

R-9220 Driver, wide seat, OE e46/e85/e86 slider  
R-9221 Passenger, wide seat, OE e46/e85/e86 slider  
R-9222 Driver, narrow seat, OE e46/e85/e86 slider  
R-9223 Passenger, narrow seat, OE e46/e85/e86 slider

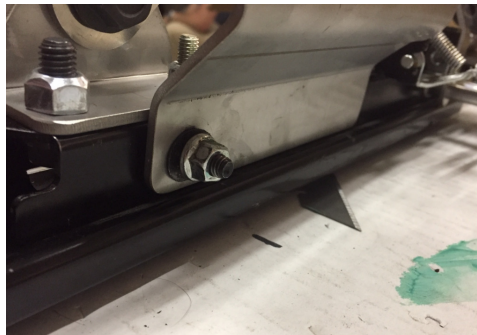
## **INSTALLATION INSTRUCTIONS: SIDE MOUNT BRACKETS FOR FACTORY E46/E85/E86 POWER OR MANUAL SLIDERS**

Please read these instructions completely before beginning the project.

Note: Use of OE manual sliders required the addition of R-9226 (driver side) or R-9227 (passenger side) to actuate the slider release mechanism.

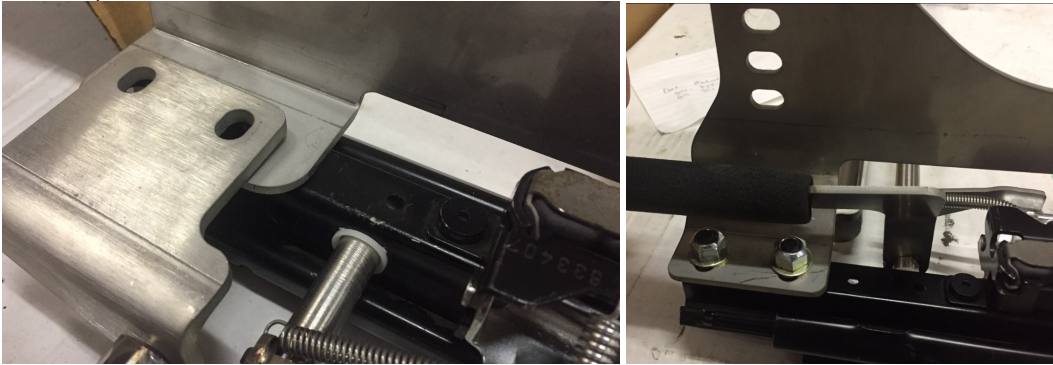
Note: Use of OE power sliders requires an e30 widow switch, or aftermarket equivalent. BMW part number 61311377905

1. Remove seats from car. Move the seat all the way backwards, remove front bolts. Move the seat all the way forward, remove rear bolts. Remove head rest from seats. Raise seat at least half way. Repeat on other seat if doing both. Disconnect battery. Remove seat from car.
2. Remove sliders from stock seat. The sliders are attached to the seats by four 10mm nuts. Remove these nuts. Pull out, away from seat. If using power sliders, the keyed portion should separate from the motor. Take care to keep slider position the same on both sides, to avoid having to realign them during assembly.
3. Match seat width to side mounts. There are two mechanisms by which you can adjust width to match your seat. The R-9220/1/2/3 include 8 black spacer disks (4 large, 4 small) that can be placed between the seat and the mount. You can also mount the side mounts either directly against the slider, with the included spacer washer on the outside, or with the spacer washer on the inside, pushing the side mounts away from the slider. This step may take a couple of attempts to get exactly correct. Note: some seats are wider at the front than the rear. Note: To properly center the seats on the steering wheel in the e46/e85/e86, the seat will sit significantly inboard of the center of the sliders. The mounts are designed to accommodate this. Equal spacers should be used on the left and right mounts to keep the seat centered.
4. The rear of the mounts attach to the stud on the slider that the factory seat attaches to. Use the included spacer either inside or outside the side mount, on the stud. Use the factory M10 nut and spring washer to secure. Note: The hole in the side mount that goes on this stud is very closely toleranced, to avoid vibration. Occasionally the powder coat goes on slightly too thick, which can cause this hole to be difficult to use. With persistence, it will work.



5. To attach the front of the side mount, you must use the included bolts with trimmed flanges (to allow them to fit in the sliders). Pass the bolt up through the bottom of the slider. On the outboard slider, you must place either a BK sub strap mount (R-9228 driver, R-9229 passenger) or the included spacer (two holes, 4.5mm thick) between the seat mount and the slider. On the inboard mount, the side mount goes directly on top of

the slider (if the sub strap mount is being installed, it goes on top of the seat mount). On top of the bolts, use the included washer and lock nuts. Note: if using the BK slider release handle (R-9226 Driver, R-9227 Passenger), it should be installed before the sub strap mount. See instructions that came with the slider release handle for details.



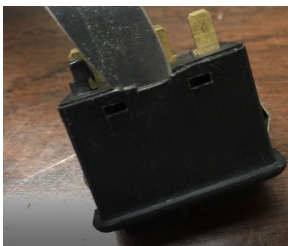
6. If using the factory 3 point belt receiver, you can remove all wiring from the yellow under seat main plug other than the pre tensioner and seat belt buckled sensor (both in the 3 point receiver), allowing both systems to continue functioning. If you do this on both seats, and disable the seat occupancy sensor on the passenger side (either through resistor or NCSExpert coding of the airbag module, which will allow the airbags to continue to function in a crash), you will have no dash error lights. Note: If you are using power sliders, read on before modifying the yellow main harness plug.

**If you are using manual sliders, the installation is now complete.** If using the R-9225 clip in lap belt mount points, install them now (using the instructions included with them). Put the seat back in the car, connect the harness, connect the battery. If you are using power sliders, read on...

The following 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.

#### 7. e30 Switch Modification

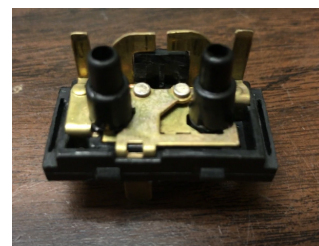
A slight modification to the e30 window switch (61311377905) is required. The e30 window switch was backlit 100% of the time the car was on. Because the power seats retain power when the car is off, leaving this behavior would result in your car battery being drained. Remove the switch from its cover by releasing the plastic clips. Once it's open, there are two posts with lights in them. The lights must be removed from the posts. Pull the post off, remove the bulb, reinstall the post, reassemble the switch. The switch only goes together one way, so if you're encountering resistance, take it apart and reverse it.



Tabs released



Posts off



Posts on without bulbs

#### Wiring

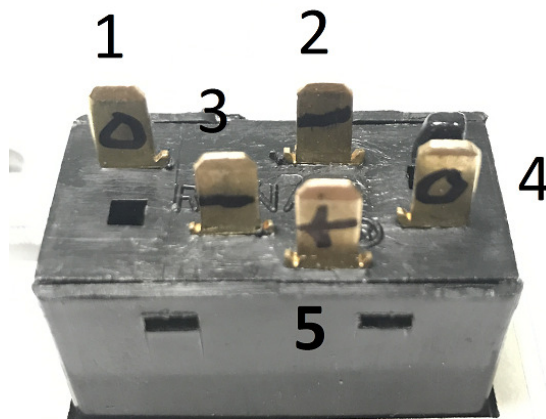
I'm making the switch wiring instructions a bit generic, as there's some month to month variation I can't account for in these instructions.

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 that 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.

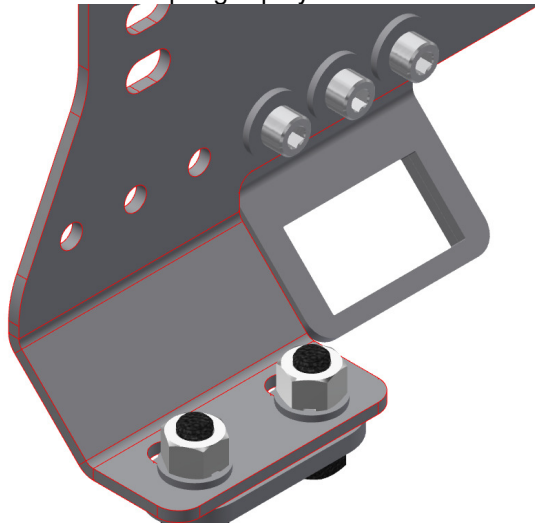
Trouble shooting:

- 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).

Note: to avoid a cluster airbag light, you must have the systems that have been removed coded off. In the e46, this is the passenger seat occupancy sensor (though, if desired, you could install a seat occupancy sensor in the aftermarket seat).

6. Switch mounting. Using the included hardware (nuts/washers/bolts, 3 each), attach the included switch mounting plate to the outboard side mount. If the switch mount plate is installed inside the seat mount, it will lay on the same plane as the front of the seat mount. Push the switch in from the outside. Use the included spacer plate (thin hollow rectangular piece) behind the switch to remove slack from the switch spring clip system.



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