Installation Instructions – Control Module

I. Boost Sensor

The 3 bar BOSCH TMAP sensor needs to be mounted in the inlet tract, either directly in the intake manifold plenum or (preferably) immediately upstream of the Throttle Body/Carburetor.

> ***Warning:*** If the TMAP sensor is downstream of throttle blades it is possible to trigger the system "on" and overpressure the intake tract causing a catastrophic failure without the sensor ever seeing pressure above atmospheric.

II. Boost Control Unit (BCU)

The Boost Control Unit is the "brain" of the Compressed Air Supercharging system. It provides closed loop boost control based upon manifold pressure readings. Engine MAP or boost is monitored by an on-board pressure transducer. Measured boost is then compared to the target boost programmed into the BCU. A proprietary Proportional Integral Derivative (PID) algorithm in the BCU then commands the EPR to alter airflow to the Ejector and thus maintain commanded boost levels.

The BCU is designed to operate in underhood environments (maximum temperature of 210^0 F). However, whenever possible it is recommended that the unit be mounted inside the vehicle passenger compartment to minimize the potential for damage.

III. System Wiring

Compressed Air Supercharging systems can be wired to inititate or "trigger" several different ways. The two most commonly used protocols are as follows:

Single Redundant Triggering - Supercharging system is triggered via WOT throttle switch when the system is armed.

Double Redundant Triggering - Supercharging system is triggered via the release of a clutch or trans brake, when the system is armed and at WOT.

Installation Instructions – Control Module

III. System Wiring Cont'd

A 8-ft BCU to EPR wiring harness is included with the BCU. One end comes assembled with a Deutsch connector that mates to the EPR. The other end is left open so that the installer can trim the cable to desired length. A 6 pin packard connector, pins and seals are provided for making the connection to the BCU.

Remaining connections are installer specific. Schematics for Single Redundant and Double Redundant Triggering Schemes are shown below.

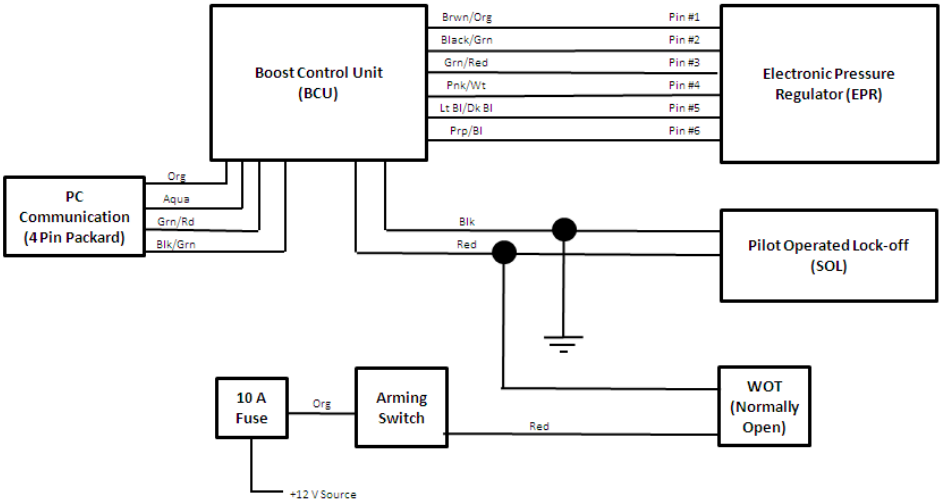
Single Redundant Wiring Diagram

The Single Redundant Triggering system uses a "high side" triggering scheme. The low side of the system is permanently grounded and a +12V one amp signal is used to trigger the system on when the system is armed and WOT has been reached.

WOT confirmation is normally accomplished via a **normally open** mechanical contact switch that is closed when WOT is reached, or by some other user configured switching mechanism, such as a piggy back circuit that monitors TPS voltage, as used on some fuel injected vehicles.

Wiring schematics and instructions for both mechanical contact switching and TPS monitoring are included to aid in your installation.

Single Redundant Wiring Schematic
Mechanical Triggering



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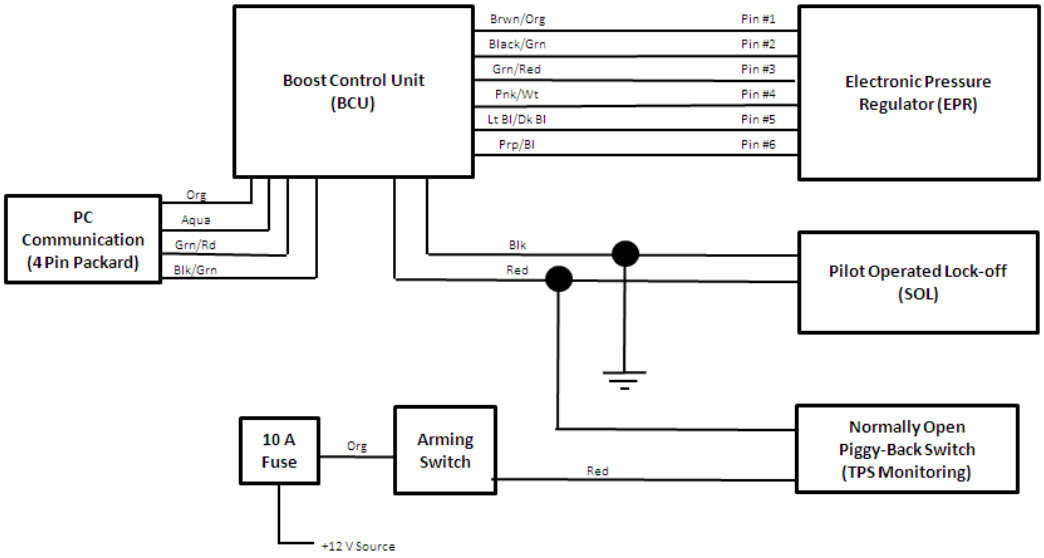
III. System Wiring Cont'd

Redundant Wiring Schematic
TPS Piggy Back Triggering



3.2.2 Double Redundant Wiring Diagram

The Double Redundant Triggering system uses a "high side" triggering scheme. The low side of the system is permanently grounded and a +12V one amp signal is used to trigger the system on when the system is armed , WOT has been reached and a **normally closed** mechanical contact switch is closed when either a clutch or trans brake is released. A wiring schematic and instructions are included to aid in your installation.

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III. System Wiring Cont'd

Double Redundant Wiring Schematic
Mechanical Contact Switch Triggering
With Supplemental Normally Closed Switch