

## TECHNICAL TIP:

### MAKING YOUR LITTLE LIGHT SHINE

By William Delli

Recently, I had problems with the lights on my '63 GT Hawk. I'd like to think that I am frugal, but I am probably just cheap. I just could not bring myself to buy a whole new part. So, I decided to repair my old one. If the headlights, parking lights or any combination of the two do not work, it may be the light switch. This light switch can be repaired by taking it apart and cleaning the contacts inside.

First, remove the switch from the dash. It is advisable to make a drawing of the position of the wires so that you will know which wire goes where. At the very least, tag each wire.

Getting the retaining nut loose from the switch may require a little patience and a lot of penetrating oil. Take care if you use pliers on the nut. Do not apply too much gripping pressure. This will smash the nut. Plier marks can be avoided by taping the jaws of the pliers. While turning the nut, hold the switch to keep it from turning on the backside of the dash.

After the switch is removed, a clean, flat surface is needed to spread out all of the switch's internal parts.

Turn the switch upside down so the four small tabs are accessible. With a small pair of needle nose pliers, bend the tabs straight. Before you bend the last tab, hold down the back of the switch with your thumb to avoid parts flying all over the shop.

Lay the switch down on a clean cloth or paper towel and pull the back away from the switch housing slowly, allowing the internal parts to come out. The following parts are inside: 1) the back assembly with the wire connectors, 2) a spacer which fits over the contacts on the inside of the back assembly (there will be 5 contact points), 3) a brass piece which has two tabs and 3 small contact protrusions (the tabs are two different sizes), 4) a large spring, 5) a small, circular phenolic piece, 6) a piece of plastic that looks

somewhat like a *Lego* block with two small holes and one large hole in the middle of it on one side and 4 protrusions and a small hole on the other, 7) inside item 6 are two small springs and two small bearings, and 8) the switch housing with the switch lever installed.

After laying out the switch parts, inspect each part to make sure nothing is broken. If each piece is good, clean the dirt, corrosion and grease from the pieces. After all pieces are thoroughly cleaned, reassemble the switch.

The switch can be reassembled using the following steps: Place the switch down with the wire connector down and the 5 contacts up. Place the spacer on the back with the holes aligned with the contacts. Install the phenolic circle in the small hole in the center of the block. Install the single large spring in the hole with the phenolic circle. Next assemble the *Lego*-like piece; take the brass contact piece and place it on top of the spring in the *Lego*-like piece. Note that the two tabs on contact point down and slide down in the slots of the *Lego*-like piece. Turn the reassembled *Lego*-like piece down while holding all of the pieces in place and put it on top of the back of the switch with the two protrusions aligned with 2 of the 3 row contacts. Install the 2 small springs in the 2 small holes in the *Lego*-like piece. Place a small amount of vasoline on the bearings and place them on top of the 2 small springs. Take the switch housing with the switch handle and place it over the internal parts. The handle has a pointed end with a bearing attached to it. This goes in the center of the *Lego*-like piece.

As you prepare to close the housing assembly, check the alignment of the tabs on the housing and the slots in the back of the switch. Press down and hold the pieces together while bending the tabs down over the back portion of the switch. This process is easier than it sounds when accomplished with the switch in hand. It worked for me!

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