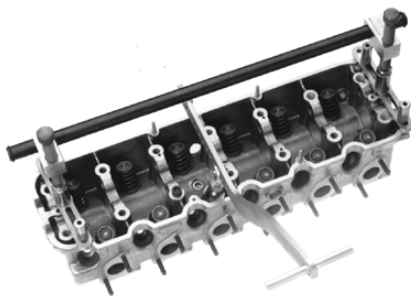
Weight: 64 kg

Note: Before use, the Engine and Gearbox Stands have to be fixed onto the ground.

KL-0125-1 A



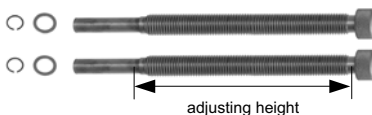
Installation example BMW, Mercedes, Opel, etc.



Installation example VW-Audi, Ford, Peugeot, Volvo, etc.



Accessory: KL-0125-102



Special Pressure Piece BMW (KL-0125-1032)



KL-0125-1 A Universal Valve-Spring Compressor Tool

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:

- Increased job time saving due to the possibility of repairing the valve-stem oil-seals with still assembled cylinder head.
- 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**.

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 and 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

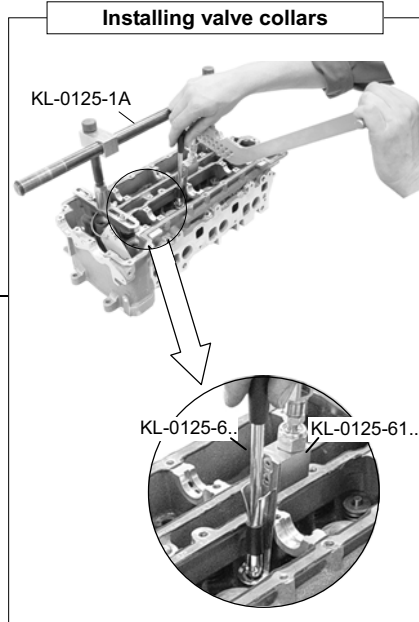
Note: The universal valve-spring compressor tool **KL-0125-1 A** is the same as the previous **KL-0125-1** valve-spring compressor tool, but with lengthened adjusting spindles that now have an adjusting height of 190 mm. (Adjusting height **KL-0125-1** = 110mm).

Accessory for KL-0125-1:

KL-0125-102 Adjusting spindles (adjusting height 190 mm)

When using the valve collar installation tools **KL-0125-601 / -602 / or -603** and the thrust block from the **KL-0125-61...** series that is also needed, the previous engine bridge **KL-0125-1** must be modified to suit the lengthened adjusting spindles **KL-0125-102**.

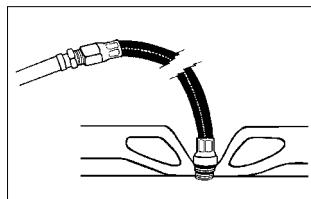
KL-0125-60



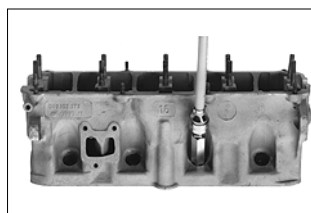
KL-0125-61..



KL-0127-20



KL-0127-1



KL-0125-60 Valve collar assembly tool set

For installing valve collars.

Re-installing valve collars 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 collar 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 collars 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.

consists of:

Part-No.:	Description	Application	Ø
KL-0125-601	Valve-Collet Assembly Tool	Opel, VW-Audi	Ø5 mm
KL-0125-602	Valve-Collet Assembly Tool	Smart, VW-Audi	Ø6 mm
KL-0125-603	Valve-Collet Assembly Tool	Mercedes	Ø7/ 8 mm

KL-0125-61..Series Press Pieces

Available Press Pieces (including fork head):

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

KL-0127-20 Compressed Air Adaptor (M14x1,25 / M18x1,5)

For connecting to Spark Plug holes.

Commonly used when valve springs or valve stem seals are replaced. Air pressure helps prevent the valve from falling into the combustion chamber. Comes with two-step fitting for both 14mm and 18mm threads. Heavy duty 12" flexible hose allows easy access to spark plug hole and air supply. Thread fitting to spark plug hole and other end of air supply.

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

KL-0127-1 Compressed Air Adaptor (M12x1,25 / M14x1,25)

For connecting to Spark Plug holes.

The Compressed Air Adaptor allows compressed air to be applied to the cylinder being repaired. This is required to hold the valves shut during replacement of the Valve-Stem Oil-Seals without removal of the cylinder-head.

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

KL-0126-205



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:

Length: 150 - 670 mm
 Magnetic-Ø: 7,5 mm
 Liftpower: 300 g
 Weight: 28 g

KL-0370-2



Mercedes

KL-0370-2 Valve Spring Compressor

For **Mercedes** engines M102 and M103 with single camshaft to change the valve seal without removing the cylinder head.

The tool does not apply to model 190 E 2.3-16!

KL-0280-1



VW-Audi, Ford



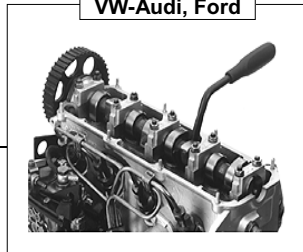
KL-0280-1 Valve Shim Pliers

For changing the valve shims while the cam followers are held depressed on **VW-Audi** engines 1.3 l and **Ford**.

KL-0280-2



VW-Audi, Ford



KL-0280-2 Valve Depressor

For bucket tappets of **VW Golf, Jetta, Caddy, Scirocco, Passat, Santana, Audi 80/100** up to 1982 in conjunction with tool **KL-0280-1**.

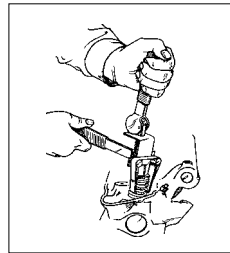
KL-0280-3



KL-0280-3 Valve Depressor

Necessary for adjusting the valve clearance on **VW-Audi** 4-cylinder engines from 1983 and all 5 and 6 cylinder engines with bucket tappets in conjunction with shim pliers **KL-0280-1**.

KL-0125-80



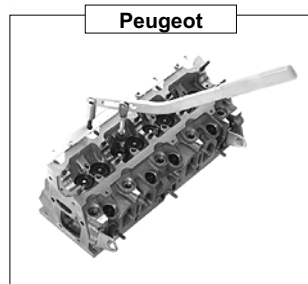
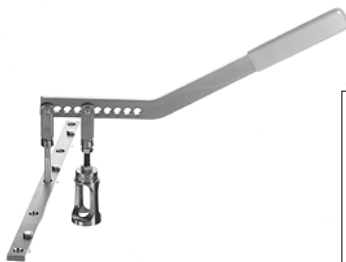
KL-0125-80 Valve Spring Compressor

Makes compressing the spring and removing the keepers a simple job because there is no need to remove the head.

Adjustable cam action. Fast, because there is no need to readjust the tool after each spring.

Weight:820 g

KL-1381-2

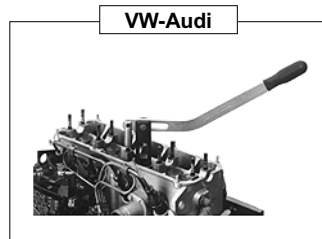


KL-1381-2 Valve Spring Compressor

For removal and installation of valve springs with removed cylinder head or cylinder head still in place; applicable on **Peugeot** engines with valve tappet disc-Ø of 38 mm.

The pressure piece is exchangeable according to the valve tappet disc-Ø. See tool **KL-0125-1 A**.

KL-0281-2



KL-0281-2 Valve Spring Compressor

Fitted with a fork head for 8 mm Cylinder Head Studs. Applicable for removal and installation of valve springs on **VW-Audi** engines from 1.3 l, up to 1993.

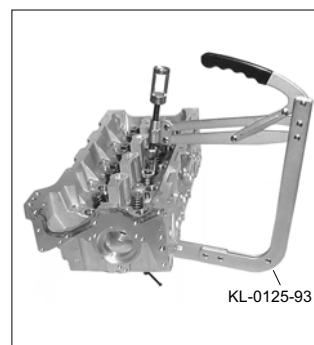
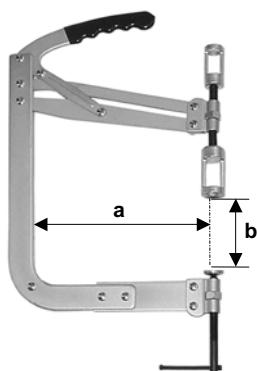
Pressure piece **KL-0125-1015**, metallastic design.

Accessory:

KL-0281-2001 Fork Head for Cylinder-Head with 7 mm studs

(e.g. **VW Polo, Golf II, Golf III** with 1.4 l and 1.6 l engines).

KL-0125-93



KL-0125-93 Valve-Spring Compressor

Valve-Spring Compressor suitable for almost all engines due to it's wide range of adjustment.

Part No.	Pressure Piece-Ø	a [mm]	b [mm]	Weight [g]
KL-0125-93	25 / 30 mm	240	20 - 250	2.550

KL-0049-17



Universal



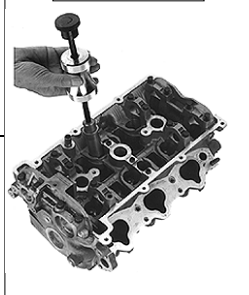
KL-0049-16



KL-0049-13



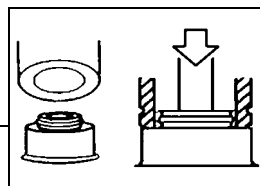
Universal



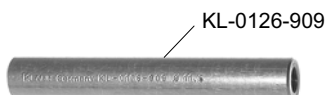
KL-0049-12



KL-0126-91K



KL-0126-9K



KL-0049-17 Valve Seal Removal Slide Hammer

For Valve Stem Sealing Rings

The Valve Seal Removal Slide Hammer can be used **universally** and consists of valve seal collet chuck **KL-0049-170** and the slide hammer **KL-0049-100**.

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.

For bucket-tappets with diameters from 12 mm to 15 mm.

KL-0049-16 Valve Seal Removal Slide Hammer

For Valve Stem Sealing Rings.

As **KL-0049-17**, but with the valve seal collet chuck **KL-0049-160** instead of **KL-0049-170**.

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

KL-0049-13 Valve Seal Removal Slide Hammer

For Valve Stem Sealing Rings.

As **KL-0049-17**, but with the valve seal collet chuck **KL-0049-130** instead of **KL-0049-170**.

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

KL-0049-12 Valve Seal Removal Slide Hammer

For Valve Stem Sealing Rings.

As **KL-0049-17**, but with the valve seal collet chuck **KL-0049-120** instead of **KL-0049-170**.

For bucket-tappets with diameters from 26 mm upwards.

KL-0126-91 K Valve Stem Seal Tool Set

For Valve Stem Sealing Rings

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

Specification:

Part No.	Description
KL-0126-91K	Valve Stem Seal Tool Set
<i>consists of:</i>	
KL-0049-100	Basic Slide Hammer
KL-0049-120	Valve Seal Collet Chuck (bucket-tappets diam. 26 mm upwards)
KL-0049-130	Valve Seal Collet Chuck (bucket-tappets diam. 23 mm up to 26 mm)
KL-0126-61	Oil Seal Removal Pliers - Long
KL-0126-9	Press Set for valve seals (10 pcs., Ø 9.5 - 14 mm inside)
KL-0126-9001	Plastic Case (empty)

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).

The Pressing Set for Valve Seals **KL-0126-9 K** consists of:

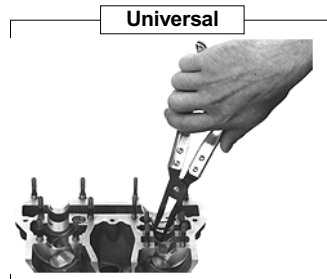
Part No.	for Inner Hole	Part No.	for Inner Hole
KL-0126-905	Ø 9,5 mm	KL-0126-911	Ø 12,5 mm
KL-0126-906	Ø 10,0 mm	KL-0126-912	Ø 13,0 mm
KL-0126-907	Ø 10,5 mm	KL-0126-913	Ø 13,5 mm
KL-0126-908	Ø 11,0 mm	KL-0126-914	Ø 14,0 mm
KL-0126-909	Ø 11,5 mm		
KL-0126-910	Ø 12,0 mm	KL-0126-9001	Plastic Case (empty)

KL-0126-9 Valve Stem Seal Installer Set

(not ill.)

As **KL-0126-9 K** but without Storage Case **KL-0126-9001**.

KL-0126-61



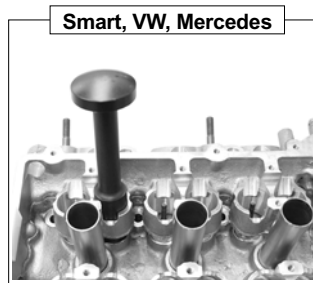
Universal

KL-0126-61 Valve Seal Removal Pliers

For Valve Stem Sealing Rings

The special long, slim form allows quick, easy and safe removal of valve-stem oil-seals, even on 4-valve cylinder heads.

KL-0126-9...-Serie



Smart, VW, Mercedes

KL-0126-9.. Serie Valve stem sealing ring installation drivers

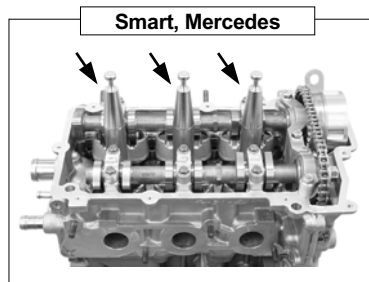
Valve stem sealing rings can be installed without risk of damage when the valves have been removed, using assembly tool **KL-0126-991**, **KL-0126-992** or **KL-0126-993**. The driver is located in the valve guide by the guide pin.

Available Valve stem sealing ring installation drivers.

Part-No.	Tip- Ø	Tip- Length	Seal ring- Ø	Tool- outside Ø	Application
KL-0126-991	5 mm	29 mm	11 mm	30 mm	Smart 3 / 4 Cyl. petrol
KL-0126-992	6 mm	29 mm	11 mm	24 mm	VW 5 Cyl.
KL-0126-993	6 mm	15 mm	11 mm	19,5 mm	Mercedes OM 642

Special versions can be produced with other dimensions.

KL-0126-999



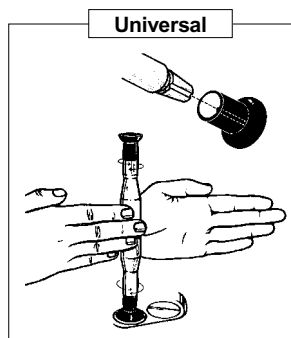
Smart, Mercedes

KL-0126-999 Guide pin set for valve cover assembly (4 Pcs.)

For Mercedes 3- and 4- Cylinder petrol engines. e.g. Smart etc.

Attaching these conical guide pins prevents the sealing rings in the valve cover from being damaged as the valve cover is being installed.

KL-0125-71 / KL-0125-70



Universal

KL-0125-71 Valve Lapper 29 / 35 mm

For Hand Lapping Valves.

Thick Hardwood handles for easy lapping.

Technical Data:

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

KL-0125-70 Valve Lapper 16 / 21 mm

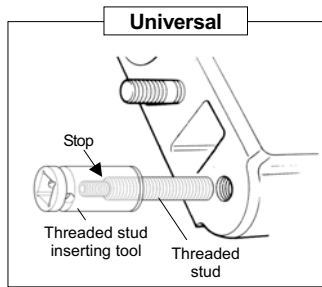
For Hand Lapping Valves.

Thick Hardwood handles for easy lapping.

Technical Data:

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

KL-0181-70 K



KL-0181-70 K Stud Inserting Tool Set in Plastic Case

Applicable for M6, M8, M10, M12, M8x1 and M10x1 threaded studs.

For clean, rapid insertion of threaded studs, for instance during engine repairs.

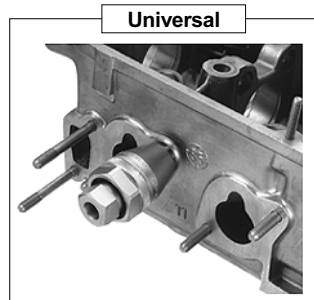
consists of:

Part-No.	Description	Qty.
KL-0181-7006	Threaded stud inserting tool M6	1
KL-0181-7008	Threaded stud inserting tool M8	1
KL-0181-7010	Threaded stud inserting tool M10	1
KL-0181-7012	Threaded stud inserting tool M12	1
KL-0181-7108	Threaded stud inserting tool M8x1	1
KL-0181-7110	Threaded stud inserting tool M10x1	1
KL-4990-1004	Plastic case with foamed material liner	1

Technical Data:

Weight: 1250 g Drive: 1/2" □ Length: ... 52 mm
Measure plastic case: 275 x 230 x 83 mm

KL-0181-1



KL-0181-1 Stud Tool

Universal tool 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.

KL-0181-6



KL-0181-6 Stud Extractor and Inserting Tool Set (5 Pcs.)

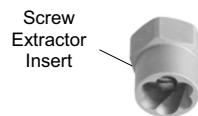
For removal and replacement of threaded studs.
Right- or Left-Hand Thread.

Weight: 1,15 kg Drive outer: 21 mm hex.
Drive inner: 1/2" □

consists of:

Part-No.	Description	Part-No.	Description
KL-0181-51	for Ø 6 mm	KL-0181-54	for Ø 10 mm
KL-0181-52	for Ø 7 mm	KL-0181-55	for Ø 12 mm
KL-0181-53	for Ø 8 mm	KL-0181-5001	Plastic case

KL-0181-72 K



KL-0181-72 K Screw Extractor Set

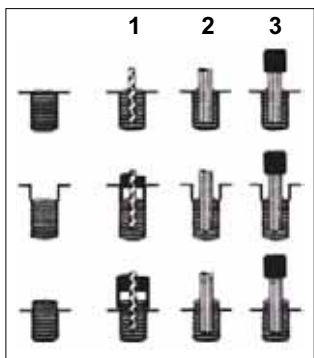
To extract screws, nuts and bolts when locating threads or hexagons are damaged.

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

Specification (Insert sizes):

1/4" (6,3mm); 5/16" (8mm); 3/8" (9,5mm); 10mm;
7/16" (11mm); 12mm; 1/2" (12,5mm); 13mm; 9/16" (14mm);
5/8" (16mm); 17mm; 11/16" (17,5mm); 3/4" (19mm)
Drive: 3/8" □ and hex.

KL-0181-21 K



KL-0181-21 K Screw Drill Set

To remove broken screws and thread bolts - thread M5 - M16.

Procedure:

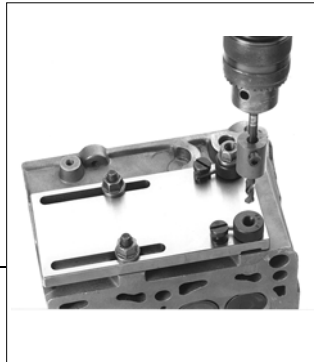
1. Open the broken bolt (or screw) by drilling (use boring bush if necessary).
2. Drive in the pin.
3. Place the nut on the pin and extract by means of a screw-wrench.

Spare Parts/Accessories:

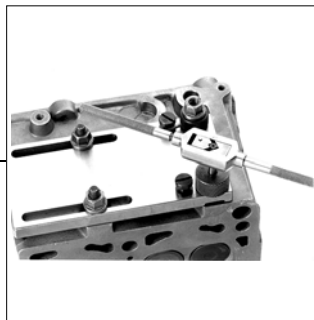
Part No.	Description	Qty.
KL-0181-2112	Drilled pin set for driller Ø: 3,2 mm (5 pcs)	1
KL-0181-2122	Drilled pin set for driller Ø: 4,8 mm (5 pcs)	1
KL-0181-2132	Drilled pin set for driller Ø: 6,4 mm (5 pcs)	1
KL-0181-2142	Drilled pin set for driller Ø: 8,0 mm (5 pcs)	1
KL-0181-2152	Drilled pin set for driller Ø: 8,8 mm (5 pcs)	1

KL-0185-1

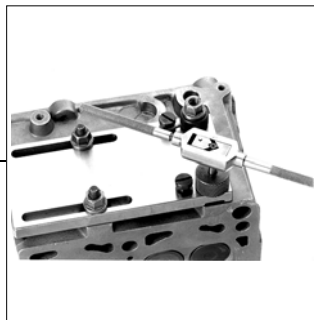
VW-Audi



KL-0185-2



KL-0185-3



KL-0185-5



KL-0185-1 Drilling Guide Set

For accurate removal of broken manifold studs on **VW and Audi** 4 and 5 cylinder water-cooled engines. (Male 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.

Contents:

With 6,5 mm pre-drilling guide for M8 threads in storage case.

Entire Weight: 1,6 kg

KL-0185-2 Drilling Guide Set

As **KL-0185-1** but with 4,0 mm and 8,5 mm pre-drilling guide instead of 6,5 mm. (Male Thread M8)

For drilling and tapping for the use of Heli-Coil inserts.

With plastic case

Entire Weight: 1,7 kg

KL-0185-3 Drilling Guide Set

As **KL-0185-2** but also supplied complete with Heli-Coil insertion tool and 25 Heli-Coil thread inserts. (Male Thread M8)

With plastic case.

Entire Weight: 2,3 kg

KL-0185-5 Drilling Guide Set (Universal)

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.

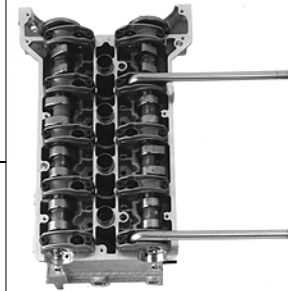
(Male Thread M8 and M10)

Time savings of between 2 and 4 hours can be achieved.

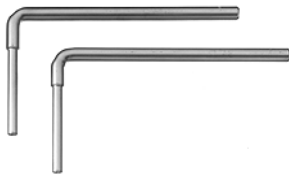
KL-1381-3



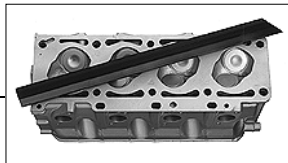
Citroën, Renault,
Peugeot



KL-1381-4



KL-0140-60



KL-0140-61



Note: Wooden case (KL-0140-6101) for Precision-Hair-Edges as Accessory available. See chapter 10

KL-4021-3111



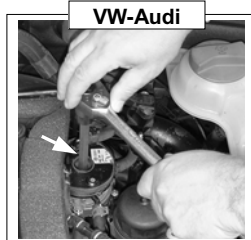
VW-Audi



KL-4021-3113



VW-Audi



KL-1381-3 Support

For wet cylinder liner on **Citroën, Peugeot, Renault**-engines.

To avoid lifting off of the cylinder liners from the seats whilst under repair, it is essential to keep these under tension with the support **KL-1381-3**. This avoids leakage between the cylinder liner and engine block.

Hole Spacing: 75 - 106 mm
Hole-Ø: 12 mm

KL-1381-4 Lever for Cylinder Head (pair)

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

To avoid lifting off of the cylinder liner from the sealing seat in the engine block when removing the cylinder head, the cylinder head should not be lifted, but tilted sideways with the lever **KL-1381-4** and secured with support **KL-1381-3**.

Pin-Ø: 12 mm

KL-0140-60 Precision-Hair-Edges 500 mm

Hair-edges hardened, ground, lapped, with heat-insulated handle. For fitting Cylinder Heads up to 4 Cylinders.

Description: Stainless Steel
Section: 40 x 7 mm
Length: 500 mm
Weight: 960 g

KL-0140-61 Precision-Hair-Edges 600 mm

As **KL-0140-60** but for fitting Cylinder Heads up to 6 Cylinders.

Length: 600 mm
Weight: 1200 g

KL-4021-3111 Socket Insert 11 mm hex

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

The special socket **KL-4021-3111** allows the removal and replacement of the plastic insert for Injector Valves on **VW-Audi, Seat and Škoda** petrol engines.

Drive: 1/2" □
Length: 100 mm
Hex: 11 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 - example when replacing the Fuel Filter.

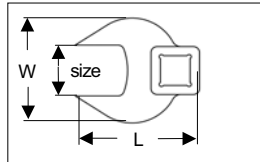
This special socket may also be used to remove and replace the brass insert on Injector Valves on Audi petrol engines 1990 - onwards.

Drive: 1/2" □
Length: 100 mm
Hex: 13 mm

KL-4417-900



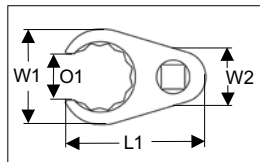
3/8"



KL-4072-301 / KL-4072-302



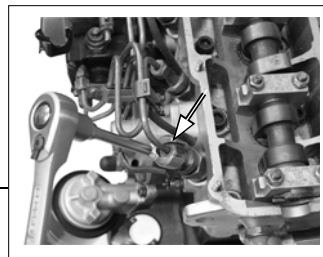
1/2"



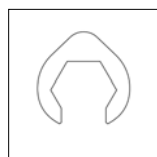
KL-4072-321



1/2"



KL-4071-311



1/2"

3/8"

KL-4417-900 Crow Foot Spanner Set

Special chrome vanadium steel

Matt chrome finish.

Drive:..... 3/8" □

Specially designed to loosen and tighten nuts and bolts in confined areas.

consists of:

Part No.	Description	Socket size	Width (W)	Length (L)	Weight (g)
KL-4417-16	Crow Foot Spanner	16	34 mm	40 mm	40 g
KL-4417-17	Crow Foot Spanner	17	35 mm	42 mm	50 g
KL-4417-18	Crow Foot Spanner	18	37 mm	45 mm	60 g
KL-4417-19	Crow Foot Spanner	19	41 mm	48 mm	70 g
KL-4417-21	Crow Foot Spanner	21	43 mm	51 mm	80 g

KL-4072-301 Open ended ring spanner Socket Set

Open 12-sided spanners are exceptionally compact and strong, so that even screws and nuts that are difficult to reach or turn can be loosened and tightened, for instance on compressed air or hydraulic lines.

Drive:..... 1/2" □

consists of:

Part-No.	Hex.	Length [L1]	Hight [H1]	Width [W1]	Width 2 [W2]	Opening [O1]	Weight [g]
KL-4072-3017	17	60 mm	20 mm	31 mm	31 mm	12 mm	150
KL-4072-3018	18	63 mm	20 mm	34 mm	31 mm	14 mm	150
KL-4072-3019	19	63 mm	20 mm	34 mm	31 mm	14 mm	150
KL-4072-3022	22	65 mm	25 mm	39 mm	31 mm	16 mm	325
KL-4072-3024	24	70 mm	25 mm	44 mm	31 mm	18 mm	350

KL-4072-302 Open ended ring spanner Socket Set

As KL-4072-301 but

Drive:..... 1/2" □

consists of:

Part-No.	Hex.	Length [L1]	Hight [H1]	Width [W1]	Width 2 [W2]	Opening [O1]	Weight [g]
KL-4072-3027	27	74 mm	25 mm	48 mm	34 mm	20 mm	360
KL-4072-3030	30	76 mm	25 mm	50 mm	34 mm	24 mm	360
KL-4072-3032	32	80 mm	25 mm	52 mm	34 mm	25 mm	360

KL-4072-321 Open ended ring wrench Socket

Specially designed to loosen and tighten nuts and bolts in confined spaces - e.g. Fuel Injector connections.

Technical Data:

Drive: 1/2" □

Length: 120 mm

consists of:

Part-No.	Hex. (12-point)	Description
KL-4072-3214	14	Open Ended ring wrench Socket
KL-4072-3216	16	Open Ended ring wrench Socket
KL-4072-3217	17	Open Ended ring wrench Socket
KL-4072-3218	18	Open Ended ring wrench Socket
KL-4072-3219	19	Open Ended ring wrench Socket

KL-4071-311 Open ended ring wrench Socket

As KL-4072-321, but as hex wrench and 80 mm long.

Technical Data:

Drive: 1/2" □

Length: 70 mm

consists of:

Part No.	Hex. (6-point)	Drive 3/8"	Drive 1/2"	Description
KL-4071-3112	12	X		Open Ended ring wrench Socket
KL-4071-3114	14	X		Open Ended ring wrench Socket
KL-4071-3116	16		X	Open Ended ring wrench Socket
KL-4071-3117	17	X		Open Ended ring wrench Socket
KL-4071-3118	18		X	Open Ended ring wrench Socket
KL-4071-3119	19		X	Open Ended ring wrench Socket

8573-00

RAHSOL
DREMOTEC



1/2"

40-200 N·m

DREMOMETER BC

Code No.:	7685530
Article No.:	8573-00
Weight:	1,4 kg
Length:	553 mm
Range of work / measurement 1, Nm / lbf.ft (min/max):	40-200
Range of work / measurement 2, lbf.ft (min/max):	30-150
Scale divisions:	5 N·m / 5 lbf.ft

Note: Further RAHSOL DREMOTEC Products and Torque Wrenches see page 3.5-04 or in the GEDORE catalogue.

8573-00 DREMOMETER BC Torque Wrench

1/2" 40-200N·m

CODE 7685530

Use:

- Controlled screw tightening in the range 40 - 200 N·m
- Ideal for the automotive industry
- Utilisation in all areas of industrial manufacturing

Features:

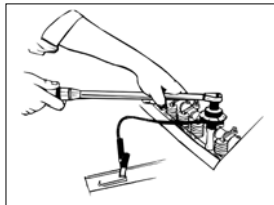
- Adjustable torque wrench with 1/2" single square drive for controlled clockwise tightening (type BC no. 8573).
- 1/2" square drive with ball-locking mechanism DIN 3120 - A 12.5, ISO 1174
- In accordance with DIN EN ISO 6789, traceable to national norms
- Automatic short-path actuation with tactile impulse and audible signal
- Actuation accuracy: +/- 3% tolerance of the scale set torque
- Full-metal construction from high-strength aluminium alloy
- Double scale with a scale graduation of 5 N·m and 5 lbf-ft
- If ordering with pre-set-value locking and safety device please specify the N·m value - if fixed factory-pre-setting is desired (price on request)

Scope of delivery:

- Torque wrench of type DREMOMETER
- Test certificate as per DIN EN ISO 6789
- Operating instructions (14-language) and service mini-CD
- Delivered in a robust black plastic box

KL-4090-302

1/2"



KL-4090-302 Torque Angle Meter

For the Torque-to-Yield Fastener with angle degree information.

Commonly used for cylinder head bolts and other bolts where a torque angle is required.

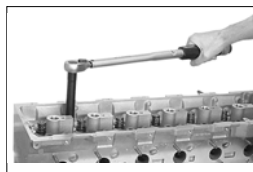
Drive: 1/2" □

Weight: 340 g

KL-4046-362

BMW, Mercedes

1/2"



KL-4046-362 Socket Set Torx® (4 Pcs.)

These Torx® Sockets in extended length with built-in magnet allow quick and easy removal and replacement of cylinder-head bolts with outer-Torx® profiles. (e.g. BMW, Mercedes CDI engines, etc.)

Specification:

Part-No:	Torx®	Length [mm]	Weight (g)
KL-4046-3610	E10	150	200
KL-4046-3612	E12	150	225
KL-4046-3614	E14	150	250
KL-4046-3618	E18	150	415

Drive 1/2" □

© = reg. trademark of Camcar-Textron Inc. USA

KL-4041-300 K



1/2"

KL-4041-30.. (1/2"□, 55 mm) KL-4041-31.. (1/2"□, 100 mm)



KL-4041-33.. (1/2"□, 140 mm)



KL-4041-34.. (1/2"□, 200 mm)



KL-4021-300 K



1/2"

KL-4021-30.. (1/2"□, 55 mm) KL-4021-31.. (1/2"□, 100 mm)



KL-4021-33.. (1/2"□, 140 mm)



KL-4021-34.. (1/2"□, 200 mm)



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

Consists of:

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

Part-No.	Size	Part-No.	Size
KL-4041-3020	T20	KL-4041-3045	T45
KL-4041-3025	T25	KL-4041-3050	T50
KL-4041-3027	T27	KL-4041-3055	T55
KL-4041-3030	T30	KL-4041-3060	T60
KL-4041-3040	T40	KL-4041-3070	T70

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

Part-No.	Size	Part-No.	Size
KL-4041-3120	T20	KL-4041-3145	T45
KL-4041-3125	T25	KL-4041-3150	T50
KL-4041-3127	T27	KL-4041-3155	T55
KL-4041-3130	T30	KL-4041-3160	T60
KL-4041-3140	T40	KL-4041-3170	T70

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

Part-No.	Size	Part-No.	Size
KL-4041-3340	T40	KL-4041-3355	T55
KL-4041-3345	T45	KL-4041-3360	T60
KL-4041-3350	T50	KL-4041-3370	T70

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

Part-No.	Size	Part-No.	Size
KL-4041-3440	T40	KL-4041-3455	T55
KL-4041-3445	T45	KL-4041-3460	T60
KL-4041-3450	T50	KL-4041-3470	T70

KL-4041-3099 Plastic case (empty) for KL-4041-300 K

© = reg. trademark of Camar-Textron Inc. USA

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

Consists of:

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

Part-No.	Size	Part-No.	Size
KL-4021-3005	hex 5	KL-4021-3012	hex 12
KL-4021-3006	hex 6	KL-4021-3014	hex 14
KL-4021-3007	hex 7	KL-4021-3017	hex 17
KL-4021-3008	hex 8	KL-4021-3019	hex 19
KL-4021-3010	hex 10		

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

Part-No.	Size	Part-No.	Size
KL-4021-3105	hex 5	KL-4021-3110	hex 10
KL-4021-3106	hex 6	KL-4021-3111	hex 11
KL-4021-3107	hex 7	KL-4021-3112	hex 12
KL-4021-3108	hex 8	KL-4021-3113	hex 13

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

Part-No.	Size	Part-No.	Size
KL-4021-3305	hex 5	KL-4021-3310	hex 10
KL-4021-3306	hex 6	KL-4021-3312	hex 12
KL-4021-3307	hex 7	KL-4021-3314	hex 14
KL-4021-3308	hex 8		

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

Part-No.	Size	Part-No.	Size
KL-4021-3405	hex 5	KL-4021-3408	hex 8
KL-4021-3406	hex 6	KL-4021-3410	hex 10
KL-4021-3407	hex 7	KL-4021-3412	hex 12

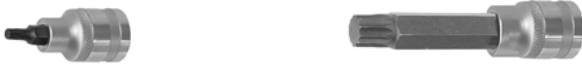
KL-4021-3099 Plastic case (empty) for KL-4021-300 K

KL-4031-300 K



1/2"

KL-4031-30.. (1/2"□, 55 mm) KL-4031-31.. (1/2"□, 100 mm)



KL-4031-33.. (1/2"□, 140 mm)



KL-4031-34.. (1/2"□, 200 mm)



KL-4051-300 K



1/2"

KL-4051-30.. (1/2"□, 55 mm) KL-4051-31.. (1/2"□, 100 mm)



KL-4051-33.. (1/2"□, 140 mm)



KL-4051-34.. (1/2"□, 200 mm)



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

Consists of:

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

Part-No.	Size	Part-No.	Size
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

Part-No.	Size	Part-No.	Size
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

Part-No.	Size	Part-No.	Size
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

Part-No.	Size	Part-No.	Size
KL-4031-3408	M8	KL-4031-3412	M12
KL-4031-3410	M10	KL-4031-3414	M14

KL-4031-3099 Plastic case (empty) for KL-4031-300 K

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

Consists of:

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

Part-No.	Size	Part-No.	Size
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

Part-No.	Size	Part-No.	Size
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

Part-No.	Size	Part-No.	Size
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)		

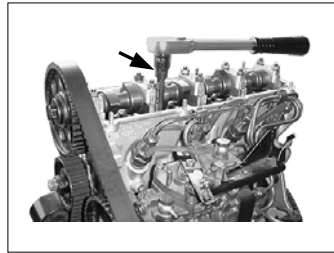
Socket Insert, Drive 1/2"□, Length 200 mm

Part-No.	Size	Part-No.	Size
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)		

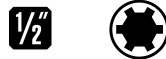
KL-4051-3099 Plastic case (empty) for KL-4051-300 K

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KL-4051-331 A



Fiat



KL-4051-331 A Socket Insert Set RIBE®

To remove and re-tighten cylinder-head retaining bolts e.g. on Fiat engines with RIBE-profile.

Specification:

Part-No.	RIBE®	Length [mm]	Weight (g)
KL-4051-3007	M7	55	80
KL-4051-3008	M8	55	80
KL-4051-3311	M10 (FIAT)	140	100
KL-4051-3312	M12	140	100
KL-4051-3313	M13 (FIAT)	140	100
KL-4051-3314	M14	140	100

Drive: 1/2"

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

KL-4051-3310



VW-Audi



KL-4051-3310 Socket Insert RIBE® M10

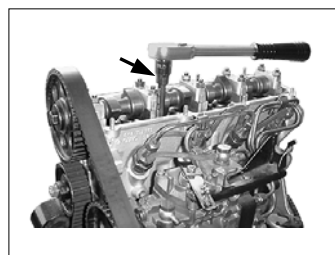
Ideal to remove and re-tighten cylinder-head retaining bolts on VW-Audi engines with RIBE similar profile.

Part-No.	RIBE®	Length [mm]	Weight (g)
KL-4051-3310	M10 (VW)	140	100

Drive: 1/2"

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

KL-4054-701 K



KL-4054-701 K Socket Insert Set RIBE® with plastic case

Consists of:

Bit-Holder, carrier of the screwdriver Inserts,

● 10 mm hex; Drive 1/2"□

Bit-Holder, carrier of the screwdriver Inserts,

● 10 mm hex; Drive 3/8"□

Bit Insert,

Drive 10 mm hex, Length 30 mm

⊕ Size: 4; 5; 6; 7; 8; 9; 10; 12; 13; 14

Bit-Insert,

Drive 10 mm hex, Length 75 mm

⊕ Size: 4; 5; 6; 7; 8; 9; 10; 12; 13; 14

Plastic case: 235 x 140 x 45 mm

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

KL-4031-3309



Toyota, Daihatsu



KL-4031-3309 Socket Insert XZN-M9, 140 mm, 1/2"

Applicable for: **jap. cars e.g. Daihatsu, Toyota 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.

KL-4061-101

VW-Audi, Mercedes,
Rover, MG



5-Point

Mercedes (Atego, Actros)



KL-4061-101 Socket Insert Set (Five point), 1/4"

7 piece Socket Set on 1/4" □ Storage Rail

For new 5 point tamper-proof bolts.

Suitable e.g. for:

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

consists of:

Socket Inserts Five point with bore:

Size: 10, 15, 20, 25, 27, 30, 40

Drive: 1/4" □

Storage Rail with 7 Clips

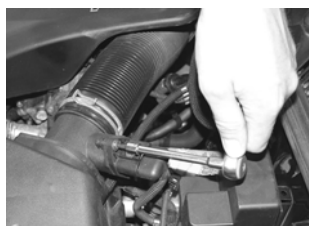
KL-4064-601 K

VW-Audi, Mercedes,
Rover, MG



5-Point

VW-Audi airflow meters.



Pumps for pump-line-injector systems on Mercedes commercial vehicles.



KL-4064-601 K Socket Insert Set (Five point)

9 screwdriver inserts in plastic case.

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

Suitable e.g. for:

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

consists of:

9x Bit Insert, 1/4" hex. 1/4" drive.

1x Bit Holder, 1/4" hex. 1/4"; 1/4" drive (to insert the screwdriver bits).

1x Plastic case

Total weight: 100 g

Size: 10, 15, 20, 25, 27, 30, 40, 45, 50

Drive (Insert): hex. 1/4"

Drive (Bit Holder): 1/4" □

Length (Insert): 25 mm

Dimension (Plastic case) 114x53x21 mm

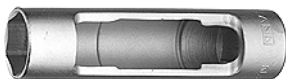
KL-0369-610



1/2"



KL-0369-10



1/2"



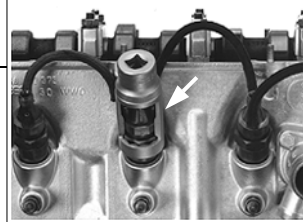
KL-0511-1



1/2"



BMW, Mercedes, VW,
Alfa Romeo, Chrysler, etc.



KL-0511-2



1/2"



KL-0369-610 Injector Socket (22mm, bihex)

Hex special socket cut away on two sides, for removing and inserting diesel engine injectors without damaging the fuel return pipes.

Specially applicable for VW-Audi, Opel. Drive: 1/2" □

KL-0369-10 Injector Socket (22 mm, hex)

Special cut-away deep socket to allow access to remove and replace injectors without damage to fuel-lines. Drive: 1/2" □

Application: VW-Audi, BMW, Ford, Opel/Vauxhall, Rover, Mercedes, Seat, Volvo, etc.

KL-0511-1 Injector Socket (27 mm, bihex)

Special cut-away deep socket to allow access to remove and replace injectors without damage to fuel-lines. For removal and replacement of injectors on. Drive: 1/2" □

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

KL-0511-2 Injector Socket (28 mm, bihex)

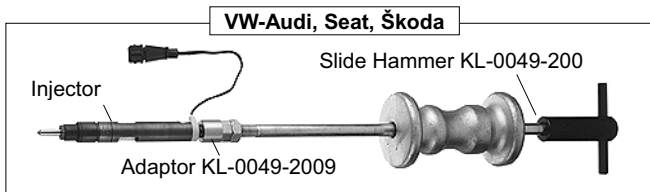
Application: Alfa Romeo; Chrysler; Rover; MAN 2,5 TD

Special cut-away deep socket to allow access to remove and replace injectors without damage to fuel-lines.

Drive: 1/2" □

Size: 28 mm

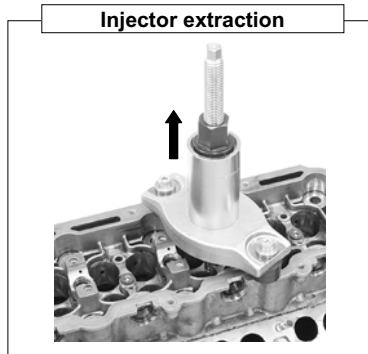
KL-0049-2009



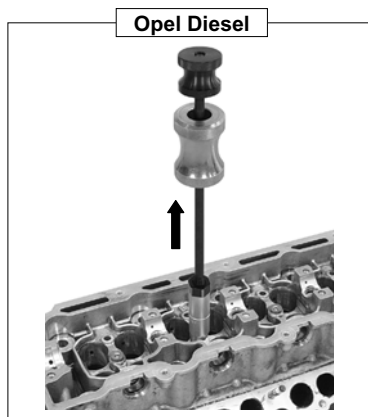
KL-0049-200



KL-0489-11



KL-0489-10



KL-0049-2009 Adaptor M14 to M14x1,5

For the Slide Hammer **KL-0049-200**, to dismount the injector at e.g. **VW-Audi TDI** engines.

KL-0049-200 Slide Hammer Basic Tool

Slide Hammer Weight: 2,35 kg
Length: 480 mm

KL-0489-11 Injector nozzle puller with spindle

Suitable for Opel Diesel engines, e.g. 2,2 L

For accurate removal of injector nozzles without risk of damage.

If the bridge-type puller and spindle are used, even injector nozzles that are a very tight fit can be removed in just a few minutes.

Technical Data:

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

KL-0489-10 Injector nozzle puller with slide hammer

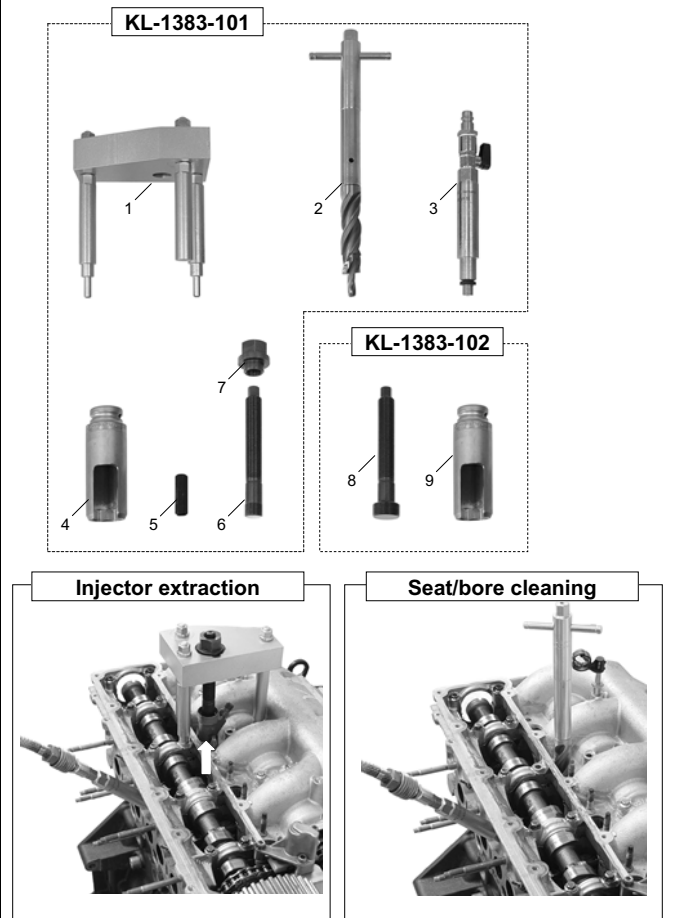
Suitable for Opel Diesel engines, e.g. 2,2 L

Injection nozzles that do not fit very tightly can be removed in just a few minutes.

Technical Data:

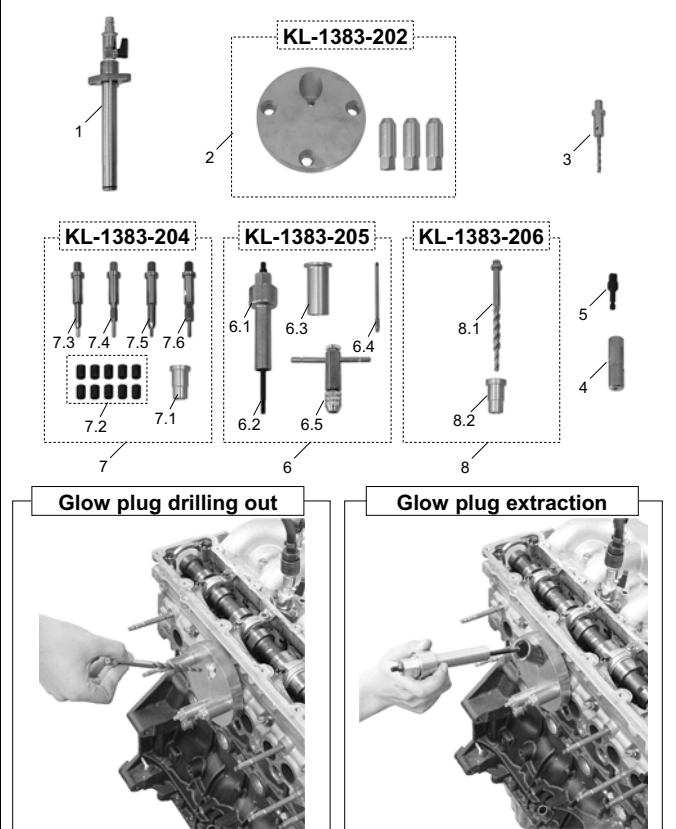
Slide Hammer Weight: 0,9 kg
Connecting thread (injector nozzle): M17x0,75 mm
Length: 185 mm

KL-1383-10 K



Note: The Tool Set is being supplied in a plastic case.

KL-1383-20 K



Note: The Tool Set is being supplied in a plastic case.

KL-1383-10 K Nozzle Extractor Set

(German Utility Model)

Suitable for PSA 2,0 (110, 135 HP) HDI engines e.g. Peugeot, Citroën etc. (Engine code DW10)

The nozzle extractor set KL-1383-10 K allows the removal from vehicles of tightly fit injection nozzles without having to remove the cylinder head, as well as the cleaning of the nozzle location hole and seat.

The use of a special pulling bridge and of the feed rod allows the fast and easy nozzle removal. The compressed air adaptor prevents impurities from entering the combustion chamber.

Specification:

Pos.	Part-No.	Description	Qty.
	KL-1383-10 K	Nozzle Extractor Set	1
consists of:			
	KL-1383-101	Nozzle Extractor Set for Peugeot / Citroën 110HP	1
	KL-1383-102	Supplement Kit for Peugeot / Citroën 135HP	1
	KL-1383-1090	Plastic storage case	1
Pos.	Part-No.	Description	Qty.
	KL-1383-101	Nozzle Extractor Set for Peugeot / Citroën 110HP	1
consists of:			
1	KL-1383-103	Extractor Base Tool	1
2	KL-1383-104	Milling tool for injector nozzle seat and bore	1
3	KL-0369-55 A	Compressed air adaptor for injector nozzle bore M10x1	1
4	KL-0369-461	Special Socket Insert 29mm hex	1
5	KL-0369-4505	Special Bit Insert 10 mm hex	1
6	KL-0369-4606	Spindle	1
7	KL-0369-4503	Shoulder Nut M16x1,5	1
Pos.	Part-No.	Description	Qty.
	KL-1383-102	Supplement Kit for Peugeot / Citroën 135HP	1
consists of:			
8	KL-1383-1021	Spindle M25x1	1
9	KL-1383-1022	Special Socket Insert 25mm hex, 1/2 drive	1

KL-1383-20 K - Glow Plug Tool Set

Suitable for PSA 2,0 (110, 135 HP) HDI engines. e.g. Peugeot, Citroën etc. (Engine code DW10)

The glow plug tool set KL-1383-20 K enables the correct removal or drilling out of damaged glow plugs and the recutting the original M10x1 thread as well as the repair of the damaged glow plug retaining M10x1 thread through drilling out M12x1 thread without removing the cylinder head. The new glow plug shall be engaged in the cylinder with an insert nut (M12x1 on M10x1).

Specification:

Pos.	Part-No.	Description	Qty.
	KL-1383-20 K	Glow Plug Tool Set Peugeot / Citroën	1
consists of:			
1	KL-1383-201	Compressed air adaptor for injector nozzle bore Ø 17.1 mm	1
2	KL-1383-202	Tool holding fixture unit	1
3	KL-1383-203	Milling tool for Glow Plug electrode	1
4	KL-0369-300	Drum-type turning tool	1
5	KL-4007-2510	Adapter for power drill 3/8" square socket	1
6	KL-1383-205	Drill Tool Set for Glow Plug tube	1
7	KL-1383-204	Drill Tool Set for Glow Plug Bore	1
8	KL-1383-206	Reaming Tool Set for Glow Plug Port	1
	KL-1383-2090	Plastic storage case	1
Pos.	Part-No.	Description	Qty.
6	KL-1383-205	Drill Tool Set for Glow Plug tube	1
consists of:			
6.1	KL-0369-3050	Extractor (Base Tool)	1
6.2	KL-1383-2052	Tie bolt 1/4"-20 UNC, (185mm long)	1
6.3	KL-1383-2051	Base Tool guide bushing	1
6.4	KL-0369-3056	Thread tap 1/4"-20 UNC with drill-bit tip	1
6.5	KL-0369-306	Tool holder with square socket 2.4 - 5,5	1
Pos.	Part-No.	Description	Qty.
7	KL-1383-204	Drill Tool Set for Glow Plug Bore	1
consists of:			
7.1	KL-1383-2041	Drill guide bushing	1
7.2	KL-1383-2042	Set (10) of threaded sleeves M10x1, 26 mm long	1
7.3	KL-0369-3011	Core drill Ø 9.1 mm for M10x1 thread	1
7.4	KL-0369-3012	Thread tap M10x1	1
7.5	KL-0369-3021	Core drill Ø 11.1 mm M12x1 thread	1
7.6	KL-0369-3022	Thread tap M12x1	1
Pos.	Part-No.	Description	Qty.
8	KL-1383-206	Reaming Tool Set for Glow Plug Port	1
consists of:			
8.1	KL-1383-2061	Reamer Ø 5.8 mm	1
8.2	KL-1383-2062	Reamer guide bushing (Ø 5.8 mm)	1

KL-1383-21 - Glow Plug Tool Set

(not ill.)

Suitable for Peugeot, Citroën (2,0 HDI [110, 135 HP]) etc.

Similar to KL-1383-20 K but not for thread repair.

Consists of: Part-No. (see KL-1383-20): 2; 3; 4; 5; 6; 7.1; 7.3; 7.4; 8.

Accessory kit for glow plug tool CDI

(not ill.)

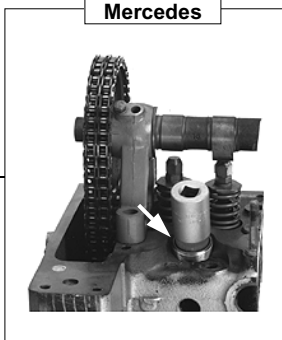
KL-1383-211 - Accessory kit (big). Similar to KL-1383-20 K if the glow plug tool set KL-0369-30 K is already available.

KL-1383-212 - Accessory kit (small). Similar to KL-1383-21 if the glow plug tool set KL-0369-31 K is already available.

KL-0057-1



Mercedes

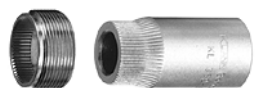


KL-0057-1 Spline Nut

For removal of the locking ring on the pre-combustion chamber on Mercedes engines OM615, OM616 and OM617.

Drive:..... 1/2"□

KL-0369-3

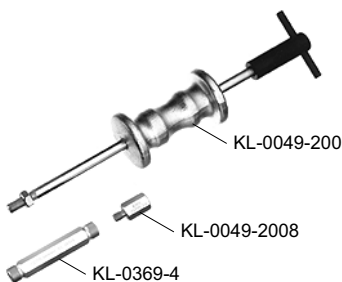


KL-0369-3 Spline Nut

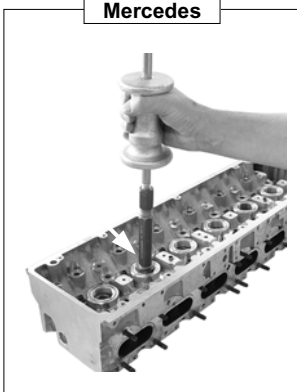
For removal of the locking ring on the pre-combustion chamber on Mercedes engines OM601, OM602, OM603 OM604, OM605 and OM606.

Drive:..... 1/2"□

KL-0049-25



Mercedes



KL-0049-25 Slide Hammer

To remove the pre-combustion chamber on Mercedes engines OM615, OM616, OM617, OM601, OM602, OM603 OM604, OM605 and OM606.

consists of:

Part No.	Description
KL-0049-200	Slide Hammer without adaptor
KL-0049-2008	Adaptor M14 to M12
KL-0369-4	Extractor Bolt (Inner Thread M12, Outer Thread M22x1 and M22x1,5)

KL-0369-11



Mercedes



KL-0369-11 Milling Cutter

The KL-0369-11 milling tool should always be used to re-machine the pre-combustion chamber sealing face before the injector nozzle body is re-installed.

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

The milling cutter KL-0369-11 consists of:

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

Note:

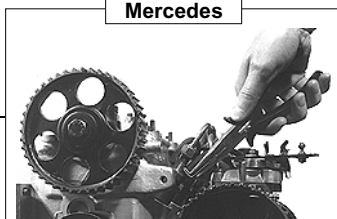
Service of the injector housing seat is essential as soon as damaged or leaking. If the injector housing seat has not been treated before, this may be done with the cylinder head removed or still in place.

If the injector housing seat is treated a second time (noticeable by the marks on the cylinder head close to the injector housing or on the spacer rings), the cylinder head has to be removed, because the clearance of the injector housing (7,6-8,1 mm) can only be correctly measured with removed cylinder head. The clearance guarantees enough distance between piston surface and injector housing in TDC position.

KL-0192-21



Mercedes



KL-0192-21 Safety Clip Pliers

For removal of the Fuel Return Line from injectors on Diesel engines.

Applicable on Mercedes diesel engines OM604, OM605, OM606 with 4-valve technology.

KL-0192-23



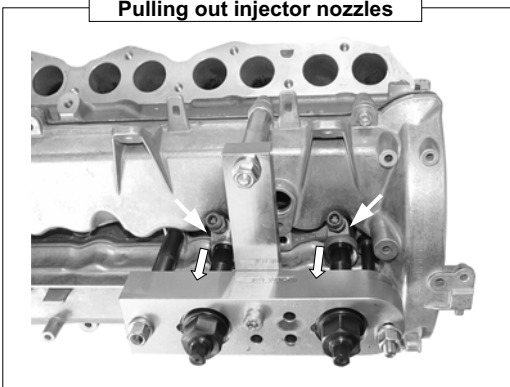
KL-0192-23 Safety Clip Pliers

For removal of returning hoses on injection nozzles of diesel engines. Especially applicable on Mercedes OM601, OM602, OM603 and VW-Audi vehicles, where the injection nozzles are located very deep in the cylinder head.

KL-0369-46 K



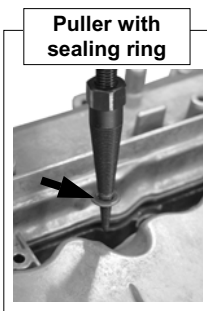
Pulling out injector nozzles



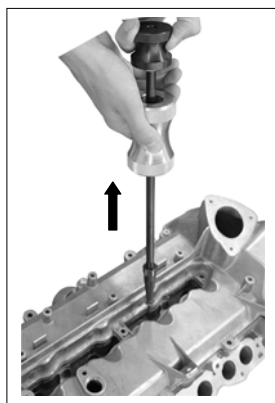
Note: The KL-0369-46 K injector nozzle puller is being supplied in a plastic case KL-0369-4690.

KL-0369-59

Mercedes CDI



Puller with sealing ring



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.

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

Due to the use of a special extraction bridge and the insertion of the two puller spindles, injector nozzles can be removed in an fast and easy way.

⇒ Steps to remove the injector nozzles:

Unscrew the nozzle head with the special wrench supplied with the set. Screw the puller spindles in the injector nozzles, remove the pre-installed extraction bridge on the valve cover and unscrew the collar nuts. Pull the nozzles out by turning the collar nuts.

Part No.	Description	Qty.
KL-0369-46 K	Injector nozzle puller	1
<i>consists of:</i>		
KL-0369-4601	Baseplate	1
KL-0040-3005	Circlip	2
KL-0021-0006	Axial bearing	2
KL-0369-4603	Plate	1
KL-0369-4602	Bolt	1
KL-0369-4604	Bolt	1
KL-0369-4605	Bolt	1
KL-0369-4606	Pull Spindle	2
KL-0369-4503	Shoulder nut	2
KL-0206-1011	Shoulder nut	3
KL-0282-5106	Screw	1
KL-0255-0011	Cylinder Pin	1
KL-0369-461 A	Impact Socket	1
KL-0369-4505	Sockets	1
KL-0369-4690	Plastic case	1

Note:

On **OM 668 CDI engines**, two injector nozzles are always held by a single retaining clip, so that if an injector nozzle has to be removed, the second nozzle must be pulled out in parallel with it.

KL-0369-59 Puller for sealing ring

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.

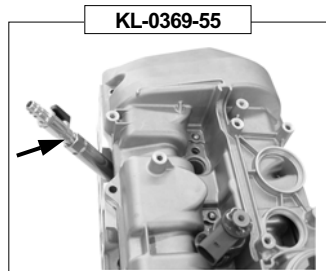
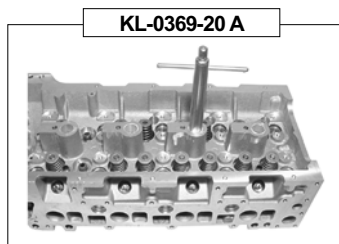
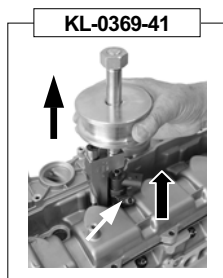
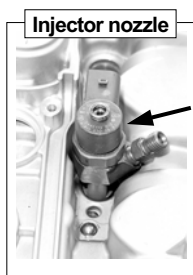
To pull out the sealing ring, screw the taper point of the tool into it, then remove with the impact-type puller.

Technical data:

Slide Hammer Weight: 0,9 kg
 Length: 385 mm
 Internal diameter of sealing ring: 4 - 16 mm

KL-0369-45 K

Mercedes CDI
OM 611, 612, 613



KL-0369-45 K Injector Nozzle Tool Set

Mercedes CDI engines
(German Utility Model)

Suitable for Mercedes CDI engines OM 611, 612, 613, etc.

The **KL-0369-45 K** injector nozzle Tool set (comprising nozzle puller **KL-0369-41**, nozzle puller **KL-0369-45**, milling cutter **KL-0369-20 A**, compressed air adapter **KL-0369-55**, thread tap **KL-0369-51** and plastic case **KL-0369-4590**) makes it possible to remove the injector nozzles correctly.

Nozzle puller **KL-0369-41** with impact weight is suitable for removing injector nozzles that are not too tight a fit, without dismantling them. Nozzle puller **KL-0369-45** with puller spindle is needed to remove nozzles that are a very tight fit. In both cases the cylinder head does not have to be removed. Milling cutter **KL-0369-20 A** is used to clean up the injector nozzle mounting bore, the nozzle seat and the small passage leading to the combustion chamber in a single operation.

If compressed air adapter **KL-0369-55** is screwed into the flame-start plug bore and air injected into the combustion chamber, this will prevent dirt or metal particles from entering the combustion chamber.

Thread tap **KL-0369-51** with drill tip is suitable for recutting and cleaning the thread for the nozzle holder. It is important to carry out this work before installing the injector nozzle again.

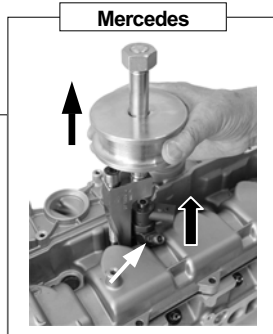
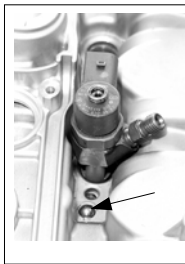
Part-No.	Description	Qty.
KL-0369-45 K	Injector nozzle tool set	1
<i>consists of:</i>		
KL-0369-41	Injector nozzle puller with slide hammer	1
KL-0369-45	Injector nozzle puller with spindle	1
KL-0369-20 A	Milling Tool for mounting hole and injector nozzle seat	1
KL-0369-55	Compressed air adapter for glow plug bore	1
KL-0369-51	Thread tap with drill-bit tip	1
KL-0369-4590	Plastic case	1

Note: Mercedes A-class CDI (OM668)

On OM 668 CDI engines, two injector nozzles are always held by a single retaining clip, so that if an injector nozzle has to be removed, the second nozzle must be pulled out in parallel with it.

For this work, the **KL-0369-46 K** injector nozzle puller, which is a new development, is needed. (see page 6.3-21)

KL-0369-41



KL-0369-41 Injector nozzle puller with slide hammer (German Utility Model)

Applicable for Mercedes CDI engines OM 611, 612, 613, etc.

With the **KL-0369-41** injection nozzle puller with impact weight, injection nozzles that do not fit very tightly can be pulled out without needing to take them apart or remove the cylinder block.

Thanks to its special design, the puller is additionally supported by the steel ball on the valve cover, which prevents the puller from tipping during the removal process.

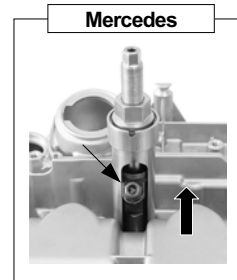
Specification:

Injector nozzle puller with slide hammer, pull rod M18, Slide hammer 1,5 kg, Screw M18.

Entire Length:.....250 mm

Accessories: **KL-0049-31 Slide Hammer** (Slide weight 4,8 kg)

KL-0369-45



KL-0369-45 Injector nozzle puller with spindle (German Utility Model)

Applicable for Mercedes CDI engines OM 611, 612, 613, etc.

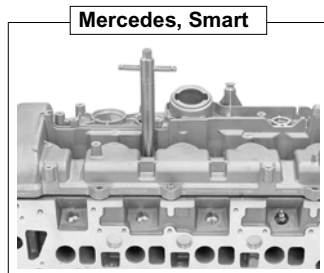
With the **KL-0369-45** injection nozzle puller with spindle, injection nozzles that fit *very tightly* can be pulled out without needing to remove the cylinder block.

⇒ **Procedure:** screw off the nozzle head, screw in the puller spindle, insert the support ring, push the support sleeve over the spindle and screw on the collar nut then pull out the nozzle by turning the collar nut.

Specification: 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.

Entire Length:.....150 mm

KL-0369-20 A



KL-0369-20 A Milling tool for mounting hole and injector nozzle seat

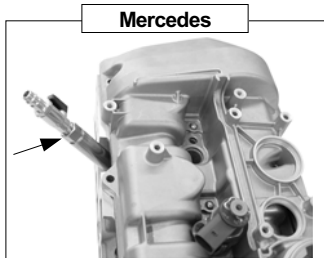
Applicable for Mercedes CDI engines OM611, 612, 613 and Smart R660.

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

Important before assembly to prevent the risk of leaks between the cylinder head and the injector.

Drive:.....13 mm hex
Length:.....235 mm

KL-0369-55

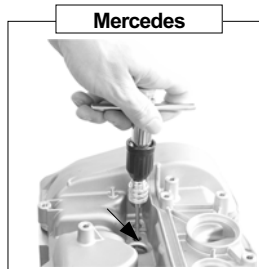
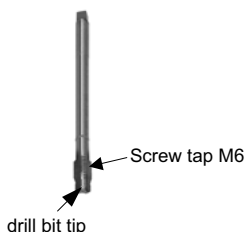


KL-0369-55 Compressed air adaptor for glow plug bore

Suitable e.g. for Mercedes CDI engines OM 611, 612, 613, etc.

If compressed air adaptor **KL-0369-55** is screwed into the flame-start plug bore and air injected into the combustion chamber, this will prevent dirt or metal particles from entering the combustion chamber.

KL-0369-51



KL-0369-51 Thread tap with drill-bit tip

Applicable e.g. for Mercedes CDI engines OM 611, 612, 613, etc.

For recutting and cleaning the tapped hole to retain the injector nozzle holder. Important: this tool must be used before re-installing the injector nozzle.

Length:.....100 mm
Thread:.....M6

KL-0369-30 K

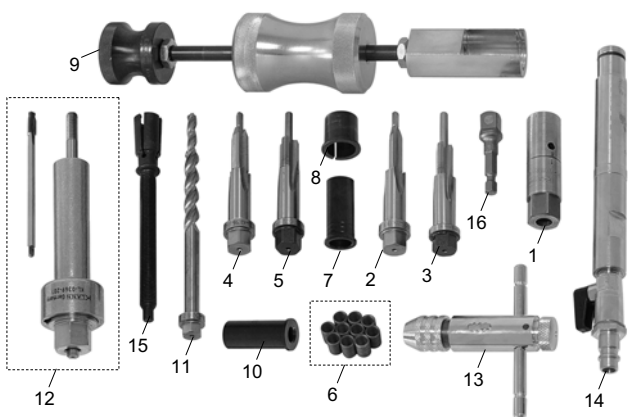
Mercedes

Glow plug



„Removing the glow plug and repairing the glow plug retaining thread“

Specification:



KL-0369-31 K

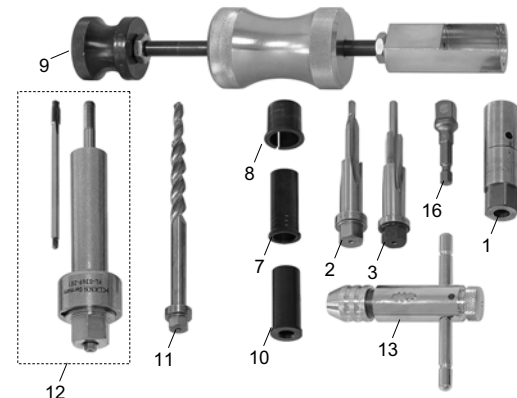
Mercedes

Glow plug



„Removing the glow plug“

Specification:



Note: Accessory kits to remove Peugeot, Citroën glow plugs, see page 6.3-19.

KL-0369-30 K Glow Plug Tool Set

for Mercedes CDI engines

(German Utility Model)

Suitable for Mercedes CDI engines OM 611, 612 and 613.

The glow plug tool set **KL-0369-30 K** enables the correct removal of burnt and/or stuck due to corrosion or torn off glow plugs as well as the repair of the glow plug retaining thread.

The cylinder head does not have to be removed.

Note: Screwing the compressed air adapter into the injector nozzle bore and injecting compressed air into the combustion chamber prevents dirt and metal particles from entering the combustion chamber

Advantage:

- Large time saving and cost saving
- Clean working methods.
- The tool is easy to operate.

Weight: 3,9 kg

Specification:

Pos.	Part No.	Description	Qty.
	KL-0369-30 K	Glow Plug Tool Set	1
	<i>consists of:</i>		
1	KL-0369-300	Drum-type turning tool for Ø 2.5 - 4.5 mm	1
2	KL-0369-3011	Core drill Ø 9.1 for M10x1 thread	1
3	KL-0369-3012	Thread tap M10x1	1
4	KL-0369-3021	Core drill Ø 11.1 for M12x1 thread	1
5	KL-0369-3022	Thread tap M12x1	1
6	KL-0369-3023	Set of threaded sleeves M10x1, 17 mm long	1
7	KL-0369-3013	Drill guide bushing	1
8	KL-0369-3014	Centring sleeve	1
9	KL-0369-303	Centring sleeve fitting/removing tool	1
10	KL-0369-3041	Reamer guide bushing (KL-0369-3042)	1
11	KL-0369-3042	Reamer	1
12	KL-0369-305	Glow plug tube extractor	1
13	KL-0369-306	Tool holder with square socket 2.4 - 5.5	1
14	KL-0369-56	Compressed air adapter for CDI injector nozzle bore	1
15	KL-0369-2013	Clamping pliers for preheat plug removal	1
16	KL-4007-2510	Adapter for power drill 3/8" square socket	1
	KL-0369-3090	Plastic case	1

KL-0369-31 Glow Plug Tool Set

for Mercedes CDI engines

(German Utility Model)

As **KL-0369-30 K**

however, it does **not** enable to repair the damaged glow plug retaining thread.

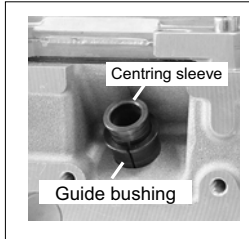
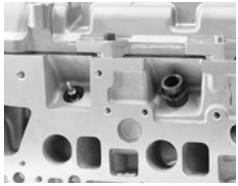
Suitable for Mercedes CDI engines OM 611, 612 and 613.

Weight 3,3 kg

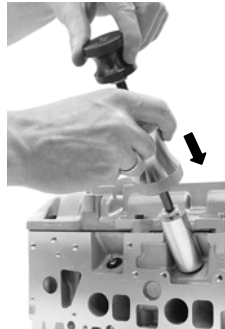
Specification:

Pos.	Part No.	Description	Qty.
	KL-0369-31 K	Glow Plug Tool Set	1
	<i>consists of:</i>		
1	KL-0369-300	Drum-type turning tool for Ø 2.5 - 4.5 mm	1
2	KL-0369-3011	Core drill Ø 9.1 for M10x1 thread	1
3	KL-0369-3012	Thread tap M10x1	1
7	KL-0369-3013	Drill guide bushing	1
8	KL-0369-3014	Centring sleeve	1
9	KL-0369-303	Centring sleeve fitting/removing tool	1
10	KL-0369-3041	Reamer guide bushing (KL-0369-3042)	1
11	KL-0369-3042	Reamer	1
12	KL-0369-305	Glow plug tube extractor	1
13	KL-0369-306	Tool holder with square socket 2.4 - 5.5	1
16	KL-4007-2510	Adapter for power drill 3/8" square socket	1
	KL-0369-3090	Plastic case	1

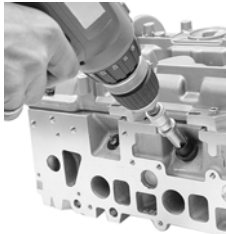
Insert the centring sleeve with guide bushing.



Locate centring sleeve and guide bushing firmly with the striker tool



Drill the glow plug head out to core hole diameter.



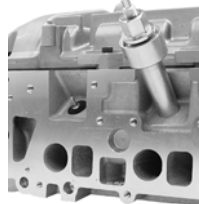
Tap the thread M10x1



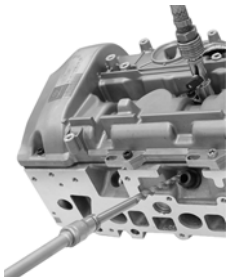
Tap the thread in the preheat plug tube.



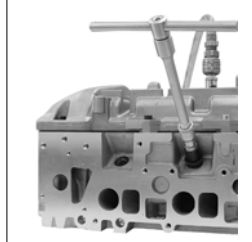
Pull out the preheat plug tube with the puller.



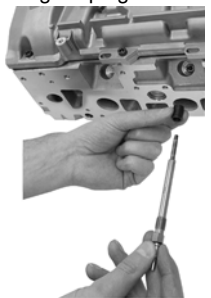
Clean the glow plug mounting bore and sealing seat.
"A"



"B"



Screw threaded sleeve on to glow plug.



Install preheat plug with threaded sleeve.

Glow plug with the threaded sleeve



Application KL-0369-30 K

The correct removal of burnt, corroded or broken-off glow plugs, and repairs to the preheat plug retaining thread without removing the cylinder head, still create almost insoluble problems for the mechanic.

The **KL-0369-30 K** glow plug tool set is used for precision removal or drilling out of damaged glow plugs to recut the original M10 x 1 thread or to repair a damaged M10 x 1 thread in the mounting bore for the glow plug by drilling it out to M12 x 1. The new glow plug is then inserted into the cylinder head with the aid of a threaded bushing (M12x1 to M10x1).

The puller in the tool set can be used to pull out the glow plug or the glow plug pin if it is a tight fit in the port.

Inserting the special guide and drilling sleeves at the glow plug bore in the cylinder head ensures accurate guiding and prevents damage to the cylinder head when the glow plug is being drilled out with the special drill bit, and when cleaning or renewing the glow plug thread. The compressed air adapter can be screwed into the injector nozzle bore and air injected into the combustion chamber (piston in cylinder being repaired must be at top dead centre on the working stroke, with the valves closed). This prevents dirt or metal particles from entering the combustion chamber. Before installing a new glow plug, clean the glow port and the seat for the seal with the three-stage reamer (supplied with the tool set), to remove carbonised oil deposits etc.

The cylinder head does not have to be removed.

Procedure KL-0369-30 K

⇒ **Pulling the glow plug out** (if it can be unscrewed but is still a tight fit in the bore).

⇒ **Drilling out the glow plug thread to core-hole diameter and recutting the original M10x1 thread.**

- Remove the centre electrode with the drum-type cutter.
- Insert the centring sleeve with guide bushing.
- Drill the glow plug head out to core-hole diameter.
- Recut the M10x1 thread.
- Cut the thread in the glow plug shaft.
- Install the compressed air adapter.
- Open the compressed air feed.
- Pull the glow plug body out with the puller.
- Clean the glow plug mounting bore and sealing seat with the reamer.

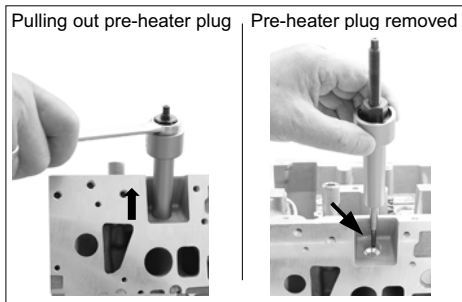
⇒ **Renewing glow plug mounting thread in cylinder head (M10x1 to M12x1).**

- Insert centring sleeve with guide bushing.
- Drill out the damaged M10x1 thread.
- Cut the new M12x1 thread.
- Insert the glow plug with the threaded sleeve screwed on.

Note: Screwing the compressed air adapter into the injector nozzle bore and injecting compressed air into the combustion chamber prevents dirt and metal particles from entering the combustion chamber.

KL-0369-201 A

Mercedes



KL-0369-201 A Glow plug puller

For glow plugs with 10 mm across flats on Mercedes CDI engines (OM 611, 612, 613 etc.)

For pulling out glow plugs after they have been unscrewed but are still located firmly in their holes.

Length:.....135 mm Drive: 19 mm hex

KL-0369-91

Mercedes CDI, Opel CDTI,
Fiat/Lancia JTD



KL-0369-91 Jointed Glow Plug Socket 8 mm

With built-in O-ring.

Designed especially for easy removal and replacement of glow plugs.

Hex.:8 mm Drive:3/8"□
Length:.....75 mm

Suitable for:

- Mercedes CDI engines OM 640 and OM 642 e.g. A-class (2004 onwards) [W169], B-class [W245] etc.
- Opel 1,3 L CDTI engines e.g. Agila, Corsa C etc.
- Fiat 1,3 L JTD engines e.g. Doblo, Idea, Punto etc.
- Lancia 1,3 L JTD e.g. Ypsilon etc.

KL-0369-92

Opel CDTI, Fiat JTD



KL-0369-92 Jointed Glow Plug Socket 9 mm

With built-in O-ring.

Hex.:9 mm Drive:3/8"□
Length:.....75 mm

Suitable for:

- Opel 1,9 L CDTI engines e.g. Astra H, Signum, Vectra C etc.
- Fiat 1,9 L JTD 1,6V engines e.g. Stilo etc.

KL-0369-9 Jointed Glow Plug Socket 10 mm

With built-in retaining spring or O-ring.

Designed especially for easy removal and replacement of glow plugs.

Hex:10 mm Drive:3/8"□
Length:.....65 mm

KL-0369-9



KL-0369-14 Jointed Socket Glow Plugs 10 mm

With built-in retaining spring or O-ring.

Designed especially for easy removal and replacement of glow plugs.

Application: Mercedes CDI-Engines (OM611, 612, 613).

Hex:10 mm Drive:3/8"□
Length:.....70 mm

KL-0369-14



KL-0369-7 Jointed Glow Plug Socket 12 mm

With built-in retaining spring or O-ring.

Designed especially for easy removal and replacement of glow plugs.

Hex:12 mm Drive:3/8"□
Length:.....65 mm

KL-0369-7



KL-0369-12 Jointed Glow Plug Socket 12 mm

With built-in retaining spring or O-ring.

Designed especially for easy removal and replacement of glow plugs.

Hex:12 mm Drive:3/8"□
Length:.....70 mm

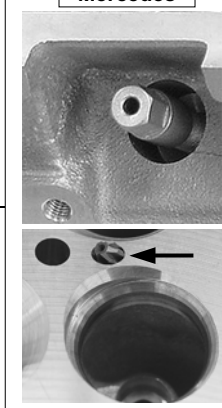
KL-0369-12



KL-0369-15



Mercedes



KL-0369-13



KL-0369-15 Reamer for Glow Plug

To ream out and clean the bore between the Glow Plug and combustion chambers.

⇒ Important if the engine is difficult to start.

Application: Mercedes CDI - Engines 4, 5 & 6 cylinder OM611, 612, 613, with Glow Plug threads M10x1.

Drive: 10 mm hex
Glow Plug: 6 mm

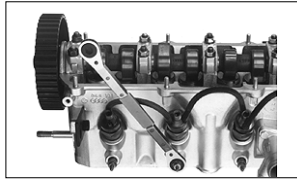
KL-0369-13 Reamer for Glow Plug

To ream out and clean the bore between the Glow Plug and pre-combustion chamber.

Application: Mercedes 4-Valve-engines OM604, OM605, OM606 with glow plug threads size M12x1,25.

Drive: 13 mm hex
Glow Plug: 7 mm

KL-0283-4 (8 / 12 mm)



KL-0283-4 Glow Plug Spanner

Double-ended ratchet ring spanner 8 mm and 12 mm for removal and replacement glow plugs.

Universal use, especially for awkward to reach glow plugs. (e.g. VW-Audi, BMW, Mercedes, Peugeot, Renault, etc.)

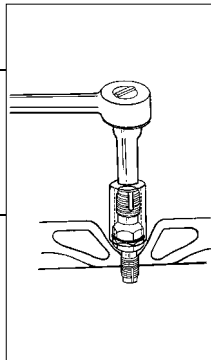
KL-0127-2206



KL-0127-2206 Last Tap

For cleaning of plug threads size M10x1,0 and M12x1,25.

KL-0132-3



KL-0132-3 Last Tap

For cleaning of plug threads size M12x1,25 and M14x1,25.

KL-0127-2207



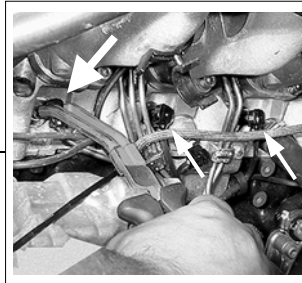
KL-0127-2207 Last Tap

For cleaning of spark plug threads size M14x1,25 and M18x1,5.

KL-0369-18



VW-Audi, BMW, Mercedes



KL-0369-18 Glow-Plug Connector Pliers straight

To remove stubborn and hardly accessible glow plug connectors installed on the latest generation engines.

e.g. Mercedes, BWM, VW-Audi etc.

KL-0369-19



VW-Audi, BMW, Mercedes

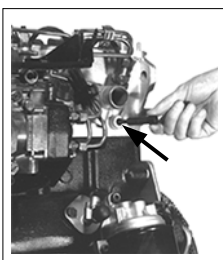
KL-0369-19 Glow-Plug Connector Pliers angled

As KL-0369-18 (Version angled at 90°)

KL-0132-5

Thread Inserts

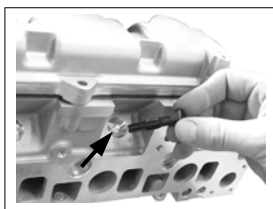
VW-Audi /
Mercedes
OM604, 605, 606



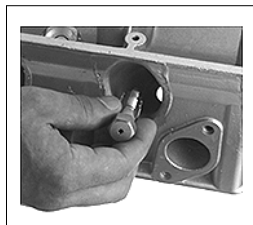
KL-0132-51

Thread Inserts

Mercedes
OM611, 612, 613



KL-0132-41



Accessory:

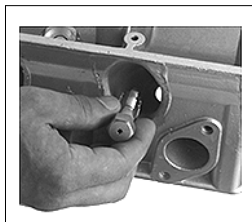


Screw Tap



Thread Inserts

KL-0132-42



Accessory:



Screw Tap



Thread Inserts

KL-0132-5 Glow Plug Thread Repair Kit M12x1,25

Should the thread in the cylinder-head be damaged, special Thread Inserts (Inner-Thread M12x1,25) may be fitted using the **KL-0132-51** Thread Repair Kit.

consists of:

Part No.	Description	Qty.
KL-0132-501	Special Drill for Thread Insert M12x1,25	1
KL-0132-502	Special Thread Drill for Thread Insert M12x1,25	1
-	Thread Inserts M12x1,25 (8 pcs.) Length 12,7 mm	1
-	Wooden Case	1

Spare Parts:

Part No.	Description	Qty.
KL-0132-412	Thread Inserts M12x1,25 (10 pcs.) Length 12,7 mm	1

KL-0132-51 Glow Plug Thread Repair Kit M10x1

Should the thread in the cylinder-head be damaged, special Thread Inserts (Inner-Thread M10x1) may be fitted using the **KL-0132-51** Thread Repair Kit.

Suitable for Mercedes OM611, 612 and 613 engines.

consists of:

Part No.	Description	Qty.
KL-0132-511	Thread Chaser M10x1	1
KL-0132-512	Thread Insert M10x1 (6 pcs.)	1
KL-0132-513	Special Drill for Thread Insert M10x1	1
KL-0132-514	Special Tap for Thread Insert M10x1	1
-	Wooden Case	1

KL-0132-41 Thread Repair Kit with case

For plug threads M12x1,25.

The repair kit is appropriate for repair of spark plug threads in aluminium cylinder heads. The tool kit contains a special screw tap to re-bore the old hole and cut a new thread M14x1,25 for installation of thread inserts M12x1,25.

consists of:

Part No.	Description	Qty.
KL-0132-411	Special Screw Tap for M12x1,25	1
-	Thread Inserts M12x1,25 (8 pcs.) Length 12,7 mm	1
-	Thread Inserts M12x1,25; Length 19 mm	8
-	Wooden Case	1

Accessory:

Part No.	Description	Qty.
KL-0132-412	Thread Inserts M12x1,25 (10 pcs.) Length 12,7 mm	1
KL-0132-413	Thread Inserts M12x1,25 (10 pcs.) Length 19 mm	1

KL-0132-42 Thread Repair Kit with case

















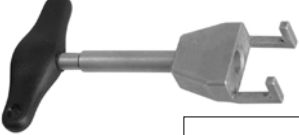

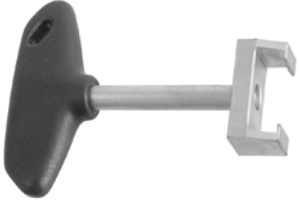


As **KL-0132-41**, but for plug threads M14x1,25.

consists of:

Part No.	Description	Qty.
KL-0132-421	Special Screw Tap for M14x1,25	1
-	Thread Inserts M14x1,25 (10 pcs.) Length 12,7 mm	1
-	Thread Inserts M14x1,25 (10 pcs.) Length 19 mm	1
-	Wooden Case	1

Accessory:

Part No.	Description	Qty.
KL-0132-422	Thread Inserts M14x1,25 (10 pcs.) Length 12,7 mm	1
KL-0132-423	Thread Inserts M14x1,25 (10 pcs.) Length 19 mm	1

KL-0127-42		 
KL-0127-41		 
KL-0127-43		 
KL-0127-44		 
KL-0127-45		 
KL-0127-46		 
KL-4015-2016		 
KL-4015-2021		 
KL-0127-81	 	
KL-0127-82		
KL-0187-84	 	
KL-0127-83		

KL-0127-42 Jointed Spark-Plug Socket 14 mm

Suitable for Renault Clio 1,2 16V; Twingo 1,2 16V etc.

Length: 80 mm Hex:  14 mm
Drive: 3/8"  Weight: 100 g

KL-0127-41 Spark-Plug Socket

Suitable for Renault Clio 1,2 16V; Twingo 1,2 16V etc.

Length: 230 mm Socket size:  14 mm
Drive: 3/8" 



KL-0127-43 Spark-Plug Socket

Suitable for Citroën C5 HPI, Peugeot 406 HPI, Mini One etc.


Length: 90 mm Socket size:  14 mm
Drive: 3/8" 

KL-0127-44 Spark-Plug Socket

Suitable for Citroën C5 HPI, Peugeot 406 HPI, Mini One etc.

Length: 250 mm Socket size:  14 mm
Drive: 3/8" 

KL-0127-45 Spark-Plug Socket

Length: 90 mm Socket size:  16 mm
Drive: 3/8" 

KL-0127-46 Spark-Plug Socket

Length: 250 mm Socket size:  16 mm
Drive: 3/8" 

KL-4015-2016 Spark-Plug Socket Insert

Length: 65 mm Socket size:  16 mm
Drive: 3/8" 

KL-4015-2021 Spark-Plug Socket Insert

Length: 65 mm Socket size:  21 mm
Drive: 3/8" 

KL-0127-81 Spark-Plug cap puller

To remove and disengage spark plugs (power final stage) on VW-Audi injection engines.

Suitable e.g. for VW, Bora, Golf, New Beetle, Passat, Polo, Touran 1,4 / 1,6 L, Lupo 4-Zyl. FSI, Phaeton and T4.

Length: 137 mm Weight: 145 g

KL-0127-82 Spark-Plug cap puller

To remove and disengage spark plugs (power final stage) on VW-Audi injection engines.

Suitable e.g. for VW, Bora, Golf, Passat, Sharan, Touareg, Phaeton and T5.

Length: 134 mm Weight: 130 g

KL-0127-84 Spark-Plug cap puller

To remove and disengage spark plugs (power final stage) on VW-Audi injection engines.

Suitable for VW 8- and 12 cylinder engines e.g. Phaeton etc.

Length: 118 mm Weight: 143 g

KL-0127-83 Spark-Plug cap puller

To remove and disengage spark plugs (power final stage) on VW-Audi injection engines.

Length: 50 mm Weight: 84,5 g

KL-0127-7



KL-0127-5



KL-0127-6



KL-0127-9



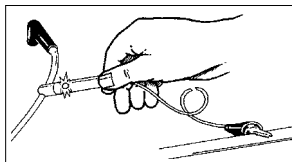
KL-0127-91



KL-0127-92



KL-0127-39



The Right Pliers for the Right Grip - Pliers for Spark Plugs

Makes exchanging spark plugs easier. Different designed spark plug pliers allow pulling off and putting on of spark plug connectors in every position and with hot engine.

Because of safety reasons, spark plugs connectors should not be pulled off when the engine is still running.

KL-0127-7 Spark Plug Pliers

Forged and with offset jaws for pulling off or putting on spark plug connectors, especially heat protection connectors on VW, Audi, Opel/Vauxhall, Porsche, etc.

KL-0127-5 Spark Plug Pliers

With 30° angled sleeve jaws for careful and safe removal and replacement of shrouds, especially for heat protection shrouds.

Applicable on almost every vehicle.

KL-0127-6 Spark Plug Pliers

With 10° angled, long sleeve jaws. Grooves in the jaws prevents from slipping off from the socket. The long jaws allow pulling off of very deep positioned spark plug connectors and offer additional safety distance to the hot engine.

Applicable on almost every vehicle.

KL-0127-9 Spark Plug Pliers

Application for: Audi, BMW, Mercedes, Opel/Vauxhall, VW.

KL-0127-91 Spark Plug Cap

For Metal Spark-Plug Caps.

To release and detach Plug-Leads from inaccessible locations, such as VW-Audi, Mercedes, Smart etc.

In particular for VW 2,8 litre and 2,9 litre VR6 engines, also Audi 2,6 litre and 2,8 litre V6 engines.

Length:.....250 mm

KL-0127-92 Spark Plug Cap

For Metal Spark-Plug Caps.

To release and detach Plug-Leads from inaccessible locations, such as VW-Audi, Mercedes, Smart etc.

Length:.....300 mm

KL-0127-39 Spark Plug Wire Tester

Quickly Locate Faulty Plug Wires. No Shock Hazard.

Now you can check spark plug wires without piercing the wires. Light flashes indicating sound wire.

Weight:85 g

Examples of applications for our Special Tools for engine repairs.



Valve-stem oil-seal replacement.



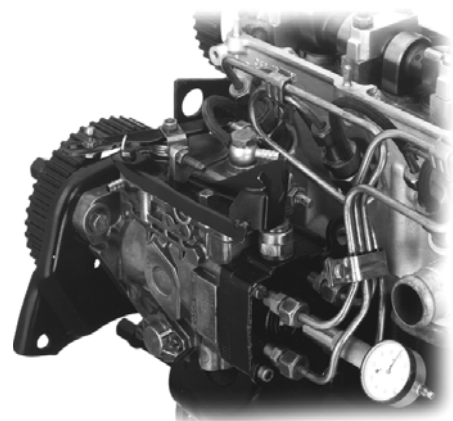
Valve replacement.



Timing-belt tension testing.



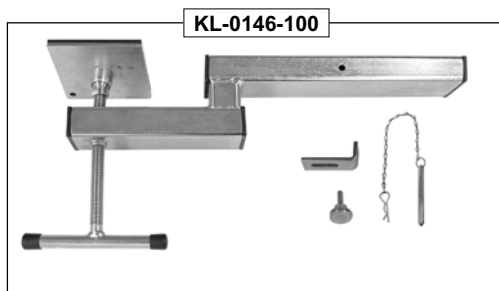
Camshaft locking.



Setting of injection-timing.

KL-0146-... Series

Base Tool:



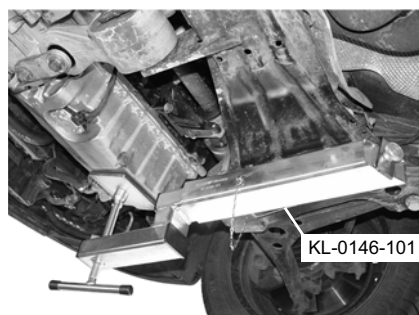
Adaptor:

KL-0146-1..

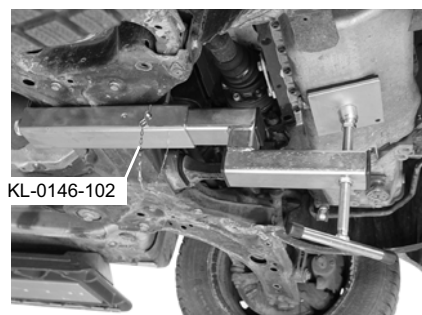


Application examples:

VW Sharan, Ford Galaxy, Seat Alhambra



VW Golf IV, New Beetle, Audi A3 etc.



Fiat Ducato, Citroën Jumper, Peugeot Boxer



KL-0146-... Series Supporting Device

To support the engine when the side engine bracket is removed. It is required when replacing e.g. timing belts, water pumps or engine brackets.

Due to the support given to the engine by the supporting device **KL-0146-... Series** it is possible to work at the engine control (belt drive) without using engine cranes or transmission lifts.

The supporting device consists of the base tool **KL-0146-100** and of an adaptor different for each kind of vehicle (see Table).

By changing the adaptor the field of application of the supporting device is almost universal.

Advantages

- High time saving
⇒ Motor cranes, gear lifters, etc. are not required.
- High cost saving
⇒ Easy and fast installation of the supporting device.
⇒ Only one mechanic is needed.
- Universally applicable
⇒ Due to the individually exchangeable adaptor.

Adaptor



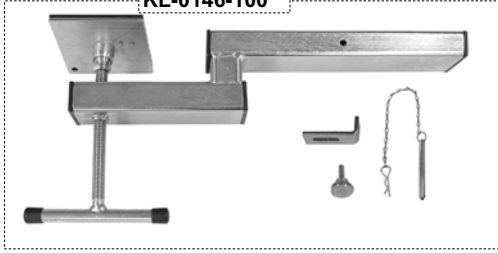
e.g. KL-0146-101

Part No.	Suitable for:
KL-0146-101	VW Sharan (7M) Ford Galaxy (WGR) Seat Alhambra (7V)
KL-0146-102	VW Golf IV, New Beetle Audi A3 (9C1, 1C1) Skoda Oktavia (1U2, 1U5) Seat Leon (1M1), Toledo (1M2)
KL-0146-103	Ford Focus I
KL-0146-104	Peugeot 206 (2A), 307 (3A, 3B)
KL-0146-105	Citroën Berlingo
KL-0146-106	Ford Focus II, C-Max
KL-0146-107	Ford Fusion (e.g. JU), Fiesta V (JH)
KL-0146-108	Seat Altea (e.g. 5P1), Toledo III (5P2), Skoda Oktavia II (1Z3)
KL-0146-110	VW Lupo (6X1, 6E1)
KL-0146-111	Citroën C4
KL-0146-112	Citroën C5
KL-0146-113	Peugeot 407
KL-0146-114	Citroën Jumpy (U6U)
KL-0146-115	Citroën Xsara Picasso (N68)
KL-0146-116	Peugeot 807 Citroën C8
KL-0146-117	Peugeot 607 (9P)
KL-0146-118	VW Polo (9N) Skoda Fabia (6Y) Seat Cordoba (6L2)
KL-0146-119	Ford Fiesta (2005 onwards)
KL-0146-120	Opel Zafira B (2005 onwards)
KL-0146-122	Peugeot Boxer Citroën Jumper Fiat Ducato
KL-0146-124	Fiat Punto (2006 onwards)
KL-0146-126	Alfa Romeo 159 (2006 onwards)

Further adaptors on request.

KL-0146-10

KL-0146-100



KL-0146-101

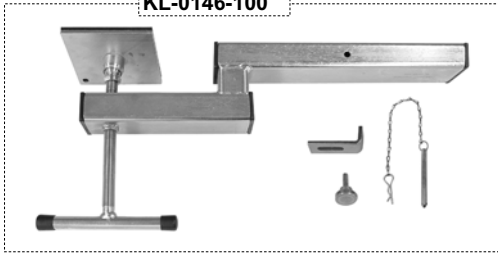


KL-0146-102



KL-0146-11

KL-0146-100



KL-0146-101



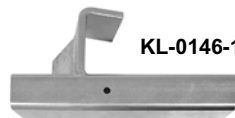
KL-0146-102



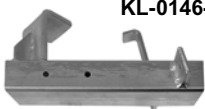
KL-0146-108



KL-0146-110



KL-0146-118



KL-0180-100 K



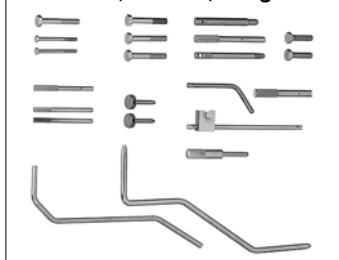
VW-Audi



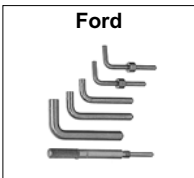
BMW



Citroën, Renault, Peugeot



Ford



KL-0146-10 Supporting Device with Adaptor 1 and 2

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).

Field of applications see 6.4-02.

By changing the adaptor the field of application of the supporting device is almost universal. (see table page 6.4-02)

Part No.	Description	Qty.
KL-0146-10	Supporting Device with Adaptor 1 and 2	1
<i>consists of:</i>		
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-0146-11 Supporting Device VW-Audi

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).

Field of applications see 6.4-02.

By changing the adaptor the field of application of the supporting device is almost universal. (see table page 6.4-02)

Part No.	Description	Qty.
KL-0146-11	Supporting Device VW-Audi	1
<i>consists of:</i>		
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-0146-110	Adaptor 10 (VW Lupo)	1
KL-0146-118	Adaptor 18 (VW Polo / Skoda Fabia / Seat Ibiza)	1

KL-0180-100 K Locking Pin Set Universal (with case)

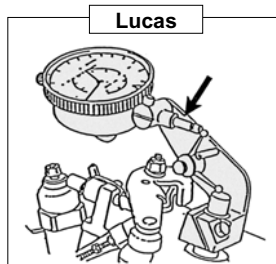
Suitable for: **VW-Audi, BMW, Citroën, Ford, Peugeot, Renault, etc.**
Application: Locking of engine shafts

The insertion of appropriate locking pins into the camshaft pulley and injection pump pulley, into flywheel and the insertion of the fixing gauge **KL-0280-9** into the camshaft slot guarantees correct positioning of camshaft and pump shaft to the crankshaft when exchanging 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.

Part No.	Description	Qty.
KL-0180-100K	Locking Pin Set Universal	1
<i>consists of:</i>		
KL-0280-10	Locking Pin (Audi V6)	1
KL-0280-8	Locking Pin Ø15.5 (VW-Audi, Seat)	1
KL-0280-9	Fixing 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 Bolt M5 × 50 (Renault)	2
KL-1280-12	Hex Bolt M7 × 50 (Renault)	3
KL-1380-10	Locking Pin A Ø8 (Peugeot)	1
KL-1380-11	Locking Pin B Ø9.5 (Peugeot)	1
KL-1380-12	Locking Pin C Ø6 (Peugeot)	1
KL-1382-1	Reaction Wrench for Timing Belt (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 Bolt M8 × 30 (Peugeot)	2
KL-1480-18	Hex Bolt M8 × 40 (Peugeot)	1
KL-0180-1020	Plastic Storage Case	1

KL-0129-20 K



KL-0129-20 K Adjusting Tool for Lucas CAV-Roto- Diesel Injection Pumps

With this Tool Set **KL-0129-20 K** it is possible to adjust Injection Pumps of Diesel vehicles with Lucas-CAV-Roto-Diesel Pumps.

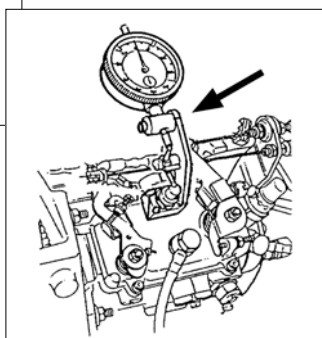
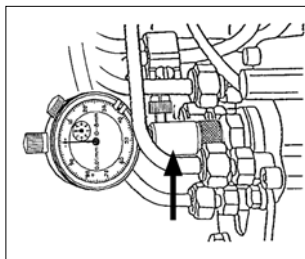
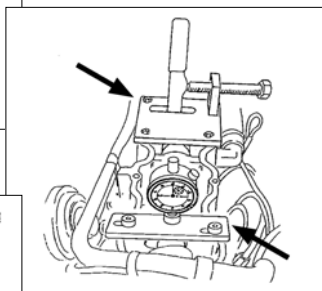
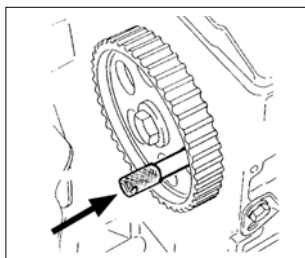
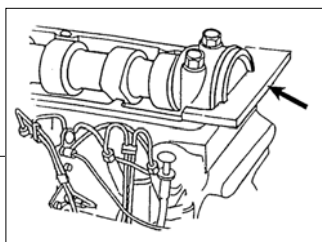
Specification:

Part No.	Description	Qty.
KL-0129-20 K	Adjusting tool with dial gauge	1
<i>consists of:</i>		
KL-0129-200	Adjusting tool	1
KL-0128-0	Dial gauge	1
KL-0129-2090	Case with insert	1

KL-0180-106 K



Universal



KL-0129-200 K Adjusting Tool for Lucas CAV-Roto-Injection Pumps (not ill.)

As **KL-0129-20 K** but without dial gauge **KL-0128-0**.

KL-0180-106 K Locking Tool Set

Universal 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), 1.9TDi (-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.

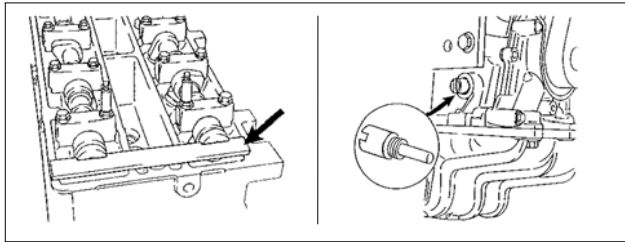
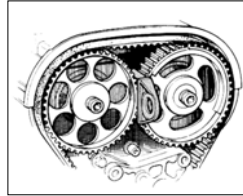
To prevent the engine shafts (e.g. camshafts, crankshaft, injection pump shaft) from turning or to keep them in a specific position when changing a timing belt or to adjust the injection pump.

Specification:

Part No.	Description	Qty.
KL-0180-106 K	Locking tool set	1
<i>consists of:</i>		
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 Ø40 mm	1
KL-1480-15	Locking pin angled Ø7,8	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
KL-1780-101	Locking pin Ø6,6	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

Note: Further valve train tools see vehicle manufacturer specific pages.

KL-0180-105 K



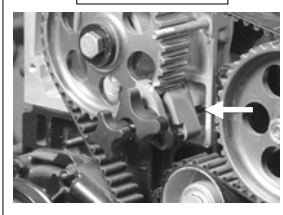
Note: Further valve train tools see vehicle manufacturer specific pages.

KL-0180-2 K

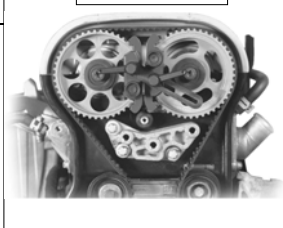
Universal



KL-0180-21



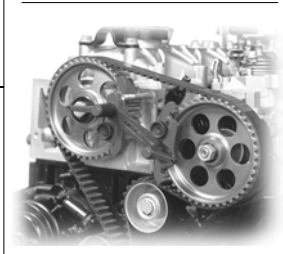
KL-0180-20



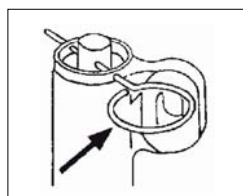
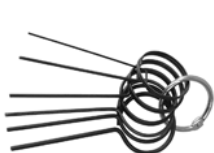
KL-0180-20



KL-0180-201



KL-0180-30



KL-0180-105 K Locking Tool Set

Suitable for TwimCam petrol engines e.g.

Ford (Zetec) Fiesta, Puma & Focus 1.25, 1.4 1.6 & 1.7 16V; Escort/Orion 1.6i & 1.8i Mondeo 1.6, 1.8 & 2.0 16V. (-98)

Honda Civic, Accord, Prelude, Integra & Shuttle 1.6, 2.0, 2.2 & 2.3

Land Rover Discovery 2.0MPi, Freelander 1.8i 16V.

Mazda 121 1.25 16V.

Rover Metro, Gta/Gti, 114, 214, 216, 218, 414, 416, MGF, 220, 420, 618, 620, 623, 820/Vitesse (92-), 25, 45

Vauxhall/Opel (EcoTec) Corsa, Tigra, Meriva, Astra, Cavalier, Calibra, Vectra, Omega, Frontera & Sintra 1.4, 1.6, 1.8, 2.0 & 2.2 16V.

To prevent the engine shafts (e.g. camshafts, balancer shafts, crankshafts) from turning.

Specification:

Part No.	Description	Qty.
KL-0180-105 K	Locking Tool Set	1
<i>consists of:</i>		
KL-1780-103	Locking pin Ø 6,8	2
KL-1780-104	Locking pins Ø 5,0	2
KL-0680-1051	Fixing gauge for camshaft	1
KL-0482-313	Locking tool for Camshafts (pale grey)	1
KL-1780-105	Locking tool for Camshafts (orange)	1
KL-1780-106	Locking tool for Camshafts (black)	1
KL-0482-314	Locking tool for Camshafts (brown)	1
KL-0482-311	Locking tool for Camshafts (yellow)	1
KL-0482-312	Locking tool for Camshafts (blue)	1
KL-1780-107	Locking pin for balance shaft Ø 7,3 / 6,1	1
KL-0680-1056	Locking pin for crankshaft (short)	1
KL-0180-1059	Case + insert	1

KL-0180-2 K Locking Tool Set Multi- / Uni-Lock

Universally applicable tool set to lock timing-belts e.g. camshaft pulleys (double and single camshaft engines), fuel injection pump pulleys, etc.

Specification:

Part No.	Description	Qty.
KL-0180-2 K	Locking tool set Multi- / Uni-Lock	1
<i>consists of:</i>		
KL-0180-20	Locking tool	1
KL-0180-201	Extended rail	1
KL-0180-21	Unilock	1

KL-0180-20 Locking Tool

Universally adjustable. For toothed pulleys spaced between approximately 5 mm to 60 mm apart.

For TwinCam engines (e.g. Citroën, Fiat, Ford, Honda, Hyundai, Lancia, Mazda, Mitsubishi, Nissan, Opel/Vauxhall, Peugeot, Renault, Rover, Saab, Subaru, Toyota, Volvo etc.) and for Diesel engines to lock the camshaft and injection pump (e.g. VW-Audi, Ford, Seat, Škoda, etc.)

By inserting the **KL-0180-20** Locking Tool in the drive pulleys it is ensured that they do not lose the relationship to the crankshaft during repairs or changing the timing belt.

KL-0180-201 Strip increased in length

To be used with the **KL-0180-20** locking tool for toothed belt sprockets with a distance of approx. **60 mm to 125 mm**, e.g. for locking the injection pump wheel in relation to the camshaft.

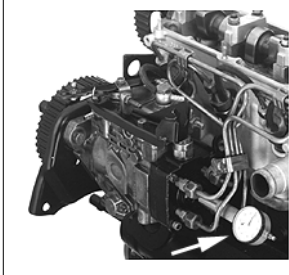
KL-0180-30 Retaining Pin Set 0,8 mm - 1,9 mm

To lock the automatic tensioner when changing the timing belt.

KL-0129-1 A



VW-Audi, Seat, Škoda



KL-0129-1 A Adjustment Tool Set

For adjustment of BOSCH-VE fuel injection pump on Diesel engines.

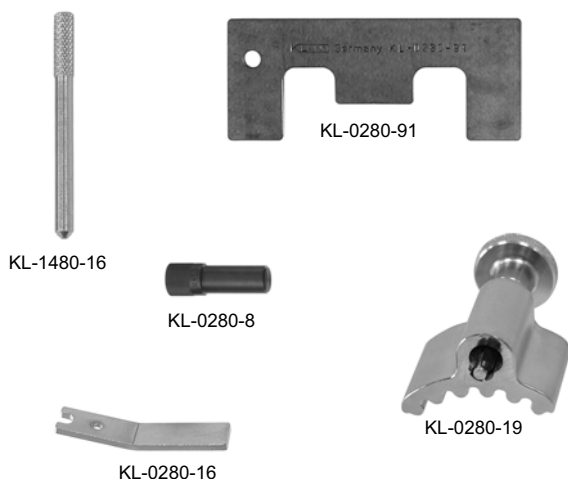
Advantages:

- Precise adjustment of the BOSCH-VE injection pump.
- Easy handling.
- Applicable on all vehicles equipped with BOSCH-VE injection pump.

consists of:

Part-No.	Description	Qty.
KL-0129-10	Adaptor 35 mm M8×1 incl. Extension KL-0128-07 (30 mm)	1
KL-0129-11	Adaptor 65 mm M8×1	1
KL-0129-12	Adaptor 120 mm M8×1	1
KL-0129-13	Adaptor M12×1,25 to M8×1 for VW-Audi TDI	1
KL-0129-14	Adaptor 85 mm M10×1 for VW-Audi TDI engines etc.	1
KL-0128-0	Dial Indicator Ø 40 mm incl. Extension KL-0128-03 (10 mm)	1
KL-0280-8	Locking Pin Ø15.5 for VW-Audi	1
KL-0280-9	Fixing Gauge for VW-Audi, Ford, etc.	1
KL-0129-1020	Plastic Storage Case, empty	1

KL-0280-106 A



KL-0280-106 A Locking Tool Set for VW-Audi (German Utility Model)

Universal Diesel tool set to lock or position Camshaft, Crankshaft, Injection Pump drive pulley, etc. when changing the Timing Belt or performing engine repairs.

Contents:

KL-0280-91 Camshaft Tool

Suitable e.g. 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-1480-16 Locking Pin Ø 6 × 60 mm

To lock Injection Pump drive pulleys
Suitable e.g. for VW-Audi, Seat, Škoda, 1,9 D; SD; SDI; TD and TDI.

To position the Camshaft
Suitable e.g. for VW-Audi, Ford, Seat, Škoda TDI PD engines.

KL-0280-8 Locking Pin Ø 15,5 mm

To lock Injection Pump drive pulleys
suitable e.g. for VW-Audi, Seat, Škoda, etc.

KL-0280-19 Locking Tool with expanding collet for Crankshaft Pulley (German Utility Model)

Suitable e.g. for VW-Audi, Ford, Seat, Škoda 3- and 4-Cylinder TDI PD engines.

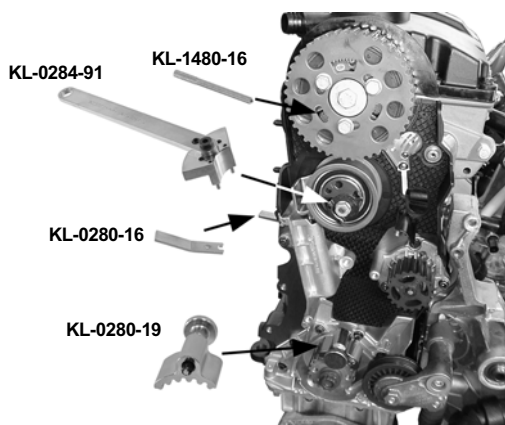
KL-0280-16 Fixture

To hold the timing belt tensioner in the starting position.
Suitable e.g. for VW-Audi, Ford, Seat, Škoda TDI PD engines.

Accessory:

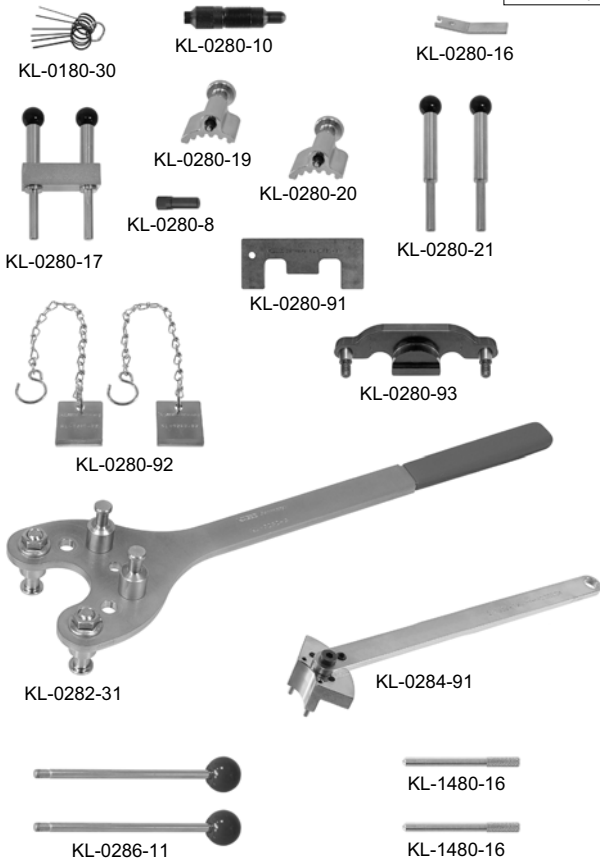
KL-0284-9 Tension Tool for idler pulley

Tools required to replace Timing Belt on VW-Audi, Ford, Seat, Škoda 1,9 TDI PD



KL-0280-107 K

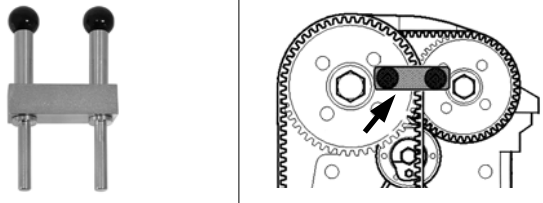
VW-Audi



Note: The tool set KL-0280-107 K is being supplied in a plastic case.

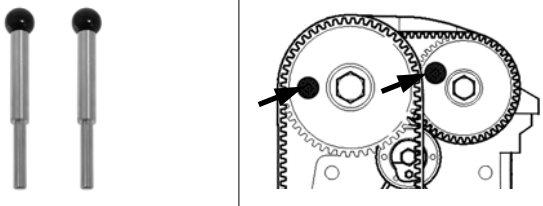
KL-0280-17

VW-Audi



KL-0280-21

VW-Audi



KL-0280-11

VW-Audi



KL-0280-13



KL-0280-10

VW-Audi



KL-0280-107 K Locking Tool Set

(German Utility Model)

Universal suitable for the current VW-Audi, Seat and Skoda vehicles e.g.:

To lock or position engine shafts such as camshafts, injection pump shafts and crankshafts to install timing belt clamping jigs when replacing timing belts or during engine repairs.

This locking set **KL-0280-107 K** is the ideal tool for your workshop.

Note: The application areas of the single tools are on catalogue pages 6.4-07 to 6.4-13.

Specification:

Part No.	Description	Qty.
KL-0280-107 K	Locking tool set	1
<i>consists of:</i>		
KL-0180-30	Retaining pin set 0,8 mm - 1,9 mm	1
KL-0280-10	Locking pin Audi V6	1
KL-0280-16	Fixture	1
KL-0280-17	Locking tool for camshaft	1
KL-0280-19	Locking tool for camshaft 1.2/1.4/1.9 l. TDI PD	1
KL-0280-20	Locking tool for camshaft 2.0 l. TDI PD	1
KL-0280-21	Locking tool for camshaft (2 pcs.)	1
KL-0280-8	Locking pin Ø 15,5 mm	1
KL-0280-91	Fixing gauge for camshaft	1
KL-0280-92	Fixing gauge for camshafts V6 (2 pcs.)	1
KL-0280-93	Fixing gauge for camshaft A3 / Golf IV TDI	1
KL-0282-31	Reaction wrench	1
KL-0284-91	Reaction wrench for timing belts 240 mm long	1
KL-0286-11	Guide bolt set for front beam	1
KL-1480-16	Locking pin Ø 6 mm, long	2
KL-0280-1070	Plastic case	1

KL-0280-17 Locking Tool for camshaft

Suitable for VW- Audi 1,4 / 1,6 L petrol engines e.g. VW Lupo, Polo, Golf IV, Bora / Audi A2

To lock the both camshaft wheels.

Necessary when replacing timing belts or during other engine repairs.

Weight:.....340 g

KL-0280-21 Locking Pin Set

Suitable for VW- Audi 1,4 / 1,6 L petrol engines e.g. VW Lupo, Polo, Golf IV, Bora / Audi A2

To lock the both camshaft wheels.

Necessary when replacing timing belts or during other engine repairs.

Weight:.....160 g

KL-0280-11 Locking Tool for Camshaft

Locking tool for camshaft **Audi V6 petrol engines with 2 valves per cylinder** e. g. for example when replacing the timing belt or performing engine repairs.

Weight:.....1,9 kg

KL-0280-13 Locking Tool for Camshaft

To lock the Camshafts on **Audi V6 petrol engines with 5 valves per cylinder**, for example when replacing the timing belt or performing engine repairs.

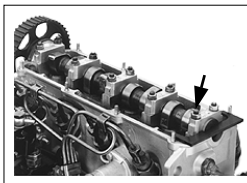
Weight:.....2,2 kg

KL-0280-10 Locking Pin

Locking Tool for Crankshaft **VW-Audi V6 petrol and V6 / V8 Diesel engines**, for example when replacing the timing belt or performing engine repairs.

KL-0280-9

VW-Audi



KL-0280-101

KL-0280-91



KL-1480-16

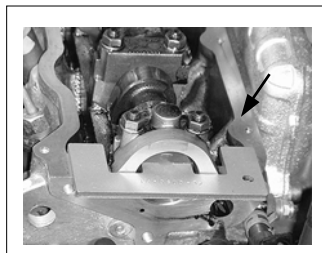


KL-0129-14



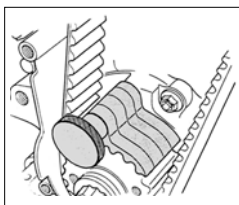
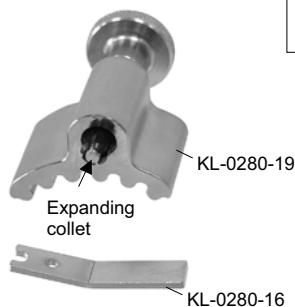
KL-0129-13

VW-Audi, Seat, Škoda



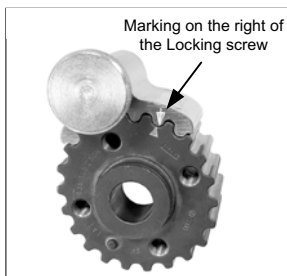
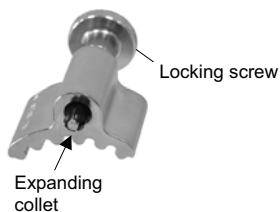
KL-0280-102 A

VW-Audi, Ford, Seat, Skoda
1,2; 1,4; 1,9; 2,0 TDI PD



KL-0280-20

VW-Audi, Seat, Skoda
2,0 TDI PD



KL-0280-9 Fixing Gauge

To lock the camshaft at **VW-Audi, Seat, Škoda, Ford, Volvo**.

The tool guarantees the correct positioning of camshaft and pump shaft to the crankshaft when exchanging the timing belt or removing or installing the injection pump. (Correct timing adjustment).

KL-0280-101 Locking Tool Set

Suitable for **VW- Audi, Seat, Škoda TDI engines**.

By inserting the Locking Tool **KL-1480-16** in the Injection-Pump pulley and inserting Guide **KL-0280-91** in the camshaft it can be ensured that the injection pump and camshaft maintain their correct position to the crankshaft during engine repairs or renewal of the timing-belt.

The Adaptor **KL-0129-13** and **KL-0129-14** enable simultaneously, together with **KL-0129-1**, the adjustment of the injection timing (advance).

Application: **Universal**

Weight263 g

KL-0280-102 A Locking Tool Set

(German Utility Model)

Suitable for **VW- Audi, Ford, Seat, Škoda 3 and 4 cyl.**
(1,2; 1,4; 1,9 and 2,0) TDI PD engines.

The use of Locking Tool **KL-0280-19** in the Crankshaft timing-belt pulley in combination with the locking of the Camshafts with Pin **KL-1460-16** will ensure that the alignment of the Camshafts to the Crankshaft is retained. Before the removal of the automatic belt-tensioning pulley, this must be brought into the "zero" position and held using tool **KL-0280-16**. Necessary during replacement of timing-belts or engine repairs.

Weight:320 g

Note: The **expander-type locking pin** holds the tool accurately in the housing hole.

Basic body made of tensional steel.

KL-0280-20 Locking Tool with Expanding collet for camshaft (German Utility Model)

Suitable for **VW-Audi 2,0 L TDI engines with oval Crankshaft timing-belt pulley, e.g. enginecode BDK, BKE, BLB, BMA, BMM, BMP, BMR, BNA, BPW, BRE, BRF, BRC, BUZ, BVE etc.**

To lock the crankshaft into position. This tool is required in the case of toothed belt replacement or engine repairs.

Note: The **expander-type locking pin** holds the tool accurately in the housing hole.

Accessories:

KL-1480-16 Locking pin
(to lock the camshaft [2x for TwinCam])

KL-0284-91 Reaction wrench
(for tensioning timing belts)

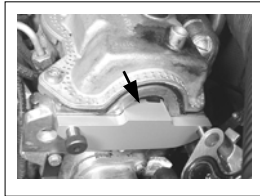
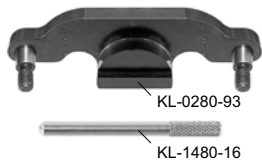
KL-0280-19 Locking tool for crankshaft timing belt
(for *round* crankshaft pulleys)

KL-0282-31 Reaction wrench

KL-0286-11 Guide Bolt set
(for front beam)

KL-0280-103

VW-Audi



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 hp) with aluminium valve cover.

The **KL-0280-103** allows retention of camshaft position without the need to remove the cam-cover - so eliminating risk of damage to vulcanised gasket.

Note: The valve cover gasket is vulcanised on to the valve cover and can only be renewed as a single unit with the cover.

The gasket is not available separately.

Required to lock engine shafts such as camshafts and injection pump shafts when replacing timing-belts or during engine repairs. Weight:..... 400 g

Advantages: High time and cost savings.

KL-0282-40

VW-Audi,
Opel, etc.



KL-0282-40 Camshaft Pulley Removal Drift

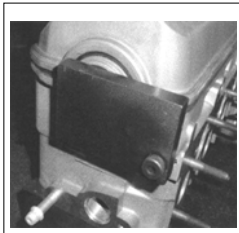
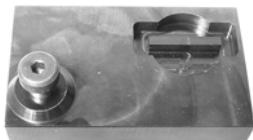
Suitable for VW/Audi 4 cylinder 1,9 TDI engine (110 hp)

To drift the camshaft pulley off the conical seat on the camshaft. The special profile of the Drift ensures that the impact force is brought to bear in an exactly axial direction onto the forward component (pulley).

Weight: 210 g

KL-0280-94

VW-Audi



KL-0280-94 Fixing Gauge for Camshaft

Suitable for VW/Audi 5 cylinder TDI engine e.g. LT, T4

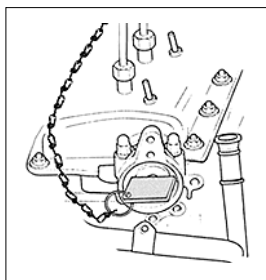
The Setting Tools allows retention of camshaft position without the need to remove the cam-cover - so eliminating risk of damage to vulcanised gasket.

Necessary while renewing Timing Belts or during engine repairs.

Weight: 680 g

KL-0280-105

VW-Audi,
Seat



KL-0280-105 Locking Tool Set

Suitable for VW-Audi 2,5 TDI V6 and Audi A8 3,3 TDI V8 engine.

To locate and hold the camshaft and the crankshafts in the correct position.

Necessary while renewing Timing Belts or during engine repairs.

Consists of:

KL-0280-92 Fixing Gauge for Camshaft (2 pcs.)

KL-0280-10 Locking Pin for crankshaft

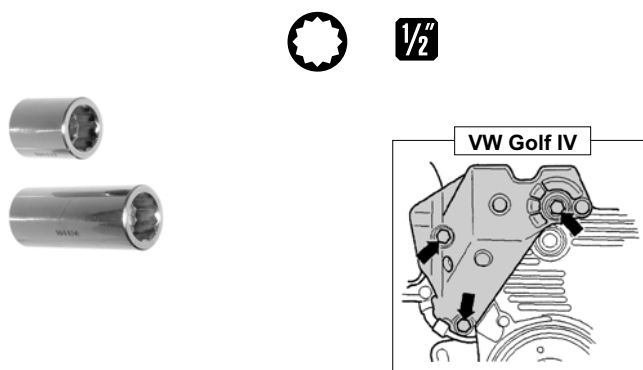
Accessories:

KL-1480-16 Locking Pin

(To prevent the injection pump gear from turning)

Weight: 115 g

KL-0286-10



KL-0286-10 Special Sockets 16 mm (2 pcs.)

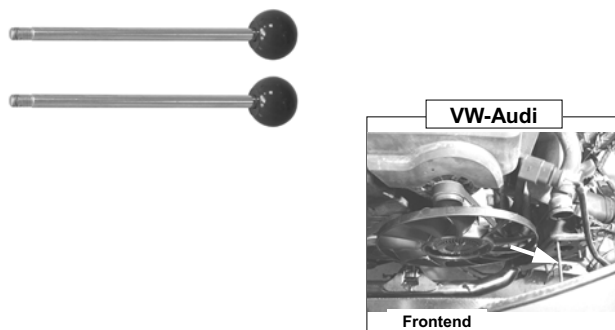
For VW Golf IV.

Required to remove and replace the alloy engine-mount, due to the very limited access, **KL-0286-10** 16 mm (12 point).

Required when changing timing-belt or performing engine repairs.

Drive 1/2"
 Length..... 30 / 47,5 mm
 Hex: 16 (12-point)

KL-0286-11



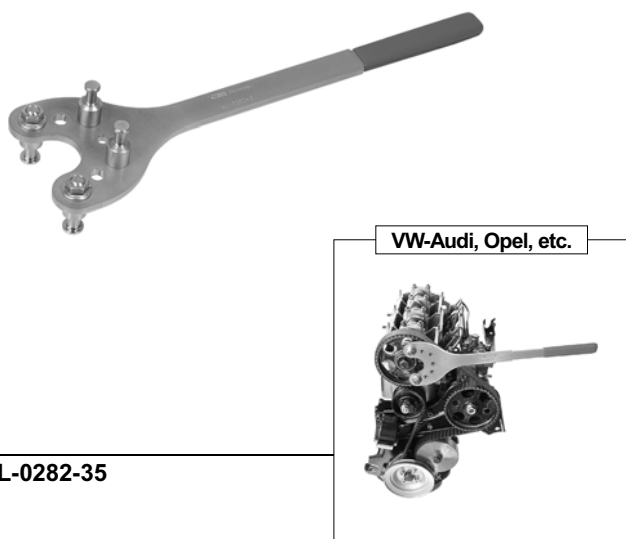
KL-0286-11 Guide Bolt Set M8 for front beam

Suitable for VW- Audi A4, A6 and Passat 1997-onwards.

When replacing timing belts or during engine repairs it is necessary to pull the front beam forwards on guide bolts.

Length:..... 190 mm

KL-0282-31



KL-0282-31 Reaction Wrench (420 mm long, adjustable)

With inter-changeable tips and several hole intervals.

Suitable for all timing pulleys with holes from minimum Ø 12 mm. e.g. VW-Audi, Ford, Opel, Peugeot, Renault, Citroën, Rover, Volvo, Japanese vehicles, etc.

To prevent the Pulley on Camshafts, Injection pumps, etc. from rotating when loosening the central fastening bolt. etc.

A selection of tip-Ø and hole intervals are available to make the wrench almost universal in its range of application.

Technical Data:

Tip distance: from 45 mm to 75 mm
 Tip-Ø:..... 12 mm and 16 mm
 Tip length: 34 mm
 Overall tool length:..... 420 mm

KL-0282-35



KL-0282-35 Reaction Wrench (420 mm long, adjustable)

Suitable for all timing pulleys with holes from minimum Ø 14 mm. e.g. VW-Audi, Ford, Opel, Peugeot, Renault, Citroën, Rover, Volvo, Japanese vehicles, etc.

To prevent the Pulley on Camshafts, Injection pumps, etc. from rotating when loosening the central fastening bolt. etc.

The adjustable lever allows to adjust the hole distance and makes the reaction wrench almost universal in its range of application.

Technical Data:

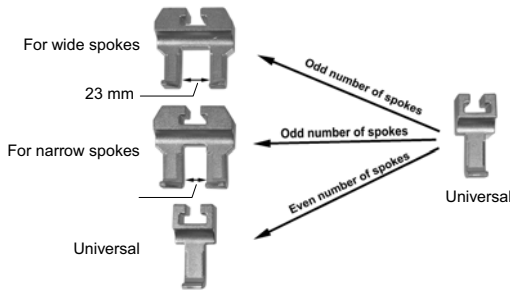
Tip distance: from 14 mm to 130 mm
 Tip-Ø:..... 14 mm
 Tip length: 31 mm
 Overall tool length:..... 410 mm

KL-0282-52

Pulling off camshaft sprocket.

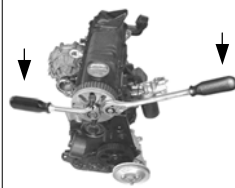


Types of hook



KL-0183-50

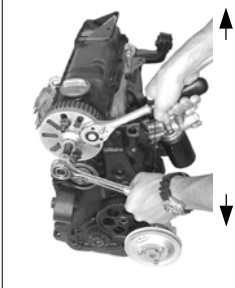
Loosen retaining bolt



VW-Audi, Ford, Seat, Škoda, Opel, etc.

Extract the Pulley

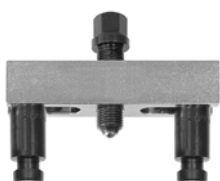
Dismantling Pulley



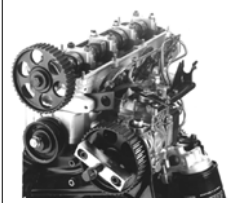
KL-0183-51



KL-0282-1



VW- Audi, Opel, etc.



KL-0282-52 Puller for Crankshaft Pulley

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 is particularly suitable for pulling off 5- and 6-spoke camshaft pulleys.

A selection of hooks is available to make the puller almost universal in its range of applications.

Technical Data:

- ⇔ [mm]..... 100 mm
- ⚙ [mm]..... 38 mm
- Working load max.:..... 2 t.
- Weight: 1,3 kg
- Hex. Drive:..... 17 mm

KL-0183-50 Pulley-Extractor and Reaction Tool (Patented)

Universal application

2 Tools in one

Loosen the retaining bolt and extract the Pulley

Suitable for all Pulleys with holes with a PCD Ø from 70 mm - 100 mm. Suitable for hole Ø from minimum 20 mm.

To lock the Pulley while loosening or tightening the retaining bolt, as well as preventing the Pulley from rotating during extraction. Any available 1/2" ratchet or extension drive may be used as the reaction tool.

Contents:

Part No.	Description	Qty.
KL-0183-50	Pulley-Extractor and Reaction Tool	1
<i>consists of:</i>		
KL-0183-510	Puller Plate	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 Pulley-Extractor and Reaction Tool (Patented)

As KL-0183-50 but with 2 Hooks Ø- 26 mm and 2 Hexagonal Nuts.

Suitable for VW-Audi, Seat, Škoda, Opel/Vauxhall Ford, BMW, Mercedes, Peugeot, Citroën, Renault, Fiat, Japanese vehicles, etc.

Contents:

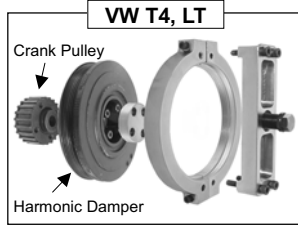
Part No.	Description	Qty.
KL-0183-51	Pulley-Extractor and Reaction Tool	1
<i>consists of:</i>		
KL-0183-510	Puller Plate	1
KL-0183-532	Hook Ø 26 mm	2
KL-0008-0009	Shoulder Nut M10	2
KL-0183-540	Pressure-Unit	1

KL-0282-1 Extractor

To loosen the injection pump pulley from the shaft.

Application: VW-Audi, Seat, Škoda, etc.

KL-0282-51



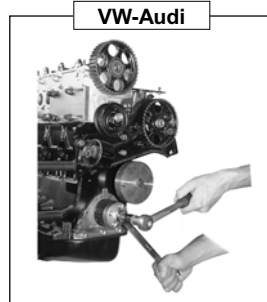
KL-0282-51 Puller for Harmonic Damper (German Utility Model)

For VW 5 cylinder engines with poly-V-belt e.g. T4, LT etc.
Removes the harmonic damper while simultaneously reacting against the crankshaft pulley. The KL-0282-51 Puller is absolutely necessary if the shoulder of the Pulley has corroded onto the harmonic damper.

Advantages:

- No damage to the harmonic damper.
- High time-savings.

KL-0282-50



KL-0282-50 Puller for Crankshaft Pulley

For VW-Audi 4 and 5 cylinder engines.
To remove the front pulley from the crankshaft.

KL-0284-61



KL-0284-61 Reaction Wrench for Crankshaft Pulley (German Utility Model)

For VW-Audi 4 and 5 cylinder engines with and without harmonic damper.
To provide a reaction onto the crankshaft front pulley so that the central pulley bolt may be loosened or tightened.

Required for timing belt changes, oil-seal replacement and during engine repairs.

Advantage:

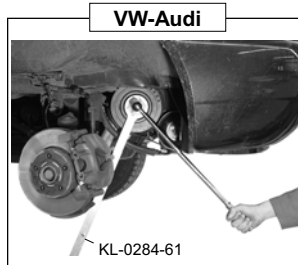
By using the 2 extension handles, the loosening and tightening of the central crankshaft pulley bolt can be undertaken by a single mechanic.

Consists of:

Adaptor, cylinder bolts (4 x), Special cylinder bolts (x 4), Special Ring Spanner 60 mm, Extension handles (x 2)

Length overall. (incl. 2 extensions): 1800 mm

KL-0284-62



KL-0284-62 Socket hex 27 mm

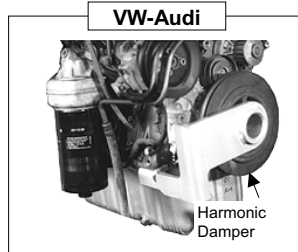
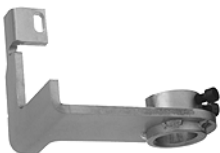
Suitable for VW-Audi, Seat, Škoda 4 and 5 cylinder engines, that have a 27mm hex bolt on the crankshaft to secure the belt pulley, vibration damper, etc.

To loosen or tighten the central crankshaft bolt. To be used with the KL-0284-61 reaction wrench.

Required when removing or installing toothed belts and their pulleys, crankshaft sealing rings, belt pulleys or vibration dampers or during engine repairs.

Hex: 27 mm Length: 100 mm
Drive: 1/2" □ Weight: 350 g

KL-0280-12

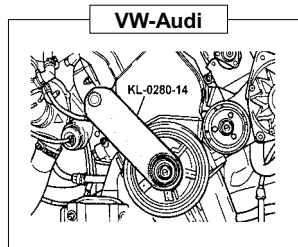


KL-0280-12 Locking Tool for Vibrator Damper

To lock the vibrator damper (pulley at the crankshaft) when the central bolt has to be loosened (e.g. changing of the timing belt).

Application: **VW engines**
(e.g. VW T4 Van with 5-cylinder Diesel)

KL-0280-14



KL-0280-14 Locking Tool

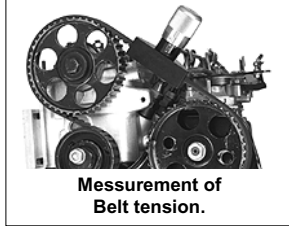
For counterbearing of the V-belt pulley / vibration damper while removing the crankshaft-centre bolt.

Application: **VW-Audi 5 Cylinder diesel engines up to '97**
(AAT, ABP, AEL).

KL-0126-10



VW-Audi, Ford, Opel



Measurement of Belt tension.

KL-0126-10 Belt Gauge (mechanical)

The belt-gauge KL-0126-10 serves for controlled adjustment of the belt tension on combustion engines.

The tool is applicable on every vehicle with available specifications of admitted belt reflexion in mm at a special force in N or kp.

It is especially suitable for:

- Audi
- Ford
- Opel
- VW etc.

Advantages:

- Easy handling.
- Compact metalastic design.
- Controlled adjustment of belt tension.
- Double reading possibility (on front and rear side).

Specifications:

Range / Scale	0 - 20 mm
Scale partition	in mm
Measuring method	mechanically (spring)
Setnut revolution by 360°	1 mm
Setnut partition	1/10 mm
Load to the measuring pin due to spring force by 1 revolution of the setnut	10 N (≈1 kp)
Weight	0,344 kg

KL-0284-91



VW-Audi



KL-0284-91 Reaction Wrench

With adjustable clamping lever to tense timing belts on **VW-Audi** engines. Due to the clamping lever adjustment, the tensioner puller can be operated even in constricted areas.

Length: 240 mm Depth: 29,5 mm

Accessories for KL-0284-9:

KL-0284-910 Tension Lever 240 mm long with Countersunk Head Screw (not ill.).

KL-0284-10



VW-Audi



KL-0284-10 Reaction Wrench

(German Utility Model)

For tightening timing belts with limited access - the wrench can be activated from a variety of angles to enable it to be used in confined spaces.

Drive: 3/8"□ or by pin.

Length: 47 mm Depth: 32,5 mm

KL-0284-14



VW-Audi

KL-0284-14 Torx®-Key T45 jointed

Applicable for loosening the clamping screw on timing belt tightener on **VW-Audi vehicles** especially on: Drive: 3/8"□

- VW Golf III, petrol engines from 115 HP onwards and every diesel engine.
- Audi 80/A4, petrol engines with 115 HP and double fan.
- Audi 80/A4, diesel engines with double fan

KL-0284-17



VW-Audi

KL-0284-17 Reaction Wrench

To stretch and relax the automatic belt clamping role on **Audi A6 5-cylinder TDI engines** (also Volvo, etc.).

Length: 175 mm

KL-0484-10



VW-Audi, Opel

KL-0484-10 Locking Tool

To block the automatic clamping role of the fan belt and the poly-V-belt on **VW-Audi** engines.

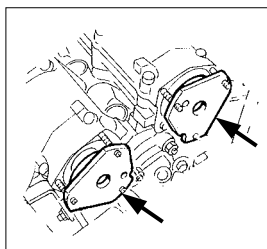
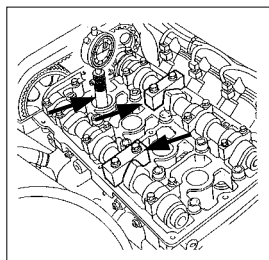
Also applicable to block the automatic clamping role of the fan belt on **Opel** vehicles with Eco Tec-engines.

Ø 4,0 / 6,0 mm

Weight: 70 g

KL-1682-30 K

Alfa Romeo,
Fiat / Lancia



**KL-1682-30 K Locking Tool Set
for Camshaft
Alfa Romeo, Fiat / Lancia**

Suitable for: Alfa Romeo vehicle with 1,4; 1,6; 1,8; 2,0; 2,5; 3,0 and 3,2 l. 4- and 6-cylinder engine. e.g.: 145, 146, 147, 155, 156, 164, 166, GTA, GTV, Spider, Spider GT etc. and Fiat / Lancia vehicle with 1,2; 1,4; 1,6; 1,8; 2,0 l. 4- and 5-cylinder engine. e.g.: Fiat Panda, Punto, Palio, Siena, Bravo, Brava, Stilo, Marea, Multipla, Barchetta, Coupe etc. Lancia Dedra, Delta, Kappa, Lydra etc.

For repairs to the cylinder head or engine, or when replacing a timing belt, the **KL-1682-30 K** locking tool set is needed to determine the top dead centre point of cylinder 1 on the working stroke, hold the camshafts in this position and permit adjustment of the tensioning pulley.

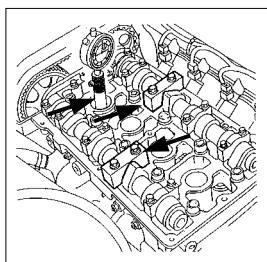
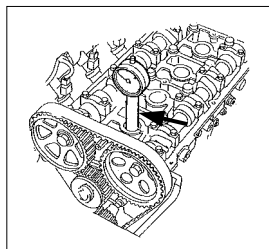
Advantage:

- Safe, accurate positioning and locking of the camshafts.
- Large time-saving.

Contents and application see table page 6.4-15.

KL-1682-31 K

Fiat, Lancia



**KL-1682-31 K Locking Tool Set
for Camshaft
Fiat / Lancia**

Suitable for: Fiat / Lancia vehicle with 1,2; 1,4; 1,6; 1,8; 2,0 l. 4- and 5-cylinder engine e.g.: Fiat Panda, Punto, Palio, Siena, Bravo, Brava, Stilo, Marea, Multipla, Barchetta, Coupe etc. Lancia Dedra, Delta, Kappa, Lydra etc.

For repairs to the cylinder head or engine, or when replacing a timing belt, the **KL-1682-31 K** locking tool set is needed to determine the top dead centre point of cylinder 1 on the working stroke, hold the camshafts in this position and permit adjustment of the tensioning pulley.

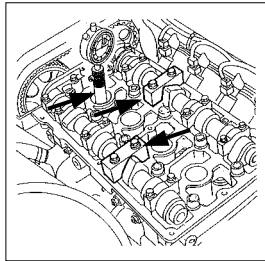
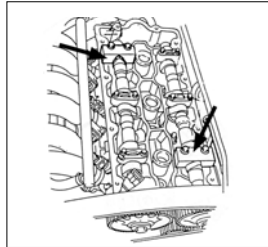
Advantage:

- Safe, accurate positioning and locking of the camshafts.
- Large time-saving.

Contents and application see table page 6.4-15.

KL-1682-32 K

Alfa Romeo



KL-1682-32 K Locking Tool Set for Camshaft Alfa Romeo

Suitable for: Alfa Romeo vehicle with 1,4; 1,6; 1,8; 2,0; 2,5; 3,0 and 3,2 l. 4- and 6- cylinder engine e.g.: 145, 146, 147, 155, 156, 164, 166, GTA, GTV, Spider etc.

For repairs to the cylinder head or engine, or when replacing a timing belt, the **KL-1682-32 K** locking tool set is needed to determine the top dead centre point of cylinder 1 on the working stroke, hold the camshafts in position.

Advantages:

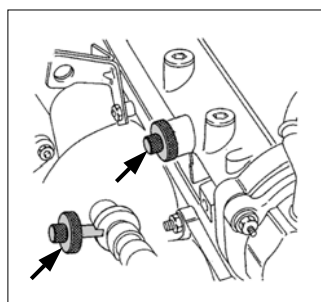
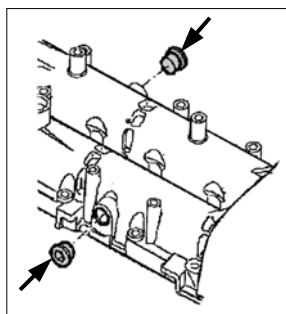
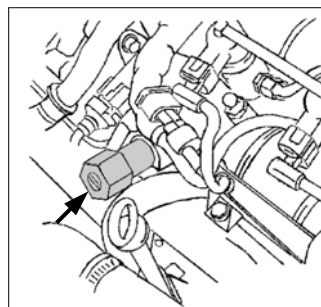
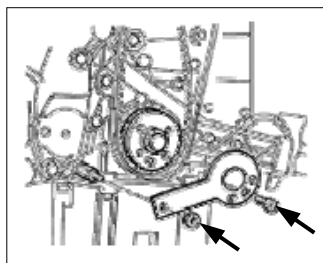
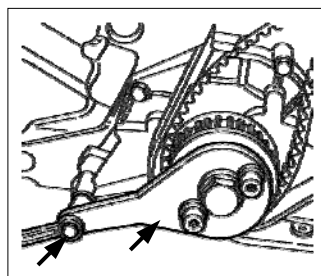
- Safe, accurate positioning and locking of the camshafts.
- Large time-saving.

KL-1682-30	KL-1682-31	KL-1682-32	Part No.	Description	Vehicle	Litre	Cubic capacity	Cylinder	Valve
•	•	•	KL-1682-301	Locking Tool Set for Camshaft (2 pcs.)	ALFA 145 / 146 / 156	1,4/1,6	1370/1598	4	16
•	•	•	KL-1682-302	Locking Tool Set for Camshaft (2 pcs.)	ALFA 145 / 146 / 155 / 156 / 164 / GTV / Spider	1,8/2,0	1747/1970	4	16
•	•	•	KL-1682-303	Locking Tool Set for Camshaft (2 pcs.)	ALFA 145 / 146 / 147	1,6	1600	4	16
•	•	•	KL-1682-304	Locking Tool Set for Camshaft (2 pcs.)	ALFA 147 / 156 / 166 / GTV / Spider GT	2,0 16V	2000	4	16
•	•	•	KL-1682-305	Locking Tool Set for Camshaft (4 pcs.)	ALFA 156 / 164 / 166 / GTV / Spider	2,5 V6/ 3,0 V6	2500/3000	6V	12 / 24
•	•	•	KL-1682-306	Locking Tool Set for Camshaft (4 pcs.)	ALFA 155 / 166 / GTA / GTV / Spider	3,2 V6	3200	6V	24
•	•	•	KL-1682-311	Locking Tool for Camshaft (1 pcs.)	FIAT Bravo / Brava / Marea LANCIA Y	1,4	1370	4	12
•	•	•	KL-1682-312	Locking Tool Set for Camshaft (2 pcs.)	FIAT Barcetta / Coupe LANCIA Dedra / Delta	1,8	1747	4	16
•	•	•	KL-1682-313	Locking Tool Set for Camshaft (2 pcs.)	FIAT Bravo / Brava / Marea LANCIA Dedra	1,8	1747/1800	4	16
•	•	•	KL-1682-314	Locking Tool Set for Camshaft (2 pcs.)	FIAT Punto HJT / Barchetta / Coupe LANCIA Dedra / Delta	1,8	1747	4	16
•	•	•	KL-1682-315	Locking Tool Set for Camshaft (2 pcs.)	FIAT Coupe LANCIA Kappa / Lybra	2,0 20V	1998	5	20
•	•	•	KL-1682-316	Locking Tool Set for Camshaft (2 pcs.)	FIAT Coupe TB LANCIA Kappa TB	2,0 20V	1998	5	20
•	•	•	KL-1682-3511	Fixing Gauge for Camshaft	FIAT Panda new / Punto new / Palio / Siena	1,2	1200	4	8
•	•	•	KL-1682-3512	Fixing Gauge for Camshaft	FIAT Panda new / Punto new / Palio / Siena	1,2	1200	4	8
•	•	•	KL-1682-352	Fixing Gauge Set for Camshaft (2 pcs.)	FIAT Bravo / Brava / Marea / Doblo / Multipla LANCIA Lybra	1,6 e	1600	4	16
•	•	•	KL-1682-383	Socket wrench for phase compensator	FIAT Barcetta / Punto new / Coupe / Marea LANCIA Lybra	1,8/ 2,0	1800/2000	4 / 5	16/20
•	•	•	KL-1682-371	Adjusting tool for tensioning pulley	FIAT Bravo / Brava / Stilo / Marea LANCIA Lybra / Delta	1,6	1580	4	16
•	•	•	KL-1682-382	Top dead centre adjusting tool	FIAT Bravo / Bravo / Coupe LANCIA Lybra ALFA 147 / 156 / 166 / GTV / Spider GT	1,6/ 2,0	1600/2000	4 / 5	16/20
•	•	•	KL-1682-381	Adapter for top dead centre adjustment		1,2	1200	4	8
•	•	•	KL-1682-3090	Plastic case					

KL-1682-40 K



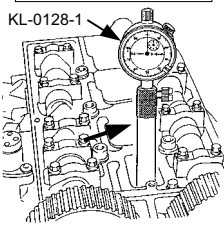
Alfa Romeo,
Fiat, Lancia



KL-1681-10



Alfa Romeo, Fiat



KL-1682-40 K Locking Tool Set Alfa Romeo, Fiat, Lancia

Applicable 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.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

Contents:

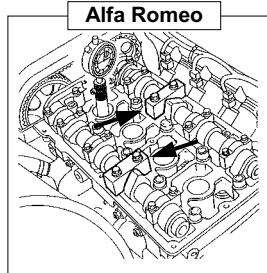
Part No.	Description	Vehicles	Engines
KL-1682-401	Locking tool for camshaft	Fiat Tipo, Tempra, Ducato Lancia Delta, Dedra Alfa 145, 146, 155	1,9 TD
KL-1682-402	Locking tool for camshaft	Fiat Ducato, Fiorino, Palio, Siena, Punto, Tipo, Uno	1,7 D / TD
KL-1682-403	Locking tool for camshaft	Fiat Bravo, Brava, Ducato, Talento, Tipo	1,9 D
KL-1682-404	Locking tool for camshaft (2 pcs.)	Alfa 147, 156, 166, GT Fiat Stilo	1,9 JTD 16V 2,4 JTD 20V 1,9 MJ
KL-1682-405	Locking tool for crankshaft	Fiat Ducato, Fiorino, Palio, Siena, Punto, Tipo, Uno Alfa 145, 146 155 Fiat Bravo, Brava, Ducato, Tipo	1,7 D / TD 1,9 D / TD
KL-1682-406	Locking tool for crankshaft	Alfa 145, 146, 147, 156 Fiat Doblò, Doblò Cargo, Marea, Punto (new), Stilo Alfa 156, 166 Fiat Stilo Fiat Punto, Stilo, Idea Alfa 156, 166, GT Lancia Kappa Fiat Marea	1,9 JTD 1,9 JTD 16V 1,9 MJ 2,4 JTD 2,4 JTD 20V
KL-1682-407	Locking tool for crankshaft	Alfa Romeo Fiat / Lancia	1,9 JTD euro 4
KL-1682-408	Locking tool for camshaft (2 pcs.)	Fiat Doblò, Idea, Panda (new), Punto (new), Lancia Ypsilon, Musa, Palio, Siena	1,3 JTD
KL-1682-409	Locking tool for crankshaft	Fiat Doblò, Idea, Panda (new), Punto (new), Lancia Ypsilon, Musa, Palio, Siena	1,3 JTD
KL-1682-410	Locking tool for camshaft (2 pcs.)	Fiat Ducato	2,3 JTD
KL-1682-411	Locking tool for crankshaft	Fiat Ducato	2,3 JTD
	Plastic case (with insert)		

KL-1681-10 TDC adjusting tool Alfa Romeo; Fiat

Applicable for Alfa Romeo and Fiat petrol engines.

This tool is needed to determine the TDC position at cylinder 1. (It can only be used with dial gauge KL-0128-1.)

KL-1682-21 K



KL-1682-21 K Locking Tools Set

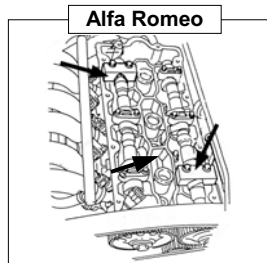
Applicable for Alfa Romeo Twin Spark 1.4; 1.6; 1.8 and 2.0 L 16V TwinCam petrol engines (Engine code: 162.01, 322.01, 323.01, 323.10, 335.03, 671.06, 672.04 and 676.01) e.g. Alfa Romeo 145, 146, 147, 155, 156, 166, Spider and GTV.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1682-211	Locking Tool Set for camshafts 1,8 / 2,0 L	1
KL-1682-212	Locking Tool Set for camshafts 1,4 / 1,6 L	1
KL-1682-213	Tensioning Tool for belt tensioner pulley (timing belt)	1
KL-1682-214	Tensioning Tool for belt tensioner pulley (balancer shaft)	1
KL-1682-2190	Plastic case	1

KL-1682-22 K



KL-1682-22 K Locking Tools Set

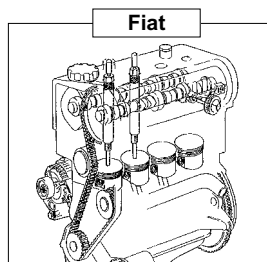
Applicable for Alfa Romeo 3,0L; 2,5L V6 24V TwinCam engine (AR324.01) e.g. Alfa Romeo 156 (97-).

To prevent the camshaft and the timing belt tensioner from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1682-221	Locking Tool Set for camshafts (4 Pcs.)	1
KL-1682-222	Tensioning Tool (11 Pcs.)	1
KL-1682-2290	Plastic case	1

KL-1682-10 K



KL-1682-10 K Locking Tools Set

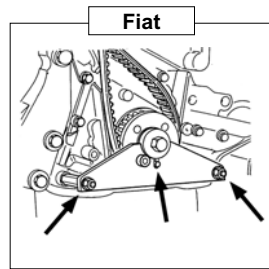
Applicable for Fiat 1,2 16 V TwinCam petrol engines (engine code: 176 B9.000, 182 B2.000 and 188 A5.000) e.g. Fiat Punto, Brava and Bravo.

To determine the specified piston position and prevent the camshafts from turning or hold them in position when changing the timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1682-1010	Piston position determination tool	2
KL-1682-1020	Locking Tool for camshaft	2
KL-1682-103	Reaction wrench	1
KL-1682-1090	Plastic case	1

KL-1682-11 K



KL-1682-11 K Locking Tool Set

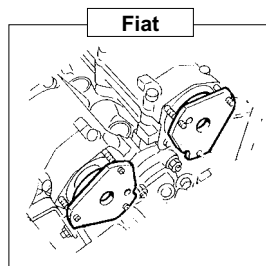
Applicable for Fiat 1,4 12 V petrol engines (182 A3.000, 182 A5.000) e.g. Fiat Brava, Bravo, Marea, Marea Weekend.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty
KL-1682-111	Locking Tool for camshaft	1
KL-1682-112	Locking Tool for crankshaft	1
KL-1682-1190	Plastic case	1

KL-1682-12 K



KL-1682-12 K Locking Tool Set

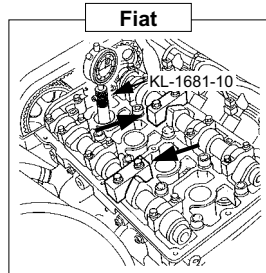
Applicable for Fiat 1,6 16 V TwinCam petrol engines (182 A4.000, 182 A6.000) e.g. Fiat Brava, Bravo, Marea, Marea Weekend, Multipla, Palio.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1682-123/1	Camshaft Setting Tool (Inlet)	1
KL-1682-123/2	Camshaft Setting Tool (Exhaust)	1
KL-1682-122	Flywheel Locking Tool	1
KL-1682-121	Adjusting Tool for tensioner pulley	1
KL-1682-1290	Plastic case	1

KL-1682-13 K



KL-1682-13 K Locking Tool Set

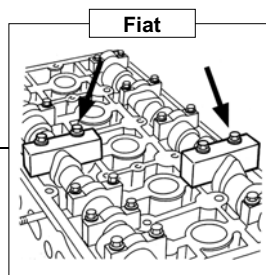
Applicable for Fiat 1,8 16 V TwinCam petrol engine (182 A2.000, 183 A1.000) e.g. Fiat Barchetta, Brava, Bravo, Coupe, Marea, Marea Weekend.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1682-132	Camshaft Locking Tool "red "	1
KL-1682-133	Camshaft Locking Tool "blue"	1
KL-1682-131	Flywheel Locking Tool	1
KL-1682-134	Adjusting Tool for tensioner pulley	1
KL-1682-1390	Plastic case	1

KL-1682-14



KL-1682-14 Camshaft Locking Tool

Applicable for Fiat 2,0 20 V TwinCam petrol engine (182 A1.000, 175 A3.000) '95-onwards e.g. Fiat Bravo, Coupe, Marea, Marea Weekend.

To prevent the camshaft from turning or to keep it in a specific position when changing a timing belt or during other engine repairs.

KL-1682-15

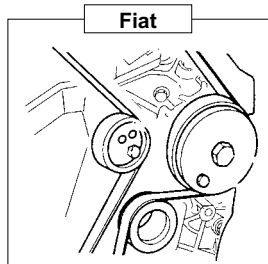


KL-1682-15 Camshaft Locking Tool

Applicable for Fiat 2,0 Turbo 20 V TwinCam petrol engine (182 A1.000, 175 A3.000) e.g. Fiat Bravo, Coupe.

To prevent the camshaft from turning or to keep it in a specific position when changing a timing belt or during other engine repairs.

KL-1682-16

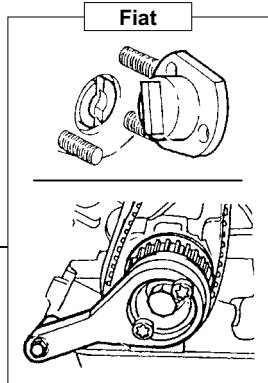


KL-1682-16 Injection pump locking tool

Applicable for Fiat 1.7 and 1.9 L diesel/turbodiesel engines with a non-adjustable camshaft timing belt pulley.
e.g. 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.

To prevent the injector pump gearwheel from turning or to keep it in position during a timing belt change and when pulling off the pump to remove it or for an engine repair.

KL-1682-17



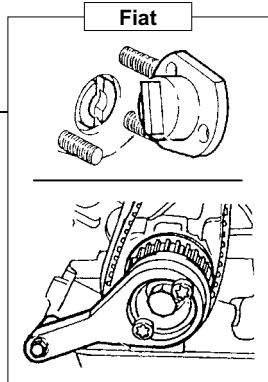
KL-1682-17 Locking Tool Set

Applicable for Fiat 1.7 L diesel / turbo diesel engines with an adjustable camshaft timing belt pulley, e.g. Fiat Punto (96-97).

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

The tool set contains an adjusting gauge for the camshaft and a locking tool for the crankshaft.

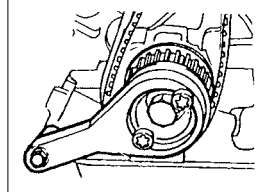
KL-1682-18



KL-1682-18 Locking Tool Set

As KL-1682-17, but for use on Fiat 1.9 L diesel engines with an adjustable camshaft timing belt pulley, e.g. Fiat Ducato (94-), Tempra (90-) and Tipo (91-95).

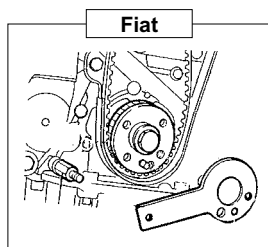
KL-1682-19



KL-1682-19 Locking Tool Set

As KL-1682-17 but for use on Fiat 1.9 L turbodiesel engines with an adjustable camshaft timing belt pulley, e.g. Fiat Ducato (94-), Tempra (90-) and Tipo (88-).

KL-1682-20 K



KL-1682-20 K Locking Tool Set

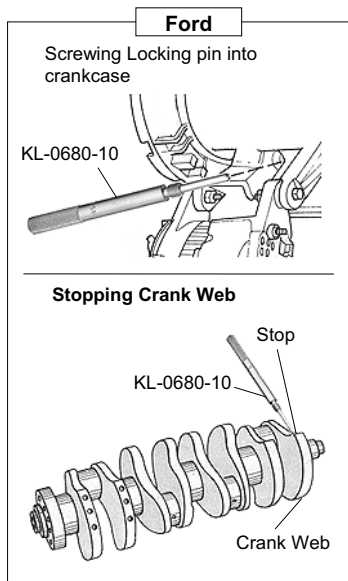
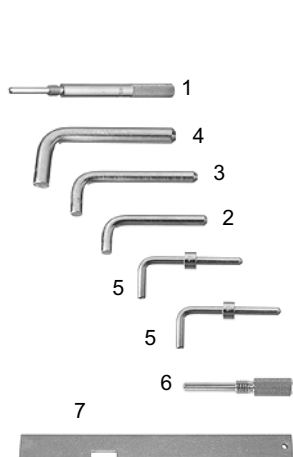
Applicable for Fiat 1,9 D/TD/JTD; 2,4 TD/JTD and PSA 1,9 D/TD, 2,1 TD diesel engines (engine code: 160 A7.000, 182 A7.000, 182 A8.000, 182 B4.000, 185 A2.000, 185 A6.000, 188 A2.000 and 188 A3.000) e.g. Fiat Brava, Bravo, Marea, Marea Weekend, Multipla, Punto, Scudo, Ulysse.

To prevent the engine shafts (e.g. camshafts, injection pump shaft, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

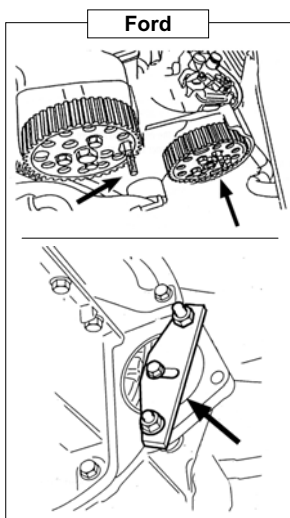
consists of:

Part-No.	Description	Qty.
KL-1380-2225	Fixing bolt (camshaft/injection pump shaft) M8	3
KL-1682-203	Locking pin for injection pump shaft	1
KL-1380-2215	Locking pin for fly wheel (angled)	1
KL-1682-201	Flywheel Locking Pin	1
KL-1682-202	Locking Tool for crankshaft	1
KL-1682-2090	Plastic case	1

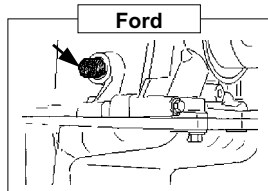
KL-0680-100 A



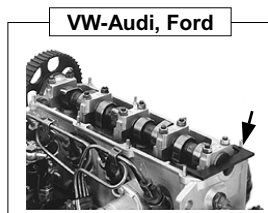
KL-0680-105 K



KL-0680-103



KL-0280-9



KL-0680-100 A Locking Tool Set for Ford

To lock and position engine components such as Camshafts, Crankshaft and Injection Pump Pulley during timing-belt replacement or engine repairs.

The correct relationship between Camshaft, Injection Pump (or correct ignition timing) to the Crankshaft during the replacement of the timing-belt or engine repairs is absolutely essential.

Only if the alignment of all components is correct will optimal power be developed and any risk of engine damage be eliminated!

Advantages:

- Correct timing adjustment.
- Quick and easy engine repairs.
- Tempered locking pins and "L-form" allows a durable usage and easy installation.

Composition:

Pos.	Part No.	Description	Qty.
KL-0680-100 A			1
consists of:			
1	KL-0680-10	Locking pin for crankshaft Ford	1
2	KL-0680-11	Locking pin Ø8,3	1
3	KL-0680-12	Locking pin Ø9,5	1
4	KL-0680-13	Locking pin Ø12,9	1
5	KL-0680-14	Locking pin Ø6	2
6	KL-0680-16	Locking pin for crankshaft	1
7	KL-0680-15	Fixing Gauge for camshaft	1

Specifications:

Part No.	Length	Ø	Ø-Handle	Thread	Weight
KL-0680-100	-	-	-	-	0,4 kg
KL-0680-10	150 mm	6,0 mm	12 mm	M10	-
KL-0680-11	77 mm	8,3 mm	-	-	-
KL-0680-12	95 mm	9,5 mm	-	-	-
KL-0680-13	105 mm	12,9 mm	-	-	-
KL-0680-14	78 mm	6,0 mm	-	-	-

KL-0680-105 K Locking Tool Set

Applicable for Ford 1,8 D/TD/TDCi diesel and 1,25 - 2,0 16V Zetec petrol engine e.g. Ford Fiesta, Escort/Orion, Focus, Puma, Sierra, Mondeo, Cougar, Courier/Kombi, P100 and Mazda 121.

Designed for pulling off the camshaft timing belt wheel and locking or positioning the engine output shafts such as the camshaft and the crankshaft. Required for changing the timing belt or for engine repair.

consists of:

Part-No.	Description	Qty.
KL-0680-1051	Locking Tool for camshaft	1
KL-0680-1052	Locking Tool for crankshaft (long)	1
KL-0680-1053	Puller for camshaft pulley	1
KL-0680-1054	Locking Tool Ø 6,0 mm	2
KL-0680-1055	Locking Tool Ø 9,5 mm	1
KL-0680-1056	Locking Tool for crankshaft (short)	1
KL-0680-1057	Locking Tool for crankshaft (middle)	1
KL-0680-1058	Locking Tool for flywheel	1
KL-0680-1090	Plastic case	1

KL-0680-103 Locking Pin Set

Applicable for Ford 1,25; 1,4; 1,6; 1,7; 1,8; 2,0 L petrol and 1,8L diesel engines.

To prevent the camshaft to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

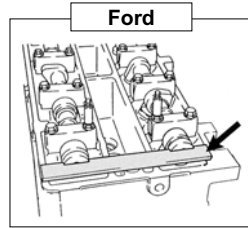
Part No.	Description	Qty.
KL-0680-10	Locking pin for crankshaft Ford	1
KL-0680-16	Locking pin for crankshaft	1
KL-0680-17	Locking pin for crankshaft	1

KL-0280-9 Fixing Gauge

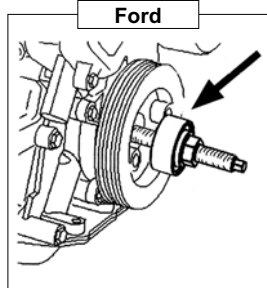
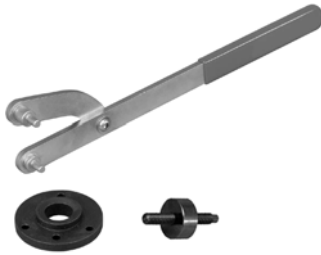
Applicable for VW-Audi, Ford, Seat, Škoda, Volvo etc. e.g. Ford 1,6 L and 1,9 L Diesel engines.

The tool guarantees the correct positioning of camshaft and pump shaft to the crankshaft when exchanging the timing belt or removing or installing the injection pump. (Correct timing adjustment).

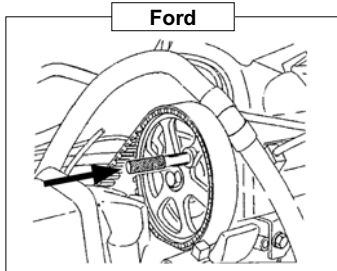
KL-0680-15



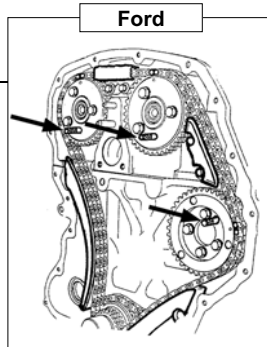
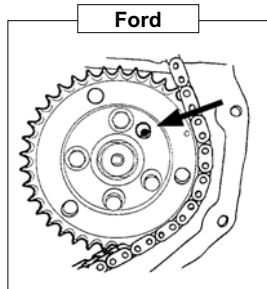
KL-0680-20



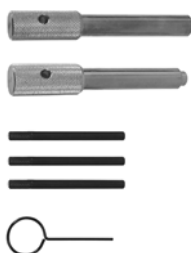
KL-0680-220



KL-0680-21 K



KL-0680-210



Note: Further Ford locking pin sets see page 6.4-04 and 6.4-05

KL-0680-15 Fixing Gauge for camshaft

Applicable for Ford ZETEC SE engines e.g. Fiesta 96 onwards, Focus 98 onwards, Puma 97 onwards and 1,25 L / 1,4 L from '95-'98; 1,6 L 16V / 1,8 L 16V / 2,0 L 16V from '91-'98 and 1,8D engines 97 onwards.

To prevent the camshafts from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

KL-0680-20 Vibration damper installation and removal tool

Applicable for Ford Zetec engine e.g. Ford Fiesta 1,25; 1,4; 1,6 16V, Puma 1,4; 1,6; 1,7 16V and Mazda 121 1,25 16V.

Designed for removing and installing the vibration damper. Required for engine repair or changing the timing belt.

consists of:

Part-No.	Description	Qty.
KL-0680-201	Reaction Wrench	1
KL-0680-202	Pull-off plate for camshaft belt pulley	1
KL-0680-203	Assembly tool for crankshaft belt pulley	1

KL-0680-220 Locking Pin Set

Applicable for Ford e.g. Fiesta, Fusion, Focus C-Max 1.4 / 1.6 TDCi; Citroën e.g. C3 (from '02-'04) and Peugeot e.g. 206, 307 (01-'04) 1.4 & 1.6 HDi [incl. 16v.] (Engine code: DV4TD (8HW/8HX), DV4TED4 (8HV/8HY DV6TED4, F6JA)

To prevent the engine shafts (e.g. camshafts, injection pump shaft, crankshaft) to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-0680-2201	Locking pin Ø 11,6	1
KL-0680-2202	Locking pin Ø 5	1
KL-0680-2203	Locking pin Ø 8	1

KL-0680-21 K Locking Tool Set

Applicable for Ford 2.0 / 2.4 16V TDDi/TDCi engines e.g. Mondeo, Transit ('01-'04) etc. (Engine code: FMBA/B, D5BA, ABFA, D3FA, F3FA, D2FA, D4FA, F4FA)

To prevent the engine shafts (e.g. camshafts, injection pump shaft, crankshaft) to keep them in a specific position when changing a timing belt or during other engine repairs and to remove and replace the injection pump.

consists of:

Part-No.	Description	Qty.
KL-0680-2100	Mounting/demounting tool for the injection pump	1
KL-0680-2101	Locking pin crankshaft Ø 14	1
KL-0680-2102	Locking pin crankshaft Ø 14 / Ø 10	1
KL-0680-2103	Locking pin crankshaft Ø 6 (3 pcs)	1
KL-0680-2104	Locking pin Ø 1,9	1
KL-0680-2190	Plastic case	1

KL-0680-210 Locking Pin Set

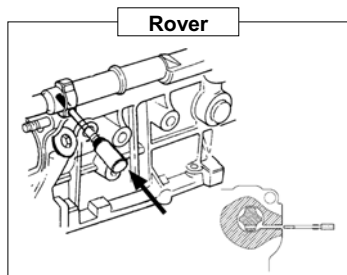
Applicable for Ford 2.0 / 2.4 16V TDDi/TDCi engines e.g. Mondeo, Transit ('01-'04) etc. (Engine code: FMBA/B, D5BA, ABFA, D3FA, F3FA, D2FA, D4FA, F4FA)

As KL-0680-21 K, to prevent the engine shafts (e.g. camshafts, injection pump shaft, crankshaft) to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-0680-2101	Locking pin crankshaft Ø 14	1
KL-0680-2102	Locking pin crankshaft Ø 14 / Ø 10	1
KL-0680-2103	Locking pin crankshaft Ø 6 (3 pcs)	1
KL-0680-2104	Locking pin Ø 1,9	1

KL-1780-14 K



Rover

KL-1780-14 K Locking Tool Set

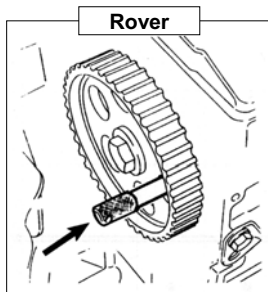
Applicable for Honda / Rover 1.6 VTi/VTEC, 1.8, 2.0, 2.2, 2.2 VTEC & 2.3i petrol engines (B, D, F & H Series) e.g. Honda Civic, Integra R, Accord, Prelude & Shuttle (87-04); Rover 216/416GTi & 600 Series and Landrover Freelander.

To prevent the engine shafts (e.g. camshafts, balancer shaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs

consists of:

Part-No.	Description	Qty.
KL-1780-140	Clamp for tensioner	1
KL-1280-205	Hex. screw M6 x 45	1
KL-1780-107	Locking pin for balancer shaft Ø 7,3 / 6,1	1
KL-1780-141	Locking pin for camshaft Ø 4,9	1
KL-1780-1490	Plastic case	1

KL-1780-10 K



Rover

KL-1780-10 K Locking Tool Set

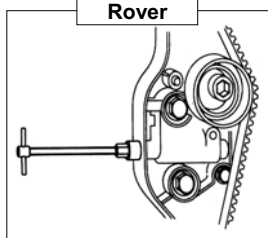
Applicable for Rover diesel and petrol engines (inclusive Di and 16V). Installed e.g. by Citroën, Honda, Fiat, LDV, Land Rover, Peugeot, TATA.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1780-101	Locking Tool Ø 6,6 mm	2
KL-1780-103	Locking Tool Ø 6,8 mm	2
KL-1780-104	Locking Tool Ø 5,0 mm	2
KL-1780-102	Locking pin for injection pump Ø 9,4 mm	1
KL-1380-2211	Locking pin for injection pump Ø 5,9 mm	1
KL-1380-2215	Locking pin for fly wheel (angled) Ø 7,7 mm	1
KL-1380-2224	Locking pin for fly wheel (angled) Ø 5,8 mm	1
KL-1380-2225	Hex bolt M8 x 40	3
KL-1780-105	Locking Tool for camshaft (orange)	1
KL-1780-106	Locking Tool for camshaft (black)	1
KL-1780-107	Locking pin for balancer shaft Ø 7,3 mm / Ø 6,1 mm	1
KL-1280-205	Hex bolt M6 x 45	1
KL-1380-2230	Reaction wrench 8 mm□	1
KL-1780-108	Reaction wrench for tensioner	1
KL-1780-1090	Plastic case	1

KL-1780-11



Rover

KL-1780-11 Locking Tool

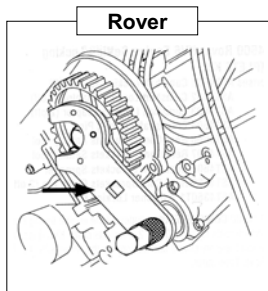
Applicable for Rover 2,0 diesel engine (20T2N / 20T2R "L-Series") e.g. Rover 220D / 420D / 620D, Land Rover Freelander and Honda Civic / Accord 2,0TD.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1780-102	Locking pin for injection pump Ø 9,4 mm	1
KL-1780-103	Locking pin for fly wheel Ø 6,8 mm	2
KL-1780-108	Adjusting tool for tensioner	2

KL-1780-12 K



Rover

KL-1780-12 K Locking Tool Set

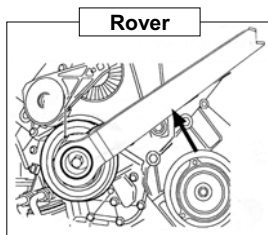
Applicable for Rover 2,0 and 2,5 V6 TwinCam engines (KV6) e.g. Rover 45, 75 and Land Rover Freelander.

To prevent the camshafts from turning or to keep them in a specific position and to adjust the timing belt tensioner when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1780-121	Locking Tool for camshaft	2
KL-1780-122	Adapter for camshaft locking tool (silver)	2
KL-1780-123	Adapter for camshaft locking tool (gold)	2
KL-1380-2226	Retaining pin	1
KL-1780-124	Aligning tool for rear camshaft sprockets	1
KL-1780-125	Spreading tool for rear camshaft sprockets	1
KL-1780-126	Guide pin for rear camshaft sprockets	2
KL-1780-1290	Plastic case	1

KL-1780-13



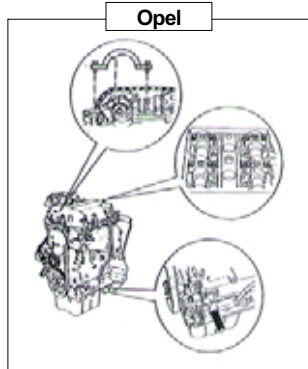
Rover

KL-1780-13 Reaction wrench for crankshaft

Applicable for Rover 2,0 and 2,5 V6 TwinCam engines (KV6) e.g. Rover 45, 75 and Land Rover Freelander.

For counter-holding the crankshaft belt pulley when screwing and unscrewing the central crankshaft bolt (e.g. for changing the timing belt).

KL-0482-43 K



KL-0482-43 K Locking Tool Set

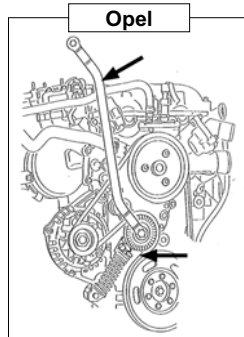
Applicable for Opel TwinCam 1,0 12V; 1,2 and 1,4 16V petrol engines (X10XE, Z10XE, Z10XEP, X12XE, Z12XE and Z14XEP) e.g. Corsa, Agila, Astra and Meriva etc.

To lock the timing chain tensioner and the engine shafts, camshafts and crankshaft by changing the timing chain or during other engine repairs.

consists of:

Part No.	Description	Qty.
KL-0482-431	Fixing Gauge for Camshaft	1
KL-0482-433	Fixing Gauge for Pulse generator wheel (Camshaft speed sensor)	1
KL-0482-432	Locking Pin for Crankshaft	1
KL-0482-434	Locking pin for timing chain tensioner	1
KL-0482-4390	Plastic case	1

KL-0484-11



KL-0484-11 V-belt tensioner

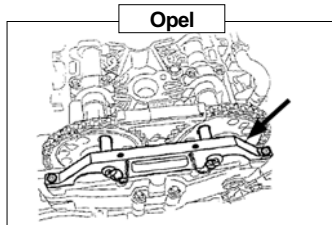
Applicable for Opel TwinCam 1,0 12V; 1,2 and 1,4 16V petrol engines (X10XE, Z10XE, Z10XEP, X12XE, Z12XE and Z14XEP) e.g. Corsa, Agila, Astra and Meriva etc.

To remove the auxiliary belt the tightener has to be set to zero position by using the clamping key KL-0484-110 and locked in place with the arresting pin KL-0484-111.

consists of:

Part No.	Description	Qty.
KL-0484-110	V-belt tensioner Torx E18 / E14	1
KL-0484-111	Locking pin Ø 4	1

KL-0482-440



KL-0482-440 Locking Tool Set

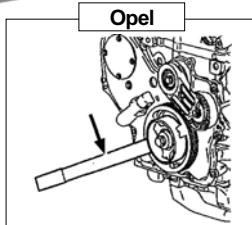
Applicable for Opel TwinCam 2,2 16V petrol engines (Z22SE) e.g. Astra, Signum, Speedster, Vectra and Zafira etc.

To lock or position the camshaft and the timing chain tensioner during engine repairs.

consists of:

Part No.	Description	Qty.
KL-0482-4401	Locking tool for camshaft Opel 2.2 16V	1
KL-0482-4402	Locking pin Ø 1,3	1

KL-0482-441

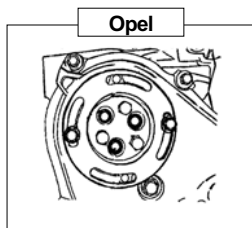


KL-0482-441 Reaction Wrench

Applicable for Opel TwinCam 2,2 16V petrol engines (Z22SE) e.g. Astra, Signum, Speedster, Vectra and Zafira etc.

To counterhold the crankshaft belt pulley during loosening and tightening of the crankshaft center screw (e.g. in case of engine repairs).

KL-0482-442



KL-0482-442 Locking Tool water pump

Applicable for Opel TwinCam 2,2 16V petrol engines (Z22SE) e.g. 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 the tool KL-0482-442.

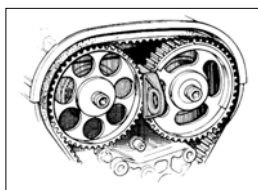
KL-0482-30



KL-0482-301



KL-0482-302



KL-0482-400



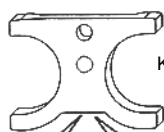
KL-0482-404



KL-0482-405

Opel

KL-0482-40 K



KL-0482-402

Opel



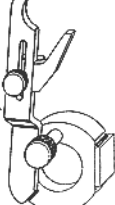
KL-0482-404



KL-0482-405



KL-0482-403

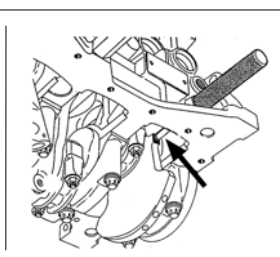
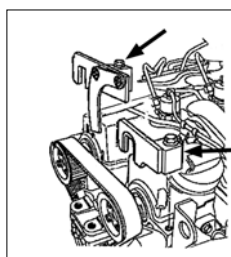


KL-0482-401

KL-1280-24 K



Opel, Renault,
Nissan



KL-0482-30 Locking Tool Set

This Tool Set can be used for locking the Camshaft Wheels together. Therefore preventing the camshaft from turning whilst the gear belt is removed.

consists of:

KL-0482-301: Locking Extractor for Camshaft

- Opel 1,8 L 16V
- Opel 2,0 L 16V

KL-0482-302: Locking Extractor for Camshaft

- Opel 1,4
- Opel 1,6 L 16V

KL-0482-400 Locking Tool Set

For Opel/Vauxhall V6 Engine.

Ensures that the position of the two camshafts to one another remains fixed, so preventing any rotation of the camshafts during changing the timing belt.

KL-0482-40 K Locking Tool Opel/Vauxhall V6 Engine

The Locking Tool **KL-0482-40 K** (for Opel/Vauxhall V6 engines) contains all the necessary tools required for locking the crankshaft and camshafts during service work. For example removal and replacement of the timing belt on the Ecotec V6 multi-valve engine.

The tool set allows the precise positioning of the camshaft drive pulleys in relation to the TDC (top dead centre) position of the crankshaft.

Note: Failure to maintain the relative position of the camshafts to the crankshaft can lead to loss of power or eventually to serious damage to the engine.

Contents:

Part No.	Description	Qty.
KL-0482-40 K	Locking Tool Opel/Vauxhall V6	1
<i>consists of:</i>		
KL-0482-401	Locking Tool for Crankshaft Opel/Vauxhall V6	1
KL-0482-402	Fixing Gauge for Camshaft Opel/Vauxhall V6	1
KL-0482-403	Retaining Tool for Timing Belt Opel/Vauxhall V6	1
KL-0482-404	Locking Tool red for Camshaft Opel/Vauxhall V6	1
KL-0482-405	Locking Tool green for Camshaft Opel/Vauxhall V6	1

KL-1280-24 K Locking Tool Set

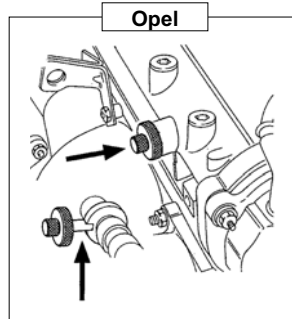
Applicable for Renault, Opel and Nissan 1,5; 1,9; 2,2 and 2,5 L direct injection diesel engines (K9K, F9Q, G9T and G9U) e.g. Renault Clio, Megane, Scenic, Laguna, Espace, Kangoo, Trafic and Master. Nissan Micra, Kubistar, Primastar, Interstar. Opel Vivaro and Movano.

To prevent the engine shafts (camshaft, crankshaft) from turning or to keep them in a specific position and to adjust the timing belt tensioner when changing a timing belt or during other engine repairs.

Contents:

Part No.	Description	Qty.
KL-1280-24 K	Locking Tool Set Renault 1.5/1.9/2.2/2.5 dCi	1
<i>consists of:</i>		
KL-1280-234	Locking pin for crankshaft Ø 7,9	1
KL-1280-233	Locking pin Ø 7,9	1
KL-1280-240	Timing belt tensioner tool	1
KL-1280-241	Hex. Screw M6 x 60	1
KL-1280-242	Locking tool for camshaft	1
KL-1280-243	Locking tool for crankshaft	1
KL-1280-2490	Plastic case	1

KL-0482-45 K



KL-0482-45 K Locking Tool Set

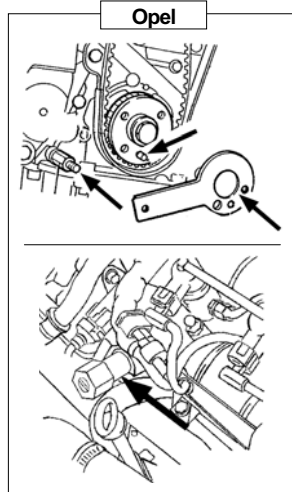
Applicable for Opel 1.3 CDTi diesel engines (Z13DT) e.g. Corsa etc.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position and to lock the timing chain tensioner when changing a timing belt or during other engine repairs.

Contents:

Part-No.	Description	Qty.
KL-0482-45 K	Locking Tool Set Opel 1.3 CDTi	1
<i>consists of:</i>		
KL-0482-450	Locking tool for camshaft (2 pcs.)	1
KL-0482-451	Locking pin for crankshaft Ø 6	1
KL-0482-434	Locking pin for chain tensioner Ø 2,4	1
KL-0482-4590	Plastic case	1

KL-0482-46 K



KL-0482-46 K Locking Tool Set

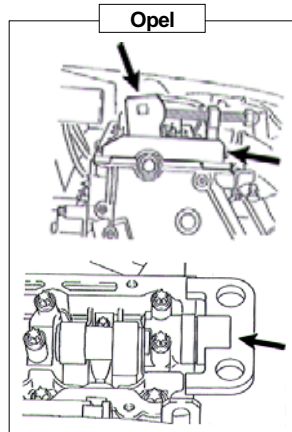
Applicable for Opel 1.9 CDTi diesel engines (Z19DT, Z19DTH) e.g. Opel Vectra, Signum etc.

To prevent the engine shafts (e.g. camshaft, crankshaft) from turning or to keep them in a specific position and to adjust the timing belt tensioner when changing a timing belt or during other engine repairs.

Contents:

Part-No.	Description	Qty.
KL-0482-46 K	Locking Tool Set Opel 1.9 CDTi	1
<i>consists of:</i>		
KL-1682-202	Locking tool for crankshafts	1
KL-0482-461	Locking pin for camshaft (2 pcs.)	1
KL-0482-462	Locking pin Ø 3,7	1
KL-0482-4690	Plastic case	1

KL-0482-41 K



KL-0482-41 K Locking Tool Set

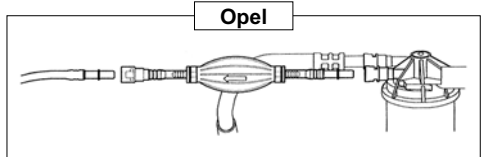
Applicable for Opel 2,0 and 2,2 Ecotec diesel engines (X20DTL, X20DTH, X22DTH) e.g. Opel/Vauxhall Astra, Astra Caravan, Zafira, Vectra, Omega, Sintra and Frontera.

Designed for locking or positioning the engine output shafts such as the camshaft, crankshaft, injection pump and the camshaft wheel when setting the timing. Required for changing the timing-chain or for engine repair.

Contents:

Part-No.	Description	Qty.
KL-0482-41 K	Locking Tool Set	1
<i>consists of:</i>		
KL-0482-411	Fixing Gauge for Camshaft	1
KL-0482-413	Locking Pin for Injection Pump	1
KL-0482-412	Locking Pin for Crankshaft	1
KL-0482-414	Adjusting Tool for Camshaft Wheel	1
KL-0482-4190	Plastic case	1

KL-0482-42

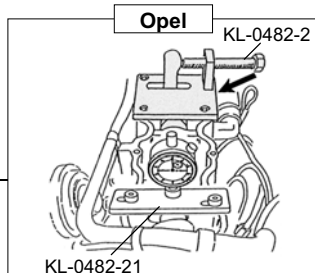


KL-0482-42 Diesel suction pump

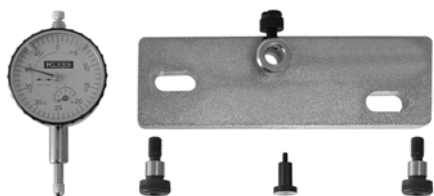
Applicable for Opel/Vauxhall 2,0 and 2,2 Ecotec diesel engines (X20DTL, X20DTH, X22DTH) with VP 44 injection pump.

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

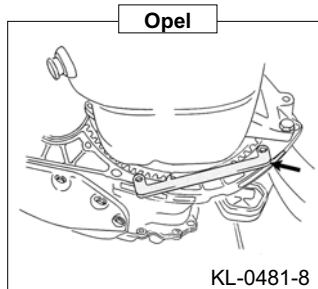
KL-0482-2



KL-0482-21



KL-0481-90



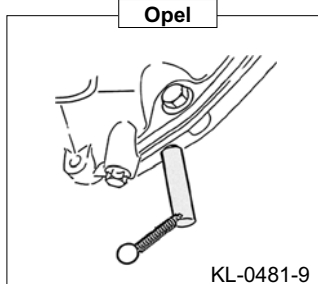
KL-0481-8

KL-0481-9

KL-0481-8

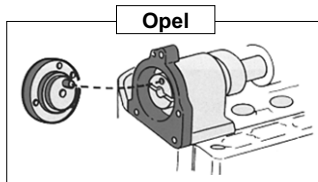


KL-0481-4



KL-0481-9

KL-0481-1



KL-0482-1



Opel

KL-0482-2 Adjusting Tool for Camshaft

Applicable for Opel 1,6D and Opel 1,7D '87 onwards.

With this Adjusting Tool **KL-0482-2** it is possible to turn the camshaft to the right position with the crankshaft (TDC-Position). The adjusting screw allows very fine adjustment.

KL-0482-21 Setting Gauge for Camshaft

Applicable for Opel 1,6 D and Opel 1,7 D '87 onwards.

To check the right position of the camshaft while setting the TDC position by using the adjusting key **KL-0482-2**.

Contents:

Part No.	Description	Qty.
KL-0482-21	Setting Gauge for Camshaft	1
<i>consists of:</i>		
KL-0482-210	Setting Gauge for Camshaft	1
KL-0128-0	Dial gauge Ø 40 mm	1

KL-0482-210 Camshaft Setting Gauge (not Ill.)

As **KL-0482-21**, but without the dial gauge **KL-0128-21**.

KL-0481-90 Locking Tool Set Opel/Vauxhall

This tool set allows the precise location of the crankshaft in the TDC-Position against the fly-wheel.

Consists of:

KL-0481-8 TDC-Locking Tool for Crankshaft

Application: Astra 1,7 D up to '97

Adjusting Tool for the TDC-Marking on the flywheel.

KL-0481-9 Locking Pin for Flywheel/Crankshaft

Application: Astra 1,7 D from '98

Pin for locking the crankshaft in the TDC-Position.

KL-0481-4 Locking Tool for Flywheels

Application: Opel/Vauxhall Diesel-Engines (Isuzu) with 1,5 and 1,7 and for Opel/Vauxhall Fuel-Engines (OHC) from 1,2 to 2,0.

KL-0481-1 Locking Tool for Camshaft Opel/Vauxhall

Applicable for Opel/Vauxhall 1,6 D up to '87 and for Opel/Vauxhall petrol engines (OHC) from 1,2 l to 2,0 l.

KL-0482-1 Drive Pulley Remover

Puller for removal of the drive pulley of the fuel-injection pump fitted to Opel/Vauxhall 1,6 litre diesel.

Note: **KL-1280-20 K Locking Tool Set** Applicable for Opel / Vauxhall e.g. Arena 1,9 / 2,5 D and Movano 2,5 / 2,8 D see page 6.4-29.

KL-0484-10

Opel, VW-Audi



KL-0484-10 Locking Tool

To block the automatic clamping role of the fan belt on **Opel/Vauxhall** vehicles with Eco Tec-engines.

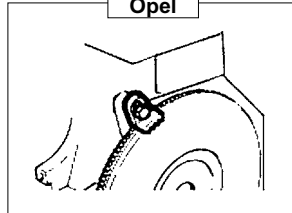
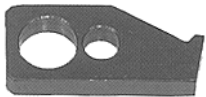
Also applicable with **Audi** and **VW** engines.

Ø 4,0 / 6,0 mm

Weight:70 g

KL-0481-7

Opel



KL-0481-7 Flywheel Locking Tool

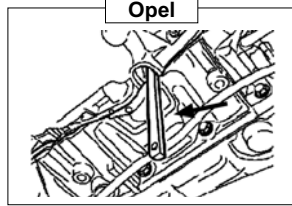
To lock the flywheel when the gearbox is dismantled.

Application: Opel/Vauxhall engines

OHV 1,0, 1,2 I; OHC 1,2 - 1,3 - 1,4 - 1,6 - 1,8 - 2,0 I; DOHC 2,0 I 16V; OHC 1,5 D - 1,5 DT - 2,0 D - 2,3 DT; CIH 4- u. 6-cylinder 2,2 - 2,4 - 2,5 - 3,0 I

KL-0481-71

Opel



KL-0481-71 Flywheel Locking Tool

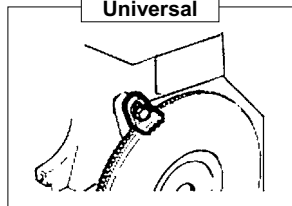
Application: Opel/Vauxhall engines

1,4 and 1,6 Eco-Tec 16 V; 1,2 - 1,6 OHC (with aluminium oilpan) and 1,8 16V (X18E1, X18XE1).

To lock the flywheel.

KL-0182-1

Universal



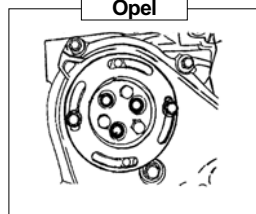
KL-0182-1 Flywheel Locking Tool

To lock the flywheel when the gearbox is dismantled.

Universal application.

KL-0482-442

Opel



KL-0482-442 Locking Tool water pump

Application for Opel 2,2 16V TwinCam petrol engines (Z22SE) e.g. 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 the tool **KL-0482-442**.

KL-0123-2

Opel, Ford



KL-0123-1 Reaction Wrench 32 mm (not ill.)

For reaction of the visco-coupling drive when removing or installing the visco-coupling on **BMW and Ford** vehicles.

Length:280 mm

KL-0123-2 Reaction Wrench 36 mm

For reaction of the visco-coupling drive when removing or installing the visco-coupling on **Ford, Opel/Vauxhall and GM** vehicles.

Length:280 mm

KL-0483-1 (46 mm)

Opel



KL-0483-1 Reaction Wrench 46 mm

For twisting the water pump when tightening the belt on **Opel/Vauxhall and GM** OHC-engines.

KL-0483-2 Reaction Wrench 41 mm (not ill.)

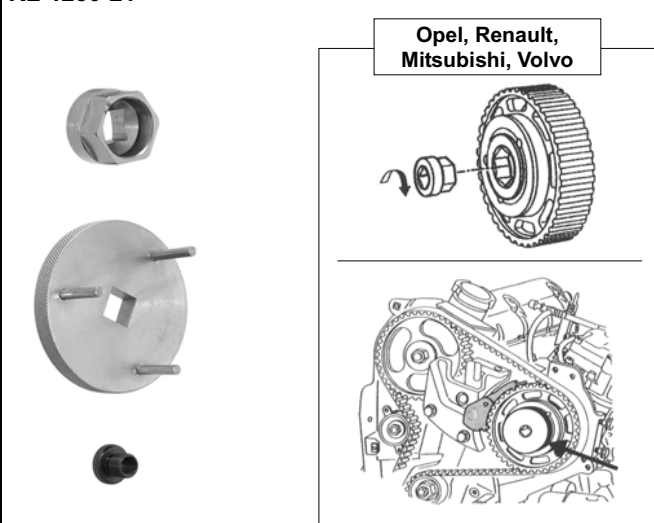
For twisting the water pump when tightening the belt on **Opel/Vauxhall and GM** OHC-engines.

Advantages: • Safe reaction of the visco-coupling • No damage to the visco-coupling • High quality of the wrench due to special manufacturing process.

Specifications: (Reaction Wrench):

Part No.	KL-0123-1	KL-0123-2	KL-0483-1	KL-0483-2
Width Across Flats	32 mm	36 mm	46 mm	41 mm
Overall length	280 mm	280 mm	125 mm	125 mm
Height	11 mm	11 mm	55 mm	55 mm
Weight	346 g	340 g	270 g	275 g
Drive	-	-	1/2"□	1/2"□

KL-1280-21



KL-1280-21 Injection pump adjustment tool

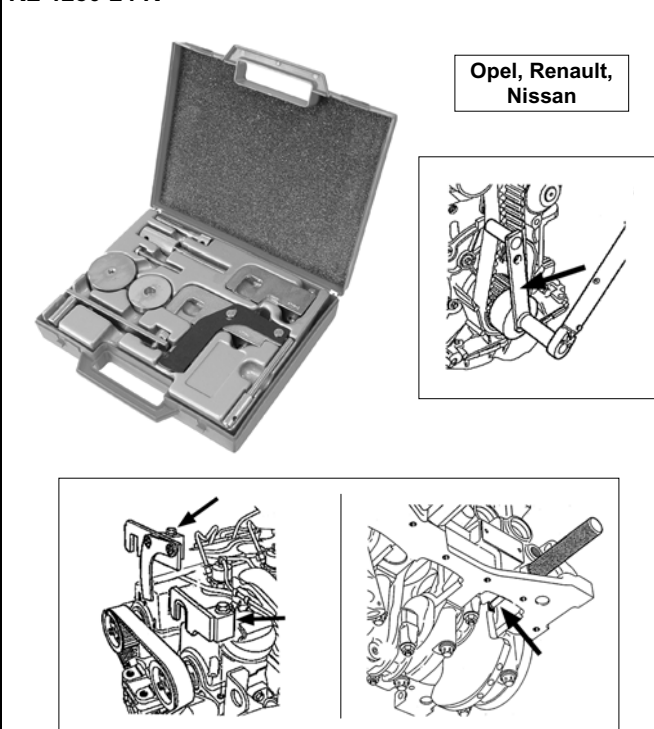
Suitable for Renault, Mitsubishi, Opel/Vauxhall and Volvo 1.9 direct-injection diesel engines (F8Q and F9Q) with adjustable injection pump wheel. e.g. Renault Megane/Scenic, Kangoo; Mitsubishi Carisma; Opel Arena and Volvo S40/V40.

The injection pump to the camshaft (start of delivery) can be adjusted with the injection nozzle adjustment tool in conjunction with the KL-0129-1 A set of tools and the required locking tools.

Specification:

Part No.	Description	Qty.
KL-1280-21	Injection Pump adjusting tool	1
<i>consists of:</i>		
KL-1280-212	Special socket wrench insert 27 mm hex for the hub fixing screw;	1
KL-1280-211	Adjusting wrench with 3 pins (for turning and adjusting the hub);	1
KL-1280-213	Adaptor for Bosch injection pumps (M10x1 to M8x1)	1

KL-1280-24 K



KL-1280-24 K Locking Tool Set Renault 1.5 / 1.9 / 2.2 / 2.5 dCi

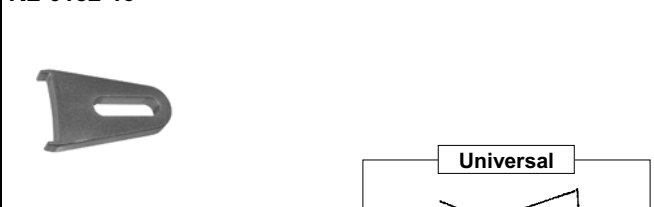
Applicable for Renault, Opel and Nissan 1,5; 1,9; 2,2 and 2,5 L direct injection diesel engines (K9K, F9Q, G9T and G9U) e.g. Renault Clio, Megane, Scenic, Laguna, Espace, Kangoo, Trafic and Master. Nissan Micra, Kubistar, Primastar, Interstar. Opel Vivaro and Movano.

To prevent the engine shafts (camshaft, crankshaft) from turning or to keep them in a specific position and to adjust the timing belt tensioner when changing a timing belt or during other engine repairs.

Specification:

Part No.	Description	Qty.
KL-1280-24 K	Locking Tool Set Renault 1.5/1.9/2.2/2.5 dCi	1
<i>consists of:</i>		
KL-1280-234	Locking pin for crankshaft Ø 7,9	1
KL-1280-233	Locking pin Ø 7,9	1
KL-1280-240	Timing belt tensioner tool	1
KL-1280-241	Hex. screw M6 x 60	1
KL-1280-242	Locking tool for camshafts	1
KL-1280-243	Locking pin for crankshafts	1
KL-1280-2490	Plastic case	1

KL-0182-19

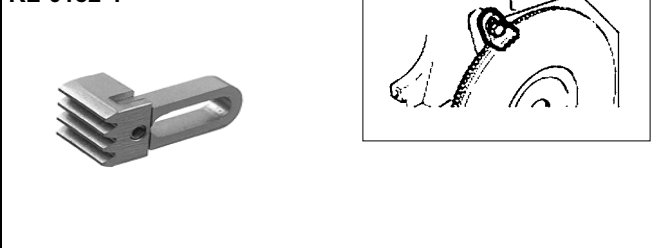


KL-0182-19 Flywheel Locking Tool

Application for Renault 2,2 L Diesel engines (G8T) e.g. Renault Laguna, Safrane and Espace.

To lock the flywheel when the gearbox is dismantled.

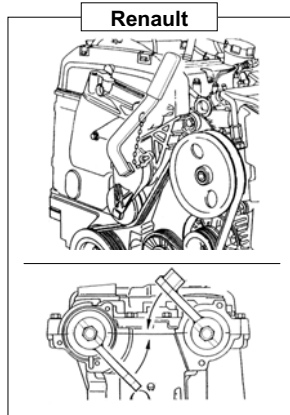
KL-0182-1



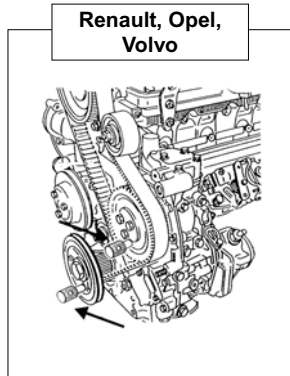
KL-0182-1 Flywheel Locking Tool

To lock the flywheel when the gearbox is dismantled. **Universal** application.

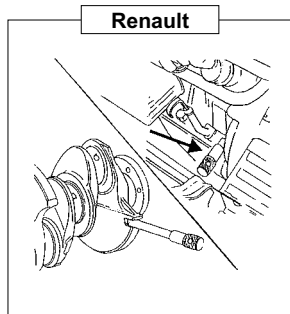
KL-1280-22



KL-1280-20 K



KL-1280-23 K



KL-1280-22 Locking Tool Set

Applicable for Renault TwinCam petrol engines 2,0 16V (N7Q) and 2,5 20V (N7U) e.g. Renault Laguna and Safrane.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1280-224	Reaction Wrench with locking pin (V-belt tensioner pulley)	1
KL-1280-223	Locking pin (hydr. Timing belt tensioner)	1
KL-1280-221	Fixing Gauge for Camshaft	1
KL-1280-222	Locking Tool for Crankshaft	1

KL-1280-20 K Locking Tool Set Renault

Applicable for Renault petrol engine 1,2 (D7F) e.g. Clio, Twingo; 1,2 / 1,4 / 1,6 (E5 - E7F/E7J/K7M) e.g. Clio, Megane, Scenic, Kangoo; 1,7 / 1,8 / 2,0 (F1N - F3N/F3P/F2R - F3R) e.g. Clio, Megane, Scenic; 1,8 / 2,0 16V (F7P/F7R) e.g. Clio Williams, Megane, Spider, R19; 2,0 / 2,2 (J5R - J7R, J5T) e.g. Safrane, Espace, Master, Traffic; and Volvo petrol engines (B16/B18/B20) e.g. 440, 460, 480.

Applicable for diesel engine 1,9 / 2,5 / 2,8 (F8M/F8Q/G8T / J8S/ F9Q/S8U/S9U/S9W) e.g. Renault Clio, Laguna, Megane, Kangoo, Espace, Master, Traffic; Opel Arena, Movano; Volvo S40, V40 etc.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1280-201	Fixing Gauge for Camshaft	1
KL-1280-233	Locking Tool for Crankshaft Ø 7,9	1
KL-1280-202	Locking Tool for Crankshaft Ø 6,9	1
KL-1280-203	Locking pin for injection pump Ø 4,9	1
KL-1280-204	Locking Tool for Crankshaft Ø 4,9 / Ø 3,9	1
KL-1280-206	Reaction Wrench	1
KL-1280-205	Hex bolt M6 x 45	1
KL-1280-2090	Plastic case	1

KL-1280-23 K Locking Tool Set

Applicable for Renault TwinCam petrol engine 1,4 / 1,6 16V (K4J/K4M [98-]) and 1,8 / 2,0 16V (F4P/F4R [98-]) e.g. Renault Clio, Clio Sport, Megane/Scenic, Laguna and Espace.

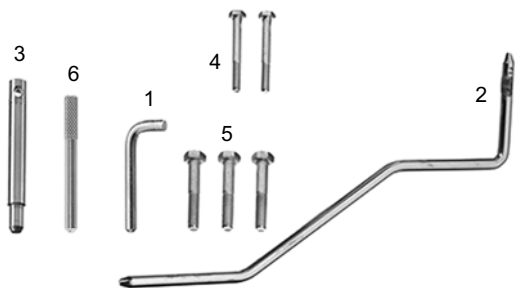
To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part-No.	Description	Qty.
KL-1280-231	Fixing Gauge for Camshaft	1
KL-1280-234	Locking Tool for Crankshaft [1,4/1,6]	1
KL-1280-233	Locking Tool for Crankshaft Ø 7,9 [1,8/2,0]	1
KL-1280-2390	Plastic case	1

KL-1280-100 A

Renault



KL-1280-100 A Locking Tool Set Renault

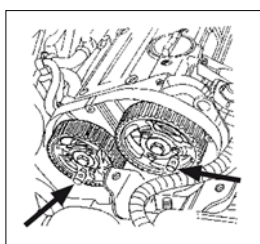
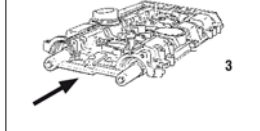
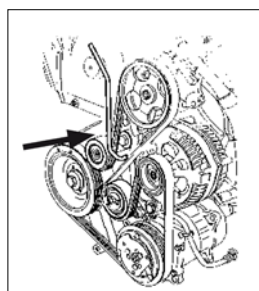
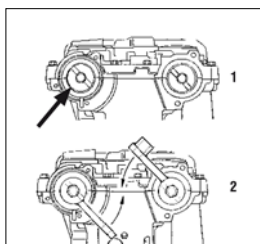
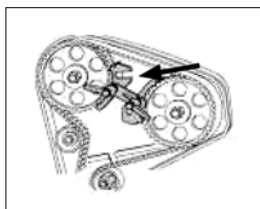
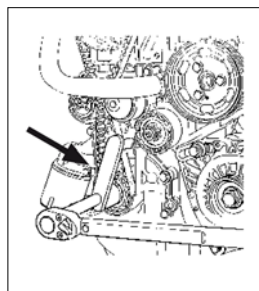
To lock the engine shafts e.g. during replacement of timing belts or during engine repairs.

consists of:

Pos.	Part No.	Description	Qty.
1	KL-0680-11	Locking Pin Ø8,3	1
2	KL-1480-15	Locking pin angled Ø7,8	1
3	KL-1280-10	Locking pin Ø8 / Ø12	1
4	KL-1280-11	Hex. screw M5 × 50	2
5	KL-1280-12	Hex. screw M7 × 50	3
6	KL-1280-13	Locking pin Ø7	1

KL-1380-101 K

Citroën, Peugeot,
Renault



KL-1380-101 K Locking Tool Set Citroën, Peugeot, Renault

Universally suitable for the following Citroën, Peugeot, Renault petrol and diesel engines. Installed also 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 gas 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); und 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 gas 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) und 1.6 16V (TU5J4); 1.8 16V (XU7JP4); 2.0 16V (XU9J4, XU10J4).

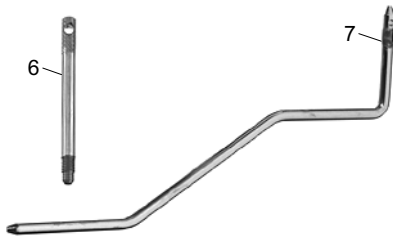
To prevent the engine shafts (e.g. camshafts, injection pump shaft, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

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	1
KL-1682-203	Locking pin for injection pump 1.9 TD	1
KL-1380-2212	Locking pin for balancer shaft Ø 5,9	1
KL-1380-2213	Locking pin for injection pump Ø 4,9	1
KL-1380-2214	Locking pin for camshaft M8	1
KL-1380-2215	Locking pin angled for flywheel Ø 7,7	1
KL-1480-15	Locking pin angled Ø7,8	1
KL-1380-2216	Locking pin angled for flywheel Ø 7,8	1
KL-1380-2225	Hex. screw M8 x 40 (3 St.)	1
KL-1380-2217	Locking pin for cam-/crankshaft (P1) Ø 9,9	1
KL-1380-2218	Locking pins for camshaft (P2) Ø 8,3 / 6,4	1
KL-1380-2219	Locking pin for camshaft (P3) Ø 7,9	1
KL-1380-2220	Locking pin for cam-/crankshaft (P4) Ø 7,9	1
KL-1380-2221	Locking pin for camshaft (P5) Ø 5,9	1
KL-1380-2222	Locking pin for cam-/crankshaft (P6) Ø 9,9	1
KL-1380-2223	Locking pin for crankshaft (P7) Ø 9,9 / 7,9	1
KL-1380-2224	Locking pin angled for flywheel Ø 5,8	1
KL-1280-233	Locking pin Ø 7,9	1
KL-1280-202	Locking pin for crankshaft Ø6,9	1
KL-1280-203	Locking pin for injection pump Ø4,9	1
KL-1280-204	Locking pin for crankshaft Ø4,9 / 3,9	1
KL-1380-2226	Locking pin for tension pulley Ø 1,5	1
KL-1280-223	Locking pin for hydr. tensioner Ø 1,9	1
KL-1280-205	Hex. screw M6 x 45	1
KL-1380-2227	Locking pin angled for poly V-belt Ø 6,7	1
KL-1380-2228	Locking pin for tension pulley Ø 3	1
KL-1280-206	Reaction Wrench (2 Pins)	1
KL-1380-2229	Reaction Wrench 7 mm □	1
KL-1380-2230	Reaction Wrench 8 mm □	1
KL-1280-211	Adjusting Tool (3 Pins)	1
KL-1280-212	Special socket insert 27 mm	1
KL-1280-213	Adaptor for Bosch pumps M10x1 on M8x1	1
KL-1380-1012	Locking pin for injection pump Ø 3,5	1
KL-1380-1090	Plastic case	1

KL-1380-100

Citroën



KL-1380-100 Locking Pin Set Citroën

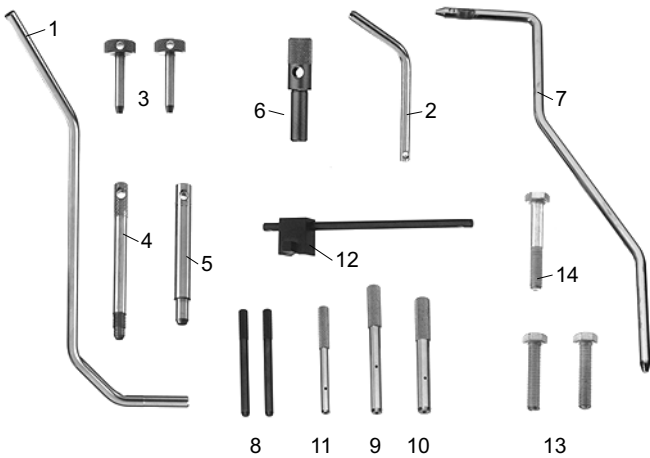
To lock the engine shafts e.g. during replacement of Timing Belts or during engine repairs.

consists of:

Pos.	Part No.	Description	Qty.
6	KL-1480-13	Locking pin M8 / Ø6,7	1
7	KL-1480-15	Locking pin angled Ø7,8	1

KL-1480-100

Peugeot



KL-1480-100 Locking Pin Set Peugeot

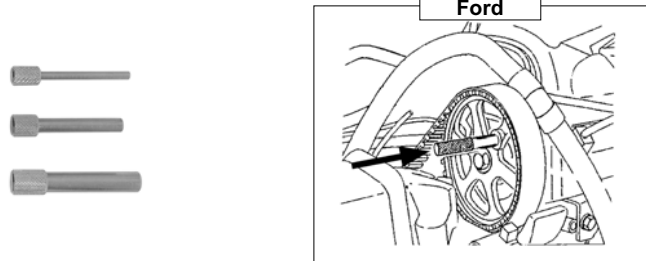
To lock the engine shafts e.g. during replacement of Timing Belts or during engine repairs.

consists of:

Pos.	Part No.	Description	Qty.
1	KL-1480-10	Locking pin angled Ø6.8	1
2	KL-1480-11	Locking pin angled Ø6	1
3	KL-1480-12	Locking pin Ø6 short	2
4	KL-1480-13	Locking pin M8 / Ø6.7	1
5	KL-1480-14	Locking pin Ø10 / Ø8	1
6	KL-0580-11	Locking pin Ø9.9	1
7	KL-1480-15	Locking pin angled Ø7.8	1
8	KL-1480-16	Locking pin Ø6 long	2
9	KL-1380-10	Locking pin A Ø8	1
10	KL-1380-11	Locking pin B Ø9.5	1
11	KL-1380-12	Locking pin C Ø6	1
12	KL-1382-1	Reaction Wrench for Timing Belts 7mm □	1
13	KL-1480-17	Hex bolt M8 × 30	2
14	KL-1480-18	Hex bolt M8 × 40	1

KL-0680-220

Ford



KL-0680-220 Locking Pin Set

Suitable e.g. for:

Citroën C3 (from '02-'04),

Peugeot 206, 307 (01-04) 1.4 & 1.6 HDi [incl. 16v.] and Ford Fiesta, Fusion, Focus C-Max 1.4 / 1.6 TDCi

[Engine code:DV4TD (8HW/8HX), DV4TED4 (8HV/8HY) DV6TED4, F6JA]

To prevent the engine shafts (e.g. camshafts, injection pump shaft, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part No.	Description	Qty.
KL-0680-2201	Locking pin Ø 11,6	1
KL-0680-2202	Locking pin Ø 5	1
KL-0680-2203	Locking pin Ø 8	1

KL-1382-1 / KL-1382-2

Peugeot
Toyota



KL-1382-1 Reaction Wrench

For tensioning timing belts on Peugeot and Toyota engines.

□: 7 mm
Length: 157 mm

KL-1382-2 Reaction Wrench

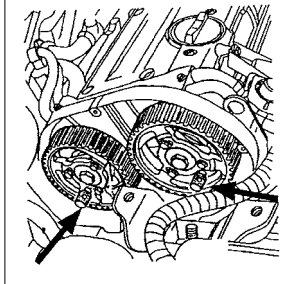
As KL-1382-1 but for Peugeot 206 Diesel DW8 etc..

□: 8 mm
Length: 157 mm

KL-1380-24 K



Citroën, Peugeot



KL-1380-24 K Locking Tool Set

Applicable for Citroën and Peugeot TwinCam 16 V petrol engine e.g. 1,8 16V and 2,0 16V engine code "EW" (inclusive HPI engines) e.g. Citroën C5 and Peugeot 206, 306 and 406.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

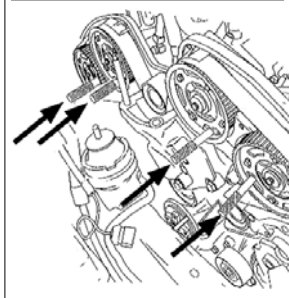
consists of:

Part-No.	Description	Qty.
KL-1380-241	Locking Tool for Camshaft Ø 9,9 / Ø 5,9 [short]	1
KL-1380-242	Locking Tool for Camshaft Ø 9,9 / Ø 5,9 [long]	1
KL-1380-243	Locking Tool for Camshaft Ø 9,9 / Ø 5,9 [with Flats]	1
KL-1380-244	Locking Tool for Crankshaft Ø 7,9	1
KL-1380-245	Locking pin for Flywheel Ø 28,5 / Ø 8	1
KL-1380-246	Fixing pin for tensioner pulley Ø 7,9	1
KL-1380-237	Timing belt fixing clip	1
KL-1380-2490	Plastic case	1

KL-1380-25 K



Citroën, Peugeot, Renault



KL-1380-25 K Locking Tool Set Peugeot, Citroën V6 3.0l

Applicable for Citroën (XFZ), Peugeot (ES9J4) and Renault (L7X) 3,0 V6 petrol engine e.g. Citroën Xantia, XM; Peugeot 406, 605 and Renault Laguna, Safrane and Espace.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

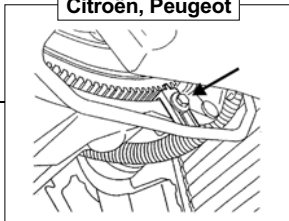
consists of:

Part-No.	Description	Qty.
KL-1380-25 K	Timing Belt Locking Tool Set Peugeot, Citroën V6 3.0l	1
consists of:		
KL-1380-251	Locking Tool for camshaft / crankshaft Ø 7,9 mm	5
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-1380-257	Tensioning tool	1
KL-1380-2590	Plastic case	1

KL-0182-17



Citroën, Peugeot



KL-0182-17 Flywheel Locking Pin

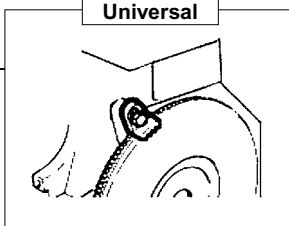
Applicable for Citroën, Peugeot (TUD5) Diesel engine e.g. Citroën AX, Saxo, Xsara; Peugeot 106; Nissan Micra and Rover 115.

To lock the flywheel.

KL-0182-18



Universal



KL-0182-18 Flywheel Locking Pin

Applicable for Citroën, Peugeot diesel and petrol engines.

To lock the flywheel.

KL-0182-1



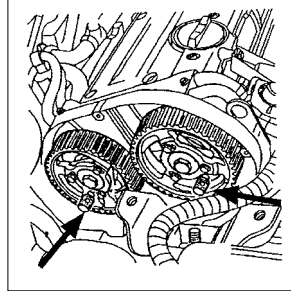
KL-0182-1 Flywheel Locking Tool

To lock the flywheel when the gearbox is dismounted. **Universal** application.

KL-1380-22 K



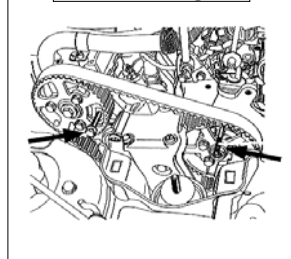
Citroën, Peugeot



KL-1380-23 K

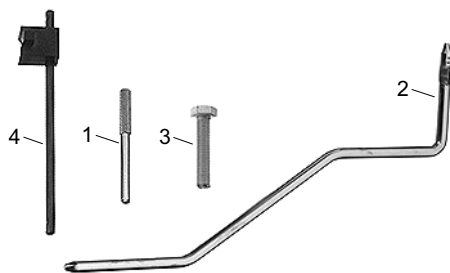


Citroën, Peugeot



KL-1980-100

Toyota



KL-1380-22 K Locking Tool Set

Applicable for Citroën and Peugeot diesel (TUD/XUD) and petrol (TU/XU) engines. Installed e.g. by Citroën, Fiat, FSO, LDV, Nissan, Peugeot, Rover and TATA etc.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part No.	Description	Qty.
KL-1380-22 K	Locking Tool Set	1
<i>consists of:</i>		
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 Tool for camshaft (C5) M8	1
KL-1380-2215	Locking pin for fly wheel (angled) Ø 7,7 mm	1
KL-1380-2216	Locking pin for fly wheel (angled) Ø 7,8 mm	1
KL-1380-2217	Locking Tool for camshaft / Crankshaft (P1) Ø 9,9 mm	1
KL-1380-2218	Locking Tool for camshaft (P2) Ø 8,3 mm / 6,4 mm	2
KL-1380-2219	Locking Tool for camshaft (P3) Ø 7,9 mm	2
KL-1380-2220	Locking Tool for camshaft / Crankshaft (P4) Ø 7,9 mm	1
KL-1380-2221	Locking Tool for camshaft (P5) Ø 5,9 mm	2
KL-1380-2222	Locking Tool for camshaft / Crankshaft (P6) Ø 9,9 mm	1
KL-1380-2223	Locking tool for crankshaft (P7) Ø 9,9 mm / 7,9 mm	1
KL-1380-2224	Locking pin for fly wheel (angled) Ø 5,8 mm	1
KL-1380-2225	Hex bolt M8 x 40 (3 pcs.)	1
KL-1380-2226	Retaining pin for tensioner pulley Ø 1,5 mm	1
KL-1380-2227	Tensioning Spindle for V-belt angled Ø 6,7 mm	1
KL-1380-2228	Retaining pin for tensioner pulley Ø 3,0 mm	1
KL-1380-2229	Reaction Wrench 7 mm □	1
KL-1380-2230	Reaction Wrench 8 mm □	1
KL-1380-2290	Plastic case	1

KL-1380-23 K Locking Tool Update Kit

Applicable for Citroën and Peugeot 1.9 D, 2.0 D, 2.2 D diesel (DW8, DW10 and DW12 [Hdi]) engine. Installed e.g. by Citroën, Fiat, Peugeot and Toyota.

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing belt or during other engine repairs.

consists of:

Part No.	Description	Qty.
KL-1380-23 K	Locking Tool Update Kit	1
<i>consists of:</i>		
KL-1380-2211	Locking pin for injection pump (C2) Ø 5,9 mm	1
KL-1380-2215	Locking pin for fly wheel (angled) Ø 7,7 mm	1
KL-1380-2216	Locking pin for fly wheel (angled) Ø 7,8 mm	1
KL-1380-2220	Locking Tool for camshaft (P4) Ø 7,9 mm	1
KL-1380-231	Locking Tool for flywheel	1
KL-1380-232	Hex bolt M8 x 80	1
KL-1380-233	Locking pin for flywheel (angled) Ø 7,7 mm	1
KL-1380-234	Puller for Crankshaft pulley	1
KL-1380-235	Reaction Wrench 8 mm □	1
KL-1380-236	Reaction Wrench 7 mm □	1
KL-1380-237	Timing belt fixing clip	1
KL-1380-2390	Plastic case	1

KL-1980-100 Locking Tool Set Toyota

Applicable for Toyota 1,9 D etc. To lock the engine shafts e.g. during replacement of timing belts or during engine repairs.

consists of:

Pos.	Part No.	Description	Qty.
	KL-1980-100	Locking Tool Set Toyota	1
<i>consists of:</i>			
1	KL-1980-11	Locking pin Ø5,5	1
2	KL-1980-12	Locking pin angled Ø7,6	1
3	KL-1980-13	Hex bolt M8 x 50	1
4	KL-1382-1	Reaction Wrench for Timing Belts 7mm □	1

KL-0580-102



BMW

KL-0580-102 Locking Tool Set BMW

Guarantees the correct positioning of the camshaft when changing the timing belt or the timing chain.

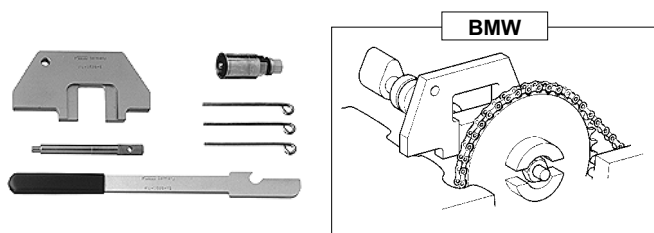
Application: BMW-engines.

Weight: 6,4 kg

consists of:

Part-No.	Description	Qty.
KL-0580-102	Locking Tool Set BMW	1
consists of:		
KL-0580-101	Locking ToolSet BMW (incl. Case)	1
KL-0580-3	Locking Tool (M21 in E30)	1
KL-0580-4	Locking Tool (M42 and M50)	1
KL-0580-5	Locking Tool (M40 and M43)	1
KL-0580-11	Locking pin Ø 9,9 (Pump)	1

KL-0580-101



BMW

KL-0580-101 Locking Tool Set BMW

Guarantees the correct positioning of the camshaft when changing the timing chain.

Application for BMW 6 cylinder diesel engine 2.5 (M51) in BMW 325 td/tds (E36), BMW 525 td/tds (E34/39) and Opel Omega 2.5 TD and for the 4 cylinder diesel engine (M41) in BMW 318 tds (E36) as well.

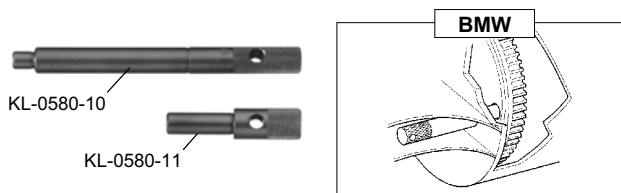
Weight: 3,0 kg

consists of:

Part-No.	Description	Qty.
KL-0580-101	Locking Tool Set BMW	1
consists of:		
KL-0580-2	Puller for Injection Pump	1
KL-0580-6	Locking Tool BMW M51	1
KL-0580-10	Locking Pin Ø11,8 / Ø8 (Flywheel)	1
KL-0580-15	Reaction Wrench for timing chain BMW	1
KL-0580-1201	Fixing Bolt Ø 4 (Chain Wrench)	3
KL-0580-1090	Plastic Storage Case	1

With Plastic Storage case KL-0580-1090.

KL-0580-100



BMW

KL-0580-100 Locking Pin Set BMW

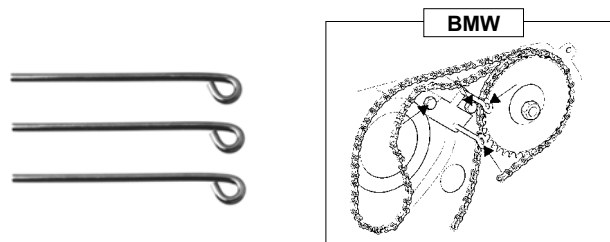
Suitable for BMW 4 cylinder diesel engine (M41), 6 cylinder diesel engine 2.5 (M51) also for Opel/Vauxhall Omega 2.5 TD.

To lock the fly-wheel and injection-pump pulley when changing timing chain or carrying out engine repairs.

consists of:

Part-No.	Description	Qty.
KL-0580-100	Locking Tool Set BMW	1
consists of:		
KL-0580-10	Locking Pin Ø11,8 / Ø8	1
KL-0580-11	Locking Pin Ø9,9	1

KL-0580-1201



BMW

KL-0580-10 Locking Pin Ø11,8 / Ø8 mm

Applicable for BMW engine M21, M40, M41, M42, M43, M43TU, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M60, M62, M70, M73, S50B30, S50B32, S54, S62.

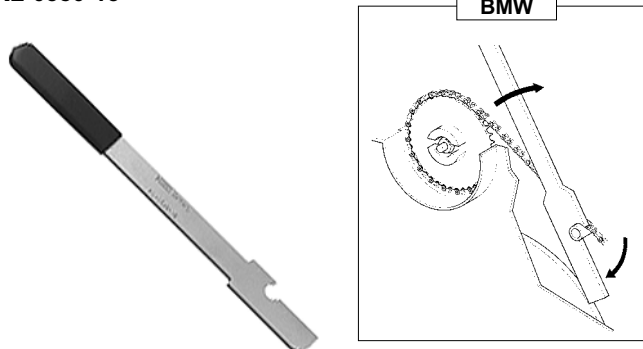
To lock the fly-wheel when changing timing chain or carrying out engine repairs.

KL-0580-1201 Fixing Bolts Ø4 mm

Application: BMW 4 cylinder diesel engine (M41), 6 cylinder diesel engine 2.5 (M51) also for Opel/Vauxhall Omega 2.5 TD.

To lock the timing chain tensioner in the relaxed position in conjunction with Reaction wrench for timing chain BMW Tool KL-0580-15.

KL-0580-15



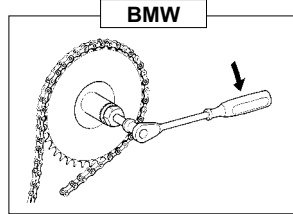
BMW

KL-0580-15 Reaction wrench

Application: BMW 4 cylinder-Diesel- Engine (M41), 6 cylinder diesel engine 2.5 (M51) also for Opel/Vauxhall Omega 2.5 TD.

To depress the automatic timing chain tensioner while changing timing chains or during engine repairs.

KL-0580-2

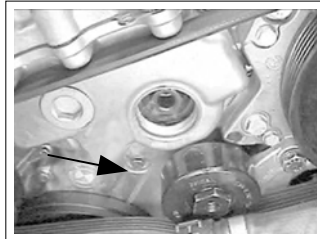
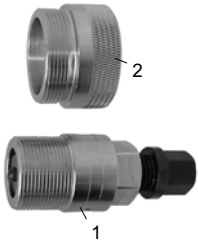


KL-0580-2 Puller for Injection Pump

Application: BMW 4 cylinder diesel engine (M41), 6 cylinder diesel engine-2,5 (M51) also for Opel/Vauxhall Omega 2,5 TD.

To loosen the injection pump pulley from the shaft when dismantling the Injection Pump.

KL-0580-21



KL-0580-21 Injection Pump Extractor

Applicable for BMW M47, M47TU, M57, M57TU engines.

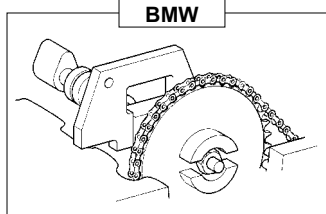
To lock the injection pump sprocket in position and press out the injection pump shaft.

This tool is required when removing the injection pump.

Note: only item 1 is used on M47 engines.

Items 1 and 2 are both used on M47TU, M57 and M57TU engines.

KL-0580-6



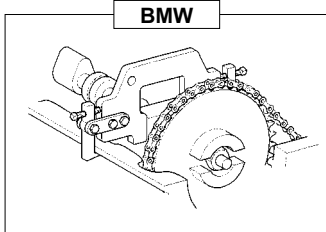
KL-0580-6 Locking Tool

Application: BMW 4 cylinder diesel engine (M41), 6 cylinder diesel engine-2,5 (M51) also for Opel/Vauxhall Omega 2,5 TD.

Guarantees the correct positioning of the camshaft and pump shaft to the crankshaft when changing the timing chain or removing or installing the injection pump.
(Correct timing adjustment).

Weight:..... 780 g

KL-0580-3



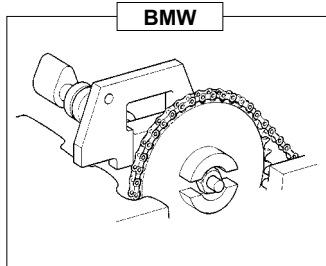
KL-0580-3 Locking Tool

Application: BMW 6 cylinder diesel engine 2.4 (M21) in E30 (324d & 324td), E28 (524d & 524td), E34 (524td).

Guarantees the correct positioning of the camshaft and pump shaft to the crankshaft when changing the timing chain or removing or installing the injection pump.
(Correct timing adjustment).

Weight:..... 915 g

KL-0580-5



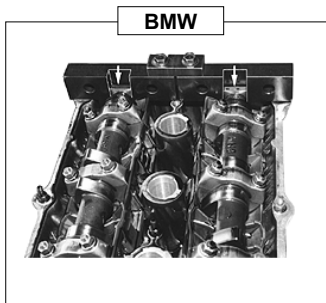
KL-0580-5 Locking Tool

As KL-0580-6 but applicable for:

BMW 4 cylinder engine-1,8 and 1,6 [M40 in E30, E36 (316, 318) and E34 (516, 518); M43 in E36 (316, 318) and E34 (516, 518)]. Also for the 12 cylinder engine [M70 in E32 (750) and E31 (850); M73 in E38 (750) and E31 (850)].

Weight:..... 665 g

KL-0580-4



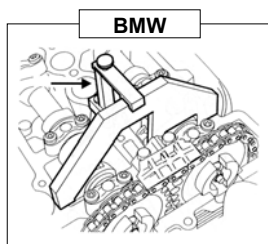
KL-0580-4 Locking Tool

Applicable for: BMW 4 cylinder 4 Valve engine M42, M44 also for the 6 cylinder 4 Valve engine M50, M52, M52TU and M54 in the E30 (318), E36 (318, 318is, 320, 325 and 328), E46 (320, 325, 328 and 330), E34 (520 and 525 and 530), E39 (520, 525, and 528) and E38 (720, 725 and 728).

This tool is absolutely necessary for locking both of the camshafts in TDC-Position while repairing the timing chain on the engine. The camshaft is pulled across the squared camshaft and lies on the cylinder head edge.

Weight:..... 1,8 kg

KL-0580-7 K



KL-0580-7 K Locking Tool Set

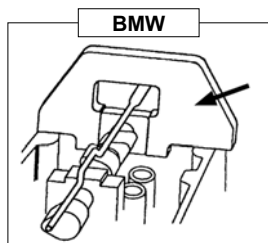
Applicable for BMW 4 cylinder diesel engine (M47) and 6 cylinder diesel engine (M57) e.g. in Series E46 (318d, 320d, 330d) and E39 (525d, 530d).

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing chain or during other engine repairs.

Contents:

Part No.	Description	Qty.
KL-0580-7 K	Locking Tool Set	1
<i>consists of:</i>		
KL-0580-701	Locking Tool for camshaft (M47 / M57)	1
KL-0580-702	Holder for camshaft locking tool	1
KL-0580-703	Locking Tool for crankshaft	1
KL-0580-704	Retaining Pin for tensioner	2
KL-0580-7090	Plastic case	1

KL-0580-80 K



KL-0580-80 K Locking Tool Set

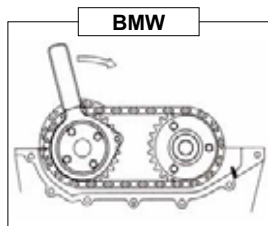
Applicable for BMW 12 cylinder petrol engine (M70, M73) e.g. in Series E32 (750i), E38 (750i) and E31 (850i).

To prevent the engine shafts (e.g. camshafts, crankshaft) from turning or to keep them in a specific position when changing a timing chain or during other engine repairs.

Contents:

Part No.	Description	Qty.
KL-0580-80 K	Locking Tool Set BMW M70 / M73	1
<i>consists of:</i>		
KL-0580-801	Locking tool for camshaft BMW M70 / M73 (2 pcs.)	1
KL-0580-703	Locking pin for crankshaft	1
KL-0580-8090	Plastic case	1

KL-0580-41



KL-0580-41 Adjusting Wrench

Applicable 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.

KL-0582-1

BMW



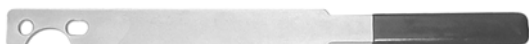
KL-0582-1 Locking Tool for Visco-Fan

To provide a reaction point to dismantle the visco-coupled cooling-fan.

Hole distance: 38 mm
Weight: 500 g

KL-0582-2

BMW



KL-0582-2 Locking Tool for Visco-Fan

As KL-0582-1 but with

Hole distance: 44,5 mm
Weight: 400 g

KL-0123-1

BMW, Ford



KL-0123-1 Reaction Wrench 32 mm

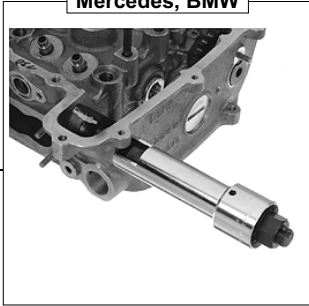
For reaction of the visco-coupling drive when removing or installing the visco-coupling on BMW and Ford vehicles.

Socket size: 32 mm
Length: 280 mm

KL-0312



Mercedes, BMW



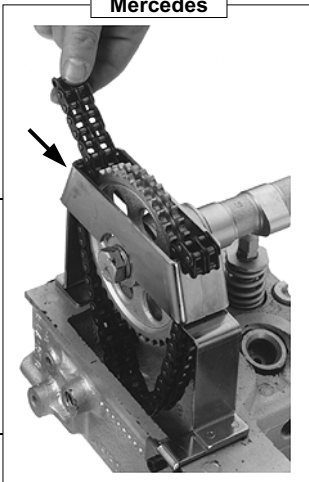
KL-0312-2



KL-0344



Mercedes



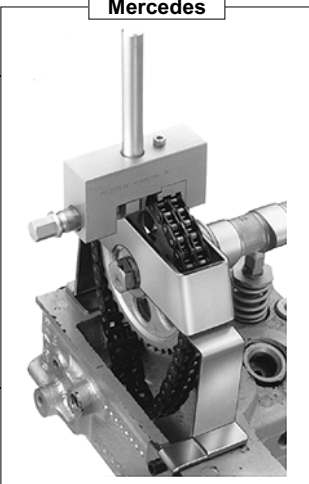
KL-0344-2



KL-0348



Mercedes



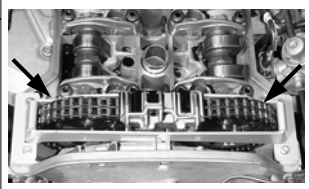
KL-0343



KL-0342



Mercedes



KL-0342-2



KL-0312 Extractor for Timing Chain Tensioner

For Timing Chain Tensioner on **Mercedes and BMW** cars, including the following Pressure Bolts and Adaptor Disc:

Spare Parts:

Part No.	Description
KL-0312	Extractor for Timing Chain Tensioner
consists of:	
KL-0312-0010	Pulling Bolt M6 × 30
KL-0312-0011	Pulling Bolt M8 × 30
KL-0312-0012	Pulling Bolt M8 × 60
KL-0312-0013	Adaptor Disc

KL-0312-2 Extractor for Timing Chain Tensioner (short version)

For Timing Chain Tensioner on **Mercedes** cars, as **KL-0312** but short version of Base Tool.

Mounting Devices for Timing Chains of Mercedes Engines

The use of these mounting devices allow a single mechanic to replace timing chains quickly without assistance.

Advantages:

- High time-savings and only one person operation.
- 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.

KL-0344 Mounting Device for Timing Chains

For 4-, 5-, and 6-cylinder **Mercedes** diesel engines OM601, OM602 and OM603.

KL-0344-2 Mounting Device for Timing Chains

For 4-, 5-, and 6-cylinder **Mercedes** diesel engines OM604, OM605 and OM606.

KL-0348 Mounting Device for Timing Chains

For **Mercedes** petrol engine M103.

KL-0343 Mounting Device for Timing Chains

For 4- and 5-cylinder **Mercedes** diesel engines OM615, OM616 and OM617 without level regulation.

KL-0342 Mounting Device for Timing Chains

For 4-cylinder **Mercedes** petrol engine M102.

KL-0342-2 Mounting Device for Timing Chains

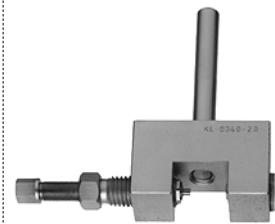
For 4-cylinder **Mercedes** petrol engine M111.

KL-0340-2 K

Mercedes



KL-0340-20



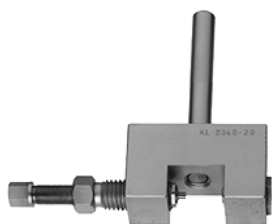
KL-0340-21



KL-0341-2



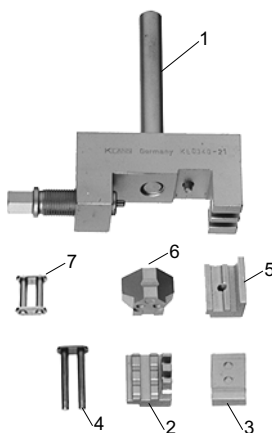
KL-0340-20



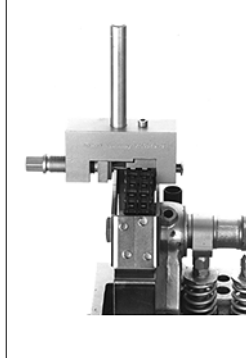
Opening of the timing chain



KL-0340-21



Mounting of the timing chain



KL-0340-2 K Riveting Tool Set

For Timing Chains on Mercedes petrol and diesel engines.

The Separating Tool **KL-0340-20** and the Riveting Tool **KL-0340-21** allow quick, easy and safe splitting and re-connection of the timing-chains - both Simplex and Duplex - as well as the double-roller to be found on new Mercedes diesels from 9/95 onwards. On such chains, the timing chain pin is peened.

For the new double-roller chains, the existing Chain Riveting Tool KL-0340 is no longer effective.

For riveting the Simplex Chains, the adaptor **KL-0341-2** is required, which is not supplied as part of the **KL-0340-2 K** kit.

Advantages:

- Clean splitting of the old timing chain
- Correct and safe assembly of the replacement timing-chain
- Exact riveting of the new timing chain



Attention:

For mounting new timing chains we recommend our mounting tools **KL-0342** to **KL-0348**. The use of these mounting tools allow a single mechanic to replace timing chains quickly and without assistance.

Part No.	Description
KL-0340-2K	Riveting Tool Set
<i>consists of:</i>	
KL-0340-20	Separating Tool for Timing Chains
KL-0340-203	Clipping Punch Set (2 Pieces Ø4 × 50)
KL-0340-21	Riveting Tool for Timing Chains
KL-0340-2020	Plastic Storage Case (empty)

KL-0341-2 Mounting Device

For Mercedes Simplex Timing Chains.

Part No.	Description
KL-0341-2	Mounting Device for Timing Chain
<i>consists of:</i>	
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-0340-20 Separating Tool

For Timing Chains on Mercedes petrol and diesel engines.

Part No.	Description
KL-0340-20	Separating Tool
<i>consists of:</i>	
KL-0340-201	Separating Base Tool
KL-0340-202	Pressing Spindle with Clipping Punch Ø4 × 50

Extra Parts for KL-0340-20:

KL-0340-203 Clipping Punch Set (2 Pieces Ø4 × 50)

KL-0340-21 Riveting Tool

For Timing Chains on Mercedes petrol and diesel engines.

Pos.	Part No.	Description
	KL-0340-21	Riveting Tool for Timing Chains
<i>consists of:</i>		
1	KL-0340-211	Riveting Base Tool with Spindle
2	KL-0340-2121	Mounting Guide Bead No.3
3	KL-0340-2122	Mounting Thrust Piece No.3
4	KL-0340-2123	Mounting Guide Link
5	KL-0340-2131	Guide Bead No.1 for Duplex Timing Chains
6	KL-0340-2132	Pressure Piece Double Chains No. 1
7	KL-0340-214	Mounting Link Ø4,4 for Duplex Timing Chains

KL-0368-3



Mercedes W124

KL-0368-3 Adjusting Guide

Sets basic adjustment of the micro-switch on injection pumps on **Mercedes Diesel W124** with engines OM605 or OM606.

KL-0343-5



Mercedes

KL-0343-5 Locking Screw

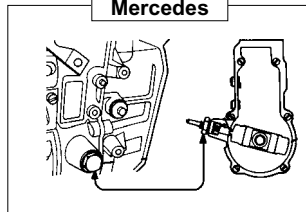
Injection pump locking screw, allows the injection pump to be removed without the loss of pump timing.

Application: Mercedes engines **OM602, OM604, OM605 and OM604** with a Lucas Injection Pump.

KL-0343-3



Mercedes



Weight: 27 g

KL-0343-3 Locking Screw

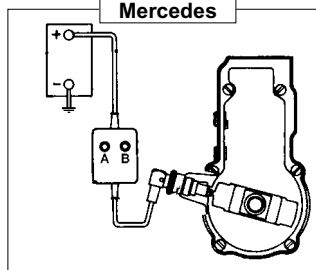
Injection pump locking screw, allows the injection pump to be removed without loss of pump timing.

Application: Mercedes engines **OM601, OM602 and OM603**.

KL-0343-4



Mercedes



KL-0343-4 Injection Timing Tool

For accurate setting of static timing on injection pumps fitted to **Mercedes engines OM601, OM602 and OM603**.

Position indication by LED's.

KL-0384-10



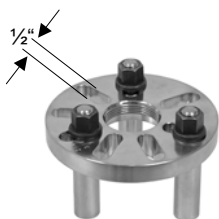
Mercedes

KL-0384-10 Locking Tool

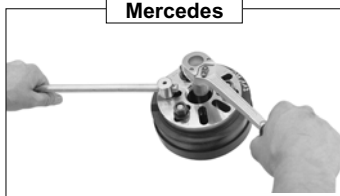
To block the camshafts on remounting of the cylinder head on **Mercedes engines M104 and M111** (petrol engines with four valve technology).

Ø 5,8 / 6,0 mm

KL-0366-80



Mercedes



KL-0366-80 Reaction Tool

Applicable for Mercedes engines e.g. M112.

For counter-holding the crankshaft belt pulley when screwing and unscrewing the central crankshaft bolt .

3550-20

RAHSOL
DREMOTEC

1/2" push-through square drive for bi-directional tightening.



1/2"

20-200 N·m

Code No.:	1379526
Part No.:	3550-20
Weight:	1250 g
Length:	485 mm
Head Ø	44 mm
Head height / length	22 mm
Range of work / measurement 1, Nm (min/max):	20-200
Range of work / measurement 2, lbf·ft (min/max):	15-150
Scale divisions:	10 N·m

8573-00



1/2"

40-200 N·m

Code No.:	7685530
Part No.:	8573-00
Weight:	1,4 kg
Length	553 mm
Range of work / measurement 1, Nm (min/max):	40-200
Range of work / measurement 2, lbf·ft (min/max):	30-150
Scale divisions:	5 N·m / 5 lbf·ft

Example for Torque Wrench:

4549-01

1/4"



1-5 N·m

4549-02

1/4"



2-25 N·m

4549-05

3/8"



5-50 N·m

Note: Further RAHSOL DREMOTEC Products and Torque Wrenches see GEDORE catalogue..

3550-20 TORCOFLEX K Torque wrench

1/2" 20-200N·m

CODE 1379526

Use:

- Controlled screw tightening in the most widely used range 20 - 200 N·m
- For use in all areas of industrial manufacturing

Features:

- Adjustable torque wrench with square drive and integrated ratchet-head function
- For controlled bi-directional tightening
- 1/2" push-through square drive with ball-locking mechanism as per DIN 3120 - A 12.5, 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, powder-coated steel tube construction with zinc-plated ratchet head
- Double scale N·m and lbf·ft underneath a window with a magnifying-glass effect
- N·m graduation of 10 N·m
- Black plastic handgrip with slip-resistant grained surface

Contents:

- Torque wrench type TORCOFLEX K
- Test certificate as per DIN EN ISO 6789
- Operating instructions
- Delivered in transparent plastic box with a practical suspension mounting

8573-00 DREMOMETER BC Torque Wrench

1/2" 40-200N·m

CODE 7685530

Use:

- Controlled screw tightening in the range 40 - 200 N·m
- Ideal for the automotive industry
- Utilisation in all areas of industrial manufacturing

Features:

- Adjustable torque wrench with 1/2" single square drive for controlled clockwise tightening (type BC no. 8573)
- 1/2" square drive with ball-locking mechanism DIN 3120 - A 12.5, ISO 1174
- In accordance with DIN EN ISO 6789, traceable to national norms
- Automatic short-path actuation with tactile impulse and audible signal
- Actuation accuracy: +/- 3% tolerance of the scale set torque
- Full-metal construction from high-strength aluminium alloy
- Double scale with a scale graduation of 5 N·m and 5 lbf·ft
- If ordering with pre-set-value locking and safety device lease specify the N·m value - if fixed factory-pre-setting is desired (price on request)

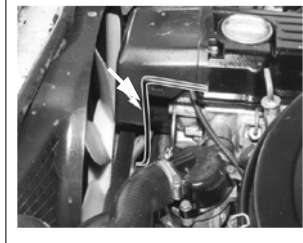
Contents:

- Torque wrench of type DREMOMETER
- Test certificate as per DIN EN ISO 6789
- Operating instructions (14-language) and service-mini-CD
- The individual wrench is delivered in a robust black plastic box

Further RAHSOL DREMOTEC Products and Torque Wrenches see GEDORE catalogue

KL-0367-1

Mercedes



KL-0367-1 Holding Tool

To allow removal of the visco-coupling on the cooling fan.
Application: On Mercedes engines e.g. M103.

KL-0366-1

Mercedes



KL-0366-1 Reaction Wrench Allen Key 10 mm

To allow adjustment of the compressor drive belt on Mercedes engines M102, M103, OM601, OM602, OM603, OM605 and OM606.

As KL-0366-2, but with Allen Key 10 mm

Length:..... 450 mm

Accessory: KL-0366-20 Allen Key 8 mm

KL-0366-2

Mercedes



KL-0366-2 Reaction Wrench Allen Key 8 mm

To allow adjustment of the visco-coupling on the cooling fan and the pulley at the water pump on Mercedes engines M102, M103, OM601, OM602, OM603, OM605 and OM606.

As KL-0366-1, but with Allen Key 8 mm

Length:..... 450 mm

Accessory: KL-0366-10 Allen Key 10 mm

Note: Torx® - Reaction Wrench see page 6.5-06.

KL-0366-5

Mercedes



KL-0366-5 Fan Wrench 36 mm

For undoing the retaining bolt on Mercedes radiator fans.

Application: Mercedes engines M111, OM604, OM605 and OM606 (C- and E-class).

Length:..... 350 mm

KL-0366-7

Mercedes



KL-0366-7 Reaction Wrench

With 3 holes

Required to remove the radiator fan hub, the reaction spanner is bolted to the front face of the hub. The poly-V belt is not in place and cannot be used to lock the hub.

Application: Mercedes C- and E-Class engines M111 (4 cylinder 4 valve), OM604, OM605 and OM606.

Length:..... 410 mm

KL-0366-6

Mercedes



KL-0366-6 Single-ended open Wrench 65 mm

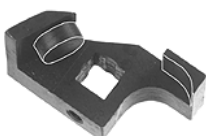
Special open-ended spanner to allow removal and replacement of the radiator fan hub.

Application: Mercedes engines M103 (6 cylinder), M104 (6 cylinder 4 valve), M119 (8 cylinder 4 valve), M120 (12 cylinder 4 valve).

Length:..... 400 mm

KL-0384-1

Mercedes



KL-0384-1 Reaction Wrench

To relieve pressure on the timing belt by compressing the automatic tension roller.

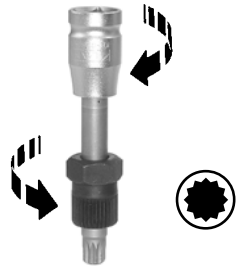
Suitable for Mercedes Transporters series 208 D to 410 D with engines types OM601 and OM602 and also for Mercedes passenger cars with hydraulic pump for self-levelling suspension.

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.

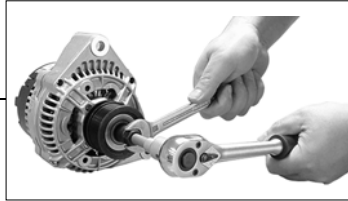
The KL-0384-1 Tension Tool makes light work of this difficult job.

The Tension Tool is operated by a normal 3/8" Socket Wrench.

KL-0284-18



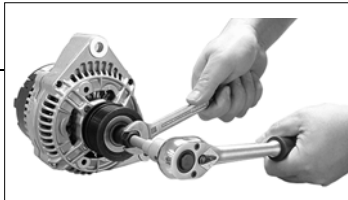
VW-Audi, BMW, Ford,
Seat, Mercedes, etc.



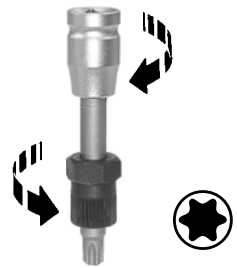
KL-0284-38



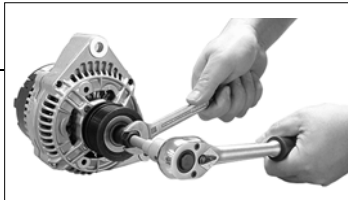
VW-Audi, BMW, Ford,
Seat, Mercedes, etc.



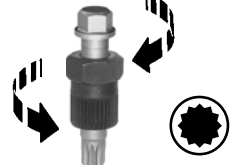
KL-0284-19



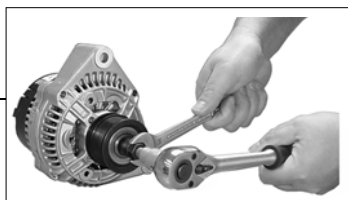
Mercedes A-Class



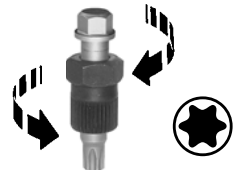
KL-0284-28



VW-Audi, BMW, Ford,
Seat, Mercedes, etc.



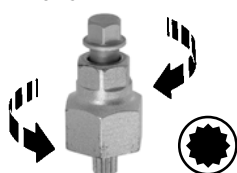
KL-0284-29



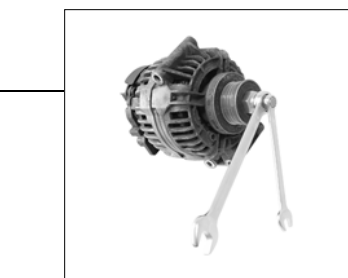
Mercedes A-Class



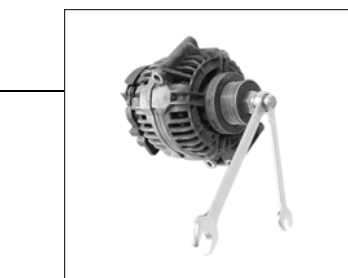
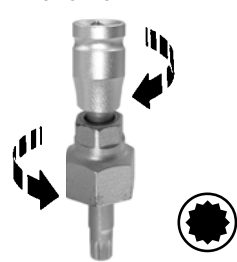
KL-0284-27



Renault



KL-0284-37



KL-0284-18 Alternator Combination Socket

Suitable for: Alternators with free-wheel drive pulley.

Application: VW-Audi, BMW, Ford, Skoda, Mercedes, Opel/Vauxhall, Porsche, Renault etc.

The two-part alternator socket allows easy removal and replacement of the Free-wheel pulley required when either the alternator or pulley must be replaced.

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 InsertXZN - M10	Drive:.....1/2" <input type="checkbox"/>
Reaction Nut with 33 teeth outer Ø 19,5 mm	Drive:.....hex 21 mm
Length:..... 110 mm	Weight:..... 156 g

KL-0284-38 Alternator Combination Socket

As KL-0284-18 but 140 mm long

Particularly suitable for belt pulleys that are hard to access.

KL-0284-19 Alternator Combination Socket

As KL-0284-18 but with Socket Insert Torx® T50

Suitable e.g. for Mercedes A-Class, Renault 1,9 DTI.

KL-0284-28 Alternator Combination Socket

Suitable for: Bosch alternators with free-wheel drive pulley.

Application: VW-Audi, BMW, Ford, Skoda, Mercedes, Opel/Vauxhall, Porsche, Renault, etc.

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:..... hex 12 mm
Reaction Nut with 33 teeth outer-Ø 19,5 mm	Drive:..... hex 21 mm
Length:..... 64 mm	Weight:..... 95 g

KL-0284-29 Alternator Combination Socket

As KL-0284-28 but with Socket Insert Torx® T50

Suitable for Mercedes A Class, Renault 1,9 DTI.

KL-0284-27 Alternator Combination Socket

As KL-0284-28 but with an 28 mm hexagonal cap nut (Drive hex 21 mm).

Applicable for e.g. Renault etc.

KL-0284-37 Alternator Combination Socket

Suitable for: Bosch alternators with free-wheel drive pulley.

Application: Renault etc.

The two-part alternator socket allows easy removal and replacement of the Free-wheel pulley required when either the alternator or pulley must be replaced.

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:..... 1/2" <input type="checkbox"/>
28 mm hexagonal cap nut	Drive:..... hex 21 mm
Length:..... 110 mm	Weight:..... 110 g

© = reg. trademark of Camcar-Extron Inc. USA

KL-0155-41 K

Universal



Version 1:
with toothed hooks.



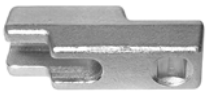
Version 2: for pulleys
with threadholes.



Version 3: for pulleys
without threadholes.



KL-0284-16



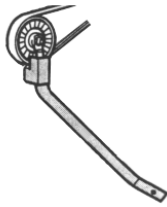
VW-Audi



KL-0284-12



VW-Audi, Seat



KL-0284-15



VW-Audi



KL-0155-41 K V-Belt Pulley Puller Set

The universal V-belt pulley puller set **KL-0155-41 K** allows, due to its different bridges, pressure pieces and hooks, the removal of V-belt pulleys of the most different types and pulling off methods (see Fig. Versions 1 - 3).

Technical data (versions combination):

Version 1: with toothed hooks (groove pulleys).

Short or long bridge with toothed hook.

Short bridge: 80 - 140 mm

Long bridge: 135 - 235 mm

Version 2: for pulleys with threadholes.

Short or long bridge with screws.

Short bridge: 43 - 120 mm

Long bridge: 95 - 210 mm

Version 3: for pulleys without threadholes.

Short or long bridge with standard hooks and/or extensions for rear locking.

Short bridge: 23 - 100 mm

Long bridge: 85 - 195 mm

Weight: 2,6 kg

Specification:

Bridge long, bridge short, 3x pressure piece small, middle, big, 2x hook standard, 2x extension, 2x screw short, 2x screw long, 2x hook toothed.

Note:

The set will be delivered in a plastic case **KL-0155-4190**.

KL-0284-16 Reaction Wrench

For V-ribbed belts.

When changing the poly-V belt the permanent belt tensioning roller can be loosened with the reaction wrench **KL-0284-16**.

Application: VW Polo, Golf, Passat, T4 and Audi.

Drive: 1/2" □

KL-0284-12 Reaction Wrench

For V-ribbed belts.

When changing the poly-V belt the permanent belt tensioning roller can be loosened with the reaction wrench **KL-0284-12**.

Application: VW Polo, Golf, Passat, T4 and Audi.

Advantages: The attachment element can be changed.

KL-0284-15 Reaction Wrench

For tensioning multi-vee belts, equipped with hardened and milled pins which allow the belt tension to be achieved at the alternator. The milled pins are designed not to slip out of the holes in the alternator.

For **VW-engines** on which the multi-vee belts can only be tightened at the alternator.

Drive: 1/2" □

Diameter (pin to pin): 157 mm

KL-0149-131



VW-Audi

KL-0149-131 Adjustable Pin Spanner

For Audi A4, A6, A8 and VW Passat.

To remove and replace the radiator Visco-Fan.

To loosen and tighten the Visco-Coupling of the radiator fan with the **KL-0123-1** it is necessary to react against the fan-belt pulley using the Adjustable Pin Spanner **KL-0149-131**.

Range: Ø14 -100 mm, Pins Ø5 mm

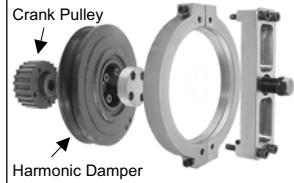
Accessory:

KL-0123-1 Combination open/ring spanner 32 mm

KL-0282-51



VW T4, LT



KL-0282-51 Puller for Harmonic Damper (German Utility Model)

For VW 5-cylinder engines e.g. T4, LT, etc.

Removes the harmonic damper while simultaneously reacting against the crankshaft pulley. The **KL-0282-51** Puller is absolutely necessary if the shoulder of the Pulley has corroded onto the harmonic damper.

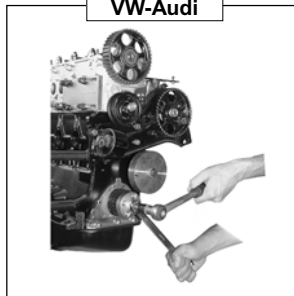
Advantages:

- No damage to the harmonic damper.
- High time-savings.

KL-0282-50



VW-Audi



KL-0282-50 Puller for Crankshaft Pulley

For VW-Audi 4 and 5-cylinder engines.

To remove the front pulley from the crankshaft.

6

KL-0284-61



VW-Audi



KL-0284-61 Reaction Wrench for Crankshaft Pulley (German Utility Model)

For VW-Audi 4- and 5-cylinder engines with and without harmonic damper.

To provide a reaction onto the crankshaft front pulley so that the central pulley bolt may be loosened or tightened.

Required for timing belt changes, oil-seal replacement and during engine repairs.

Advantage:

By using the 2 extension handles, the loosening and tightening of the central crankshaft pulley bolt can be undertaken by a single mechanic.

Consists of:

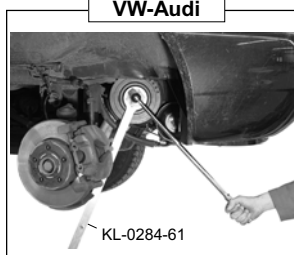
Adaptor, cylinder bolts (4x), Special cylinder bolts (x 4), Special Ring Spanner 56 mm, Extension handles (x 2)

Length overall (incl. 2 extensions): 1800 mm

KL-0284-62



VW-Audi



KL-0284-62 Socket hex 27 mm

Suitable for VW-Audi, Seat, Škoda 4- and 5-cylinder engines with a 27 mm hex bolt at the crankshaft to attach the belt pulleys.

The central crankshaft bolt can be unscrewed or tightened in conjunction with the **KL-0284-61** reaction wrench.

It is required for removing and installing the timing belt, timing belt pulley, radial crankshaft seal ring and vibration damper and for engine repairs.

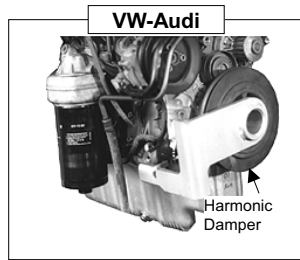
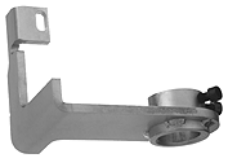
Hex: 27 mm

Length: 100 mm

Drive: 1/2" □

Weight: 350 g

KL-0280-12

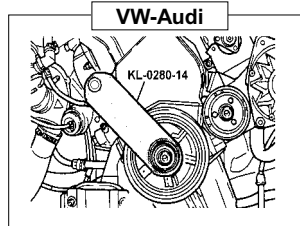


KL-0280-12 Locking Tool for Vibrator Damper

To lock the vibrator damper (pulley at the crankshaft) when the central bolt has to be loosened (e.g. changing of the timing belt).

Application: VW engines (e.g. VW T4 Van with 5-cyl. diesel)

KL-0280-14



KL-0280-14 Locking Tool

For counterbearing of the V-belt pulley / vibration damper while removing the crankshaft-centre bolt.

Application: VW-Audi 5 cylinder diesel engines up to '97 (AAT, ABP, AEL).

KL-0282-31



KL-0282-31 Reaction Wrench (adjustable)

With inter-changeable tips and several hole intervals.

Suitable for all timing pulleys with holes from minimum Ø 12 mm. e.g. VW-Audi, Ford, Opel, Peugeot, Renault, Citroën, Rover, Volvo, Japanese vehicles, etc.

To prevent the Pulley on Camshafts, Injection pumps, etc. from rotating when loosening the central fastening bolt. etc.

A selection of tip-Ø and hole intervals are available to make the wrench almost universal in its range of application.

Technical Data:

Tip distance:.....45 mm to 75 mm Tip-Ø: 12 mm and 16 mm
Tip height:34 mm Tool length:.....420 mm

KL-0282-35



KL-0282-35 Reaction Wrench (adjustable)

Suitable for all timing pulleys with holes from minimum Ø 14 mm. e.g. VW-Audi, Ford, Opel, Peugeot, Renault, Citroën, Rover, Volvo, Japanese vehicles, etc.

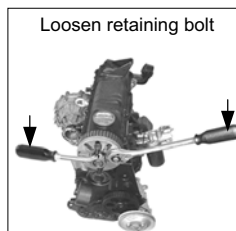
To prevent the Pulley on Camshafts, Injection pumps, etc. from rotating when loosening the central fastening bolt. etc.

The adjustable lever allows to adjust the hole distance and makes the reaction wrench almost universal in its range of application.

Technical Data:

Tip distance:..... 14 mm to 130 mm Tip-Ø: 14 mm
Tip height:31 mm Tool length:.....410 mm

KL-0183-50



KL-0183-50 Pulley-Extractor and Reaction Tool (Patented)

Universal application

2 Tools in one

Loosen the retaining bolt and extract the Pulley

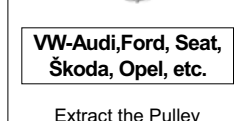
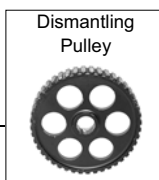
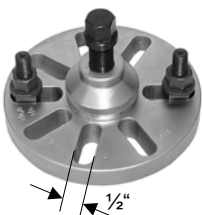
Suitable for all Pulleys with holes with a PCD Ø from 70 mm - 100 mm. Suitable for hole Ø from minimum 20 mm.

To lock the Pulley while loosening or tightening the retaining bolt, as well as preventing the Pulley from rotating during extraction. Any available 1/2" ratchet or extension drive may be used as the reaction tool

consists of:

Part No.	Description	Qty.
KL-0183-510	Puller Plate	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



KL-0183-51 Pulley-Extractor and Reaction Tool (Patented)

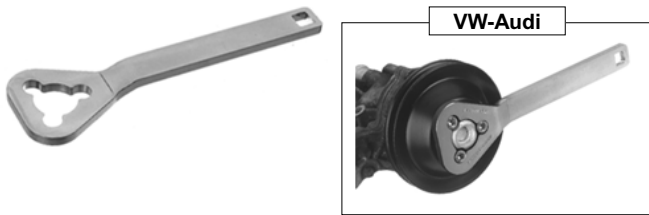
As KL-0183-50 but with 2 Hooks Ø- 26 mm and 2 Hexagonal Nuts.

Suitable for VW-Audi, Seat, Škoda, Opel/Vauxhall Ford, BMW, Mercedes, Peugeot, Citroën, Renault, Fiat, Japanese vehicles, etc.

consists of:

Part No.	Description	Qty.
KL-0183-510	Puller Plate	1
KL-0183-532	Hook Ø 26 mm	2
KL-0008-0009	Shoulder Nut M10	2
KL-0183-540	Pressure-Unit	1

KL-0284-8



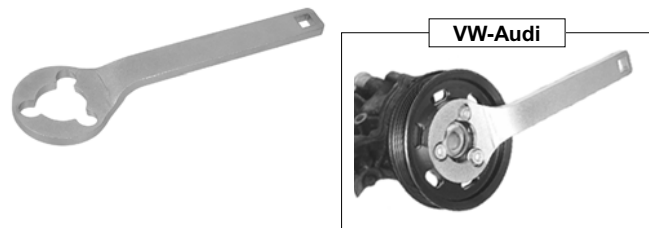
KL-0284-8 Reaction Wrench

For locking the pulley on the water-pump on **VW Polo, Golf, Passat and Audi A4**.
Length:250 mm

Advantages:

- The 1/2" □ drive in the tools handle enables an extension of the tool by e.g. a ratchet.
- Easy loosening of stubborn bolts on the water-pump pulley

KL-0284-81

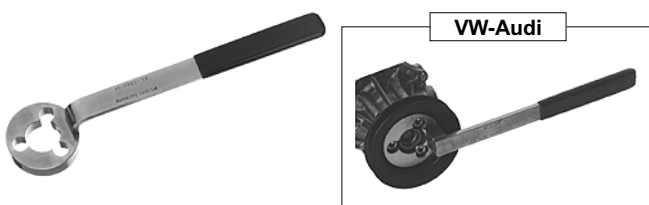


KL-0284-81 Reaction Wrench

For locking the pulley on the servo-pump on **VW Passat ('97 onwards) and Audi A4 ('99 onwards) etc.**

Necessary to lock the Servo-pulley while loosening or tightening the pulley retaining bolts.

KL-0284-11



KL-0284-11 Reaction Wrench

For locking of **deep-drawn** water-pump pulleys on **VW and Audi** engines, as they are used when e.g. an air conditioning is also built in.
Length:298 mm

Advantages:

- Safe locking of the water-pump pulley.
- Easy loosening of stubborn bolts on the water-pump pulley.

Technical Data:

Part No.	KL-0284-8	KL-0284-11
Overall length	250 mm	300 mm
Width	80 mm	65 mm
Height	8 mm	40 mm
Weight	450 g	450 g
Drive	1/2"□ or by hand	by hand

KL-0484-10



KL-0484-10 Locking Tool

To block the automatic clamping role of the fan belt on **Opel/Vauxhall** vehicles with Eco Tec-engines.

Also applicable with Audi and VW engines.

Ø 4,0 / 6,0 mm

Weight:70 g

KL-0366-3



KL-0366-3 Reaction Wrench Torx® T45

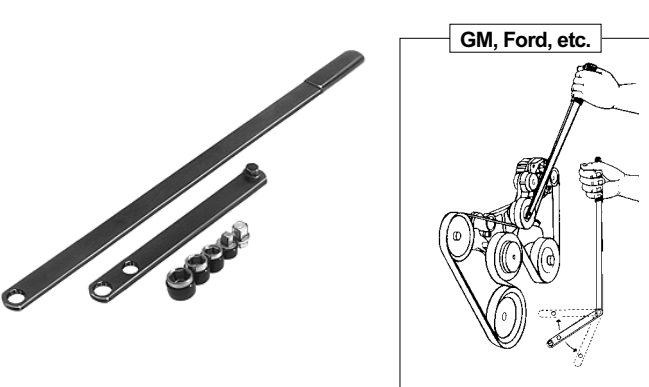
Applicable for **Renault 2,2 L diesel engines (G8T)** e.g. **Espace, Laguna, Safrane** etc.

When removing or installing V-belts, the automatic tensioning pulley must be tensioned with the special **KL-0366-3** wrench to reduce stress on the V-belt.
Length:450 mm

Accessory: **KL-0366-30 Torx® Insert T45**

Note: Further Reaction wrenches see page 6.5-01.

KL-0183-20

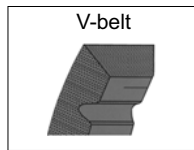


KL-0183-20 Reaction Wrench with Socket Set

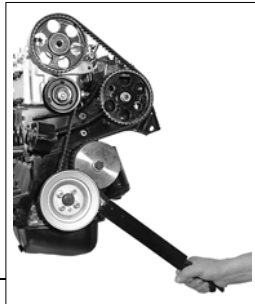
Releases Tension on Serpentine Belts with a spring Loaded Idler Pulley.

Used to remove and install belts on serpentine belt systems using a spring loaded idler pulley. Will reach where conventional ratchets or breaker bars won't. Fits pulleys requiring 13 mm, 15 mm, 16 mm, 18 mm hex and both 3/8" and 1/2" square drive sizes. Also comes with an extension that can be bolted on and set in 11 different positions for hard to reach areas. Covers most applications.
Weight: 1,2 kg

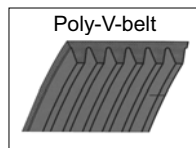
KL-0183-60



Accessories: KL-0183-6001



KL-0183-61



Accessories: KL-0183-6101



KL-0582-1 / KL-0582-2

BMW



KL-0123-1 / KL-0123-2

BMW, Ford



KL-0483-1 / KL-0483-2

Opel



KL-0183-60 Reaction Wrench for V-belt Pulleys

To lock the Pulley while loosening or tightening the central pulley retaining bolt.

Universal application for A and V belt pulleys.

Load max.:150 Nm

Accessories: KL-0183-6001 Replacement belt

KL-0183-61 Reaction Wrench for Poly-V belt Pulleys

To lock the Pulley while loosening or tightening the central pulley retaining bolt.

Universal application for Poly-V belt pulleys.

Load max.:100 Nm

Accessories: KL-0183-6101 Replacement belt

KL-0582-1 Locking Tool for Visco-Fan

To provide a reaction point to dismantle the visco-coupled cooling-fan.

Hole distance:..... 38 mm

Weight: 500 g

KL-0582-2 Locking Tool for Visco-Fan

As KL-0582-1 but with

Hole distance:..... 44,5 mm

Weight: 400 g

KL-0123-1 Reaction Wrench 32 mm hex.

For reaction of the visco-coupling drive when removing or installing the visco-coupling on **BMW and Ford** vehicles.

Length: 280 mm

Technical Data see KL-0483-2.

KL-0123-2 Reaction Wrench 36 mm hex.

For reaction of the visco-coupling drive when removing or installing the visco-coupling on **Ford, Opel/Vauxhall and GM** vehicles.

Length: 280 mm

Technical Data see KL-0483-2.

KL-0483-1 Reaction Wrench 46 mm hex.

For twisting the water pump when tightening the belt on **Opel/Vauxhall and GM** OHC-engines

Technical Data see KL-0483-2.

KL-0483-2 Reaction Wrench 41 mm hex.

For twisting the water pump when tightening the belt on **Opel/Vauxhall and GM** OHC-engines.

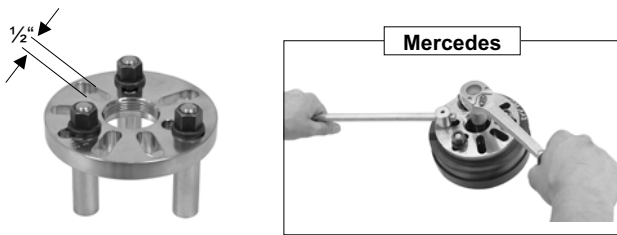
Advantages:

- Safe reaction of the visco-coupling.
- No damage to the visco-coupling.
- High quality of the wrench due to special manufacturing process.

Technical Data: (Reaction Wrench):

Part No.	KL-0123-1	KL-0123-2	KL-0483-1	KL-0483-2
Width Across Flats	32 mm	36 mm	46 mm	41 mm
Overall length	280 mm	280 mm	125 mm	125 mm
Height	11 mm	11 mm	55 mm	55 mm
Weight	346 g	340 g	270 g	275 g
Drive	-	-	½" □	½" □

KL-0366-80

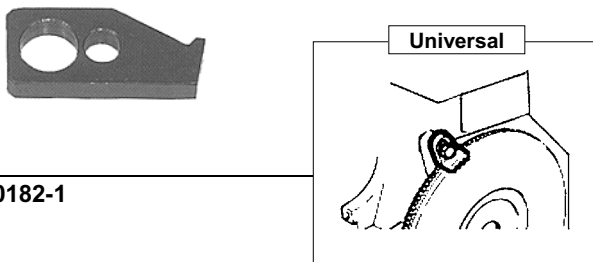


KL-0366-80 Reaction Tool

Applicable for Mercedes engines e.g. M112.

For counter-holding the crankshaft belt pulley when screwing and unscrewing the central crankshaft bolt.

KL-0481-7



KL-0481-7 Flywheel Locking Tool

To lock the flywheel when the gearbox is dismantled.

Application: Opel/Vauxhall engines:

- OHV 1,0, 1,2
- OHC 1,2 - 1,3 - 1,4 - 1,6 - 1,8 - 2,0
- DOHC 2,0 16V
- OHC 1,5 D - 1,5 DT - 2,0 D - 2,3 DT
- CIH 4 + 6 cylinder 2,2 - 2,4 - 2,5 - 3,0

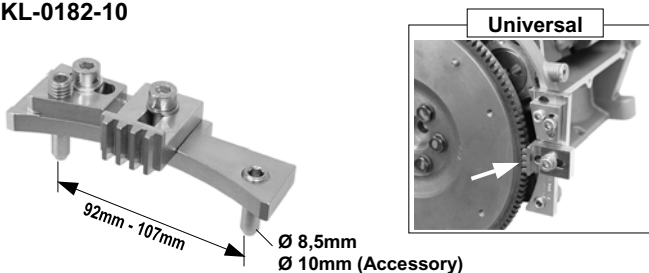
KL-0182-1



KL-0182-1 Flywheel Locking Tool

To lock the flywheel when the gearbox is dismantled. **Universal** application.

KL-0182-10



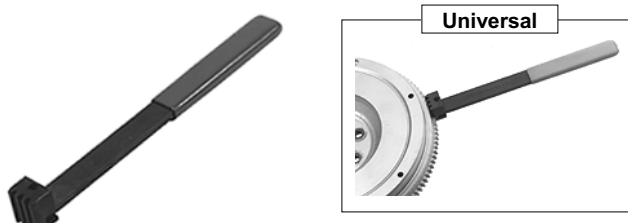
KL-0182-10 Flywheel Locking Tool adjustable (German Utility Model)

To lock the flywheel when the gearbox is dismantled.

Universal application. The tool can be adjusted axially and radially and can be used almost universally by screwing in different stud bolts.

Accessory: KL-0182-1017 Bolt Ø 10 mm x 35 mm
KL-0182-1018 Bolt Ø 10 mm x 45 mm

KL-0110

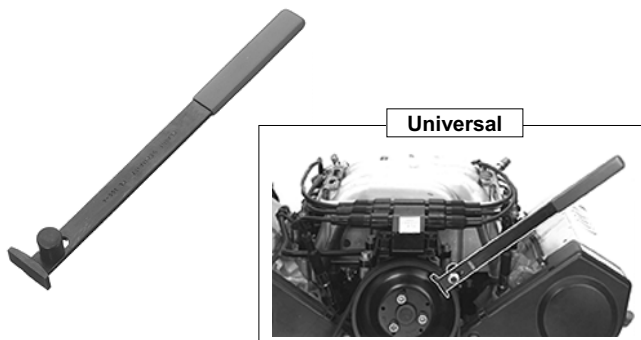


KL-0110 Flywheel Locking Tool (Universal)

Necessary for dismantling or re-assembling flywheels, clutch pressure plates and belt pulley.

Length:250 mm
Weight:0,5 kg

KL-0366-4



KL-0366-4 Pulley Spinning Tool

For deep forged pulleys to turn off the crankshaft, camshaft, etc.

Length:325 mm

Application:

Mercedes, VW-Audi, BMW, Ford, Opel, Peugeot, Renault, Rover, Volvo, Japanese cars.

Attention:

KL-0366-4 is not a counter-holding wrench for shafts.

KL-0181-90

KL-0181-900

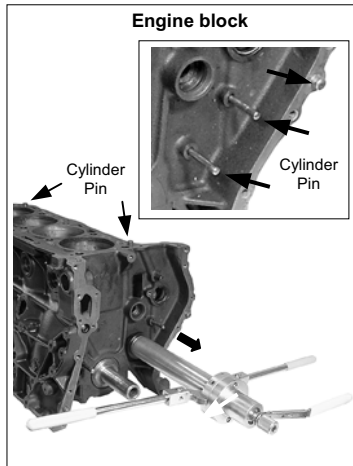
Universal



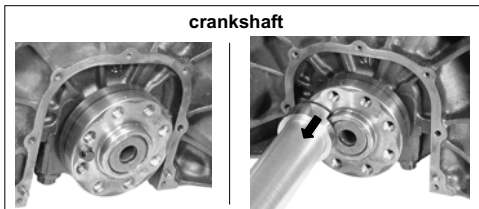
For unhardened pins



For hardened pins



Accessory: KL-0181-920



KL-0181-93

Mercedes



Oil injection nozzle



Note:
Guide sleeve puller for Ø 5 - 10 mm see page 6.6-02.

KL-0181-90 Puller for Cylinder Pin

(German Utility Model)

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.

consists of:

Part No:	Description:
KL-0181-90	Puller for cylinder pins
consists of:	
KL-0181-900	Puller for Cylinder Pin Basic Tool (with distance plates)
KL-0181-9006	Chuck Ø6 mm for unhardened pins
KL-0181-9008	Chuck Ø8 mm for unhardened pins
KL-0181-9010	Chuck Ø10 mm for unhardened pins
KL-0181-9106	Chuck Ø6 mm for hardened pins
KL-0181-9108	Chuck Ø8 mm for hardened pins
KL-0181-9110	Chuck Ø10 mm for hardened pins

Accessory:

KL-0181-920 Extension Set for Crankshaft Pins

consists of:

Part No:	Description:
KL-0181-9201	Support Ring
KL-0181-9208	Chuck Ø8 mm for unhardened pins

Supplementary Accessories:

KL-0181-9202 Support ring 14 mm

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-4990-1017 Plastic case (not ill.)

Measurement: Outer 450x365x106 mm
Inner 437x295x100 mm

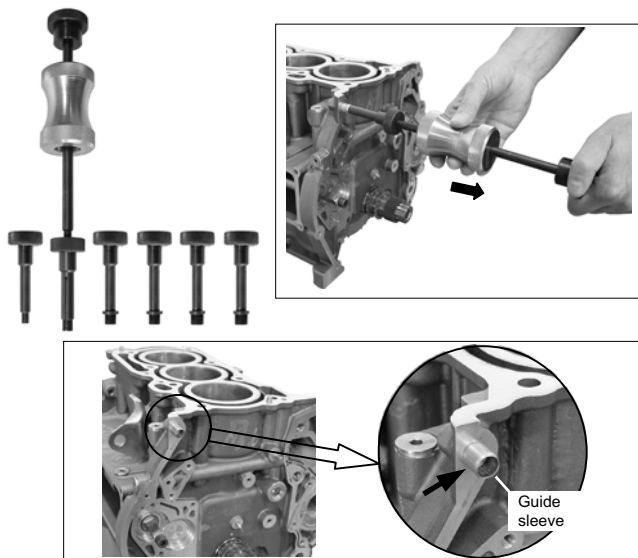
KL-0181-93 Puller for oil injection nozzles with support frame

(German Utility Model)

To be used in the same way as the **KL-0181-90** but with a support frame for pulling the oil injection nozzle out of the engine housing.

Mercedes CDI engines OM 611, 612, 613.

KL-0181-80



KL-0181-80 Guide sleeve puller

(German Utility Model)

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.

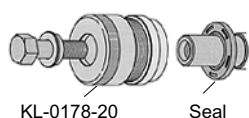
consists of:

Part-No.	Description
KL-0181-80	Guide Sleeve Puller
consists of:	
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-0178-20

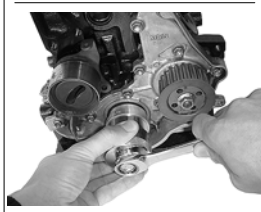


Crankshafts, Camshafts



KL-0178-20

Seal



Accessories: KL-4990-1007 Plastic case

Measurement: Outer 340x275x83 mm
Inner 326x222x77 mm

KL-0178-20 Seal Renewal Tool Set

Suitable for Crankshafts and Camshafts.

Seal Rings with an outer Ø from 42 to 60 mm and located up to 85 mm from the shaft-end, can be quickly, easily and safely replaced, *without the need to dismantle the engine.*

KL-0128-31



KL-0128-31 Dial Gauge with Stands

Consists of KL-0128-1 and KL-0128-3.

- To measure the distortion of the brake disc.
- For adjusting the engine and transmission.

Strong rods of tool-steel, with fine adjustment for dial-gauge-clamp, prismatic magnetic base. Inclusive Dial Indicator Ø 58 mm and Wooden Case.

KL-0128-1 Dial Indicator Ø 58 mm

Description: Stem and spindle stainless steel, accuracy to DIN 878-A.

Reading:0,01 mm
Measuring Range:10 mm
Housing-Ø:58 mm
Set nut revolution by 360°:1 mm
Stem-Ø:8 h 6

KL-0128-3 Dial Gauge without Stands

Note: More Informations about Measuring Tools and Accessories **see Chapter 10.**

KL-0140-50



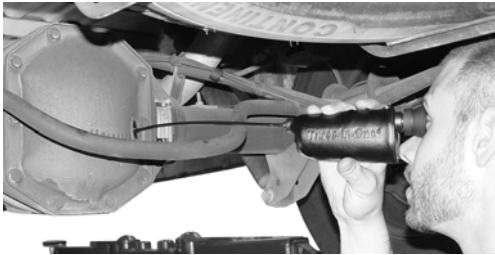
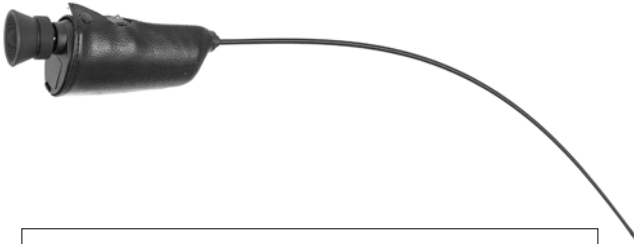
KL-0140-50 Precision-Inside-Measuring-Tools

Dial gauge for measuring of cylindrical bores, especially for petrol and diesel engines. Includes dial-gauge and wooden case.

Measuring range.....Ø 50-178 mm
Measuring depth:.....180 mm

KL-0140-90

Universal



Accessories:

KL-0140-902 Mirror 45°

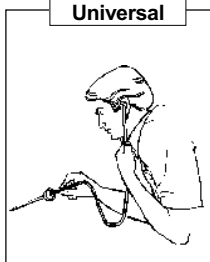


KL-0140-901 Bulb set



KL-0140-95

Universal



KL-0140-90 Endoscope

For optical tests in the less accessible places or inside mechanical devices such as motors, gearboxes or axle drives.

The endoscope allows to focus the many inside components and consequently to perform analyses and tests sparing time and expensive dismantling works.

The long and flexible 4.5 mm optical feeler, its light and manageable casing together with its simple single-hand operation make possible to perform a quick and precise optical test even in the most difficult- to-reach places.

The optical feeler has been especially designed so that the light of the lamp placed in the casing is led through the optical fibres to the feeler head, where it forms a ring around the lens. This allows to have the max. brightness without any lamp or other power source in the lens. (Important when working in explosion-hazardous areas)

The feeler housing is delivered in a dustproof leather case.

Advantages:

- ✔ Extra-thin 4.5 mm feeler (length: 450 mm)
e.g. for CDI glow-plug bore.
- ✔ Light source in the housing.
- ✔ Single-hand operation.
- ✔ Highflexible feeler for less accessible places.
- ✔ Anti-skidding focus ring.

Specification:

Part No.	Description	Qty.
KL-0140-900	Endoscope	1
KL-0140-901	Bulb set	1
	Plastic case	1
	Batteries 1,5 V (AA)	2

Accessories:

KL-0140-902 Mirror 45°

It allows 90° lateral view.

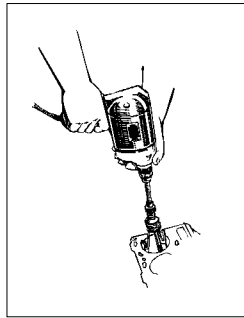
KL-0140-901 Bulb set (5 pieces)

KL-0140-95 Stethoscope

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

Length: 1100 mm Weight: 115 g

KL-0199-12



KL-0199-12 Hone Tool Ø 51-175 mm

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: 570g

Hone Stone: Length: 100 mm

Accessories:

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

Measure: 11 mm x 100 mm

Weight: 57 g

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

Measure: 11 mm x 100 mm

Weight: 57 g

Accessories Hone Stones for „old Version“:

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

Length: 76 mm

Weight: 57 g

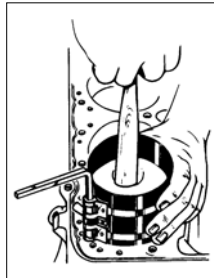
KL-0199-122 Hone Stone Set hard (3 Pcs.)

Length: 76 mm

Weight: 57 g

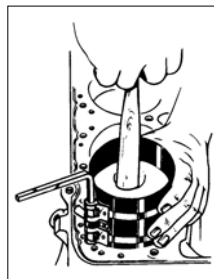
KL-0126-44

KL-0126-45

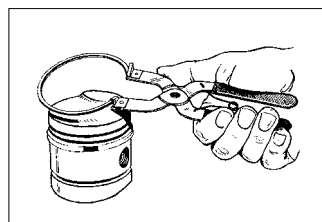


KL-0126-46
KL-0126-47

KL-0126-48



KL-0126-43



Ring Compressor

The spring clutch assures a proper fit on the piston and a positive locking action.

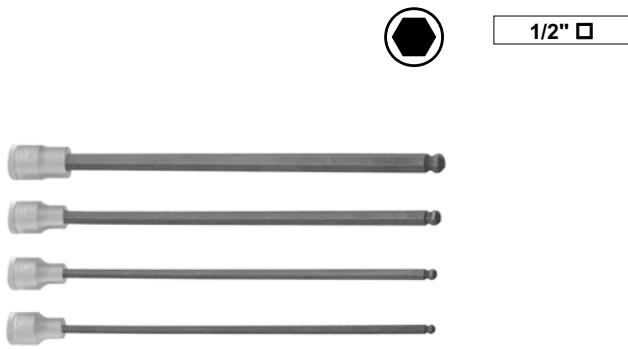
Part No.	Description	Height [mm]	Ø [mm]	Weight [g]
KL-0126-44	Piston Ring Tightening Strap	39	57 - 125	170
KL-0126-45	Piston Ring Tightening Strap	52	40 - 75	115
KL-0126-46	Piston Ring Tightening Strap	89	57 - 125	315
KL-0126-47	Piston Ring Tightening Strap	89	90 - 175	400
KL-0126-48	Piston Ring Tightening Strap	178	90 - 175	765

KL-0126-43 Piston Ring Pliers

Tapered jaws to remove and install most passenger car and light truck rings from 1,2 - 6,3 mm.

Weight: 115 g

KL-4022-241



Note: Further socket inserts see chapter 10.

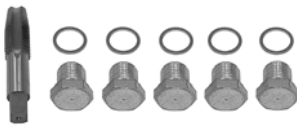
KL-0100-6



KL-0132-48



Content:



KL-0122-912



KL-4022-241 Socket Insert Set "Ball head"

Extra-long design with ball head.

Ideal for unscrewing and tightening internal 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 pan bolts in VW T4 5-cylinder engines;

KL-4022-2408 Removal and installation of knock sensor on Audi V6 engines

Special Socket set, "Ball head", 1/2"

Part-No.	Description	Qty.
KL-4022-241	Special Socket set, "Ball head"	1
<i>consists of:</i>		
KL-4022-2405	Special Socket, "Ball head" hex 5 mm	1
KL-4022-2406	Special Socket, "Ball head" hex 6 mm	1
KL-4022-2408	Special Socket, "Ball head" hex 8 mm	1
KL-4022-2410	Special Socket, "Ball head" hex 10 mm	1

Drive: 1/2"□

Length: 288 mm

KL-0100-6 Extension, Length 600 mm

This tool is essential for works on gearbox, engine and on the exhaust system.

Drive: 1/2"□ to 3/8"■

KL-0132-48 Oil Drain Plug Repair Kit M14x1,5

For threads M14×1,5, Includes a special thread borer (KL-0132-481), 5 Threaded Plugs (Set = KL-0132-482), 5 Washers (Set = KL-0132-483) and wooden case / plastic case.

KL-0122-912 Socket hex 24 mm

Applicable for Opel 1,8 petrol engines e.g. Opel Zafira.

To remove and install the oil pressure switch.

Due to the special shape, the ribbed V-belt tensioning pulley does not need to be removed.

Hex: 24 mm

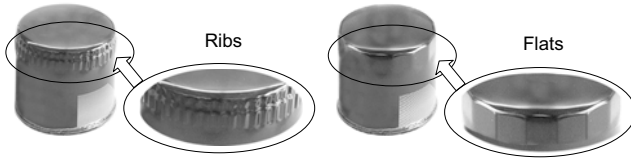
Length: 70 mm

Drive: 1/2"□

Weight 260 g

Identify the suitable oil filter key:

1. Ribs or Flats?



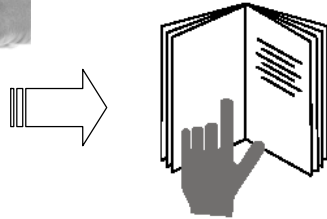
2. Count the number of ribs or flats.



3. Measure the wrench opening.



4. Choose the proper oil filter key.



Oil Filter Key

To identify the proper oil filter key perform the following steps:

1. Verify if 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 page 6.7-03 or from the pages 6.7.

KL-0122-332 Oil Filter Key 78 mm

Suitable for **Ford, Mitsubishi, Nissan, Toyota**, etc.

For oil filter with 78 mm and 15 flats.

Drive: 3/8"□

KL-0122-334 Oil Filter Key 95 mm

Suitable for **Alfa Romeo, Chrysler, Ford, Toyota** etc.

For oil filter with 95 mm and 15 flats.

Drive: 3/8"□

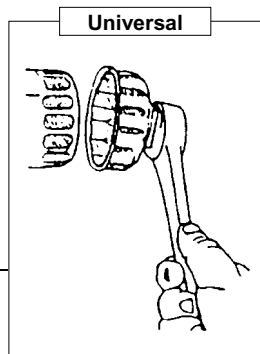
KL-0122-335 Oil Filter Key 99 mm

Suitable for **Toyota** etc.

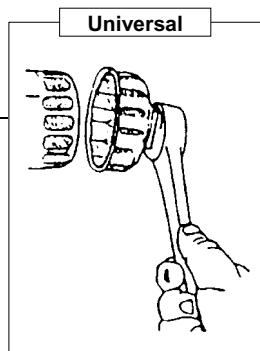
For oil filter with 99 mm and 15 flats.

Drive: 3/8"□

KL-0122-332



KL-0122-334



KL-0122-335



KL-0122-31 K

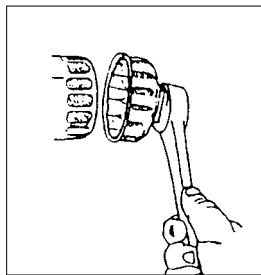


KL-0122-32 K



VW-Audi
BMW
Fiat
Lancia
Mercedes
Seat
Skoda
Volvo
etc.

KL-0122-301 - KL-0122-327



KL-0122-15



KL-0122-3.. Oil Filter Key

The re-inforced and profiled Oil Filter Tools correspond to the Oil Filter Cartridge.
Drive:..... 3/8"□

KL-0122-31 K Oil Filter Key Set consists of:
KL-0122-32 K Oil Filter Key Set consists of:

Part No:	Filter Profile and Application examples:		
KL-0122-301	74 mm • 14 Flats • 1 Step ⇒ Audi (e.g. A3 TDI) • BMW (E36 with 4 Cyl. engine) • Citroën • Fiat • Ford • Lancia • Mazda (e.g. 6 with 4-cyl. engine) • Mercedes (e.g. CDI engines, C- and E-Class with 4 and 6 Cyl. petrol engines) • Nissan • Opel • Peugeot • Porsche • Renault • Toyota • VW (e.g. Golf IV TDI) • etc.		•
KL-0122-302	74 mm • 15 Flats • 2 Steps ⇒ Ford • Opel • etc.		•
KL-0122-303	76 mm • 15 Flats • 2 Steps ⇒ VW-Audi • Mercedes • Opel • etc.		•
KL-0122-304	91 mm • 15 Flats • 1 Step ⇒ Alfa Romeo • Fiat • Ford • Honda • Mazda • Mitsubishi • Nissan • Opel • Porsche • Renault • Volvo • VW-Audi etc.		•
KL-0122-305	79 mm • 15 Flats • 1 Step ⇒ Ford • Honda • Isuzu • Mazda • Nissan • Opel • Subaru • Toyota • etc.		•
KL-0122-306	Ø 74 mm • 30 Ribs • 1 Step ⇒ Ford • etc.		•
KL-0122-307	Ø 92 mm • 36 Ribs • 1 Step ⇒ Ford • etc.		•
KL-0122-308	64 mm • 14 Flats • 1 Step ⇒ Fiat • Daihatsu • Nissan • Toyota • Honda • etc.		•
KL-0122-309	65 mm • 14 Flats • 2 Steps ⇒ Daihatsu • Toyota • etc.		•
KL-0122-310	72 mm • 14 Flats • 1 Step ⇒ Toyota • Mini Diesel • etc.		•
KL-0122-311	67 mm • 14 Flats • 1 Step ⇒ Mazda • Ford • etc.		•
KL-0122-312	Ø 86 mm • 18 Ribs • 1 Step ⇒ 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 1,9 D and Laguna, Safrane; Espace III 2,1 D) • etc.		•
KL-0122-313	Ø 96 mm • 18 Ribs • 1 Step ⇒ Audi (e.g. A4 with TDI-engines) • VW (e.g. Touareg with V 10 TDI engines, Passat '97-onwards with TDI-engines) • Renault (z.B. Master 2,5 / 2,8 D / TD, Laguna; Safrane; Espace III 2,2 D • R19; Rapid and Megane 1,9 / 2,1 D / TD) • Opel (e.g. Movano 2,5 / 2,8 D / TD) • etc.		•
KL-0122-314	82 mm • 15 Flats • 2 Steps ⇒ Honda • Mazda • Nissan • Subaru • Toyota • etc.		•
KL-0122-315	89 mm • 15 Flats • 1 Step ⇒ Honda • Isuzu • Mitsubishi • etc.		•
KL-0122-316	100 mm • 15 Flats • 1 Step ⇒ Isuzu • Mitsubishi • etc.		•
KL-0122-317	Ø 93 mm • 45 Ribs ⇒ VW-Audi (diesel, TDI and 2,4 / 2,6 and 2,8 L engines), etc.		•
KL-0122-318	Ø 66 mm • 6 Ribs ⇒ Fiat (e.g. Punto 1,2) ⇒ Renault (e.g. Clio 1,2; Express; Kangoo; Rapid; Twingo; etc.		•
KL-0122-319	Ø 76 mm • 12 Ribs ⇒ 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 (e.g. Vivaro), etc.		•
KL-0122-320	Plastic case for KL-0122-31 K		•
KL-0122-321	108 mm • 18 Ribs ⇒ Renault (e.g. Espace; Laguna; Master; Safrane; Traffic 2,4 / 2,5 / 2,8 D / TD), etc.		•
KL-0122-322	106 mm • 15 Flats ⇒ Fiat (e.g. Ducato 2,5 D / TD), etc.		•
KL-0122-323	74 mm • 8 Flats ⇒ Fiat (e.g. Marea) • Lancia (e.g. Delta), etc.		•
KL-0122-324	92 mm • 10 Flats ⇒ 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	86 mm • 16 Flats ⇒ BMW (e.g. 316i, 318i '01-onwards etc) • Volvo (e.g. S40, S70 etc), etc.		•
KL-0122-327	108 mm • 15 Flats ⇒ Volvo (e.g. C70/S70/V70 - TDI Turbo diesel, 850 TDI Turbo Diesel), etc.		•
KL-0122-329	Adaptor 1/2" to 3/8"		•
KL-0122-330	Plastic case for KL-0122-32 K		•
KL-0122-15	3-legged Oil Filter Tool Ø 65 - 120 mm		•

Oil Filter Tool Sets KL-0122-31 K and KL-0122-32 K are delivered in a durable Plastic Storage Case.

KL-0122-3



VW-Audi,
BMW Mercedes



KL-0122-212



VW-Audi,
Seat, Skoda



KL-0122-213



VW-Audi,
Seat, Skoda



KL-0122-217



VW-Audi,
Skoda, etc.



KL-0122-219



VW-Audi,
Skoda, etc.



KL-0122-3 Oil Filter Key

Applicable on **VW-Audi, BMW, Citroën, Fiat, Ford, Lancia, Mazda, Mercedes, Nissan, Opel/Vauxhall, Peugeot, Porsche, Renault, Suzuki, Toyota, etc.**

Especially suitable for **Audi A3 TDI, VW Golf IV TDI, BMW E36 with 4-cylinder engines, Porsche Cayenne, Boxster, 911 and Mercedes CDI engines, as well as C- and E-Class with 4- and 6-cylinder petrol engines**

For Oil Filter with 74mm and 14 Flats.

Drive: SW 22 mm

KL-0122-212 Oil Filter Key

Applicable for **VW-Audi, Seat, Škoda etc.**

Especially suitable for **VW (e.g. Golf III / Passat up to '96 with TDI-engine) • Audi (e.g. A6 up to '96 with TDI-engine 115 hp) • Renault (e.g. Clio; Rapid 1,9 D and Laguna, Safrane; Espace III 2,1 D) • etc**

For Oil Filter with Ø 86mm and 18 Ribs.

Drive: 3/8"□

KL-0122-213 Oil Filter Key

Applicable for **VW-Audi, Seat, Škoda etc.**

Especially suitable for **Audi (z.B. A4 with TDI-engine) • VW (e.g. Touareg with V 10 TDI engine, Passat'97-onwards with TDI-engine) • Renault (e.g. Laguna; Safrane; Espace III 2,2 D • R19; Rapid and Megane 1,9 / 2,1 D / TD) • Opel/Vauxhall (e.g. Movano 2,5 / 2,8 D / TD) • Renault (e.g. Master 2,5 / 2,8 D / TD) • etc.**

For Oil Filter with Ø 96mm and 18 Ribs.

Drive: 3/8"□

KL-0122-217 Oil Filter Key

Applicable for **VW-Audi, Seat, Škoda etc.**

Especially suitable for **VW-Audi (Diesel, TDI and 2,4 / 2,6 and 2,8 engine), etc.**

For Oil Filter with Ø 93mm and 45 Ribs

Drive: 3/8"□

KL-0122-219 Oil Filter Key

Applicable for **VW-Audi, Mercedes, Seat, Škoda etc.** (with Purflux Filter LS 918)

Especially suitable for **Mercedes with 6-cylinder petrol engine M102 and M103.**

Due to the particularly compact oil filter wrench design, the oil filter on Mercedes M102 and M103 engines can be exchanged without the need to remove the induction pipe.

For Oil Filter with Ø 76mm and 12 Ribs.

Drive: 3/8"□

KL-0122-2



VW-Audi,
Skoda, etc.



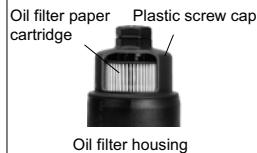
KL-0122-5 / KL-0122-51 / KL-0122-52



VW-Audi,
BMW Mercedes



KL-0122-3300 K



Note: The torque wrench is not part of the kit.

Accessory: 4549-05 TORCOFIX K



KL-0122-426



KL-0122-2 Oil Filter Key

For **VW-Audi** diesel engines with MANN-, Mahle- or Knecht- filter. This tool is especially applicable for removal of oil filters in narrow space conditions. Drive:..... 22 mm hex or 1/2"□

KL-0122-5 Oil Filter Socket 36 mm hex

Necessary to remove and replace the oil-filter housing when replacing the oil-filter element.

Application 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. Drive:..... 3/8"□

KL-0122-51 Oil Filter Socket 32 mm hex

Necessary to remove and replace the oil-filter housing when replacing the oil-filter element.

Applicable for **Opel** e.g. on **X10XE, X12XE, Y17DT, Y17DTL** engines, **Mercedes** HGV's e.g. **OM 364, OM 366** engines and **Skoda Superb**. Drive:..... 3/8"□

KL-0122-52 Oil Filter Socket 27 mm hex

As **KL-0122-51**, but applicable for **Mercedes** e.g. **A-Class (W169)** and **Smart**. Drive:..... 3/8"□

KL-0122-3300 K Set of Oil Filter Keys in plastic case

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.

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/V, Passat, Sharan, Touareg, T4, T5; • **BMW** e.g.: 1st (E87), 3rd (E36, E46), 5th (E39, E60), 7th (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** e.g.: Agila, Astra G / H, Corsa C, Meriva, Signum, Vectra B / C, Zafira.

Supplied tools (KL-0122-3300 K):

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)

Accessory: 4549-05 - TORCOFIX K Code: 1545140

5-50 Nm, Length: 335 mm, graduation: 0,25 Nm, weight: 540 g

KL-0122-426 Oil Filter Key 86 mm 16-Flats bonded

Necessary to remove and replace the oil-filter housing when replacing the oil-filter element.

Especially suitable for Volvo (e.g. S40, S70 etc), etc.

For Oil Filter with 86mm and 16 Flats.

Drive: 3/8"□

KL-0122-601 / KL-0122-602



KL-0122-7



KL-0122-605



KL-0122-606



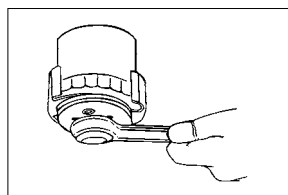
KL-0122-651



KL-0122-12



KL-0122-13 / KL-0122-14



Oil Filter Key

Allows quick and easy removal of stubborn Oil Filters.

Part-No.	Measures and Application:	Drive	Weight
KL-0122-601	Ø 66 mm • 6 Ribs ⇨ Renault (Twingo, Clio with D-Petrol engines and filter-No. 77 00 869 029)	3/8"	191 g
KL-0122-602	Ø 108 mm • 18 Ribs ⇨ Renault (Trafic, Master, Safrane with S8U-engines and filter No. 77 00 860 823)	3/8"	289 g
KL-0122-7	Ø 76 mm • 12 Ribs • with grip ⇨ Ford with 1,8 diesel-engines and motorcraft-filter EFL 344 • Peugeot with Purflux-filter • Renault (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) • etc.	Grip	293 g

KL-0122-605 Oil Filter Key 135 mm 18 flats

Necessary to remove and replace the oil-filter housing when replacing the oil-filter element.

Applicable e.g. for the **MAN 18 - 48 tons series F2000, FE and TGA.** (MANN Filter No. HU 1381 x)

Drive: 1/2"□

KL-0122-606 Oil Filter Key 106 mm hex. 15 flats

Stubborn and hard to reach oil filters quickly and easily removed and replaced.

Applicable e.g. for the **MAN 8 - 10 tons series L2000, LE, M2000 and ME.** (MANN Filter No. W 1160)

Drive: 1/2"□

KL-0122-651 Oil Filter Key 106 mm hex. 15 flats

Stubborn and hard to reach oil filters quickly and easily removed and replaced.

Applicable e.g. for the **MAN 8 - 10 tons series L2000, LE, M2000 and ME.** (MANN Filter No. W 1160)

Drive: 1/2"□

KL-0122-12 Oil Filter Key

For Oil Filter with Ø 60-125 mm.

Drive: 3/8"□

KL-0122-13 Oil Filter Key Ø 64-80 mm

The large range enables this wrench to fit most standard size filters. Steel jaws grip filter without slipping. Works great in tight spots since it works from the top of the filter.

Clamping range: Ø 64-80 mm

Weight: 400 g

Drive: 3/8"□

KL-0122-14 Oil Filter Key Ø 80-98 mm

As **KL-0122-13** but with:

Clamping range: Ø 80-98 mm

Weight: 400 g

Drive: 3/8"□

KL-0122-4

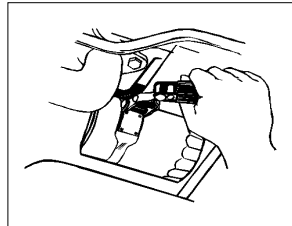
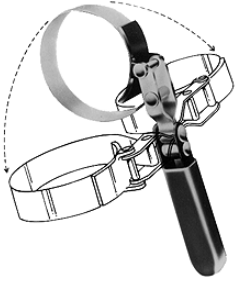


KL-0122-4 Oil Filter Key

Universal application, with strong chain.

Clamping range:Ø 50 - 110 mm
Drive: 1/2"□

KL-0122-801 / -804



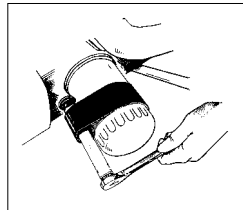
“Swivel Grip“ Oil Filter Wrenches

Handle Swivels to Clear Obstructions.

All models feature the swivel handle, gripper “teeth“ and 1“ wide stainless steel band. The swivel handle makes it easy to turn filters in hand to reach locations. Vinyl covered handle.

Part No.	Description	Range	Weight
KL-0122-801	Oil Filter Key	Ø 60 - 66 mm	310 g
KL-0122-802	Oil Filter Key	Ø 73 - 82 mm	370 g
KL-0122-803	Oil Filter Key	Ø 89 - 98 mm	370 g
KL-0122-804	Oil Filter Key	Ø 105 - 112mm	400 g

KL-0122-40



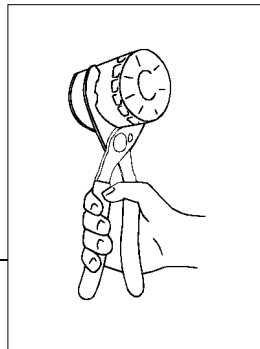
KL-0122-40 Oil Filter Belt up to Ø152 mm

For Filters up to 152 mm.

Adjusts quickly to fit any spin-on filter up to 152 mm diameter. Strong nylon belt.

Drive: 1/2" □
Weight: 280 g

KL-0122-851



KL-0122-851 Oil Filter Pliers Ø 57-100 mm

Suitable for HGV's, Tractors, etc.

The tool has 2 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 slipping.

Slip Joint Handles for greater Range.

Range: Ø 57-100 mm
Weight: 560 g

KL-0122-852



KL-0122-852 Oil Filter Pliers Ø 92-152 mm

Suitable for HGV's, Tractors, etc.

The tool has 2 steps allowing a wide operating range from 92 to 152 mm. For better handling, the Jaws are angled by 20°. Hardened teeth prevent the tool slipping.

Slip Joint Handles for greater Range.

Spannbereich: Ø 92-152 mm
Gewicht: 760 g

KL-0231-30



VW-Audi
4 motion/Quattro

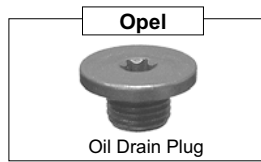
KL-0231-30 Oil Filter Key

Suitable for 4-wheel vehicles VW Bora, Golf IV/V, Sharan, Touran 4motion as well as Audi A3 and TT Quattro etc.

To remove and install the Haldex-clutch oil filter.

Length: 400 mm
Weight: 700 g

KL-4041-3045



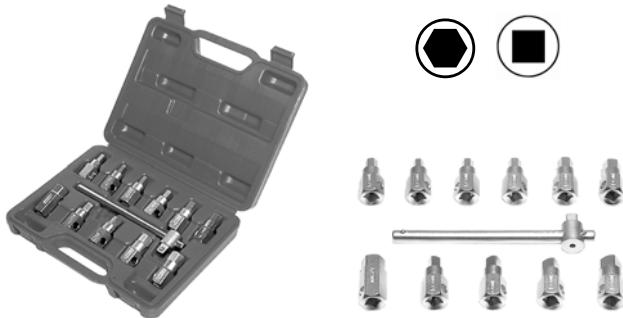
KL-0231-2



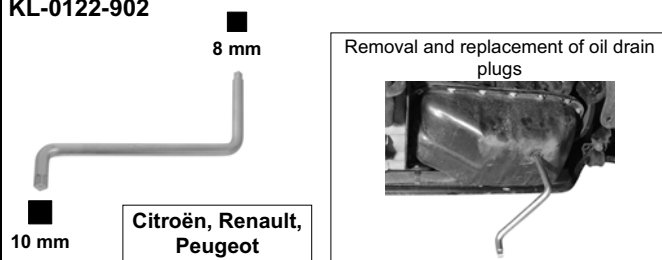
KL-0231-1



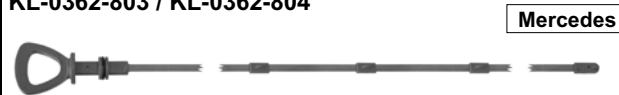
KL-0122-901 K



KL-0122-902



KL-0362-803 / KL-0362-804

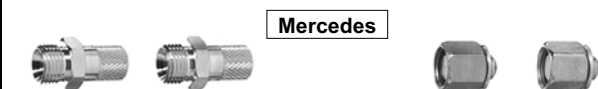


KL-0362-801 / KL-0362-802



KL-0362-1

KL-0362-2



KL-4041-3045 Special Socket Insert T45

For removal and replacement of the Gear Box drain plug Torx® T45.
Application: Opel/Vauxhall.

Weight:85 g
Length:55 mm Drive: 1/2"□

KL-0231-2 Special Socket Insert xZN M16,

For removal and replacement of the Gear Box drain plug.
Application: Audi A3, A4, A6; VW Golf IV, LT.

Drive: 1/2"□

KL-0231-1 Jointed Hex Nut hex 17 mm

With 3/8" drive for the gearbox oil control bolt on **VW-Audi.**

Especially applicable on VW Golf II and III and Audi vehicles with **automatic drive**, were the oil control bolt is heavily accessible. The pivot nut may be driven by extension **KL-0100-6.**

Drive: 3/8"□

KL-0122-901 K Oil Service Tool Set

For removal replacement of oil drain plugs.

consists of:

Description	Qty	Description	Qty
T-Bar with 3/8" Drive	1	Drain Plug Socket-Hex 14 mm	1
Drain Plug Socket-Hex 3/8"	1	Drain Plug Socket-Hex 17 mm	1
Drain Plug Socket-Hex 8 mm	1	Drain Plug Socket □ 5/16"	1
Drain Plug Socket-Hex 9 mm	1	Drain Plug Socket □ 3/8"	1
Drain Plug Socket-Hex 10 mm	1	Drain Plug Socket □ 11 mm	1
Drain Plug Socket-Hex 12 mm	1	Drain Plug Socket □ 13 mm	1
Plastic Case	1		

KL-0122-902 Oil Service Tool

□ 8 mm / 10 mm

Suitable for e.g. Citroën, Renault, Peugeot etc.

For removal and replacement of oil drain plugs and gear box oil control bolts.

Length:220 mm Weight: 350 g
Socket size □ (outer squared): 8 and 10 mm

KL-0362-803 Oil Dipstick

Suitable for Mercedes engines 103, 104, 111, 119, 120, 137, 603, 604, 605, 606, 611, 612, 613, 626, 913, 943, 963, 984, 985, 997.

Engine oil level manual check. Länge: 930 mm

KL-0362-804 Oil Dipstick

Suitable for Mercedes engines 112, 113, 646, 647, 648.

Engine oil level manual check. Length: 930 mm

KL-0362-801 Oil Dipstick

Suitable for Mercedes transmission 722.6.

Transmission oil level manual check. Length: 1220 mm

KL-0362-802 Oil Dipstick

Suitable for Mercedes transmission 722.7, 716.5.

Transmission oil level manual check. Length: 920 mm

KL-0362-1 Blanking Plugs Set (Outer thread)

Necessary for radiator repairs to prevent leakage of transmission fluid.
Application: All Mercedes cars with automatic gearbox equipped with transmission fluid oil-cooler. Thread: M16×1,5

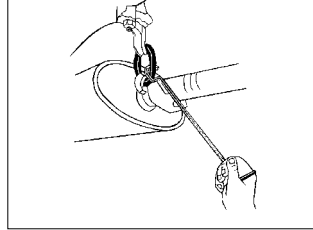
KL-0362-2 Blanking Plugs Set (Inner thread)

As **KL-0362-1** but with inner thread. Thread: M16×1,5

KL-0130-1



VW-Audi, Mercedes, Opel



KL-0130-1 Hook Puller

For quick and easy removal and replacement of the exhaust mounting rubbers.

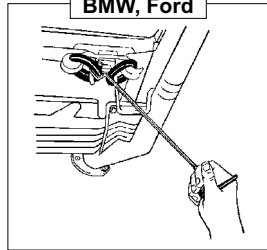
Application: **VW-Audi, Mercedes, Opel, Jap. vehicles**, etc.

Hook length: 17 mm Return angle: 110°
Tool overall length: 205 mm Weight: 90 g

KL-0130-2



BMW, Ford



KL-0130-2 Hook Puller

For removal and replacement of exhaust mounting rubbers.

Application: **Ford, BMW**, etc.

Hook length: 40 mm Return angle: 100°
Tool overall length: 200 mm Weight: 95 g

KL-0284-21



VW-Audi, Seat, Škoda



KL-0284-21 Exhaust Spring Compressor, short Length 145 mm

For steel clamps of **VW Golf, Passat**, etc.

For removal and replacement of steel clamps on the flange on exhaust manifolds, as built in on **VW, Audi, Seat and Škoda**.

KL-0284-22

VW T4



KL-0284-22 Exhaust Spring Compressor, long Length 790 mm

For steel clamps of **VW Transporter T4 Van**.

For removal and replacement of steel clamps on the flange on exhaust manifolds, as built in on **VW, Audi, Seat and Škoda**.

The installation of these steel clamps for clutch or exhaust repairs e.g. on **VW T4 (5-cylinder diesel engines)** is only possible under greatest efforts and a job time of 2 - 3 hours. The spring compressor **KL-0284-22** allows the installation of the steel clamp within 3 minutes.

The length of the tool makes it possible to reach, expand, remove and install the steel clamps from the gearbox mountings.

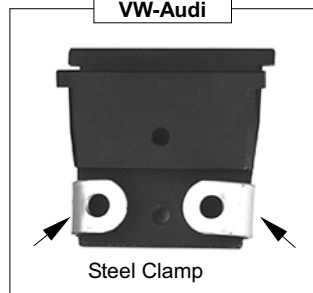
Advantages:

- Increased job time saving (2 hours and more).
- High safety, no jumping away of steel clamps.
- Easy handling of the tool.

KL-0284-3



VW-Audi



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.

Weight: 650 g

Note: Not applicable for VW Transporter T4!

KL-0132-1



KL-0132-1 Special Socket 22 mm hex

With 1/2" drive for removal and replacement of almost every lambda-probe with disconnectable cable.

Hex:22 mm
 Drive: 1/2"-axial
 Length: 100 mm
 Weight:284 g

KL-0132-8

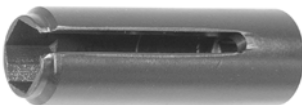


KL-0132-8 Special Socket 17 mm hex

With 1/2" drive for removal and replacement of lambda-probes on **Nissan, Renault** and other vehicles.

Hex:17 mm
 Drive: 1/2"-axial
 Length: 100 mm
 Weight:260 g

KL-0132-81



KL-0132-81 Special Socket 22 mm hex

For removing and installing lambda sensors with a deep-seated hexagon. Particularly suitable for the Mercedes M111, for instance.

Hex:22 mm
 Drive: 1/2"-axial
 Length: 110 mm
 Weight:300 g

KL-0132-2



KL-0132-2 Angled Socket 22 mm hex

With 1/2" drive at 90 degrees for easy removal and replacement of hard to reach lambda-probes.

Hex:22 mm
 Drive: 1/2"-axial
 Length:35 mm
 Weight:328 g

KL-0132-6



KL-0132-6 Angled Socket 22 mm hex

As **KL-0132-2** but with: Drive: 1/2"- axial displaced

Application: **VW-Audi, BMW, Mercedes, Ford, Opel/Vauxhall, Peugeot, Citroën, Renault, Seat, Skoda, Japanese cars, etc.**

Hex:22 mm
 Drive: 1/2"- axial displaced
 Length: 110 mm
 Weight:234 g

KL-0132-7



KL-0132-82



KL-0132-12



KL-0134-10



KL-0132-7 Angled Socket 22 mm hex

As **KL-0132-2** but with **radially** positioned ½"drive as well as a **radially displaced** ½" drive.

KL-0132-82 Angled Socket 22 mm hex

For easy removal and replacement of hard to reach lambda-probes e.g. when the lambda sensor is located directly in front of the splash wall.

Hex: 22 mm
Length: 220 mm
Weight: 320 g

KL-0132-12 Lambda Tool Kit

For lambda-probe mounting threads **M18×1.5**

If damage occurs to the thread of the manifold when exchanging the lambda probe, then it can be re-threaded with the last tap **KL-0132-120** for M18×1.5 threads or re-bored with the special thread cleaner **KL-0132-121** and replaced by thread inserts which are also contained in the tool kit.

Measure: 149 × 123 × 32 mm
Weight: 498 g

consists of:

Part-No.	Description
KL-0132-120	Last Tap M18×1.5
KL-0132-121	Special Screw Tap M20x1.5 for M18×1.5
KL-0132-122	Thread Inserts M20x1.5 M18×1.5 (10 pieces)
-	Wooden Case (empty)

KL-0132-13 Lambda Tool Kit (not ill.)

As **KL-0132-12**, but for **M12×1.5** threads.

Measure: 149 × 123 × 32 mm
Weight: 450 g

consists of:

Part-No.	Description
KL-0132-130	Last Tap M12×1.5
KL-0132-131	Special Screw Tap M14x1.5 for M12×1.5
KL-0132-132	Thread Inserts M14x1.5 M12×1.5 (10 pieces)
-	Wooden Case / plastic case (empty)

KL-0134-10 Arm Protector

Protects Arm from Burns While Working Around the Engine.

Made of durable, heat-resistant Kevlar®. Double wall construction for added heat protection.

Weight: 57 g

KL-0131-5

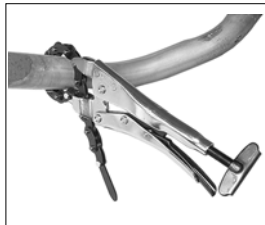


Accessories:



KL-0131-5001

KL-0131-51

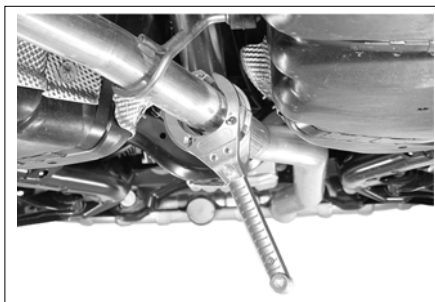


Accessories:



KL-0131-5101

224021



KL-0131-5 Chain Pipe Cutter

Universal. For quick and clean cutting of exhaust pipes up to 85 mm diameter by only 90° rotation.

Weight:490 g

KL-0131-5001 Replacement Chain

KL-0131-51 Chain Pipe Cutter

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.

Length:.....250 mm

Note:

The addition of another chain allows the cutter to be used on pipes with larger diameters.

KL-0131-5101 Replacement Chain

Length:.....270 mm

224021 Ratchet Pipe Cutter niro CODE 1600885

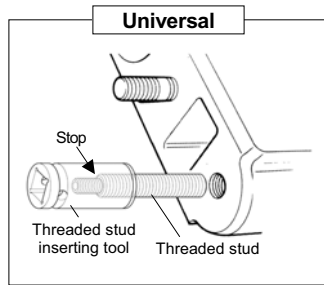
Body in zinc-plated pressure-cast aluminium, for pipes 35 - 66 mm Ø, cutting wheel made from high-alloy stainless steel, especially for cutting stainless steel pipes with high service life. Easy handling via ratchet feed with automatic infeed of the cutting wheel with every rotation, even in confined spaces.

Length:.....275 mm

Weight:580 g

224213 Replacement cutting wheel

KL-0181-70 K



KL-0181-70 K Stud Inserting Tool Set in Plastic Case

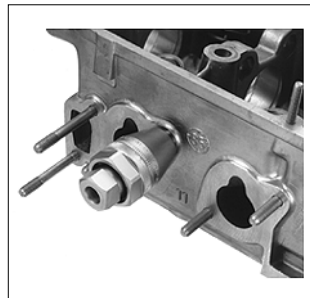
Applicable for M6, M8, M10, M12, M8x1 and M10x1 threaded studs.

For clean, rapid insertion of threaded studs, for instance during engine repairs.

consists of:

Part No.	Description	Qty.
KL-0181-7006	Threaded stud inserting tool M6	1
KL-0181-7008	Threaded stud inserting tool M8	1
KL-0181-7010	Threaded stud inserting tool M10	1
KL-0181-7012	Threaded stud inserting tool M12	1
KL-0181-7108	Threaded stud inserting tool M8x1	1
KL-0181-7110	Threaded stud inserting tool M10x1	1
KL-4990-1004	Plastic case with foamed material liner	1

KL-0181-1



Technical Data:

Weight: 1250 g Drive: 1/2" □

Length: 52 mm

Measure plastic case: 275 x 230 x 83 mm

KL-0181-1 Stud Tool

Universal tool 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 screws with dimension smaller than specified.

KL-0181-6



KL-0181-6 Stud Extractor and Inserting Tool Set

For removal and replacement of threaded studs.

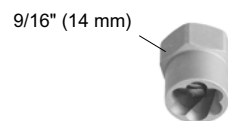
Weight: 1,15 kg Drive outer: 21 mm

Drive inner: 1/2" □

consists of:

Part No.	Description	Part No.	Description
KL-0181-51	for Ø 6 mm	KL-0181-54	for Ø 10 mm
KL-0181-52	for Ø 7 mm	KL-0181-55	for Ø 12 mm
KL-0181-53	for Ø 8 mm	KL-4940-1004	Plastic case

KL-0181-72 K



KL-0181-72 K Screw Extractor Set

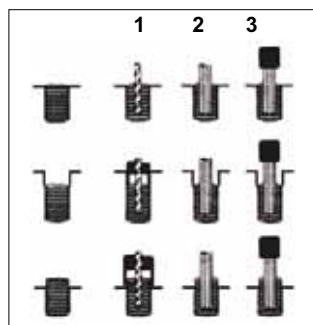
To extract screws, nuts and bolts when locating threads or hexagons are damaged.

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

Specification (insert dimensions): Drive: 3/8"

1/4" (6,3mm); 5/16" (8mm); 3/8" (9,5mm); 10mm; 7/16" (11mm); 12mm; 1/2" (12,5mm); 13mm; 9/16" (14mm); 5/8" (16mm); 17mm; 11/16" (17,5mm); 3/4" (19mm)

KL-0181-21 K



KL-0181-21 K Screw Drill Set

To remove broken screws and thread bolts - thread M5 - M16.

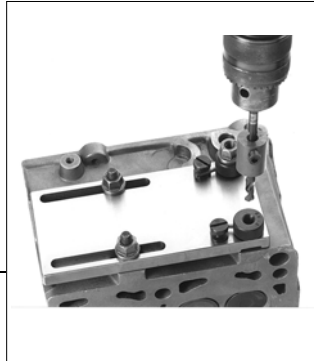
Procedure: 1. Open the broken bolt (or screw) by drilling (use boring bush if necessary). 2. Drive in the pin. 3. Place the nut on the pin and extract by means of a screw-wrench.

Spare parts/Accessories:

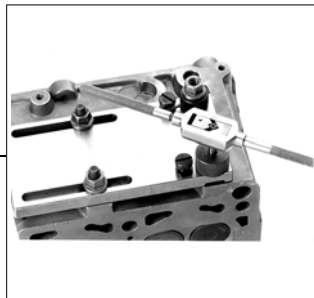
Part No.	Description	Qty.
KL-0181-2112	Drilled pin set for driller Ø: 3,2 mm (5 pcs.)	1
KL-0181-2122	Drilled pin set for driller Ø: 4,8 mm (5 pcs.)	1
KL-0181-2132	Drilled pin set for driller Ø: 6,4 mm (5 pcs.)	1
KL-0181-2142	Drilled pin set for driller Ø: 8,0 mm (5 pcs.)	1
KL-0181-2152	Drilled pin set for driller Ø: 8,8 mm (5 pcs.)	1

KL-0185-1

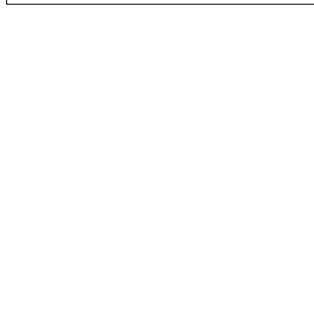
VW-Audi



KL-0185-2



KL-0185-3



KL-0185-5



KL-0185-1 Drilling Guide Set small

For accurate removal of broken manifold studs on **VW and Audi** 4 and 5 cylinder water-cooled engines. (bolt thread M8)

Advantages:

- Great savings in time -approximately 2 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.

With 6,5 mm pre-drilling guide for M8 threads.

In plastic storage case.

Total weight: 1,6 kg

KL-0185-2 Drilling Guide Set middle

As **KL-0185-1** but with 4,0 mm and 8,5 mm pre-drilling guide instead of 6,5 mm. (bolt thread M8)

For drilling and tapping for the use of Heli-Coil inserts.

In plastic storage case.

Total weight: 1,7 kg

KL-0185-3 Drilling Guide Set big

As **KL-0185-2** but also supplied complete with Heli-Coil insertion tool and 25 Heli-Coil thread inserts. (bolt thread M8)

In plastic storage case.

Total weight: 2,3 kg

KL-0185-5 Drilling Guide Set universal

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. (bolt thread M8 and M10)

Time savings of between 2 and 4 hours can be achieved.