



**Equipped with AEM® Dryflow™ Filter  
No Oil Required!**

## **INSTALLATION INSTRUCTIONS PART NUMBER:**

**21-8317DC**

(Gun Metal Grey Finish)

**21-8317DP**

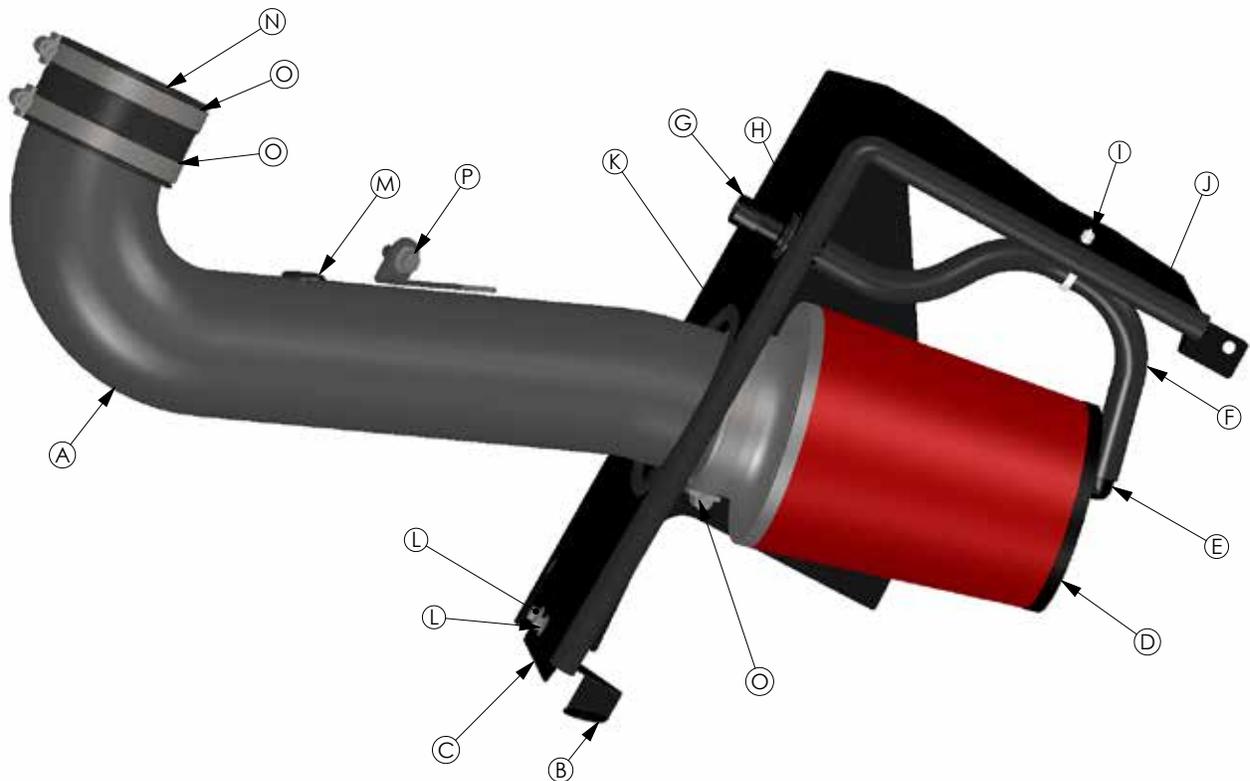
(Vacuum Metalized Chrome - VMC)

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2011-2014	JEEP	GRAND CHEROKEE	5.7 L-V8	C.A.R.B. E.O. # D-670-21
2011-2014	DODGE	DURANGO	5.7 L-V8	C.A.R.B. E.O. # D-670-21

**Intake systems for vehicles listed are 50  
state legal. See [AEMIntakes.com](http://AEMIntakes.com) for CARB  
status on each part for a specific vehicle.**

ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY
A	2-1463C/P	INLET PIPE, 2011 JEEP GRAND CHEROKEE	1
B	32-3083	BRACKET, HEAT SHIELD 20-8518	1
C	20-8518	HEAT SHIELD; GRAND CHEROKEE/DURANGO	1
D	21-2047D-HK	3-1/2 X7" DRY AEM W/ BREATHER HOLE	1
E	8-120	ELBOW, PLASTIC 5/8"	1
F	5-7013	HOSE; 5/8"ID X 13"L	1
G	8-185	PLASTIC ADAPTOR, REDUCER, 3/4"-5/8"	1
H	08058	GROMMET; 3/4" ID	1
I	1-127	ZIP TIE, 8" TREE PUSH-MNT	1
J	8-4024	EDGE TRIM, 24"	1
K	8-3014	RUBBER EDGE TRIM 14"	1
L	08373	BOLT; M6X1.00X16 HEX; FLG	2
M	784634	GROMMET, 1/2"	1
N	08654	HOSE; 3.50 ID X 2.2; BLACK EPDM	1
O	9456	1/2" BNDSHOSE CLAMP, 3.15"-4.00"	3
P	08318	BOLT; M8X1.25X16 HEX; FLG	1



**Read and understand these instructions BEFORE attempting to install this product. Failure to follow installation instructions and not using the provided hardware may damage the intake tube, throttle body and engine.**

## **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.
- d. Disconnect negative battery terminal.
- e. Do not discard stock components after removal of the factory system.

## **2. Removal of Stock System**



a. Your factory air intake system should look like this.



b. Remove the engine cover by pulling straight up.



c. Disconnect the inlet air temperature (IAT) sensor wire harness from the sensor.



d. Loosen and remove the M6 air inlet chamber mounting bolt.



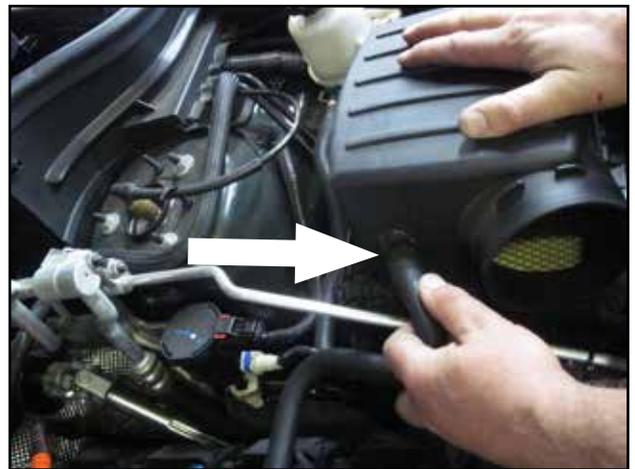
e. Loosen the hose clamp at the throttle body.



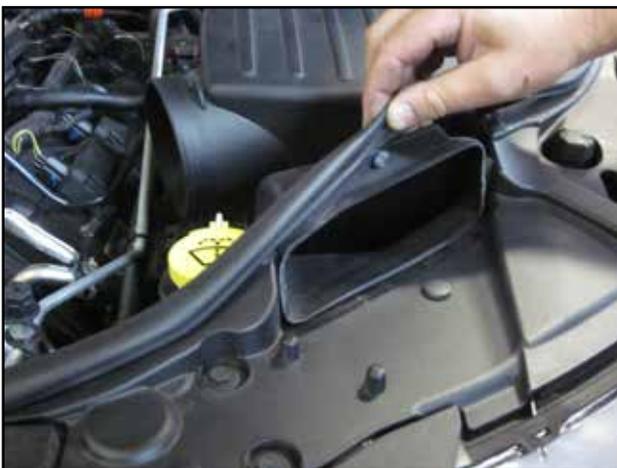
f. Loosen the hose clamp at the air box.



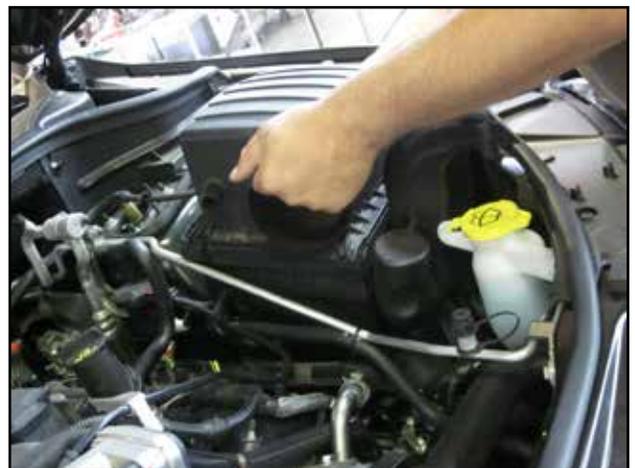
g. Remove the air inlet hose from the engine bay.



h. Detach the valve cover breather hose from the airbox.



i. Detach the air inlet duct from the rubber edge trim.



j. Lift and remove the air box from the engine bay.



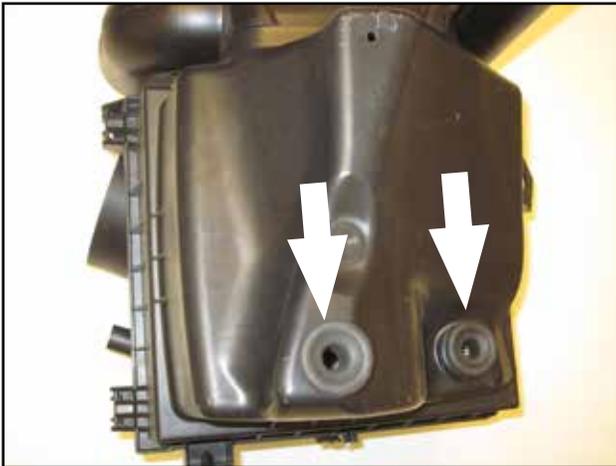
k. Loosen and remove the M8 bolt securing the power steering fluid reservoir. The bolt will be reused later.



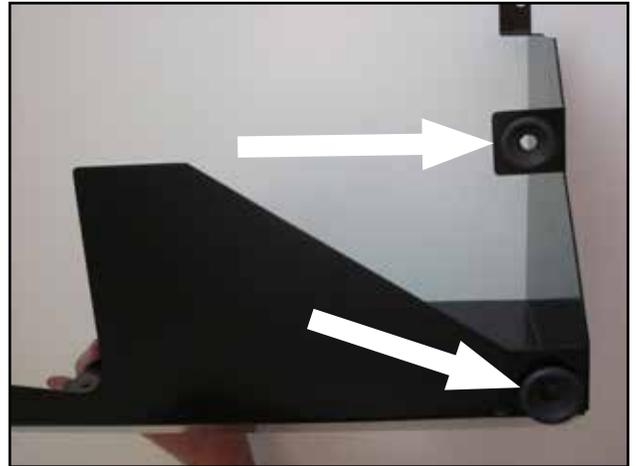
l. Remove the plastic clip securing the windshield washer fluid reservoir to the core support.

### 3. Installation of AEM® Intake System

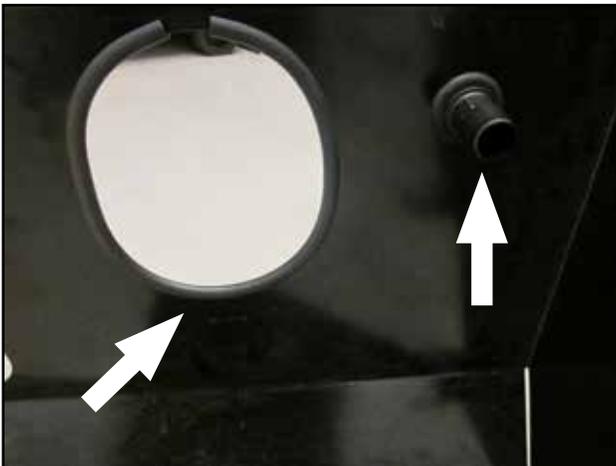
- a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



- b. Remove the rubber grommets from the bottom of the air box.



- c. Insert the grommets into the hole on the bottom of the heat shield (C) as shown.



- d. Install the supplied grommet (H) and straight hose adaptor (G) into the heat shield and install the supplied thin edge trim (K) around the opening as shown. **Note: The 5/8" end of the fitting goes on the outside of the heat shield.**



- e. Install the supplied heat shield bracket (B) to the core support with the factory 6 mm bolt. Do not completely tighten the bolt at this time.



f. Line up the grommets to the two studs and place the heat shield in place; install the thick rubber edge (j) trim on top of the heat shield.



g. Place the power steering reservoir tab over the AEM heatshield bracket and install the factory M8 bolt. Do not tighten completely at this time.



h. Attach the heat shield to the bracket installed in step 3-e) with supplied M6 bolts (L).



i. Place the windshield washer reservoir back in its place and reinstall the plastic clip removed from step 2-l).



j. From the factory air inlet tube, twist and remove the IAT sensor.



k. Once the IAT sensor is removed, use a suitable tool or pick to remove the small o-ring from the IAT sensor.



l. Install the supplied grommet (m) into the hole on the AEM intake tube.



m. Insert the IAT sensor into the AEM air intake tube as shown.



n. This is what the IAT sensor probe looks like inside the tube when sensor is properly inserted.



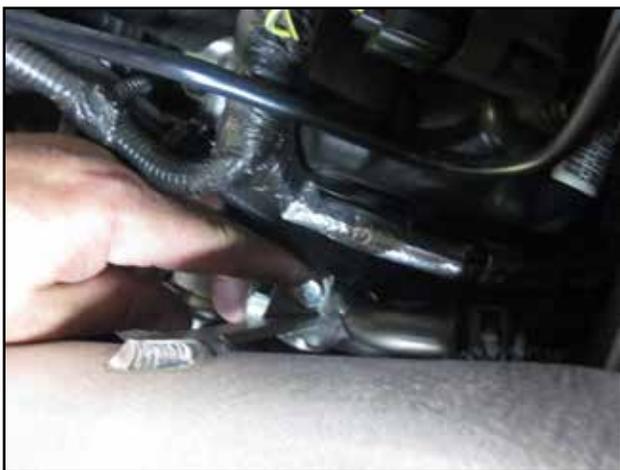
o. Loosen and remove the M8 bolt from the power steering pump housing. This bolt will not be re-used.



p. Install the supplied coupler (N) on the throttle body along with the supplied hose clamps (O).



q. Install the AEM air intake tube (A) to the throttle body and through the heat shield opening.



r. Attach the bracket on the AEM air intake tube to the power steering pump with the supplied M8 bolt.



s. This is how the bracket should look when properly installed.



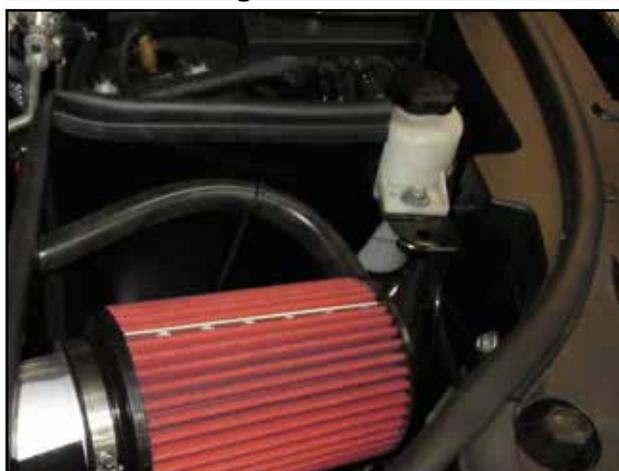
t. With the AEM air intake tube properly aligned, tighten all hose clamps, nuts and bolts installed in previous steps.



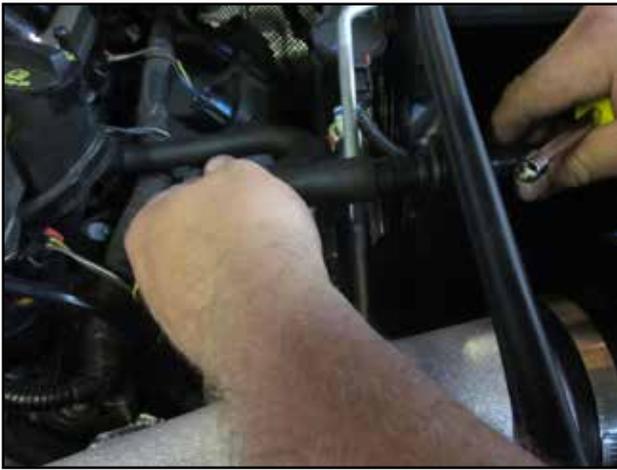
u. Install the elbow vent fitting (E) to the AEM air filter (D) top and attach the supplied 5/8" id hose (F) to the fitting.



v. Attach the filter to the AEM air intake tube and attach the vent hose to the vent fitting on the heat shield.



w. Wrap the zip tie (I) around the vent hose to hold it in place. And snap the tree into the hole.



x. Attach the valve cover breather hose to the other end of the straight vent fitting.



y. Connect the IAT wire harness to the sensor.



z. Re-install the engine cover.



aa. AEM Intake installed.

#### 4. Reassemble Vehicle

- a. Position the inlet pipes for the 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 re-tighten them.
- c. Inspect the engine bay for any loose tools and check that all fasteners that were removed are properly tightened.
- d. Reconnect the negative battery terminal and start the engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

#### 5. CARB Sticker Placement

- a. The C.A.R.B. exemption sticker, if applicable, must be visible under the hood so that an emissions inspector can find it when the vehicle is required to be tested for emissions. California requires testing every two years, other states may vary.

#### 6. Service and Maintenance

- a. AEM Induction Systems requires cleaning the intake system's air filter element every 100,000 miles. When used in dusty or off-road environments, our filters will require cleaning more often. We recommend that you visually inspect your filter once every 25,000 miles to determine if the screen is still visible. When the screen is no longer visible some place on the filter element, it is time to clean it. To clean, purchase our Synthetic air filter cleaner, part number 1-1000 and follow the easy instructions.
- b. Use window cleaner to clean your AEM® intake tube. **(NOTE: DO NOT USE aluminum polish on powder coated AEM intake tubes).**

For technical inquiries  
e-mail us at  
sales@aemintakes.com  
or  
call us at  
(800) 992-3000

## **AEM Air Intake System Warranty Policy**

AEM® warrants that its intake systems will last 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.

This warranty is limited to the repair or replacement of the AEM part. In no event shall this warranty exceed the original purchase price of the AEM part nor shall AEM be responsible for special, incidental or consequential damages or cost incurred due to the failure of this product. Warranty claims to AEM must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is nontransferable. Improper use or installation, use for racing, accident, abuse unauthorized repairs or alterations voids this warranty. AEM disclaims any liability for consequential damages due to breach of any written or implied warranty of all products manufactured by AEM. Warranty returns will only be accepted by AEM when accompanied by a valid Return Merchandise Authorization (RMA) number. Credit for defective products will be issued pending inspection. Product must be received by AEM within 20 days of the date RMA is issued.

If you have a warranty issue, please call (800) 992-3000 and our customer service department will assist you. A proof of purchase is required for all AEM warranty claims.

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