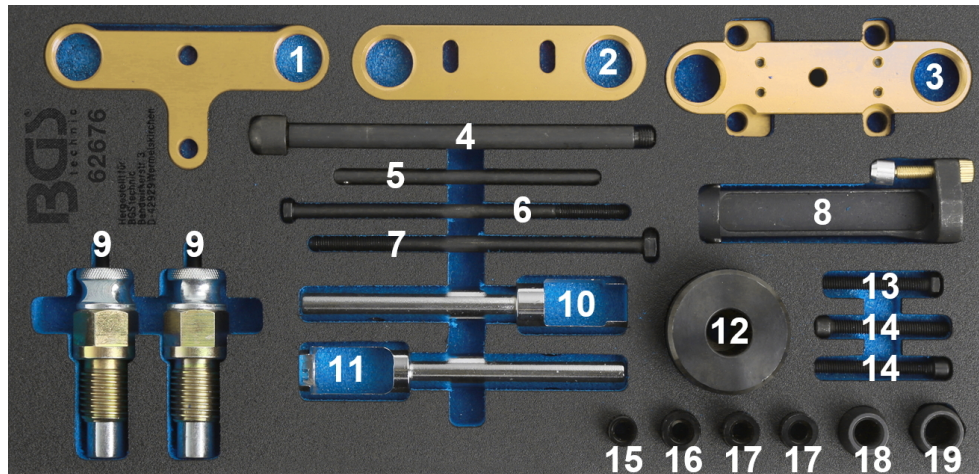


Petrol Injection Nozzle Tool Set, for BMW and Mercedes



TOOLS

- 1 Base plate, to be used as BMW OEM 130320
- 2 Base plate, to be used as BMW OEM 130270
- 3 Base plate, to be used as BMW OEM 2249115
- 4 Draw bolt, can be used with tool 8 and 12
- 5 Sliding handle, can be used with tool 10 and 11
- 6 Fastening screw
- 7 Fastening screw
- 8 Pulling claw, to be used as BMW OEM 130180
- 9 Draw bolt, can be used with tool 1, 2 and 3
- 10 Pulling claw, to be used as Mercedes Benz OEM 271589023300
- 11 Pulling claw, to be used as Mercedes Benz OEM 278589003300
- 12 Sliding hammer weight, can be used with tool 4 and 8
- 13 Fastening screw
- 14 Fastening screw
- 15 Spacer sleeve
- 16 Spacer sleeve
- 17 Spacer sleeve
- 18 Seal ring mounting tool, Ø 10.5 mm, to be used as BMW OEM 130195
- 19 Seal ring mounting tool, Ø 12.5 mm, to be used as BMW OEM 130195

UNPACKING

When unpacking, make sure that all parts are present.
Contact your dealer if parts are missing or damaged.

ATTENTION

Read the operating instructions and all safety instructions contained therein carefully before using the product. Use the product correctly, with care and only according to the intended purpose. Non-compliance of the safety instructions may lead to damage, personal injury and to termination of the warranty. Keep these instructions in a safe and dry location for future reference. Enclose the operating instructions when handing over the product to third-parties.

INTENDED USE

This tool serves the disassembly and assembly of petrol injector nozzles and is required for, e.g. the renewal of injectors and replacement of injector gaskets. The tools included are suitable for, e.g. the following vehicle models and engines:

VEHICLES

Manufacturer	Model	Year of manufacture
BMW	135is	2008 -
	335	2007 -
	335xi	2007 -
	535i	2008 -
	535xi	2008 -
	550i GT	2010 -
	750Li	2009 -
	750i	2009 -
	X3 3.0i	2007 -
	X5	2011 -
	X5 3.0i	2008 -
	X6	2008 -
	engines	
N14, N18, N20, N47, N54, N57, N55, N63		

Manufacturer	Model	Year of manufacture
Mercedes Benz	C Class	2007 -
	CLK / SLK	2007 -
	E Class	2007 -
	A / CLA / GLA 45 AMG	2013 -
	CL / CLS 63 AMG	2010 -
	E / G / GL 63 AMG	2011 -
	GLE 63 AMG	2015 -
	S / SL 63 AMG	2010 -
	SLK 55 AMG	2012 -
	Engines	
M133 / M152 / M157 / M270 / M271 / M274 / M276 / M278		

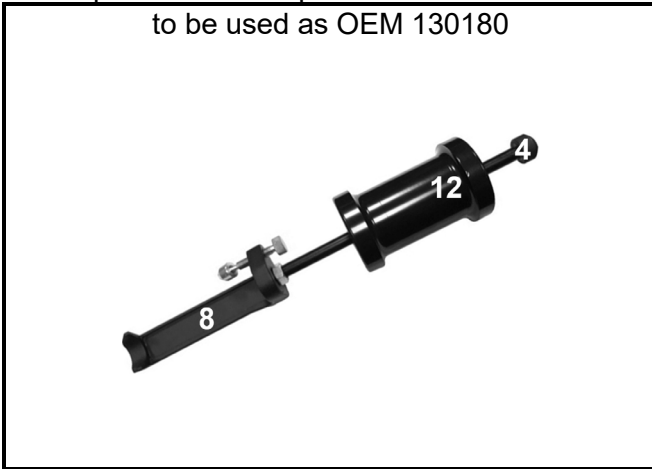
SAFETY NOTES

- Keep children and unauthorised persons away from the work area.
- Do not let any children play with the tool or its packaging.
- Make sure that the work area is sufficiently illuminated.
- Keep the work area clean, organised, dry and free from other materials.
- Do not allow untrained persons work with this tool set.
- Do not use the tool if parts are missing or damaged.
- Never place the tool on the vehicle battery. Danger of short circuit!
- Caution when working on the running engines. Loose clothing, tools and other objects may be caught by rotating parts and cause severe injuries.
- Be careful when working on hot engines because of the risk of burn injuries!
- If you remove the ignition key before repairing, you can prevent the engine from being started accidentally.
- This manual serves as a brief guide and does not replace a workshop manual.
- Please obtain technical data such as technical values, notes on disassembly and assembly from a vehicle-specific service literature.

TOOL PREPARATION

Apply a coat of oil to the thread and application surface of the draw bolt in order to keep the friction as low as possible and to protect the tool.

to be used as OEM 130180



to be used as OEM 130270



to be used as OEM 130320



to be used as OEM 2249115



BMW engine N63 / S63

Fig.1

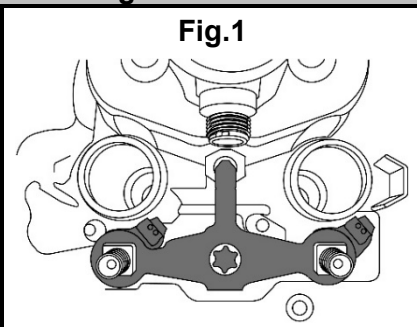


Fig.2

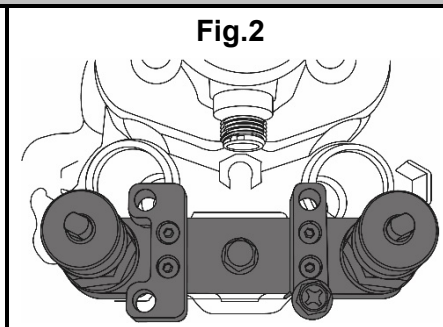
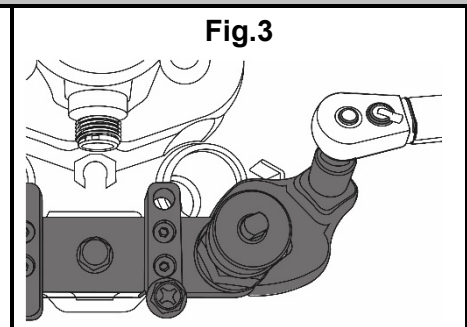


Fig.3



BMW engine N55

Fig.1

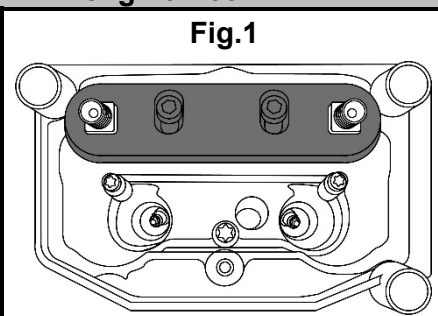


Fig.2

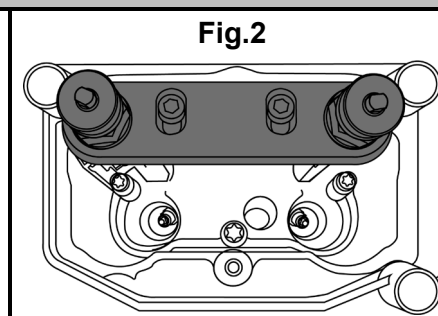
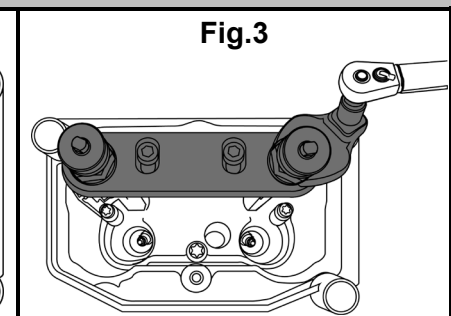
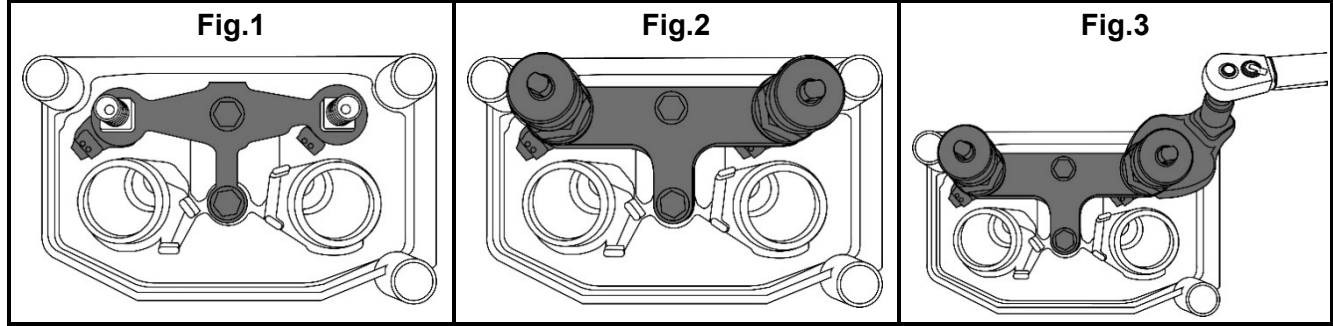


Fig.3



BMW engine N20 / N26 / N55



USING on BMW engines N20 / N26 / N55 / N63 / S63

1. Loosen and remove the screw of the original holding bridge, take out the holding bridge (Fig. 1).
2. Mount the injector tool without draw bolt with spacer sleeves and screws hand-tight.
3. Align the tool, insert the draw bolt and secure to the injectors (Fig. 2).
4. Tighten the fastening screws with the spanner.
5. Pre-tension the draw bolt by hand.
6. For pulling out, use a torque wrench and set this clockwise to the torque value specified by the manufacturer.
7. With the torque wrench, use a 24 mm crowfoot spanner attachment and place this on the hexagon head of the draw bolt (Fig. 3).
8. Rotate the torque wrench clockwise until the injector has been pulled out.
9. Attention: if the torque wrench clicks when removing the injector, the injector must be replaced.
10. Loosen the fastening screws and pull out the complete tool with screws, draw bolt and the injector.

BMW engine N43 / N53 / N54

1. Connect the sliding hammer weight (12) with draw bolt (4) to the pulling claw (8).
2. Place the pulling claw (8) onto the injector.
3. By actuating the sliding hammer, pull the injector out of the cylinder head.

