

Service Information

Cylinder Head

The combination of exhaust turbocharger, Valvetronic, and direct fuel injection is referred to as Turbo-Valvetronic-Direct-Injection (TVDI).

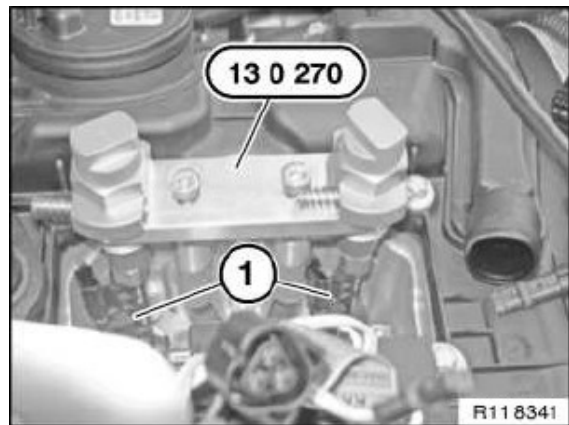
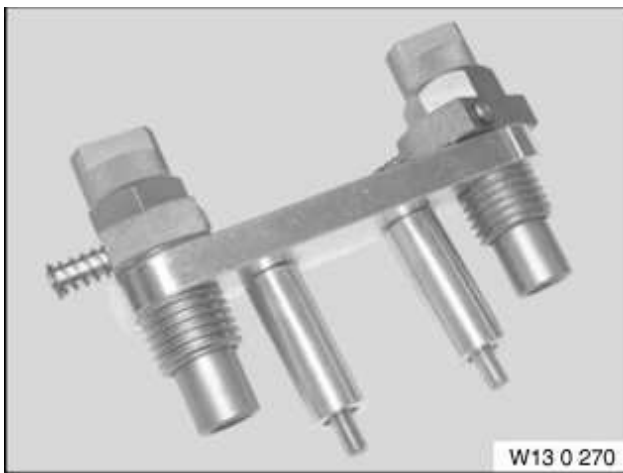
Cylinder Head Cover

Note: If a customer complains about high oil consumption and oil is discovered in the turbocharger, it should not be immediately assumed that the turbocharger is defective.

If the oil is present in the fresh air pipe after the introduction of the blow-by gasses then the entire engine should be checked for leaks. Defective gaskets or crankshaft seals may be the cause of excessively high blow-by gas output.

Fuel Injectors

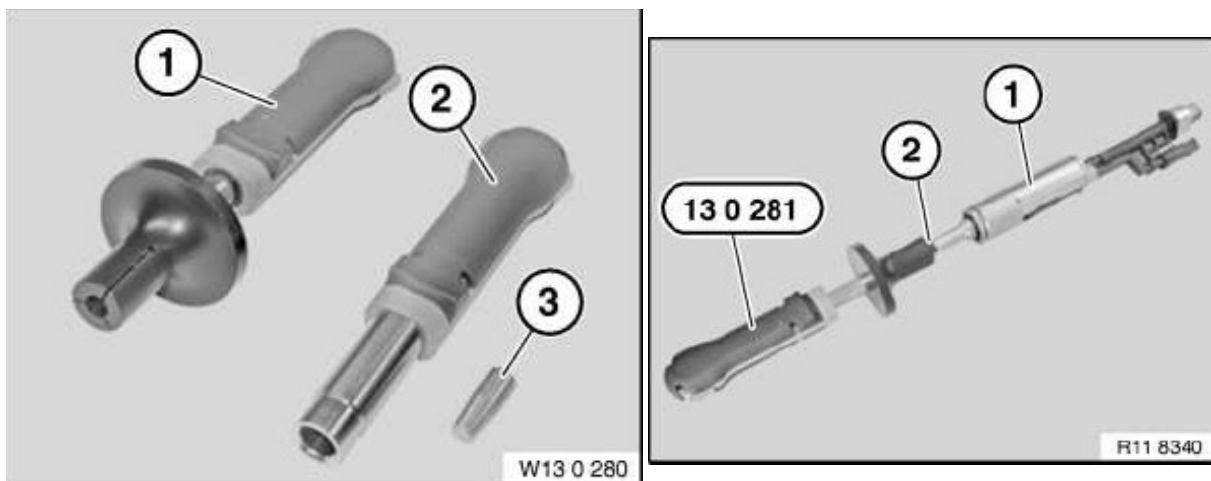
In order to remove the N55 fuel injectors from the cylinder head, special tool #13 0 270 must be utilized. Failure to use the special tool will result in damage to the injectors.



Note: Do not open the high pressure fuel injection system if the coolant temperature is above 40°C . The residual pressure in the high pressure fuel system could cause bodily injury.

Note: It is essential to follow the repair instructions and observe the utmost cleanliness when working on the high pressure fuel system. Even minute soiling or damage at the connections of the high pressure lines and cause leaks.

There is a new tool # 13 0 280 that must be used when replacing the PTFE seals on the tips of the solenoid valve injectors. As with piezoelectric injectors these seals must be replaced if and when the injectors are being re-installed.



Ignition Coils

The ignition coils of the N55 have been redesigned for better rigidity and durability. Particular care must be taken when working on the fuel system to ensure that the ignition coils are not wet with fuel. The resistance of the silicone material is greatly reduced by contact with fuel. This could compromise the coils insulation and result in arcking at the top of the spark plug causing a misfire.

- The ignition coils must be removed before working on the fuel system.
- When installing new solenoid valve fuel injectors utmost cleanliness must be observed.
- After removing the ignition coils use a rag to prevent fuel from entering the spark plug well.
- Ignition coils that have been saturated with fuel must be replaced.