



# ***SHORT RAM INTAKE SYSTEM UPGRADE***

Installation Instructions for:  
Part Number 21-426  
2003-2005 Dodge SRT-4 2.4L

**ADVANCED ENGINE MANAGEMENT INC.**  
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Instruction Part Number: 10-7026  
2003-2004 Dodge SRT-4 2.4L C.A.R.B. E.O. # Pending  
2005 Dodge SRT-4 2.4L C.A.R.B. E.O. # Pending

Cold Air 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 car at any price!

The **AEM** Short Ram Intake System Upgrade is the result of extensive development the SRT-4. The 21-426 Short Ram Intake System Upgrade converts your 22-425 Short Ram Intake System to a Cold Air System. All **AEM** Cold Air Systems deliver maximum performance gains through 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. Unlike 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: 21-426

1	2-557	Inlet Pipe
1	10-7026	Instructions
1	20-425	Splash Shield
2	559999	Fender Washer
2	444.460.04	M6 Nylok Nut
2	1-2038	Bolt, Hex/Flange M6X20
1	5-302	Coupler 3.0"
2	103-BLO-4820	Hose clamps
15"	8-111	Rubber Edge Trim
1	10-922E300	AEM Decal
1	10-905	Warning 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.

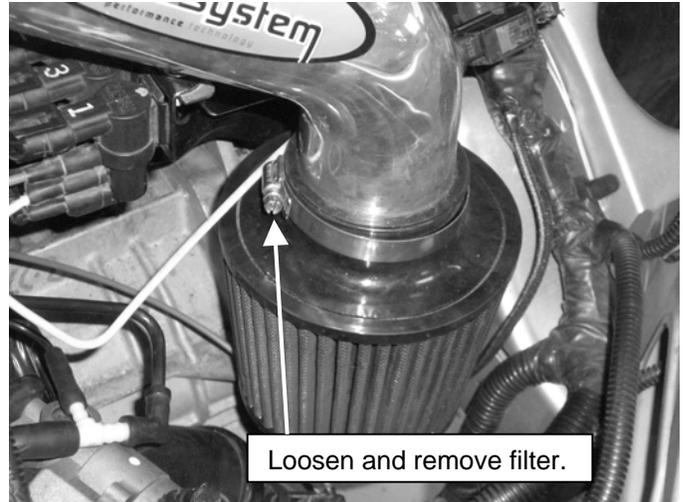
### 1) Getting started

- 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.
- e) Disconnect vacuum line to the inlet pipe.

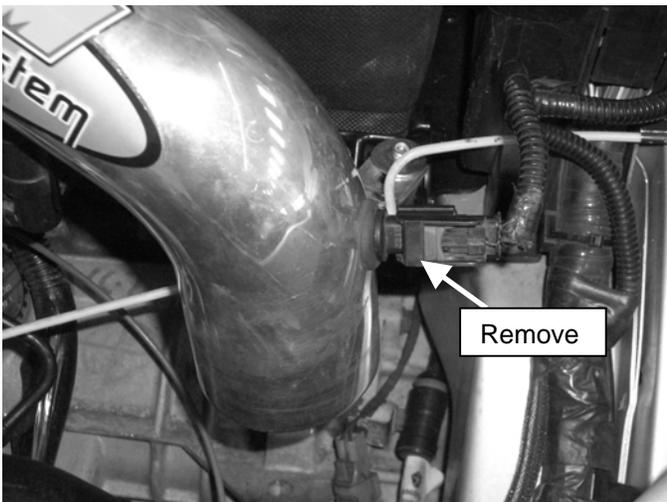
### 2) Removing the AEM Short Ram System



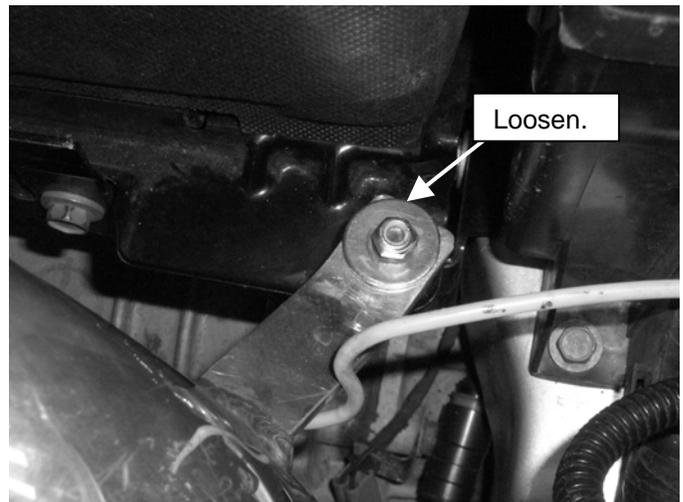
**a)** Your AEM Short Ram System should look like this.



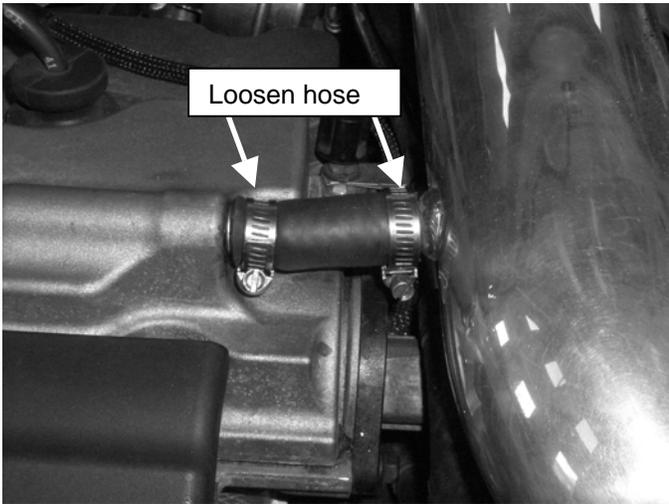
**b)** Loosen hose clamp to the filter element and remove.



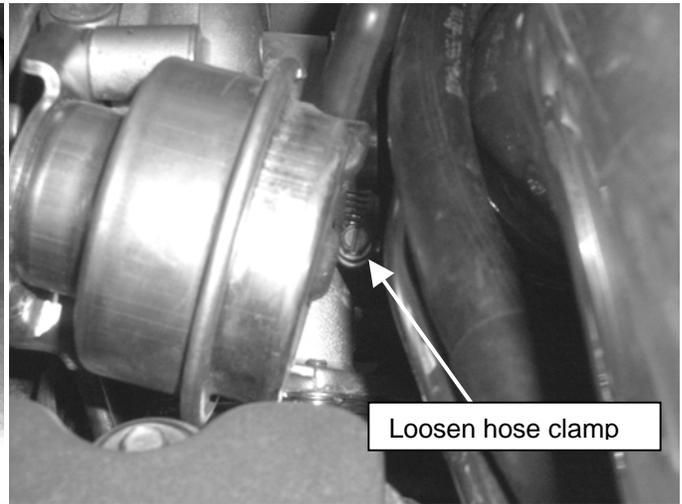
**c)** Remove IAT sensor and grommet. This grommet will be reused in the installation section of the instructions.



**d)** Loosen nylok nut for inlet pipe removal.



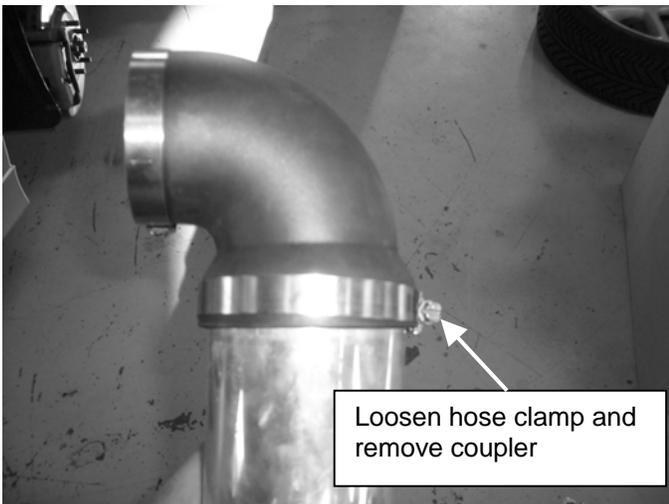
**e)** Loosen hose clamps.



**f)** Loosen hose clamp at the turbo and carefully remove your inlet pipe.

### 3) Installation of the *AEM* Short Ram Intake System Upgrade.

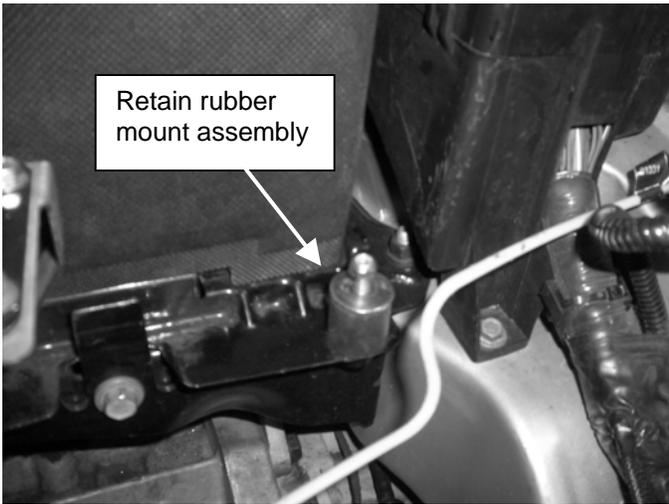
When installing the SRS Upgrade, DO NOT completely tighten the hose clamps or mounting tab hardware until instructed to do so later in these instructions.



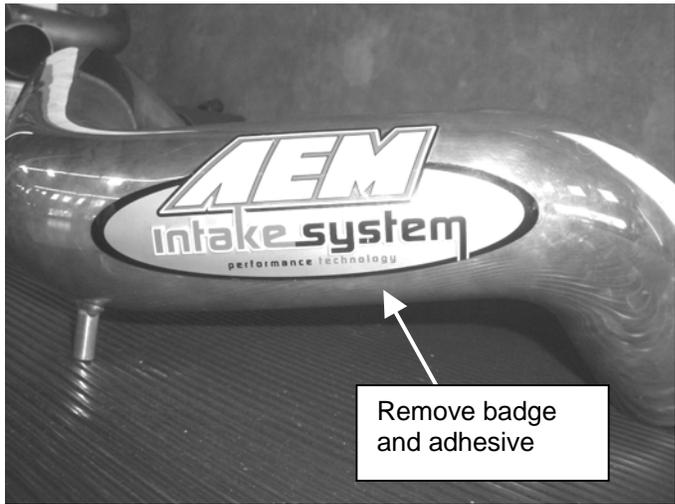
**a)** Loosen the hose clamp for the turbo inlet and remove the coupler from the inlet pipe.



**b)** Retain the vacuum assembly bracket.



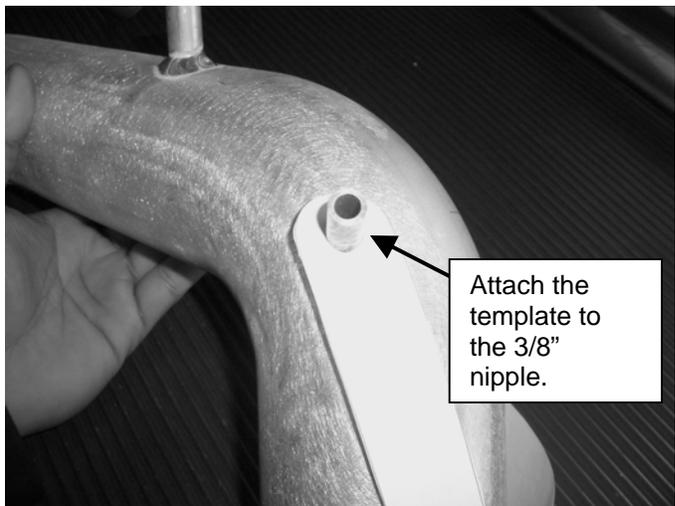
c) Retain rubber mount, nylok nut, and washer



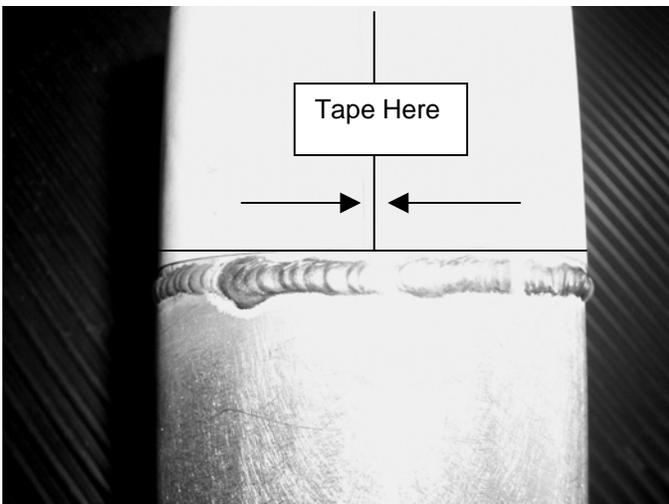
d) Remove the AEM intake system badge. Remove all adhesive from the pipe. **The badge is metal, be careful of the sharp edges.**



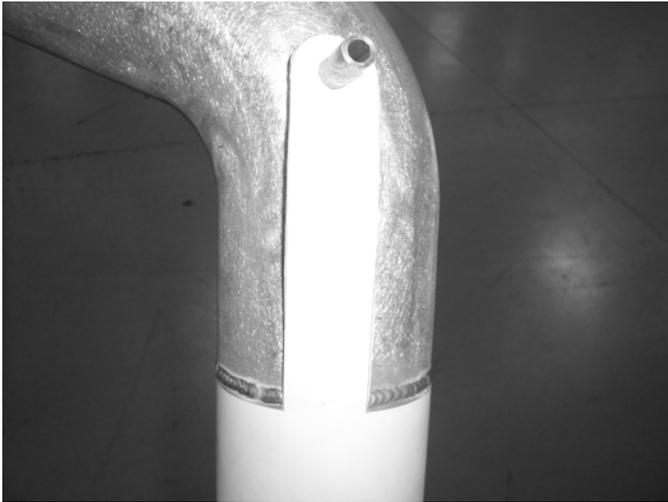
e) Cut out the template for shortening the inlet pipe. You should be able to go back to your SRS system so retain all the piping.



f) Attach the template to the 3/8" nipple. This is the nipple closest to the bracket. The template should not fit over the 1/2" nipple.



g) On the opposite side of the pipe, tape the edges of the template together. The two sides should align for a perfect cut.



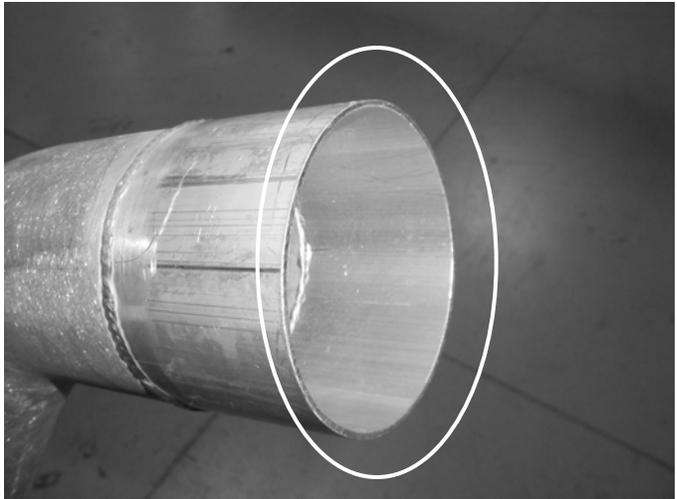
**h)** With the backside taped the front should look like this.



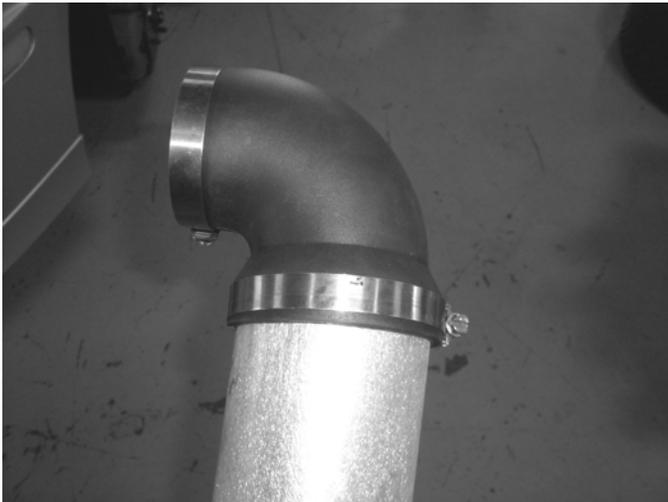
**i)** Saw your pipe at the edge of the template.



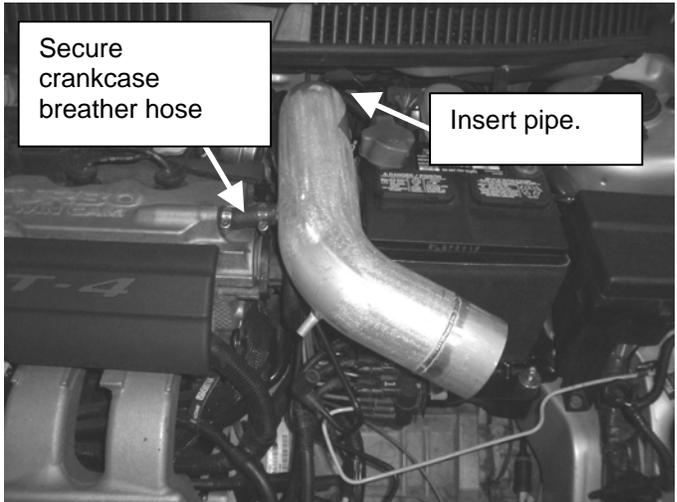
**j)** Your new pipe should look like this.



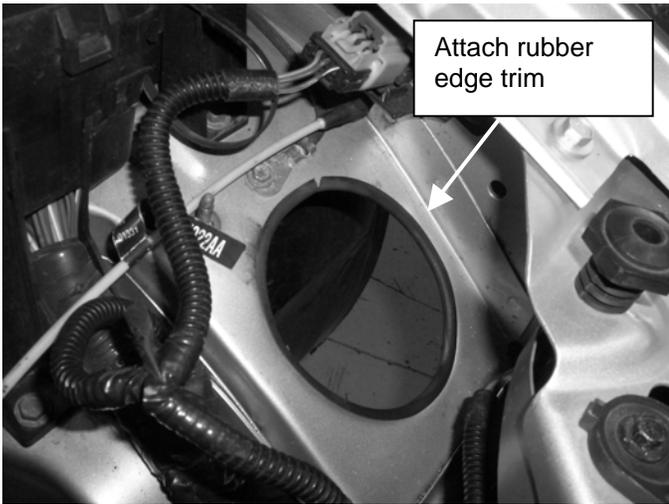
**k)** Remove the burrs from the edges of both pipes.



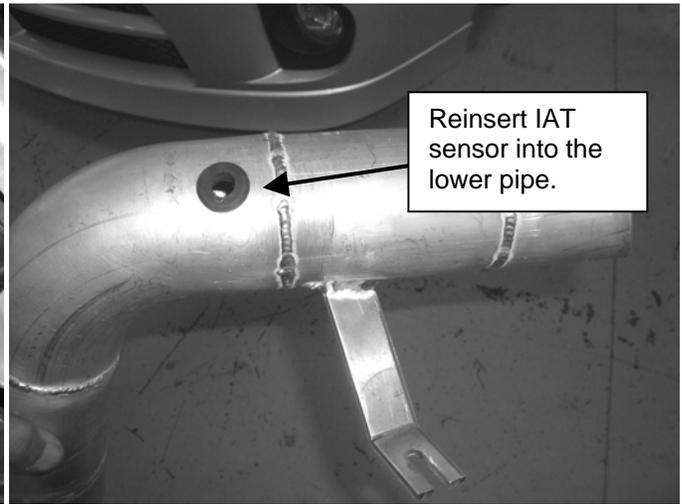
**l)** Attach the turbo coupler onto the pipe



**m)** Attach the modified pipe to the crankcase breather



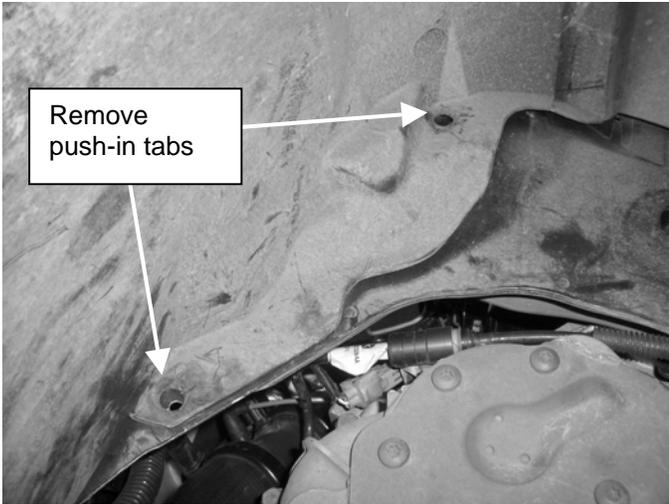
Attach rubber edge trim



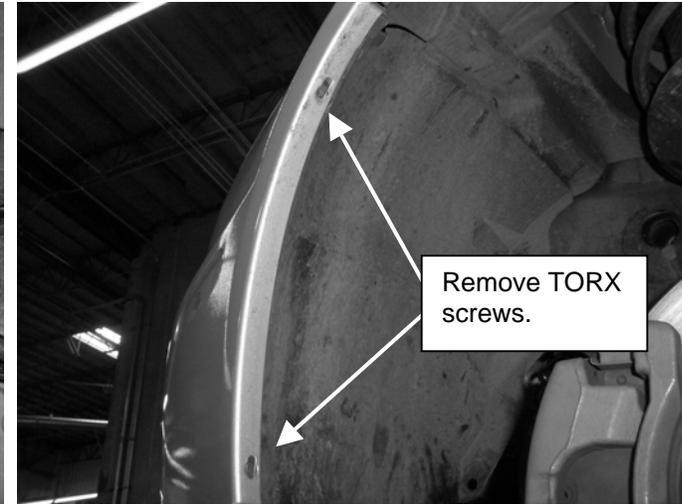
Reinsert IAT sensor into the lower pipe.

**n)** Attach the rubber edge trim to protect the lower pipe. *Adhesive may be necessary.*

**o)** Reinsert the grommet for the IAT sensor.



Remove push-in tabs



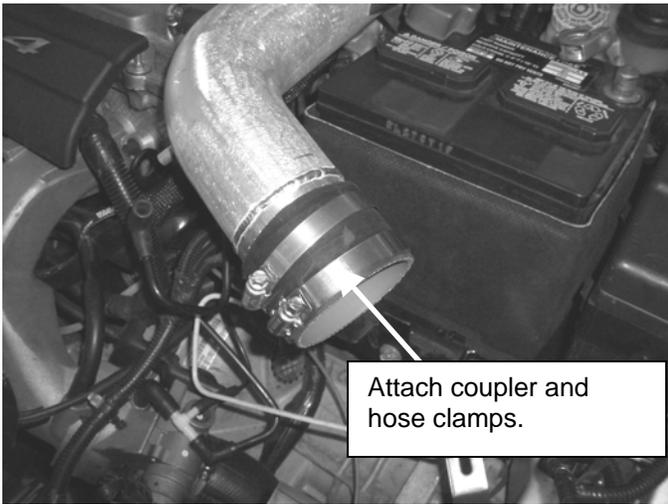
Remove TORX screws.

**p)** Remove push in tabs from the fender liner. Do not throw away the tabs. They will be reused.

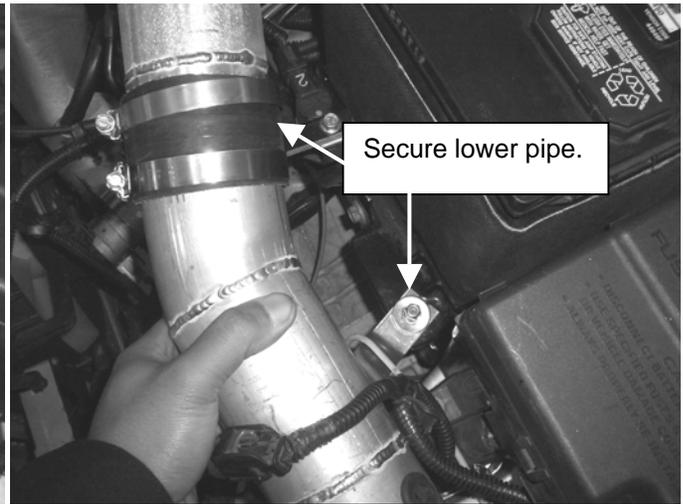
**q)** Remove the two TORX screws (T20) from the fender liner.



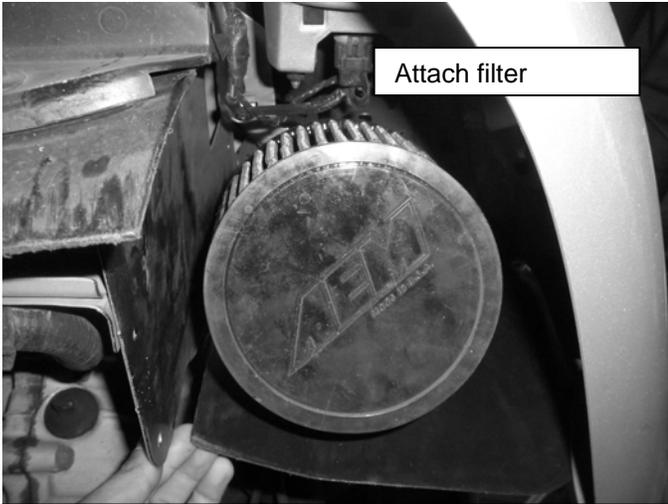
**r)** Insert the lower inlet pipe into the rubber lined cavity.



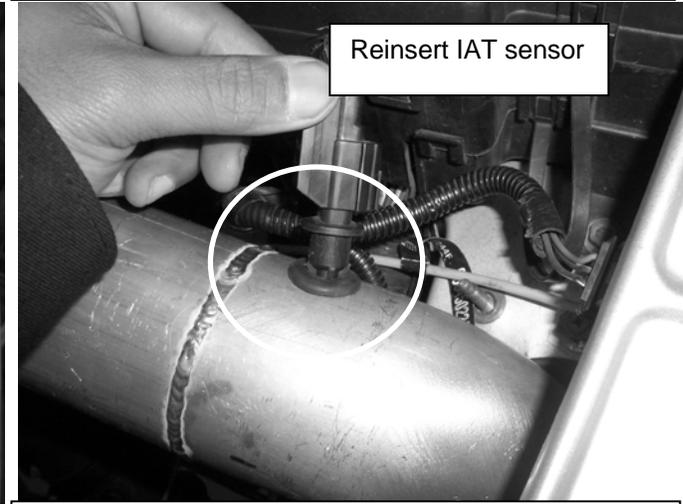
s) Attach coupler and hose clamps.



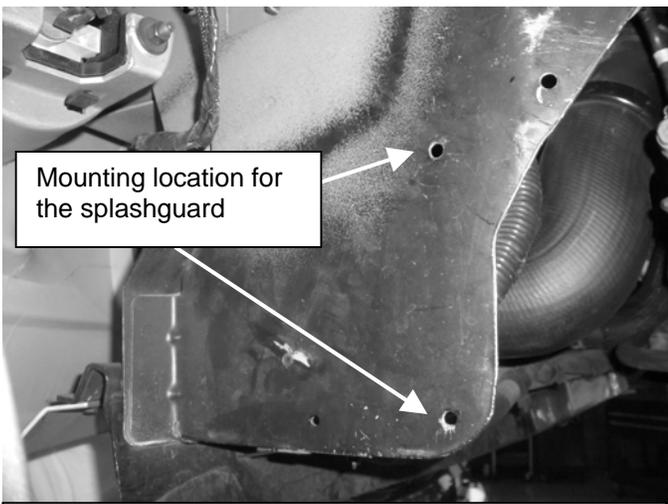
t) Insert the lower inlet pipe into the coupler and align the bracket with the rubber mount. **Make sure you center the pipe in the rubber lined hole.**



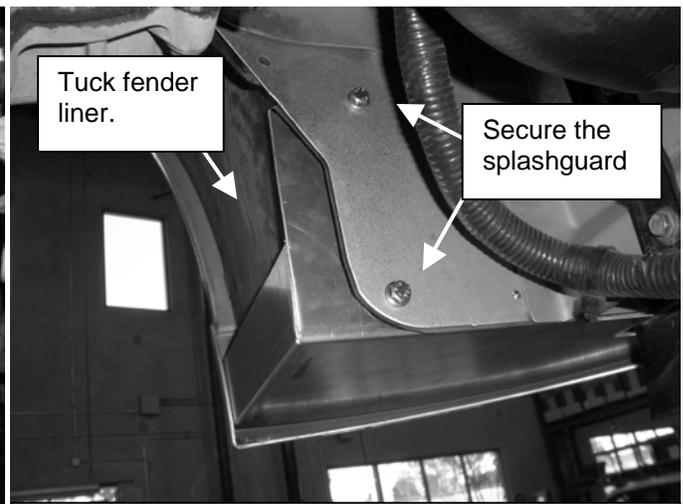
u) Attach filter element and secure.



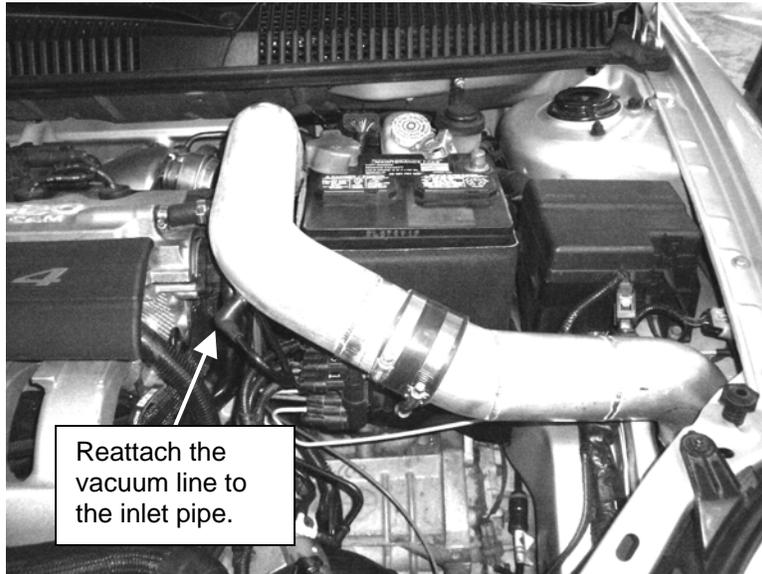
m) Reinsert IAT Sensor.



n) Locate the two mounting holes in the fender.



o) Secure the splashguard with flange bolt, washers and nylok nut. The fender liner will tuck inside the splashguard.



Reattach the vacuum line to the inlet pipe.

n) Adjust the pipes so that there is proper clearance at the cavity and at the filter. The filter should not touch the fender liner or the foglight harness if applicable. Reattach the vacuum line to the inlet pipe.

#### 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 terminal.
- (d) Reattach fender liner.
- (e) Start engine and perform a final inspection before driving the vehicle.

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