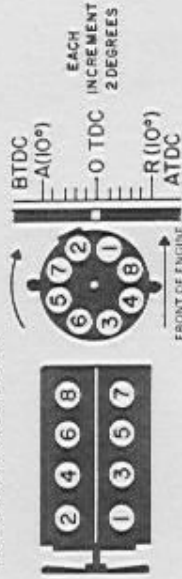


ENGINE 350 Cu. In.



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. H11-50
Standard 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" "B" "C"
Active Active Inactive
630 600 450

DWELL

With Air Cond.-Off 600
Auto Trans. (DR) 600
(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
Auto Trans. 4 BTDC @ Idle RPM

IGNITION ADVANCE

(degrees @ 2500 RPM)
Disconnected wire connector at T.C.S. vacuum advance solenoid.
Mounted at RH side of engine near carb. base.

Auto Trans. Cent. & Vac. Cent. Only
39-46 15-18

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

SPARK PLUGS

AC R44
Gap .035"
Torque 25 Ft/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 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 W/E.C.S.
Auto Trans. 7040114 7040414
W/Air Cond. 7040116 7040416

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 (fuel tank) Strainer-Service as required.
Filter (evaporator control system) Replace vapor canister filter every 12,000 miles or 12 months.
Filter (carb. inlet nut) Replace element every 12,000 miles or 12 months.

DISTRIBUTOR

Delco Auto Trans. 1112002
Rotation C
Spring Tension (oz) 19-23
Gap (inch) New .019
Used .016
Dwell (Degrees) 30 (28-32)
Variation (Degrees) 2
Condenser Capacity .18-.23MFD

MECHANICAL ADVANCE

1112002
Dist. RPM Dist. Deg.
550 0-2
700 3-5
2200 15-17

VACUUM ADVANCE

In. Vac. Dist. Deg.
6-8 Start
16-17% 12-14

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

HIGH 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. bat. cable only .2v)
(Solenoid contacts-.2v)
Ground Circuit
Bat. Neg. Post to Starter Motor Housing-.2v

STARTER FREE RUNNING CURRENT DRAW

Delco 1108367 Ring Gear 12½"
50-80A (includes solenoid) @ 9.0v RPM 5500-10500
(Ultra High) Delco 1108430 Ring Gear 14"
65-95A (includes) @ 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

Bat. 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	TVR12CCI 70C44238B01	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 70D44791B	55 Ampere RBT	TVR12CCI 70C44238B01	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 TVR12CCI
70C44238B01
12 Volts-Neg. Grd.
CHARGING CIRCUIT RESISTANCE
Operate engine at 1000 RPM with 10 amp. load, volt-
meter 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

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.

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 1/2 volt
or more than 2 volts.

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.

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
WITH DIODE RECTIFIER TESTER
Meter Indication 2 Amps. or More
Meter Indication 1 Amps. or Less
Meter Indication Zero

Diode Satisfactory
Diode Shorted
Diode Open

WITH 12V BULB AND 12V BATTERY
Test Lamp Lites One Direction
Test Lamp Lites Both Directions
Test Lamp Does Not Lite Either
Direction

Diode Satisfactory
Diode Shorted
Diode Open