



KA-665C Rear Wheel Bearing Remover / Installer (C-CLASS)

- Designed R & R of rear wheel bearing located in wheel carrier.
- Also for installation of the rear axle shaft flange.
- Applicable: Models W202.



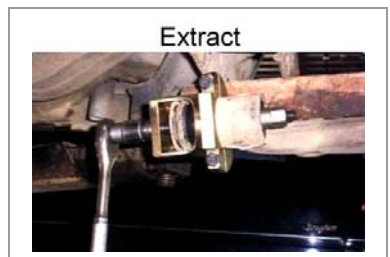
KA-665E Rear Wheel Bearing Remover / Installer (E-CLASS)

- Designed R & R of rear wheel bearing located in wheel carrier.
- Also for installation of the rear axle shaft flange.
- Applicable: Models W210



KA-665S Rear Wheel Bearing Remover / Installer (S-CLASS)

- Designed for R & R of rear wheel bearing located in wheel carrier.
- Also for installation of the rear axle shaft flange.
- Applicable: Models W140





KA-6927 Axles Wheel Bearing Extractor / Installer

- To replace front wheel bearings without removing the steering knuckle & strut assembly.
- We don't remove the spindle assembly and no alignment of front end after the job is done.
- Application: Mercedes Benz, BMW, Toyota, VW, March, Ford, Volvo.



KA-3341 Mercedes BENZ Rear Wheel Bearing Remover & Installer

This precision machined tool is used for removing and replacing the rear wheel bearing found on Mercedes Benz rear axles. This tool is also used for the rear axle flange.

- Suits Mercedes Benz models: 124, 129, 201 & 202.



KA-3583 Wheel Hub / Wheel Bearing Tool Set

For installing and removing the wheel hub / wheel bearing of built-in parts.

- Vehicle types with wheel hub 72 mm: AUDI A2 since 2000, SKODA Fabia since 2000, VW Polo since 2002, Fox since 2005, SEAT Ibiza since 2002

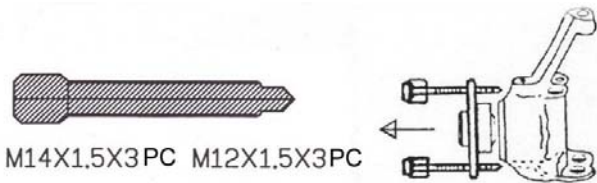


KA-7315K Front Wheel Drive Kit

Universal front hub & bearing installer (puller)

- Can fast assembly and disassembly of wheel bearing and wheel hub.
- not necessarily the shock strut not necessarily.
- applicable for all usual vehicle types.

Adapter 55.5 – 84mm
 INNEN-UND Outer Puller 76 – 91MM
 Spindle 295mm



22.225 mm 7/8" →	A	A 1	55.5 mm	2 - 3/16"
		A 2	59 mm	2 - 11/32"
		A 3	62 mm	2 - 7/16"
		A 4	65 mm	2 - 9/16"
22.225 mm 7/8" →	B	A 5	66 mm	2 - 19/32"
		A 6	71.5 mm	2 - 13/16"
		A 7	73 mm	2 - 7/8"
69.00mm 2-23/32" →	C	A 8	78 mm	3 - 3/32"
		A 9	84 mm	3 - 5/16"
		B	38 mm	1 - 1/2"
22.225 mm 7/8" →	D	C	76 mm	3"
		D 1	86 mm	3 - 13/32"
		D 2	91 mm	3 - 19/32"

KA-7167A 24pcs Fwd Front Wheel Bearing Tool

Remove and replace front wheel bearing with the steering knuckle and strut assembly still on the vehicle!
That makes the whole job easier, and eliminates the need for a front end alignment after the service work is done.

Use with a slide hammer and front hub puller. Works on both domestic and import front wheel drive cars and light trucks.

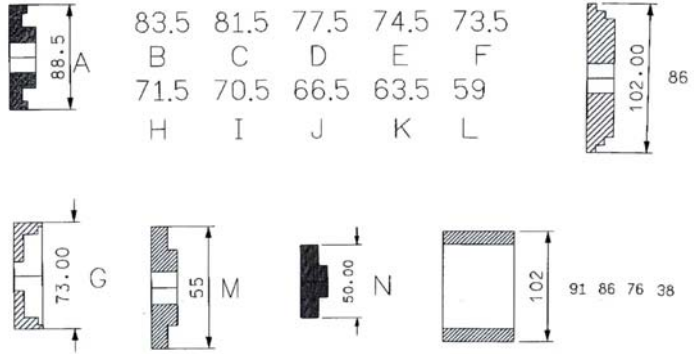
Material: CR.V Steel

21pc size: 38 - 50 - 55- 59 - 63.5 - 66.5 - 70.5 - 71.5 73 - 73.5 - 74.5 - 76 77.5 - 81.5 - 83.5 - 86 - 86 - 88.5 - 91 - 102 - 102mm

1pc: Nut

1pc: Screw

1pc: Washer



KA-5043V 4-WD Front Wheel Bearing Tool

Presses wheel bearing and hub in & out on "VW GOLF" cars



KA-5043 4-WD Front Wheel Bearing Tool

Presses wheel bearing and hub in & out on "VW GOLF" & "AUDI" cars.



KA-6924 Bush Extractor

Extractor for replacing of the differential mounting metallic bushes in the rear sub-frame of Mercedes type: 124.
Replacing mounting bushes without removal of the differential.



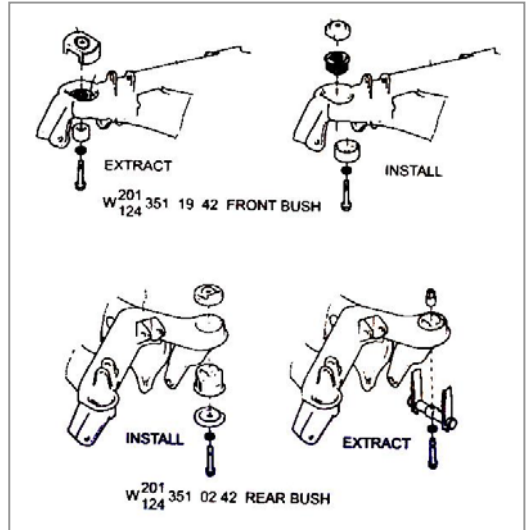
KA-2873 Bush Extractor

- Used for R&R of rear wheel bearing located in wheel carrier.
- This tool can also be used to install the rear axle shaft flange.
- Applicable: VW, T4



KA-6923 Suspension Bush Extractor / Installer

- For replacing of the front and rear metalastic rear sub-frame mounting bush.
- For replacing of the mounting bushes without lowering the complete rear axle assembly.
- Applicable: W124, 201



KA-3128 BMW (E30, E36, E46) Bush Extractor

- Used for R&R of rear wheel bearing located in wheel carrier.
- Application: BMW E30, E36, E46



KA-3136 BMW (E32, E34) Bush Extractor

- Removal and replacement tool for metallic bushes on upper sub-frame.
- Application: BMW E32, E34



KA-6925 Bush Remover / Installer

To remove and replace the metallic bushes on rear axles Mercedes type 201/124/202/140/129/210. KA-6925 incorporates an axial bearing and also incorporates a pressure piece which ensures the correct position of the new metallic bushes when replaced.



KA-3137 BMW (E38, E39) Bush Remover / Installer

- Removal and replacement tool for metallic bushes on rear axles.
- Application: BMW E38, E39





KA-3129 BMW (E34) HUD Remover / Installer

- Designed for professional removal and installation of rear wheel hub.
- Applicable: E34



**KA-3581
7pc VW Extractor Set**



KA-3587A Pulley-Extractor and Reaction Tool

- Universal application: VW-Audi, Seat, Škoda, Opel/Vauxhall Ford, BMW, Mercedes, Peugeot, Citroën, Renault, Fiat, Japanese vehicles, etc.
- 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 ½" ratchet or extension drive may be used as the reaction tool.

Contents:

- 1 x Puller Plate
- 3 x Hook Ø 20 mm
- 3 x Hook Ø 26 mm
- 3 x Shoulder Nut M10
- 1 x Pressure-Unit



KA-3587 Pulley-Extractor and Reaction Tool

- As KA-3587A Pulley-Extractor and Reaction Tool 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:

- 1 x Puller Plate
- 2 x Hook Ø 26 mm
- 2 x Shoulder Nut M10
- 1 x Pressure-Unit



KA-3588 Extractor

- To loosen the injection pump pulley from the shaft.
- Application: VW-Audi, Seat, Škoda, etc.





KA-3637 Suspension Bush Tool

- Volkswagen Polo 2002 later.
- Special tool for replacing the front suspension bushes on Volkswagen Polo from 2002 onwards. Replacements are available for the Bolt and Bar which are considered consumable.



KA-3990 Subframe Bush Remover (Ford mondeo)

A specially designed tool for removing and installing the rear subframe on a ford mondeo



KA-2043 Rear Sub-Frame Bush Tool – BMW 5 Touring

- Bush replacement tool for use on rear axle carrier bushes(33311094036) as used on BMW 5 series touring models(E38/E39)
- The tool features a fine pitch thread and thrust bearing to enable the rear sub-frame bush to be removed/inserted – without removing the rear sub-frame assembly from the vehicle



KA-2044 Rear Sub-Frame Bush Tool – BMW X5

- Bush replacement tool for use on rear axle carrier bushes(33311093662) as used on BMW X5 series models
- The tool features a fine pitch thread and thrust bearing to enable the rear sub-frame bush to be removed / inserted – without removing the rear sub-frame assembly from the vehicle



KA-2045 Rear Sub-Frame Bush Tool – BMW E39 5 Series

- Bush replacement tool for use on rear axle carrier bushes(33311091422) as used on BMW E39 5 series saloons
- The tool features a fine pitch thread and thrust bearing to enable the rear sub-frame bush to be removed / inserted – without removing the rear sub-frame assembly from the vehicle



KA-2047 Track Control Arm Bush Tool

Fine pitch thread with thrust bearing enables the rear bush to be removed from the front track control arm on VW Polo III / Skoda Fabia / Seat models



KA-2048 Rear Axle Bush Tool – Ford Fiesta

- Remove / Install Fiesta IV rear axle mounting bushes
- Can be used in situ –no need to remove trailing link assembly from vehicle
- Applications: Ford Fiesta IV 1996 on wards



KA-2049 Bush Removal Tool – Ford Mondeo

- Remove / Install rear sub-frame bushes on Mondeo
- Can be used in situ – no need to remove sub-frame from vehicle
- Applications: Ford Mondeo 2001 on wards



KA-2052 Rear Trailing Arm Bush Tool – BMW 3 Series

- For the easy removal and insertion of the rear trailing arm bushes(33321097009) as fitted to BMW 3 series models –E36, E46 & E46 compact.
- Suitable for removing ORIGINAL BUSHES and removing & installing NEW STYLE “SLOTTED” bushes(33321097009) –in situ without removing the rear trailing arm.



KA-2053 Rear Ball Joint Tool – BMW 5 & 7 Series

- For the easy removal and insertion of the press fit rear suspension joints(33326767748) as fitted to BMW E39 5 series & E38 7 series models.
- Designed for using in situ –on the vehicle.



KA-3613 Needle Bearing Extractor Sets

Also for ball bearing and bushings.

For bores: dia. 12, 15, 18 mm.

For cars: Audi, BMW, Citroen, Fiat, Ford, DB, Opel, Peugeot, Porsche, Renault, Rover, Saab, Volvo, VW, Nissan, Datsun, Toyota...

Contents: Pair of legs, 3 distance wedges, 1 slide hammer with holder.

12mm for BMW, Opel

15mm for Audi, DB, Ford, Opel, Porsche, VW

18mm for Audi



KA-3301
VW Transmission Filler And Drain Wrench

- Size: 17mmx7" long



KA-6964 **Turning Tools**

- For W123, 124, 126



KA-7513 **Brake Pad Key**

8mm hexagon wrench with handle. Works on front disc brakes, fitted to the following vehicles:

- All BMW models (except 5 series).
- GM Vauxhall Opel.
- Ford transverse engines CVH (gearbox) on: Escort, Fiesta, Orion.
- VW brake seat fixing on: most models from 1980 on.



KA-3043 **4-WD Spindle Puller Remover**

- Fits all common 4-WD pick-up Spindles stepped.
- Design fits 1-1/2", 1-5/8" and 2" spindles. Use with either a 1/2"-20 or 5/8"-18 slide hammer.



KA-3582 **Turning Tool (Both End)**

- For R&R of protective cover for ignition-steering lock
- Use for: W116, W123, W124, W126, W163, W170, W202, W210



KA-6947 **Assembly Sleeve For Ignition**

- For removal and replacement of the ignition switch retaining ring fitted (W129, W140, W202, W210, W220)



KA-7186 **Metal Clad Bushing R & R Kit**

Needed for the efficient R&R of rear axle thrust rod bushings found on late model rear axle wheel carrier assemblies. Incorporation a thrust bearing to ease the pulling/pushing action, reduces the wear & tear of the tool ensuring longevity. This bushing tool comes complete with all the proper components to efficiently get the job done right.

- Applicable: Chassis-W124, W129, W140, W201, W202, W210

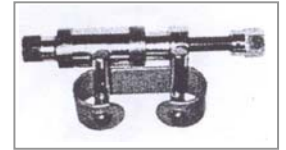


KA-3340 **BENZ Turning Tool Set**

- For R&R of protective cover for ignition-steering lock
- KA-6964 use for: W123, W124, W126
- KA-3582 use for: W116, W123, W124, W126, W163, W170, W202, W210
- KA-6947 for removal and replacement of the ignition switch retaining ring fitted to Mercedes types W129, W140, W202, W210, W220

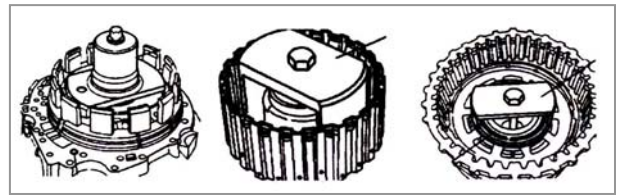
KA-2815 Exhaust Spring Clamp Remover / Installer

- A Tool Designed for safe, controlled removal of clamps attaching the exhaust to manifold.
- An Essential Tool to Have!!
- Special design provides "LEVERAGE" to expand the strong spring clamps.
- For Volkswagen.

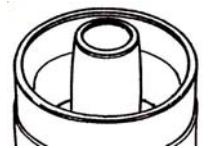


KA-6926 Sleeve, Assembly Device & Assembly Fixture

- Sleeve to intuit reverse gear piston in front cover.
- Assembly fixture: use for circlip on spring retainer of clutch K1 and K2.
- Applicable: Transmission 722.6



KA-6935 Assembly Sleeve Transmission Seal Assembly Sleeve



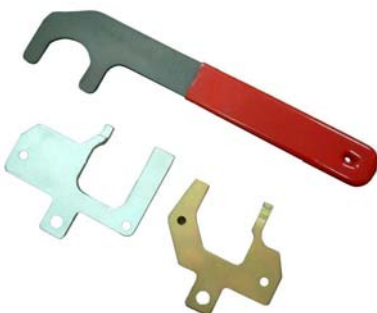
KA-6939 Caliper Pressure Tool

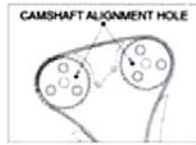
Universal tool for pressing caliper pistons back into caliper housings. Due to the construction of this tool which incorporates high-precision hardened cylinder and piston, together with a built-in axial bearing, the highest precision allows easy function to press-back the pistons into the caliper.



KA-2810 BENZ Camshaft Alignment Tool

- Holding the camshaft in 40 degree TDC position (left/right side)
- Application : C-CLASS(202) 2.4/2.6/2.8/3.2/4.3 -1998-00
 CLK(208) 3.2/4.3/5.4 -1997-03
 E-CLASS(210) 2.4/3.2/4.3/5.5 -1997-03
 S-CLASS(220) 2.8/3.2/4.3/5.0 -1998-03
 SL-CLASS(129) 2.8/3.2/5.0 -1998-02
 SLK(170) 3.2 -2000-03
 M-CLASS(163) 3.2/4.3/5.4 -1998-03
 G-WAGEN(463) 3.2 -1993-01





KA-4455 Camshaft Alignment Tool For BENZ W100/W119

- For holding camshaft tight in installation position.

KA-3130 Camshaft Alignment Tool

To lock the fly-wheel and injection-pump pulley when changing timing chain or carrying repairs.

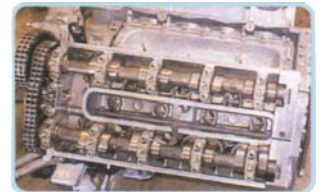


KA-3124 Camshaft Alignment Tool Kit

BMW engine models M42 & M50: Includes 2 block swivel lock plate & locking pin for setting camshaft timing.

Engine models M40 & M70: Include plate & locking pin for setting camshaft timing.

BMW engine models M60 & M62: Includes 2 block swivel lock plate & locking pin for setting camshaft timing.



KA-3125 BMW (M42, M50) Camshaft Alignment Tool

- Includes: 2 blocks swivel lock plate & locking pin for setting camshaft timing.
- Application: BMW engine model M42 & M50



KA-3126 BMW (M60, M62) Camshaft Alignment Tool

- Includes: 2 blocks swivel lock plate & locking pin for setting camshaft timing.
- Application: BMW engine model M60 & M62



KA-3127 Camshaft Alignment Tool

- Includes: plate & locking pin, for setting camshaft timing.
- Applicable: BMW engine models M40



Injector Extractor

- With this tool, when removing seized or stuck Common Rail injectors, no more need to disassemble the cylinder head.
- Applicable for MERCEDES-BENZ CDI engines 611, 612, 613, etc.
- Especially for the limited spaces due to the cylinder head cover



KA-3968

- Contents:**
- 1 Impact Extractor
 - 1 Injector Claw
 - 1 External Adapter
 - 1 Slide Hammer



KA-3970

- Contents:**
- 1 Impact Extractor
 - 1 Injector Claw
 - 1 External Adapter

Injector Puller For Mercedes-Benz (slide hammer style)

- For removing adapted tight common rail injectors without having to disassemble cylinder head.
- Use for Mercedes-Benz CD engines 611.612.613...etc.
- Injection puller with impact hammer, injection nozzles that do not fit very tightly can be pulled out without needing to take them apart or remove the cylinder block.

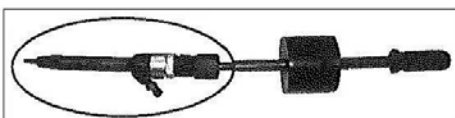
KA-3969 4PCS



KA-5167B 6PCS



KA-5167C 7PCS



This high quality tooling is designed for the removal of stuck and seized injectors.

KA-5167A 9pcs Common Rail Injectors Extractor Set

Feature:

- With slide hammer for DB CDI-engines & Mercedes CDI engines OM 611, 612, 613 etc.
- For removing stuck and the seized common-rail injectors without dismount the cylinder head.
- The sturdy construction will enable the swift removal of even the most severely seized in injector.

Specification:

- Material: S45C steel
- Total Length: 350mmL
- Contents: Slide Hammer (1.75kgs)
Adaptor M17 x 1.0
Adaptor M27 x 1.0 for Bosch injector nozzle.
Adaptor: Puller w/M12 x 1.75



KA-3120
Automatic Transmission Clutch Spring Compressor
(Promotion)



KA-3121 THMR1 Transmission Extractor/Installer
This set of tool is designed to extract and install BMW THMR1 transmission.



KA-3149 Double Vanes Setup Bracket
■ For BMW M52, M54, M56



KA-3150 BMW Timing Tool



KA-2876 BMW Timing Tool
■ For M52, M24, M56



KA-3151K BMW Timing Tool Kit
■ BENZ double vanes setup bracket
■ Application: BMW M52, M54, M56



KA-2728 BENZ Oil Extractor Adapter



KA-2877 Injection Pump Lock Pin-Late Model
■ Locks diesel pump cam to maintain timing during pump installation
■ Mercedes Benz: 601, 602, 603, 604, 605, 606, and 617.



KA-3650 BMW Camber Adjuster Tool
Use this fixture to adjust the front camber on late model 3 series with KDS.
Applicable: BMW E38, E39, E46, E53, E65, E66, E67, E85, E87



KA-3651 BMW Camber Adjuster Tool
Use to adjust front camber.
Applicable: BMW E60, E61, E63, E64



KA-6934 Guide Rail Pin Puller

To remove even the most stubborn pins from the cylinder head. This puller incorporates a thrust bearing to ease the pulling action. The overall length is 85mm. Which allows it to fit into those tight problem areas.
 This alloy steel heat treated tool has already been tested in shops and has proven to be the best solution.
 Applicable: Model M102. M110. M115. M116. M117. M130. OM 601. OM 602. OM 603. OM 615. OM 616 & OM 617.
 Screw specification: M8 x P1.25 x M6 x P1.0 x 1pcs
 M8 x P1.25 x 30MM x 1pcs



KA-3132 BMW Guide Rail Pin Puller

- Can remove even the most stubborn pins from the cylinder head, unlike the short slide hammer previously used to attempt this job.
- This puller incorporates a thrust bearing to ease the pulling action.
- This alloy steel, heat treated tool has already been tested in shops and has proven to be the best solution.



KA-6959 Guide Rail Pin Puller

- Can remove even the most stubborn pins from the cylinder head, unlike the short slide hammer previously used to attempt this job.
- Applicable: Model M 102, 110, 115, 116, 117, 130, OM 601, 602, 603, 615, 616, & 617



KA-6936 Crankshaft Pulley Holder

- Suits for BNEZ M111, M112
- Brake loose the crank shaft pulley/harmonic balancer bolt.
- Designed to properly secure the pulley from rotating during R & R of crank bolt. The 50mm hex head armature slips past the lightest of spaces and slides right into the center slot on the pulley. Then slide the long bar onto the receiving end of the armature and lock it into position with the securing bolt.



KA-6937 Crankshaft Harmonic Balancer Pulley Holder

For removal and replacement of the crankshaft bolt M112 and M113 as found on E320, E430 etc...

KA-3170 Adjustable Fuel Tank Lid Remover

- To adjust from the middle track.
- Can use on all kinds of vehicle with salient fuel tank lid.
- Applicable: Benz, BMW, European cars...etc.



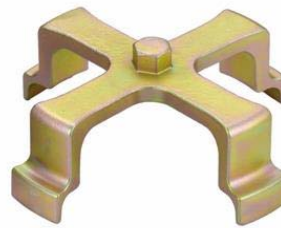
KA-6943 Fuel Tank Cup Wrench
The tool to removal plastic fuel tank cup (W210)



KA-6944 Fuel Tank Cup Wrench
The tool to removal plastic fuel tank cup (W202) C-class



**KA-3147
BENZ Transmission
Clutch Tool**
For: 722.6



**KA-3148
BENZ Full Tank Lid
Dissembler**



KA-6943K 3pc BENZ Fuel Tank Service Kit

- (1) **KA-6943 Fuel Tank Cup Wrench**
The tool removal plastic fuel tank cup (W210)
- (2) **KA-6944 Fuel Tank Cup Wrench**
The tool removal plastic fuel tank cup (W202) C-class
- (3) **KA-3148 BENZ Full Tank Lid Dissembler**



Double Offset Ratchet Wrench

- For installation and removal of glow plugs of diesel engines of RENAULT, VW, AUDI
- For glow plugs between the motor unit and the diesel injection pump
- Heads with hexagon profile.

KA-7812

8mm x 12PT x 1mm x 12PT x 300mm long.

- S 8mm for operation of conductor rail screws with limit stop to guide the 8mm nut.
- S 12mm for the operation of glow plug

KA-7812A

8mm x 12PT x 10mm x 12PT x 300mm long.

- S 8mm for operation of conductor rail screws with limit stop to guide the 8mm nut.
- S 10mm for the operation of glow plug



Valve Depressors for Disc Removal

- KA-7759A** 180mm
- KA-7759B** 230mm
- KA-7759C** 245mm



KA-4449 BENZ & BMW Fan Service Wrench Kit

Contents:

- KA-6487 Holding Tool
- KA-6480 Reaction Wrench With 3 Holes
- KA-6481 Single Ended Open Wrench 65mm
- KA-6956 Fan Belt Service Wrench
- KA-7185 BMW Pulley Holder
- KA-9001A 32mm Viscous Fan Hub Spanner
- KA-9002A 36mm Viscous Fan Hub Spanner



KA-6956 Fan Belt Service Wrench

- This universal tool has been designed to service Mercedes BENZ, Nissan Quest, mercury villager radiator fans and pulley belts. The three in-one design allows servicing three separate areas of repair, all of which require a specialty tool due to their confined locations.
- This special wrench can be used for loosening the A/C idler pulley tensioner lock-nut for A/C belt adjustment or replacement.
- 8m/m & 10m/m bit included.



Viscous Fan Hub Spanner

For removal of thermo, Viscous fan hubs. Cranked for easy access.

KA-9001A – Size: 32mm

Application: BMW 316i, 520i, 525i, 530i, 535i, 730i, 735i
 FORD CAPRI, SIERRA GRANADA 2.0 & 2.8
 FORD TRANSIT 2.0 1986-90.(with viscous fan)
 LCX 2.0, LCT 2.0, 2.5 DIESEL 1980-90, LCX 2.5D & LCY 2.5D

KA-9002A – Size: 36mm

Application: FORD, GRANADA 2.4 & 2.9.
 GM CARLTON, MOANTA & SENATOR. MERCEDES BENZ



KA-6480 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 not be used to lock the hub.

- Application: Mercedes engine M111 (4-cylinder 4-valve; C-class, E-class)
- Length: 410mm



KA-6481 Single-Ended Open Wrench 65mm

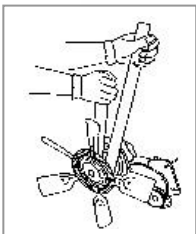
Special open-ended spanner to allow removal and replacement of the radiator fan hub.

- Application: Mercedes engines M1.3(6-cylinder), M104(6-cylinder 4-valve), M119(8-cylinder 4valve), M120(12-cylinder 4-valve)
- Length: 400mm



KA-7185 BMW Pulley Holder

- Needed for securing water pump hub from rotating during R&R of fan clutch nut.
- Applicable engine: M10, M20, M30, M50, M70, M42, M60



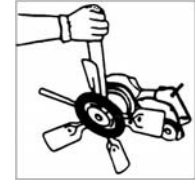
KA-6487 Holding Tool

- To allow removal of the visco-coupling on the cooling fan.
- Application: on Mercedes engines.



KA-2116 2 Way Viscous Fan Spanner

- For the removal of thermo-viscous fans on BMW, FORD, OPEL & VAUXHALL vehicles
- Size: 32mm, 36mm
- L: 13" (330mm)



KA-9001K 4pc Fan Hub Wrench Set

Content:

- KA-9001 32mm Open end x 270mm length for reaction of the visco-cuppling driver on BMW and FORD.
- KA-9002 36mm Open end x 270mm length for reaction of the visco-cuppling driver on FORD, OPEL and GM
- KA-9001K-41 41mm Open end x 270mm length for twisting the water pump on OPEL and GM when tightening the belt on OHC-engines.
- KA-9001K-46 46 mm Open end x 270mm length for twisting the water pump on OPEL and GM when tightening the belt on OHC-engines.

KA-7187 Packing Brake Installer

- For the removal and replacement of the handbrake retaining spring on Mercedes-Vehicles.
- Applicable for conical and cylindrical retaining springs.
 - Length: 145mm



KA-3611 Special Tool for Brakes

- For installing and removing spring plates and the holding device of brake linings on drum brakes, e.g. on VW, SEAT, SKODA, OPEL and RENAULT with rear drum brakes
- Push- and turn-part with carbide coating layer in front working area
- Plastic handle
- Chrome-Vanadium
- Surface chrome-plated



KA-6954

Wheels Stud Alignment Guide Tool

- Assists when mounting wheels, especially models with long lug bolts.
- Applicable: all Mercedes models with lug bolts.

KA-6954 M12 x P1.5

KA-6955 M14 x P1.5



KA-6955



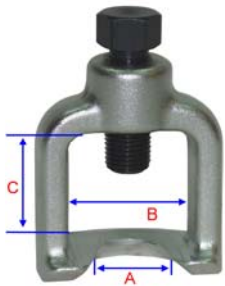
KA-6867 Universal Ball Joint Extractor

- For splitting track-rod ends, anti-roll bar mountings, wheel-hub ball joints, etc.
- For VW-Audi, BMW, Fiat, Ford, Mercedes, Nissan, Saab, Opel/Vauxhall, Peugeot, Renault, Rover, Toyota, Volvo
- Jaw open: 22 mm
- 2-Stage up to 50mm



KA-5534 Ball Joint Extractor

- For splitting track-rod ends, anti-roll bar mountings, wheel-hub ball joints etc...
- Jaw Opening: 20mm
 - Opening: 2-stage(50-80mm)
 - For OPEL/REKORD, SENATOR, MONZA, VWTRANSPORTER



Universal Ball Joint Extractors

For splitting track-rod ends, anti-roll bar mountings, ball joints etc...

Model No	a =	b =	c =
KA-5535	18mm	40mm	35mm
KA-5536	23mm	50mm	45mm
KA-5537	29mm	60mm	55mm
KA-5538	40mm	80mm	80mm
KA-5539	46mm	90mm	100mm



KA-2851 Universal Ball Joint Separator

For splitting track-rod ends, anti-roll bar mountings, ball joints etc... Especially in small space conditions like on AUDI, VW, BMW, FORD, MERCEDES (W170, W202, W220 etc), OPEL / VAUXHALL, MITSUBISHI etc...



KA-3580 Ball Joint Extractor

For splitting track-rod ends, anti-rod bar mountings, ball joints etc., especially in narrow space conditions like on BMW E46 or other vehicles.

A Opening	B	C	Max torque	Max capacity	Spindles mm	sw
mm	mm	mm	Nm	t KN	Thread x length	
24	45	43	80	4 40	M14 x 1.5 x 60	17



KA-6292K Ball Joint Extractor Set

- For Audi., BMW, Ford, Chrysler, Opel Saab, Volvo, VW, Nissan, Toyota..
- Contents:

	A: φmm	B: mm
KA-5532	23	55
KA-5533	28	55
KA-6292C	34	63





KA-7166A Ball Joint Installer & Remover – BMW 3 Series

- A professional quality tool designed for using in situ to enable the easy removal and insertion of press fit control arm ball joints.
- Suitable for using on BMW 3 series(E36) models.
- Fine pitch thread drive screw with thrust bearing.



KA-3122 BMW (E30, E36) Ball Joint Remover / Installer

- For removal and installing the ball joint using a hydraulic press.
- Application: BMW E30, E36



KA-4016B

Ball-Joint Installer/Remover Tool for Benz (W220/W211/W230)

- On car maintenance.
- Special design to remove & install the ball joint without removing any parts.
- Applicable: Benz W220/W211/W230



KA-3609 Mercedes Benz Ball Joint Remover / Installer

- For removing and installing the ball joint into the steering knuckle.
- Applicable: W220



KA-3610

Benz Ball Joint Remover / Installer



KA-6938

Ball Joint Installer (W123, 126, 220)

- For presson ball joint into steering knuckle.



KA-5127A Drive Nut Set

Article-No	Size	Applicable
5127-01	10.5mm	VW GOLF REAR AXLE
5127-02	12.5mm	VW POLO FRONT AXLE
5127-03	14.5mm	POLO.GOLF.PASSAT.AUDI 80
5127-04	14.5mm	AUSTIN MAESTRO
5127-05	14mm	BENZ(W203)



**KA-5127B
3pc Universal Strut Nut Tool Set**

- 10.5 mm VW Golf Rear Axle
- 12.5 mm VW Polo Front Axle
- 14.5 mm Polo, Golf, Passat, Audi 80



KA-2820 BENZ Strut Nut Socket

- Use for removing and installing the top shock retaining.
- Applications: BENZ W220



KA-8201 8pc Special Socket Set

Mercedes, BMW, VW, GM, Audi, Ford, Honda, Mazda, Nissan, Mitsubishi, Toyota



KA-6964 BENZ Lock

- FOR:W123, 124, 126



KA-3131 Transmission Socket

- With 1/2" drive.
- For BMW (5HP18)



KA-3131A Transmission Socket

- With 1/2" drive. For grooved nut on transmission drive shaft flange.
- For BMW (5HP24/5HP30)



**KA-2817
BENZ M-Class Pin Wrench Socket**

- Size: 3/4" Drive
- For securing retaining ring for ball-joint replacement job. For 163 M-Class front & rear axles.



KA-3076 VW and Audi Strut Nut Socket

Because the top shock retaining nut on VW and Audi FWD cars is recessed inside the strut tower, conventional methods for removing and installing it just won't work. The 1-3/4" long socket reaches down into the recess and fits the slot in the top of the nut. Center bore allows you to use a hex key to hold the strut shaft from turning, and the 7/8" (22mm) hex can be gripped with a wrench.



KA-4235 VW Drain Plug Socket

17mmx3/8" square drive for removing and installing Volks transmission drain plugs. Recessed for full wrenching enga over magnet. 3/8" female square drive and 17mm male hex alloy steel. Heat-treated and zinc plated. Socket is 1-1/4" long. Not for impact use.



KA-3977 VW, AUDI V-Belt Pulley Remover

- Special design to stop the pulley and remove the centre bolts to remove the V-belt pulley at the generator.
- Use with 17mm wrench.
- Applicable: VW GOLF, VENTO, PASSAT, AUDI A3, AND VOLVO



KA-3598 Injector Socket Set

A four piece toothed Injector Socket Set for use on Commercial Vehicles. Also suitable for some Iveco, Scania and Renault commercial vehicles.



KA-3595 Angled Socket 22mm hex

For easy removal and replacement of hard to reach lambdaprobes e.g. when the lambda sensor is located directly in front of the splash wall.

- Hex: 22 mm
- Length: 220 mm



KA-2901 (Black)



KA-2901A (Blue)

Hex Angle Swivel Socket With Handle

- HEX: 22mm
- Length: 250mm
- Weight: 450g
- Application: VW-Audi, BMW, Mercedes, Ford, Opel/Vauxhall, Peugeot, Citroën, Renault, Seat, Skoda, Japanese cars, etc.

KA-2901 6 x 12 point: 22mm

KA-2091A 12 x 12 point: 22mm



KA-2902 (Black)



KA-2902A (Blue)

Hex Angle Swivel Socket With Handle

- Bending Angle: 30°
- Length: 250mm
- Weight: 450g
- Application: VW-Audi, BMW, Mercedes, Ford, Opel / Vauxhall, Peugeot, Citroën, Renault, Seat, Skoda, Japanese cars, etc.

KA-2902 6 x 12 point: 22mm

KA-2092A 12 x 12 point: 22mm



KA-2725 Pentagon Driver

Fives sides driver needed for R&R of BMW antitheft radios.
Applicable: models equipped with an antitheft radio mount the only way to remove radio without damage.



KA-4447 BENZ Wedge Set

Use to safely remove the wood & plastic pieces on the door panels as well as on the dashboard, without damaging it.
Applicable: all Mercedes-Benz



KA-3599 Auto Valve Tool

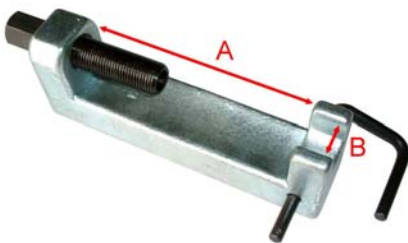
For use on all motors with overhead valves-autos, motorcycles, marine, and aircraft. Will not bend or loosen valve springs. Works on gas or diesel engines; removes and replaces VW Rabbit keepers. Magnet retains keepers. Takes the place of C-clamp style removers.



KA-3600 Auto Valve Tool

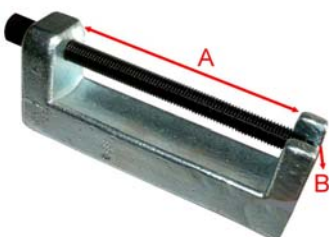
For use on all motors with overhead valves-autos, motorcycles, marine, and aircraft. Will not bend or loosen valve springs. Works on gas or diesel engines; removes and replaces VW Rabbit keepers. Magnet retains keepers. Takes the place of C-clamp style removers.

- Fits most Overhead Valve applications
- Smaller size fits new Chrysler New World Engine and some Toyota four cylinders
- Comes in a handy plastic case
- Can work on the car or bench
- Magnet in tool body captures keepers for quick removal and valve disassembly
- Quickly removes and installs valve keepers on most overhead valve engines. Works on valve stems from 4.5 to 7.5 mm and 5/16" to 3/8". Magnet in tool body captures keepers for quick removal and valve disassembly



KA-3602 Screw Pusher Set

- Release tool
- For loosening and extraction of firmly sitting clamping screws, which fix the link pins in the wheel bearing housing of four-steering wheel front axles; e.g. of VOLKSWAGEN Passat + Synchro, AUDI A4, A6, A8 including Quattor, SKODA Superb.
- A: 110 mm, B: SW 16 mm



KA-3603 Screw Pusher Set

- Release tool
- For loosening and extraction of firmly sitting clamping screws, which fix the link pins in the wheel bearing housing of four-steering wheel front axles; e.g. of VOLKSWAGEN Passat + Synchro, AUDI A4, A6, A8 including Quattor, SKODA Superb.
- A: 110 mm, B: SW 16 mm



KA-3618 Assembly Tool

- Hook with T-Handle
- Special steel
- Surface chrome-plated
- For installing and removing the draw spring of hand brake shoes, e.g. on MERCEDES-BENZ passenger cars with rear disc brakes as well as on VW LT since 1997



KA-3619 Brake Spring Installer

- For pressure spring of packing brake.
- Applicable: all Mercedes models.



KA-3983 4pcs Ignition Coils Puller Set

- Use for VW BORA, GOLF, NEW BEETLE, PASSAT, POLO, TOURAN 1.4/1.6L, LUPO 4-ZYI. FSI, PHAETON and T4, BBY.BKY1.4.
- Use for VW BORA, GOLF, PASSAT SHARAN, TOUAREG, R32 PHAETON and T5,V5 2.3, V6 3.2.
- Use for VW 8-AND 12 CYLINDER ENGINES E.G. PHAETON, B5 1.8T, GTI. FSI 2.0
- This tool can use for most of VW-AUDI injection engines.



KA-3985
Differently handle



KA-3522A Spark Plug Puller

To install and remove the ignition coils with power stage on VW Polo, Golf 1.4, 1.6l, Caddy 1.4l, Boral.4, Passat, Touran 1.6l, Phaeton, Transporter T4.



KA-3986
Differently handle



KA-3522BL Spark Plug Puller

To install and remove the coils with power stage of injection engines on 5 and 6cy1, olf, Bora, 4 and 5cy1. VW Passat, 6cy1. VW Sharan, Touareg, Phaeton.



KA-3522C Spark Plug Puller

To install and remove the ignition coils with power stage of injection engines on VW 8 and 12 cy1



KA-3522D Spark Plug Puller

To install and remove the ignition coils with power stage of injection engines on VW 8 and 12 cy1



KA-3874 Spark Plug Electric Wire Remover

- The tool is designed to separate the electric wire from spark plug.
- Applicable: VW VR6, PASSAT, BENZ V-CLASS



KA-2381B Spark Plug Boot Puller Wrench

- Application: BENZ V6 ENGINE
- 17mm



Spark Plug Socket

- KA-6266** 3/8" x 14mm x 12PT x 250mmL – black finished
- KA-6266A** 3/8" x 16mm x 12PT x 250mmL – chrome plated
- KA-2819** 3/8" x 14mm x 12PT x 250mmL – chrome plated
- KA-2819A** 3/8" x 16mm x 12PT x 250mmL – black finished



Spark Plug Socket Remover

- KA-3874A** L:352.2mm
- KA-3874B** L: 225mm



The tool is designed to separate the electric wire from spark plug.



KA-3523 Glow-Plug Connector Pliers (straight)

To remove stubborn - awkward to reach Glow-Plug connectors, commonly on the latest generation of engines. e.g. Mercedes, BMW, VW-Audi etc.



KA-3524 Glow-Plug Connector Pliers (angled)

To remove stubborn - awkward to reach Glow-Plug connectors, commonly on the latest generation of engines. e.g. Mercedes, BMW, VW-Audi etc.

- Version angled at 90°



KA-3593 Spark Plug Socket Pliers (straight)

- For installing and removing straight spark plug sockets.
- Long jaws provide a better safety distance to the hot engine.
- Especially for deeply located spark plug sockets, e.g. on AUDI V6 and V8 engines, JAGUAR 12 cyl.
- Ergonomically shaped 2-component plastic handle covers.
- Special steel.
- Surface chrome-plated.



KA-3594 Spark Plug Socket Pliers (angled)

- For installing and removing straight spark plug sockets.
- Safe application due to milled jaw profile.
- Especially on MERCEDES-BENZ.
- Ergonomically shaped 2-component plastic handle covers.
- Special steel.
- Surface chrome-plated



KA-7774 Clamp Pliers

- For removing the axle collar clamps on passenger cars, such as MAZDA, NISSAN, HONDA, MERCEDES-BENZ, BMW, OPELM VW & AUDI
- Made with lug holding-down device.
- Length: 230mm



KA-7009 CV Boot Clamp Pliers

- Works on earless-type clamp-bands on axle collars, water and fuel hoses.
- Universal Application.
- Specially for VW-Audi etc.



KA-5007-A CV Boot Clamp Pliers

For Easy Installation of Ear-Type Clamps on Fuel Filters, Water Pumps, Other Cooling System Hose, and CV Joint Clamps.

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

- Length: 245mm
- Weight: 535g
- Jaw opening: 23mm (max)
- Red Coating Handle
- Can be used with 1/2" SQ. Drive Torque Wrench



KA-5133 Hose Clips Pliers

- 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.



KA-3605 Hose Clip Pliers

- With locking ratchet
- 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.



KA-7790 Tube Blocking Pliers

For releasing and re-fitting the re-usable hose clips types CLIC and CLIC-R. Suitable for VW-Audi, Citroën, Mercedes, Opel/Vauxhall, Peugeot, etc.



KA-3525 Fuel Feed Pipe Pliers

- To undo quick release connections on fuel feed pipe lines.
- Application: Opel/Vauxhall, Fiat, GM, VW etc.



KA-7767 Valve Stem Seal Pliers

- To remove the valve stem seals on Peugeot, Citroen and other engines.



KA-7758 Valve Seal Removal Pliers

- To remove valve stems sealing ring.
- The special long, slim form ensures the quick, safe and easy removal of valve-stem oil-seals, even on 4-valve cylinder head.



KA-1266 Audi / VW Fan Clutch Holding

- Audi & VW fan clutch idler pulley holding tool is a 4 pin wrench design that holds the pulley of the viscous fan clutch.
- This allows the technician to hold the fan clutch with one hand and break the coupling nut loose with the other.
- Its long handle design gives the technician plenty of room to hold the wrench securely.
- 32mm wrench is a perfect match for this fan clutch service.
- AUDI 1996~2001 A6 2.6L V6.
- VW 1998 and Later Passat 3.0L V6.



KA-5168 Compression Test Adaptor

(designed to fit 12mm spark plugs)

- This extra long compression test adaptor is designed to fit 12mm spark plugs.
- This tool is now essential on BMW E90 335i with N54 engine 2006, BMW MINI, Mercedes M156.
- Also used on PEUGEOT 207/307 and RENAULT 1.2 16 valve engine

KA-5168A – 14mm



KA-3659 CDI-Glow Plug Tool

For unscrewing and disassembly of glow plugs in the cylinder head, especially for glow plugs that are stuck because of carbonization remains. Cylinder does not need to be removed any more. Fits all Mercedes 10mm glow plugs, engine codes 611-612-613 etc.



KA-7308K Front Coil Spring Compressor

Models: W116, W123, W124, W126, W129, W140, W170, W201, W202, W210, GM, Opel, Peugeot, Rover, Saab, Volvo, VW T2, Ford, Taurus, Hyundai, Mitsubishi Lada, Skoda, etc. Features extra strong Trapezoid thread on center screw.

Supplied in blow mold storage case.

- Maximum capacity: 5-1/2" (140mm) spring diameter
- Overall length: 13-3/8" (340mm)
- Drop forged



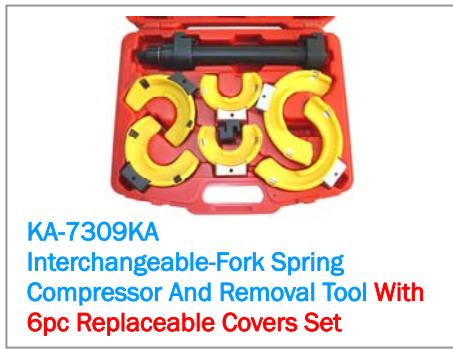
KA-7309K-SP 6pcs Coil Spring Clamp Set

- INTERCHANGEABLE
- Open: 150~ 350mm (6"~13-3/4")
- Small Jaw: 67~100mm (2-5/8"~4")
- Medium Jaw: 100~140mm (4"~5-1/2")
- Large Jaw: 140~200mm (5-1/2"~7-7/8")

KA-7309K

Interchangeable-Fork Spring Compressor And Removal Tool

- Spring compressors are multi-application tools specifically.
- Developed for modern macpherson suspensions, using a range of 3 sets of interchangeable monobloc forks
- Application: BMW, Toyota, Ford, Mitsubishi, VW, Audi, Saab, Nissan, Honda, Accord, Subaru, Volvo, Opel, Porsche.
- Spring specification:
 - A. Ø190 ~ Ø140
 - B. Ø140 ~ Ø110
 - C. Ø110 ~ Ø75



KA-7309KA
Interchangeable-Fork Spring Compressor And Removal Tool **With 6pc Replaceable Covers Set**



KA-7309A
Interchangeable-Fork Spring Compressor And Removal Tool **With Coating**

KA-7309K-AIR

Air Powered Interchangeable Fork Spring Compressor And Removal Tool

- Air powered
- Sets of interchangeable monbloc forks
- For modern macpherson suspension

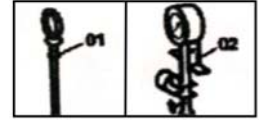


KA-7309KA-AIR



KA-6950 Oil Gauge (Flat Type – stainless steel)

- Length: 850mm
- Engine 103.943/984/985, 104, 111, 119, 120, 137, 603.913/963/97, 604, 605, 606, 611, 612, 613, 626



KA-6951 Oil Gauge (Flat Type – head 90° - stainless steel)

- Length: 930mm
- Engine 112, 113, 646, 647, 648



KA-6952 Transmission Oil Gauge (ROUND SPRING TYPE)

- Length: 920mm
- Transmission 716.5, 722.7



KA-6953 Transmission Oil Gauge (ROUND SPRING TYPE)

- Length: 1220mm
- Transmission 722.6



KA-5160 Audi Oil Dipstick

- Length: 695mm
- Applicable: Audi 100



KA-5161 Mercedes Truck Oil Dipstick

- Length: 1000mm



KA-5173 Engine Oil Dipstick For AUDI

- This oil gauge and dipstick is designed for measuring the oil levels on different Audi engines fitted with electronic oil level systems.
- The tool also checks the oil levels in Audi A4 A5 6 cylinder petrol 3.2 liter 4 valve engines. It can also be used to assist the calibration of the driver's instrument panel. OEM Code: T40178



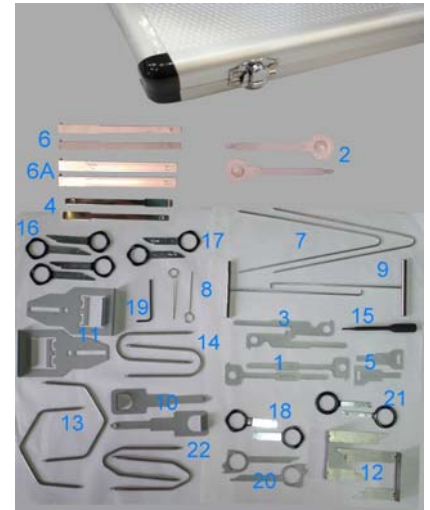
46pcs Radio Removal Tool Set



KA-6963K-46
– Aluminum Case



KA-6963K-46B
– Blow Case



Contents:

NO.	Description	QTY	NO.	Description	QTY
1	KENWOOD II 1998-2001	2	12	FIAT BRAVE	2
2	SONY II ab 2002	2	13	OPEL	2
3	KENWOOD III ab 2002	2	14	BLAUPUNKT, GRUNDIG, VW,AUDI, FORD	2
4	PIONEER & JVC	2	15	BMW	1
5	SONY I bis 2001	2	16	VW, AUDI, BECKER, MERCEDES BENZ	4
6	PANASONIC	2	17	BECKER, PORSCHE, MERCEDES BENZ	2
6A	PANASONIC 2006	2	18	VW	2
7	MERCEDES BENZ & BMW	2	19	BMW, OPEL- inbus	1
8	MERCEDES BENZ & BMW	2	20	BECKER NEU ab 2002	2
9	MERCEDES BENZ & BMW	2	21	SKODA NEU ab 2002	2
10	CLARION-NEU	2	22	BLAUPUNKT NEU ab 2002	2
11	CLARION (ALT)				

KA-6963K-52

52pcs Radio Removal Tool Set



Model	QTY
Radio Removal U-Hook (FORD/VW/AUDI/GRUNDIG/BLAUPUNKT)	2 pcs
Special Pentagon Wrench (BMW)	1 pcs
Radio Removal Keys (VW/AUDI/BECKER/MERCEDES-BENZ)	4 pcs
Radio Removal Keys (MERCEDES BENZ/ PORSCHE/BECKER)	2 pcs
Radio Removal Keys (VW)	2 pcs
Allen Hex Wrench (BMW/OPEL)	1 pc
Radio Removal Keys (NEW BECKERS)	2 pcs
Radio Removal Keys (NEW SKODA)	2 pcs
Radio Removal U-Hook (NEW BLAUPUNKT)	2 pcs
Radio Removal Keys (FIAT BRAVA)	2 pcs
Radio Removal U-Hook (OPEL Doppel-Kugel-Inbus)	2 pcs
Radio Removal Keys (MERCEDES BENZ & BMW)	6 pcs
Radio Removal Keys (KENWOOD II 1998-2001)	2 pcs
Radio Removal Keys (SONY II ab 2002)	2 pcs
Radio Removal Keys (KENWOOD III ab 2002)	2 pcs
Radio Removal Keys (PIONEER & JVC)	2 pcs
Radio Removal Keys (SONY Ibis 2001)	2 pcs
Radio Removal Keys (PANASONIC)	2 pcs
Radio Removal Keys (KENWOOD Ibis 1998)	2 pcs
Radio Removal Keys (KENWOOD-NEW)	2 pcs
Radio Removal Keys (CLARION-NEW)	2 pcs
Radio Removal Keys (CLARION(ALT))	2 pcs
Radio Removal Keys (PANASONIC 2006)	2 pcs
Radio Removal Keys (SONY IDIC 2005)	2 pcs



KA-6960K 9pcs Radio Removal Tool Set

Contents:

- For Ford/VW models with a din chassis.
- For BMW models with anti-theft radio.
- For Audi A4, A6, A8 and VW new beetle.
- For 1992 & newer Mercedes 129, 140, 163, 202, 210 models.
- For VW new body style Passat, Jetta and Golf.
- Made of stainless steel

10pcs Radio Removal Tool Set

Contents:

- For Ford/VW models with a din chassis.
- For BMW models with anti-theft radio.
- For Audi A4, A6, A8 and VW new beetle.
- For 1992 & newer Mercedes 129, 140, 163, 202, 210 models.
- For VW new body style Passat, Jetta and Golf.
- For BMW hex key 2mm



- KA-6960A** -- Made of Plate Metal
-- Red coated ring & Pouch
- KA-6960KA** -- Made of Stainless Steel
-- Stainless



KA-6963K

18pc Radio Removal Tool Kit

Contents:

- (1) 2pcs blaupunkt (NEW)
- (2) 2pcs For Skoda (NEW)
- (3) 2pcs For Becker (NEW)
- (4) 1pcs For BMW /OPEL
- (5) 2pcs For VW /Becker
- (6) 2pcs For Porsch / Mercedes Benz
- (7) 4pcs For VW / AUDI Becker / Mercedes Bena
- (8) 1pc For BMW
- (9) 2pcs For VW / Ford / AUDI /Groundig /Blaupunkt

- KA-6963K** -- Made of Stainless Steel
-- Pouch Bag
- KA-6963KB** -- Made of Stainless Steel
-- Blow Case



KA-6963KB

KA-6963K-20 20pcs Radio Removal Tool Set

Made of Stainless Steel

Set includes the following tools needed to install and remove radios:

- 4pcs Radio Removal Keys (New VW Beetle/Audi)
- 2pcs Radio Removal Keys (Mercedes Benz)
- 2pcs Radio Removal Keys (VW)
- 2pcs Radio Removal Keys (New Skoda)
- 2pcs Radio Removal Keys (New Becker)
- 2pcs Radio Removal Keys (Pioneer)
- 2pcs Din Radio Removal U-Hooks (New Blaupunkt)
- 1pc Allen Hex Wrench (BMW)
- 2pcs Din Radio Removal U-Hooks (Ford/VW/Audi)
- 1pc Special Pentagon Wrench (BMW)





KA-6511K Mercedes & BMW Ignition Lock Set

- Complete kit for removal and installation for Mercedes and BMW motor vehicles. Stored in a plastic case.
- Includes:
 - 2pcs Instrument cluster removal hooks for models: 107, 116, 123, 124, 126, 140 & 201.
 - 2pcs Radio removal tools for 1992 and newer Mercedes vehicles Models: 140, 129, 202 & 210.
 - 2pcs Ignition lock removal tools for models W124 & 201.
 - 2pcs Ignition lock removal tools for models W124, 126 & 201.



KA-6511B 14pcs Radio Removal Tool Set

For Mercedes & BMW ignition lock & radio service



KA-3981 Mercedes-BENZ Dashboard Service Tool Set

- 2pcs removal hooks for instrument cluster on models W107, W116, W123, W124, W126, W140 and W201.
- 2pcs removal tools for ignition lock on model W126.
- 2pcs removal tools for ignition locks on model W124 and W201.
- 4pcs radio removal tools on models W129, W140, W202 and W210.



KA-6963K-26 26pc Radio Removal Tool Kit & Antenna Wrench Kit

includes the following tools needed to install and remove radios:

- 4pc. Radio Removal Keys (New VW Beetle/Audi)
- 2pc. Radio Removal Keys (Mercedes Benz)
- 2pc. Radio Removal Keys (VW)
- 2pc. Radio Removal Keys (New Skoda)
- 2pc. Radio Removal Keys (New Becker)
- 2pc. Din Radio Removal U-Hooks (New Blaupunkt)
- 1pc. Allen Hex Wrench (BMW)
- 2pc. Din Radio Removal U-Hooks (Ford/VW/Audi)
- 1pc. Special Pentagon Wrench (BMW)
- 7pc. Special Socket Set
- 1pc. Chrysler Radio Removal Socket



KA-6961K Euro Door Hinge / Handle Kit

A compact solution to accessing the special fasteners found on the door hinges & door handles of VW/AUDI, MERCEDES-BENZ and Porsche. Includes 4 door hinge bits (less than 1 inch long) with slender ratcheting wrench and extra long drives for accessing Mercedes and VW door handle fasteners.



KA-6633 17pc Deluxe Lockout Tool Set

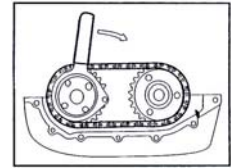
Tool identification chart

119-6	Knob Knabber	235-2-08	Astro Camaro Tool
235-2-02	Reverse Zinger	235-2-05	Dual Tool
235-2-06	Japanese Button Hook	235-2-10	Button Pull
235-2-01	Inside Button Hook	235-2-09	Double Curve
119-3	Wonder Tool	235-3	Thin Bar - 22"
119-4	Wedge	235-4	Wide Bar - 24"
235-2-07	Porsche Tool	235-2-04	Mercedes, Volvo Tool
235-2-03	Camry Chrysler Tool	119-2	Gas Cap Key



KA-2821 BMW Sprocket Extractor / Installer

For BMW M50, M52, S50, S52, M42, M44



KA-3965 Double-Ring Shaped

For counterholding when operating the bottom strut unit screws on MERCEDES-BENZ type 169 (A-class)

- Especially adapted to the limited space
- Very helpful for installation or removal works, measurements /adjusting work. Additional counterholding with a second hand (with a second mechanic) and another tool is not necessary
- Chrome-Vanadium, chrome-plated
- 2 x 21 mm 12-point profile
- Dimensions (L x W): 90 x 30 mm
- Thickness: 8 mm



KA-6422 First Motion Shaft Puller

For OPEL and VAUXHALL gear boxes on vehicles with transverse engines.

- Contents: 008S slide hammer
 097 first motion shaft adaptor
 One set of 096 clutch retaining clips.



KA-6552 12pc Drain Plug Key & T-Bar

8mm HEX – BMW (BA), FORD (GB), GM (BA, GB)
 9mm HEX – GENERAL MOTORS (BA)
 10mm HEX – FORD (BA)
 12mm HEX – FIAT LANCIA (GB, PU), PEUGEOT TALBOT (GB, PU)
 14mm HEX – LANCIA (GB, PU), MERCEDES (BA, GB)
 17mm HEX – AUDI (GB), AUSTIN (GM), BMW (GB), VW (GB)
 3/8" HEX – BLMC (MORRIS) (BA), LANCIA BETA (DIFF)
 8mm (5/16") SQ – CITROEN (GB, PU), PEUGEOT (BA, GB, PU), RENAULT (PU), TALBOT (GB, PU), VOLVO (PU)
 11mm SQ – FORD (BA, GB)
 13mmSQ – NISSAN (BA, GB), SUBARU (BA)
 3/8" SQ – HONDA (GB, PU), MAZDA (BA, GB), RENAULT (GB, PU), SAAB (GB), VOLVO (BA, PU)
 KEY: BA=BACK AXLE, GB=GEAR BOX, PU=PUMP



KA-7806 15pc Drain Plug Key Set

- 127mm (1/2") SQ DRIVE
- HEX: 8,9,10,12,14,17mm
- Square: 8,9.5,11,12,13mm
- Triangular: 9.5mm Δ
- Female Square: 10 x 12mm Socket
- 12.7mm Sq Drive Bar



KA-7805 14pc Drain Plug Key Set

BMW, LANCIA, RENAULT, CITROEN, MAZDA, SAAB, FIAT, MERCEDES, TOYOTA, FORD, NISSAN, VAUXHALL/OPEL, HONDA, PEUGEOT, VOLKSWAGEN

- 6- 3/8" Dr. Hex : 8,9,10,12,14,17mm
- 6- 3/8" Dr. Square: 7,8,11,13mm 5/16" & 3/8"
- 3/8" Dr. Female Square: 10mm
- 1- 3/8" Dr. Triangular Δ

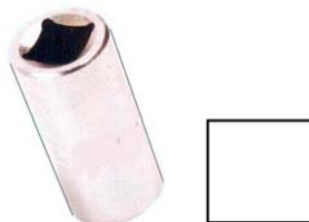


KA-7780 Oil Service Wrench

- For the oil filler and oil drain plug gearbox, differential, oil pan e.g. on ALFA ROMEO, FIAT, LANCIA.
- For 12mm inside hexagon screws.



KA-7807 Triangular Drain Plug Key
 Application: Renault



KA-7808 Drain Plug Socket
 10mm Square Female.
 Applicable: BMW, FORD, RENAULT, TOYOTA



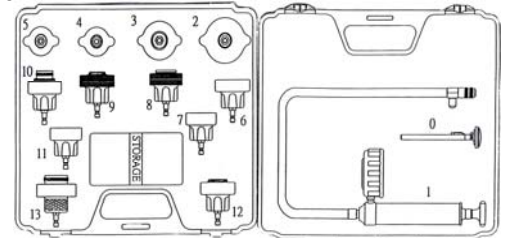
KA-7809 1/2" & 3/8" Square, High Torque Drain Plug Wrench
 1/2" & 3/8" male square for removing drain plugs on oil, transmissions, and differentials. Heavy duty construction, tempered to withstand the rigors of constant use.

KA-7230K Universal Radiator Pressure Tester Kit

(For cooling system testers)

Availability range for the testing head:

- NO 0: Needle type thermometer.
- NO 1: Manual pumping set.
- NO 2: TRUCK, GM (CADILLAC)
- NO 3: BENZ, FORD, TRUCK, JAPANESE 123 SERIES, GM (BUICK), JEEP
- NO 4: PEUGEOT, JAPANESE 124 SERIES (MITSUBISHI, NISSAN, MAZDA, TOYOTA, SUBARU, INFINITI, GEO, SUZUKI, ISUZU, LEXUS)
- NO 5: JAPANESE 125 SERIES (HONDA, TOYOTA, SUZUKI, MITSUBISHI)
- NO 6: OPEL, VW, FORD, BMW245, SAAB, JAGUAR
- NO 7: VOLVO, SAAB, AUDI, CITRON, RENAULT, FIAT, PEUGIOT, ALFA, JEEP
- NO 8: NEW VW
- NO 9: VW T4, NEW AUDI A4, A5, A6, BMW 345
- NO 10: BMW
- NO 11: AUDI, VW
- NO 12: FORD, INTERNATIONAL, GM, ROVER
- NO 13: BENZ



KA-7779 Diesel Injection Pump Wrench

13mm 12PT 90 Degree Crank.

- Made for fastening screws at the injection pump, when replacing the toothed belt or adjusting the injection starts.



KA-3584 Special Injection Pump Wrench

According to regulate and adjust to the changed.

For beginning with the engine running.

- SW 13mm, 170mm in length.
- Application on VW LT Diesel.



KA-3585 Injection Line Wrench

■ For installing and removing injection lines on diesel engines, esp. for 1.7 DTi 16V OPEL engines,

- e.g. on ASTRA G and Corsa B and C.
- Due to slim style, the wrench may also be used on diesel engines of other car manufactures.
- Chrome-Vanadium
- Surface chrome-plated



KA-7310K 13pcs Disc Brake Pad & Caliper Service Tool Kit

- Magnetic socket adapter
- Includes 10 adapters for brake assemblies
- For rotating pistons back into the caliper to provide clearance for the new pads
- Prevents damage to the piston and boot
- Kit comes complete in blow molded storage case
- Designed for use with MERCEDES, BMW, VOLKSWAGEN, GM, AUD FORD, HONDA, SUBARU, NAZDA, NISSAN, MITSUBISHI, TOYOTA, land rover and 4-wheel drive vehicles



KA-2807 5pcs Universal Caliper Wind Back Kit

- 1 : LEFT HAND HELIX BOLT
- K : Citroen
- K1 : Citroen
- K2 : Citroen
- K3 : Citroen/Renault



KA-4272 18pc Disc Brake Caliper Tool Kit

Repair Part	Applications	Disc Size Φ (mm)
1	General Motors	63.5
2	Alfa Romeo, Audi, Austin, BMW, Ford, Honda, Jagur, Mercedes-Benz, Mitsubishi, Nissan, Rover, Toyota, VW	55
3	General Motors	54
4	Citroen	54
5	Citroen XM, Xantia u.a.	50.8
6	General Motors	47.5
7	Nissan Primera, VW Golf IV	42
8	Audi 80,90,V8+100, Ford Sierra ABS+Scorpio ab 85, Honda Prelude, Nissan Siliva 1.8 turbo, Rover 8000, Saab 9000, Subaru L+Z, VW Golf+Passat	42
9	Nissan Maxima	42
10	Adapter mit 3/8" Innenvierkant	36
11	Alfa Romeo 164 2.0, Ford, Mazda, Saab 9000, Subaru	32
12	Renault	32(30)
13	Ford	32
14	Opel Astra	32
15	Saab, Honda	32
A		
B	A +A-1 & B+B-1 BODY, A-2 PAD	



KA-4271 15pcs Universal Caliper Wind Back Kit

- 1:RIGHT HAND HELIX BOLT
- 2: Citroen/XM, Xantia. (F/R)
- 3 : Audi (F). FIAT/Alfa Romeo (F). Ford/Fiesta (F). ISUZU (F). HONDA/Concesto (F). Jaguar/XJ6,XJ40 (F/R). BMW/318is, 320i, 325TD, 518i, 525i &1x, 740i, 850ci, M5. (F). Mercedes Benz/190,200, 300, 420, 560 series (F). Mitsubishi/Concesto (F). NISSAN/MIera, Stanza, Sunny (F). Rover/Austin, Metro, 200 & 400 series, Maestra, Montego (F). TOYOTA/Camry (F). Volvo (F). VW/Passat, Golf GTI (F).
- 4 : FORD Australia/NZ Telstar, Laser(R). MAZDA (R). SAAB 9000 (R). FIAT/Alfa Romeo 1642.0 (R). HONDA/Prelude, CRS 16i, GM/Saturn (R). GM/Grand Prix, Lumina.
- 5 : 3/8" dr. Adapter used with extention bar and ratchet when need to apply more strength to the piston.
- 6 : NISSAN, PRIMERA, VW/GolfIV.
- 7 : Audi/80, 90, V8+100, Coupe E(R). Rover/800 ABS. SUBARU L+Z(R). FORD/Sierra ABS, Granada, Scorpio ABS 85(R). NISSAN/Bluebird 1.8 Turbo, Silvia Turbo, Primera 2.0i LS/GS/GSX(R). PEUGEOT/405 1.9 Gi, Gri, Sri, Gtxi, MI 16, 605 2.0 Sri(R). TOYOTA/Celica, Corolla GT MR2(R). VW/Golf Gti, Jeta Synchro, Jetta Gti 16v, Passat CL, GL, GT and GT 16v, Corrado 16V scirroca GTX 16V(R).
- 8 : GM most 1-7/8" diameter pistons.
- 9 : GM most 2-1/8" diameter pistons. (CADI Seville/Eldorad 80-85).
- 0 : GM most 2-1/2" diameter pistons. (Seville/Eldored 79).
- A : Renault/R21, Laguna (Rear Disk).
- M : Ford Motors Mini Cooper.
- N : SAAB. Honda.
- F : Opel (Rear disk)

KA-2808A 21pcs Universal Caliper Wind Back Kit



- 1-1: RIGHT HAND HELIX BOLT
- 1-2: LEFT HAND HELIX BOLT
- 2: Citroen/XM, Xantia. (F/R)
- 3: Audi (F). FIAT/Alfa Romeo (F). Ford/Fiesta (F). ISUZU(F). HONDA/Concesto(F). Jaguar/XJ6,XJ40(F/R).BMW/318is,320i,325TD,518i,525i & 1x,740i,850ci,M5.(F). Mercedes Benz/190, 200, 300, 420, 560 series (F). Mitsubishi/Colt (F). NISSAN/Miera, Stanza, Sunny(F).Rover/Austin, Metro,200 & 400 series, Maestra, Montego(F).TOYOTA/Camry(F). Volvo (F). VW/ Passat, Golf GTI (F).
- 4: FORD Australia/NZ Telstar, Laser(R). MAZDA(R). SAAB 9000 R). FIAT/Alfa Romeo 1642.0(R).HONDA/Prelude, CRS 16i, GM/Saturn(R).GM/Grand Prix,Lumina.
- 5: 3/8" dr. Adapter used with extention bar and ratchet when need to apply more strength to the piston.
- 6: NISSAN, PRIMERA, VW/Golf IV.
- 7: Audi/80,90,V8+100, Coupe E(R). Rover/800 ABS. SUBARU L+Z(R). FORD/Sierra ABS, Granada, Scorpio ABS 85(R). NISSAN/Bluebird 1.8 Turbo, Silvia Turbo, Primera 2.0i LS/GS/GSX(R). PEUGEOT/405 1.9Gi,Gri, Sri, Gtxi, MI 16,605 2.0 Sri(R). TOYOTA/Celica, Corolla GT,MR2(R).VW/Golf Gti, Jeta Synchron, Jetta Gti 16v, Passat CL, GL ,GT and GT 16v, Corrado 16V scirocca GTX 16V(R).
- 8: GM most 1-7/8" diameter pistons.
- 9: GM most 2-1/8" diameter pistons. (CADI Seville/Eldorad 80-85).
- 0: GM most 2-1/2" diameter pistons. (Seville/Eldored 79).
- A: Renault/R21, Laguna (Rear Disk).
- M: Ford Motors Mini Cooper.
- N: SAAB. Honda.
- F: Opel (Rear disk)
- E:NISSAN Maximas.
- K: Citroen
- K1: Citroen
- K2: Citroen



KA-2714
Air Power Brake Caliper Wind Back Tool

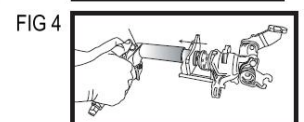
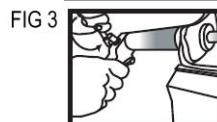
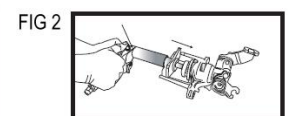
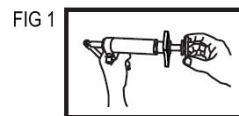


KA-2714K
Air Power Brake Caliper Wind Back Tool Kit
(With 15pc Brake Pads)



KA-2714K1
Air Power Brake Caliper Wind Back Tool Kit
(With 17pc Brake Pads)

- 1: Air Adjusting Lever
- 2: Citroen/XM, Xantia. (F/R)
- 3: Audi (F). FIAT/Alfa Romeo (F). Ford/Fiesta (F). ISUZU(F). HONDA/Concesto(F). Jaguar/XJ6. XJ40(F/R). BMW/318is. 320i, 325TD, 518i, 525i & 1x, 740i, 850ci, M5.(F). Mercese Benz/190, 200, 300, 420, 560 series (F). Mitsubishi/Colt (F). NISSAN/Miera. Stanza, Sunny(F). Rover/Austin. Metro, 200 & 400 series, Maestra, Montego(F). TOYOTA/Camry(F). Volvo (F). VW/Passat, Golf GTI (F).
- 4: FORD Australia/NZ Telstar, Laser (R). MAZDA(R). SAAB 9000 (R). FIAT/Alfa Romeo 1642.0 (R). HONDA/Prelude, CRS 16i, GM/Saturn (R).
- 5: 3/8" dr. Adapter used with extention bar and ratchet when need to apply more strength to the piston.
- 6: NISSAN, PRIMERA, VW/Golf IV
- 7: Audi/80, 90, V8+100, Coupe E(R). Rover/800 ABS. SUBARU L+Z(R). FORD/Sierra ABS, Granada, Scorpio ABS 85(R). NISSAN/Bluebird 1.8 Turbo, Silvia Turbo, Primera 2.0i LS/GS/GSX(R). PEUGEOT/405 1.9Gi, Gri, Sri, Gtxi, MI 16,605 2.0 Sri(R). TOYOTA/Celica, Corolla GT, MR2(R). VW/Golf Gti, Jeta Synchron, Jetta Gti 16v, Passat CL, GL, GT and GT 16v, Corrado 16V scirocca GTX 16V(R).
- 8: GM most 1-7/8" diameter pistons.
- 9: GM most 2-1/8" diameter pistons.
- 0: GM most 2-1/2" diameter pistons.
- A: Renault/R21, Laguna (Rear Disk).
- M: Ford Modeo
- N: SAAB, Honda
- F: Open (Rear disk)
- K: Citroen
- E: NISSAN Maximas.



PATENTED: 1. TAIWAN 2. CHINA 3. U.S.A. 4. GERMANY



KA-3616 Oil Drain Plug Repair Kit

For threads M14x1,5, Includes a special thread borer , 5 Threaded Plugs ,5 Washers.



KA-7229K 64pcs Oil Drain Repair Kit

- Renew the diameter and replace a new drain oil drain plug.
- Four popular sizes fit nearly all applications.
- Specification: M13 x 1.5P, M15 x 1.5P, M17 x 1.5P, M20 x 1.5P



KA-5041B Universal Valve-Spring Compressor Tool

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

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.



KA-3615 Valve Stem Oil Seal Service Kit

This kit is essential for renewing the Valve Stem Seals without removing the cylinder head on Audi vehicles with 20v engines. Comprising compressor unit assembly with Valve Spring Holding Tool, Pressure Hose and Valve Stem Seal Replacer.



KA-3643 BENZ W220 Shock Absorber Service Tool Set

- This tool is for changing the top seal in air suspension.
- Fix suspension strut to a vise.
- Set 3 legs onto stub bolts in strut.
- Drive the contour forcing screw to compress the seal cup and replace the seal.
- Application: Benz W220





KA-8345 BENZ Seal Top Air Suspension Strut

- Special design to remove the seal cap easily and quickly
- Applicable: W220



KA-3589 Puller for Harmonic Damper

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 KA-2589 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.



KA-8318 Puller for Crankshaft Pulley

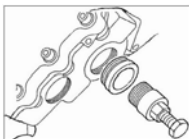
- For VW-Audi 4 and 5 cylinder engines.
- To remove the front pulley from the crankshaft.



KA-8317 Diesel Injection Pump Puller For BMW

This tool is specifically designed for holding the sprocket/chain in place when disassembling the VP44 injection pump and high pressure pump.

- Common rail fitted to BMW engines:
318D/compact(E46), 320D/TD compact(46), 330D(E46), 525D(E39), 525D(E60/E61), 530D(E39), 530D(E60/E61), 535D(E60/E61), 730D(E38), X53.0D(E53)



KA-3656 Diesel Injection Pump Puller for Land Rover

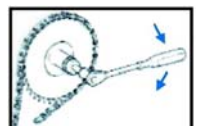
This tool is specifically designed for holding the sprocket/chain in place when disassembling the VP44 injection pump and high pressure pump.

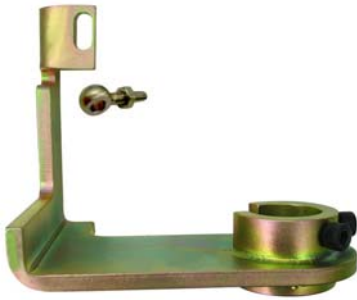
- Common rail fitted to Land Rover engines:
Land Rover / Freelander (TD4) / Rover / 75 (M47)



KA-8286 Puller for Injection Pump Tools Kit for BMW

- Applicable for 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 form the shaft when dismantling the injection pump.





KA-3590 Locking Tool

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)



KA-3591 Locking Tool

For counter bearing 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).



KA-2993 Self- Adjusting Clutch Assemble Tool

Applicable: For Most SAC Clutch. VW, CMW, MERCEDES, VOLVO, OPEL/VAUXHALL, RENAULT...etc



KA-2993A

Complete Kit For Assembling and Disassembling Self Adjusting Clutches (3 hole pitch)

Suitable for most Self Adjusting Clutches SAC(3 holes) equipped on vehicles of FIAT GROUP, VW-AUDI, BMW, MERCEDES, VOLVO, OPEL, RENAULT etc.

Allows operations on clutch equipped with this device in order to prevent any damage to system and to keep adapter ring in right position.

Advantages :

- Pre-tightening of disk pushing plate during assembly and disassembly avoiding clutch deformation.
- Alignment of clutch disk to drive bearing or to disk pushing plate.



KA-2993B

Complete Kit For Assembling and Disassembling of Self Adjusting Clutches (3 and 4 hole pitch)

Suitable for most Self Adjusting Clutches SAC(4 holes) equipped on vehicles of FIAT GROUP, VW-AUDI, BMW, MERCEDES, VOLVO, OPEL, RENAULT etc.

Allows operations on clutch equipped with this device in order to prevent any damage to system and to keep adapter ring in right position.

Advantages :

- Pre-tightening of disk pushing plate during assembly and disassembly avoiding clutch deformation.
- Alignment of clutch disk to drive bearing or to disk pushing plate.



KA-3601 Valve Seal Pusher

For pressing on valve stem seals Ø 7 mm on MERCEDES-BENZ vehicles

- On multi-valve engines M 104, M 119, M 120
- Length 160 mm



KA-3612 Valve Seal Pusher

For pressing on valve stem seals Ø 7 and 8 mm

- On BMW passenger cars
- Length: 150 mm



KA-3648 BMW Outside Mirror Removal Pliers

Use to remove the retainer on the outside mirror.

- Applicable: BMW E12, E21, E23, E24, E28, E30, E31, E32, E34, E36, E38, E39.



KA-3649 BMW Output Shaft Prybar - AWD

Use to remove the output shaft from the front transaxle assembly on 4WD vehicles.

- Applicable: BMW 525ix, X3, X5



KA-3658 Wheel Nut Cap Remover Tool

Storage for 6 caps in the tool keeps them safe ready for replacing after repair. This is an ideal tool for busy type bays, garage workshops and roadside repair and recovery mechanics etc. This wheel cap remover is a simple but effective tool for use on Volkswagen / Audi / Seat / Skoda and Vauxhall / Opel vehicles.



KA-3657 BENZ Flywheel Locking Tool

Use for BENZ M101, M102, M103, M104, M111, M601, M602
Used to fix the flywheel gear to remove & install crankshaft pulley center bolt.



KA-3652 BMW Self Adjusting Clutch Fixture

Use to install and set all self adjusting clutches (SAC).

- Applicable: BMW E34, E36, E38, E39, E46, E52, E53, E85 Z3



KA-3653 BMW Self Adjusting Clutch Centering Tool

Use to reset and center the centering ring on self adjusting clutch.

Use with KA-3652-Self Adjusting Clutch Fixture.

- Applicable: BMW E34, E36, E38, E39, E46, E52, E53, E85



KA-4032 Injector Nozzle Tool Set

- Mercedes CDI engines (German Utility Model)

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

- This injector nozzle Tool set (comprising nozzle puller, nozzle puller, milling cutter, compressed air adapter, thread tap and plastic case) makes it possible to remove the injector nozzles correctly.



KA-4034 Injector Nozzle Puller for Mercedes CDI

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

The injector nozzle puller makes it possible to remove even nozzles that are a very tight fit in the cylinder head, without the cylinder head having to be removed from the engine.



KA-4033 Glow Plug Tool Set

- For Mercedes CDI engines

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

- The glow plug tool set KA-4033 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.