

Dual Port Turbo Compressor Bypass Valve

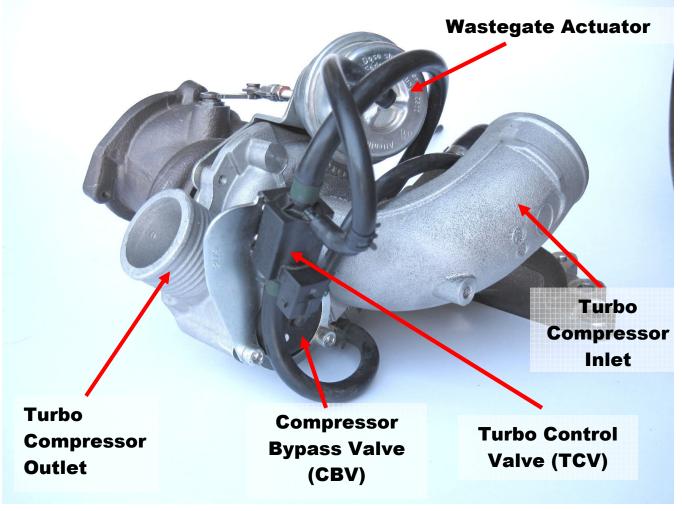
Tools needed:

- 5mm Allen Ball-End Hex Driver (1/4" or 3/8" drive)
- Several Extensions (1/4" or 3/8" drive)
- Ratchet Handle (1/4" or 3/8" drive)
- Pliers

Please completely read through these instructions to familiarize yourself with the installation. There are no cutting, drilling or other modifications required to install the ELEVATE Dual Port Turbo Compressor Bypass Valve (CBV). Work in a clean environment and make sure the CBV is clean and free of any debris before installing. Do not allow any debris to enter the turbo compressor housing when the CBV is removed.

The ELEVATE CBV is a direct replacement for the factory unit. The CBV is located on the turbo compressor housing, which is most easily accessed through the right front wheel well (wheel removed). On some vechicles, loosening the right side axle bearing will allow better access. When working under the vehicle, ensure that it is supported with proper jack stands or a vehicle lift. These instructions show the turbo and CBV assembly off of the vehicle for clearer imagery. The CBV can be replaced with the turbo on the car.

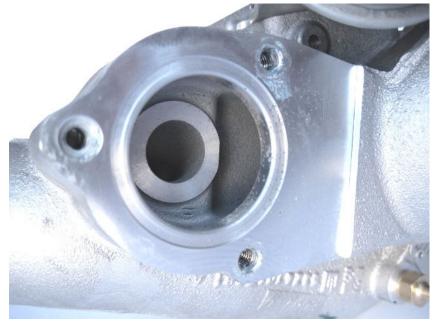
1. Familiarize yourself with the stock turbocharger and CBV location:



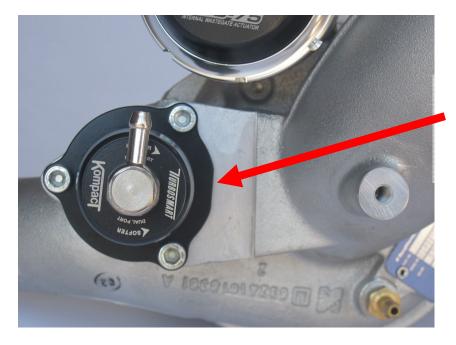
- 2. Remove the Turbo Control Valve (TCV) from its metal bracket by unclipping it from the metal bracket. You do not need to remove the vacuum lines connect from the TCV—just move it out of the way.
- 3. Remove the black vacuum hose connected to the CBV by compressing the spring clamp (if so equipped) with pliers.
- 4. Using a 5mm Allen Hex ball-end driver or wrench, remove the three screws that attach the CBV and TCV metal bracket to the turbo compressor housing.
- 5. Remove the CBV. The CBV has spring pressure pushing on the black plastic housing. Remove the black plastic housing, spring, and diaphragm assembly. These components will not be reused.



6. Ensure that all the mounting surface and inside of the compressor housing is clean and free of any dirt or debris. Here you can see the passages that the CBV covers and uncovers in operation.



7. Install ELEVATE Dual Port Turbo Compressor Bypass Valve using included screws and thread locking compound. Make sure both o-rings are in place. IMPORTANT: There is a flat section on the CBV flange. This flat section is to face the turbo compressor inlet. The reason for this is that this is where the opening is for the CBV to redirect boosted air into the turbo inlet.



Flat section on CBV flange to face turbo inlet

- 8. Orient vacuum nipple on CBV to desired position (do not tighten) and connect the included vacuum hose to metal nipple, securing the hose with clamp. There is an optional straight nipple included if that would be better for your application.
- 9. Route the vacuum hose from the CBV to the inlet manifold and secure using included ziptie.
- 10. Secure the TCV to a suitable location away from excessive heat.
- 11. Start the engine and check for any vacuum leaks.

Set up and adjustment:

The Elevate Dual Port Compressor Bypass valve is set up to work properly out of the box with two full turns "out". You can fine tune how much boost is required to vent to atmosphere (in dual port mode) by rotating the top cap. Turning the top cap clockwise (marked "harder" on the cap) will keep the piston closed until a higher boost pressure is released. It will stay in recirculating mode more until more boost pressure is present. If you prefer the CBV to vent to atmosphere (making more sound) with less boost, turn the cap counter-clockwise (marked "softer" on the cap). Do not unscrew the cap beyond the o-ring groove.