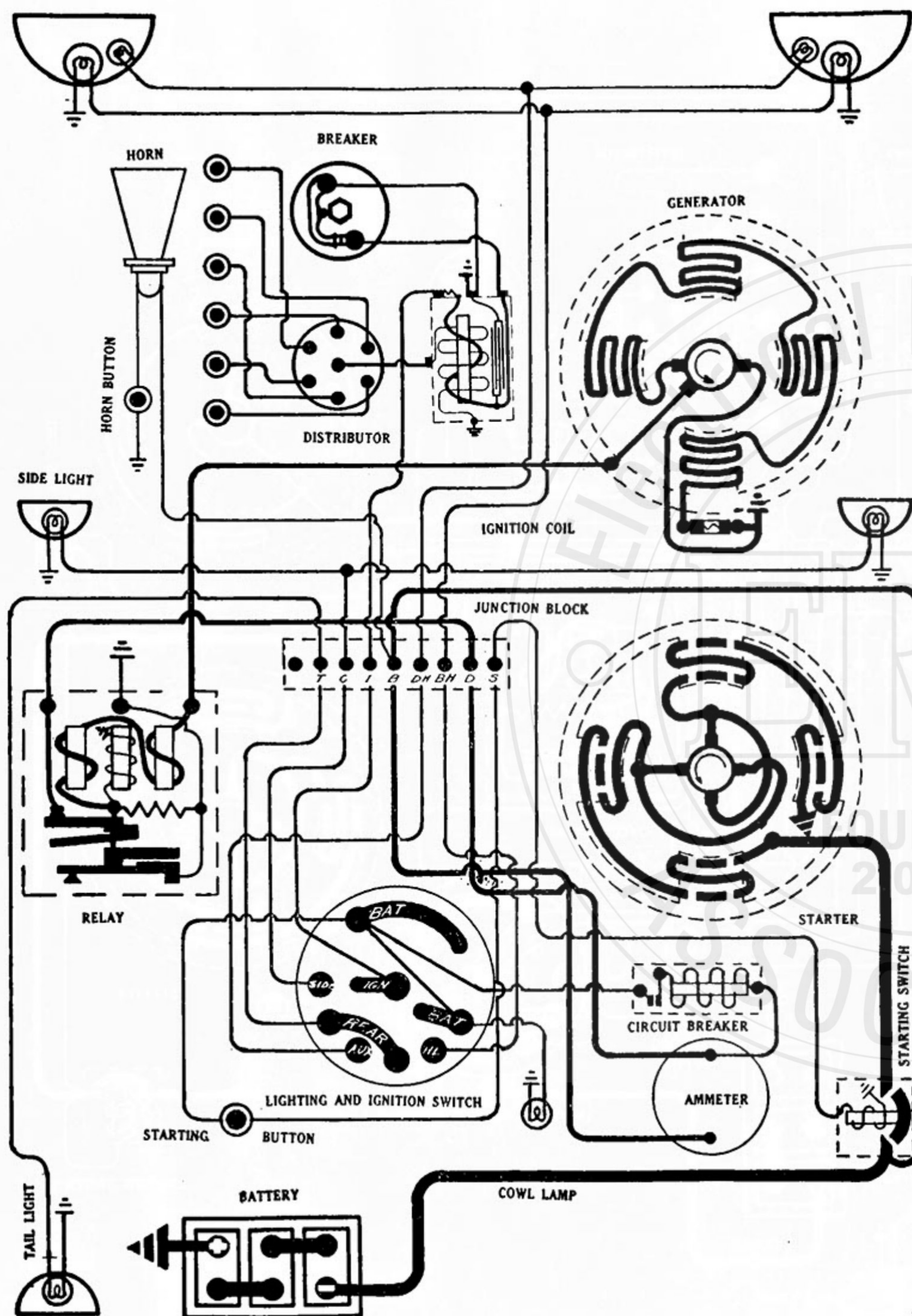




HAYNES

MODELS 50 (1921) AND 55 (1922)

LEECE-NEVILLE GENERATING, STARTING AND LIGHTING SYSTEM KINGSTON IGNITION

BATTERY.—Prest-O-Lite, Type 615-S. H. C. for 1922. Willard, Type SJRN-5 for 1921. 6 volts, 132 ampere-hour. Starting capacity—135 amperes for 20 minutes. Lighting capacity—5 amperes for 20 hours. The positive (+) terminal is grounded.

IGNITION.—Kingston Battery Ignition. Breaker contacts separate .018 inch. If condition affects ignition, remove and resurface on a hard oilstone.

Timing.—Breaker contacts begin to open when piston No. 1 is slightly past top dead center on power stroke, setting "Inlet Open" on flywheel at indicator mark. Spark control lever and breaker assembly fully retarded.

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

Spark Plug Gaps.—Spark plug gaps are .025 inch.

Oiling.—Put 5 or 6 drops of light engine oil into distributor oiler every 500 miles.

STARTER:—Model No. 318-M, 388-M. Direction of rotation is counter-clockwise, looking at commutator end. Starter cranks the engine at 1100 R.P.M. of armature at 42°F., taking 400 amperes at 4 volts. Motor running freely takes 60 amperes at 6 volts. The lock torque is 15 pound-feet, current being 675 amperes at 3.2 volts.

Starter Test Data

Torque	R.P.M.	Amperes	Volts
1 lb. ft.	2200	165	5.2
5 lb. ft.	840	330	4.3
10 lb. ft.	245	540	3.4
15 lb. ft.	0	675	3.2

The brush tension is 3 pounds.

Oiling.—No oil is necessary, as oilless bearings are used.

GENERATOR:—Model 326-G, 424-G. Direction of rotation is counter-clockwise, looking at commutator end. The third brush system is used for current regulation. The maximum charging rate is 18 amperes (cold) reached at 1200 R.P.M. The main brush tension is 2½ pounds, and the third brush tension is 2 pounds.

Generator Test Data

Amperes	Hot Test	R.P.M.	Amperes	Cold Test	R.P.M.
0		430	0		430
10		800	14.5		800
15		1200	18		1200
13		1600	15		1600

Oiling.—Place a few drops of light engine oil in each generator oiler once every two weeks. If the car is driven more than 500 miles in two weeks, this care must be given every 500 miles.

RELAY.—Model No. 13-CC-6. Closes at 450-500 R.P.M., 8-10 M.P.H., 6.5 volts; opens at 400-450 R.P.M., 6-7 M.P.H., 0-2 amperes discharge. Relay contacts separate .047 inch. Air gap between relay armature and coil core is .063 inch, contacts closed.

LAMPS.—Head lamps, 6-8 volts, 21 cp. Auxiliary lights, 6-8 volts, 6 cp. Dash and tail lamps, 6-8 volts, 2 cp.

FUSES.—Generator field fuse is 5 amperes.

CIRCUIT BREAKER.—A circuit breaker is used instead of fuses in the lighting and ignition circuits.