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shows you how

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

12 Rear differential - removal and installation

Note:

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

Removal

- 1 Block the front wheels. Raise the rear of the vehicle and support it securely on jackstands. Remove both rear wheels.
- 2 Using paint or a marking pen, make alignment marks between the driveshaft and rear differential flange. Unscrew the bolts/nuts securing the driveshaft to the rear differential and discard them; new ones must be used on installation.
- 3 Remove the driveshaft (see [Section 11](#)). Disconnect the vent hose from the differential.
- 4 On E-series chassis models, remove the driveaxles (see [Section 8](#)). On F-series chassis models, the driveaxles must be removed once the rear differential is partially lowered. **Note:** *Do not allow the driveshaft to hang under its own weight as the CV joint may be damaged.* Discard the bolts; new ones should be used on installation.
- 5 Remove the nuts/bolts and the heat shield panel from the left-hand end of the tension strut beneath the differential input-shaft flange.
- 6 Move a floor jack and block of wood into position and raise it so that it is supporting the weight of the differential.
- 7 Making sure the differential is safely supported, loosen and remove the bolts securing the front of the unit to the subframe and the single bolt securing the rear of the differential to the subframe.
- 8 Carefully lower the rear differential out of position and remove it from underneath the vehicle. Examine the differential mounts for signs of wear or damage and replace if necessary.

Installation

9 Installation is the reverse 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. Insert the differential front mounting bolts, then the rear bolt.**
- C. Tighten the front differential mounting bolts to the specified torque setting, followed by the rear bolt.**
- D. Install the new driveshaft joint bolts/nuts and tighten them to the specified torque.**
- E. Install the new driveshaft joint retaining bolts and plates and tighten them to the specified torque.**
- F. Refill/top-off the rear differential with oil (see [Chapter 1](#)).**

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