



Haynes
shows you how

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

4 Valve cover - removal and installation

Note:

The camshaft cover is made from magnesium alloy. Do not install steel bolts/studs into the cover, or excessive corrosion will result.

Removal

- 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 Remove the intake silencer (see [chapter 4](#)).
- 6 Loosen the clamps to the vent lines then disconnect the vent line from the valve cover.
- 7 Disconnect the electrical connectors to the variable camshaft control actuators, then remove the bolts and actuators from the valve cover (see [Chapter 6](#)).
- 8 Disconnect the fuel supply line quick-connect fitting (see [Chapter 4](#)), then remove the fuel line retaining brackets and remove the supply line to the fuel rail.
- 9 Remove and the high-pressure fuel pump line to the fuel rail, then remove the fuel rail and high-pressure fuel pump (see [Chapter 4](#)).
- 10 Remove the vacuum pump (see [Chapter 9](#)).

Note:

Discard the high-pressure fuel line – a new one must be used during installation.

11 Unclip the oxygen sensor harness connector from the corner of the valve cover and place the harness out of the way.

12 Remove the servo flange bolts.

13 On N20 engine models, disconnect the electrical connector to the electro-pneumatic pressure converter then remove the mounting screws and place the converter out of the way.

14 Remove the ignition coils (see [Chapter 5](#)).

15 Remove the electrical harness cover then disconnect the positive battery cable nut and move the cable out of the way.

16 Remove the bolts in the reverse order of the tightening sequence (see **illustration 4.20**) and lift off the valve cover. Replace the gaskets. Discard the bolts - new ones must be installed.

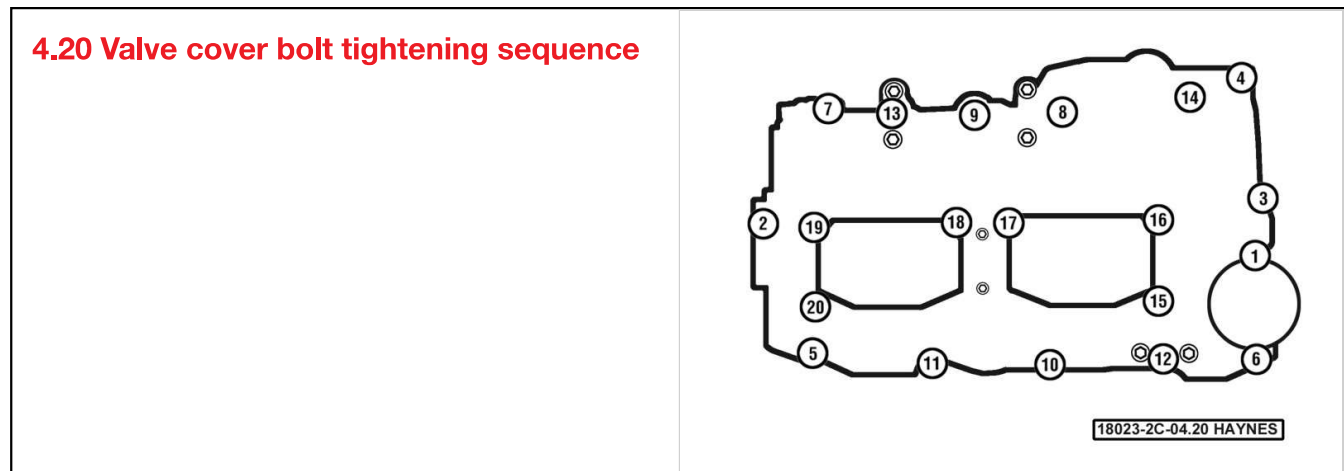
Installation

17 Before installing the valve cover, replace all the seals and gaskets.

18 Clean the gasket/sealing faces of the cylinder head and the valve cover.

19 Lay the valve cover in position, taking care not to disturb the gaskets.

20 Install the new valve cover bolts, then tighten them evenly in sequence (see **illustration**) to the torque listed in [this Chapter's Specifications](#) .



21 The remainder of installation is the reverse of removal.