

advanced FLOW engineering

Instruction Manual P/N: 77-47001

Make: Hyundai	Model: Avante Sport	Year: 2017-2019	Engine: L4-1.6L Turbo
Make: Hyundai	Model: Elantra	Year: 2017-2020	Engine: L4-1.6L Turbo
Make: Hyundai	Model: Elantra GT	Year: 2018-2020	Engine: L4-1.6L Turbo
Make: Hyundai	Model: i30	Year: 2017-2020	Engine: L4-1.6L Turbo
Make: Hyundai	Model: Kona	Year: 2018-2020	Engine: L4-1.6L Turbo
Make: Hyundai	Model: Veloster	Year: 2013-2020	Engine: L4-1.6L Turbo
Make: KIA	Model: Forte GT	Year: 2019-2020	Engine: L4-1.6L Turbo
Make: KIA	Model: K3 GT	Year: 2019-2020	Engine: L4-1.6L Turbo



- 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.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use.

Label	Qty.	Description	Part Number
A	1	Module	R77-47001
B	1	LED Switch	05-70013
C	2	Velcro (2" Inches)	05-01244
D	4	Cable Ties	05-60167

Attention:

aFe POWER strongly recommends upgrading the factory spark plugs to high performance spark plugs to maintain a stronger, more consistent spark and prevent any damage to your engine. During our testing we used HKS M45XL spark plugs and recommend those spark plugs or equivalent. Alternatively, the factory spark plug gap can be closed to 0.026" or smaller. The use of 91 or higher octane is also highly recommended.

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

Note: Legal in California for use on race vehicles only. The use of this device on vehicles used on public streets or highways is strictly prohibited in California and others states that have adopted California emission regulations.





SLEEP MODE

Figure A

Refer to Figure A for Step 1.

Step 1: Before installing your aFe module, you will have to place your vehicles 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.

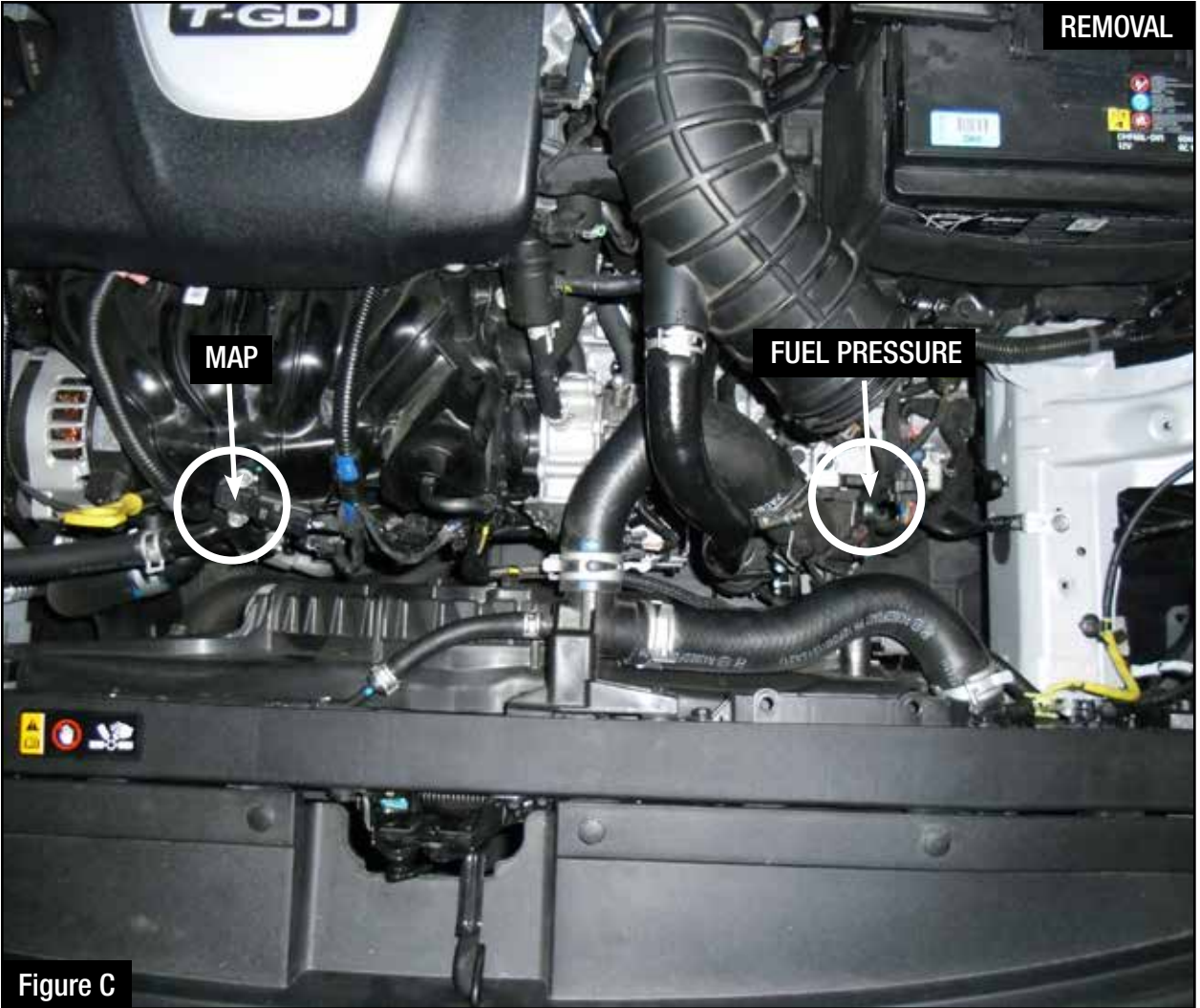


Figure B

Refer to Figure B for Steps 2-3.

Step 2: Remove the (2) push clips securing the air scoop and loosen the clamp securing the intake tube to the airbox.

Step 3: Remove the (3) 10mm bolts securing the airbox, then pull the airbox out of the vehicle.



Refer to Figures C for Step 4.

Step 4: Locate the MAP and T-MAP sensors. The MAP sensor is on the intake manifold. The T-MAP sensor is on the charge pipe, before the throttle body.

**Figure D****Refer to Figure D for Steps 5-6.**

Step 5: Locate then disconnect the MAP sensor connector by pressing down on the locking tab of the connector and sliding it out of the sensor.

Step 6: Locate the MAP sensor jumper harness on the aFe module. The harness will be labeled "MAP". Plug the female connector of the module into the factory MAP sensor, then the male connector of the module to the female connector of the engine harness.



Figure E

Refer to Figure E for Step 7.

Step 7: Check with the pictures to make sure the connectors are correctly connected.



Note: Make sure connections are fully engaged. Usually, connectors make a snapping sound when fully engaged.



Figure F

Refer to Figure F for Steps 8-9.

Step 8: Locate and disconnect the TMAP sensor connector, by pressing down on the locking tab of the connector, and sliding it out of the sensor.

Step 9: Locate the TMAP sensor jumper harness on the aFe module. The harness will be labeled "TMAP." Plug the female connector of the module into the factory T-MAP sensor, then the male connector of the module to the female connector of the engine harness.

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

Step 10: Check with the pictures to make sure the connectors are correctly connected.



Note: Make sure connections are fully engaged. Usually, connectors make a snapping sound when fully engaged.



Figure H

Refer to Figure G for Steps 11-12.

Step 11: Carefully route the switch cable behind steering wheel cover.

Step 12: Mount the Switch on an open, flat surface

**Figure I****Refer to Figure I for Step 13.**

Step 13: Remove the (4) 10mm bolts securing the TCU under the dash, and gently lower the TCU to gain access to the firewall grommet. Do not unplug the TCU.



Note: This step is specific to the vehicles equipped with an automatic transmission, wiring of the switch cable will vary for manual transmission vehicles.

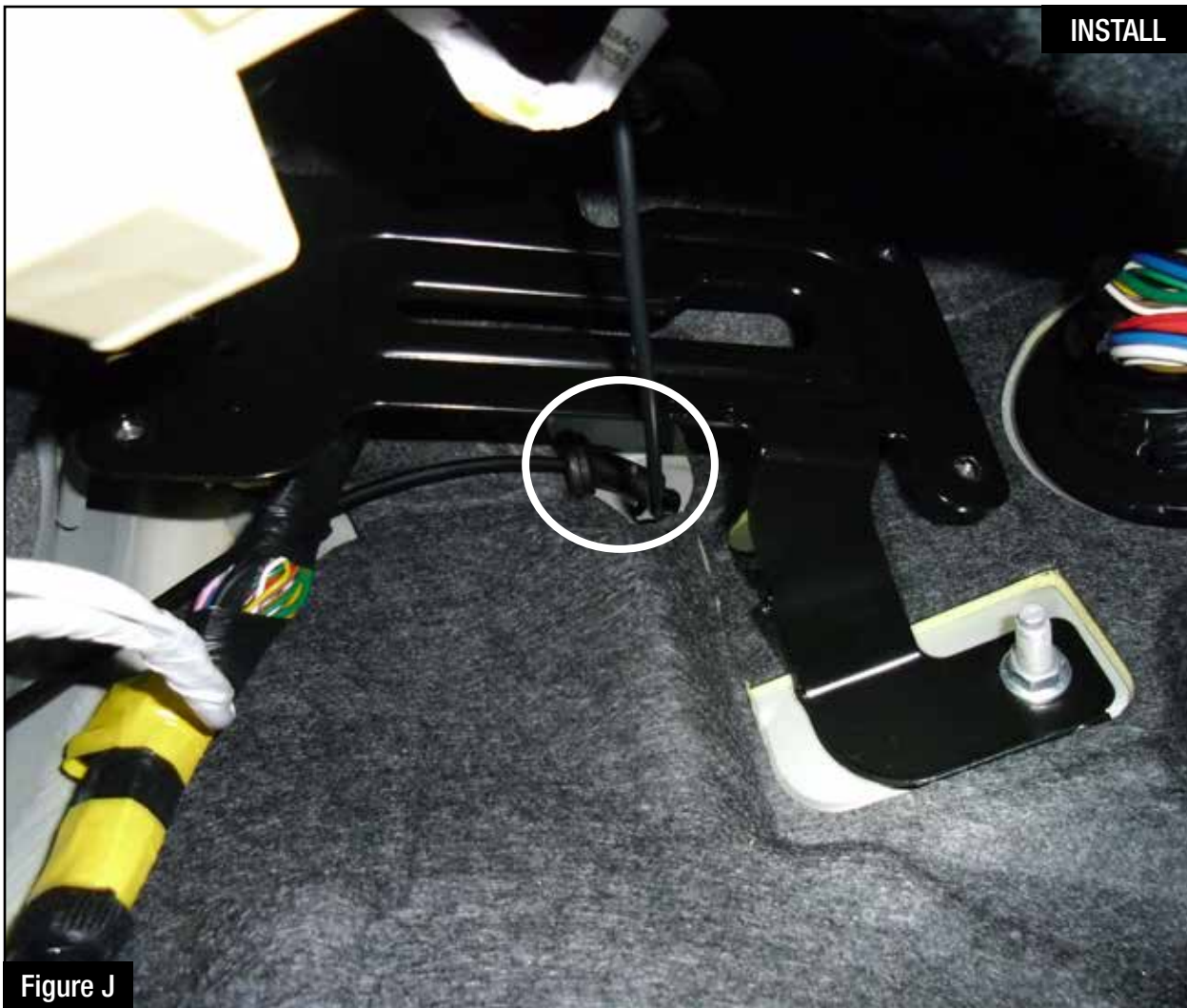
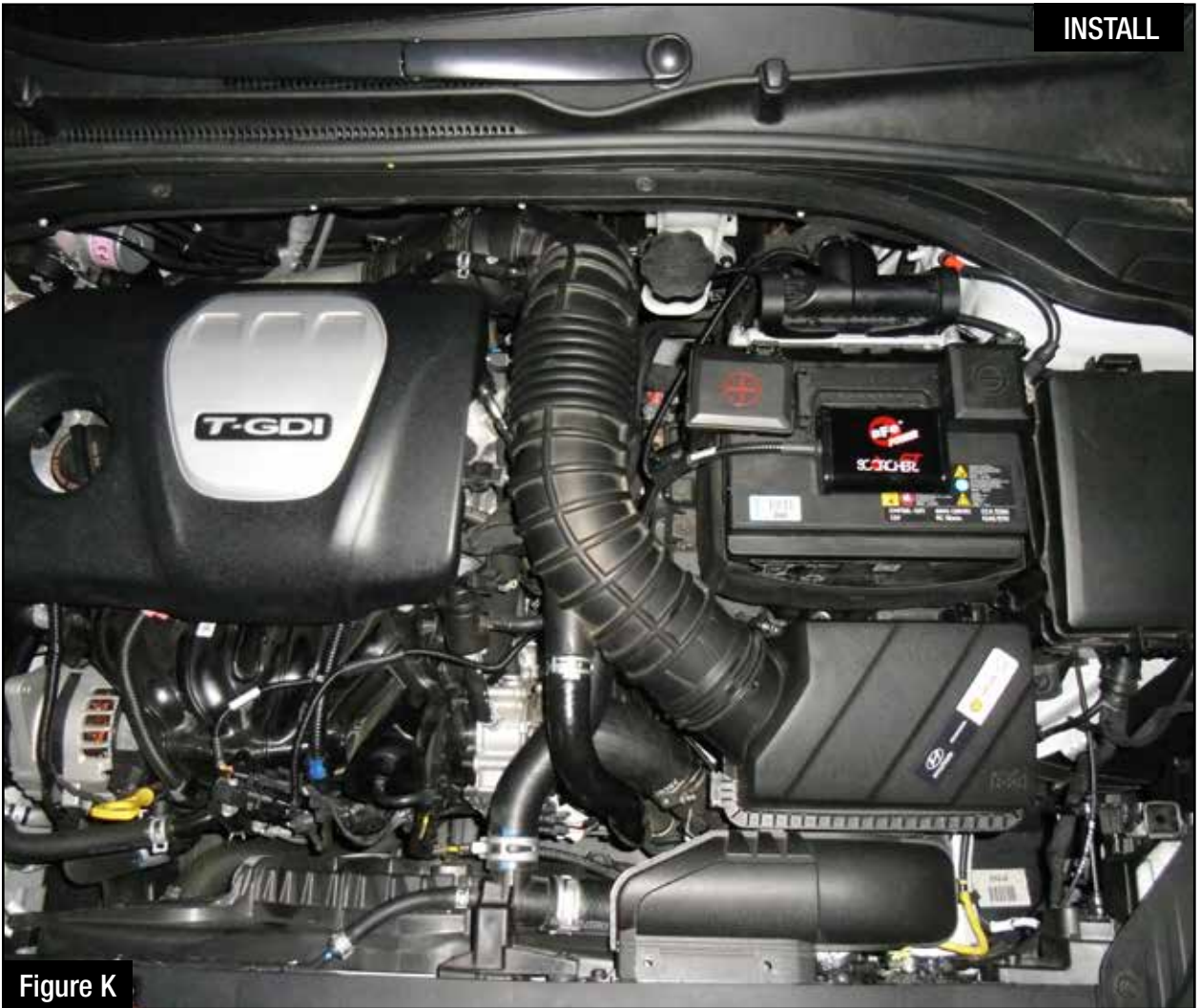


Figure J

Refer to Figure J for Step 14.

Step 14: Route the switch cable through firewall and into the engine bay. Follow the hood latch cable through the grommet into the firewall. Plug the end of the cable to the module harness. Then reinstall the TCU.

**Figure K****Refer to Figure K for Steps 15-16.**

Step 15: Mount the module in a safe location, such as on top of the battery, using the supplied Velcro strip. Then, secure the wires and module away from any extreme heat and moving parts, with the provided ties. Make sure all connections are secured and fully engaged.

Step 16: Reinstall the airbox.



Figure L

Refer to Figure L for Step 17.

Step 17: When turning on the vehicle, the switch will go through the light. It will stop at its last setting.

The LED on the switch represents the different level of power.

- Green LED: Stock
- Yellow LED: Sport (91 Octane or Higher is recommended)
- Orange LED: Sport+ (91 Octane or Higher is recommended)
- Red LED: Race (93 Octane or Higher is recommended)

Use the grey button to select the desired setting. Power adjustments can be done at any moment.

Thank you for choosing aFe POWER!



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