

Replacing a 2 Piece Rubber Rear Main Seal.

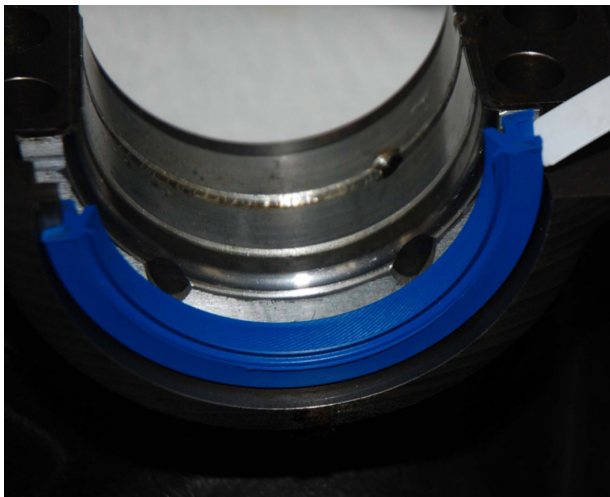
After rope rear main seals were phased out, the industry moved to two-piece rubber main seals that were easier to install and provided a better seal.

STEP 1

Remove oil pan, oil pump (if necessary), rear main cap and the old seals. Clean the rear main bearing cap and crankshaft area. Inspect the crankshaft for nicks, scratches or a groove worn into the crankshaft. If equipped remove the original rope seal retaining pin from the bearing cap.

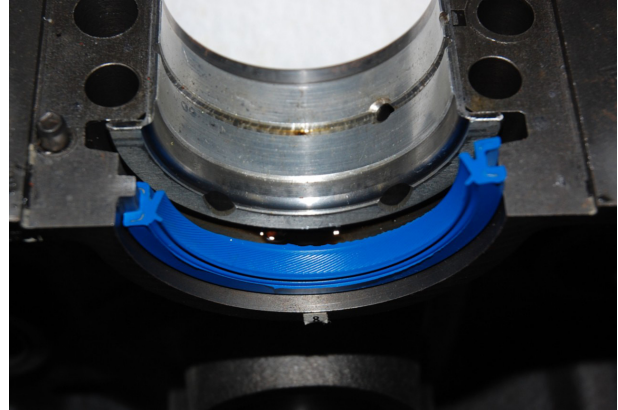
STEP 2

Fit the seal in the rear main bearing cap. The large sealing lip will face the front of the engine; some seals may have "air side" on the seal indicating this side faces the flywheel. The upper portion can be slid into place around the crankshaft. A shoehorn tool is provided to help prevent damaging the back side of the seal as you insert it. Make sure a light coat of oil is applied to the seal lip before installing the upper portion.



STEP 3

Offset the seal in relation to the rear main bearing cap parting line by about 3/8" – where the ends of the seal meet. You don't want the ends of the seal to line up with the block and cap parting lines. Ensure the upper seal half should have one end sticking down below the block line and the other end recessed up into the block. The lower seal half should reflect this when installed into the rear main bearing cap.



STEP 4

Apply light coat of engine oil to sealing lip of the lower seal in the rear main bearing cap before installation.

STEP 5

Put a tiny dab (1/8" or smaller) of RTV on each end of the lower seal, where the seal ends meet, taking care to avoid the sealing lip. Less is better in this case.

STEP 6

Apply a manufacturer recommended sealer to the machined surfaces where the rear main seal cap meets the engine block. Some rear main bearing caps may have side seals; follow the manufacturer's instructions for these seals.

STEP 7

Torque the rear main bearing cap to manufacturer specifications.