

# FCX Offroad Innovations

Thank you for purchasing the FCX Heated front seats loom kit for 2.4 Defender

This kit is used when installing Genuine Land Rover heated seats in a Puma Defender that has no heated seat switches fitted. It is entirely 'Plug and play' with no additional cables required, there is no soldering or crimping required. One hole will need to be drilled under your cubby box / tray. Please allow a couple of hours to fit the kit - take your time, read the instructions first.

Please check the contents of your kit:

- 2 x Genuine LR Heated seat switches
- 1 x Main Loom with 2 x relays
- 1 x Switch loom
- 2 x loose grommets
- 2 x 10amp fuses
- 1 x Seat box clip
- Some cable ties

Tools you may need:

6mm socket. NOTE Not all Defenders are built the same so this size may vary !  
Hex drives (1 for dash screws, 1 for underseat fuse box, 1 to remove cubby box / tray if fitted)  
Cone cutter or other means of drilling a 25mm hole in steel (Dab of paint to put around drilled hole - any colour / type, it wont be seen)

## Installation



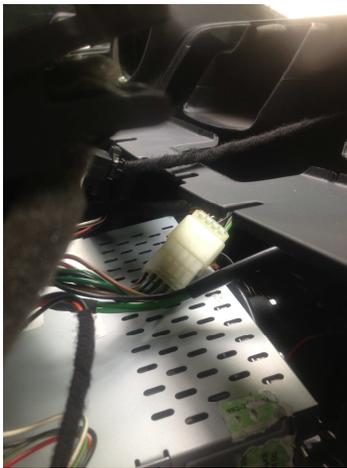
Remove the two black screws holding the front of the dash (just below the electric window switches).

The dash panel is then held with clips top, middle and bottom on either side, it can be pulled forward with some gentle persuasion with your fingers starting at the top above the air vent. Gently pull forward as shown in the picture.

Remove the blanking plates (the two outer ones in the bank of three at the bottom) and insert the supplied new heated seat switches (push until they clip in)



Connect the two black plugs from the new switch loom to the new switches, the black plug with the longer loom (blue with grey trace) is the left hand switch (blue pink trace is right)



Remove the factory plug from the back of the hazard warning light switch (top centre - there is a tab on the plug that has to be squeezed to release) and replace with the plug from the new loom. The factory hazard warning light plug is then inserted in the socket of the new loom.

You should be left with one small white plug with two wires attached.

Leave this area for a moment.

Moving to the driver's seat (right hand drive). Remove the seat base with a sharp upward movement and disconnect the heated seat cable from the seat back. Put the seat base safely out of the way.



Push the newly supplied relays onto the existing metal tabs (picture on right) so that they look like the picture on the left (do not insert fuses yet - they will go into the top of each relay later)

Remove the 6mm nut holding the bracket as shown on the right and put the two ring terminals in black (the other in the kit has a red tape on the cable - don't use that one yet) underneath and tighten the nut back up. This is the 'earth connection'





Next, remove the lid from the underseat fuse box and carefully route the other cable with a ring terminal on (has a red stripe around the cable) in from underneath and fit under the terminal in the bottom left of the picture that already has a wire attached. Be very careful not to let the cable you are temporarily removing touch anything else as it is live.

This is the 'positive connection'

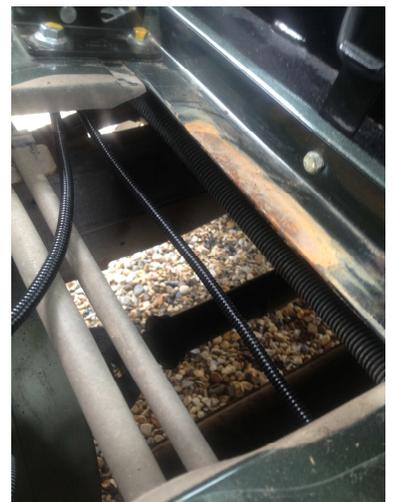


You will now be left with three cables under the seat box, the shortest one with the grommet pre-fitted is the driver's heated seat connection. This needs to be carefully fed through the existing hole in the top of the seat box towards the back nearest the door (it may be covered with a black sticker). The plug has a clip fitted and this will fit into the existing square hole just in front of the hole you've just bought the cable through. Install the grommet.

Now remove your cubby box / tray and then remove the metal plate that is underneath (held with four screws) and put to one side.



The two remaining cables in the kit need to be fed carefully through the grommet shown on the left, the other picture shows the centre plate between the seats removed and a view of the grommet from the other direction. The cable with the black plug on now needs to enter the passenger side under seat compartment utilizing an existing grommet. This is then fed through the hole up to the seat exactly the same as you did on the driver's side.





The picture on the left shows the cable entering the passenger side seat box. The picture on the right shows the cable secured with the supplied cable ties under the centre section.



**Well done, you're nearly there !**

The last part is taking the one remaining cable (with the white plug on) up to the dash.



The metal plate that you removed from between the seats requires a 25mm hole to be drilled in it. This can be done with a cone cutter / step cutter or by drilling lots of smaller holes and then filing into one big hole. Make sure you protect your eyes when drilling and take all necessary precautions to avoid injury.

The hole needs to be sited where it won't interfere with the cubby box when repositioned. Paint around the new hole to prevent rusting.

Use the supplied grommet and bring the cable with the white plug through.

This cable now needs to be routed under the carpet adjacent to the gear levers and up behind the dash on the driver's side and connected to the white socket that you previously installed.

The passenger side can now be 'put back together' after ensuring that the newly installed cable is safely cable tied away from sharp or hot objects.

The seat can be plugged in to your new socket.

**Install the new fuses into the new relays (gently, don't bend them) and put the drivers side 'back together' (remember to put the lid back on the underseat fuse box.**

**Now test the heated seat switches (the engine will need to be running)**

**Once everything is tested you can reinstall the centre plate (again make sure all newly installed cables are safely and securely routed away from sharp or hot items) and reinstall the dash.**

**Now go and make a cup of tea !**

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