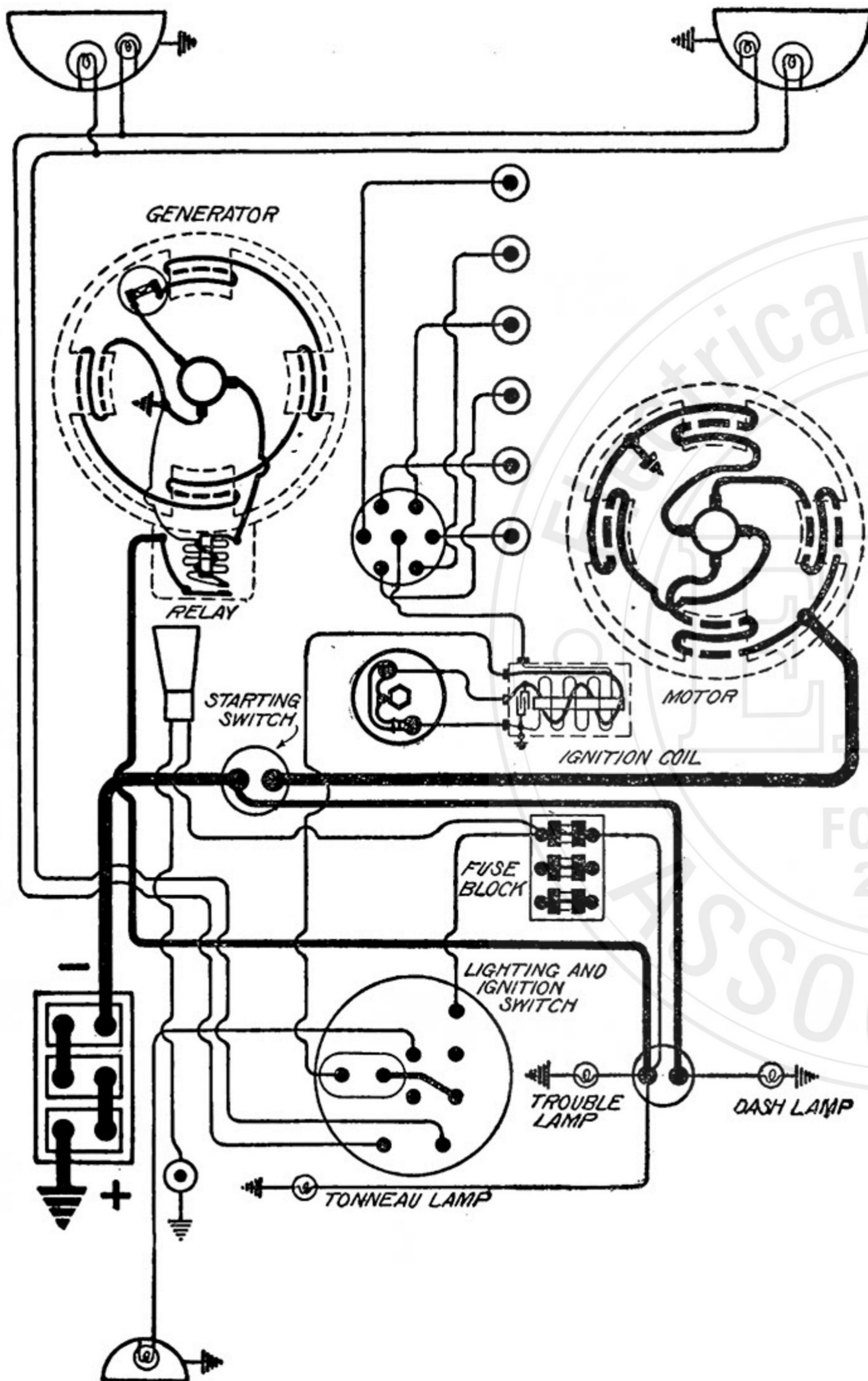




AMERICAN

MODEL C-6 (1920-21)

GRAY & DAVIS GENERATING, STARTING AND LIGHTING SYSTEM CONNECTICUT IGNITION

BATTERY.—Willard, 6 volt, 90 ampere-hour. The positive (+) terminal is grounded.

IGNITION.—Breaker contacts separate .018 to .024 inch. They are made of tungsten. When the condition of the contacts affects the ignition, renew the inner breaker mechanism. For temporary service, resurface contacts with fine emery cloth.

OILING.—Refill the cup under the breaker head with pure vaseline and turn down every month. If the car is driven more than 1000 miles in a month, this must be done every 1000 miles. Do not put grease or oil in the cup.

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

FIRING ORDER.—The firing order is 1, 4, 2, 6, 3, 5.

SPARK PLUGS.—Diameter, $\frac{7}{8}$ inch. Spark gaps are .025 to .030 inch.

STARTER.—Model No. 515, 521. Rotation is counter-clockwise, looking at commutator end. Starter is connected to the engine through a Bendix drive. Starter cranks the engine at 150-225 R.P.M., taking 150 amperes. Lock torque is 15 pound-feet at 3.5 volts.

Starter Data

Torque	R.P.M.	Amperes
0 lb. ft.	4500	45
1 lb. ft.	2100	100
2 lb. ft.	1600	135
6 lb. ft.	900	260
8 lb. ft.	650	320

Pressure of the brushes on the commutator is 2.5 to 3.5 pounds.

OILING.—Put 5 or 6 drops of light engine oil in the starter oilers every month.

GENERATOR.—Model No. 605, 619, 621. Rotation is counter-clockwise, looking at commutator end. Generator current regulation is by the third brush system. Maximum charging rate is 15 amperes, reached at 1400 R.P.M. of the armature, or 25 miles per hour.

Amperes	Generator Data	R.P.M.
0		460
4		580
8		720
10		820
12		940
15		1400
12		2600

Charging rate is varied by adjustment of the third brush setting. Adjustment is made by turning the pinion screw, located between the fuse and relay at the front end of the generator. Turn the adjusting screw to the left (facing commutator end of the generator) to increase the charging rate and to the right to decrease the charging rate. Shunt field winding takes 2.6 amperes at 6 volts. Pressure of brushes on the commutator. Pressure of brushes on the commutator is $1\frac{1}{4}$ to $2\frac{1}{4}$ pounds.

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

RELAY.—Relay closes at 460-500 R.P.M. of the armature or 10 miles per hour and opens at 420-460 R.P.M. of the armature or 8 miles per hour. Relay contacts separate .015 to .018 inch. Air gap between relay armature and coil core is .030 inch. Clean relay 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.

LAMPS.—Head lamps are 6-8 volt, 15 cp. Dimmer lamps are 6-8 volt, 5 cp. Dash and tail lamps are 6-8 volt, 2 cp.

FUSES.—Fuses are 20 amperes.