



Haynes
shows you how

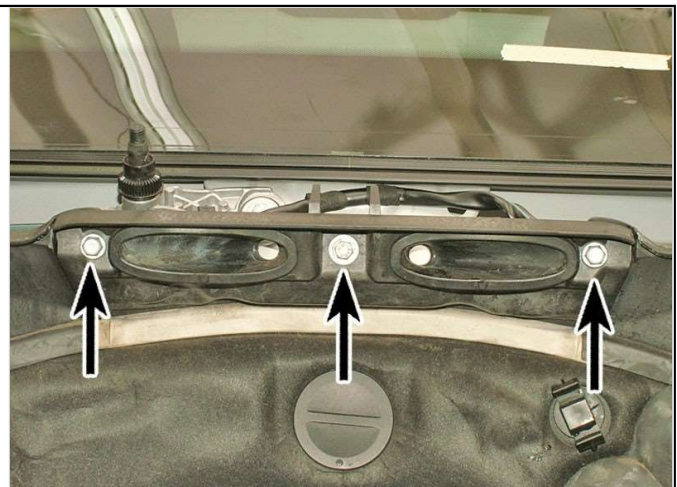
BMW 3-Series 320i & 320xi (12-14), 325i, 325xi, 330i & 330xi (06) & 328i & 328xi (07-14) Haynes Online Manual

11 Oil pan - removal and installation

Removal

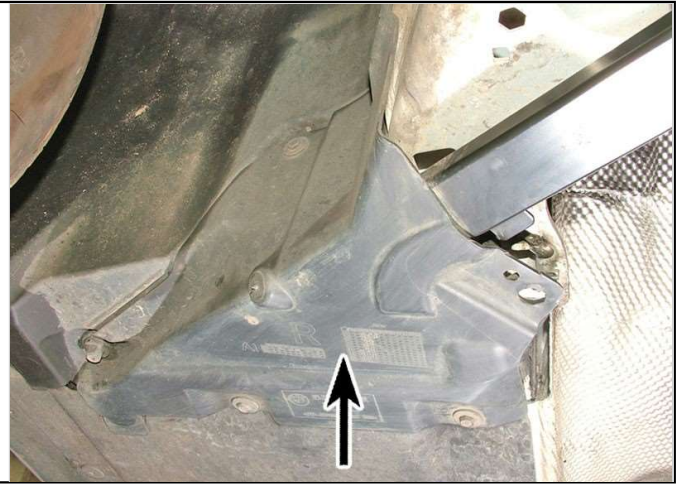
- 1 Remove the strut support and the cabin air filter cover (see [Section 4](#) , Steps 1 through 7).
- 2 Disconnect the mass airflow sensor wiring plug, then release the clamp and disconnect the air intake hose.
- 3 Remove the air filter housing (see [Chapter 4](#)).
- 4 Remove the cover over the ignition coils.
- 5 Remove the mounting bolts and remove the cowl housing (see illustration) .

11.5 Remove the bolts and remove the cowl housing



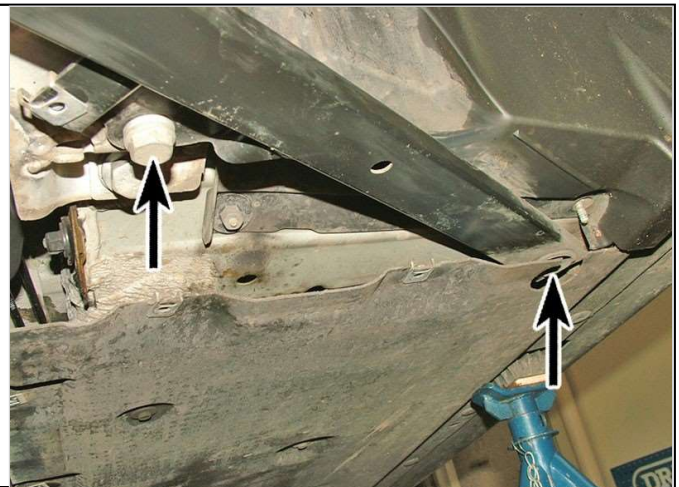
- 6 The engine must be supported in position using an engine hoist or engine support fixture. Attach the hoist or fixture to the engine lifting eyes at the front and rear of the engine. Take the weight off the engine mounts.
- 7 Loosen the nut at each side securing the engine mount support brackets to the mounts, then raise the engine approximately 1/2 inch (12 mm).
- 8 Remove the fasteners and the underbody paneling from each side in the area of the reinforcement brace under the subframe (see illustration) .

11.8 Remove the underbody paneling at each side



9 Remove the nuts/bolts and remove the reinforcement brace from each side under the front subframe (see illustrations) . Discard the nuts/bolts - new ones must be installed.

11.9a Remove the bolts at each end of the front reinforcement brace . . .

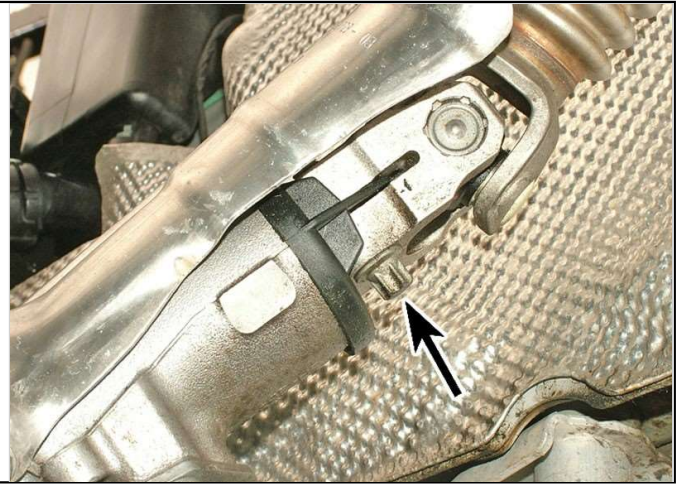


11.9b . . . and the bolts in the center



10 Remove the steering column lower universal joint pinch-bolt and lift the column shaft upwards from the steering gear (see illustration) . Discard the pinch-bolt - a new one must be used. **Caution:** *Ensure the steering wheel/column is not rotated with the universal joint disconnected from the steering rack pinion. Damage to the column could result.*

11.10 Steering column lower joint pinch-bolt

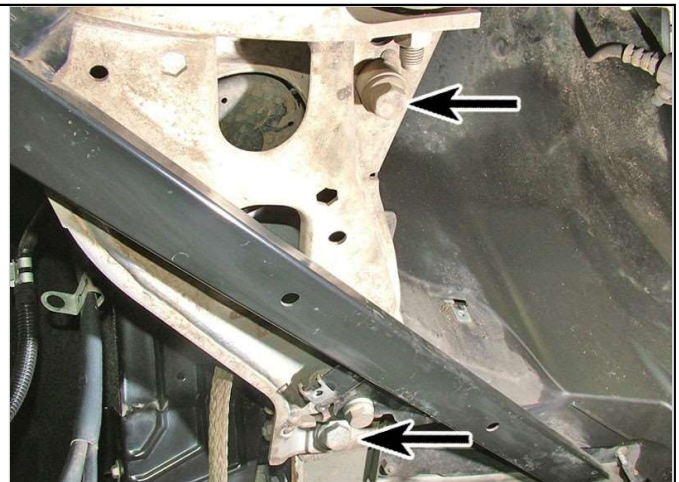


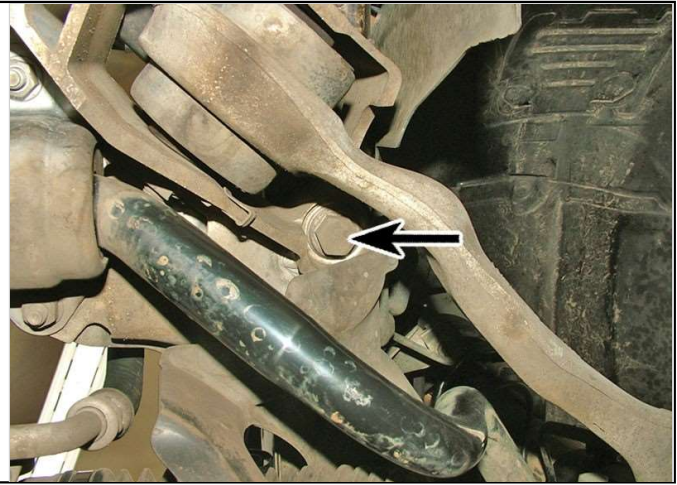
11 Disconnect the wiring plugs from the ride height sensors (if installed), then disconnect the vacuum hoses from the engine mounts.

12 On models with electric power steering, cut the cable tie securing the wiring harness to the subframe.

13 Support the front subframe using a suitable jack and lengths of wood, then remove the mounting bolts at each side and carefully lower the subframe a maximum of 3.9 inches (10 cm) (see illustrations) . Pay attention to the power steering hoses/pipes as the subframe is being lowered - do not allow them to be bent or stretched. Note that the subframe bolts at the front are 3.5 inches (90 mm) long, the middle bolts are 5.7 inches (145 mm) long, and the rearmost bolts are 2 inches (53 mm) long. When installing, tighten down the front bolts first.

11.13a The front subframe is secured by two bolts at the rear on each side . . .



11.13b . . . and one at the front

14 Disconnect the oil return hose(s) from the oil pan (see illustration) .

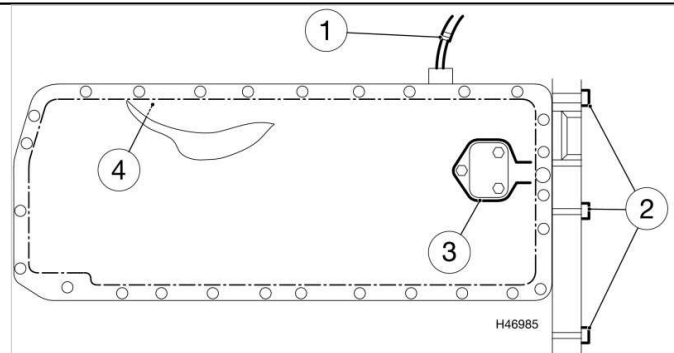
11.14 Oil pan details

1 Oil return hose

2 Transmission-to-oil pan bolts

3 Oil level sensor

4 Oil pan retaining bolts



15 Note the installed positions of the various wiring plugs from the sensor(s) on the oil pan, then disconnect the sensors.

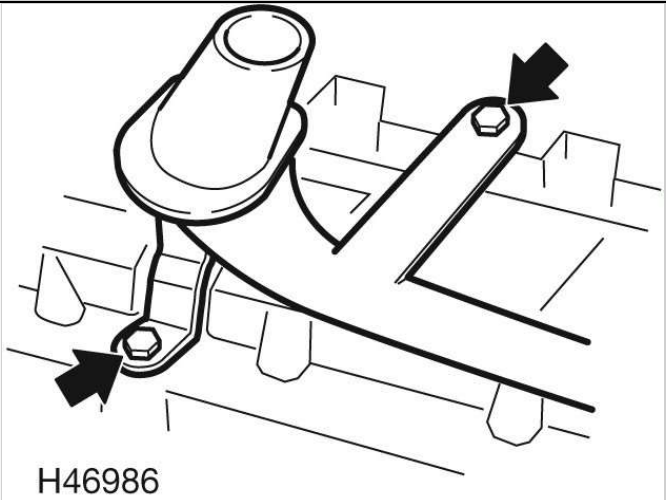
16 Loosen and remove the bolts securing the transmission casing to the oil pan.

17 Progressively loosen and remove the bolts securing the oil pan to the base of the cylinder block. Discard the bolts; new ones must be installed.

18 Break the oil pan joint by striking the oil pan with the palm of the hand, then lower the oil pan from the engine. Remove the gasket and discard it; a new one must be used on installation.

19 While the oil pan is removed, take the opportunity to check the oil pump intake pipe for signs of clogging or splitting. If necessary, unbolt the intake pipe, and remove it from the engine along with its gasket (see illustration) . The strainer can then be cleaned easily in solvent. Inspect the strainer mesh for signs of clogging or splitting and replace if necessary. The bolts and sealing ring must be replaced.

11.19 Oil pump intake pipe retaining bolts



20 Reinstall the oil pan gasket if it is not torn, otherwise use a new gasket.

Installation

21 Thoroughly clean the mating surfaces of the oil pan and cylinder block.

22 Place the gasket in position on the oil pan flange.

23 Raise the oil pan up to the cylinder block, ensuring that the gasket stays in place, and install the new oil pan securing bolts, tightening them finger-tight only.

24 Tighten the oil pan-to-transmission and transmission-to-engine bolts to the specified torque.

25 Progressively tighten the oil pan-to- cylinder block bolts to the specified torque.

26 The remainder of installation is the reverse of removal, noting the following points:

- A. When raising the subframe into position, make sure that no pipes, hoses and/or wiring are trapped.
- B. Use new subframe and reinforcement frame/plate bolts.
- C. Tighten the engine mount nuts to the specified torque.
- D. On completion, refill the engine with oil (see [Chapter 1](#)).
- E. On automatic transmission models, check the transmission fluid level (see [Chapter 1](#)).