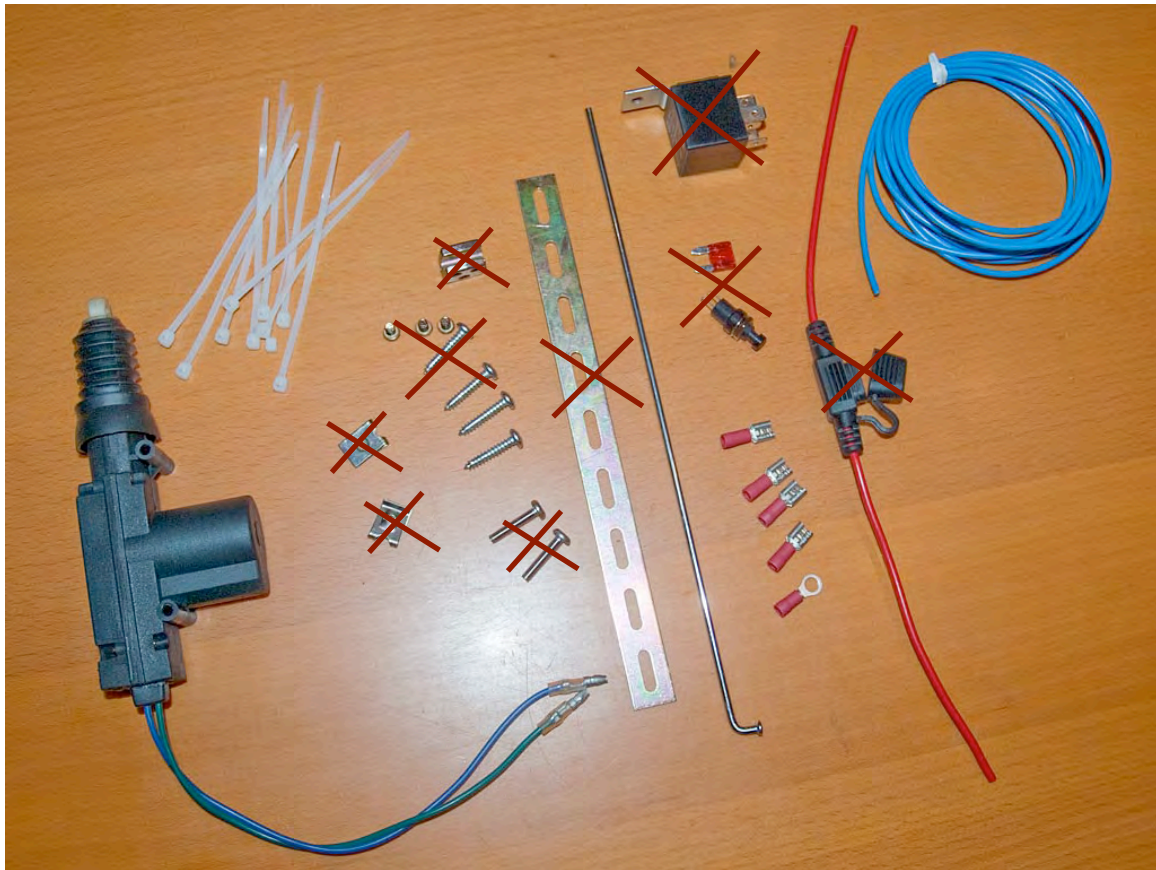


Lilibet's Workshop 1

Electric Boot Release

Oh, please **not another** instruction, you might think, but with the versions I had seen so far it seemed very inconvenient that the solenoid was always mounted visibly somewhere under the boot lid. So I went for something completely different ...

For just £17.50 incl. p/p, I acquired a complete kit on eBay. After a couple of weeks (praise Deutsche Post for their thorough inspection!) this is what arrived at my doorstep:



One solenoid, 10 small cable ties, a collection of screws and bolts, a clamp for the pull rod, a universal bracket, the pull rod itself, one small switch, a couple of crimp connectors, a relay, an in-line fuse and a lot of blue wire.

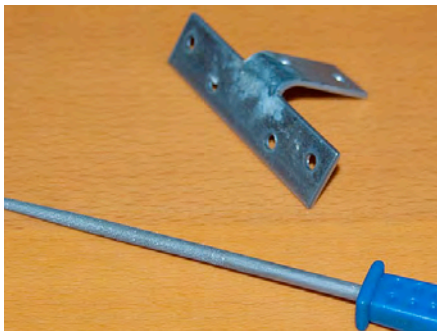
With what I was up to, all crossed out parts were obsolete, leaving them for a plethora of future sensible ideas. On the other hand, some extras were needed: a mounting bracket from our local DIY store, a plastic tube joint, even more different crimp connectors and large cable ties, shrink-on tube, insulation tube and tape, a little more wire, two rivets ... and one used fog lamp switch from a Mk II MGF.

The following tools were required: a small file, hacksaw, a vice for bending, drilling machine, 4 mm steel drill, hand riveter, set of flat pliers, soldering iron, wiring aid for electric installations, sharp knife, crimp pliers, different nuts and screwdrivers.

Drive Preparation



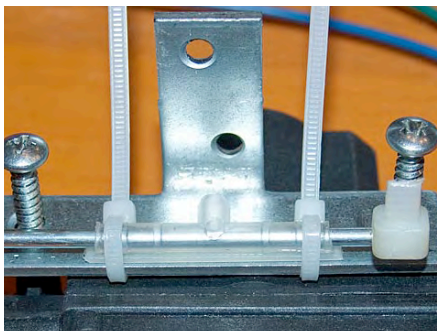
Here is a close look of the bracket from our local DIY store, the holes almost perfectly matching the mounting points of the solenoid. Only very little work had to be done with the file after bending it:



Afterwards the pull rod was bent in a way that it would move freely through the plastic tube joint, allowing parallel movement.



Then I cut the rod to an appropriate length, affixed a large cable tie to its end to work as a pulley on the lock release and joined all pieces with two small cable ties to the bracket, using a remainder of the large cable tie as spacer.



Stick in, mate!

Next thing to do was to find the ideal mounting position for the solenoid. So you just have to fiddle in the assembly into the lock bearing and see where the large cable tie can easily move the lock release when moving to the right.

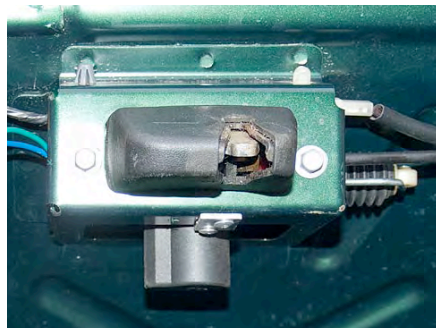


Once the position is clear, mark it and drill the two holes.



My first idea was to cut threads into the holes and fix the bracket with two of the three M4 clamp screws from the kit. But I didn't have a 3.2 mm drill handy in the first place and even more it seemed a bit tricky, as there will be quite some force applied here.

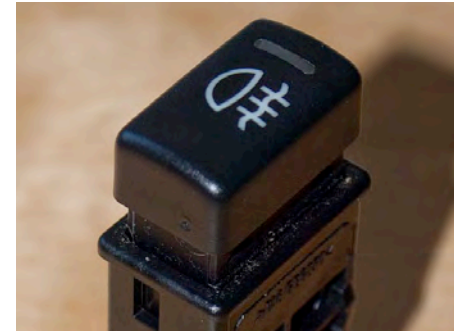
So I just drilled 4 mm holes and used two rivets and fixed it.



And this is what it finally looks like. The complete assembly is neatly hidden within the lock bearing, only the solenoid's motor sticks out a little to the inside.

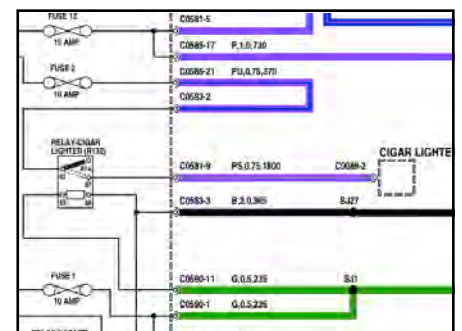
So that's it for the mechanics, but ...

what about electrics?



I wanted to control the boot opener via a standard fog light switch, lots of which are readily available on eBay. But in no way it seemed wise to simply use the switch to open the boot lid. The button may easily be operated in error whilst driving on dual carriageway, allowing the precious contents of my boot to be spread alongside the hard shoulder.

I remembered the way Rover used to secure the electric hood assistance on some MGFs, where you had to press the brake pedal to operate. So, taking power from the brake pedal switch seems quite easy. But how can this be fed to the relay? Let's just have a look at the wiring diagram:

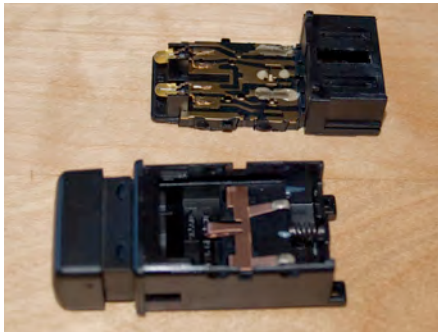


The relay is fitted already! It's in charge of the cigar lighter and even comes with its own proper fuse (fuse 2 in the diagram). It is controlled from connection C0590-11 on the passenger compartment's fuse box. So I just had to cut this cable and insert the switch between the brake pedal switch's output and C0590-11 below the steering wheel.

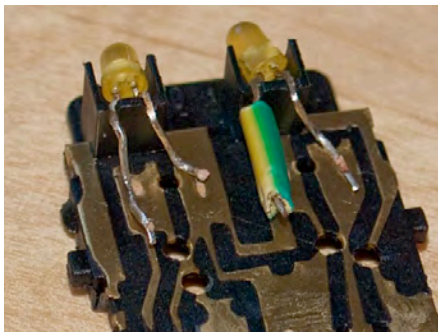
This actually sounds easier than it is, as the fog lamp switch is wired to operate against ground while I want to switch power. Even worse, the lamps within the switch box are LEDs, having to be connected in the right "direction" ...

Switch mods

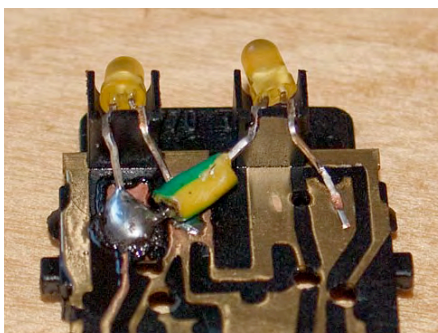
To modify the switch, it has to be opened in the first place. This is easily done with the help of a fat knife, giving access to what looks like this. Don't worry: no parts will be flying around.



You will now need to loosen the left LED with the flat pliers and simply turn it the other way round. On the right LED, only the left leg needs to be pulled off and insulated with some leftover cable plastic.

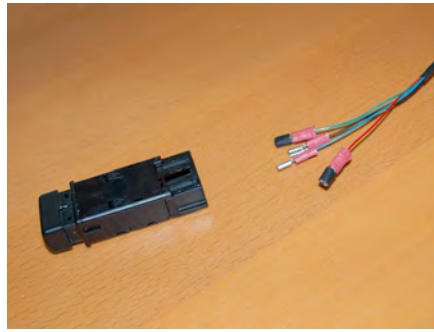


It is even better to solder a short piece of insulated wire to the right LED's contact, as some part of the switch tends to move way up to the lights, thus the mod wiring being prone to short circuits. I had simply covered all this with insulating tape.

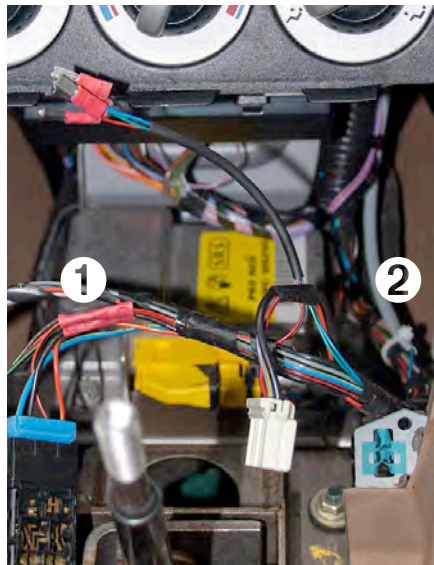


At first the left LED has to be soldered in the turned over position, now located between connections 4 (exit to relay) and 5 (ground), it will light up while operating the switch. The right LED will receive power from connection 2 and illuminate the switch. Connection 1 is the live wire from the brake pedal switch.

A little loom ...



The current through these new cables is very low, with only short time relay switching and LED lighting to be provided. Therefore I have made up a little loom from four old networking wires and crimped some small connectors to them: 1 blue, 2 red, 4 green, 5 black. Connectors 2 and 4 received an extra shrink-on coating, preventing them to be the cause of any short circuit.



Wiring it up

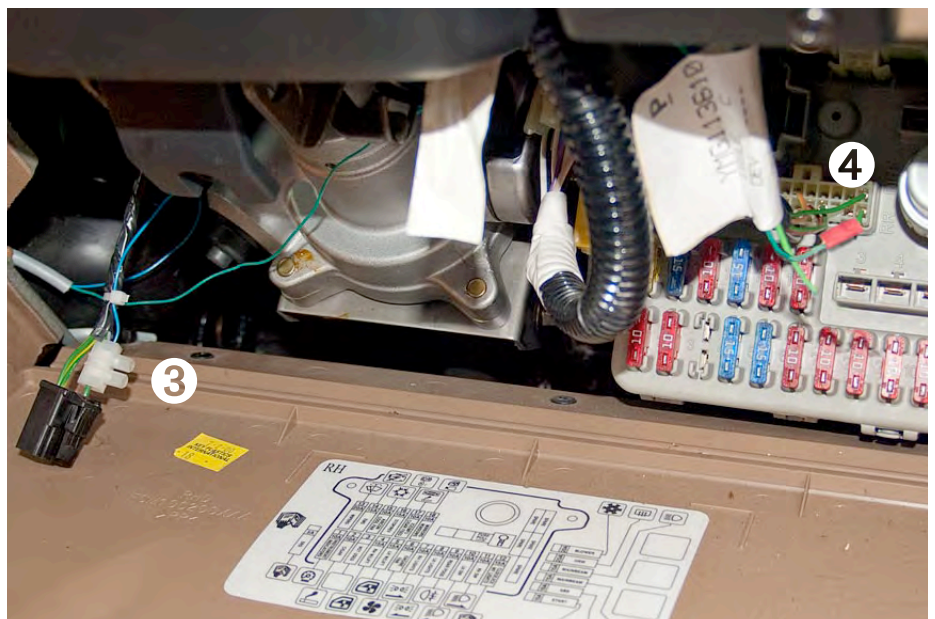
First of all, disconnect the battery! Now the fascia must come off to get access to the switchboard. The black and red wires will now be tapped to their colour counterparts leading to the fog light switch already installed (1), providing the new switch will illuminate as soon as the headlights are switched on.

Looking at mark (2) within the same image, you will discover some insulation tube, neatly tied to the existing cable loom under the fascia. This is where the blue and green wires run.

Input voltage for the blue wire will be taken from the brake light control switch. To access, simply disconnect the wiring from the switch and pull it out through the fusebox cover under the steering rack. Leave some cable length to ensure free movement and tap the single green/purple cable (3). I used an old wire connector, better get hold of crimped ones.

Position 4 in the fuse box shows where the green cable has to go: simply cut the lower, right, green cable from the multi-plug on the fuse box and connect it to the green cable from the switch.

Now connect the modded switch to its cables and make sure no open ends are hanging around anywhere. Reconnect battery, switch on ignition, press brake pedal and push the new button ... a "click" must be heard.

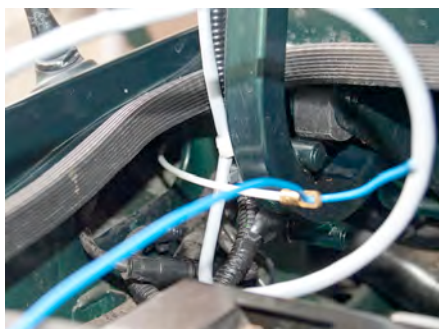


In the long run ...



It is now time to connect the solenoid to the long blue cable that has to be fiddled through to the cigar lighter. A wiring aid for electric installations can be quite handy here. I used this to pull the wire through the boot lid from the boot lamp as well as from the engine compartment to the rear shelf.

The cable will enter the rear shelf through an oval rubber seal located on the near side. To get access, simply lift the carpet and the sound mat there, Fumble out the rubber seal, cut a small hole in it and pull the cable right through it. Don't cut the seal's edges!



In the same way, I made way for the cable through the rubber seal at the bottom of the boot lid.

The solenoid's blue cable got crimped to the long blue wire just installed; the green wire has been connected to ground via the boot lock's fixing bolt.

Within the engine bay, I used the insulation tube for the blue cable once again and fixed it with a lot of cable ties to the existing loom. From the rear shelf, the cable is then led behind the rear side rear carpet to the central console.

After the storage box and the ashtray have been removed, it is quite easy to pull the cable into the console tunnel.



Now the cigar lighter has to be disconnected and the cable pulled up through the ashtray recess.

A connection blade had been crimped to the blue cable then, and it was connected to the cigar lighter's purple cable.

All in all, the whole business took about three and a half hours to complete, I even had the rear part of the hood flipped up, but I don't think this is really necessary.

A word about security: To operate the boot opener, ignition must be on and the brake pedal pressed.



Supply Source and Disclaimer

I got the kit from William Thompson, he can be found on eBay under the nick coolwill2k. William is a very nice chap, doing business with him is strongly recommended. He also has his own web site: www.blaize-electronics.com. I will send him this alternative mounting instruction, maybe an adapted kit will be available.

It will be understood that this report is only a collection of my personal experiences and that I can't give any warranties as to its functionality or security or take liability for any further faults or issues resulting from the work described. Reproduction is on your own risk! My car is a RHD MY2000 MGF, other models may vary as to wiring and/or cable colour coding. Please double-check before commencing work.