

# **HEMI RAM AIR INSTRUCTIONS**



**Read Completely Before Installing**

**VARARAM**



Stock Hemi air intake system.



The stock system is held in by 2 / 10mm bolts,loosen these,they will not come out ,just loosen them.



Disconnect factory air temp sensor ,by twisting 1/2 turn and pulling on sensor.

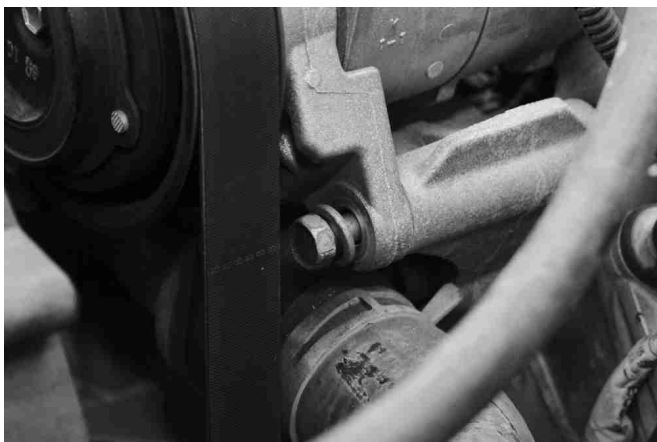
(Intake kit will now come out in one piece simply by lifting the airbox and plenum chamber as one unit)



Clip the harness clamps in the central firewall area to allow the wiring loom some slack

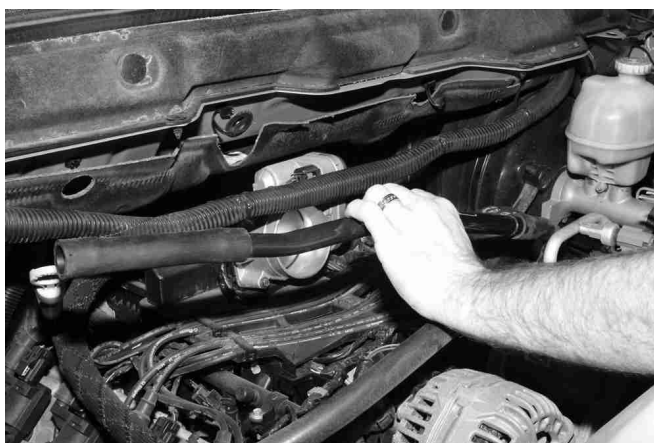


Remove factory orange seal around throttle body.



Install supplied bracket ,by loosening A/C bolt, you only need to back this out 1/4 inch, slide in bracket and tighten bracket.

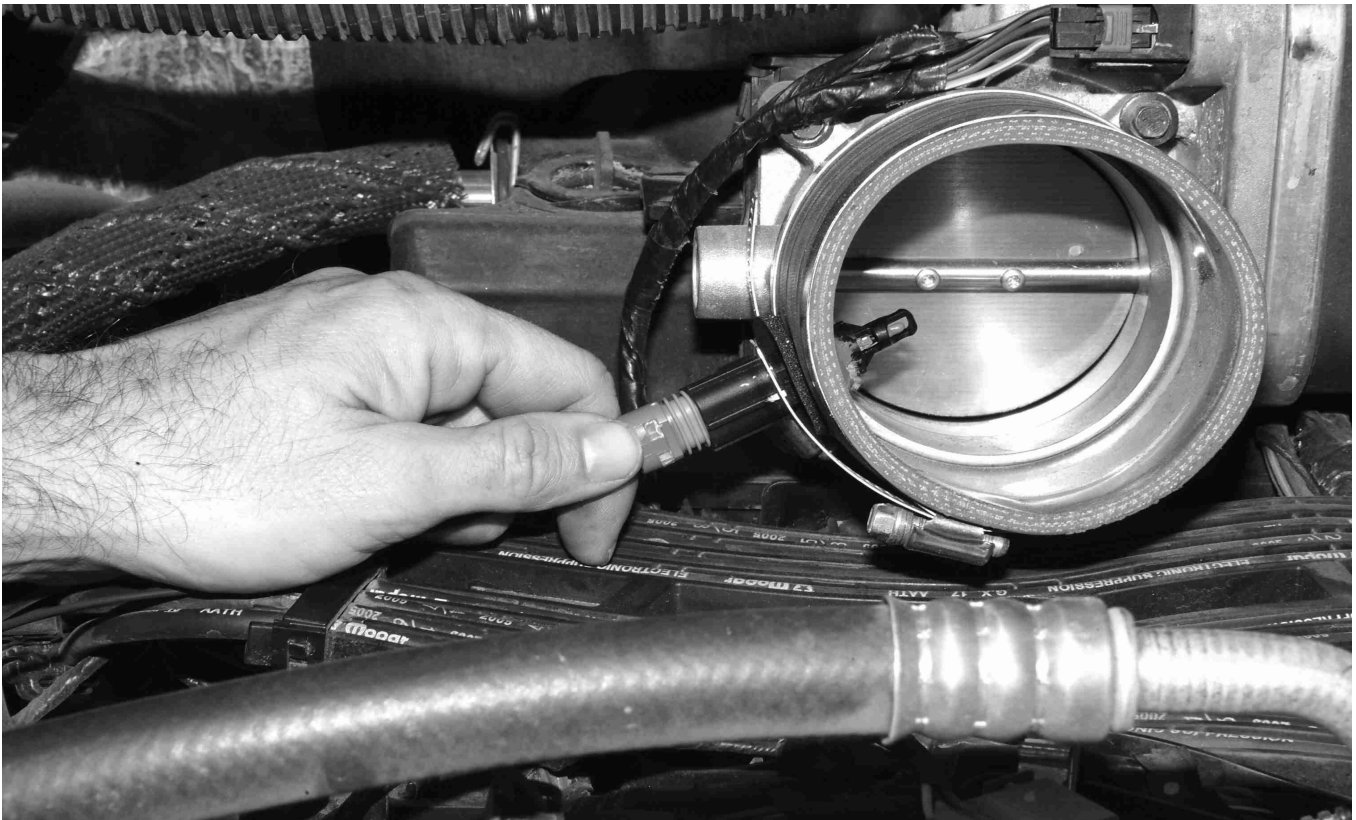
( Prepare hemi under glass for install by, attaching supplied red hose onto rear air horn, slide on one clamp and tighten this completely to the air horn,slide a second clamp on but "DO not tighten yet" )  
Install the kit at a 45 deg angle sliding the hose onto the throttle body as U lower the kit into place.



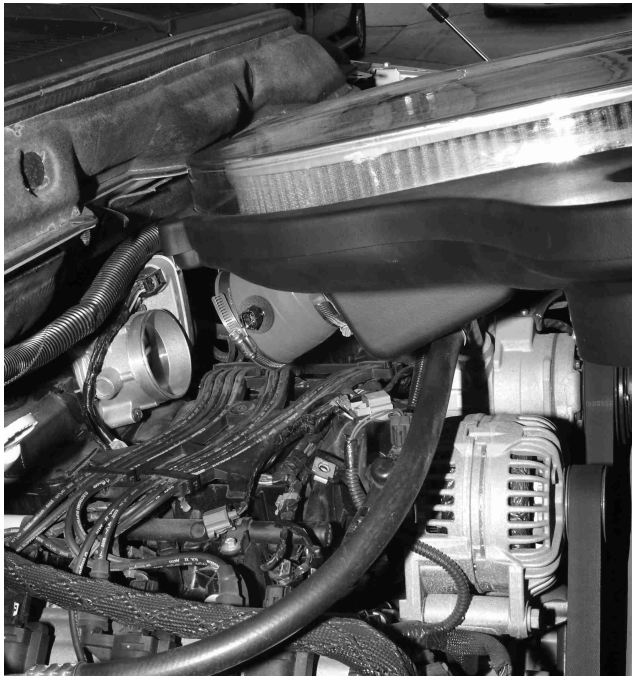
Disconnect the PCV line by removing the plastic tube, leaving the elbow that comes off the oil fill cap neck.  
Rotate this neck 45-90 deg ( use chrome oil breather supplied with kit)



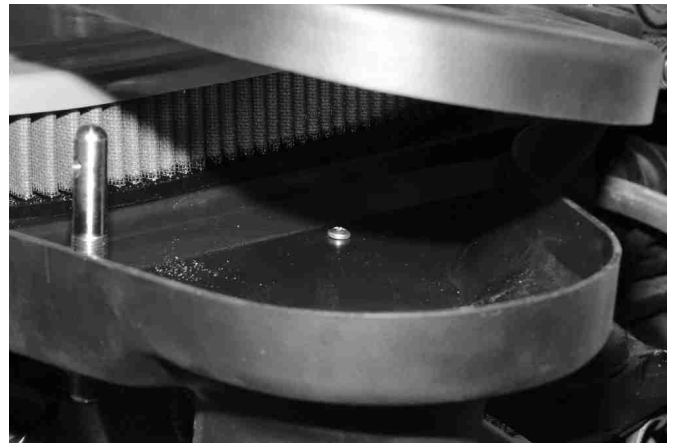
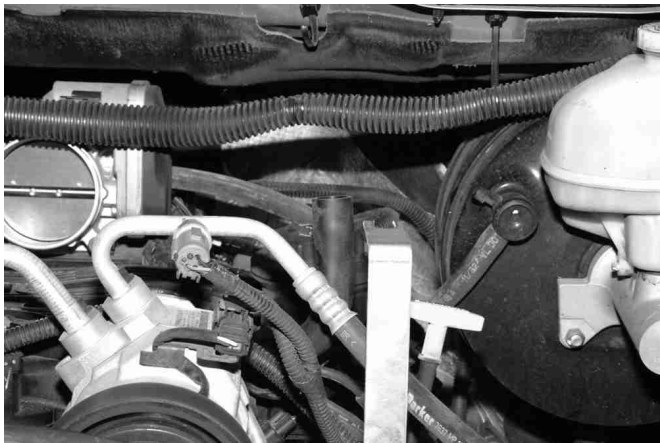
Air temperature extension wire  
(use only if factory harness will not reach)  
Bend wires slightly if it doesn't fit tightly



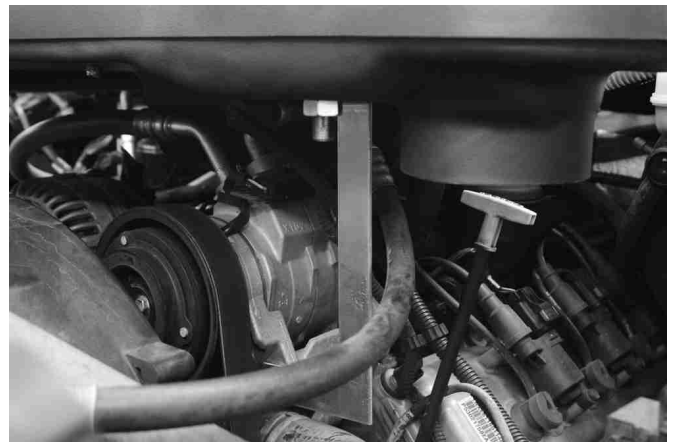
Install air temperature sensor as shown - at the 7 o'clock position.  
Make sure you see both wires. This gives a clean shot of cool air to the temperature sensor.  
Push the sensor into the gasket until flush as shown



Install unit at angle shown. Clamp red hose to unit before placing hose over throttle body. Tighten hose clamps after red hose is over throttle body.



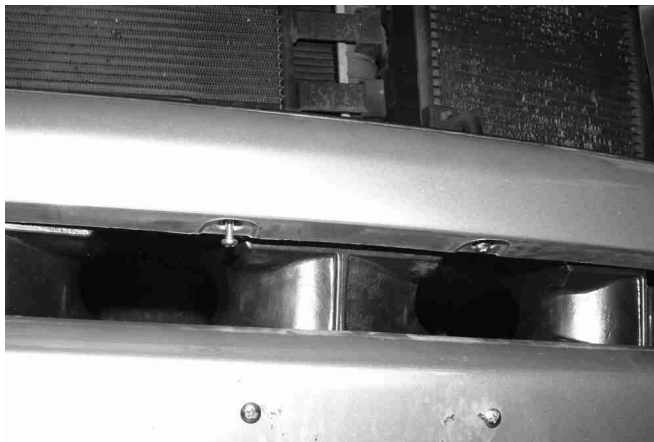
Install 3/16ths screw and washers (space washers accordingly to align kit)



The system will rest on the water bottle ,L-bracket and throttle body



You can now remove the front deflector as shown in pictures . These use a philips head screwdriver , however 9 out of our 10 test trucks these little things just stripped out,so we used a pair of wire cutters and just cut them off.



Once removed slide VR scoop behind the bumper assembly. The scoop will overlap the back side of the bumper.

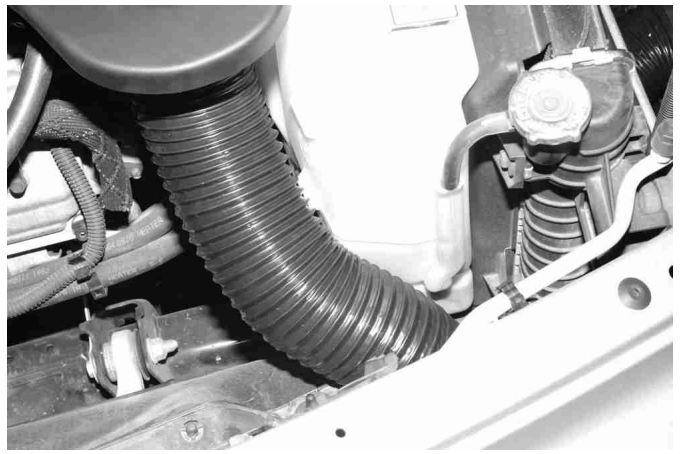


Using the 2 center screw holes mark this area and drill holes into the VR scoop assembly , use the supplied screws,washers and locknuts.

## Hose Installation



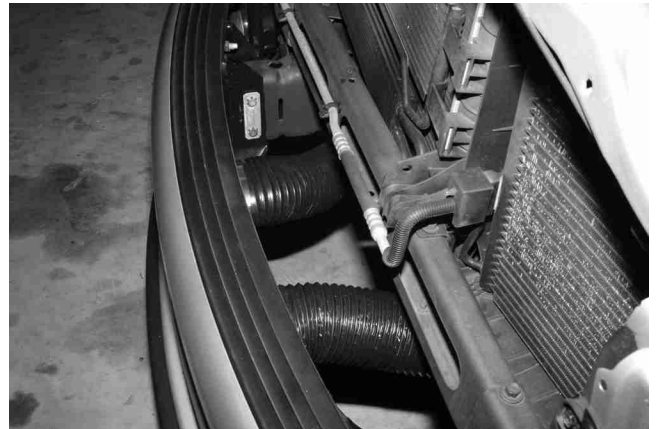
Route between frame rail and water hose just in front of control arm as shown for 1500



Route through fender for 2500



Install supplied hose and trim to reduce any unwanted slack.



Bend hose clamps as shown to make install easier .



Upper plenum chamber has pop rivets installed in to the necks to ensure a proper lock for the intake hose and clamp once installed. Make sure hose and clamp is above rivet heads.



Allow your truck 100-200 miles to dial in to the new airflow. The truck will start rich and then lean back down accordingly. We look for the fuel mileage improvement on most trucks ,if data logging is not present.

You may need to disconnect the negative end of the battery for approximately 2hrs or more for the ECU to relearn properly.

## **"Hemi speed secrets"**

### **Tips from our test trucks covering 1500-2500 vehicles**

1. Keep it cool- Hemi's heat soak like crazy,so if you are looking for every ounce install a lower thermostat and distilled water mixed with coolant or red line water wetter. About a 70-30mix is good.
2. The transmission- these things are finicky, for max performance run them as cool as possible ,otherwise they will shift up early during 1/4mile runs around 80mph (programmers help here) or use a Torque converter lockup device
- 3 Watch the wheelspin- it kills the 1/4 mile and 0-60mph numbers greatly, just walk it out and then hammer the throttle for good consistent numbers( don't Torque up, unless on a sticky track)
4. Relocating or installing a resistor in the air temp sensor harness- this is an old trick however don't try this with the VR unit as our location point and the system itself are always getting cold air and we have located this in best possible location.
5. Use good gas ,meaning name brand ,don't try to save pennies here your Hemi will love you for it.
6. Oil- Use Mobil-1 or Royal Purple synthetic and add some Lucas oil additive,this keeps the valve train and lifters quiet so the knock sensors don't accidently pick up the wrong acoustic.

## **Trouble shooting**

1. **How do I route the hose?**  
1500 trucks can go down by the frame rail between the radiator hose and frame rail, pull hose tight. 2500 trucks will route through the fender well as the factory box did.
2. **Truck doesn't seem to run better and fuel mileage is worse**
  1. Check wire harness to airtemp sensor connection
  2. Reset computer by disconnecting negative battery cable for 2hrs min then reconnect and allow to relearn
  3. The Hemi's all go a little rich to match the new found airflow so give the truck about 200miles after you have checked the above mentioned items.
3. **Will this system work with my programmer?**  
Yes ,it is programmer compatible
4. **How often do I clean the air filter?**  
Every 3-5K
5. If further assistance is needed simply call our tech line- 1-713-899-6456 this is manned almost 24-7 by a test engineer.