



Equipped with *AEM DRYFLOW* Filter
No oil required!

Kit Part Number: 21-8220

Dodge Nitro 4.0L V6 2007

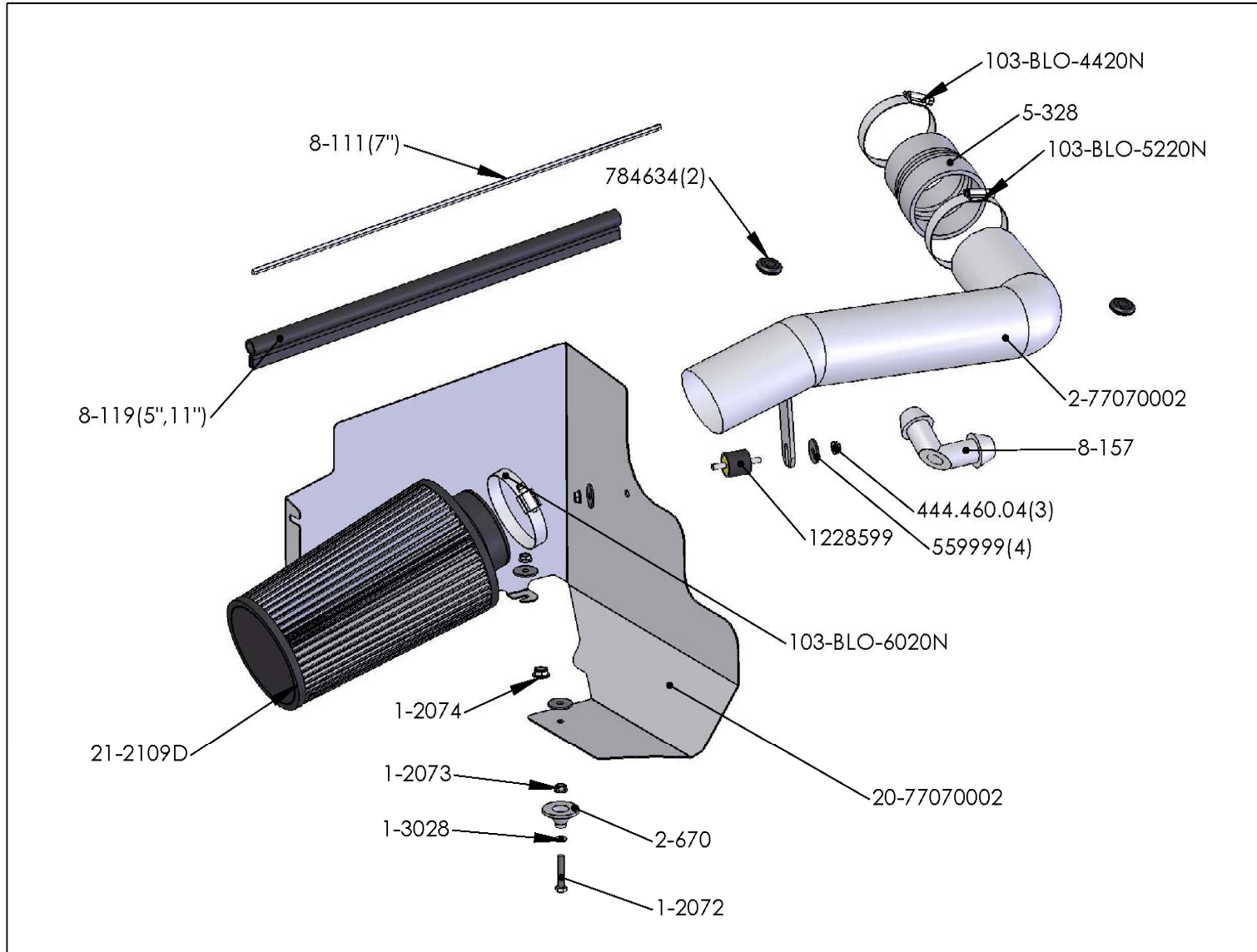
CARB EO # D-392-30

Brute Force Intake Systems that are pending an Executive Order number (EO#) relating to exemptions under Section 27156 of the Vehicle Code from the California Air Resource Board (CARB) are for off-road use only in California, which may never be used on public highways.

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Part Number	Description	Qty
2-7707002	Inlet pipe	1
10-8220	Instructions	1
10-922Y	AEM Decal Yellow	2
21-2109D	AIR FILTER ASMBLY 3.25 9" ELEMENT	1
559999	M6 Washer	4
1-3028	1/4 Washer	1
1-2072	1/4-20 x 1 3/4 Bolt	1
1-2074	1/4-20 Nylock Nut	1
1-2073	1/4-20 Nut	1
2-670	Spacer	1
103-BLO-6020N	#60 Hose Clamp	1
103-BLO-4420N	#44 Hose Clamp	1
103-BLO-5220N	#52 Hose Clamp	1
784634	Grommet	2
8-119	Gasket Sponge	11
8-119	Gasket Sponge	5
8-111	Rubber Edge Trim	7"
1228599	Rubber Mount 1"	1
444.460.04	M6 Nut	3
8-157	1/2" 90 Deg Connector	1
5-328	2.75/3.25 Adapter	1
20-77070002	Heat Shield	1

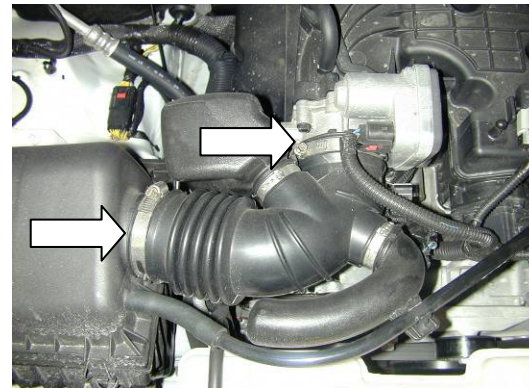
1. Preparing Vehicle

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

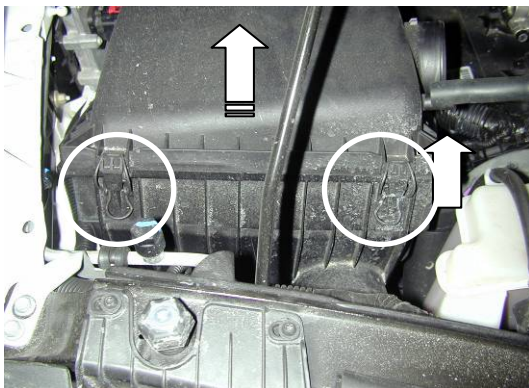
2. Removal of Stock System



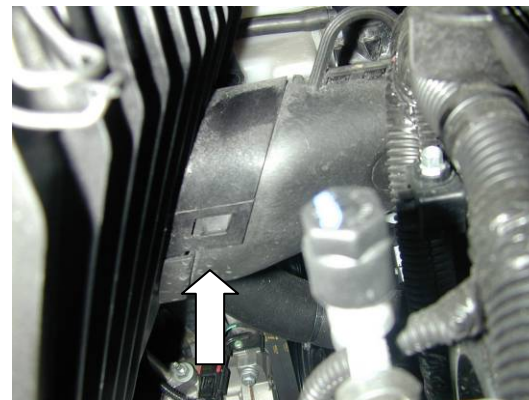
a) Disconnect the Inlet Air Temperature (IAT) Sensor connector. Push up the on the release (red) and depress the connector (black).



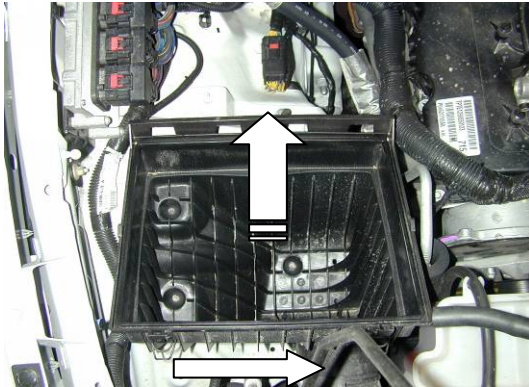
b) Loosen hose clamp at the throttle body and at the air box. Remove air inlet tube.



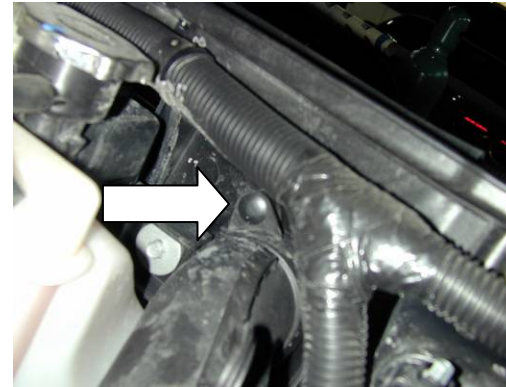
c) Remove the PCV breather tube from the air box. Unclip the air box lid and remove with air filter.



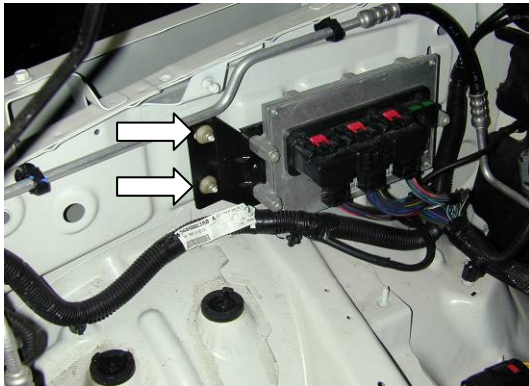
d) Disconnect the lower air box from the fresh air duct by unclipping the connection on both sides of the tube.



e) Remove the lower section of the air box by pulling straight up. *Note: Careful not to damage the fresh air inlet tube.*



f) Remove the push-in tab from the fresh air duct and remove ducting.



g) Loosen and remove the nuts to the ECU mounting bracket. These will be reused.

3. Installation of Brute Force Intake

a) When installing the Intake System, DO NOT completely tighten the hose clamps or mounting tab hardware until instructed to do so.



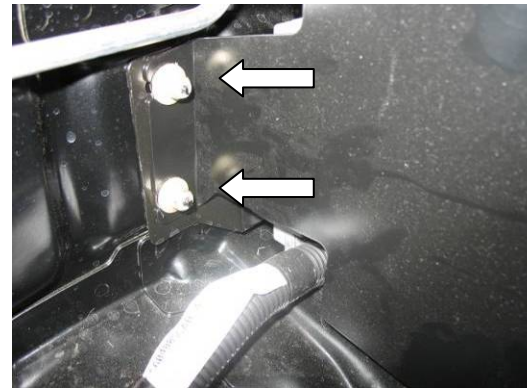
b) Insert the ¼-20 bolt and ¼" washer from underneath the grommet through the fender well.



c) Secure the ¼-20 bolt and washer with the ¼-20 nut and tighten.



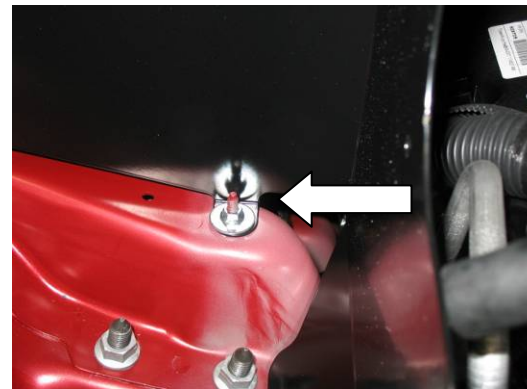
d) Insert the heat shield as shown. Align the heat shield to the studs in step 2g. The bottom of the heat shield should align with the stud from step 3c.



e) Secure the heat shield with the nuts from 2g.



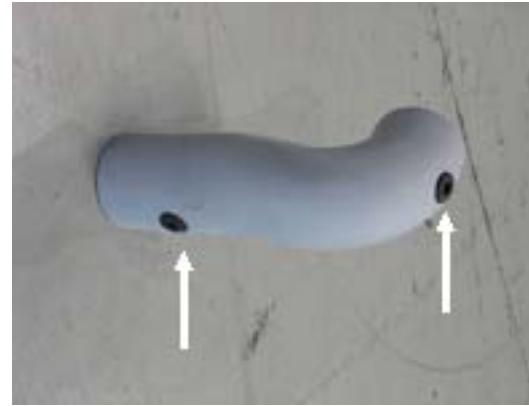
f) Secure the bottom of the heat shield with the fender washer and nylock nut.



g) Secure the heat shield tab with the fender washer and M6 nut. Check for clearance around the heat shield. Tighten all mounting points.



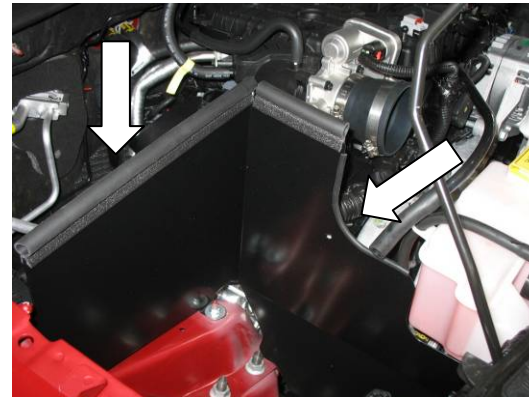
h) Attach the coupler to the throttle body and secure with #44 and #52 hose clamp.



i) Insert both grommets into the pipe. Check the inside of the pipe for proper fit.



j) Insert the 90 degree fitting into the straight section of the pipe. Insert the IAT Sensor removed with the inlet tube (Step 2b), into the grommet near the bend.



k) Attach the sponge gasket to the top to the heat shield. Attach the rubber edge trim on the radius.



l) Install the rubber mount, fender washer and M6 nut onto the heat shield.



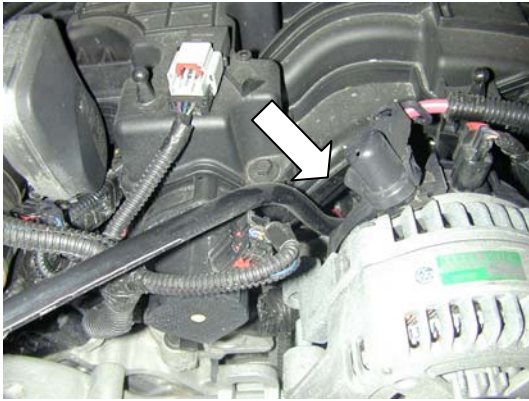
l) Insert the pipe as shown.



m) Align the bracket with the rubber mount. Check for clearance around the heat shield. Secure with fender washer and M6 nut.



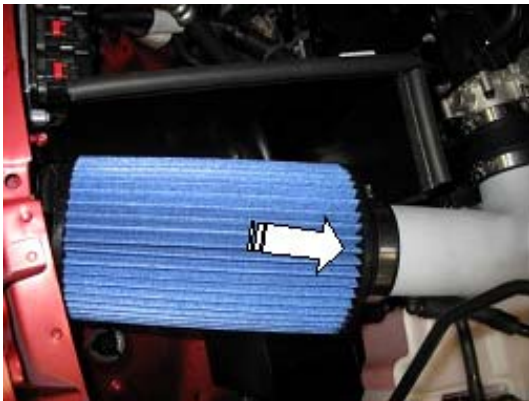
n) Attach the factory breather hose to the nipple.



o) Check for clearance of the breather hose around the alternator and connector.



p) Reconnect the IAT sensor harness connector and secure.



q) Attach the filter element and secure with #60 hose clamp.



r) Your AEM Brute Force Intake should look like this.

4. Re-assemble Vehicle

- a) Position the inlet pipes for best fitment. Be sure that the pipes or any other components do not contact any part of the vehicle. Tighten the rubber mount, all bolts and hose clamps.
- b) Check for proper hood clearance. Re-adjust pipes if necessary and retighten them.
- c) Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tight.
- d) Reconnect negative battery terminal. Start engine. Let car idle for 3 minutes. Perform a final inspection before driving the vehicle.

5. Service and Maintenance

- a) It is recommended that you service your AEM dryflow filter every 20,000 miles for optimum performance. Use AEM dryflow cleaning kit part # 21-110.
- b) Use aluminum polish to clean your polished AEM Brute Force intake pipe.
- c) Use window cleaner to clean your powder coated AEM Brute Force intake pipe. **(NOTE: DO NOT USE Aluminum polish on a powder coated AEM BRUTE FORCE intake pipe)**

For technical inquiries
e-mail us at tech@aempower.com
or
call us at
310.484.2322 Option #3

12 MONTH LIMITED WARRANTY

AEM warrants that its intake systems will last for the life of your vehicle. AEM will not honor this warranty due to mechanical damage (i.e. improper installation or fitment), damage from misuse, accidents or flying debris. AEM will not warrant its powder coating if the finish has been cleaned with a hydrocarbon-based solvent. The powder coating should only be cleaned with a mild soap and water solution. Proof of purchase of both the vehicle and AEM intake system is required for redemption of a warranty claim.