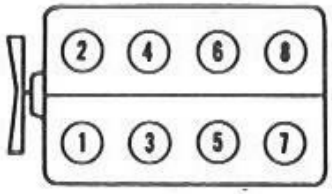
1966 CHECKER MOTORS

A11
A12 - A12W

V8 ENGINE
283 CU. IN.



283 CU. IN. ENGINE

ENGINE VAC. @ IDLE 17"-21"
COMP. RATIO 9.25-1
COMP. PRES. 150 PSI (MIN.)
MAX. VAR. 20 PSI
FIRING ORDER 1-8-4-3-6-5-7-2
HYD. LIFTERS — ZERO LASH + 1 TURN

IGNITION COIL

DELCO — 1115204

PRI. RES. 1.28-1.42 OHMS
SEC. RES. 7200-9500 OHMS
TEST SET LINE 8

IGNITION CURRENT
ENGINE STOPPED 4.0A — IDLING 1.8A

BALLAST RESISTOR

1.4-1.65 OHMS

CONDENSER CAPACITY

.18-.23 MFD

SPARK PLUGS

STAND. — AC 45
COLDER — AC 44
GAP — .035"
TORQUE — 20-25 FT./LBS.

IDLE SPEED

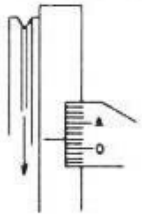
STAND. TRANS. 500
AUTO. TRANS. 475 (DR)
W/AIR COND. ON — HOLD HOT IDLE COMPENSATOR VALVE CLOSED WHEN MAKING IDLE SPEED ADJUSTMENT.

IGNITION TIMING

STAND. TRANS. 4° BTDC @ 550 RPM
AUTO. TRANS. 4° BTDC @ 550 RPM
DIST. VAC. LINE DISCONNECTED AND PLUGGED.

IGNITION ADVANCE AT 2500 ENGINE RPM

TOTAL CENT. VAC.	CENT. ONLY
34°-38°	19°-23°



SET AS SHOWN
EACH INCREMENT
2 DEGREES

FRONT OF ENGINE

DISTRIBUTOR

Delco	**1111015**
Rotation	C
Spring Tension	19-23 Oz.
Dwell	30° (28°-32°)
Gap	.019" NEW .016" USED
Dwell Variation BETWEEN IDLE AND 1500 RPM	2° (MAX.)

DISTRIBUTOR MECHANICAL ADVANCE

DIST. RPM	DIST. DEG.
400	0°
600	3½°
1200	10°
2000	15°

VACUUM ADVANCE

VAC.	DIST. DEG.
8"	0°
15½"	7½°

SECONDARY RESISTANCE — 3.0 MIN.
HI TENSION WIRE RESISTANCE 3000-7000 OHMS PER FOOT

STARTER FREE SPEED CURRENT DRAW

49-76 AMPS (INCLUDES SOLENOID) @ 10.6 VOLTS
6200-9400 RPM

BATTERY

12V NEG. GRD.
50 AH

CRANKING VOLTAGE
MIN. 9.0V

SOLENOID CURRENT DRAW

HOLD IN WINDINGS
10½-12½ AMPS @ 10 VOLTS

BOTH WINDINGS
42-49 AMPS @ 10 VOLTS

SOLENOID PULL IN VOLTAGE

7.7 VOLTS (MIN.)

STARTING MOTOR CIRCUIT RESISTANCE

INSULATED CIRCUIT — .4 VOLT
BATTERY POSITIVE POST TO BATTERY TERMINAL OF SOLENOID — .2 VOLT
BATTERY TERMINAL OF SOLENOID TO MOTOR TERMINAL OF SOLENOID — .2 VOLT
GROUND CIRCUIT — .2 VOLT
SOLENOID CONTROL CIRCUIT — 3.5 VOLTS (MAX.)

FUEL PUMP

PRES.
5¼-6½ PSI @ 450-1000 RPM

VOL.
1 PT. 30-45 SEC @ IDLE RPM

FUEL FILTERS

FUEL TANK — STRAINER
CARB. — INLET FILTER
REPLACE AS REQUIRED
FUEL PUMP — CERAMIC ELEMENT AND SEDIMENT BOWL
REPLACE ELEMENT AS REQUIRED

FORM NO. 690-660-093

SUN ELECTRIC CORPORATION — CHICAGO, ILLINOIS 60631

STANDARD
ALTERNATOR — MOTOROLA

MOTOROLA — A12NCC454

RATED OUTPUT — 35 AMPERE NEG. GRD.
CIRCUIT TYPE — RBT
ROTATION — CLOCKWISE
15 AMPERES @ 500 ENGINE RPM
CURRENT OUTPUT — 33 AMPS @ 15 VOLTS
MINIMUM — 25 AMPS @ 13 VOLTS
WHEN MEASURED AT BATTERY
ADD 3 AMPS TO CURRENT OUTPUT FOR TOTAL OUTPUT
ENG. RPM — 2000
GEN. RPM — 5000
FIELD CURRENT 1.2-1.7 AMPS @ 10 VOLTS
BELT TENSION FT./LBS.
NEW CAR INSPECTION — 80-110
NEW BELT — 110-120
USED BELT — 70-80

CHARGING CIRCUIT RESISTANCE

VOLTS @ 10 AMPS
.3V INS. CIR.
.05V GRD. CIR.

ROTOR FIELD CURRENT DRAW

2.0-2.6 AMPS @ 12.6 ± .2 VOLTS

WITH AIR COND.
ALTERNATOR — MOTOROLA

MOTOROLA — A12NCC604 **MOTOROLA — A12NCC603**

RATED OUTPUT — 55 AMPERE NEG. GRD.
CIRCUIT TYPE — RBT
ROTATION — CLOCKWISE
22 AMPERES @ 500 ENGINE RPM*
CURRENT OUTPUT — 55 AMPS @ 15 VOLTS
MINIMUM — 50 AMPS @ 13 VOLTS
WHEN MEASURED AT BATTERY
ADD 3* AMPS TO CURRENT OUTPUT FOR TOTAL OUTPUT
ENG. RPM — 2000
GEN. RPM — 5000
FIELD CURRENT — 1.8-2.4 AMPS @ 10 VOLTS
BELT TENSION FT./LBS.
NEW CAR INSPECTION — 80-110
NEW BELT — 110-120
USED BELT — 70-80

CHARGING CIRCUIT RESISTANCE

VOLTS @ 10 AMPS
.3V INS. CIR.
.05V GRD. CIR.

ROTOR FIELD CURRENT DRAW

2.1-2.7 AMPS @ 12.6 ± .2 VOLTS

RECTIFIER DIODE TESTING

WITH 12V BULB AND 12V BATTERY

TEST LAMP LITES ONE DIRECTION
DIODE SATISFACTORY

TEST LAMP LITES BOTH DIRECTIONS
DIODE SHORTED

TEST LAMP DOES NOT LITE EITHER DIRECTION — DIODE OPEN

WITH DIODE RECTIFIER TESTER

METER INDICATION 2 AMPS OR MORE
DIODE SATISFACTORY

METER INDICATION 1 AMP OR LESS
DIODE SHORTED

METER INDICATION ZERO
DIODE OPEN

REGULATOR — MOTOROLA
MOTOROLA — TVR12CCI

CIRCUIT TYPE — RBT

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 ½ 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

TEMPERATURE	VOLTAGE SETTING	TEMPERATURE	VOLTAGE SETTING
0°	14.6-15.4V	80°	13.9-14.7V
20°	14.4-15.2V	100°	13.8-14.6V
40°	14.2-15.0V	120°	13.7-14.5V
60°	14.1-14.9V	140°	13.6-14.2V
		160°	13.3-14-1V