6. Clean the surfaces in the cylinder block for the main bearings. Use tool (B), and install new upper halves of main bearings (bearings with the oil hole) in the cylinder block. Do not put oil on the bearing.

7. Clean the surfaces of the main bearing caps for the main bearings. Install the new lower halves of the main bearings in the main caps without oil.



Typical Example

The serviceman must be very careful to use Plastigage correctly. The following points must be remembered:

...Make sure that the backs of the bearings and the bores are clean and dry.

...Make sure that the bearing locking tabs are properly seated in their slots.

... The crankshaft must be free of oil where the Plastigage touches it.

...If the main bearing clearances are checked with the engine upright or on its side, the crankshaft must be supported. Use a jack under an adjacent crankshaft counterweight and hold the crankshaft against the crown of the bearing. If the crankshaft is not supported, the weight of the crankshaft will cause incorrect readings.

...Put a piece of Plastigage on the crown of the bearing half that is in the cap. Do not allow the Plastigage to extend over the edge of the bearing.

...Install the bearing cap using the correct torque-turn specifications. Do not use an impact wrench. Be careful not to dislodge the bearing when the cap is installed.

...Do not turn the crankshaft with the Plastigage installed.

...Carefully remove the cap, but do not remove the Plastigage. Measure the width of the Plastigage while it is in the bearing cap or on the crankshaft journal. Do this by using the correct scale on the package. Record the measurements.

...Remove the Plastigage before installing the cap.

When using Plastigage, the readings can sometimes be unclear. For example, all parts of the Plastigage are not the same width. Measure the major widths to make sure that they are within the specification range. Also, experience has shown that when checking clearances tighter than 0.10 mm (.004") the readings may be low by 0.013 to 0.025 mm (.0005 to .0010"). Out-of-round journals can