

KING

MODEL EE (1917-18), F AND G (1918-19)

BIJUR GENERATING, STARTING AND LIGHTING SYSTEM ATWATER-KENT IGNITION

BATTERY.—Battery is 6 volt, 80 ampere-hour. The positive (+) terminal is grounded.

IGNITION.—Breaker contacts separate .005 to .008 inch. They are made of tungsten. When the condition of the points affects the ignition, remove and resurface with fine emery cloth or against the flat side of an emery wheel, finishing on a hard oil stone.

OILING.—Put several drops of light engine oil in the oil hole, exposed when distributor cap is removed, every two weeks. Put a very small amount of vaseline on the cam, applying with a toothpick. If car is driven more than 500 miles in two weeks, the oiling must be done every 500 miles.

TIMING.—Breaker contacts begin to separate when the piston entering power stroke is on top dead center, spark control lever $\frac{1}{2}$ inch from the fully retarded position.

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

SPARK PLUG GAPS.—Spark plug gaps are .025 inch.

STARTER.—Type ED-160, M 794, M 908 or M 909. Starter is connected to engine through a Bijur automatic pinion shift. Rotation is clockwise viewed from commutator end.

OILING.—Put several drops of light engine oil in each of starter bearing oilers every month.

GENERATOR.—Type L61, M-741 or M-1088. Anti-clockwise rotation, commutator end. Generator current regulation is by third brush system. Maximum generator output is 12-16 amperes, reached at 20-25 miles per hour, or 1400-1600 R.P.M. of armature. Output is varied by shifting third brush. Third brush is secured to generator by two

stud bolts, the nuts of which appear in a recess in the front head of generator. Loosen these nuts with a socket wrench and shift the brush by gently tapping the shank of the wrench. Shifting brush in the direction of armature rotation will increase the output. Shifting brush in the opposite direction will decrease the output. Shifting the brush $\frac{1}{16}$ inch will vary the output 2 or 3 amperes. Tighten nuts after adjusting brush. Brush adjustment is made to give the desired rate with generator hot and charging a 3 cell battery, reading 1.250 or above. There is a 10 ampere fuse in the small aluminum cap on generator housing to protect generator windings, should excessively high resistance occur in the charging circuit.

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

RELAY.—Relay closes at 10-12 miles per hour or 500-600 R.P.M. of armature, and opens at 8-10 miles per hour, or 450-500 R.P.M. of armature. The charging current is 1 to 3 amperes at closing and the discharge current 0 to 1 ampere at opening of relay. 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, 4 cp. Tonneau lamp is 6-8 volt, 4 cp. Inspection lamp is 6-8 volt, 4 cp. Dash lamp is 6-8 volt, 2 cp. Tail lamp is 6-8 volt, 2 cp.

FUSES.—Fuses are 10 amperes.

