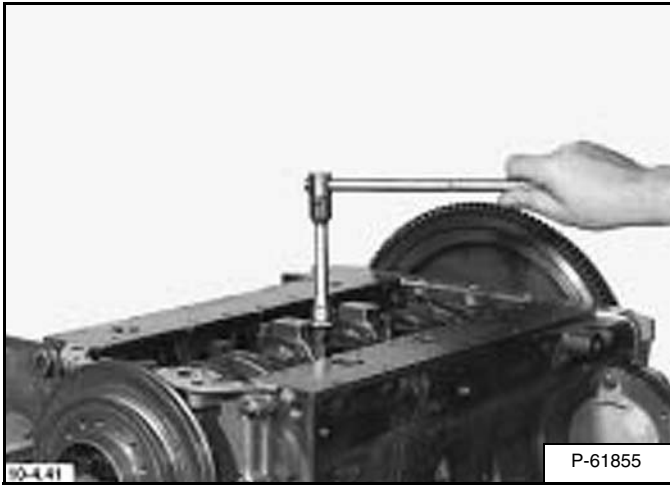


RECONDITIONING THE ENGINE (S/N 522311001 & ABOVE) (CONT'D)

Disassembly (Cont'd)

Figure 60-80-12

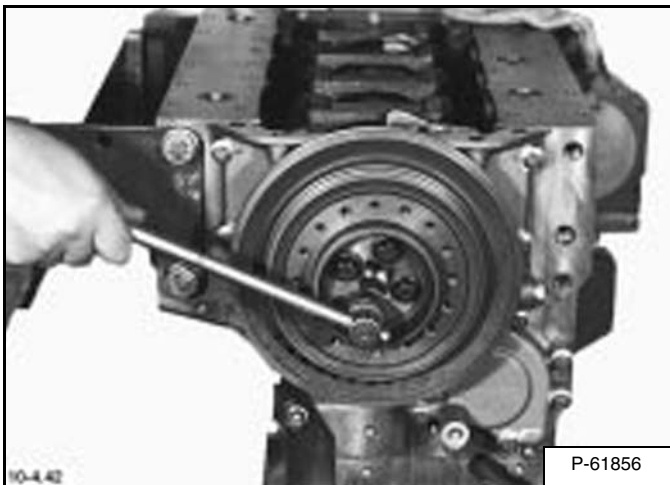


Remove the connecting rod bolts **[Figure 60-80-12]**.

Remove all the piston/connecting rod assemblies from the engine block.

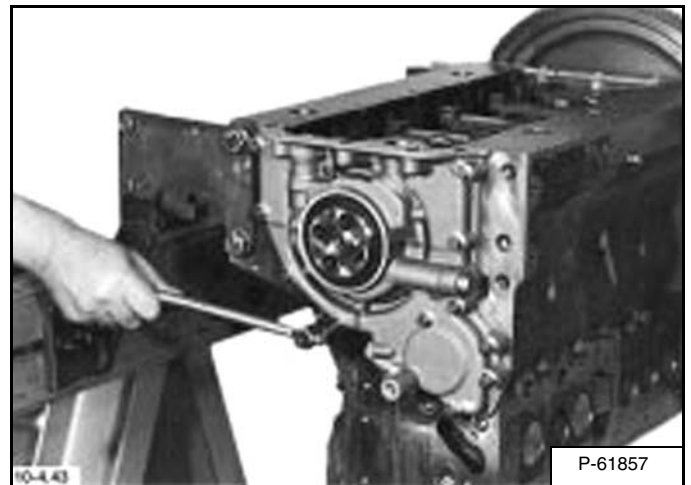
To check the piston/connecting rod assembly. (See Piston Installation On The Connecting Rod on Page 60-80-64.)

Figure 60-80-13



Remove the pulley **[Figure 60-80-13]**.

Figure 60-80-14

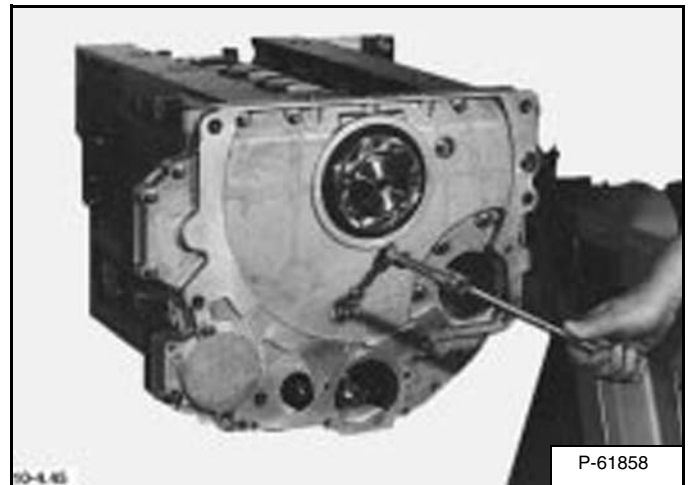


Remove the front cover **[Figure 60-80-14]**.

To disassemble and assemble the front cover. (See Front Cover Disassembly on Page 60-80-70 .)

Remove the flywheel. (See Removal And Installation on Page 60-70-1.)

Figure 60-80-15



Remove the rear cover **[Figure 60-80-15]**.

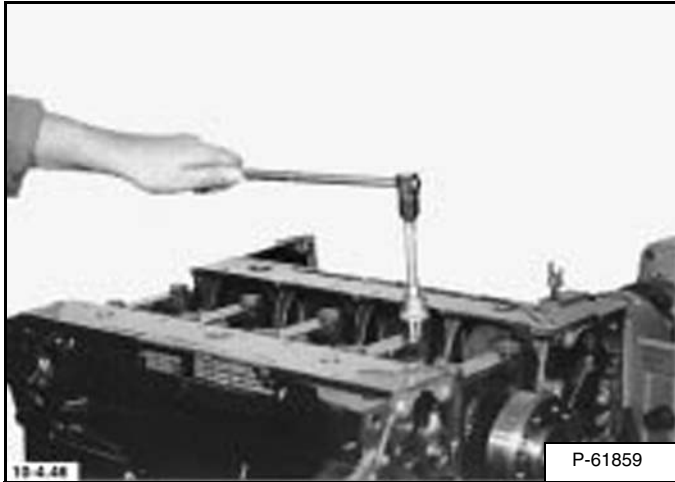
To install a new rear seal and inspect the cover. (See Rear Cover Seal Removal And Installation on Page 60-80-54.)

RECONDITIONING THE ENGINE (S/N 522311001 & ABOVE) (CONT'D)

Disassembly (Cont'd)

Mark the location of each main bearing cap so it will be installed in the original position.

Figure 60-80-16



Remove the main bearing caps bolts [Figure 60-80-16].

Remove the main bearing caps.

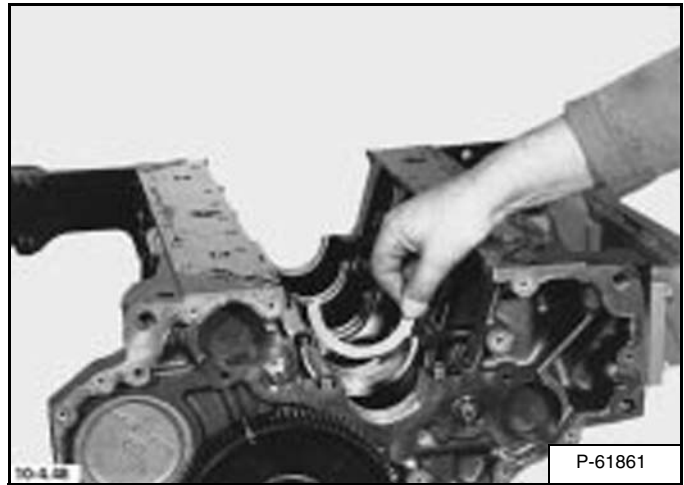
Figure 60-80-17



Remove the crankshaft [Figure 60-80-17].

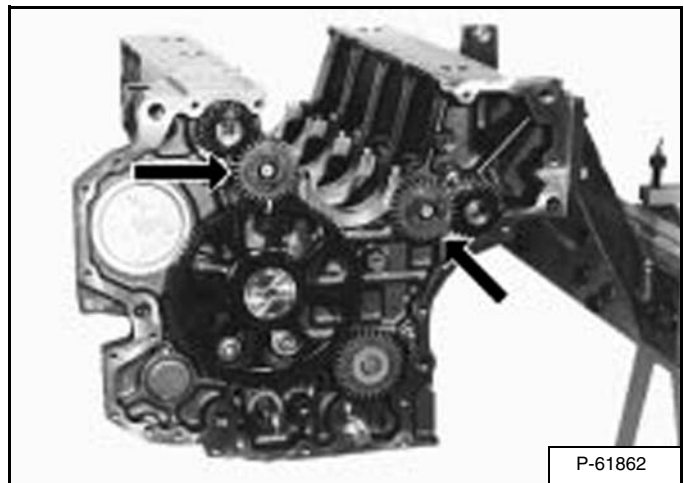
Check the crankshaft specifications. (See Crankshaft, Checking on Page 60-80-56.)

Figure 60-80-18



Remove the thrust rings and upper half of the main bearings [Figure 60-80-18].

Figure 60-80-19

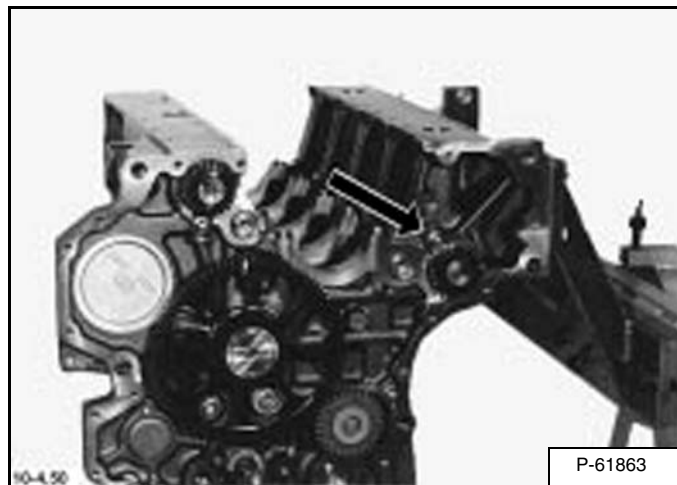


Install the balancing shaft drive gears [Figure 60-80-19]. (If equipped)

RECONDITIONING THE ENGINE (S/N 522311001 & ABOVE)

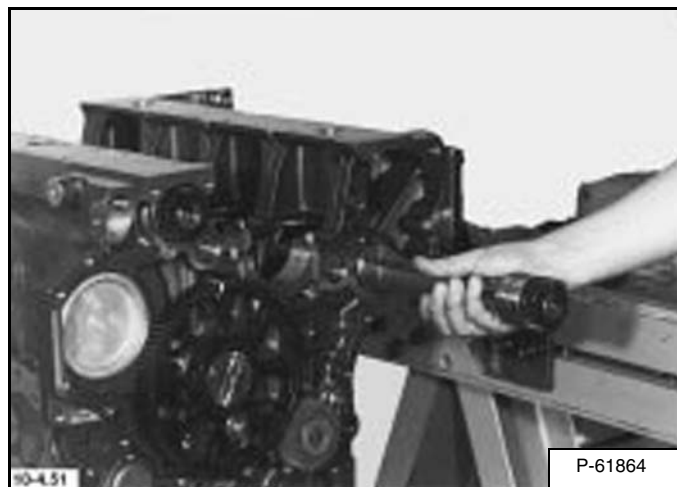
Disassembly (Cont'd)

Figure 60-80-20



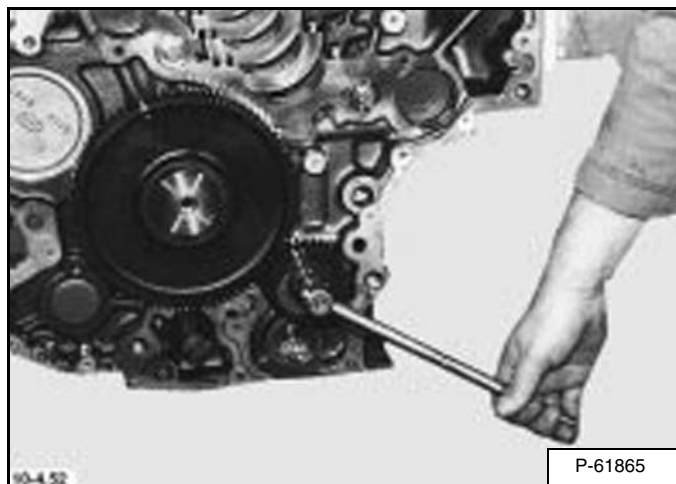
Remove the balancing shaft thrust washers [Figure 60-80-20]. (If equipped)

Figure 60-80-21



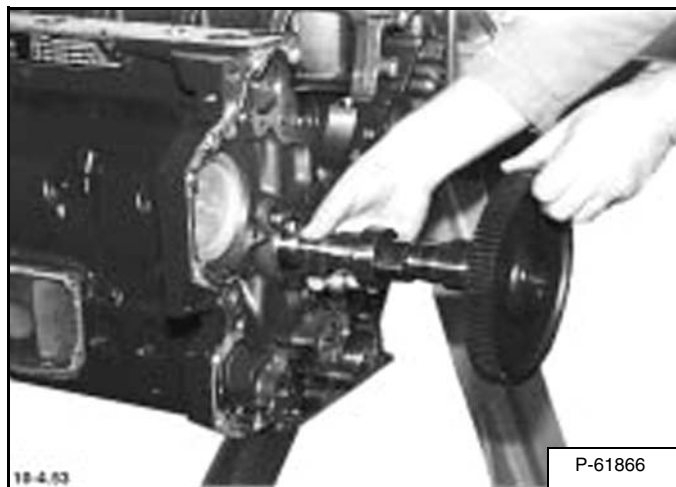
Remove the balancing shafts [Figure 60-80-21]. (If equipped).

Figure 60-80-22



Remove the governor drive gear [Figure 60-80-22].

Figure 60-80-23

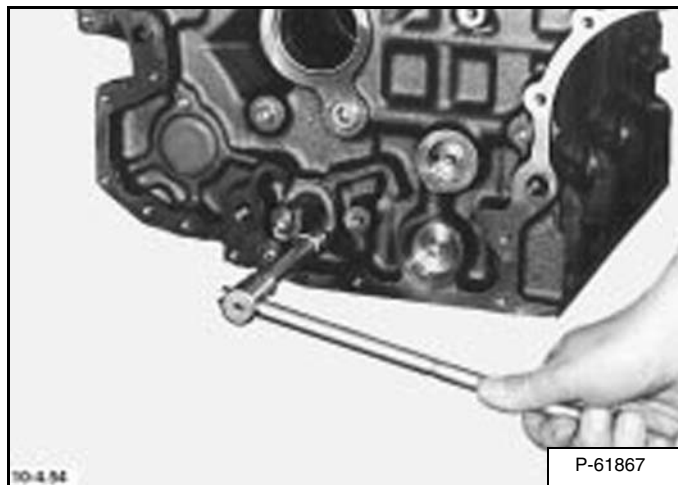


Remove the camshaft [Figure 60-80-23].

RECONDITIONING THE ENGINE (S/N 522311001 & ABOVE)

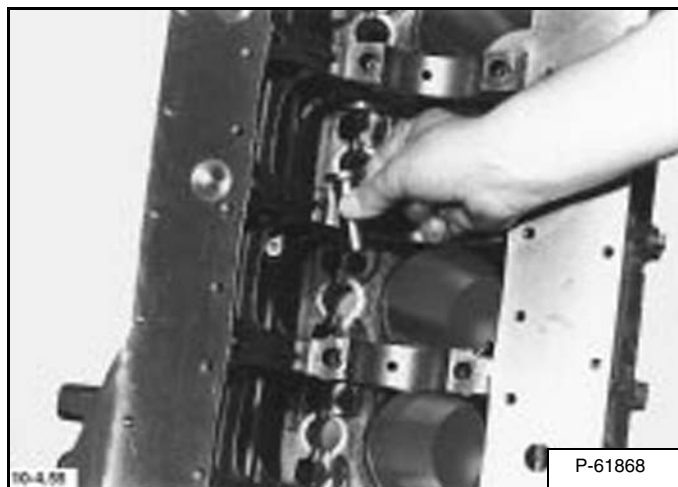
Disassembly (Cont'd)

Figure 60-80-24



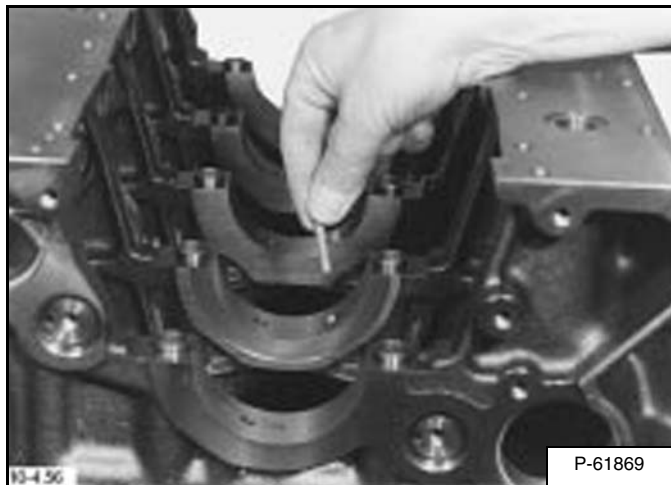
Remove the guide sleeve and control rod [Figure 60-80-24].

Figure 60-80-25



Remove the tappets from the engine block [Figure 60-80-25].

Figure 60-80-26

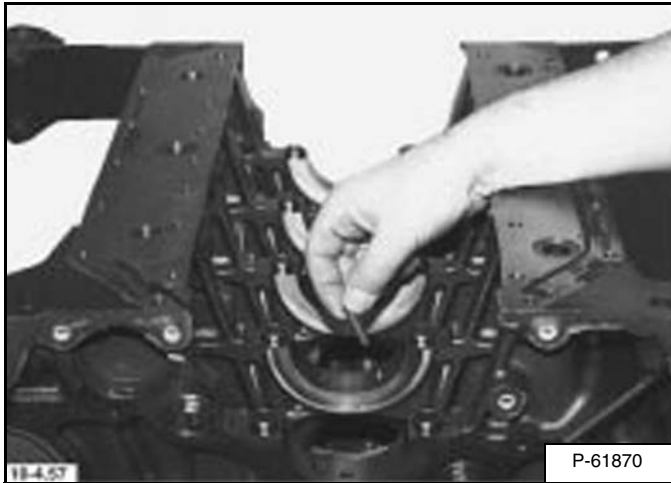


Remove the oil spray nozzles [Figure 60-80-26].

RECONDITIONING THE ENGINE (S/N 522311001 & ABOVE) (CONT'D)

Assembly

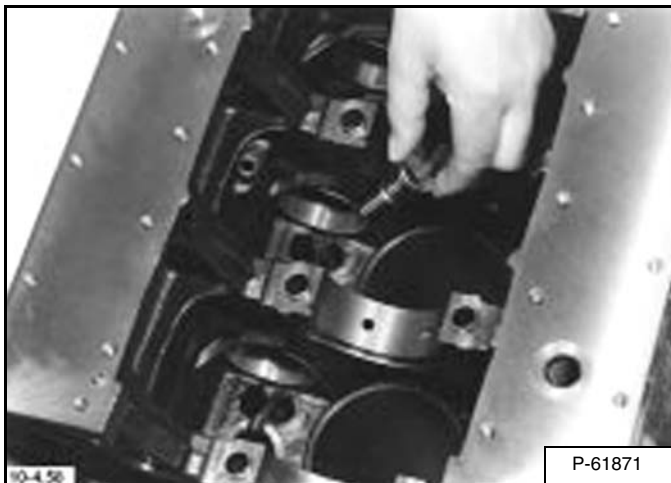
Figure 60-80-27



Install the oil spray nozzles [Figure 60-80-27].

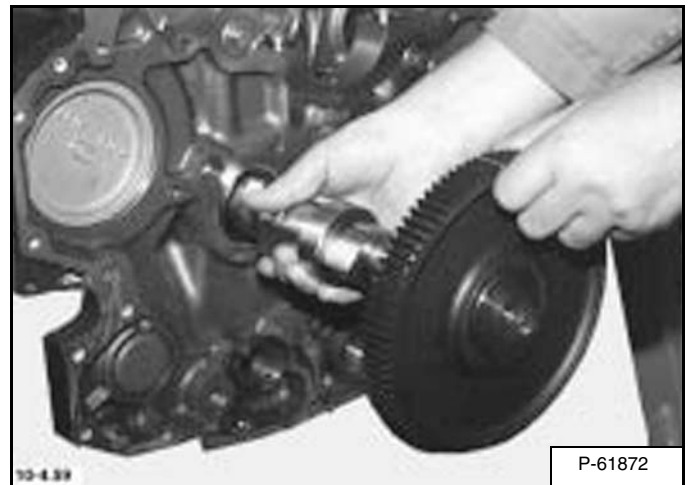
NOTE: Check the oil parts for obstructions.

Figure 60-80-28



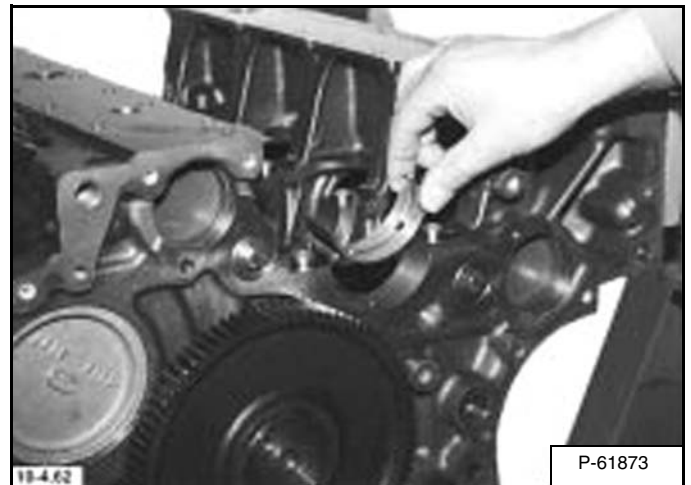
Install the tappets [Figure 60-80-28].

Figure 60-80-29



Install the camshaft [Figure 60-80-29].

Figure 60-80-30



Install the upper main bearing halves [Figure 60-80-30].

RECONDITIONING THE ENGINE (S/N 522311001 & ABOVE) (CONT'D)

Assembly (Cont'd)

Figure 60-80-31



Install the other main bearing half into the main bearing caps [Figure 60-80-31].

Figure 60-80-32



Install the thrust bearings halves on the main bearing cap [Figure 60-80-32].

Measure the width of the thrust washers/main bearing cap [Figure 60-80-32].

Figure 60-80-33

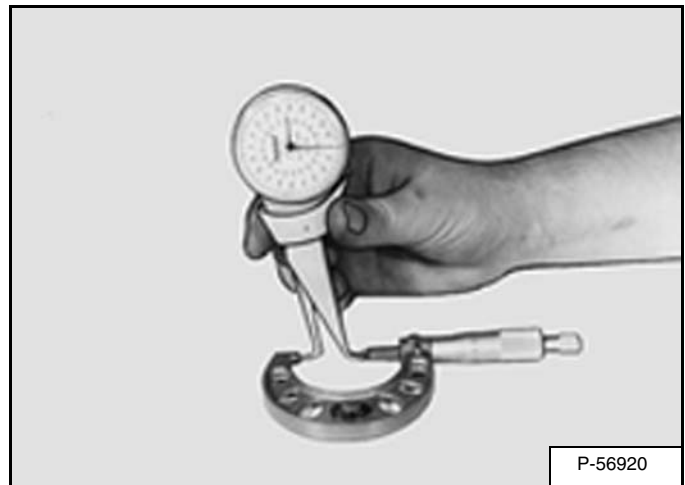
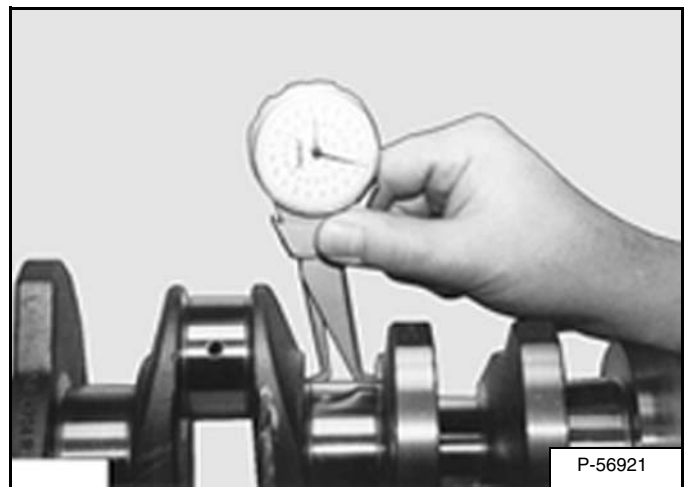


Figure 60-80-34



Measure the bearing journal width at the crankshaft [Figure 60-80-33] & [Figure 60-80-34].

Specifications:

Journal Width Std. 1.417 - 1.419 in..
(36,0 - 36,04 mm)

Limit for O/S 1.435 in.. (36,44 mm)

Determine the end play for the crankshaft.

Specifications:

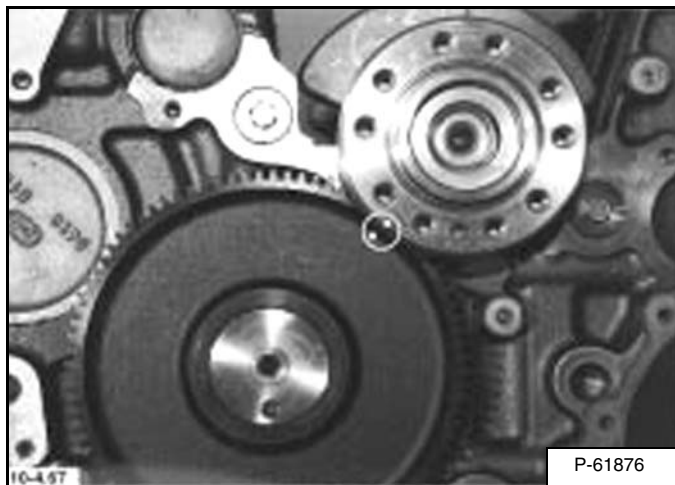
Std. End Play. 0.004-0.012 in..
(0,10-0,30 mm)

Use new thrust washers as needed to get the correct end play.

RECONDITIONING THE ENGINE (S/N 522311001 & ABOVE) (CONT'D)

Assembly (Cont'd)

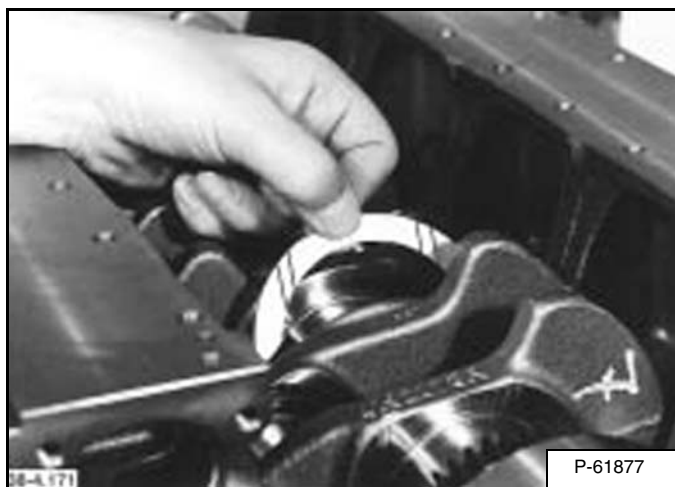
Figure 60-80-35



Install the crankshaft into the engine block [Figure 60-80-35].

NOTE: Align the marks on the crankshaft and camshaft.

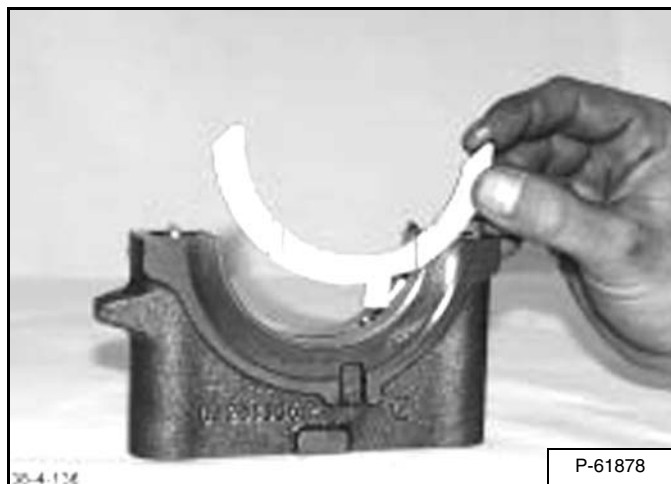
Figure 60-80-36



Lubricate the thrust washer (without tab) with grease and install them on the main bearing cap [Figure 60-80-36].

NOTE: The wear surface of the thrust washer must face the crank web.

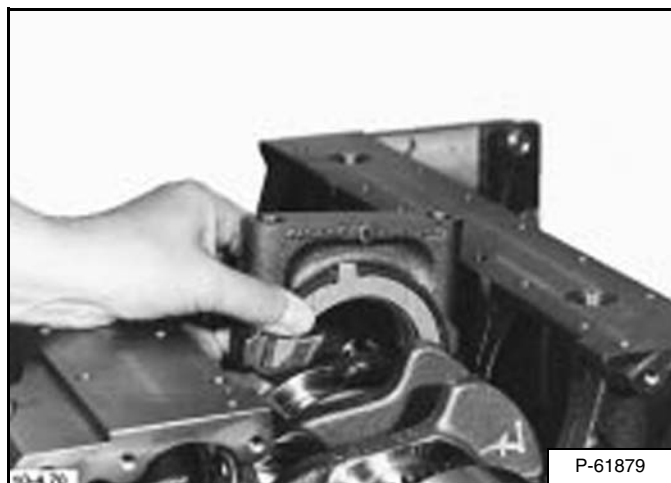
Figure 60-80-37



Lubricate the thrust washer (with tab) with grease and install them on the main bearing cap [Figure 60-80-37].

NOTE: The wear surface of the thrust washer must face the crank web.

Figure 60-80-38



Install the main bearing/thrust washer assembly [Figure 60-80-38].

NOTE: The main bearing cap No. 1, at the flywheel end, the chamfer must be towards the flywheel end.