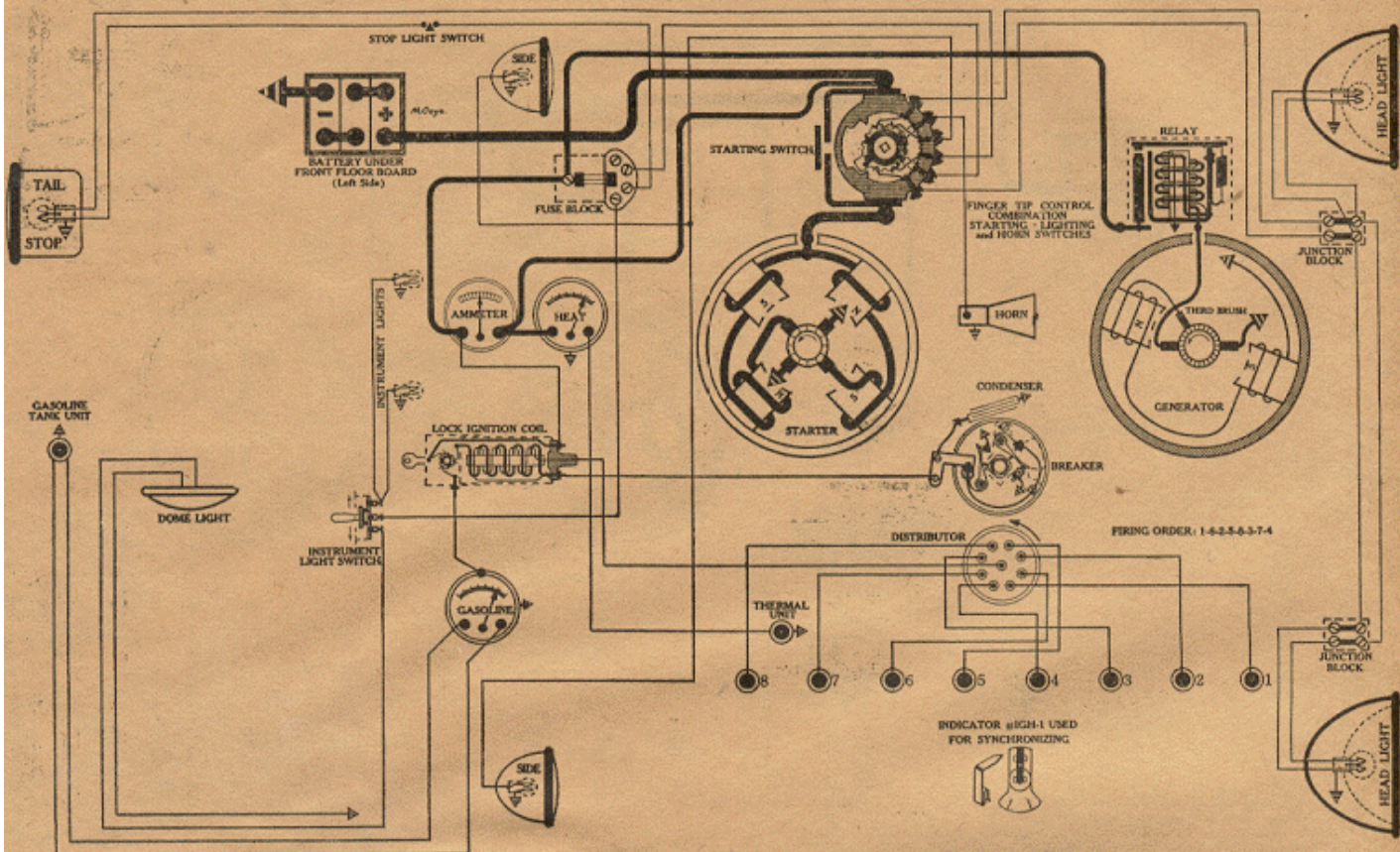


WILLYS

Model, 8-80, Straight Eight, (1930)



BATTERY

U. S. L., 3-HVX-7X-6A, 6 volts. Negative Terminal Grounded

Starting Capacity—148 amps. for 20 minutes.

Lighting Capacity—5 amps. for 28 hours.

Box—Length, 11 3/4; width, 7 7/16; height, 9 3/4 inches.

STARTER

Rotation, L. H., Com. End
Auto-Lite, MAB-4031

Connection to Engine—Bendix drive.

Running Free—60 amps. at 6 volts.

Cranking Engine—160-170 amps. at 5 volts.

Lock Torque—17 pound-feet, 520 amps. at 3 volts.

Brush Spring Tension—24 to 28 oz. on each.

Starting Switch—Located foot of steering column. Operated by pulling up on horn button.

IGNITION

Rotation, L. H., Top View
Auto-Lite, IGH-4013

Breakers—Contact separation .018 inch.

Contact Spring Tension—17 to 19 oz. on each.

Timing—With No. 1 Piston on compression stroke, bring flywheel mark "IGN" opposite pointer, spark fully advanced, rotor opposite No. 1 Dist. Cap Terminal; stationary set of breaker points should just open.

Spark Plugs—Metric (Champion No. 8); Gap .025 inch.

Firing Order—1-6-2-5-8-3-7-4.

Manual Advance—12 degrees (on Flywheel).

Automatic Advance—20 degrees (on Flywheel).

Eng. R.P.M.	Degrees Advance (on flywheel)	Dist. R.P.M.	Degrees Advance (on cam)
800	0	400	0
1600	6	800	3
2400	11	1200	5.5
3200	17	1600	8.5
3600	20	1800	10

Lock Ignition Coil—Auto-Lite, IG-4083.

NOTE: This unit is a combined ignition switch and coil. Impossible to "jump out" ignition switch with wire, to run engine.

GENERATOR

Rotation, L. H., Com. End
Auto-Lite, GAL-4131 (Belt Drive)

Performance Data—Gen. cold.

Amps.	R.P.M.	Volts	Amps.	R.P.M.	Volts
0	650	6.5	10	1075	7.3
2	720	6.6	14	1340	7.7
5	850	7	16	1800 (Max.)	8

Motoring Freely—5 to 5 1/2 amps. at 6 volts.

Max. Stall Current—16 to 19 amps. at 6 volts.

Field Test—4.7 amps. at 6 volts across field coils in series.

Field Fuse—(None).

Brush Spring Tension—20 to 24 oz. on each.

Third Brush Adjustment—Loosen cover band. See Fig. 13, P. 7, Sec. AA.

RELAY

Auto-Lite, CB-4014

Closes—7 to 7 1/2 volts.

Opens—1/2 to 2 1/2 amps. discharge.

Contact Gap—.025 to .035 inch.

Core Gap—.010 to .012 inch, contacts closed.

LIGHTING

Switch—Aid Mfg. Co., No. 805,

Location—Foot of steering column. This unit is a combination starting switch, lighting switch, and horn switch, all controlled by horn button on steering wheel.

Fuses—Single 20 amp. fuse mounted on block under engine hood (left side).

Lamps—See P. 3, Sec. AA. HEAD—1110 (Bifocal); SIDE—63; INSTRUMENT—63; DOME—63; STOP and TAIL—1158.

NOTE: This is the old style Ford headlight bulb with two filaments. Make sure the 3 C.P. filament burns for tail light.