



M-6010-BOSS302 Cylinder Block INSTRUCTION SHEET

NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF FORD RACING PERFORMANCE PARTS.

Please contact the Tech Line for the most current instruction information (800) 367-3788.

!!! PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION !!!

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.
- 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	-6 AN (qty 9) Aluminum 8-10 lb-ft Steel 22 lb-ft -20 AN (qty 8) Aluminum 24-26 lb-ft Steel 30 lb-ft -8 AN (qty 1) Aluminum 14-16 lb-ft Steel 24 lb-ft
Head Bolts	1/2-13 UNC
Cross Drilling	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.

Tech Line (800) 367-3788

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