

M-6010-Z35192 351 ALUMINUM BLOCK 9.2-INCH DECK

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Please visit https://www.performanceparts.ford.com for warranty information

OVERVIEW:

This sheet contains important information regarding dimensions and specifications of the M-6010-Z35192 blocks. The M-6010-Z35192 block is an aluminum Windsor based block that comes bored to finish hone at 4.125 bore. The main bearing bores accommodate a 2.750 main journal crankshaft. 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-Z351.

(1) F2AE-6890-AA Oil Filter Threaded Insert

(6) 16-SA-17ALUM Plug- 1 5/16"-16 NPSF O-Ring Boss (Alum)

(6) 22617-16 O-Ring -16

(1) M-6026-S351 Cam Plug

(4) C20E-6A008-A1 Split Dowels (Heads)

(2) EAD-6397-A Dowel Pin Trans.

(2) 388192-S Split Dowel (Front Cover)
(7) 87837-S Pipe Plug 1/4" Hex
(3) 87839-S011 Pipe Thread Plug 1/2"
(1) 87838-S Pipe Plug 3/8" Hex
(1) 22S-10 ORB -10 Plug Zero Leak

FEATURES AND SPECIFICATIONS:

Part Number M-6010-Z35192

Material Aluminum with iron sleeves

Bore Size 4.115 +/- .002" (hone finish at 4.125)

Bore Spacing 4.380

Block Deck Height (out of box) 9.212 +/-.005" (Sleeves will be above aluminum out of the box) deck to 9.200"

Siamese Bore

Maximum Stroke recommended 4.000" Head Bolt Size 1/2-13 UNC

Main Bolt configuration Splayed 4 bolt main caps on positions 2, 3, Straight 4 bolt caps on positions 1 and 5

Main Bearing Bore Size Main bearing bore size 2.9415" – 2.9425"

Main Cap Material 4142 Steel

Main Cap Fasteners Studs 1/2-20 UNF (torque spec. 100 lb*ft) and 7/16-20 UNF (65 lb*ft), 3/8-16 UNC (35 lb*ft)

HCS

Cam Bearing Bore Size Cam bearing bore size 2.2032" - 2.2052" requires M-6261-J351, or Dura Bond 351

RHP(RHPT) for common journal camshafts

Cam Plug Size Requires M-6026-S351 cam plug Lifter Bore Size Lifter bore size .8753" - .8768"

Lifter Style compatibility Compatible with hydraulic roller lifters

Oiling System Dry sump oiling system

Oil Filter Mounting Block mount oil filter M-6731-FL1A

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Oil Pan Configuration Check oil pan fitment to insure clearance Freeze Plugs/Threaded Core Plugs -16 AN Aluminum, torque spec. (24-26 lb*ft)

Rear Seal Type 1 piece rear seal M-6701-B351

Maximum Displacement 427 cubic inches

Weight 108#

RECOMMENDED PARTS:

Heads Recommended cylinder heads M-6049-X2, M-6049-Z2, M-6049-Z304P(A), M-6049-

Z304D(A), M-6049-D3

Head Gaskets Head gaskets M-6051-R351

Cam Bearings M-6261-J351 or M-6261-R351 Head Stud Kit Head stud kit M-6014-Z304, M-6014BOSS

Head Bolt KitHead bolt kit M-6065-BOSSMain Bearings2.750" Main journalOil FilterOil filter M-6731-FL1ARear SealRear seal M-6701-B351

Timing Cover M-6059-D351 (includes fuel pump provision)
Timing Chain and Sprocket Set Timing chain and sprocket set M-6268-A302, M-6268-B302

Replacement sleeves M-6012-C35192

OILING:

Oil into the engine is usually supplied thru the front -10 port fitting. The oil circuit in this block feeds the left lifter gallery thru a cross over annulus in the rear cam bearing.

CAM BORES:

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

- Use Dura Bond 351 RHP(RHPT) for common journal camshafts.
- 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"

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ADDITIONAL FEATURES:

- The two lower timing cover bolts are 3/8-16 UNC.
- Front oil gallery is threaded for a ORB -10 port fitting (plug included with block kit)
- 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, it
 is required to check water hole alignment between block and head.
- Check main caps for adequate clearance to oil pan.
- Designed for standard 1-piece 351 rear main seal.
- For solid roller cam applications, the rear lifter galleries are internally threaded for ¼ NPT-18 pipe plugs suitable for drilling restrictor holes. Check with the lifter manufacturer for details. See pictures below:



Rear View of Block



Close up of internal ¼ NPT-18 threads

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