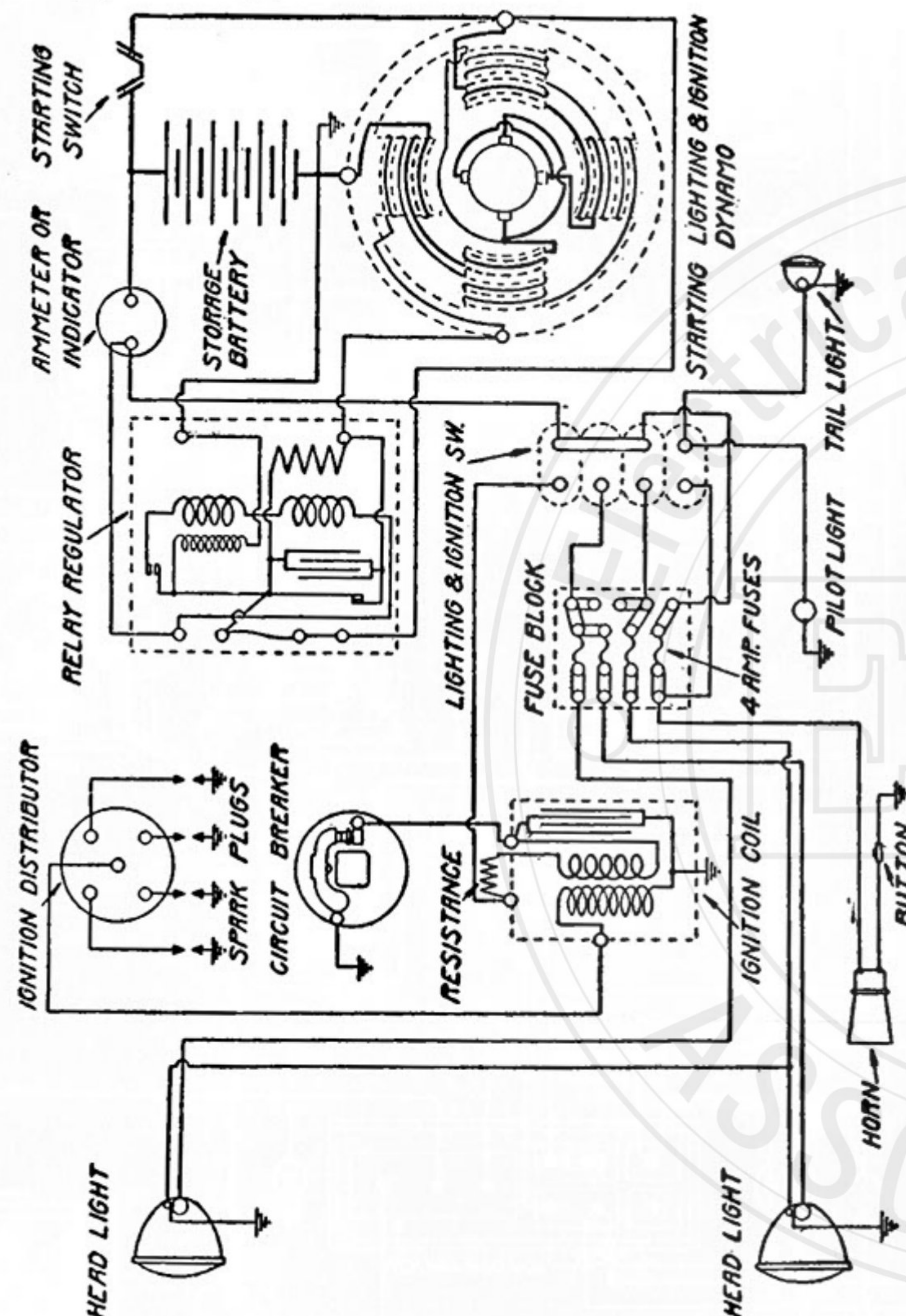


Empire

MODEL 31-40 (1915) (SERIAL NOS. 405101 TO 406190)

MODEL 33 (1915) (SERIAL NOS. 331001 TO 333300)

REMY GENERATING, STARTING AND LIGHTING SYSTEM REMY IGNITION



BATTERY.—Battery is 12 volt, 50 ampere-hour. The negative (—) terminal is grounded.
IGNITION.—Breaker contacts separate .018 to .020 inch. When the condition of the points affects the ignition, resurface with a fine, flat jeweler's file or worn No. 00 sandpaper.

OILING.—Refill the cup under the distributor head with soft cup grease and turn down two turns every two weeks. Put a small amount of vaseline on the fiber bumper of the contact arm using a toothpick. If the car is driven more than 500 miles in two weeks, these attentions should be given every 500 miles.

TIMING.—Breaker contacts begin to separate when piston entering stroke is on top dead center, spark control lever and breaker assembly in the fully retarded position.

FIRING ORDER.—The firing order is 1, 2, 4, 3.

SPARK PLUG GAPS.—Spark plug gaps are .028 to .030 inch.

STARTER-GENERATOR.—Starter and generator are combined into one unit, but are electrically separate. Starter is connected to the engine through a set of reduction gears.

Starter Data. Motor-Generator No. 129-A

Torque	R.P.M.	Amperes	Volts
0 lb. ft.	1100-1200	6-10	12.0-13.0
2 lb. ft.	900-1000	20-30	11.4-11.3
3 lb. ft.	800-900	30-40	11.3-11.5
5 lb. ft.	600-700	40-50	10.5-10.6
7 lb. ft.	500-600	70-80	10.0-10.5
8 lb. ft.	Lock	300-350	10.0

GENERATOR.—Generator current regulation is by reverse series field and vibrator regulator. Maximum output is reached at 15 miles per hour.

Generator Data. Motor-Generator No. 129-A

Amperes	R. P. M.	Volts
0.0	1050-1140	13.0-13.5
5.0	1200-1350	14.0-14.5
7.5	1250-1450	14.5-15.0
6.5	6000	14.0-15.0

OILING.—Put 5 or 6 drops of light engine oil in each of starter-generator oilers every two weeks. If car is driven more than 500 miles in two weeks, the oiling must be done every 500 miles.

RELAY-REGULATOR.—Relay closes at 8-10 miles per hour and opens at 6-8 miles per hour. Air gap between relay armature (moving member) and coil core is .012 to .015 inch. Contacts separate .012 to .015 inch. Clean relay and regulator contacts by drawing unglazed paper between them. If badly burned or pitted, resurface with well worn No. 00 sandpaper. Remove all grit. Adjust before again putting into service. Increasing spring tension on regulator armature will increase the output, and decreasing spring tension will decrease the output.

LAMPS.—Head lamps are 12-16 volt, 16 cp. Dimmer lamps are 12-16 volt, 6 cp. Dash and tail lamps are connected in series and are each 6-8 volt, 3 cp.

FUSES.—There is a 15 ampere fuse on relay-regulator base. Other fuses are 4 ampere.

MODEL NUMBERS.—Motor-Generator is No. 129-A. Relay-Regulator is No. 262-A. Ignition Coil is No. 49-A. Combination Switch is No. 145-A.