



Brute Force Intake System

Equipped with AEM DRYFLOW Filter. No oil required!

Installation Instructions for:
Part Number 21-8308
2004 Jeep Wrangler 2.4L

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Instruction Part Number: 10-8308

2004 Jeep Wrangler 2.4L C.A.R.B. E.O. #pending

Brute Force Air Intake Systems that are pending CARB approval are illegal in California except on racing vehicles which may never be used on public highways.

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Congratulations! You have just purchased the finest Air Induction & Filtration system for your truck at any price!

The **AEM** Brute Force System is the result of extensive development on a wide variety of trucks. 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 Systems deliver maximum performance gains through lightweight, all-aluminum, mandrel-bent tubing that is tuned in both length and diameter. The aluminum will not crack in extended use like plastic. The tube length and diameter are matched for each specific engine to give power over a broad RPM range. Unlike plastic systems that use a continually diverging cross-section, we take advantage of the acoustical energy in the inlet duct to promote cylinder filling during the intake valve-opening event. 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 air mass flow to the engine is increased because of the increased airflow and reduced inlet temperature, which translates to more power.

Bill of Materials for: Part # 21-8308

Quantity	Part Number	Description
1	2-83081*	Intake Pipe
1	20-8308*	Heat Shield
1	21-2029D	Air Filter Assembly 2.75" x 9"
1	5-227	Hose, Adapter, 2.75/2.25x3
10"	65004	5/8" Breather Hose
1	1228560	Mount,Rubber 1" X 8MM
2	559960	Washer M8
2	444.460.08	Nut,Nylok 8MM
1	1-127	Zip tie for heatshild
2	4093-6	1-1/16" Hose Clamp
1	103-BLO-4420	# 44 Hose Clamp
18"	8-111	Edge Trim
1	103-BLO-4820	# 48 Hose Clamp
1	103-BLO-4020	# 40 Hose Clamp
1	10-8308*	Kit Instructions

Read and understand these instructions **BEFORE** attempting to install this product.

Note: This inlet pipe kit requires the removal and reinstallation of emissions related components. If you are not familiar with the installation and/or the operation of these components then please refer this installation to a qualified professional.

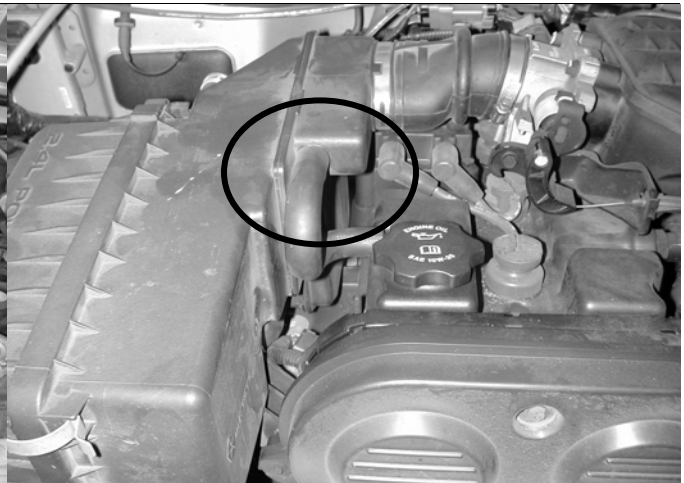
1) Getting started

- a) Make sure vehicle is parked on a level surface.
- b) Set parking brake.
- c) Disconnect negative battery terminal.
- d) If engine has run within the past two hours let it cool down.

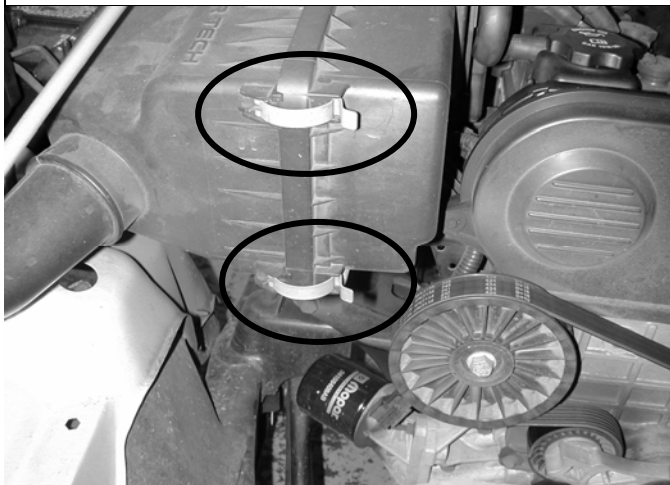
2) Removing the stock air inlet system



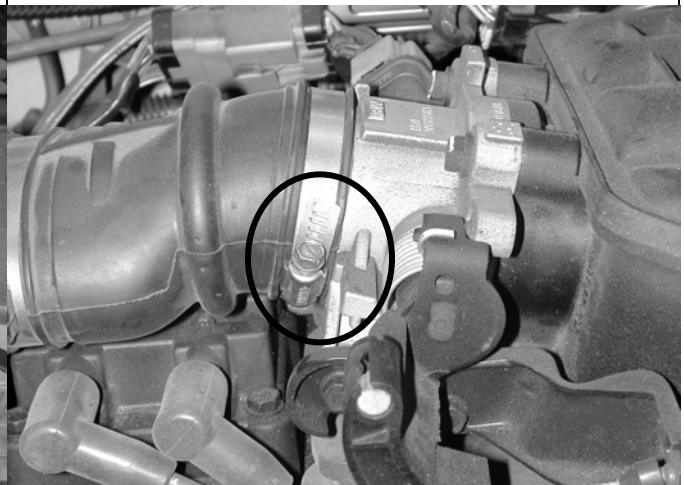
a) Before removing any of the O.E. components, **label each individual part so that no components become mixed up during the installation process.**



b) Disconnect the breather hose from the air filter housing.



c) Unclip the two metal retaining clips on the air filter housing. Remove the air filter housing lid and air filter.



d) Loosen the hose clamp on the throttle body.

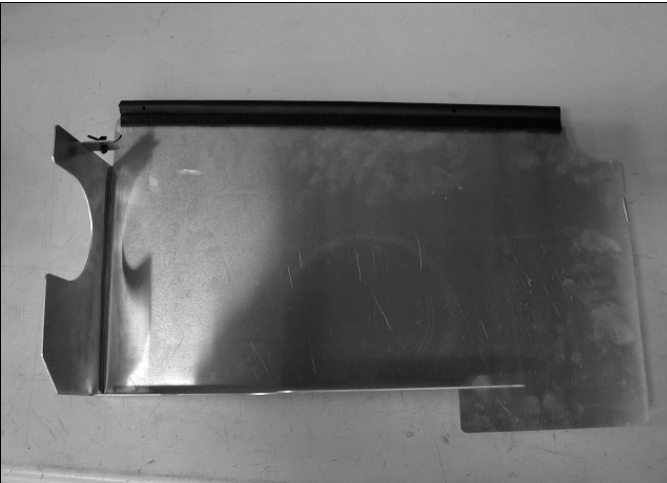


e) Remove the nut securing the air filter housing to the engine.

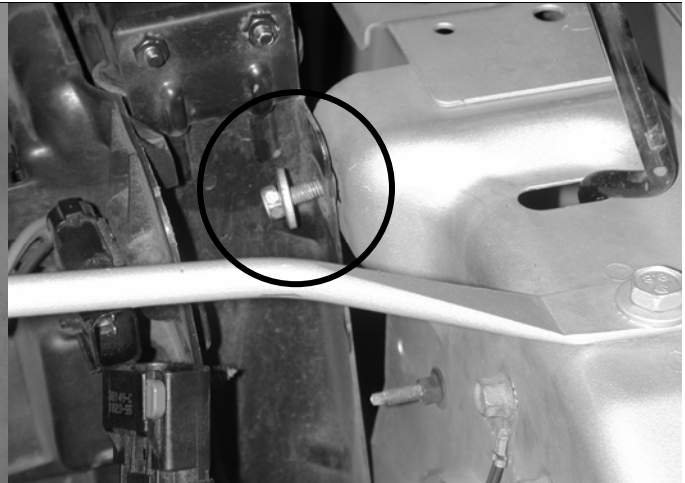


f) Remove the air filter housing from the engine compartment.

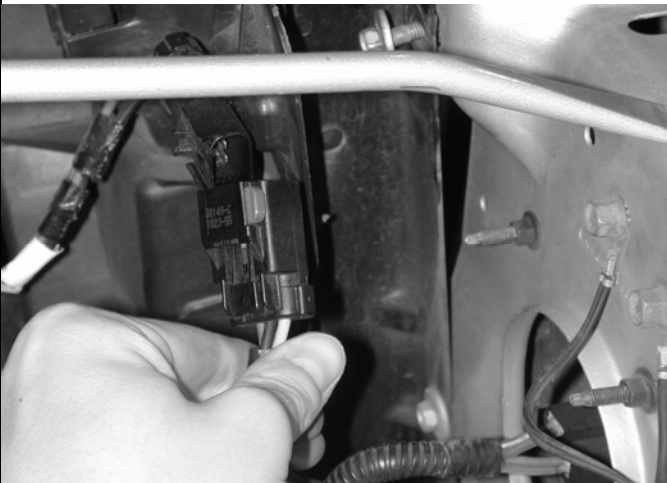
3) Installing the *AEM* Brute Force Intake



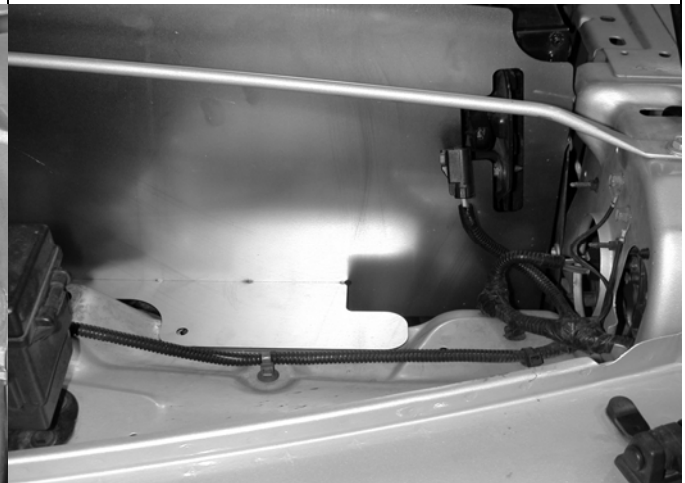
a) Install the supplied rubber edge trim to the heat shield and trim to fit.



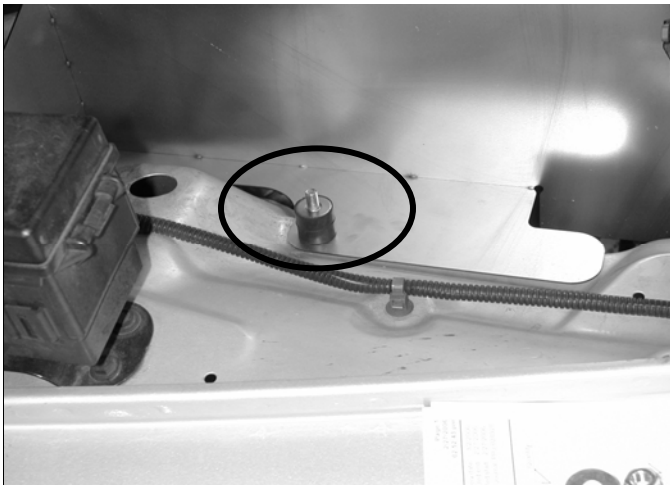
b) Remove the bolt on the passenger side radiator support as shown.



c) Unplug the fan wiring harness from the fan.



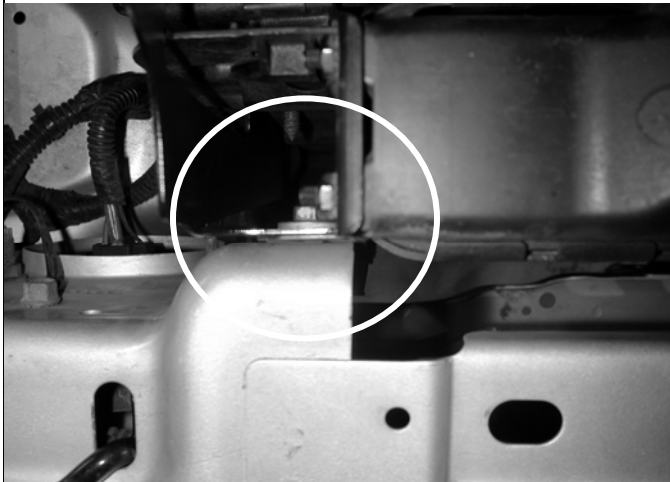
d) Install heat shield into engine compartment and align the front mounting tab with the bolt removed in step 3b.



e) Align the hole on the bottom of the heat shield with the hole in the inner fender. Install the supplied M8 rubber mount into the hole as shown.



f) Install the M8 washer and nut to the bottom of the rubber mount previously installed. This is done from inside the wheel well of the Jeep.



g) Reinstall the bolt removed in step 3b to secure the front of the heat shield. Plug the fan wiring harness back into the fan.



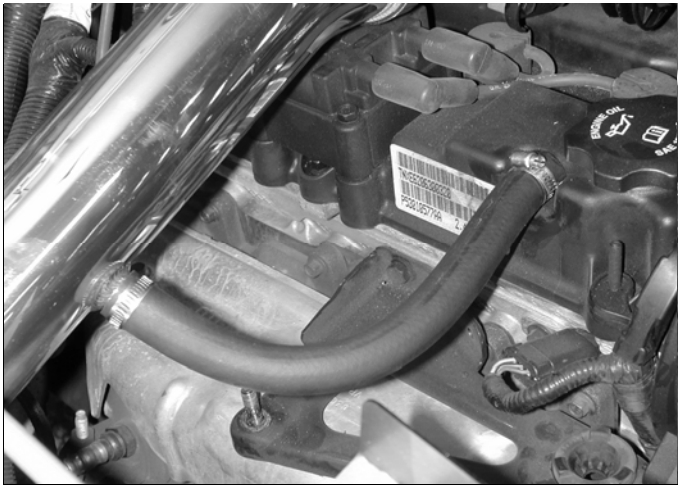
h) Install the supplied silicone coupler onto the throttle body and secure using a #40 hose clamp.



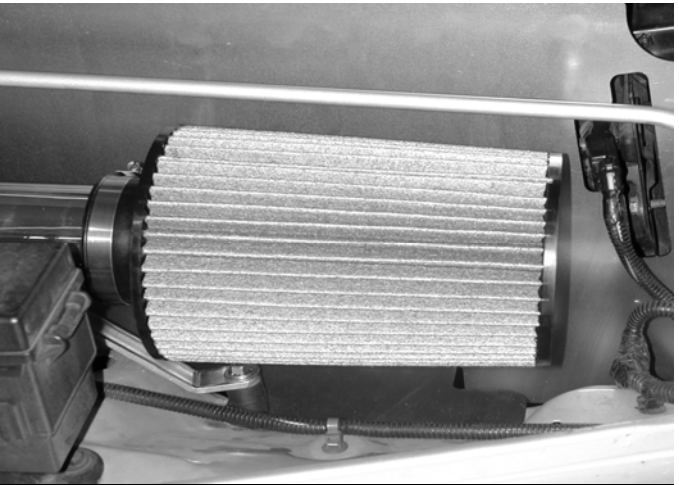
i) Check to be sure the intake pipe is free from debris. Install the **AEM Brute Force** intake pipe into the silicone coupler on the throttle body and secure using a #44 hose clamp.



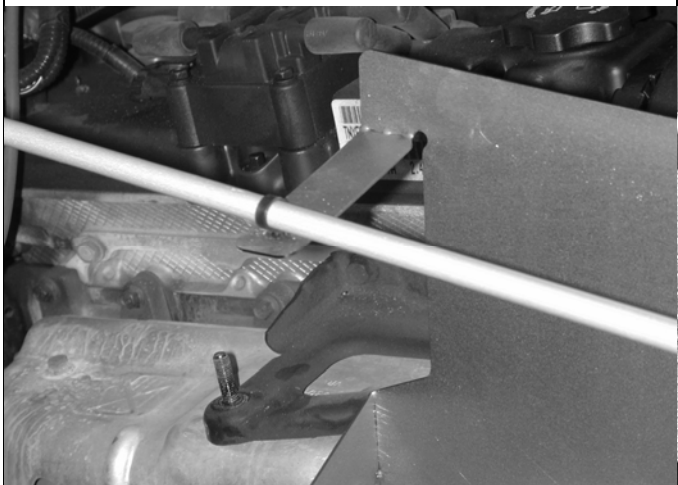
j) Align the intake pipe bracket with the rubber mount previously installed. Install the M8 washer and nut onto the rubber mount to capture the bracket.



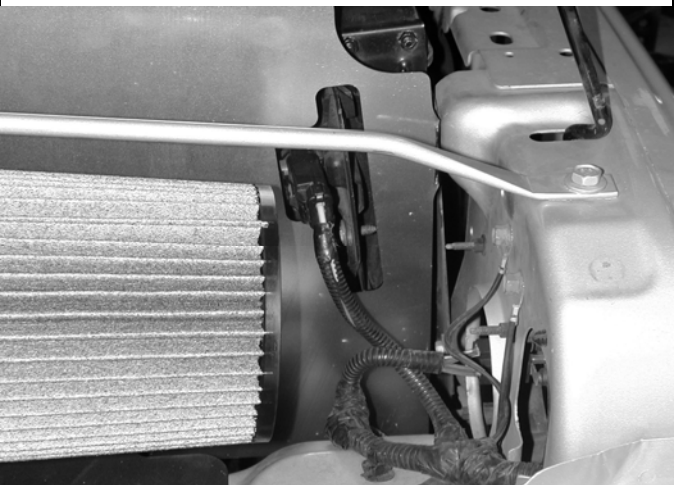
k) Install the supplied 5/8" breather hose between the intake pipe nipple and the valve cover elbow using two 1-1/16" hose clamps.



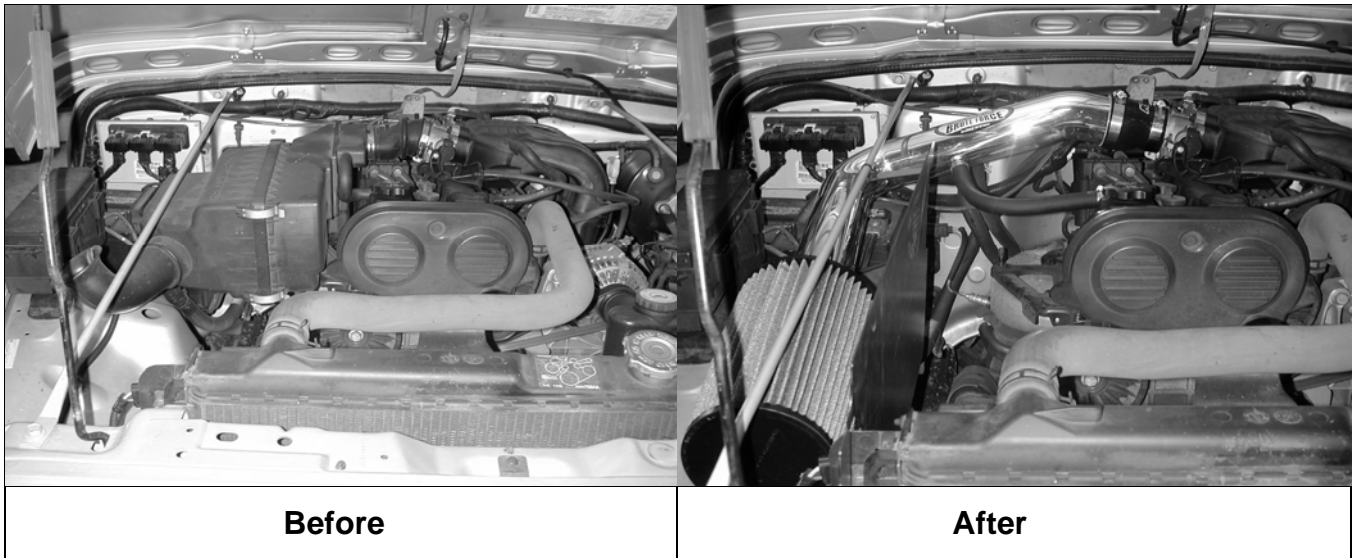
l) Install the **AEM** filter into the space behind the headlight. Push the filter over the inlet pipe until the stop in the filter is reached. Install the #48 hose clamp to secure the filter to the inlet pipe.



m) Insert the tree mount zip-tie into the mounting tab on the back of the heat shield. Secure the zip tie to the radiator support beam and trim the excess plastic off.



n) Check that the filter is not touching any part of the vehicle. Position the **AEM Brute Force** intake for best fitment. Be sure that the pipe or any other component is not in contact with any part of the vehicle. Tighten the hose clamps at the throttle body. Tighten the nut on the mounting bracket. Re-adjust pipe if necessary.



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.
- b) Reconnect the battery cables to the battery (always connect positive first).
- c) Start the vehicle and check for proper operation of all the components that were removed.

**For Technical Inquiries
E-Mail Us At
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