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## **Procedure:**

Installation of P/N: ATP-HGC-001 (Blow-off Valve Pipe kit) on the Hyundai Genesis Coupe 2.0T engine.

Warning: Check local laws before adding turbo components to your vehicle. Some states prohibit the addition of an aftermarket turbo system onemissions controlled vehicles.





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# Parts Checklist (Bill Of Materials):



- 1) Main pipe with BOV Flange (flange type specified at time of order but can be changed via twist off)
- 2) (1) 2.75" Silicone coupler (for throttle body)
- 3) (2) 3" hose clamps (for silicone hose above)
- 4) (1) 2" to 2.5" Transition Silicone coupler (for top of intercooler pipe)
- 5) (2) hose clamps (for silicone hose above)
- 6) (5) Feet of 1/8" silicone vacuum hose
- 7) (1) 3-way vacuum tee
- 8) (1) Aluminum Block-off plate for stock diverter valve
- 9) (3) 6mm bolts and nuts for block-off plate above

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### Some notes regarding this BOV (Blow off Valve) Modification:

- The Hyundai Genesis Coupe 2.0T Engine has a speed density based engine management system where a MAF sensor is not used. For that reason, an atmospheric BOV can be installed without the fear of affecting the air/fuel ratio of the running engine and typical negative side-effects of that.
- There are several configurations in the use a BOV on the Genesis Coupe 2.0T engine.You may choose the configuration that you are comfortable with and explore other configurations as you go along.
- 3. If you have no understanding of the turbo engine, ask for help before proceeding with the installation.

#### **Installation Instructions:**

# **BOV Configuration Option #1 (The parallel mode):**

This is the most basic use of a BOV on the GenCoupe 2.0T engine, installation is very simple and you'll be up and running in no time. In the parallel configuration, you install the additional BOV and BOV pipe, but you do not remove the stock diverter valve that is mounted on the side of the turbo. In this mode, you allow your new BOV to co-exist without "bothering" the rest of the engine bay and engine function.

# A. Remove the stock throttle body hose (90 degree elbow):



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B. Mount the Blow off valve onto the pipe and secure with the applicable bolts and gasket (between BOV and BOV flange) as called out by that specific BOV.



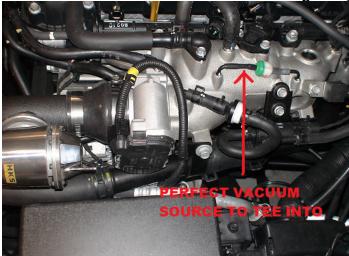
C. Place the entire BOV pipe assembly back into the original location (between throttle body and upper intercooler pipe)



D. Check to make sure there is adequate clearance between pipe and alternator pulley when tightening down the hose clamps.

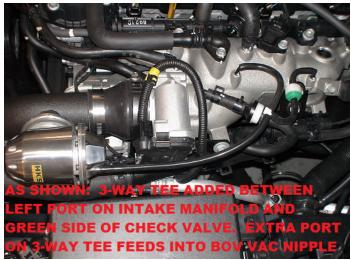


E. Tee in the vacuum source into the new BOV using 3-way Tee



F. Install the 3-way Tee BETWEEN the left port and the green side of the factory installed check-valve (shown at arrow in the picture).

There isn't enough room to insert the tee inline so a simple loop has to be created as shown. AVOID ANY KINKS IN THE HOSE AND USE SMALL ZIP TIES AT ALL CONNECTIONS TO AVOID BLOW-OUT UNDER BOOST.



Installation of the new BOV in Parallel Mode is complete! You can now drive the car and enjoy your new Blow-Off Valve!

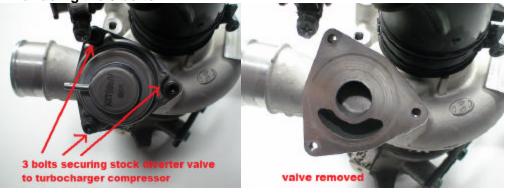
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If you want to go beyond Parallel Mode, continue the installation with the steps below, AFTER YOU HAVE ALLOWED THE CAR TO COOL DOWN TO AVOID BURNING YOURSELF ON HOT ENGINE PARTS!

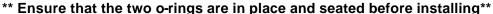
### **BOV Configuration Option #2 (The single BOV mode):**

In parallel mode, the new BOV can sound quieter than it's capable of since the stock valve is also doing the job of dumping boost at the same time. By going beyond parallel mode, you will remove the stock diverter valve entirely through the use of the block-off plate that we provided. By doing this, you will eliminate any chance of boost being leaked through a defective stock diverter valve and your new BOV valve via the BOV pipe will assume 100% boost dumping duty, therefore the sound will be much louder than when the valve was operating in parallel mode.

G. Unbolt the stock diverter valve from the turbo compressor side by undoing the 3 bolts.



H. Bolt on the block off plate with 3 new bolts.





#### I. What to do with the vacuum hose that went to the stock diverter valve.



There is a vacuum hose that goes from the computer controlled solenoid into the old diverter valve. What should you do with it?

## Option #1 – The simplest way

Run that hose to the new BOV (yes, eliminate the 3way tee you previously installed). This allows your new BOV to act directly in place of the old diverter valve. By running the vacuum hose from the solenoid into the new BOV, you allow the computer to control the new BOV as though it was the old valve. In some cases, the ECU retains the right to open and close the BOV at will to \*possibly\* control or limit boost.

### Option #2 – The computer bypass mode.

In this mode, you keep your new BOV vacuum routing the way you have it in parallel mode (with the 3-way tee inserted previously). You plug the end of the hose that went into the old valve. By doing this, you do not allow the ECU to control the operation of the BOV. In this mode, the ECU may choose to throw an error code if it senses that the BOV is not responding its command.