

Precautions

- Eye and hand protection must be worn while operating the tester.
- Refer to the manufacturer's technical service documentation before starting the testing procedure and pay particular care to the depressurisation procedure.
- Seal fuel line pipes and fittings when disconnecting fuel lines. Avoid contact with fuel.
- Clean up fuel spills immediately and dispose of all soiled rags as per local authority guidelines.
- Do not place yourself or another person in a position in line with the injector being tested. Very high pressures are involved which could potentially cause serious injury.

Warranty

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool's use and while all attention is given to the accuracy of the data no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.



Safety First. Be Protected.

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[®]

4708

Diesel Injector Tester

Instructions



4708 - Diesel Injector Tester

Tests opening pressure, leakage and spray pattern.

Enables the testing of injectors under pressure. Gauge reads both PSI and Bar. Transparent plastic reservoir includes filter. Supplied with two connecting pipes, M12 1.5 and M14 1.5. 89mm gauge (0 – 8700psi, 0 – 600 Bar).

Suitable for pressure-activated injectors. With the addition of an electronic switching device (not supplied) it can be used for testing common-rail type injectors.



Instructions

Note: Before using the tester, make sure you have read and understood the safety precautions below. **We recommend that the tester is bolted down to the workbench for ease of use and safety.**

1. Depressurise the vehicle's fuel system as described in the manufacturer's technical service documentation. For example, on some vehicles this involves deactivating the electric fuel pump(s) and running the engine until it stops. Be aware that there may be more than one pump.
2. Remove the injector(s) to be tested, following the procedure in the manufacturer's technical service documentation.
3. Fill the 4708 tester's reservoir with an appropriate diesel injector test fluid such as Shell V-Oel 1404 or Castrol Calibration Oil 4113 and replace the lid.
4. During testing, fluid will be sprayed from the injector, therefore have a suitable receptacle placed to capture the spray. Do not point the nozzle of the injector towards yourself or anyone else.
5. Pumping the lever on the tester will build up pressure to the injector. Once some pressure has built up, check to see if the pressure drops, or there are obvious leaks. There could be a leak between the supplied pipe and the injector or tester. Check and tighten the connections as necessary. If there is still a pressure drop after checking and tightening the connections, the injector nozzle may be leaking.
6. Continue to pump the lever and observe the pressure at which the injector nozzle opens; compare this to the figure detailed in the manufacturer's technical service documentation.
7. Upon nozzle opening, compare the spray pattern/atomisation to the manufacturer's described correct spray pattern.
8. If required, carry out any repairs or remedial work to the injector as detailed in the manufacturer's technical service documentation, before re-testing. Note: when disconnection the injector, be aware that care needs to be taken to depressurise.

Testing Different Types of Equipment

The Laser 4708 Tester can be used for testing other sorts of equipment, where high pressure is required. Always follow the equipment manufacturer's recommendations and safety instructions.