

# advanced FLOW engineering

**Instruction Manual P/N: 77-47001** 

Model: Elantra GT Sport Year: 2018 Make: **Hyundai** Engine: L4-1.6L Turbo Engine: **L4-1.6L Turbo** Make: **Hyundai** Model: Elantra Sport Year: 2017-2019 Model: Veloster Turbo Year: 2019 Make: Hyundai Engine: L4-1.6L Turbo Make: **Hyundai** Model: i30 / Avante Sport Year: 2017-2019

Engine: L4-1.6L Turbo Model: K3 GT Make: KIA Year: 2019 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 951-493-7100.
- 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
А	1	Module	R77-47001
В	1	LED Switch	05-70013
С	2	Velcro (2" Inches)	05-01244
D	4	Cable Ties	05-60167

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.



**REMOVAL** 



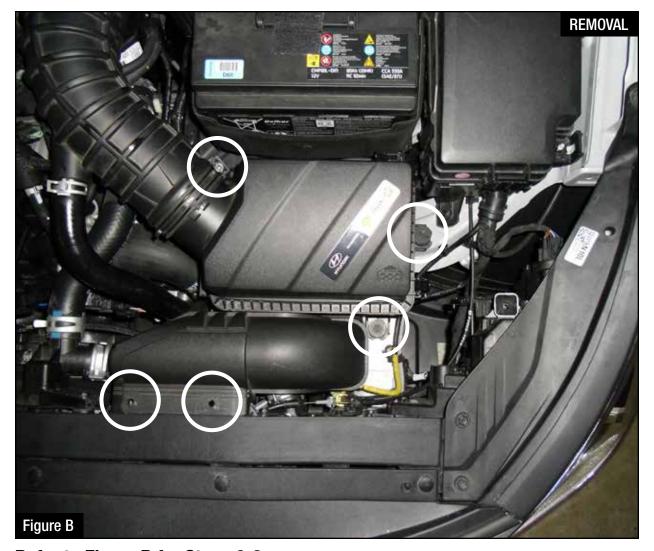
# **SLEEP MODE**

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.



# 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 TMAP sensors. The MAP sensor is on the intake manifold. The TMAP sensor is on the charge pipe, before the throttle body.



#### 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.





#### 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.



### 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 TMAP sensor, then the male connector of the module to the female connector of the engine harness.





#### 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.



# 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



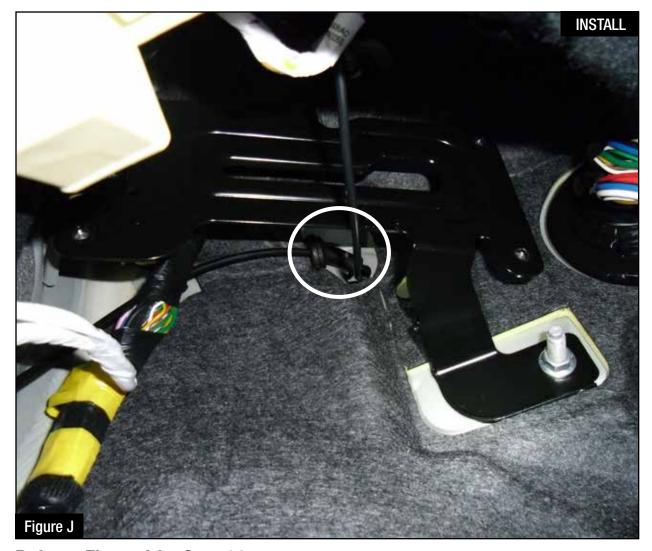


#### Refer to Figure I for Step 13.

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.



# 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.





# 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.



### 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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**Turbo Downpipe** 



P/N: 48-37001-HC (Street) 48-37001-HN (Race)

### Race-Pipe Exhaust



P/N: 48-37002-RN

Mid-Pipe Exhaust



P/N: 49-37001

Axle-Back Exhaust



P/N: 49-37002-L (Blue Tips) 49-37002-P (Pol. Tips) 49-37002-B (Blk. Tips)

Cat-Back Exhaust



P/N: 49-37003-L (Blue Tips) 49-37003-B (Blk. Tips) 49-37003-P (Pol. Tips)

Takeda Mascot Decal



P/N: TP-7003D

Takeda Decal



P/N: TP-7002D

Takeda T-Shirt



P/N: 40-30332 (M) 40-30333 (L) 40-30334 (XL)

Takeda Lic. Plate Frame



P/N: TP-7014F

# Warranty

#### **General Terms:**

- aFe warrants their products to be free from manufacturer's defects due to workmanship and material.
- This warranty applies only to the original purchaser of the product and is non-transferrable.
- Proof of purchase of the aFe product is required for all warranty claims.
- Warranty is valid provided aFe instructions for installation and/or cleaning were properly followed.
- Proper maintenance with regular inspections of product is required to insure warranty coverage.
- Damage due to improper installation, abuse, unauthorized repair or alteration is not warranted.
- Incidental or consequential damages or cost, including installation and removal of part, incurred due to failure of aFe
  product is not covered under this warranty.
- All warranty is limited to the repair and/or replacement of the aFe part. To request Return Goods Authorization
  ("RGA"), email RGA@afepower.com or call (951)493-7100. Upon receipt of the RGA, you must return the product
  to the address provided in the RGA, freight prepaid and accompanied with a dated proof of purchase and the RGA.
  Upon receipt of the defective product and upon verification of proof of purchase, aFe will either repair or replace the
  defective product within a reasonable time, not to exceed thirty days.

Product Category	P/N Prefix	Warranty duration
Direct OE Replacement Filters	10, 11, 30, 31, 71, 73	Life of the vehicle
Racing Filters	18	1 year
Universal	21, 24, 72,TF	2 years
Air Intake Systems	50, 51, 54, 55, 75,TR.TA,TL	2 years
Exhaust Systems	49	2 years
Intercoolers & Intercooler Tubes	46-2	2 years
Intake Manifolds	46-1	2 years
Differential Cover	46-7	Life of the vehicle
Exhaust Manifolds	46	2 years
Throttle Body Spacers	46-3	2 years
Fluid Filters	44	90 days
Pre-Filters	28	2 years
Heavy Duty OE Replacement	70	2 years
PowerSports OE Replacement	81, 87	2 years
PowerSports Intake Systems	85	2 years
Tuners	77	1 year

No other warranty expressed or implied applies nor is any person or advanced FLOW engineering authorized to assume any other warranty. Some States do not allow the exclusion or limitation of incidental or consequential damages or do not allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.



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