



M-6009-427F 427 Short Block INSTALLATION INSTRUCTIONS

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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-6009-427F engine short block assembly is used to build the M-6007-Z427FFT and M-6007-Z427FRT 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-BOSS35195 block.
- Forged aluminum 4.125" Mahle pistons with a 17cc dish and full floating pins & pin locks.
- Forged H beam rods bushed for floating pins (.927 diameter).
- Forged Steel 4.00" 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.
2. Rod shoulder to cam lobe clearance must also be checked. If required, .050" minimum clearance.
3. The crank has been internally balanced use neutral balance crankshaft damper and flywheels (M-6316-D302 damper, and M-6375-D302AB flywheel).
4. A high performance oil pan to suit the intended vehicle application and usage should be used.

Specifications M-6009-427F

Bore x Stroke - 4.125" x 4.000"

Piston specs - 1.245" compression height, dish + notch volume = 17.0 +/- .5 cc
.927" floating pin
1.5, 1.5, 3.0 mm ring pack

Deck height - 9.500"

Piston to deck - .010" nominal

Note: all dimensions are nominal

Recommended Clearances:

Piston to bore	.0045 - .0060"
Ring end gap	Top .020", 2nd .018"
Piston pin	.0008 - .0012"
Crank end play	.004 - .008"
Main bearing	.0020 - .0025"
Rod bearing	.0020 - .0025"
Rod side clear	.012 - .022"

Recommended Parts:

Oil pump, Melling 10833

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