

MCM 350/454 Magnum Specifications

- A. Tune-Up Specifications
- B. Electrical Specifications
- C. Carburetor Specifications
- D. 350/454 Wiring Diagram
- E. 350 Cooling System
- F. 454 Cooling System

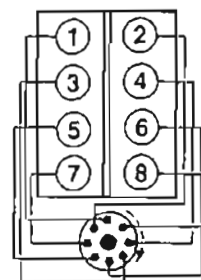
A. TUNE-UP SPECIFICATIONS

Model	350 Magnum	454 Magnum
Horsepower (Kilowatts)	260 + (194 +)	330 (246)
Cu. In. Displacement	350 CID (5.7 Liters)	454 CID (7.4 Liters)
No. of Cyls.	V-8	
Bore	4.00011 (101.6mm)	4.25011 (107.95mm)
Stroke	3.48011 (88.39mm)	4.00011 (101.6mm)
Compression Ratio	9.0:1	8.5:1
Compression Pressure	150 PSI (1035 kPa)	
Ignition	Thunderbolt IV (HEI)	
Fuel Required	86 Minimum Octane (Average Octane Rating)	
Spark Plug Type	AC-MR43T or Champion RV8C	
Plug Gap	.035" (.9mm)	
Timing @ Idle RPM	8° BTDC	
Max. RPM @ W.O.T.	4200-4600	
Idle RPM (In Gear)	650-700 RPM	
Firing Order	1-8-4-3-6-5-7-2	

Model	350 Magnum	454 Magnum
Fuel Pump Pressure	3-7 PSI (21-48 kPa)	
Electrical System	12-Volt Neg. Ground	
Battery Rating (Cold Cranking Amperage)	Min. 350 Amps	Min. 450 Amps
Min. Oil Pressure At Idle	4 PSI (28 kPa)	
Oil Pressure @ 2000 RPM	30-55 PSI (207-379 kPa)	30-70 PSI (207-483 kPa)
Oil Pan Capacity w/Filter (*Approx.)	5.5 Qts (5.2 Liters)	7 Qts (6.6 Liters)
Alternator Rating	55 Amps	
Closed Cooling System Capacity (Approx.)	20 Qts (19 Liters)	/
Closed System Cap Pressure	14 PSI (97 kPa)	/
Thermostat	143° F (62° C)	
Stern Drive Unit Oil Capacity Approx.)	32 Oz. (.95 Liter)	
Stern Drive Unit Gear Ratio	1.50:1	1.32:1

*Approximately.
ALWAYS use dipstick to determine exact quantity of oil required.

L.H. ROTATION FRONT



Firing Order 1-8-4-3-6-5-7-2

B. ELECTRICAL SPECIFICATIONS

Ignition Specifications

Engine Model	350 Magnum	454 Magnum
Coil	Coil Part No. 392-7803A4	
Coil Primary Resistance (Ohms) Minimum	.60	
Coil Primary Resistance (Ohms) Maximum	.80	
Coil Secondary Resistance (Ohms)	9,400-11,700	

Starter Motor Specifications

Model	Identification Number	No Load Test					Brush Spring Tension
		Volts	Min. Amps	Max. Amps	Min. RPM	Max. RPM	
350 Magnum	50-12177A2 (Delco-Remy) 1998566	10.6	70	120	5400	10800	56-105 oz. (1588-2976g)
454 Magnum	50-99418A1 (Delco-Remy) 1998314	10.6	70	120	5400	10800	56-105 oz. (1588-2976g)

C. CARBURETOR SPECIFICATIONS

Model	350 Magnum	454 Magnum
Make (Model)	4 MV	
Part No. Mercury/Rochester	1347-8289 17080562	1347-8291/ 17080563
Float Level	15/64" (5.9mm)	
Pump Rod Hole Location	Inner	
Accelerator Pump (Note 1)	23/64" (9.1mm)	
Air Valve Dash Pot (Air Valve Rod)	.025" (.64mm)	
Vacuum Break	.080" [5/64" (2.0mm)]	
Air Valve Spring Wind Up	3/8 Turn 70-90 Gr.	1/2 Turn 80-95 Gr.
Choke Coil Rod (Note 2)	Top of Rod Even with Bottom of Hole	
Float Weight (Max.)	9.88 Gr.	

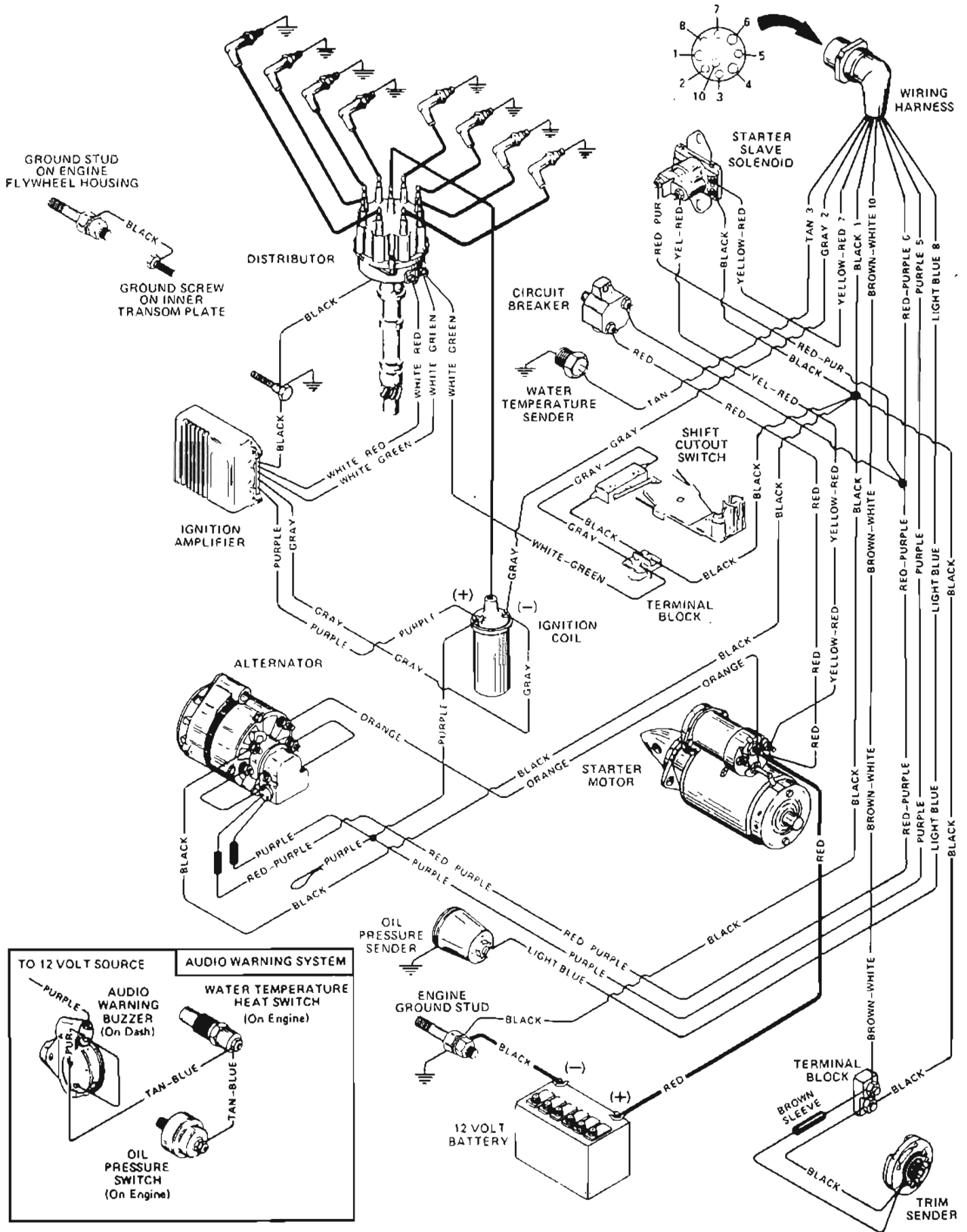
Model	350 Magnum	454 Magnum
Primary Jet	.069"	.069"
Metering Rod (Primary)	.042"	.042"
Metering Rod (Secondary)	CL	DB
Idle Mixture Screw, Pre- liminary Setting	2-3 Turns	

All Measurements are $\pm 1/64"$ (0.4mm)

NOTES:

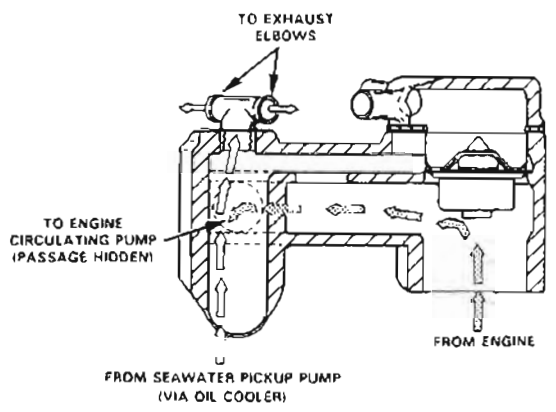
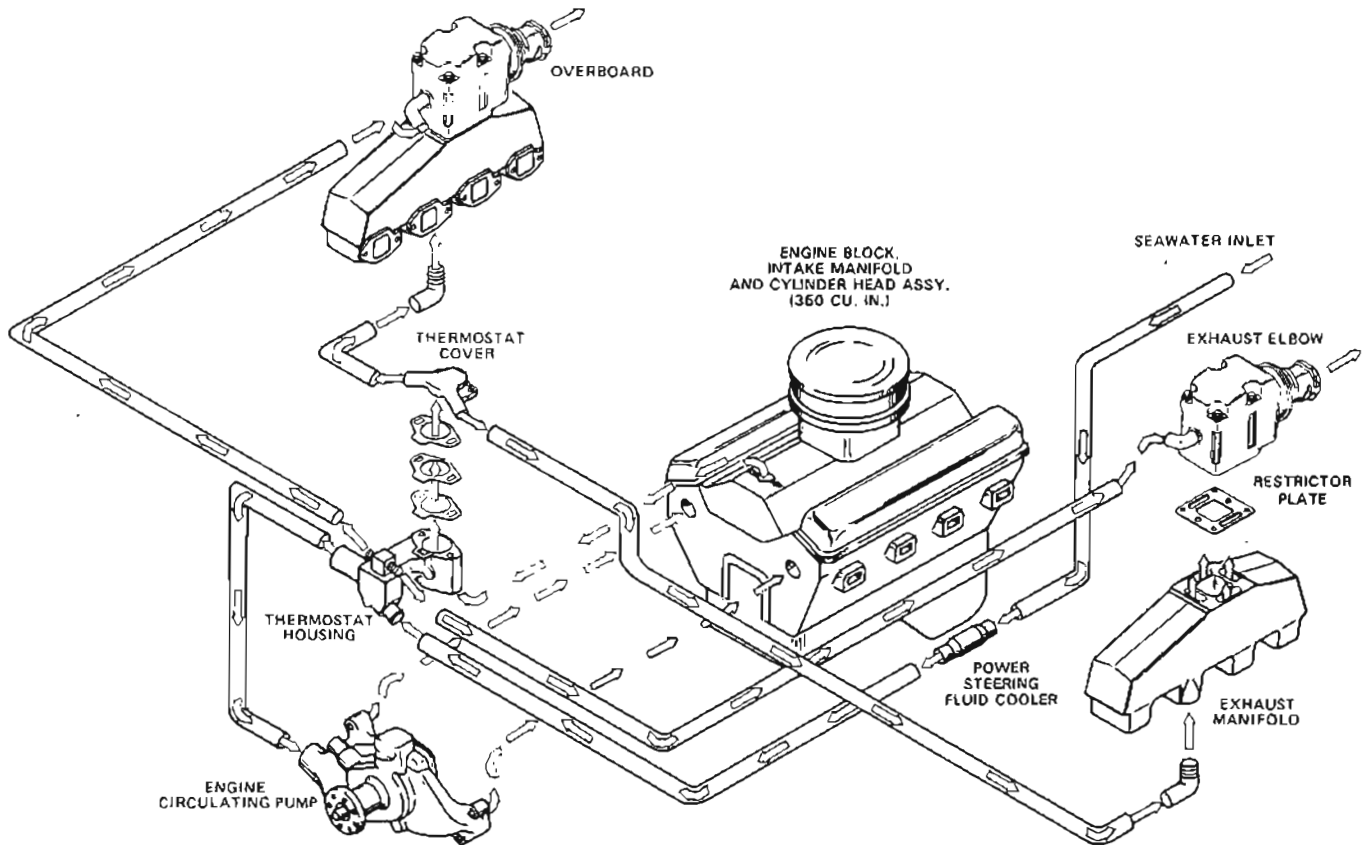
- 1) Accelerator Pump Measurement Taken From Flame Arrestor Mounting Surface to Pump Stem with Throttle Plates Fully Closed. This is Different Than Previous Method.
- 2) Choke Coil Rod Adjustment Performed with Choke Valve Completely Closed, Choke Rod in Bottom of Choke Lever Slot and Choke Coil Rod Pushed Down to End of Travel.

IMPORTANT: For internal engine specifications refer to MerCruiser Service Manual 90-95693, Sec. 6, Part C, pages 9 thru 13.

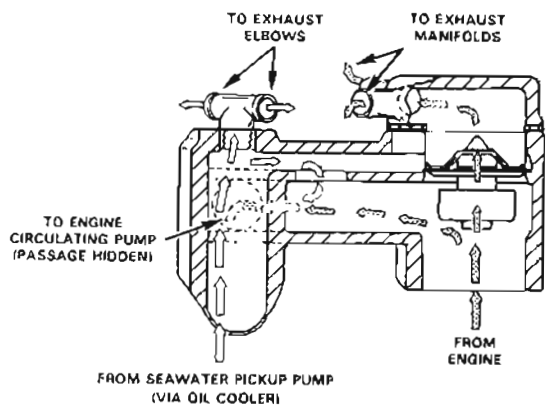
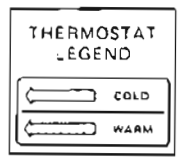


D. MCM 350/454 MAGNUM ELECTRICAL SYSTEM WIRING DIAGRAM

335 HRR

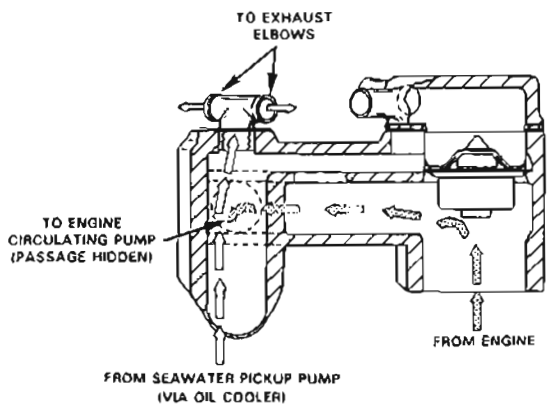
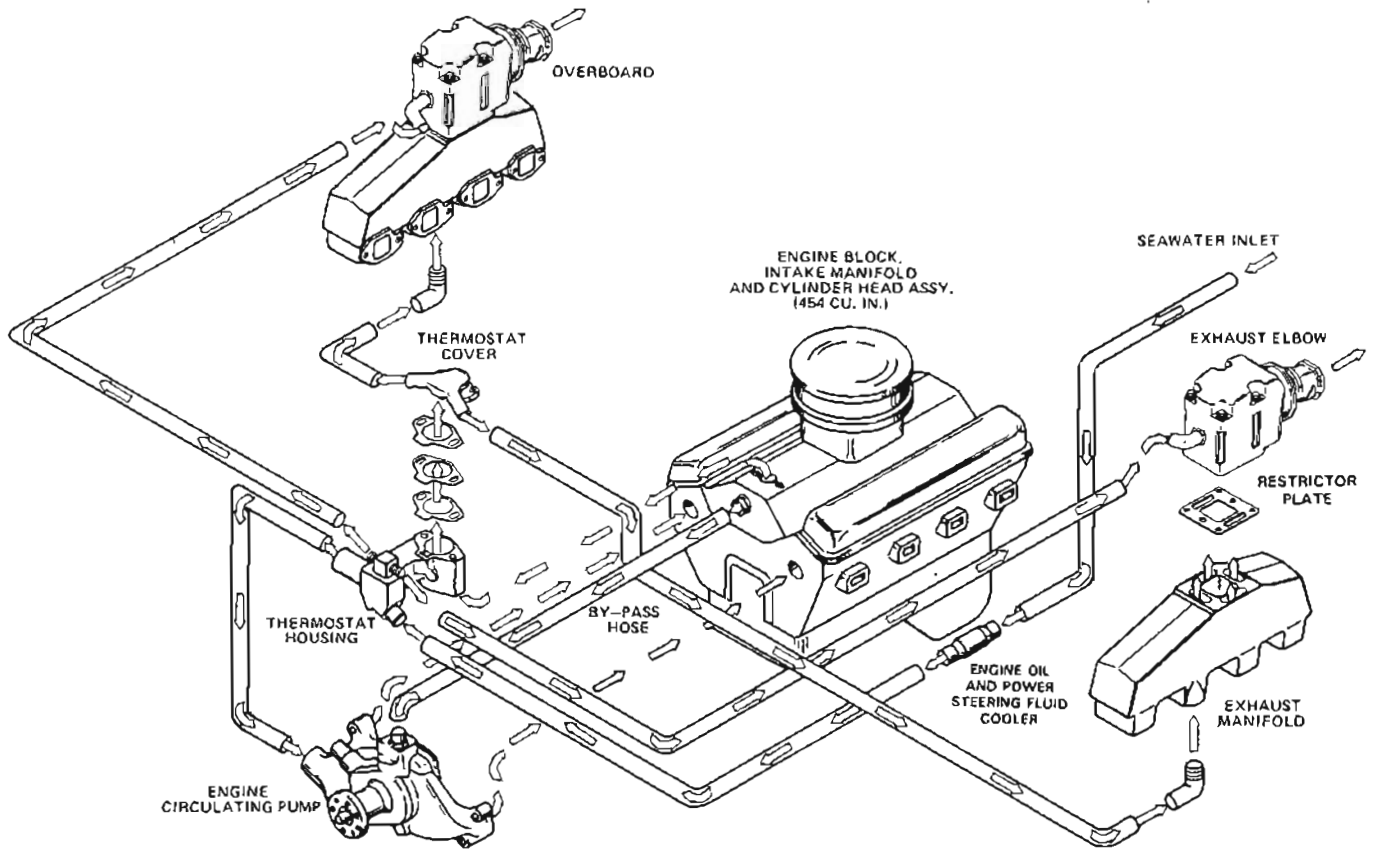


COOLANT FLOW THROUGH THERMOSTAT HOUSING WITH THERMOSTAT CLOSED

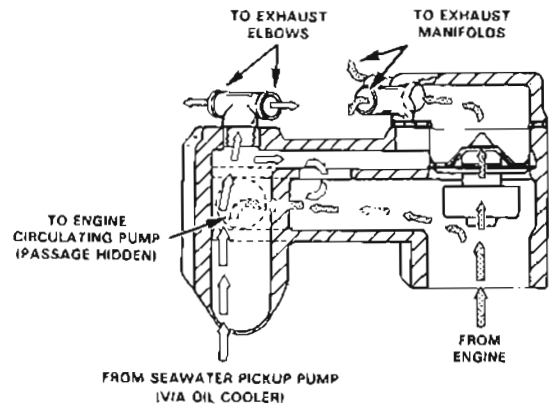
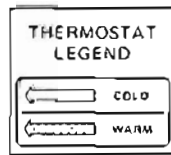


COOLANT FLOW THROUGH THERMOSTAT HOUSING WITH THERMOSTAT OPEN

E. MCM 350 MAGNUM WATER FLOW



COOLANT FLOW THROUGH THERMOSTAT HOUSING WITH THERMOSTAT CLOSED



COOLANT FLOW THROUGH THERMOSTAT HOUSING WITH THERMOSTAT OPEN

F. MCM 454 MAGNUM WATER FLOW