

HUDSON

SUPER SIX MODEL (1929) SERIAL NUMBERS 825415 UP
PRODUCTION STARTED JANUARY 1, 1929
AUTO-LITE GENERATING, STARTING SYSTEM
AUTO-LITE IGNITION

BATTERY:—Exide, Type 3-XI-15-IG, 6 volt. The negative (—) terminal is grounded. Starting capacity (20 minute rate) is 114 amperes for 20 minutes. Lighting capacity (5 ampere rate) is 5 amperes for 20 hours. Battery is mounted under the left front seat.

IGNITION:—Coil Model IG-4065. Coil is mounted on the front of the engine block. Ignition current is 1-3 amperes at 6 volts with engine running and 3.4-5 amperes at 6 volts with engine stopped.

Distributor Model IGA-4058. Breaker contacts separate .018-.020 inch. Set contact gap by loosening lock nut on stationary contact mounting stud and turning up stud until correct gap is secured with breaker arm on lobe of cam. Resurface contacts when necessary with a fine flat contact file or on a medium hard oilstone. Breaker arm spring tension is 16-20 ounces. Distributor is semi-automatic. Maximum manual advance is 28 degrees (engine). Automatic advance begins at 600 R.P.M. of engine. Maximum automatic advance is 36 degrees (engine) reached at 3200 R.P.M. Electrolock ignition switch is standard equipment.

Mounting:—Distributor is mounted on the crank case at the right of the engine. To remove distributor, disconnect manual advance rod and remove distributor head with cables intact. Then disconnect Electrolock at dash and take out two bolts in distributor mounting flange. Then lift distributor out and remove with Electrolock as a unit. The Electrolock can be removed from the distributor by taking off the nut on the terminal stud inside the case and pulling the Electrolock cable, ferrule and stud straight out from the distributor housing.

Oiling:—Put 6 or 8 drops of light engine oil in the oiler on the side of the distributor housing each 500 miles. Each 250 miles put one drop of oil on the breaker arm pivot pin. Every 5000 miles remove the distributor head and rotor and put a small bit of vaseline on the face of the breaker cam.

Timing:—Breaker contacts begin to open when the piston entering power stroke reaches a position 3 teeth on the flywheel before top dead center with the manual spark control fully advanced. To set timing, crank engine over until piston No. 1 enters compression stroke (the up stroke with both valves closed). Fully advance manual spark control lever. Continue to crank engine until the punch mark on the flywheel (which is three teeth before the top dead mark 'DC-1-6') is opposite the pointer on the inspection hole in the left side of the flywheel case. Then loosen the advance arm clamp screw and rotate the distributor until contacts begin to open. Tighten the clamp screw and connect the segment opposite the rotor to the spark plug in cylinder No. 1. Connect the remaining spark plugs in order 5-3-6-2-4 clockwise around the distributor head.

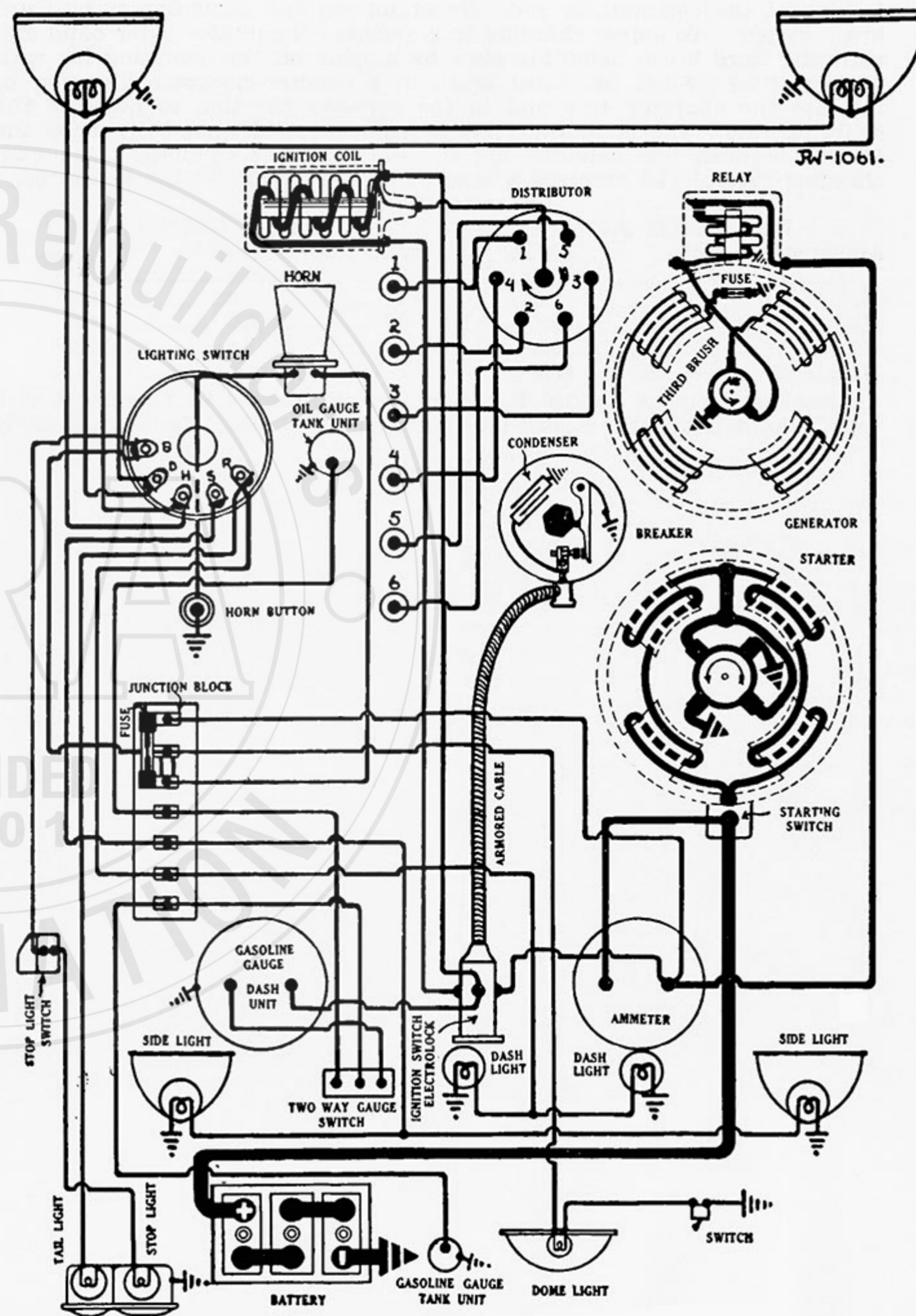
Firing Order:—The firing order is 1-5-3-6-2-4.

Spark Plugs:—Spark plugs are 18MM. Metric. Gaps are .025 inch.

VALVE TIMING:—**INLET VALVES:**—Head diameter, 2 1/32 inches. Stem diameter, .373 inch. Stem length, 6 inches. Valve life, 11/32 inch. Spring pressure, 96 pounds. Tappet clearance, .004-.006 inch.

EXHAUST VALVES:—Head diameter, 1 27/32 inches. Stem diameter, .373 inch. Stem length, 6 3/4 inches. Valve lift, 19/64 inch. Spring pressure, 75 pounds. Tappet clearance, .006-.008 inch. Valve stem guides are removable. Oversize valves are not made.

Valve Timing:—Inlet valves open 7 degrees after top dead center with the piston 5/64 inch down on inlet stroke.



HUDSON

SUPER SIX MODEL (1929) SERIAL NUMBERS 825415 UP
PRODUCTION STARTED JANUARY 1, 1929
AUTO-LITE GENERATING, STARTING SYSTEM
AUTO-LITE IGNITION

STARTER:—Model MUA-4001. Starter is connected to the engine through a sliding gear shift interconnected with the starting switch. Pressing down on the starting pedal meshes the gears and closes the starting switch. When the pedal is released a spring reverses these operations. The direction of rotation is clockwise, viewed from the commutator end. Brush spring tension is $1\frac{3}{4}$ - $2\frac{1}{4}$ pounds. Starter cranks the engine at 110 R.P.M. drawing 250 amperes at 5.5 volts.

Starter Data			
Torque	R.P.M.	Volts	Amperes
0 lb. ft.	4200	6	50
2 "	1500	5.3	130
4 "	1000	5.0	200
6 "	600	4.6	275
8 "	450	4.2	340
22 "	Lock	3.5	500

Mounting:—Starter is cradle mounted on special mounting bracket at the right of the engine. The starting switch is built in the bracket. To remove starter, loosen the mounting clamp band and lift starter from place.

Oiling:—Starter bearings are oilless. They require no attention.

GENERATOR:—Model GAB-4008. The direction of rotation is counter-clockwise, viewed from the commutator end. Generator current regulation is by third brush shunt field. To adjust generator output, remove the commutator cover band and shift the third brush mounting plate by tapping on the mounting stud with a screwdriver. Shift the third brush in a counter-clockwise direction to increase the charging rate and in the opposite direction to decrease the charging rate. The brush is held in position by friction between the mounting stud and the end plate. With standard car setting, maximum charging rate is 15 amperes (cold) reached at 1300 R.P.M. of the generator armature.

Generator Data

Cold Test (72°F.)			Hot Test (206°F.)		
Amperes	Volts	R.P.M.	Amperes	Volts	R.P.M.
4	6.8	630	4	6.8	790
10	7.4	800	10	7.6	1240
14	7.8	1020	12.5	8.0	1550
15	8.0	1300	11	7.8	2000
12	7.8	1950			

Motoring at 355-390 R.P.M. generator draws 4.7-5.2 amperes at 6 volts. Shunt field current is 6.1-6.8 amperes at 6 volts. Each coil draws 24.4-27.2 amperes at 6 volts. Brush spring tension is 1-1.5 pounds. The fuse in the field circuit is 7.5 ampere capacity.

Mounting:—Generator is cradle mounted on special bracket at right of engine. To remove generator, disconnect lead and drive coupling and loosen mounting clamp band. Then lift generator from place.

Oiling:—Put 4 or 5 drops of light engine oil in each of the generator bearing oilers every two weeks or each 500 miles of operation.

RELAY:—Model CB-4014. Relay is mounted on the generator. Relay closes at 545-625 R.P.M. when the generator voltage reaches 7-7.5 volts and opens with a discharge current of 0-2.5 amperes. Charging current must not exceed 5 amperes at closing of contacts. Contacts separate .025-.035 inch. Air gap is .010-.030 inch with contacts closed.

LIGHTING:—Clum Switch Model 10717. Lighting switch is mounted at base of steering column. Double filament headlights using a second 21 cp. filament instead of dimmers are standard equipment. Headlights are 6-8 volt, 21-21 cp. D.C. Mazda 1110. Stop light is 6-8 volt, 15 cp. S.C. Mazda 87. Side, dash and tail lights are each 6-8 volt, 3 cp. S.C. Mazda 63.

FUSES:—Generator field fuse is 7.5 ampere capacity. Lighting fuse mounted on junction block on dash is 20 ampere capacity.