

# BRUTE FORCE AIR INTAKE SYSTEM

Equipped with AEM DRYFLOW Filter. No oil required!

Installation Instructions for: Part Number 21-8206 Dodge Ram 2500,3500 5.9L Turbo Diesel I6 2003-2005

ADVANCED ENGINE MANAGEMENT INC.

2205 126<sup>TH</sup> Street, Unit A Hawthorne, CA. 90250 Phone: (310) 484-2322 Fax: (310) 484-0152 www.aempower.com Instruction Part Number: 10-8206

Dodge Ram 2500,3500 5.9L Turbo Diesel I6, 2003-2005 2003-2005 C.A.R.B. E.O. # D-392-28 © 2009 Advanced Engine Management, Inc. **Congratulations!** You have just purchased the finest Air Induction & Filtration system for your vehicle at any price!

The **AEM** Brute Force Intake System is the result of extensive development on a wide variety of vehicles. It is the most advanced short pipe air intake system on the market. Each system is specifically engineered for its particular application. All **AEM** Brute Force Intake Systems deliver maximum performance gains through the lightweight, all-aluminum, mandrel-bent tubing that is tuned in both length and diameter. The tube length and diameter are matched for each specific engine to give power over a broad RPM range. Every intake is coated with a high-gloss, heat-reducing Zirconia based powder coating. This special blend of powder coating helps reduce heat penetration, which in turn reduces the temperature of the inlet air charge. The cooler inlet air temperature translates to more power during the combustion process because cool air is denser than warm air. The <u>air mass</u> flow to the engine is increased because of the increased airflow and reduced inlet temperature, which translates to more power.

Quantity	Part Number	Description
1	2-82061	BRUTE FORCE INLET PIPE
1	20-8206	HEAT SHIELD
1	5-490	RUBBER ELBOW
3	9464	#64 HOSE CLAMP
1	21-2059D	A/F ASSY 4.00" X 9" DRYFLOW
1	1-2038	HEX HEAD FLANGE BOLT
3	559999	WASHER
3	444.460.04	LOCK NUT
1	1228598	RUBBER MOUNT
2	1-2097	ALLEN HEAD MACHINE SCREWS
7.75"	8-119	GASKET, SPONGE RUBBER
11.25"	8-119	GASKET, SPONGE RUBBER
1	10-8206	INSTRUCTIONS
2	10-922S	AEM DECAL

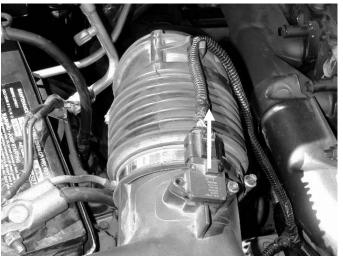
# Bill of Materials for: 21-8206

## Read and understand these instructions **<u>BEFORE</u>** attempting to install this product.

#### 1) Getting started

- a) Make sure vehicle is parked on a level surface.
- b) Set parking brake.
- c) Disconnect both battery terminals.
- d) If engine has run within the past two hours let it cool down.
- 2) Removing the stock air inlet system





a) Stock intake system.

b) Unplug the Inlet Air Temperature (IAT) sensor.



c) Remove the nut securing the front tab of the air box.



d) Loosen the hose clamp at the turbo inlet and pull the hose off of the turbo.



e) Remove the air box and inlet hose from the vehicle.



g) Extract the filter status meter and its grommet from the air box.

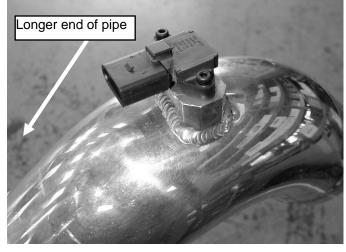
f) Remove the IAT sensor from the air box.



h) Remove the grommet from the inner air box mounting tab.

#### 3) Installation of the AEM Brute Force Intake System.

a) When installing the BFI System, DO NOT completely tighten the hose clamps or mounting tab hardware until instructed to do so later in these instructions.



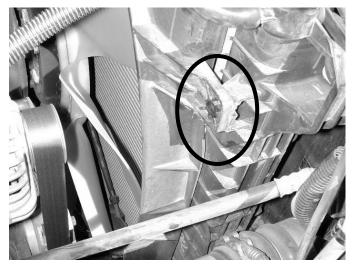
b)	Install the IAT sensor in the Brute Force Inlet Pipe
usi	ng the supplied screws. Make sure the electrical plug
is p	pointed towards the longer section of piping.

c) Insert the filter status meter and grommet into the ahole in the inlet pipe.



d) Install the short arm of the elbow onto the turbo inlet with the supplied hose clamp. Do not tighten the clamp.

e) Attach the gasket material to the heat shield as shown.





f) Remove the bolt securing the radiator fan shroud and save it for later use.

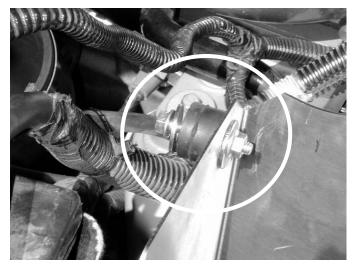
g) Place the heat shield in the engine bay as shown.

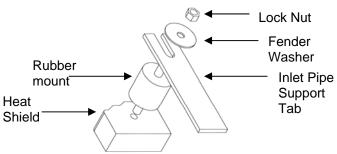


h) Insert the heat shield tab under the radiator shroud tab and secure it with the bolt removed earlier.



i) Secure the lower tab with the supplied bolt, washer and lock nut. The washer and lock nut should be installed from the bottom, underneath the plastic tab.





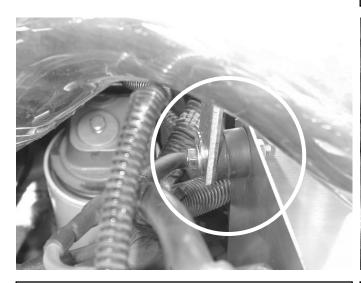
j) Install the rubber mount onto the turbo side of the heat shield.

I) Place the Brute Force Inlet Pipe in the engine bay.

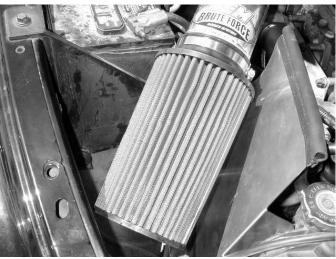
k) Proper rubber mount installation.



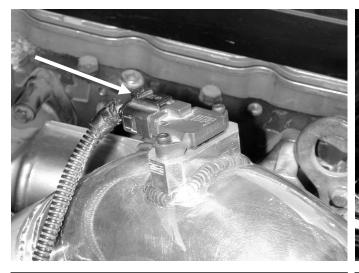
m) Insert the lower end of the pipe into the elbow at the turbo inlet. Do not tighten the hose clamp.



n) Secure the pipe to the rubber mount as shown in step 3k. Do not tighten the lock nut.



o) Install the AEM filter onto the Brute Force Inlet Pipe.



p) Route the IAT sensor wire under the inlet pipe and plug it into the IAT sensor. Confirm that the plug is towards the rear of the vehicle. q) AEM Brute Force Intake System installed.

### 4) Re-Assemble the vehicle.

a) Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tight.

- a) Position the pipe so that it does not touch any other surface and tighten hose clamps and lock nuts.
- b) Reconnect battery terminals.
- c) Start engine and perform a final inspection before driving the vehicle.

For Technical Inquiries E-Mail Us At tech@aempower.com