



2501 Ludelle Street
Fort Worth, Texas 76105
817-244-6212 Phone • 817-244-4024 Fax
888-350-6588 Sales • 800-423-9696 Tech
E-mail: painless@painlessperformance.com
Web: www.painlessperformance.com

Installation Instructions

For

50413, 50414, 50415, 50416, 50417 and 50418

Universal Switch Panels

The 50413, 50415 and 50417 switch panels are designed to be mounted in the dash using the screws provided.

The 50414, 50416 and 50418 switch panels are designed to be mounted in the box provided. The assembled box and panel may be attached to the roll cage or any location convenient for operation. The box may be attached to the roll cage with regular hose clamps by routing the clamp through the slots precut in the back of the box and then around the roll bar. No cutting or welding is necessary.

The large red wire, that has been spliced several times, is included in the kit to provide power to all the switches.

Individual wires with terminals on one end are the wires to be routed from the switch to the device being controlled. The terminal end is for the switch and once the wire has been routed, the extra length may be cut off and then terminated. Each kit has one extra switch and one extra wire, which may be needed in your particular application.

The following chart is a guideline to what color wire is normally used for a particular circuit.

Red; Battery power
Black; Chassis ground
Purple; Starter solenoid
Pink; Ignition coil
White; Accessory
Blue/Yellow; Headlights

Orange; Accessory
Yellow/White; Fuel pump
Green; Fuel pump 2
Blue; Water pump
Gray/White; Electric fan relay
Brown; Tail lights

FIGURE: A

DIODE

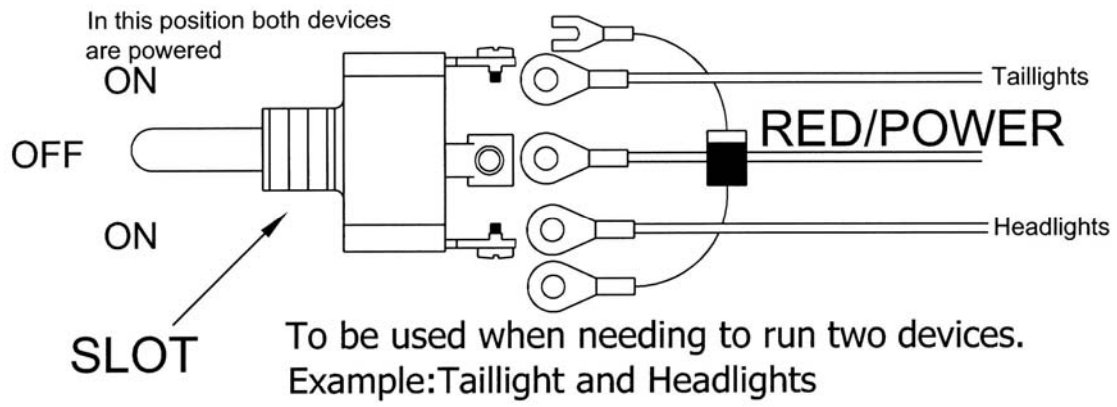
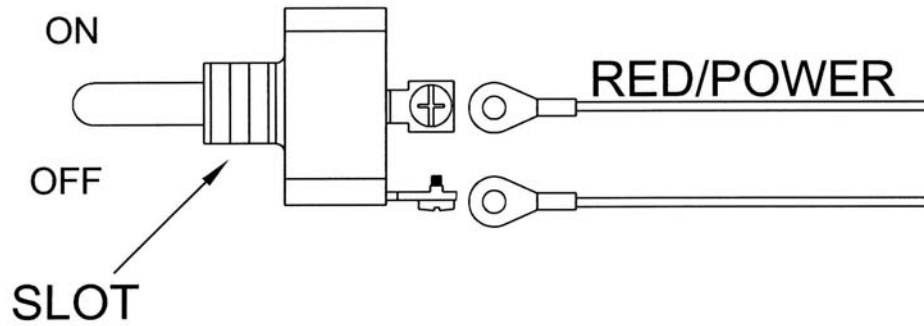


FIGURE: B



NOTE: All switches are installed slot down.

FIGURE: C

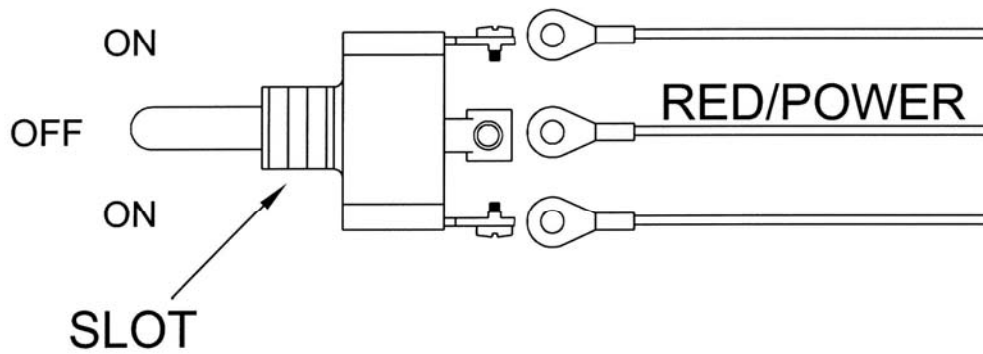


Figure "A" illustrates the proper hookup of wires using an on/off/on switch when two devices are to be operated and one of the devices is to be on in both positions. An example might be headlights and taillights. With the switch in the lower position only the taillights are on and in the upper position the headlights and taillights are on. The diode, in the illustration, allows this function to take place. If the diode is not used, the switch operates two devices independently as shown in figure "C".

Figure "B" illustrates the proper hookup of wires to an on/off switch, which will control a single device.

The label sheet included is to identify each switch of its function. Simply peel off the label needed and place it under the switch wired for that function. The "R" and "L" labels are for right and left in the event an on/off/on switch is turned sideways for turn signals.

If your kit has a box for roll bar mounting, the rubber grommet is to be installed in the hole the wires will be exiting out of and the plastic plugs are to fill the remaining holes. The plastic wire ties are for looming and securing the wires to the vehicle

The following is included in this kit;

- 1 switch panel
- 1 mounting box depending which kit you have
- 3, 5 or 7 on/off switches depending on which kit you have.
- 1 on/off/on switch
- 1 momentary on switch
- 1 diode assembly
- 1 sheet of labels to describe switch function
- 4 mounting screws
- 1 rubber grommet (kit with boxes only)
- 3 plugs for box holes not used (kits with boxes only)
- 4 7" tie straps
- 100 4" tie straps
- 5, 7 or 9 color-coded wires for switch attachment
- 1 red input power wire

Painless Performance Limited Warranty and Return Policy

Chassis harnesses and fuel injection harnesses are covered under a lifetime warranty.

All other products manufactured and/or sold by Painless Performance are warranted to the original purchaser to be free from defects in material and workmanship under normal use. Painless Performance will repair or replace defective products without charge during the first 12 months from the purchase date. No products will be considered for warranty without a copy of the purchase receipt showing the sellers name, address and date of purchase. You must return the product to the dealer you purchased it from to initiate warranty procedures.

Copyright © 2007 by Perfect Performance Products, LLC