



INSTALLATION MANUAL

Petty's Garage Supercharger Bypass Controller

(IMP-BCVAC-01AA, Vacuum Actuated)

Installation Instructions:

To prepare for the installation of the Boost Controller, follow these steps:

- Locate a suitable mounting location for the Boost Controller near the vehicle's under-hood fuse box or power distribution module. Ensure that the location is free from excessive heat or moisture.
- Identify an ignition/engine run power source to be used as the relay trigger.
- Identify a main battery/12-volt power source.
- Locate a reliable chassis ground. The Boost Controller's performance will be erratic if the ground is poor or intermittent.
- Determine a method for securely mounting the Boost Controller to the vehicle using a minimum of two fasteners. The electrical connector must face down during installation.

Wiring Instructions:

To connect the Boost Controller's wiring harness, follow these steps:

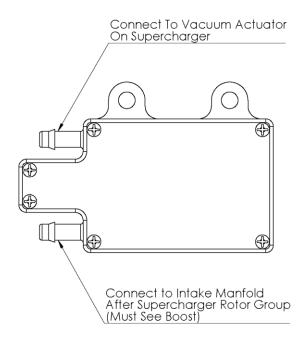
- Disconnect the vehicle's Negative battery terminal.
- Connect the single red wire to a 12-volt power source/main battery. Ideally, this should be a fused output from a Power Distribution module. If a fused output is not available, use an inline fuse holder (10 Amp).
- Connect both black wires to a reliable chassis ground. Poor grounding is the most common cause of failure in automotive electronic modules.
- Connect the single white wire to an ignition/engine run power source that turns off when the vehicle ignition is turned off.



- Connect the main harness to the supercharger's electronic bypass control valve. Ensure that the wiring harness is routed in a manner that keeps it clear from sources of heat or chafing.
- If included, connect the accelerator peddle position sensor break-out harness to the vehicle's throttle pedal and associated harness. Locate a suitable pass-through location on the firewall for the yellow wire on the main harness. Connect the yellow wire from the main harness to the pink wire on the break-out harness.
- If no break-out harness is suppled, locate the Accelerator Pedal Position Sensor output #1 wire and connect the yellow wire from the main harness.

Hose Routing:

- 1. Connect a manifold pressure reference hose to the manifold port of the Boost Controller. Ensure that the vacuum hose routing is correct and free from kinks or obstructions. Refer to the image for port identification.
- 2. Connect the bypass valve hose to the bypass port of the Boost Controller. Ensure that the vacuum hose routing is correct and free from kinks or obstructions. Refer to the image for port identification.
- 3. Ensure that the hoses are installed properly and free of leaks.





Tuning

Retuning of the PCM / ECM is not normally required following installation of the bypass controller. It is the responsibility of the installer/tuner to ensure proper fuel delivery and spark characteristics during the operation of the supercharger.