

Procedure:**Installation Instructions for P/N: ATP-VVW-176****Mechanical Diverter Valve conversion Kit (using HKS SSQ BOV)****Parts Checklist (Bill Of Materials):**

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

Additional components required for installation:

- 5) HKS SSQ 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 hold 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.

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 proper vacuum 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 allen 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 HKS BOV points the vacuum port on the valve towards 45 between the firewall and the ground 3) the L-clamp and bolt will be accessible once the plate is on.
6. Torque the 3 allen bolts from the adapter plate to the compressor housing at 14 ft/lbs.
 - a. Prepare the HKS BOV for installation
7. Slide the HKS BOV onto the o-ringed surface pad on the adapter plate until it is snug and there is room to bolt on the "L" bracket.
8. Install the machined "L-bracket" and hand start the hex head 6mm bolt.
9. Tighten down the bolt and torque to 16 ft/lb.
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 1/2") to allow for proper functioning of the brake booster system.