## techbench techbench

JOHN HINCKLEY

## REAR BULB RE-INCARNATION

eader's Question: I recently bought a nice "driver" '66 four-speed coupe, and my backup lights don't work. Replacing the bulbs didn't help, and the bulb sockets don't show any power when it's in reverse with the ignition on. Where is the switch and wiring? I see an

unused, open two-wire connector hanging from the harness that runs across the firewall – does that have anything to do with the backup lights?

**Response:** This is a fairly common problem. Sometimes when the transmission is removed for rebuild and reinstalled, the original backup light switch and wiring doesn't find its way back in place ("Bubba" is everywhere).

The backup light switch and a small shield mounts with two screws to a bracket that attaches under two of the transmission side cover bolts, and has a wire actuating rod that connects it to the reverse lever on the transmission. You'll find it in the M20 section of the assembly manual. The switch includes an integral two-wire harness pigtail that routes forward through a clip on the side of the tunnel and then comes up and plugs into a connector on the dash harness that comes through the firewall (the one you mentioned that's hanging loose). One wire is pink (ignition-switched 12-volt feed), and the other one is light green (feed to the backup light bulb socket).

The switch is normally open. When you shift into reverse, the small rod from the reverse lever moves the switch actuating lever, closing the internal contacts, which connects ignition-switched power to the light green wire, lighting the backup lamps.

The switch mounting to the bracket is adjustable. Install it with the transmission in neutral (and the actuating rod already connected to the switch lever and transmission reverse lever) and a 3/32" drill bit through the gauge holes in the switch and its lever. Then tighten the two screws and remove the drill bit, and it will be properly adjusted.

Before installing the switch, you can do a quick check to verify the integrity of the wiring for the ignition-switched feed and the body wiring to the backup lamps by putting a short jumper wire across the two terminals in the connector hanging down from the dash harness (with the key in "on" or "accessory" position). This will do the same thing the switch does, and will light the backup lamps.

The entire package (switch, actuating rod and clips, mounting bracket, shield, and screws) is available from most of the Corvette parts houses for about \$80, and the installation is about a 30-minute job.







- 1 Bottom view of the backup light switch, shield, and mounting bracket, with the pink and green wires going forward in the tunnel. The wire actuating rod is visible going rearward to the reverse lever on the transmission.
- 2 This view from the front shows the mounting bracket under the side cover bolts, the switch and the shield, and the actuating rod connection to the switch lever.
- 3 This is the connection at the firewall between the pink (power) and green (backup lamp feed) wires from the dash harness and the pigtail from the backup lamp switch at the transmission.

corvetteenthusiast.com CORVETTE ENTHUSIAST 81