

Installation Instructions: Part No. 1108 – Fuel Pump Shut-Off Switch, Inertia Activated

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IMPORTANT!

Please read all instructions before beginning work.

Be sure you understand each step completely before you begin. If you have any questions, please contact us first.

These instructions assume some knowledge of automotive electrical systems and the possession of basic tools. If you have any reason to believe that any part of these instructions is beyond your abilities, experience, and comfort level, please stop immediately and consult with a trusted mechanic.

This switch is intended to cut power to an electric fuel pump in the event of a heavy impact. (Please see also "What This Switch Cannot Do" on Page 2.)

WARNING!

The switch and warning label must be installed exactly as described in these instructions.

Failure to follow these instructions exactly may cause the switch to trigger inadvertently (causing the vehicle to stall) or may prevent the switch from triggering (defeating the safety function of the switch).

Kit Contents:

Switch
Electrical Connector
Connector Pin Kit

If any of these parts are missing, please contact us immediately.

You Will Need:

Marking pen or center punch and hammer
Drill with 1/8" drill bit
(2) sheet metal screws and screwdriver
Electrical wire (14 to 18 gauge)
Wire crimpers
Electrical tape, heat-shrink tubing, or butt connectors

Installation Instructions

Step 1

Read all directions through to the end. If anything is unclear, please contact us before starting work. If you are not comfortable performing the work yourself, please consult with a trusted mechanic. If you are not confident that this switch will perform the function you need, please return the unused kit to us for a refund.

Step 2

Locate a rigid steel body panel or other rigid structure where the switch can be mounted vertically, with the red reset button on top.

Do leave enough room below the switch for the electrical connector and wiring.

Do leave enough room above the switch for access to the reset button.

Do not locate the switch where it might be struck by loose objects (tools, luggage, etc).

Do not locate the switch where it might get wet.

Do not locate the switch in the middle of an unsupported panel.

Unsupported panels can amplify normal bumps and vibrations, causing unwanted triggering of the switch under normal driving conditions.

We recommend locating the switch inside the passenger compartment if possible. A position where the driver can reset the switch without exiting the driver's seat is best. If you cannot find a suitable location in the passenger compartment, the trunk is the next best choice. We recommend against locating the switch in the engine compartment because of the high levels of heat and vibration in this area.

Step 3

Check behind the chosen structure to be sure that all wires, hoses, tubes, etc are clear of the area. If necessary, relocate those items or choose another location for the switch. Using the switch as a template, mark the location of the two mounting holes. Drill two 1/8" mounting holes as shown in Figure 1.

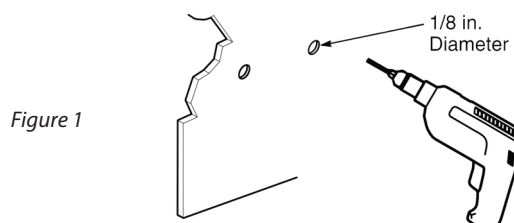


Figure 1

Step 4

Ensure that the ignition is turned off and disconnect the battery.

WARNING!

Failure to disconnect the battery may result in electric shock, damage to the vehicle electrical system, and risk of fire.

Step 5

Locate the power (switched) wire to the fuel pump. **Note:** For pumps drawing more than 5 amps, locate the power wire to the trigger coil of the fuel pump relay instead.

Step 6

With the battery disconnected, cut the power wire to the fuel pump. Splice your electrical wire to each of the cut ends. The resulting extended wires must reach to your chosen location for the switch. Route, secure, and protect the wires as necessary to prevent chafing and other damage.

Step 7

Looking at the bottom of the switch, locate the markings C, NO, and NC as shown in Figure 2. Match each of these markings with the three terminals of the connector. It may be easier if you fit the connector partway to the switch, but do not snap the connector in place yet.

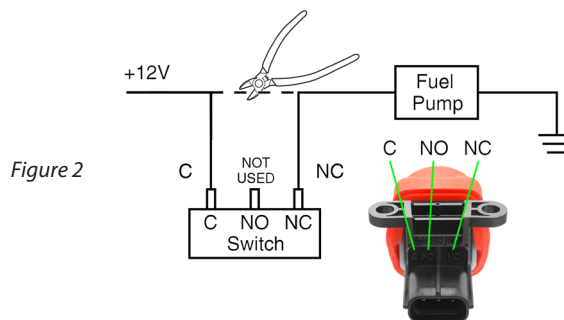


Figure 2

Connect your fuel pump wire from the battery to the C (Common) terminal and the wire from the fuel pump to the NC (Normally Closed) terminal as shown in Figure 2. Do this by crimping a connector pin from the pin kit onto the end of each wire and then installing the pins into the appropriate sockets in the connector.

Optional: You can connect the NO (Normally Open) terminal to a warning light on your dash. Ground the other side of the light, and the light will come on if the switch has been triggered.

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Step 8

Hold the switch in your hand and install the connector until it snaps in place.

Note: Do not force it! The connector is designed to go on one way only. If you encounter resistance, try turning the connector around.

Step 9

Check that the switch is set by pressing down on the reset button as shown in Figure 3.

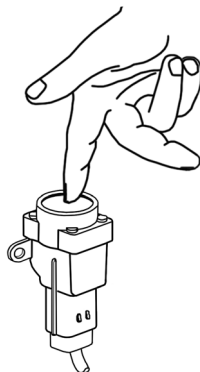


Figure 3

Step 10

Reconnect the battery and start the engine. If the engine does not start, turn off the ignition, disconnect the battery, and check for continuity between the wires connected to the C and NC terminals. Refer back to Step 7 and Figure 2 if necessary.

Step 11

With the engine running, hold the switch in one hand and strike it sharply with your other hand as shown in Figure 4.



Figure 4

If you strike the switch with enough force, it should trigger the switch and the engine should stop. Reset the switch and repeat the test before moving on to Step 10. **Note:** Most carbureted vehicles will continue to run for a minute or two after the fuel pump stops running. If you can hear that the pump has stopped running, you may consider the test a success without waiting for the engine to stop.

If the engine does not stop, turn off the engine, disconnect the battery, and check that there is no continuity between the wires connected to the C and NC terminals. If this test checks out, something has been done incorrectly between Step 5 and Step 9. Correct the error and repeat the test.

Step 10

Turn off the ignition and disconnect the battery. Use your sheet metal screws to mount the switch in your chosen location. Tighten the screws firmly but do not exceed 2 lb-ft of torque.

Step 11

Reset the switch by pressing the red button. Reconnect the battery and start the vehicle. Using a rubber mallet, strike the panel near the switch (do not strike the switch directly). If the switch triggers during this test, you must find

a more rigid location.

Step 12

Conduct further tests by slamming the vehicle's doors, hood, and trunk; driving over rough roads; and driving over speed bumps. The switch should not trigger under any of these normal conditions. If it does, you must relocate it to a more rigid structure.

Step 13

After the mounting location has been proven to be satisfactory, cut out the red label below. Mark the location of the switch on the label and affix it to a prominent location inside the vehicle.

ATTENTION!

This vehicle is fitted with an inertia-activated fuel pump cut-off switch. It is located in the:

- ☐ Cabin
- ☐ Trunk
- ☐ Engine Bay

Press the red button on top of the switch to reset ONLY if the fuel system is not leaking and if the vehicle is safe to operate.

Recommended label locations include the driver's door jamb, on the instrument panel or dashboard, or on the steering column. Cover the label with clear tape to protect it from the elements.

CONGRATULATIONS

Your inertia switch is now installed. We recommend re-testing the switch periodically (at the start of each racing season, or when taking the vehicle out of off-season storage) to ensure continued proper operation.

WARNING!

It is impossible to predict every potential situation or to prevent every danger that may arise. The seller makes no claim or warranty about this product's ability to prevent damage, injury, or death.

Some Things This Switch Cannot Do

- Prevent or extinguish fires.
- Prevent or stop fuel leaks.
- Soften wash water so detergents clean better.
- Stop a mechanically-driven fuel pump.
- Stop the free flow of fuel.

If you expect this switch to perform one or more of these functions, please return the complete unused kit for a refund.

IMPORTANT DISCLAIMER

Auto racing is a dangerous sport and products are subject to failure when exposed to the high stresses involved. This product is sold without warranty, expressed or implied. No warranty or representation is made to the product's ability to protect the user from any injury or death. The user assumes the risk. Pegasus is NOT responsible for damage, consequential or otherwise, for equipment failure or mal-performance after installation.