

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

## 3 Oil seals - replacement

## Input shaft oil seal

- 1 Remove the transmission (see Section 5).
- 2 Remove the <u>clutch</u> release bearing and lever (see <u>Chapter 8</u>).
- 3 Unscrew the mounting bolts and withdraw the <u>clutch</u> release bearing guide sleeve from the transmission bellhousing (see illustration).

# 3.3 Remove the bolts securing the release bearing guide sleeve



- 4 Note the installed depth of the now-exposed input shaft oil seal.
- 5 Drill one small hole in the <u>oil seal</u> (two small pilot holes should be provided at opposite points on the seal). Coat the end of the drill bit with grease to prevent any filings from the holes entering the transmission (see illustration).

### 3.5 Drill a small hole in the oil seal



6 Using a small drift, tap one side of the seal (opposite to the hole) into the bellhousing as far as the stop.

7 Screw a small self-tapping screw into the opposite side of the seal, and use pliers to pull out the seal (see illustration) .

# 3.7 Insert a self-tapping screw in to the hole, and pull the seal out with pliers



- 8 Clean the oil seal seating surface.
- 9 Lubricate the lips of the new <u>oil seal</u> with a little clean transmission oil, then carefully slide the seal over the <u>input shaft</u> into position in the bellhousing.
- 10 Tap the oil seal into the bellhousing to the previously-noted depth.
- 11 Install the guide sleeve to the transmission housing and tighten the retaining bolts securely, using a drop of locking compound on the threads of the bolts.
- 12 Install the clutch release lever and bearing (see Chapter 8).
- 13 Install the transmission (see Section 5), then check the transmission oil level (see Chapter 1).

## **Output flange oil seal**

#### Note:

Thread-locking compound will be required for installation of the transmission flange nut.

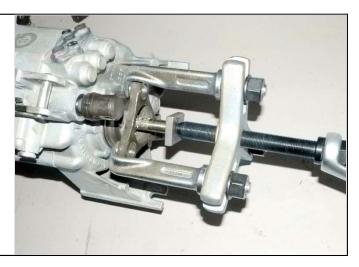
- 14 Raise the vehicle and support securely on jackstands.
- 15 Disconnect the <u>driveshaft</u> from the transmission flange, and support it clear of the transmission using wire or string (see <u>Chapter 8</u>).
- 16 Where applicable, pry the transmission flange nut cover plate from the flange using a screwdriver. Discard the cover plate it is not required on installation. If necessary, support the transmission and remove the transmission crossmember to improve access.
- 17 Counter-hold the transmission flange by bolting a forked or two-pin spanner tool to two of the flange bolt holes, then unscrew the flange securing nut using a deep socket and extension bar (see illustration).





18 Using a puller, draw the flange from the end of the transmission output shaft (see illustration). Be prepared to catch spilling oil.

3.18 Use a three-legged puller to remove the output flange



19 Note the installed depth of the <u>oil seal</u>, then using an oil seal puller or remover (take care to avoid damage to the transmission output shaft), pull/pry the oil seal from the transmission casing (see illustration).

### 3.19 Carefully pull the seal out



20 Clean the oil seal seating surface.

21 Lubricate the lips of the new <u>oil seal</u> with a little clean transmission oil, then carefully tap the seal into the transmission casing to the previously-noted depth using a suitable tubular spacer or socket (see illustration).

3.21 Tap the seal into place using a tubular spacer or socket which bears only on the hard outer edge of the seal



22 Install the flange to the output shaft. **Note**: *To ease installation of the flange, immerse it in hot water for a few minutes, then install it on the shaft.* 

23 Tighten the flange nut to step one of the torque setting, then loosen and remove the nut (step two). Coat the threads of the flange nut with thread-locking compound, then tighten the nut to the step three torque as specified. Counter-hold the flange as during removal.

24 If a flange nut cover plate was originally installed, discard it. There is no need to install a cover plate.

25 Reconnect the <u>driveshaft</u> to the transmission flange (see <u>Chapter 8</u>), then check the transmission oil level (see <u>Section 2</u>), and lower the vehicle to the ground.

### Gear selector shaft oil seal

#### Note:

A new selector shaft eye securing roll-pin will be required on installation.

- 26 Raise the vehicle and support securely on jackstands.
- 27 Disconnect the propeller shaft from the transmission flange, and support it clear of the transmission using wire or string (see <a href="Chapter8">Chapter 8</a> ). For improved access, support the transmission, and remove the transmission crossmember.
- 28 Slide back the locking collar, then slide out the pin securing the gear selector shaft eye to the end of the gear selector shaft.
- 29 Pull the gear selector shaft eye (as an assembly with the gear linkage) off the end of the selector shaft, and move the linkage clear of the selector shaft.
- 30 Using a small flat-bladed screwdriver, pry the selector shaft oil seal from the transmission casing.
- 31 Clean the <u>oil seal</u> seating surface, then tap the new seal into position using a small socket or tube of the correct diameter (see illustration).

# 3.31 Tap the new selector shaft oil seal into position



- 32 Check the condition of the rubber washer in the end of the selector shaft eye and replace if necessary.
- 33 Push the selector shaft eye back onto the end of the selector shaft, then align the holes in the eye and shaft and secure the eye to the shaft using the pin.
- 34 Slide the locking collar into position over the roll-pin.

35 Reconnect the propeller shaft to the transmission flange (see Chapter 8).

36 Check the transmission oil level (see Section 2), then lower the vehicle.

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