

## Sunroof Repair

Here's a simple fix for broken sunroof arms. Its moderate-easy difficulty, should take no more than 3 hours with these directions. The beauty part is that you don't have to remove the sunroof cartridge and it requires minimal adjustments!

### Symptoms

One day you'll be cruising along (at the speed limit, of course) and you'll hear a 'snap' when tilting your sunroof – that's one side failing. A few months later, you'll hear another 'snap' - that's the other side failing. After that, your tilt stops functioning. The retract feature will work, but the sunroof no longer locks down properly, causing it to rattle over bumps.

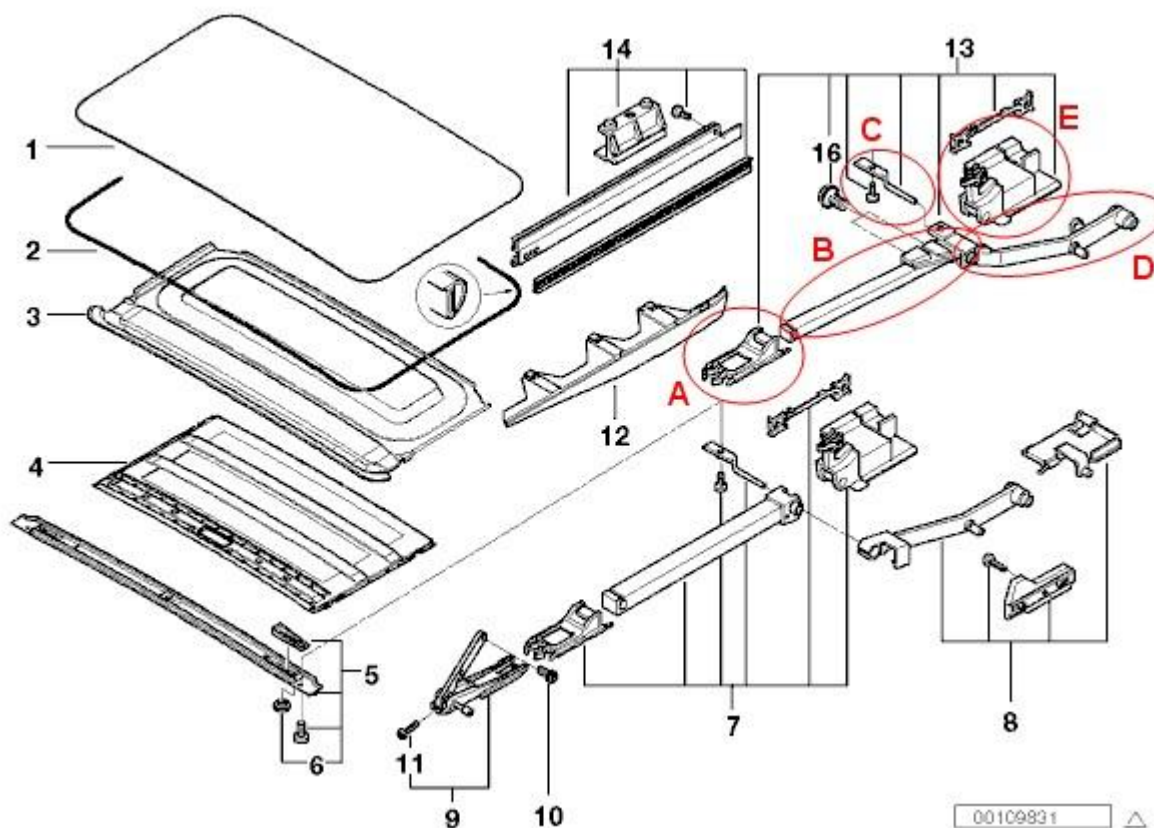
If your symptoms are different (such as no retract), then you may have other problems such as a broken cable. This fix will probably not work and may require removing the cartridge.

### Parts List (for a 97 528i but cars with all E39s glass sunroof should be the same):

54-12-8-202-295 Left control rail kit (Part 13)

54-12-8-202-296 Right control rail kit

These kits should be about \$30 each from the dealer.



### Tools & supplies:

T-25 Torx wrench

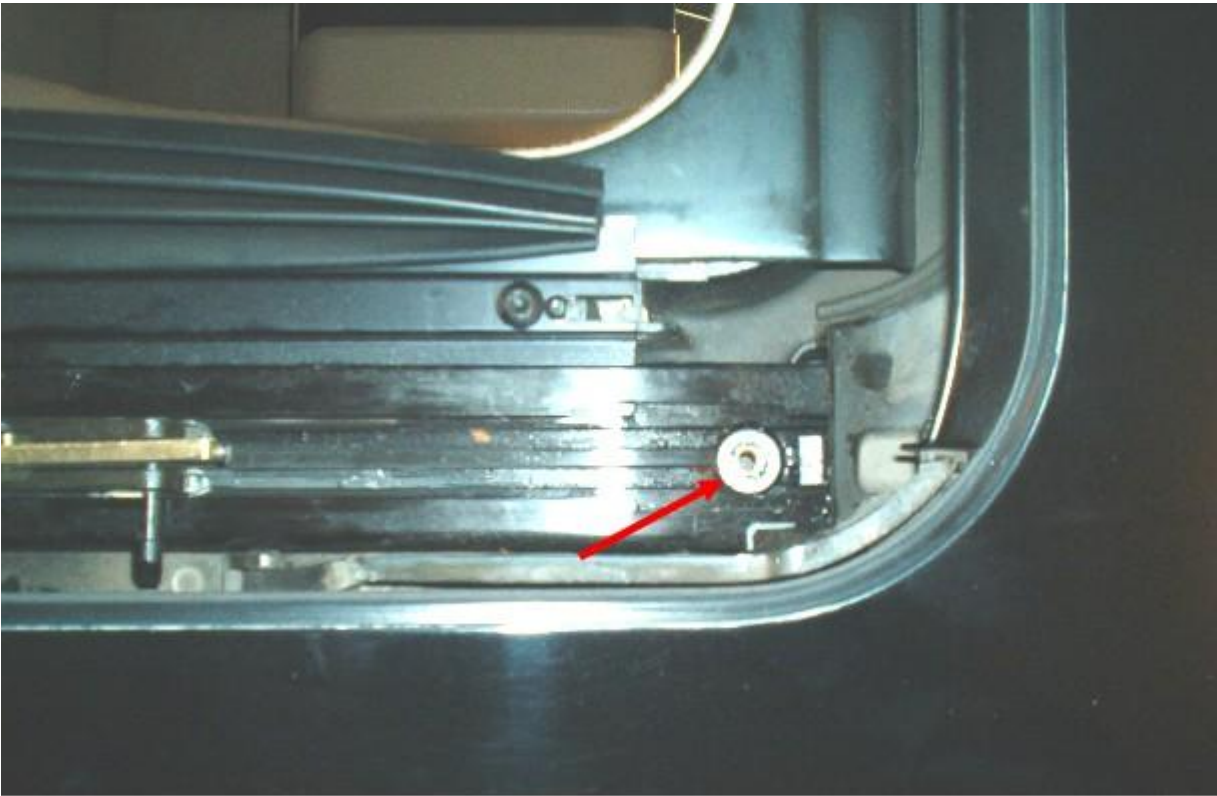
Screwdriver

Pliers

Heavy lithium grease

**Step 1**

Retract the sunroof back slightly, and remove the front stops on both sides.

**Step 2**

Close the roof, then press the tilt button - you'll probably have to tilt it manually. Place something soft between the glass and roof to keep it tilted. I used a chunk of plastic.

**Step 3**

Remove the top of the rubber gators (inside car) from the sunroof. Side it inward and back slightly, but be gentle. The bottom will NOT come detached.

**Step 4**

Remove 3 Torx head screws from each side of the sunroof (inside car). The sunroof can tilt up even more now, which makes the next step easier.

**Step 5**

Using a screwdriver, remove the sunroof glass sides from the tilt hinge slider pins (Part 9 in the diagram).

**Step 6**

Lift out the sunroof glass.

**Step 7**

You should be able to see your broken parts now. The front sliders (A) are broken and disconnected from the control rods (B). You're in luck, so have a beer.

**Step 8**

To get the broken pieces out, you have to disconnect the wind deflector from its arms. Electronically, slide the sunroof guides back about 8 inches. Use pliers to pinch the plastic pin that connects the deflector to its arm. Tilt the deflector arms back and remove them.

**Step 9**

Manually slide out the tilt hinge slider and the broken front slider piece. Electronically move the sunroof guides full forward.

**Step 10**

There is a short rubber cover at the back of the opening. Disconnect it from the main rear slider by popping it upward and then sliding it forward slightly. You can leave it in the opening. Note how it is held in place.

**Step 11**

Remove the screw on the plate over the main rear slider (E) and slide out the pin (C). Remove the cover and disconnect the main slider (E) from the rear guide arm (D).



**Step 12**

Remove the control rod (B) by slide it forward.

**Step 13**

Remove the rear guide lever (D).

**Step 14**

Clean and grease all contact surfaces.

**Step 15**

Install new rear guide lever (D).

**Step 16**

Place the front slider (A) on the control rod (B) and slide it on the track. Also slide on the tilt hinge slider (part 9).

**Step 17**

Install new cover and pin (C). Screw in place.

**Step 18**

Pop the rear rubber cover in place.

**Step 19**

Electronically slide the assembly back about 8 inches. Reinstall deflector arms and connect to wind

deflector.

**Step 20**

Electronically slide the assembly forward and check the tilt function of the assembly. Leave the assembly tilted up.

**Step 21**

Reinstall sunroof glass. Getting the hinge pins in place is a bit tricky – align them as close as possible, and work from the inside of the car with a small screwdriver in the hole next to it to get them in. Expect some cussing.

**Step 22**

Install the 3 Torx screws on each side, but leave them just snug. These screws set the alignment.

**Step 23**

Close the sunroof electronically and check for alignment. There's a BMW procedure, but I just winged it. If you have to make adjustments, tilt the sunroof back up, loosen the screws and reset.

NOTE: Do NOT retract the sunroof more than ½" or you will crush the gators.

**Step 24**

Reinstall the gators and check full operation

**Step 25**

Reinitialize the sunroof by pressing the tilt button for 30 seconds.

**Step 26**

Take the \$1400 you saved by NOT going to the dealer and put it toward a cool mod, like an upgraded theft deterrence system.