

PT V4 Installation - Royal Enfield Meteor 350

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Application information	PowerTRONIC V4
Vehicle	Royal Enfield
Model	Meteor /Classic /Hunter 350
Year of manufacture	2021-2023

Note:

- Read through all instructions before installation and use.
- Ensure that the bike is switched off and the key is out of the ignition before proceeding with the installation.
- Some parts of the bikes might be hot/sharp and may cause burns/cuts. Proceed with extreme caution or wait until the bike has cooled down. Always wear safety gloves.
- When the installation is complete, make sure to secure the wiring loom away from the movable parts or components which tends to heat up during the normal operation of the vehicle at any chance.
- PowerTRONIC is intended for motorsport use on a closed course, please check with your local laws before using this product. Race Dynamics / PowerTRONIC is not liable for consequences arising out of using the product.

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1. Parts list

1	PowerTRONIC	Piggyback ECU
2	Stock Coupler	Stand by unit <ul style="list-style-type: none"> • Can be connected in place of the PowerTRONIC to run the bike in stock mode if need be. • Used for the verification of the connections.
3	Harness	Bike specific harness contains the following connectors <ul style="list-style-type: none"> • Fuel injector connector • Spark/Ignition coil connector • Throttle position sensor connector (TPS) • Oxygen override cable • Map selection connector • Quickshifter connector • Ground terminal
4	USB cable	Can be used to connect the PowerTRONIC to a laptop for throttle calibration or changing the maps
5	Nylon Tags	To secure the wiring harness
6	User guide and Warranty card	Instructions

2. Tools required

Serial No	Main tools	Optional tools
1	M10, M8 Hexagonal socket	Spinner handle
2	6 mm Allen key	Ratchet handle
3	Wire cutter	Extension bar or Sliding T-bar

3. Installation procedure

3.1 Removing panels, and fairing

Begin at the right side of the bike.

Park the bike using the center stand on a level surface (Or a paddock stand).



3.1.1 Unlock the side panel. Refer to **Image 1**



Image 1

3.1.2. Detach the side panel. Refer to **Image 2**



Image 2

3.1.3 Locate the grab rail and pillion seat bolts. Refer to **Image 3**



Image 3

3.1.4 Using a 6 mm Allen key unscrew the bolts. Refer to **Image 4**

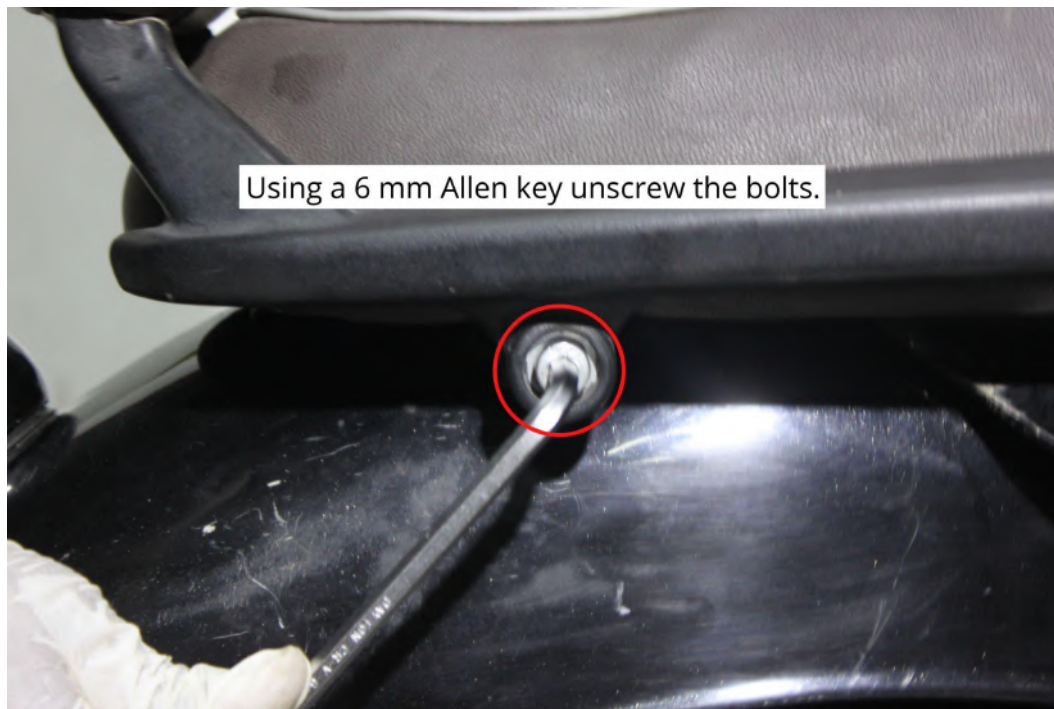


Image 4

3.1.5 Repeat the process on the other side.

3.1.6 Carefully detach the grab rail and the pillion seat.- Refer to **Image 5**.



Image 5

3.1.7 Locate the rider seat bolts. Refer to **Image 6**

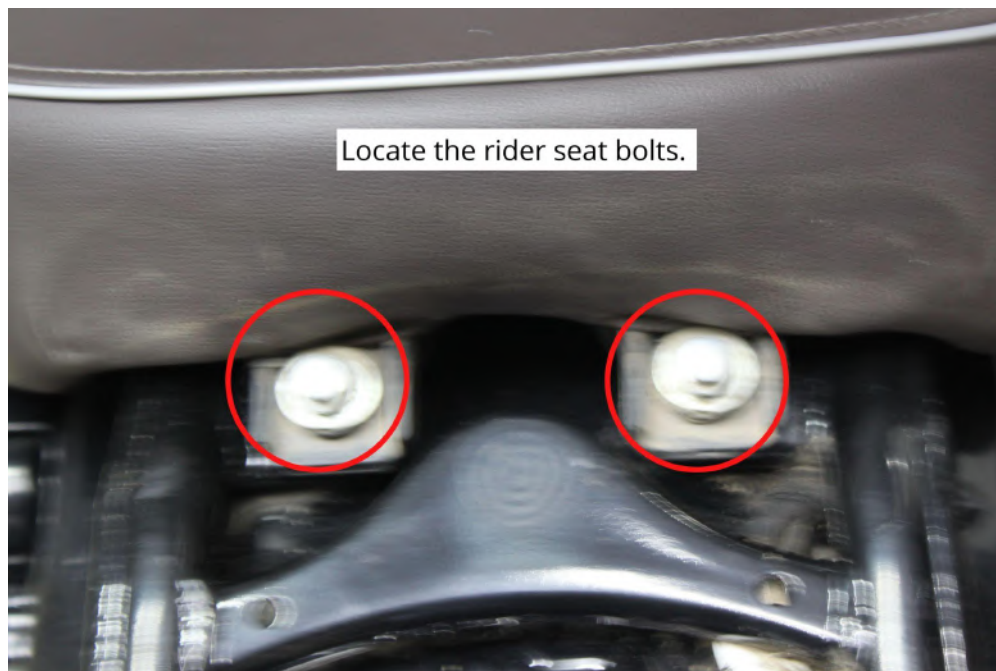


Image 6

3.1.8 Using a 10 T handle, unscrew the rider seat bolts. Refer to **Image 7**.

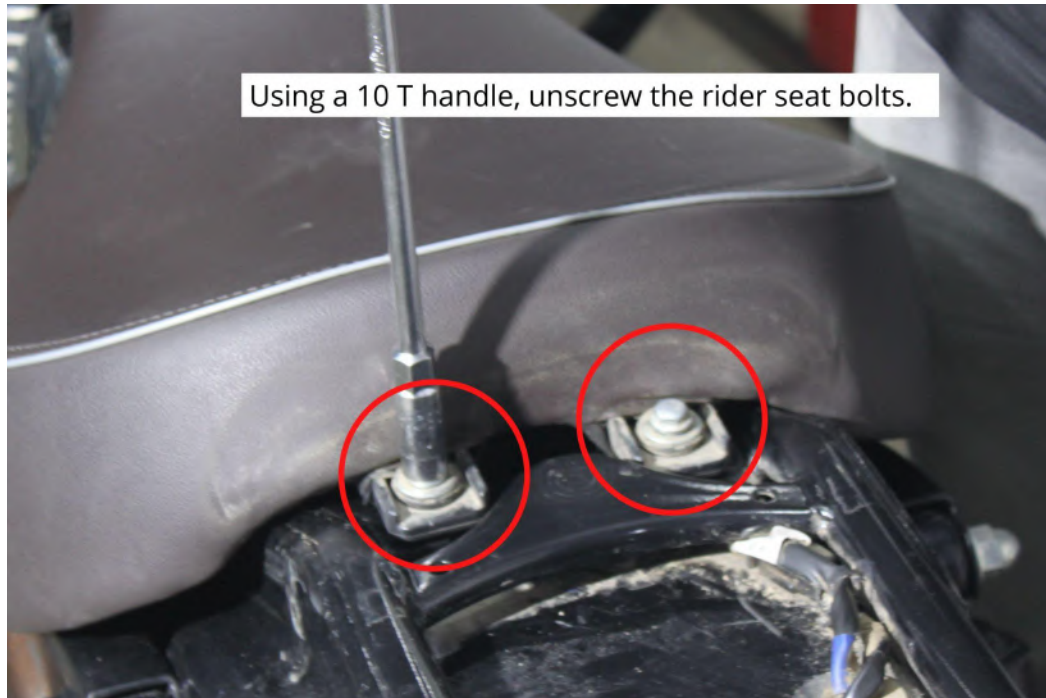


Image 7

3.1.9 Gently lift the rider seat. Refer to **Image 8**.



Image 8

3.1.10 Locate the tank rear mounting bolt. Refer to **Image 9**.



Image 9

3.1.11 Using 10 and 8 mm sockets unscrew the tank rear bolts. Refer to **Image 10**.

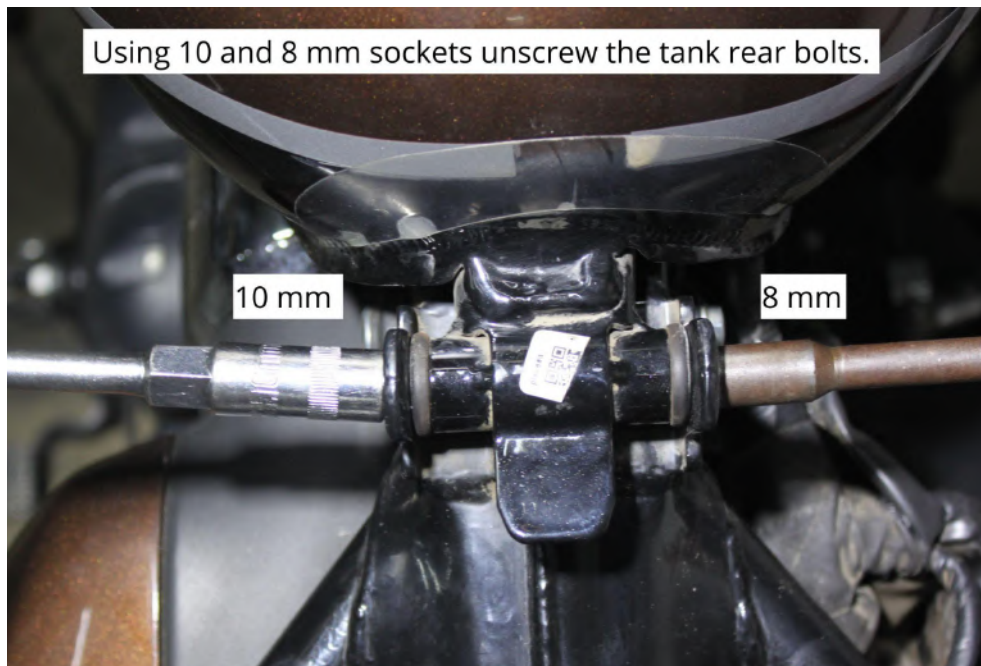


Image 10

3.1.12 Gently lift the rear end of the fuel tank and detach the vacuum hoses. Refer to **Image 11**.

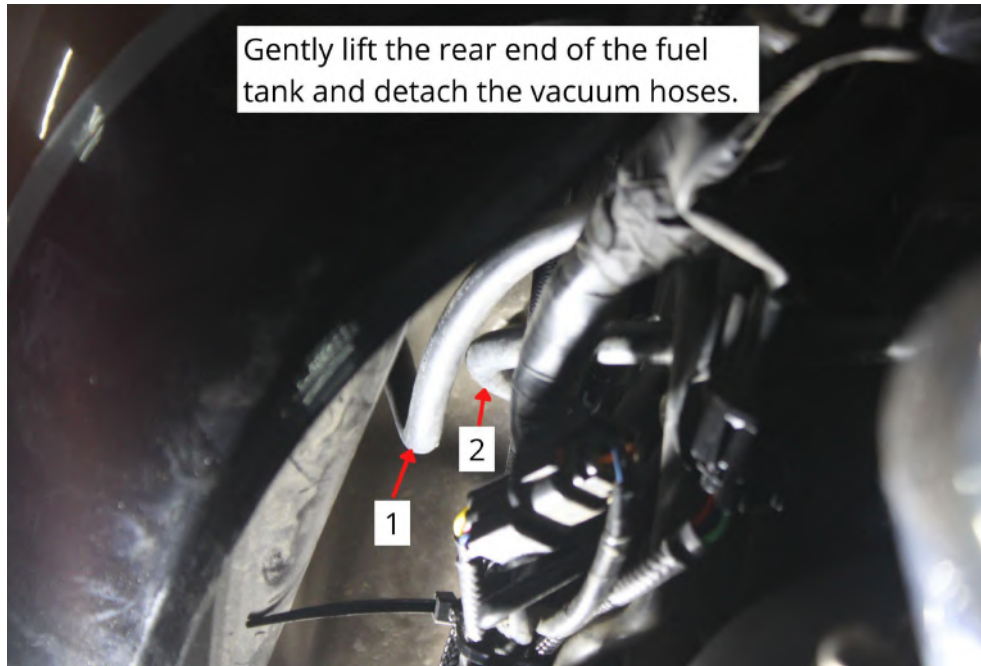


Image 11

3.1.13 Gently disconnect the fuel line from the left side of the fuel tank. Refer to **Image 12**.

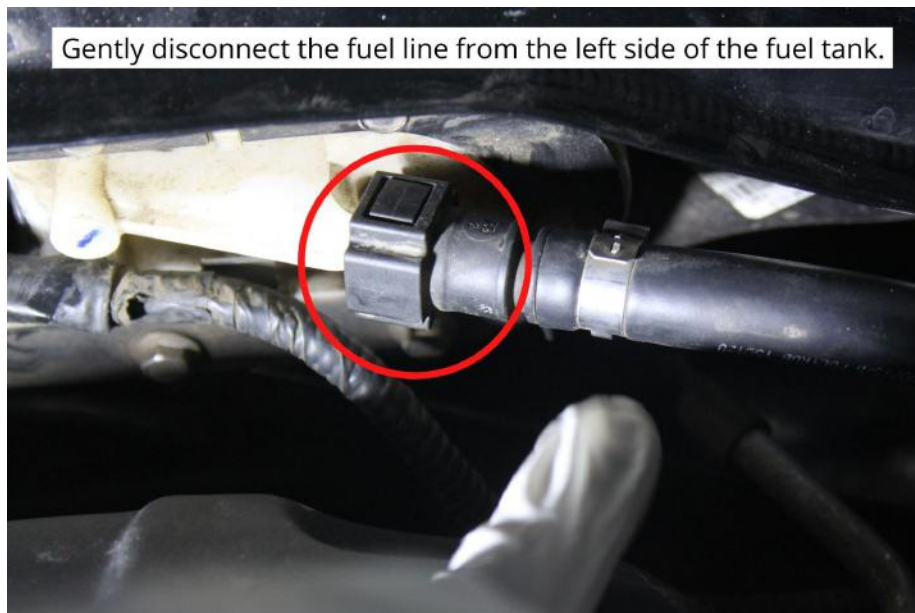


Image 12

3.1.14 Gently disconnect the fuel pump connector from the left side of the fuel tank. And gently detach the tank. Refer to **Image 13**

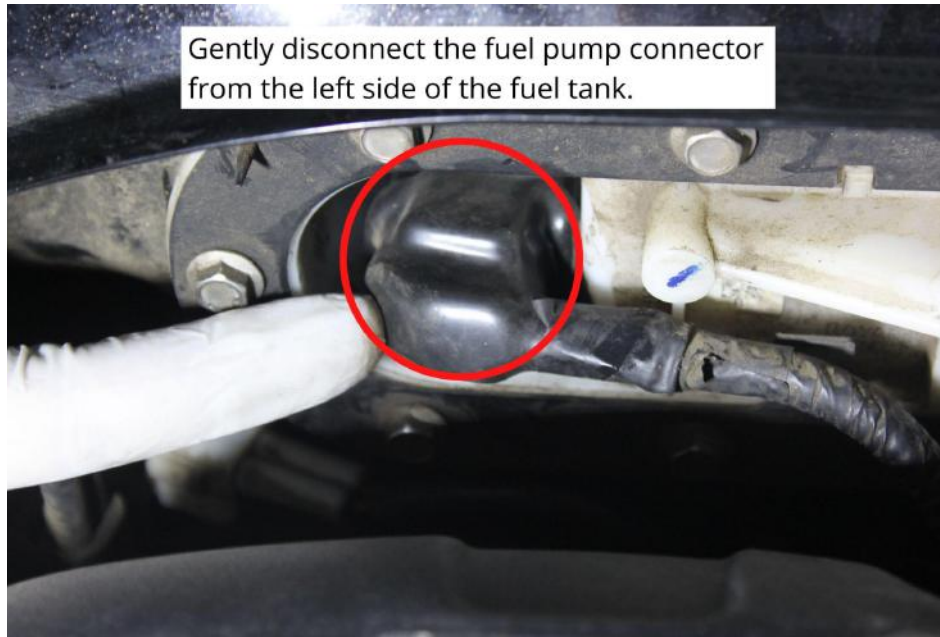


Image 13

3.2 Routing the harness

3.2.1 Starting from under the seat, route each connector terminal from in between the welded plate and the mudguard. Refer to **Image 14**.

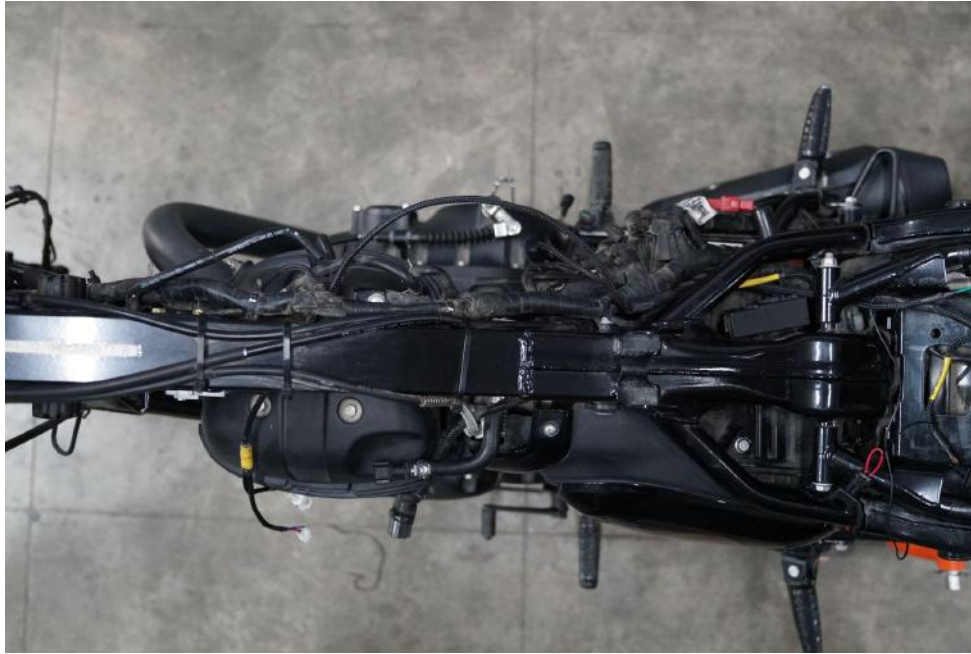


Image 14

3.2.2 Route the Spark connector (SPK) to their respective position. Refer **to Image 15**.



Image 15

3.2.3 Route the Injector connectors (INJ) to their respective position. Refer to Image 16.



Image 16

3.2.4 Route ground cable (GND) to the battery negative. Refer to Image 17



Image 17

3.3 Fuel Injector Connector (Left side of the bike)

3.3.1 Locate the stock injector connector of your bike. Refer the [Images 18](#) and [Image 19](#) below

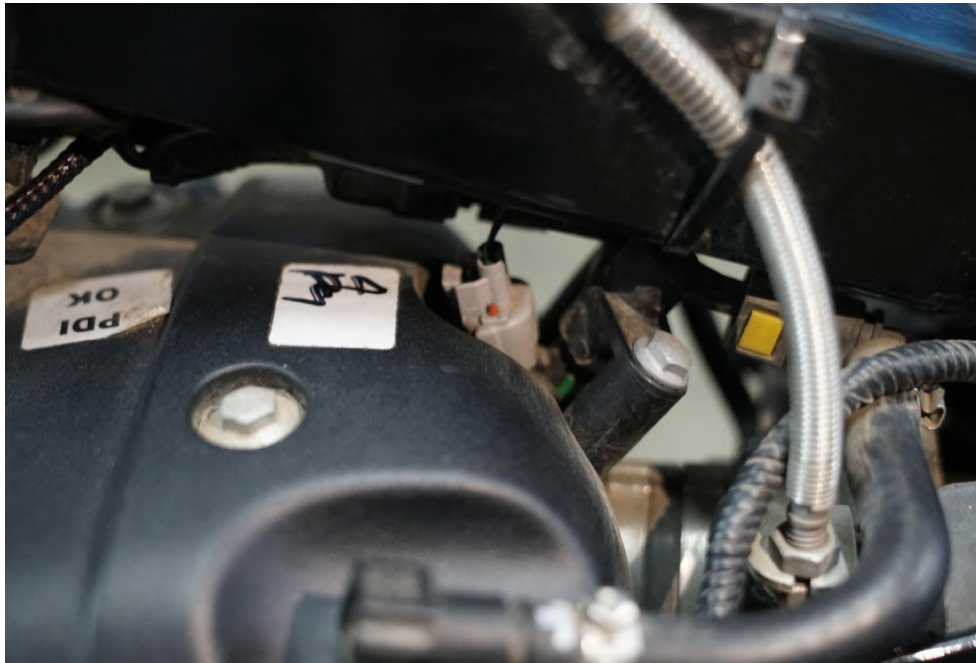


Image 18



Image 19

3.3.2 Identify the fuel injector connector in the PowerTRONIC wiring harness. The connectors are labeled 'INJ'

3.3.3 Disconnect the injector connector on your bike. Refer to the zoomed view ([Image 20](#)).



Image 20

3.3.4 Connect the female PowerTRONIC injector connector to the stock male injector connector. Refer to [Image 21](#).



Image 21

3.3.5 Connect the stock female injector connector to the PowerTRONIC male injector connector. Refer to **Image 22**.



Image 22

3.4 Ignition Coil Connector (Left side of the bike)

3.4.1 Locate the stock Spark/Ignition coil connector on the ignition coil, located right above the engine. Refer to **Images 23** and **24**.

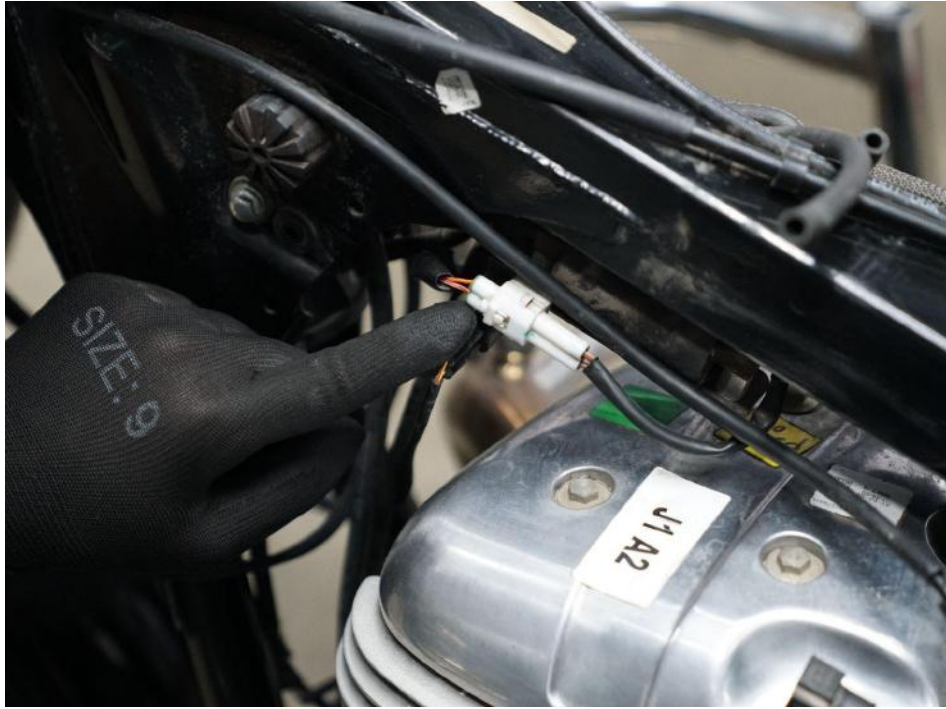


Image 23

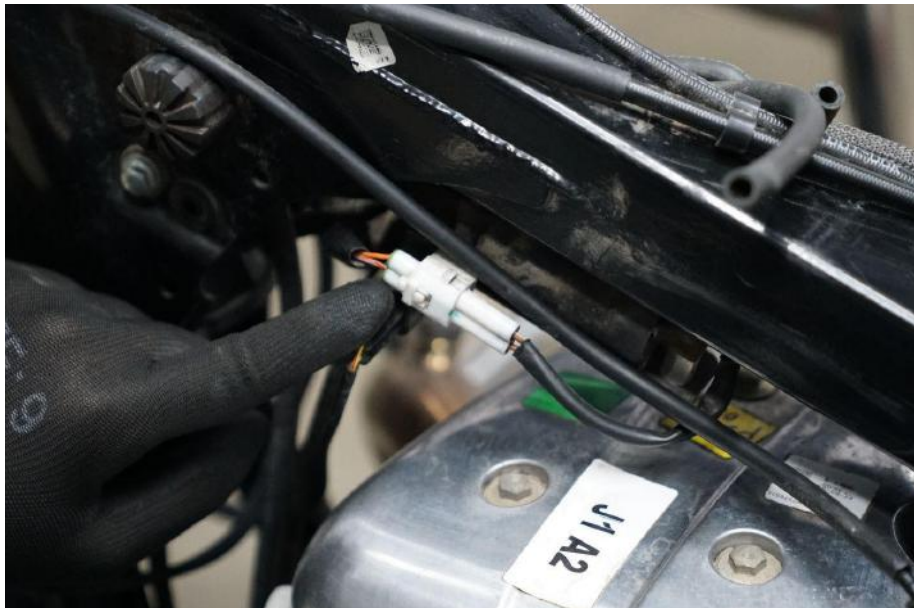


Image 24

3.4.2 Identify the Spark/Ignition coil connector in the PowerTRONIC wiring harness. The connectors are labeled 'SPK'. Refer to **Image 25**.



Image 25

3.4.3 Detach the stock ignition coil connectors. Refer to **Image 26**.

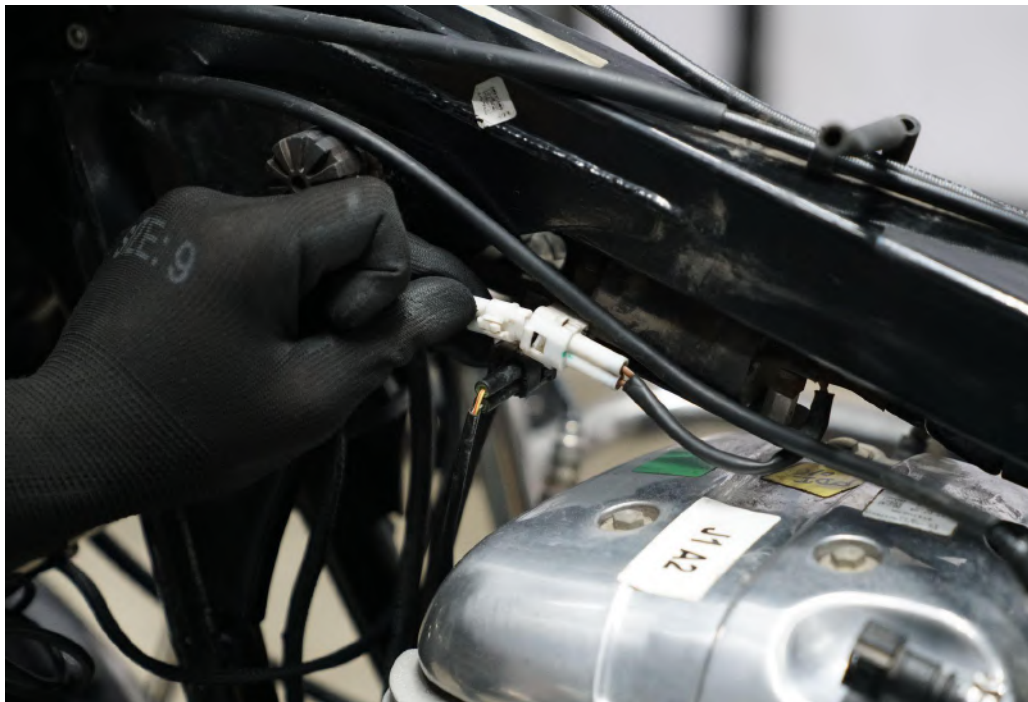


Image 26

3.4.4 Connect the PowerTRONIC Ignition coil male connector to the stock ignition coil female connector. Refer to **Image 27**.



Image 27

3.4.5 Connect the PowerTRONIC Ignition coil female connector to the stock ignition coil male connector. Refer to **Image 28** below.

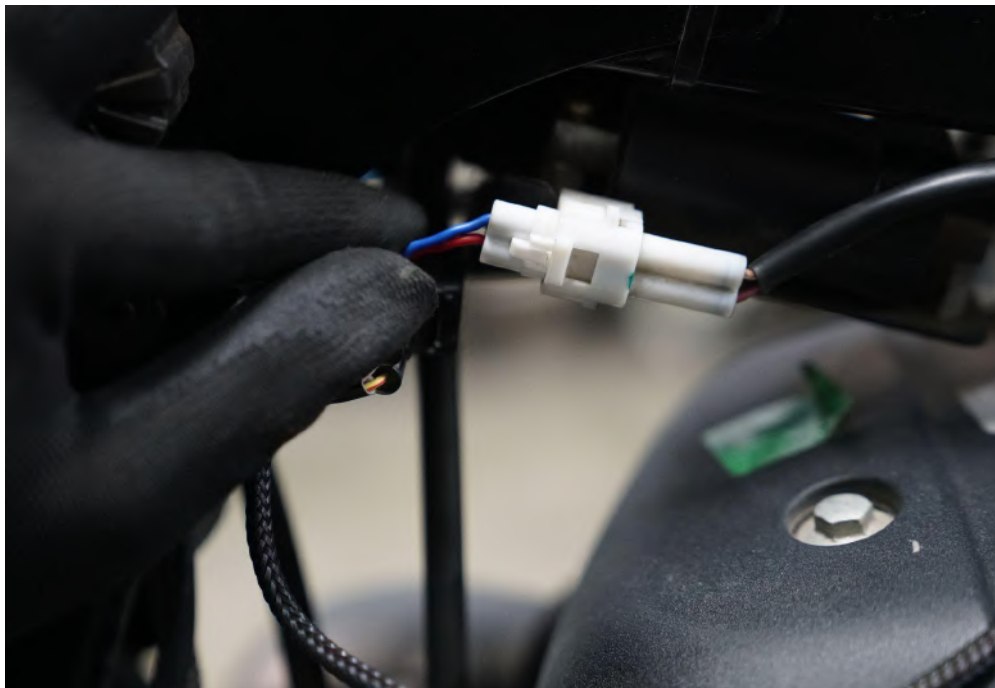


Image 28

3.4.6 Refer to **Image 29** for the completed view.



Image 29

3.5 Ground Terminal Connector (Right side of the bike)

3.5.1 Identify the Ground terminal connector labeled as GND and connect it to the negative terminal of the battery.
Refer the **Images 30** and **31** and **32**

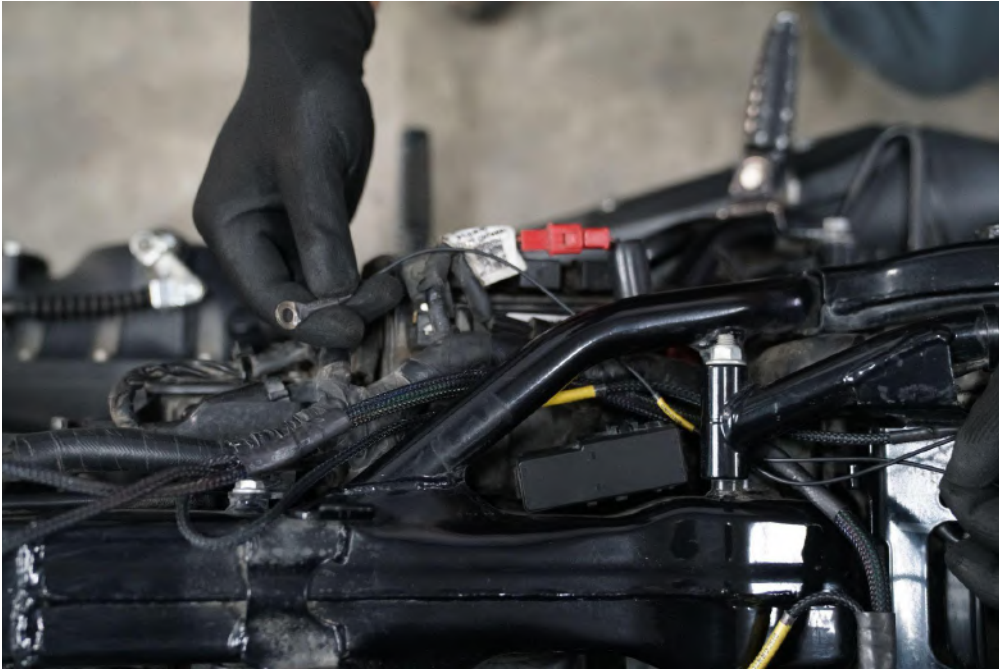


Image 30



Image 31



Image 32

3.6 Securing the harness using ties

3.6.1 Secure the harness away from hot moving/parts by attaching it to the chassis/frame using the zip ties provided wherever necessary. Refer the **Image 33**.



Image 33

3.7 Testing with the stock coupler

3.7.1 Attach the fuel tank.

3.7.2 You can verify the connections by attaching the stock coupler. Refer detailed Stock coupler test document.



Image 34

DO NOT proceed with the PowerTRONIC ECU without first verifying the connections with the stock coupler.

3.8 Plugging in the PowerTRONIC

3.8.1 Remove the key from the ignition, unplug the stock coupler, and connect the PowerTRONIC to the harness by connecting it to the 32-pin connector. Secure it in the glove box. Refer to [Image 35](#).



Image 35

3.8.2 Connect the modulator connectors on the PowerTRONIC ECU to the Modulators. Refer to [Image 36](#).

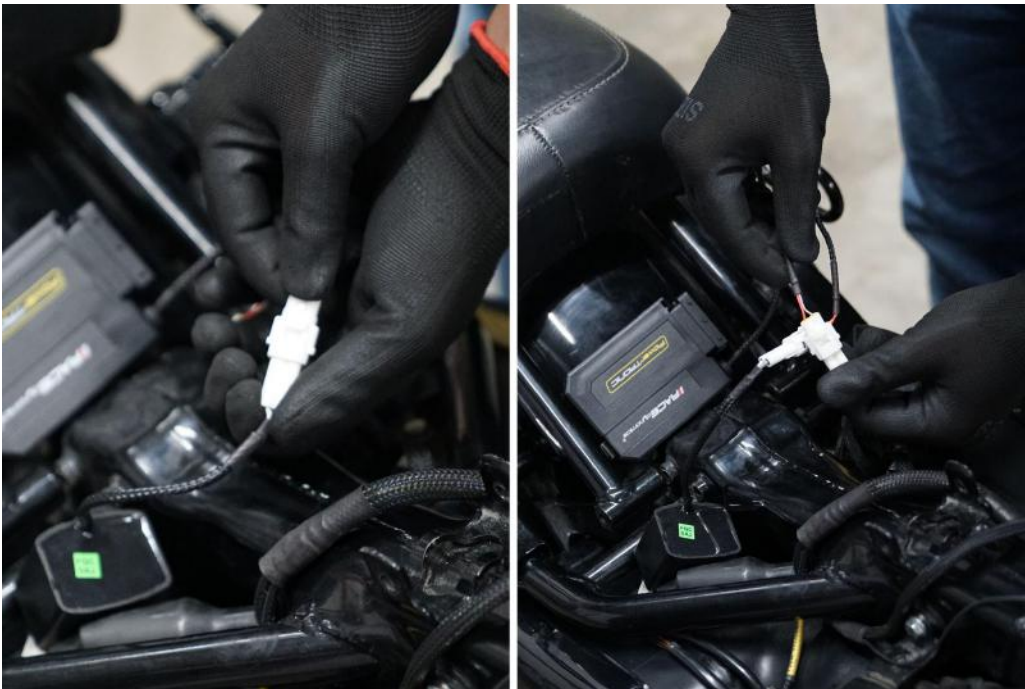


Image 36

3.8.3 The user can place the ECU in the side compartment. Refer to **Images 37** and **38** ECU modulator's position.



Image 37



Image 38

3.9 Attaching the panels fairing etc

Attach the panels, and fairing as removed from the bike