



# MagVolt® TPS Installation

2018+ Oil Injected Beta Motorcycles

Beta's oil injection requires TPS (Throttle Position Sensor) input to set the oiling rate from idle to full open throttle, injecting less oil at low throttle positions and more oil at higher throttle positions. It is a highly sensitive, learning system that may take some time to recognize the new voltage sweep coming from the MagVolt® TPS.

If the ECU does not accept MagVolt® TPS input, the check engine light (CEL) may turn on in the display unit and the ECU may default into an over-oiling fail-safe mode. Over-oiling symptoms include poor running and excessive smoke/spooge out of the exhaust. A TPS fault may occur after the first full throttle pull. The ECU must learn the new maximum voltage (full throttle position) to set the maximum oiling rate.

A triple engine stop and restart will reset the ECU's memory. If the CEL remains on after a triple restart, unplugging the ECU from battery power for 30+ seconds may be required to reset its memory and prepare it to accept and map the new sweep. Repeat these steps and check all connections if necessary until the ECU learns the new sweep.

**NOTE:** The full throttle range is required for proper function of the MagVolt® TPS and Beta's oil injection system. Excessive throttle cable slack and/or the use of a throttle tamer are not recommended and may prevent the throttle from reaching full wide open.

## Kit Components

2018+ Beta MagVolt® TPS Kit includes:

- These Instructions
- Type 2 MagVolt® TPS
- Power Lead
- Velcro Strap
- Large Zip Tie
- 3 Small Zip Ties



# Kit Installation

**NOTE:** Refer to Page 20 of the User Manual (included with your purchase or accessible online at [smartcarb.com/technical-support](http://smartcarb.com/technical-support)) for instructions on installing the SmartCarb®.

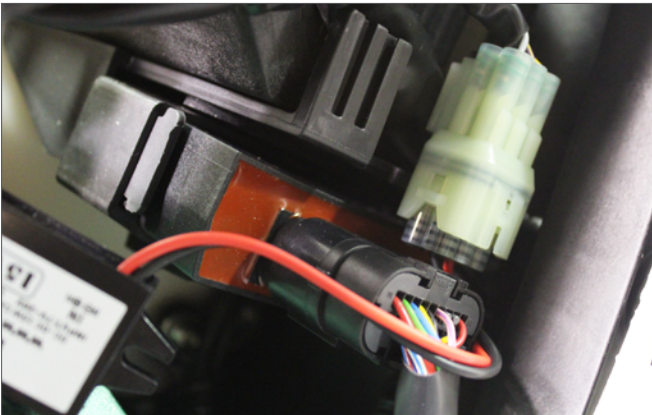
1. Locate the 6-pin diagnostic port connector behind the airbox side panel or rear fender (left side). If the connector is located under the rear fender, removal of the fender bolt is required to access it.



2. Remove the inner weather-proof connector plug (leave the outer adapter piece in place).



3. Connect the MagVolt® TPS power lead to the diagnostic port and re-install it on its mounting tab.



## Kit Installation (continued)

4. Route the power lead wire toward the SmartCarb® along the existing factory wiring harness under the seat and connect it to the matching black connector.

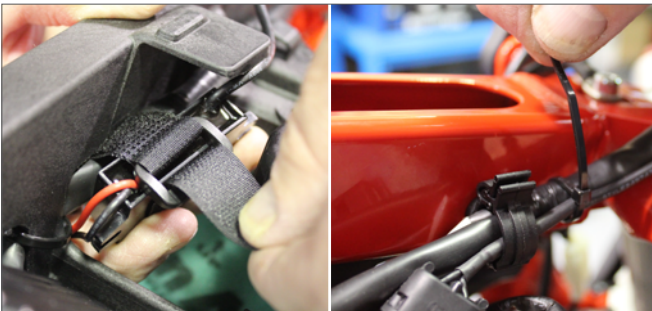


5. Connect the white 3-pin TPS connector to the wiring harness where the stock connector used to be.



6. Secure wiring with the supplied velcro strap and zip ties.

**CAUTION:** Avoid pinching, kinking, or pulling wires when securing them and ensure that they are not stressed with the fuel tank and seat installed. Be careful not to position the connectors where they can be crushed by the rear shock while riding.



# Contact

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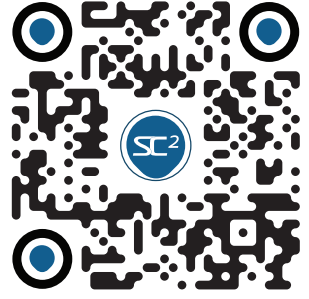


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# Online Resources

Manuals, Videos, Guides, & More



[smartcarb.com/support/](https://smartcarb.com/support/)

