

AUBURN

MODEL 6-80 (1929), SERIAL NUMBERS 2,981,851 UP
PRODUCTION STARTED DECEMBER 15, 1928
DELCO-REMY GENERATING, STARTING SYSTEM
DELCO-REMY IGNITION

BATTERY:—U.S.L. Type XY-13X-6, 6 volt. The positive (+) terminal is grounded. Starting capacity (20 minute rate) is 90 amperes for 20 minutes. Lighting capacity (5 ampere rate) is 5 amperes for 17 hours. Battery is mounted under front seat on right side.

IGNITION:—Coil Model 528-C. Coil is mounted under the cowl. Ignition current is 4 amperes at 6 volts with engine running and 6 amperes at 6 volts with engine stopped.

Distributor Model 641-F. Breaker contacts separate .020 inch. Set contact gap by loosening lock screw on stationary contact mounting plate and turning eccentric adjusting screw until proper gap is secured with breaker arm on lobe of cam. Resurface contacts when necessary with a fine flat contact file or on a medium hard oilstone. Breaker arm spring tension is 17-21 ounces. Distributor is semi-automatic. Maximum manual advance is 20 degrees (engine). Maximum automatic advance is 22 degrees. Ignition switch is an Electrolock. Electrolock must be removed as a unit with the distributor.

Mounting:—Distributor is mounted on the cylinder head and must be removed from the right side. To remove distributor, remove Electrolock from dash, disconnect manual advance rod and remove head with cable intact. Then loosen set screw in side of shaft housing and pry up on distributor until it can be lifted from place.

Oiling:—Fill the grease cup with medium grease and turn down one turn every month or each 1000 miles. Put a small bit of vaseline on the face of the breaker cam.

Timing:—Breaker contacts begin to separate when the piston entering power stroke reaches a position 6 degrees (on the flywheel) past top dead center with the spark control lever in the fully retarded position. To set timing, crank engine over until piston No. 1 enters compression stroke (the up stroke with both valves closed). Fully retard spark lever. Continue to crank engine until piston reaches a position 6 degrees past top dead center when the flywheel mark '1-6DC' will be three teeth past the indicator on the flywheel housing. Loosen the advance arm clamp screw and rotate the distributor until contacts begin to separate. Tighten the clamp screw and connect the spark plug in cylinder No. 1 to the terminal directly opposite the rotor. Connect the remaining spark plugs in order 5-3-6-2-4 counter-clockwise around the distributor head.

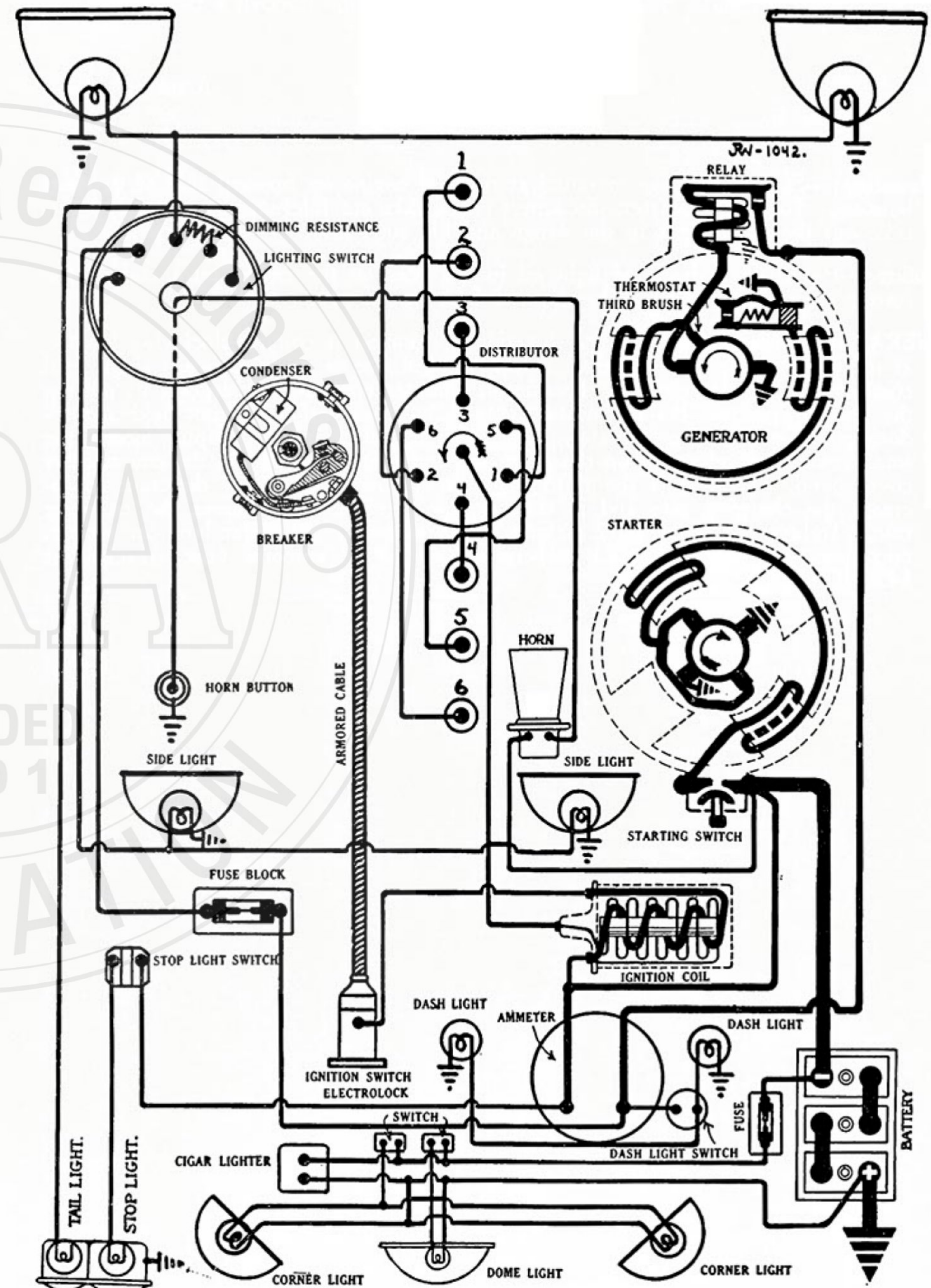
Firing Order:—The firing order is 1-5-3-6-2-4.

Spark Plugs:—Spark plugs are 7/8-18 S.A.E. Standard. Gaps are .030 inch.

VALVE TIMING:—INLET VALVES:—Head diameter, 1 17/32 inches. Stem diameter, .3425-.341 inch. Stem length, 5 1/4 inches. Valve lift, 11/32 inch. Spring pressure, 47 pounds (valve closed). Tappet clearance, .006 inch (hot). Inlet valves open at top dead center and close 45 degrees after lower dead center.

EXHAUST VALVES:—Head diameter, 1 13/32 inches. Stem diameter, .3425-.341 inch. Stem length, 5 1/4 inches. Valve lift, 11/32 inch. Spring pressure, 47 pounds (valve closed). Tappet clearance, .008 inch (hot). Exhaust valves open 50 degrees before lower dead center and close 10 degrees after top dead center. The flywheel is marked '1-6DC' for inlet opening. Valve stem guides are removable. Oversize valves are made.

STARTER:—Model 716-C. Starter is connected to the engine through a Bendix drive. The direction of rotation is clockwise (armature shaft), viewed from



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the commutator end. Brush spring tension is 24-28 ounces. Starter cranks the engine at 90 R.P.M. drawing 150 amperes at 6 volts.

Starter Data

Torque	R.P.M.	Volts	Amperes
0 lb. ft.	3000	5	70
15 "	Lock	3.7	450

Mounting:—Starter is flange mounted at right of engine on forward side of flywheel housing. To remove starter, disconnect cable and remove flange mounting cap screws. Pull starter forward and lift from place.

Oiling:—Put 4 or 5 drops of light engine oil in the oiler on the commutator end of the starter every month or each 1000 miles. The drive end bearing is oilless.

GENERATOR:—Model 955-H. The direction of rotation is counter-clockwise, viewed from the commutator end. Generator current regulation is by third brush shunt field and thermostat. Thermostat contacts open at 175°F. cutting the resistance across the thermostat contacts in series with the field and reducing the output approximately 40%. To adjust charging rate, remove the commutator cover band and loosen the small round headed screw on the generator end plate. Then shift the third brush by hand in a counter-clockwise direction to increase the charging rate and in the opposite direction to decrease the charging rate. Tighten the screw after making the adjustment. With standard car setting, maximum charging rate is 21 amperes (cold) reached at 1650 R.P.M.

Generator Data

Cold Test			Hot Test		
Amperes	Volts	R.P.M.	Amperes	Volts	R.P.M.
19-21	8.35-8.5	1450	9-12	7.35-7.65	1800-2000

Motoring, generator draws 5.5 amperes at 6 volts. Shunt field current is 4-6.1 amperes at 6 volts. Brush spring tension is 14-18 ounces.

Mounting:—Generator is mounted on special swinging bracket at right of engine and is belt driven from the crankshaft. The water pump is mounted directly on the rear of the generator and is driven by the generator shaft. To remove generator, first drain radiator and remove water pump hose connections. Then loosen adjustment clamp bolt and swing generator toward the engine. Slip off the drive belt. Then remove two bolts in the bracket under the generator and lift generator from place. The water pump can be removed by taking out the cap screws on the generator bosses.

Belt Adjustment:—To adjust belt tension, loosen the adjustment clamp bolt and swing the generator away from the engine until the correct belt tension is secured. Tighten the clamp bolt. Do not make the drive belt too tight or it will crowd the generator bearings.

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

RELAY:—Model 265-B. Relay is mounted on the generator. Relay contacts close at 600 R.P.M. when the generator voltage reaches 6.75 volts and open with a discharge current of 0-2.5 amperes. Relay contacts separate .015-.025 inch. Air gap is .014-.020 inch with contacts closed.

LIGHTING:—Soreng-Manegold Switch. Lighting switch is mounted at lower end of steering column. Dimming is through a resistance mounted on the switch. Headlights are 6-8 volt, 21 cp. S.C. Mazda 1129. Side lights are 6-8 volt, 3 cp. S.C. Mazda 63. Stop light is 6-8 volt, 15 cp. S.C. Mazda 87. Dash, tail, dome and corner lights are each 6-8 volt, 3 cp. S.C. Mazda 63.

FUSE:—Lighting fuse on block on dash is 20 ampere capacity.