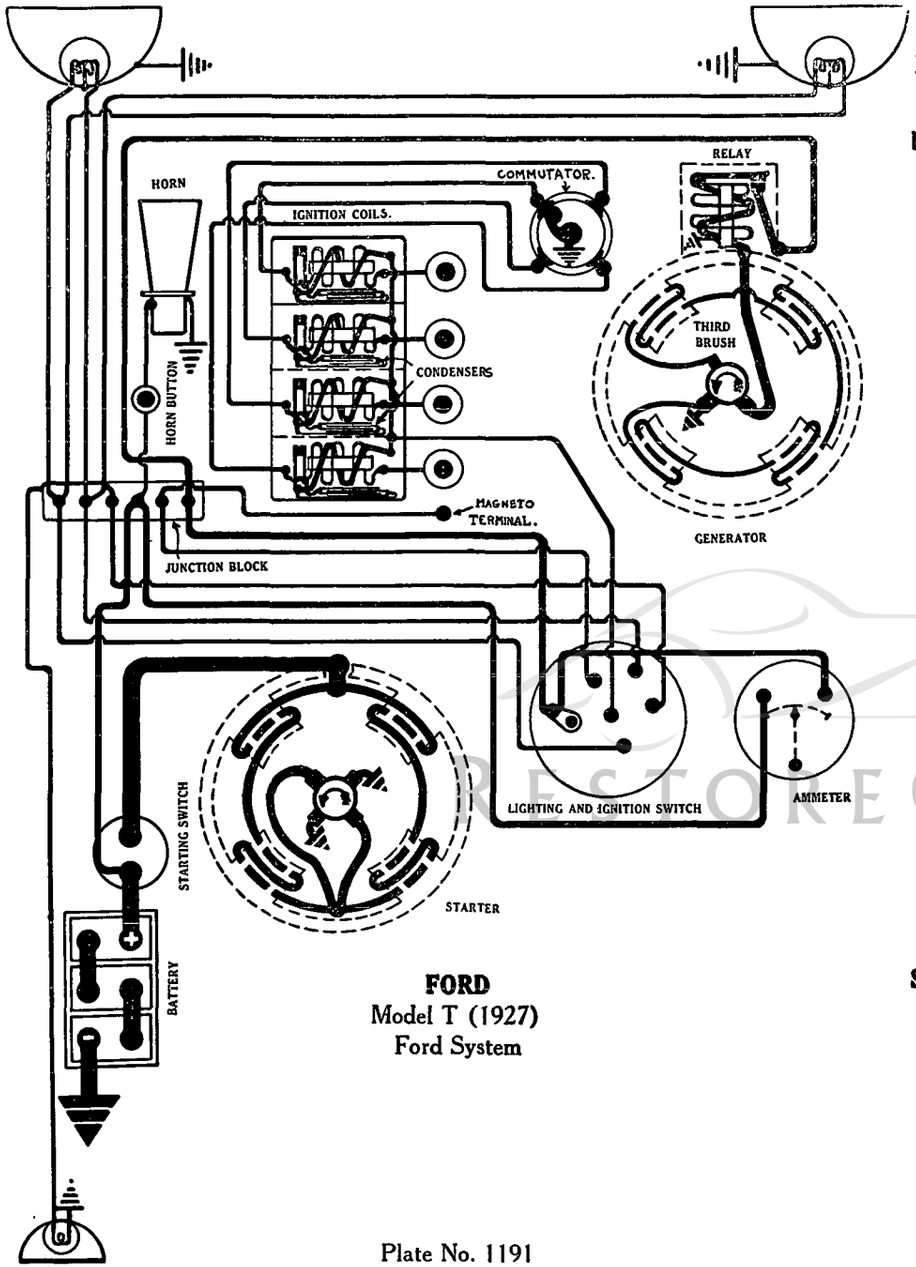

FORD
Model T (1927)
Ford System

Plate No. 1191

FORD

MODEL "T" (1927)

FORD GENERATING, STARTING AND LIGHTING SYTSEM

FORD IGNITION

BATTERY:—Ford. 6 volt. Starting capacity is 98 amperes for 20 minutes. Lighting capacity is 5 amperes for 17 hours. The negative (—) terminal is grounded. Battery is mounted on the left frame member under the floor boards.

IGNITION.—The magneto is carried in the flywheel housing. There should be a clearance of .031 inch, between the coil cores and the magnet pole pieces. The magneto delivers alternating current to four vibrator ignition coils, one connected to each spark plug, as the timer closes the circuit in the proper sequence. When the vibrator arm is held down, the contacts should separate .030 inch. If the contacts are badly burned or pitted, resurface with a fine, flat jeweler's file or on a medium hard oilstone. Coils should be adjusted to draw 1.3 amperes at 6 volts.

Mounting:—Timer or commutator is mounted at front of engine on the forward end of the cam shaft. It is held in place by the commutator spring, a flat piece of metal bolted to the oil filler.

Oiling.—Put several drops of light engine oil in the spring oiler of the timer every two weeks. In cold weather a mixture of 1/4 kerosene and 3/4 light engine oil should be used.

Timing.—Timer roller should just make connection with segment connected to Number 1 coil when the piston in Number 1 cylinder is on top dead center of the power stroke, spark control lever and timer assembly in the fully retarded position. Number 1 coil is nearest the front of the engine and number 1 segment is the upper left hand terminal viewing timer from the front. Intake closes when piston is 3 1/8 inches below face of cylinder block on compression stroke. Exhaust opens when piston is 3 3/8 inches below face of cylinder block on power stroke.

Valve Timing:—INLET VALVES:—Head diameter, 1 15/32 inches; stem diameter, .3105 to .312 inch; stem length, 4.974 inches; tappet clearance, 1/32 to 1/64 inch; spring pressure, 30 to 34 pounds (open); valve lift, .225 inch; intake opens at 1/16 inch after top dead center and closes 9/16 inch past lower dead center.
EXHAUST VALVES:—Head diameter, 1 15/32 inches; stem diameter, .3105 to .312 inch; stem length, 4.974 inches; tappet clearance, 1/32 inch to 1/64 inch; spring pressure, 30 to 34 pounds (open); valve lift, .225 inch; exhaust opens 5/16 inch before lower dead center and closes at top dead center. The guide stems are not removable. Oversize valve stems are made. A variance of .312 inch is allowed in stem diameter.

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

Spark Plug Gaps.—The spark plug gaps are .030 to .032 inch.

STARTER.—Type F.A. Starter is connected to the engine through a Bendix drive. The direction of rotation is counter-clockwise, looking at the commutator end. Starter cranks the engine at 500 R.P.M., taking 200 amperes at 3.4 volts. Starter brush tension is 1 1/4-1 3/4 pounds for 50° to 70° deflection.

Starter Data.—F.A.

Torque	R.P.M.	Volts	Amperes
1 lb. ft.	2500	5.5	125
5 lb. ft.	1050	4.4	330
9 lb. ft.	425	3.6	465
13 lb. ft.	Lock	3.0	580

Mounting:—Starter is mounted at left of engine on forward side of transmission case. To remove starter, remove four small screws holding Bendix drive cover at rear of transmission case. Remove cover and withdraw Bendix drive assembly after backing out set screw in end of starter shaft. Then remove four flange mounting screws holding starter on forward side of transmission case and slide starter forward. Starter can then be lifted from place.

Oiling.—Starter requires no oiling.

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