

KANKAKEE

7-N ENGINE (1919)

9-N ENGINE (1920-21)

DELCO GENERATING, STARTING AND LIGHTING SYSTEM

DELCO IGNITION

BATTERY.—6 volt. The negative (—) terminal is grounded.

IGNITION.—Coil Model No. 2159. Distributor Model No. 5215. Breaker contacts separate .020 inch. They are made of tungsten. When the condition of the contacts affects the ignition, remove and resurface with fine emery cloth or against the flat side of an emery wheel, finishing on a hard emery stone.

Oiling.—Put 4 or 5 drops of light engine oil in each of the distributor head oilers every two weeks. If the track of the rotor button is not well polished, apply a small amount of vaseline with a soft cloth. If the car is driven more than 500 miles in two weeks, these attentions must be given every 500 miles.

Timing.—Breaker contacts begin to separate when the top dead center mark on the fly-wheel is $1\frac{3}{8}$ inches past the indicator, spark control lever and breaker assembly in the fully retarded position.

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

Spark Plug Gaps.—Spark plug gaps are .030 inch.

STARTER.—Model No. 102, 179. Starter is connected to the engine through a Bendix drive.

Oiling.—Put 5 or 6 drops of light engine oil in each of the starter oilers every month. Remove the grease plug in the reduction gear housing and inject soft cup grease every six months.

GENERATOR.—Model No. 101, 180. Generator current regulation is by the third brush system. Maximum current output of 11-15 amperes is reached at 1200 R.P.M. of the armature or 18-24 miles per hour.

Amperes	Generator Data	R.P.M.
4		800
8		1000
11-15		1200
11-14		2000
8-12		2300

Charging rate is varied by adjusting third brush setting. Loosen the three screws holding the third brush plate and move the third brush in a counter-clockwise direction (looking at the commutator end) to increase the charging rate. Move the brush in the opposite direction to decrease the charging rate. Tighten the screws and reseal the brush after adjusting position.

Oiling.—Put 4 or 5 drops of light engine oil in each of the generator bearing 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 is mounted on generator frame. Relay closes at 8-9 and opens at 5-7 miles per hour. Relay contacts separate .046 to .062 inch. Air gap between relay armature (moving member) and coil core is .020 to .035 inch, contacts closed. To adjust relay, connect a voltmeter between the positive generator brush and ground. Then slowly speed up the generator and adjust the relay spring tension by turning the thumb screw until the relay contacts close when the voltmeter indicates 7.5 volts. 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, 18 cp. Dimmer lamps are 6-8 volt, 5 cp. Dash, tail, tonneau and step lamps are 6-8 volt, 2 cp. Dome lamp is 6-8 volt, 5 cp. Dash, dome and step lamps have double contact base. All other lamps have single contact base.

CIRCUIT BREAKER.—A vibrating circuit breaker takes the place of fuses. It requires 25 amperes to start the vibrator, but 3-5 amperes will cause it to continue.

