## Warning

- · Always read and follow the manufacturers instructions
- · Always wear gloves, safety goggles and safety boots
- Always tighten components to the manufacturers recommended torque settings
- Where injectors are badly sieved due to corrosion/carbon build up it is advised that the injectors are soaked overnight in a cleaning agent to soften the build up.
- Cleanliness is essential, dirt and carbon can easily fall into the cylinder when the injector is removed.

5128\_Instructions\_V3

## Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: +44 (0) 1926 818186. Normal wear and tear are excluded as are consumable items and abuse.



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# LASER®

5128

# **Dual Connection Adaptor**Bosch Injectors



# **Diesel Injector Removal Set**

Use of this kit requires the dismantling of the Injector tops.

Common rail injection systems work at very high internal pressures and are extremely accurate fuel metering valves.

For this reason The Tool Connection Limited strongly recommend these injectors are reassembled by qualified specialists equipped with the necessary test and metering equipment.

Many modern diesel engines suffer from injector "blow-by"; this is where combustion gasses start to escape past the injector seals. Blow-by results in a build up of hard carbon deposits that makes the removal of the injector very difficult.

As a result of this it has been necessary to develop ever more aggressive methods to remove the injectors when they are stuck. Unfortunately the injector bodies are some times not strong enough to survive these aggressive methods of removal.

In order to significantly reduce the potential for damage to the injector Laser have developed a 2 piece solution to ensure the stresses of injector pulling are spread across as much of the injector body as is possible so as not to put excessive stress on just one threaded area.

This set is a professional 2 piece kit designed assist the removal of stubborn Bosch common rail diesel injectors using a slide hammer (4811 slide hammer available separately).

NB: For removal of the injector internals a special 10mm taper proof hex bit is required. Laser part number 4761.

Applications: Bosch Common Rail Diesel Injectors

### Preparation

- Remove fuel and engine components required to access the injectors.
- Clean the areas around the injectors, if necessary soak the area in a suitable cleaning agent to help soften significant carbon/corrosion build up.





Outer adaptor

Inner adaptor

## Instruction

- Remove the electrical connections from the injectors.
- Remove the low and high pressure fuel pipes from the injectors

(NB the injection system manufacturers recommend the replacement of metal high pressure injection pipes if removed, see manufacturers' recommendations)

- Many Common Rail injection systems have coded injectors, it is advised a note is made of the injector numbers and the cylinders they came from.
- Remove the injector solenoid (Sockets Part No 4843 available separately)
- Remove the internal components of the injector.

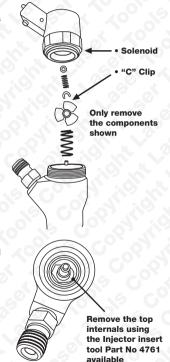
Bosch – press down on the internal components and slide out the small central "C" clip, lift out the internal components (these components are very small so great care should be exercised not to loose or mix up these components)

- Using the Part No 4761 (available separately) or similar remove the top injector internal components.
  Do not remove valve seat.
- Remove the injector fixings/clamps.
- Thread the internal adaptor into the injector. It is recommended that this adaptor is tightened briefly using an air impact wrench as the vibration will help loosen the injector. Stop immediately if the injector starts to spin as the injector HP connection port could foul on the rocker box etc. tighten to 60nm.
- Fit the outer adaptor over the top of the inner adaptor and tighten to no more than 50Nm.
- Thread the 4811 or similar slide hammer into the internal thread of the internal adaptor and tighten the lock nut.
- The injector is now ready for removal.

Additional information:

Due to the length of the slide hammer it may be necessary to remove the vehicles bonnet to allow access.

(For example Citroen C8/Peugeot 807 HDi diesels)



separately