



M-6010-BOSS302, M-6010-B302BB Cylinder Blocks INSTRUCTION SHEET

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!!! PLEASE READ ALL OF THE FOLLOWING INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION. AT ANY TIME YOU DO NOT UNDERSTAND THE INSTRUCTIONS, PLEASE CALL THE FORD RACING TECHLINE AT 1-800-367-3788 !!!

OVERVIEW:

This sheet contains important information regarding dimensions and specifications of the M-6010-BOSS302 block. These instructions should be reviewed by all engine builders, due to minor changes that could impact the engine assembly process.

CONTENTS:

Be sure to check for the following parts included with M-6010-BOSS302.

- M-6026-R452 plug and dowel kit. **NOTE:** Early kits will have steel plugs. Torque specifications for both steel and aluminum are listed below.
- Plug kits supplied with blocks packaged after April 2013 include one -4 oil galley plug with .030" hole. Galley plug is silver in color. Galley plug is to be installed in oil galley behind distributor. Oil hole in plug provides distributor gear with additional lubrication for increased durability.
- Check for clearance to the starter index plate on the left bank. The core plug may require a clearance hole in the starter index plate.

FEATURES AND SPECIFICATIONS:

Block Deck Height	8.215" +/- .005"
Main Bearing Bores	2.4412" – 2.4420"
Cylinder Bore	(as delivered) 3.990" +/- .005" (max finish bore 4.125")
Main Bolt Torque	100 lb-ft (inner) 35 lb-ft (outer) with 30wt oil
Lifter Bores	.8760" +/- .0007" (finished bore)
Plugs	-4 AN (qty 9) Aluminum or Steel 8-10 lb-ft -20 AN (qty 8) Aluminum 24-26 lb-ft Steel 30 lb-ft
Head Bolts	-6 AN (qty 1) Aluminum or Steel 12-14 lb-ft
Cross Drilling	1/2-13 UNC Bores are Siamese with cross-drilled coolant passages

CAM BORES:

All cam bores are finished to a diameter of 2.204" nominally and require a common outside diameter cam bearing.

- Use M-6261-R351 cam bearings for a common journal camshaft.
- Use M-6261-J351 cam bearings for a stepped journal production type camshaft.

Maximum cam bore diameter for roller cam bearings (1-4) 2.480" (5) 2.280"

ADDITIONAL FEATURES:

- The two lower timing cover bolts are 3/8-16 UNC.
- Front oil pressure sending unit hole is 1/2 NPT. Check fitting thread engagement prior to final wash.
- Check cylinder heads for proper steam-hole alignment. Steam holes are designed to reduce the possibility of steam pocket formation. Due to the large number of aftermarket heads that can be used on this block, you will have to check this and modify as necessary.
- For wet sump applications, use main bolt (with stud) D7TZ-6345-A (for oil pump pick-up). Oil pump pick-up for use with stock rear sump FOX body stamped pan is part M-6622-BOSS302.
- Check main caps for adequate clearance to oil pan (.150" minimum).
- Designed for standard 1-piece 302 rear main seal.

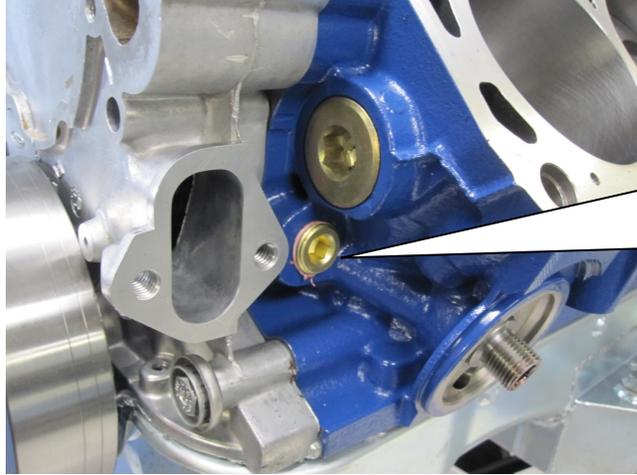
Factory Ford shop manuals are available from Helm Publications, 1-800-782-4356



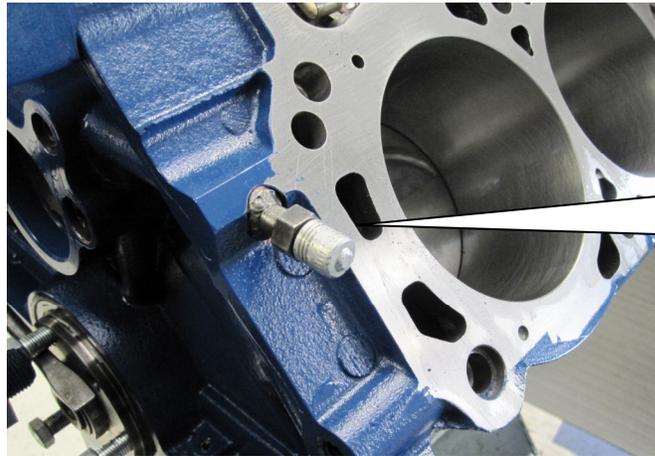
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ADDITIONAL NOTES:



Use caution when tightening 1/2 NPT oil galley plug. **40 Ft. Lbs. MAX.** *Overtightening can cause cracking in this area.*



Oil pressure available at the right rear of block via -4 AN fitting with an O-ring seal.

Factory Ford shop manuals are available from Helm Publications, 1-800-782-4356