



***advanced FLOW engineering***

**Instruction Manual**

P/N: 77-46206

SCORCHER GT POWER MODULE

Make: Jeep

Model: Wrangler (JL)

Year: 2018-2023

Engine: L4-2.0L (t)

Make: Jeep

Model: Wrangler (JL)

Year: 2020-2023

Engine: L4-2.0L (t) Hybrid



**THIS IS A HIGH-PERFORMANCE PRODUCT:** Do not use this product until you have carefully read the following agreement and installation instruction. This sets forth the terms and conditions for the use of this product. The installation of this product indicates that the BUYER has read and understands this agreement and accepts its terms and conditions.

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**Before proceeding with the installation:**

- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7185.
- Ensure you have all necessary tools before proceeding. Do not attempt to work on your vehicle when the engine is hot.

Warranty Information available at <https://afepower.com/contact#warranty>

**Emission Disclaimer:** This product is not currently CARB exempt and is not available for purchase in California or for use on any vehicle registered with the California Department of Motor Vehicles.



| Label | Qty. | Description        | Part Number |
|-------|------|--------------------|-------------|
| A     | 1    | Module             | R77-46206   |
| B     | 1    | LED Switch         | 05-70029    |
| C     | 2    | Velcro (2" Inches) | 05-01244    |
| D     | 4    | Cable Ties         | 05-60167    |





# SLEEP MODE

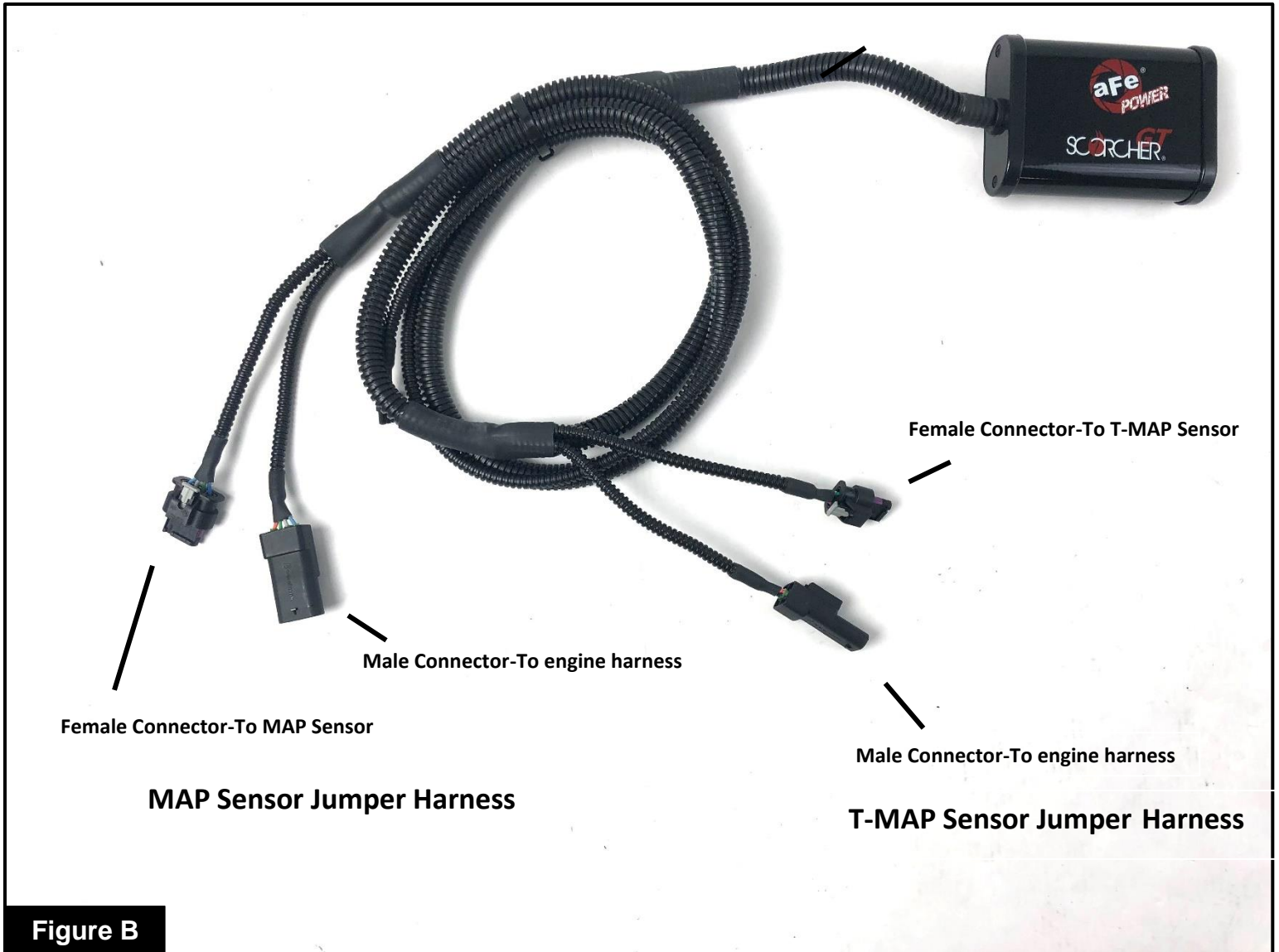
Figure A

## Refer to Figure A for Step 1

Step 1: Before installing your aFe POWER module, you will have to place your vehicle's ECU in sleep mode. In order to do this, you will need to do the following:

- If the engine is cold: open the hood, close the doors, lock the car and wait 30 seconds.
- If the engine is warm: open the hood, close the doors, lock the car and wait 20 minutes.
- If the engine is warm and you can't wait 20 minutes: disconnect the battery.

 **Note: Do NOT open doors or start vehicle while one of the sensors is disconnected. This could create a check engine light**



**Figure B**

**Refer to Figure B for Step 2**

- Step 2: Refer to the diagram to identify the connectors and their corresponding sensors that they plug into.
- a. The MAP sensor jumper harness will be the longer set of wires. It has a 4 wires connector and is labeled "MAP".
  - b. The T-MAP sensor jumper harness will be the shorter set of wires. It has a 3 wires connector and is labeled "T-MAP"



**Refer to Figure C for Steps 3-5**

Step 3: Remove the oil cap (Engine cover cannot be removed with the oil cap in place)

Step 4: Remove the two 10mm bolts. The engine cover can now be lifted and removed.

Step 5: After removing the engine cover, re-install the oil cap for the time being so that small objects cannot fall into the oil filler neck.


**Figure D**

### **Refer to Figure D for Step 6**

Step 6: Locate the MAP Sensor and the T-MAP Sensor.

- a. The MAP (Manifold Absolute Pressure) sensor is located on top of the intake manifold near the oil dipstick on the passenger side of the engine bay.
- b. The T-MAP (Turbo Manifold Absolute Pressure) sensor is located on the charge pipe towards the rear of the passenger side of the engine bay.



**Figure E**

**Refer to Figure E for Step 7**

Step 7: Remove the two 10mm bolts that secure the engine shield to the intake manifold.





Figure F

**Refer to Figure F for Steps 8-9**

Step 8: Locate the MAP sensor. It is on top of the intake manifold underneath the charge pipe. Disconnect it by sliding out on the locking tab, pressing down on the release tab, and sliding the connector out of the sensor.

Step 9: Locate the MAP sensor jumper harness on the aFe POWER harness. This is the harness labeled "MAP". Plug the female connector of the aFe POWER harness to the MAP sensor, then take the male connector of the aFe POWER harness and connect it to the female connector of the engine harness.

**Figure G****Refer to Figure G for Step 10**

Step 10: Check with the picture to make sure the connectors are fully seated and that the locking tabs are locked back into place.



**Make sure that the connections are fully engaged and not reversed. Usually, connectors make a snapping sound when fully engaged.**

**Figure H****Refer to Figure H for Steps 11-12**

Step 11: Locate the T-MAP sensor. It is on top of the charge pipe. Disconnect it by sliding out on the locking tab, pressing down on the release tab, and sliding the connector out of the sensor.

Step 12: Locate the T-MAP sensor jumper harness on the aFe POWER module. This is the harness labeled "T-MAP". Plug the female connector of the module to the stock T-MAP sensor, then take the male connector of the module and connect it to the female connector of the engine harness.

**Figure I****Refer to Figure I for Steps 13-14**

Step 13: Check with the picture to make sure the connectors are fully seated and that the locking tabs are locked back into place.

Step 14: Reinstall the engine shield intake.



**Make sure that the connections are fully engaged and not reversed. Usually, connectors make a snapping sound when fully engaged.**

**Figure J****Refer to Figure J for Steps 15-17**

Step 15: Find the desired location to mount and secure the Scorch GT Power Module.

Step 16: Use the included zip ties to secure the Scorch GT harness away from all moving parts and components that will get hot when the engine is running.

Step 17: Remove the engine oil cap, and then reinstall the engine cover along with the two 10mm mounting bolts, and then reinstall the oil cap. Pay particular attention to how the cap screws on, as it is very easy to cross thread the oil cap and not making a tight seal.

**The doors can now be opened to install the LED Switch.**



**Figure K**

**Refer to Figure K for Steps 18-19**

Step 18: Select the desired location for the LED switch. Route the cable on the back of the switch to exit towards the top or the bottom of the switch.

Step 19: Use the provided double sided tape to secure the LED switch in the desired location.

**Figure L****Refer to Figure L for Steps 20-21**

Step 20: Locate the engine bay wiring access slot below the driver side kick panel.

Step 21: Route the LED switch cable through the firewall and into the engine bay using this slot.

**Figure M****Refer to Figure M for Steps 22-23**

Step 22: Plug the end of the LED switch cable to the aFe POWER harness inside the engine compartment.

Step 23: Secure all wires away from any extreme heat and moving parts with the provided zip ties. Make sure all connections are secured and fully engaged.

**The installation of the module itself is now complete. Keep reading the installation instructions to learn how to use all of its features.**





**Figure N**

### **Refer to Figure N (LED Switch)**

When turning on the vehicle, each LED will flash, and it will stop at its last setting. The LED on the switch represents the different level of power.

- Green LED: Stock
- Yellow LED: Sport
- Orange LED: Sport+
- Red LED: Race

Use the grey button to select the desired setting. Power adjustments can be done at any time while the unit is on.



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