

PT V4 Installation - Honda CB350/ CB350 H'ness/ CB350 RS/ GB 350 (2020-2025)

Document Version	2	Release Date	18 Oct 2025
-------------------------	----------	---------------------	--------------------

Application information	PowerTRONIC V4
Vehicle	Honda
Model	CB350/ CB350 H'ness/ CB350 RS/ GB 350
Year of manufacture	2020-2025

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 that tend to heat up during the normal operation of the vehicle at any time.
- 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 from using the product.

Support:

North & South America : +1 267 214 9292 (Call) +91 9606 044 178 (WhatsApp)
India, Bangladesh, Bhutan, Srilanka & Nepal : +91 9916 229 292 (Call & WhatsApp)
Rest of the world : +91 9606 044 177 (Call & WhatsApp)
Email : support@powertronicecu.com
Website : www.powertronicECU.com

Table of Contents

1. Parts list
2. Tools required
3. Installation procedure
 - 3.1 Removing panels, fairing, etc
 - 3.2 Routing the harness
 - 3.3 Fuel Injector Connector
 - 3.4 Ignition Coil Connector
 - 3.5 TPS connector
 - 3.6 CKP connector
 - 3.7 Ground Terminal
 - 3.8 Securing the routed harness
 - 3.9 Testing with Stock Coupler
 - 3.10 Plugging in the PowerTRONIC
 - 3.11 Attaching the panels, fairing, etc

1. Parts list

1	PowerTRONIC	Piggyback ECU
2	Stock Coupler	Stand by unit • 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 • Fuel injector connector • Spark/Ignition coil connector • Throttle position sensor connector (TPS) • CKP connector • 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	8, 10, 12 mm Hexagonal socket	Spinner handle
2	4, 6 mm Allen key	Ratchet handle
3	Wire cutter	Extension bar or Sliding T-bar

3. Installation procedure

3.1 Removing panels and fairing

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



3.1.1 Locate and unscrew the seat bolts. The position of the bolt may vary based on the variant. Refer to **Image 1**



Image 1

3.1.2 Repeat the process on the other side. Refer to **Image 2**



Image 2

3.1.3. Detach the seat. Refer to **Image 3**



Image 3

3.1.4 Locate the side panel mounting bolt. Refer to **Image 4**.



Image 4

3.1.5 Gently detach the side panel. Refer to **Image 5**



Image 5

3.1.6 Locate the side panel mounting bolt. Refer to **Image 6**.



Image 6

3.1.7 Unlock the side panel using the key. Refer to **Image 7**.



Image 7

3.1.8 Gently detach the side panel. Refer to **Image 8**



Image 8

3.1.9 Locate the fuel tank mounting bolt at the rear end of the fuel tank. And gently detach the tank. Refer to **Image 9**



Image 9

3.1.10 Gently lift the rear end of the tank and disconnect the Fuel Pump connector. Refer to **Image 10**



Image 10

3.1.11 Gently disconnect the Fuel line. Refer to **Image 11**



Image 11

3.1.12 Disconnect the vacuum hoses. Refer to **Image 12**

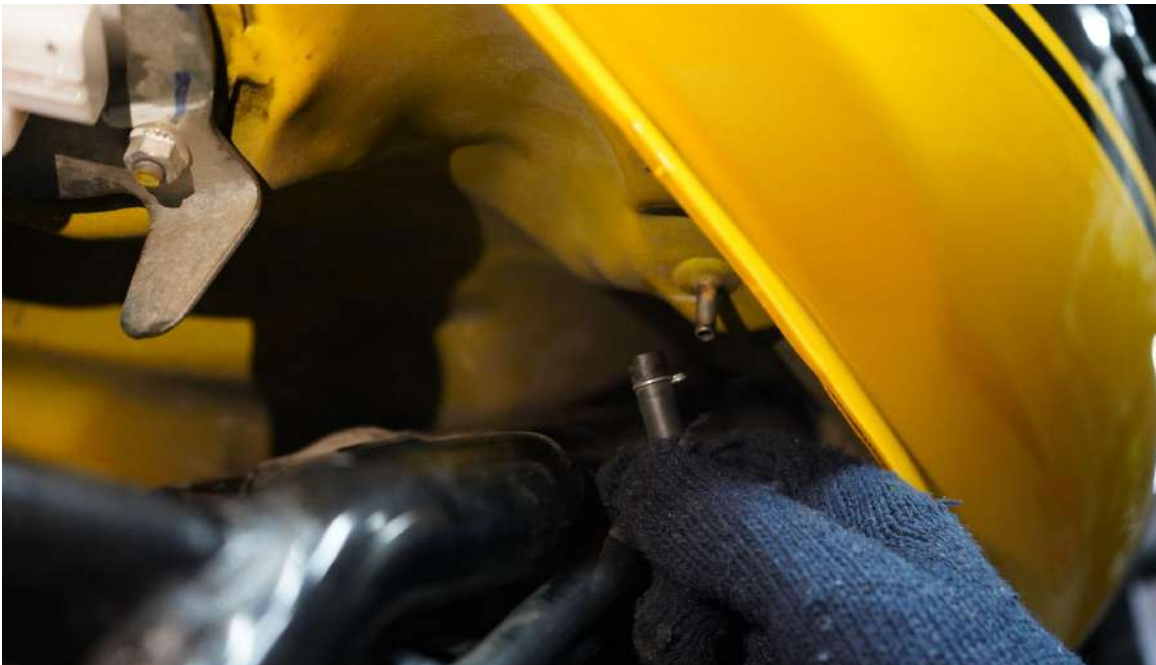


Image 12

3.1.13 Gently lift the tank and place it safely. Refer to **Image 13**



Image 13

3.1.14 Unscrew the bolt of the side cover and detach it gently. Refer to **Image 14**



Image 14

3.2 Routing the harness

3.2.1 Starting from under the seat, route each connector terminal from between the welded plate and the mudguard. Refer to **Image 15**.



Image 15

3.2.2 Route the connector to its respective position. Refer **to Image 16**.



Image 16

3.2.3 Route the Injector connectors (INJ) to their respective position. 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 to **Images 18** and **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

3.4.3 Detach the stock ignition coil connectors. Refer to **Image 25**



Image 25

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



Image 26

3.4.5 Connect the PowerTRONIC Ignition coil 12V female pin to the stock ignition coil male pin. Refer to **Image 27**



Image 27

3.4.6 Connect the PowerTRONIC Ignition coil 12V male pin to the stock ignition coil female pin. Refer to **Image 28**



Image 28

3.4.7 Connect the PowerTRONIC Ignition coil signal female pin to the stock ignition coil male pin. Refer to **Image 29**



Image 29

3.4.8 Connect the PowerTRONIC Ignition coil 12V male pin to the stock ignition coil female pin. Refer to **Image 30**



Image 30

3.4.9 Refer to **Image 31** for the completed view.



Image 31

3.5 Throttle position sensor connector

3.5.1 Locate the TPS connector of your bike. It is generally located on the throttle body, parallel to the throttle cable return springs. Refer to **Image 32**.

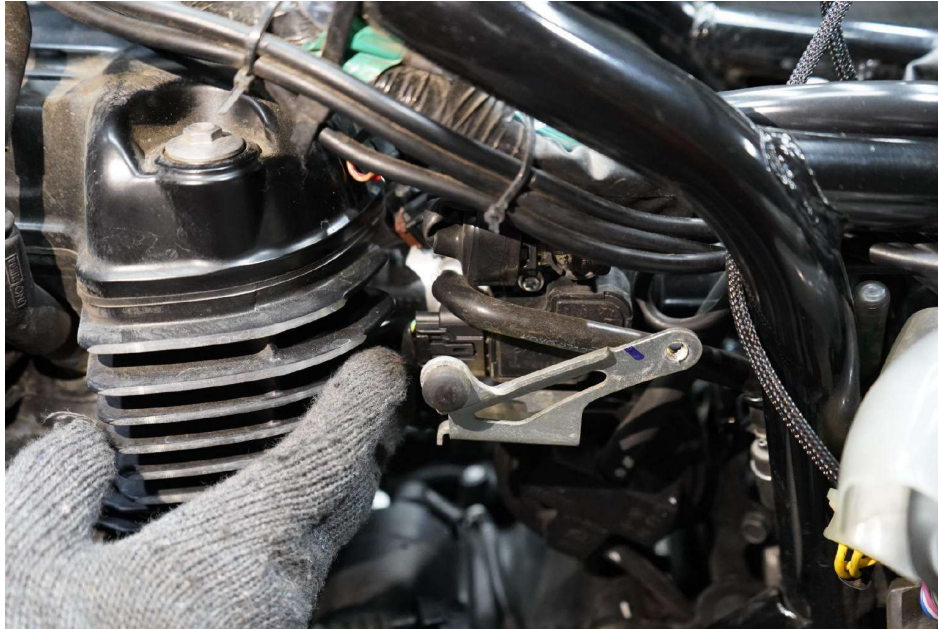


Image 32

3.5.2 Refer to **Image 33** for a zoomed view.



Image 33

3.5.3 Identify the Throttle Position sensor connector in the PowerTRONIC wiring harness, labeled as 'TPS.'

3.5.4 Disconnect the TPS connector of the bike. Refer to **Image 34.**



Image 34

3.5.5 Connect the PowerTRONIC male TPS connector to the stock female TPS connector. Refer to **Image 35.**



Image 35

3.5.6 Connect the PowerTRONIC male TPS connector to the stock female TPS connector. Refer to **Image 36**



Image 36

3.5.7 Connect the PowerTRONIC male TPS connector to the stock female TPS connector. Refer to **Image 37**



Image 37

3.6 Crank position sensor

3.6.1 Locate the stock crankshaft position sensor connector on the bike. It is located inside a pouch near the battery. Refer to **Image 38**

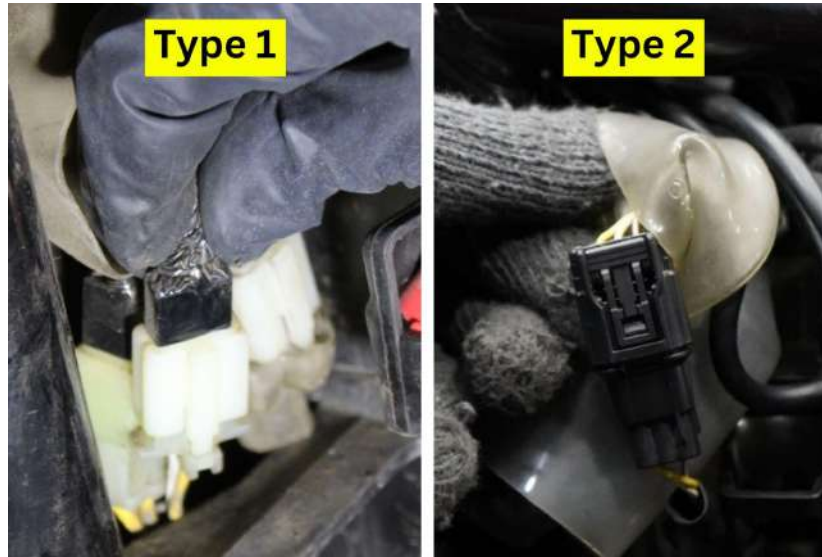
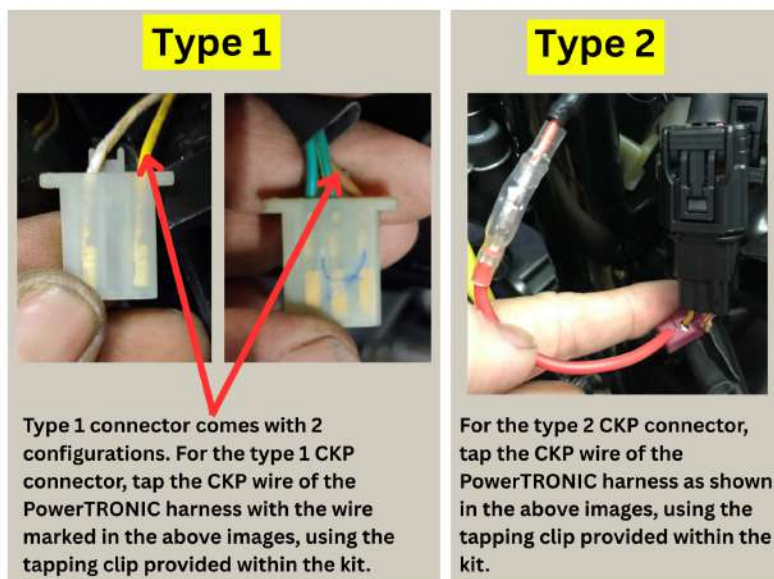


Image 38

The CKP connector type may vary. Proceed with either the Type 1 steps or the Type 2 steps, depending on the connector.

If the PowerTRONIC harness contains a wire instead of a connector, use the tapping clip provided to tap the CKP signal wire as shown in the image.



For any assistance, please contact the technical support team at support@powertronicecu.com

Type 1

3.6.2 Locate the stock crankshaft position sensor connector on the bike. Refer to **Image 39**.



Image 39

3.6.3 Disconnect the stock CKP connector. Refer to **Image 40**



Image 40

3.6.4 Connect the PowerTRONIC female CKP connector to the stock male CKP connector. Refer to **Image 41**



Image 41

3.6.5 Connect the PowerTRONIC male CKP connector to the stock female connector. Refer to **Image 42**



Image 42

Type 2

3.6.6 Locate the stock crankshaft position sensor connector on the bike. Refer to **Image 43**.



Image 43

3.6.7 Disconnect the stock CKP connector. Refer to **Image 44**



Image 44

3.6.8 Connect the PowerTRONIC female CKP connector to the stock male CKP connector. Refer to **Image 45**



Image 45

3.6.9 Connect the PowerTRONIC male CKP connector to the stock female connector. Refer to **Image 46**



Image 46

3.7 Ground Terminal Connector (Right side of the bike)

3.7.1 Identify the Ground terminal connector labeled as GND and connect it to the negative terminal of the battery.
Refer to **Image 47**



Image 47

3.8 Securing the harness using ties

3.8.1 Secure the harness away from hot moving/parts by attaching it to the chassis/frame using the zip ties provided wherever necessary. Refer to **Image 48**



Image 48

3.9 Testing with the stock coupler

3.9.1 Attach the fuel tank.

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



Image 49

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

3.10 Plugging in the PowerTRONIC

3.10.1 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 50](#).



Image 50

3.11 Attaching the panels, fairing, etc

Attach the panels and fairing as removed from the bike.