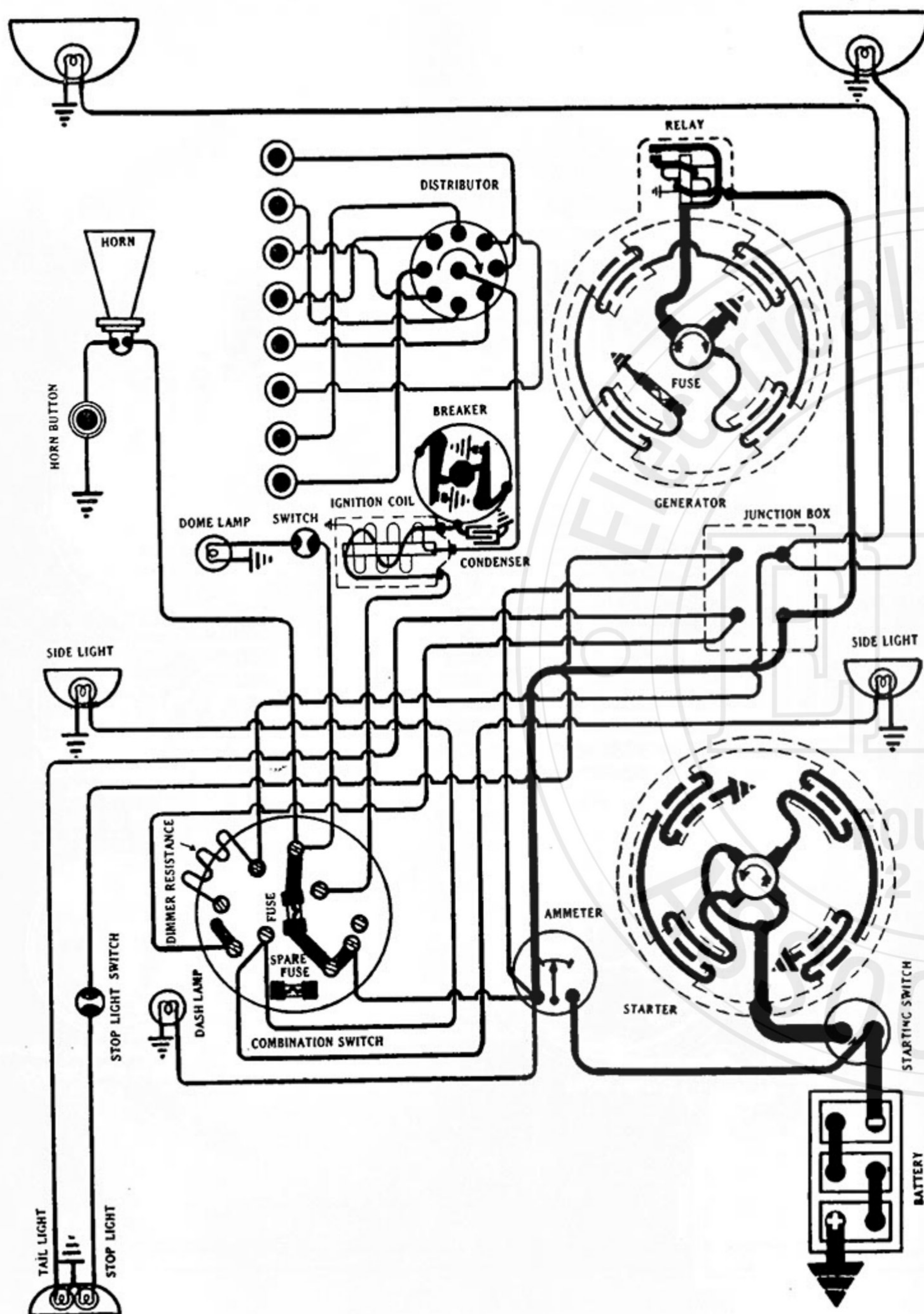




## HUPMOBILE

### MODEL E-1 (1925) SERIAL NOS. E-1 UP.

### WESTINGHOUSE GENERATING, STARTING AND LIGHTING SYSTEM

### ATWATER KENT IGNITION.

**BATTERY:**—Willard, Type SJR-6. 6 volt, 155 ampere hour. The positive (+) terminal is grounded.

**IGNITION:**—Coil Model N. Distributor Model RA. Breaker contacts separate .010-.012 inch. They are made of tungsten. When the condition of the contacts affects the ignition, remove and resurface with a fine, flat jeweler's file or on a medium hard oilstone.

**Oiling:**—Put 4 or 5 drops of light engine oil in the oiler on the side of the distributor housing every two weeks or each 500 miles if the car is driven more than 500 miles in two weeks. Place a small bit of vaseline on the face of the breaker cam, applying with a toothpick, every 1000 miles.

**Timing:**—Breaker contacts begin to separate when the top dead center mark on the flywheel is 8° past the indicator on the flywheel housing with the spark control lever and breaker assembly in the fully retarded position.

**Firing Order:**—The firing order is 1-5-2-3-8-4-7-6.

**Spark Plugs:**—Spark plug diameters are 7/8 inch. Gaps are .022-.025 inch.

**STARTER:**—Frame No. 59AO. Type S-416662. Starter is connected to the engine through a Bendix drive. The direction of rotation is clockwise, looking at the commutator end.

#### Starter Data.

| Torque    | R.P.M.    | Volts | Amperes |
|-----------|-----------|-------|---------|
| 0 lb. ft. | 2500-3500 | 5.5   | 45      |
| 34 "      | Lock      | 3.5   | 675     |

**Oiling:**—Put 4 or 5 drops of light engine oil in each of the starter oilers every two weeks or each 500 miles if the car is driven more than 500 miles in two weeks.

**GENERATOR:**—Frame No. 36-GT. Type S-416706. The direction of rotation is counter-clockwise, looking at the commutator end. Generator current regulation is by the third brush system. To adjust the charging rate shift the third brush. Shifting the brush in the direction of armature rotation increases the charging rate and in the opposite direction decreases the charging rate.

#### Generator Data.

| Amperes | Volts | R.P.M.    |
|---------|-------|-----------|
| 0       | —     | 500       |
| 8       | —     | 800       |
| 16-17   | 8     | 1400-1450 |
| 10      | 8     | 2500      |

Running freely as a motor, generator draws 5 amperes at 6.2 volts. Shunt field current is 2.35 amperes at 6 volts.

**Oiling:**—Put 4 or 5 drops of light engine oil in each of the generator oilers every two weeks or each 500 miles if the car is driven more than 500 miles in two weeks.

**RELAY:**—Relay contacts close when the voltage of the generator reaches 6.75 to 7.5 volts and open with a discharge current of 0 to 3 amperes. Contacts separate .030 to .035 inch. The air gap between the relay armature and coil core is .015 inch, contacts closed.

**LIGHTING:**—Head lamps and stop lamp are each 6-8 volt, 21 cp.S.C. Dash, dome, tail and side lamps are each 6-8 volt, 3 cp.S.C.

**FUSES:**—Generator field fuse is 5 ampere. Lighting fuses are 20 ampere.