

# ***Installation Manual for the Pantera Ignition Switch Bypass***

This Ignition Switch Bypass solves the Pantera owners problem of replacing the ignition switch that is expensive and difficult to source. The Ignition Switch Bypass bypasses high currents that flow through the "ACCESSORIES" and RUN" position ignition switch contacts with relay contacts. This Ignition Switch Bypass has been designed to retrofit Pantera's with the dual pod (speedometer and tachometer) dashboard only. It installs over the steering column replacing ignition switch connector strip and provides a safe and reliable switch system for the Pantera. The Ignition Switch Bypass has heavy duty connectors designed to accept large wires for high current circuits.

## **Ignition Switch Bypass Features and Benefits:**

>> Eliminates high current through the ignition switch from the following systems on fuses #10 through #14:

- Engine Ignition
- Radiator Fans
- Heater - A/C blower
- Rear Brake Lights
- Back-up Lights
- Power Windows
- All Gauges

>> Reduces engine run-on from radiator fans coasting after ignition switch is turned off.

>> Utilizes (2) automotive grade relays with a minimum operating voltage of 7 volts, necessary during starter motor operation.

>> Integrated design fits above the steering column without wiring modification, no long wires and additional connections to relocated relays that cause voltage drop.

>> Simple installation, direct replacement for the strip connector, labels matching the wire colors from the wire harness to the ignition switch.

>> High quality screw connectors rated in excess of 50 amps, no crimp terminals needed.

>> Printed circuit board designed in excess of 30 amps for ACCESSORIES and RUN circuits.

## **Installation**

***Disconnect the battery by removing the negative (-) or ground cable from the battery terminal.***

**Note:** the Ignition Switch Bypass will be referred to as ISB for the remainder of this manual.

- 1) Remove 4 bolts that support the steering column, rest the steering wheel on the drivers seat.
- 2) Find the 4 wire connector strip and note the wire colors or make a connection diagram.
- 3) The ISB has a "WIRE HARNESS" side and a "IGNITION SWITCH" side, it is labeled on the backside of the printed circuit board.

### Notice !

The large RED wire and large BLACK wire from the ignition switch are in reversed position from the original connector when installed in the Ignition Switch Bypass.

The large RED with small PINK wire and large PINK wire from the wire harness are in reversed position from the original connector when installed in the Ignition Switch Bypass.

4) Start by removing the 4 wires from the original connector to the ignition switch, these are the wires from the steering column.

5) Install the wires in the connector on the ISB side labeled "IGNITION SWITCH". Note that the wire color sequence will not be the same as in the original connector, this is intentional. This should position the ISB with the connectors facing you so that the connector screws are accessible. When inserting the wires it's important to not tighten or clamp down on the wire insulation but yet still fully clamp down on as much copper wire as possible. If stripping some additional insulation to expose more copper wire is needed be careful not to nick any copper wire. *These are high current carrying wires and care to install properly is very important. Wires not properly installed can potentially cause fires.*

6) Remove the 4 wires from the original connector to the wire harness, note that there is a pair twisted or soldered together. Keep the pair of wires together and install in the ISB side labeled "WIRE HARNESS". Note that the wire color sequence will not be the same as in the original connector, this is intentional. When inserting the wires it's important to not tighten or clamp down on the wire insulation but yet still fully clamp down on as much copper wire as possible. If stripping some additional insulation to expose more copper wire is needed be careful not to nick any copper wire. *These are high current carrying wires and care to install properly is very important. Wires not properly installed can potentially cause fires.*

7) Strip the black 20 AWG wire and crimp the quick disconnect female terminal on the wire. This terminal is installed on the male tab labeled "GND". This wire connects to ground or the chassis and allows the relays to operate.

8) Find a nearby screw or drill a hole in a convenient location in the sheet metal, the hole should be slightly smaller the self tapping screw size. Estimate the length of wire to reach the hole, cut and strip the wire then crimp the ring lug terminal on the end of the wire. Use a self-tapping screw and mount the ring terminal.

9) Lift steering column and replace the 4 bolts, position the ISB so that the wires clear and moves freely as the steering column is raised into position.

## Testing

1) Connect the negative (-) or ground cable to the battery terminal.

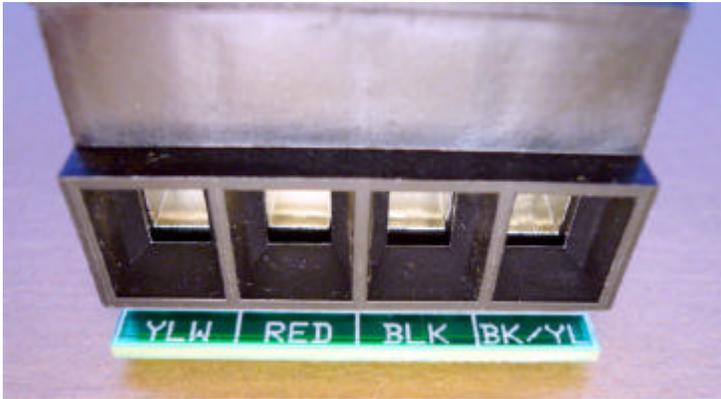
2) With the key in the ignition switch, rotate the switch to the "ACCESSORIES" position

- 3) Check the heater blower or headlight motor (up/down) operation to see if those accessories are operational.
- 4) Rotate the ignition switch to the "RUN" position.
- 5) Check the brake lights, power windows or gauges to see if they are operational.
- 6) Rotate the ignition switch to the "START" position. The starter motor should operate and the engine should fire and run.
- 7) Rotate the ignition switch to "OFF" and all functions should be off.
- 8) Testing complete.

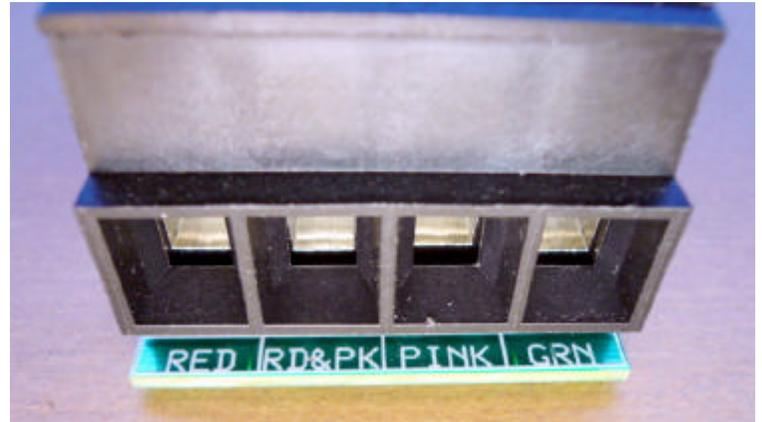
#### Disclaimer

The products on this website have been design and manufactured with the best quality components known to the engineer. The installation instructions have been written to assist the owner in the proper use and installation of the products. Pantera Electronics can not be held responsible or held liable for the interpretation or incorrect implementation of the products.

ISB top side view, the wire labels are visible on ignition switch side. Image 1



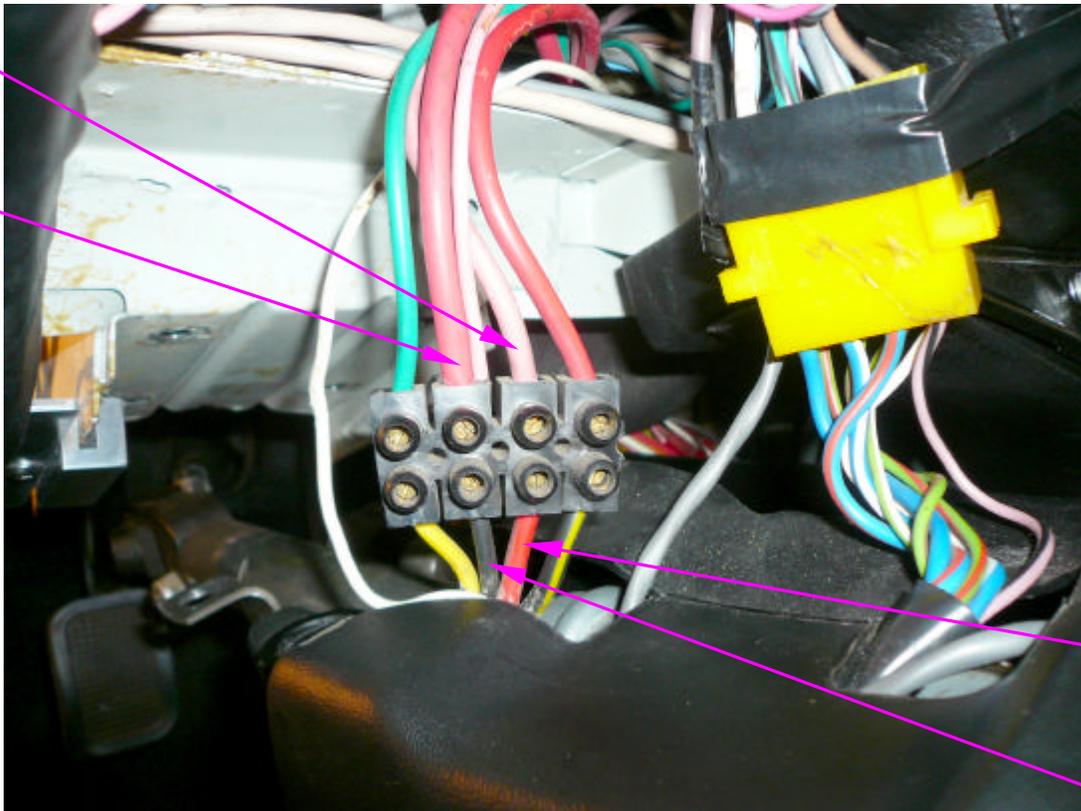
ISB top side view, the wire labels are visible on wire harness side. Image 2



De Tomaso ignition switch connector above the steering column in a 1972 Pantera.

Image 3

These wires will exchange positions



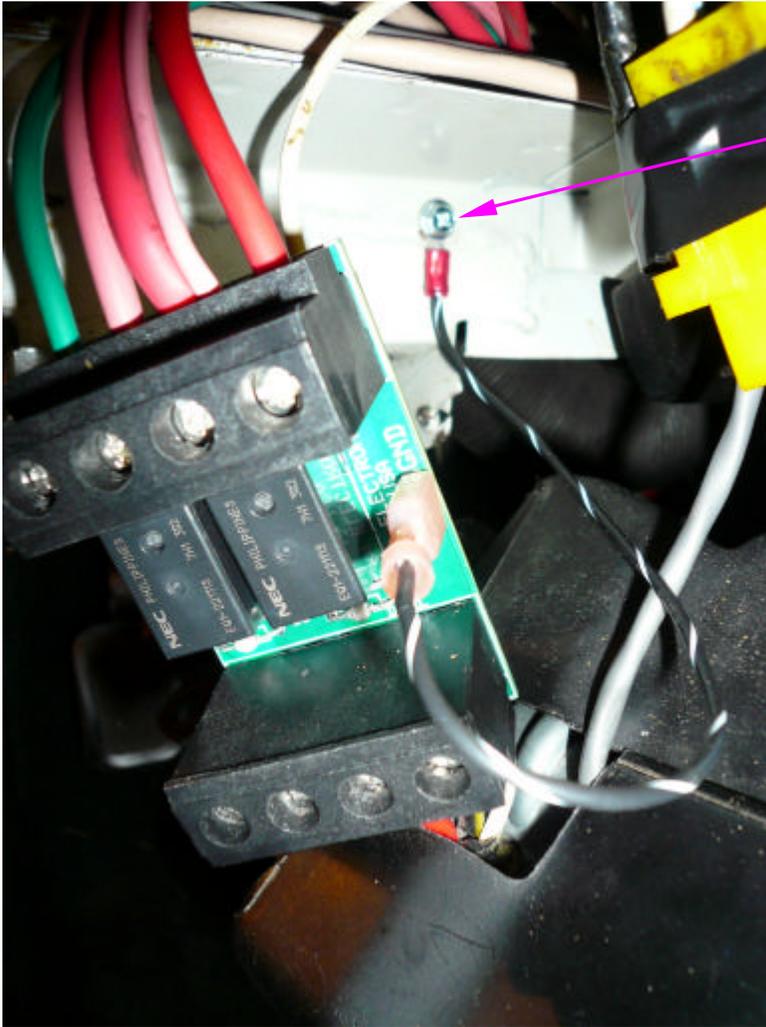
These wires will exchange positions



An example of proper wiring to the connector of the ISB Image 4



Typical position of the ISB after replacement of original connector without modifying wire length Image 5



Installation of the ISB with black "GND" wire connected to the chassis.  
Image 6

Wiring diagram for the ISB Image 7

