

DIESEL INJECTOR EXTRACTOR MASTER KIT BFT1640



GENERAL

These tools are designed for removing different types of injectors. This set includes internal hexagon bits as well as deep open profile sockets which are used to dismantle injectors. Plug adaptors also supplied for attaching to the sliding hammer.

Please read these instructions carefully taking careful notice of the operation requirements, warnings and cautions. Use the product correctly and with care for the purpose in which it is intended. Failure to do so may cause damage and/or personal injury and will invalidate the warranty. Please keep instructions safe for future use.

SAFETY INSTRUCTIONS

- Ensure Health and Safety, local authority and general workshop practice regulations are adhered to when using tools.
- Always use caution when working around fuel systems. The fuel in the fuel rail may be pressurised even if the engine is not running.
- These instructions are provided as a guide only.
- Always refer to the vehicle manufacturer's service instructions, or a proprietary manual, to establish the current procedure and data, also any warnings or cautions particular to the vehicle.
- DO NOT use the set if any parts are missing or damaged.
- DO NOT use this tool for any purpose other than that for which it is designed.
- Switch off vehicle's ignition and disconnect the battery before commencing work under the bonnet.
- Never lay tools on the vehicle's battery. This may short the terminals together, causing harm to yourself, the tools, or the battery.
- Operate in a well ventilated area. Do not inhale fuel vapours.
- Wear approved eye protection.
- Wear suitable clothing to avoid snagging. Do not wear jewellery and tie back long hair.
- Keep children and other unauthorised persons away from the working area.
- Keep yourself, tools, and test equipment away from hot engine parts.
- Always keep a fire extinguisher close by, that is suitable for fuel electrical or chemical fires.
- NEVER smoke or have open flames near vehicle.
- Always relieve fuel pressure before disconnecting fuel lines from injectors.
- Use a rag to cover fuel line fittings, when connecting or disconnecting fuel lines. Avoid contact with fuel.
- Clean up all fuel spills immediately and dispose of all rags properly.
- Maintain the tool components in good and clean condition for best and safest performance.
- When work on the vehicle is finished, ensure all connections on vehicle are restored, and that there are no tools left in the engine bay.
- Replace tools in the carrying case and store in a safe, dry, childproof location.

TOOLS

This tool set includes also the following components:

3 different slide hammer 1,6 Kg x 160 mm - 2,7 Kg x 460 mm - 5,1 Kg x 600 mm

Pulling claws with fork opening, 13.7 x 18 mm, 105 mm long - 12.7 x 19 mm, 130 mm long

Slotted 6-pt 1/2" sockets, 100 mm long, sizes 25 - 27 - 28 - 29 - 30 mm

Injector extractor in sleeve design with supporting shells, OD 35 mm, ID 29 mm

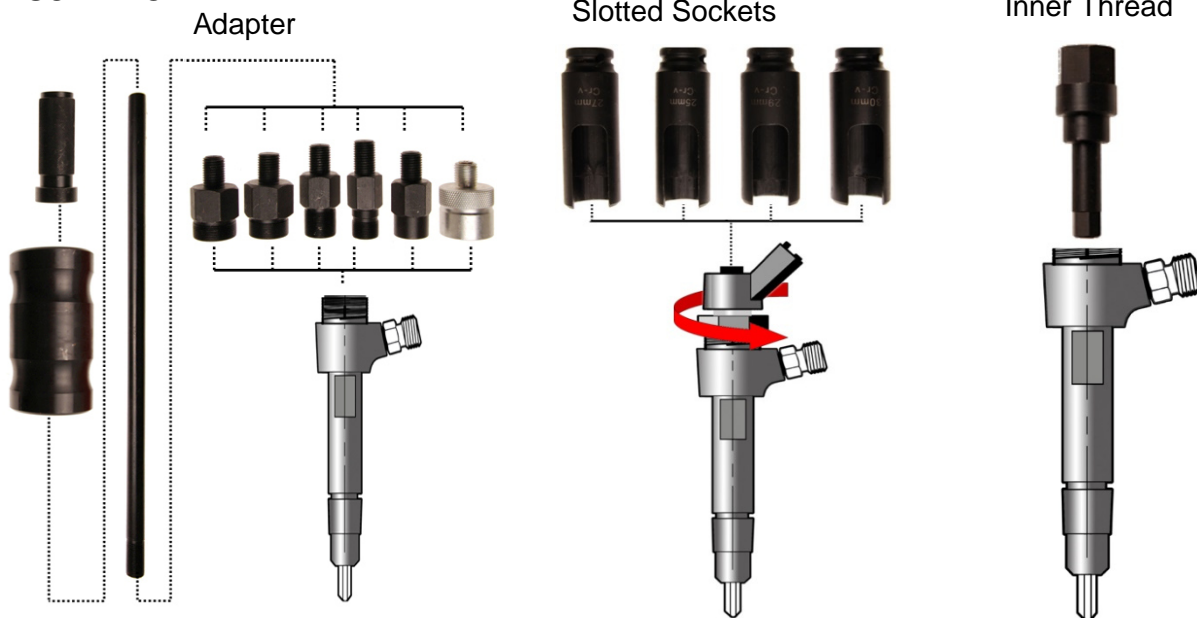
Spindle M17 x 1.0

Pulling adapter with external thread, M27 x 1.0 (3pcs) and M25 x 1.0

Pulling adapter with internal thread, M27 x 1.0 (3pcs)

Sliding hammer adapter for inner, outer and claw extractor

DESCRIPTION



NOTE: The technique required for removal of the injector will depend on which system is fitted to the vehicle. Always use an external adaptor first if possible. If by using reasonable force the injector cannot be removed, use an internal adaptor. Before working on the fuel system, make sure that the fuel system is NOT pressurised. Refer to the manufacturer's instruction manual on how to de-pressurise the system. Disconnect the injector wires and connections as per the manufacturer's instructions. Remove any carbon build up from around the injector. Remove the electrical unit from the injector.

OPERATION

Use of external adaptor

Remove the electrical unit. (see **A**)

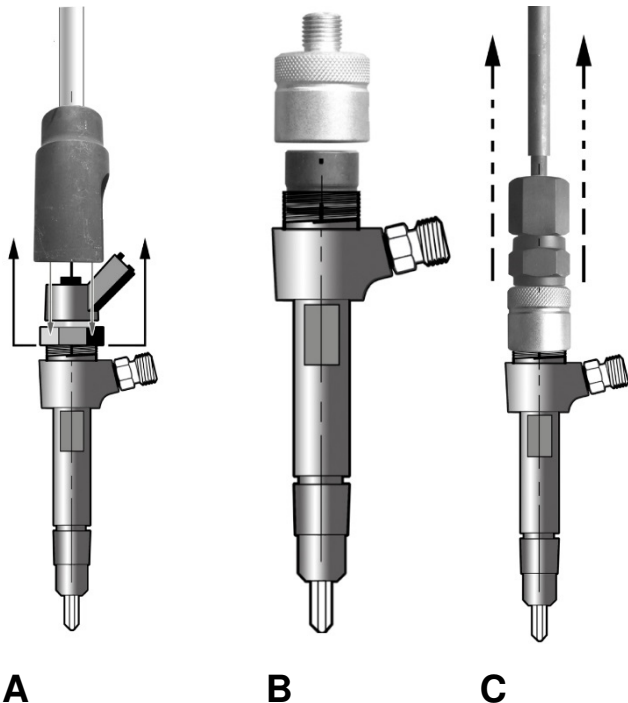
Position the adapter with outside thread on top of the injector (see **B**)

Connect sliding hammer to the adapter with outside thread. (see **C**)

The injector can be removed by using reasonable force on the sliding hammer.

When an injector has been removed, it is recommended that only a new or refurbished injector is fitted.

Follow manufacturers fitting and safety instructions.



Use of internal adaptor

Remove the electrical unit

Insert and turn anti-clockwise a special hex socket to remove the inner sleeve (see **D**).

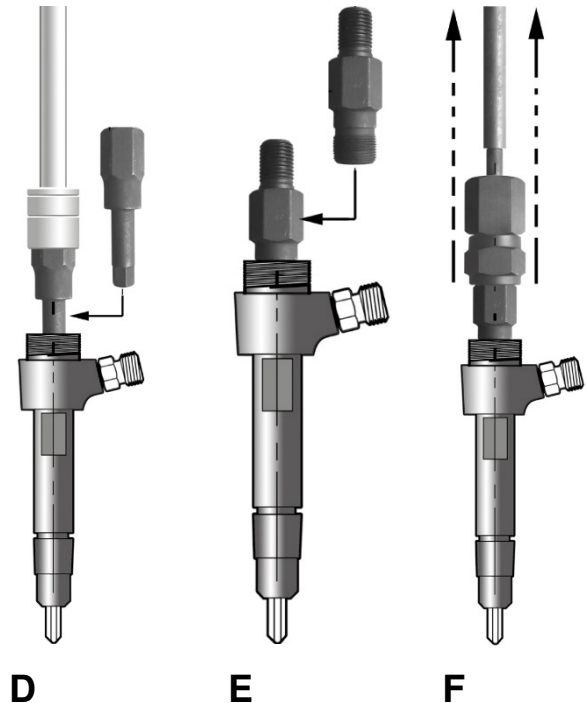
Screw the appropriate internal adaptor (5) into the threads of the injector and tighten with a suitable spanner (see **E**).

Screw the slide hammer onto the adaptor.

The injector can now be removed using reasonable force on the slide hammer (see **F**). Be prepared for the sudden release of the injector from the cylinder head.

When an injector has been removed, it is recommended that only a new or refurbished injector is fitted.

Follow manufacturers fitting and safety instructions.



NOTE:

To protect the threads all adaptors must be fixed tightened.