

PCM QUICK REFERENCE SERVICE SPECIFICATIONS

FUEL SYSTEMS

MECHANICAL FUEL PUMP

Pressure: 5 - 6 psi
 Volume: 16 Oz. in 10 seconds @ 650-750 (idle) RPM (minimum)

ELECTRIC FUEL PUMPS

Low Pressure Fuel Pump (LPFP):

Pressure 7 - 9 psi (SN 473065 and above)

Pressure 4 -7 psi
 Volume 20 oz. in 10 seconds (min.)

EFI High Pressure Pump

Pressure

PTI Std.	14 - 17 psi @ WOT*
PTI H.O.	13 - 15 psi @ WOT*
PTI Retrofit	23 psi @ WOT*
GT40	39 - 42 psi @ WOT*
GM TBI	27 - 33 psi @ WOT*
GM APEX	44 - 48 psi @ WOT*
GM Excalibur	57 - 62 psi @ WOT*
GM 5.0L (Bosch Intake)	57 -62 psi @ WOT*
GM 6.0L (MY '03)	57 - 60 psi @ WOT*
GM 6.0L (MY '04)	59 - 61 psi @ WOT*
GM 8.1L (-'04)	44 - 48 psi @ WOT*
GM 8.1L ('05-)	57 - 62 psi @ WOT*

***IMPORTANT: WHEN CHECKING FUEL PRESSURE, ENSURE THAT WOT READING IS OBTAINED WITH ENGINE UNDER LOAD.**

FUEL FILTERS

Kit, FCC Fuel Filter	RP080026
Kit, Pre-Filter	RP077014
Fram Fuel/Water Separator (short)	RP080008
Fram Fuel/Water Separator (tall)	RP080012
Racor Fuel Filter	R080020
Fuel Filter, Inline (EFI)	R080024

ELECTRICAL

ELECTRICAL SPECIFICATION

12 Volts - Negative Ground

Minimum Input Voltage All Systems Under All Conditions: 9.6 Volts at the device input terminal.

Maximum Continuous Input Voltage All Systems Under All Conditions: 15.2 Volts at the device input terminal.

FUSES

Early GT40	50 AMP BUSS SC-50 Barrel Type - Near Battery (R153016)
Later GT40, All Other EFI	40 AMP SPADE Blade Type Near Battery (R153015)
All GM EFI - to '02	(3), 15 AMP Spade (R153017A)
All GM EFI - '02 - 2006	(3), 20 AMP Spade (R153017B)
All GM EFI - 2007 -	Fuse Block
	1 - 40A, Maxi (R153019F)
	1 - 20A, Maxi (R153019C)
	2 - 20A, Mini (R153017B)
	2 - 15A, Mini (R153017A)
	1 - 5A, Mini (R153017C)

CIRCUIT BREAKERS

All Engines (thru '06)	50 or 60 AMP For Main Electrical System
All PTI and GT40	12.5 AMP For Ignition Circuits
All PTI and GT40	15 AMP For Fuel Pump Circuits

RELAYS

GM EFI & GT40	2 Constant Duty
	1 - System and 1 - Fuel Pump
PTI	1 OR 2
	All Have (1) Fuel Pump Relay
	Some Have Ignition Feed Relay
All Engines	1 Intermittent Duty
	Start Relay

IGNITION TIMING *See Note*

FORD Point and Breakerless Engines

Clip-On Distributor Cap	6° BTDC
Screw Down Distributor Cap	10° BTDC
*GT40	5° BTDC

*PRO-TEC and PTI Engines

STD ENGINE	HO ENGINE
30° BTDC	26° BTDC

*GM With Mallory "AV" OR "BV" Distributor

STD ENGINE	HO ENGINE
5° BTDC	3° BTDC

GM With Mallory "MV" Distributor

STD Engine	HO Engine
9° BTDC	7° BTDC

*GM With Prestolite Distributor

STD ENGINE	HO ENGINE
5° BTDC	3° BTDC

*GM With Delco EST Distributor thru '01
 10° BTDC

*GM 5.0L/5.7L EFI Engines '02 & 2006

CAM Retard	43 - 47 degrees
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*GM 5.0L/5.7L EFI Engines 2007 & newer

CAM Retard	0 - 4 degrees
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FIRING ORDER

FORD	LH	RH
	13726548	18456273

GM	LH	RH
	18436572	12756348

GM 6.0L/8.1L	LH	18726543
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SPARK PLUG GAP

All Point/B.I.D. Equipped Engines	.035"
All PRO-TEC Engines	.045"
GM With Delco EST Distributor	.045"
EFI Engines thru '01	.045"
All GM Engines '02 - present	.060"

NOTE Ignition Timing On All FORD Breakerless And Point Equipped Engines Must Be Set At 600 - 700 RPM. Ignition Timing On All GM Point Equipped Engines Must Be Set At 600 - 700 RPM. Ignition Timing On All GM Breakerless Equipped Engines Must Be SET At 4000 RPM @ 29° BTDC For STD. Engines and @ 26° BTDC For HO Engines. Ignition Timing Of All PRO-TEC And PTI Engines Must Be Set At 3600 RPM. Ignition Timing On All GT40 Engines Must Be Set At 1000 RPM With The 'SPOUT' Connector Removed. Ignition Timing On All GM With Delco EST Distributors, Must Be Set With Spark Advance Disabled or for EFI Engines, thru '01 Model Year, Must Be Set With The Engine ECM in "Service Mode". CAM Retard Must Be Set At Idle RPM (650 - Non-Adjustable) And Requires a Special Diagnostic Scan Tool.

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SPARK PLUGS

FORD 5.0/5.8 (18MM) ('71 - '74)	R030001 GAP: .035"
FORD 5.0/5.8 (14 MM) STD.	R030002 GAP: .035 - POINTS GAP: .045 - PRO-TEC
FORD 5.0/5.8 (14 MM) H.O.	R030007 GAP: .035 - POINTS GAP: .045 - PRO-TEC/GT-40
GM 5.0/5.7/7.4/8.2	R030003 Gap: .035" or .045" (See Plug Gap Table)
GM GEN1+ (VORTEC) 5.0/5.7/MP454 - '96 - '01	R030008 or R030008A Gap: .045" (ALL)**
GM GEN1+ (VORTEC) 5.0/5.7 - '02 - PRESENT	R030010 Gap: .060" (ALL)
GM 6.0L '03 - PRESENT	R030011 Gap: .060" (ALL)
GM 8.1L '01 - PRESENT	R030009 Gap: .060" (ALL)

****NOTE: R030008 OR R030008A PLUGS MAY BE USED IN '02 AND NEWER ENGINES. WHEN INSTALLING R030008 OR R030008A IN AN '02 OR NEWER ENGINE ENSURE PLUG GAP IS .060".**

IGNITION WIRE KITS

RA121008/9	7MM 302/351 Carb w/Point/BID Dist.
RK120011	305/350/454 w/EST Ignition
RK120011A	8.2L Python
RK120015	GT-40
RK120016	8mm GM/Ford Carb w/Point/BID Dist.
RK120017	8mm 7.4L Carb w/Point/BID Dist.
RK120018	5.0/5.7L Excalibur
RK120019A	8.1L Python
RA121020	7MM 305/350 Carb w/Point/BID Dist.
RK120021	6.0L ZR6
RA121022	7MM 454 Carb. w/Point/BID Dist.
RA121040	All PRO-TEC Engines

BELTS

<u>5.0/5.8</u>	
Belt, Raw Water Pump Drive $\frac{3}{8}$ "	R066008
Belt, Alt./Circ. Pump Drive $\frac{3}{8}$ "	R066001
Kit, Drive Belt	RP066001/8
<u>5.0L/5.7L (1998 and earlier)</u>	
Belt, Raw Water Pump Drive $\frac{1}{2}$ "	R066021
Belt, Alt./Circ. Pump Drive $\frac{1}{2}$ "	R066010
Kit, Drive Belt	RP066010/21
<u>5.0L/5.7L (1999 and newer)</u>	
Belt, Raw Water Pump Drive $\frac{1}{2}$ "	R066026
Belt, Alt./Circ. Pump Drive $\frac{3}{8}$ "	R066008
Kit, Drive Belt	RP066008/26
<u>7.4L/8.2L</u>	
Belt, Raw Water Pump Drive $\frac{1}{2}$ "	R066021
Belt, Alt./Circ. Pump Drive $\frac{1}{2}$ "	R066011
Kit, Drive Belt	RP066011/21
<u>5.7L ('03 - thru)</u>	
Belt, Serpentine (LH)	R066028
Belt, Serpentine (RH)	R066029A
<u>6.0L</u>	
Belt, Serpentine	R066027
<u>8.1L</u>	
Belt, Serpentine (Crank RWP)	R066024
Belt, Serpentine (Serp. RWP)	R066024A

RAW WATER PUMP IMPELLER

<u>5.0L/5.8L</u>	
Impeller	R061015
Gasket, R/W Pump	RM0125
O-Ring	R047111
Repair Kit, Minor	RP061015
<u>5.0L/5.7L/7.4L/8.1L/8.2L</u>	
Impeller	R061017
Gasket, Cover	RM0269
O-Ring, Cover	R047111
Repair Kit, Minor	RP061017
<u>5.0/5.7/6.0/8.1L Serpentine Driven Raw Water Pump</u>	
Impeller	R061022
O-Ring, Housing	R047242
O-Ring, Bolt	R047243
Repair Kit, Minor	RP061022

**RAW WATER PUMP VOLUME
5 GALLONS IN 15 SECONDS @ 4000 RPM**

THERMOSTAT

<u>Raw Water Cooling (5.0/5.8)</u>	
Thermostat, 143° (Carburetor)	R026002E
Thermostat, 160° (EFI)	R026002
Gasket, T-Stat Housing	RM0003
Kit, T-Stat W/Gasket 143°	RP026002E
Kit, T-Stat W/Gasket 160°	RP026002
<u>Raw Water Cooling (5.0/5.7/7.4/8.2)</u>	
Thermostat, 143° (thru 1996)	R026003
Seal, T-Stat 143° (thru 1996)	R047011
Thermostat, 160° (1997 On)	R026002
Seal, T-Stat, 160° (1997- '01)	RM0244
Gasket, T-Stat Housing Upper ('02 On)	RM0258
Gasket, T-Stat Housing (ALL)	RM0121
<u>Raw Water Cooling (8.1L)</u>	
Thermostat, 160°	R026002
Gasket, T-Stat Housing Lower	RM0121
Gasket, T-Stat Housing Upper	RM0256
<u>Fresh Water Cooling (ALL)</u>	
(Separate Component System)	
Thermostat, 143° (Carburetor)	R026003
Thermostat, 170° (EFI)	R026001
Seal, T-Stat	R047011
Gasket, T-Stat Housing Upper	RM0004
Gasket, T-Stat Housing Lower	RM0121
(One Piece Heat Exchanger - Thermostat Mounted In The Intake Manifold)	
Thermostat, 160° w/holes	R026002F
O-Ring, T-Stat Housing	R047189
(Thermostat Mounted In The Heat Exchanger)	
Thermostat, 170°, bypass	R026007
Gasket, T-Stat Housing	RM0121
(Thermostat Mounted Circ. Pump - 6.0L)	
Thermostat, 160°	R026002
Gasket, T-Stat Housing	RM0275
Retainer Plate, Thermostat	R109051
Heat Exchanger -	
Anode, Sacrificial Zinc $\frac{3}{8}$ " NPT	R168008
Anode, Sacrificial Zinc $\frac{1}{4}$ " NPT	R168005
Anode, Sacrificial Zinc $\frac{1}{8}$ " NPT	R168007

***NOTE* ALWAYS REFER TO THE APPROPRIATE PCM MANUALS FOR DETAILED SERVICE PROCEDURES AND SERVICE PARTS FOR THE MODEL OF PCM ENGINE BEING SERVICED.**