



TS-0223-1255 - BPV Kompact EM Series - Instructions

Product Name:	BPV Kompact EM Series
Product Description:	BPV Kompact EM Series
Product Number:	TS-0223-1255

Important notes on your new BPV

- Turbosmart accepts no responsibility whatsoever for incorrect installation of this product which is potentially hazardous and can cause serious engine damage or personal injury
- The EM series BPV is designed for use as a factory replacement for a turbocharged vehicle that utilises an electronic diverter valve, this valve can be used on other applications so long as there is a control signal to actuate the BPV.
- Ensure the engine is cold prior to installation.

Recommendations

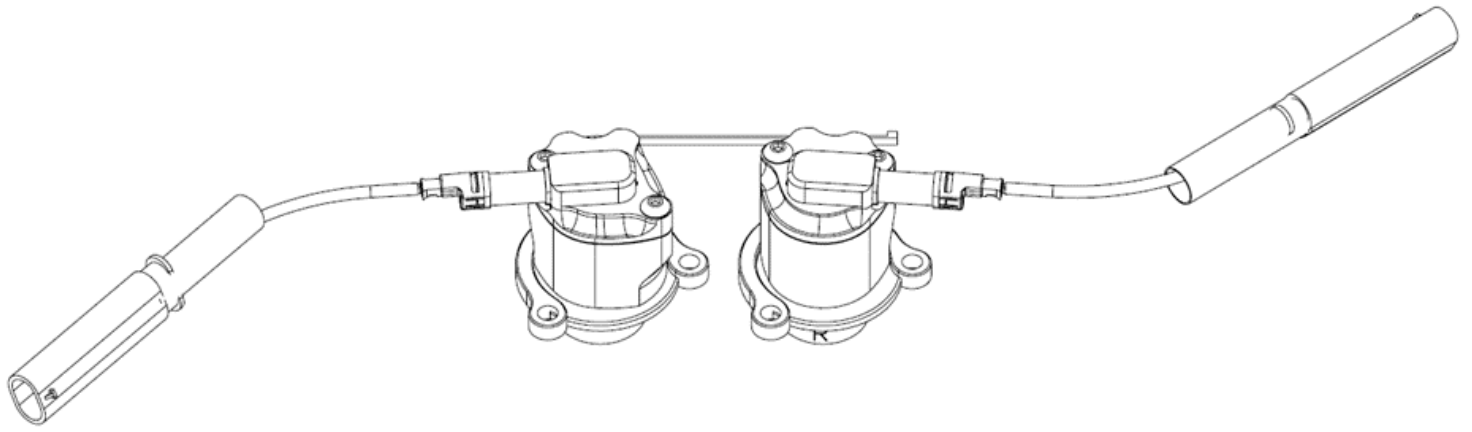
- Turbosmart recommends that your Bypass Valve (BPV) is fitted by an appropriately qualified technician.

[INSTALLATION VIDEO](#)



Kit Contents

Part	Description	Use
1	Turbosmart EM Series BPV	Main unit x 2
2	6 x Allen Bolts	Allen bolts for mounting BPV to car
3	Cable Tie	100mm Cable Tie
4	Turbosmart Sticker	
5	Instruction Card	



Tools Required

Allen key set metric

Screwdriver

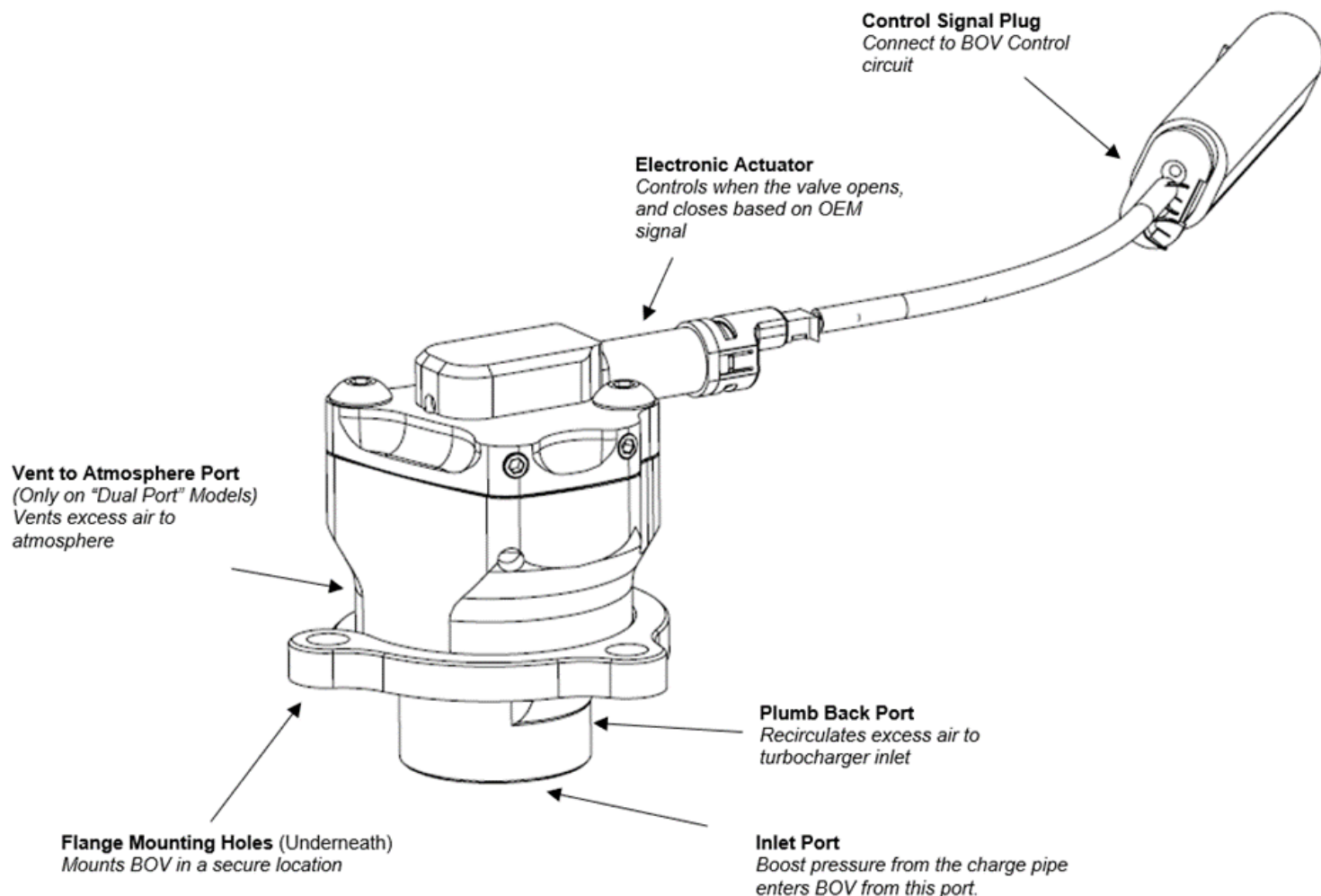
Basic socket set

Torx bits

About Your EM Series BPV

Turbosmart has developed a unique “plug and play” diverter valve (otherwise known as a bypass valve) upgrade for vehicles that come factory equipped with an electronic diverter valve.

Turbosmart’s upgraded diverter valves have been developed to be simple to install without compromising performance. Unlike many OEM valves, a TurboSMART EM Series BPV will not leak under elevated boost pressures and will continue to provide rapid response rates ensuring all OEM calibration strategies remain active. Providing maximum boost performance under all conditions as well as retaining all advanced control strategies of the OEM computer system.



Fitting your EM Series BPV

Identify diverter valve location

On the model designation W205 AMG C63 the diverter valve is located on the compressor cover housing. This is located on the front of the engine in the vee, underneath a plastic wiring guard.

NOTE!

Allow for the engine to cool down.



If the diverter valve cannot be located, seek assistance from your local specialist.

NOTE!

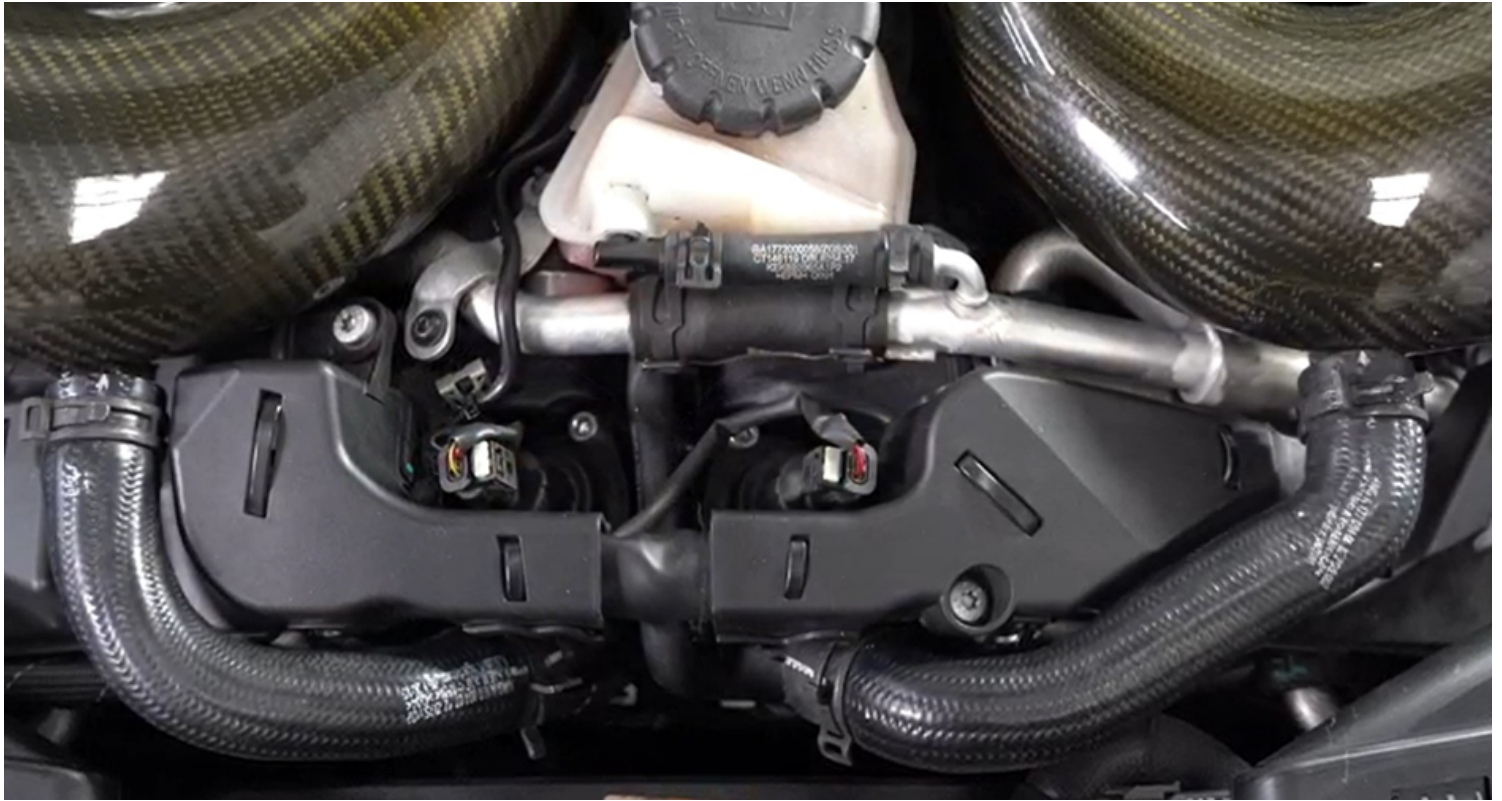
It may be required to remove auxiliary components to access the diverter valve, ensure you consult your local specialist or a service manual for correct disassembly procedures.

Undo the air filters and remove them out of the way. There are 4 x T30 Bolts that hold the plastic wiring cover on. These should be removed to allow for easier access to the stock diverter valve.

The electrical connectors need the light grey slider to be pulled back before they can be depressed and unlatched. Once unlatched it should be easy to remove the electrical connector from the valve. 6 x Torx bolts need to be removed from the stock diverter valve to remove the OEM diverter valve. It is recommended to do one side at a time to ensure nothing is accidentally installed incorrectly.

NOTE!

A magnet may be useful in removing the bolts from the vee to avoid them falling into the engine bay.



Orientation is important for installation of the Turbosmart EM BPV. A swivel flange is used to allow for easier installation. Once the standard OEM diverter has been removed. Match up the orientation of the valve with orientation of the OEM the swivel flange.

Take care not to drop the O-rings on the bottom of the Turbosmart BPV. Use 3 of the 6 bolts included to fit the BPV to the car. They require a 5mm Allen key.



Ensure electrical connectors clip in with a positive click and lock. Once engaged the light grey connector can be pushed in to lock the connector in place. Note: the image below shows correct orientation of the valve and solenoids.



Reinstall intake onto the car. As this car has an aftermarket intake system your specific installation may differ slightly. The recirculation pipes may need to be removed on OEM intakes and some aftermarket intakes to allow for enough room.

TROUBLE SHOOTING

- BPV not actuating - Confirm electrical signal plug is connected appropriately, as the plugs are new, some force may be required to click the plug into place.
- Valve is staying open - Confirm the valve has O-rings as they may have been dropped or lost during installation.
- Boost Pressure loss or lower than before - Confirm the valve has O-Rings as they may have been dropped or lost during installation.
- Failing the above, submit a technical request to tech@turbosmart.com.au with information of your engine configuration and photos of installation.
- As the factory engine control unit controls the valve, the diverter valve is almost silent.

NOTES ON EM SERIES BPV OPERATION

- Due to its construction, your EM series may be much more audible than the OEM valve
- During normal operation you may now be able to hear the valve open for a few seconds under the following events: traction control, cruise control management, rapid gear changes and varying throttle position changes. This is standard operation of your diverter valve and is coded as part of the torque management software in the OEM engine control unit; there is no adjustment available over these functions on the Turbosmart EM valve directly. It is normal for a diverter valve to be “very active” as it protects your turbocharger from surge events as well as bypassing air for torque management purposes.