

Fitting a Dummy Flashing Alarm LED to Fiat Panda 169 (2004)

Introduction:

This setup is connected into the car's battery & fuses and will flash the LED whenever the engine is off & turn off the LED when the car engine is running. The use of a Relay switch was found to be necessary to prevent the battery from draining.

The main benefits of this are that it will obviously deter any potential car thieves and does not rely on the driver to separately remember to enable/disable this feature when entering or leaving the car.

Items needed:

2 x Mini Fusetaps	(widely available online)
1 x Relay	(widely available online or in Halfords Part No: 184161)
1 x Flashing LED	(widely available online)
1 x small U bolt cable clamp	(needed for the grounding connections.)
1 x Bulldog clip	(needed for attaching the Relay)
1 pack of car mini fuses	(assorted packs widely available online)
1 x metre of single core insulated electrical wire	(an unused AC Power supply can be used)
1 x pack of 4mm spade connectors	(widely available online)
1 x pack earth/ground ring connectors	(widely available online)
Some small cable ties	(widely available online)

Tools Needed:

- 1 x Philips screwdriver
- 1 x headtorch
- 1 x pair of crimpers/pliers
- 1 x pair of long nosed pliers
- 1 x hand-drill
- 1 x mini adjustable wrench or socket set

All the work will be done in the fuse compartment inside the car (not the one in the engine) which in the Fiat Panda 169 (2004) is on the right of the driver's side just above the foot-well, as shown below:



Step 1

In the interests of safety disconnect the battery first.

Unscrew & remove the panel to locate the two banks of fuses.

One of these fusebanks is obvious whilst the other is a bit further back and slightly lower and to the left of the other fusebank.

Step 2

Inside this compartment there is a metal frame visible which will allow you to attach or hang the relay off using a suitable clip or other fitting. The relay shown in the picture is attached using a small bulldog clip



Type of bulldog clip used:

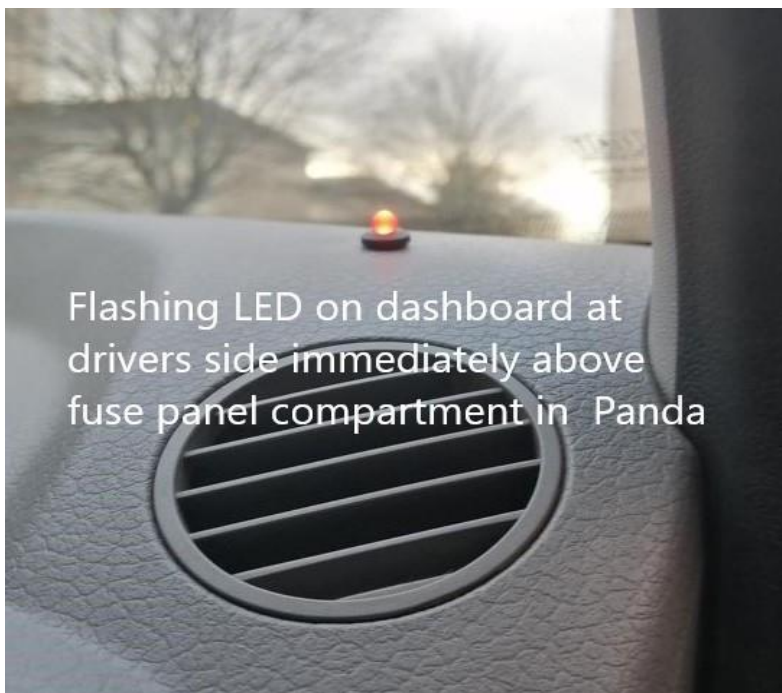


This part is quite fiddly and will involve hooking the relay onto the clip & then reaching up & clipping this securely onto the metal frame

Step 3

A hole (in this case 4mm) is drilled into the dashboard just above where the fuse compartment is located. The exact placement of the hole is an arbitrary choice and care is needed to ensure any structures below the dashboard are not damaged as a result of any drilling.

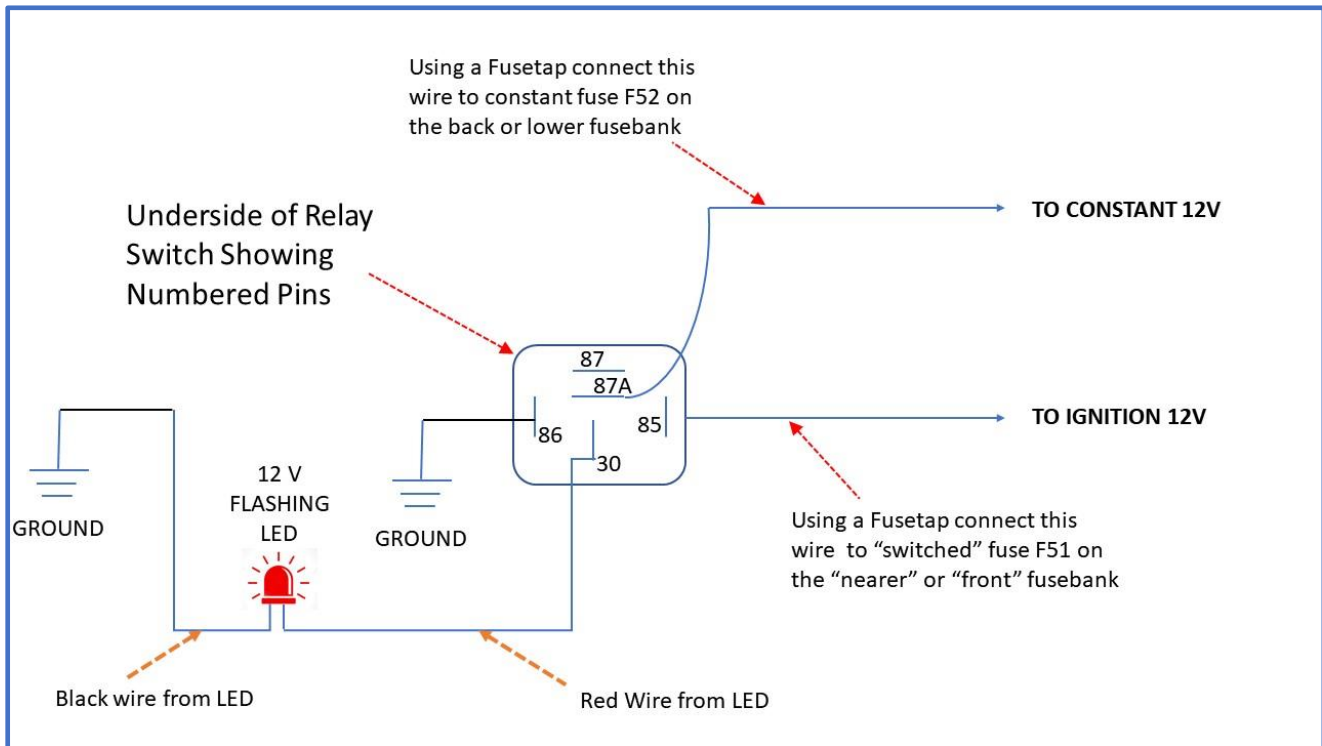
Also please measure the diameter of the flashing LED which you bought first before drilling any holes. This approximate position of the flashing dummy alarm LED is on the right hand side of the driver's position on the dashboard and is shown thus:



Insert the flashing LED into this hole & check it is clearly visible from outside of the car. Placing the LED here ensures that the LED's trailing red and black wires drop down towards where the Relay and fuses are to where they will be connected.

Step 4

The wired connections to make thereafter are given in this diagram below:



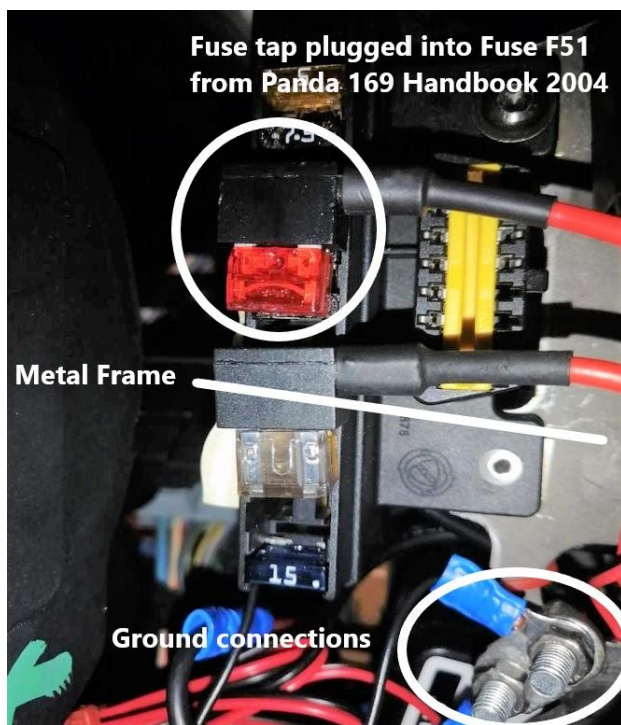
The choice of fuses F51 (switched) & F52 (constant) was done through testing each fuse in the Panda in turn to determine whether it was in fact constant or switched. The Fuse labels "F51" & "F52" correspond to the same denoted fuses in the Fiat Panda 169 Handbook which is available online.

This wiring will of course involve sensibly judging and cutting the correct lengths of connecting wire to use for each connection shown above; using the crimpers to safely attach the spade terminals & ground rings and using the long nosed pliers to carefully remove & then insert matching fuses in each of the fusetaps for Fuses F51 & F52.



The two ground connections shown above can be made by using the small U bolt cable clamp and ground connecting rings to attach to the metal frame to which the Relay was attached earlier. The "U Bolt Cable Clamp" is shown opposite & is widely available online

The two fusebanks together with the ground connections are shown in the following two images:



Step 5

At this point, if all the above steps have been carried out, then the battery can be reconnected & the setup can be tested by turning the engine off and on.

Any trailing or hanging wires should be safely tied up using a cable ties before then replacing the panel covering of the fusebox compartment.