



**Haynes**  
shows you how

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

## 14 Oil seals - replacement

### Crankshaft front oil seal

1 The procedure is described as part of the lower timing chain cover removal and installation procedure in Section 6 .

### Crankshaft rear oil seal

**Note:**

A new oil seal housing gasket will be required on installation.

2 Remove the flywheel/driveplate, (see Section 15 ).

3 Working at the bottom of the oil seal housing, unscrew the bolts securing the rear of the oil pan to the housing.

4 Unscrew the bolts securing the oil seal housing to the cylinder block.

5 If the housing is stuck to the oil pan gasket, run a sharp, thin blade between the housing and the oil pan gasket. Take care not to damage the oil pan gasket.

6 Withdraw the housing from the cylinder block. If the housing is stuck, tap it gently using a soft-faced mallet. Do not lever between the housing and the cylinder block, as this may damage the gasket surfaces.

7 Recover the gasket.

8 Thoroughly clean all traces of old gasket and sealant from the mating faces of the oil seal housing and the cylinder block. Again, take care not to damage the oil pan gasket. If the oil pan gasket has been damaged during removal, it is advisable to fit a new one with reference to Section 12 .

9 Support the oil seal housing on blocks of wood, then drive out the seal from the rear of the housing using a hammer and drift.

10 Clean the seal mating surfaces in the housing.

11 Lightly grease the outer edge of the new oil seal, and carefully drive it into position in the housing, using either a large tube of the correct diameter, or a block of wood, to avoid damage to the seal.

12 Ensure that the locating dowels are in position in the rear of the cylinder block, then locate a new oil seal housing gasket over the dowels.

13 Lightly grease the inner lips of the oil seal, then carefully offer the housing to the cylinder block, sliding the oil seal over the crankshaft flange. Take care not to damage the oil seal lips.

14 Install the housing-to- cylinder block and the oil pan-to-housing bolts, and tighten them lightly by hand.

15 Tighten the housing-to- cylinder block bolts to the specified torque, then tighten the oil pan-to-housing bolts to the specified torque.

16 Install the flywheel/driveplate (see [Section 15](#)).

## Camshaft oil seals

17 No camshaft oil seals are fitted. Sealing is provided by the valve cover gasket and the timing chain cover gaskets.