Mid-Year Corvette "Non-Cluster" Dash Harness Connections

Dave Zuberer and Tim Welsh

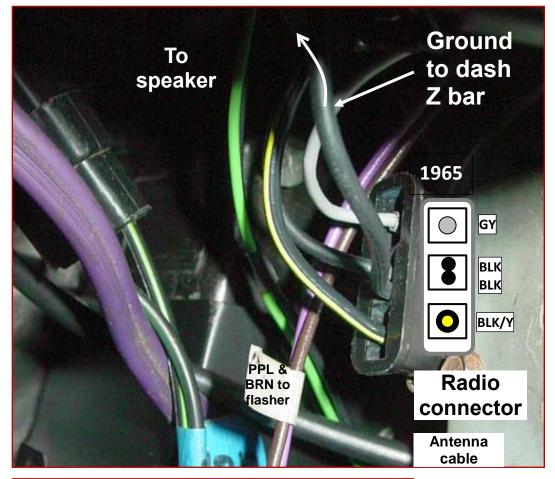


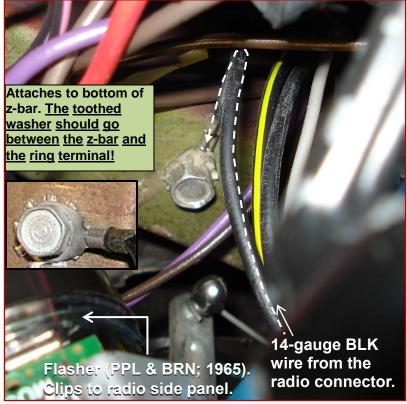
The information presented here is based mostly on the GM wiring diagrams from the **Assembly Instruction Manuals** (the so-called "AIMs") for the "mid-year" Corvettes (1963-1967). A few diagrams are based on the diagrams put out by Mitchell Repair Information Co. The photos are mostly from DZ's 1965 AC coupe or Tim Welsh's 1966 roadster. Some of the photos have been gleaned from the Corvette Forum C1-C2 website or contributed by members and we hope credit has been given where credit is due!

Our intent is not to have covered every last nuance of the wiring connections of the dash harness (also referred to as the "main" harness by some) but to hit the main connections that one will encounter when replacing the dash harness. Depending on the options in your car (e.g., radio or heater delete, AC vs. Non-AC, etc.), there may be some differences in the connections. In this document we focus on the "non-cluster" connections i.e., the radio, clock, heater, glove box lamp and courtesy light switched and lamps.

We hope that this information takes a little of the mystery out installing a dash harness. While it looks intimidating, if one carefully labels the various connectors and wires upon removing the old harness and similarly labels the new harness before installation, it's actually pretty much a "plug and play" exercise.

Mid-Year Corvette Radio Connections and Grounding Points



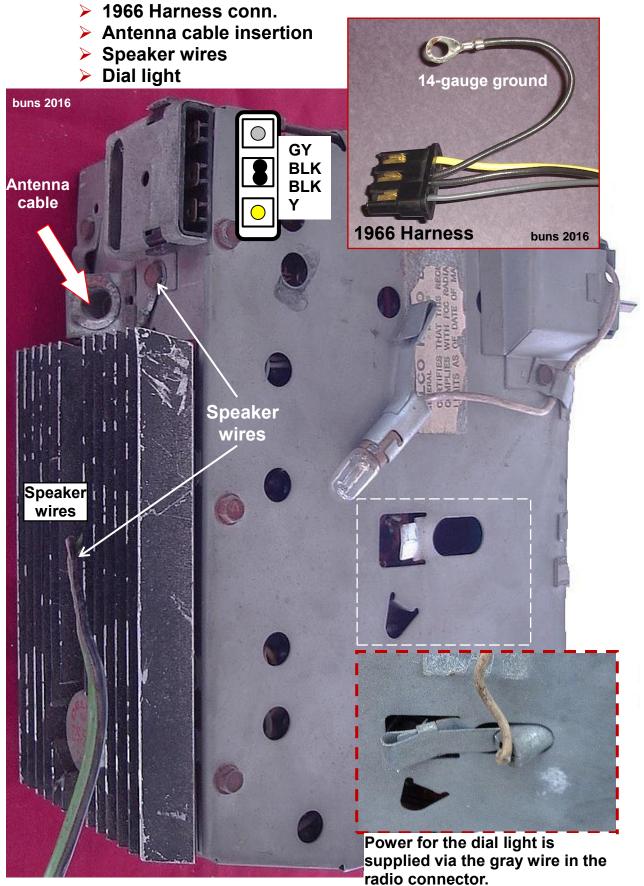


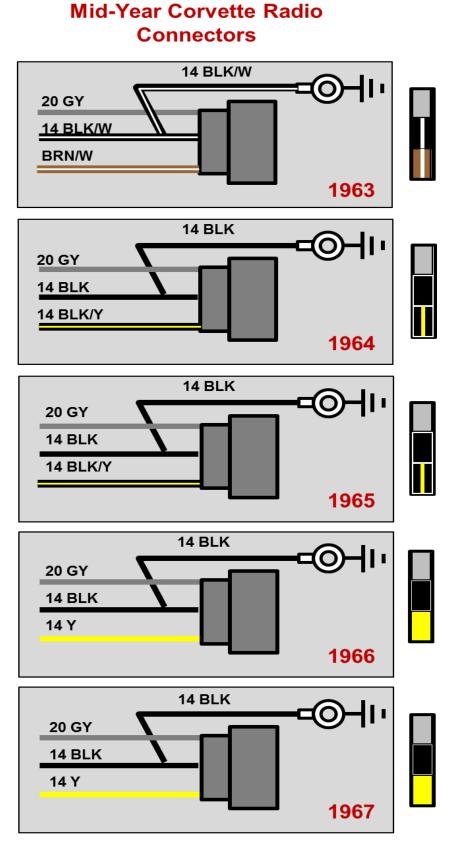
The gray lead in the connector supplies power for the radio dial light which mounts in the driver side of the radio housing with a torpedo lamp socket (see next pg.). The BLK/Y (1965) wire supplies 12V to the radio and the 14-gauge black wire with the ring terminal is the main grounding point for the dash harness.

Shown here are the connections for a 1965. The flasher is electronic to accommodate LED signal lights at all 4 corners.

Dave Zuberer May 2016

Radio connections:



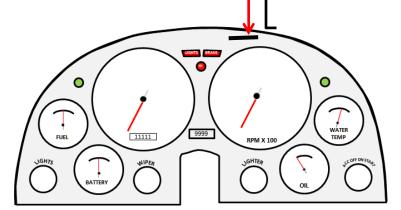


The ground wire with the ring terminal is attached to the z-bar (dash cross member) with a screw. The toothed washer goes between the z-bar and the ring terminal to insure a good ground connection. See page 2.

The all-important cluster and dash harness ground connections:

This ground connection is absolutely critical for the dash harness and gauges to function correctly!

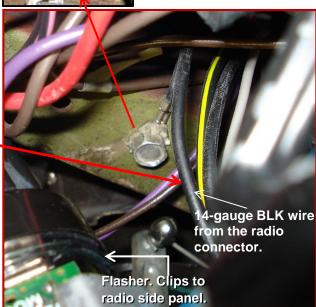
If you painted the backside of the cluster you must remove paint at the cluster ground (right arrow) and the bulb sockets (down arrows) to ensure a proper ground.

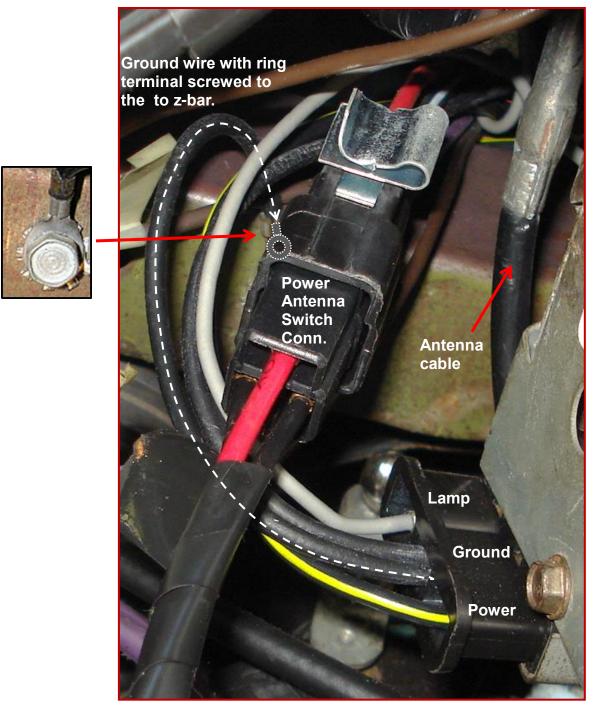


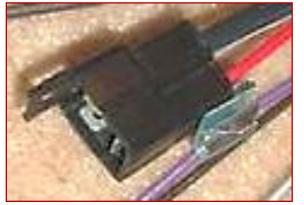
The main grounding point for the dash harness is the 14-gauge black wire with the ring terminal that comes from the middle leg of the radio connector and connects to the underside of the z-bar ("dash cross member") in an area just to the left of the radio side panel. If you have a "radio delete" car, be sure to make the ground connection to the z-bar!

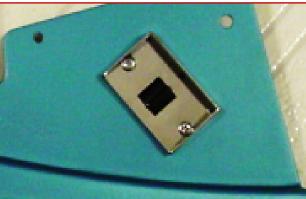


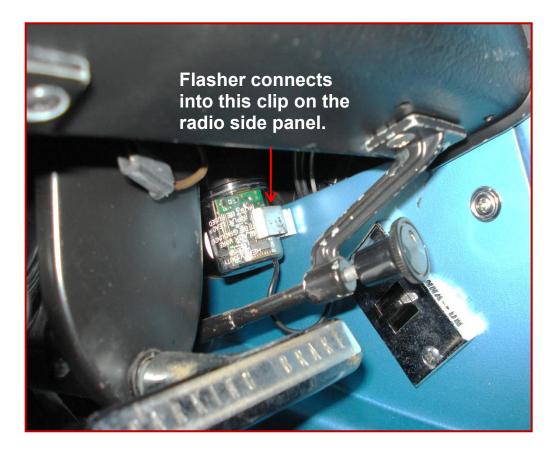
Attaches to bottom of z-bar. Washer between zbar and terminal.











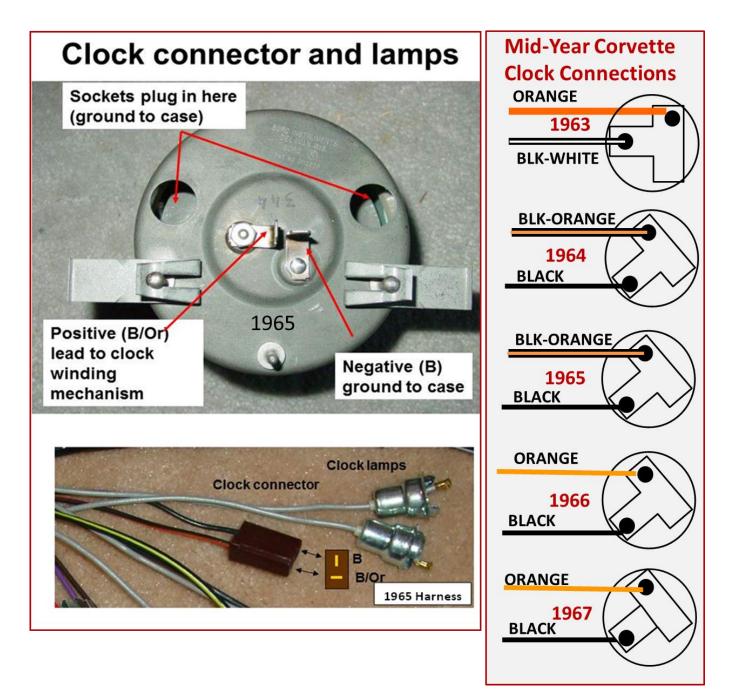
The signal flasher mounts in the clip on the radio side panel. Note: this is an electronic flasher with polarity reversal as I (DZ) am running LED signal lamps at all four corners.

CF Note from John Hinckley

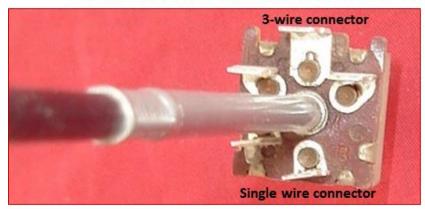
All midyears, radio-equipped or not, have the 3-cavity radio connector pigtail on the dash harness; the center cavity in that connector has two wires in it - one black wire from the dash harness (<u>that grounds everything in the car from the firewall back</u>), and the other black wire in that cavity is a pigtail with a ring terminal on it that screws to the bottom of the Z-bar. If that pigtail with the ring terminal isn't screwed to the bottom of the Z-bar, nothing from the firewall back will be grounded properly.

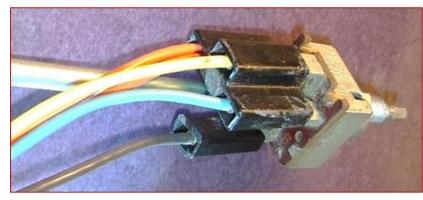
The "torpedo" lamp that illuminates the heater controls that clips to the bottom of the clock mounting bracket gets ITS ground by the end of the upturned lip on the clip on the lamp housing contacting the outside of the clock case, which is grounded through the clock connector. Photo below shows the upturned end of the clip (see page 12).

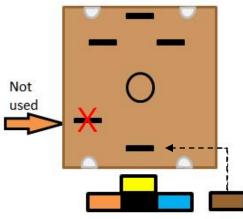
Mid-Year Corvette Clock Wiring

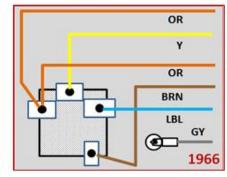


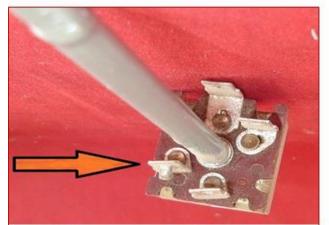
Heater Blower Motor Switch and Cable Assembly - 1966



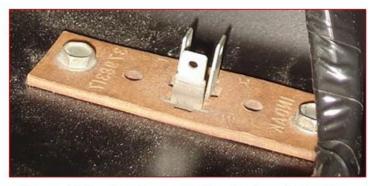








REAR VIEW OF THE HEATER BLOWER MOTOR SWITCH ARROW POINTING TO TERMINAL NOT USED

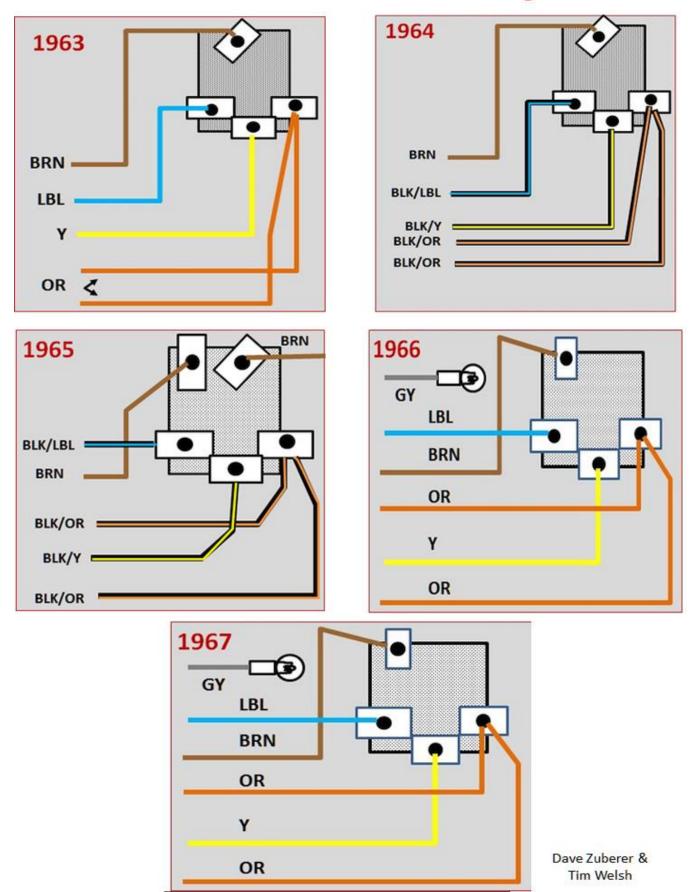


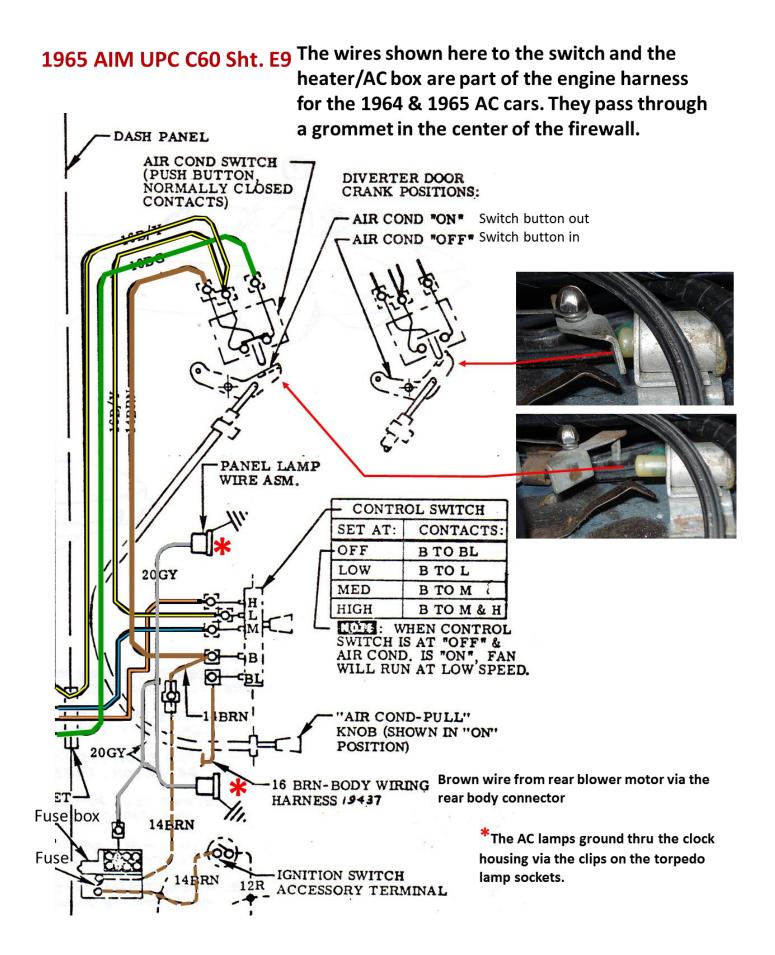
Blower Motor Resistor on Heater Box (non-AC car)

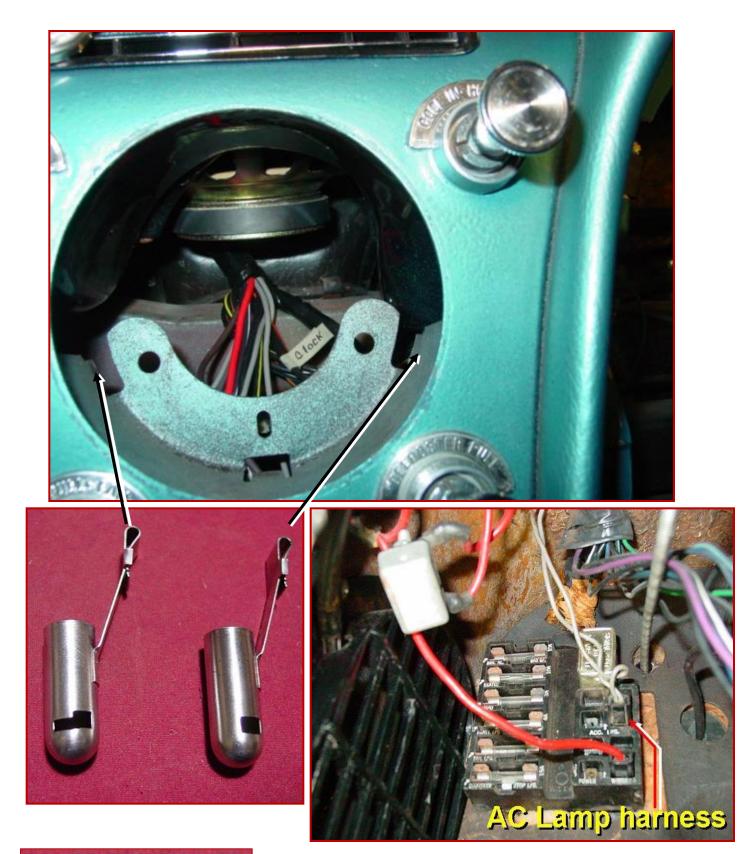


All photos this page courtesy of buns

Mid-Year Corvette Heater Blower Motor Wiring Connections

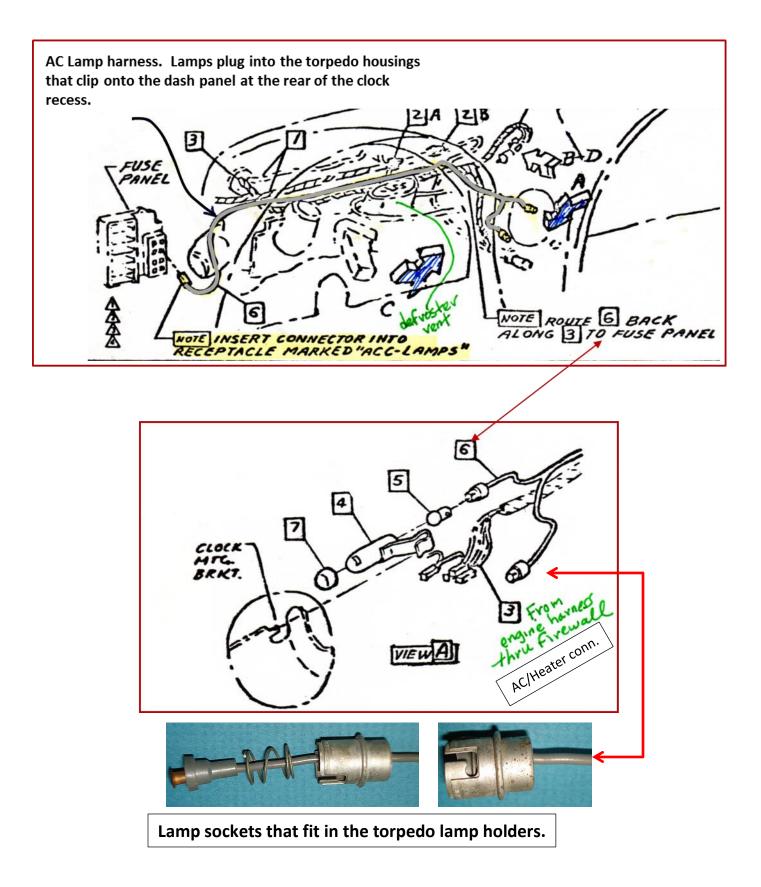




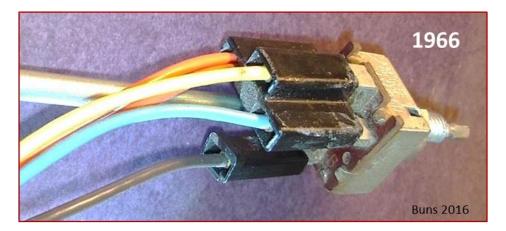




The "torpedo" lamps for the heater/AC dash illumination lamps ground to the clock housing through contact of the upturned "tab" on the torpedo clip. See John Hinckley's note on page 7.

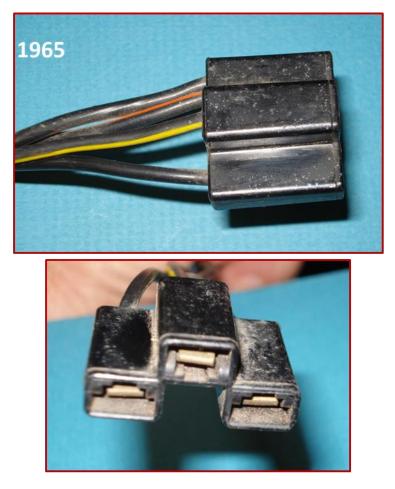


Some notes on wiring the AC/Heater blower switch for a 1964 & 1965 Coupe with rear compartment blower.





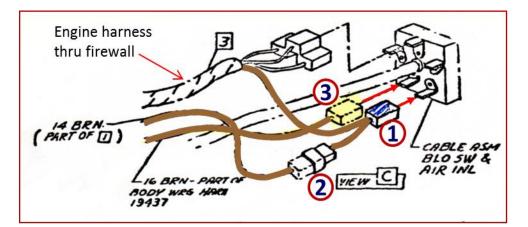
Back side of the heater/blower switch in a '65 air-conditioned coupe. Notice the 3-terminal connector at the top of the switch and the brown wire connector to the lower right terminal of the switch (as viewed from the rear). See illustrations below.



3-slot connector to rear of heater/fan switch



On 1964 and 1965 coupes with the rear compartment blower assembly, this single brown wire (that connects through the rear body connector) also attaches to the rear of the heater/fan switch (lower left terminal of the switch as viewed from the rear). See diagram above (1965 AIM UPC C60 Sht E8).



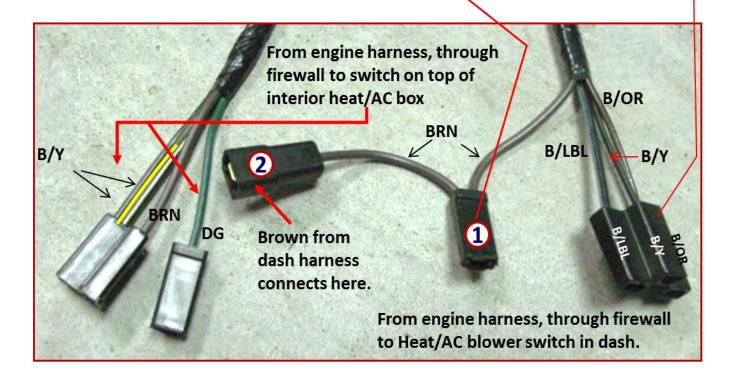
1 Part of engine harness

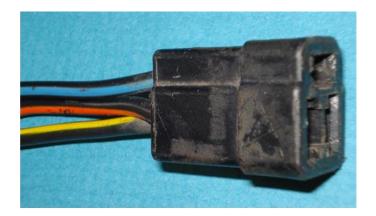
Part of engine harness

From rear body harness via the rear body connector of the dash harness

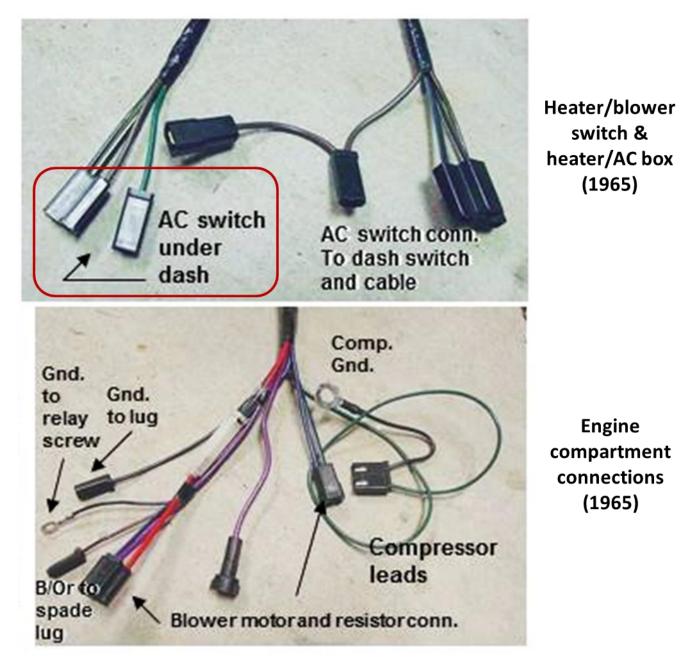


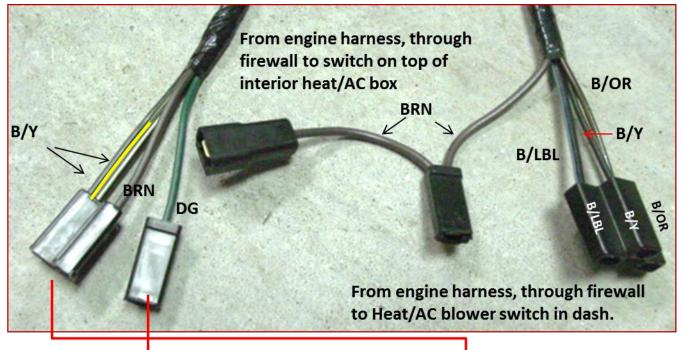
Torpedo lamp that illuminates the dash bezel. Part of the AC lamp harness. Note the green filter has cracked and pulled away.

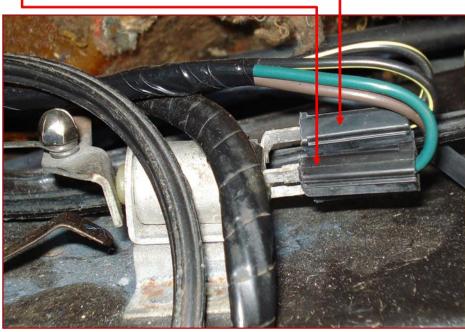




Connector to heater blower motor. This one is not used in AC cars as the blower motor connection is part of the engine harness (Left below).



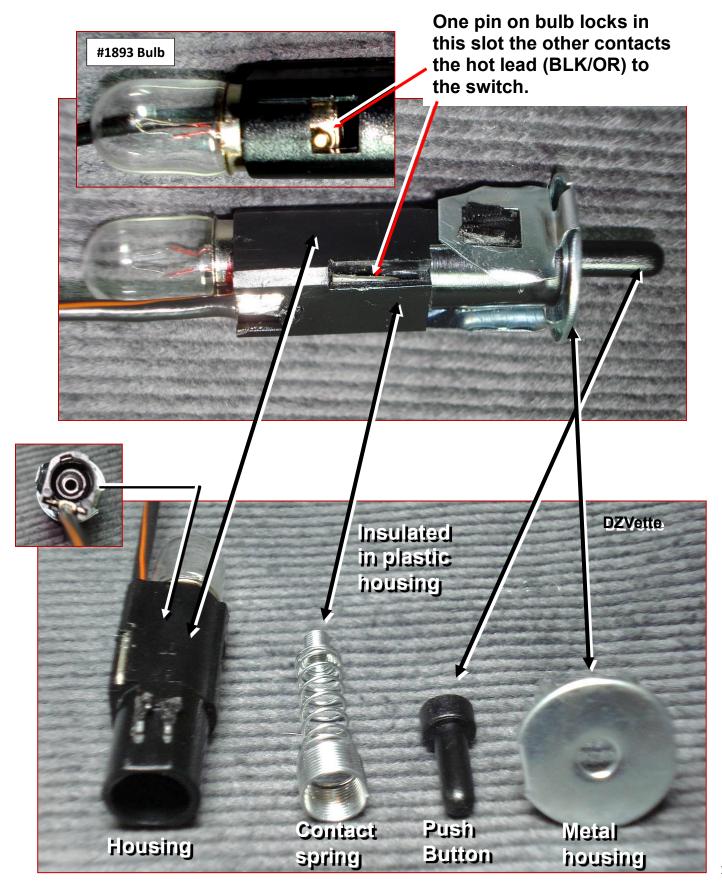


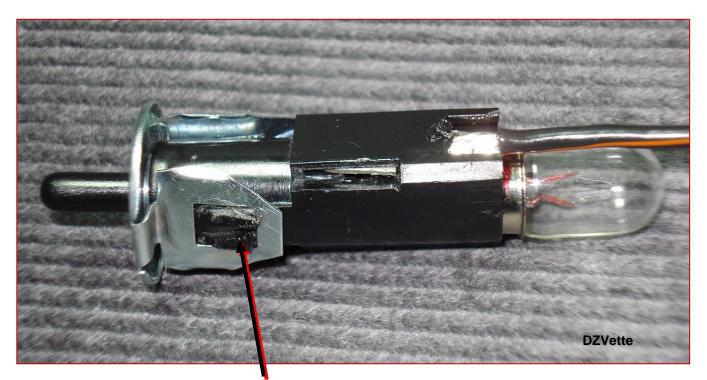




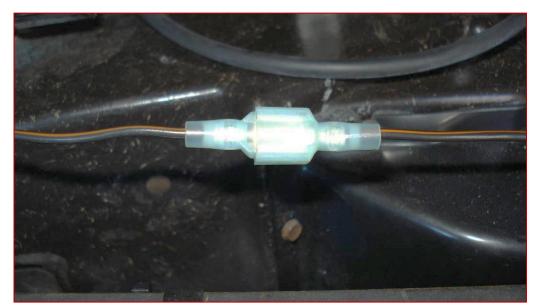
Mid-year Corvette glove-box lamp switch

Dave Zuberer





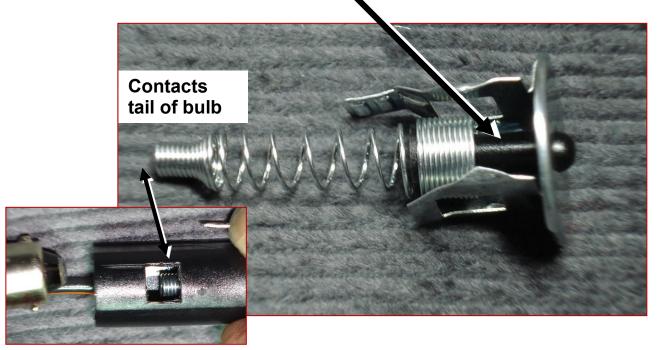
To disassemble the switch carefully trim the melted plastic from this area and gently pry metal side tabs up over remaining plastic. Preserve as much as you can.



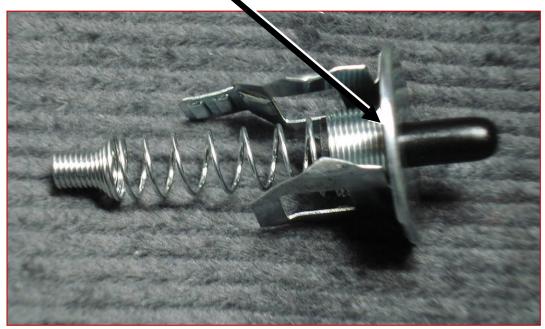
Consider adding a quick-connect in the Blk/Or wire to the glovebox lamp. It will eliminate having to wrestle that connector out of the lamp housing which can be problematic. Makes Glove Box removal easier in the future!

Mid-Year Corvette Glove-box lamp switch mechanism

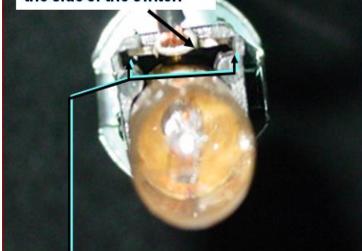
When Glove-box door is closed the push button pushes the spring away from the grounded metal housing breaking the circuit.



When Glove-box door is open the push button releases the spring which moves forward to make contact with the grounded metal housing closing the circuit to light the lamp.



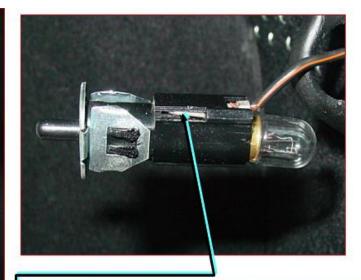
Toward the open slit in the side of the switch



Connector slips in here. Open side of the "hook can be seen in the slit at the_ upper right of the switch housing.

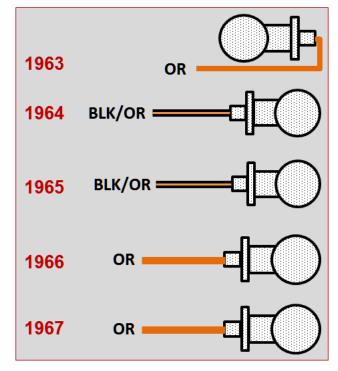


This clip slides into a thin slot in the rear of the glove box light fixture. If I am not mistaken, the open side of the hook should face the open slit (toward the rear of the switch) that you will see on the upper right side of the switch as you look at the switch head-on from the front.





Glove-Box Lamp Connections



Mid-Year Corvette Courtesy Switch and Lamp Wiring

