

### Removal of the cover with the "small flap"

1. Open the roof. Remove the aluminum cover at the front of the panel in the door entry. Torx15 - two longer screws at the top and two shorter screws at the bottom.
2. Unscrew the black Torx15 screw at the rear (can only be reached after partially closing the convertible top, or easier by pressing the "load assist" button in the trunk) and keep it in a safe place. Sometimes the sheet metal nut is holding on very loose... take it off and squeeze it a bit with pliers to make it become tighter.
3. Use a longer 8 mm hex socket and a small ratchet to loosen the screw under the "small flap" ... do not unscrew it completely - just loosen it a little so that the panel is free there
4. When all screws have been removed/loosened, the cover with the "small flap" can be removed, start with pulling it out of the window seal. And then the two inner plastic pegs. While removing the panel the two plastic clips at the middle inner and rear inner side are unclipped. Be careful not to break the little plastic pin that acts as a front guidance for the Little Flap.
5. If you want to drive the car without the cover that has the "small flap" in it, tighten the 8 mm screw (from step 3) so that it does not get lost. And pull off the loose sheet metal nuts (where the black Torx15 was screwed in at the back) and keep it in a safe place. Or make the sheet metal nuts hold better, see Step 2.
6. Check: The window seal sometimes comes off a little. Press it on the car body again.
7. Keep the screws and parts in a safe place. Install everything in reverse order. Remember where the two plastic clips are. Ensure that the clips are clicked in again. Tap on the panel areas with your palm.

### Installation of the new hinge

8. Requirements for using our hinge element: The 2 mm steel wire that is in the "small flap" must still be available and the small spring needs to be reused too.
9. Pull the 2mm steel pin out of the "small flap" with small pliers. If parts of the mounting holes of the "small flap" are slightly cracked or have crumbled off, the 2mm steel wire can be glued into the "small flap" after the new hinge part has been attached. The steel wire is an axis and does not turn in the "small flap". For cracks use Crazy Glue... for broken off pieces use Stabilit Express or some similar glue that is bonding well with ABS plastics. Stabilit (Methylmethacrylate) it is used by RC model airplane builders to bond the white ABS shells with other parts. Our R230 panels are made of ABS. Because the repair with our spare part permanently solves the problem (we give a 5 year guarantee on the material by RIMA Innovations GbR) it is not to be expected that you really have to disassemble it again.
10. At the front end of the recess in the large panel (for the small flap) is a small pin that engages in the front of the small flap. This small pin is made of plastic and is very brittle... this pin should be reinforced with a bit of superglue gel so that it does not break off that easily. If this little pin breaks off it is not really a problem either, because the hinge works without the pin ... but the alignment of the little flap is made easier / better with the existing pin.
11. Then the remnants of the small hinge brackets on the large panel need to be snipped off with a small side cutter. Then the underside of the cover needs to be smoothed in the areas where the old hinge point was... with a Dremel (with a sanding roller). If the Flap is still barely hanging in, snip off the brittle hinge points.
12. Then mount the hinge plates (which are of course different for the left and right) on the "small" flap and insert the spring ... to do this, push the 2mm steel wire (axis) through the holes in the flap and the new hinge plate and the small spring. Look at the picture on our website.
13. Now check the ease of movement. If everything has been done correctly, the little flap should move freely, no jamming. The small spring pushes the "small flap" with relatively little pressure in the closing direction.
14. As said before, if the mounting points on the "small flap" have broken off "a bit", the axle can now be further secured with UHU Plus 2K adhesive or Stabilit Express. Degrease well beforehand, etc.
15. Now the "small flap" with the newly installed hinge can be held into the large panel to test it and to have the first happy sight of how it will work later... insert the front hinge point on the flap into the corresponding hole in the panel. Now you can see how it will fit in the end. You should mark the area for gluing the hinge plate with a pencil or felt pen.

Please check on our [www.kleine-klappe.de](http://www.kleine-klappe.de) website that you have the latest version of the instructions

There are download links for the German and English and Dutch version... in the future maybe some other languages and a link for an instruction description with pictures... (in German but the numbers of the steps help)

16. The next step is to glue in the hinge plate ... for this the contact adhesive Pattex Classic must be used (in contrast to other adhesives, this is long-term stable and heat-resistant). Pattex (Polychloropren Contact Glue – Heat resistant up to 110 C – it has a kind of hard rubber consistency when it gets older). Under no circumstances use „Pattex transparent“!



Apply to the degreased sheet metal hinge and to the panel in the marked area and let it dry off for 8-10 minutes. Then bring the flap into the correct position (pretension the hinge against the spring a little, if necessary, do it with two people), insert the front hinge point (small plastic pin, see point 10.) into the corresponding hole in the little flap

and when the "The small flap" is in the right position, press the sheet metal of the hinge onto the back of the panel ... it already holds perfectly. And according to my experience for 20 years and more.

17. The next step is to mount the securing screws (2.67 mm self-tapping screws). To do this, use the provided 2 mm drill to drill two not too deep holes into the panel through the holes in the glued-on hinge plate. The attached short piece of silicone hose can be pushed onto the 2mm drill bit to be on the safe side, so that only approx. 5 mm drill length are be used. Then carefully drill only approx. 5 mm deep. There is a 2 mm thick plastic layer you must drill through. This is very easy to do with a cordless screwdriver. Do not drill any deeper !! otherwise you will come out on the visible side of the panel at some point. Keep your finger at the other side so you are drilling carefully.
18. Screw in the small self-tapping screws with a well-fitting Phillips bit (Phillips PH 1) and tighten gently. The new hinge is now assembled and ready for installation.
19. Secure the screws with a little blob of Pattex glue. **Before reassembly check you did not forget the screws**
20. Check that everything moves smoothly (the flap must close automatically in the installation position) and check that all parts that are somehow visible are matt black. If necessary, repaint with a cotton swab any glossy areas with matt black paint. Or Matte Black Nail polish
21. Installation of the large panel: follow the removal instructions backwards. Start with the roof open. Insert the large cover first in the back. The 8 mm nut, which can be reached after opening the small flap, **must of course be loosened beforehand so that the plastic fork of the large cover fits between the washer and sheet metal**. Press on the panel to clip in the two clips.. Now you can check the gap between the panel and the rear body parts. You can push the panel backwards a bit. The hole for the black 15Torx should be hidden. Insert the tabs on the front inner part of the large panel first and then push the panel into the window seal...
22. Press the Load Assist Button in the trunk to access and mount the sheet metal nut and the black Torx15
23. Basically, do step 7->1 and **do not forget to tighten the 8 mm screw**.
24. Done ... Function test: roof open / closed 😊 The whole procedure takes approx. 30 minutes per side. We charge our customers an hour of work for completing both sides.

If you live close to Nuremberg we can do this repair for you. Or you can mail us your Panel with the Little Flap.

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