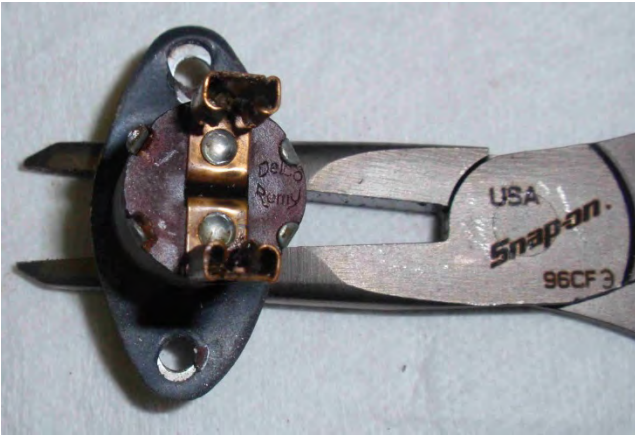


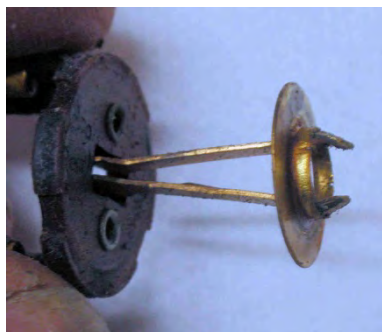
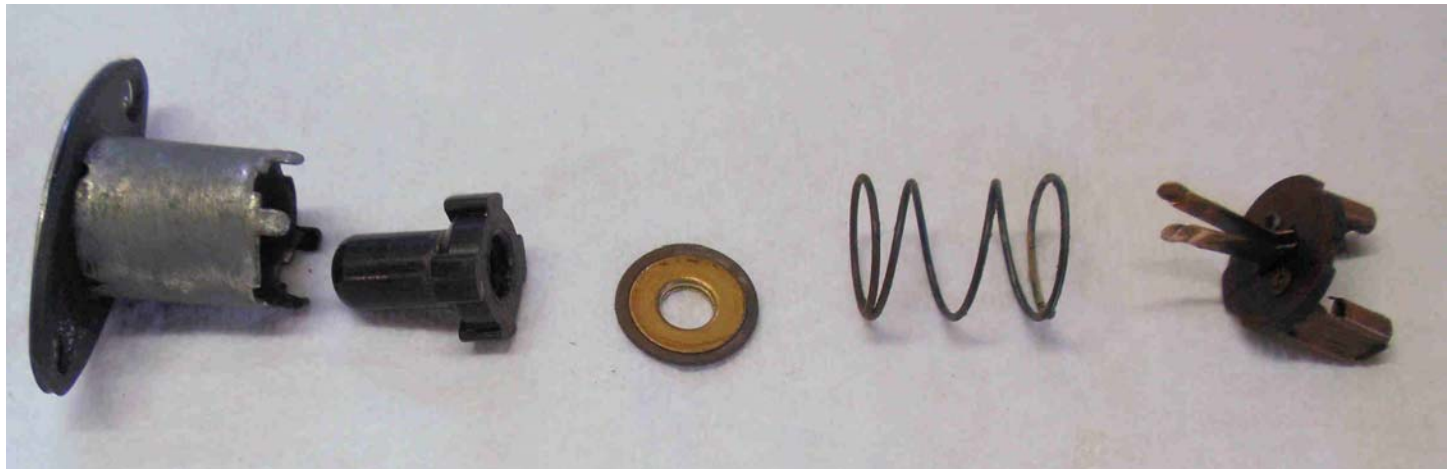
C1 Door Switch Rebuild

By: Tom Hoyer

Before installing the door switches back into the 58 I'm working on, I decided to check their function. Connecting a DVM set to measure ohms, I was not surprised to see that they were not providing very good switch action. With the plunger fully extended, you should read a direct short across the terminals. Pressing the plunger in should show an open circuit. Both of my door switches exhibited high resistance (over 60k ohms) with the plunger extended indicating that they needed some attention.



The switch is fairly easy to open, being held together by four small tabs on the rear of the housing that are bent over to secure the assembly together. A minute or two with a screw driver and some needle nose pliers and you can bend the tabs up enough to extract the switch guts from the housing.



Once everything was apart, it was interesting to see how the switch was made and how it actuated. The plunger pushes down on a brass disc that is insulated from the housing by a fiber washer. The long contacts that are attached to each terminal ride inside the brass ring. When the plunger is fully extended (door open, lights on), the brass ring makes contact with the ends of the two long terminals effectively shorting them together. When the plunger is pushed in (door closed, lights off), the brass ring travels down along the

terminals to a point where it no longer makes contact with the terminals effectively opening the circuit. The terminals also extend into the plunger which pulls the close together as it is depressed. The spring is there to push the brass ring / plunger out when the door opens.

Inspecting the contacts in my switches showed a fair amount of crud build up on both the terminals and the brass ring. I cleaned them with alcohol and sprayed them with a deoxidizer made specifically for electrical contacts. All of the parts received a good cleaning including the inside of the housing where the fiber washer slides up and down the walls of the housing. My switches were pretty sticky inside probably from the breakdown of the old dielectric grease the used in the switch back in 58.



Reassembly can be a little tricky as the spring seems to want to push everything apart. After a bit of trial and error, I was able to get the entire assembly back into the housing. Once everything is assembled connecting the meter shows that the switch was now functioning properly and ready for installation in the vehicle.

