The Preventative Maintenance Series

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Common electrical problems: The following can either be "preventative maintenance" or a cure for a current problem. Keep in mind that bizarre electrical occurrences are usually from lack of a good ground.

Late model rear tail light sockets and early model front turn signal/parking light sockets share a common problem. They fall apart when removed repeatedly or they rust around the hole and lose their ground. Replace them with Echlin LS 6469 or O'Reilly 08542 (Calterm). This socket does not have the plastic outer portion that comes apart on the original style. It has six metal tabs to ground instead of the original two. It does take extra effort to get it in place but once installed will not loosen up. You can also get the same all metal socket with a separate ground in case you have an especially bad early model trunk area.

Early model rear sockets can produce strange lighting effects due to bad grounds. The entire socket assembly must have a good ground to the body where it clamps from the back. The inner socket can lose its ground where it is crimped to the outer housing. The best approach is to replace the entire assembly when they begin to rot out. The reproductions should be weatherproofed from the back side after installation. Be sure they have a good ground to the body and that a good gasket is installed under the lens to keep water out of the inner socket. Poor lens gaskets rot out the inner socket on all the original taillight sockets also. If you're still nursing an original socket and the bulb seems loose, try extending the two contacts on the end of the bulb with a small drop of solder. This compensates for shrunken connectors underneath the dirt and undercoat. With the car lights on, use a test light to test the separate parts of the socket for good grounds. If you install an 1156 bulb in an 1157 socket or cross the wiring, you activate the taillight circuit when you put on the brakes or activate the brake light circuit when you turn on the lights. Fun to track down!

A fuel gauge that reads over full is caused by an open in that circuit. The ground wire from the sending unit to the body at the tank is a likely cause. The other common problem is an open or dirt insulated area in the sending unit windings. Also a faulty dash ground on late models can cause an over full reading. If you have a float full of gas, the gauge will stay empty or close to empty. Before attempting repairs, use an ohm meter or a known good sending unit to test the system.

The next time our forecast is for -20 degrees, remember this: A battery at zero degrees has only 30% of its capacity. Take your battery indoors overnight or leave a droplight hooked up next to it and notice the wonderful difference. A lot of people think the engine turns over slow because it is cold - not so (unless you have dirty oil!!). Remove and clean battery cable connections twice a year; the inner surface of the clamps can lose contact due to corrosion and not show up during inspection.

Next month: some emergency procedures, including how to steal a Corvair in 30 seconds or how to prevent yours from being stolen.