

Brute Force Intake System

Equipped with AEM DRYFLOW Filter. No oil required!

Installation Instructions for: Part Number: 21 -8303 2002-2003 Jeep Liberty 3.7L V6

ADVANCED ENGINE MANAGEMENT INC.

2205 126TH Street, Unit A Hawthorne, CA. 90250 Phone: (310) 484-2322 Fax: (310) 484-0152 www.aempower.com Instruction Part Number: 10-8303 2002-2003 Jeep Liberty 3.7L V6 C.A.R.B. E.O. #D-392-21 **Congratulations!** You have just purchased the finest Air Induction & Filtration system for your truck at any price!

The **AEM** Brute Force Intake System is the result of extensive development on a wide variety of cars. 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.

Bill of Materials for: 21-8303

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1	2-83031	Inlet Pipe
1	10-8303	Instructions
1	5-320	Hose, Adapter 3.25/3.00X3" BLK
1	103-BLO-4820	Hose Clamp,2.56-3.50"
1	103-BLO-5220	Hose Clamp, 2.81-3.75"
1	21-2039D	Air Filter Asmbly 3.00 9" & Clamp
1	1-2072	Bolt, 1/4-20-UNCx1 3/4
1	1-2074	Lock Nut, 1/4-20
18"	65004	Hose 5/8 ID
1	2-647	Spacer, 1.00 OD X .250 ID X .625"
1	1-2073	Nut, 1/4-20
1	2-670	Heat shield spacer
2	559999	Fender Washer
1	1-3028	Washer, 1/4 SAE Flat
1	20-8303	Heat shield
2	559960	M8 Washer
2	444.460.08	M8 Nylok Nut
1	444.460.04	M6 Nylok Nut
9"	8-119	Gasket, Rubber Sponge
1	1228560	Mount, Rubber 1"X8mm
2	99024.032	Hose Clamp, 1"
1	1-2030	Bolt, Hex M6 X 1 X 16
1	1-3018	Washer, Flat M6X12
1	10-922B30	Emblem, 3.00" AEM BFS
2	10-922S	AEM Large Decal - Silver
1	10-504	Box, CAS 24X12X8
1	10-504	Box, CAS 24X12X8

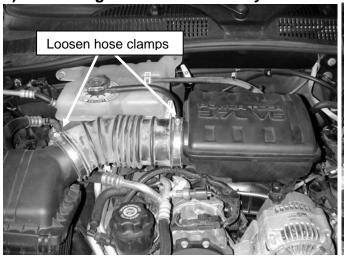
Read and understand these instructions **BEFORE** attempting to install this product.

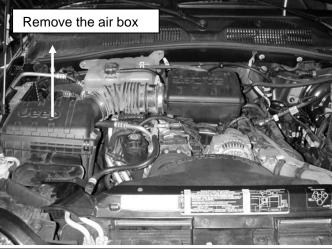
Note: This inlet pipe kit requires the removal and reinstallation of emissions related components. If you are not familiar with the installation and/or the operation of these components then please refer this installation to a qualified professional.

1) Getting started

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

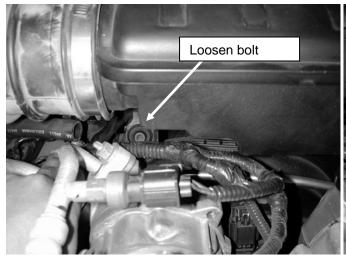
2) Removing the stock air inlet system



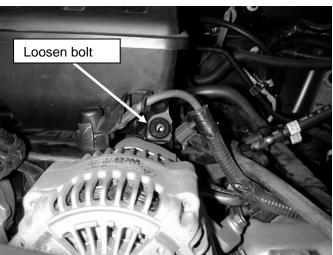


a) Loosen hose clamps.

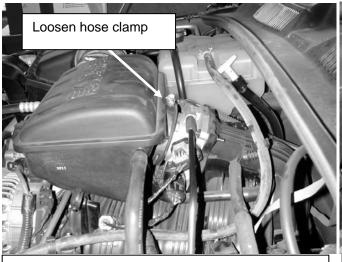
b) The air box is held in place by 3 rubber mounts on the base of the box. Gently pull out stock air box.

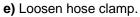


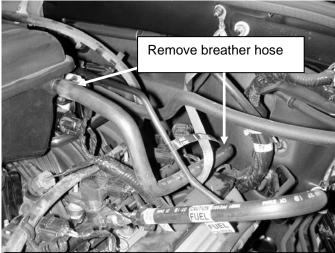
c) Loosen bottom left bolt.



d) Loosen bottom right bolt.







f) Remove breather hose from the vehicle.



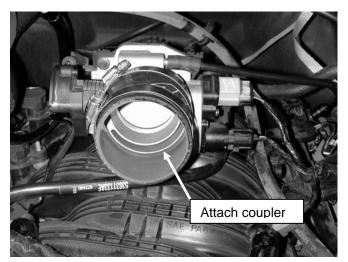
g) Detach breather hose. Remove remaining intake system tract.



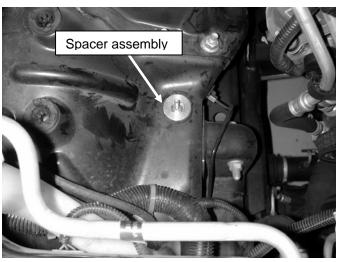
h) Engine bay should look like this once the stock air intake system is removed.

3) Installation of the AEM Brute Force Intake System.

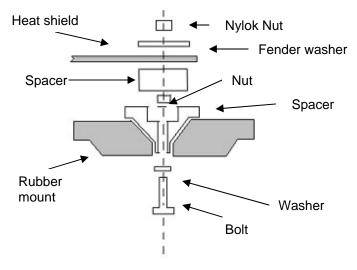
a) When installing the BFI System, DO NOT completely tighten the hose clamps or mounting tab hardware until instructed to do so later in these instructions.



b) Attach provided coupler and hose clamps to the throttle body.

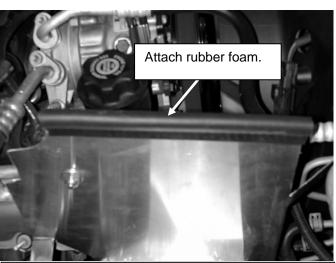


c) Mount the spacer assembly in the lower rubber mount left by the bottom of the air box. Spacer assembly consists of the bolt, washer, spacers and nut. Refer to diagram.





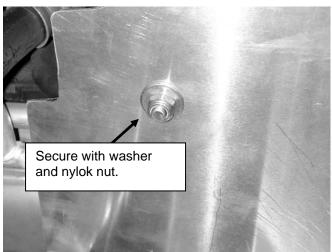
d) Insert heat shield. Secure bottom tabs with provided washers and nylok nuts.



e) Attach provided rubber foam to the top of the heat shield.



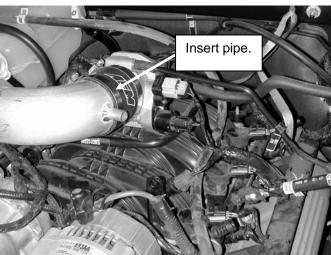
f) Secure heat shield on the fan shroud support with provided bolt and washer.



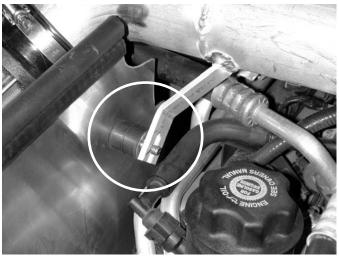
g) Attach the rubber mount to the engine bay side of the heat shield. Secure opposite side with provided washer and lock nut.



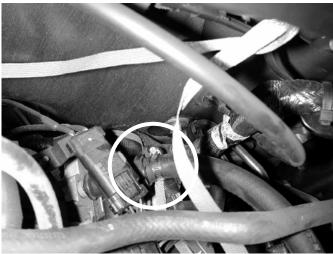
I) Attach filter element.



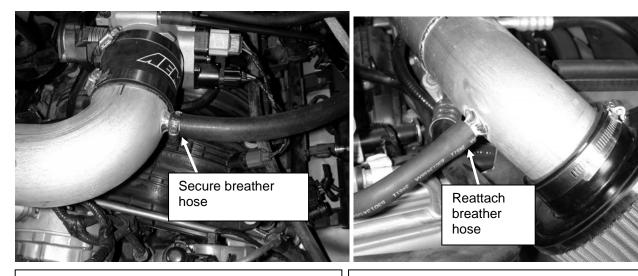
h) Insert inlet pipe and secure with hose clamps.



i) Secure bracket to the rubber mount on the heat shield with provided washer and lock nut. Refer to diagram on next page.

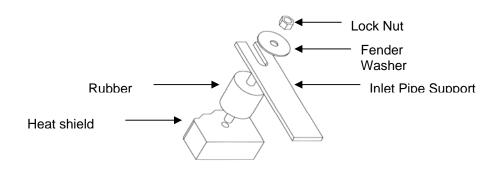


j) Attach breather hose and secure with hose clamp.



k) Secure other end of the breather hose with provided hose clamp.

I) Reattach breather hose to the filter-end nipple.



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, including the fuse box and fender liner.
- (b) Position the pipes so that they do not touch any other surfaces and tighten hose clamps.
- (c) Reconnect battery terminals.
- (d) Start engine and perform a final inspection before driving the vehicle.

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