



**Haynes**  
shows you how

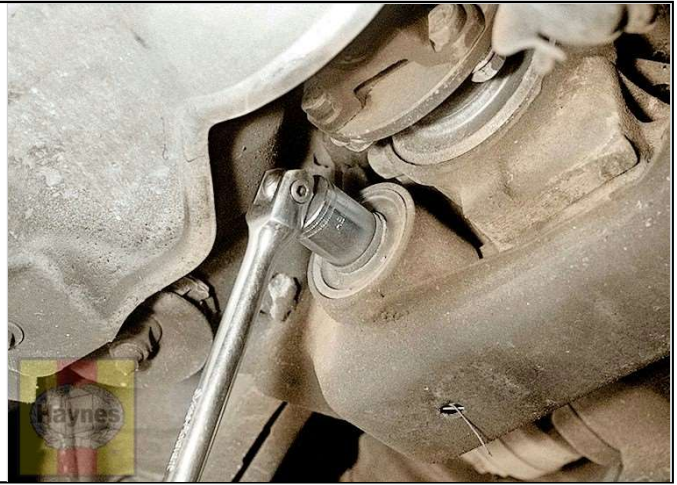
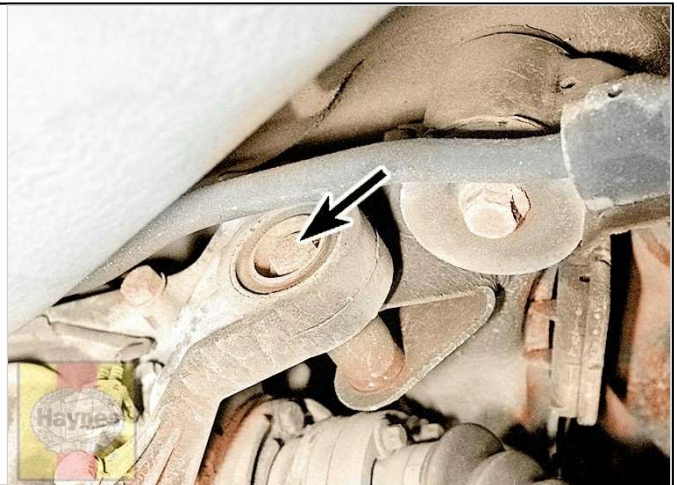
**BMW 3-Series (92-98) & Z3 (96-98) Haynes Online Manual**

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## 9 Differential - removal and installation

### Removal

- 1 Chock the front wheels. Jack up the rear of the vehicle and support it on axle stands. Remove both rear wheels. If necessary, drain the differential (see [Chapter 1](#) ).
- 2 Using paint or a suitable marker pen, make alignment marks between the driveshaft and differential flange. Unscrew the nuts securing the driveshaft to the differential and discard them; new ones must be used on installation.
- 3 Loosen and remove the retaining bolts and plates securing the right-hand driveaxle to the differential flange and support the driveaxle by tying it to the vehicle underbody using a piece of wire. **Note:** *Do not allow the driveaxle to hang under its own weight as the CV joint may be damaged.* Discard the bolts, new ones should be used on installation.
- 4 Disconnect the left-hand driveaxle from the differential (see Step 3).
- 5 Disconnect the wiring connector from the speedometer drive on the rear of the differential.
- 6 Loosen and remove the left- and right-hand stabilizer bar mountings (see [Chapter 10](#) ).
- 7 Move a jack and block of wood into position and raise it so that it is supporting the weight of the differential.
- 8 Making sure the differential is safely supported, loosen and remove the two bolts securing the rear of the unit in position and the single bolt securing the front of the unit in position (see [illustrations](#)) .

**9.8a Remove the front . . .****9.8b . . . and rear differential mounting bolts (arrow)**

9 Carefully lower the differential out of position and remove it from underneath the vehicle. Examine the differential mounting rubbers for signs of wear or damage and replace if necessary.

## Installation

**Note:**

New driveshaft rear coupling nuts and driveaxle retaining bolts will be required on installation.

10 Installation is a reversal of removal noting the following.

- A. Raise the differential into position and engage it with the driveshaft rear joint, making sure the marks made prior to removal are correctly aligned.
- B. Tighten the differential mounting bolts to the specified torque setting.
- C. Install the new driveshaft joint nuts and tighten them to the specified torque.
- D. Install the stabilizer bar mountings (see [Chapter 10](#) ).
- E. Install the new driveaxle joint retaining bolts and plates and tighten them to the specified torque.
- F. On completion, refill/top-up the differential with oil (see [Chapter 1](#) ).