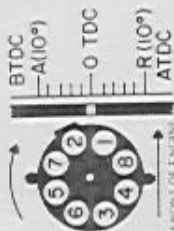
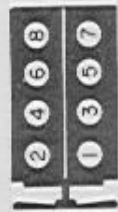


ENGINE 327 Cu. In.



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

Output (min) Standard 30A
Operating Voltage 14.0-14.8v
(measured at battery) Optional 50A
14.0-14.8v

IDLE

Engine Vac. 16"-20"
RPM—apply park brake firmly (automatic load leveler motor—inactive)
HOT IDLE COMPENSATOR VALVE—Must be seated
W/AIR CLEANER REMOVED—Plug eng. vac. supply port.
Manual Trans. 700 W/Air Cond. off
Auto. Trans. (DR) 600 W/Air Cond. off

DWELL (Degrees)

At Idle 30 (28-32)
Variation 2 (between idle and 1500 RPM)

IGNITION TIMING (Degrees)

Dist. Vac. Line Disconnected and Plugged 2 ATDC @ Idle RPM
Manual Trans. 2 ATDC @ Idle RPM
Auto. Trans. 2 BTDC @ Idle RPM

IGNITION ADVANCE (Degrees @ 2500 RPM)

Cent. & Vac. Cent. Only
Manual Trans. 31½-37½ 17½-21½
Auto. Trans. 24-34 14-18

IDLE MIXTURE

Air Cleaner Installed—Vac. Hose Connected
With idle speed RPM set to specifications, and mixture screws backed out 3 turns from lightly seated position. Turn mixture screws equally as required to obtain max. idle speed RPM.
Adjust carb. idle speed screw to obtain specified idle speed RPM setting, turn each mixture screw clockwise (lean) to obtain a 20 RPM engine speed drop and then counter-clockwise (rich) ½ turn. Readjust carb. idle speed screw as required to obtain specified idle speed RPM setting.

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) Strainer—Service as required.

SPARK PLUGS

Standard AC45 Colder AC44
Torque .035" 25 Ft./Lbs. 25 Ft./Lbs.

CARBURETOR

Manual Trans. Rochester-2GV 7029127
Auto. Trans. Rochester-2GV 7029102

DISTRIBUTOR

Delco 1111482 Manual Trans. 1111483 Auto. Trans. C
Rotation 19-23 C
Spring Tension (oz) New .019 19-23
Gap (inch) Used .016
Dwell (Degrees) 30 (28-32) 30 (28-32)
Variation (Degrees) 2
Condenser Capacity .18-.23MFD

MECHANICAL ADVANCE

1111482	Dist. Deg.	1111483	Dist. RPM	Dist. Deg.
525	0-2½	600	600	½-2¼
690	3½-6	1000	1000	5-7
710	4-6½	2150	2150	13-15
950	6½-8½			
2150	15-17			

VACUUM ADVANCE

In. Vac.	Dist. Deg.	In. Vac.	Dist. Deg.
6	0	6	0
12	7½	12	7½

IGNITION COIL (ohms @ 80°F)

Delco 1115293
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

SECONDARY RESISTANCE 3.0 min.

HI TENSION WIRE RESISTANCE

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

STARTING 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
Manual Trans.—1108382—14" Ring Gear RPM 6400-8600
53-69A (includes solenoid) @ 9.0v
Auto. Trans. 1108367 12½" Ring Gear RPM 6400-8600
53-69A (includes solenoid) @ 9.0v

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**

MOTOROLA ALTERNATOR MODEL	CIRCUIT TYPE	REGULATOR MODEL	ROTATION	COLD OUTPUT When Measured at Battery Add 5 Amps to Current Output for Total Output	ENGINE RPM	GEN RPM	FIELD CURRENT @ 80°F.	BELT TENSION FT/LBS.
Standard 70D44790B	35 Ampere RBT	TVR120CI 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 110-120 70-80
W/Air Cond. Optional 70D44791B	55 Ampere RBT	TVR120CI 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 TVR120CI CIRCUIT TYPE - RBT

70C44238B01

12 Volts - Neg. Grd.

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

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 amp. 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

Diode Satisfactory
Diode Shorted
Diode Open

Diode Satisfactory
Diode Shorted
Diode Open