

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

19 Steering column intermediate shaft - removal and installation

Warning:

These models are equipped with a Supplemental Restraint System (SRS), more commonly known as airbags. Always disable the airbag system before working in the vicinity of any airbag system component to avoid the possibility of accidental deployment of the airbag(s), which could cause personal injury (see Chapter 12).

Warning:

Do not use a memory saving device to preserve the PCM or radio memory when working on or near airbag system components.

Removal

- 1 Block the rear wheels, firmly apply the parking brake, then raise the front of the vehicle and support it securely on jackstands. Set the front wheels in the straight-ahead position. Remove the bolts and the engine undershield (see illustration 3.1).
- 2 Remove the fasteners and the driver's knee bolster panel (see illustration 17.2) .
- 3 Pry the rubber boot upwards from the base of the column (see illustration 17.7) .
- 4 Using paint or a marking pen, make alignment marks between the intermediate shaft universal joint and the steering column, the shaft and flexible coupling, and the flexible coupling and the <u>steering gear pinion</u> (see illustration 17.8).
- 5 Loosen and remove the clamp bolts, then slide the two halves of the shaft together and remove the shaft assembly from the vehicle.
- 6 Inspect the intermediate shaft universal joint for signs of roughness in its bearings and ease of movement. Also examine the shaft rubber coupling for signs of damage or deterioration, and check that the rubber is securely bonded to the flanges. If the universal joint or rubber coupling are suspect, the complete intermediate shaft should be replaced.

Installation

- 7 Check that the front wheels are still in the straight-ahead position, and that the steering wheel is correctly positioned.
- 8 Align the marks made on removal, and engage the intermediate shaft joint with the steering column and the coupling with the <u>steering gear</u>.
- 9 Insert the new clamp bolts, and tighten them to the specified torque setting.
- 10 The remainder of installation is the reverse of removal. If a new shaft has been installed, it will be necessary to recalibrate the steering angle <u>sensor</u> using BMW diagnostic equipment. Entrust this task to a dealer or other qualified shop.

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