INSTALLATION GUIDE

Initial Fitting & Basic Set-Up

The larger end of the Tillix valve is the boost entry end. You will find a small piece of silicone hose attached to quickly identify this.

The smaller end is always the end that goes to the vacuum pump and the turbo actuator.

Fitting cable ties or clamps to any/all of the joints is not necessary unless you plan on running upward of 30psi of boost. The size of the hose has been carefully selected to allow a hassle free seal and will not pop off under normal conditions.

To increase the boost level tighten the Tillix valve (Clockwise), To decrease the boost loosen it (Counter Clockwise).

Fine Tuning of the System to Suit Your Vehicle

There are certain aspects of the system that can be altered which change the way the entire system works.

The length of hose, or any type of dampening filter leading up to the Tillix valve can drastically effect the performance of the system in regards to the boost response around the valve opening point.

A very short length of hose will give instant response, but can lead to some spiking and oscillation of the boost as a result.

A long length of hose, or a dampener can give very flat boost control with some reduced speed at which the valve opens.

It is up to the end user to determine what works best for your own situation.

Trouble-Shooting Your Vehicle

Almost all problems associated with VNT boost control are attributed to the setup of the pneumatic system.

1) Boost oscillation:

#The most common cause of this is a hose length leading to the Tillix valve that is too short for the system.
#Some boost gauges, carry high needle speed and can show an over boost situation when it does not actually exist.
#The piston has become sticky due to residue built up between it and the sealing surface area.
#The spring has not been seated correctly on its base causing the piston to move on an angle rather than straight.

2) Low Boost

#Incorrect installation and orientation of the system's parts is the most likely cause of this problem. Re-check the installation pictures to ensure everything has been installed in the correct manner.
#The Tillix valve does not have enough tension on it to seal the piston against its seat. Screw the valve clockwise to increase base tension.
#Leak between vacuum pump and Tillix valve. Check all pre-existing lines and ensure there is no cracks/splits/leaks at joint etc… If in doubt replace lines with new silicone provided in the kit.
#Use a vacuum gauge to ensure there is 28-30”HG available to the system at the entry to the Tillix valve.
#As a final check, connect the vacuum source directly to the turbo and check the VNT actuator arm moves to its stopper. If it does not then the problem is turbo related.

3) High Boost

#If the Tillix valve has to much pre tension to achieve your desired boost pressure, One or more coils can be cut off its base in order to lower the preload on the spring thus lowering the point at which the boost will push it off its seat.
If the valve is installed the wrong way around, it will not allow boost to push it off its seat, causing an overboost situation. Ensure the large end of the Tillix valve it facing the boost input side of the circuit.

4) Boost Increasing or Decreasing over the RPM range.

#It is normal for the boost to increase/decrease a couple of psi across the rpm range (1000-4000rpm).
The location of the boost input to the Tillix valve can play a large role in the overall amount of creep or loss of boost during acceleration.

If you require any additional troubleshooting assistance, please contact me on the details provided.

Contact Details & Feedback

If you have any problems or would like to leave feedback please direct your email to
sales@tillix.com.au

Keep an eye on our facebook page for updates, dyno graphs, guides, etc...
https://www.facebook.com/TillixPerformance

If the matter is urgent *you can contact me through phone. Please send a text message if I do not answer and I will call back as soon as possible.*

Regards...

Lindsay

Tillix Performance & Tuning

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