SECTION INDEX

Supplements to Group B: Body

ELECTRICALLY-OPERATED SLIDING ROOF

The electrically-operated sliding roof is controlled by a switch on the instrument panel. The electric motor and the transmission are installed in the forward part of the roof structure and joined by a flexible shaft. A drive pinion engages into the windings of the conveyer cables and pulls the sliding roof forward or rearward, depending upon the direction of rotation. A friction clutch is provided in the transmission as a safety precaution to prevent damage to the drive assembly in case of malfunctions, and to minimize the possibility of accidental injury. The motor and transmission are easy accessible through a zipper provided in the head lining.

Manual Operation

Should the electric drive fail, it is possible to close or open the sliding roof lid with a hand crank provided for that purpose. It will be necessary to withdraw the plastic cap and remove the slotted head screw in the drive shaft. When removing the slotted head screw pay attention not to lose the shims necessary for adjusting the clutch.

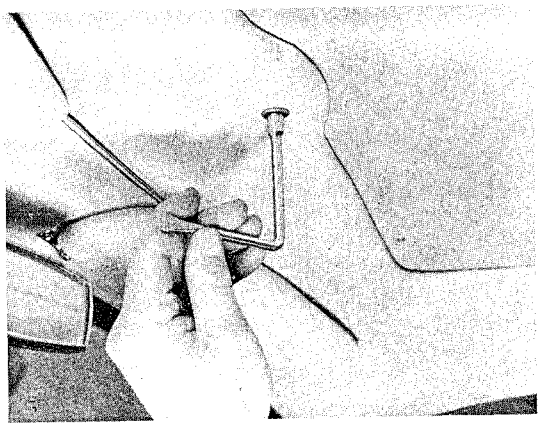

Fig. 1

Removing and installing sliding roof lid

Removal

1. Move lid to half-open position.
2. Remove both sheetmetal screws holding head lining to forward corners.
3. Pull head lining forward to roof structure.
4. Withdraw head lining frame reinforcement from head lining frame brace; the head lining frame reinforcement is secured at each end with adhesive tape.

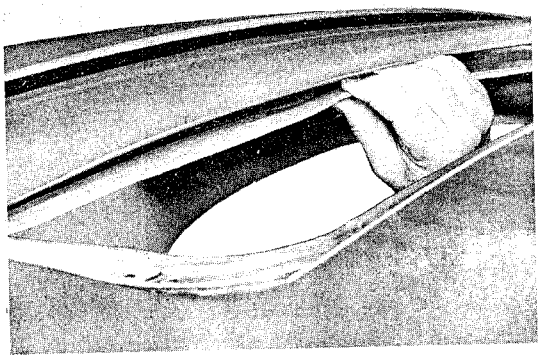

Fig. 2

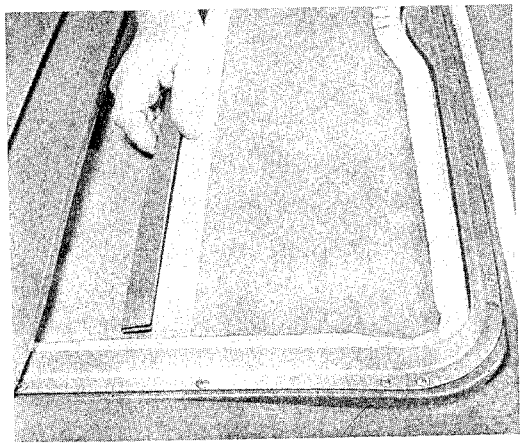

Fig. 3

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Removal

1. Remove sliding roof lid as outlined on preceding pages.
2. Remove drive housing cover located in the center of forward roof structure.
3. Remove retaining plate located above drive pinion.

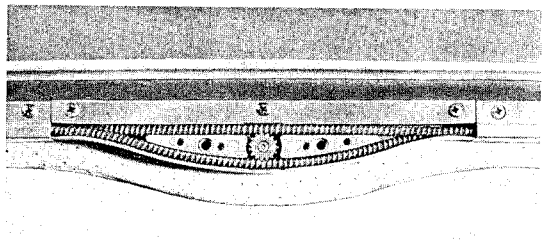

Fig. 7

4. Remove both connections, top and bottom, in forward roofstructure, also both guide elbows, top.
5. Pull conveyer cables and rear guides out of guide rails.

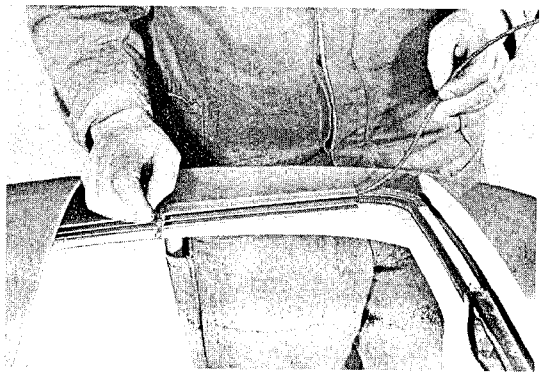

Fig. 8

Installation

NOTE

Check conveyer cables for wear, bends, or other faults prior to installation; install new parts if necessary. In order to ensure a free and even movement of the lid, we recommend that both cables be replaced even if only one should be defective.

If new cables are installed, they can be somewhat longer but should never be shorter than specified.

We recommend that grease containing molybdenum-sulphide additive be used for lubricating the cables.

1. Slide conveyer cables and guides into guide rails reaching end stops.
2. Install both guide elbows, top, and connections, top and bottom, in forward part of roof structure. Make certain that rails and guide elbows are flush with each other, straighten if necessary.
3. Insert cables in drive housing in such way that right cable lies in front of drive pinion and left cable lies behind it.
4. Insert retaining plate with released chamfer from the front and mount drive housing cover.
5. Check lid for free movement, adjust if necessary.

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5. Pull head lining up to above the roof structure and remove by pulling forward.
6. Pull lid to within 2 inches of closed position.
7. Remove guides after loosening screws in both forward corners.

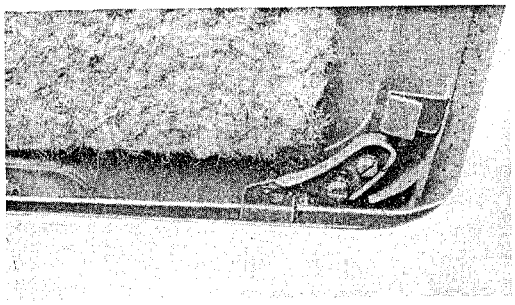

Fig. 4

8. Remove slotted retaining screws at guides, detach shackle from its bracket.
9. Using a screwdriver, push lifters off studs and take out.

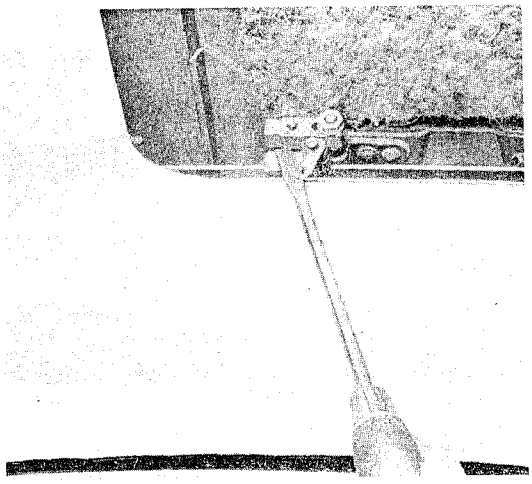

Fig. 5

10. Raise forward end of lid and slide it out.

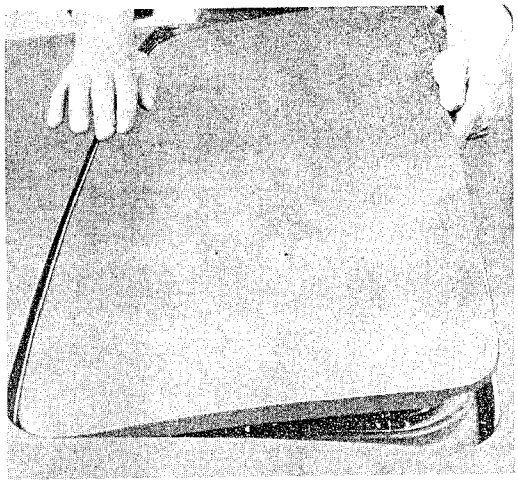

Fig. 6

Installation

1. Slide the lid in, make sure that both cable guides are completely in the back (within the cut out).
2. Mount lid lifters on studs of cable guides. Connect shackle to bracket and secure with screw. Notch the leaf spring, fixed to the cover, beneath the studs of the guide of the lifter.
3. Check if lid moves uniformly, i.e., does not bind sideways; if necessary adjust cable in the drive housing (refer to instructions, pages SB 6 and SB 7).
4. Adjust lifters and lid lever (refer to page SB 6).
5. Install head lining and head lining frame reinforcement.
6. Push head lining frame reinforcement over head lining frame brace and secure both ends with adhesive tape.
7. Check sliding roof for proper seating and free movement.

REMOVING AND INSTALLING SLIDING ROOF MOTOR

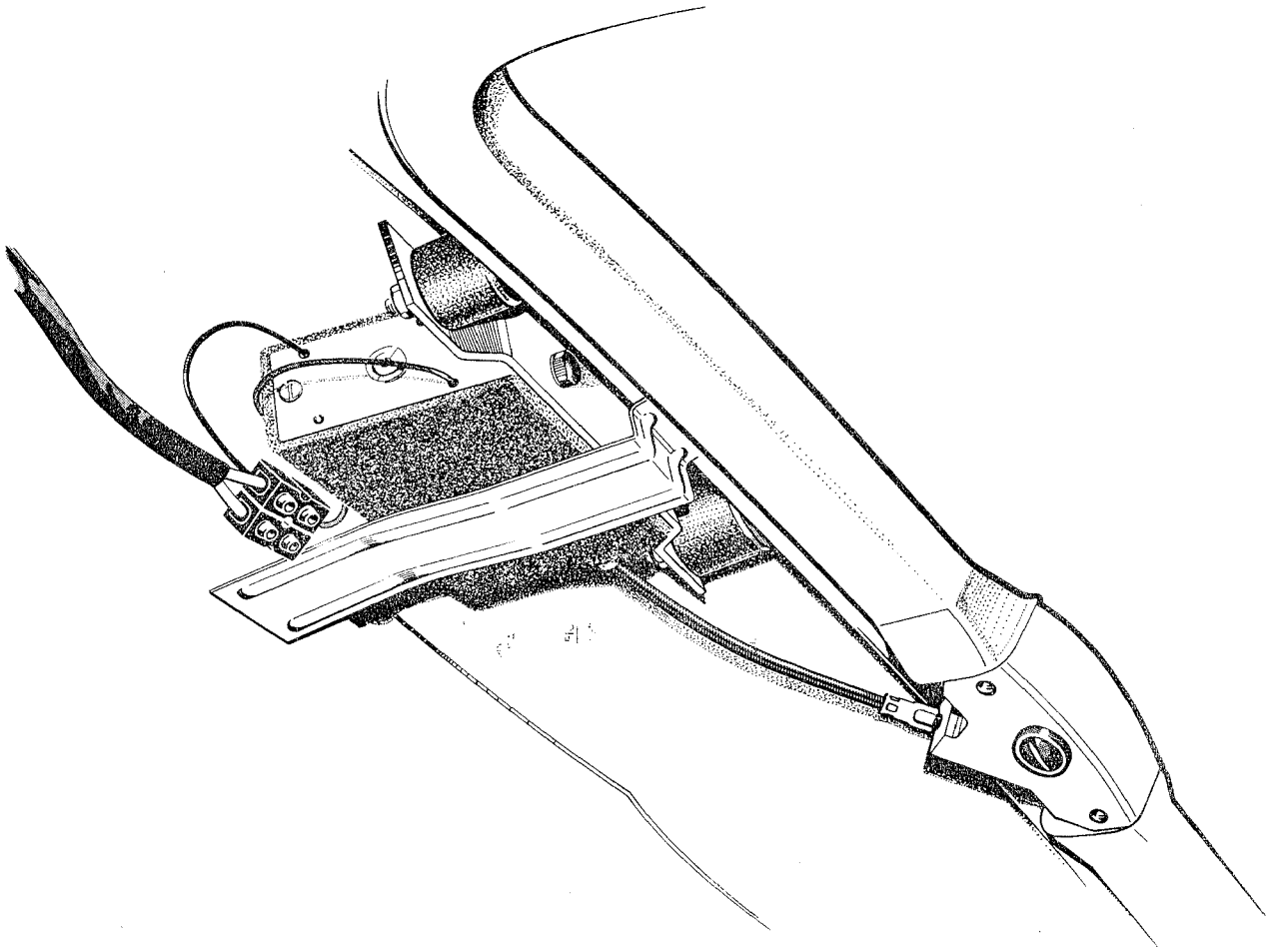

Fig. 9

Removal

1. Open zipper in roof lining.
2. Disconnect wire at porcellain insulator.
3. Withdraw flexible shaft from sockets and take out.
4. Remove both motor hold-down nuts at rubber bushings.
5. Slide motor over reinforcing bar and take it out.

Installation

1. Prior to installation, glue a 1/4" thick felt strip around motor to muffle noises.
2. Slide motor in through space above reinforcing bar and secure to studs in rubber bushing using 6 mm nuts.
3. Insert flexible shaft into sockets.
4. Connect electrical wires and check motor for proper operation. Shift motor in oval orifice until smoothness of action of the flexible shaft is possible. Tighten 6 mm nuts in this position.
5. Close zipper, check condition of roof lining.

REMOVING AND INSTALLING SLIDING ROOF TRANSMISSION

NOTE

It is necessary to pull off some of the forward roof lining when removing the transmission box.

Removal

1. Open sliding roof lid.
2. Remove drive housing cover located in center of forward roof structure.
3. Remove retaining plate located above drive pinion.
4. Remove both connections, top and bottom, of forward roof structure.
5. Remove drive housing.
6. Open zipper in roof lining.
7. Withdraw flexible shaft from sockets in transmission and motor.
8. Detach roof lining where necessary.
9. Remove both transmission retaining screws, withdraw transmission.

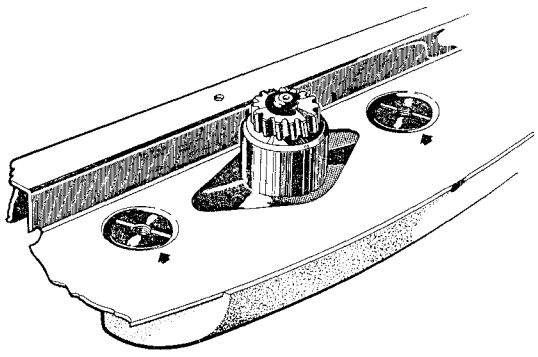

Fig. 10

Installation

1. Insert transmission and secure with screws.
2. Glue roof lining in.
3. Install flexible shaft connecting transmission with motor.
4. Slide drive housing over drive pinion and secure with screws.
5. Place conveyer cables in connections, top and bottom, and screw to forward roof structure.
6. Insert conveyer cable in drive housing so that right cable lies in front of drive pinion and left cable lies behind it.
7. Install retaining plate making sure that drive shaft does not lie above it.
8. Reinstall drive housing cover.
9. Check lid for free movement, readjust if necessary.

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ADJUSTING SLIDING ROOF

Adjusting Position of Sliding Roof Lid

a) Forward end, right and/or left side:

1. Remove sliding roof lining and frame (see p. SB 1)

2. Lid lever is adjusted by resetting lock nuts (2). Loosen bolts (4) securing guide (3), raise or lower sliding roof lid (1) by resetting lock nut (2), retighten guide.

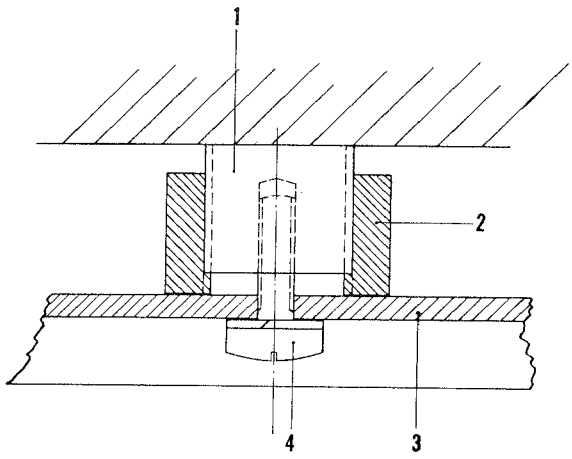

Fig. 11

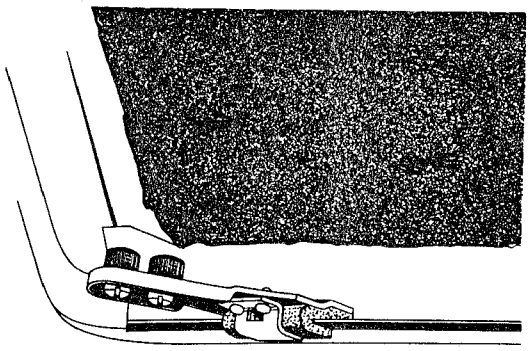

Fig. 12

3. Check lid for free movement.

4. Reinstall head lining (see page SB 2)

b) Rearward end, right and/or left side:

1. Remove head lining (see page SB 1).

2. Loosen nut (1) on stud (3); nut is 5 mm. By turning adjustment screw (2) in right or left direction, stud in oval orifice of lifter (4) is brought to desired position.

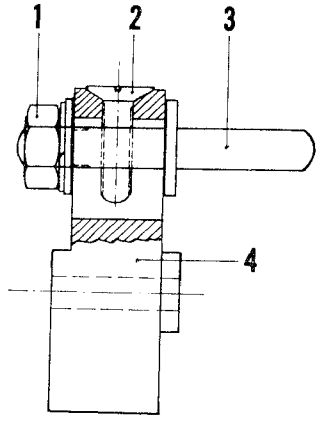

Fig. 13

3. Retighten nut on stud.

4. Check lid for free movement.

5. Reinstall head lining (see page SB 2).

CORRECTING ONE-SIDED LIFT OF SLIDING ROOF

Inspection and Corrective Action

1. Lifter ramp located in gutter of sliding roof frame must be flush with lid lifters.
2. Open sliding roof fully.

NOTE

The spot on which each lifter comes into contact with rear part of ramp can be visually determined.

3. Straighten ramp so that lifter contacts center of ramp. The ramps must be so positioned that when the front edge of cover contacts the velvet sealer, the lifters are at an angle of 45°. By adjusting the position of the ramp, the point of contact of the lifters changes.
4. If necessary, readjust lifter (see page SB 6, par. b).
5. To adjust lifter it is necessary to remove head lining as outlined on page SB 1.
6. Check sliding roof lid for free movement.

CORRECTING UNEVEN TRAVEL OF SLIDING ROOF

1. Determine which side of lid is slow by letting lid close.
2. Open lid.
3. Remove drive housing cover.
4. Pull retaining plate upward over drive pinion.
5. Reinstall retaining plate in drive housing.
6. Reinstall drive housing cover.
7. Check sliding roof lid for free movement.

Adjusting

Example:

Should right side of sliding roof lid be slow, raise forward laying cable over drive pinion, pull to left by one or more teeth, reinsert cable.

CHECK AND ADJUST FRICTION CLUTCH

Check

The adjustment of the friction clutch is in order, when on closing the sliding roof the switch is operated longer than necessary in the "Z" (closed) position and the motor runs slowly in spite of the already closed sliding roof. This shows that the friction clutch works. If the switch is operated in the "Z" (closed) position when the sliding roof is closed, the stalled motor must not put into action the friction clutch. The setting of the friction clutch can be adjusted by addition or removal of shims.

Adjust

1. Remove plastic cap at the bottom of the gear unit.
2. Remove slotted-head screw with crank.
3. Add one or more shims and reinsert and tighten slotted-head screw.
4. Check sliding roof lid for free movement.

NOTE

Each automobile equipped with an electrically operated sliding roof is furnished with a crank and a plastic bag containing 3 shims.

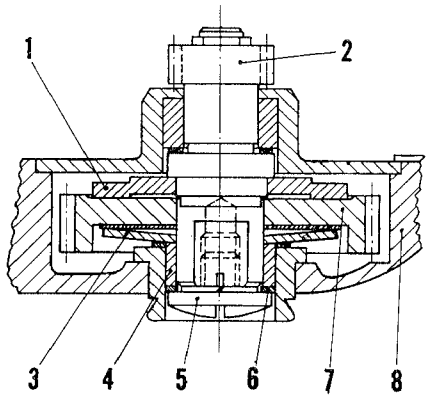

Fig. 14

1. Counter plate
2. Pinion
3. Elastic pressure plate
4. Bearing bush acting as pressure piece
5. Adjusting screw
6. Spacers
7. Gear
8. Housing

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REPAIR OF SLIDING ROOF WATER DRAINS

If the water drain hoses are blocked, they can be cleaned with compressed air. Cleaning with a flexible steel cable is also possible. If this procedure is not successful, renew the water drain hose. Pull off some of the lining and insert the new hose without bending it.

SEAL SLIDING ROOF

1. Glue the large velvet sealer on the front and both sides of the roof cut-out and the small velvet sealer on to the rear of the lid.
2. Pay attention that the small velvet sealer is glued right to the end of the rear radius of the lid. The large velvet sealer must be glued on in such a way that there is no intermediate space between the two velvet sealers.
3. Furthermore, right behind the small velvet sealer there is a weather strip glued on the rear lid profile with its short side, so that its long side lies under the rim of the small velvet sealer.
4. The small velvet sealer and the rear weather strip can only be renewed after removal of the lid.

RELINING SLIDING ROOF

1. Remove head lining as described under "Removing and installing sliding roof", items 1 to 5.
2. Pull off damaged or soiled head lining from frame and remove traces of glue.
3. Glue head lining, consisting of artificial leather, plastic material and center holding strip, held together by the seam running across the center, on head lining frame.

   Make sure that a plastic strip (4 mm thick) is first glued on the lower part of the rear head lining frame brace.

   The center holding strip is so glued on the front to head lining frame brace that the head lining frame reinforcement can be pushed on from behind. Glue the head lining only to the upper side of the head lining frame brace, so that the head lining frame can slide in the head bracket.
4. Install sliding roof as described under "Removing and installing sliding roof".

VENTILATING PLANT

General Remarks

The fresh air vent is located on the center piece under the windshield. A water receptacle, located under the fresh air vent, collects the water which may enter the vent and drains it.

There are two fresh air ducts located in the inner wall of the luggage compartment. Their two ventilation flaps can be operated from the passenger compartment, allowing the air to enter according to their position.

Description of Function

When the vehicle is in motion, the air pressure causes air to be pressed into the luggage compartment, from where it enters the passenger compartment through the adjustable air flaps in the fresh air ducts, and is then conveyed either to the windshield or the floor. An intermediate position of the ventilation lever divides the air accordingly between the floor level and the windshield.

Ventilation lever and flap position

Ventilation lever position 1

The ventilation flaps in the fresh air ducts are closed: no air can enter the luggage compartment.

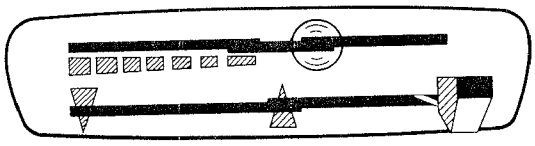


Fig. 14

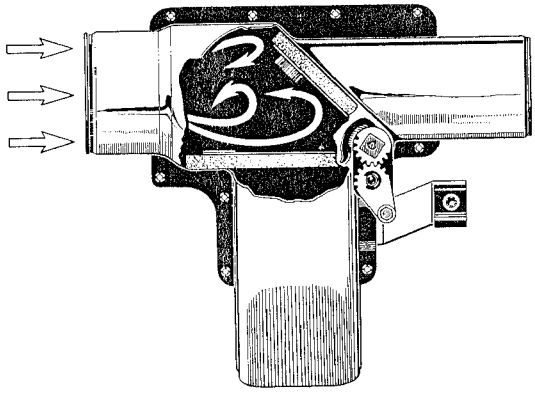


Fig. 15

Ventilation lever position 2

The ventilation flaps convey the air entering when vehicle is in motion to the windshield defroster slots.

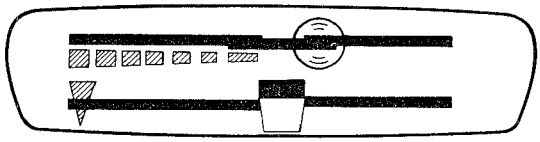


Fig. 16

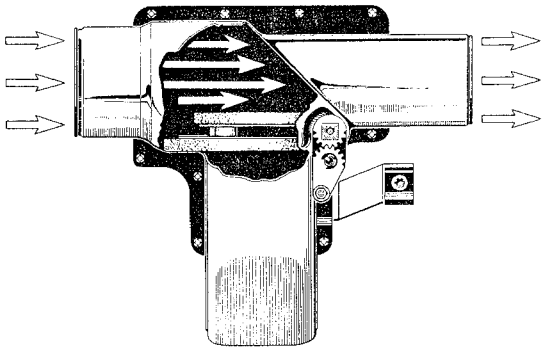


Fig. 17

Ventilation lever position 3

The ventilation flaps in the fresh air ducts convey the air entering when vehicle is in motion to the floor level.

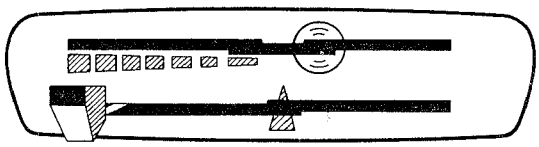


Fig. 18

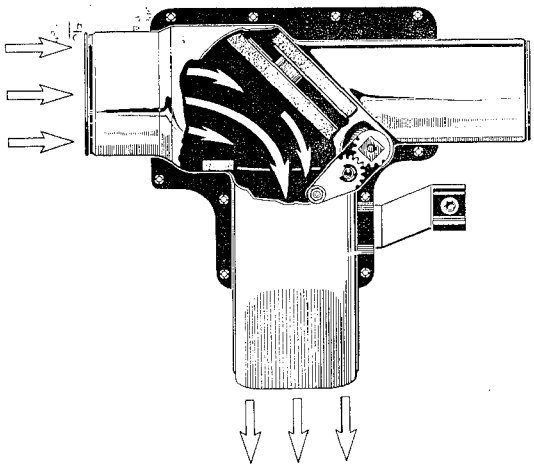


Fig. 19

Remove and Install Fresh Air Ducts

General Remarks

The fresh air duct is held to the luggage compartment wall by means of a 6 mm long bolt and fastened with the corresponding nut. The ventilation flaps are operated from the instrument panel by means of a bowden control. The ventilation flap shafts must be lubricated from time to time.

Removal

1. Loosen bowden control at fastening clip and at bell crank for ventilation flaps, and remove.
2. Loosen fresh air ducts by unscrewing from the wheel well side the nut from the fastening bolt.
3. Loosen fresh air ducts from the hose connection by twisting it slightly, and remove.

Installation

1. Before installing the fresh air ducts, check ventilation flaps for proper operation and free movement, rectify if necessary.
2. Rub hoses with tallow to facilitate installation.
3. Insert fresh air ducts in hoses.
4. Adjust the air ducts to the openings for the hoses by means of 6 x 18 washers.
5. Fasten the air ducts from the wheel well side, insert first 6 x 18 washer, then tighten with M 6 nut and finally apply packing material on nut and washer.
6. Hoses must be properly packed with Teroson packing putty at the fresh air ducts as well as at the opening between luggage compartment and passenger compartment. The same applies also for the openings of the bowden controls in the partition.

Bowden Control Adjustment

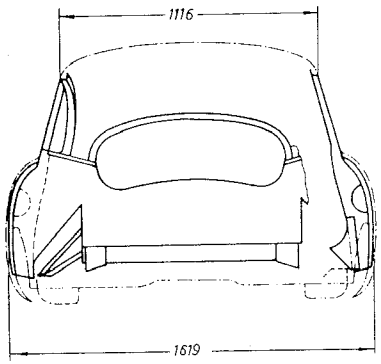
1. Special attention must be paid that the bowden control be attached to the fastening clip in a soft arch from the ventilation lever.
2. Place ventilation lever in position 2.
3. Tighten bowden control with a hex. wrench on the appropriate fastening clip.
4. Fasten bowden control to bell crank by inserting it in the screw hole. The ventilation flaps must be in the position shown in Fig. 17.
5. Operate ventilation lever, check position of ventilation flaps and of bell crank, adjust if necessary.
6. Adjust possible tension between bowden control and bell crank by regulating the position of the fastening link.

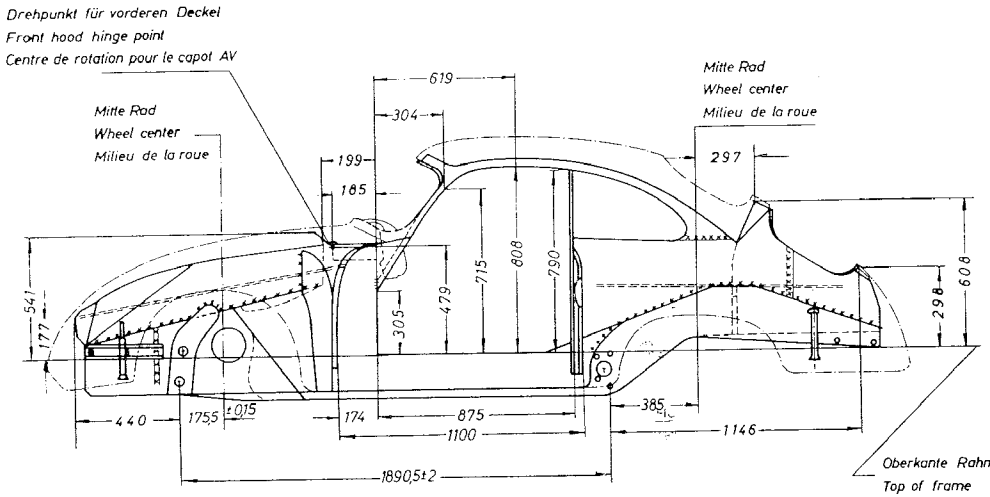
Remove and Install Ventilation Lever

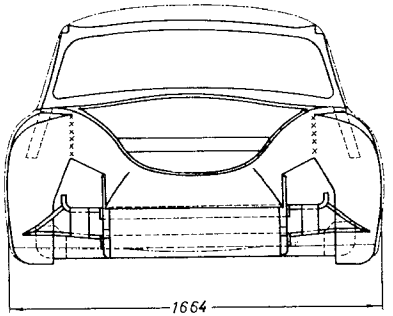
Removal

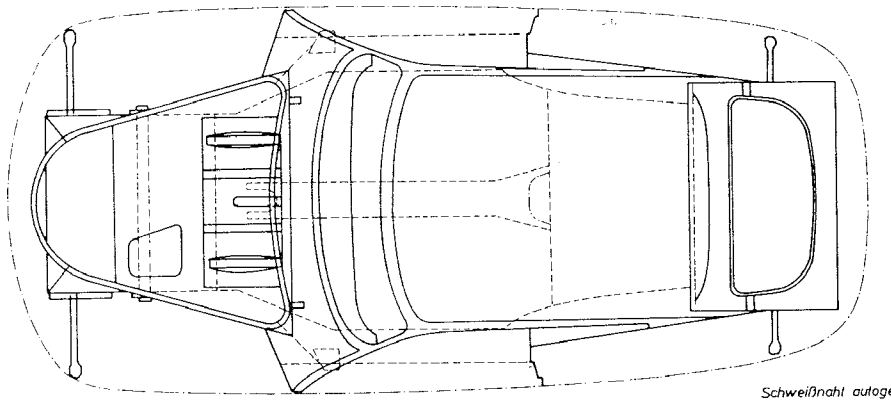
1. Remove electric clock.
2. Loosen bowden control from the fastening clip and from the locking disc.
3. Loosen fastening nuts from the ventilation lever.
4. Remove ventilation lever.

The ventilation lever is installed in the reverse order of removal.









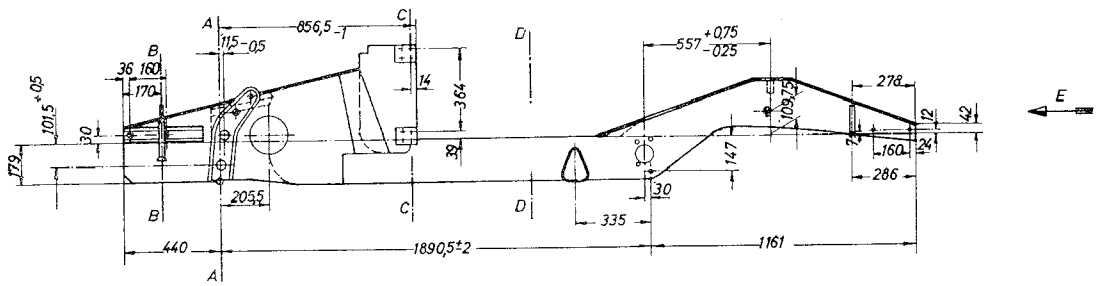
Schweißnaht autogen
Weldet seam
Joint de soudure

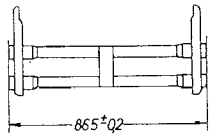
××××××××
Punktschweißnaht
Spot welding
Soudure par points

56 B - 356 C

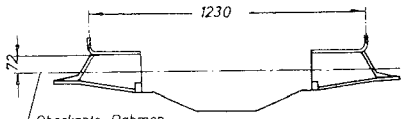
Reparatur-Anweisung für Coupe Innenverkleidung
Body Work Dimensions for Interior of Coupe
Instructions de réparation pour le parement intérieur du Coupé

NA 15
SB 15
SC 15



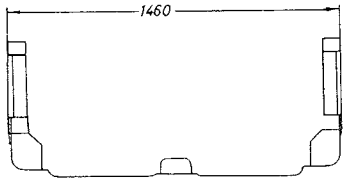


Schnitt
Section A-A
Coupe

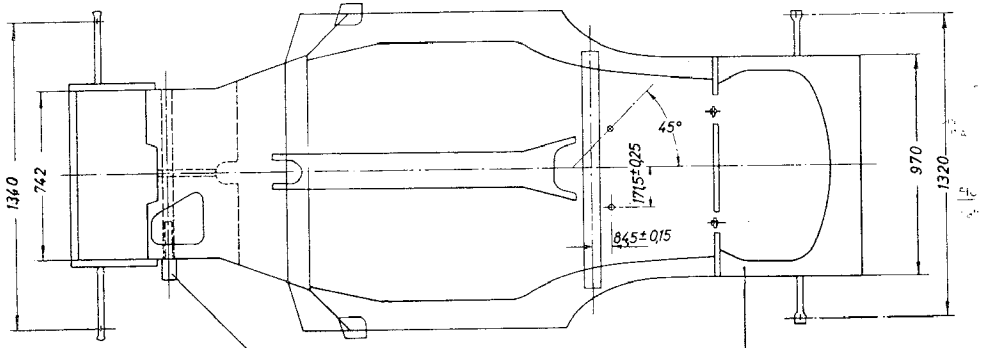


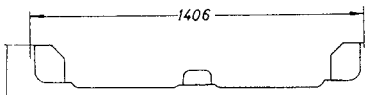
Schnitt
Section B-B
Coupe

Oberkante Rahmen
Top of frame
Bord supérieur du châssis



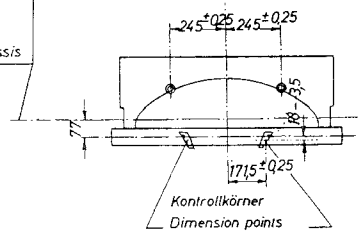
Schnitt
Section C-C
Coupe





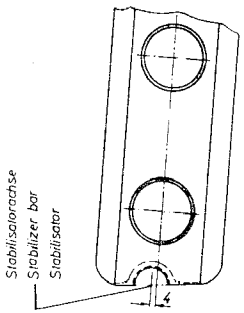
Schnitt
Section D-D
Coupe

Oberkante Rahmen
Top of frame
Bord supérieur du châssis

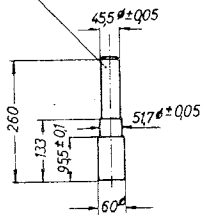


Ansicht E
As seen from E
Vue E

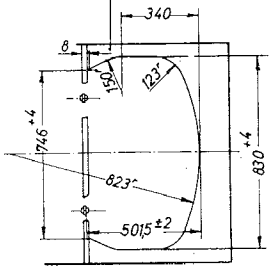
Kontrollkörner
Dimension points
Pointeau de contrôle



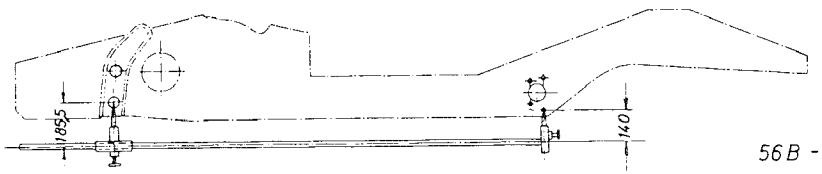
Stabilisatorachse
Stabilizer bar
Stabilisateur



2 Meßbolzen für vorderes Querrohr
2 Measuring pins for front suspension tubes
2 Écrous de mesure pour tube AV



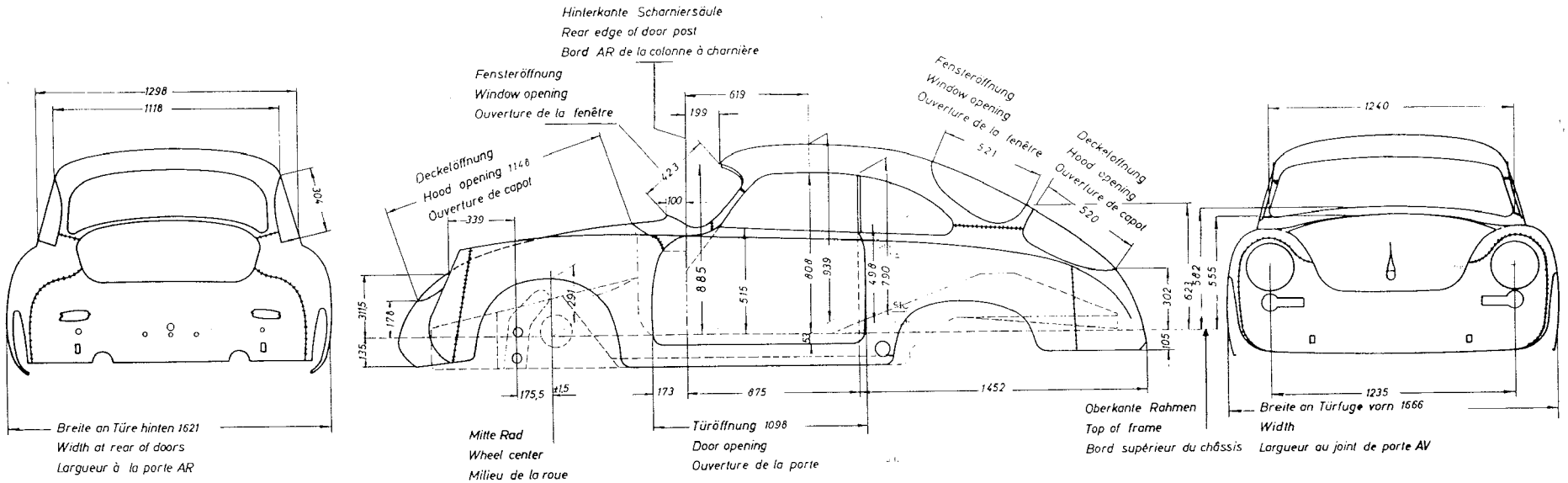
Ausschnitt für Motor 616
Dimensions for engine 616
Découpe pour moteur 616

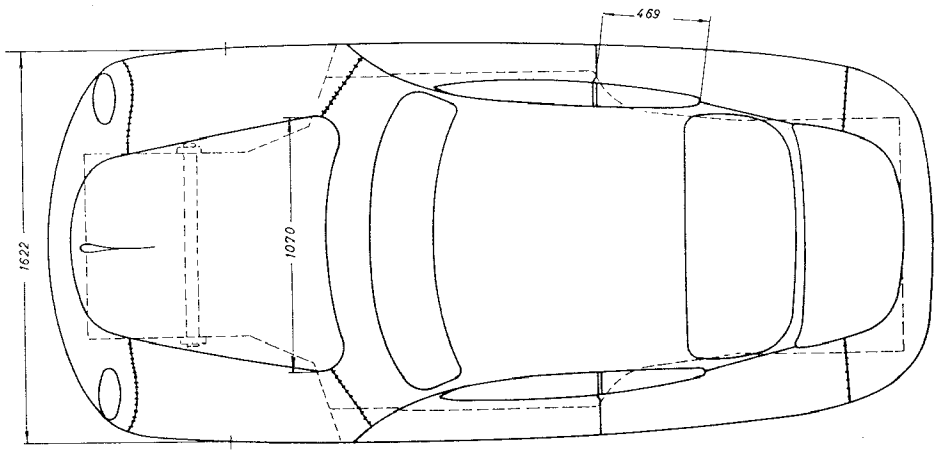


56 B - 356 C

NA 13
SB 13
SC 13

Kontrollmaße für Rahmen
Chassis Dimensions
Cotes de contrôle du châssis

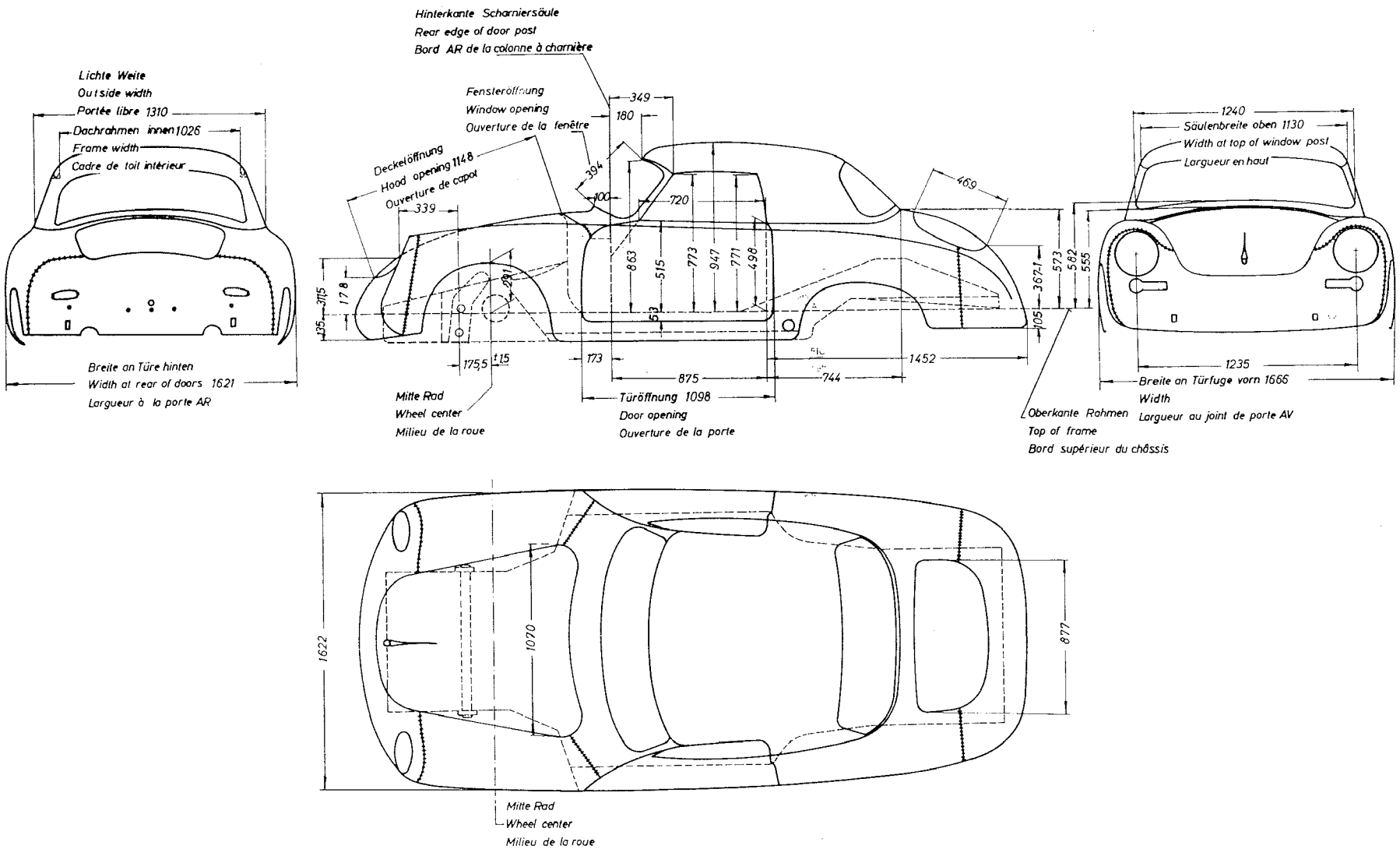




Reparatur-Anweisung für Coupe Außenverkleidung
Body Work Dimensions for Coupe
Instructions de réparation pour le parement extérieur du Coupé

356 B - 356 C

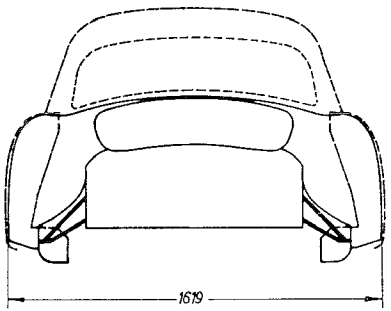
NA 14
SB 14
SC 14

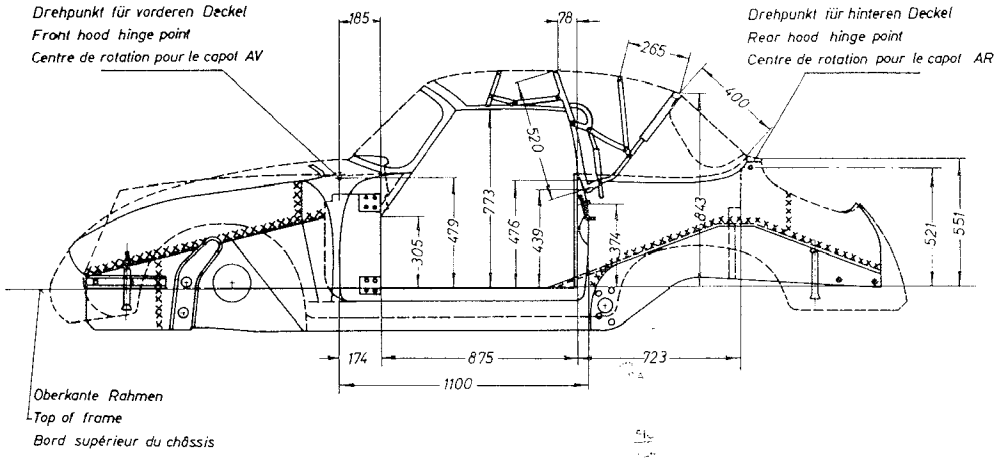


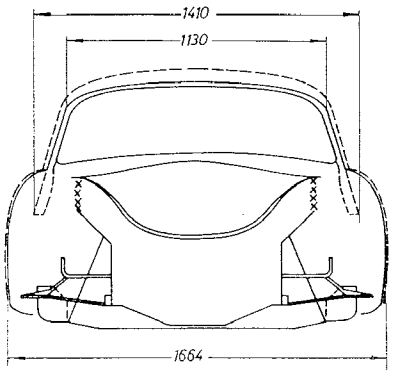
Schweißnaht autogen
Weldel seam
Joint de soudure

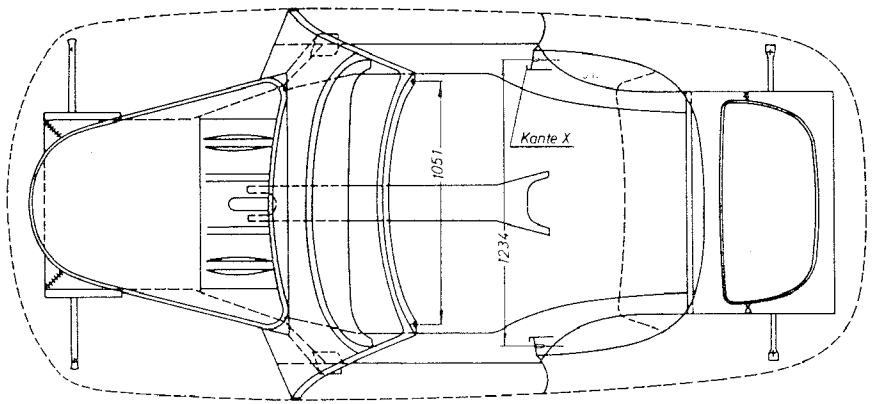
Reparatur-Anweisung für Hardtop (Cabriolet) Außenverkleidung
Body Work Dimensions for Cabriolet/Hardtop
Instructions de réparation pour le parement extérieur du Hardtop (Cabriolet)

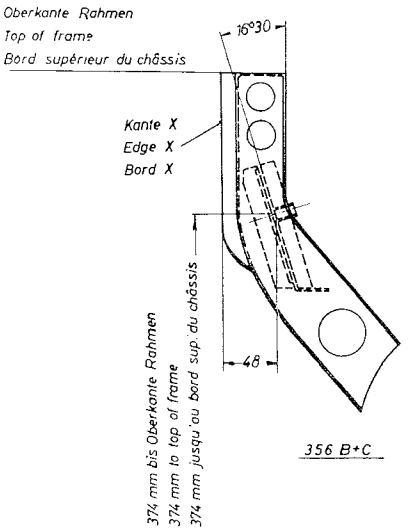
NA 16
SB 16
SC 16











356 B - 356 C

Reparatur-Anweisung für Hardtop (Cabriolet) Innenverkleidung
Body Work Dimensions for Interior of Cabriolet/Hardtop
Instructions de réparation pour le parement intérieur du Hardtop (Cabriolet)

NA 17
SB 17
SC 17