

**Haynes**
shows you how

BMW 3-Series 320i & 320xi (12-14), 325i, 325xi, 330i & 330xi (06) & 328i & 328xi (07-14) Haynes Online Manual

13 Exhaust module (turbocharger) – removal and installation

Removal

Note:

The exhaust module consists of the exhaust manifold and exhaust turbocharger which must be removed and installed as an assembly.

- 1 Disconnect the negative battery cable (see [Chapter 5, Section 3](#)).
- 2 Remove the engine cover by lifting the front of the cover up and pulling it forwards.
- 3 Remove the strut tower crossbrace plastic push-pins and bolts then remove the brace.
- 4 Remove the sound insulator plastic retainers and lift the insulator off of the engine.
- 5 Raise the vehicle and support it securely on jackstands, then remove the lower splash shield from under the vehicle.
- 6 Drain the engine oil and engine coolant (see [chapter 1](#)).
- 7 Remove the heat shield mounting bolts and heat shield from the exhaust manifold.
- 8 Disconnect the exhaust system from the turbocharger.
- 9 Disconnect the right side pipe of the charge air cooler (see [Section 14](#)).
- 10 Disconnect the vacuum line to the wastegate then disconnect the electrical connector to the blow-off valve.
- 12 Using a pair of needle-nose pliers, pull the wastegate linkage wire retaining clip down and out, then disconnect the linkage.
- 13 Remove the vacuum unit Torx head mounting screws and remove the vacuum unit.

14 Remove the harness from the harness routing brackets then remove the bracket bolts and brackets.

15 Remove the turbocharger support bracket bolts and support.

16 Remove the oil return pipe mounting bolts, then disconnect the pipe from the turbocharger. Be sure to replace the gasket.

17 Locate the mounting stud (across from the banjo bolt on the turbocharger) then remove the nut.

18 Remove the oil return line bolt, then pull the line from the cylinder block. Be sure to replace the O-ring.

19 Remove the coolant supply line mounting bolt and separate the coolant lines. Be sure to replace the O-ring.

20 Remove the oil feed line bolt from the rear of the cylinder block then pull the line from the cylinder block. Be sure to replace the sealing ring.

21 Remove the exhaust module mounting nuts, starting from the center, working in a circular pattern until all the bolts are removed, then remove the assembly. Always replace the mounting nuts.

Note:

Once the module assembly is removed the remaining oil supply line can be accessed and removed if necessary. Make sure to replace the O-ring.

Installation

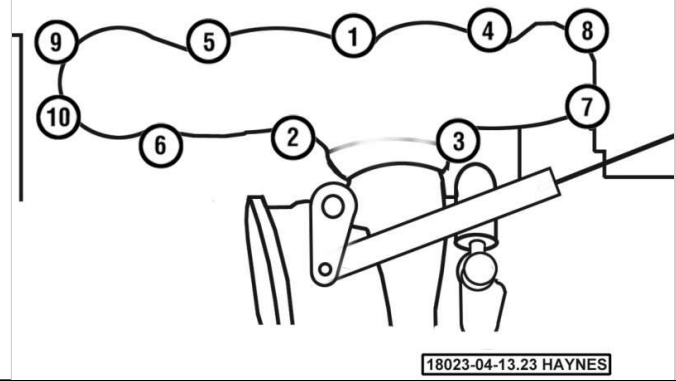
22 Replace all of the graphite seal on the cylinder head, then place the module assembly onto the cylinder head and install two bolts hand tight to hold the assembly in place.

Caution:

The exhaust module assembly must be installed “stress free” make sure unit sits flush with the cylinder head before tightening any of the mounting bolts, or damage to the unit may occur.

23 Install the mounting nuts and tighten in sequence (see illustration) to the torque listed in [this Chapter's Specifications](#) .

13.23 Exhaust module tightening sequence – 2.0L engines



24 Installation is the reverse of removal.

© 2024 Haynes Manuals, Inc. Contact us