



## M-6009-363 Engine Short Block 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:**

The M-6009-363 engine short block assembly is used to build the M-6007-Z363FT and M-6007-Z363RT engines. These engines are intended for high performance or street rod vehicles (not subject to emission restrictions). The pistons will accept M-6049-X306, M-6049-X307, and M-6049-Z304D cylinder head assemblies. **Piston to valve clearance needs to be checked.**

### **Short block components include:**

- M-6010-BOSS302 block.
- Forged aluminum 4.125" Mahle pistons with a 6cc dish and full floating pins & pin locks.
- Forged I beam rods bushed for floating pins (.927 diameter).
- Forged Steel 3.400" 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 ( $\frac{1}{2}$ " +/-  $\frac{1}{16}$ " )
7. M-6600-D2 Oil pump recommended.
8. Head gasket M-6051-R351 recommended for most applications.

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### Specifications M-6009-363

Bore x Stroke - 4.125" x 3.400"  
Piston specs - 1.090" compression height, notch volume 6.0 cc's  
.927" floating pin  
1.5, 1.5, 3.0 mm ring pack  
Deck height - 8.200"  
Piston to deck - .010" 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"

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