

**Haynes**
shows you how

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

13 Front differential (AWD models) - removal and installation

Note:

This is a difficult procedure for the home mechanic, requiring an engine lifting device and a transmission jack .

Removal

- 1 Disconnect the negative battery cable (see [Chapter 5](#)).
- 2 Block the rear wheels. Raise the front of the vehicle and support it securely on jackstands.
- 3 Remove the fasteners, the engine splash shield and the shield below the radiator.
- 4 Remove the cabin air filter housing (see [Chapter 1](#)).
- 5 Remove the engine air filter housing.
- 6 Open the hood to the most upright position and attach an engine lift or engine support assembly to lifting points on the engine. **Note:** *The engine need only be raised enough to remove the weight from the engine mounts.*
- 7 On the left side, disconnect the tie-rod end, tension strut, control arm and the strut-to- steering knuckle pinch-bolt (see Chapter 10).
- 8 Remove the driveaxles (see [Section 8](#)).
- 9 Remove the bolts and the front subframe reinforcement panel, if equipped.
- 10 Disconnect the vent hose from the differential case.
- 11 Make match-marks on the front differential flange and the front of the driveshaft, as well as the rear of the

driveshaft and the flange at the transfer case.

12 Remove the bolts securing the driveshaft front yoke to the differential flange.

13 Remove the bolts securing the driveshaft rear flange to the transfer case, and remove the driveshaft from the vehicle.

14 Remove one subframe mounting bolt and purchase new bolts that are 2.5 inches longer.

15 With a suitable support under the subframe (such as a transmission jack), replace each of the subframe mounting bolts with the longer bolts.

16 Lower the subframe two inches to access the differential-to- oil pan mounting bolts. Remove the differential from the vehicle.

Installation

17 Installation is the reverse of removal, noting the following points:

- A. This is a good time to replace the driveaxle oil seals while the differential is out of the vehicle.
- B. Use a new O-ring between the oil pan and the differential.
- C. Use the original subframe bolts or new bolts of the same length as original.
- D. Check and top-off the lubricant in the differential.