

BMW FUEL INJECTOR INSTALL & REMOVAL TOOL (N20,N55)



Introduction:

Special designed to install and remove the injector in N20, and new N55 engine.

Description	OEM
Fuel Injector Install & Removal Tool	13 0 320

Application:

BMW: N20, N55

Instruction:

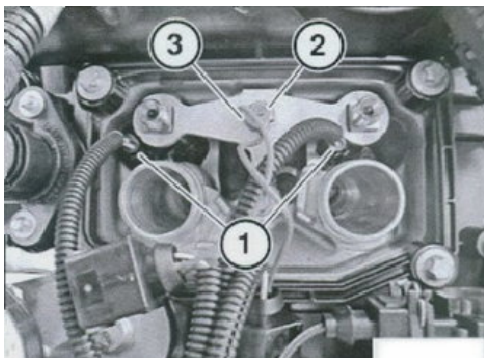
Prepare to work

- Disconnect the negative battery cable (stitches due to a short circuit when there is a fire hazard)
- Removing the corresponding cylinder ignition coil
- Removing the corresponding cylinder high-pressure pipeline

1. The following description applies to all the injection means of the cylinder 1-6.

- Loosen and remove the injector plugs (1)
- Loosen the nut
- Tightening torque: 12 90 5AZ
- Remove the ground wire (3)

Fig.1

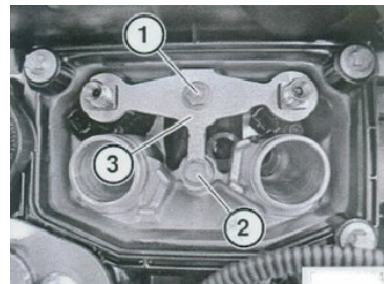


2. **Caution:** Loosen the bolts (2) first, then loosen the bolts (1), otherwise the clamping device may tilt.

Removing the pressing set (3). Pull up and remove the nozzle from the cylinder head.

If you are removing more than one nozzle, you must ensure that each injector reinstalled into its original mounting position (cylinder).

Fig.2

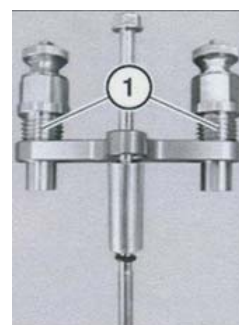


3. Fixed injector work steps:

Use special tools when disassembling the fixed nozzle 13 0 320, Pull the thread using a special tool (1) before the slightly oiled and fully spin out.

Caution: Pull the thread (1) is a left-hand thread.

Fig.3

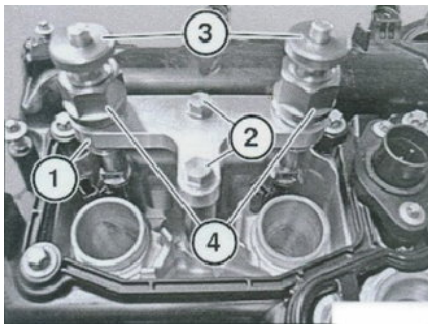


4. The special tool (1) 13 0 320 attached to the nozzle guide hole. The bolt (2) by a certain pitch is mounted to the nozzle guide hole. Pull screwed into threads (4) until the threaded sleeve (3) screwed to the injector. The threaded sleeve (3) screwed onto the nozzle and tighten.

Tighten the bolts (2).

Tightening torque: 13 53 13AZ

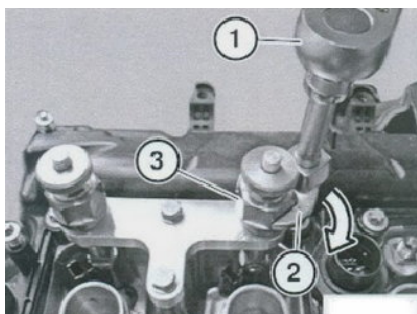
Fig.4



5. **Caution:** Torque wrenches (1) the right to adjust the rotation to 5 Nm. Special tools 13 0 320 corresponds to the maximum 2000 Newton. If the nozzle is pulled out torque wrench rattle, you must update the injector.

The torque wrench (1) and special tools (2) 00 9 170 special tools to install 13 0 320 hexagonal segments (3). Rotary torque wrench (1) in a clockwise direction until the nozzle is pulled out.

Fig.5



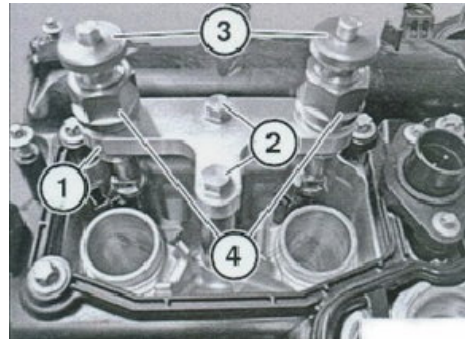
6. Injector nozzle is inserted in the hole.

The special tool (1) 13 0 320 attached to the nozzle guide hole. The bolt (2) by a certain pitch is mounted to the nozzle guide hole. Pull screwed into threads (4) until the threaded sleeve (3) screwed to the injector. The threaded sleeve (3) screwed onto the nozzle and tighten.

Tightening the bolt (2).

Tightening torque: 13 53 13AZ

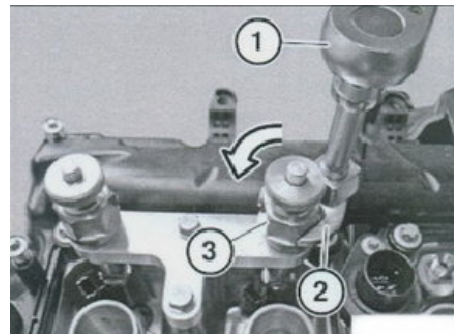
Fig.6



7. **Caution:** Torque wrenches (1) the right to adjust the rotation to 2 Nm.

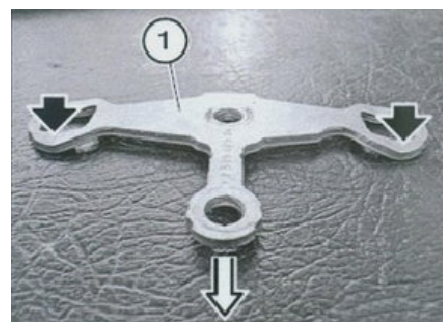
The torque wrench (1) and special tools (2) 00 9 170 special tools to install 13 0 320 hexagonal segments (3). The (1) counter-clockwise until it reaches 2 Nm torque wrench.

Fig.7



8. Installation: Down installation clamping device with bow arc (black arrow) (1).

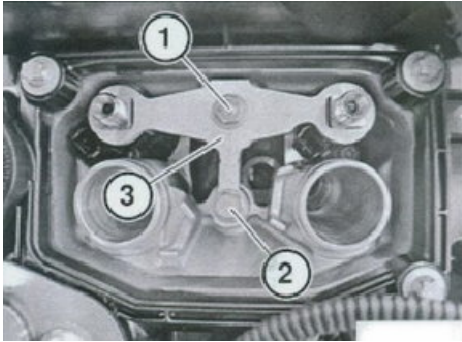
Fig.8



9. Pressing set installed on the nozzle (3).

Caution: The bolt (1) slightly tightened. Only the bolts (2) into several pitch. Do not close to the bolt head (2), or else the pressing set (3) may tilt.

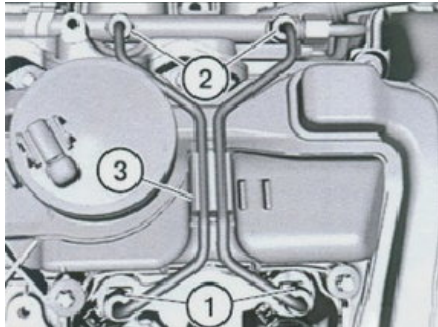
Fig.9



10. The high-pressure piping installed on the fuel rail and injectors. Only slightly tighten the mounting nut (1) and (2) at the same time.

Reinstall the shock absorber pipe (3).

Fig.10



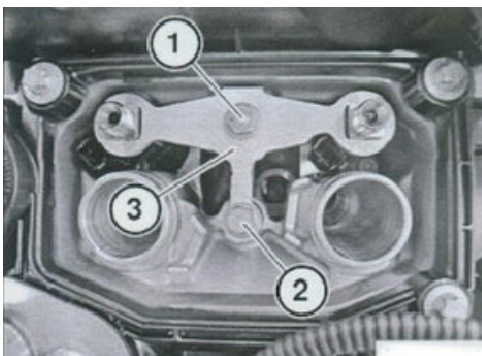
11. Tighten the bolts (1) first.

Tightening torque: 13 53 6AZ

Then tighten the screws (2).

Tightening torque: 13 53 6AZ

Fig.11



12. Tighten the injector (1) high-pressure pipeline.

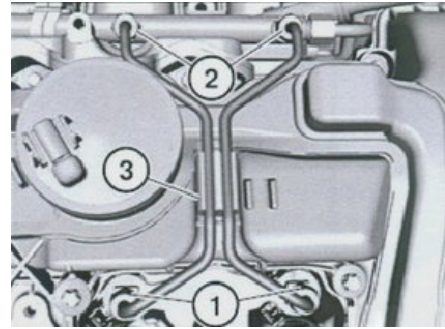
Tightening torque: 13 53 9AZ

Then tighten the high-pressure fuel rail lines tight on (2).

Tightening torque: 13 53 9AZ

Installation: Reinstall the shock absorber pipe (3).

Fig.12



13. Clean the spark plug hole. Assembly engine.

Check the tightness of the fuel system. Functional checks for DME.