E81/E87/E90/E91/E92/F22/F30/F31/F32/F80/F82/F87
(and other cars with the same sliders)

Side Mount Installation & Wiring Instructions

These instructions assume a basic comfort with crimping and/or soldering. That said, all of the electrical components that will be modified in this installation are fused, by the factory power seat fuse, so the amount of damage you can do is limited. These instructions may make the process seem worse than it is, due to their length. They are long because of the attempt to lay out every detail of doing the project. That said, it's not too difficult of a job—your second seat should take you less than half an hour to do.

Required parts not included with seat mount purchase, per seat:
-1x E30 window switch (or aftermarket equivalent): BMW PN 61311377905
-6 feet of 14 gauge wire (multiple colors makes life easier but is not required)*
-2x BMW spade connector, BMW PN 61136901733*
-2x BMW plug connector, BMW PN 61130006626*

Optional: BMW wiring harness fabric tape: BMW PN 61138351989

To be removed from your factory power seats (instructions below):
-slider assembly
-one seat motor plug

*Note: These items can be removed from your stock seat instead of purchased, if you're willing to cut the wiring harness on your stock seat. This does make the project less reversible, as the other stock parts used either bolt or clip in and out.

1. Disassembly

Remove the stock seat from the car. Move the seat all the way forward to remove the rear bolts, move the seat all the way backwards to remove the front bolts, the move the seat to the middle of its travel. Disconnect the battery, and then unplug the seat harness. Remove the seat from the car.

Remove the plastic trim that covers the slider hardware on the door side of the seat:

Remove the two nuts that attach the seat to the slider. **NOTE: YOU <u>MUST</u> TURN THE NUT, NOT THE STUD.** The stud is keyed to the slider. Turning it instead of the nut

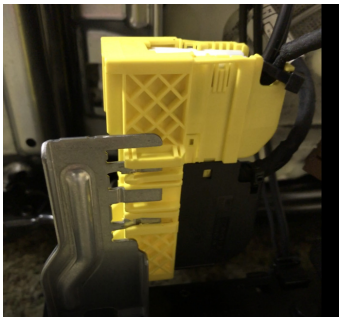
will permanently damage the slider. On the front, the nut is located outside the slider. On the rear, the nut is located inside the slider.

Front nut

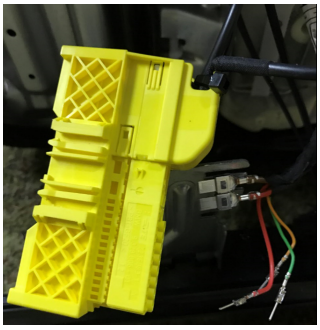
Rear nut

Next disconnect the slider motor cable, seat wiring harness plug, and remove the cables clipped into the seat wiring harness plug (slide connector covers off to the side by removing the zip tie and releasing the retainer clip, depress tabs on metal pins (that have been exposed by removing plastic covers) to slide out)

Slider motor plug



seat wiring harness

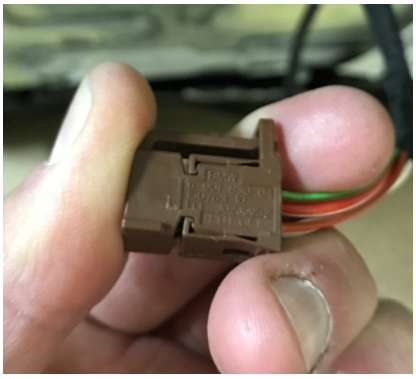


Removed cables

You will now need to remove one of the seat motor plugs (like the one that was plugged into the slider motor, but all the seat motor plugs are the same).

If you are using the factory seat wiring reuse route, this is easy—cut out a seat motor plug, keeping ~16” of wire attached to the power and ground wire. The thinner wires will not be used by us, and can be removed.

If you are going the easily reversible route, you must still extract one of the seat motor plugs (as BMW does not sell them separately). Next to each pin slot, there is another thin slot. Release the side clips and insert a ~1/8” wide thin piece of metal into this slit to remove the wiring and just take the plug. This will be the hardest part of the project and can be a bit fiddly—don’t get frustrated, try a couple of times and it will release. The tweezers attachment from a Swiss army knife is a pretty perfect tool for this:


Seat motor connector you need


Swiss army tweezers extracting the pins

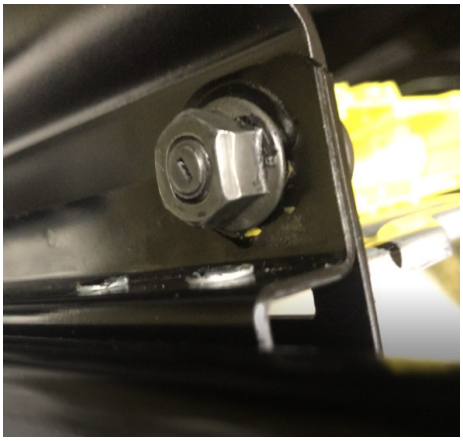
If you are going the less reversible route, you should now cut out the power and ground wire that originally went into your large yellow seat harness connector. Preserve ~16" of wire as you cut this out.

2. Seat Mounting

Measure the width of your seat at the front and rear mount points (which are not necessarily the same). You will want to recreate that width between your mounts. The side mounts can be mounted on either the inside or outside of the factory slider, allowing for 6mm of variance. In addition, the mounts come with eight spacers—four 5mm spacers and four 2mm spacers. These should be mounted between the seat mount and seat. They can be used individually or in any combination, but no more than 2 spacers should be used at any individual mount point.

Note: If you use the included spacers, the seat to side mount hardware included with your seat is no longer acceptable. Longer bolts must be used—longer than the original bolts (included with your seat) by the thickness of spacer you add. Seat mounting bolts should be grade 10.9. As a general rule, you want at least 1.5 times the diameter of the bolt threaded into the seat. This distance starts where the metal insert in your seats begin—some seats have a significant distance within the seat before actual threading begins.

The factory hardware that attached the factory seat to the slider is reused, with the addition of some spacer rings to eliminate slope. Orientation is critical on all hardware—the factory keying in the slider mount points must be reused. Two black washers are included for use on the rear mount points; two silver washers are included for use on the front mount points. In both the front and the rear, **the keyed hardware must key into the slider.** Note that the rear nuts insert into the mount when properly installed.



Front (left) and rear (right) bolts should sit flush with nuts if installed properly. Use loctite.

3. Switch Mounting

The switch (61311367373) can be mounted in two possible locations. If you will be mounting the seat on one of the higher position on the side mount, the switch can be placed directly into the square hole in the side mount. If you are using one of the lower seat mounting positions, you must use the included switch mounting bracket and hardware to attach the switch to the front three small holes on the front of the seat mount (note: you can still use these holes to mount a fire extinguisher with the switch in this position).


High mounted seat


Low mounted seat with switch bracket

4. Wiring

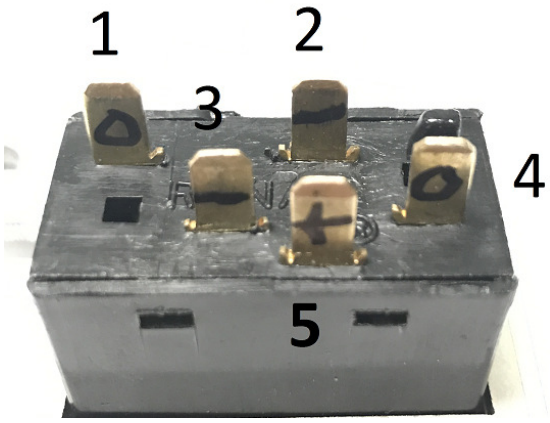
I'm making the switch wiring instructions a bit generic, as there's some month to month variation I can't account for in these instructions.

The BMW seat motors are extremely simple. Every seat motor has two large wires going into it. They sometimes also have some small wires to sense position for seat memory, but those can be ignored (since seat memory will no longer function). Calling the two large wires A and B:

-if A receives power and B gets grounded, the seat moves one direction
-if B receives power and A gets grounded, the seat moves the other direction
-if neither A nor B receives power, the seat remains stationary

Similarly, while there is some model to model variation in the main seat wiring harness (the large yellow plug the connects to the floor chassis harness), all of them have a thick brown wire (ground) and a thick red (or red with a stripe) wire that provides power to the seat. These are the wires you will want to use to provide power to the switch.

For the black e30 window switch, the pins will be numbered as indicated below. You should connect to the switch using the included quick connect crimps (Note: 10 connectors included per switch, to allow for 5 crimping mistakes—only 5 are required for install) or an e30 wiring harness (not available separately, but often available from cars getting parted out).



Wires should be connected as follows:
Yellow (seat connector) ground (brown wire) to black (e30 switch) pin 2 and 3
Yellow (seat connector) power (red) to black (e30 switch) pin 5
Seat motor (seat motor plug) pin A to black (e30 switch) pin 1
Seat motor (seat motor plug) pin B to black (e30 switch) pin 4

Bundle the wire up (using BMW fabric tape, for the OE look, if so desired) and secure it to the slider such that it won't get tangled.

Trouble shooting:
-If your slider only moves one direction, one of your grounds is disconnected.
-If your slider moves the opposite direction as the switch, reverse e30 switch pins 1 & 4.
-If you're blowing seat motor fuses, you have a short in the system.
-If your switch back light is on, go back and remove the bulbs! (not optional)

Note: to avoid a cluster airbag light, you must have the systems that have been removed coded off. For most people, this is the passenger seat occupancy sensor and the airbags inside the seat (though both of these can be retained with certain aftermarket seats).