



Haynes
shows you how

BMW 3-Series and Z4 (99-05) Includes 2006 325ci/330ci Coupe and Convertible models Haynes Online Manual.

12 Driveshaft - removal and installation

Note:

New driveshaft front and rear coupling nuts will be required on installation.

Removal

1 Chock the front wheels. Jack up the rear of the vehicle and support it on jackstands.

2 Remove the exhaust system and heat shield as described in [Chapter 4](#) . Where necessary, unbolt the exhaust system mounting bracket(s) in order to gain the necessary clearance required to remove the driveshaft.

3 On models where the front of the driveshaft is bolted straight onto the transmission output flange, make alignment marks between the shaft and transmission flange then loosen and remove the retaining nuts. Discard the nuts - new ones should be used on installation.

4 On models where a rubber coupling is installed between the front end of the driveshaft and transmission output flange, make alignment marks between the shaft, transmission flange and rubber coupling. Loosen and remove the nuts and bolts securing the coupling to the transmission (see illustration). Discard the nuts - new ones should be used on installation.

12.4 Loosen and remove the bolts securing the coupling to the transmission flange



5 Using a large open-ended wrench, or suitable adjustable pliers, loosen the threaded sleeve nut, which is situated near the support bearing, a couple of turns (see illustration).

12.5 Unscrew the large threaded sleeve a couple of turns

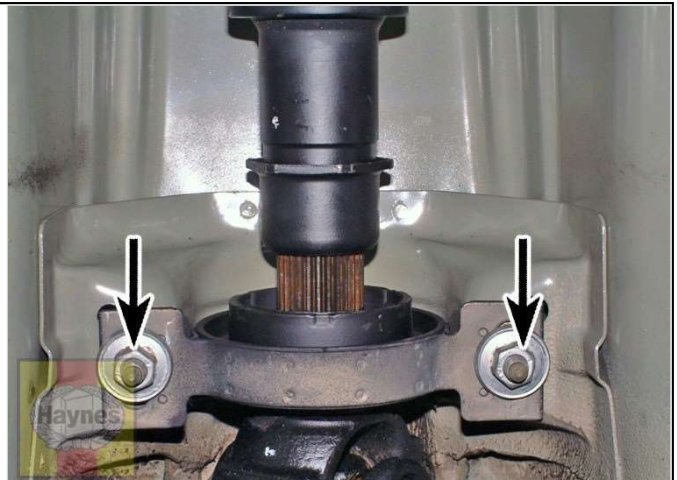


6 Using paint or a suitable marker pen, make alignment marks between the driveshaft and differential unit flange. Unscrew the nuts securing the driveshaft to the differential unit and discard them; new ones must be used on installation.

7 With the aid of an assistant, support the driveshaft then unscrew the center support bearing bracket retaining nuts (see illustration). Slide the two halves of the shaft towards each other then lower the center of the shaft and disengage it from the transmission and differential unit. Remove the shaft from underneath the vehicle.

Note: Do not separate the two halves of the shaft without first making alignment marks. If the shafts are incorrectly joined, the driveshaft assembly may become unbalanced, leading to noise and vibration during operation.

12.7 Remove the center bearing bracket retaining nuts



8 Inspect the rubber coupling (if equipped), the support bearing and shaft universal joints as described in Sections 13, 14 and 15. Inspect the transmission flange locating pin and driveshaft bushing for signs of wear or damage and replace as necessary.

Installation

9 Apply a small amount of molybdenum disulfide grease to the transmission pin and shaft bushing and maneuver the shaft into position (see illustration).

12.9 Apply moly-based grease to the transmission pin



10 Align the marks made prior to removal and engage the shaft with the transmission and differential unit flanges. With the marks correctly aligned, install the support bracket retaining nuts, tightening them lightly only at this stage.

11 Install new retaining bolts to the rear coupling of the driveshaft and tighten them to the specified torque.

12 On models where the driveshaft is bolted straight onto the transmission flange, install the new retaining nuts and tighten them to the specified torque.

13 On models with a rubber coupling, insert the bolts and install the new retaining nuts. Tighten them to the specified torque, noting that the nut/bolt should only be rotated on the flange side to avoid stressing the rubber coupling.

14 Tighten the driveshaft threaded sleeve nut securely.

15 Loosen the center bearing bracket nuts. Slide the bracket forwards to remove all free play, then preload the bearing by moving the bracket forwards another 4 to 6 mm. Hold the bracket in this position and tighten its retaining nuts to the specified torque.

16 Install the exhaust system and associated components as described in [Chapter 4](#).