



BERU Quality tools for safety & protection

BERU spark plugs and ignition coil installation tools

Spark plug mounting aid ZMH001

Extending the mechanic's reach



The problem

The engine compartment is typically tightly packed. When you are installing or removing the spark plugs, this can not only cause injuries and burns to the hands on the engine, the spark plugs themselves can also be damaged if they fall out.

The solution

BERU spark plug mounting aids made of rubber help to „extend the mechanic's reach“: They keep the spark plug securely in place and allow gentle insertion or removal after loosening or before tightening the spark plug.

Article	Order no.
Spark plug assembly aid	ZMH001

Spark plug mounting aid ZMH002

Safe spark plug changes without skewing



The problem

Due to the relatively large opening of the spark plug shaft, installing and removing spark plugs with an extension involves the risk of holding the spark plug spanner at an angle, thus causing a fracture of the spark plug insulator. The consequences: misfires due to voltage arcing on the spark plug insulator can destroy the catalytic converter.

The solution

The BERU mounting tool for use with almost all vehicle models is simply plugged into the 3/8" spark plug extension and pushed down into the spark plug shaft. This keeps the spark plug spanner parallel to the shaft, avoiding the risk of skewing.

Article	Order no.
Spark plug assembly aid	ZMH002

Spark plug connector grease

Prevents voltage flashovers

(Also available in a display, see page 4)



The problem

After replacing spark plugs, sporadic misfiring occurs – over the entire speed range. The cause is voltage flashovers on spark plug neck, which in turn are caused by leaking, damaged or brittle spark plug sockets.

The solution

Before installing the spark plugs, apply a thin coat of BERU plug grease to the (smooth or ribbed) spark plug neck . Important: always check the spark plug caps and replace if necessary. Especially with single and double spark ignition coils with plug type connectors, it is advisable to renew the caps along with the spark plugs - since the former are often brittle, and thus leak, in the seal area to the spark plug.



Apply BERU spark plug connector grease directly to the plug before screwing in the spark plug – to protect against brittleness and high voltage flashovers. Important: always check the spark plug caps and replace if necessary.

Article	Order no.
Spark plug connector grease (tube of 10 g)	ZKF01
Spark plug connector grease (tube of 50 g)	ZKF02

Spark plug thread repair kit ZGR Set1



Quick & easy The special drill bit strips out the defective thread and taps a new thread. Then all you need to do is screw in a spark plug with the matching threaded insert – and you're done!

The problem

A defective cylinder head thread – time and time again, the reason for a major overhaul, and often entailing the replacement of the cylinder head.

The solution

BERU offers you the option of a fast and economical repair – with a professional kit for all standard M16 threads, consisting of a special drill bit for thread-cutting and threaded inserts for all standard spark plug threads. The retroactively installed threaded insert sits securely and is compression tight, of course.

Article	Order no.
Spark plug thread Repair kit	ZGR Set1
Content: 1 drill bit M16x1, 25, Threaded insert with thread length 9.5 mm (flat sealing seat) Threaded insert with thread length 12.7 mm (flat sealing seat) Threaded insert with thread length 19.0 mm (flat sealing seat) Threaded insert with thread length of 17.5 mm (conical sealing seat)	

All kit components are also available as single parts:

Article	Order no.	Content
Drill M16x1, 25	ZGB1	1 pcs.
Threaded insert with thread length 9.5 mm (flat sealing seat)	ZGE1 14 – 9,5 mm	4 pcs.
Threaded insert with thread length 12.7 mm (flat sealing seat)	ZGE2 14 – 12,7 mm	4 pcs.
Threaded insert with thread length 19.0 mm (flat sealing seat)	ZGE3 14 – 19,0 mm	4 pcs.
Threaded insert with thread length of 17.5 mm (conical sealing seat)	ZGE4 14 – 17,5 mm	4 pcs.

Bi-Hex spark plug wrench

available in 14 mm and 16 mm widths across flats



The problem

If bi-hex spark plugs are installed with „normal“ spark plug wrenches, this can cause damage to the bi-hex. But even with what claim to be bi-hex wrenches that work with retaining springs, metal abrasion can cause spark-over and thus lead to rapid failure of the spark plugs.

The solution

BERU bi-hex wrenches for spark plugs have rounded corners at the 12 points, thus avoiding load being applied to the bi-hex head of the spark plug. Thanks to integrated holding magnets it also offers the special benefit of fixing solely by means of magnetic force. This means there is no metal abrasion on the insulator.

Article	Order no.
Bi-hex spark plug spanner	SW14
Bi-hex spark plug spanner	SW16

Ignition coil puller for VW/Audi



The problem

Plug shaft/connectors ignition coils are mounted directly on the spark plug due to their very lean shape. If it seizes on the SAE contact and the insulation on the hexagon of the spark plug, the coil can be very difficult to remove. Practical experience shows that in case of incorrect removal the ignition coil can break into 2 parts.

The solution

Here BERU offers 3 special ignition coil pullers for Volkswagen Group applications that specifically match the geometry of the ignition coil heads. Depending on the version, there are flat, square or oval ignition coil housings. With the BERU ignition coil puller, you can not only remove the current Volkswagen Group ignition coils, but also those of the previous generation which had a dimensionally different head shape. That is, a puller can be used simultaneously for old and new ignition coil types.

Article	Order no.
Ignition coil puller, angular	ZSA042
Ignition coil puller, flat	ZSA043
Ignition coil puller, oval	ZSA044

BERU glow plug mounting tools

Offset ring ratchet spanners

Facilitate glow plug changes



The problem

Due to the geometry of modern diesel engines, glow plugs are often difficult to access.

The solution

The offset ring ratchet spanner facilitates removal and installation, especially with Audi, Volkswagen and Renault engines. Practical: two widths across flats, 8 mm and 12 mm (for glow plug connections).

Article	Order no.
Ring ratchet spanner 8x12	RRS8x12

Glow plug mounting grease



The problem

Burnt in glow plugs are unfortunately already part of the daily grind in the workshop – they cost both time and nerves.

The solution

Applying BERU special grease to the glow plug shaft and thread when changing the glow plugs it prevents corrosion of the glow plug, thus avoiding moisture penetration and facilitating removal.

Article	Order no.
Glow plug assembly grease (tube of 10 g)	GKF01

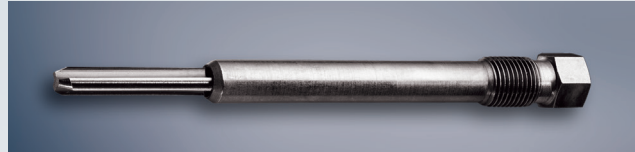


Our tip: the practical BERU counter display for quick access – with spark plug connector grease (see page 3) and glow plug assembly grease to avoid burnt in glow plugs.

Article	Order no.
Spark plug connector grease	ZKF01
Glow plug assembly grease	GKF01
Display (spark plug and glow plug assembly grease) Contents: 5 tubes each of 10 g	

Glow plug reamer

Removes deposits in the glow plug shaft



The problem

Deposits and coking in the glow plug shaft that can arise in particular due to „caking“ of the glow plug and cylinder head, make it difficult to change glow plugs.

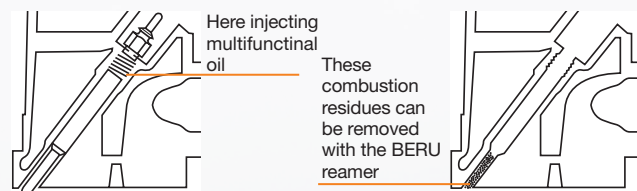
The solution

The BERU reamer is coated with grease and screwed into and back out of the cylinder head, thus removing carbon deposits from the glow plug shaft. Then the new BERU glow plug can be installed with these.

Article	Order no.
Reamer for glow plug shaft*	RA003

* Among others, for DC motors OM 611, OM 612, OM 613 and VW/Audi TDI, Peugeot DI and all DI with M10x1 thread.

Thanks to the BERU reamer, deposits can be quickly and easily removed from the glow plug shaft. Important: Coat the blade area with grease prior to use.



PSG socket bit width across flats 12mm



The problem

If PSG glow plugs are fitted with „normal“ glow plug spanners, this can cause damage to the glow plugs.

The solution

The BERU PSG glow plug socket bit has rounded corners in the hex, thus avoiding load being applied to the hex head of the glow plug. It also holds the plug safely thanks to integrated holding balls. The PSG socket bit can also be used with 12 mm width across flats for removal/installation of standard glow plugs.

Article	Order no.
PSG socket bit	SW12mm

BERU Testers

Glow Plug Universal Rapid Tester

Secure glow plug diagnosis without removal



The problem

Function testing of the glow plug in the vehicle by visual inspection is very time-consuming.

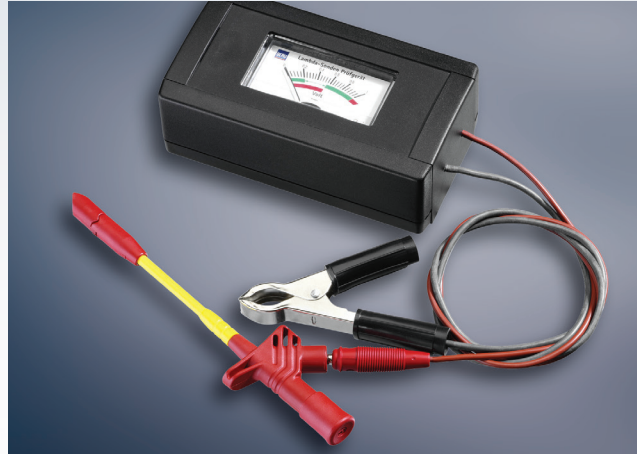
The Solution

Glow plugs (3.3 to 15 V) can be tested economically with the Glow Plug Universal Rapid Tester – individually, without removing, and without starting the engine. Suitable for testing of steel and ceramic glow plugs.

Article	Order no.
Glow Plug Universal Rapid Tester	GPT

Lambda sensor tester

Easy and fast testing of zirconium sensors



The problem

Higher fuel consumption, black smoke and acceleration judder – the cause is often a defective lambda sensor. However, it is often impossible to check the sensor immediately, because the test facility is not available.

The Solution

The lightweight and handy lambda sensor tester by BERU can test zirconium sensors quickly and easily with and without heating. The two test cables made of heat resistant silicone are quickly connected; the test is completed in just 2 to 3 minutes.

Article	Order no.
Lambda sensor tester	OST02

BERU assembly tools for connectors, ignition cables and injector holders

Range of cable crimping parts

Repairing ignition cable harnesses safely and professionally



The problem

Different crimping types are used in serial production in the automotive industry. This means that it is often impossible for the workshop to repair or completely replace ignition wiring harnesses safely and professionally.

The solution

The BERU crimping parts assortment in a practical box puts the workshop in the position to use the crimping techniques typically used in serial production. Included in each kit: one tube of spark plug grease that facilitates the installation and removal of ignition cable connectors.

Article	Order no.	Content
Complete cable crimping part assortment	ZAZ3KIT	
Crimping pliers	ZAZ3	1 pcs.
Insertion probe	EFS7	1 pcs.
Ratchet sleeves	RHB001	20 pcs.
Sawtooth sleeves	RHB002	25 pcs.
M3 threaded sleeves	RHB003	20 pcs.
SAE spark plug cable sleeves 90 °	RHB005	20 pcs.
SAE spark plug wire sleeves, straight	RHB004	20 pcs.
DIN distributor sleeves	RHB006	20 pcs.
Water protection cap	G1PK	10 pcs.
Water protection cap	GW11	10 pcs.
Water protection cap	GS7	10 pcs.
Spark plug connector grease (tube of 10 g)	ZKF01	1 pcs.

Crimping pliers ZAZ3

For secure installation of contact sleeves on ignition



Crimping pliers ZAZ3

The problem

In order to achieve a secure connection of the plug and ignition cable, it is important to apply the optimum pressure during crimping. Only then can the required tightening torques be achieved.

The solution

ZAZ 3 crimping pliers enable easy and professional repairs directly on the engine block – without replacing the wiring harness system – and the use of connectors with OE contacting.

Article	Order no.
Crimping pliers for M3 (Daimler-Chrysler, Porsche), sawtooth (VW, Audi, BMW) and ratchet sleeve (BMW)	ZAZ3



Ratchet sleeves



M3 threaded sleeves



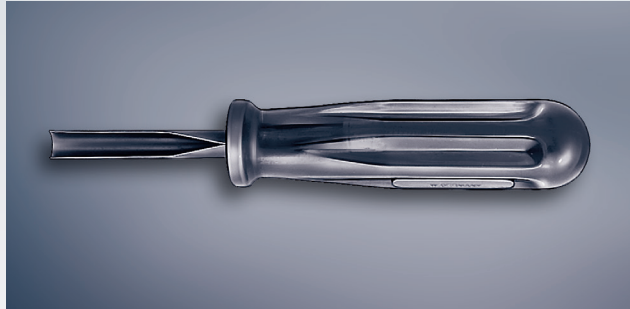
Sawtooth sleeves



Ratchet sleeves

Insertion and assembly probe

Ignition cables and plugs – safely installed and removed



The problem

Installing ignition cables with ratchet sleeves on the plug connector is time consuming and challenging.

The solution

The insertion and installation probe facilitates the assembly of the ignition cables with ratchet sleeve connectors on the connector. Also M3 ignition cables are easily installed and removed (BMW individual ignition cables/CopperCable).

Article	Order no.
Insertion and installation probe	EFS7

Injector holder socket

The installation tool for injector holder combinations



The problem

Often injector holders are not easily accessible in the engine compartment – and the use of inappropriate tool cause damage to the injector holder hex during removal attempts.

The solution

The special socket tool simplifies the installation and removal of the injector holder, without causing damage. Width across flats 27, drive 1/2".

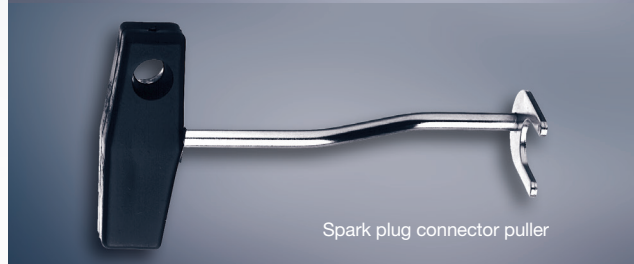
Article	Order no.
Injector holder socket	SN2712

Spark plug – pullers

Simplifying the removal of spark plugs



Spark plug connector pliers



Spark plug connector puller

The problem

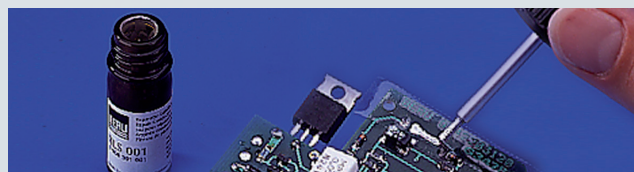
The connector is often removed from the cable with the engine hot and at a hard-to-reach installation location – this poses an acute threat to the ignition circuit. But if an inappropriate tool is used, the plug is often damaged after the event, and this can lead to high voltage spark-over.

The solution

Special puller tools – spark plug connector pliers and spark plug connector pullers – help to easily and smoothly pull off spark plug connectors.

Article	Order no.
Spark plug connector pliers	ZSA2
Spark plug connector puller	ZSA4

Conductive silver



The problem

Just because the rear window heating is defective, this doesn't automatically mean replacing the rear window.

The solution

Simply apply conductive silver to the „gap“ with the enclosed brush; let it dry – and you're done!

Article	Order no.
Conductive silver	RLS001

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