**Design and Manufacturing** 

Installation Instructions for P/N: ATP-VVW-175
Mechanical Diverter Valve conversion Kit (using Greddy type RS BOV)

## Parts Checklist (Bill Of Materials):

- 1) Qty: 1 Main Adapter piece (machined alum) with O-ring attached to all (4) O-ring grooves
- 2) Qty: 3 6mm x 10mm length bolt with allen head
- 3) Qty: 2 6mm x 12mm length bolt with hex head
- 4) Qty: 1 Horn plug with o-ring attached (machined alum)

## Additional components required for installation:

- 5) Greddy Type RS BOV
- 6) 3/16" high temp vacuum hose-8 feet
- 7) 3-way barbed vacuum/boost tee
- 8) Zip tie 8 inches (2)

## **Application Notes:**

The stock diverter valve is an electronically actuated unit mounted directly onto the side of the compressor housing of the stock turbo. You can access the (3) allen bolts that hdd the valve to the turbo by placing the car on a vehicle lift and accessing it from underneath. The valve is nested between the passenger side firewall and the passenger side fender well. This procedure eliminates the use of this stock valve (which can be a source of boost leaks) and replaces it with a more reliable mechanical valve.

Document Number: INS-PRO-VVW-165- A

Page 1 of 1

Please Note: The mechanical valve does need to be actuated by a vacuum/boost signal and should be tee'd into the intake manifold the same way a boost gauge is for propervacuum boost signal.

## **Installation Instructions:**

- 1. Lift vehicle in the air and secure safely using a vehicle lift.
- 2. Find the black color diverter valve bolted to the side of the stock turbo compressor housing. It should have (3) 6mm allen bolts holding it onto the housing and an electrical plug for actuation.
- 3. Using a 5mm allen wrench, remove the (3) 6mm allend bolts.
- 4. Gently pull the stock valve straight outwards and tie it away in a safe spot without disconnecting the electrical connector to prevent throwing a code due to it being disconnected. (You may order an electrical sim plug to allow you to fully disconnect it)
- 5. Install the main adapter plate to opening on the compressor housing, while making sure that: 1) all 4 o-rings are secure onto the grooves on the plate 2) Make sure the final orientation of the Greddy BOV points the horn 45 degree between the firewall and the ground (this allows you to access the horn to screw and unscrew at will).
- Torque the 3 allen bolts from the adapter plate to the compressor housing at 14 ft/lbs.
- 7. Prepare the Greddy BOV for installation by doing the following:
  - a. Unscrew the horn, push the machined vent plug into the back of the threads until it stops. This puts the valve into recirc mode and vents the outlet to the base back into the compressor inlet side.
  - b. Screw the horn back into the Greddy valve until it stops.
  - c. DO NOT use the Greddy supplied paper gasket. The adapter has a built in oring gasket to seal and allow the adapter to work properly without the additional gasket supplied in the Greddy box.
- 8. Bolt the Greddy RS BOV directly to the adapter plate using the (2) 6mm bolts provided with the 10mm hex head and tighten down properly to about 16 ft/lb.
- Run a vacuum hose from the back of the Greddy RS vacuum port to the driver side intake manifold on the engine. Note make sure the vacuum fitting on the Greddy is properly tightened to the valve. It's often loose from the factory.
- 10. Tee into the intake manifold for vacuum/boost (same way as a boost gauge)to properly actuate the valve on throttle lift. One possible source is the big brake boost hose pointing sideways on the driver side of the manifold. If you use this source, you must tee right at the intake manifold before the checkvalve. Also, you must use a large enough tee at this hose (3/8" to ½") to allow for proper functioning of the brake booster system.