



Brute Force Intake System

Equipped with AEM DRYFLOW Filter. No oil required!

Installation Instructions for:
Part Number 21-8304
1991-1995 Jeep Wrangler 2.5L

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Instruction Part Number: 10-8304

1991-1995 Jeep Wrangler 2.5L 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 #21-8304

Quantity	Part Number	Description
1	2-83041	Upper Intake Pipe
1	2-83042	Lower Intake Pipe
1	20-8304	Heat Shield
1	21-2049D	Air Filter Assembly 3.5" x 9"
1	5-353	Reducer Coupler 3"-3.5"
1	5-305	Hose, Elbow 3.0 x 2.5 90 BLK
15"	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
1	1-113	Zip tie, 6" Long
2	4093-6	1-1/16" Hose Clamp
1	103-BLO-4020	# 40 Hose Clamp
12"	8-111	Edge Trim
2	103-BLO-4820	# 48 Hose Clamp
1	103-BLO-5620	# 56 Hose Clamp
4	559999	Washer, 6mm Flat
2	1-2014	Bolt, 1/4-20 x 3/4"
2	1-2074	Nut, Nylock 1/4-20
1	10-8304	Kit Instructions
1	10-922B	Brute Force Emblem
2	4093-5	3/4" Hose Clamps
2	2-658	Spacer
2	1-3028	1/4" Flat Washer
2	1-2075	Bolt, M6
2	444.460.04	Nut, 6mm
14"	65006	Power Steering Hose
2	10-922S	AEM Silver Decal

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.

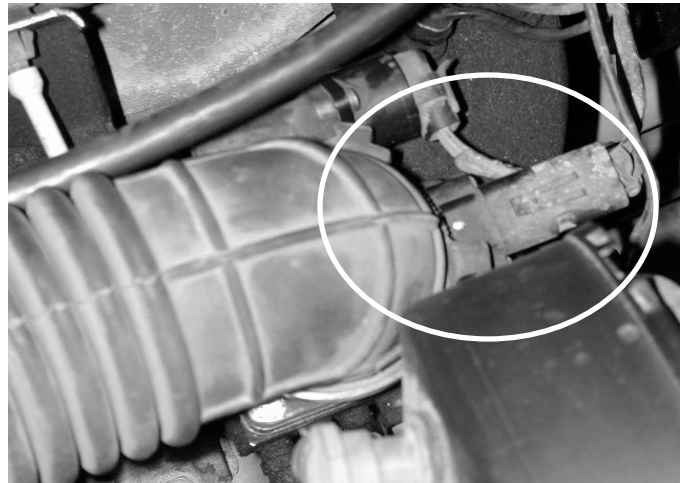
1) Getting started

- 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



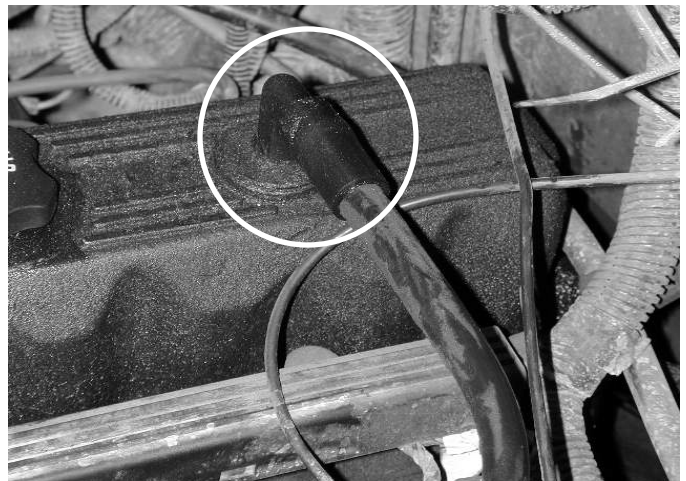
a) Before removing any of the O.E. components, **label each individual part so that no components become mixed up during the installation process.**



b) Loosen the plastic hose clamps on the rubber intake tube attached to the throttle body. Do this by pulling the two plastic tabs on the hose clamp apart. Disconnect the intake tube from the throttle body.



c) Disconnect the charcoal box breather hose from the air filter housing.



d) Remove the breather hose connecting the valve cover to the air filter housing.



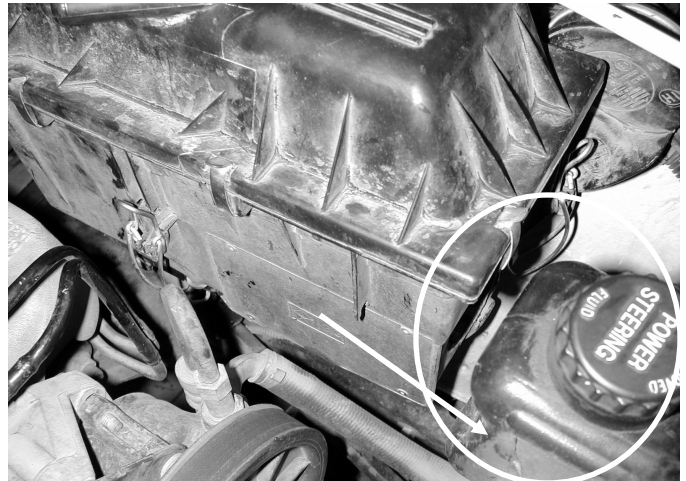
e) Unstrap the three hook holding the air filter housing to the chassis. Lift the Air filter housing and intake tube from the vehicle.



f) Remove the inlet air duct from below the headlight housing.



g) Remove the two rubber grommets from the air filter housing mount.



h) If equipped with power steering remove the two bolts securing the reservoir.



h) Remove the two bolts securing the fan shroud to the radiator support on the driver side.



i) Loosen the nuts on the radiator support brace and lift brace off of mount. Rotate the brace out of the engine compartment.

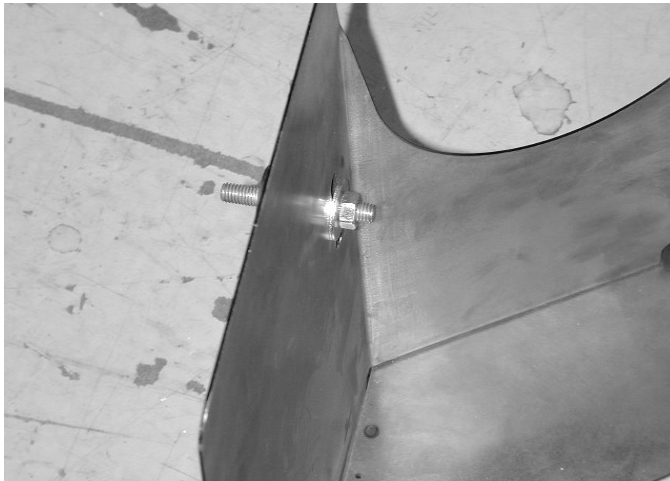
3) Installing the *AEM* Brute Force Intake



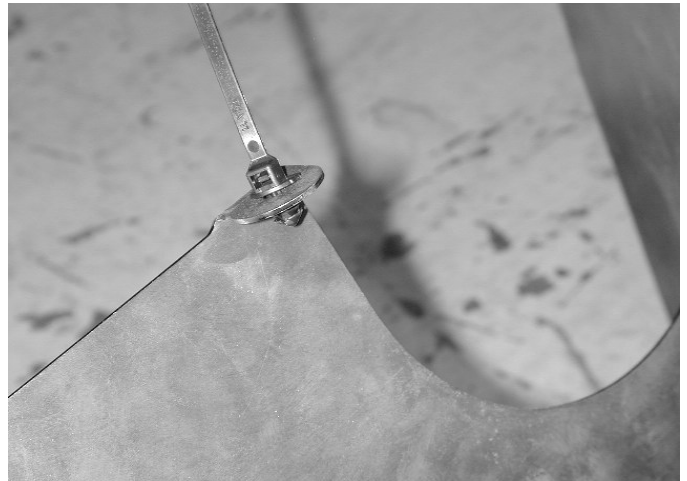
a) Install the rubber elbow with the smaller, 2.5" side on the throttle body.



b) Attach elbow using the supplied #44 Hose clamp.



c) Prepare the heat shield for installation by first installing the rubber mount into the slot as shown.



d) Install the plastic zip-tie mount by pressing it into the hole on the heat shield tab.



e) Install the heat shield by sliding the two tabs behind the radiator shroud. Install the two bolts previously removed in step 2h to secure.



f) Install the two bolts, two nuts, and four washers to secure the bottom of the heat shield. Tighten until nut is snug but do not over tighten. For non-power steering Jeeps continue to stem 3m.



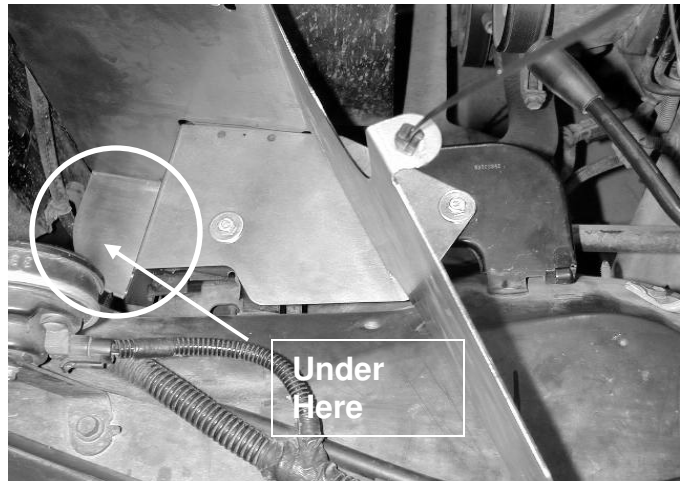
h) Remove power steering hose connected to the hard line attached to the chassis.



i) Secure power steering hose supplied with a hose clamp.



j) Secure other side of hose to the reservoir with supplied hose clamp. Mock up power steering reservoir using supplied spacers, bolts, and nuts.



k) Check for clearance of power steering line under heat shield. If the hose hits the heat shield gently bend the power steering hard line down.



j) After clearance is checked tighten power steering reservoir to heat shield using supplied spacers, bolts, and nuts.



m) Install the upper intake pipe into the elbow on the throttle body. The nipple should be pointing up in the direction of the engine as shown.



n) Install the **AEM** filter into the space behind the headlight. This will make installation of the lower pipe much easier.



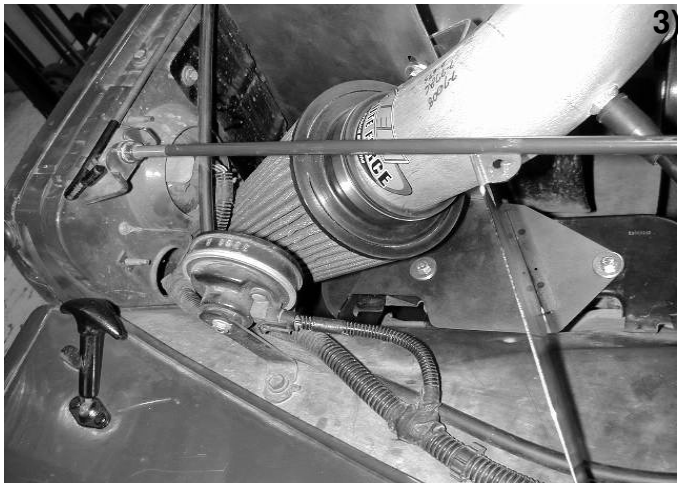
o) Install the AEM Brute Force lower intake pipe. Align the bracket with the rubber mount on the heat shield and slide the filter on.



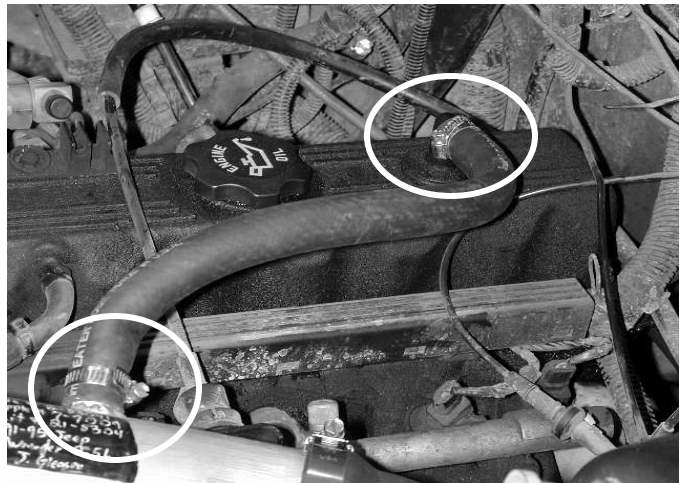
k) Slide the lower intake pipe to the coupler attached to the upper intake pipe and secure with a #56 hose clamp.



l) Install the washer and Nylok nut onto the rubber mount to capture the intake bracket.



m) Push the filter over the inlet pipe until the stop in the filter is reached and install one hose clamp to secure the filter onto the inlet pipe. Once fitment is checked, tighten the hose clamp.



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



o) Attach the factor charcoal box breather line to the lower intake pipe by sliding it over the nipple.



p) 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 and silicone coupling. Tighten the nut on the mounting bracket. Re-adjust pipe if necessary. Install rubber edge trim to the top of the heat shield



q) Swing the radiator support brace back to its' stock location and secure. Wrap the heat shield zip-tie mount around the brace and secure the heat shield to the brace.



r) Zip-tie the radiator overflow hose to the wiring harness on the top of the inner fender as shown. Install Brute Force Emblem on heat shield.



Before



After Without Power Steering



After With Power Steering

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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