

Product Name: **4 Port solenoid**  
 Product Description: Eboost2 4 Port solenoid kit  
 Product Number: TS-0301-2003



ABOUT THIS PRODUCT

- Your four port solenoid is designed to allow you to have a large range in boost pressure settings when using an e-boost and an external wastegate.
- The four port solenoid can be used with either the e-boost or e-Boost2 electronic boost controller.
- The external wastegate has a top and bottom port as described in the diagram below. Pressure on the bottom port opens the wastegate valve and pressure on the top port holds the valve closed.
- When the four port solenoid is de-energized it feeds pressure to the bottom port and exhausts the top port of the wastegate. When energized it feeds pressure to the top port of the wastegate and vents the bottom port.
- In this way the controller can add pressure to the top of the wastegate and effectively add to the wastegate spring pressure so a higher boost pressure can be achieved using a soft wastegate spring.

IMPORTANT NOTES

- Set your minimum boost pressure by choosing a wastegate spring pressure that will give you your desired minimum boost pressure with the e-Boost set point at a low value.
- By increasing your next set point value on the e-Boost the four port solenoid will feed more pressure to the top port of the wastegate and raise your boost pressure to levels much higher than your wastegate spring pressure. **IMPORTANT: Refer to e-Boost instructions for full details on setting your boost pressure.**
- Changing your connection method can cause a higher than expected increase in boost pressure.

RECOMMENDATIONS

- **Turbosmart recommends adjusting your e-Boost back to its minimum setting and measuring the new minimum boost pressure achieved by the new setup before increasing your boost again.**

**HOW TO INSTALL YOUR 4 PORT SOLENOID KIT**

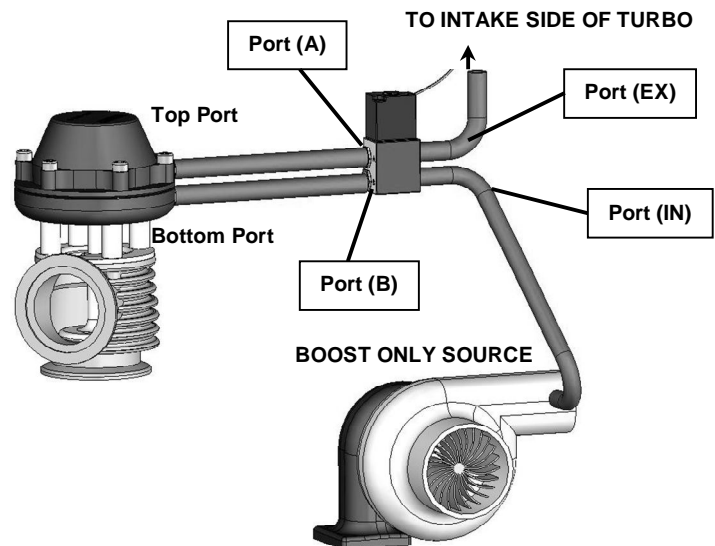
Please check that the following items have been provided with your four port solenoid.

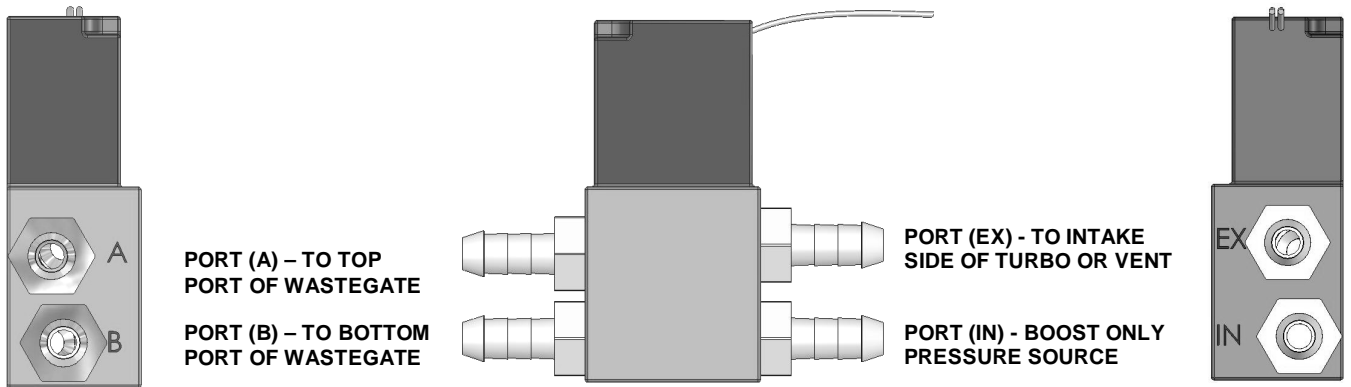
Qty	Description	Use
1	Four port solenoid valve	Optional Accessory for use with Turbosmart e-boost & e-boost2
4	6mm barb nipples	Screw into solenoid valve body & connect to silicone hose

**“FOUR PORT” CONNECTION METHOD**

Connect the four ports on the e-Boost four port solenoid according to the diagram as follows.

- Port (A) connects to the “Top” port on the Waste-Gate.
- Port (B) connects to the “Bottom” port of the Waste-Gate.
- Port (IN) Connects to a “boost only” pressure source, typically from the compressor housing on the turbocharger. If your turbocharger does not have this fitting, connect to a “boost only” pressure source before the throttle-body or butterfly. Do not connect to the intake manifold, as the pressure signal will have both vacuum and boost pressure.
- Port (EX) vents pressure from the e-Boost solenoid. Connect this hose to the intake side of the turbo, between the air cleaner and the inlet on the front of the turbocharger. Otherwise connect a short piece of the silicon hose and face the vent downwards to stop water or debris entering the solenoid





If you are unable to achieve your desired boost pressure it is normally due to exhaust manifold backpressure forcing the wastegate valve open. To increase your maximum boost pressure further, fit a heavier wastegate spring to increase your minimum & maximum boost pressure. If you are still unable to achieve your desired boost pressure ensure that your turbocharger is correctly sized for your application.

# The Turbosmart Pledge

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*Happy motoring!*  
The Turbosmart Team

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