

GROUP 10
ELECTRICAL SYSTEMS

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SECTION 10-A
ELECTRICAL SPECIFICATIONS

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10-1 BATTERY SPECIFICATIONS

Item	
Make	Delco-Remy
Model	1980571
Cat. No.	1980570
Location Under Hood	L.F. Fender Skirt
Terminal Grounded	Negative
Voltage	12
Capacity—Wet (Apm. Hrs. @ 20 Hr. Rate)	70
Number of Cells & Plates/Cell	6,11
Specific Gravity, Full Charge @ 80° F.	1.260 to 1.280
Bench Charging Rate, Start	5 Amps.
Bench Charging Rate, Finish	2 Amps.
Separators	Porous Rubber
Case	Hard Rubber
Dimensions	12 1/32" x 6 13/16" x 8 13/16" High

10-2 GENERATING SYSTEM SPECIFICATIONS

a. Generator

Item	Standard	Air Condition
Make and Type	Delco-Remy, Delcotron	
Number	1100623	1100622
Location, Side of Engine	Right	
Drive and Rotation (Viewing Drive End)	Fan Belt, Clockwise	
Speed Ratio, Generator to Engine	2.34 to 1	2.83 to 1
Field Current Draw (Amps.) @ 80° F. at 12 Volts	1.9 to 2.3	
Bench Test at 14 Volts (Amps. Cold @ Generator RPM) . .	42 @ 6500	52 @ 6500
Current Output @ 500 ERPM	10 Amps. Min.	15 Amps. Min.
Current Output @ 1500 ERPM	30 Amps. Min.	35 Amps. Min.
Belt Tension	70 Lbs.	90 Lbs.

10-2 SPECIFICATIONS**ELECTRICAL SYSTEMS****b. Generator Regulator**

Item	
Make and Type	Delco-Remy, Double Contact
Number	1119512
Field Relay Air Gap	.015"
Field Relay Closing Voltage	2.3 to 3.7
Voltage Regulator Air Gap, Upper Points Just Touching	.060"
Voltage Regulator Upper Contact Point Opening	.014"
Voltage Regulator Upper Contact Setting @ 2000 Eng. RPM (After 15 Min. Warm-Up)	See Figure 10-25
Voltage Regulator Lower Contact Setting (Step Voltage)	.1 to .3 Below Upper Setting

10-3 CRANKING (STARTER) SYSTEM SPECIFICATIONS**a. Cranking Motor**

Item	
Make	Delco-Remy
Number	1107221
Location, Side of Engine	Left
Type of Shift	Mechanical - Electrically Controlled
Shift Actuation	Solenoid
Shift Operation	Ignition Switch
Type of Drive	Overrunning Clutch
Rotation, Viewing Drive End	Clockwise
Gear Ratio, Motor to Engine	18.4 to 1
No. Teeth on Ring Gear and Drive Pinion	166, 9
Cranking Speed, Engine RPM (at Operating Temperature)	160 Approximately
No Load Test	
Amperes	80 to 120
Volts	10.6
RPM	3900 to 5400
Locked Armature Test	
Amperes	290 to 370
Volt	2.0
Brush Spring Tension - Ounces	35 min.
Armature End Play	.005" to .050"
Pinion Clearance in Cranking Position	.010" to .140"

b. Solenoid Switch

Item	
Make	Delco-Remy
Solenoid Switch Number	1114272
Current Draw of Solenoid Windings @ 80° F.	
Hold-in Winding, Amps. @ 10 Volts	15.5 - 17.5
Both Windings in Parallel, Amps. @ 10 Volts	47 - 54

10-4 IGNITION SYSTEM SPECIFICATIONS**a. Ignition Coil and Resistor**

Item	
Make	Delco-Remy
Coil Number (Less Bracket)	1115087
Current Draw, Amperes @ 12.6 Volts	
Engine Stopped	3.7
Engine Idling	1.7
Coil Resistance (Ohms) @ 80° F.	
Primary	1.28 to 1.42
Secondary	7200 to 9500
Resistance Wire	Part of Wiring Harness
Resistance, Ohms @ 80° F.	1.80 ± .05

b. Spark Plugs

Make and Model (for Normal Operation)	AC 44S
Make and Model (for High Speed Operation)	AC 42 COM
Thread and Shell Hex. Sizes	14MM, 13/16"
Gap at Points	.035"
Terminal Nut Length	3/8"
Tightening Torque (ft. lbs.)	30

c. Distributor

	Syn. Trans. (Prem. Fuel)	Syn. Trans. (Reg. Fuel)	Auto. Trans. (Prem. Fuel)	Auto Trans. (Reg. Fuel)
Make		Delco-Remy		
Drive		From Camshaft		
Rotation, Top View		Clockwise		
Firing Order		1-2-7-8-4-5-6-3		
Number (Less Cap)	1111030	1111031	1110993	1110999
Timing, Crankshaft Degrees Before U.D.C.	5	5	12	12
Spark Advance - Crankshaft Degrees (In Addition to Initial Timing Advance)				
Vacuum, Max.	14 - 18	18 - 22	14 - 18	18 - 22
Centrifugal, Max.	26 - 30	26 - 30	18 - 22	18 - 22
Vacuum Control Number	1116163	1116164	1116163	1116164
Vacuum Advance Test, Inches of Vacuum				
Vacuum Needed to Start Advance	8 - 10	6.5 - 8.5	8 - 10	6.5 - 8.5
Vacuum Needed for Max. Advance	16 - 18	12 - 14	16 - 18	12 - 14
Centrifugal Advance Test, Dist. Degrees and RPM (1/2 Eng. Degrees and RPM)				
Start Advance - 450 RPM	1° to 3°	1° to 3°	0° to 2°	0° to 2°
Medium Advance - 1000 RPM	7° to 9°	7° to 9°	3° to 6°	3° to 6°
Maximum Advance - 2000 RPM	13° to 15°	13° to 15°	9° to 11°	9° to 11°
Contact Point Opening		.013" to .019"		
Adjust to		.016"		
Contact Point Dwell Angle		30° ± 1°		
Adjust to		30°		
Dwell Variation		3° Max.		
Breaker Arm Spring Tension, at Side of Point, Ounces . .		19 to 23		
Condenser Make and Capacity (Microfarads)		Delco-Remy, .18 to .23		

10-5 LIGHTING SYSTEM SPECIFICATIONS**a. Lamps, Switches, Wiring**

Headlamp Make and Type	Guide, Dual T-3 Sealed Beam
Headlamp Lens Diameter	5 3/4"
Tail, Stop, Parking, Signal Lamps, Make	Guide
Lighting Switch, Make	Delco-Remy
Wiring Circuit Type	Single Wire
Wiring Circuit Protection for Head and Front Parking Lights	Thermo Circuit Breaker
Thermo Circuit Breaker Location	In Lighting Switch
Thermo Circuit Breaker Calibration @ 75° F.	
Stay Closed Indefinitely @ Amps.	15
Open Within 60 Seconds @ Amps.	26

b. Fuses and Circuit Breakers

NOTE: Unless otherwise specified, all fuses are mounted on fuse block under left side of instrument panel.

Back-Up Lights	10 Amp. - 1 1/4"
Clock	2 Amp. - 5/8"

10-4 SPECIFICATIONS**ELECTRICAL SYSTEMS****b. Fuses and Circuit Breakers (Cont'd.)**

Direction Signal, Signal Indicator, and Stop Lights	10 Amp. - 1 1/4"
Dome Light, Trunk Compartment Light and Rear Cigar Lighter	20 Amp. - 1 1/4"
Courtesy Lights and Glove Box	5 Amp. - 1 1/4"
Heater-Defroster Blower, Air Conditioner Blower and Compressor Clutch	30 Amp. - 1 1/4"
Panel Lights and Rheostat	3 Amp. - 1 1/4"
Radio (Except Wonder Bar)	2.5 Amp. - 7/8"
Radio (Wonder Bar)	7.5 Amp. - 7/8"
Speedometer Warning Buzzer, Parking Brake Warning Light, and Automatic Light Switch Amplifier	5 Amp. - 1 1/4"
Tail Lights, License Light, Panel Lights and Rheostat, Cornering Lights	10 Amp. - 1 1/4"
Wiper and Washer Motor	25 Amp. - 1 1/4"
Antenna Motor	10 Amp. - 1 1/4"
Location	In Wiring Connector Near Switch
Cigar Lighter	Special
Location	In Back of Lighter
Guide-Matic Amplifier	4 Amp. - 5/8"
Location	In Wiring Connector Near Amplifier
Headlights and Front Parking Lights	15 Amp. Circuit Breaker
Location	In Lighting Switch
Power Windows, Vents, Seat, and Top	40 Amp. Circuit Breaker
Location	Left Shroud Panel plus Circuit Breaker in Each Motor
Rear Window Defroster	5 Amp. - 1 1/4"
Location	In Wiring Connector Near Switch

c. Lamp Bulbs

Ash Tray (4700)	53; 1 CP
Ash Tray	1445; .5 CP
Automatic Transmission Control Dial (44-4800)	158; 2 CP
Automatic Transmission Control Dial (46-4700)	1816; 3 CP
Back-Up	1073; 32 CP
Clock Dial	1816; 3 CP
Cornering	1195; 50 CP
Courtesy, Console, Rear Seat Side Rail or Arm Rest	90; 6 CP
Cruise Control Switch	53; 1 CP
Dome	1004; 15 CP
Glove Box	1816; 3 CP
Headlamp High Beam Indicator	158; 2 CP
Headlamp Sealed Beam Unit, 5 3/4" Dia., Type 1 (Inner)	4001; 37.5 Watt
Headlamp Sealed Beam Unit, 5 3/4" Dia., Type 2 (Outer)	4002; 37.5-50 Watt
Ignition Switch	1445; .5 CP
Indicator Lights (Hot, Cold, Oil and Amp.)	158; 2 CP
Instrument Cluster Dial Lights	161; 1 CP
Instrument Panel Control Housing	57; 2 CP
License Plate, Rear	67; 4 CP
Parking Brake Warning Signal	1816; 3 CP
Parking and Turn Signal, Front	1034; 32-4 CP
Parking and Turn Signal, Upper Front (4700)	1034A; 32-4 CP
Parking, Lower (4700)	67A; 4 CP
Radio Dial	1881; 1 CP
Tail, Stop and Direction Signal, Rear (All)	1034; 32-4 CP
Turn Signal Indicator	158; 2 CP
Trunk	89; 6 CP

**10-6 SIGNAL SYSTEMS
SPECIFICATIONS**

Stop Light Switch - Type	Hydraulic
Stop Light Switch - Location	Master Cylinder
Direction Signal Switch - Make	Delco-Remy
Direction Signal Flasher - Make and Type	Tung-Sol, AP 273S

10-6 SIGNAL SYSTEMS SPECIFICATIONS (Cont'd.)

Lamp Bulbs - No. and Candle Power	See Par. 10-5, c
Direction Signal and Stop Light Fuse	See Par. 10-5, b
Horn - Make and Type	Delco-Remy, Solenoid
Horn Number, High Note	9000462
Low Note	9000461
Horn Amperage Draw at 12 Volts (Either Horn)	7 to 11
Horn Relay and Junction Block Number	1116946
Horn Relay Adjustment	
Closing Voltage.	1.5 to 9.5
Adjust to	6.5
Speed Warning Buzzer Number	1351924
Point Opening	.020 - .025"
Amperage Draw @ 13.5 - 14.5 Volts	.05 - .07