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AEROFLOW PERFORMANCE

BLOW OFF VALVE

WARNING!

THIS PRODUCT REQUIRES DETAILED KNOWLEDGE OF AUTOMOTIVE SYSTEMS. WE RECOMMEND THAT THIS INSTALLATION BE CARRIED OUT BY A QUALIFIED AUTOMOTIVE TECHNICIAN.

INTRODUCTION

Congratulations on your purchase of Aeroflow Performance universal blow off valve. Aeroflow Performance products cannot and will not be responsible for any damage, or other conditions resulting from misapplication of the parts described herein. However, it is our intention to provide the best possible products for our customer, products that perform properly and satisfy your expectations. Should you have any questions? Please call technical support at +61 2 8825 1900 and have the product part number on hand when calling.

The Aeroflow Performance 50mm Blow Off Valve is a high flowing universal blow off valve for use with supercharged and turbocharged applications. The body and all internal components are CNC-machined from 6061 aluminium alloy including the 50.5mm internal valve. 7mm vacuum / boost hose barb size. Mounting flange is v band, and included in this kit is a 2" weld on pipe. Installed in this blow off valve is an 11psi spring suitable for turbo charged applications with high boost. A 6psi spring (AF59-2152) for turbo charged applications with low boost is sold separately. For supercharged applications it is recommended to use the 2-psi spring (AF59-2150) sold separately.

RECOMMENDATIONS

- Ensure the correct sized silicone hose is used and it is rated for the pressure/vacuum for your application
- Ensure when plumbing this blow off valve it is secured and suitable clamps are used for install
- Do not install next to an extreme heat source that could damage the blow off valve if required install a heat shield to protect the blow off valve.
- Check the vacuum level produced by your engine to ensure the right spring is installed in your blow off valve for maximum efficiency.
- Aeroflow Performance also sell BOV adapters for a variety of makes and models to allow this BOV to be a bolt-on applications. These BOV Adapters are sold separately. See Part Numbers below:
    - AF64-5060BLK (25.4mm clamp-on)
    - AF64-5058BLK (38.1mm clamp-on)
    - AF64-5059BLK (HKS)
    - AF64-5057BLK (BMW 135, 335, 535, X5)
    - AF64-5054BLK (Mazda 3, 6, CX7)
    - AF64-5052BLK (Mitsubishi Evolution)
    - AF64-5055BLK (Nissan R35 GTR)
    - AF64-5053BLK (Subaru WRX 2002 to 2007 and Subaru STI 2004 to 2013)
    - AF64-5056BLK (Subaru WRX 2008 to 2013 and Subaru Liberty 2005 to 2009)

- Aeroflow Performance also sell block off plugs various hose sizes :

    - AF64-5220 (Polished finish 20mm Block Off)
    - AF64-5220BLK (Black finish 20mm Block Off)
    - AF64-5225 (Polished finish 25mm Block Off)
    - AF64-5225BLK (Black finish 25mm Block Off)

- AF64-5230 (Polished finish 30mm Block Off)
- AF64-5230BLK (Black finish 30mm Block Off)
- AF64-5233 (Polished finish 33mm Block Off)
- AF64-5233BLK (Black finish 33mm Block Off)
- AF64-5234 (Polished finish 34mm Block Off)
- AF64-5234BLK (Black finish 34mm Block Off)
- AF64-5238 (Polished finish 38mm Block Off)
- AF64-5238BLK (Black finish 38mm Block Off)

INSTALLATION GUIDELINES

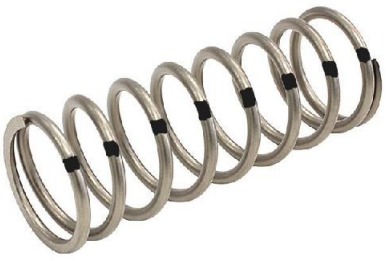
- Allow the engine to cool down before installing your blow off valve.
- Identify a suitable location along the intercooler/intake piping for the BOV. This will need to be between the outlet of the turbo and the throttle body ideally between the throttle body and the intercooler is the best location.
- Remove the BOV from the weld on adapter by removing the V-Band clamp. Be careful not to damage or lose the O-ring that seals the BOV to the weld on flange.
- Weld the adapter onto the intake pipe in your ideal position, then allow the adapter to cool down.
- Put the V-Band clamp over the adapter before re-installing the O-Ring seal and the BOV
- Open the V-Band clamp and place in position. Tighten the V-Band clamp screw until it is finger tight then tighten to 4 Nm (3 ft/lbs) with an allen key. **NOTE:** Be sure not to over tighten the screw as this will cause damage to the V-Band clamp.
- Install the provided vacuum nipple into the port on the top cap. Identify a standalone vacuum / pressure source from a port after the throttle body and connect with 7mm (1/4") silicone hose to the vacuum/boost port nipple on the port on the top cap. If a Braided line is to be used the top port is a M10 x 1.00mm thread.
- Start the engine and check for air leaks in the system.

SPRING REPLACEMENT GUIDELINES

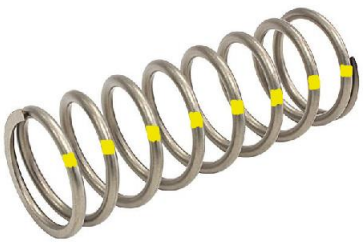
1. Remove the BOV off the intercooler piping from the vehicle inducing any vacuum lines.
2. Remove any fittings from the top cap and place the BOV in a vice or press.
3. The use of a press or vice may be used to hold down the BOV top cap while loosening the bolts as the top cap is under the high spring tension. Ensure to use all safety gear necessary during this procedure.
4. Using a 3mm hex allen key, remove the five hex key cap screws that secure the billet aluminium top to the wastegate.
5. Remove the cap slowly, using care to secure the spring upon removal.
6. Remove the spring from the BOV. Determine which spring you will be installing. Install the spring into the BOV, on top of the diaphragm ensure they sit into the corresponding groove in the BOV. Use care to ensure that you do not to tear or scratch the diaphragm.
7. Visually align the bolt holes of the top cap and BOV base. Now compress the BOV top cap until it is seated with the BOV base. Make sure that the bolt holes are aligned before tightening. Once bolt holes are aligned, install the five 3mm hex head cap screws. Tighten the cap screws in a criss-cross pattern to 6Nm.
   WARNING: Make sure that the lip of the diaphragm is not pinched between the top cap and the BOV base.

AF59-2150

AF59-2152



AF59-2153




AF64-5058BLK


AF64-5059BLK


AF64-5053BLK

AF64-5220BLK to AF64-5238BLK

For more information or technical enquires

Contact: Aeroflow Performance on

Phone: (02) 8825 1979 Website: www.aeroflowperformance.com