CSC Encore TPMS/DCT Module Installation.
DCT Transmission
Honda Goldwing 2018-2024 Except 2021-Current European Models.

4/29/2025

The TPMS/DCT module has two purposes.

1. It permanently turns off the TPMS (Tire Pressure Monitoring System) light on the dash of the trike. **The low-pressure warning light and pressure display for the front wheel will continue to work as normal.** The rear wheel pressure display will permanently read 0 psi.

2. It corrects a rear wheel speed value discrepancy. This discrepancy may cause the motorcycle computer to mistime some DCT shifting events. Some Honda Goldwing motorcycles with the DCT automatic transmission are more sensitive to the Encore trike kit and may have problems with shifting out of first gear when accelerating rapidly.

Notes:
Adding this module to the Encore trike modifies critical electrical circuitry in the Honda wire harness. If not done correctly it can cause the motorcycle to not start or run. Therefore, these instructions must be followed exactly as they are shown below.

If this module were to fail it can be bypassed by simply unplugging the CSC wire harness from the "active" connector on the module and then plugging back into the "passive" connector on the module. This returns all electrical functions back to OEM Honda specs.

When your motorcycle was converted to a trike, the functionality of the rear tire pressure monitor was disabled. Please check your rear tire pressures on a regular basis. Recommended tire pressures for typical riding loads is as follows: 215/45-17 tires: 25psi, 205/55-16 tires: 27psi.

Installation Procedure:

1. Check to make sure trike has a 27-tooth rear wheel speed pulsar ring. (Park Brake Rotor) If it has a 28-tooth ring (uncommon) then this must be changed for a 27-tooth ring. See separate instructions for how to change this ring.
2. Remove left side (battery) cover, right side cover and trike seat.
3. Disconnect negative battery cable.
4. Remove left side lower fairing, left side mirror, and raise left side of shelter cover for access to the motorcycle ECM per Honda instructions.
5. Place and route the CSC wire harness. Route the blue and yellow wire pairs with the single purple wire up towards the motorcycle ECM.
6. Find the CAN BUS junction connector under the seat. (picture 1)
7. Remove covering around the wire harness coming out of connector and expose the wires.
8. Identify the correct red and white wires (picture 2,) and cut them approximately in the middle of the exposed section or wherever allows for the most access for splicing.
9. Connect the wires (red/black stripe and white/black stripe) from the CSC harness to the OEM Honda wire harness corresponding color wires (red/black to red and white/black to white). Use lineman's splice (picture 7) and heat

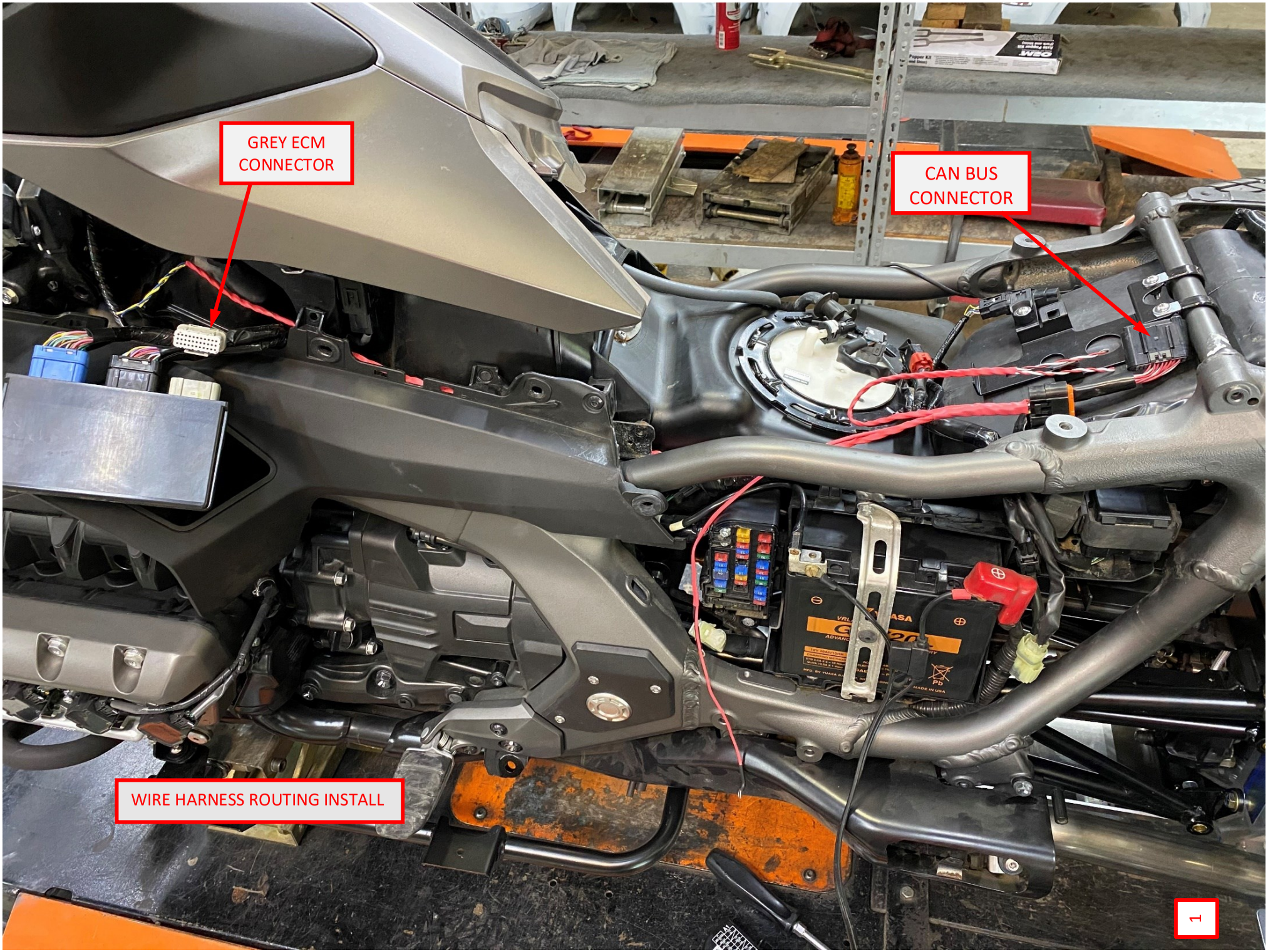
shrink/solder supplied connectors. **Do not use any other type of connector**. Use included aluminum sheet for a heat shield while shrinking connector if required. **Be careful not to melt OEM wire insulation.**

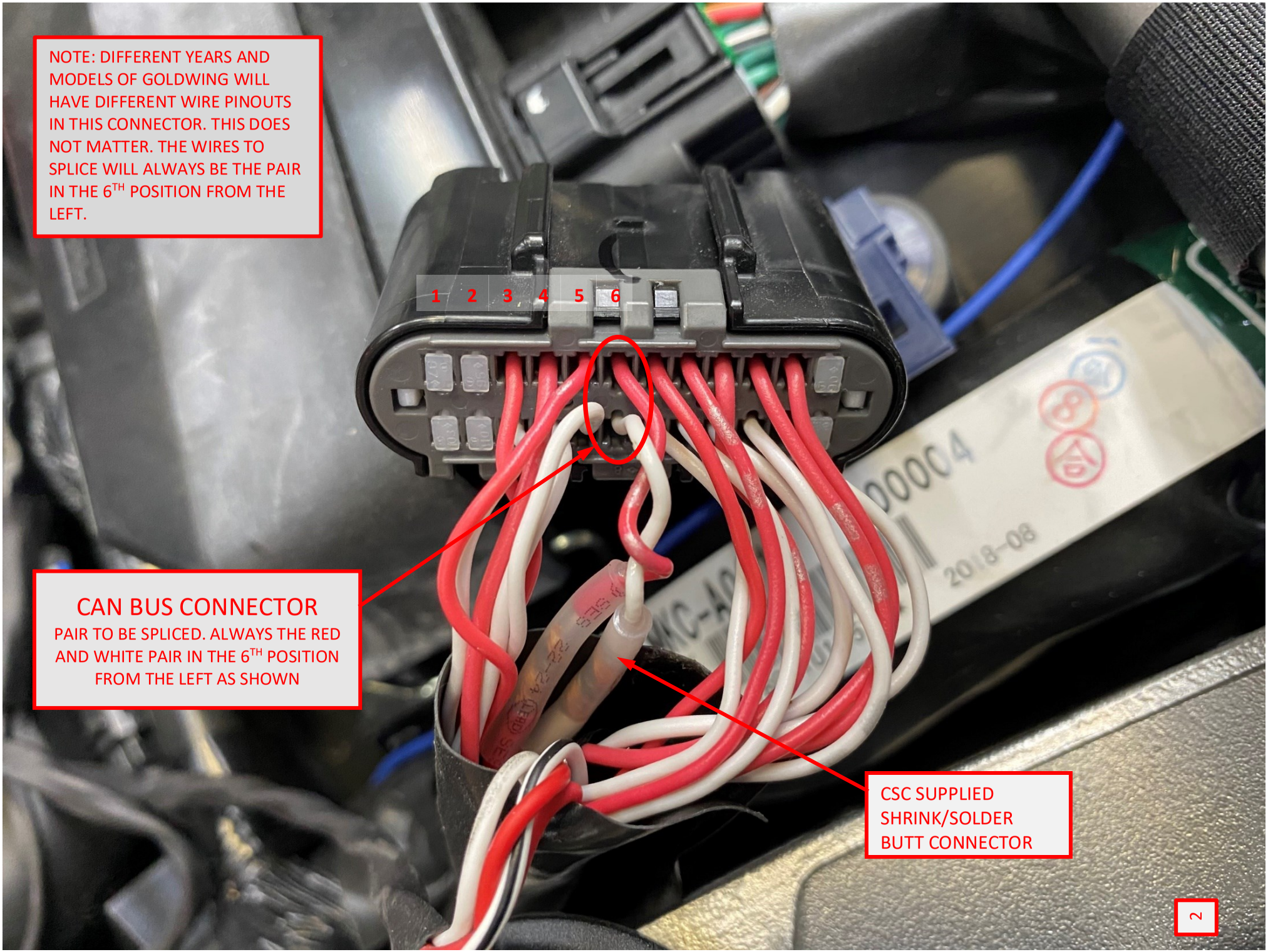
10. Connect the wires (red and white) from the CSC harness to the OEM Honda connector corresponding color wires. Use lineman's splice and heat shrink/solder supplied connectors. **Do not use any other type of connector**. Use included aluminum sheet for a heat shield while shrinking connector if required. **Be careful not to melt OEM wire insulation.**
11. Replace all wire covering, add tape if necessary and reattach connector.
12. Find the grey ECM connector (picture 1).
13. Identify the correct blue and yellow wires (picture 3) and cut them approximately in the middle of the exposed section or wherever allows for the most access for splicing.
14. Connect the wires from the CSC harness (blue/white stripe and yellow/white stripe) to the OEM Honda wire harness corresponding color wires (blue/white to blue and yellow/white to yellow). Use lineman's splice and heat shrink/solder supplied connectors. **Do not use any other type of connector**. Use included aluminum sheet for a heat shield while shrinking connector if required. **Be careful not to melt OEM wire insulation.**
15. Connect the wires from the CSC harness (blue and yellow) to the OEM Honda connector corresponding color wires. Use lineman's splice and heat shrink/solder supplied connectors. **Do not use any other type of connector**. Use included aluminum sheet for a heat shield while shrinking connector if required. **Be careful not to melt OEM wire insulation.**
16. **Find the red wire with blue tracer in the same grey ECM connector (picture 3). Strip insulation from the middle of this wire, do not cut wire. Splice single purple wire (CSC harness) into the red/blue Honda wire using a solder joint.**
17. Replace all wire covering and add electrical tape where necessary.
18. Remove trike fuse box (picture 4) and rear cover. (picture 5)
19. Install wires with ring terminals (red 12V switched and black ground) into fuse box. (picture 6)
20. Route harness along with OEM wires out of fuse box and reassemble and reinstall fuse box.
21. Plug TPMS/DCT module into CSC harness on the "passive" side and temporarily place module.
22. Reattach negative battery cable.
23. Start trike and verify all dash indicators work and transmission notifications are present. If functioning correctly the transmission indicator will read " N Tour ". If not functioning correctly the indicator will read " --**** "
24. Turn off trike.
25. Reconnect CSC harness to "active" side of module. Permanently place module (picture 8).
26. Start trike to test for TPMS rear tire pressure (should indicate "0") and correct transmission notification.
27. Replace all body parts and seat.
28. Test ride trike.
29. Finished.

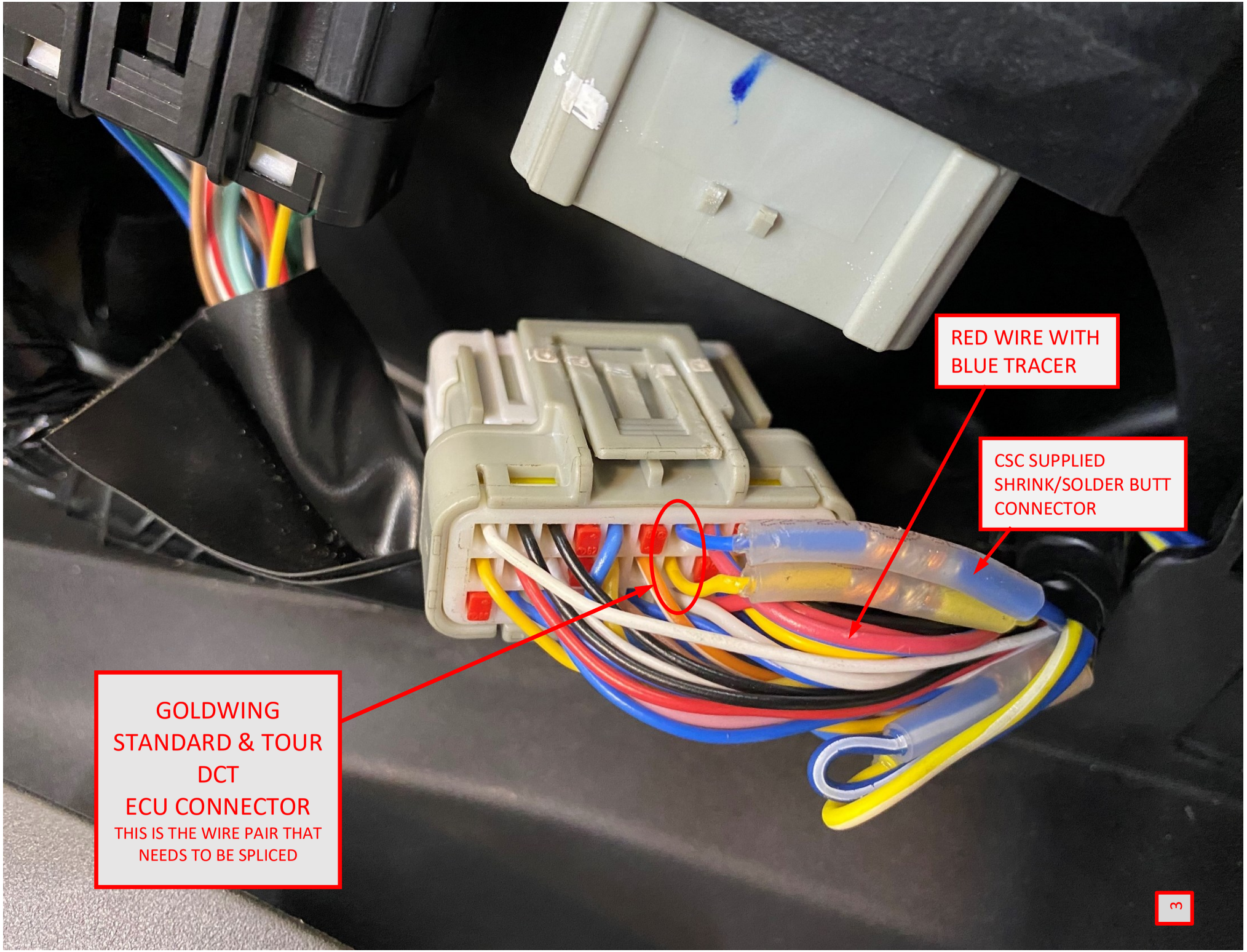
Enjoy the Ride!

Items included in upgrade kit.

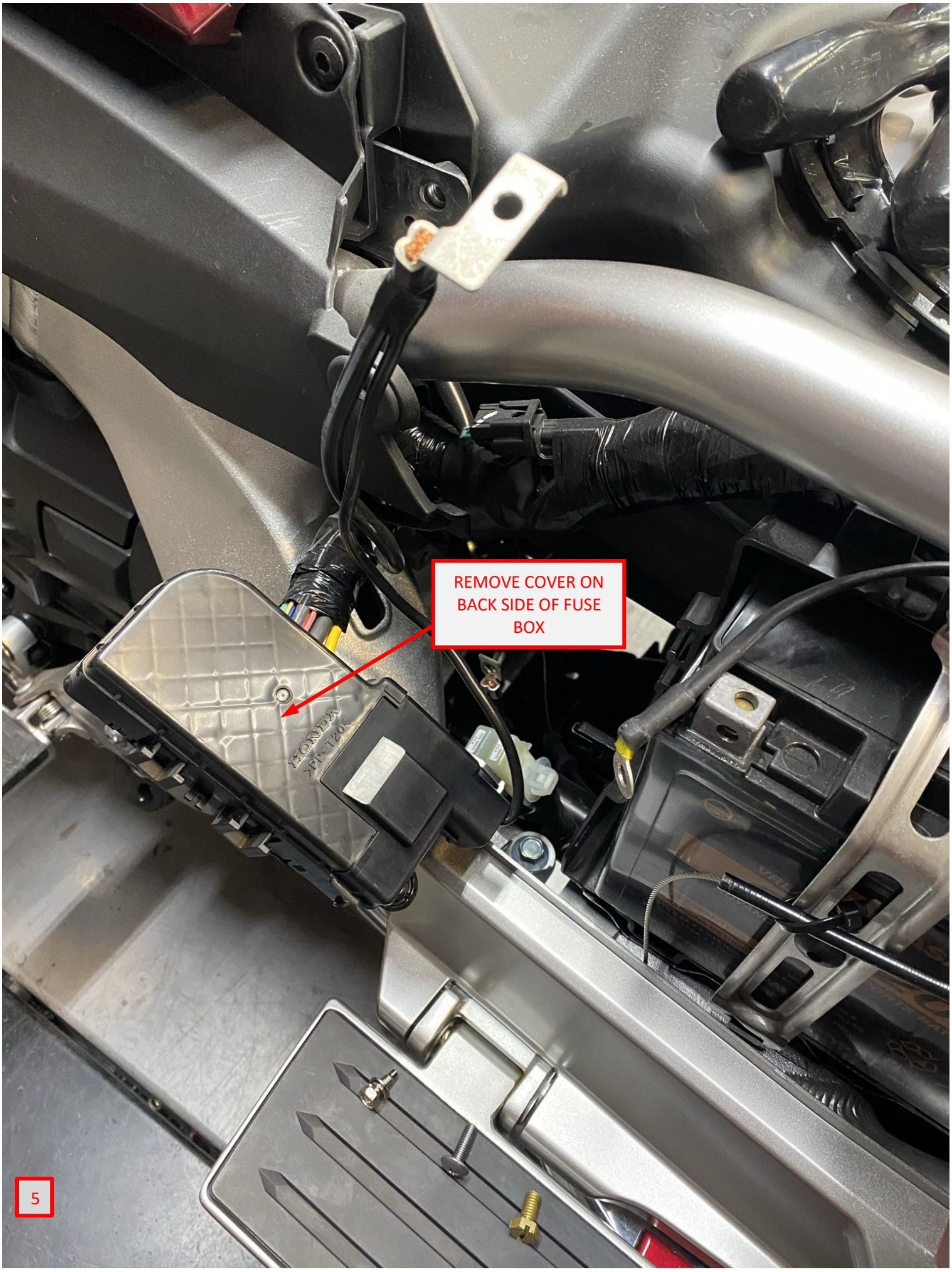
(1) TPMS/DCT Module (ELC-20501)
(1) Wire Harness (ELC-48341)
(10) Solder/Shrink Splice Connectors (ELC-22903)
(5) Small Zip Ties
(5) Large Zip Ties
(1) Aluminum Sheet (BDY-0013)
(1) Hex Key Wrench 6mm

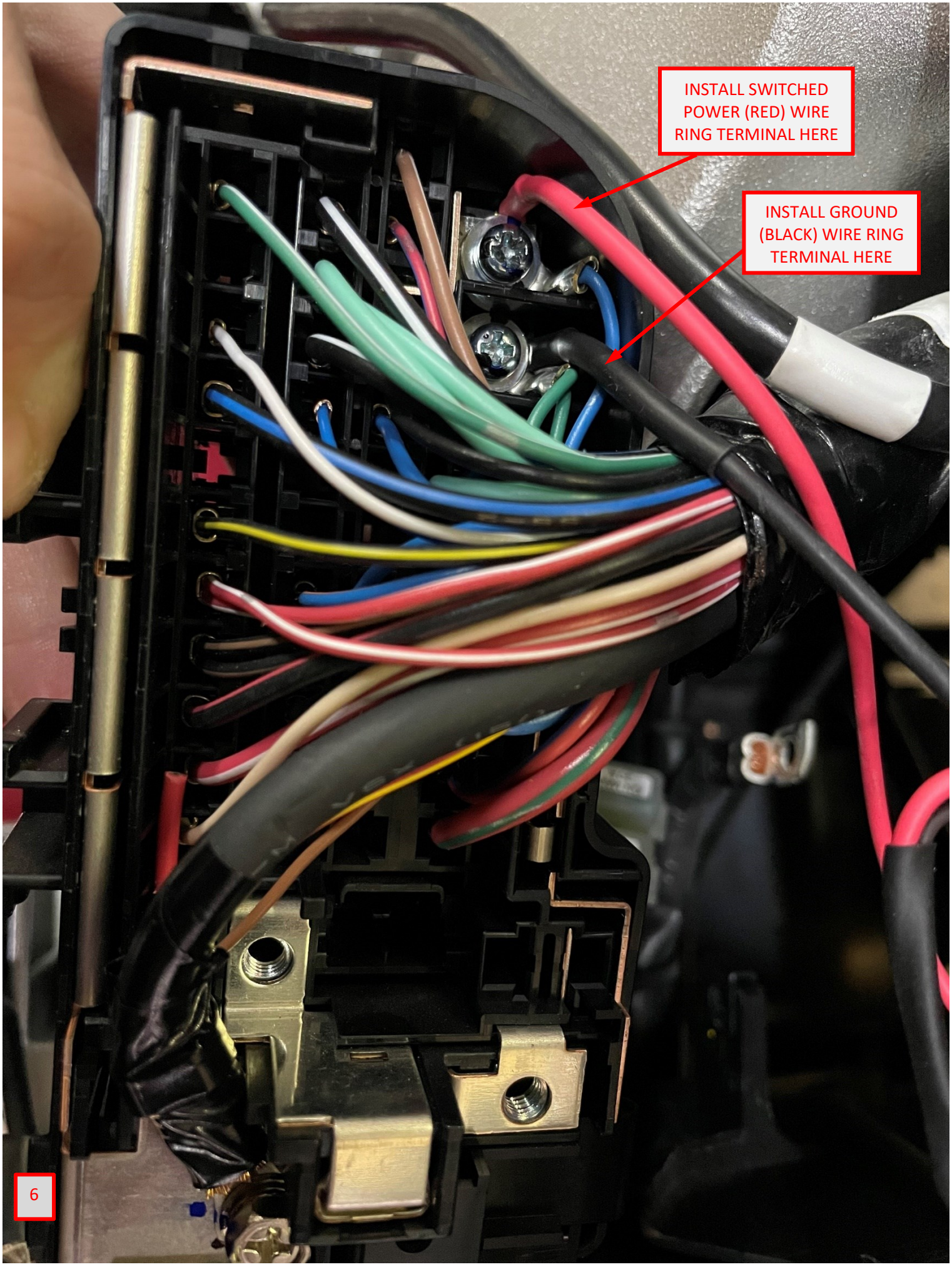

GREY ECM CONNECTOR
CAN BUS CONNECTOR
WIRE HARNESS ROUTING INSTALL


NOTE: DIFFERENT YEARS AND MODELS OF GOLDWING WILL HAVE DIFFERENT WIRE PINOUTS IN THIS CONNECTOR. THIS DOES NOT MATTER. THE WIRES TO SPLICE WILL ALWAYS BE THE PAIR IN THE 6TH POSITION FROM THE LEFT.
1 2 3 4 5 6
CAN BUS CONNECTOR
PAIR TO BE SPLICED. ALWAYS THE RED AND WHITE PAIR IN THE 6TH POSITION FROM THE LEFT AS SHOWN
CSC SUPPLIED SHRINK/SOLDER BUTT CONNECTOR

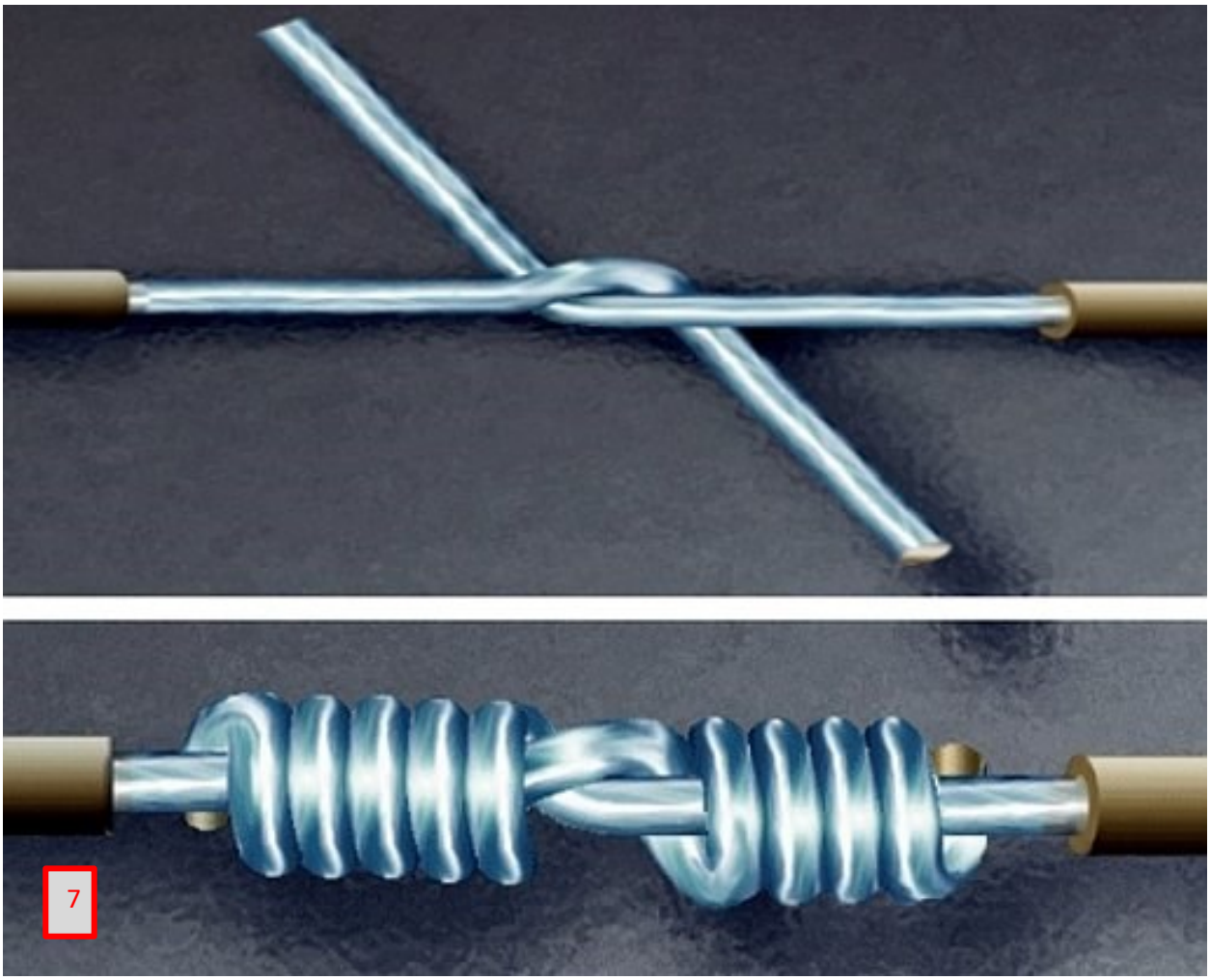

RED WIRE WITH
BLUE TRACER
CSC SUPPLIED
SHRINK/SOLDER BUTT
CONNECTOR
GOLDWING
STANDARD & TOUR
DCT
ECU CONNECTOR
THIS IS THE WIRE PAIR THAT
NEEDS TO BE SPLICED

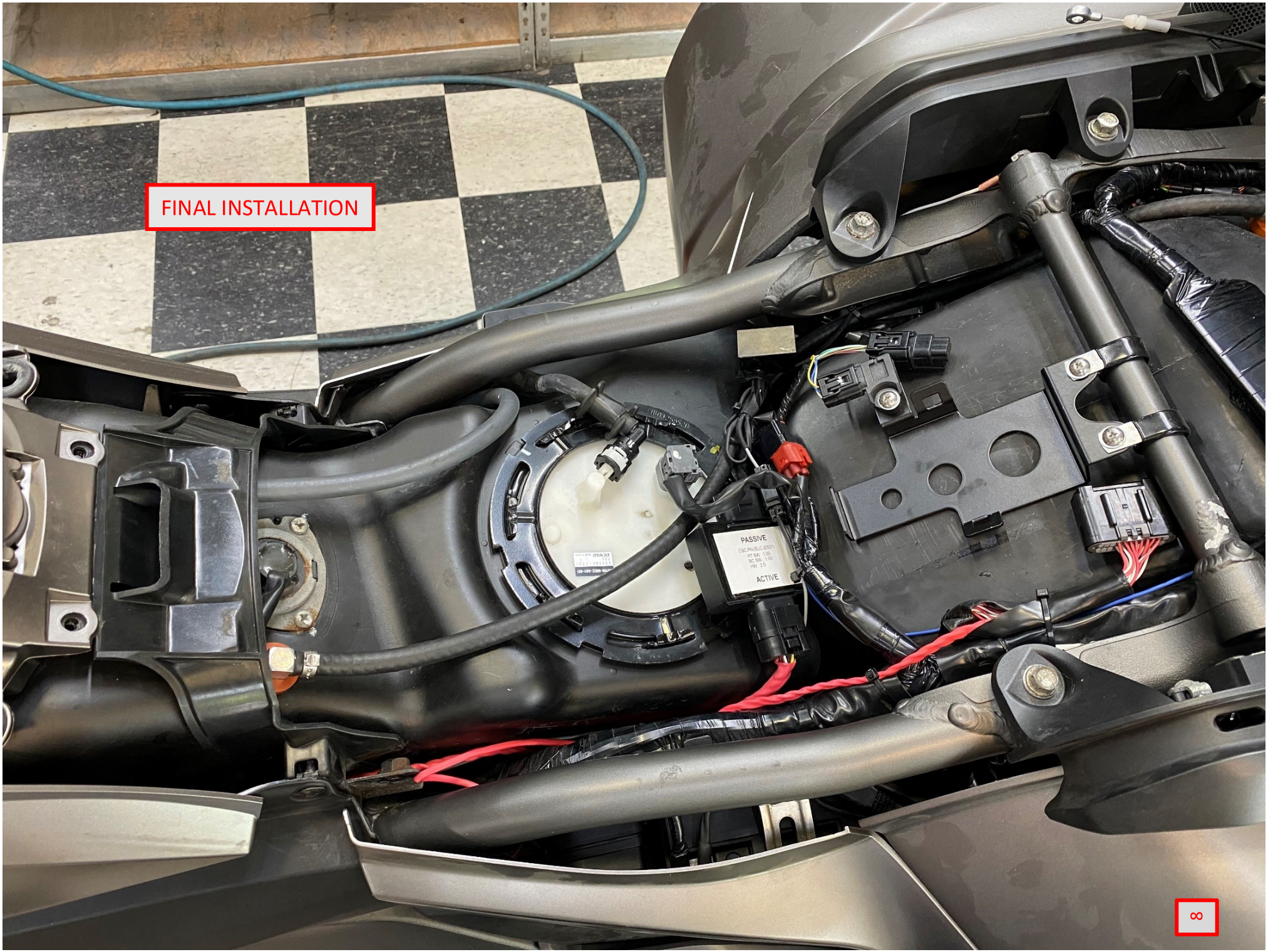

REMOVE SCREWS TO GAIN ACCESS TO BACK SIDE OF FUSE BOX
UNCLIP FUSE HOLDERS
IGN MAIN 30A
ACC MAIN 20A

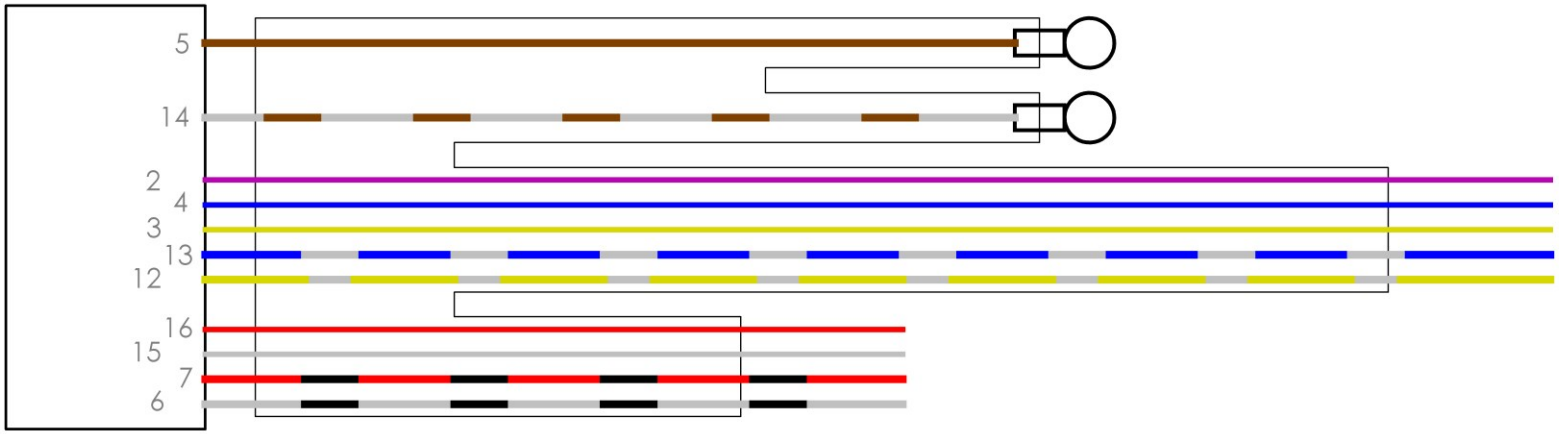

REMOVE COVER ON BACK SIDE OF FUSE BOX
HONDA
7PP-T20


INSTALL SWITCHED POWER (RED) WIRE RING TERMINAL HERE
INSTALL GROUND (BLACK) WIRE RING TERMINAL HERE

Lineman’s Splice




FINAL INSTALLATION
PASSIVE
ACTIVE
∞



WIRE COLORS	
BROWN	12V SWITCHED (RED WIRE COVER)
PURPLE	12V ECM CONNECTOR
WHITE/BROWN	GROUND (BLACK WIRE COVER)
BLUE	ECM CONNECTOR
YELLOW	ECM CONNECTOR
BLUE/WHITE	WIRE HARNESS (TO TCM)
YELLOW/WHITE	WIRE HARNESS (TO TCM)
RED	BUS CONNECTOR
WHITE	BUS CONNECTOR
RED/BLACK	WIRE HARNESS (TO SCU)
WHITE/BLACK	WIRE HARNESS (TO SCU)

UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES. DO NOT SCALE DRAWING.
ALL THREAD FITS TO BE 2A (EXTERNAL) OR 2B (INTERNAL)

APPROVALS	DATE
DRAWN BY TODD WIGHTMAN	Nov 23, 2021
CHECK	
APPROVED	

TOLERANCES:	
DECIMAL: X.XXX ±	0.010
FRACTIONAL:	1/8

California Side Car inc.

100 MOTORCYCLE RUN, ARRINGTON, VA 22922

TITLE: WIRE HARNESS, DCT/TPMS MODULE, INT DIODE, ENCORE

SIZE	PART NUMBER	REV
A	ELC-24961	D

SCALE	VENDOR DRW NUMBER	SHEET
1:1	N/A	2 OF 2

TPMS/DCT Trouble Shooting Guide

1. CSC Service history has shown that 98% of all problems with the CSC DCT/TPMS module are wiring mistakes during installation. Triple check your wiring!

2. When the module is connected to the PASSIVE connector, it simply connects the wires back together that were cut during installation. It does nothing else. So, if you have cut the wrong wire pair, putting the module on PASSIVE will return the trike to OEM and it will work just like OEM. This indicates that you have done a good job on the wiring connections. However, it still won't work on ACTIVE. For example if the CSC solid Blue was connected to the Honda wire harness wire, and the CSC Blue/White was connected to the Honda ECM wire (opposite of how it is supposed to be installed).

3. Red and White wire pairs are for the TPMS circuit only. Blue and Yellow wire pairs are for the DCT circuit only.

4. Red covered eyelet (brown wire) is switched 12V power to the CSC module. Black covered eyelet (white with brown tracer wire) is Ground. The module cannot function in ACTIVE without a good power and ground. This can be checked at the CSC wire harness plug.

5. When the CSC module is connected to ACTIVE, the trike is turned on, and the REAR Tire pressure on the motorcyle dashboard pressure display shows "0" psi, the TPMS portion of the CSC module and wire harness are working correctly. If the dashboard shows "-" for rear tire pressure it is NOT working correctly.

6. When the CSC module is connected to ACTIVE, the trike is turned on, and the transmission indicator on the dash of the trike says "N Tour", the DCT portion of the module is working correctly. If the dash says "*****" or anything other than "NTour", the DCT portion of the module is NOT working correctly.

7. The TPMS portion of the module and the DCT portion of the module are completely separate electronics. One can function perfectly while the other does not.

8. If all electronic functions of the module seem to be working correctly but the trike still does not shift correcty when ridden, perform a clutch initialization procedure. If it still does not work, change the engine/transmission oil and both filters. Both of these things are proven to improve the shifting of the DCT transmission on both two wheel bikes and trikes.

9. Some aftermarket electrical accessories (such as add on voltmeters) are know to cause DCT issues, but this is rare. If all other methods have been exhausted to correct a DCT problem, try disconnecting the most likely accessories.

10. A bad or improperly installed CSC Reverse/Backup Light Detector module can cause DCT problems by changing the gear indicator sensor signal voltage to the Honda ECM. Simply unplug the connector with the grey and blue wires and ride the trike to test for this problem.

11. FYI different Goldwing motorcycles will respond to the CSC Encore trike kit differently. There seems to be a lot of DCT shifting varriability from trike to trike before the CSC module is installed. After the module is installed they all act and shift the same.