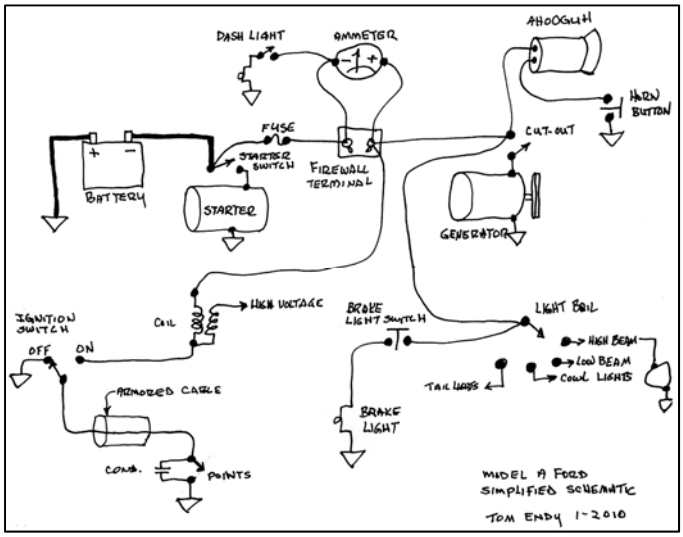
Ignition Electrical

by Tom Endy

The best tool to have along in your Model A tool bag is a trouble light. They can be purchased at any auto parts store and they work on both 6 and 12 volts. When encountering an ignition fault whip out your trouble light before someone in the crowd cries out "change the condenser", and run a check of the ignition system.



Looking at the diagram above, start at the starter switch where the battery cable attaches. Next check both sides of the fuse. Move to both sides of the terminal box on the firewall. All of these points should light the trouble light. Next check both sides of the primary of the coil. With the ignition key off both sides should light the trouble light. Put a business card between the points and turn the key on. Put the trouble light probe on the arm of the points, the light should light.

If the trouble light does not light at all of these points, that is where you are losing voltage to the points. Quite often the loss will be found between one side of the coil and the arm of the points. The fault possibilities are then numerous and something you don't want to mess around with on the road.

This is where a spare distributor that has been road tested on your car with the timing and point gap set. You also need a bypass cable. Many of the suppliers sell them. Replace the distributor with your spare and attach the bypass cable to the replacement distributor and clip it to the primary side of the coil where the wire going to the key is attached. Remove this wire from the coil first.

This will bypass the ignition key, the pop-out cable and any fault inside the distributor.

Note on the diagram that when the ignition key is switched to off the pointer goes to ground. This puts a ground on the ignition points and prevents hot wiring. Part of Henry's anit-theft thinking.

As a suggestion, make a copy of this diagram and put a red dot at each voltage point and carry it with the trouble light. The diagram can also be used to check out the rest of the electrical circuit using the trouble light.

Another suggestion is to remove the wire at the brake light switch going to the light bale. Fold it back and wrap it with electrical tape to insulate it. Run a new wire from the switch direct to the fuse. In the event of a short circuit in the rat's nest of wires in the light bale, disconnect the wire going to the light bale from the cut-out. Now you can drive the car during daylight hours and still have brake lights.

The diagram below was posted on Fordbarn by Tom Wessenberg and should be helpful to those who do not understand electrical schematics as it shows the actual components. This diagram can also be copied and carried with the trouble light. Put a red dot at each of the voltage points.