

GARDNER

MODELS 95 (1928), 130 (1929)

DELCO-REMY GENERATING, STARTING SYSTEM DELCO-REMY IGNITION

VALVE TIMING:—INLET VALVES:—Head diameter, 1 5/8 inches; stem diameter, 11/32 inch; stem length, 4 7/8 inches. Tappet clearance is .006 inch (hot). Spring pressure is 36 pounds (valve closed). Valve lift is 5/16 inch. Inlet valves open 5 degrees before top dead center and close 45 degrees after lower dead center.

EXHAUST VALVES:—Head diameter, 1 15/32 inches, stem diameter, 11/32 inch; stem length, 4 7/8 inches. Tappet clearance is .008 inch (hot). Spring pressure is 36 pounds (valve closed). Valve lift is 5/16 inch. Exhaust valves open at 50 degrees before lower dead center and close 10 degrees after top dead center. Valve stem guides are removable. Oversize valve stems are made.

STARTER:—Model 720-YX ('28), 720-Y ('29). Starter drives engine through Bendix drive. The direction of rotation is counter-clockwise, looking at the commutator end. Starter brush tension should be 24-28 ounces. Starter switch is Model 406-D.

Starter Data

Torque	R.P.M.	Volts	Amperes
0 lb. ft.	6000	5.0	65
15 "	Lock	3.15	570

Mounting:—Starter is flange mounted at left of engine on the forward side of the flywheel housing. To remove starter, disconnect cable and starting pedal rod. Then remove 3 cap screws on flange. Lift starter forward and out.

Oiling:—Put 4 or 5 drops of light engine oil in the oiler on the starter every 1000 miles.

GENERATOR:—Model 949-C ('28), 955-K ('29). Direction of generator rotation is counter-clockwise, looking at the commutator end. Current regulation is by the third brush system, combined with a thermostat. The thermostat contacts open at 150 degrees F. To adjust the generator output, loosen the screw on generator end plate and shift the third brush mounting plate in a counter-clockwise direction to increase the charging rate and in the opposite direction to decrease the charging rate.

Generator Data

Cold Test			Hot Test		
Amperes	Volts	R.P.M.	Amperes	Volts	R.P.M.
19-21.....	8.5.....	1450	9-12.....	7.5.....	2000

Generator motoring draws 5.5 amperes at 6 volts. Shunt field current is 5 amperes at 6 volts. Generator brush spring tension is 24-28 ounces.

Mounting:—Generator is flange mounted at right of engine on rear of timing chain case. To remove generator, take off hose connections at water pump, loosen plate on front of chain case and swing out of the way. Loosen generator flange nuts, push generator towards motor, lift off chain from sprocket; keep chain from dropping down in chain case by fastening up with wire. Take out flange mounting nuts and lift generator and pump assembly from place.

Oiling:—Put 4 or 5 drops of light engine oil in the generator oiler every 1000 miles.

RELAY:—Model 265-B. Relay is mounted on the generator. Relay contacts close at 675 R.P.M. of the generator armature or 6-7 miles per hour with a generator voltage of 6.57 volts. Contacts open with a discharge current of 2.5 amperes. Relay contacts separate .015-.025 inch. Air gap between relay armature and coil core is .014-.021 inch with contacts closed.

LIGHTING:—Delco-Remy Lighting Switch Model 420-Q. Switch is mounted on the lower end of the steering column. Head lights are 6-8 volt, 21-21 cp. (double filament-double contact base using 21 cp. filament instead of dimming) Mazda No. 1110. Parking and tail lights are 6-8 volt, 3 cp. S.C. Mazda No. 63. Side lights are 6-8 volt, 6 cp. S.C. Mazda No. 81. Dash lights are 6-8 volt, 3 cp. S.C. Mazda No. 63. Stop and backing lights are 6-8 volt 15 cp. S.C. Mazda No. 87. Corner lamps are 6-8 volt, 3 cp. D.C. Mazda No. 64.

FUSES:—There are five 10 ampere fuses mounted on the lighting switch.

