ELEVATE P1 Turbo Control Valve (TCV)

Tools needed:

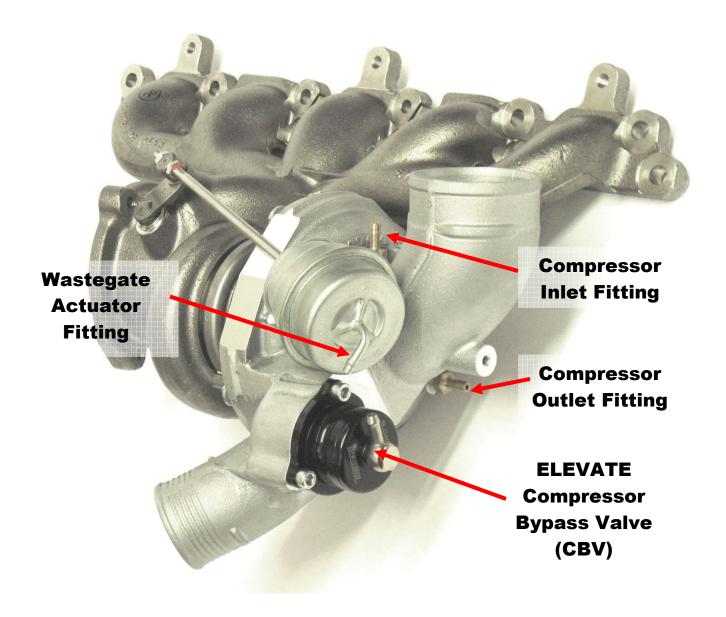
- Pliers
- 13mm deep socket with ratchet or 13mm combination wrench

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 Turbo Control Valve (TCV). Work in a clean environment.

The ELEVATE TCV is a direct replacement for the factory unit, although relocated and with new vacuum hoses. The stock TCV is located on the turbo compressor housing, which accessed from underneath the vehicle, with the plastic splash guard removed. When working under the vehicle, ensure that it is supported with proper jack stands or a vehicle lift. These instructions show the turbo and assembly off of the vehicle for clearer imagery.

1. Familiarize yourself with the turbocharger and TCV location: **Wastegate** actuator Turbo Compressor Inlet **Turbo Control** Compressor **Turbo** Valve (TCV) **Bypass Valve** Compressor (CBV) Outlet

- 2. Remove the Turbo Control Valve (TCV) from its metal bracket by unclipping it from the metal bracket.
- 3. Disconnect the electrical terminal at the TCV by compressing spring clip.
- 4. Acquaint yourself with the four vacuum hose connections on the turbo.

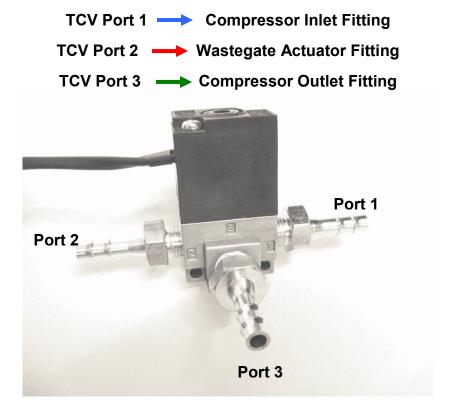


- 5. Remove the three black vacuum hoses connected to the TCV at the turbo by compressing the spring clamps (if so equipped) with pliers. The vacuum line from the CBV to Inlet Manifold remains untouched and intact. NOTE: The vacuum line at the Compressor Outlet Fitting can be challenging to get access to. For a temporary fitment, a barbed vacuum hose connector is included. Disconnect this vacuum hose at the TCV and later connect the new vacuum line to the short length of factory vacuum hose connected to the Compressor Outlet Fitting.
- 6. Remove the stock TCV from the vehicle.

7. Mount the TCV to the firewall using included washer and nut. The bracket is designed to allow vertical adjustment of the valve on the bracket to allow the metal fittings to be centered between the air conditioner hard lines. Do not overtighten nut/washer holding the bracket to the firewall. The sound absorbing material on the firewall acts to cushion the TCV.



8. Route vacuum hoses and cut to length as detailed below. Use caution when routing hoses as improper routing could cause overboosting or very little boost to be generated. Ports are marked on the valve as "1", "2", "3", with "2" being on the left (when facing valve), "3" in the middle, and "1" on the right.



- 9. Secure vacuum hoses using factory spring clamps.
- 10. Use included zip ties to keep vacuum hoses clear of surrounding components and heat sources.
- 11. Connect factory electrical terminal to ELEVATE TCV terminal. Secure wire using included zip tie.
- 12. Double check that all vacuum hoses are routed correctly, connecting the correct TCV port with corresponding turbo fitting.
- 13. Start the engine and check for any vacuum leaks.
- 14. Drive vehicle using part throttle for two miles (3km) or more to allow the engine control module to adapt to the new TCV.
- 15. If you hear a "clicking" sound from the cockpit, slightly loosen the nut/washer holding the TCV bracket to the firewall so that the sound absorbing material on the firewall can absorb the sound.

