

Overland

Model 85-6 (1917)

Auto-Lite Starting and Lighting System. Connecticut Ignition Battery.—Battery is 6 volt, 80 ampere-hour. The negative (—) terminal is grounded at the starting motor.

Ignition.—Breaker contacts should separate .018 inch to .020 inch. They are made of tungsten. They will operate properly even though quite rough. Should they become badly worn, affecting the ignition, the inner breaker mechanism should be renewed as directed on Page 50. In an emergency, contacts may be resurfaced enough to give service for 300 or 400 miles by drawing a piece of fine emery cloth between them.

Timing.—Contacts should begin to separate when the mark "1-6 D-C" on the flywheel is $1\frac{1}{8}$ 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 should be about .023 inch.

Ignition Thermostat.—There is a thermostat in the lighting-ignition switch case to open the ignition circuit, should the switch be left "On" with engine idle, contacts closed. This device is treated on Page 50.

Oiling.—Refill the cup under the breaker head with pure vaseline and turn down every month. If 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.

Starter.—Starter is connected to engine by a Bendix drive. Cold engine, tight bearings, heavy oil or other obstructions will cause slow cranking speed and high current.

Oiling.—Clean and repack starter bearings with soft cup grease every six months. Put in one or two drops of oil every month to keep grease soft.

Generator.—Generator current regulation is by reverse series field in the type GG generator and by third brush system in the GH type generator. Relay should close at 500-575 R. P. M., of generator armature on the GG generator and at 550-600 R. P. M. on GH type generator. Charging current should be .5 to 1.5 ampere at closing and the discharge current 0 to 1 at opening.

GENERATOR DATA.

Model GG (Reverse Series Type).		Model GH (Third Brush Type).	
Amperes	R. P. M.	Amperes.	R. P. M.
5.0	750- 860	5.0	760- 820
10.0	1225-1400	10.0	1020-1100
12.5	1600-1825	12.5	1200-1300
15.0	2175-2450	15.0	1460-1675
17-18	3200-3700	15-17	1950-2250

A variation of 1.5 amperes from these amounts is allowable. Output may be varied somewhat by adjusting brush pressure on commutator on GG type or third brush on GH type. The pressure should be 1 to $1\frac{1}{4}$ pounds. If operated freely as a motor, type GG generator should take 2.8 amperes, armature revolving at 350 R. P. M. Model GH generator should take 2.7 amperes, armature turning at 450 R. P. M. Greater speed indicates damp, grounded or short circuited field coils. Greater current or lower speed indicates tight bearings or damp, grounded or short circuited armature windings or commutator. Periodic swinging of ammeter needle indicates grounded or short circuited armature coils or commutator bars. Shunt field should take approximately 1.1 amperes on model GG and 1.7 amperes on model GH.

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, the oiling must be done every 500 miles.

Lamps.—Head lamps are 6-7 volts, 16 cp. Dash and tail lamps are in series. They are each 3-3.5 volts, 2 cp.

Fuses.—Fuses are 20 ampere.

Model Numbers.—Generator Model GG 1064 is used on cars having Serial Number up to 13,000. On cars above this number, type GH 1006 generator is used. Starter is Model ME 1021 on cars up to Serial Number 1179. After this number type ME 1026 is used. A USL AD 313 battery is used on late cars. On early cars battery is Williard OHSLB or Prestolite 613 W 02.