Name:

Date:

PLASTIGAGE BEARING CLEARANCE

Project:

JOB SHEET – CHECK BEARING CLEARANCE WITH PLASTIGAGE

Tools and materials

- Safety glasses
- Clean shop towels
- Appropriate hand tools
- Torque wrench
- Strip of Plastigage
- Shop engine block with crankshaft (not installed)
- Service manual for engine to be worked on
- Air hose
- Air blow gun

Procedure

(CAUTION: Follow all shop safety procedures.)

- Put safety glasses on.
- Place engine to be worked on upside down (with crankcase up) on engine stand or blocks.
- Remove main bearing caps from engine block. (NOTE: If caps are not numbered, mark caps and side of engine block for proper replacement.)
- Place main bearing caps on work bench in order of removal.
- Blow out crankcase and oil hole passages with a blow gun.
- Clean main bearing saddles and caps with a clean lint free shop towel.
- Clean main bearing shells of any dirt or lubricant.
- Check service manual for correct sequence for installing main bearing into block and caps.
 - (NOTE: Check thrust bearing location.)
 - Check for proper locating lips/tabs
 - Check lube hole location



Measure the flattened Plastigage with the scale on the original Plastigage envelope. (Figure 2)

- Record measurement here.
- Compare your measurements with specification.
- Remove Plastigage from bearing.

(CAUTION: Do not damage bearing surface with removing Plastigage.)

- Clean bearing shell and crankshaft journal.
- Lubricate bearing shell and crankshaft journal.
- Install main bearing cap onto engine block.
- Torque to specification in sequence.
- Check crankshaft for freeness at this point.
- Measure remaining main bearings in the method mentioned above.

Obtain Instructor's initials here before proceeding to next step.