



FORD PERFORMANCE

# M-6007-572DR / M-6007-572-DF

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## M-6007-572DF(DR) Crate Engine Specifications and Owner's Manual

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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 !!!**

### INSTALLATION INSTRUCTIONS:

These instructions consist of (4) Sections:

1. Technical Specifications M-6007-572DF(DR) Crate Engine
2. Lubrication Priming Procedure
3. Bill of Materials
4. Torque Specifications

### 1. Technical Specifications M-6007-572DF(DR) Crate Engine

Crate Engine Part Number	M-6007-572DF(DR)
Engine Type	460 based crate engine (385 series)
Displacement (cubic inches)	572
Horsepower Rating	655 HP STP cor. 5500 rpm
Torque	710 lb* ft STP cor. 4500 rpm
Block M-6010-A460	Cast Iron; 4 Bolt Main (center 3)
Bore	4.500
Stroke	4.500
Crankshaft	Forged Steel Neutral Balance
Vibration Damper	M-6316-A521 Neutral Balance
Connecting Rod	Forged Steel H Beam (6.700 Center to Center .990 Pin)
Piston	Forged Aluminum
Camshaft	Hydraulic Roller
Cam Timing	Position "0" (multi-index crank sprocket)
Camshaft Lobe Separation	112°
Camshaft Duration	259° @ .050" lift intake, 263° @ .050" lift exhaust
Camshaft Lift	.649"
Cylinder Head	M-6049-SCJA Aluminum
Chamber Volume	72cc
Valve Diameter Int./Ex.	2.200 Int./1.760 Ex.
Compression Ratio	10.0:1
Rocker Arm (M-6564-F351)	Stainless Steel Roller 1.73:1 Ratio

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



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Recommended Timing	28° BTDC Total 4000 rpm
Maximum Rated rpm	6000 rpm
Oil Pan	M-6675-DRS460 or M-6675-FT460
Oil Filter	M-6731-FL1A
Oil Pressure	60 psi @ 240° F / 4000 rpm
Recommended Oil	10w-40 Mobil 1
Max Oil Temperature	240° F
Recommended Coolant Temperature	195° F
Spark Plugs	AGSP-32C
Firing Order	1-5-4-2-6-3-7-8
Fuel Pressure (@ carburetor)	6-7 psi

### Recommended Parts Not Included

Canton Racing Products - PN 22-595 – FORD 90 DEGREE ROTATING REMOTE FILTER ADAPTER This 90 deg. rotating remote oil filter adapter spins-on to 3/4"-16 thread with 2-5/8" seal stock filter locations and provides 1/2" N.P.T. in and out ports for plumbing a remote filter. It's unique design permits the two 90 degree inlet and outlet ports to be rotated. This simplifies hose and fitting connections for all applications. It is machined from billet aluminum and comes with all necessary hardware and O-Ring seals.



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### Standard Operating Specifications

Main Bearing Clearance	.0023" -.0028"
Rod Bearing Clearance	.0020" -.0025"
Crankshaft End Float	.005"-. .007"
Wrist Pin to Rod Clearance	.0010"-.0012"
Wrist Pin to Piston Clearance	.0010"-.0012"
Piston to Deck Distance	.015" Below Deck (+/- .005")
Piston to Bore Clearance	.0065" (+/- .0005")
Valve Spring Installed Height	1.850"
Intake Valve to Guide Clearance	.0014"-.0016"
Exhaust Valve to Guide Clearance	.0018"-.0022"
Valve Lash	0 Lash plus ¼ turn Pre-load

### 2. Lubrication Priming Procedure

1. Fill engine with recommended oil.
2. Hand rotate engine to cylinder #1 TDC firing
3. Remove distributor cap.
4. Mark rotor position on distributor housing.
5. Mark distributor housing and intake manifold interface.
6. Remove distributor.
7. Insert a 5/16" deep-well 6 point socket and long extension (tip: tape the socket to the extension) into distributor hole and engage the oil pump drive shaft.
8. Remove valve covers.
9. Rotate oil pump drive shaft counter clockwise with an electric drill until oil flow is visible from pushrods to the rocker arm in the rocker cover area.
10. Re-install valve covers.
11. Remove socket/extension from distributor hole.
12. Install distributor and align **both** rotor to distributor housing **and** distributor housing to intake manifold marks. Note: if distributor does not drop into place, gradually rotate oil pump drive with socket until it does. **Do not** force distributor into position.
13. Install distributor hold down.
14. Check oil level.
15. Set timing as recommended (total advance of 28° BTDC @ 4,000 rpm).
16. NOTE: engine must be primed after installation of remote filter or and oil cooler.

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### 3. Bill of Materials

Assembly Part Number # **M-6007-572DF(DR)**  
Description Bill of Materials Crate Engine

Part Number	Description	Required
09024500	Ring Set	1
2-454-67-2200	Connecting Rod Set	1
20-850	Canton Dipstick and Tube	1
2966	Intake Manifold	1
HAR J4.000-1	Main Stud	1
388813-S	Balancer Bolt	1
4-460-4500-2200	Crankshaft	1
73615-16	Rocker Arms 1.73:1	1
7AQ4.475-1C 9/16" x 4.475	12 Point Head Bolt	10
7AQ5.500-1C 9/16" x 5.500	12 Point Head Bolt	10
800-FPP	Piston (Coated Skirt)	8
83870	Carburetor	1
85801	Distributor w/melanized gear	1
AGSP32CA	Spark Plugs	8
AQW10,9/16" x 1.00	9/16" x 1.00 Head Bolt Washers	20
C15211	Gasket Kit	1
C3AZ-12270-A	Distributor Clamp	1
C8SE-8508-B	Water Pump Plate	1
CM-6731-FL1A	Oil Filter	1
E6DZ-6700-A	Front Cover Seal	1
EAD-6397-B	Trans Dowel	2
EDC-6378-A	Crank Damper Washer	1
EOAZ-6626-B	Oil Pump Gasket	1
F1TZ-6019-A	Front Cover	1
F3SZ-6278-A	Cam Gear Washer	1
F5TZ-6710-C	Oil Pan Gasket	1
FORD-CUSTOM5	Camshaft	1
KAASE385	Oil Pump	1
M-12259-C460	Plug Wire Set Blue	1
M-6010-A460XBB	Bare Block	1
M-6049-SCJA	Cyl. Head Assembly	2

**Note: Piston Part #FPP-800 consists of the following parts:**

COMPONENT PART #	COMPONENT DESCRIPTION	SOURCE
4.500	COATED PISTON	DIAMOND RACING PISTONS
015106	SPIROLOX	DIAMOND RACING PISTONS
PIA	PISTON PIN .990 8620 STEEL	DIAMOND RACING PISTONS

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Part Number	Description	Required
M-6268-A460	Timing Set	1
M-6316-A521	Crank Damper	1
M-6582-C460	Valve Cover	1
M-6605-A429	Oil Pump Shaft	1
M-6622-FT460(DRS 460)	Oil P/U tube	1
M-6675-FT460(DRS460)	Oil Pan	1
M-8501-C460	Water Pump	1
T8650803	Pushrod Exhaust 8.650"	8
T8225803	Pushrod Intake 8.225"	8
1021	Front Cover Gasket	1
1022	Water Pump Gasket	1
1023	Water Pump Rear Plate Gasket	1
1301	Valve Cover Gaskets	2
42910-S	Cam Plate Bolt	2
8038	Timing Pointer	1
8047	Damper Spacer	1
2212BBR	Tie Bar roller Lifters	8
BUL2948	Rear Main Seal	1
BS40032	Rear Main Seal	1
CP460N	Camshaft Thrust Plate	1
CR808HPN STD	Connecting Rod Bearing Set	1
CR808HPN STD X	Connecting Rod Bearing Set +.001 (optional)	1
E7TZ-8597-A	Bypass Hose	1
F-30	Cam Bearing Set	1
MB5650HP	Main Bearing Set	1
MB5650HPX	Main Bearing Set +.001 (optional)	1
PK135	Woodruff Key	1
C5206-060	Cometic Intake Gasket set	1
PK-174	Damper Key	1

1

#### 4. Torque Specifications

Application	Torque (lb*ft unless otherwise noted)	Recommended Lubricant
Main bolts 1/2 inch	95-105	Engine oil
Rod bolts	63	ARP Moly rod bolt lube
Head bolts	130	Engine oil
Rocker studs	60-65	Loctite PFT
Intake manifold bolts	30-35	Loctite 242
Flywheel bolts	75-80	Loctite 242 or dry-seal
Vibration damper bolt	90	Engine oil
Oil pump to block	30-32	Loctite 242
Oil pickup tube to main stud	28-35	Loctite 242
Cam bolt	35	Loctite 242
Cam retainer plate bolt	9-12	Loctite 242
Oil pickup tube to oil pump	12-18	Loctite 242

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