



Main Bearing Girdle Installation Instructions

049 198 601 MBG & 06A 198 601 MBG

ATTENTION: Read through this entire instruction sheet before installation!
This product must be installed by qualified technicians only.

- 1.) Install main bearing studs.



- 2.) Install main bearing stud spacers.



- 3.) Fit main bearing girdle over block.



- 4.) Use graphite grease and lubricate the studs, washers, and nuts. Thread the nuts over the studs by hand, then torque in three stages in the pattern specified by the factory (25 ft-lbs 1st stage, 40 ft-lbs 2nd stage, 55 ft-lbs final stage).



- 5.) Using a feeler gauge, measure the gap between the block and girdle. A minimum of two measurements must be taken, one from the left and one from the right side of the block.



- 6.) To determine how much material needs to be machined from the spacer, take the measurement from the gauge and subtract 0.001". That amount must be removed from the spacer.

EXAMPLE: The gap between the girdle and block measures 0.060" after the girdle has been properly torqued. Therefore:

$$\begin{array}{l} 0.060'' \text{ (Measured gap between girdle and block)} \\ - 0.001'' \text{ (Allowable tolerance between girdle and block)} \\ \hline 0.059'' \text{ (Amount of material to be removed from spacer)} \end{array}$$



- 7.) Remove the nuts and main bearing girdle from the block and machine the spacers accordingly.

- 8.) Apply silicone sealant between the girdle and block prior to reinstallation.

- 9.) Reinstall the girdle. It may be helpful to thread a few oil pan bolts to hold the girdle and prevent shifting. Reapply graphite grease if necessary and retorque the nuts as described in Step 4.



NOTE: We do not recommend the use of thread lock on any threads!

10.) After the main bearing girdle has been installed, fit the oil pump to the block. A section of the pump may not clear the nut and will have to be cut (06A). Mark the section with a permanent marker and machine as necessary.



11.) Once there is appropriate tolerance, reinstall the oil pump and chain to factory specifications.



12.) Install the oil baffle.



13.) The two girdle nuts located at the rear of the engine may interfere with the oil pan. Two grooves are required for proper clearance, but because the oil pan wall is narrow, an aluminum reinforcement block must be TIG welded to the opposite side prior to machining the grooves. Be sure there is enough space to thread in the oil pan bolts.



14.) Once the outer oil pan is reinforced, machine cut two grooves to clear the girdle nuts.



15.) Apply silicone sealant to the oil pan and install.
Torque the bolts in the sequence and specification provided by the factory.



See Next page for Note >

NOTE:

The installation of a main bearing girdle will prevent the use of some oil pan to transmission mounting holes on some applications.



On V6 models the starter locating bushing must be relocated up by the thickness of the girdle:
0.375 inch / 9.500 mm

