Mechanical Compressor Recirc Valve

Thank you for purchasing this ALTA product for your car! Installation of this product should only be performed by persons experienced with installation of aftermarket performance parts and proper operation of high performance vehicles. If vehicle needs to be raised off the ground for installation, the installer must use proper jacks, jack-stands and/or a professional vehicle hoist for safety of the installer and to protect property. If the vehicle is lifted improperly, serious injury or death may occur! Please read through all instructions before performing any portion of installation. If you have any questions, please contact our tech department prior to starting installation. We can be reached in any of the following methods:

Email Tech@ALTAperformance.com
Instant Chat off the main page of www.ALTAperformance.com
Or simply call our tech team at 503-693-1702

GENERAL MODIFICATION NOTE

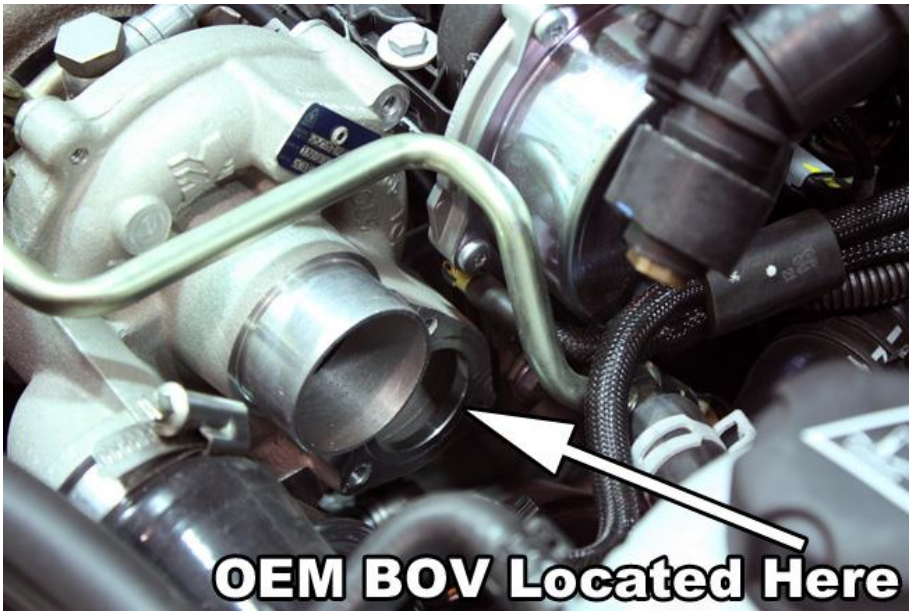
Modifications to any vehicle can change the handling and performance. As with any vehicle extreme care must be used to prevent loss of control or roll-over during sharp turns or abrupt maneuvers. Always wear seat belts, and drive safely, recognizing that reduced speeds and specialized driving techniques may be required. Failure to drive a vehicle safely may result in serious injury or death. Do not drive a vehicle unless you are familiar with its unique handling characteristics and are confident of your ability to maintain control under all driving conditions. Some modifications (and combinations of modifications) are not recommended and may not be permitted in your state or country. Consult the owner's manual, service manual, instructions accompanying these products, and local laws before purchasing and installing these modifications. You are responsible for the legality and safety of the vehicle you modify using these components.

SPECIAL NOTES:

- Use of the factory service manual can be very helpful during the installation. These can be purchased at the dealership or online.
- http://www.realoem.com has diagrams for the entire car, which can also be helpful.
- Installation requires an ALTA Boost Port Adapter or similar type of product that allows for an intake manifold vacuum/boost source.
- The 3 bolts securing Compressor Recirc Valve (CRV) to turbo have thread locker on them, take time in removing.
- You will find there are new sounds from the intake and CRV after installation. This is normal and to be expected because this CRV works differently than stock you will hear it blowing off during very low throttle or light load.
- If you receive a Check Engine Light, or Half Power Indication, check that resistor is fully seated in electrical pins.

Parts Included with the ALTA Blow Off Valve Spring Upgrade:

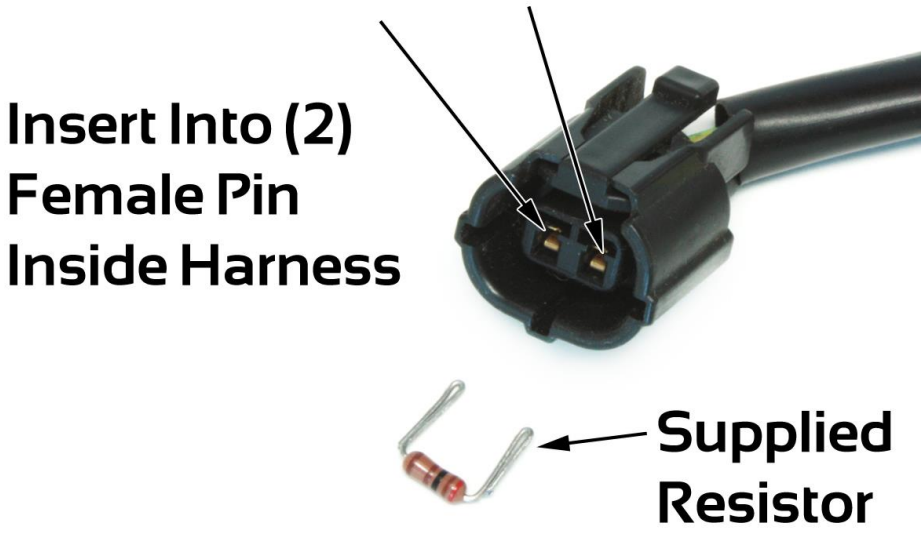
- **(1) ALTA Mechanical Compressor Recirc Valve Assembly**
- **(1) Resistor**
- **(4') 5/32"ID Vacuum Hose**
- **(1) 3/16" Tee**
- **(1) M4 Allen Wrench**
- **(4) Zip Ties**



Installation of ALTA Mechanical Compressor Recirc Valve:

1) Open hood and locate turbocharger at front of engine.
2) Unbolt coolant tank from radiator core support, and move toward left side of vehicle. This is done to gain access to OEM Compressor recirc valve. **NOTE: Take care not to break any of the plastic coolant connections while moving out of way.**

3) Remove turbo inlet pipe to expose OEM Electronic Compressor Recirc Valve. This is the black unit held on by 3 bolts just below the turbo inlet. In above picture it is already removed, showing where the ALTA CRV (Compressor Recirc Valve) goes.
4) Unplug electrical connection, remove (3) 5mm socket cap screws from electronic compressor recirc valve (CRV). Carefully remove from car making sure to not lose o-ring (yellow in color) used to seal CRV to turbo.
5) Locate electrical plug removed from OEM CRV. Locate two small female pins in end of plug. Install each leg of supplied resistor into each female pin, creating a jumper between each pin. Make sure to put resistor into the metal electrical pins, not into the plastic housing. This ensures a proper electrical connection is made.
6) Wrap in electrical tape to secure and protect against resistor grounding out on other engine components. **NOTE: This step is to eliminate a check engine light that can occur by not having the stock CRV plugged in. This is important to do properly to keep your car performing properly.**



7) Remove OEM O-ring (yellow in color) from OEM CRV and place into groove on bottom of ALTA CRV. **NOTE: If having trouble keeping it in place, use a small amount of grease to secure.**

8) Install ALTA CRV to turbocharger as shown below. Since bolts are captured in cap, thread each bolt a couple turns at a time until CRV is fully seated on turbo. Tighten bolts to hand tight with supplied M4 wrench. **NOTE: The three threaded holes are NOT a symmetrical bolt pattern. Rotate CRV until all (3) screw holes line up. This is important to do to ensure thread damage does not occur.**

9) With ALTA CRV installed, install supplied vacuum hose onto nipple. Install Zip-Tie around hose to secure.

10) Route hose to ALTA boost port or similar type manifold vacuum/pressure adapter. Use included zip ties to secure hose out of way of moving engine parts and away from parts that get extremely hot.

11) Secure vacuum hose to boost port adapter using supplied zip tie.

12) Reinstall turbo inlet pipe and start engine to ensure no check engine lights are on.

13) Take car for test drive. If you hear a whooshing sound as you lift throttle, CRV is functioning correctly. If you hear sounds like a chirping/ fluttering during shifts (automatic customers will need to lift throttle to test this) it could be from the vacuum source. This could be from the vacuum line being pinched some where along the routing or an improperly installed Boost Port Adapter. If this occurs, drive car back to shop and recheck installation. If you verify vacuum hose is correct, and noise still occurs, call tech support.

Questions, Comments and Suggestions Contact: Tech@ALTAperformance.com
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