

**Haynes**
shows you how

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

12 High-pressure fuel pump (2.0L engine) – removal and installation

Warning:

Gasoline is extremely flammable. See Fuel system warnings in Section 1 .

Warning:

Fuel pressure system is under extremely high pressure and cause skin and eye injuries. When removing the high-pressure fuel pump, once the pressure is relieved, let the vehicle sit for two hours with the battery disconnected before removing the pump.

Removal

- 1 Relieve the fuel system pressure (see [Section 3](#)).
- 2 Disconnect the negative battery cable (see [Chapter 5, Section 3](#)).
- 3 Remove the engine cover by lifting the front of the cover up and pulling it forwards.
- 4 Remove the strut tower crossbrace plastic push-pins and bolts then remove the brace.
- 5 Remove the sound insulator plastic retainers and lift the insulator off of the engine.
- 6 Remove the ignition coils (see [Chapter 5](#)).
- 7 Pull the sound insulator off of the pump, if equipped.
- 8 Using a flare-nut wrench, loosen and disconnect the high-pressure line pipe fittings.

Caution:

The manufacturer states that the pipe must be replaced if it has been removed.

9 Using a flare-nut wrench, loosen then disconnect the feed pipe fitting on the high-pressure pump, but do not remove the line.

10 Disconnect the electrical connector from the high-pressure fuel pump.

11 Loosen the high-pressure fuel pump bolts 1/4-turn at a time until the bolts can be removed, then remove the pump. Always replace the bolts and O-ring.

Caution:

If the mounting bolts are loosened or tightened more than a 1/4-turn at a time, the high-pressure pump piston can break.

Caution:

The bucket tappet can fall out when the high-pressure pump is being pulled off.

Installation

12 With the pump removed, rotate the engine by hand and make sure the camshaft lobe is at its Bottom Dead Center (BDC) base circle before trying to install the pump. To verify the camshaft is at (BDC), mount a dial indicator to fuel pump mounting flange and watch the needle movement until the (BDC) is reached.

13 Lubricate the bucket tappet with engine oil and install it.

14 Set the pump into the cylinder head and tighten the bolts evenly, no more than 1/4-turn at a time.

Caution:

If the mounting bolts are loosened or tightened more than 1/4-turn at a time, the high-pressure pump piston can break.

Note:

As the pump bolts are tightened it will get harder to tighten the bolts until the spring in the pump is compressed.

15 Tighten the bolts to the torque listed in this Chapter's Specifications .

16 Installation is the reverse of removal.

17 Reconnect the cable to the negative battery terminal (see Chapter 5), then start the engine and check for fuel leaks.