



MY15-MY17 WHIPPLE SUPERCHARGERS BILLET THROTTLE BODY ADJUSTMENT FORD S550/F150 5.0L

Due to factory variances on the electronic throttle cover, some adjustment may be required.

With a scan tool connected to vehicle, ignition on, engine not running, the TP voltages should be:

- **TPS 2 (TP2) should be between .40v to .45v in the max closed position (blade forced closed). This is the only voltage that is critical. TP2 in the relaxed position should read between 0.75v - 0.85v (Target = .80v) when the closed position is set correctly.**
- TPS 1 (TP1) should be between 4.10v - 4.20v (Target = 4.15v)

If either of these readings are outside these windows, it may cause high idle issues and or throttle stuck DTC codes. Common codes are P2111 (throttle stuck open) or P2112 (throttle stuck closed). NOTE: TP2 is the most important reading.

If the readings from TP1 and TP2 show correct but problem persist, remove the air tube for access to the throttle body blade. With the ignition on, engine not running, push the throttle blade to its full closed position with your hand or end of a screw driver handle, check the TP2 reading. TP2 needs to be between 0.40v - 0.45v for perfect operation. The absolute minimum on TP2 is 0.35v, any lower and it will set a code when in operation. If your voltage is out of range, follow the following instructions to adjust the voltage.

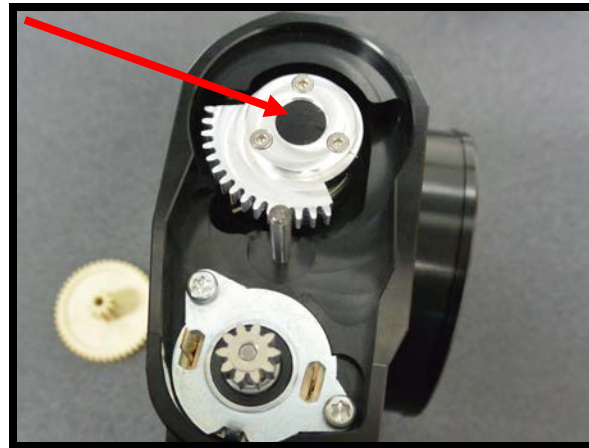
1. Remove the (6) throttle body cover tabs by releasing using a small pick or screw driver.



2. Remove the factory cover from the throttle body.



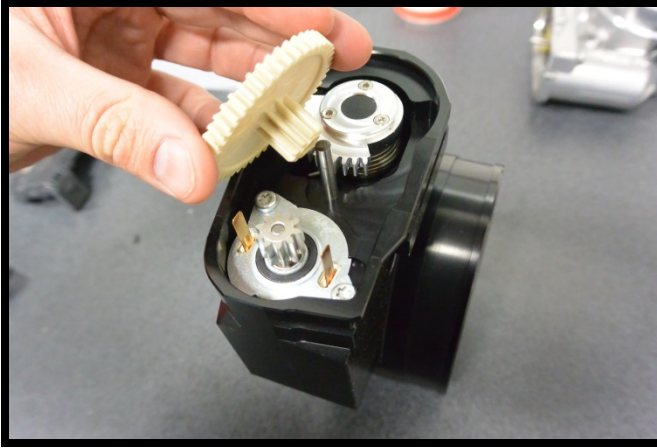
3. Remove the factory plastic gear from the throttle body by lifting up and away to access to the magnet and the (3) socket head allen bolts securing it.



4. Make a mark using a white out or grease pencil on the magnet and billet gear for reference before adjustment. Using a 2.5mm allen socket, carefully loosen the (3) bolts and remove the black magnet and magnet retainer. Carefully move the black magnet clockwise to increase voltage, counter clockwise to lower (extremely small adjustments). Lightly tighten the bolts after adjusting, install the cover without tabs, push the blade to max closed position for accurate reading and recheck TPS2 (most important reading). Repeat until the unit is in the (.40v - .045v) range at max closed position (applying light force on blade to close to zero position/max closed).



5. Reinstall the cream-colored factory gear to the throttle body by lowering onto the pressed in shaft. Move until it falls into place.



6. Reinstall the factory cover, make sure the oring stays in place during assembly and the (2) electrical connections are made.



7. Reuse the (6) throttle body cover tabs by pressing on until they click and lock in place.

