

H. C. S.

TAXICAB MODELS O AND L (1925-26) SERIAL NOS. 3600 UP AMERICAN BOSCH GENERATING, STARTING AND LIGHTING SYSTEM AMERICAN BOSCH IGNITION

BATTERY.—Prest-O-Lite, Type 613-SHK. 6 volt. Starting capacity is 130 amperes for 20 minutes. Lighting capacity is 5 amperes for 22.5 hours. The negative (—) terminal is grounded.

IGNITION.—Coil Model TC-30. Distributor Model T-4242. Breaker contacts separate .018-.020 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. If excessively worn, the points should be replaced.

Mounting.—Distributor is mounted on generator at left of engine.

Oiling.—Fill the oiler on the side of the distributor housing with light engine oil every month or each 1000 miles if the car is driven more than 1000 miles in a month. Put one drop of oil on the breaker arm pivot and place a small bit of vaseline on the surface of the breaker cam applying with a toothpick.

Timing.—Breaker contacts begin to separate when the piston entering power stroke reaches top dead center.

Firing Order.—The firing order is 1-2-4-3.

Spark Plugs.—Spark plug diameters are $\frac{7}{8}$ inch. Gaps are .030 inch.

STARTER.—Model 952. Starter is connected to the engine through a Bendix drive. The direction of rotation is counter-clockwise, looking at the commutator end. Starter brush tension should be $1\frac{3}{4}$ -2 pounds each. Starter switch is Model S-203.

Starter Data			
Torque	R.P.M.	Volts	Amperes
0 lb. ft.	3000	6	60
12 " "	Lock	4	450

Mounting.—Starter is mounted at right of engine by a standard S. A. E. No. 1 flange mounting.

Oiling.—Starter bearings are self oiling. They require no attention.

GENERATOR.—Model 1269. The direction of rotation is counter-clockwise, looking at the commutator end. The third brush system is used for current regulation. To adjust the generator output, loosen the generator cover band and shift the third brush mounting plate. Shifting the plate in the counter-clockwise direction increases the charging rate and in the opposite direction decreases the charging rate. The maximum charging rate is 16-18 amperes reached at 1100-1300 R.P.M. of the generator armature.

Generator Data		
Amperes	Volts	R.P.M.
0	6.5-7.5	550
10		800
16-18	8	1100

Motoring freely generator draws 6 amperes at 6 volts. The shunt field current is 6.6 amperes at 6 volts. Field resistance at 70° F. is .9 ohms. Generator brush tension should be $1\frac{1}{2}$ - $1\frac{3}{4}$ pounds each.

Mounting.—Generator is mounted at left of engine by a standard S. A. E. No. 2 flange mounting.

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

RELAY.—Relay is mounted on the generator. Relay contacts close at 500 R.P.M. when the voltage of the generator reaches 6.5-7.5 volts and open at 450 R.P.M. with a discharge current of 1-3 amperes. Contacts separate .015 inch. Air gap between relay armature and coil core is .010 inch, contacts closed. The resistance of the shunt coil is 45 ohms.

LIGHTING.—Switch Model S-106. Head and stop lamps are each 6-8 volt, 21 cp. S. C. Side lamps (in head lamp) are 6-8 volt, 6 cp. S. C. Dome and tail lamps are each 6-8 volt, 4 cp. S. C.

FUSES.—Generator field fuse is 7.5 amperes.

