

BODY

The body of the Borgward "Isabella" is of the combined body / chassis type, to which the front axle assembly as well as the rear axle is mounted.

The adjustment of the assemblies are determined by this way of assembly.

Castor of frontwheels as well as track, toe-in and wheelbase of rear wheels are thus constant.

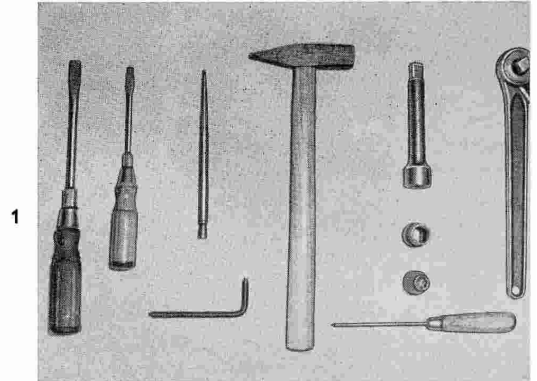
Settings are made by the works. In case of deviations it must be concluded that in most cases the car was involved in accidents.

A. BODY

A 1. Removal and installation of a door

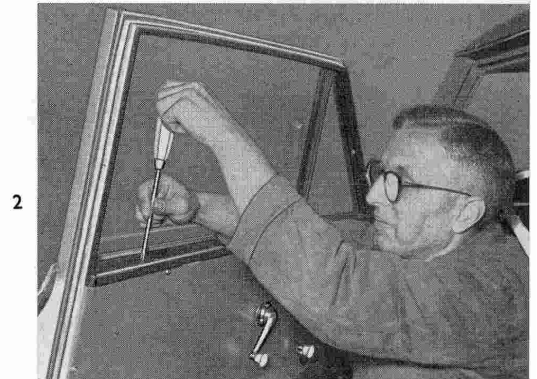
Tools: "Stanley" screwdriver for Philipp screws, screwdriver, punch 3 mm, hammer, socket 10, 14 mm, Allen (Inbus) key 6 mm.

Figure 1



1. Remove plastic frame for window.
(Stanley screwdriver)

Figure 2



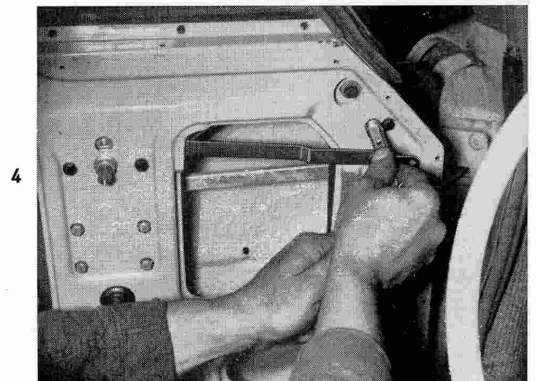
2. Remove both window regulators, press back es-cutcheons, drive out pin.
(Screwdriver, punch 3 mm or 1/8", hammer)

Figure 3

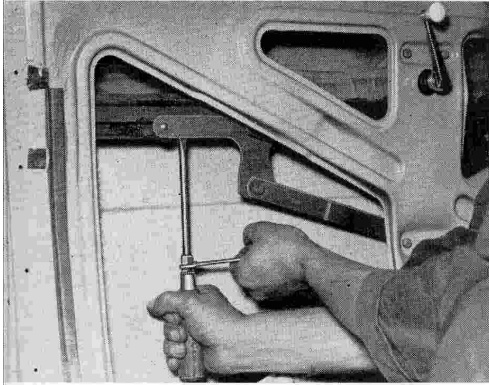


3. Undo door handle
(Screwdriver)
4. Remove cover plate, door inside.
(Stanley screwdriver)
5. Loosen pullrod for door handle.
(Socket 10 mm)
6. Undo support plate for pullrod door opener.
(4 bolts, socket 10 mm)

Figure 4



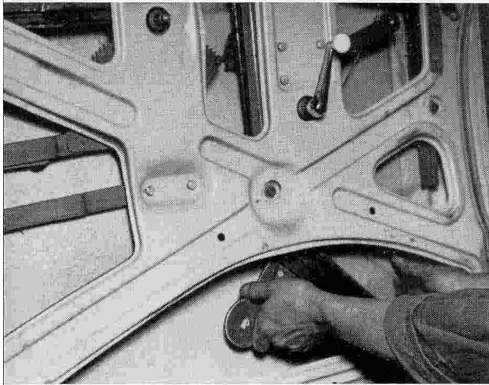
Isabella



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7. Loosen door hinges.
(Socket 14 mm, hold on with Allen key)
8. Lift out ornamental batten.
(Screwdriver)
9. Lever out guide pulley from guide channels.
(3 strong screwdrivers)

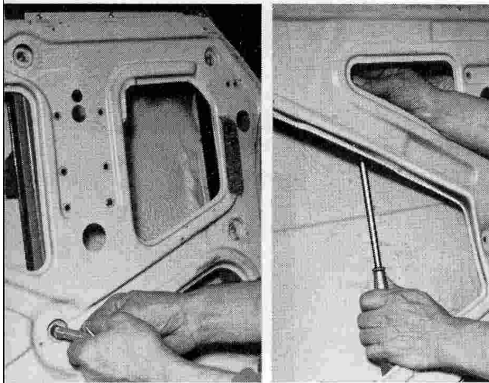
Figure 5



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10. Pull down small ventilating pane and lift out through aperture on door cover.

Figure 6



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11. Undo attachment bolts for frame.
(4 bolts, socket 10 mm)

Figure 7, left

12. Undo slotted screw for parapet batten from underneath, inside.

Figure 7, right



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13. Undo 2 slotted screws for frame on door side.
(Screwdriver)
14. Remove parapet batten outside.
15. Undo 2 slotted screws for frame.
(Screwdriver)
16. Lift out frame upwards uniformly.
17. Screw out door lock from inside through stuck together holes. (Screwdriver)

Figure 8

A 3. Removal and mounting of front and rear window pane

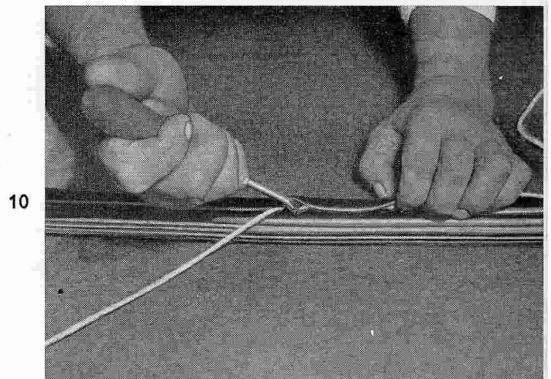
1. Press defect pane outwards with frame and rubber frame.
2. New pane with frame and rubber frame are put together on a felt square.

Figure 9



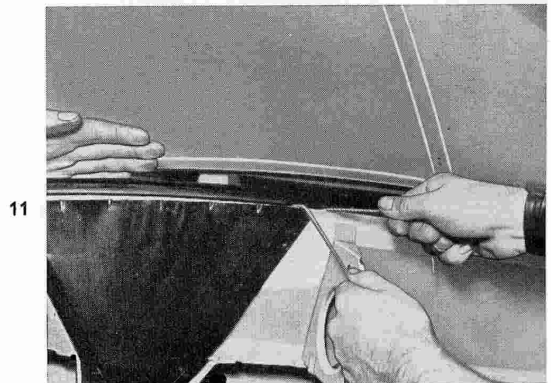
3. Insert strong cord between slot of rubber strip, which is fitted to window guide channel. Cord tails must cross themselves underneath. Insertion by screwdriver with ground in arch shaped edge.

Figure 10



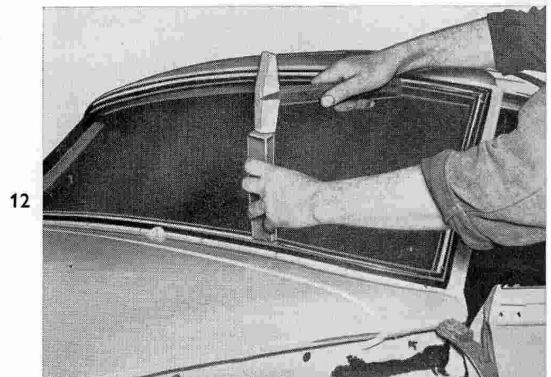
4. Set on pane and have it pressed on everywhere and uniformly by 2 or 3 assistants. Grip crossed cord tails of guiding cord and pull out positively to left and right so that the sealing lip of the rubber socket puts itself over the support plate.

Figure 11

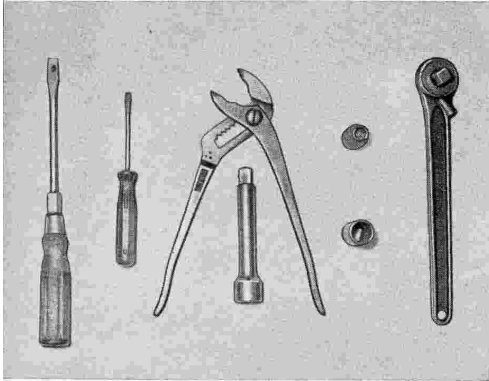


5. Tap on pane all the way round with wooden block and hammer.

Figure 12



Isabella

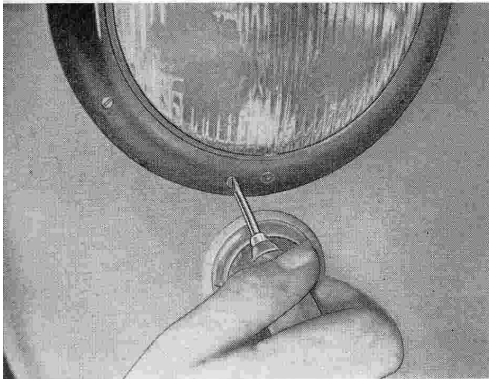


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A 5. Replacement of front wing

Tools: Socket 10, 17 mm, ratchet, screwdriver 8 mm, insulated screwdriver, gland nut pliers.

Figure 13



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1. Remove front bumper.
(Socket 17 mm)
2. Remove head lamp.
 - a) Take off head lamp outer ring.
(Screwdriver 8 mm)
 - b) Undo bottom bolt and pull out headlamp insert.
(Screwdriver 8 mm)

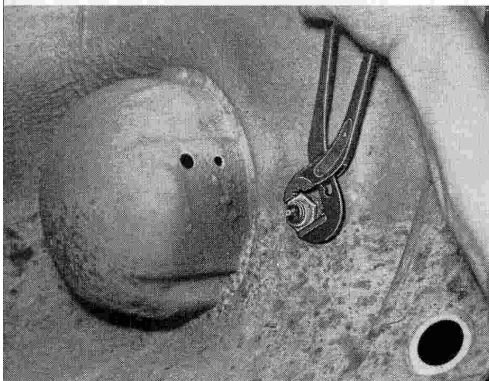
Figure 14



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- c) Disconnect cable from bulb socket and pass through inward.
3. Remove blinker.
(Screwdriver 8 mm)
4. Disconnect blinker connection, rear, disconnect ground cable.
(Screwdriver 8 mm, insulated screwdriver)
5. Undo wing all the way round.
(Socket 10 mm)

Figure 15



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6. Screw out socket for blinker on wing.
(Gland nut pliers)

Figure 16

Assembly in reversed sequence.

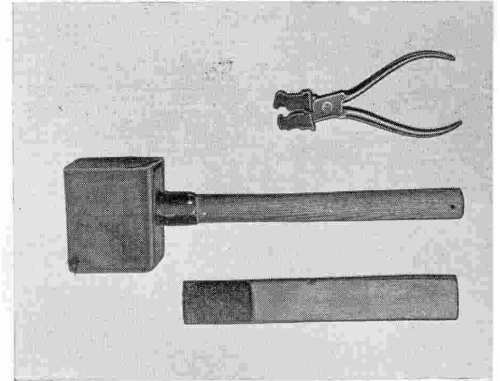
Caution: A clearance of appr. 8 mm or 5/16" between wing and door (The same applies to rear wing) is essential.
If the wing face is not in alignment with the door an adjustment can be made by underlaying or removal of felt.

A 9. Renewal of roof guttering

Tools: Wooden rod with pasted on leather, felt mallet with pasted on leather, flat jawed pliers, jaws leather covered. (Pasted on)

Figure 17

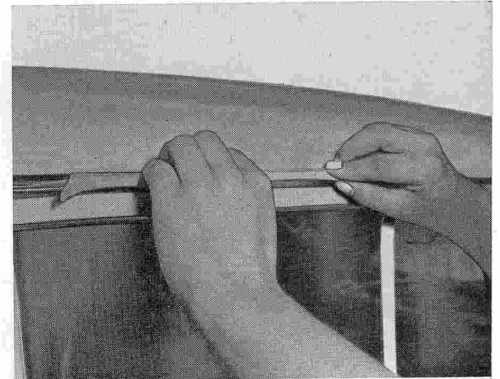
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1. Paste on sealing rubber full length on roof guttering seating.

Figure 18

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2. Set up roof guttering and paste on rubber bed, starting from rear body arch.

Figure 19

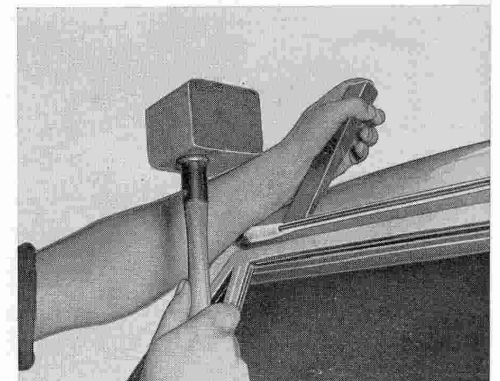
19



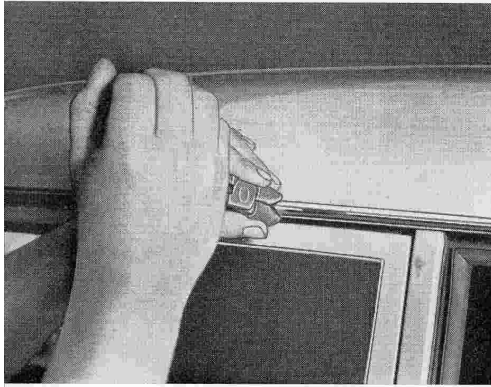
3. Tap on roof guttering with felt mallet on the outside, use holding on wooden rod from inside so that the roof guttering is compressed and fits on full length.

Figure 20

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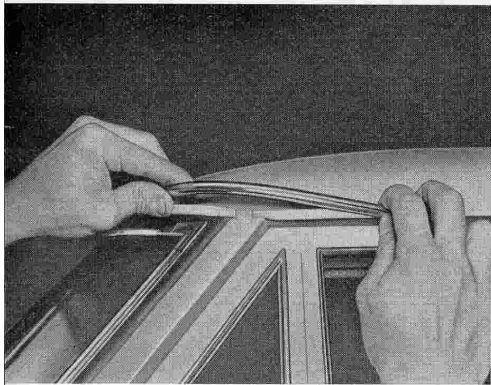
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4. Compress roof guttering positively over full length with leather protected flat jawed pliers.

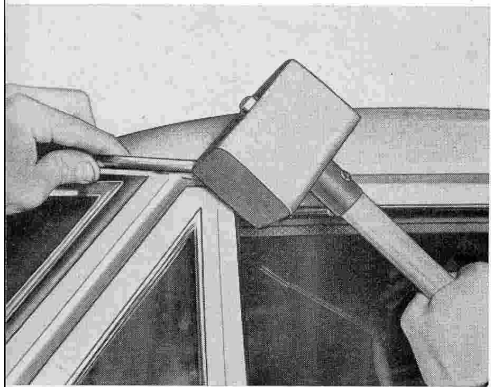
Figure 21



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5. Cover also arch on front roof guttering seat with rubber.
6. Set up bent piece of roof guttering for front corner pillar and compress in the same way as described in working process 4, 5, and 6.

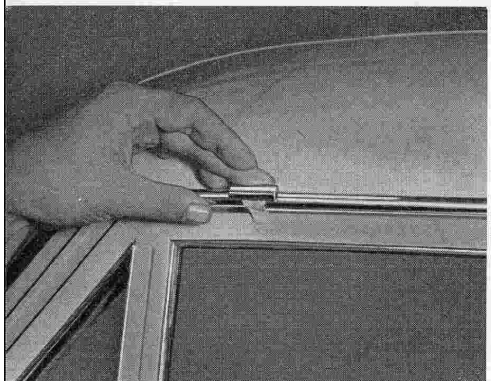
Figure 22



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7. Tap roof guttering tight on rounding with felt hammer.

Figure 23



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8. Paste sealing rubber to roof guttering connection points.
9. Clamp connecting piece over intersection and clamp by means of wood and pliers.

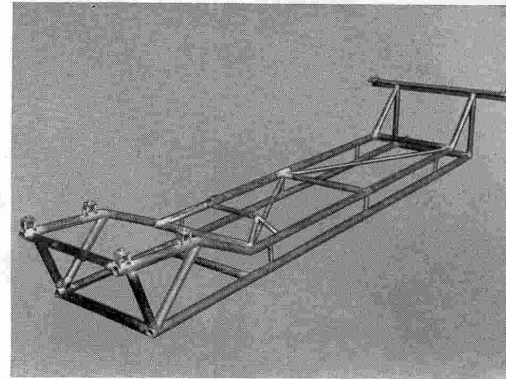
Figure 24

A 11. Renewal of both side sheet members
Body admeasurement

An admeasuring frame is required for the renewal of one or both side sheet members. See scale drawing on the rear side of the next page. The admeasuring frame has 8 measuring points.

Figure 25

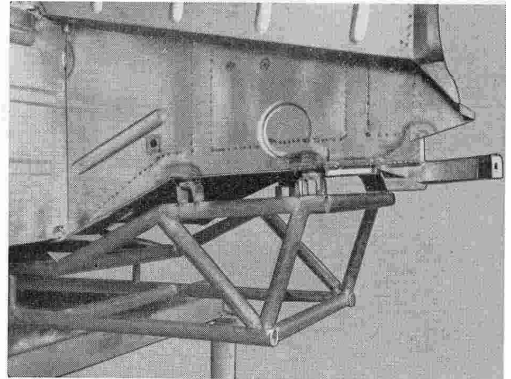
25



a) 4 measuring points in front for the location holes of the front axle assembly

Figure 26

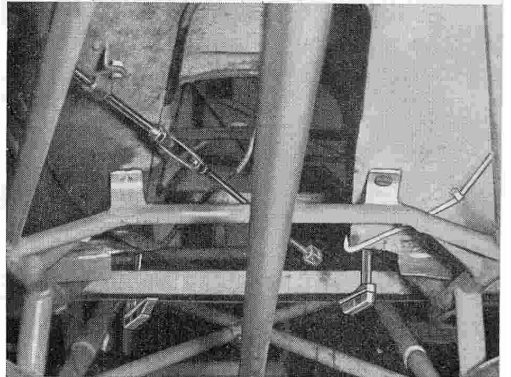
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b) 2 measuring faces in centre for the gear box girder location.

Figure 27

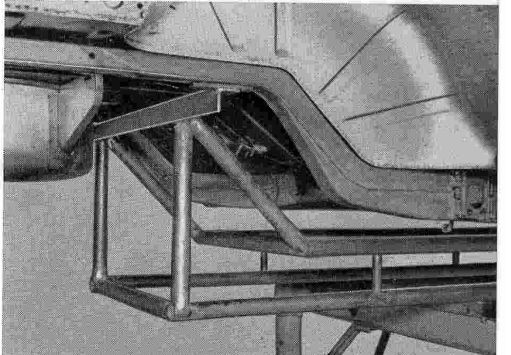
27



c) 2 measuring points, rear, for rear axle girder location.

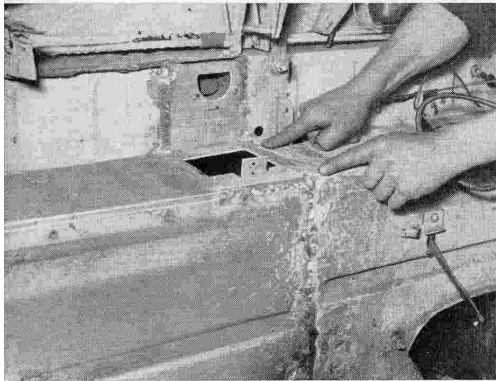
Figure 28

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1. Cut off old side sheet members and clip off neatly on connection points of body wall. These points must be neatly trimmed so that the new member fits well on its connection facing.

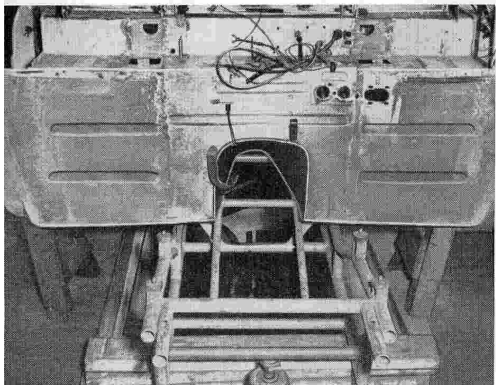
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2. Corner points of the dashboard are brazed and should be re-brazed again before fitting new member.

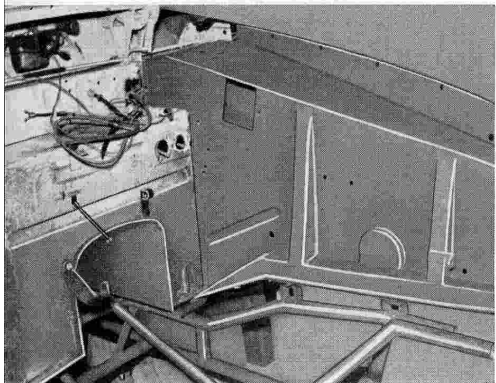
Figure 29



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3. Align total frontal area for the set-up of the new side sheets. Place body on admeasuring frame and bolt gear box suspension to body on lower side.

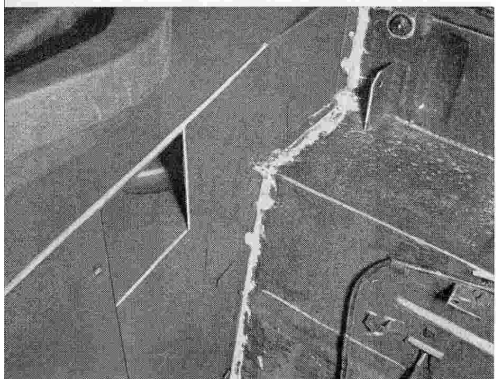
Figure 30 and front page Figure 27



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4. Fit new side sheet members, place on admeasuring frame in lower locating holes for axle member attachment. Take care that it fits well everywhere.

Figure 31



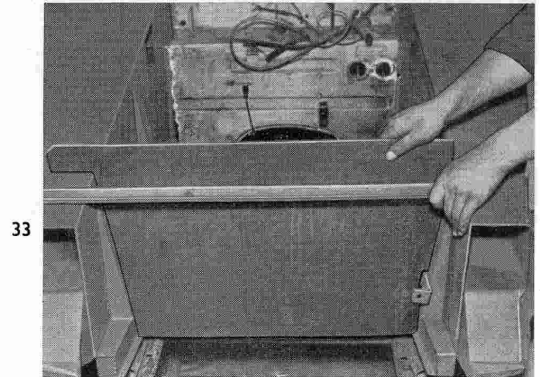
32

5. Take off side sheet members again and cover attachment face well with sealing compound, fit side sheet members again and fasten sheet member screws in appr. 80 mm or 3 5/32" distance.

Figure 32

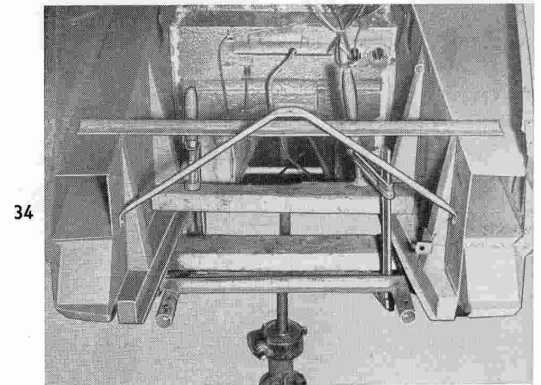
6. After set up of both side sheet members align members on top with gauge and bolt flat bar on top of correct distance.

Figure 33



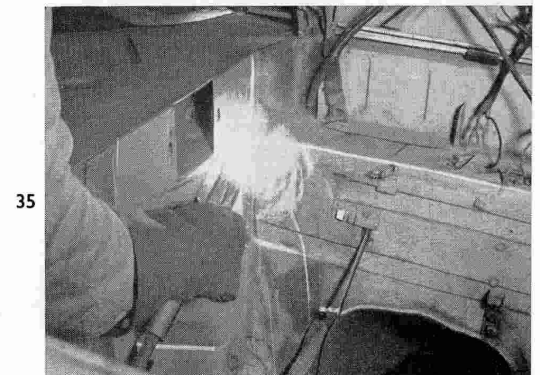
7. Both side sheet members must be attached and supported in two ways as shown in figure 34. Press side sheet members tightly to admeasuring frame by two suitable hardwood pieces and clamp screw.

Figure 34



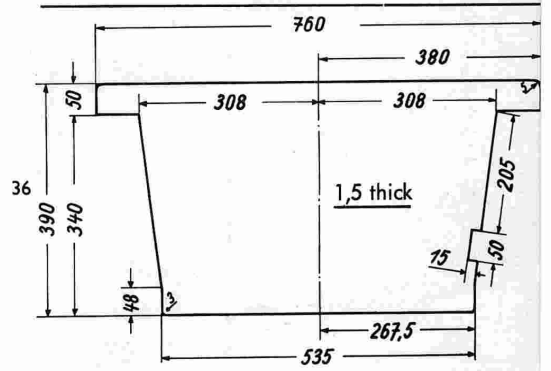
8. Weld side sheet members electrically on contact points to body dashboard all round.

Figure 35

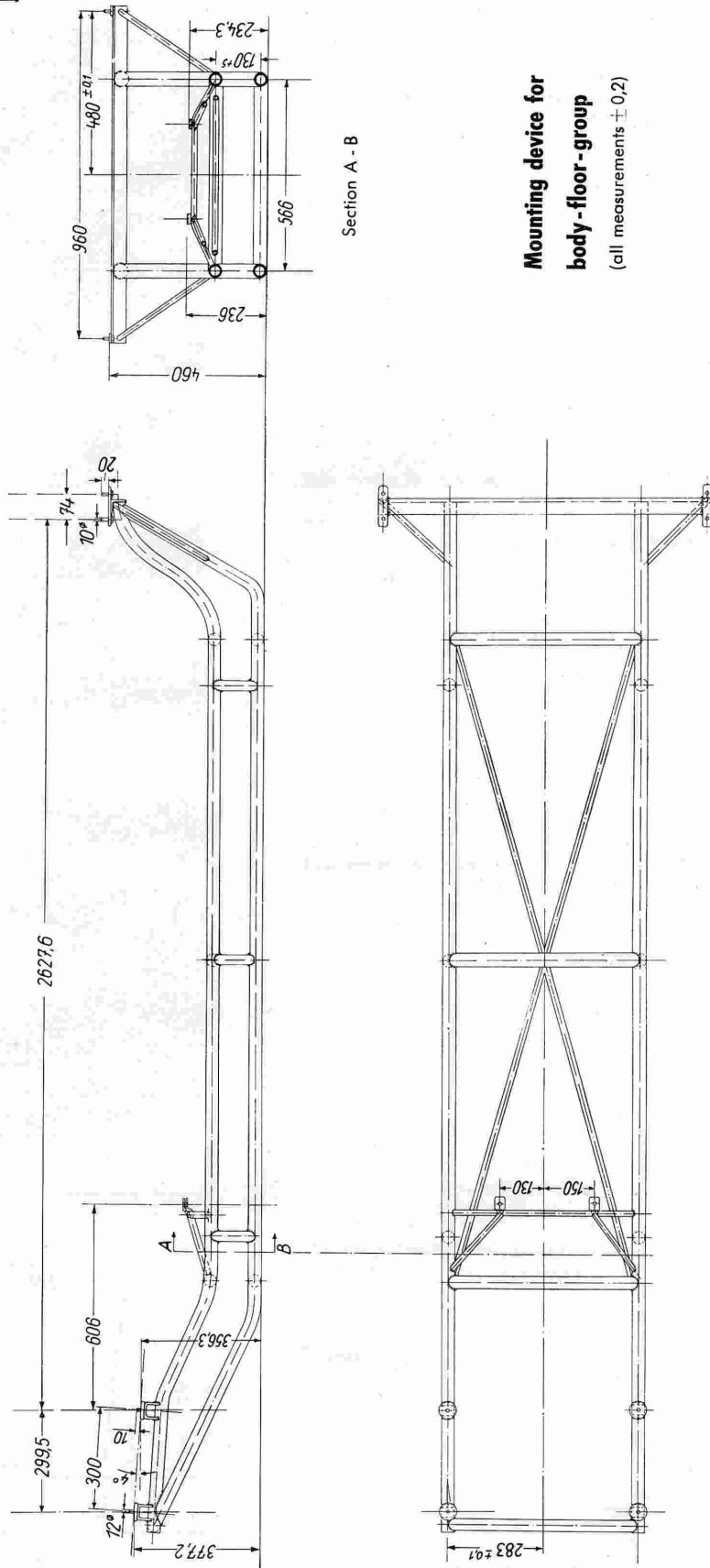


9. After loosening of spanning, the side sheet members must fit tightly on the controls of the admeasuring frame, the side distance must correspond with the inserted gauge.

Figure 36



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Section A - B

**Mounting device for
body-floor-group**
(all measurements ± 0,2)