



## Assembly Instructions

Sleeping roof SCA 194      Art.-Nr.: 154385

Sleeping roof SCA 195      Art.-Nr.: 158824

Reinforcing frame SCA 194      Art.-Nr.: 156509

Reinforcing frame SCA 195      Art.-Nr.: 160310

These assembly instructions are intended for the complete sleeping roof construction.

C.F. Maier has released and verified only the complete construction set.

All statutory provisions must be observed.

**Important information for the acceptance by the Technical Supervisory Association:**

The vehicle is constructively modified by the roof construction resulting in the expiry of the operating licence.

When the assembly works are finished, it must be applied for a new operating licence according to motor vehicle construction and use regulation C.U.R. in effect presenting an official expertise by an inspector for motor traffic or an official expert.

## 1. Preparation of the vehicle

Cover the walking area of the vehicle with firm material (corrugated cardboard, press board etc.).



Dismantle the inside roof lining as well as the sun visors. Heat the sound absorbing panels (if there are any) with a hot-air dryer and remove them with a spatula.



Remove the lengthwise and crosswise running electric cables carefully from their fastening as to prevent the roof cover from being damaged.



Seal all vehicle openings of the car body using a varnish-compatible adhesive tape in order to prevent chips from entering! It is also possible to use the foil from the packaging.



Seal all the openings as aforementioned, particularly in the area of the side windows, as chips can fall in here easily from above and it is very difficult to remove them then.



Encase the inside of the vehicle by generously sticking foil to the area of the cut-out in order to prevent falling chips from entering the interior.

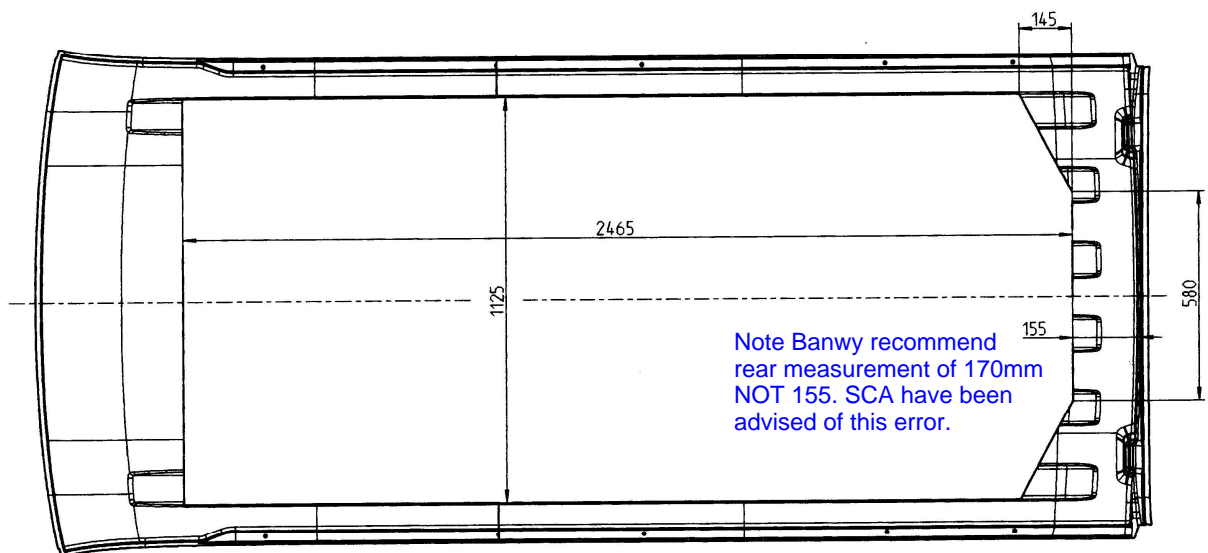
Furthermore, the roofing sheet must be well secured against falling down when it has been cut out.

**Important information:** Please pay attention that the electric cables are not placed in the cut-out area!



## 2. Cutting out the roof:

Transfer the outline of the cut-out to the vehicle's roof according to drawing 194/1.



194/1

Rebore the corners with a borer of 12 mm diameter.





After that, you can saw out the roof with a jigsaw, starting from one of the corners.

The reinforcing sheet will be cut out in the area which is marked in red in order to fit in the reinforcing frame from the bottom (approx. 20mm more).

**Important information:** Protect the roof from falling down!



After having removed the cut-out roof, the lateral reinforcing clips must be shortened according to the photograph opposite so that the reinforcing frame can be placed laterally.



The clips are cut with a special saw for the car body. Please pay attention to the wiring harness!



### 3. Adaptation of the reinforcing frame

As soon as all reinforcing clips have been shortened, the reinforcing frame is fitted in with screw clamps. Please see to it that the frame is situated centrally and as far back as possible.



Starting from the offset to the outline of the cut-out with 10 mm, bore holes are placed with a distance of about 200 mm through the roofing sheet and the upper wall of the reinforcing frame. Start in one corner of the cut-out and divide the bore holes over the whole length and width of the vehicle. Bore diameter is 5.2 mm.



After that, remove the reinforcing frame again. The bore holes must be deburred thoroughly as well as all cutting edges, which have developed by cutting out the roof cladding and its reinforcements. Remove the bore and saw shavings thoroughly with an industrial vacuum cleaner!

Then, please prime all newly-developed bare spots with a standard rust inhibitor.



#### 4. Bonding in the roof reinforcement

Prior to bonding the bonding surfaces at the vehicle and at the reinforcement frame must be cleaned with cleaning agent Sika 205.

**Attention: The reinforcement frame must be bonded in dead centre.**

The distance from the reinforcement frame to the drip rail must be equal at the lefthand and the righthand side.



After that, please apply Sika-Primer 206 G+P to all surfaces concerned lightly, but holohedrally. Use a cloth again for applying.

The Primer should be vented for at least 15 minutes!



Apply Sika 221 to the corresponding surfaces of the frame and align the reinforcing frame within the vehicle to the roof cut-out as soon as the ventilation has been finished. You can use one or several rivets for orientation. Again, fix the reinforcing frame with screw joints. In order to avoid having to rebore the rivet openings, it would be recommendable to stick all rivets into the boreholes first. Please use a blind rivet with 4.8 x 16.9 mm aluminium/steel.





Thoroughly remove excessive Sika after riveting by using a particular Sika removing agent and seal then the cutting edges. Now, any fixtures used can be removed, too.



Rivet the fixing plates (article no. 111978) laterally below the cut reinforcing clips (see page 5 / image in the middle). The plates for which boreholes have already been prepared must only be aligned centrally to the reinforcing clip and the drilling template must be transferred to the car body and the reinforcing frame, bore diameter 5 mm, rivets with 4.8 x 16.9 mm aluminium/steel. The vehicles with a short wheel base (SCA 194/195) have four fixing plates on the left side, three plates on the right side due to the sliding door..



**Achtung:** der Kabelstrang mit den Befestigungsbleche fixieren (siehe Bild).

## 5. Sleeping Roof Assembly

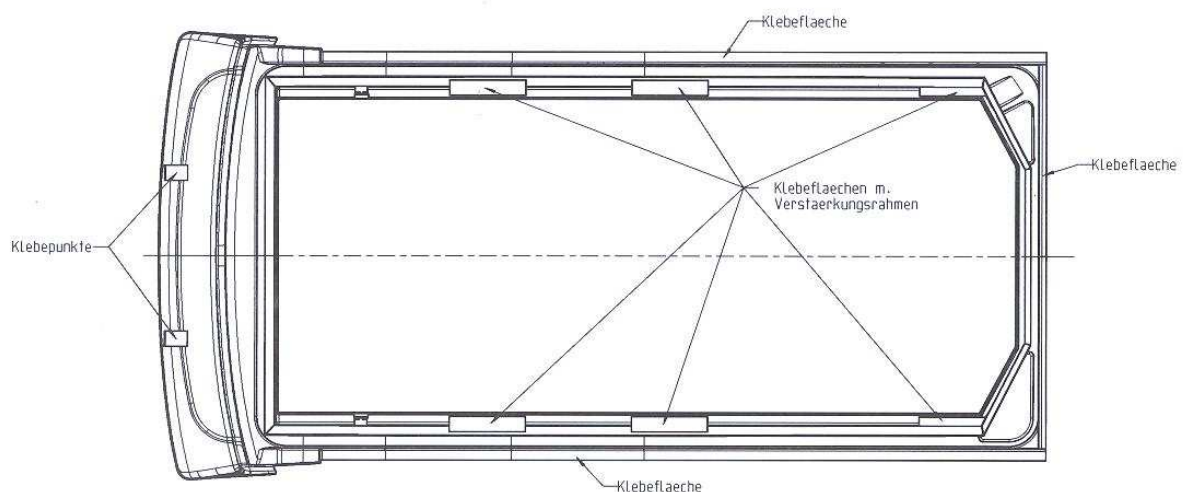
Position the assembled sleeping roof (condition at the time of delivery) onto the vehicle and open the roof. Support the roof shell in front. After that, align the spoiler of the platform with the contours of the windscreen as well as with the lateral drip rail. Now, the sleeping roof must be secured against shifting. Please pay attention to fasten the screw clamps in a way to prevent a collision with the roof shell when closing the roof. Finally, check the roof for proper functioning.



The vehicle must be masked round and round with adhesive tape alongside the cutting edge in order to prevent contamination of the car body when applying the primer or by excessive adhesive. After that, the roof can be removed again.



Neatly pre-treat the bonding surfaces according to drawing 194/3 with cleaner Sika 205 (bonding surface spoiler fastening in front and bonding surface support sheets / do not forget reinforcing frame!). Roughen the surfaces to be bonded at the platform with abrasive paper.



**194/3**

Then, apply Sika-Primer 206 G+P lightly but covering the complete surface (platform and car body!). Apply the primer with a brush or a cloth!

The flash off time is at least 15 minutes.

Apply Sikaflex 252 sufficiently onto the bonding surfaces after exhausting the air from around the product. Additionally add Sikaflex on the side of the area around the three boreholes for the hinged shears.



Then, the roof can be replaced and re-aligned again. In the area of the spoiler, the platform is pulled onto the roof sheet using a strap.

**Important information:** Pay attention when placing the roof on top that the bellows has no contact with the adhesive (contamination!).





After that, the platform is clamped inside onto the reinforcing frame with screw clamps and left under tension for 48 hours until it is sure that the adhesive has completely dried.

**Attention: Tighten all screw clamps equally to obtain an even platform.**



The external cutting edges on the platform must be neatly masked (the car body has already been masked after replacement and alignment).



Fill the sealing joint neatly and completely with Sikaflex. Remove excessive Sikaflex evenly with a rubber spatula or simply with your finger.





After removal of the adhesive tape the joint must be polished once more with a sleeking agent in order to obtain an optimal result.



Then you can mount the lateral and rear gas springs. The preloaded gas springs must be hooked into the ball heads and secured with the provided locking springs. As soon as all gas springs have been hooked, the supports can be removed again.



Now, you can install the slatted frame and mount the gas springs there as well.

**Attention:** The gas springs must always be mounted with the piston rod at the bottom when open!



## 6. Assembly of Interlocking

Insert the provided interlocking sheets into the slotted holes and mark the holes.



Bore two holes with 5mm and then tap M6. Put Interlocking into dedicated notch and fit it with delivered Screw (M6x16)



Close the roof and adjust the interlocking by moving it to the top or bottom to achieve that the upper interlocking engages into the lower interlocking without exerting pressure. Finally, you can tighten the screws..



Den ClicLock Verschluss schließen.  
Der Verschluss dient nur als Sicherung  
gegen eine unbeaufsichtigte Öffnung  
des Daches.

Close the ClicLock. The ClickLock only  
serves as a protection for unattended  
opening of the roof.



## 7. Tools used:





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