

GROUP 10

ELECTRICAL SYSTEMS

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SECTION 10-A

ELECTRICAL SPECIFICATIONS

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10-1 BATTERY SPECIFICATIONS

Make	Delco-Remy
Model	562
Cat. No.	562
Location Under Hood	L.F. Fender Skirt
Terminal Grounded	Negative
Voltage	12
Capacity—Wet (Amp. 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	13 ¹ / ₁₆ " x 6 ¹ / ₆₄ " x 8 ¹ / ₁₆ "

10-2 GENERATING SYSTEM SPECIFICATIONS

a. Generator

	Standard	Air Condition
Make and Type	← Delco-Remy, Shunt →	
Number	1102181	1102197
Location, Side of Engine	← Right →	
Drive and Rotation (Viewing Drive End)	← Fan Belt, Clockwise →	
Speed Ratio, Generator to Engine	2.40 to 1	2.82 to 1
Brush, Spring Tension, ounces	← 26-32 →	
Field Current Draw (Amps.) @ 80°F at 12 Volts	1.69 to 1.79	2.66 to 2.86
Bench Test (Amps.) Cold at 14 Volts and 2600 Generator RPM	35	45

10-2 SPECIFICATIONS

ELECTRICAL SYSTEMS

b. Generator Regulator

	Standard	Air Condition
Make	← Delco-Remy →	
Number (Including Fuse)	1119242	1119617
Fuse Rating, Amperes	40	50
Cutout Relay Closing Voltage	12 to 13.5	12 to 13
Adjust to	12.8	12.5
Cutout Relay Opening Current	← Reverse or Discharge →	
Cutout Relay Air Gap Points Closed	← .020" →	
Cutout Relay Contact Point Opening	← .020" →	
Current Regulator Air Gap, Points Just Touching	← .075" →	
Current Regulator Setting @ 1500 Eng. RPM (After 15 Min. Warm-Up)	← See Chart on Page 10-31 →	
Voltage Regulator Air Gap, Points Just Touching	.075"	.067"
Voltage Regulator Upper Contact Point Opening	None	.016"
Voltage Regulator Setting @ 2000 Eng. RPM (After 15 Min. Warm-Up)	← See Chart on Page 10-31 →	

10-3 CRANKING (STARTER) SYSTEM SPECIFICATIONS

a. Cranking Motor

	364 Engine	401 Engine
Make	← Delco-Remy →	
Number	1107783	1107784
Location, Side of Engine	← Left →	
Type of Shift	← Mechanical—Electrically Controlled →	
Shift Actuation	← Solenoid →	
Shift Operation	← Accelerator Pedal →	
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 →	
No Load Test		
Amperes	65 to 100	80 to 120
Volts	← 10.6 →	
R.P.M.	3600 to 5100	3900 to 5400
Locked Armature Test		
Amperes	300 to 360	290 to 370
Volt	3.5	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 and Relay

	364 Engine	401 Engine
Make	← Delco-Remy →	
Solenoid Switch Number	1114262	1114263
Current Draw of Solenoid Windings @ 80°F.		
Hold-in Winding, Amps. @ 10 Volts	10.5-12.5	15.5-17.5
Both Windings in Parallel, Amps. @ 10 Volts	42-49	47-54
Voltage Required for Solenoid Switch Pull-In @ 80°F.	7.2 Max.	
Relay Number	← 1116963 →	
Air Gap—Points Closed	← .011" →	
Point Opening	← .020"-.030" →	
Closing Voltage	← 3.8 to 5.0 →	
Adjust to	← 4.4 →	
Sealing Voltage, Max. Above Closing Voltage	← 0 to .2 →	
Opening Voltage, Min.	← .6 →	

10-4 IGNITION SYSTEM SPECIFICATIONS

a. Ignition Coil and Resistor

Make	Delco-Remy
Coil Number	1115100
Current Draw, Amperes:	
Engine Stopped	4.5
Engine Idling	2.5
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	.....
Thread and Shell Hex. Sizes	.....
Gap at Points	.....
Terminal Nut Length	.....
Tightening Torque (ft. lbs.)	.....

AC 44S
14MM, 13/16"
.035"
3/8"
25

c. Distributor

Make	.....
Drive	.....
Rotation, Top View	.....
Firing Order	.....
Number (Less Cap)	.....
Timing, Crankshaft Degrees Before U.D.C.	.....
Spark Advance—Crankshaft Degrees (In Addition to Initial Timing Advance)	.....
Vacuum, Max.	.....
Centrifugal, Max.	.....
Vacuum Control Number	.....
Vacuum Advance Test, Inches of Vacuum	.....
Vacuum Needed to Start Advance	.....
Vacuum Needed for Max. Advance	.....
Centrifugal Advance Test, Dist. Degrees and RPM (1/2 Eng. Degrees and RPM)	.....
Start Advance	.....
Medium Advance—1000 RPM	.....
Maximum Advance—1900 RPM	.....
Contact Point Opening	.....
Contact Point Dwell Angle	.....
Adjust to	.....
Dwell Variation	.....
Breaker Arm Spring Tension, at Side of Point, Ounces	.....
Condenser Make and Capacity (Microfarads)	.....

Auto. Trans. (Prem. Gas)	Auto. Trans. (Reg. Gas)	Syn. Trans.
←	Delco-Remy	→
←	From Camshaft	→
←	Clockwise	→
←	1-2-7-8-4-5-6-3	→
1110961	1110962	1110963
12	12	5
14-18	18-21	18-21
18-22	18-22	24-29
1116163	1116164	1116164
8-10	6.5-8.5	6.5-8.5
16-18	12-14	12-14
225-450 RPM	225-450 RPM	225-450 RPM
3° to 6°	3° to 6°	5° to 7°
9° to 11°	9° to 11°	12° to 14.5°
←	.0125" to .0175"	→
←	28° to 32°	→
←	30°	→
←	3° Max.	→
←	19 to 23	→
←	Delco-Remy, .18 to .23	→

10-5 LIGHTING SYSTEM SPECIFICATIONS

a. Lamps, Switches, Wiring

Headlamp Make and Type	.....
Headlamp Lens Diameter	.....
Tail, Stop, Parking, Signal Lamps, Make	.....
Lighting Switch, Make	.....
Wiring Circuit Type	.....
Wiring Circuit Protection for Head and Front Parking Lights	.....
Thermo Circuit Breaker Location	.....
Thermo Circuit Breaker Calibration @ 75°F.	.....
Stay Closed Indefinitely @ Amps.	.....
Open Within 60 Seconds @ Amps.	.....

Guide, Dual T-3 Sealed Beam
5 3/4"
Guide
Delco-Remy
Single Wire
Thermo Circuit Breaker
In Lighting Switch
15
26

b. Fuses and Circuit Breakers

NOTE: Unless otherwise specified, all fuses are mounted on fuse block under cowl.

Back-Up Lights	.....
Clock	.....
Direction Signal and Stop Lights	.....
Dome Light, Trunk Compartment Light and Rear Cigar Lighter	.....
Glove Box and Map Light	.....
Heater, Defroster, Air Conditioner Blower and Compressor Clutch	.....
Instrument Lights and Rheostat	.....
Radio	.....
Speedometer Warning Buzzer, Parking Brake Warning Light, and Automatic Light Switch Amplifier	.....
Tail Lights, License Lights, and Instrument Light Rheostat	.....
Wiper and Washer Motor	.....
Antenna Motor	.....
Location	.....
Automatic Light Switch	.....
Location	.....
Cigar Lighter	.....
Location	.....
Generator Regulator	.....
Standard	.....
Air Condition	.....
Location	.....
Headlights and Front Parking Lights	.....
Location	.....
Power Windows, Seat, and Top	.....
Location	.....
Rear Window Defroster	.....
Location	.....

10 Amp.—1 1/4"
2 Amp.—5/8"
10 Amp.—1 1/4"
20 Amp.—1 1/4"
5 Amp.—1 1/4"
30 Amp.—1 1/4"
5 Amp.—1 1/4"
7.5 Amp.—7/8"
5 Amp.—1 1/4"
10 Amp.—1 1/4"
25 Amp.—1 1/4"
15 Amp.—1 1/4"
In Wiring Connector Near Switch
25 Amp. Circuit Breaker
Near Starter Relay
Special
In Back of Lighter
40 Amp.
50 Amp.
Regulator Battery Terminal
15 Amp. Circuit Breaker
In Lighting Switch
40 Amp. Circuit Breaker
Left Shroud Panel
plus Circuit Breaker in Each Motor
5 Amp.—1 1/4"
In Wiring Connector Near Switch

c. Lamp Bulbs

Automatic Transmission Control Dial.....	57; 2 CP
Back-Up.....	1073; 32 CP
Clock Dial.....	57; 2 CP
Dome.....	1004; 15 CP
Direction Signal Indicator.....	57; 2 CP
Gas Gauge.....	53; 1 CP
Glove Box.....	57; 2 CP
Headlamp High Beam Indicator.....	57; 2 CP
Headlamp Sealed Beam Unit, Type 1.....	4001; 37.5 Watt
Headlamp Sealed Beam Unit, Type 2.....	4002; 37.5-50 Watt
Heater-Defroster Control Dial.....	53; 1 CP
Ignition Switch Dial.....	53; 1 CP
Indicator Lights (Cold, Hot, Oil, Gen.).....	57; 2 CP
Instrument Dial Lights.....	57; 2 CP
License Plate, Rear.....	67; 3 CP
Map Light.....	90; 6 CP
Parking Brake Warning Signal.....	57; 2 CP
Parking and Dir. Signal, Front.....	1034; 32-4 CP
Radio Dial.....	57; 2 CP
Side Rail or Arm Rest, Rear.....	90; 6 CP
Tail, Stop and Direction Signal, Rear.....	1034; 32-4 CP
Trunk Compartment.....	89; 6 CP
Vent or Air Conditioner Control Dial.....	53; 1 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.....	Tungsol
Lamp Bulbs—Mazda No. and Power.....	See Par. 10-5, c
Direction Signal and Stop Light Fuse.....	See Par. 10-5, b
Horn—Make and Type.....	Delco-Remy, Vibrator
Horn Number, High Note (Right Location).....	9000424
Low Note (Left Location).....	9000423
Horn Amperage Draw at 12 Volts (Either Horn).....	7 to 11
Horn Relay and Junction Block Number.....	1116965 or 1189107
Horn Relay Adjustment	
Closing Voltage.....	1.5 to 9.5
Adjust to.....	6.5
Speed Warning Buzzer Number.....	1116952
Point Opening.....	.020-.025"
Amperage Draw @ 13.5-14.5 Volts.....	.05-.07
Air Conditioner Relay Number.....	1116956 or 1194967
Point Opening.....	.020"-.030"
Opening Voltage.....	4.0-5.0