

HUDSON

SUPER-SIX MODEL (1922-23-24)

AMERICAN BOSCH GENERATING, STARTING AND LIGHTING SYSTEM AMERICAN BOSCH IGNITION

BATTERY.—Exide, Type 3-XC-15-1, 6 volts, 106 ampere-hour capacity. The starting capacity is 114 amperes for 20 minutes. The lighting capacity is 5 amperes for 20 hours. The negative (—) terminal is grounded.

IGNITION.—Coil Model TC-30. Compensating Timer-Distributor Model TC-6100. The direction of rotation of the distributor is clockwise, looking from the top of the distributor. The coil is mounted on the engine side of dash and is dust and water-proof. The timer-distributor is mounted on the right side of the engine over the gear housing. Contacts are made of tungsten and separate .020 inch. Contact surface should be flat. When the condition of the contact points affects the ignition, remove and resurface with a fine, flat jeweler's file or on a medium hard oil-stone. If the points are excessively worn, they should be replaced.

Oiling.—Fill distributor oiler on the side of the distributor housing with light engine oil. Put one drop of oil (less rather than more) on the interrupter lever pivot. Place a bit of grease or vaseline about the size of a match head on the side of the interrupter fibre block nearest to the pivot post. Follow closely the above lubrication directions every month. If the car is driven more than 1000 miles in a month, care must be given every 1000 miles.

Timing.—Breaker contact points begins to separate when the flywheel marking is opposite the indicator on flywheel case with No. 1 piston on the compression stroke, and spark control lever and breaker assembly fully advanced. To adjust timing, place spark control lever in fully advanced position, loosen clamping screw on timer arm and turn the distributor housing opposite to direction of rotation of the rotor shaft until points just open. Tighten the clamping screw, being careful not to disturb the relative position of the timing arm and housing.

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

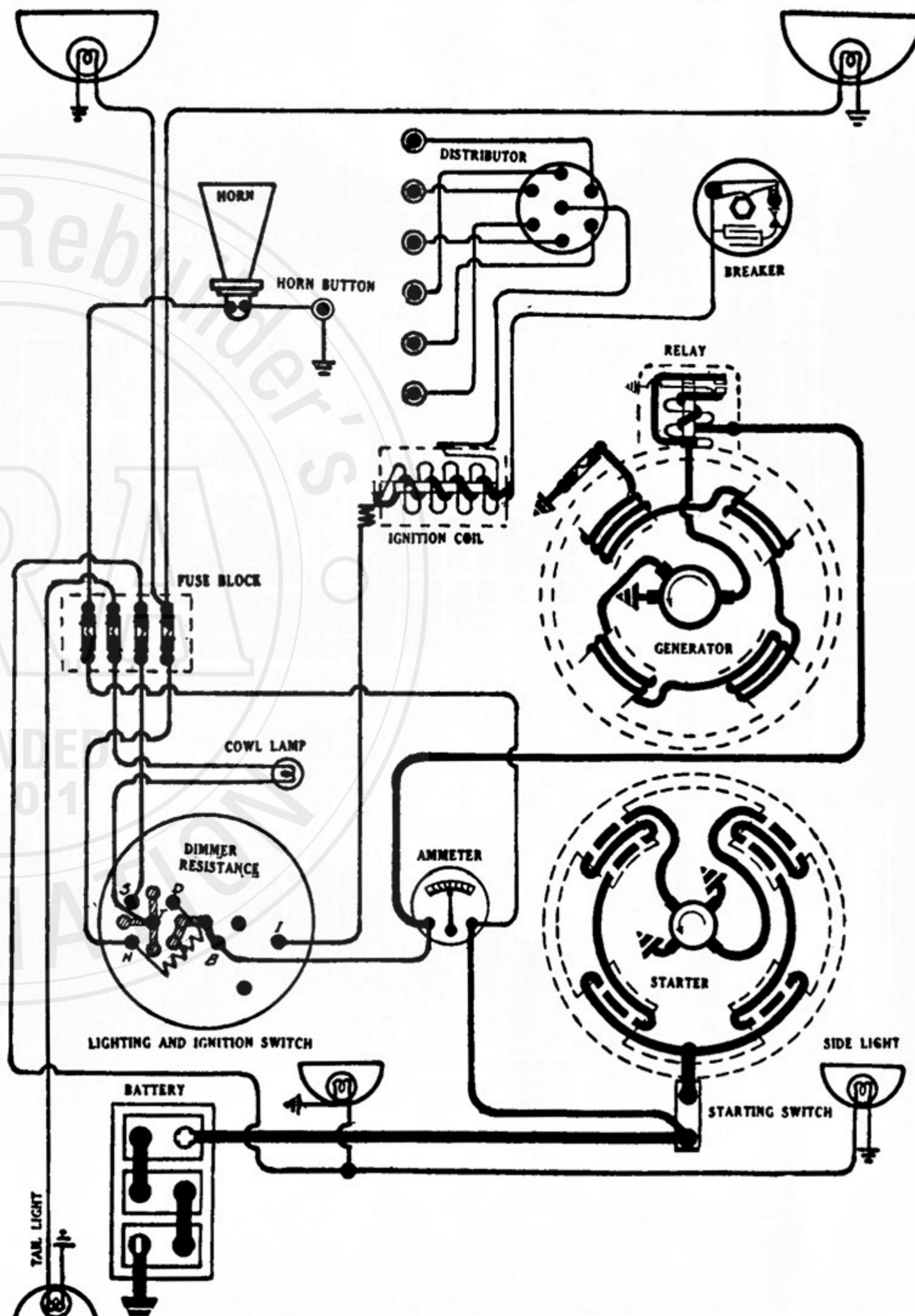
Spark Plugs.—Spark plugs diameters are of the metric scale, gaps are .030 inch.

STARTER.—Model No. 926. The starter is a four pole, series wound motor. Starting mechanism, which is operated by foot pedal, carries an over-running clutch. See that motor connections are tight and clean. Keep commutator clean wiping it off with a clean cloth slightly moistened with gasoline. Wipe dry before operating. Motor takes 125-200 amperes to crank engine at 150 R.P.M. The direction of rotation is counter-clockwise, looking at commutator end.

Starter Test Data.				
R.P.M.	Amperes	Volts	Torques	H.P.
3800.....	70.0.....	5.75.....	0.....	0.....
2250.....	100.0.....	5.7.....	0.6 lb. ft.....	0.3.....
1000.....	200.0.....	4.0.....	3.6 lb. ft.....	0.65.....
500.....	300.0.....	4.5.....	7.0 lb. ft.....	0.76.....
250.....	400.0.....	4.0.....	11.0 lb. ft.....	0.5.....
Lock.....	525.0.....	3.5.....	16.25 lb. ft.....	0.0.....

Oiling.—Fill oilers on each end of starter with light engine oil once every two weeks. If the car is driven more than 500 miles in two weeks, this care must be given every 500 miles.

GENERATOR.—Model No. 1217, 1238, 1252. Direction of rotation is counter-clockwise, looking at commutator end. The third brush system is used for current regulation. The charging rate is varied by loosening the screws on the commutator end plate and moving the third brush in the direction of rotation (counter-clockwise) to increase the output, and the reverse direction to decrease the charging rate. The maximum charging rate is 14-15 amperes at 8 volts, reached at 1100 R.P.M. of generator armature. See that the commutator is not dirty or pitted.



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Clean commutator by holding a piece of cloth slightly moistened with gasoline against it. Wipe dry before operating. If the commutator is rough or slightly pitted, smooth it by using No. 00 Sandpaper. Brush contact surface must conform to the curvature of the armature.

Generator Test Data					
Amperes	Volts	R.P.M.	Amperes	Volts	R.P.M.
	Cold Test			Hot Test	
0.0	7.0	400	0.0	6.8	450
8.0	7.4	600	4.0	7.2	600
12.0	7.8	800	7.5	7.5	800
14.3 (Max.)	8.0	1100	10.3 (Max.)	7.6	1200
10.6	8.0	2000	8.5	7.7	2000
7.8	7.6	3000	6.2	7.2	3000
Field Amperes (Cold)					
R.P.M.	600	1200	1600	2000	3000
Amperes	2.9	2.1	1.6	1.3	0.7

Oiling.—Put 4 or 5 drops of light engine oil into each of the generator oiler every

two weeks. If the car is driven more than 500 miles in two weeks, this care must be given every 500 miles.

RELAY.—Relay closes at 6.5-7.5 volts, and opens at 0-2 amperes discharge. Relay contacts separate .015 inch, and the air gap between relay armature and coil core is .010 inch, contacts closed. The relay is mounted on top of the generator frame and is enclosed within a metal case. To adjust relay connect ammeter in series with battery and gradually slow down generator. The contacts should open at the limits given above. Adjust by loosening or tightening the adjusting screws on the side of the relay. Be sure to resolder the screw after adjustment so as to eliminate the possibility of the screw becoming loose and changing the tension. Clean the contacts by drawing fine sandpaper between them.

LIGHTING.—Type S-106 Switch is used. The switch is mounted on the dash and is supplied with two faced levers one for controlling the lighting system and the other for operating the ignition system. The terminals on the back of the switch are marked for proper connections wires. Head lights are 6-8 volts, 21 cp., S.C. Side lamps are 6-8 volts, 2 cp., S.C. Dash and tail lights are connected in series. They are each 3-4 volts, 2 cp., D.C. and S.C. respectively.

FUSES.—Generator fuse is 5 amperes. All lighting and other fuses are 10 amperes.

