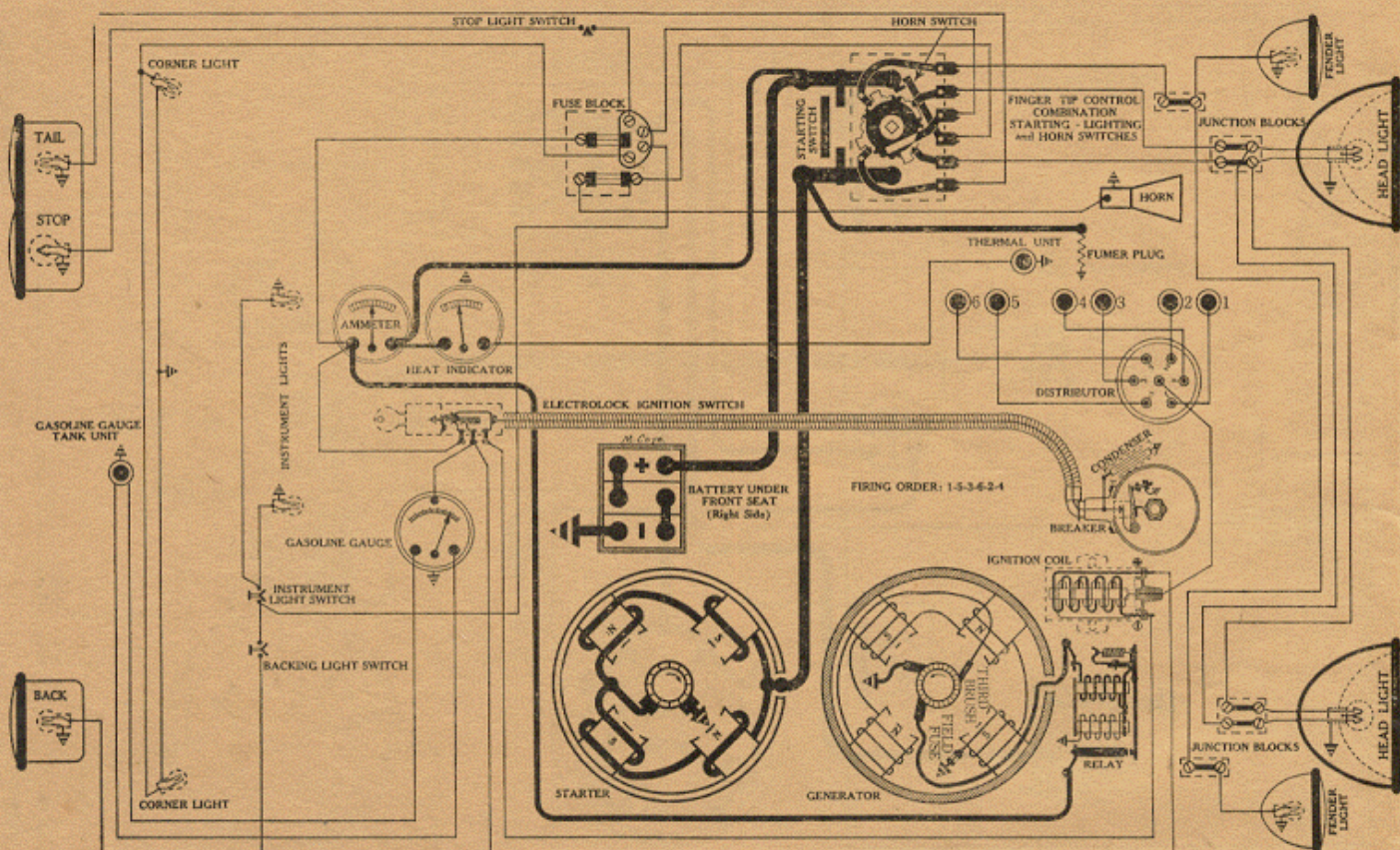


WILLYS-KNIGHT

Model 66-B, (1929-30)



BATTERY

U.S.L., 3-HVX-8X-6A, 6 volts. Negative Terminal Grounded.

Starting Capacity—170 amps. for 20 minutes.
Lighting Capacity—5 amps. for 33 hours.
Box—Length, 13 1/16; width, 7 7/16; height, 9 3/4 inches.

STARTER

Rotation, R. H., Com. End
North-East, Model SBH, Type 6585

Connection to Engine—Bendix drive.
Running Free—35 amps. at 6.1 volts—4800 R.P.M.
Cranking Engine—170-180 amps. at 5.25 volts—1200 R.P.M.

Lock Torque—16 pound-feet, 540 amps. at 3.3 volts.
Brush Spring Tension—42-48 oz. on each.
Starting Switch—Located foot of steering column. Operated by pulling up on horn button.

IGNITION

Rotation, R. H., Top View
North-East, Model TBU-10877

Breaker—Contact separation .020 inch.
Contact Spring Tension—18-22 oz.
Timing—Set ignition 16 flywheel degrees before T.D.C. with spark lever fully advanced.
Spark Plugs—7/8 inch long regular (Champion No. 3); Gap .025 inch.
Firing Order—1-5-3-6-2-4.
Manual Advance—20 degrees (on Flywheel).
Automatic Advance—21 degrees (on Flywheel).

Eng. R.P.M.	Degrees Advance (on flywheel)	Dist. R.P.M.	Degrees Advance (on cam)
400	0	200	0
800	3	400	1 1/2
1200	5	600	2 1/2
1600	8	800	4
2400	14	1200	7
2800	17	1400	8 1/2
3400	21	1700	11 1/2

Coil—North-East, Type 22636.

Ignition Switch—"Electrolock", Type B. For theory of operation and instructions on servicing, see P. 18, Sec. AA.

GENERATOR

Rotation, L. H., Com. End
North-East, Model LB, Type 6580

Performance Data—Gen. cold.

Amps.	R.P.M.	Volts
0	500	6.5
5	650	6.9
11	900	7.4
15	1150	7.8
18	1300 (Max.)	8.2

Motoring Freely—3 1/2 to 4 amps. at 6 volts.
Max. Stall Current—21 to 23 amps. at 6 volts.
Field Test—2.1 amps. at 6 volts across field coils in series.
Field Fuse—10 amps. mounted in generator end frame, and held by slotted brass cap in housing.
Brush Spring Tension—16 to 18 oz. on each.
Third Brush Adjustment—Not necessary to loosen cover band. See Fig. 18, P. 7, Sec. AA.

RELAY

North-East, Type 20220

Closes—7 to 7 1/2 volts.
Opens—0 to 2 amps. discharge.
Contact Gap—.020 to .025 inch.
Core Gap—.015 inch.

LIGHTING

Switch—Briggs & Stratton 50160.
Location—Foot of steering column. This unit is a combination starting switch, lighting switch, and horn switch, all being controlled by horn button on steering wheel.
Fuses—Two 20 amp. fuses mounted on block under engine hood (left side).
Lamps—See P. 3, Sec. AA. HEAD—1110 (Bifocal); FENDER—63; INSTRUMENT—63; BACK—87; TAIL—63; STOP—87; CORNER—63.