

## M-6009-460 460 CUBIC INCH BOSS SHORT BLOCK - WINDSOR SB BASE

NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF FORD PERFORMANCE PARTS © Ford Motor Company 2020

# PRIOR TO INSTALLATION READ THESE INSTRUCTION COMPETELY For questions, Call the FORD PERFORMANCE Techline 1-800-367-3788

Please visit <a href="https://www.performanceparts.ford.com">https://www.performanceparts.ford.com</a> for warranty information

#### **OVERVIEW:**

The M-6009-460 engine short block assembly is used to build the M-6007-Z460FFT and M-6007-Z460FRT engines. These engines are intended for high performance or street rod vehicles (not subject to emission restrictions). The pistons will accept M-6049-X2, M-6049-Z2, M-6049-Z304P(A) and M-6049-Z304D(A) cylinder head assemblies. **Caution - Piston to valve clearance needs to be checked.** 

## Short block components include:

- ✓ M-6010-BOSS35195 block.
- ✓ Forged aluminum 4.150" Mahle pistons with a 30cc dish and full floating pins & pin locks.
- ✓ Forged H beam rods bushed for floating pins (.927 diameter).
- ✓ Forged Steel 4.250" stroke crankshaft.
- ✓ Clevite rod and main bearings.

#### Notes:

- 1. PISTON TO VALVE CLEARANCE MUST BE CHECKED with any high lift camshaft. Recommended minimum clearance is .100" intake, .125" exhaust, .060" radial.
- 2. Rod shoulder to cam lobe clearance must also be checked. If required, .050" minimum clearance.
- 3. The crank has been internally balanced to use neutral balance crankshaft dampers and flywheels.
- 4. M-6316-D302 "0" balance damper recommended.
- 5. M-6375-D302AB "0" balance manual transmission 157 tooth flywheel recommended.
- 6. A performance oil pan and pickup tube to suit the intended vehicle application should be used. (check pickup tube to crankshaft clearance), also check pick up tube to bottom of pan distance (1/2" +/- 1/16")
- 7. M-6600-D2 Oil pump recommended.
- 8. Head gasket M-6051-R351 recommended for most applications.

Ford Factory Shop Manual purchase options www.motorcraftservice.com

Techline 1-800-367-378 Page 1 of 2 IS M-6009-460 040120



# M-6009-460 460 CUBIC INCH BOSS SHORT BLOCK - WINDSOR SB BASE

NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF FORD PERFORMANCE PARTS © Ford Motor Company 2020

### Specifications M-6009-460

Bore x Stroke – 4.150" x 4.250"

Piston specs – 1.2450" compression height, notch volume 30.0 cc's

.927" floating pin

1.0, 1.0, 2.0 mm ring pack

Deck height - 9.500"

Piston to deck - .005" nominal

Note: all dimensions are nominal

#### Clearances:

Piston to bore .0045 - .0060"

Ring end gap Top .020", 2nd .018" (+.001"/-.000")

Piston pin .0008 - .0012"
Crank end play .004 - .008"
Main bearing clearance .0020 - .0025"
Rod bearing clearance .0020 - .0025"
Rod side clear .012 - .022"

Ford Factory Shop Manual purchase options www.motorcraftservice.com