Instructions for use

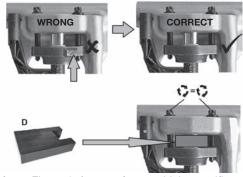
Refitting injector:

Refer to Figure 5, when refitting the injectors they should first be fitted to the fuel rail. Component (D) is used to ensure the 2 injector bolts are correctly and evenly tightened to avoid damage to the injector and rail.

The injectors and the injector holders must both be mounted in the correct orientation as shown.

Use component (D) as shown to ensure the 2 fixing screws are evenly tightened. The injectors should still be able to rotate in relation to the rail.

Figure 5.



Refer to Figure 6, (note: refer to vehicle specific technical data to check torque settings) fit the injector and rail assembly as shown and tight the rail fixing bolts in the sequence shown 180° at a time. Check the rail is sitting evenly on the cylinder head. Refer to Figure 6 for an example of the stages involved in torqueing the rail down.

WARNING: THE TOOLCONNECTION LTD. CAN NOT BE HELD RESPONSIBLE FOR USE OF INCORRECT TORQUE SEQUENCE. PLEASE REFER TO MODEL SPECIFIC OEM DATA.

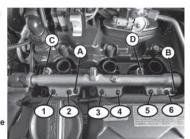
Figure 6

Stage 1 = A, B = 180° degrees alternating until rail sits level on the cylinder head. Stage 2 = C, D as above. Stage 3 = A, B, C, D = 5 Nm

Stage 4 = in pairs 1&2, 3&4, 5&6 + 90° Stage 5 = set torque wrench to 5 Nm and tighten in pairs 1&2, 3&4, 5&6 + 90° at time untill all reach 5 Nm. Stage 6 = 1&2, 3&4, 5&6 + 90°

Stage 7 = Loosen A, B, C, D and re-torque to 5 Nm

Stage 8 = Tighten A, B, C, D + 90°



7335 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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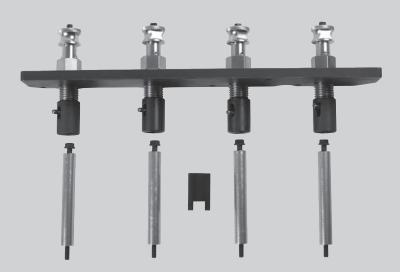
Kineton Road, Southam, Warwickshire CV47 0DR T +44 (0) 1926 815000 F +44 (0) 1926 815888 info@toolconnection.co.uk www.toolconnection.co.uk



7335

LASER®

Fuel Injector Puller Kit BMW & Mini Petrol Engines B38/B48



The 7335 injector puller kit is designed to extract and fit the plastic bodied petrol injectors used on some BMW and Mini engines.

In order to perform engine timing, engine repair and maintenance on these engines it is often necessary to remove the cam covers which requires the removal of the injectors first.

The construction of the injectors dictates that they be removed in a particular way to avoid damage. The 7335 is equivalent to the recommended OEM tools and therefore designed specifically to remove the injectors in a controlled manner while significantly reducing the chance of damaging the injectors.

For replacement of injector seals use 7335 in conjunction with Laser 7085 Fuel injector Seal Remover and Installer kit.

Note: 7335 must be used with a torque wrench.

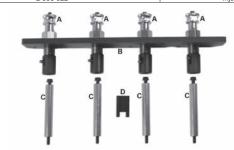
www.lasertools.co.uk

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7335 - Fuel Injector Puller Kit Item OEM Description A B 2 358 417 Injector Removal and Installation Kit C D 2 358 022 Injector Fitting Setting Gauge



The following instructions are for guidance only. Please refer to OEM derived data such as the vehicles manufactures own data or Autodata. The use of this kit is purely down to the user's discretion and The Tool Connection Ltd cannot be held responsible for any damage caused what so ever.

SAFETY WARNING PLEASE READ

- Personal protection and safety equipment must be used at all times
- Remove damaged tools from use
- Store in a dry place when not in use

Warning: Only to be used with hand tools, ensure all OEM torque settings are observed.

Preparation

- Remove engine bay covers.
- Intake air filter body and pipe work.
- Remove Wiring for injectors.
- · Remove ignition coils and wiring.
- Removal main fuel rail (keep clean and sealed).

Instructions:

Component A-B-C – Injector Removal and Installation Kit

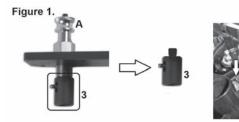
Components A-B-C are used to pull the fuel injectors out in a controlled manner. If the Torque figure quoted for removal is exceeded the injector/s should be replaced. This is due to internal damage occurring to the injector.

Max: Tensile Force 2000 N.

Max: Twisting force = Torsional force 6 Nm.

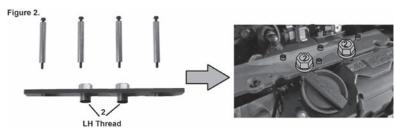
Please refer to vehicle specific OEM Data.

Refer to figure 1, remove the fixture 3 from the injector pulling tools and fit to the injector/s to be removed. Ensure the lever of fixture 3 is in the downward position when it is locked on to the injector as shown.

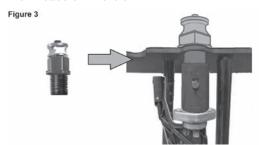


Instructions for use

Refer to Figure 2, assemble the puller plate (B) and the puller legs (C) on to the engine as shown and fit the left hand threaded injector puller component.

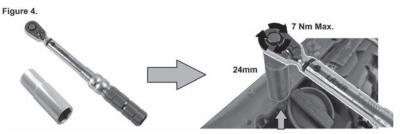


Refer to Figure 3, re-assemble the central puller components of (A) ensuring full contact on the threads of fixture 3.



Refer to Figure 4, using a suitable torque wrench and socket (24mm Deep Socket), set the torque wrench to 7 Nm (this will produce a pulling (torsional) force of 2000 N on the injector). Using the torque wrench turn the top puller nut

WARNING: - if the torque wrench clicks it indicates more than 7Nm is required to remove the injector which means the 2000 N pull has been exceeded and the injector will need to be replaced.



NOTE: Once removed use Laser 7085 kit to remove and replace the injector seals – available separately.

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