

# advanced FLOW engineering Instruction Manual P/N: 54-76105-S

Make: Nissan Model: Titan XD Year: 2016-2019 Engine: V8-5.0L (td) Cummins



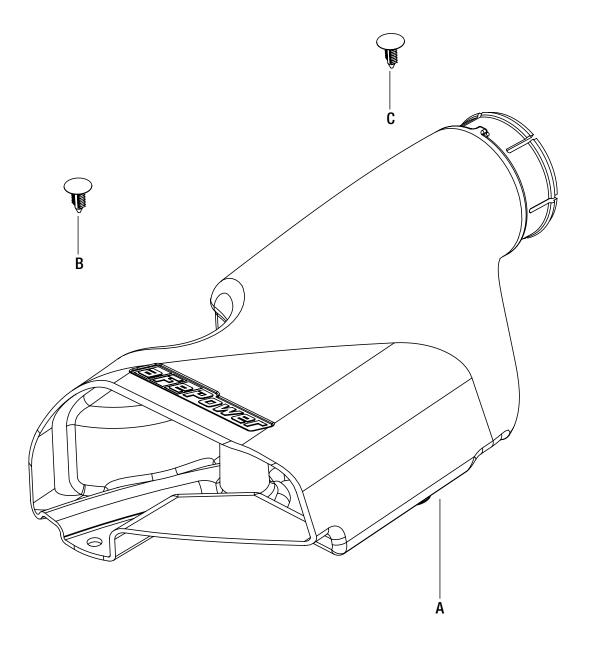


- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7100.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.

# Retain factory parts for future use.

Label	Qty.	Description	Part Number
Α	1	Scoop, Rotomold	05-76105B3
В	1	Retainer Clip	03-50525
С	1	Retainer Clip, 8mm	03-01407

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.







### Refer to Figure A for Steps 1-3

- Step 1: Remove the plug on the housing if installed.
- Step 2: Push the aFe scoop into the round opening of the housing.
- Step 3: Secure the scoop with the push plastic rivet and the Christmas tree plastic rivet, inside the scoop.



Refer to Figure B for Step 4

Step 4: Verify the scoop is secured correctly. The installation is now completed.



Air Intake System



P/N: 50-76105 (P10R) 51-76105-E (PDS)

DPF-Back Exhaust System



P/N: 49-46113-B (Blk) 49-46113-P (Pol)

**SCORCHER HD Module** 



P/N: 77-46101

aFe Gear



P/N: 40-30372 (M) P/N: 40-30373 (L) P/N: 40-30374 (XL) P/N: 40-30375 (2XL)

# **Warranty**

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- 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
Turbochargers	46-6	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

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.

<sup>\*</sup>See turbocharger warranty for more info



## advanced FLOW engineering, inc.

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advanced FLOW engineering SCORCHER HD Module Instruction Manual P/N: 77-46101

Make: Nissan Model: Titan XD Year: 2016-2019 Engine: V8-5.0L (td) Cummins





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

Label	Qty.	Description	Part Number
А	1	Module	R77-46101
В	1	LED Switch	05-70029
С	2	Velcro (2 Inches)	05-01244
D	4	Cable Ties	05-60167





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.



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



### Refer to Figure B for Step 2.

Step 1: Locate the MAP 1 and Fuel Pressure sensor 2. The MAP sensor is located in front of the engine on top of the manifold, the Fuel pressure sensor is located under the EGR at the end of the fuel rail.





### Refer to Figure C for Steps 3-4.

- Step 3: Disconnect the MAP sensor.
- Step 4: Locate the MAP sensor jumper harness on the aFe module. This is the longer harness with a Blue and Black connector. Plug the male connector of the module to the stock map sensor, then the female connector of the module male connector of the engine harness.



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



### Refer to Figures D for Steps 5-6.

- Step 5: Locate and disconnect the fuel pressure sensor, by pressing on the locking tab and sliding the connector out of the sensor.
- Step 6: Locate the fuel pressure sensor jumper harness on the aFe module. This is the shorter harness with an orange rubber seal on the female connector. Plug the female connector of the module into the stock fuel pressure sensor, then take the male connector of the module and connect to the female connector of the engine harness.



NOTE: To help gain access to the fuel pressure sensor, loosen the bracket on the fuel lines under the EGR.

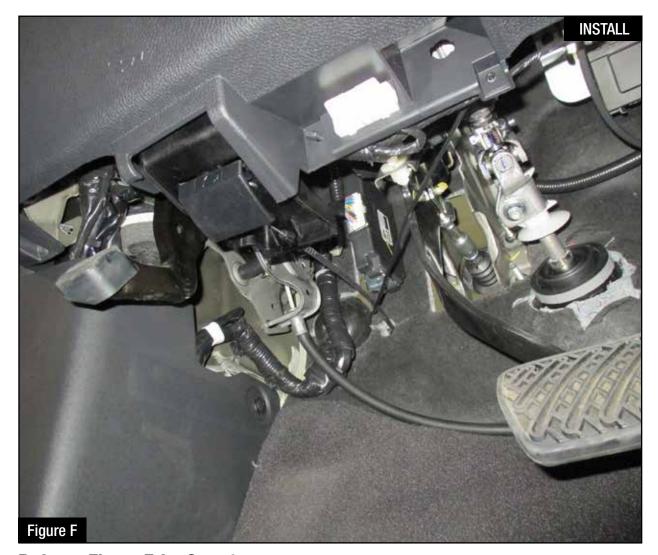
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### Refer to Figure E for Steps 7-8.

- Step 7: Select the desired location of the LED switch. Route the cable on the back of the switch to exit towards the top or bottom.
- Step 8: Use the provided double sided tape to secure the LED switch in the desired location.



Refer to Figure F for Step 9.

Step 9: Route the switch cable through firewall and into the engine bay. Follow the main harness through the grommet into the firewall. Plug the end of the cable to the module.





### Refer to Figure G for Step 10.

Step 10: Mount the module in a safe location, 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.



### Refer to Figure H for Step 11.

Step 11: 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
Orange LED: Sport+
Red LED: Race

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

NOTE: Place enclsoed CARB EO sticker on or near the device on a smooth, clean surface. EO identification label is required to pass the smog test inspection.



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Air Intake System



P/N: 50-76105 (P10R) 51-76105-E (PDS)

Air Intake Scoop



P/N: 54-76105-S

OE Replacement Filter



P/N: 30-10269 (P5R) 31-10269 (PDS) 73-10269 (PG7)

**DPF-Back Exhaust System** 



P/N: 49-46112-B (Blk Tip) 49-46112-P (Pol Tip)

**DPF-Back Exhaust System** 



P/N: 49-46113-B (Blk Tip) 49-46113-P (Pol Tip)

aFe Diesel T-Shirts



P/N: 40-30221 (M) 40-30222 (L) 40-30223 (XL) 40-30224 (2XL) 40-30225 (3XL)

aFe Turbo Diesel T-Shirts



P/N: 40-30411-B (S) 40-30412-B (M) 40-30413-B (L) 40-30414-B (XL) 40-30415-B (2XL)

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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

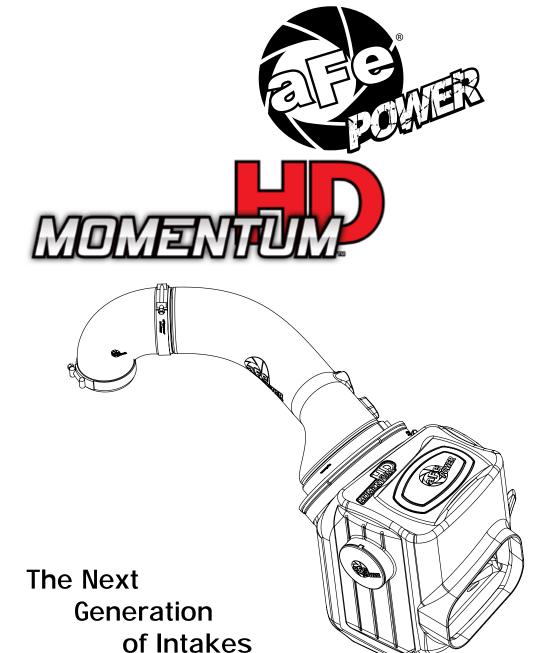
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### advanced FLOW engineering, inc.

252 Granite Street Corona, CA 92879 TEL: 951.493.7100 E-Mail:Tech@aFepower.com



advanced FLOW engineering

Instruction Manual P/N: 50-76105 / 51-76105 Momentum Air Intake

Make: Nissan Model: Titan XD Year: 2016-2019 Engine: V8-5.0L (td) Cummins





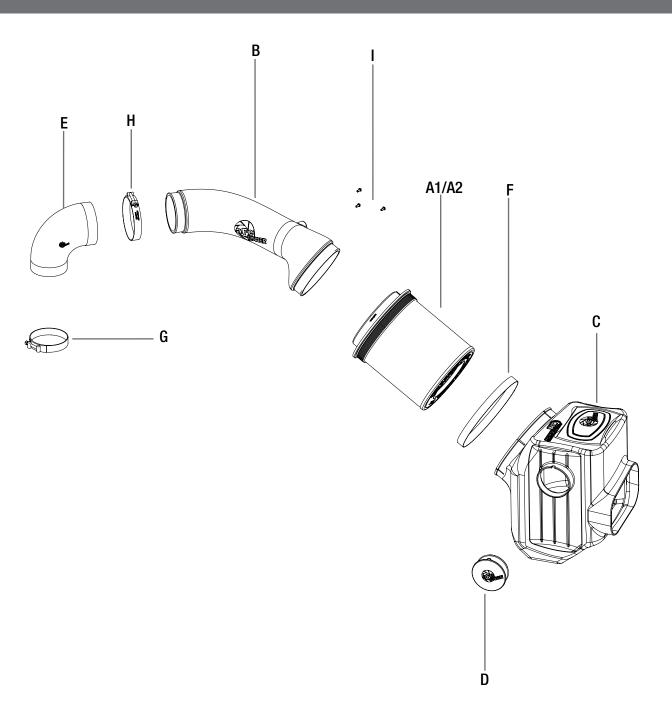
- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call technical support at 951-493-7100 or e-mail tech@afepower.com.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect both the negative battery terminal before proceeding.

# Retain factory parts for future use.

Label	Qty.	Description	Part Number
<u>A1</u>	1	Pro 10R (Blue Media)	20-91059
<u>A2</u>	1	Pro DRY S (Gray Media)	21-91059
<u>B</u>	1	Tube	05-76105B1
С	1	Housing	05-76105B2
D	1	Plug, Urethane	05-01361
<u>E</u>	1	Coupling, Silicone Elbow	05-01402
<u>F</u>	1	Clamp, T-bolt (8-5/16"-8-5/8")	03-50267
G	1	Clamp, T-bolt (3-9/16"-3-7/8")	03-50498
<u>H</u>	1	Clamp, T-bolt (4-1/16"-4-3/8")	03-50262
I	3	Screw, Torx: M4 x .7 x 8mm	03-50490

Installation will require the following tools:

10mm, 7/16" nut driver or socket, T15 driver, pliers and wrench.







### Refer to Figure A for Steps 1-4

- Step 1: Disconnect the Mass Air Flow (MAF) sensor and the temperature sensor harnesses.
- Step 2: Loosen the clamp on the factory intake tube to the turbo inlet.
- Step 3: Remove the two spring clip connecting the top to the bottom of the factory housing. Then pull the tube and top of the housing outside of the vehicle.
- Step 4: Remove the flat panel air filter.



### Refer to Figure B for Steps 5-6

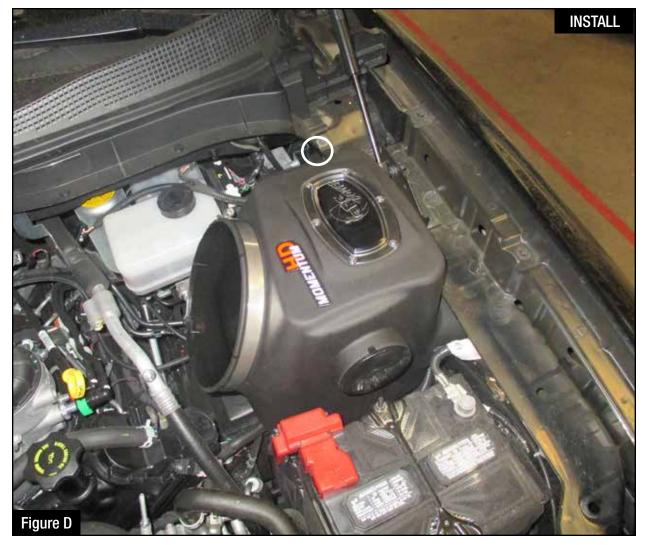
- Step 5: Remove the 10mm bolt securing the bottom of the housing to the truck. The bolt is located on the firewall side. This bolt will be re-used.
- Step 6: Pull the bottom of the factory housing out of the vehicle. Also remove the factory intake duct going into the side fender.





Refer to Figure C for Steps 7-8

Step 7: Transfer the 3 rubber isolation mounts from the bottom of the factory housing to the aFe housing. Step 8: Install the big clamp on the aFe housing. Do not tighten yet.



Refer to Figure D for Steps 9-10

Step 9: Install the aFe housing inside the vehicle. Firmly push the housing into the two bottom studs.

Note: It may help to use a small amount of lubricant in the inside of the rubber grommet.

Step 10: Secure the housing using the factory bolt removed at Step 5.





Refer to Figure E for Step 11

Step 11: Insert the filter in the housing with the clamps installed. Do not tighten yet.



Refer to Figure F for Step 12

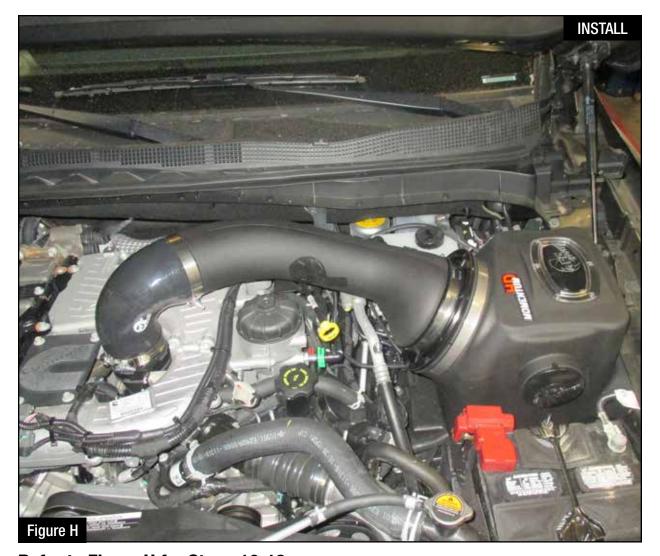
Step 12: Transfer the MAF sensor and the temperature sensor from the factory housing to the aFe tube. Secure them using the furnished M4 screws.





### Refer to Figure G for Steps 13-15

- Step 13: Install the 90 degrees coupling onto the turbo inlet of the truck. Install the clamps but do not tighten yet.
- Step 14: Slide the aFe tube into the coupling then into the filter. Align the tube, coupling and filter then tighten all clamps.
- Step 15: Re-connect the MAF sensor and temperature harnesses.



Refer to Figure H for Steps 16-18

Step 16: If you have purchased the aFe air scoop (P/N: 54-76105-S), install it referring to its install instruction sheet. Step 17: If you don't have the air scoop, you have the option to close off the extra air inlet with the furnished plug or to keep it open.

- Without the plug installed, the aFe Power intake will capture the maximum air available. More airflow offers
  more power. Yet some of this air is picked up from inside the engine compartment and could be warmer
  air. Warmer air will affect the performance of the vehicle.
- The plug installed on the housing will block off any hot engine air entering the housing and make sure the coolest air available is directed into the engine. It will also reduce the noise of the intake.

Step 18: Verify all connection are secured. The installation is now completed.

NOTE: Place enclosed CARB EO sticker on or near the intake system on a smooth/clean surface.

EO identification label is required to pass the smog test inspection.



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Pro DRY S Air Filter



P/N: 21-91059

Pro 10R Air Filter



P/N: 20-91059

Pro-GUARD 7 Air Filter



P/N: 72-91059

**Pro DRY S Restore Kit** 



P/N: 90-59999

Blue Squeeze Restore Kit



P/N: 90-50501

**Gold Squeeze Restore Kit** 



P/N: 90-50500

Pre-Filter



P/N: 28-10273

**Dynamic Air Scoop** 



P/N: 54-76105-S

### SCORCHER HD Module



P/N: 77-46101

**DPF-Back Exhaust System** 



P/N: 49-46113-B (Blk Tip) 49-46113-P (Pol Tip)

Intercooler w/ Tubes



P/N: 46-20282-B

**Rear Differential Cover** 



P/N: 46-70362-WL (w/ 0il) 46-70360 (RAW)

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