

CHRYSLER

MODEL 50 (1927) SERIAL NOS. FWOOH UP

DELCO-REMY GENERATING, STARTING AND LIGHTING SYSTEM DELCO-REMY IGNITION

BATTERY:—Willard, Type WR-13. 6 volt, 84 ampere hour. Starting capacity is 98 amperes for 20 minutes. Lighting capacity is 5 amperes for 16.6 hours. The positive (+) terminal is grounded. Battery is mounted at left of frame under the front floor board.

IGNITION:—Coil Model 525-E. Distributor Model 638-B. Breaker contacts separate .018-.023 inch. Resurface contacts on a medium hard oilstone or with a fine flat contact file. To adjust contact opening, loosen lock screw located behind stationary contact and turn eccentric adjusting screw on crescent shaped contact mounting arm until desired breaker gap is obtained. Then tighten lock screw to hold adjustment. Distributor is of the semi-automatic type. Manual advance is 22°. Automatic advance begins at 400 R.P.M. and reaches a maximum of 18° at 1800 R.P.M. The breaker arm spring tension should be 15-20 ounces. Ignition current is 2 amperes at 6 volts with engine running, and 5 amperes at 6 volts with engine stopped.

Mounting:—Distributor is mounted at front of engine and is accessible from the right side. Drive is by slotted tongue from the forward end of the cam shaft. To remove distributor, disconnect breaker lead and high tension cables or remove distributor head. Then remove two mounting bolts holding distributor bracket and gear case to forward end of engine gear case. Distributor can then be lifted from place.

Oiling:—Fill the grease cup on the side of the distributor shaft with medium cup grease and turn down two turns every month or each 1000 miles. Keep the oiler on the distributor gear compartment filled with light engine oil.

Timing:—Breaker contacts begin to separate when piston entering power stroke reaches a position .063 inches before top dead center with the manual spark control lever in the fully advanced position. To set timing, crank engine until piston No. 1 enters compression stroke (the up-stroke with both valves closed). Then continue to crank engine until piston No. 1 and No. 4 reach a position .063 inch before top dead center. Make certain that the spark control lever is in the fully advanced position. Loosen the clamp screw holding distributor in position on spark control lever and rotate distributor until contacts begin to separate. Tighten the clamp screw and replace the rotor and distributor head. Make certain that the rotor is opposite the segment connected to the spark plug in cylinder No. 1.

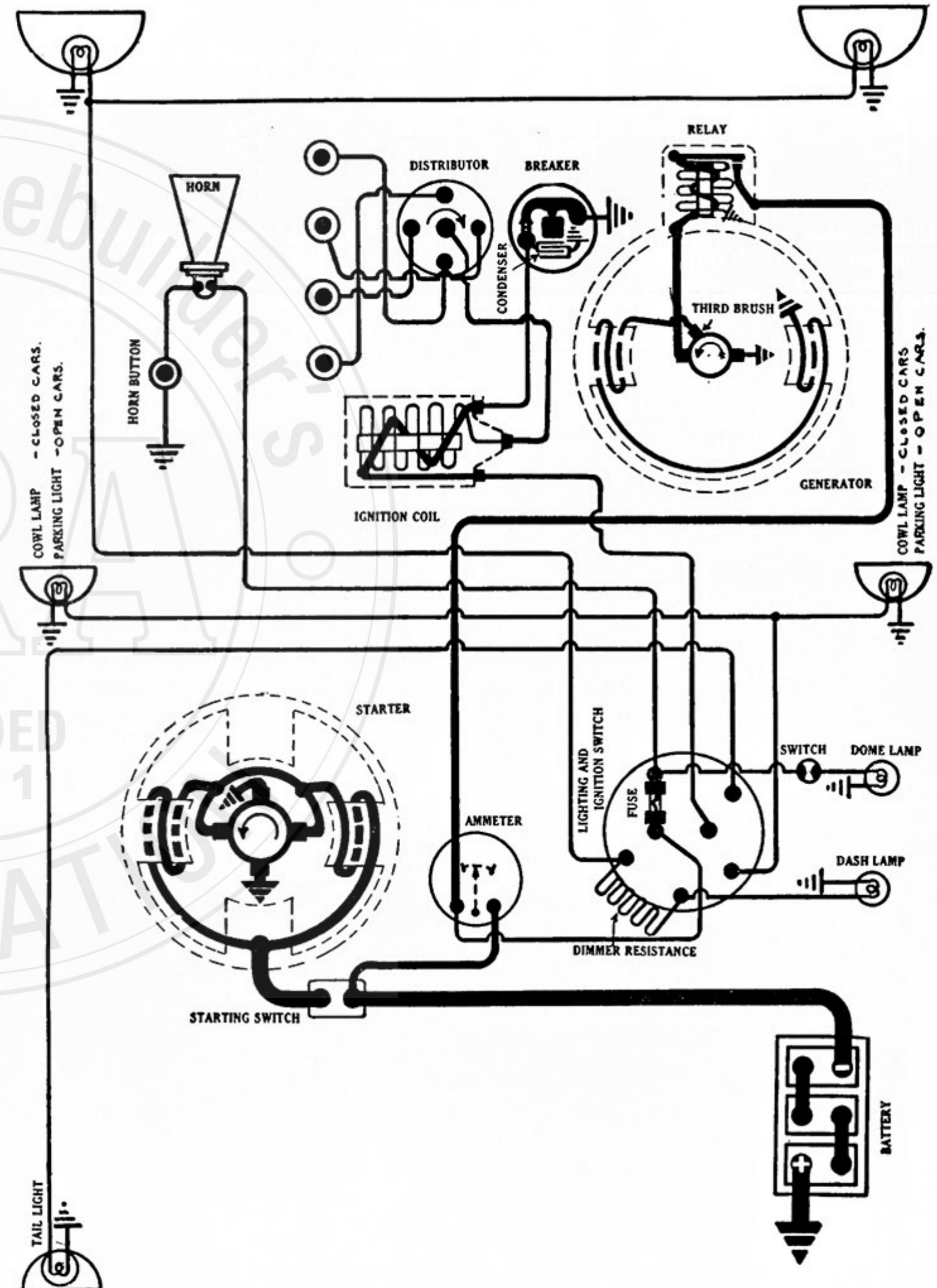
"Red Head" Engines. On cars with high compression 'Red Head' engines breaker contacts begin to separate with the piston .004 inch before top dead center with full advance. Allowable variation is .002 inch with piston limits .002 or .006 inch before top dead center. Special spark plugs and special material valves are used in "Red Head" engines.

Valve Timing:—**INLET VALVES:**—Head diameter, 1 7/16 inches; stem diameter, 3/8 inch; stem length, 5 1/16 inches; tappet clearance, .004 inch (hot); spring pressure, 35-42 pounds; valve lift, 9/32 inch; intake opens at top dead center and closes at 40° past lower dead center.

EXHAUST VALVES:—Head diameter, 1 7/16 inches; stem diameter, 3/8 inch; stem length, 5 1/16 inches; tappet clearance, .006 inch (hot); spring pressure, 35-42 pounds; valve lift, 9/32 inch; exhaust opens at 48° before lower dead center and closes 2° past top dead center. Stem guides are removable. No oversize valve stems are made.

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

Spark Plugs:—Spark plugs are 7/8-18 S.A.E. Gaps are .030 inch.



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STARTER:—Model 712-F. Starter is connected to the engine through an outboard Bendix drive Type R-11-X. The direction of rotation is counter-clockwise looking at the commutator end. Starter cranks the engine at 150 R.P.M. taking 150 amperes at 5 volts. Starter switch is Model 404-V. Starter brush tension is 24-28 ounces.

Starter Data			
Torque	R.P.M.	Volts	Amperes
0 lb. ft.	5000	5.6	70
1.6 "	1560	5.2	150
3.0 "	1250	5.0	200
4.2 "	800	4.7	250
6.0 "	550	4.4	300
9.4 "	150	4.0	400
11.0 "	Lock	3.7	450

Mounting:—Starter is flange mounted at left of engine on forward side of bell housing. To remove starter, disconnect starter cable and remove two flange mounting screws. Then slide starter from place.

Oiling:—Put 4 or 5 drops of light engine oil in the oiler on the commutator end of the starter every month or each 1000 miles. The bearing on the drive end is oilless.

GENERATOR:—Model 947-A. The direction of rotation is counter-clockwise, looking at the commutator end. Generator current regulation is by the third brush system. To adjust charging rate, remove the commutator cover band and loosen the small round headed screw on the commutator end plate of the generator. Then shift the third brush in a counter-clockwise direction to increase the charging rate and in the opposite direction to decrease the charging rate. Tighten the screw after making the adjustment. Maximum output is 17 amperes (cold) reached at 1800 R.P.M. or 20-22 M.P.H.

Cold Test			Hot Test		
Amperes	Volts	R.P.M.	Amperes	Volts	R.P.M.
2	6.6	570	5	6.9	1175
4	6.8	850	9	7.4	1550
7	7.1	1050	11-13	7.6	2125
10	7.5	1225	9	7.4	3000
15-17	8.0	1800	8	7.2	3500
11	7.6	3000			
9.4	7.4	3500			

Field current is 4.5 amperes at 6 volts. The generator brush tension should be 24-28 ounce.

Mounting:—Generator is cradle mounted at front end of the engine and is belt driven. The fan is mounted on the forward side of the generator drive belt. To remove generator, disconnect generator lead and loosen the generator cradle stud nut which is the large nut directly under the generator holding the generator cradle bracket in position. Then lower generator and cradle and slip off drive belt. Loosen nut on generator mounting strap and slide generator from place.

Oiling:—Put 4 or 5 drops of light engine oil in the oiler on each end of the generator every month or each 1000 miles.

RELAY:—Model 265-B. Relay is mounted on top of the generator. Relay closes when the voltage of the generator reaches 7.25 volts and opens with a discharge current of 0-2.5 amperes. Relay contacts separate .020 inch. Air gap between relay armature and coil core is .016 inch, contacts closed.

LIGHTING:—Clum Switch Model 10607. Head and stop lamps are each 6-8 volt, 21 cp. Dimming is by resistance on the switch. Dash, side and tail lamps are each 6-8 volt, 3 cp. Dome lamp is 6-8 volt, 15 cp. Stop lamp connected to fuse terminal on switch is 6-8 volt, 15 cp.

FUSES:—Lighting fuse on back of switch is 30 amperes.