BMW 5-series E61 Rear Glass micro switch replacement process

Scenario:

In early Oct 2010, my Sep 2007 E61 535D LCI European (German) model suddenly popped open the rear hatch glass as I had started the engine and put the car in Drive. This occurred a number of times over the next 2 days and I same time noticed that I at times could not manually open the glass lock using the outside lever. On a couple of occasions, after the car had been parked for a while, I got a heavy battery discharge warning when I put the key in the ignition and I noticed the clock and trip computer was reset.

Browsing the 5-forum, I learned that wires in the hatch are often torn or the lining worn off, causing short circuits to occur. I followed the pdf pictorial guide in the forum and found the correct brown as well as brown/blue wires but found they were all in perfect condition. Just to be safe, I decided to replace these two wires between the antenna box under the spoiler and all the way in to the rear ceiling mounted right speaker. Shortly after the operation, I found that the problem persisted so that was a good 3 hours wasted and I fear that I weakened the wiring harness in the process which I actually found was in perfect order and nowhere near as weak or poorly designed as otherwise intimated on the forum. The silver lining was that at least what had occurred to me as the most likely cause, was now eliminated and I then found a post discussing replacement of the micro-switch, i.e. the rear lever/button, mounted on the glass. The post I read, suggested that it was nigh on impossible to remove the switch and that it had to be cut away – not so, it was in fact very easy once I had the proper tools; here chiefly thinking of a ball bearing puller tool which I had to purchase, but it was easy to find and reasonably cheap to boot.

With no further ado, here are the steps. Please excuse the greasy window and flash glare, as I did the operation on a cold and windy October evening and focused on getting the job done very quickly with a minimum of documentation!



First off, be sure you have the following tools:

Ball bearing puller, socket wrench size 10mm, open-ended wrench/spanners size 13mm and 24mm, a knife or very fine screwdriver (not pictured) and the crucial spare part 61319218995 "rear window key button with micro switch".

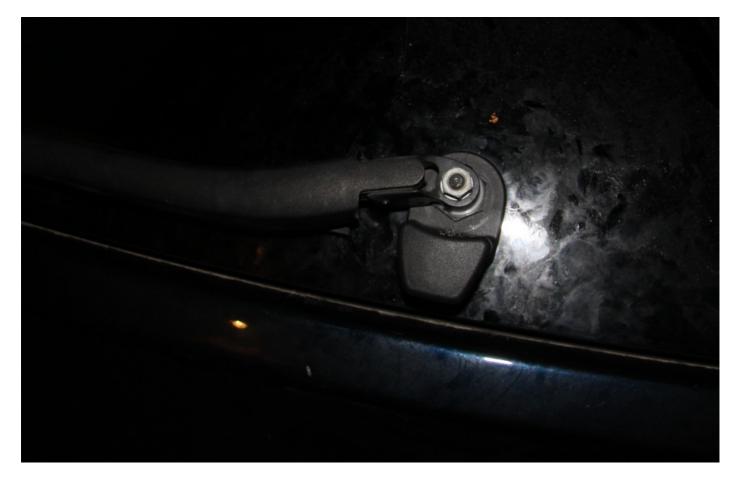
With the tools ready, here's where you start. Be sure the rear glass is open, so you can access it from the inside as well. If you have no way of doing this, you are SOL.... Well, you may be able to remove the inside cover in the hatch and get to the glass cover that way; not sure but there is a description elsewhere in the forum on how to possibly open the glass if you have lost all manual control over it and the car doesn't voluntarily open it for you...



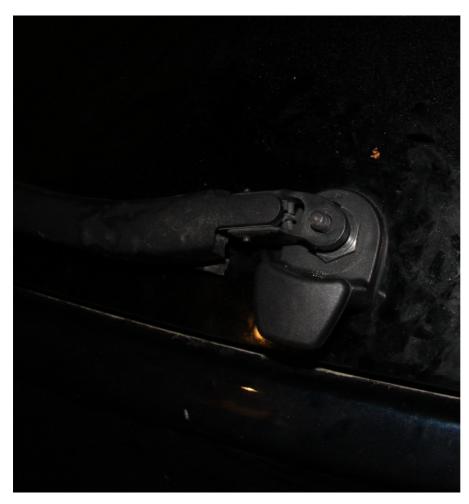
First, simply use your fingers to pry open the soft cover at the end of the wiper; it slides off without effort:



Now you will have access to the 13mm nut and washer which you unscrew using the 13mm spanner/wrench – there's one such in your standard BMW tool kit:



The picture here shows the wiper after unscrewing – not profound, but unfortunately I forgot to take a picture of the 24mm nut which sits beneath the wiper so I include the picture here anyway. After you've pulled the wire off the axle, you remove the 24mm nut shown here



But first things' first; use a two or three legged ball bearing puller tool which slides in underneath the wiper and where the centre bolt you screw down can press against the centre of the wiper axle.



Now unscrew the 24mm nut with the open-ended spanner, as mentioned 2 pictures ago and you will have full access to the micro switch as follows



You can now simply pull the micro switch off the axle and in doing so, you will notice a wire which goes through the hole in the glass, so you will now need to open the glass to access the box on the inside of the glass.



Use a fine screwdriver or knife to pry out the two black round covers so you can access the nuts below.



Now use the 10mm socket wrench to remove the two nuts and then gently take off the plastic cover.



Now you slide off the black electric connector and gently pull the axle assembly out of the hole in the glass. Throw away the defective micro switch, replace with the new micro switch. Reconnect the plug and put the axle assembly back in the hole. I forgot to take pictures of this but it is straightforward once you get to this step as all is loose and requires not tools or special knowledge to deal with.

Now reverse the process putting all the covers back on again; set the wiper at an appropriate horizontal placement and tighten the bolts. Test that the wiper and glass lock works properly and you're done. 15 minutes well spent.

If you managed to mess anything up in the process that's your responsibility; I'll accept no liability... and you can easily do this; I'm an office guy with no mechanical background and I found this to be a piece of cake.

Good luck with it.

Allan Jensen

Fredensborg, Denmark

October 2010