

MC21 Wire Splice

Help - MC21 NSR250 Wire Splice

The MC21 is restricted in a couple of ways. The first and most significant is a by way of retarding the ignition timing at high rpm. This allows the motor to rev, but kills the power flat.

The second restriction is by way of the gear position sensor (GPS), which sends a message to the PGMIII unit telling it which gear is selected, and then the appropriate ignition curve map is used. The maps used for the top three gears are somewhat retarded, so not really what is needed for good power.

Here's how it's done:

To bypass the first (main) restriction, the method is as follows:

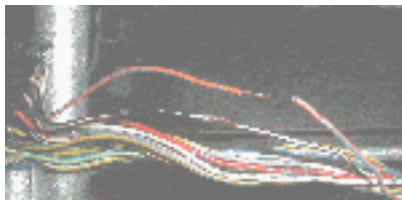
Make sure that the ignition is switched OFF and the battery is disconnected. Now, remove the seat unit and take a close look at the black connector that plugs into the PGMIII unit. You'll see a bunch of wires running into it, but it is the orange with blue stripe wire only that we are concerned with. As standard, this wire runs to earth, but what we need to do is reconnect this wire to send 12V power into the box

Unplug the connectors and remove the insulation from the PGMIII connectors for about 150mm. Find the O/Bu wire and the 12V BI/W wire and separate from the rest of the wires. These are the only two wires that concern us for now.

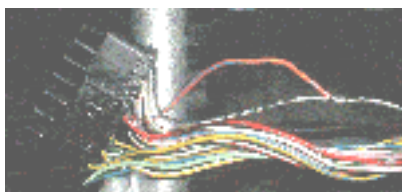


Now, cut the O/Bu wire about 50~60mm away from the black connector, and strip about 5~10mm of insulation from the O/Bu wire that runs into the PGMIII as we now need to connect this to a 12V power source.

The 12V power can be taken from a number of sources, but the most convenient is the black with white stripe wire that also runs into the black connector of the PGMIII unit. Strip 5~10mm of insulation from the BI/W wire about 50mm away from the connector. **DO NOT CUT THE WIRE.**



Now, solder the O/Bu wire to the BI/ W wire, so sending 12V up the O/Bu wire and into the PGMIII.



Insulate the soldered joint well with electrical tape, and also insulate the cut end of the O/Bu that

runs away into the harness.

Wrap the whole thing back up in electrical tape and re-connect the PGMIII.



Job done. Enjoy extra power at high rpm.

The second trick is to fool the PGMIII unit into thinking that it only gets into third gear. This is done by rewiring the GPS wires so that the 1st, 2nd and third gear wires are unchanged, but 4th, 5th and 6th are re-routed into third gear, so keeping the aggressive ignition curve of third through the top three gears (more power). Picture's coming soon.

Here's how it's done:

The wires from the GPS are colour coded as follow:

Lt Gr/Pk - 1st

Lt Gr/R - Neutral

Lt Gr/Br - 2nd

Lt Gr/Gr - 3rd

Lt Gr/Y - 4th

Lt Gr/Bl - 5th

Lt Gr/W - 6th

Snip the wires for 4th, 5th and 6th, and then solder these three wires from the GPS to the 3rd gear wire. Do not cut the third gear wire, just remove 10mm or so of insulation. Individually insulate the 4th, 5th and 6th gear wires that run into the PGMIII as these now serve no purpose. Insulate the soldered up joint, and that's it.

Reconnect the battery, put the seat back on and away you go.

Some people have routed all the GPS wires into 1st gear, but I cannot recommend this for everyday use, as the very aggressive ignition mapping could result in engine damage with sustained high speed use.

With the above modifications performed, there may be a need for re-jetting, so a plug chop or two wouldn't hurt, before any full throttle abuse.

Please note that any alterations from the standard machines are not recommended by the manufacturer, and are strictly the owners responsibility. TYGA Performance will accept no responsibility whatsoever for any personal injury or machine damage incurred by such modifications.