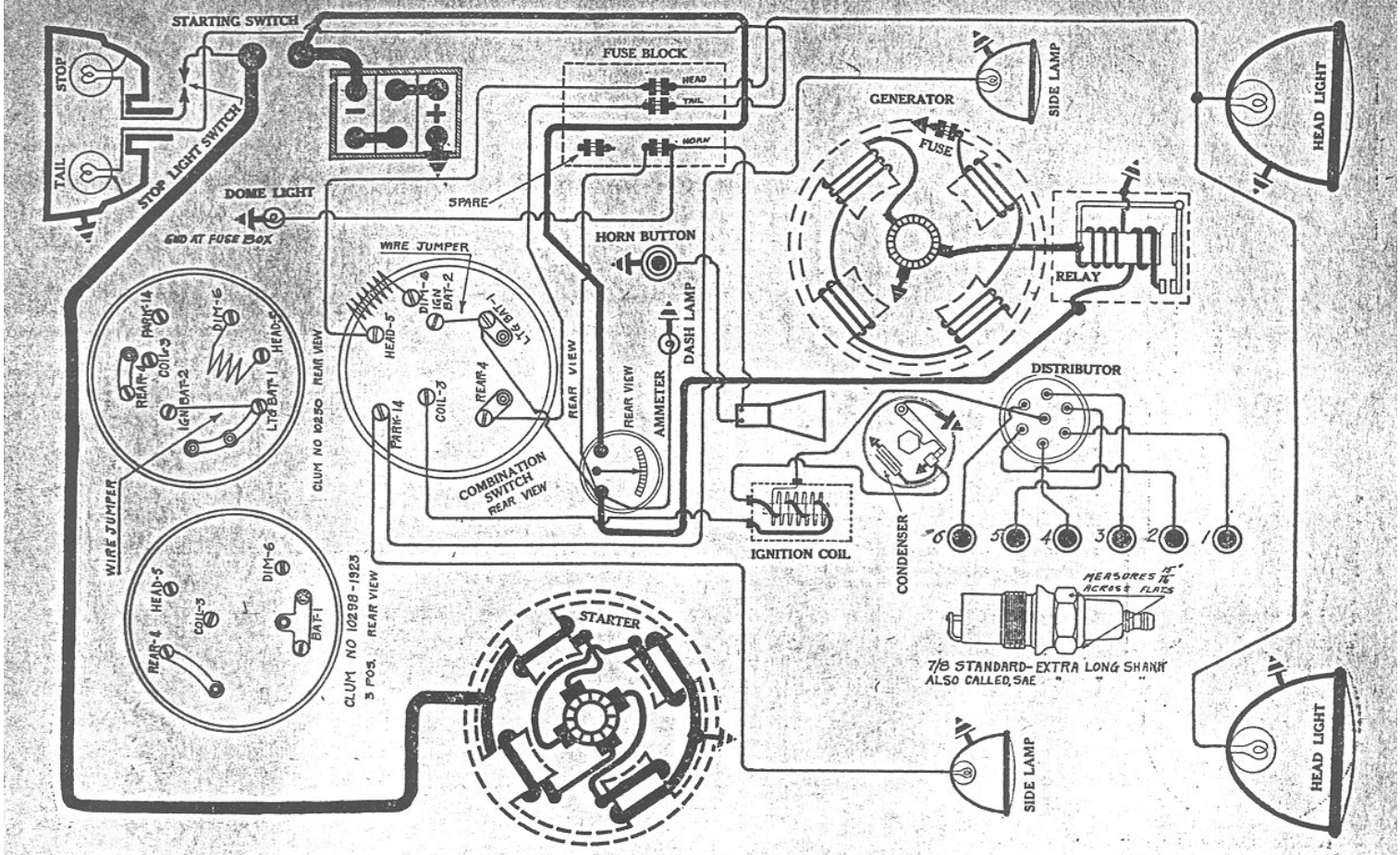
Dort Six (1924) American Bosch System. American Bosch Ignition.
NOTE—If Generator 1228 used; same as p. 527. If Starter 934; same as p. 654



BATTERY

U. S. L., Type 3-HVX-5X, 6 Volts. Positive Terminal Grounded.

Starting Capacity—105 amps. for 20 minutes.
Lighting Capacity—5 amps. for 18.4 hours.
Box—Length, 9⅛ in. Height, 9¾ in. Width, 7 7/16 in.
Terminals—Plug type.

STARTER

Rotation, R.H., Com. End.
American Bosch, No. 525

Connection to Engine—Bendix drive.
Running Free—35 amps., 5000 R.P.M., 6 volts.
Cranking Engine—100-150 amps., 100-150 R.P.M., 5-5.5 volts.
Lock Torque—12 pound-feet, 450 amps., 3.5 volts.

GENERATOR

Rotation, L.H., Com. End.
American Bosch, Type 651-653

Performance Data—(Gen. hot.)

Amperes	R.P.M.
0	500
5.5	700
9.0	900
13.4	1300
14.7	1700
12.0	2500

Motoring Freely—4-4.5 amps., 350-425 R.P.M.
Field Test—2.5-3.0 amps., 6.3 volts.
Third Brush Adjustment—NOT NECESSARY TO LOOSEN COVER BAND. Small screw located above and slightly to the left of center line, and on commutator end of generator, has pinion attached which runs in a rack fastened to the third brush plate. Turning the screw R.H. moves brush L.H., and vice versa. Movement of **third brush** in direction of rotation increases, and in the opposite direction decreases the charging rate.

IGNITION

Rotation, R.H., Top View
American Bosch, T.M. 662 with TC-20 Coil
T.H., 662 with TC-30 Coil

Breaker—Contact separation, .025 inch.
Timing—See detailed instructions on page 1, Sec. AA.
1—Locate T.D.C. 2—Locate rotor. 3—Set spark.
Firing Order—1-4-2-6-3-5.
Spark Plugs—AC SAENT (⅞ Standard, Extra Long Shank). Gap, .025 inch.
Coil—American Bosch TC-20 or TC-30 (no resis. unit.)

RELAY

Closes—6.5-7.5 volts.
Opens—0-2 amps. discharge.
Contact Gap—.015 inch. Core Gap—.010 inch, contacts closed.

LIGHTING

Switch—Clum No. 10298 (1923). Drill two horizontal holes to install this switch, which supersedes Switch No. 10194.
Test Circuits—IGNITION: **Off**—0; **On**—1-3. LIGHTING: **Off**—0; **Dim**—1-6-4; **On**—1-5-4.
Clum No. 10230 (1924). Resistance unit No. 2458 supersedes No. 7486, which has a built-up unit supplied with Switch No. 10194.
Test Circuits—IGNITION: **Off**—0; **On**—2-3. LIGHTING: **Off**—0; **Park**—1-4-14; **On**—1-4-5 (thru resis. to 6); **Dim**—1-4-6 (thru resis. to 5).
Clum No. 10333 (1924) Test Circuits—IGNITION: **Off**—0; **On**—1-3; LIGHTING: **Off**—0; **Park**--1-4-14; **Dim**—1-4-6 (thru resis. to 5) **On**—1-4-5 (thru resis. to 6.)
Lamps—See p. 3, Sec. AA. **HEAD, STOP**—1129; **TAIL, DASH**—63; **DOME**—82.
Fuses—Light, Horn, 10 amps. Generator, 5 amps.

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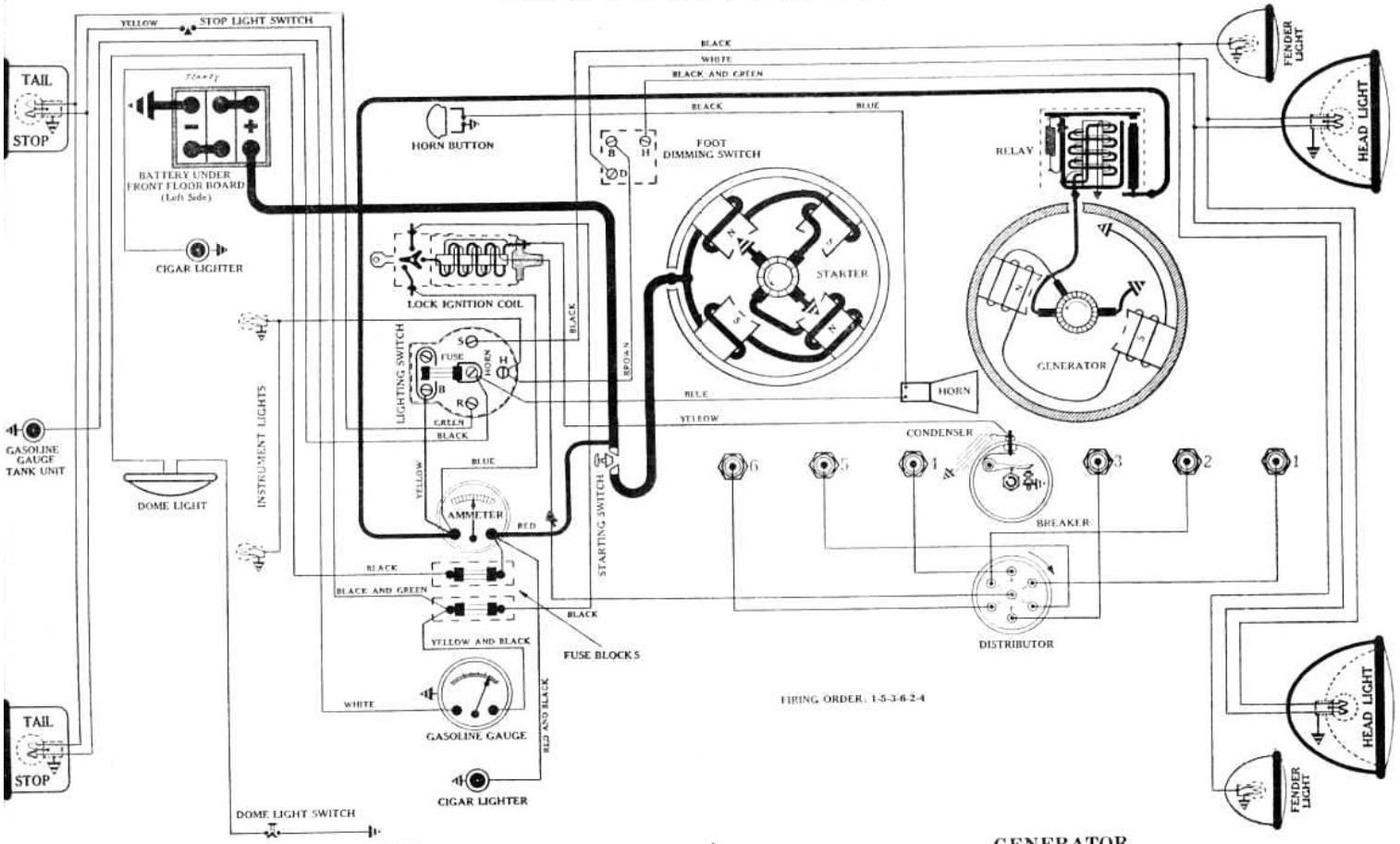
DURANT

Models 612 and 614, 6 cyl., (1931)



BATTERY

U. S. L., 3-CVX-6X-7A, 6 volts. Negative Terminal Grounded.
Starting Capacity—115 amps. for 20 minutes.
Lighting Capacity—5 amps. for 21 hours.
Box—Length, 10 7/16; width, 7 7/16; height, 9¼ inches.

STARTER

Rotation, L. H., Com. End
Auto-Lite, MAJ-4001

Connection to Engine—Bendix Drive.
Running Free—50 amps. at 5.5 volts.
Cranking Engine—160 amps. at 5.25 volts, 228 R.P.M.
Lock Torque—12½ pound-feet, 575 amps., 3 volts.
Brush Spring Tension—44 to 48 oz. on each.
Starting Switch—Auto-Lite, SW-4003.
Armature—Auto-Lite, MAJ-2006.

IGNITION

Rotation, R. H., Top View
Auto-Lite, IGB-4031-A

Breakers—Contact separation .018 inch.
Contact Spring Tension—17 to 19 oz.
Timing with MOTOR GAUGE—IMPORTANT! Time ignition in full advance position. Remove No. 1 spark plug and attach MOTOR GAUGE, using adapter No. 104 and rod No. 2. Slowly hand crank engine until No. 1 piston is coming up on compression stroke. Stop when .011 inch before T.D.C., as indicated on Gauge. With rotor opposite No. 1 Dist. Cap Terminal, breaker points should just open.
Spark Plugs—(Model 612)—Metric (AC, type G-10); Gap .025 inch. (Model 614)—Metric (Champion, type C-7); Gap .025 inch.
Firing Order—1-5-3-6-2-4.
Manual Advance—20 degrees (on Flywheel).
Automatic Advance—15 degrees (on Flywheel).

Eng. R.P.M.	Degrees Advance (on flywheel)	Dist. R.P.M.	Degrees Advance (on cam)
600	0	300	0
1200	4	600	2
1800	8	900	4
2400	12	1200	6
2800 (Max.)	15	1400	7½

Lock Ignition Coil—Auto-Lite, IG-4302.
NOTE:—This is a new type coil, with but one primary terminal at top, which should always be connected to the breaker. Two other primary terminals are located at base of coil, either one of which may be used for the "hot" feed; the other terminal is for the gas gauge or other auxiliary units.

GENERATOR

Rotation, L. H., Com. End
Auto-Lite, GAL-4330, (Belt Drive)

NOTE:—A few early Model 612 Durants used Auto-Lite, GAL-4130 Generators. For data see 1929 Durant, Model 614.
Performance Data—Gen. cold.

Amps.	R.P.M.	Volts
0	600	6.3
6	800	6.9
10	1000	7.1
13	1200	7.5
15	1400	7.7
17	1900 (Max.)	8.

Motoring Freely—4½ to 5 amps. at 6 volts.
Max. Stall Current—16 to 19 amps. at 6 volts.
Field Test—4½ amps. at 6 volts across field coils in series.
Field Fuse—(None).
Brush Spring Tension—10 to 13 oz. on each.
Armature—Auto-Lite, GAL-2141.
Third Brush Adjustment—Loosen cover band. See Fig. 13, P. 7.

RELAY

Auto-Lite, CB-4014

Closes—7 to 7.5 volts.
Opens—½ to 2½ amps. discharge.
Contact Gap—.025 to .035 inch.
Core Gap—.010 to .012 inch, contacts closed.

LIGHTING

Switch—Clum, No. 5192 (interchangeable with Clum, No. 10741).
Location—Behind instrument board. Operated by pull knob.
Fuses—(Horn and Lighting), single 20 amp. fuse (type 3A-20), mounted on switch back. (Stop, Light, Gas, and Heat Gauge), single 20 amp. fuse (type 3A-20), mounted on block behind instrument board. (Rear Compartment Cigar Lighter), single 20 amp. fuse (type 3A-20), mounted on block attached to steering post support behind instrument board.
Foot Dimming Switch—Clum, No. 9126.
Location—On toe board (left side). Tilt beam controlled by pressing foot plunger.
Lamps—See P. 3, Sec. AA. HEAD—1110 (Bifocal); FENDER—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.

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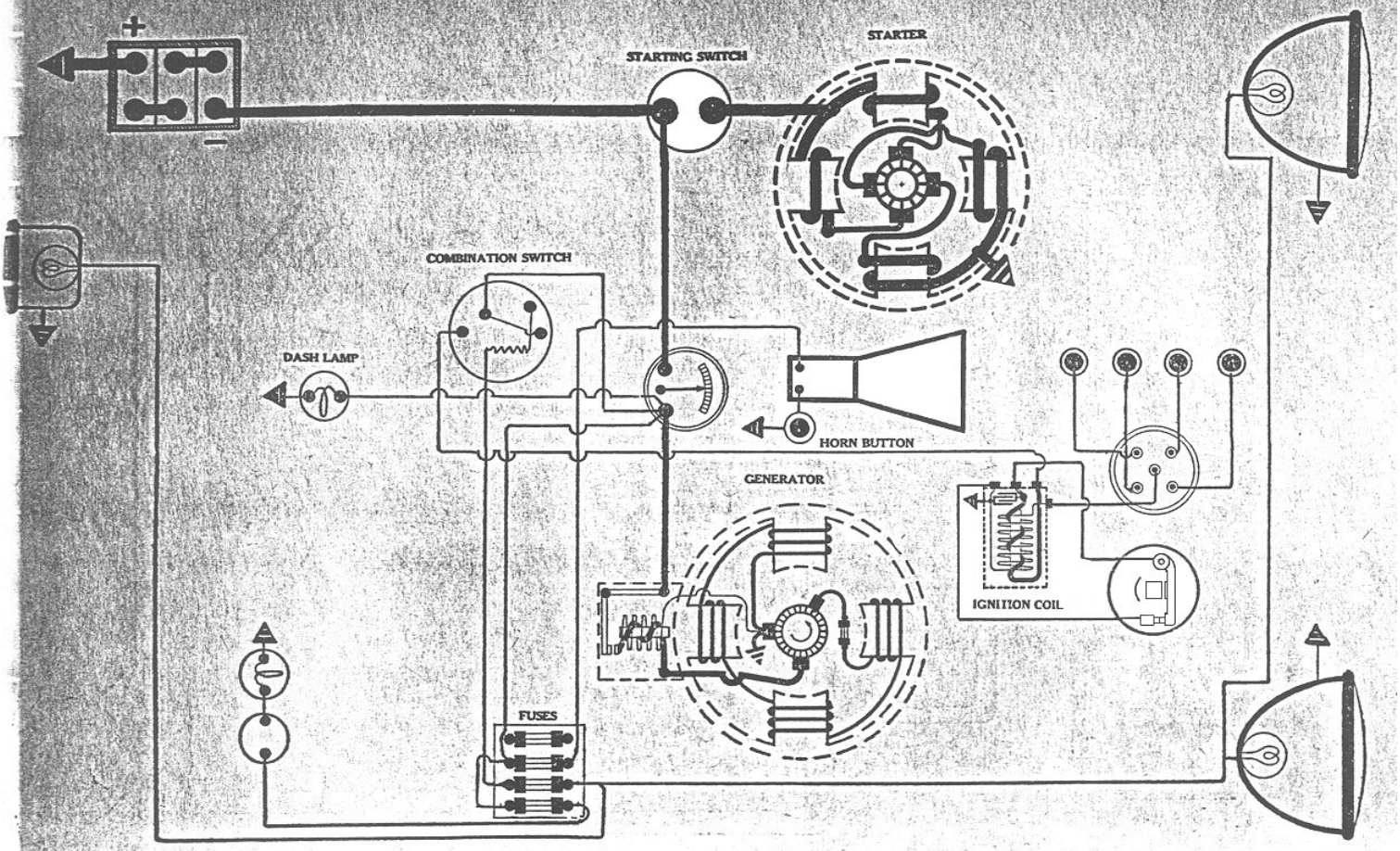
DORT

Models 12 and 17 (1921), Models 14 and 19 (1922). American-Bosch System. Connecticut Ignition



BATTERY

U.S.L., Type HDN-311-X, 6 volts. Positive terminal grounded

Starting Capacity—96 amperes for 20 minutes.
Lighting Capacity—5 amperes for 17 hours.
Box—Length, 9⅛ inches. Height, 9¾ inches. Width, 7⅜ inches.
Terminals—Thimble type.

STARTER

American-Bosch, Model No. 525

Connection to Engine—Bendix drive.
Running Free—35 amperes, 5000 R.P.M., 6 volts.
Cranking Engine—100–150 amperes, 100–150 R.P.M., 5–5.5 volts.
Lock Torque—12 pound-feet, 450 amperes, 3.5 volts.

IGNITION

Connecticut Battery Ignition

Breaker—Adjust contact gap to .025 inch, contacts fully separated.
Timing—Breaker contacts just open when No. 1 piston is on upper dead center, compression stroke, mark "1 and 4 DC" on flywheel is one inch past indicator.
Spark Plug—Diameter, ⅞ inch. Gap, .030 inch.
Firing Order—1-3-4-2.

RELAY

Closes—450-500 R P. M., 7-10 M. P. H., 6.5-7.5 volts.
Opens—400–450 R.P.M., 6–8 M.P.H., 0–2 amperes discharge.
Contact Gap—.015 to .018 inch.
Core Gap—.012 to .015 inch, contacts closed.

GENERATOR

American-Bosch, Model No. 636

Performance Data—

	Amperes	R.P.M.	M.P.H.
	0	450	
	5	600	
	10	825	
Max.	15	1400	18–20
	12	2500	

Regulation—Third brush, current regulation. Brush is moved by turning a pinion screw located between fuse and relay on the commutator end plate. Turn screw to left to increase the charging rate and to right to decrease the charging rate.
Motoring Freely—3 to 5 amperes, 6 volts.
Field Test—2.6 amperes, 6 volts.

LIGHTING

Switch—Combination lighting and ignition, lever and key type.
Lamps—Head 6-8 volt, 21 cp., S.C.
Dash .....6-8 volt, 2 cp., S.C.
Tail .....6–8 volt, 4 cp., S.C.
Fuses—10 amperes, Size No. 1.

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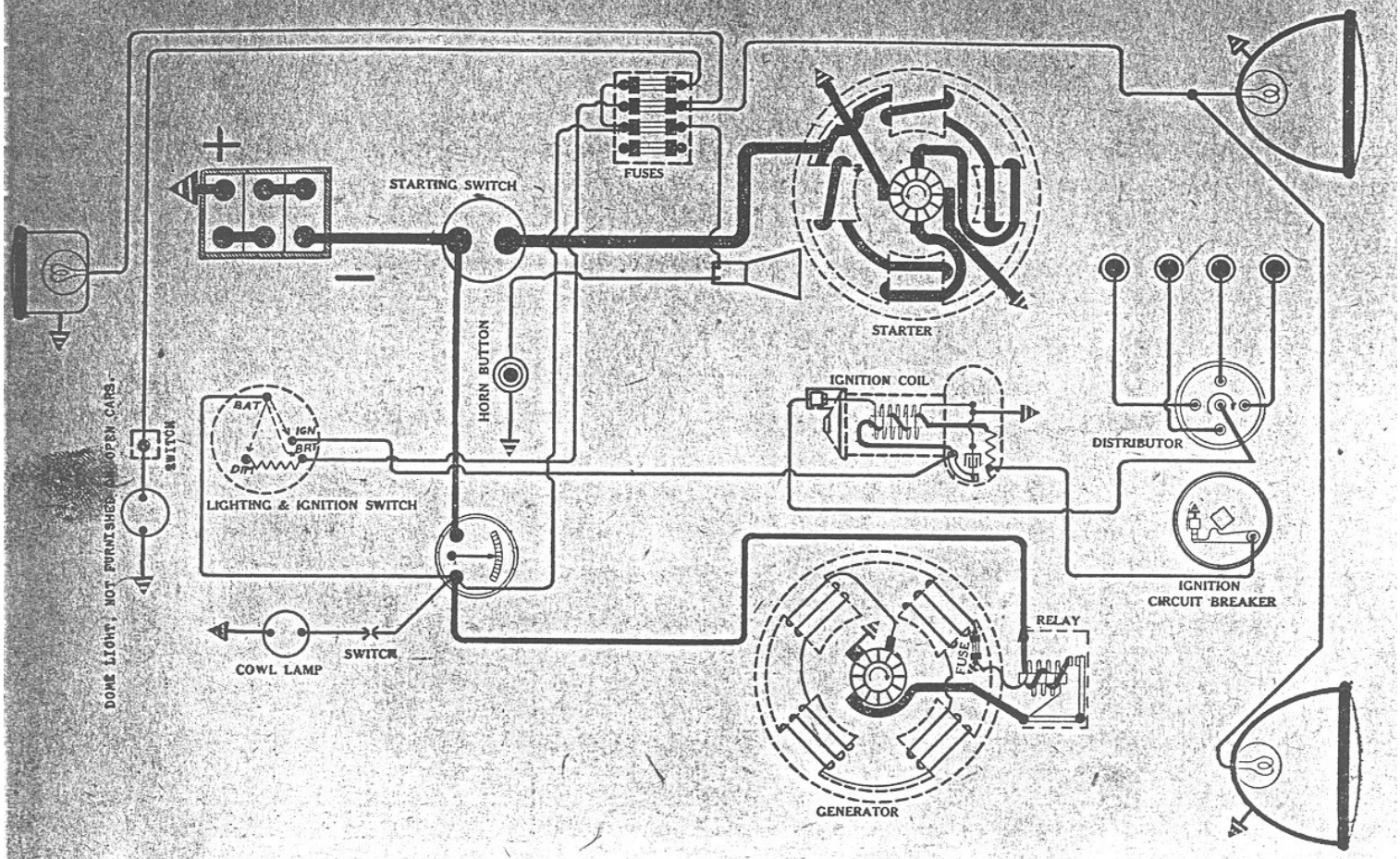
DORT

Models 18 and 23, 4 cylinder, (1923). American-Bosch System. Connecticut Ignition



BATTERY

U. S. L., Type HDN-311-X, 6 volts. Positive terminal grounded

Starting Capacity—96 amperes for 20 minutes.
Lighting Capacity—5 amperes for 17 hours.
Box—Length, 9⅝ inches. Height, 9¼ inches. Width, 7½ inches.
Terminals—Thimble type.

STARTER

American-Bosch, 525 type

Connection to Engine—Bendix drive.
Running Free—35 amperes, 5000 R. P. M., 6 volts.
Cranking Engine—100-150 amperes, 100-150 R. P. M., 5-5.5 volts.
Lock Torque—12 pound-feet, 450 amperes, 3.5 volts.

RELAY

Closes—450-500 R. P. M., 8-10 M. P. H., 6.5 to 7.5 volts.
Opens—400-450 R. P. M., 6-8 M. P. H., 0-2 amperes discharge.
Contact Gap—.013-.018 inch.
Core Gap—.012 to .015 inch, contacts closed.

LIGHTING

Switch—Combination lighting and ignition. Clum Mfg. Co. Knob type.
Lamps—Head .....6-8 volt, 21 cp., S.C.
Dash .....6-8 volt, 2 cp., S.C.
Tail .....6-8 volt, 2 cp., S.C.
Dome .....6-8 volt, 4 cp., S.C.
Fuses—Light, 10 ampere, horn, 10 ampere.

GENERATOR

American-Bosch 1223 type

(Refer to page 334 for 600 series. Used on early 1923 models.)

Performance Data—(Generator hot).

Amperes	R.P.M.	Volts
0	450	6.8
6	700	7.2
9	900	7.8
10.2	1300	8.8
9.5	1700	8.0
7.0	2500	7.8

Regulation—Third brush, current regulation. To increase charging rate, loosen hexagon nut located inside commutator housing holding third brush and move brush in direction of armature rotation, (counter clock-wise facing commutator end).
Motoring Freely—4.0-4.5 amperes running at 350-425 R. P. M.
Field Test—2.5-3.0 amperes, 6.3 volts.

IGNITION

Connecticut Battery Ignition, Type 225-Y

Breaker—Adjust contact gap to .025 inch, contacts fully separated.
Timing—Breaker contacts just open when No. 1 piston is on upper dead center compression stroke, mark "1 and 4DC" on flywheel is one inch past indicator, spark fully retarded.
Firing Order—1-3-4-2.
Spark Plugs—Diameter, ⅞ inch. Gap, .030 inch.

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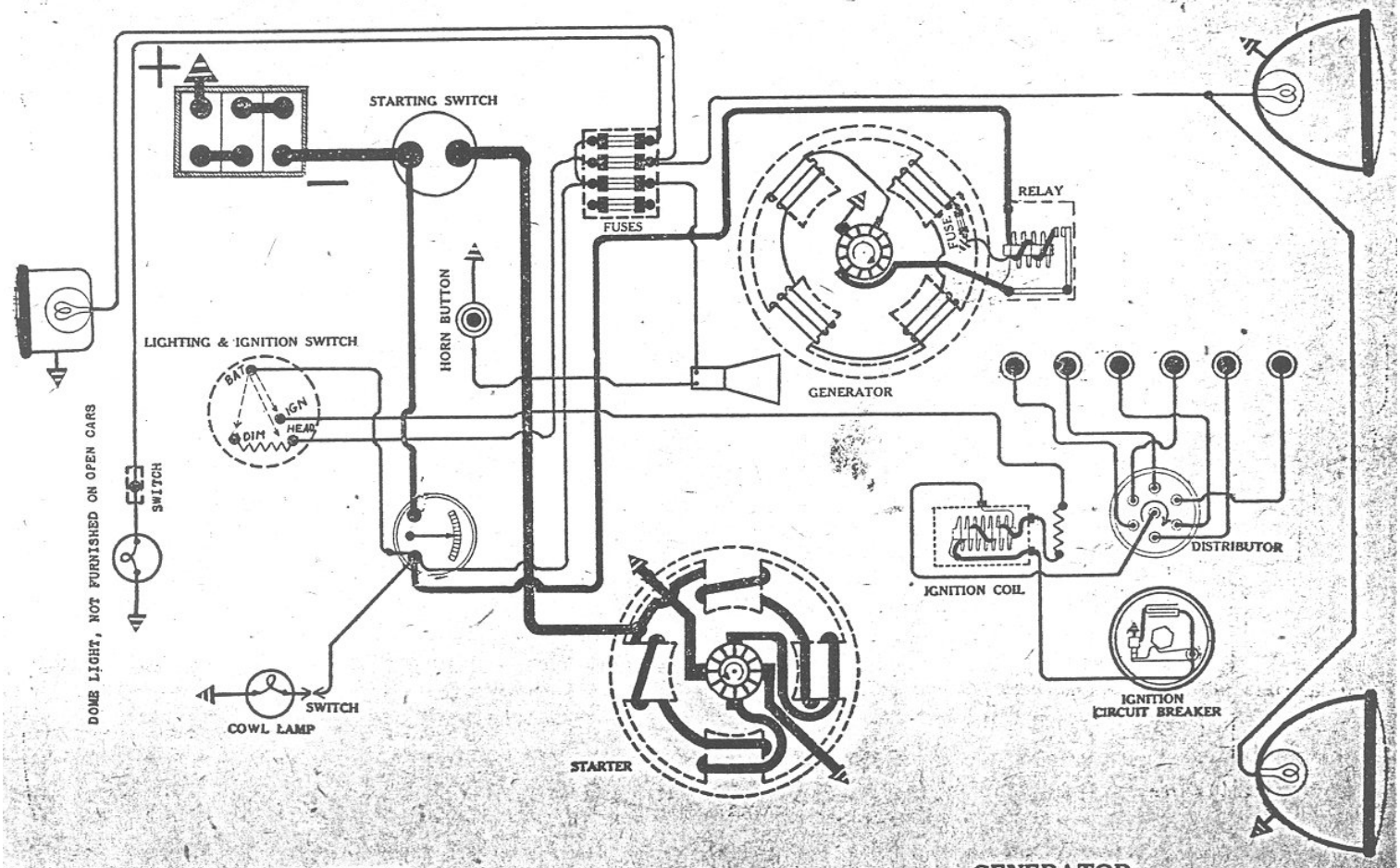
DORT

Model 20-25, 6 cylinder, (1923). American-Bosch System. American-Bosch Ignition



BATTERY

U. S. L., Type HDN311X, 6 volts. Positive terminal grounded

Starting Capacity—96 amperes for 20 minutes.
Lighting Capacity—5 amperes for 17 hours.
Box—Length, 9⅝ inches. Height, 9¼ inches. Width, 7½ inches.
Terminals—Thimble Type.

STARTER

American-Bosch 525 Type

Connection to Engine—Bendix drive.
Running Free—35 amperes, 5000 R. P. M., 6 volts.
Cranking Engine—100-150 amperes, 100-150 R. P. M., 5-5.5 volts.
Lock Torque—12 pound-feet, 450 amperes, 3.5 volts.

RELAY

Closes—450-500 R. P. M., 8-10 M. P. H., 6.5 to 7.5 volts.
Opens—400-450 R. P. M., 6-8 M. P. H., 0-2 amperes discharge.
Contact Gap—.015 to .018 inch.
Core Gap—.012 to .015 contacts closed.

LIGHTING

Switch—Combination. Clum Mfg. Co., Knob Type.
Lamps—Head .....6-8 volt, 21 cp., S.C.
Dash .....6-8 volt, 2 cp., S.C.
Tail .....6-8 volt, 2 cp., S.C.
Dome .....6-8 volt, 4 cp., D.C.
Fuses—Light.....10 ampere.
Horn.....10 ampere.
Field..... 5 ampere, (never higher).

GENERATOR

American-Bosch 649 type

Performance Data—(Hot)—

Amperes	R.P.M.	Volts
0	500	
5.5	700	
9.0	900	
13.4	1300	
14.7	1700	
12.0	2500	

Regulation—Third brush, current regulation. Brush is moved by turning a pinion screw located between fuse and oil hole on the commutator end plate. Turn screw to right to increase the charging rate and to the left to decrease the charging rate.
Motoring Freely—4.0-4.5 amperes running at 350-425 R. P. M.
Field Test—2.5-3.0 amperes. 6.3 volts.

IGNITION

American-Bosch Battery Ignition. Type TC 30

Breaker—Adjust contact gap to .025 inch, contacts fully separated.
Timing—Breaker contacts just open when No. 1 piston is on upper dead center, compression stroke, mark "1 and 6" on flywheel exactly opposite indicator, spark fully retarded.
Firing Order—1-4-2-6-3-5.
Spark Plugs—Diameter, ⅞ inch. Gap .030 inch. Long type.

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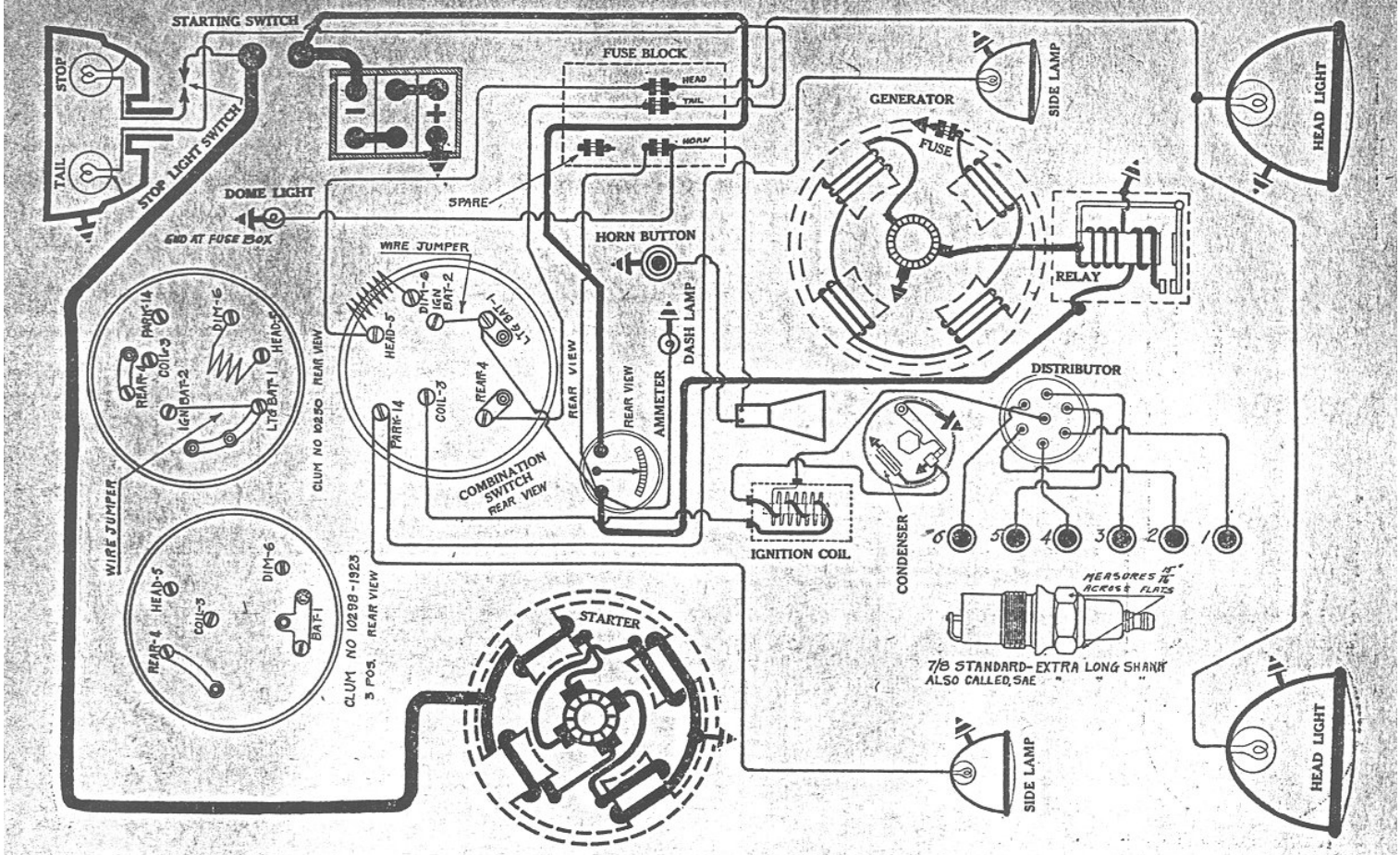
Dort Six (1924) American Bosch System. American Bosch Ignition.
NOTE—If Generator 1228 used; same as p. 527. If Starter 934; same as p. 654



BATTERY

U. S. L., Type 3-HVX-5X, 6 Volts. Positive Terminal Grounded.

Starting Capacity—105 amps. for 20 minutes.
Lighting Capacity—5 amps. for 18.4 hours.
Box—Length, 9⅛ in. Height, 9¾ in. Width, 7 7/16 in.
Terminals—Plug type.

STARTER

Rotation, R.H., Com. End.
American Bosch, No. 525

Connection to Engine—Bendix drive.
Running Free—35 amps., 5000 R.P.M., 6 volts.
Cranking Engine—100-150 amps., 100-150 R.P.M., 5-5.5 volts.
Lock Torque—12 pound-feet, 450 amps., 3.5 volts.

GENERATOR

Rotation, L.H., Com. End.
American Bosch, Type 651-653

Performance Data—(Gen. hot.)

Amperes	R.P.M.
0	500
5.5	700
9.0	900
13.4	1300
14.7	1700
12.0	2500

Motoring Freely—4-4.5 amps., 350-425 R.P.M.
Field Test—2.5-3.0 amps., 6.3 volts.
Third Brush Adjustment—NOT NECESSARY TO LOOSEN COVER BAND. Small screw located above and slightly to the left of center line, and on commutator end of generator, has pinion attached which runs in a rack fastened to the third brush plate. Turning the screw R.H. moves brush L.H., and vice versa. Movement of **third brush** in direction of rotation increases, and in the opposite direction decreases the charging rate.

IGNITION

Rotation, R.H., Top View
American Bosch, T.M. 662 with TC-20 Coil
T.H., 662 with TC-30 Coil

Breaker—Contact separation, .025 inch.
Timing—See detailed instructions on page 1, Sec. AA.
1—Locate T.D.C. 2—Locate rotor. 3—Set spark.
Firing Order—1-4-2-6-3-5.
Spark Plugs—AC SAENT (⅞ Standard, Extra Long Shank). Gap, .025 inch.
Coil—American Bosch TC-20 or TC-30 (no resis. unit.)

RELAY

Closes—6.5-7.5 volts.
Opens—0-2 amps. discharge.
Contact Gap—.015 inch. Core Gap—.010 inch, contacts closed.

LIGHTING

Switch—Clum No. 10298 (1923). Drill two horizontal holes to install this switch, which supersedes Switch No. 10194.
Test Circuits—IGNITION: **Off**—0; **On**—1-3. LIGHTING: **Off**—0; **Dim**—1-6-4; **On**—1-5-4.
Clum No. 10230 (1924). Resistance unit No. 2458 supersedes No. 7486, which has a built-up unit supplied with Switch No. 10194.
Test Circuits—IGNITION: **Off**—0; **On**—2-3. LIGHTING: **Off**—0; **Park**—1-4-14; **On**—1-4-5 (thru resis. to 6); **Dim**—1-4-6 (thru resis. to 5).
Clum No. 10333 (1924) Test Circuits—IGNITION: **Off**—0; **On**—1-3; LIGHTING: **Off**—0; **Park**--1-4-14; **Dim**—1-4-6 (thru resis. to 5) **On**—1-4-5 (thru resis. to 6.)
Lamps—See p. 3, Sec. AA. **HEAD, STOP**—1129; **TAIL, DASH**—63; **DOME**—82.
Fuses—Light, Horn, 10 amps. Generator, 5 amps.

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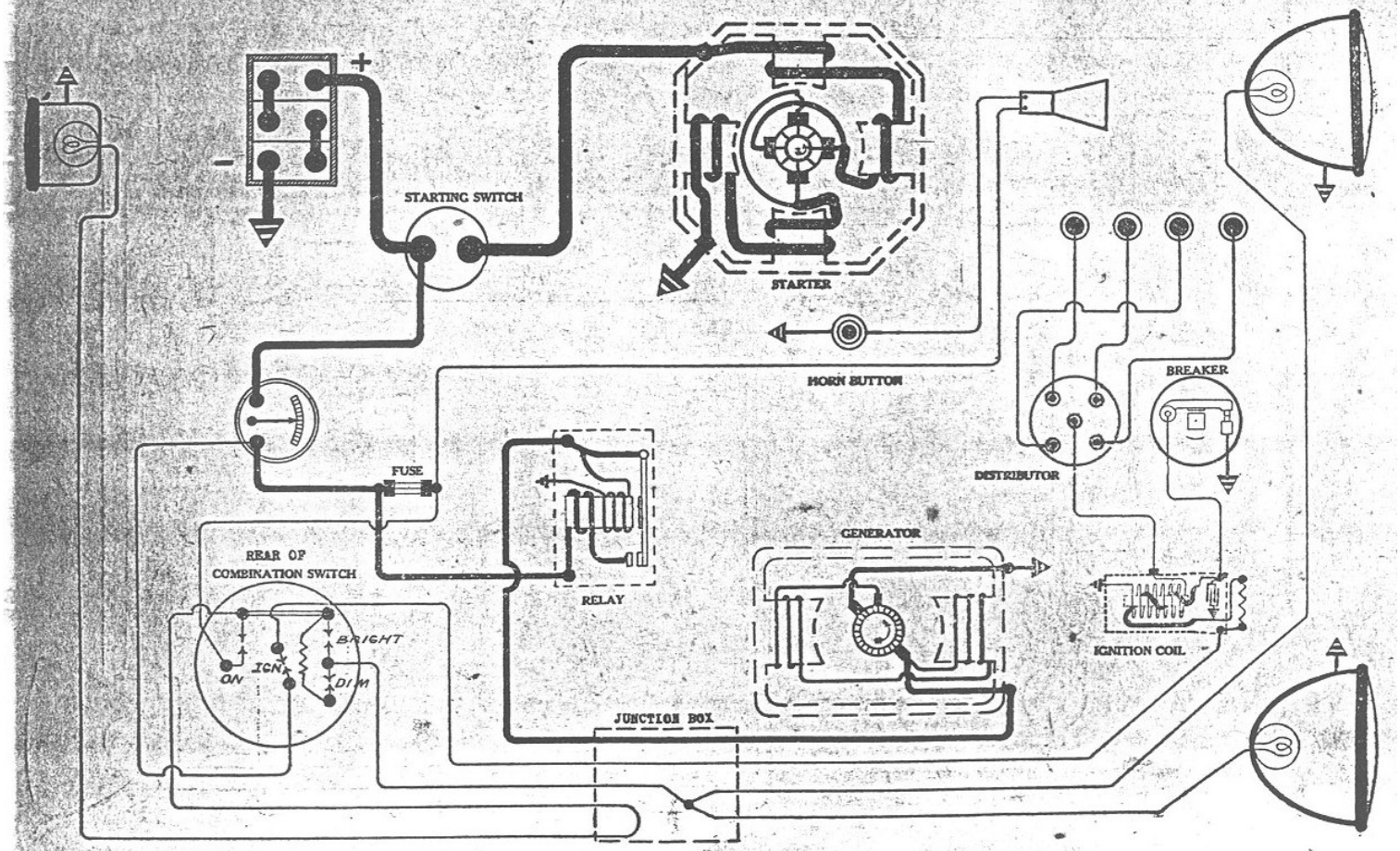
DURANT

Model A-22 (1922-24). Auto-Lite System. Auto-Lite Ignition.

NOTE—After October 1923 Connecticut switch No. 193-1-Y was used. See p. 638 for diagram.



BATTERY

U. S. L., Type HDN-311-X, 6 volts. Negative terminal grounded

Starting Capacity—96 amperes for 20 minutes.
Lighting Capacity—5 amperes for 17 hours.
Box—Length, 9⅛ inches. Width, 7 7/16 inches. Height, 9¼ inches.
Terminals—Thimble type.

STARTER

Auto-Lite, Model MF

Connection to Engine—Bendix drive.
Running Free—40 amperes, 4000 R.P.M., 6 volts.
Cranking Engine—120-160 amperes, 110 R.P.M., 5.5 volts.
Lock Torque—10 pound-feet, 400-450 amperes, 3-4 volts.

IGNITION

Auto-Lite Battery Ignition

Breaker—Adjust contact gap to .025 inch, contacts fully separated.
Timing—Breaker contacts just open when No. 1 piston is on upper dead center, compression stroke, spark lever and breaker assembly fully retarded.
Firing Order—1-2-4-3.
Spark Plugs—Diameter, ⅞ inch. Gap, .025 inch.

GENERATOR

Auto-Lite, Model GH

Performance Data—(Generator cold).

Amperes	R.P.M.	M.P.H.
0	550	
8	900	
Max. 16	1700	20

Regulation—Third brush, current regulation. To increase output of the generator remove brush band, loosen brass nut inside generator above commutator, and move third brush in direction of armature rotation (toward engine).
Motoring Freely—2.7 amperes at 6 volts.
Field Current—1.7 amperes at 6 volts.

RELAY

Closes—500-550 R.P.M. of armature, 7-9 M.P.H., 6.5 volts.
Opens—450-500 R.P.M. of armature, 5-7 M.P.H., 0-1 ampere discharge.
Contact Gap—.025-.035 inch.
Core Gap—.010-.015 inch, contacts closed.

LIGHTING

Switch—Connecticut, Type 187-3-Y.

Lamps—Head	6-8 volt,	21 cp.,	S.C.
Dim	6-8 volt,	4 cp.,	S.C.
Tail	6-8 volt,	2 cp.,	S.C.
Dash	6-8 volt,	4 cp.,	D.C.

Fuses—20 amperes.

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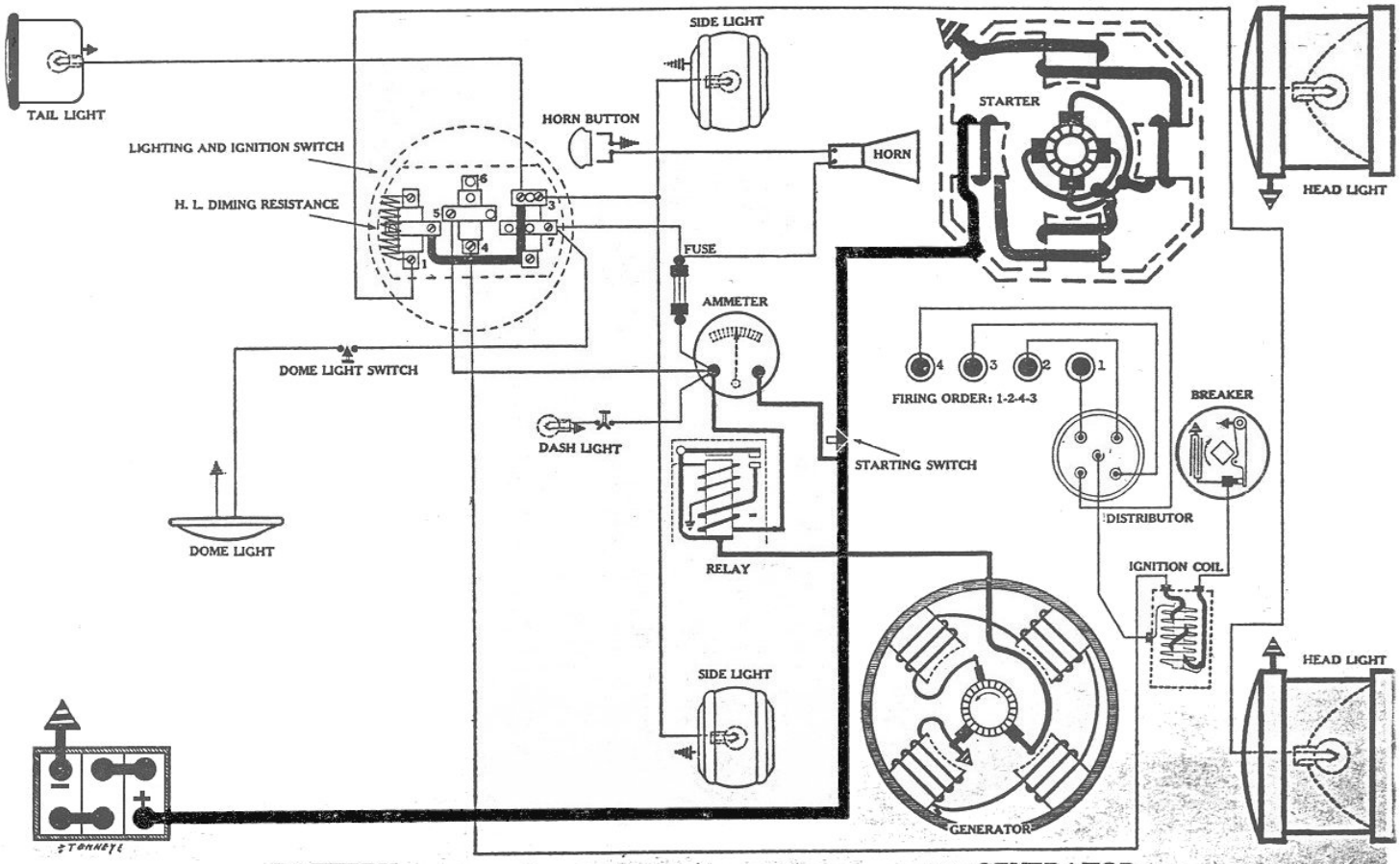
DURANT

Model A, 4-Cyl. (1925)



BATTERY

U. S. L., 3HVX-5X, 6 volts. Negative terminal grounded

Starting Capacity—105 amps. for 20 minutes.
Lighting Capacity—5 amps. for 18 hours.
Box—Length, 9⅛ inches. Width, 7 7/16 inches. Height, 9¾ inches.
Terminals—Taper posts.

STARTER

Rotation, L. H., Com. End
Auto Lite, MF-1096

Connection to Engine—Bendix drive.
Running Free—40 amps., 4000 R. P. M.
Cranking Engine—120-160 amps., 110 R. P. M., 5.5 volts at motor.
Lock Torque—10 pound-feet, 400-500 amps., 3.4 volts at motor.

IGNITION

Integral Generator
Rotation, R. H., Top View
Auto Lite, IG-4018 Igniter

Breaker—Contact separation, .015-.020 inch.
Timing—See detailed instructions p. 1, Sec. AA.
1—Locate T. D. C. 2—Locate rotor. 3—Set spark.
Firing Order—1-2-4-3.
Coil—Auto Lite.

GENERATOR

Rotation, L. H., Com. End
Auto Lite, CH-1036

Performance Data—

	Amps.	R. P. M.
	0	325
Max.	15	1100-1300
	10-11	2500-3000

Motoring Freely—4.5 amps., 6 volts.
Field Test—2.2 amps., 6 volts.
Coils Separately—8.8 amps., 6 volts.
Field Fuse—5 amps.
Third Brush Adjustment—LOOSEN COVER BAND. See Fig. 12, p. 7, Sec. AA.

RELAY

Closes—325-375 R. P. M. of Gen., 7-9 M. P. H., 7.75 volts.
Opens—250-300 R. P. M. of Gen., 5-6 M. P. H., 1-2 amps. discharge.
Contact Gap—.025-.035 inch. **Core Gap**—.010-.015 amps., contacts closed.

LIGHTING

Switch—Connecticut 193-1-Y.
Lamps—See p. 3, Sec. AA. HEAD—1129; SIDE, DOME—81; DASH, TAIL—63.
Fuse—20 amps.

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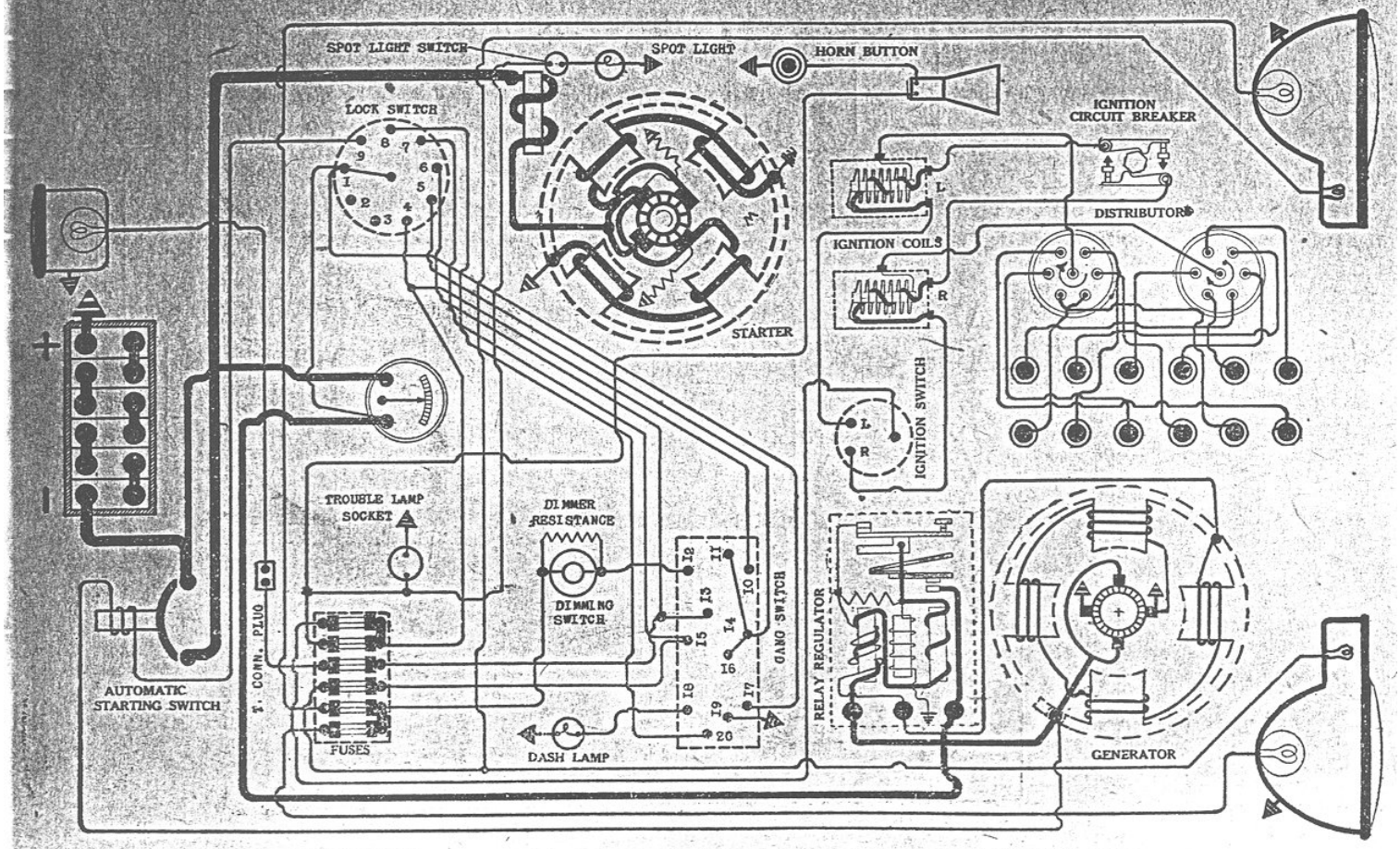
LOCOMOBILE

Series VIII (1923). Westinghouse System. Delco Ignition
Cars 18100 to 18210 (6 volts) same as Series VII Gen. 788 Cars 18211 and up (12 volts) as shown below



BATTERY

Westinghouse, Type 12-C-11. Positive terminal grounded

Lighting Capacity—5 amperes for 76 hours.

Box—Length, 15 1/16 inches. Height, 9 13/16 inches. Width, 7⅜ inches.

Terminals—Straight posts.

STARTER

Westinghouse, Frame No. 779

Running Free—70 amperes, 5000 R. P. M., 5-5.5 volts.

Cranking Engine—200-300 amperes, 125 R. P. M., 5 volts.

Lock Torque—27½ pound-feet, 750 amperes, 2.5 to 3.5 volts.

RELAY-REGULATOR

Closes—400-450 R. P. M., 12.4-13 volts.

Opens—350-400 R. P. M., 0-3 amperes discharge.

Relay Core Gap—.055-.060 inch. **Reg. Core Gap**—.045-.055. **Center Gap**—.015-.019 inch.

Relay Adjustment—Relay is adjusted by bending two brass prongs at end of relay arm, which determines core gap and spring tension.

Regulator Adjustment—Turn thumb screw at end of regulator arm. Turn in clockwise direction to increase voltage.

GENERATOR

Westinghouse, Frame No. 787R (12 volt-voltage reg. type)

Performance Data—

Amperes	R.P.M.	Volts
0	450	12.4
4	500	13
10	800	13
Max. 10	1250	13

Motoring Freely—5 amperes, (max.) 12 volts.

Field Test—1.5 amperes, (min.) 12 volts.

IGNITION

Delco Battery Ignition

Breaker—Adjust contact gap to .016-.020 inch, contacts fully separated.

Timing—Inlet breaker points should be just opening when center line on flywheel is 1½ inches past indicator, No. 1 piston on compression stroke, breaker assembly fully retarded.

Firing Order—1-5-3-6-2-4.

Spark Plugs—Diameter, ⅞ inch. Gap, .026-.030 inch.

LIGHTING

Lamps—Head	12-16 volt,	21 cp.,	S.C.
Signal	12-16 volt,	2 cp.,	S.C.
Tail	12-16 volt,	2 cp.,	S.C.
Cowl	12-16 volt,	2 cp.,	S.C.
Trouble	12-16 volt,	2 cp.,	S.C.
Tonneau	12-16 volt,	2 cp.,	S.C.
Step	12-16 volt,	2 cp.,	S.C.
Spot	12-16 volt,	21 cp.,	S.C.

Fuses—All 10 amps except horn, which is 20 amps.

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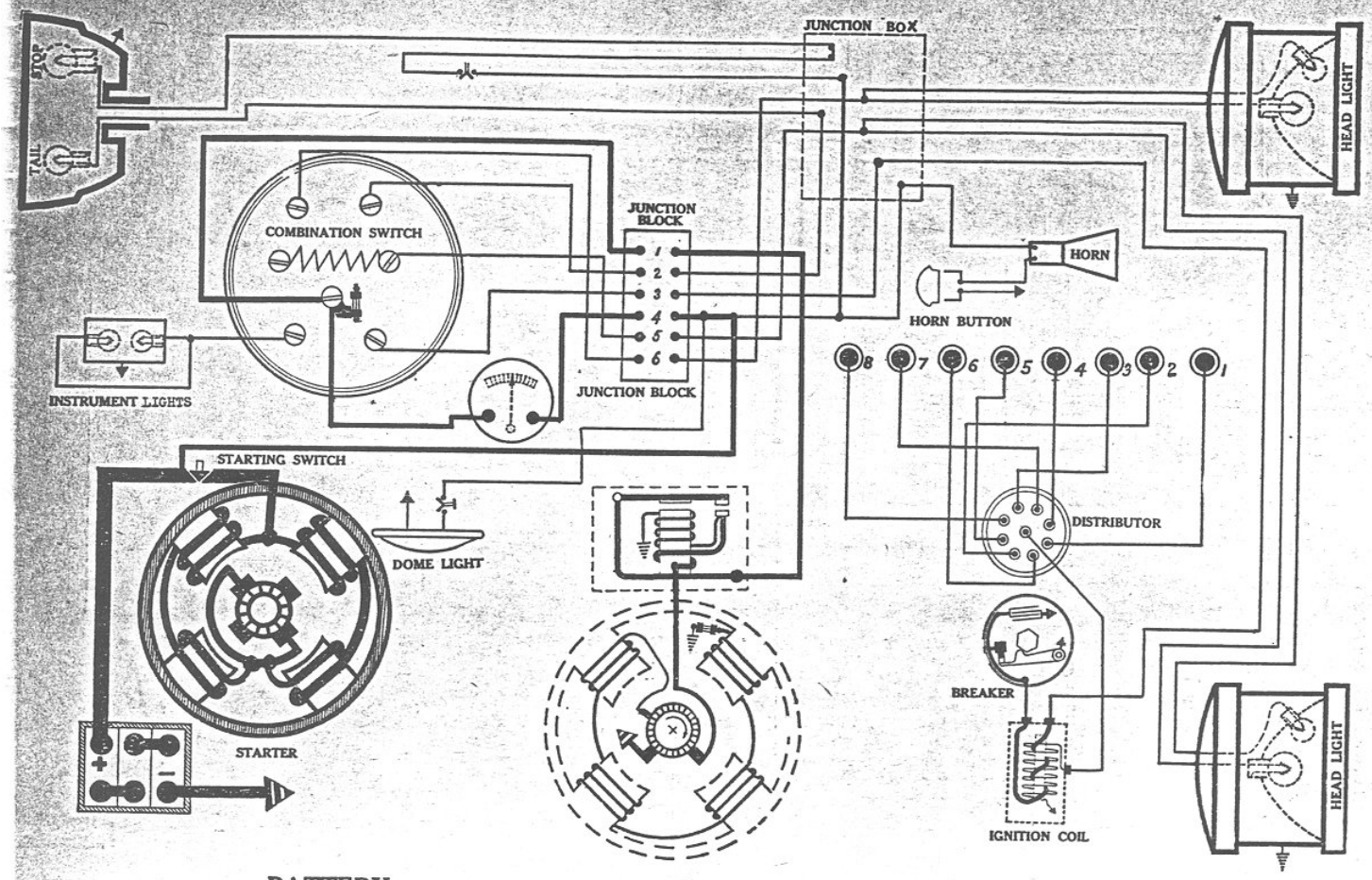
LOCOMOBILE

Model, Jr. 8 (1925)



BATTERY

USL, 3-HVF-6X, 6 Volts. Negative terminal grounded.

Starting Capacity—127 amps. for 20 minutes.
Lighting Capacity—5 amps. for 23 hours.
Box—Length, 10 7/16 inches. Height, 9¾ inches. Width, 7 7/16 inches.
Terminals—Taper posts.

STARTER

Rotation, L. H., Com. End
De' Jon, SA-4003

Connection to Engine—Bendix drive.
Running Free—40 amps., 5 volts at motor.
Lock Torque—20 pound-feet, 800 amps., 4 volts at motor.

GENERATOR

Rotation, R. H., Com. End
De' Jon, EA-4006

Performance Data—Gen. hot.

Amperes	R.P.M.
0	480
2	600
7	800
10	1000
11	1600
9	2400

Field Test—2.5 amps. at 6 volts. **Fuse**—5 amps.

IGNITION

Rotation, R. H., Top View
De' Jon, IA-4008

Breaker—Contact separation, .018-.020 inch.
Timing—See detailed instructions p. 1, Sec. AA.
1—Locate T. D. C. 2—Locate rotor. 3—Set spark.
Firing Order—1-6-2-5-8-3-7-4.
Coil—De' Jon CA-4008. Test Data as follows:
Resis. cold: 6.5-6.75 amps. thru primary on 6 volts.
Resis. hot: 4.0-4.25 amps. thru primary on 6 volts.

Distributor R.P.M.	Spark Jump Atmos. Pressure
200	.360 in.
600	.400 in.
1000	.400 in.
1600	.400 in.
2000	.375 in.
2500	.350 in.
3000	.300 in.

RELAY

De' Jon, RA-4001-A

Closes—7-7.5 volts.
Opens—0-2.5 amps. discharge.
Contact Gap—.025-.035 inch. **Core Gap**—.010-.015 inch, contacts closed.

LIGHTING

Lamps—See p. 3, Sec. AA. HEAD, STOP—1129; Aux.-HEAD—81; TAIL, DOME, INSTRUMENT—63.

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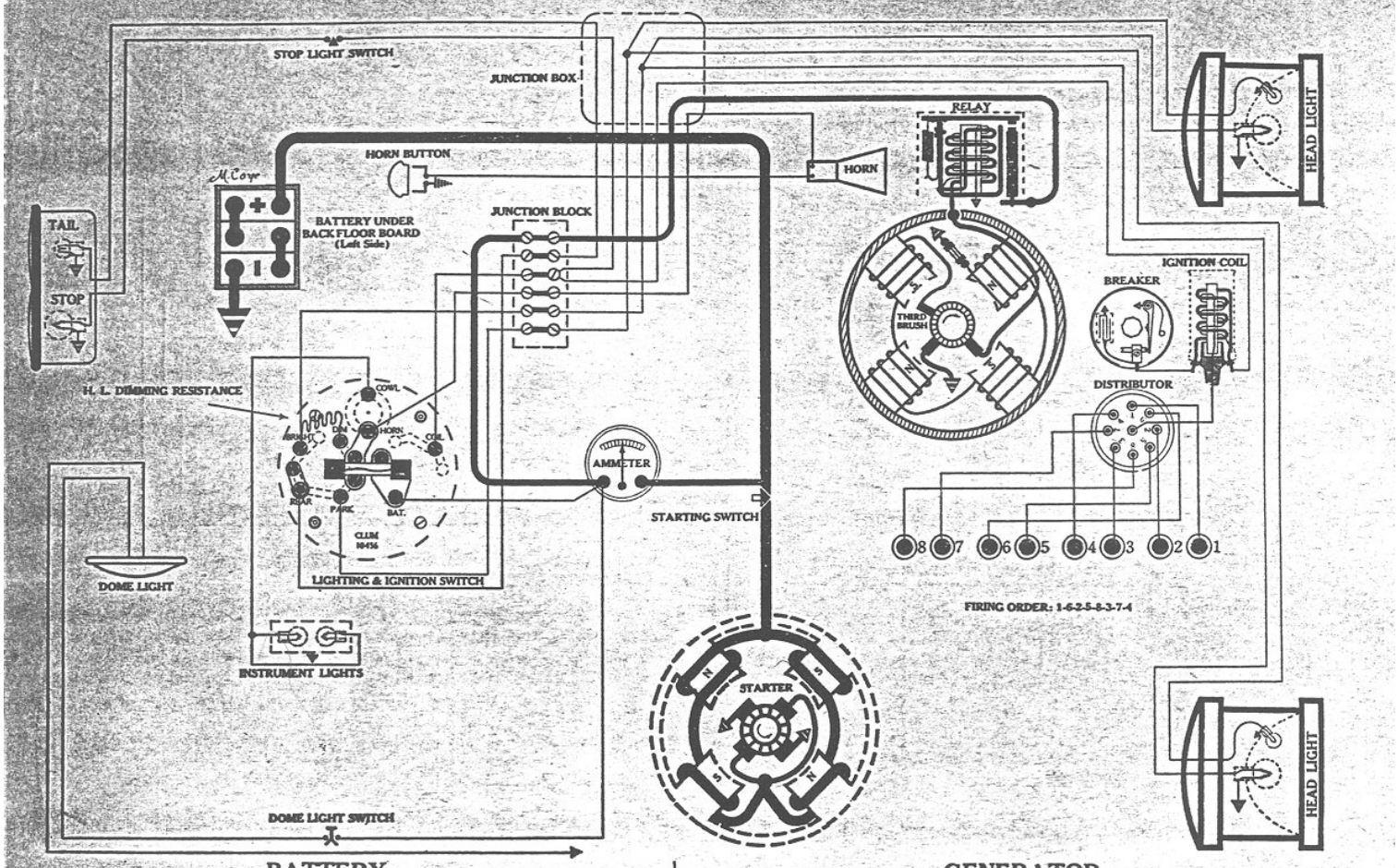
LOCOMOBILE

Model 8-66, (1927)



BATTERY

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

Starting Capacity—148 amps. for 20 minutes.
Lighting Capacity—5 amps. for 28 hours.
Box—Length, 11¾ inches. Width, 7 7/16 inches. Height, 9¾ inches.

STARTER

Rotation, L. H., Com. End
De'Jon, SA-4003

Connection to Engine—Bendix drive, Type L-11-X.
Running Free—40 amps. at 5 volts.
Cranking Engine—160-180 amps. at 4.5 volts.
Lock Torque—13 pound-feet, 600 amps. at 3 volts.
Brush Spring Tension—24-28 oz. on each.

IGNITION

Rotation, R. H., Top View
De'Jon, IA-4008

Breaker—Contact separation .018 to .020 inch.
Contact Spring Tension—16-18 oz.
Timing—See detailed instructions P. 1, Sec. AA.
1—Locate T. D. C. 2—Locate rotor. 3—Set spark.
Firing Order—1-6-2-5-8-3-7-4.
Manual Advance—20 degrees (on Flywheel).
Automatic Advance—30 degrees (on Flywheel).

Eng. R.P.M.	Degrees Advance (on flywheel)	Dist. Shaft R.P.M.	Degrees Advance (on cam)
400	0	200	0
800	5	400	2.5
1200	10	600	5
1600	15	800	7.5
2000	20	1000	10
2400	25	1200	12.5
2800	30	1400	15

Coil—De' Jon, CA-4008.

GENERATOR

Rotation, R. H., Com. End
De' Jon, DA-4006

Performance Data—Gen. cold.

Amps.	R.P.M.	Volts	Amps.	R.P.M.	Volts
0	500	6.5	10	1000	7.8
2	600	6.9	11	1200 (Max.)	7.9
7	800	7.2	10	2000	7.9

Motoring Freely—4½-5 amps. at 6 volts.
Max. Stall Current—16-18 amps. at 6 volts.
Field Test—2½ amps. at 6 volts across field coils in series.
Field Fuse—5 amps.
Brush Spring Tension—14-18 oz. on each.
Third Brush Adjustment—Not necessary to loosen cover band. See Fig. 18, P. 7, Sec. AA.

RELAY

De' Jon, RA-4001-A

Closes—7-7.5 volts.
Opens—0-2.5 amps. discharge.
Contact Gap—.025-.035 inch. **Core Gap**—.010-.015 inch, contacts closed.

LIGHTING

Switch—Clum No. 10456.
Fuses—Single 20 amp. fuse mounted on switch back.
Lamps—See P. 3, Sec. AA. HEAD—1129; AUX.—63; INSTRUMENT—63; STOP—87; DOME—63; TAIL—63.

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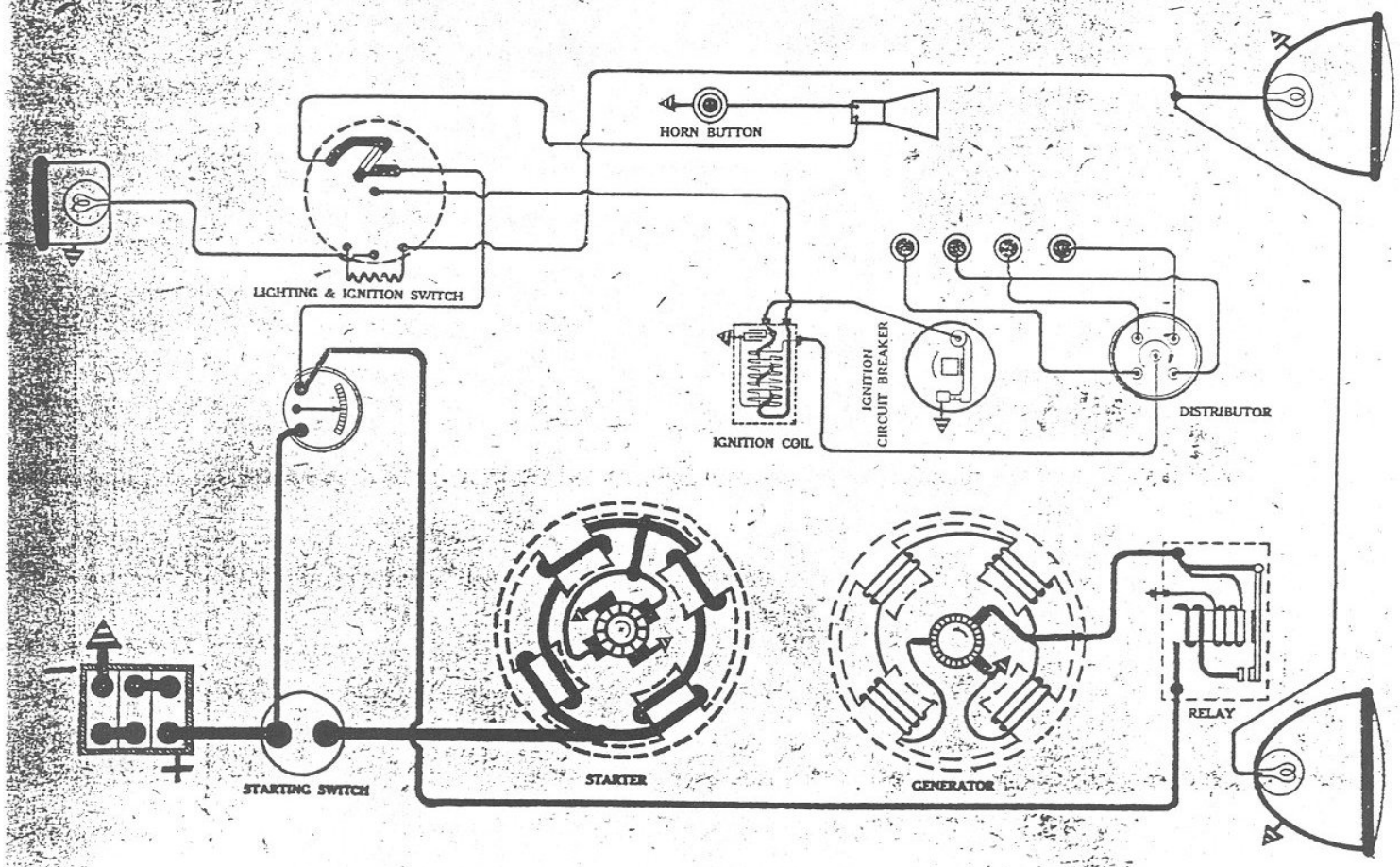
STAR

(1922-23) Auto-Lite System. Auto-Lite Ignition



BATTERY

U. S. L., Type CDN-311-X, 6 volts. Negative terminal grounded

Starting Capacity—96 amperes for 20 minutes.
Lighting Capacity—5 amperes for 17 hours.
Box—Length, 9⅛ inches. Width, 7 7/16 inches. Height, 9¼ inches.
Terminals—Thimble type.

STARTER

Auto-Lite, Model MG

Connection to Engine—Bendix drive.
Running Free—40-60 amperes, 4000 R. P. M., 6 volts.
Cranking Engine—150 amperes, 125 R. P. M., 5 volts.
Lock Torque—450 amperes, 12 pound-feet, 3-4 volts.

IGNITION

Auto-Lite Battery Ignition

Breaker—Adjust contact gap to .023 inch, contacts fully separated.
Timing—Breaker contacts just open when No. 1 piston is on top dead center, compression stroke, spark control and breaker assembly fully retarded.
Firing Order—
Spark Plugs—Diameter, ⅞ inch. Gap, .030 inch.

GENERATOR

Auto-Lite, Model GJ

Performance Data—

	Amperes	R.P.M.	M.P.H.
	0	500	
Max.	16	1750-2000	20-25
	10-11	3000-3500	

Motoring Freely—4 to 5 amperes, 6 volts.
Field Test—2.2 amperes, 6 volts. Each coil separately, 8.8 amperes, 6 volts.
Regulation—Third brush, current regulation. Move third brush in the direction of armature rotation to increase the output. First loosen nut inside generator on third brush holder.

RELAY

Closes—500-550 R. P. M. of armature, 7-9 M. P. H., 6.5 volts.
Opens—450-500 R. P. M. of armature, 5-7 M. P. H., 0-1 ampere discharge.
Contact Gap—.025-.035 inch.
Core Gap—.010-.015 inch, contacts closed.

LIGHTING

Switch—Combination lighting and ignition switch.
Lamps—Head ....6-8 volt, 21 cp., S.C.
Dim .....6-8 volt, 4 cp., S.C.
Tail .....6-8 volt, 4 cp., S.C.
Dash .....6-8 volt, 2 cp., D.C.
Fuses—20 amperes.

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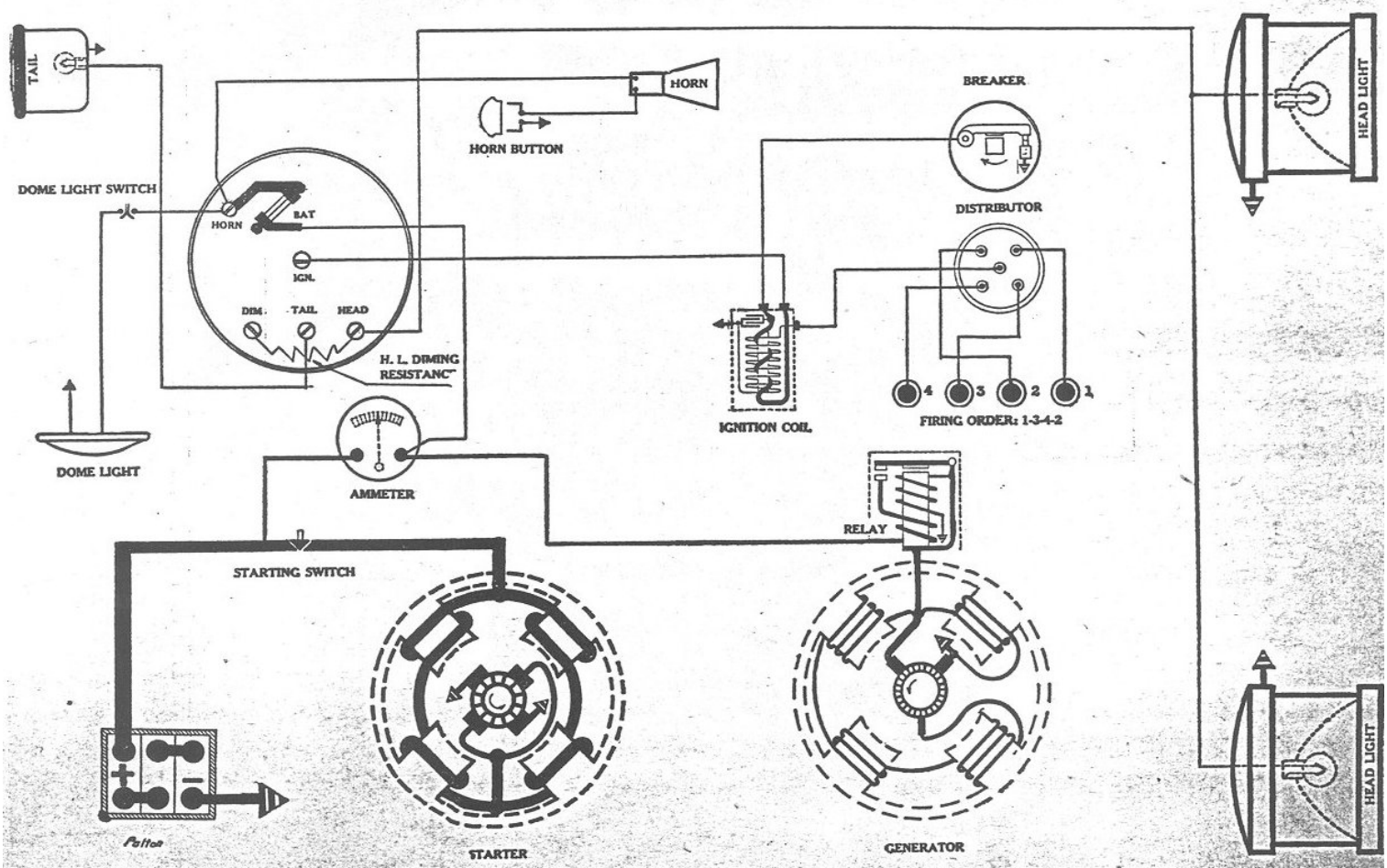
STAR

Model F-25 (1925)



BATTERY

U. S. L., 3 CVF-5X, 6 volts. Negative terminal grounded

Starting Capacity—96 amps. for 20 minutes.
Lighting Capacity—5 amps. for 17 hours.
Box—Length, 9⅛ inches. Width, 7¼ inches. Height, 9¼ inches.
Terminals—Taper posts.

STARTER

Rotation, L. H., Com. End
Auto Lite, MO-4120

Connection to Engine—Bendix drive.
Running Free—40-60 amps., 4000 R. P. M., at 6 volts.
Cranking Engine—150 amps., 5 volts at motor.
Brush Spring Tension—2-2½ lbs. on each.

IGNITION

Rotation, R. H., Top View
Auto Lite, IG-4047

Breaker—Contact separation, .018-.022 inch.
Timing—For detailed instructions see p. 1, Sec. AA.
1—Locate T. D. C. 2—Locate rotor. 3—Set spark.
Firing Order—1-3-4-2.
Coil—Auto Lite, IG-4031.

GENERATOR

Rotation, L. H., Com. End
Auto Lite, GT-4001

Performance Data—Gen. hot.

	Amps.	R. P. M.
	0	400
	3	600
	10	1200
Max.	11	1600

Motoring Freely—4-5 amps. at 6 volts.
Field Test—2.2 amps. at 6 volts. Coils tested separately 8.8 each at 6 volts.
Third Brush Adjustment—LOOSEN COVER BAND. See Fig. 14, p. 7, Sec. AA.

RELAY

Auto Lite, CB-1078

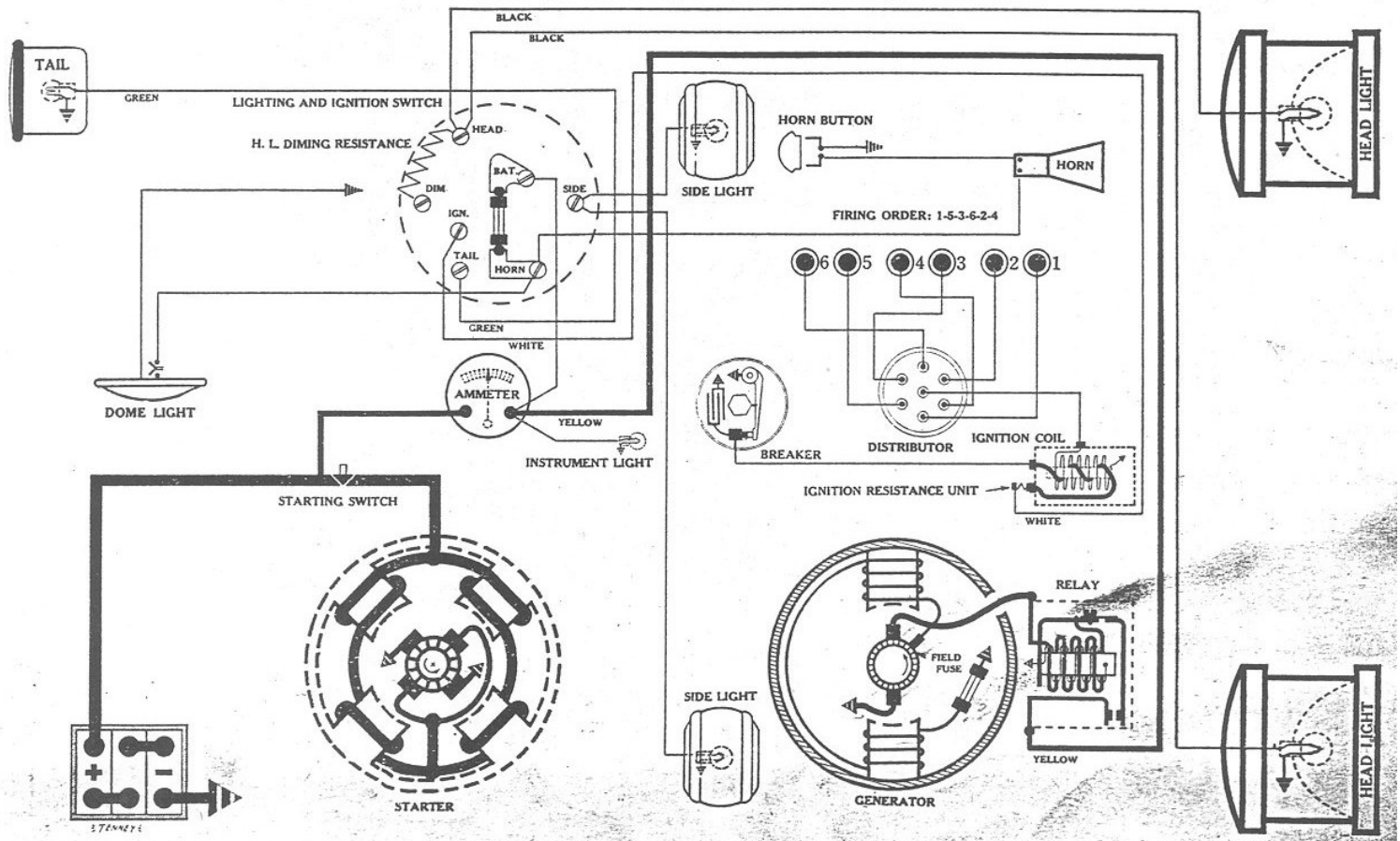
Closes—7.0-7.5 volts.
Opens—0-2 amps. discharge.
Contact Gap—.025-.035 inch. **Core Gap**—.010-.015 inch, contacts closed.

LIGHTING

Switch—Briggs & Stratton No. 17040.
Fuse—5 amps. mounted on switch back.
Lamps—See p. 3, Sec. AA. HEAD—1129; TAIL, DOME—63.

STAR

Model R, 6 Cylinder, Standard. (1926).



BATTERY

U. S. L., Type 3-CVF-5X, 6 volts
Negative Terminal Grounded

For battery sizes and data see Page 12, Sec. AA.

STARTER

Rotation, L. H., Com. End
Auto-Lite, MO-4102

Connection to Engine—Bendix drive.
Running Free—50 amps. at 5.5 volts.
Cranking Engine—180 amps. at 5.1 volts, 200 R. P. M.
Lock Torque—10 pound-feet, 490 amps., 3.6 volts.
Brush Spring Tension—1¼-1½ lbs. on each.

IGNITION

Rotation, R. H., Top View
Auto-Lite, Dist. No. IG-4067A

Breaker—Contact Separation .020 to .024 inch.
Timing—See detailed instructions P. 1, Sec. AA.
1. Locate T. D. C. 2. Locate Rotor. 3. Set Spark.
Firing Order—1-5-3-6-2-4.
Manual Advance—50 degrees measured on fly wheel.
Coil—IG-4066.
NOTE: Coil draws 5 to 3.4 amps. engine stopped. 3 to 1 amp. engine running, depending on speed and temperature.

GENERATOR

Rotation, L. H., Com. End
Auto-Lite, GT-4001A

Performance Data—Cold Test.

Amps.	R.P.M.	Volts
0	510	6.5
4	680	6.9
10	960	7.5
14	1450	8.2

Maximum Charging Rate—14 amps. at 8 volts, or 13.5 amps. at 7.5 volts.
Motoring Freely—4.5 amps. at 6 volts.
Max. Stall Current—18 amps. at 6 volts.
Field Test—3.6 amps. at 6.2 volts directly across field coils in series.
Field Fuse—5 amps.
Brush Spring Tension—1¼-1½ lbs. on each.
Third Brush Adjustment—Loosen Cover Band. See Fig. 13, P. 7, Sec. AA.

RELAY

Auto-Lite, CB-4007

Closes—7-7.5 volts.
Opens—½-2½ amps. discharge.
Contact Gap—.025-.035 inch.
Core Gap—.010-.030 inch, contacts closed.

LIGHTING

Switch—Clum Combination Switch No. 10555.
Fuses—Horn and Dome Light Fused only—Fuse back of Switch.
Lamps—See P. 3, Sec. AA. HEAD—1129; SIDE—81; INSTRUMENT—63; TAIL—63; DOME—81.

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