

This corrective mod has been successfully applied by many rswarrior.com members 1
however as with all mods you proceed at your own risk so read carefully.

NOTE: in 2008 the Warrior PC3 came available with a TPS plug that incorporates this modification, another example of RSW pioneers driving the market. This archive data will remain handy for non-TPS-Plug versions, especially for future service.

The following was updated 8-04-06

This install covers ALL years of Warriors to date.

If your Warrior cuts out, has dead spots, a wacky throttle response off idle or a dyno tuner that goes nuts trying to get you a good custom map follow these instructions. It will fix 99% of these issues unless you have a broken CPS.

Many people have experienced that the PCIII setup as described in its manual is not perfect. The TPS read out in particular is a problem. Instead of a steady TPS signal the PCIII (regular and USB) jumps around pretty wild. This causes not only shops to do custom maps to take a lot longer to get it right but can also lead to less than perfect throttle response of your Warrior. The solution is very simple and is highly recommended for EVERY Warrior PCIII owner.

IMPORTANT: When looking for the right wires please make sure that the first color is the base color and the second on is the strip on it. So black/blue for example is a black wire with a blue strip.

Start with the gray PCIII TPS hookup wire: Pull it back through the insulation to have it come out pretty close of the PCIII. Depending on where you install the PCIII you only need a few inches of gray wire. Check first before you cut it too short.

Now locate the solid yellow wire that runs into the ECU. Be aware that there are several wires that have a least part yellow marking on them. There is only one solid yellow wire (it might have some gold markers on it as all the wires).

Cut that wire, take the insulation off both ends, twist the gray wire around one of those ends, push a piece of shrink tubing over the other yellow end and solder the connection back together. Last but not least push the shrink tubing back over the solder joint and heat shrink it.

The second connection that is even more important is the PCIII digital ground. The Warrior uses a digital ground wire for all its sensors to reduce noise. The PCIII comes with a digital ground wire but unfortunately as it is sold it is connected to regular ground. When you pull back the insulation of the PCIII ground wire you will find two wires ending at the ground connector: One is black (regular ground) and the other one is black/white (digital ground). Cut the black/white wire and pull it back to the same exit you used to run the gray wire. The black/white wire will need to be approximately the same length as the gray wire. Now find the black/blue wire that runs into the ECU. There is only one.

Do the same thing as before but now splice the black/white (PCIII) wire into the black/blue (ECU) wire and heat shrink the solder joint.

Install the PCIII in its final location and you are done.

Now when you hookup a laptop or dyno computer to the PCIII the TPS signal on a running Warrior should be rock steady and the bike should run cleaner and very crisp. If not you might adjust the map you are currently running.

Hope this helps!

Oliver

This corrective mod has been successfully applied by many rswarrior.com members 2
however as with all mods you proceed at your own risk so read carefully.

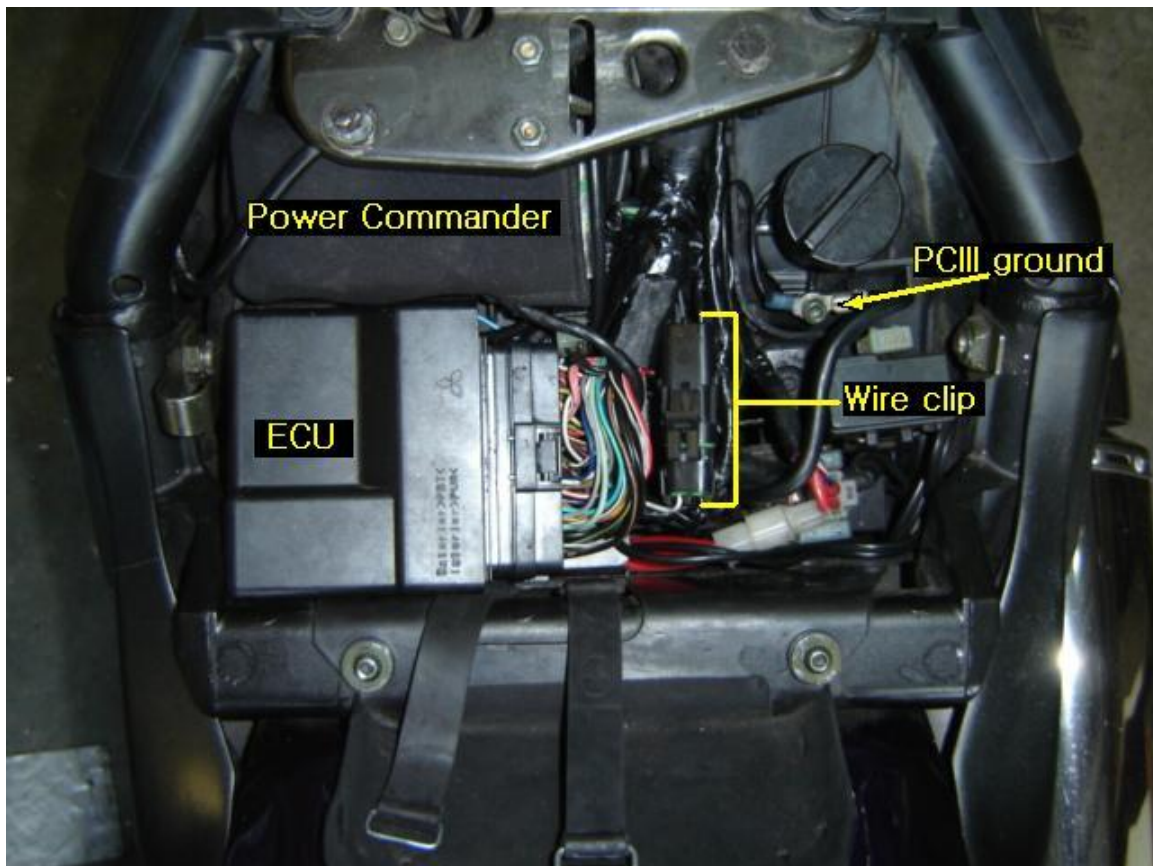
Courtesy of Redhorse:

<http://rswarrior.com/photos/redhorse/default.aspx>

<http://home.roadrunner.com/~redhorse/>

An overview:

I cut the wire and twist soldered one end of the bike's wire and the PCIII wire. I then pushed a heat shrink tube over the two connected wires but behind the actual connection and soldered the remaining wire (towards the TPS) inline as if it would be a T- connection. That way you can push the shrink tube over the solder connection and shrink it to become resistant to water - although water does not present a real problem once soldered.



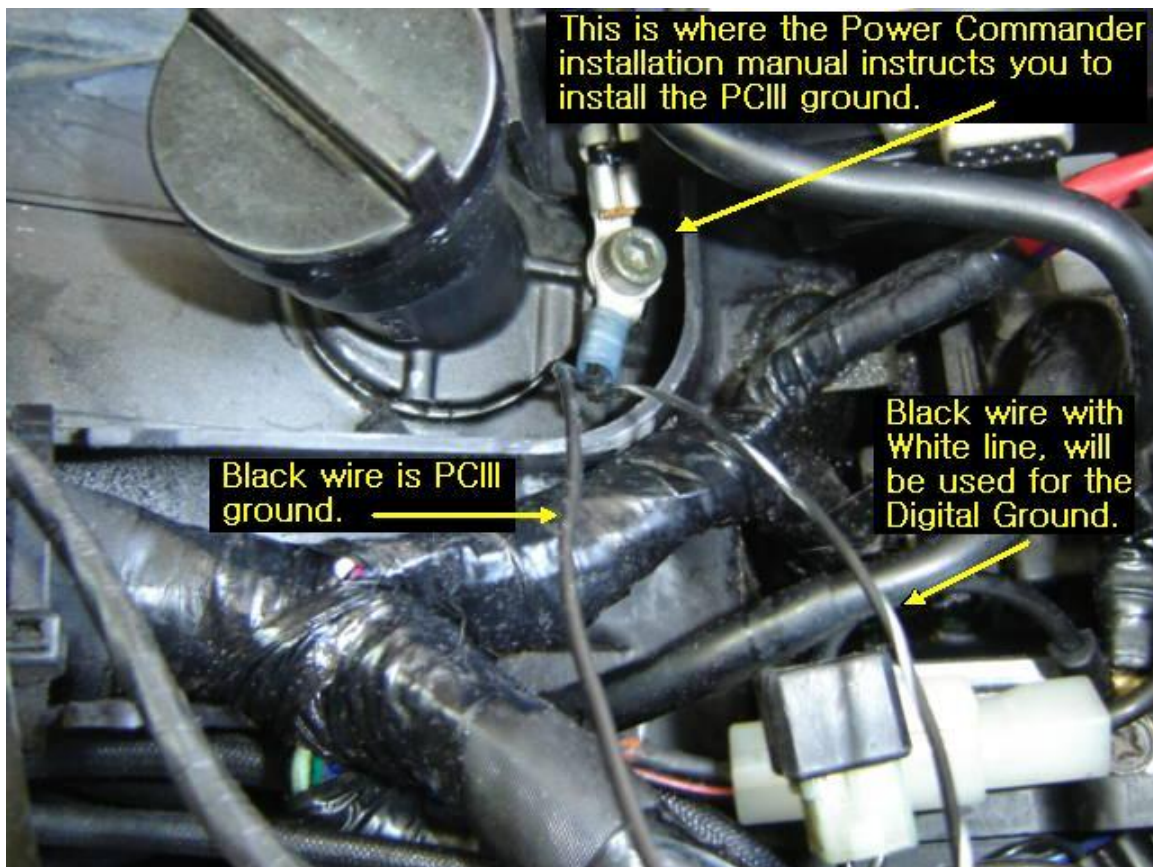
This corrective mod has been successfully applied by many rswarrior.com members 3
however as with all mods you proceed at your own risk so read carefully.

Step By Step:

I have had my PCIII installed on the Warrior for a few years already. I had to work around it, while it was still on the bike. I didn't have to uninstall it from the bike to do the "Perfect" install.

After doing this mod, it's recommended that you recalibrate the throttle position in the Power Commander software.

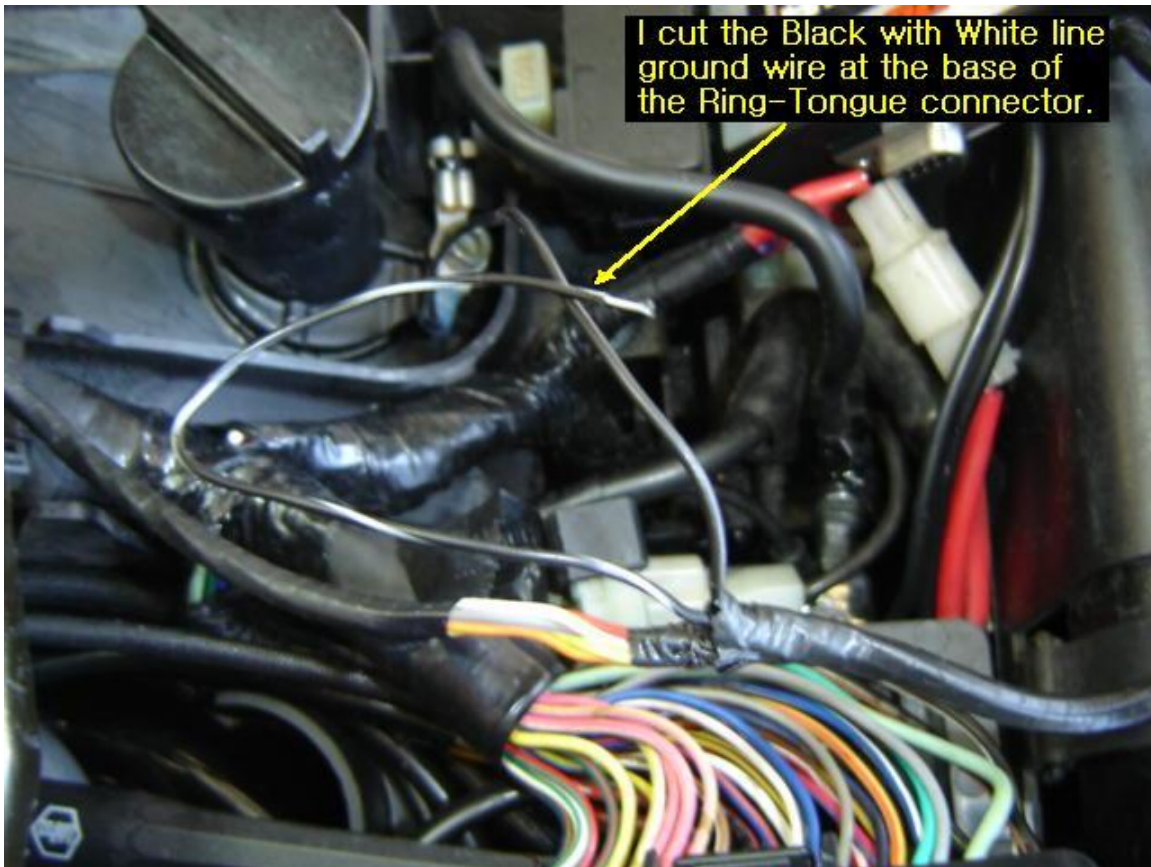
First step was to cut one of the PCIII ground wires to hook up to the bikes ECU digital ground from the frame electrical ground. The PCIII ground has two wires going to the ring tongue connector that is grounded near the oil filler cap.



This corrective mod has been successfully applied by many rswarrior.com members 4
however as with all mods you proceed at your own risk so read carefully.

I

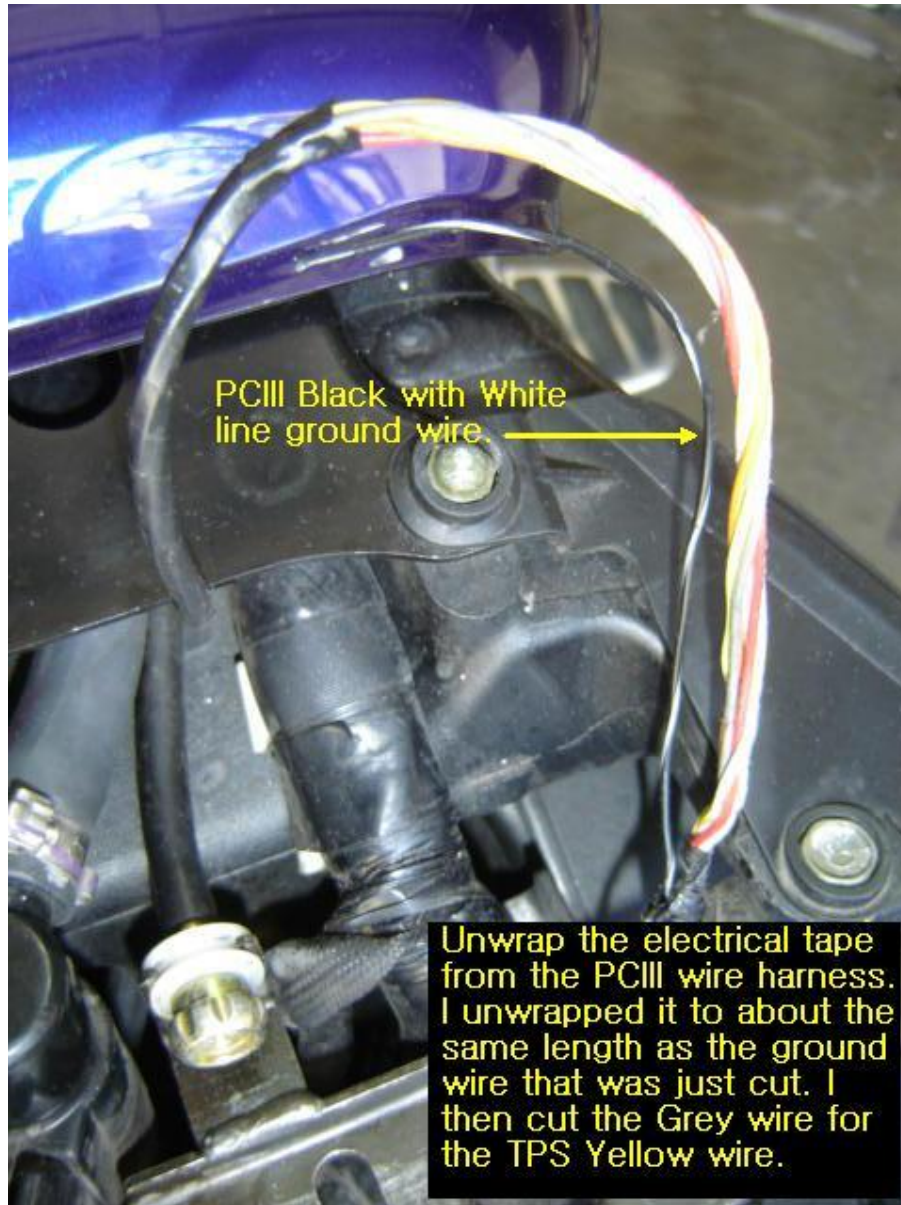
cut the black-with-white-line PCIII ground wire at the base of the ring tongue connector. I left the solid black PCIII ground wire still attached to the ring tongue connector that is still bolted down near the oil filler cap.



This corrective mod has been successfully applied by many rswarrior.com members 5
however as with all mods you proceed at your own risk so read carefully.

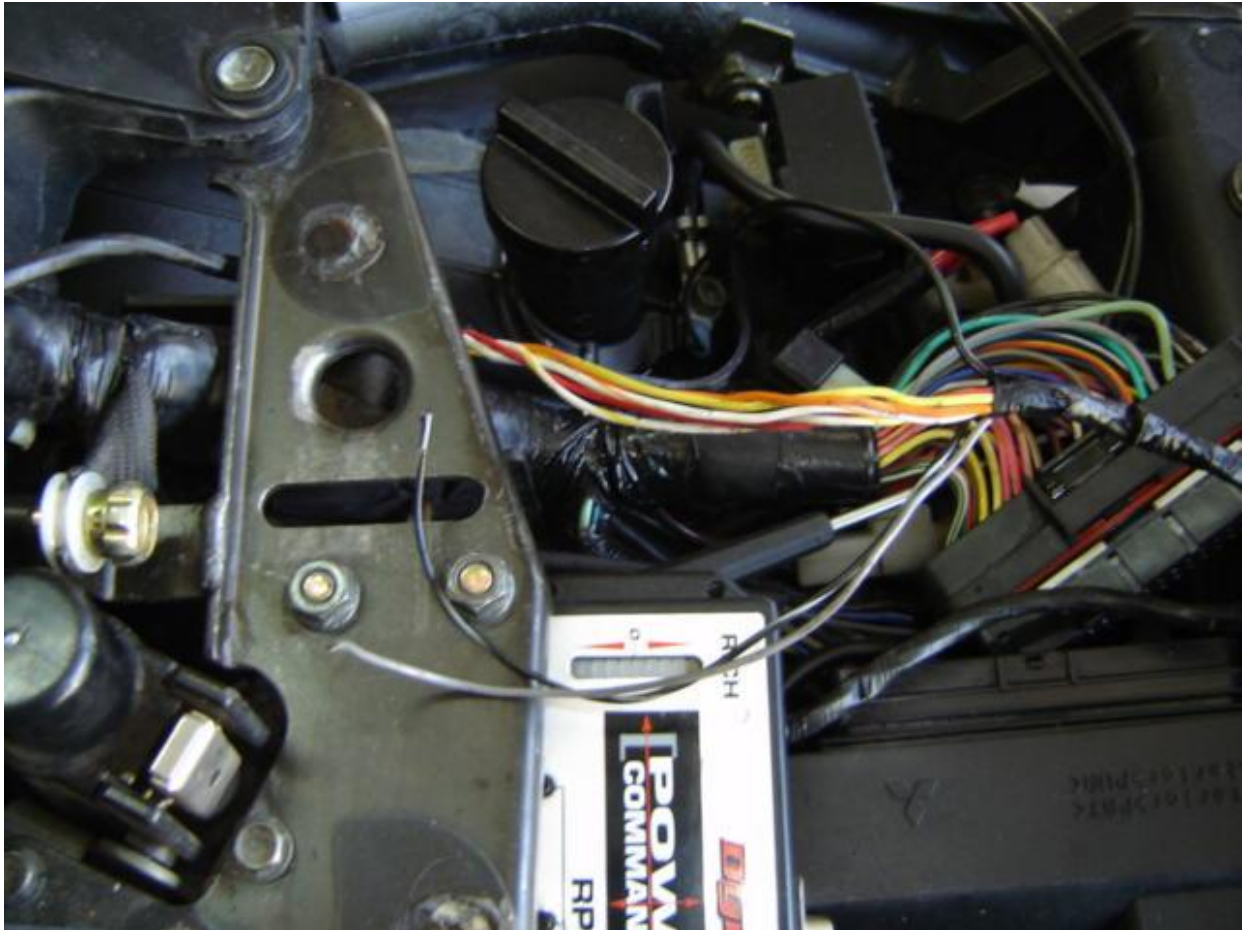
Next step was to unwrap the electrical tape from the PCIII wires going to the TPS connector between the cylinders. I unwrapped about 7 inches of the electrical tape. About the same length of wire as the digital ground wire that I had just cut. I then located the Grey wire and cut it about the same length as the Black/White-line ground wire.

I re-wrapped the PCIII wire harness with electrical tape.



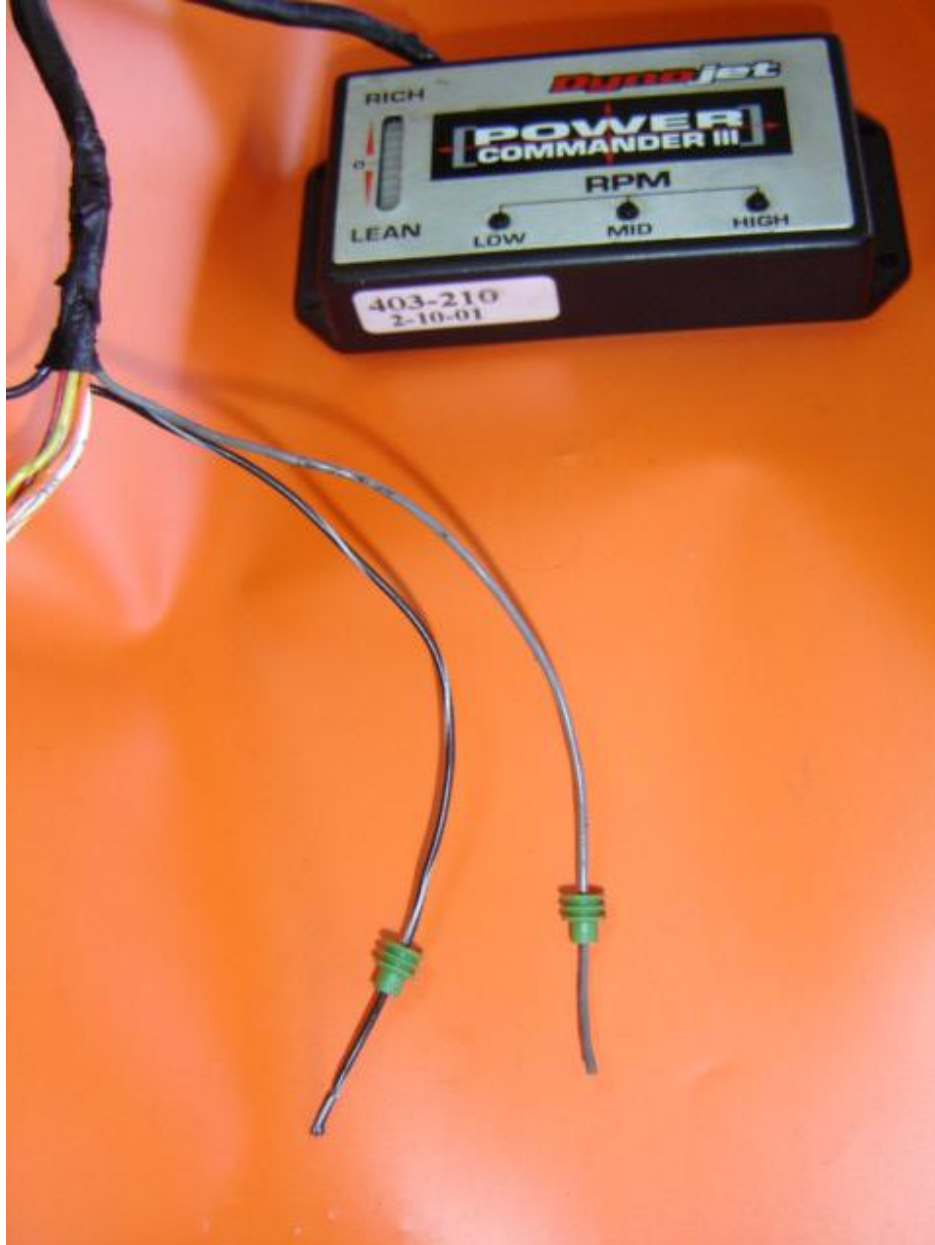
This corrective mod has been successfully applied by many rswarrior.com members 6
however as with all mods you proceed at your own risk so read carefully.

I then took the Grey & Black/White-line wires and stripped enough of the end off
to crimp some terminals.



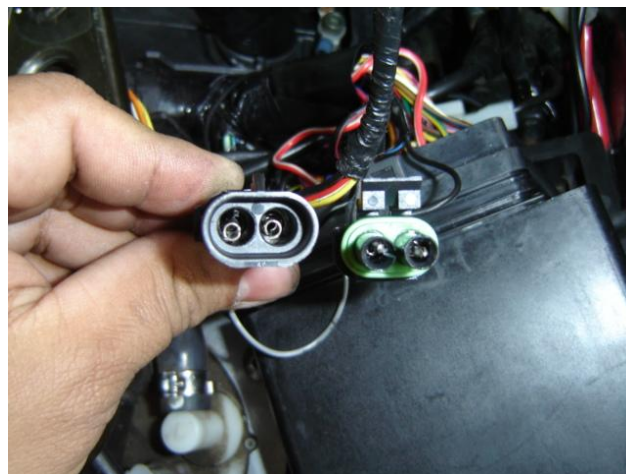
This corrective mod has been successfully applied by many rswarrior.com members 7
however as with all mods you proceed at your own risk so read carefully.

The green grommet is supposed to make the connector water resistant. After crimping the terminals I soldered the terminals to the wires.



This corrective mod has been successfully applied by many rswarrior.com members 8
however as with all mods you proceed at your own risk so read carefully.

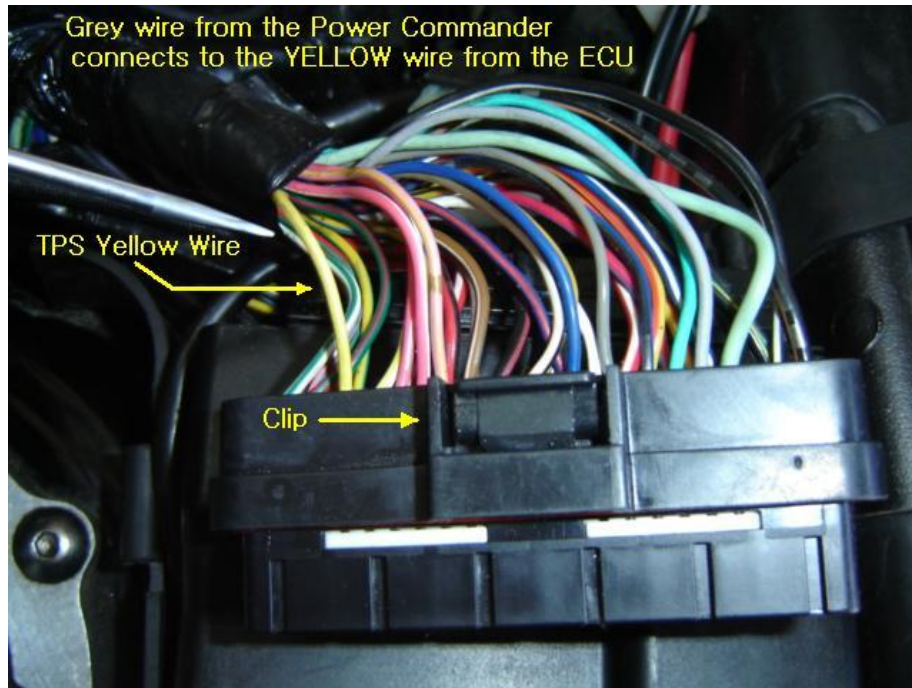
I then inserted the terminals into the connector body. Pushed the green grommets in and snapped the back end of the connector over the wires



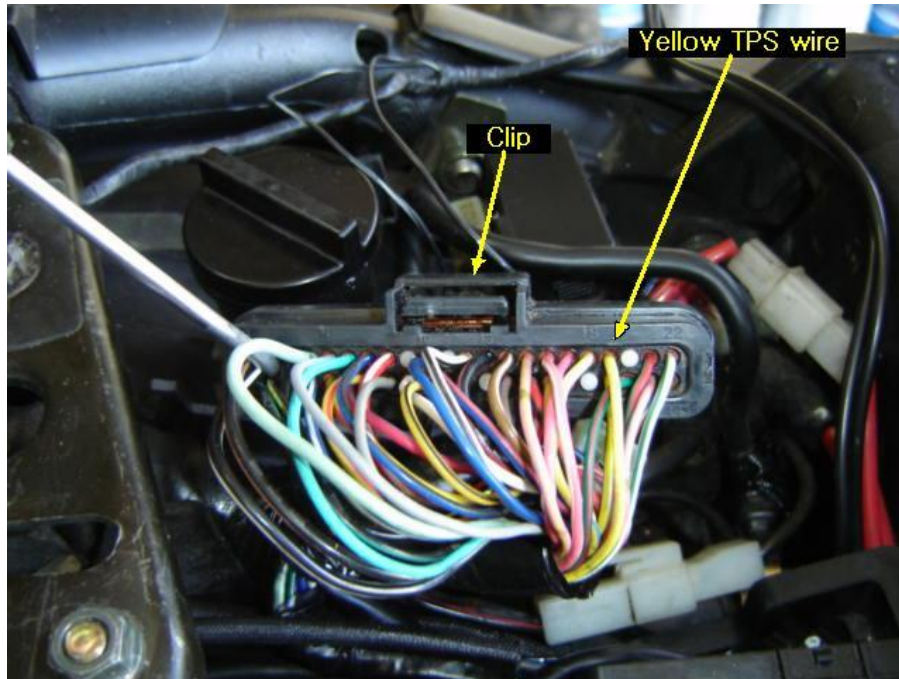
This corrective mod has been successfully applied by many rswarrior.com members however as with all mods you proceed at your own risk so read carefully. 9

I disconnected the ECU from the main wire harness. To prevent damaging the ECU, while cutting and soldering a few wires.

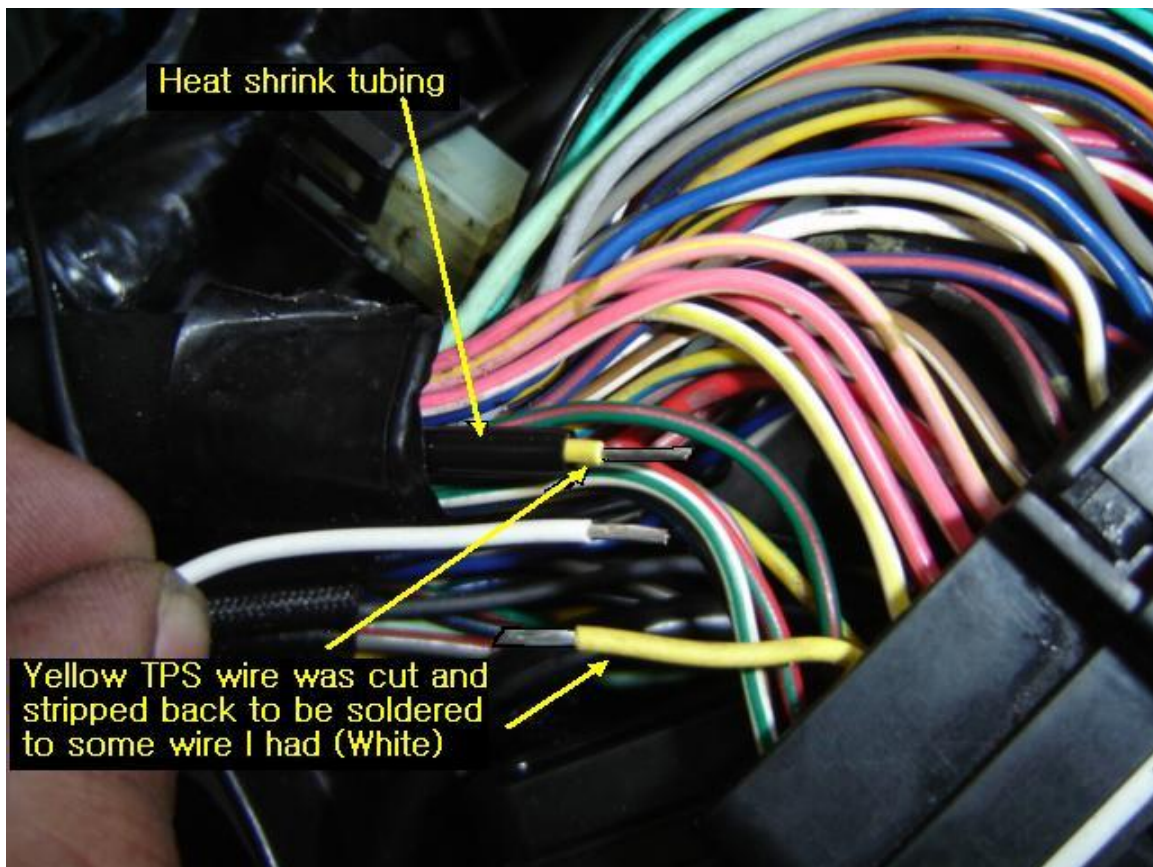
I located the Yellow TPS wire that needed hooked up to the Grey PCIII wire.



This corrective mod has been successfully applied by many rswarrior.com members 10
however as with all mods you proceed at your own risk so read carefully.



I cut the Yellow wire a few inches from the connector, and stripped the ends



This corrective mod has been successfully applied by many rswarrior.com members 11
however as with all mods you proceed at your own risk so read carefully.

I then cut a piece (5 inches) of 18 gauge White wire from a spool (I didn't have Yellow wire). I slipped a few inches of heat shrink tubing over one of the Yellow wires and then proceeded to solder the two halves of the Yellow Wire with the White wire I had cut.

(is it possible to strip insulation from yellow wire without cutting the conductor, then solder connecting wire and heat-shrink?)

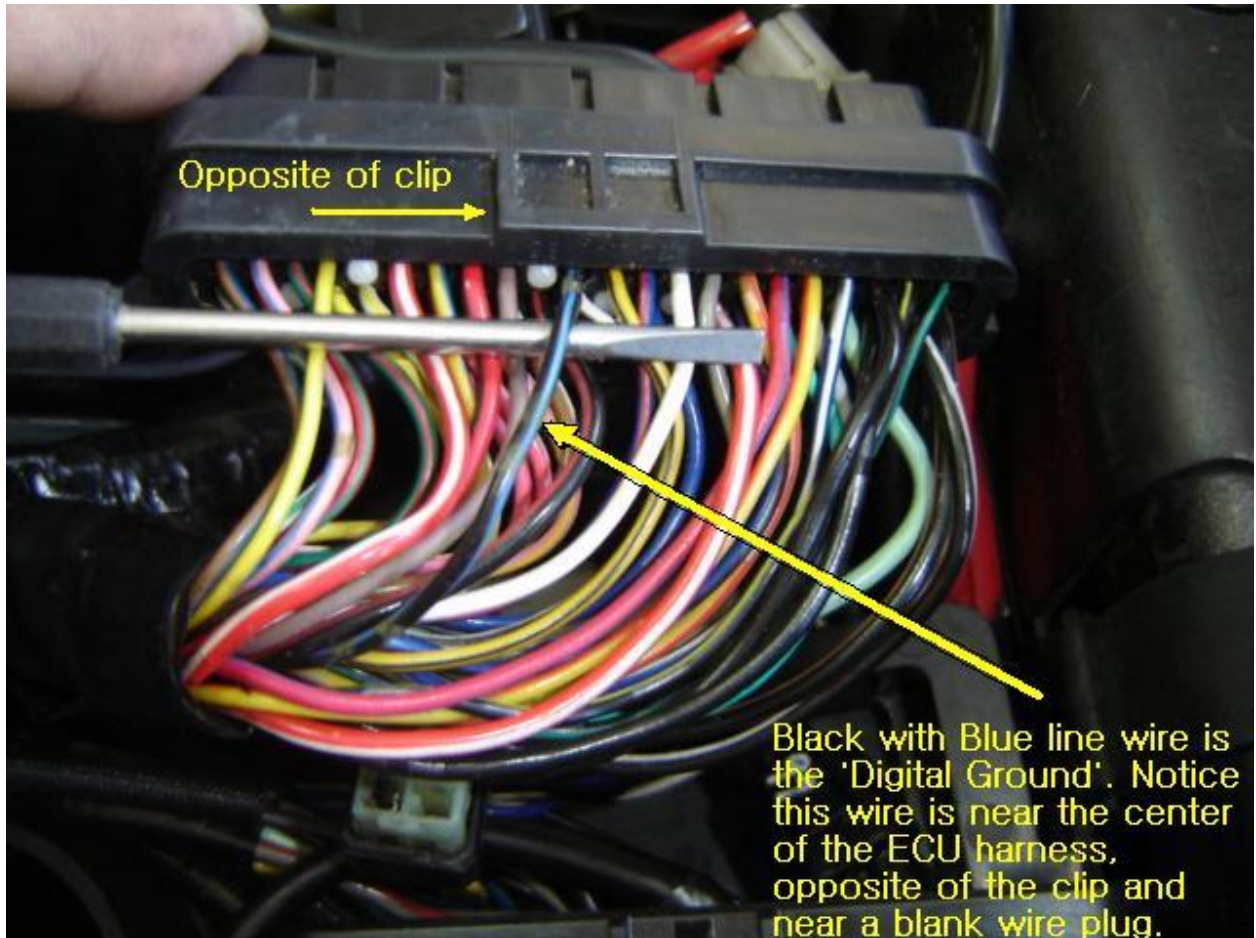


When I was satisfied with the solder joint, I slipped the heat shrink tubing over the joint and shrunk it down with a hair dryer and lighter.

(Is it beneficial to connect conductor so it exits the opposite side away from the harness clip – to make it easier to connect ECU to clip?)

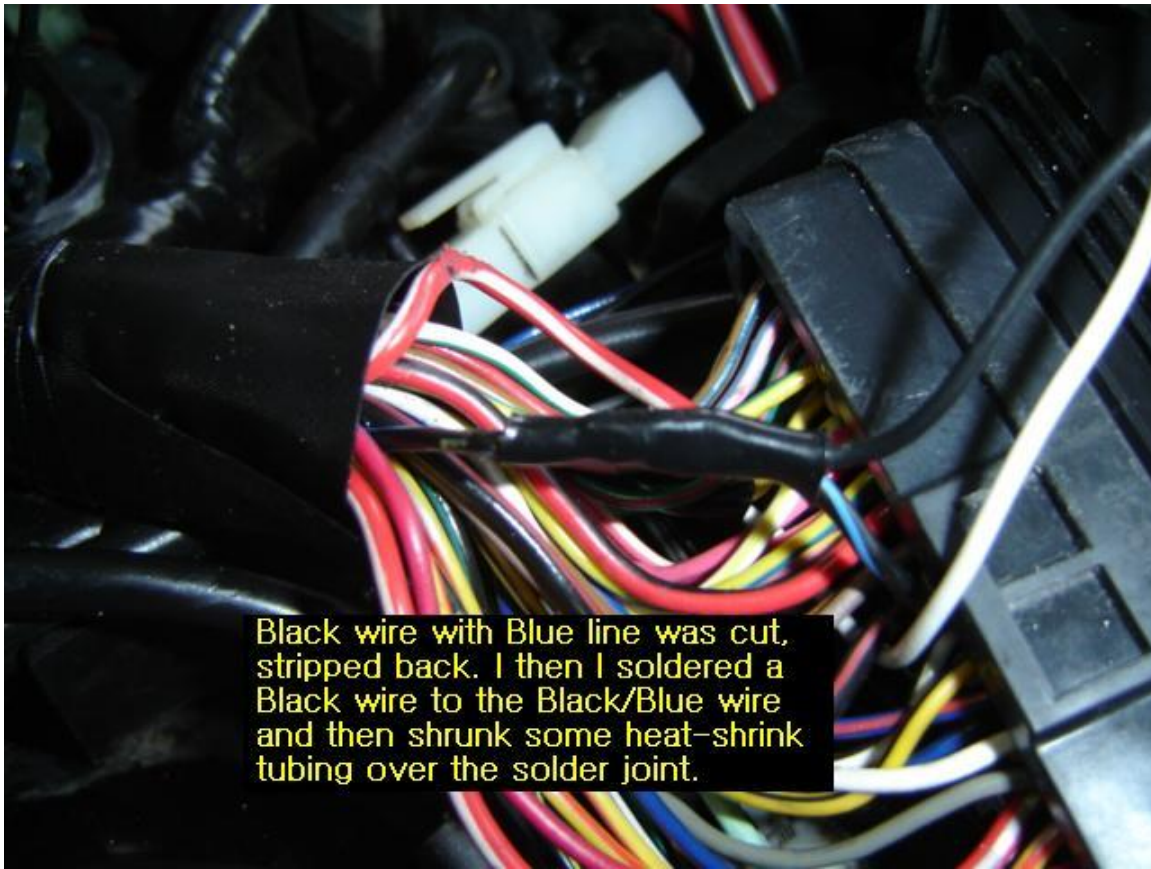
This corrective mod has been successfully applied by many rswarrior.com members 12
however as with all mods you proceed at your own risk so read carefully.

Locate the ECU's digital ground wire.



Its the Black/Blue-line wire on the other side of the connector from the Yellow TPS wire. It's near the center of the connector, near a wire plug.

This corrective mod has been successfully applied by many rswarrior.com members 13
however as with all mods you proceed at your own risk so read carefully.



I then cut the Black/Blue-line wire a few inches from the connector.

I stripped the ends off and cut a 5 inch long Black 18 gauge wire from a spool.

I slipped a piece of heat shrink tubing over one end of the Black/Blue-line.

I soldered the two halves of the Black/Blue-line wire with the Black wire.

I slipped the heat shrink tubing over the solder joint, and shrunk it down with a hair dryer and lighter.

This corrective mod has been successfully applied by many rswarrior.com members 14
however as with all mods you proceed at your own risk so read carefully.



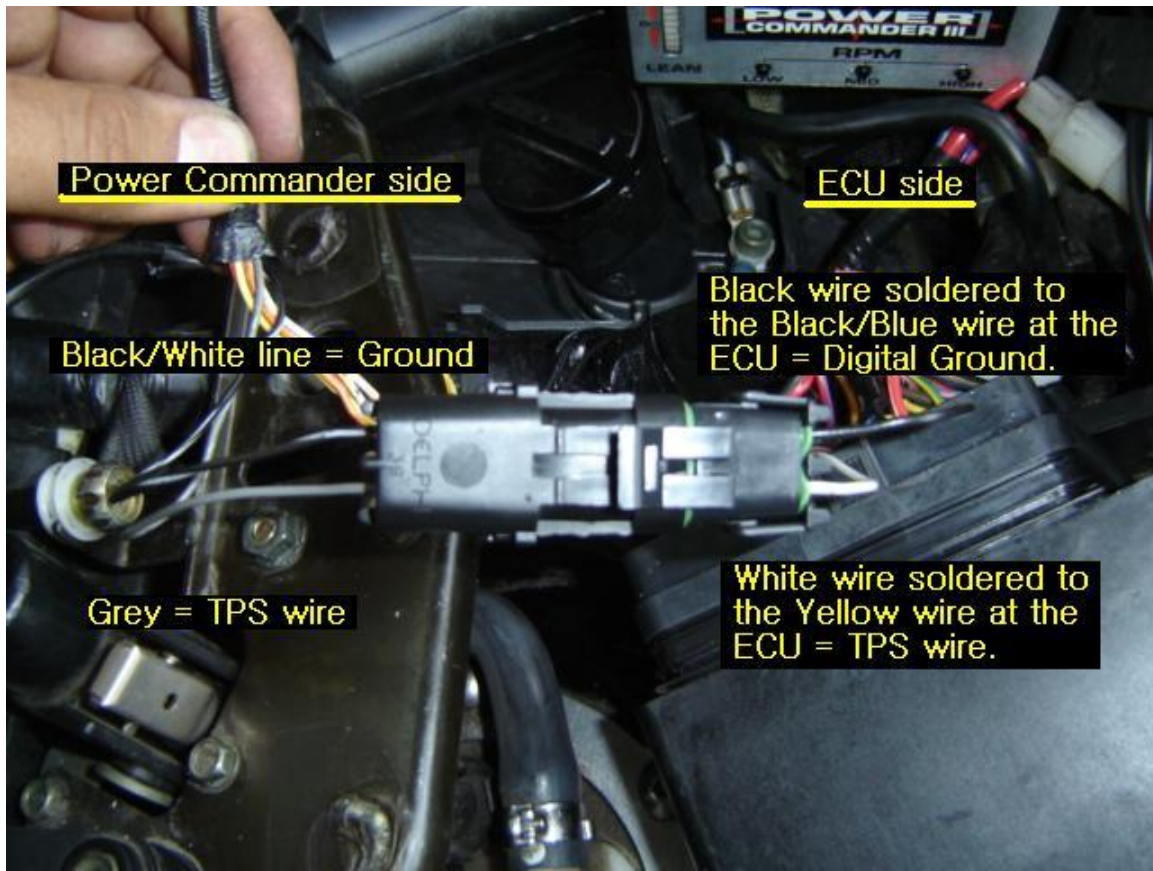
I stripped the ends of the two wires (solid Black and the solid White wire) that I had soldered to the Yellow and Black/Blue-line wires from the ECU connector.

I slipped the green grommets over the wires then crimped the terminals onto them.

I soldered the terminals to the wires. Then inserted the terminals onto the connector body.

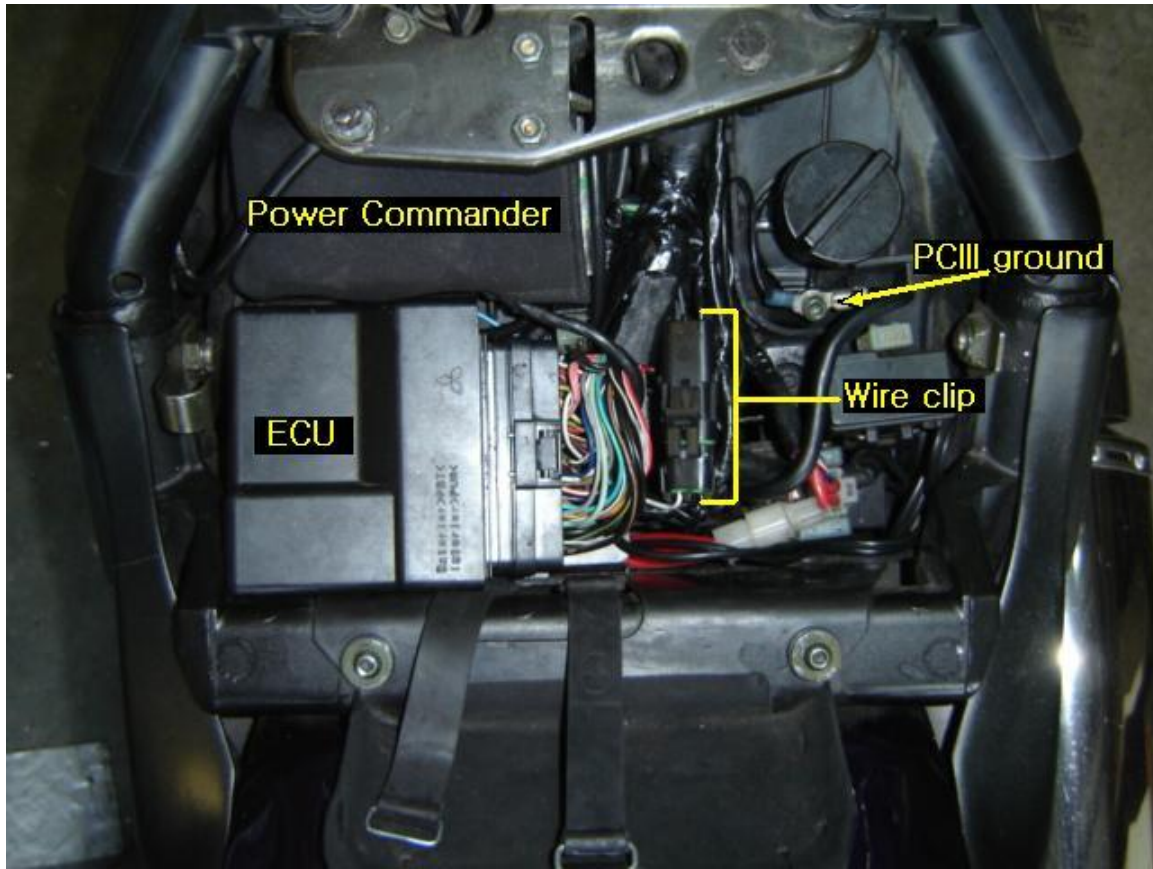
I had to make sure and match the correct colored wires into the connector body, to make sure they match up with the correct wires on the other connector. You don't want to cross the wires.

This corrective mod has been successfully applied by many rswarrior.com members 15
however as with all mods you proceed at your own risk so read carefully.



The 2nd photo shows the connector snapped together. I made sure that I had the correct ECU wires going to the correct corresponding wires from the PCIII.

This corrective mod has been successfully applied by many rswarrior.com members 16
however as with all mods you proceed at your own risk so read carefully.



All the components back in place. ECU & PCIII is plugged in. The PCIII in it's neoprene pouch, under the seat bracket. I put the foam cover over the components and strapped the ECU strap over the cover & ECU.

After doing this mod, it's recommended that you recalibrate the throttle position in the Power Commander software.

- compiled with permission of authors by -

ArizonaWarrior