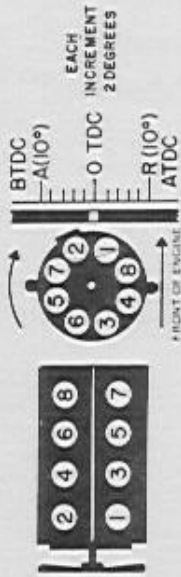


ENGINE 350 Cu. In.



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

Hyd. Lifters Zero Lash + 1 turn down

Comp. Ratio 9.0-1

Comp. PSI (min.) 160

(max. var.) 20

BATTERY

12V Neg. Grd.

Standard H11-50 50AH

Optional 80AH

Cranking Voltage (min.) 9.0v

CHARGING SYSTEM

(measured at battery) Standard Optional

Output (min.) 30A 50A

Operating Voltage 14.0-14.8v 14.0-14.8v

IDLE

Engine Vac. 17"-21"

RPM-(apply park brake firmly)

(automatic load leveler motor-inactive)

W/AIR CLEANER REMOVED-plug eng. vac. supply port.

Dist. Vac. Hose Disconnected and Plugged

W/E.C.S. Disconnect fuel tank line at vapor canister.

HOT IDLE COMPENSATOR VALVE-must be seated.

IDLE STOP SOLENOID

"A" Active "B" Active "C" Inactive

Manual Trans. 750 830 750 450

Auto Trans. (DR) 600 630 600 450

DWELL

(Degrees) Dist. Vac. Hose Disconnected and Plugged

At Idle 30 (28-32)

Variation 2 (between idle and 1500 RPM)

IGNITION TIMING

(Degrees) Dist. Vac. Hose Disconnected and Plugged

Manual Trans. 0 TDC @ Idle RPM

Auto Trans. 4 BTDC @ Idle RPM

IGNITION ADVANCE (degrees @ 2500 RPM)

Disconnect wire connector at T.C.S. vacuum advance solenoid. Mounted at RH side of engine near carb. base.

Manual Trans. Cent. Only

Auto Trans. 15%-19%

Reconnect vacuum solenoid wire connector an audible click should be heard at vac solenoid.

SPARK PLUGS

AC R44

Gap .035"

Torque 25FU/Lbs.

IDLE MIXTURE

Air Cleaner Installed-Vac. Hose Connected

Dist. Vac. Hose Disconnected and Plugged

W/E.C.S.-Disconnect fuel tank line at vapor canister.

Turn mixture screws clockwise (lean) until lightly seated, then back out each mixture screw four turns.

Adjust solenoid idle stop screw to obtain "A" RPM, turn mixture screws clockwise (lean) as required to obtain "B" RPM. Disconnect idle stop solenoid wire connector and adjust carb. throttle stop screw as required to obtain "C" RPM. Reconnect idle stop solenoid wire connector.

Reconnect Dist. Vac. Hose and Fuel Tank Line.

CARBURETOR

Rochester 2GV

Manual Trans. 7040213

Auto Trans. 7040123

THERMO AIR CLEANER

Engine off and underhood temp. below 85°F, Snorkel Passage should be open-Heat off position.

Engine at idle speed and underhood temp. below 85°F, Snorkel Passage should be closed-Heat on position. With underhood temp. 85°F-128°F, Snorkel Passage control damper door should begin to open (heat off). Underhood temp. above 128°F, Snorkel Passage should be open-Heat off position.

With a min of 9" vac. applied to diaphragm assy., damper door should completely close Snorkel Passage.

FUEL PUMP

Press. 5-6½ PSI @ 450-1000 RPM

Vol. 1 pt. 30-45 sec. @ Idle RPM

Filter (carb. inlet nut) Replace element every 12,000 miles or 12 months.

Filter (fuel tank) Starliner-Service as required.

Filter (evaporator control system) Replace vapor canister filter every 12,000 miles or 12 months.

DISTRIBUTOR

Delco Manual Trans. Auto Trans.

Rotation 1111338 1111338

Spring Tension (oz.) C 19-23

Gap (inch) New .019 .019

Used .016 .016

Dwell (Degrees) 30 (28-32) 30 (28-32)

Variation (Degrees) 2 2

Condenser Capacity .18-.23MFD

MECHANICAL ADVANCE

1111338 1111338

Dist. RPM Dist. Deg. Dist. Deg.

600 1-3 600 1-3

1000 6-8 1000 6-8

2050 13-15 2050 13-15

VACUUM ADVANCE

In. Vac. Dist. Deg. In. Vac. Dist. Deg.

NONE NONE NONE

IGNITION COIL

(ohms @ 80°F)

Delco 1115275

Pri. Res. 1.77-2.05

Sec. Res. 3000-20,000

Test Set Line 8

Ballast Resistor External 1.35

IGNITION CURRENT

Engine Stopped 4.0A

Idling 1.8A

HI TENSION WIRE RESISTANCE

Coil to Dist. Cap 10000 ohms per foot (max)

Spark Plug Wires 10000 ohms per foot (max)

CRANKING CIRCUIT RESISTANCE

Insulated Circuit

Bat. Pos. Post to Starter Motor Terminal of Solenoid-.4v

(Pos. battery cable only. .2v)

(Solenoid contacts-.2v)

Ground Circuit

Bat. Neg. Post to Starter Motor Housing-.2v

STARTER FREE RUNNING CURRENT DRAW

Delco 1108427 Ring Gear 12½"

55-80A (includes solenoid) @ 9.0v RPM 3500-6000

(Ultra High) Delco 1108430 Ring Gear 14"

65-95A (includes solenoid) @ 9.0v RPM 7500-10500

SOLENOID CURRENT DRAW

Hold in Windings 14½-16½A @ 10v
Both Windings 41-47A @ 10v

SOLENOID PULL IN VOLTAGE

SW (S) Term. of Solenoid and Ground-7.7v (min.)

SOLENOID CONTROL CIRCUIT

Bar. Term. of Solenoid to SW (S) Term. of Solenoid-3.5v (max.)

MOTOROLA ALTERNATOR MODEL	CIRCUIT	REGULATOR	ROTATION	COLD OUTPUT When Measured at Battery Add 5 Amps. to Current Output for Total Output	ENGINE RPM	GEN RPM	FIELD CURRENT	BELT TENSION FT./LBS.
Standard 70D447908	35 Ampere RBT	TVR12CC1 70C44238801	Clockwise	15 Amperes 35 Amps. @ 15 Volts	500 2000	5000	2.0-2.6 Amps. Bench Testing Rotor Current Draw 2.3-2.9 Amps. @ 12.4-12.8v	New Used 110-120 70-80
W/Air Cond. Optional 70D447918	55 Ampere RBT	TVR12CC1 70C44238801	Clockwise	22 Amperes 55 Amps. @ 15 Volts	500 2000	5000	1.8-2.4 Amps. Bench Testing Rotor Current Draw 2.1-2.7 Amps. @ 12.4-12.8v	110-120 70-80

MOTOROLA REGULATOR MODEL TVR12CC1 70C44238801 12 Volts-Neg. Grd.	CIRCUIT TYPE-RBT	
CHARGING CIRCUIT RESISTANCE Operate engine at 1000 RPM with 10 amp. load, Voltmeter pos. lead connected to alternator output terminal, Voltmeter neg. lead connected to positive battery cable, meter indication not to exceed: With Ind. Light-0.3 volts Grd. Cir. .05v Reg. Grd. .05v	OPERATING VOLTAGE TEST Voltmeter connected pos. lead to alternator output terminal, neg. lead to alternator ground, Engine RPM 2000 with 10 amp. max. load, 14.0-14.8 volts @ 75°F.	
ISOLATION DIODE TEST Voltmeter connected pos. lead to alternator regulator terminal, neg. lead to alternator ground. With ignition switch and all accessories off voltmeter indication should not exceed .1 volt.	RECTIFIER DIODE TESTING WITH DIODE RECTIFIER TESTER Meter Indication 2 Amps. or More Meter Indication 1 Amps. or less Meter Indication Zero WITH 12V BULB AND 12V BATTERY Test Lamp Lites One Direction Test Lamp Lites Both Directions Test Lamp Does Not Lite Either Direction	
REGULATOR TERMINAL VOLTAGE TEST Voltmeter connected pos. lead to alternator regulator terminal, neg. lead to alternator ground. With ignition switch on voltmeter should indicate not less than ½ volt or more than 2 volts.	OPERATING VOLTAGE CHART Temp. Deg. 0 20 40 60 80 100 Setting (min.) 14.6 14.4 14.2 14.1 13.9 13.8 Volts (max.) 15.4 15.2 15.0 14.9 14.7 14.6 Temp. Deg. 120 140 160 Setting (min) 13.7 13.6 13.3 Volts (max.) 14.5 14.2 14.1	RECTIFIER DIODE TESTING Diode Satisfactory Diode Shorted Diode Open Diode Satisfactory Diode Shorted Diode Open