



M-6007-A50NA 5.0L Engine Assembly

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FORD RACING PERFORMANCE PARTS

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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 !!!**

**Note: Engine is shipped dry with no engine oil; do not start without adding engine oil.
Pilot bearing is provided but not installed to allow for an automatic transmission.**

1) Technical Specifications M-6007-A50NA Crate Engine:

Engine Assembly Part Number	M-6007-A50NA
Engine Type	5.0L 4V TiVCT – 2011 Mustang
Engine Weight	195.5 kg. (431 lbs)
Displacement	4.957L, (302 ci)
Cylinder Block	M-6010-A50L4V
Bore	92.2 mm (3.629 in)
Stroke	92.7 mm (3.649 in)
Firing Order	1-5-4-8-6-3-7-2
Compression Ratio	11:1
Maximum rated rpm	6800 rpm
Spark Plug (0.032 Gap)	M-12405-M50
Crankshaft	Forged Steel, Internal Balance
Vibration Damper	BR3E-6316-JA, Neutral Balance
Connecting Rod (14042R-8)	Manley Forged Steel w/ ARP2000 Bolts
Piston (part # 0930008101)	Mahle Forged, dome
Camshafts	Hydraulic Roller
Cam Timing	Variable
Camshaft Duration Int./Ex.	Intake: 260°, Exhaust 263° Total Duration
Camshaft Lift Int./Ex.	Intake: 12mm, Exhaust 11mm
Rocker Arm	2:1 Ratio
Cylinder Head	Aluminum
Chamber Volume	54.5-57.5 cc
Valve Head Diameter Int./Ex.	37mm (1.45 in) / 31mm (1.22 in)
Oil Filter	M-6731-FL820
Oil Pressure	80 psi @ 70° F/ 650 rpm
Max Oil Temperature	280° F
Engine Oil (8.0 qts.)	Motorcraft SAE 5W-50 Full Synthetic XO-5W50-QGT or equivalent
Engine Coolant	Motorcraft Specialty Orange Engine Coolant VC-3-B (US); CVC-3-B (Canada)
Max Coolant Temperature	230° F

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