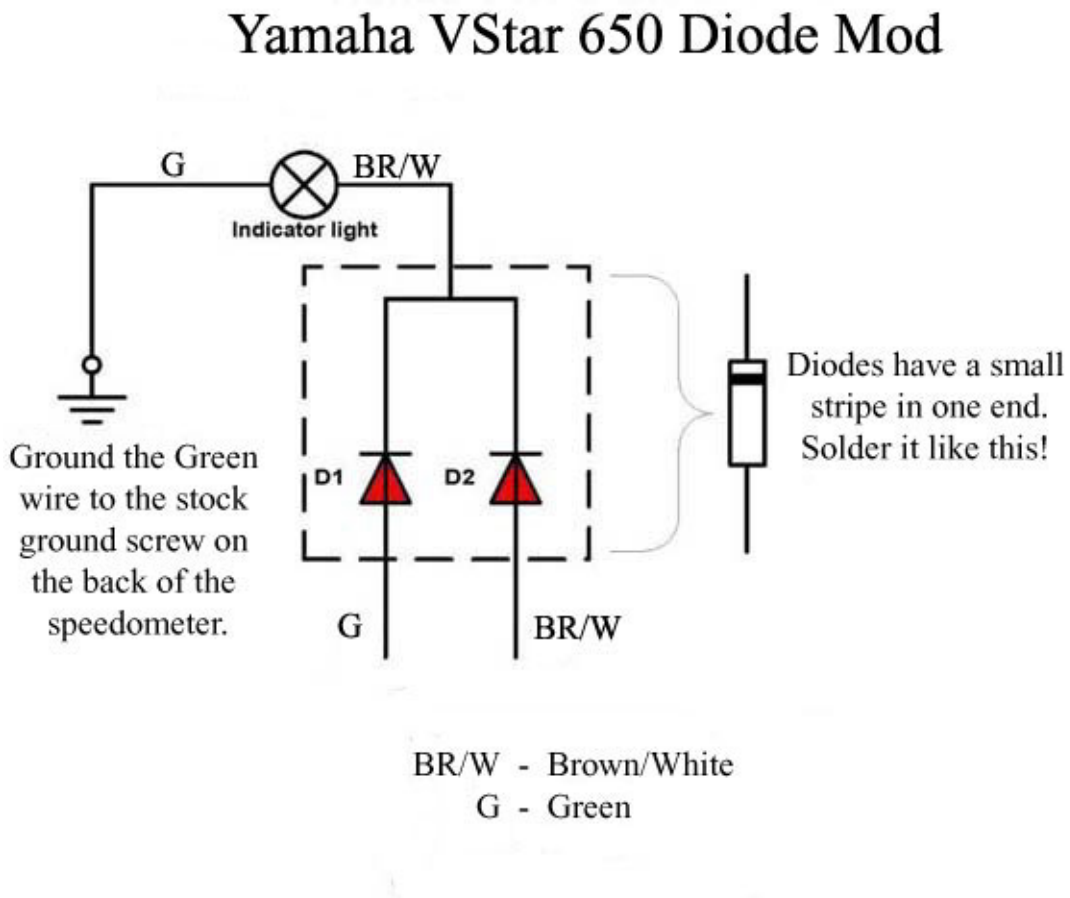
Yamaha VStar 650 Diode Mod

After installing my L.E.D. rear turn signals I needed a diode modification in the wiring because both signals flashed together when I selected a left or right turn. Here is the necessary information to make your own diode setup with parts from Radio Shack. You will need two 3 Amp diodes (Radio Shack part #276-1143 - cost $1.49).

All you do is wire them up as described below. To help you understand I have this schematic.

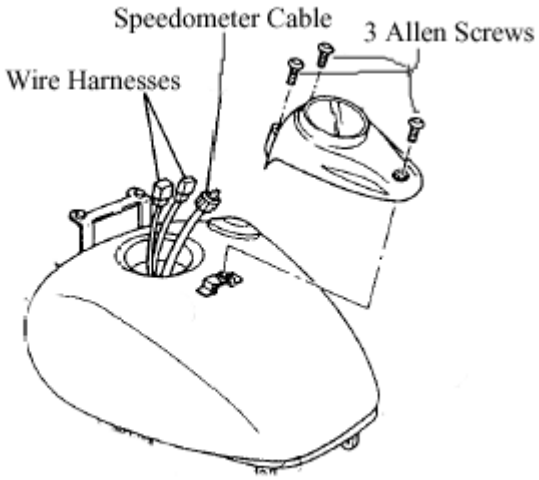


After you solder the diodes and the wires I would strongly recommend using shrink tubing on the soldered portions. Just remember to slide the shrink tubing on the wire before you solder it, otherwise you won't be able to get it on!

Supplies/Items Needed:

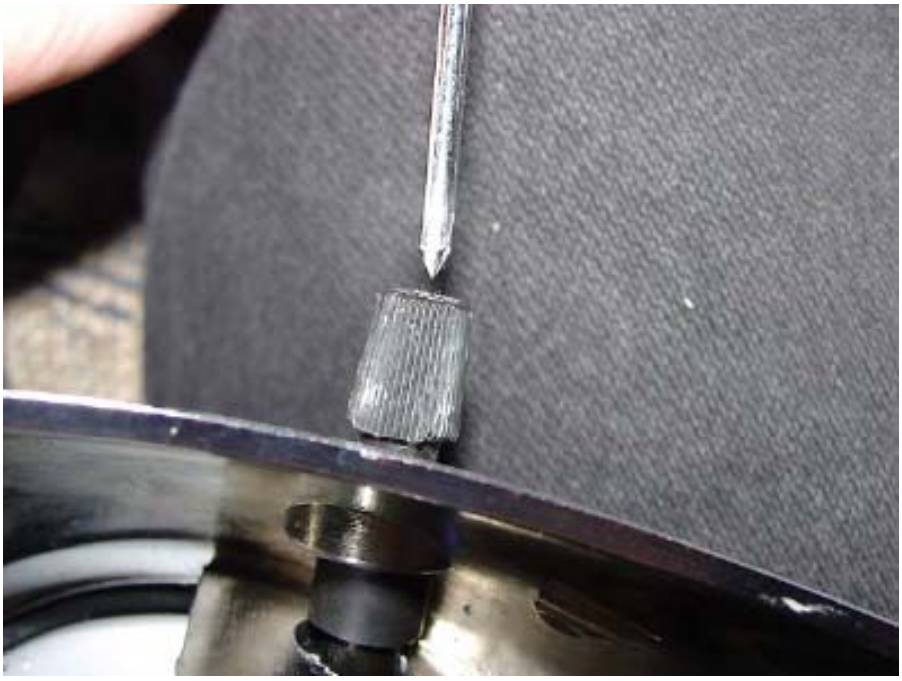
- Soldering Iron & Solder
- Two 3-amp diodes (part # 276-1143 from radio shack $1.49)
- Small Phillips head screw driver
- #4 metric allen wrench
- Shrink tubing

First thing you want to do is take the speedometer/dash assembly off the gas tank. Accomplish this by removing the three allen screws holding the speedometer/dash plate on, pull the whole assembly up enough to disconnect the two wire harnesses and the speedometer cable.

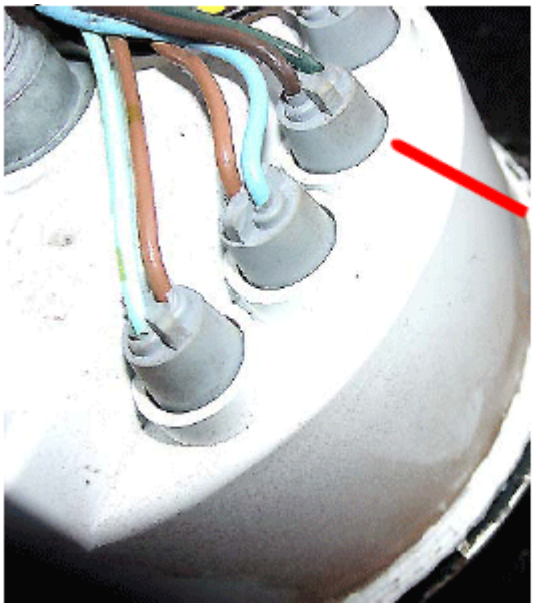


Next you have to remove the speedometer from the housing do this by removing the two nuts from the back of the housing, as seen below.

The trip meter knob is attached with a #2 metric Phillips screw down the center of the knob.



Locate the turn signal indicator light. You will need to access these wires, and splice them. See picture below.

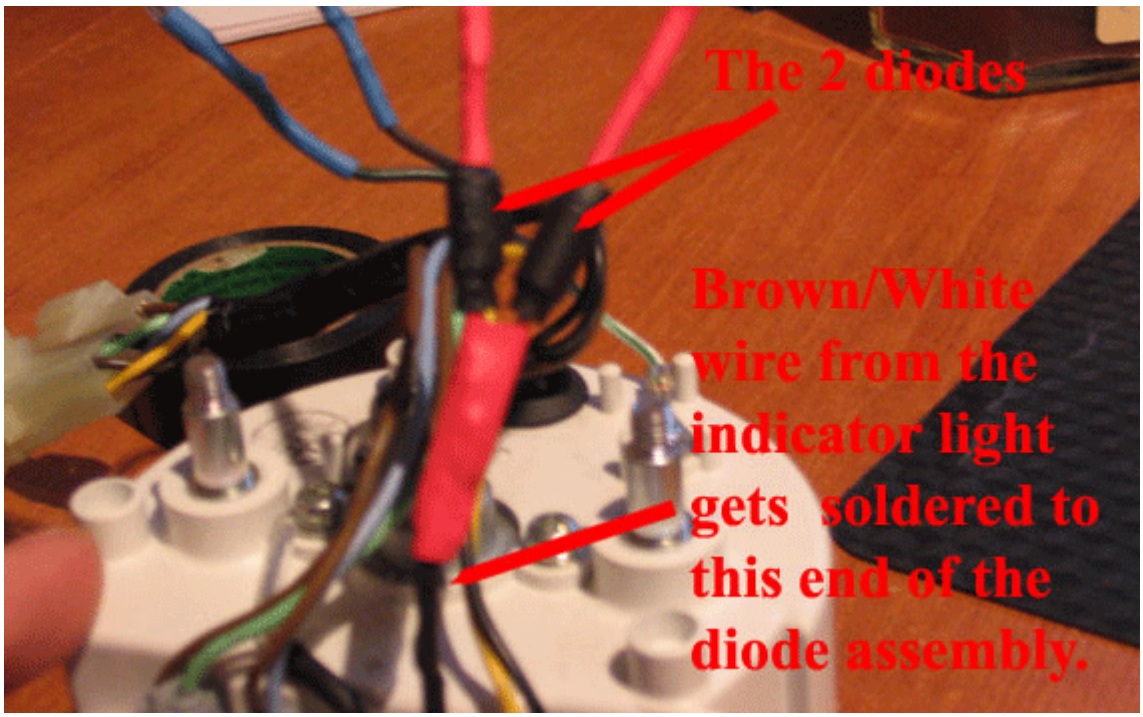


Next you will need to cut the green wire and ground the bulb to the ground screw located on the back of the speedometer face as seen below. Also reference the schematic on page one to familiarize yourself with how the wires should be cut.

Note: There should be enough green wire coming out of the wiring harness still to solder it to the diode assembly, and enough green wire attached to the indicator bulb to ground to the ground screw.

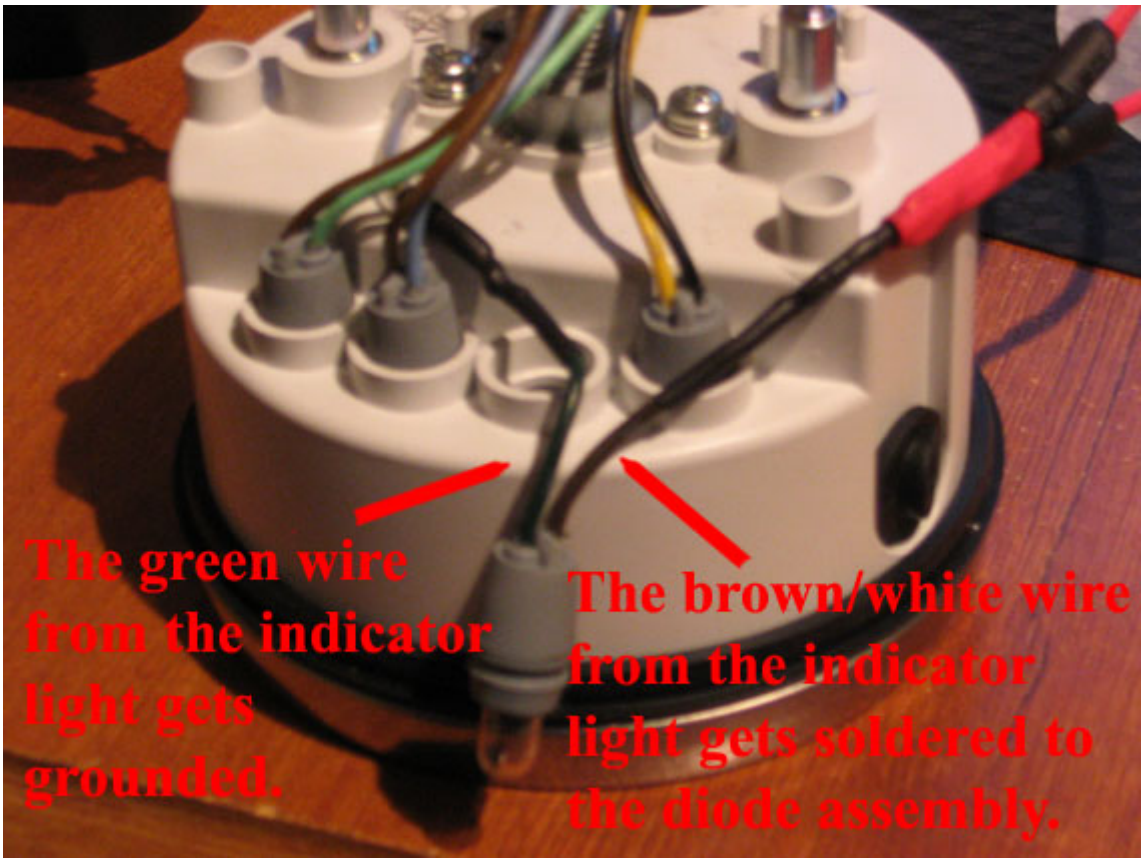
Next you have to make your own diode assembly. This is very easy, just be sure you have the ends of the diodes facing in the proper direction as shown in the schematic on page one. You essentially have to solder the diodes together at one end and create a "Y" looking diode. Again reference the schematic so you solder the correct end of the diodes.

You will solder the diodes and the brown/white wire coming from the indicator bulb together. This picture shows that "Y" that is created.



The black things are the diodes, the red is just shrink tubing around the soldered joints.

Here is a picture showing the indicator light with both wires where they should go. The green wire goes to the ground screw and the brown/white wire gets soldered to the diode assembly. Notice the "Y" shaped diode assembly I mentioned (top right of the picture).



The last thing you have to do to the back of the speedometer is solder the end of the diode assembly that has two wires sticking out to the green and brown/white wires coming out of the wiring harness. One wire from the diode assembly gets soldered to the green wire and the other gets soldered to the brown/white wire. It doesn't matter which one is which.

Plug the wiring harness into the other end of the harness that's sticking out of the gas tanks and test your L.E.D. signals out to make sure everything works and then re-assemble the speedometer/dash assembly and put it back on the gas tank in the reverse order in which you took it off.