



## INSTALLATION MANUAL

### Drive-by-Wire LS Throttle Body

PFETBFW104 / PFETBFW105

Included Items	QTY
102mm LS Drive-By-Wire Throttle Body	1
M6 x 40mm Socket Head Cap Screws	4

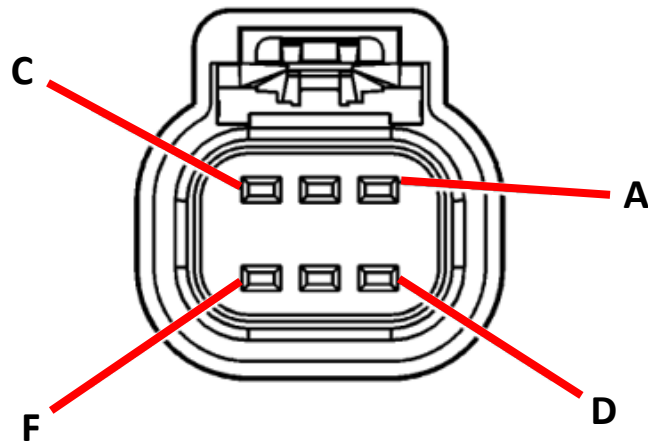
**WARNING:** PLEASE READ ALL INSTRUCTIONS BEFORE PROCEEDING. PROFLOW WILL NOT BE RESPONSIBLE FOR ANY DAMAGE AS A RESULT OF THE INCORRECT INSTALLATION OF THIS PRODUCT. IT IS RECOMMENDED THAT A QUALIFIED AUTOMOTIVE TECHNICIAN PERFORMS THIS INSTALLATION.

### TYPICAL INSTALLATION

1. Before installing, ensure you have the correct throttle body for your engine. The best way to do this is to check the blade colour of your factory throttle body.
2. Disconnect the negative terminal from the battery.
3. Following the factory service manual of your vehicle, disassemble the factory LS throttle body from the intake manifold.
4. If using on a standard intake manifold, the bore may have to be modified to clear the throttle blade as the original opening is much smaller. The intake is recommended to be removed from the engine to do this.
5. Install the new billet throttle body to the intake manifold using the supplied M6 bolts. Torque to approximately 10 Nm.
6. If the factory o-ring groove cannot be re-used on the intake, either a custom flat gasket or a silicone sealant is recommended to be used as a sealing method.
7. Reconnect the 6-pin harness connector to the throttle body and reconnect the negative battery terminal.
8. Perform the engine idle re-learn procedure below if using the factory ECU:
  - a) Key on without starting the engine. Depress throttle to wide open (full throttle) and then release. Slowly perform this procedure 3 times. This spans the throttle blade from 0 to 5 volts.
  - b) Start the engine (it may take several attempts and some throttle input).
  - c) Allow your engine to run for 5 minutes until operating temperature is reached.
  - d) Custom tuning will be required for perfect idle as the throttle body's stepper motor has different parameters in comparison to the standard throttle body. Please consult your tuning expert.

## Throttle Body Pin-Out Diagram:

The throttle body pin-out diagram can be seen below if required:



- A:** TAC Motor Control 2
- B:** TAC Motor Control 1
- C:** Low Reference
- D:** TP Sensor 1 Signal
- E:** 5-Volt Reference
- F:** TP Sensor 2 Signal