Trouble Shooting Hints for the Sliding Roof

Cause	Remedy
1. Locking lever (handle) of the sliding roof difficult to move.	1. If there is no mechanical obstruction at the locking lever, the roof fabric is stretched too tightly. To decrease the tension either put a shim under the anchor plate or, if this should not be sufficient, decrease the tension of the roof fabric at the adjusting screws (see Job No. 78—1 and Fig. 78—1/2). **Note:** Contrary to most materials the Covertex plastic material used for the roof shrinks when hot and expands when cold. This peculiarity must be taken into consideration when the tension is adjusted. The tension must not be relaxed too much, since otherwise the roof fabric may flap.
2. Sliding roof binding in slide rails.	2. Clean the slide rails with gasoline and a clean rag. After drying, lightly oil the guides with sewing machine oil (bone oil) which leaves no resin deposits. **Note:** Do not use grease or vaseline since then the sliding roof will bind even more when dirt gets into the rails and at low temperatures.
3. Sliding roof still binding after the operations outlined in Para. 2 have been carried out.	3. The chrome-leather covered slide shoes bind at certain places in the slide rails. Use a flat hardwood wedge approx. 100 mm wide and 200 mm long to bend the guide rail carefully upward at these places until the main bow runs smoothly along the whole lenght of the slide rail.
4. Main bow loose at some point when the sliding roof is open, and rattling in the air stream.	4. The chrome-leather covered slide shoes are loose at one or several places in the slide rails. At these places the slide rail should be bent down by means of a flat hard-wood wedge approx. 100 mm wide and 200 mm long. To do this, place the slightly inclined wedge along the slide rail profile and adjust the profile downward by light hammer strokes on the wedge. Over-adjustment can be corrected by bending the rails upward again by means of the wedge (see Par. 3).

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	The rails should be straightened until the main bow runs smoothly along the entire lenght of the slide rail.
5. Main bow moving easily although the locking lever is closed.	5. The brake built into the main bow does not work properly. Loosen the lock nuts on the brake bolt to the left and to the right inside the main bow and readjust the brake bolt. When the bolt is adjusted, retighten the lock nuts. Bolts which are too short should be replaced by longer bolts. **Note:** The brake bolts have a rubber cover and should not therefore be oiled or greased.
6. Rhythmical squeaking noises at the main bow when the sliding roof is open.	6. The main bow has too much play in the guides. If this cannot be corrected by readjusting the brake, the sliding roof has to be removed (see Job No. 78—1). When removing the sliding roof, make sure that the greasy and dirty slide shoes of the bows do not dirty the headlining. It is advisable to clean the slide shoes at once or to tape them during removal. Then bend the angle plates of the main bow which carry the slide shoes, slightly inward by sharp hammer blows. It is advisable to measure the distance between slide rails and main bow slide shoes beforehand in order to ensure that the angle plates are not bent too much. The main bow should run smoothly against the guide rails but it should not bind. If necessary, the slide rails must be re-adjusted (see Para. 4).
7. "Gritting" noises produced by the Covertex material.	7. These noises are produced by slight rubbing of the roof material against the outside car enamel. They are due to the 'adhesive friction characteristic of the plastic material. There is no permanent remedy. A temporary improvement can be achieved by rubbing the contact edge of the material with vaseline. Before applying a new coat of vaseline to the Covertex edge, dirt and vaseline residue should be removed with gasoline.
8. Noisy roof fittings.	8. When there are cracking noises, the sliding roof fittings are probably responsible. Noises

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	may occur at the side rails for the side headlining and at the slide rails, because these parts are screwed to the body by means of oval-head countersunk tapping screws and when these screws work loose, they may produce scraping or cracking noises. The same applies to the front cover rail and the angle plates (see Job Nos. 78 — 1 and 78 — 2). In the case of noises at or under the front cover rail, the wooden molding can be removed and instead short wooden blocks can be placed under the right and left ends of the cover rail. This will usually eliminate the noise. The wooden molding can also be insulated with woolen fabric or with tape. On all cars of this series the slide rails are insulated by means of plasticine, tape or Tesadur tape. If the slide rails show chafed spots because of metallic contact the insulation should be renewed. Metallic contact may be the source of noise. The cover rail, the angle plates, and the slide rails must not touch at the butt ends, since otherwise such contact may produce noises. The gap should be approx. 1 mm. The packing below the angle plates should not be made of Covertex material but a textile fabric should be used to prevent noises. The tension of the front cover cap should be neither too small nor too great. If the tension is too small, there may be wind noises and water may enter the car. If the tension is too great, the car enamel may be damaged by the Covertex edge. An adjustment can be made by changing the position of the sheave at the main bow. The side rail underneath the headlining is protected against coming into metallic contact with the fixing screw in the front hole by a rubber grommet. When this grommet is worn, the screw may scrape against the metal. The contact pressure of the front cover cap against the outside of the roof can be adjusted by displacing the sheaves at the main bow. The contact pressure should not be more than required to provide protection against wind noises and water, since otherwise the Covertex edge may rub away the car enamel.

Cause	Remedy
9. Cemented part of the sliding roof material coming off at the corners of the main bow cover.	9. In this case, the miter-cuts in the Covertex material slide over the corners and become visible from outside. The sliding roof has to be removed (see Job No. 78—1). Then loosen the cemented parts at the corners of the front sheet-metal cover and remove the adhesive residue. Cement a piece of leather to the corner of the sheet-metal cover. After repositioning the miter-cut material, cement it to the leather and wire-stitch it. The Covertex corner is then cemented over the cemented and stitched corners. **Note:** On recent models this procedure has been adopted throughout.
10. Snapping of wire cables in the edges of the Covertex material.	10. If the wire cables snap, a new Covertex cover can be installed over the old bows and the old headlining. For a less expensive repair, the old Covertex cover can be opened at the sides and used again. The foam rubber parts must be replaced; the foam rubber must be free from sulphur and should therefore be ordered from our Sindelfingen works.
11. Cracking noises in the sliding roof frame.	11. Cracking noises that occur no matter whether the roof is open or closed, usually indicate an unsound welding point or spot welding point in the welded-in sliding roof frame. If this is the case, the headlining should be removed near the source of the noise. At that point the sheet-metal should be slightly deformed by a hammer blow on an interposed wooden block. If this does not eliminate the noise, it will usually be necessary to renew the weld at this point. In some cases the source of the noise may be a crack in the U-shaped roof frame in the sliding roof opening. In this case, too, it is necessary to renew the weld at the cracked place. **Note:** In many cases spraying with Caramba (penetrating oil) around the source of the noise may prove an effective remedy. However, because of its creeping properties, penetrating oil may creep along the roof frame parts and produce grease spots on the headlining.

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	Any search for noises in the body shell may require much time and should therefore be carried out systematically. Never undertake several operations simultaneously but check the result of each individual operation on a trial run.