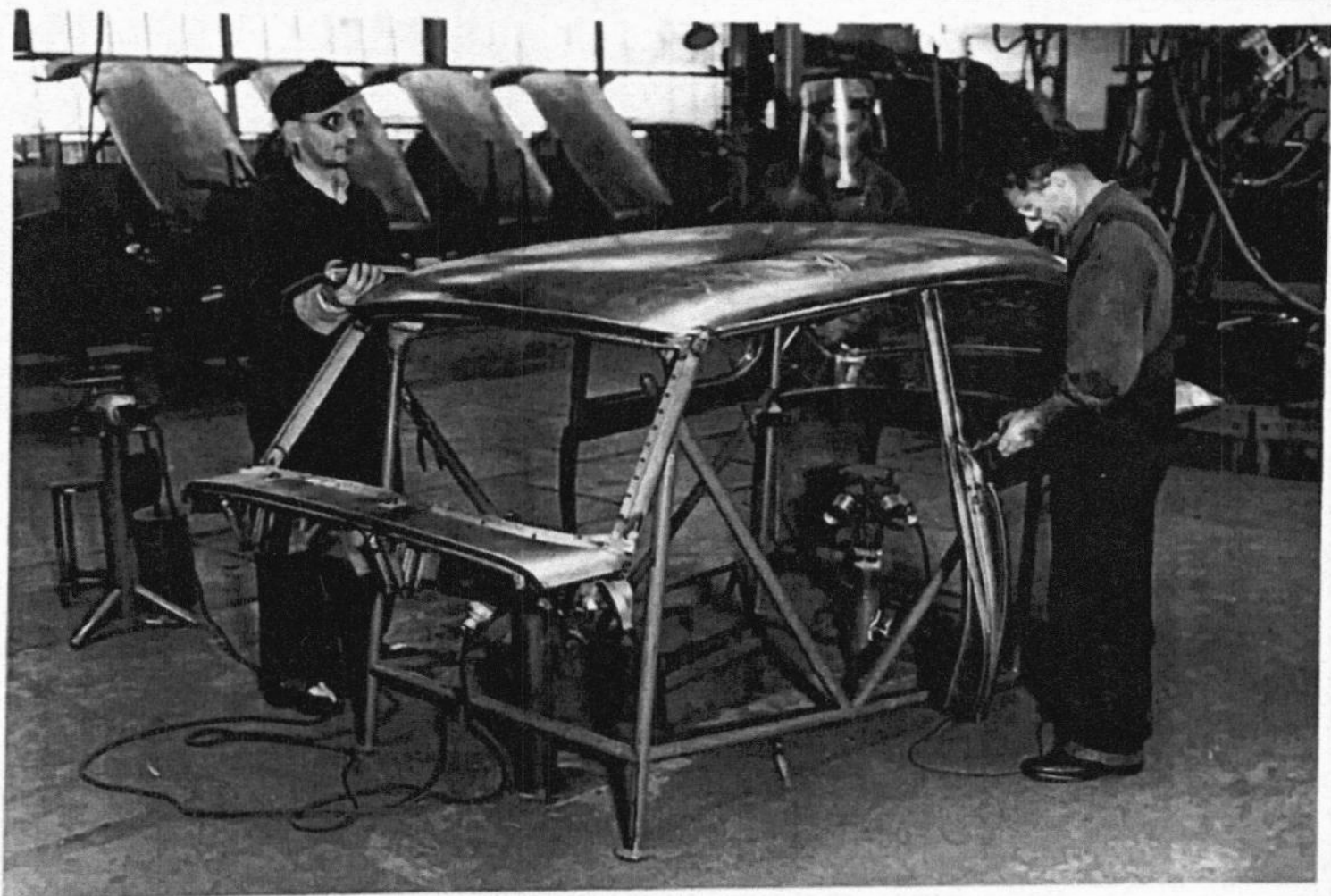
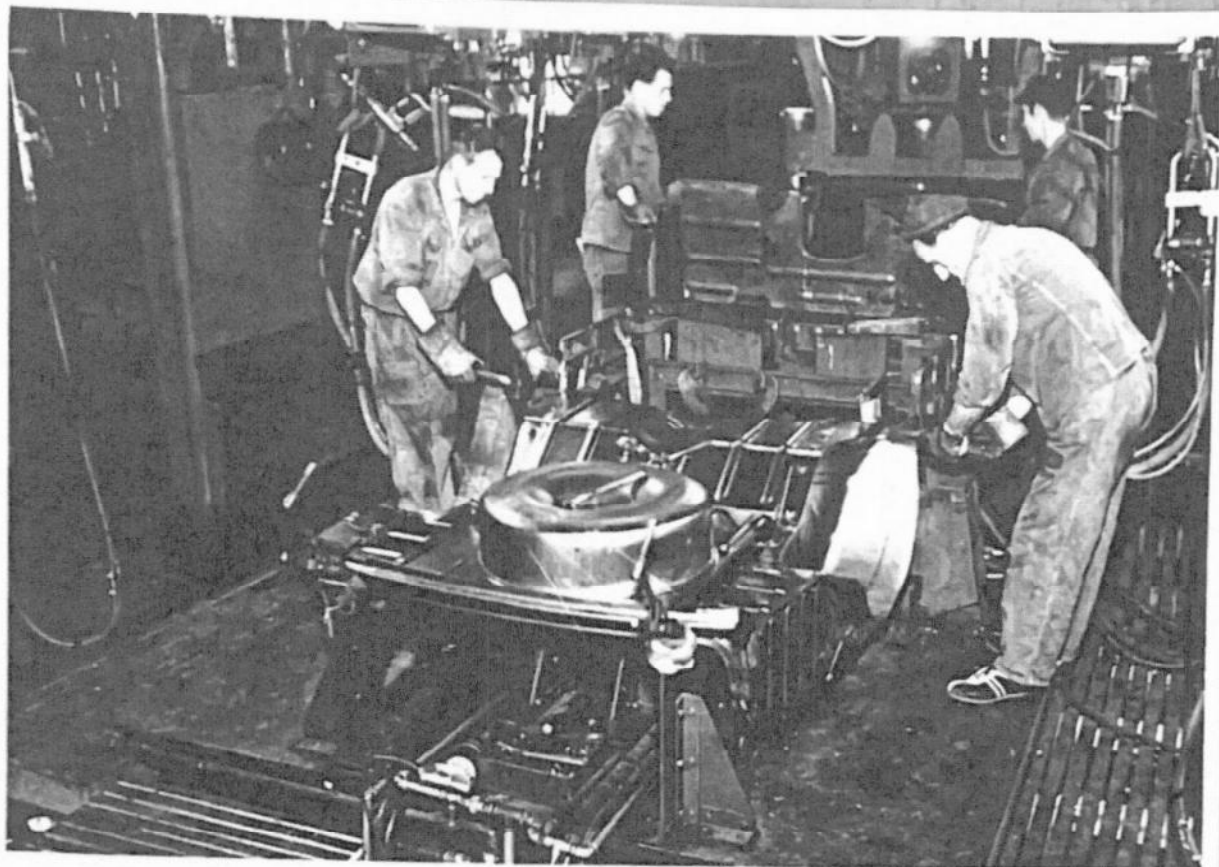


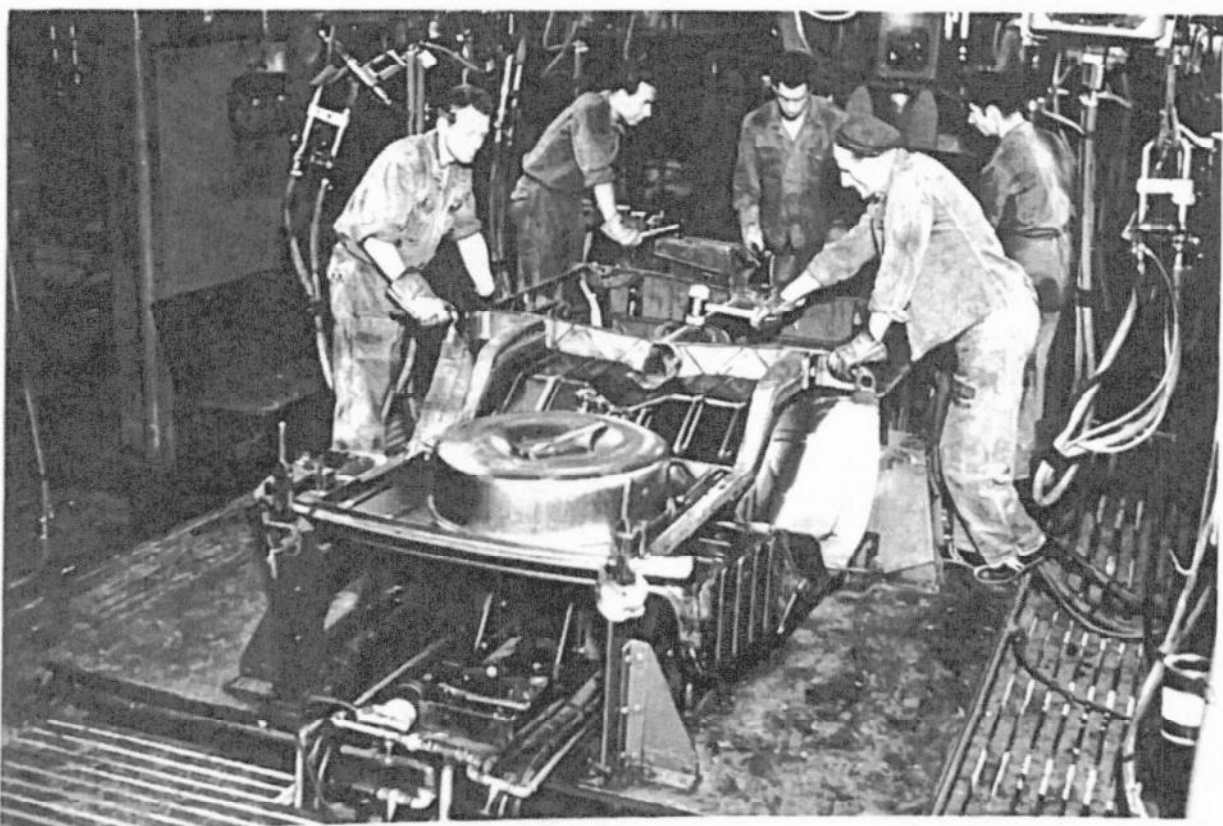
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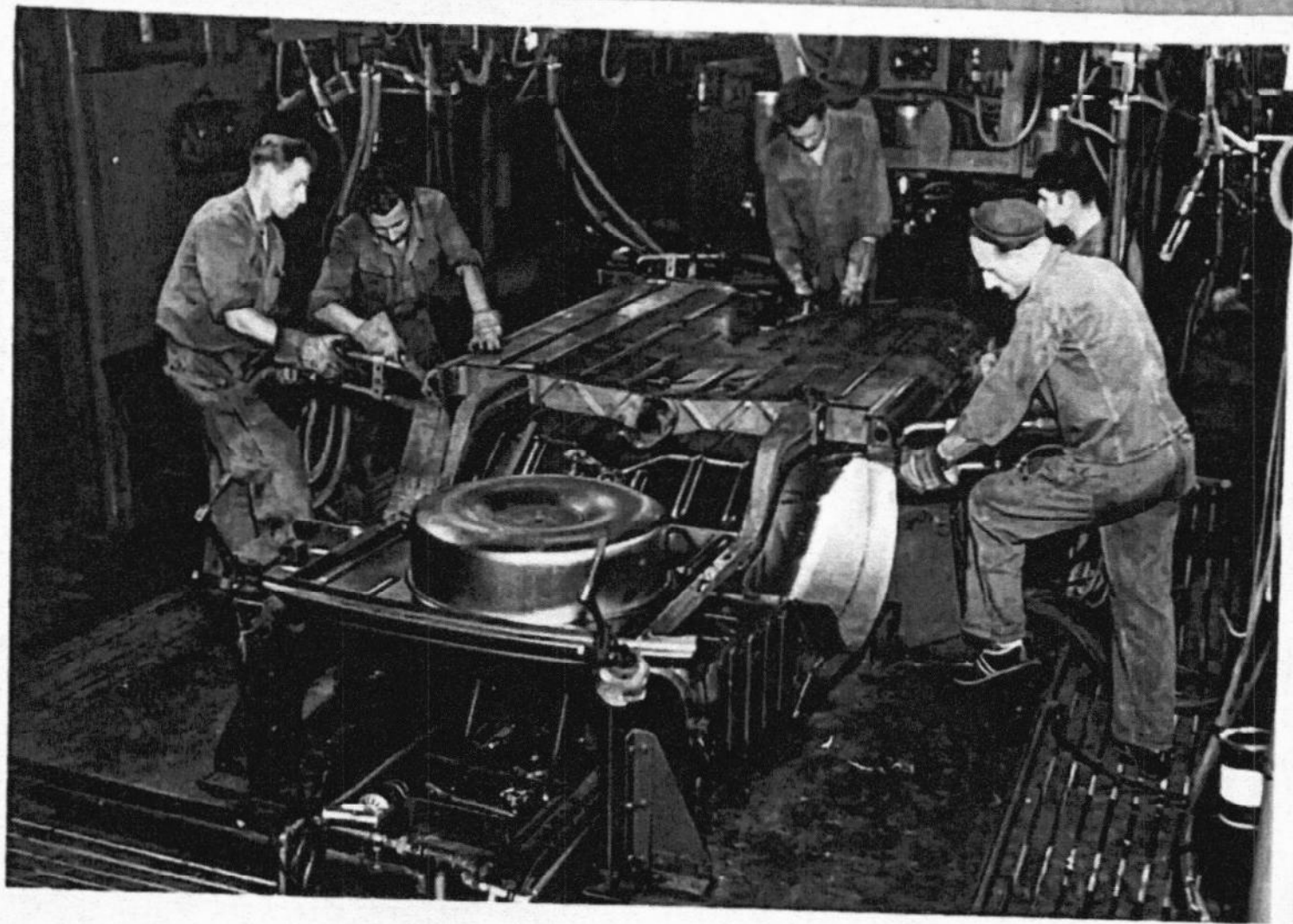


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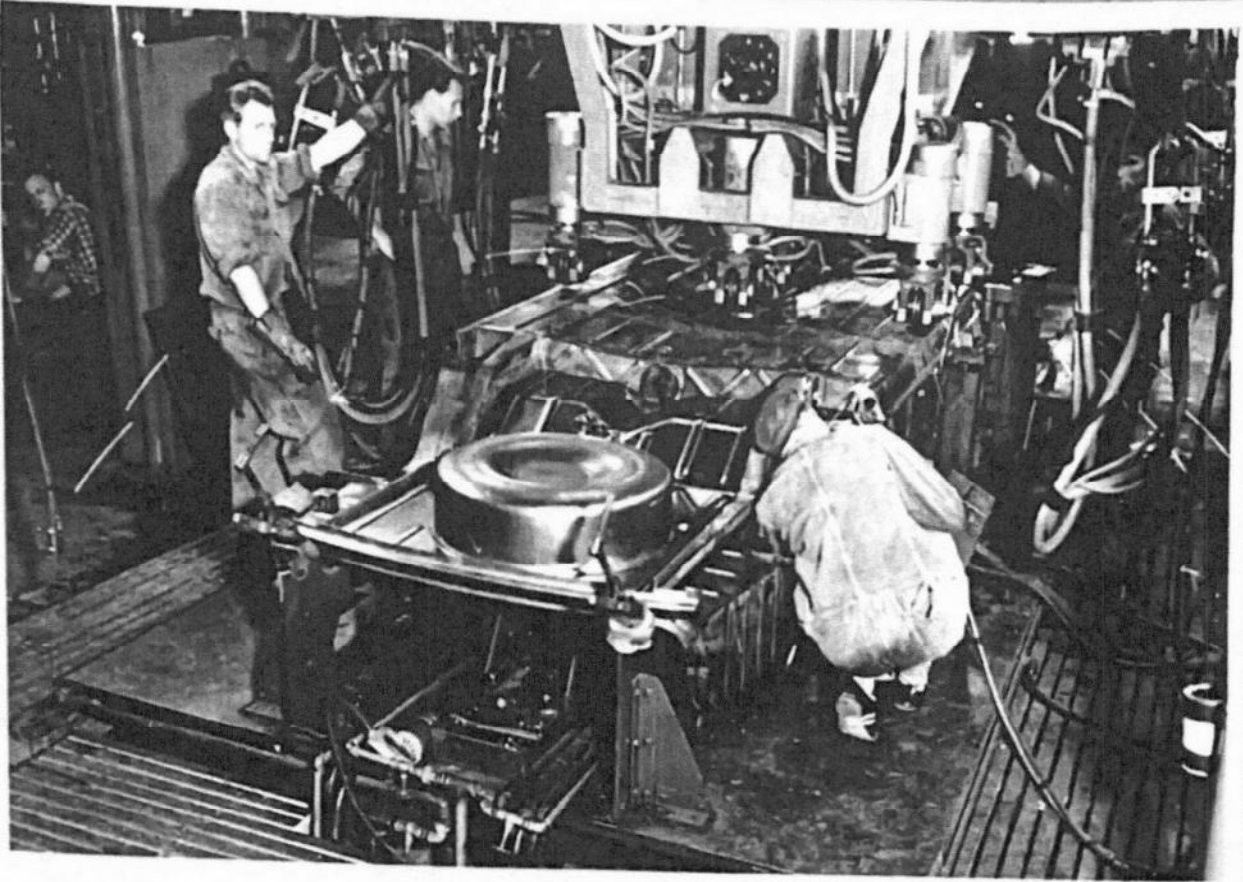


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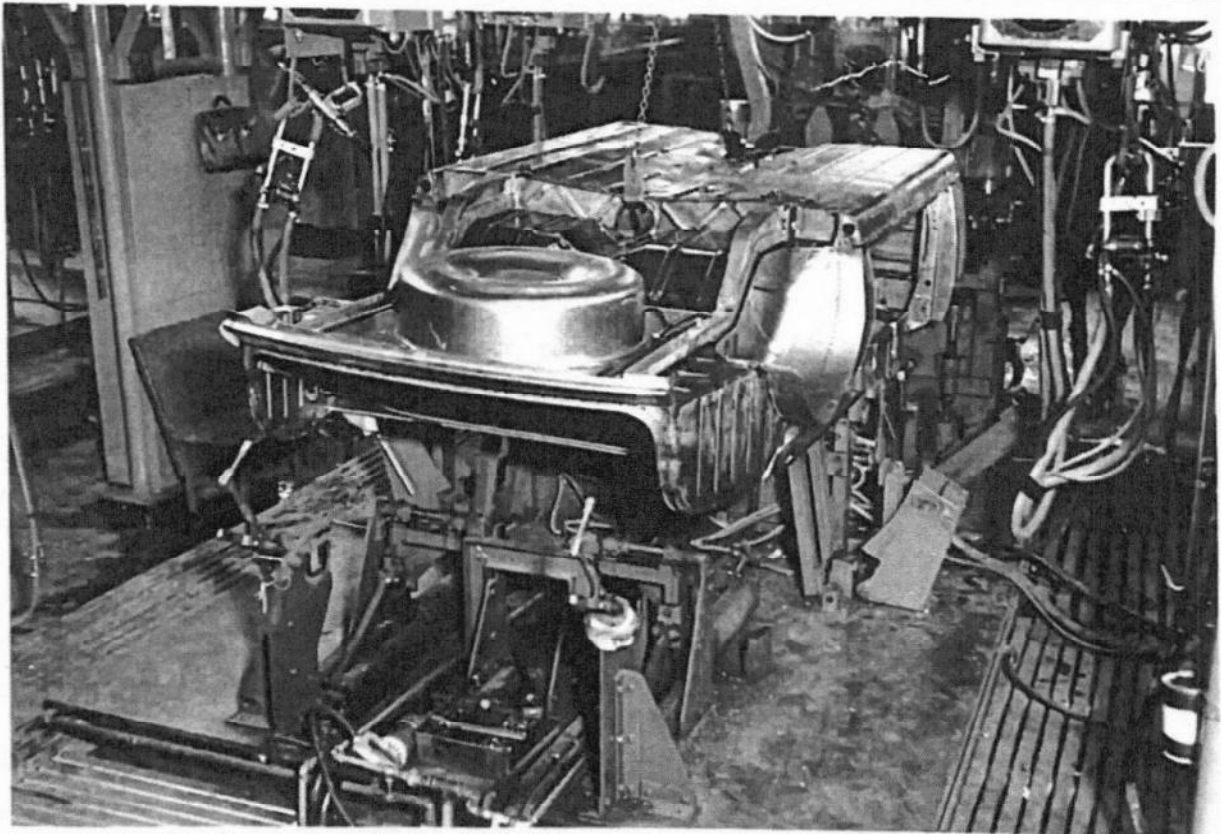
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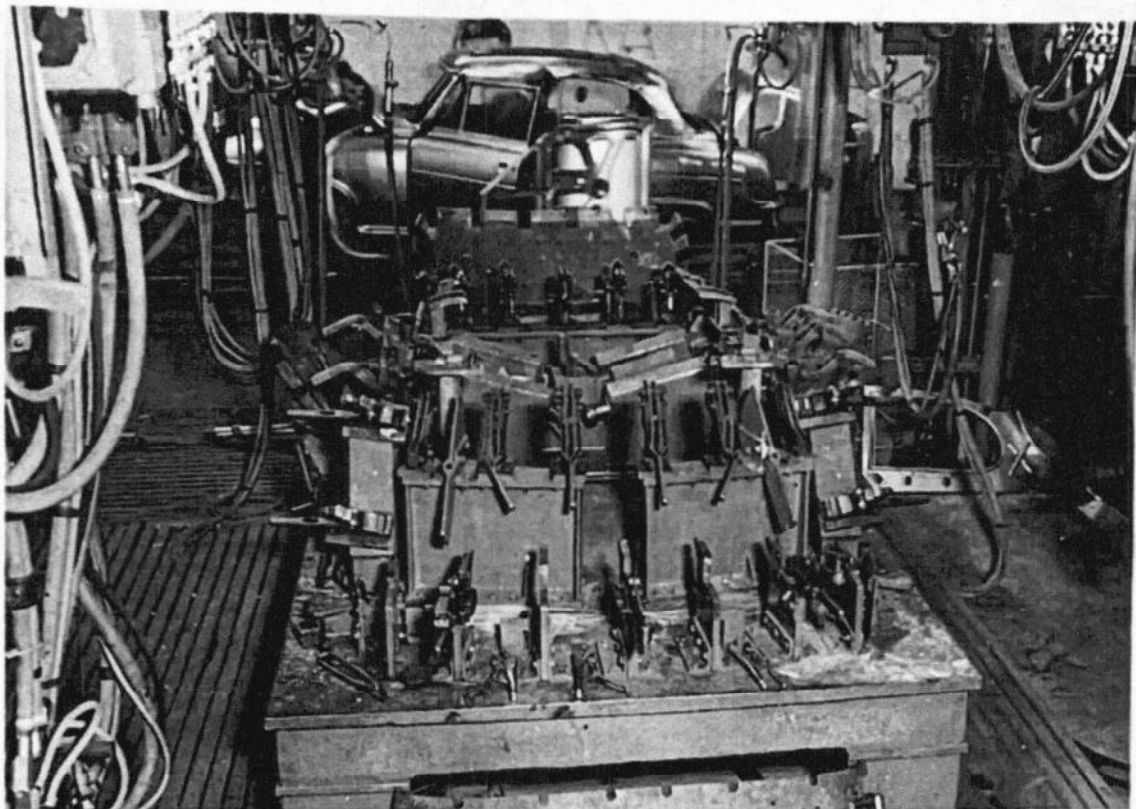


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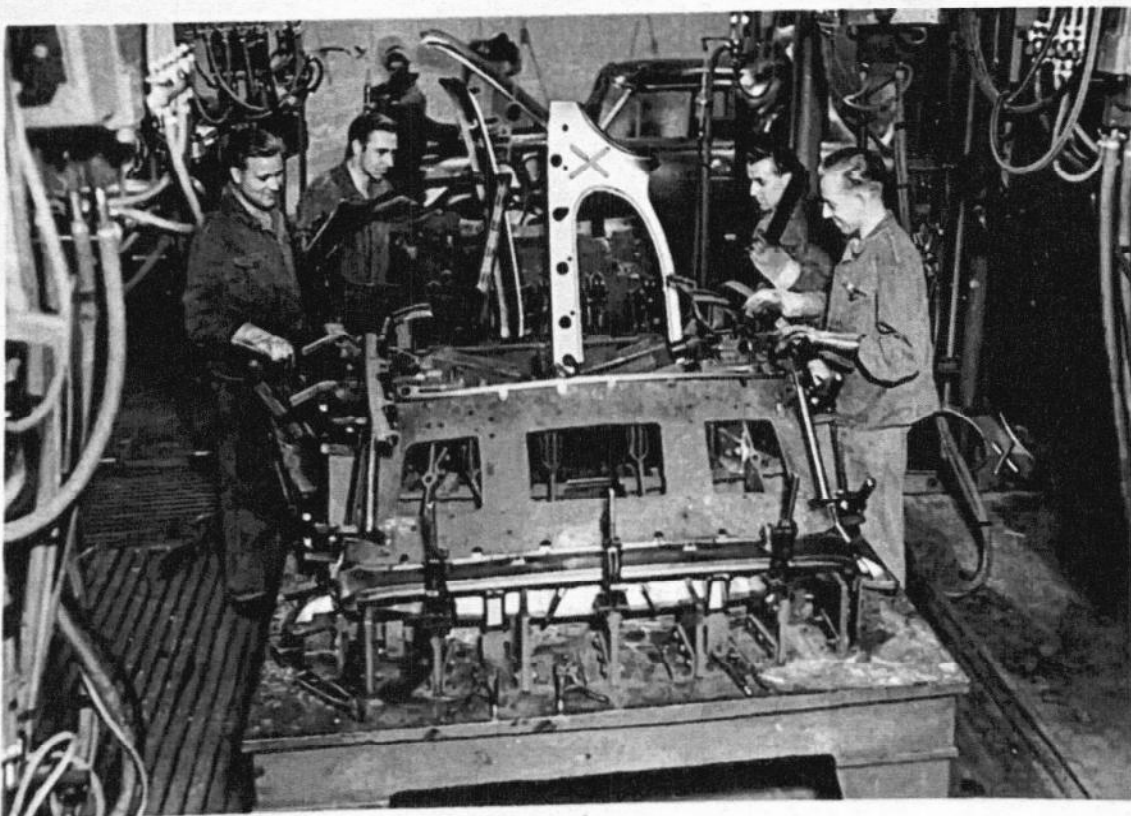


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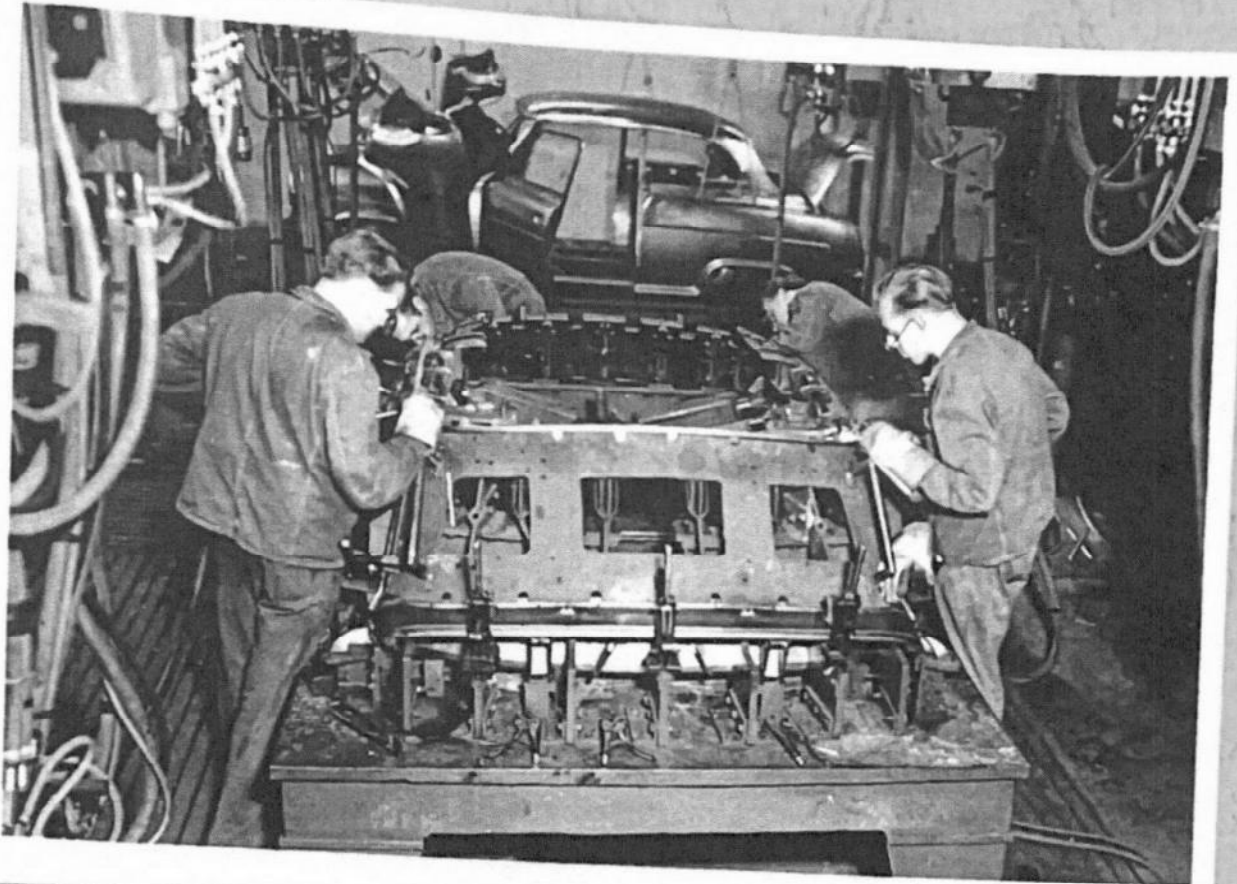


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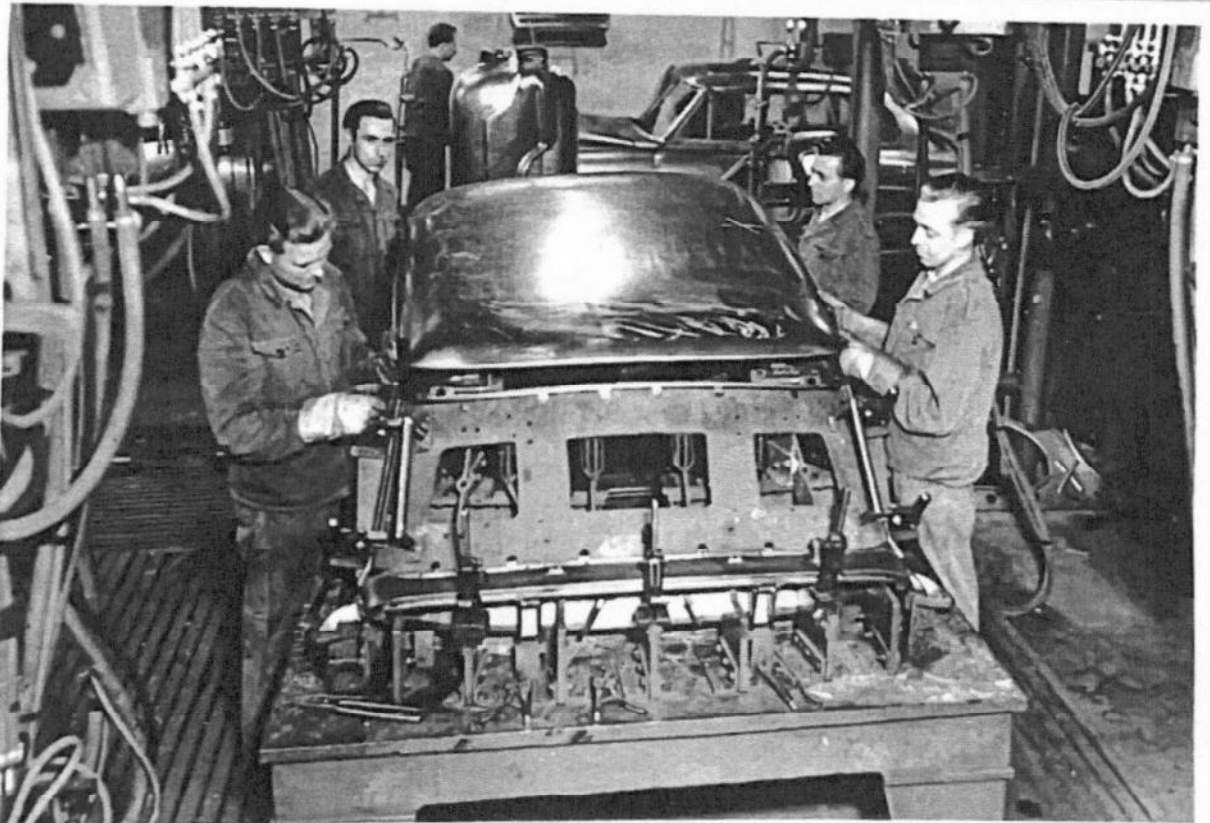


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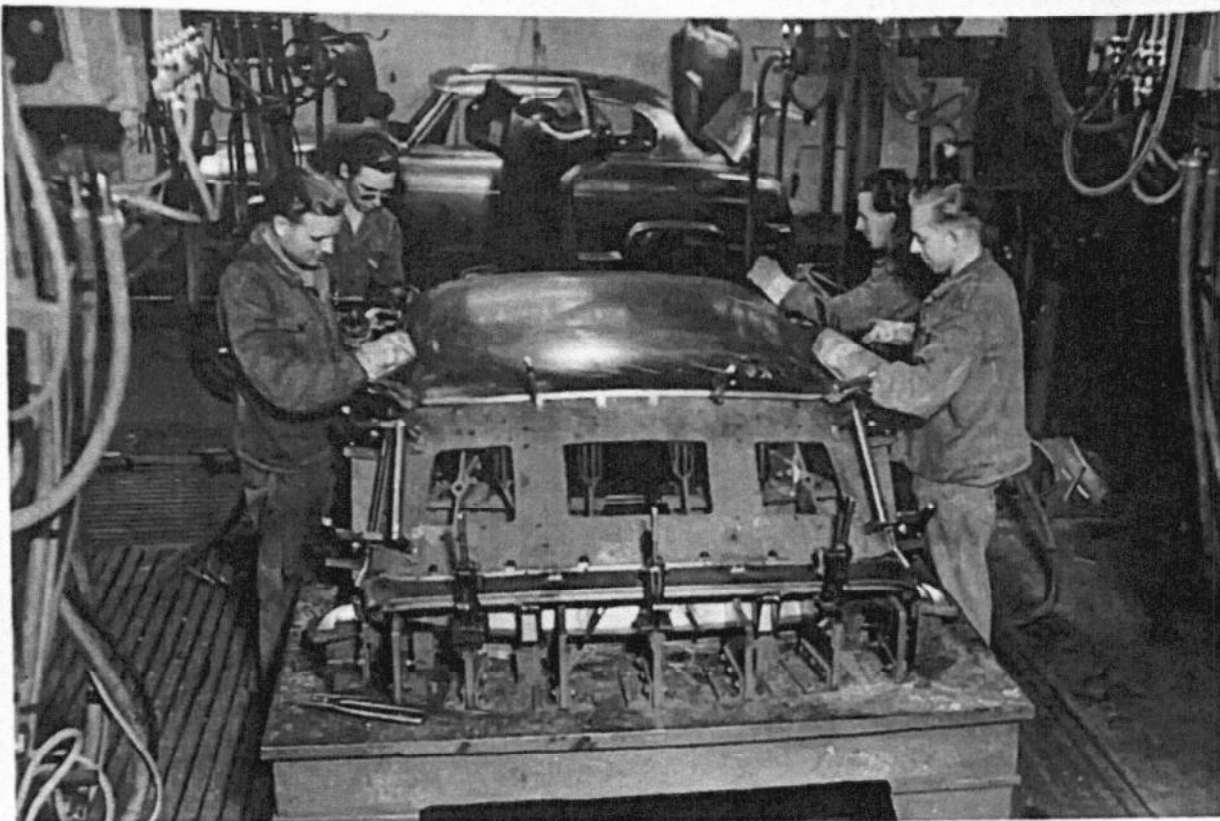


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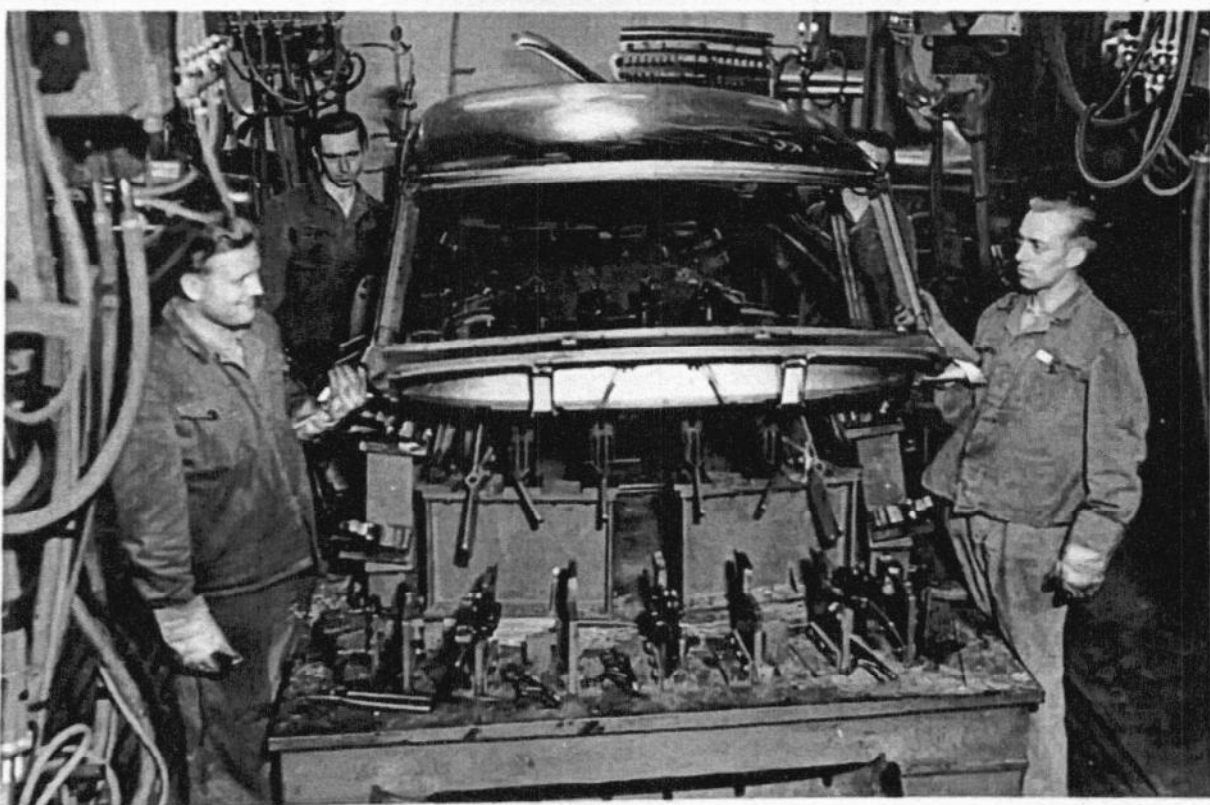


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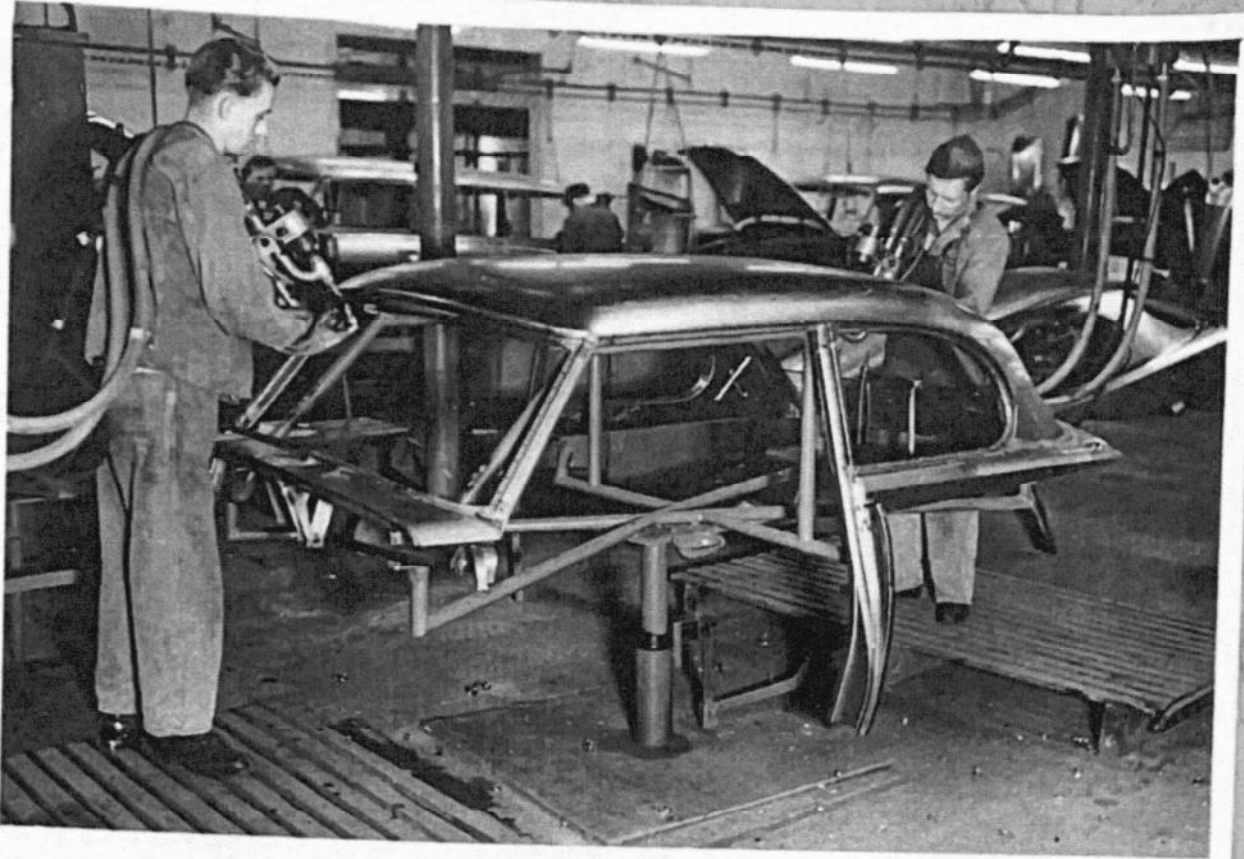


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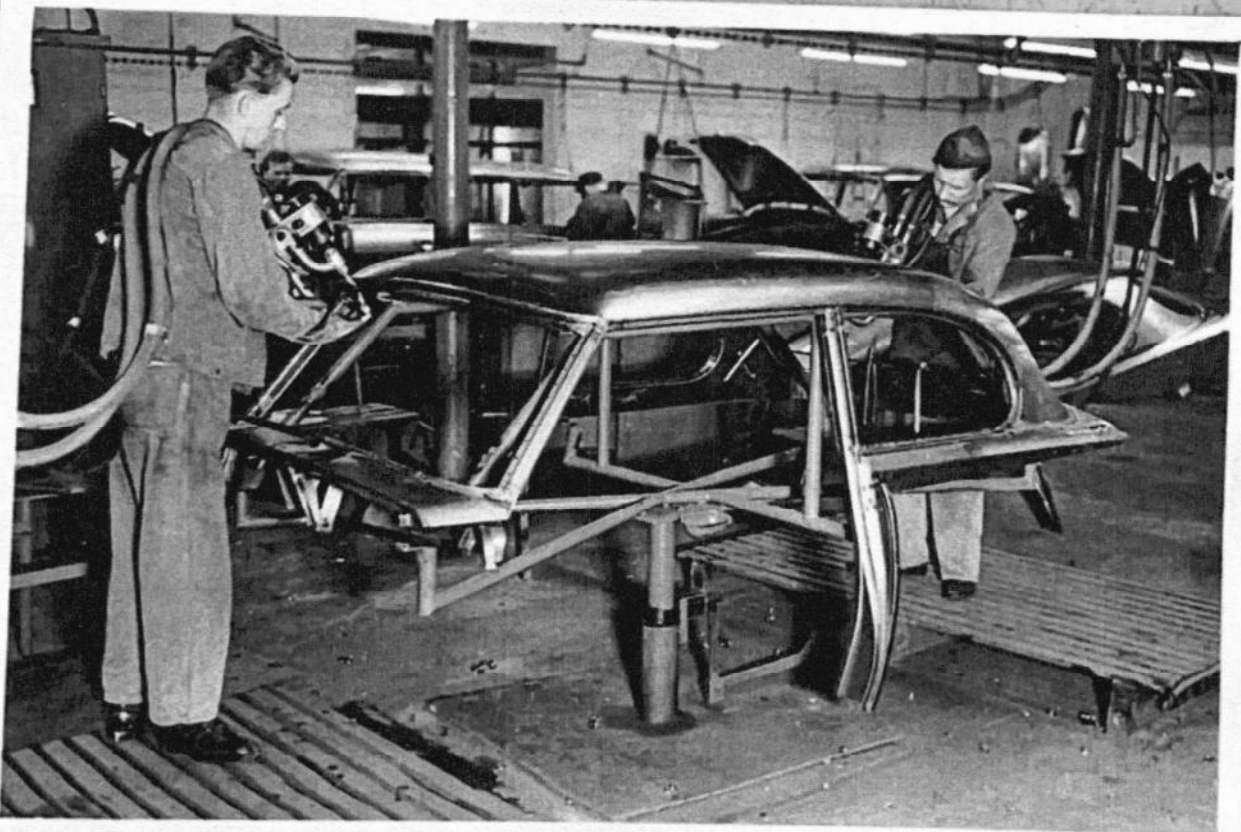


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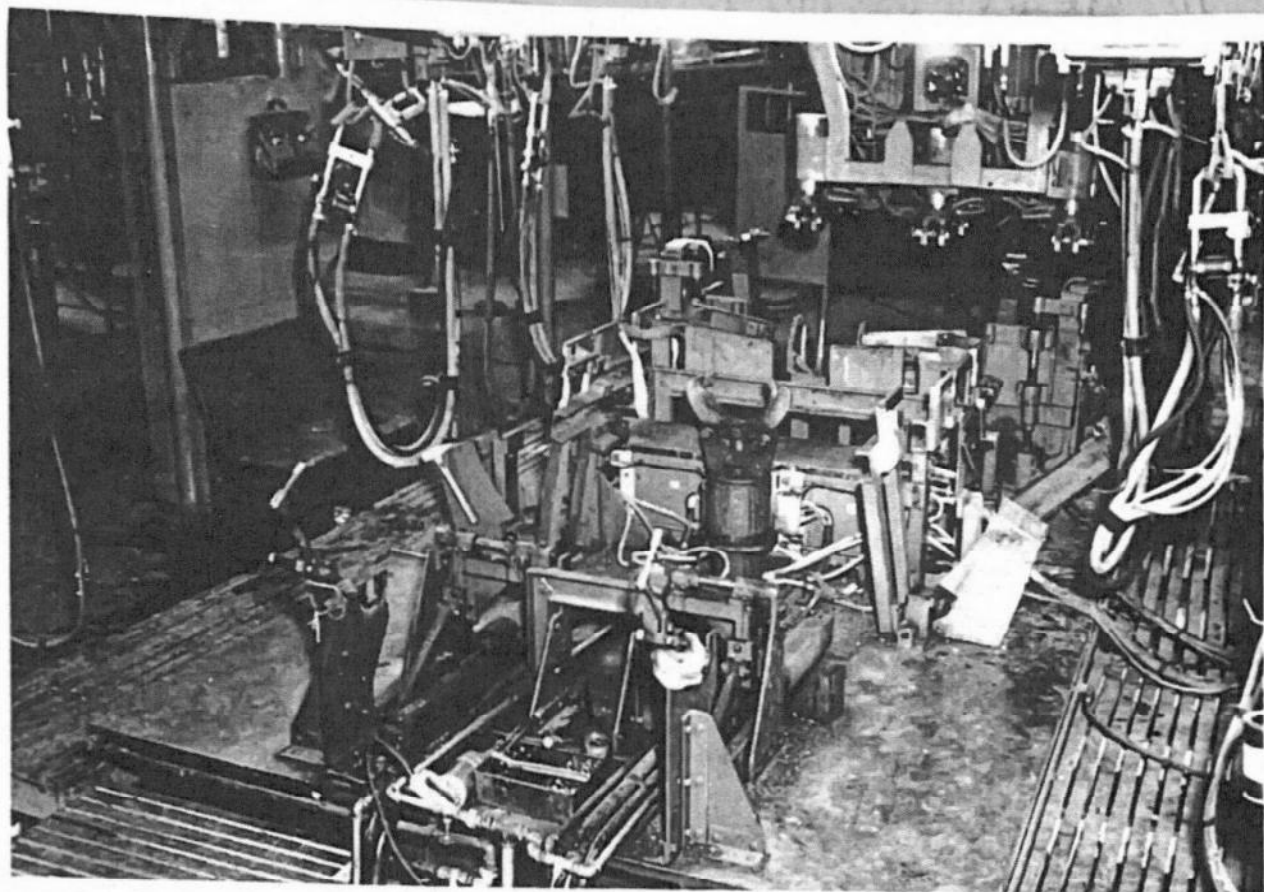


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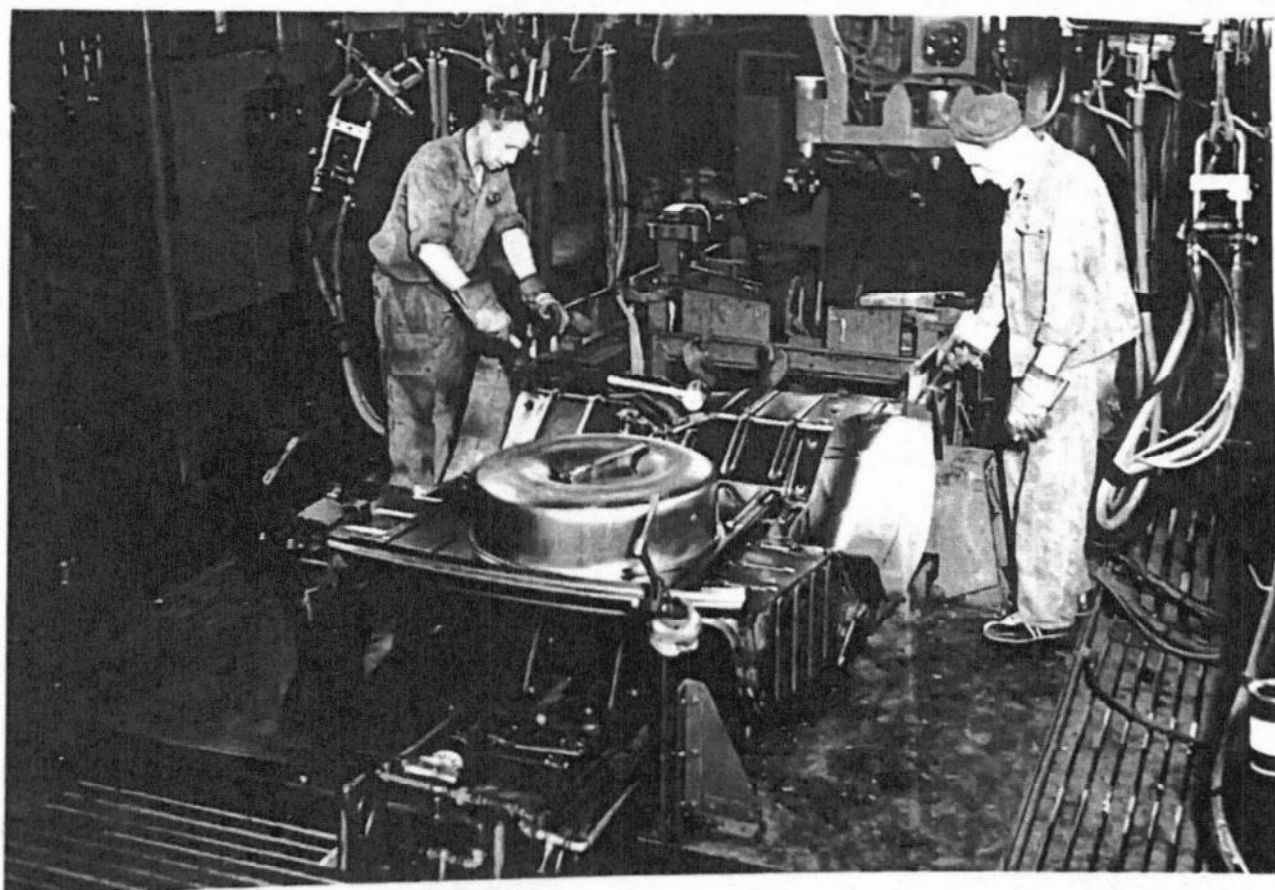


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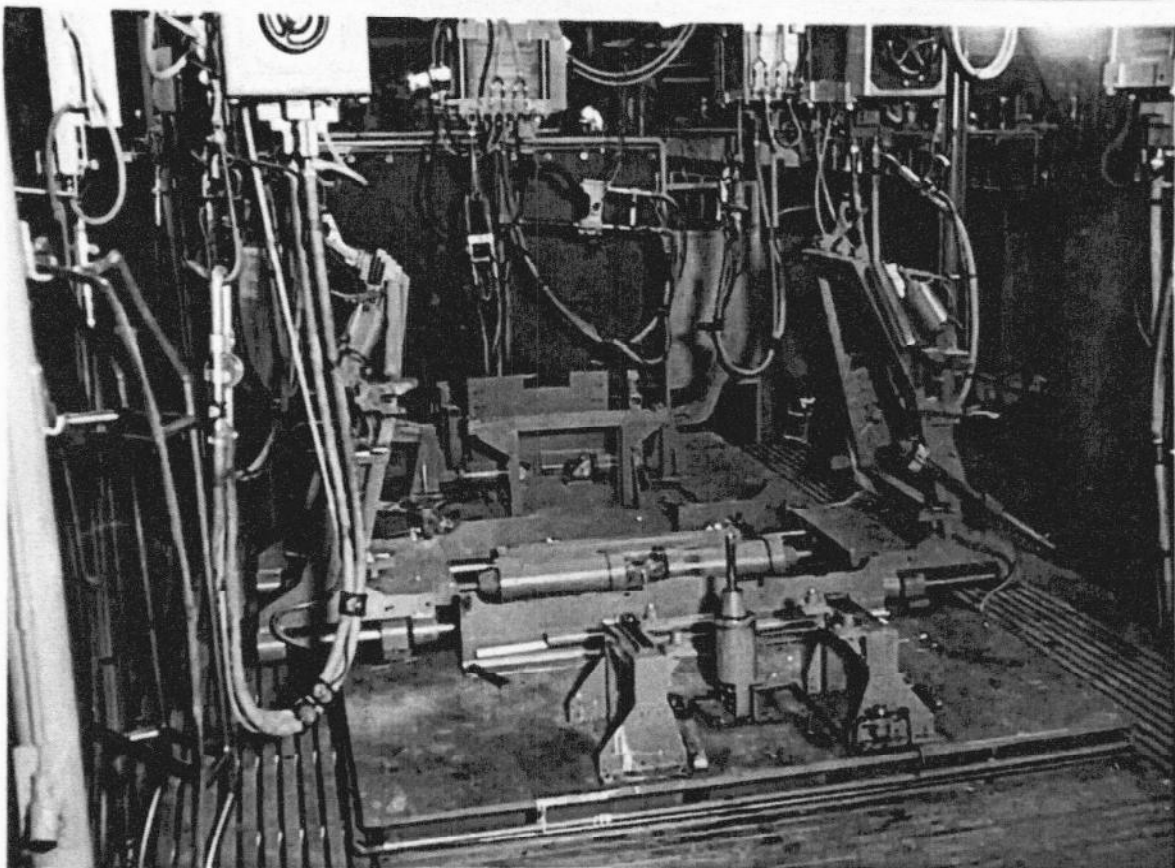


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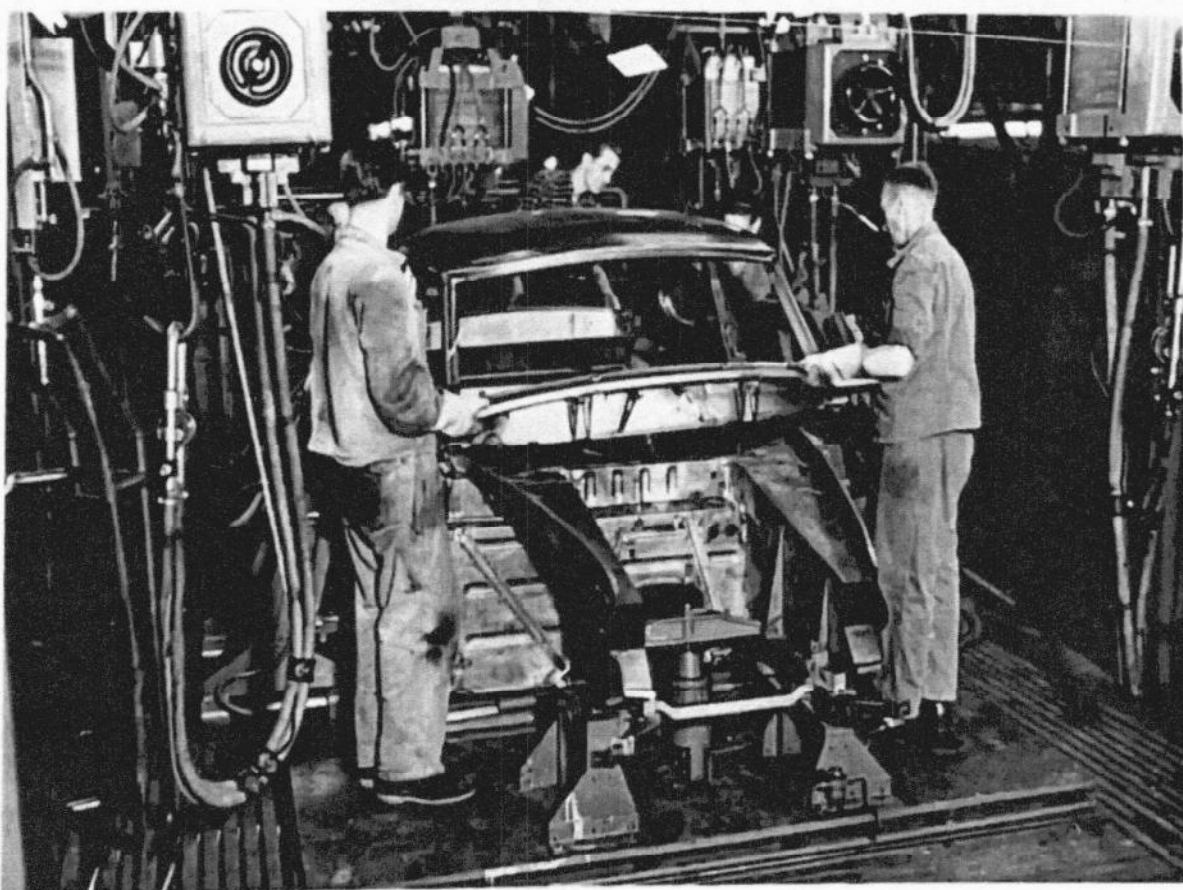


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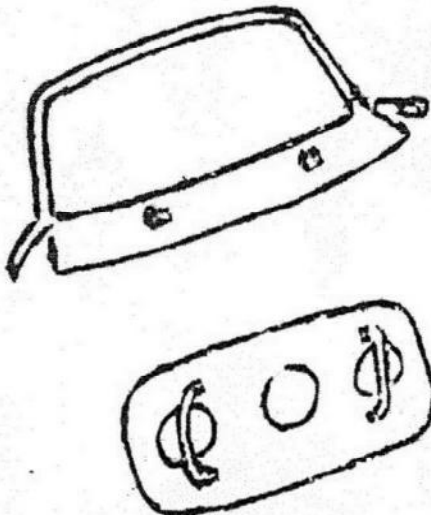


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H 1500 - "Isabella" Saloon.
Assembling Instructions - Body Roof.

1.) Assembling of roof:

In the first place the complete fore windshield 65.41 -24 U is put in the assembling device VZ - 5002 1343 - 1 for welding and spot welding of the inner roof parts with the roof exterior sheet.

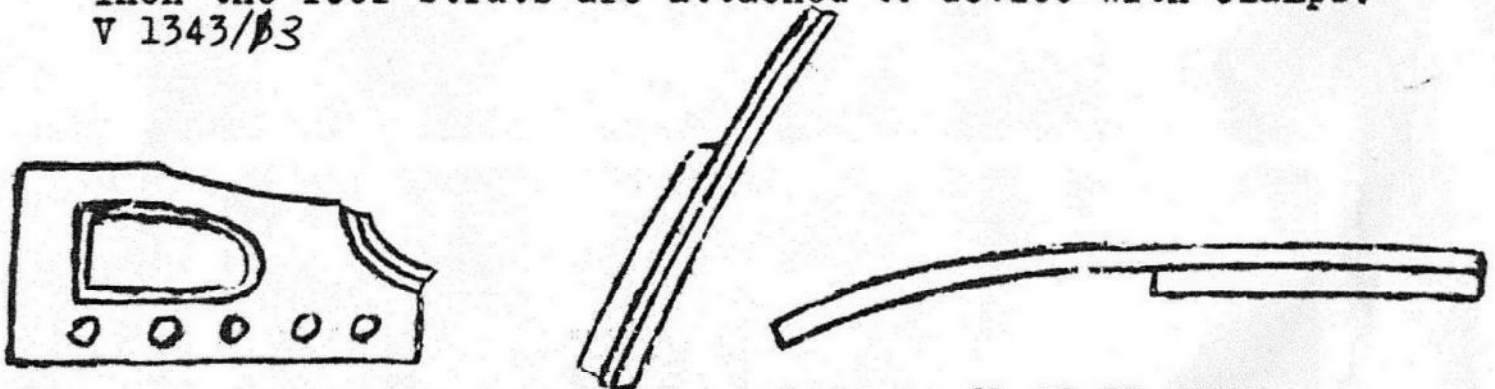


Place the fore device plate in the window aperture. The windshield frame 65.41-24 U is attached with six levers, the device plate however with only one lever.

Then insert on the left side interior sheet GA 65.43-24 LH as well as door pillar 2 GA 65.42-27 U and the left outward roof strut GA 65.44-13.

Insert on the right side the rear interior sheet GA 65.43-25 RH, then the door pillar 2 - GA 65.42-28 U.R.H. and the right roof strut GA 65.44-14..

Now the two skylights of the device must be closed and tightened, so that the inner window sheets fit firmly. Then the roof struts are attached to device with clamps.
V 1343/β3



Attach the rear window inner sheet GA 65.43-33 with two clamps to the rear side of the device.

V = Photo No.

The rear window inner sheet must be welded autogenous with a welding seam of 150 mm or appr. 5', the roof center struts with a welding seam of 50 mm or appr. 2" on the left and right rear inner sheet.

Two evaluation angles D 65.42 - 162/163 for the trunk lid must be welded to the bearing brackets left and right on rear window inner sheet.

The roof struts GA 65.44 - 13/14 must be aligned and trimmed with tinman's snips. Now roof struts right and left are spot welded 10 times each on the rear window sheets and in front welded autogenous to the windshield frame as well as both door pillar panels. V 1343/5.

Now the three windows of the device are opened, the roof is put into the device and attached. V 1343/7.

Both side windows and the rear window of the device must be closed and tightened.

The left and right side as well as the front part of the roof are clamped to the lower parts of the device with appr. 15 clamps.

Now realign the roof guttering all around with hand hammer. Spot-weld roof, rear, five times to roof centre strut A 65.43-33.

Attach roof guttering autogenous, 10 times on each side and 8 times on windshield frame.

Then the left side of the roof is welded to the top end of the left door pillar panel. The window parapet is welded autogenous to the door pillar panel and in front the roof to the left side of the windshield frame, the same working operations apply to the right side of the roof. V 1343/9.

Finally the attachment clamps (Number: 15) are taken off, both side windows and the rear windows of the device are opened and the device front plate removed. The complete roof can be lifted out now. V 1343/11.

2.) Spot welding of body roof on turning support:

The complete roof is lifted out of device VZ-5002 and is placed on turning support (Turning support VZ-5916)

Each side window, which is already attached is now attached by spot welding with appr. 80 spots with spot welding tongs. Spot weld to inner edge at uniform intervals.

Re-align the inner edge of rear window with hand hammer. The inner edge is now spot welded with the same spot welding tongs. Weld at uniform intervals, appr. 130 welding spots.

Windshield window is spot welded on upper edge. Make spots at uniform intervals of 25 mm or appr. 1". V 1343/15.

Trim the inner edge of rear window with tinman's snips and regrind with hand grinder.

V = Photo No.

3.) Body roof autogenous welding:

Put roof on support and align edge on rear side windows and windscreen pillar panels, bottom, with a hand hammer.

Now weld both door pillars, top, to the roof and in centre to the window parapets.

Weld roof guttering at the ends, on both sides of the roof. Weld both evaluation angles for the trunk lid at the rear part to the lower part of the roof. Weld brackets for the instrument panel on front part. V 1344/2.

4.) Roof - roof guttering autogenous welding:

The roof is put on a support in a box.
(Support VZ - 5917)

Align top edge of roof guttering with a hammer and trim irregular spots of edge with tinman's snips.

The outer edge of the roof is now welded (Argon process).
V 1344/3/5.

5.) Grinding of body roof and cleaning of welding positions:
(Support VZ - 5915)

The body roof is put on a support and all welding locations are neatly ground.

Welding seams on roof guttering and windscreen pillar panels are neatly milled (Small miller in electric hand drill) and all irregularities removed, the same applies to both door pillar panels. V 1344/7.

Mill away all irregularities on both side windows and on rear window.

Clean roof surface all round with disk miller.

Last working process: Align exactly roof guttering on roof with hand hammer and holding on tool.

V = Photo No.

H 1500 - Isabella Assembly Instructions for
Body - Lower Part Assembly GA 65.43-119

Consisting of : Rear part
Front part
Frame
Floor sheet
Large size device: VZ - 4976 V 1341/5

Firstly the rearpart is inserted to the device and attached.
Align front edge of wheel arch panel and notch with tinman's
snip. V 1341/7. Put front part in device and attach. V 1341/11.

Insert frame and attach with lever.

The rear floor sheet must be spot welded to rear cross rein-
forcements. The flange edge must be tilted by hand and in
following is hammered with compressed air hammer.

The front edge of the dashboard is spot welded to the front
cross member, the projecting edge is tilted with a hammer and
rehammered with compressed air hammer.

The gearbox cover sheet must be spot welded to the dashboard.
Edge is tilted with hand hammer and rehammered with compressed
air hammer.

Next working process: Spot weld the rear inner sheet and the
dashboard side part to the top part of threshold (Left and
right). Following weld (autogenous) dashboard to gearbox
tunnel and threshold top part in 4 places. V 1341/13.

Spot-Weld 2 angles E 65.43-121 for rear engine suspension to
gearbox tunnel.

Girder bottom ends must be realigned.

Drill out two holes 11 mm or .4331" in gallows and rear floor
sheet. Insert two c.s. bolts M 10 in gallows and floor sheet
and tighten with nuts.

Drill out 4 holes 11 mm or .4331" for axle suspension.

Spot weld, in front, threshold top part to dashboard, appr.
15 welding spots.

Weld autogenous wheel arch panel left and right to threshold
top part.

Two holes, 11 mm or .4331", to be found in both gallows serve
for brazing the gallows to the rear floor sheet.

Application of floor sheet:

Spot weld floor sheet to top edge of threshold top part on each
side, left and right.

The floor sheet is then spot welded to the rear cross rein-
forcements. V 1340/2.

The floorsheet is spot welded in front to the gearbox tunnel,
tilt the flange edge with a hand hammer and compress with
compressed air hammer.

V = Photo No.

Spot weld floor sheet in centre to the central cross reinforcements with impact spot welder. Spot weld front side of floor sheet left and right to dashboard; tilt dashboard edge with hammer and compress with compressed air hammer. The rear end of the floor sheet is autogenous welded to the end of the floor sheet, left and right.

Weld 2 holes for car jack autogenous.

Braze 3 places on gearbox tunnel.

The floor sheet is 3 times spot welded in longitudinal direction to both floor thresholds and centre tube with spot roller or impact spot welder. V 1341/2.

Open device and lift out lower part of body. V 1341/3

Turning Device VZ 5452-2

for body lower part

The body lower part is put in the turning device by DEMAG crane and attached.

The underside of the body lower part stands upside down, both holes for the car jack, left and right, are electric welded. V 1340/5

The floor sheet, rear and left above the gallows and above the centre tube, is electric welded.

The cross member D 65.41-88, the connection angles 65.43-73/74, the bearing sheets D 65.41-544/545 and the girders GA 65.43-377/378 are electric welded left and right to the front side sheets of the girder floor GA 65.41-20 U / 21 U.

Braze the gearbox tunnel left and right to the dashboard and floor sheet. The device with body lower part is revolved by 180 degree. V 1340/7.

The lower hinge boxes left and right C 65.41-128/129 are electric welded underneath to the thresholds, the front side of the hinge boxes is closed by welding. The edge of the upper hinge boxes D 65.41-117/118 is electric welded to the dashboard and the angles B 65.41-449/450 are also electric welded together on a shank with the upper hinge boxes.

Four spacer tubes E 65.41-38, 22 mm or 7/8" dia., are electric welded to the front side beams, left and right.

Bosch horn bracket E 65.43-156 is electric welded inside to the left front wall.

The brake pedestal E 65.41-114 U is electric welded to dashboard and left front part.

The rear floor sheet is electric welded about 80 mm or 3 1/8" length to the front edge above the centre tube.

Braze dashboard right and left, front, to the thresholds. Braze angles B 65.41-449/450 above front door pillar panels to upper hinge boxes. V 1340/9.

Braze dashboard, front in the corners two times to the gearbox tunnel and braze gearbox tunnel to centre tube one time.

The dashboard must be also brazed to the reinforcement two times on each side.

The rear inner sheet left and right must be brazed inside on each side to wheelarch panel and side sheet.

On the outside, the side sheets are brazed to wheel arch panels and thresholds.

Altogether there are 21 hard soldering places.

Then the body lower part is lifted out of the turning device by DEMAG crane and placed in the last device VZ 4977.

H 1500 General Body Assembly
(Large size device VZ 4977)

The body lower part is inserted in welding device by DEMAG crane and attached. V 1340/11

Realign inner side sheets with hammer. The two supports for the rear seats are spot welded with impact spot welder.

The complete roof is now placed by DEMAG crane on the body lower part and attached. V 1340/15.
a grid of the device comes into the windscreen frame.

One angle each D 65.41-349/350 is spot welded left and right to the front part.

The roof is spot welded left and right to the rear inner sheet.
The rear door pillar panels left and right are spot welded inside to the roof.

The windscreen frame is autogenous welded underneath to the left and right front door pillar panels. V 1342/1.

The window parapet left and right to the roof are spot welded to the rear inner sheet left and right.

The windscreen frame is spot welded to the front part inside the body. Then the edge of the windscreen frame on the front part is tilted with a hammer and recompressed with compressed air hammer.

The rear door pillar panels are autogenous welded underneath to the floor thresholds.

The device is now opened. The grid is removed from the windscreen frame. The complete body can be lifted out by DEMAG crane. V 1342/3

Electric welding of complete body:

The bottom edge of the left and right front door pillar panels and the bottom edge of the left and right rear door pillar panel are electric welded to the floor thresholds.

The two supports E 65.43-161 U for the rear seats are electric welded to rear floor sheet. Fill up twelve holes in rear floor sheet by electric welding and connect through this the rear floor sheet to the left and right galleys.

Two supports tubes E 65.43-70 for car jack are electric welded to centre cross beams.

Two reinforcement angles E 65.43-121 for rear engine suspension are electric welded to gear box tunnel.

Sheet ends of the front girder floor GA 65.41-20 U/21 U which project into body, are electric welded to the floor sheet. One bolt M8 x 40 is electric welded to rear floor sheet.

Autogenous welding of complete body:

The following items are autogenous welded:

Connection between front door pillar panel and windscreen pillar panel, left and right.

Rear inner sheet on door pillar panel left and right. Rear inner sheet upper part with rear inner sheet upper part front left and right.

Wheel arch panel to inner sheet outside left and right. Support for pedestal for steering column on lower part of windscreen frame.

H 1500 Rear Part GA 65.43-281

The welding group 2 consists of:

Rear floor sheet	GA 65.43-26
with spare wheel container	
Apron, rear	GA 65.43-30
Wheel arch panel, left and right	GA 65.43-19/20

This welding group 2 is placed in the assembly device VZ 4967. Following left the rear inner sheet lower part GA 65.43-37 and right the rear inner sheet lower part GA 65.43-38. The backrest sheet GA 65.43-29 is placed in the centre.

The device is now closed. Attach each inner sheet with 3 levers and the backrest sheet with two levers.

The bottom edge of the inner sheets left and right are spot welded to the wheel arch panels left and right with spot welding tongs.

The backrest sheet is spot welded to the rear floor sheet as well as left and right to the wheel arch panels with an impact spot welder. V 1344/9.

The rear inner sheet is spot welded, appr. length 120 mm or 4 3/4", on each side to the floor sheet.

The device is now opened so that the connection sheets GA 65.44-11/12 left and right can be spot welded to the rear inner sheets and backrest sheet. V 1344/11.

Two skin plates C 65.44-52/53 are spot welded after fixing to the top of the back rest. sheet.

The complete rear part is lifted out of the device and let down. V 1344/13

Complete rear part GA 65.43-281

Rewelding, spot rewelding and brazing outside the device.

The rear inner sheet - lower part left and right is spot welded at the rear to the floor sheet.

Then the right side, appr. length 100 mm or appr. 4", is autogenous welded.

The apron rear is autogenous welded to the rear floor sheet.

The spot welded cross reinforcement C 65.43-130 or spare wheel container and floor sheet is autogenous welded.

Penetrated spot weldings on wheel arch panels are autogenous re-welded.

The rear inner sheets are brazed to the wheel arch panels and the rear floor sheet; in trunk room corners left and right.

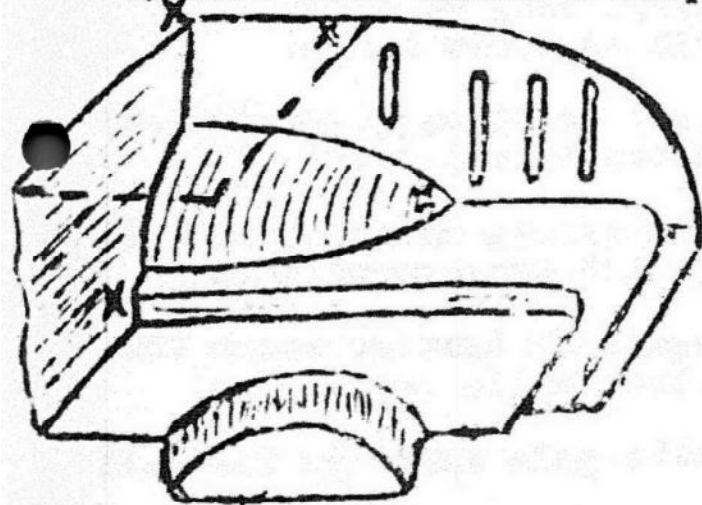
The backrest is brazed left and right to the rear floor sheet.

Furthermore the backrest is brazed to the inner sheets left and right.

The upper edge of the backrest is brazed left and right to the rear inner sheets.

The rear apron is spot welded left and right to the rear inner sheets.

The upper edge of the apron is autogenous welded left and right to the rear inner sheet and re-hammered, the projecting edge is trimmed with tinman's snips and burrs and ridges removed.



X Braze four places on each side.

Assembling instructions for undressed body assembly line.

- 1.) Place body on assembly line.
- 2.) Align windscreen and rear wall window with master gauge and bolt bearing block for engine hood to dashboard.
- 3.) Process flanges and weldings within the windscreen, the side windows and rear wall window. Cut off projecting sheet on rear door pillar panel, realign and grind.
- 4.) Machine welding seams within the door aperture and windscreen pillar panels.
Paint hinge fitting surface with colour.
- 5.) The following items must be processed for brazing: spot welded and welded places on rear roof extension, on profile frame for trunk lid, apron rear and roof guttering above the rear side window, on windscreen pillar panels and windscreen upper part.
- 6.) Mounting of trunk lid:
 - 1) attach hinges, insert spring rods
 - 2) screw on trunk lid
screw on locking mechanism
realign trunk lid to fit properly.
- 7.) Mounting of doors:
 - 1) insert doors, screw on and align
 - 2) insert door check arms
screw on door cotter
adjust doors to fit properly.
- 8.) Screw on supports for spring rods, insert spring rods and fit hinge levers and hinge guides.
- 9.) Support for grille mounting, punch inconsecutive serial body number and drill out spacer tubes for engine mounting.
- 10.) Screw on hood to hinge lever, screw on support for locking mechanism, align hood.
- 11.) Set up front wing attachment holes, remill, realign and screw on.
- 12.) Remill rear wing attachment holes, set up, realign and screw on.

- 13.) Mount grille sheet and realign engine hood accordingly.
- 14.) Solder welding places and roof guttering on windscreen pillar panel and adjust windscreen pillar panel upper part to wing.
- 15.) Solder spot welded places on roof extension.
- 16.) Solder roof guttering above side window.
- 17.) Solder welding places on profile frame for trunk lid and spot welded places on the apron. Solder rear door pillar panel at the lock and side window arch.
- 18.) Trim solder places on windscreen pillar panels on roof extension,
on windscreen pillar panel upper part,
on roof guttering,
on profile frame for trunk lid,
and on apron.
Rear door pillar panel at the lock and side window arch.
- 19.) Equalize door passage to front and rear wing.
- 20.) Inspection.
- 21.) Eliminate faults discovered by inspection.
- 22.) Cleanse body.
- 23.) Unscrew, take off and number the following components:
Front and rear wing,
grille sheet, striker plate, door parapet sheets and door profile frame.
- 24.) Transport body to paint shop and assembly line.

Preparatory operations for body final assembly.

1. Prepare defroster nozzles for installation.
2. Prepare heater flaps for installation. Paste on foam-rubber sealing and paste on rubber buffer on rear side.
3. Adjust secondary lock and prepare for installation.
4. Prepare pullrod and striker plate for installation.
5. Attach "Borgward" signature to frontwings left and right.
6. Pull up triangular pane and window glass.
7. Attach lock and safety catch.
8. Paste on 3 foam-rubber strips to heat interchanger.
9. Prepare cubby box for installation by attaching connection angle with 5 hollow type rivets and mounting of support clip.
10. Assemble license plate lamp and attach "Borgward" letters.
11. Paste on rubber strip and circular rubber to instrument insert for instrument panel.
12. Paste on foam-rubber strips to dashboard for front wings.
13. Assemble and prepare swivelling window and mount aperture guide.
14. Assemble rhomboid and attach 2 profile battens.

Mounting operations for body final assembly.

- a) Installation of the complete pedal gear, hand brake rod and clip for speedometer cable.
- b) Screw on straps for fuel tank right underneath rear and mount one support each for bumper right and left.
- c) Attach oil pressure pipes in engine room between cylinder and left and right side wall.
- d) Install intermediate shaft for gearchange in wing room left front.

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Body - Final Assembly

Sequence of working process.

1. Install wire trellis on heater channel left and right.
2. Install trunk lock, connect Bowden cable and attach in trunk room, adjust lid to fit properly.
3. Install section radiator block left and right.
4. Install sealing rubber for trunklid, paste on weatherstrip to door, front, paste on sealing rubber on wheel arch panel and seal with "Bostik", paste felt on roof inside.
5. Rubberize 4 door rubbers and paste on frame.
Paste on door pillar rubbers.
6. Lay tail lamp cables in body - trunk room connect ground cable rear and front (Tail lamp cables = License plate lamp = Stop - blinker)
7. Lay main harness, lay engine cable in engine room.
8. Install fuse box, insert insulators, pull through, connect, and connect stoplight switch.
9. Lay cable for roof lamp and attach. Lay tail lamp cables from rear side to instrument panel. Install ignition coil and voltage regulator.
10. Attach and connect license plate lamp, complete.
11. Paste on profile rubber strip for side windows.
Paste on 2 weatherstrips.
12. Paste on sealing rubber to baffle plate for fuel tank and screw on. Paste on sealing rubber for front wings, coat area for wings left and right with adhesive.
Paste on felt strips for front and rear wings left and right.
13. Mount front wings left and right.

14. Mount rear wings left and right.
15. Install defroster nozzles left and right.
16. Install heater flaps left and right.
17. Install grille, pre-align and fasten.
18. Align grille completely and finish assembly.
19. Attach bulge sheets, align and screw on.
20. Align hood, install lock, and adjust to fit properly.
21. Install top baffle plates in front wing left and right.
22. Install remote control lock (Insert striker plate)
23. Install door lock and door handle, connect linkage for remote control lock, adjust door to shut properly left and right.
24. Prepare windscreen glass front and install.
25. Prepare glass for backlight and insert.
26. Attach scoop for stop lamp and blinker left and right, attach scoop for reflector left and right, attach scoop for reflector left and right and install reflector.
27. Install battery, clamp on positive (plus) cable, install "Bosch" horn, connect ignition coil and voltage regulator
28. Install window regulator for triangular window and door window.
29. Assemble window frame left and right.
30. Install window frame left and right.

31. Adjust parapet sheet and prepare for assembly.
32. Install parapet sheet on doorwindow left and right.
33. Attach rhomboid and chromium profiles to grill (U frame)
34. Attach windscreen pillar panel ornamental moulding, attach "Isabella" badge to trunk lid.
35. Ornamental mouldings, front wings, door, rear wing left and right. Parapet ornamental moulding door left and right.
36. Attach rear parapet ornamental moulding.
37. Align trunk lid, adjust to fit properly, equalize with remaining body, install protection flap for locking cap, attach Bowden cable and handle to interior rear seat side.
38. Install and connect dimmer switch, door switch, blinker automatic and terminal strip, connect existing cables.
39. Attach ornamental moulding and hood moulding (mascot) to hood. Attach "Borgward" badge to engine hood.
40. Install rear blinker lamps left and right.
41. Install and connect headlamp and front blinker lamp.
42. Install windshield wiper motor unit, wiper axle and wiper arm, connect wiper motor.
43. Sliding roof. Installation of complete guiding frame. (Special design)
44. Attach defroster, heater and starter cables to instrument panel.

45. Installation of stepboard battens right and left.
Installation of door left and right.
46. Install door plates left and right.
47. Align door.
48. Installation of side window frames left and right.
49. Install parapet battens.
50. Install instrument panel.
51. Install cubby box.
52. Install door frame.
53. Adapt all plastic parts and grind to proper fit if necessary.
54. Installation and connection of clock, combination instrument, speedometer, ignition switch with starter, head lamp switch, panel light and warning lights.
55. Inspection of the complete electrical equipment. Elimination resp. repair of all faults.
56. Install ventilator (Swivel) window left and right.
57. Attach sunvisor, rear vision mirror, cloth hangers left and right.
Install door contact rubbers and roof lamp and connect.

Final Assembly

Preparatory working process for final assembly:

- 1a Mount tyres and balance
- 1b Rig engine and mount on front axle
- 1c Completion of fuel tank
- 1d Finish oilpressure pipe and fuel pipe assembly
- 1e Completion of radiator

Final Assembly

- 1. Put front- and rear axle on assembly device.
- 2. Completion of body from underneath.
- 3. Place body on front- and rear axle and assemble.
- 4. Hang brake cables, assemble drive shaft, bolt gearbox suspension and install neck journal.
- 5. Install stabilizer and exhaust pipe complete and connect oilpressure pipe.
- 6. Install radiator.
- 7. Install complete heater equipment in engine room.
- 8. Install steering column.
- 9. All connections in engine room.
- 10. Attach front- and rear bumpers.
- 11. Bleeding of brake system, install cover plate in left wing (front)
- 12. Wheel mounting, inspection of complete car.
- 13. Adjustment of track.
- 14. Run in.

Preparatory operations
for assembly on body
final assembly line

- 1. -

	Part No.	Parts required
Prepare defroster nozzles for installation	D 65.45-32/33	1 (ea.) striker plate, 1. a. r.
Prepare heater flaps <u>A2</u>	865.45-26U/	1 (ea.) lock with remote
Prepare remote control lock <u>A3</u>	27U	control lock complete
Pre-align pull rod and striker plate <u>A4</u> <u>A1</u>	65.45-175/176	1 (ea.) pull rod with deflector
		4 Bolts, hex, M 6 x 10 DIN 933
		4 toothed washer A 6,4 DIN 6797
	E 65.45-183/184/185	Sev. shims for striker plate
	B 65.41-140U/141U	1 (ea) Defroster nozzle
	665.41-96U	2 heater flaps
	State of body at begin of working process see photo 1346/1 and 1345/15	

Past on heater flaps, paste on heat inter-changer prepare cubby box for installation, <u>A2</u> <u>A8</u>	C 55.41-96U	2 heater flaps
attach clamp and angle sheet with hollow rivets <u>A9</u>	D 65.41-74U	2 Part radiator blocks (heat interchanger)
	B 65.41-369U	1 Cubby box
	D 65.41-371U	1 Angle batten
	E 65.41-468	1 Clamp
	GHE No.32425	7 Hollow rivets
	B 65.41-370	1 Sheet strip
		Adhesive
	E 65.41-99	2 Rubber frames for heater flaps
	E 65.43-222	2 sealing rubbers for heat interchanger
	E 65.43-223	4 ditto

Assembly of rhomboid, screw on profile battens <u>A14</u>	E 65.41-392	1 Set letters "Hansa 1500"
		18 "Ateco" lock washers 2.5 Ø Ateco 5107
	E 65.41-391	18 washers
	65.41-178	1 centre batten
	65.41-179	1 centre batten
	65.41-177	1 Rhomboid inner sheet
	65.41-176	1 Rhomboid outer sheet (galvanized)
		6 Washers 5.8 DIN 440
		6 Spring washers A 5.3 DIN 6797 (galvanized)
		6 Nuts, hex, M 5 DIN 934

Screw on complete locking mechanism complete to radiator grille

C 65.41-156U

- 1 Locking mechanism compl.
- 2 Bolts, hex, M 8 x 15 DIN 933
- 2 Spring washers A 8 DIN 127

A7

Completion of license plate lamp

2C 38.48-224

- 1 Lamp cap

Paste on rubber strip and circular rubber to instrument insert for instrument panel

2D 3.48-225

- 3 Buttonhead bolts A M 5 x 12 DIN 86
- 1 Frame for brake lamp cap
- 3 Washers, 5.3 DIN 125
- 3 Spring washers A 5,3 IN 6797

Paste on foam rubber strips to baffle plates for front wing

A10

2E 38.48-58

- 3 Nuts, hex, M 5 DIN 934

A11

E 65.42-183

- 1 Set Borgward letters
- 2 Rubber gaskets for lamp casing

A12

E 65.42-201

- 16 "Ateco" lock washers "Ateco" 2 Ø 5107

C 65.41-351

- 16 Washers

C 65.41-352

- 1 Wall in wing, L.H.
- 1 ditto, R.H. (Baffle plates)

E 38.48-73

- 2 Seals, foam rubber

E 65.43-220

- 2 ditto

E 65.43-221

- 2 ditto adhesive

Assembly of instrument panel, paste on radio cover, attach blind frame and attach cubby box lid

D 65.41-379

- 1 Blind cover "Isabella"

C 65.41-325

Radio blind cover

E 65.41-361

Circular rubber

(Obsolete when radio is installed)

2E 38.41-469

- 1 Ashtray

GA 65.41-137

- 1 Instrument panel

65.41-461

- 1 Loudspeaker fabric

- 3 c.s. bolts M 4 x 15 DIN 63
- 4 cylinder bolts, M 5 x 8 DIN 84

E 65.41-464

- 1 Angle for ashtray

- 4 c.s. Bolts (ashtray) M 4 x 15 DIN 63

- 4 Toothed washers A 4.3 DIN 6797

- 4 Nuts, hex, M 4 DIN 934

- 4 Fan washers A 5.3 DIN 6798 (phosphate)

Cubby box lid

C 65.41-321

- 1 Hinge pin

E 65.41-367

- 1 Hinge pin

E 65.41-368

- 1 Button for cubby box lid.

E 65.41-336

- 2 Grub screws for attachment of hinge pins M 5 x 8 DIN 553

Supplied as unit

2E38.48-113	2 Rubber guide lips 4.5 Ø
E 38.41-515U	1 Spring roll
	1 Lens-head bolt M 4 x 12 DIN 91
	1 Nut, hex. M 4 DIN 934
	Cloth protection washers GHE No. 32 643 (Brass- nickel plated)
	Fan washer A 4.3 DIN 6798 (phosphate)
	Washer 4.3 DIN 125
E 65.41-328	2 Blind frames side part
E 65.41-327	2 Blind frames, instrument side part
E 65.41-326	2 ditto
C 65.41-333	1 Blind frame centre part
D 65.41-334	1 Blind frame cubby box part
E 65.41-451	2 Cone head bolts for blind attachment
E 24.26-71	2 Double clamps
	2 Nuts, hex, M 4 DIN 934
	2 Toothed washers A 4.3 DIN 6797
	6 Bolts, hex, M 8 x 20 DIN 931
	6 Nuts, hex M 8 DIN 934
E 21.26-24	12 Washers
	6 Toothed washers A 8.4 DIN 6797

Attach "Borgward" signa- ture to front wings left and right	E 65.41-388	2 "Borgward" signatures
		12 "Ateco" lock washers 2.5 Ø A DIN 5107
<u>A5</u>	E 65.41-391	12 Washers

Pull up triangular panes and window panes. Mount support to guide channel	B 65.45-82	2 Sliding window panes
	C 65.45-86	2 Corner window panes
	65.45-93	2 Window guide channels (rustproofed)
	65.45-153	2 Felt strips
	65.45-165/166	2 Window guide channels (rustproofed)
	D 65.45-302	2 Support on corner window
		4 C.sk. bolts M 4 x 10 DIN 63
		4 Toothed washers A 4.3 DIN 97
		4 Nuts, hex. A M DIN 439

Assemble ventilator
window and finish
for installation
Attach toggle link

B 65.42-30
B 65.42-56
B 65.42-71
65.42-33
65.42-34
65.42-35
65.42-36
65.42-37

2 Panes for side window
1 Rubber frame
1 ditto
2 Frame front parts
1 Frame rear part, left
1 Frame rear, right
4 Separating angles
2 Hinge springs
8 Lenshead rivets 3 x 5 DIN
662
8 Lenshead rivets for sep-
angles
2 Toggle links, upper part
4 Lenshead c.sk. cutting
screws E M 4 x 20 DIN
7513

65.42-36

63.42-47

Body - Final Assembly

Installation of com-
plete pedal work

55.31-1U

Installation of pedal
bearing bracket with
4 hex. nuts to dash-
board

Ba E55.31-16

Pedal bearing bracket
compl.
4 Bolts, hex. M 8x25 DIN 931
4 Nuts, hex. M 8 DIN 934
2 Support plates for tension
spring (for pedal bearing
bracket)

Installation of acce-
lerator pedal gear

C55.31-29U

Mounting of hand brake
rod

Attach level to bracket,
connect brake cable

E55.31-14

4 Spring washers A 8 DIN 127

1 Accelerator pedal gear

2 Gaskets

3 Bolts, hex. M 6 x 12 DIN
933

1 Bolt, hex. M 6 x 15 DIN 933

4 Nuts, hex. M 6 DIN 934

Attach bracket for speed-
ometer cable in engine
room

Adjust play for clutch
and brake pedal

E55.31-35U

E55.31-45U

4 Spring washers A 6 DIN 127

1 Handbrake rod compl.

1 Clamp complete

2 Bolts, hex. M 6 x 20 DIN
933

2 Bolts, hex. M 6 DIN 933

2 Nuts, hex. M 6 DIN 934

1 Washer. 6.4 DIN 433

1 Spring washer M 6 DIN 127

1 Handbrake lever

1 Washer

1 Washer 10 DIN 1440

1 Spring washer A 10 DIN 127 -

1 Bolt, hex.

1 Bolt

1 Grooved nut

1 Bracket for speedo.cable

D55.31-42U

E28.31-113

E28.31-114

E28.31-21

E28.31-22

E65.43-232U

Attach straps for fuel tank and mount supports for bumpers left and right punch in chassis No.

D65.43-115U/
116 U
C65.43-188/
189U

- 1 (ea.) Strap complete
- 1 (ea.) Attachment angle f. bumpers rear, left and right
- 5 Bolts, hex. M 10 x 50 DIN 931
- 5 Nuts, hex. M 10 DIN 934
- 4 Washers 10.5 DIN 125
- 5 Toothed washers A 10.5 DIN 6797

Mounting of clutch master cylinder and brake master cylinder. Installation of brake fluid pipe from brake fluid containers on front side wall left and right. Connect brake hoses, connect brake fluid pipe of the rear axle to brake fluid container and attach to dash board

D 55.31-50U

- 1 Clutch Master cylinder (A36911-190)

D 55.31-51U

- 1 Brake Master cylinder (A37515-115)

- 4 Bolts, hex. M 8 x 30 DIN 931

- 4 Toothed washers A 8. 4 DIN 6797

- 1 Bolt, hex. M 8x18 DIN 931

- 1 Bolt, hex. M 8x20 DIN 931

- 2 Toothed washers J8, 4 DIN 6797

- 1 Nut, hex. M8 DIN 934

- 2 Washers 8.4 DIN 433

- 1 Taper pin 5x25 DIN 1471

D 55.26-52U

- 1 Brake pipe, front, left, compl.

D 55.26-54U

- 1 Brake pipe, front right compl.

C 55.26-56U

- 1 Brake pipe, centre compl.

C 55.26-44

- 2 Brake hoses, front (A 72574)

Screw on intermediate shaft for steering wheel gear change and adjust to operate smoothly

D 55.22-890

- 1 Intermediate shaft for steering wheel gear change

- 2 Bolts, hex. M8x18 DIN 931

- 2 Toothed washers J8, 4 DIN 6787

- 1 Taper pin

Install wire screen on heater-channel left and right

E 65.43-195U

- 1 Guard wire f. heaterchannel, right

E 65.43-196U

- 1 Guard wire f. heaterchannel left

E 65.43-200

- 2 ditto

E 65.43-197

- 2 Guard wire frames

E 65.43-199

- 2 Angles

E 65.43-198

- 4 Angles

- 2 Roundhead sheet screws Z 2.9x6.5 DIN 7974

Install trunk locking device.
Connect Bowden cable and attach in trunk room.
Adjust trunk lid to fit properly

D65.42-111U
D65.42-112U

- 1 Trunk lock
- 1 Bowden cable complete
- 3 Bolts hex. M 6x12 DIN 933
- 1 Nut, hex. M 6 DIN 934
- 3 Toothed washers A 6.4 DIN 6797
- 1 Washer, galvanized 6.4 DIN 125
- 4 Nuts, hex. M 4 DIN 934
- 4 Toothed washers A 4.3 DIN 6797
- 3 Clamps 1 x 6 DIN 72571
- 3 Cylinder bolts M 4 x 10 DIN 83
- 3 Nuts, hex. M 4 DIN 934
- 3 Toothed washers A 4.3 DIN 6798

Mount Part-radiator block (Heat Interchanger) with 2 (ea.) hex. bolts left and right in heater channel

D 65.41-74U

- 2 Part radiator blocks
- 4 Bolts, hex. M 8 x 15 DIN 933
- 4 Toothed washers A 8.4 DIN 6797

Attach rubberseal to trunk lid.

D 65.42-93

- 1 Rubberframe for trunk lid gasket

Paste on weatherstrip to door, front

Paste on sealing rubber to wheelarchpanel and seal with "Bostik"

E 65.42-173

- 2 Grommets for torsion bar spring
- 2 Grommets 60 mm lenght or 2 3/8"

Paste on felt to roof inside

E 65.43-172

- 1 Roof felt (Jute felt) one-sided adhesive

E 65.43-173

- 2 Sealing rubbers for wheel arch panel

E 65.43-174

- 1 Sealing rubber
- 1 ditto
- 3 Cylinder sheet screws 52.2 x 10 DIN 7971
- 3 Washers 4.3 DIN 125

E 65.43-167

- 1 Rubber grommet for tank filler extension

E 65.45-172

- 2 Gaskets on front door pillar

Rubberize 4 door rubbers (in machine) and paste on to frame.
Paste on door pillar rubbers (already at hand)

D 65.45-215

- 1 Door gasket top left (special tool)

D 65.45-216

- 1 Door gasket, top right

D 65.45-217

- 2 Door gasket, bottom (rubber rolle)

Lay rear light cables in body and trunk room	D 65.48-12	1 Tail lamp harness
Screw on ground cable rear between body and trunk lid.	E 38.48-332	3 Grommets for cable
Attach engine ground cable, battery ground cable and battery ground cable	E 38.48-93	1 Grommet for cable
	E 31.49-65	3 ditto
		3 Buttonhead bolts A M 5 x 12 DIN 86
		3 Nuts hex. M 5 DIN 934
		3 Toothed washers A 5.3 DIN 6797
		1 Groundcable for trunk lid
		2 Cylinder bolts M 4 x 10 DIN 83
		2 Nuts hex. M 4 DIN 934
		2 Toothed washers A 4.3 DIN 6797
		1 Engine groundcable
		1 ditto
		2 Bolts, hex. M8 x 15 DIN 931
		2 Nuts, hex. M8 DIN 934
		2 Washers 8 DIN 1440
		2 Toothed washers A8.4 DIN 6797

Lay main harness	C 65.48-13	1 Main harness
Lay engine cable in engine room	24.34-23	1 Grommet for cable
	E 31.49-65	1 Grommet on dashboard for dynamo cable
	E 31.49-65	2 Grommets on side wall for headlamp cables
	E 31.49-65	1 Grommet for stoplamp cable
		2 Buttonhead bolts AM 5 x 10 DIN 86
		2 Bolts, hex. M5,3 DIN 934
		2 Toothed washers A5.3 DIN 6797

Install fuse box, grommets and pull cables through, connect to fuse box, connect stop switch	D 65.48-2	1 Fusebox
		2 Cylinder sheet screws 23.5 x 13 DIN 79

Lay cable for roof lamp and attach.	TK 6 A 3	1 Ignition coil
Lay tail lamp cables from body rear part to instrument board.		2 Bolts, hex. M 8x15 DIN 931
Install Ignition coil and voltage regulator		2 Nuts, hex. M 8 DIN 934
		2 Toothed washers 8.4 DIN 6797
		1 Voltage regulator for dynamo RS/TB 130/150/6/1 (Bosch)

Attach and connect
licence plate lamp

D 65.42-123U

- License plate lamp compl.
- 2 Bulbs for license' plate lamp (Bayonet type) GV 5W Nr. 6416
- 2 Sealing frames, inner
- 2 Sealing frames, outer
- 4 Cylinder bolts AM 4x15 DIN 84
- 4 Wing nuts M4 DIN 315
- 4 Toothed washers A4.3 DIN 6797
- 1 Lamp cap, compl.
- 1 Frame for above
- 4 Nuts, hex. M5 DIN 434
- 4 Toothed washers A5.3 DIN 6797
- 1 Clamp for cable attachment 1 x 10

E 65.42-125
E 65.42-126

C10

65.42-120
2D38.48-225

Paste on profile
rubber, for side
window, paste on
weatherstrip

C11

B65.42-69

- 1 Profile rubber for rear side window frame, left
- 1 as above , right
- Adhesive
- 1 gasket each

B65.42-70

D65.45-281/
282

B65.45-218
B 65.45-219
C65.45-300
C 65.45-301

- 1 Weatherstrip, door, left
- 1 Weatherstrip, door, right
- 1 Weatherstrip, door, rear, left
- 1 Weatherstrip, door, rear, right

Paste on sealing
rubber to baffle
plate for fuel tank
and screw on.

Paste on sealing rub-
ber to frontwing

Coat surface for wing
rubber strips with ad-
hesive left and right.

Paste on felt strips for
front and rear wings
left and right

C12

E 65.43-172

E 65.43-173

E 65.43-174

E 65.43-167

65.43-211
65.41-490

- 2 Sealing rubbers for wheel arch panel
- 1 Sealing rubbers for baffle plate on rear inner sheet
- 1 Sealing rubber for baffle plate on inner sheet.
- 2 Cylinder sheet screws S2.2 x 10 DIN 7971
- 3 Washers 4.3 DIN 125
- 1 Rubber grommet for tank filler extension.
- 2 Felt strips for wing padding
- 2 ditto
- 2 Felt strips for wing padding on rear pillar
- Adhesive

Attach front wing left
and right with 6 c.sk.
bolts after previous
alignments.

C13

GA 65.41-5U/
6U

C 65.41-421

- 1 Front wing each
- 2 Rubber strips for front wing
- 12 Bolt, hex. M 6x15 DIN 933 (galvanized)
- 11 Washers R7 DIN 440 (galvan.)
- 14 Toothed washers A6.4 DIN 6797 (phosphate)
- 2 Nuts, hex. M6 DIN 934

Attach rear wing
left and right

GA 65.42-8U/9U	1	Rear wing each
C65.42-131	2	Rubber strips for rear wing
	18	Bolts hex. M6x20 DIN 933
E38.48-92	18	Rubber washers
	2	Buttonhead bolts AM 5-15 DIN 86
	2	Nuts, hex. M 5 DIN 934
	2	Toothed washer A 5.3 DIN 6797
D65.42-169	2	Wing supports rear
	2	Bolts, hex. M 5x10 DIN 933
	1	Nut, hex M 5 DIN 934
	4	Toothed washer A5.3 DIN 6797

Attach defroster nozz-
les left and right

C15

B 65.41-140/ 141U	1	Defroster nozzle each
	6	Lenshead screws M 4 x 15 DIN 85
	4	Lenshead screws M 4 x 15 DIN 85
	4	Nuts, hex. M 4 DIN 934
	4	Washers 4,3 DIN 125
	10	Toothed washers A 4.3 DIN 6797
D 65.47-44	2	Felt linings on inner pillar panel frame left right

Installation of heater
flaps left and right
with 4 Lenshead bolts
each

C16

C 65.41-96 U	2	Heater flaps
	8	Lenshead bolts M 4 x 10 DIN 85
	8	Toothed washers A 4,2 DIN 6797

Prealignment attach-
ment and installation
of grille

C17

GA 65.41-39	1	Grille
B 65.41-138	1	Cover plate front
E 65.41-139	1	Reinforcement sheet
E 65.41-182	2	Rubber buffers
E 65.42-178	3	Rubber disks
	2	Lenshead screws for rubber buffers M 5 x 35 DIN 85
	2	Toothed washers A 5,2 DIN 6797
	2	Nuts hex. M5 DIN 934
	6	Zylinder bolts f. cover- plate M 4 x 10 DIN 84 (galvanized)
	6	Spring washers for cover- plate A 4, DIN 127 (galvan.)

- 6 Nuts, hex M 4 DIN 934 (galvanized)
6 Washers for cover plate 4,3 DIN 125

Align grille completely and finish	C18	C 65.41-156	U 1	Locking device, compl.
		E 65.41-147	1	Locking hook
		E 65.41-158	1	Tension spring
		E 65.41-159	1	Deflector spring
		E 65.41-171	1	Bearing for locking shaft
		E 65.41-458	2	Washers
		E 21.26-24	2	Washers
			2	Bolts, hex. M 8 x 15 DIN 933
			2	Spring washers A 8 DIN 127
		E 65.41-146	U 1	Bearing
		E 65.41-194	1	Bearingplate
			2	Nuts, hex. M 8 DIN 934
		E 65.41-148	U 1	Safety ratchet
		E 65.41-168	U 1	Locking shaft, complete

Attach bulge sheets, align and screw on	C19	6 S 65.43-78/79	1 (ea)	Bulge sheet on floor sheet
			8	Cylinder sheet screws S 3,9 x 13 DIN 7971
			8	c.sk. Sheet screws S 3.5 x 13 DIN 7972
		E 63.43-227	4	Pads for bulge sheet

Install door lock and doorhandle, connect linkage for remote control lock, insert greaser to door linge. Adjust door to fit properly, left and right	C23	C 65.45-26/27	U 1	(ea) door lock left and right complete with remote control lock
			8	Lenshead bolts M 6 x 12 DIN 91 (rust proofed)
			8	Toothed washers V 6.4 DIN 6797
		C 65.45-34/34	1	(ea) Press button handle
		E 65.45-127	2	Doorhandle escutcheon front
		E 65.45-136	2	ditto, rear
		E 65.45-67	2	Plates for handle attachment
			4	Lenshead c.sk. screws V 5.3 DIN 6797 (rustproofed)
		E 65.45-192	2	Rubber buffers for doorhandle
			4	Greasers for door hinge A M 6 DIN 3402
		65.45-175/176	1	(ea) Deflector with pullrod
			4	Bolts, hex. M 6 x 10 DIN 933
			4	Toothed washers A 6,4 DIN 6797

Adjust hood, install
lock and adjust to fit
properly.
Install pullrod for lock-
ing device.

C20

E65.41-160 U

- 1 Locking bracket for hood (galvanized)
- 2 Bolts, hex. M 8 x 60 DIN 931 (rust-proofed)
- 2 Nuts hex. M 8 DIN 934 (rustproofed)
- 2 Spring washers A 8 DIN 127
- 4 Washers 8,4 DIN 125 (rust-proofed)
- 2 Rubber buffers for hood
- 4 Rubber washers
- 2 Lenshead bolts M 5 x 35 DIN 85 (galvanized)
- 2 Nuts hex. M 5 DIN 934 (galvanized)
- 2 Toothed washers A 5,3 DIN 6797 (galvanized)
- 1 Support clamp for radiator
- 1 Cylinder bolt M 6 x 20 DIN 83 galvanized)
- 1 Rubber washer for support clamp
- 1 Nut hex. M 6 DIN 934(rustpr.)
- 1 Toothed washer A 6,4 DIN 6797
- 1 Pullrod for locking device ..
- 1 U sheet for pullrod
- 1 Theaded pin for pullrod
- 1 Tubular pull rod
- 1 Handle for engine hood
- 1 Nut, hex. M 5 DIN 934
- 2 Grommets Conti-No. 16101
- 1 Bolt 5 x 12 x 8 DIN 1435
- 1 Washer 5,3 Ø DIN 433
- 1 Split pin 1,5 x 8 DIN 94
- 1 Support for pullrod
- 2 Button head bolts M 5 x 10 DIN 86
- 2 Toothed washers A 5,5 DIN 6797
- 2 Nuts hex. M 5 DIN 934
- 1 Siphon
- 1 Support plat for siphon

E 65.41-182

E 38.48-92

E 55.32-27

E 38.48-92

E 65.41-317 U

E 65.41-318

E 65.41-319

E 65.41-320

E 65.42-130

E 65.41-509

E 65.41-409

E 51.31-99

E 28.31-165

Installation of upper
baffle plate in front
wing left and right

C21

C 65.41-351/
352

- 1 (ea) wall in wing complete
- 10 Cylinder bolts S 3,9 x 13 DIN 7971

Installation of remote
control lock, insert
striker plate

C22

D 65.45-52/
53

E 65.45-183/
184/185

- 1 (ea.) Striker plate, left and right
- Several shims under striker plate

- 6 Lenshead c.s.k. bolts M 8 x 32 (like DIN 88)
- 6 Toothed washers V 8.4 DIN 6797 (phosphate)
(see also working process 23)

Prepare and install
windscreen, window
pane, front

C 24

GA 65.41-10

C 65.41-57

C 65.41-58 U
65.41-532

65.41-533

- 1 Pane complete
- 1 Rubber frame
- Sealing compound Adhesive.
- 1 Ornamental frame
- 2 Corner clamps for ornamental batten, bottom
- 2 Corner clamps for ornamental batten, top

Prepare rear window
pane and insert rear

C 25

GA 65.44-19

C 65.44-23

C 65.44-24

65.44-54

65.44.255

65.44-256

- 1 Window pane for rear window
- 1 Rubber frame for rear window
- 1 Ornamental batten frame for rear window
- 2 Clamps for ornamental batten
- 1 Ornamental batten frame left part
- 1 ditto right part

Mount scoop for stop
and blinker light left
and right

C 26

B 65.42-156/
157U

E 65.42-161

- 1 (ea.) Blinker cap
- 2 Profile rings for above
- 2 Rubber grommets for blinker cable
- 4 Bolts hex. M 6 x 20 DIN 933
- 4 Nuts hex. M 6 DIN 934
- 4 Toothed washers A 6,4 DIN 6797
- 4 Washers 6,4 DIN 125
- 1 (ea.) reflector compl.
- 1 (ea.) pad for above
- 2 Rubber gaskets
- 2 Nuts hex. M 6 DIN 934
- 2 Washers R 7 DIN 440 rust-proofed
- 2 Spring washers A 6 DIN 127 rustproofed

D 65.42-132
133 U

D 65.42-160
170 U

65.42-159

Mount reflector scoop
including reflector,
left and right

Install battery, attach
plus cable, install Bosch
horn, connect ignition
coil and voltage regulator

C 27

- | | |
|-----------------------|---|
| 6 V 84 Ah - | 1 Battery |
| Din 72311 | |
| D 21.34-14 | 1 Support plate |
| E 21.34-25 | 2 Rods for battery attach-
ment |
| 38.48-202 | 1 1 Felt sheet (Battery
padding) |
| | 2 Wingnuts M 6 Din 315 |
| 2 E 38.48-66 | 1 Starter cable |
| | 1 Attachment clamp for above
1 x 12 |
| | 1 Cylinder sheet screw
S 3.5 x 12 Din 7971 |
| HEZ 35/3 A1
290 HZ | 1 Cup horn |
| | 1 Bolt, hex.M 10x30 DIN 933 |
| | 1 Nut hex.M 10 DIN 934 |
| | 1 Toothed washer A 10.5
DIN 6707 |
| E 65.48-9 | 1 Cable from horn to press
button |
| E 38.48-93 | 1 Grommet for horn cable |

Install window regulator
for triangular window and
door window

C 28

- | | |
|------------------------------|--|
| B 65.45-89U/
90U-195/196U | 1 Window regulator, left and
right (Optional) |
| C65.45-96U/
97U-200U/201U | 2 Window regulators for tri-
angulated window |
| | 8 Bolts hex.68 DIN 933
(rustproofed) |
| | 8 Toothed washers A 6.4 DIN
6797 (plasplate) |
| E 65.45-311 | 4 Rubber rings |
| | 2 Rubber rings M 6x8 DIN 933 |
| | 8 Toothed washes A 6.4 DIN
6797 |
| | 8 Bolts, hex M 6x8 DIN 933 |

Assembly of window frames
left and right

Material see working process 48

C 29

Install window frames left
and right
(Plastic)

C 30

- | | |
|------------|--|
| B 65.42-38 | 1 Side window frame, left |
| B 65.42-39 | 1 ditto , right |
| | 10 Lenshead c.s.k.screws
S 3.9x32 DIN 7983
(Heads chrome plated) |

Attach parapet sheets and
finish

C 31

- | | |
|---------------------------|----------------------------------|
| G A 65.45-
111 U/112 U | 1 (ea) Top parapet com-
plete |
| G A 65.43-31U1 | Window parapet, left |
| G A 6543-32U 1 | ditto , right |

Install parapet sheet on
door window left and right

- 14 -

See working process 31
GA 65.45-111U
/112U

C 65.45-208

C 32

- 1 (ea) Parapet complete
- 2 Rubber strips on upper parapet
- 8 Cylinder bolts M 6x12 DIN 84 (rustproofed 6 x 12)
- 8 Washers 6.4 DIN 125 (galvanized)
- 8 Toothed washers A 6.4 DIN 6797 (phosphate)
- 2 Countersunk sheet screws 2 3.5 x 13 DIN 7972
- 2 ditto 2.2 x 9,5 DIN 7972

Mount rhomboid and chromium 2 GA 65.41-
profile on grille (U frame) 52 U

C 33

- 1 Rhomboid with ornamental batten, complete
- 16 Washers 5.8 DIN 440 (galvanized)
- 16 Nuts hex. M 5 DIN 934
- 16 Toothed washers A 5.3 DIN 6797
- 1 frame, left
- 1 frame right

65.41-180

65.41-181

Mount windscreen pillar
panel ornamental batten
left and right. Attach
"Isabella" sign on trunk
lid

65.44-32

65.44-49

65.44-35

C 34

D 65.41-174

E 65.41-391

- 1 Orn. batten on windscreen pillar panel left
- 1 Orn. batten on windscreen pillar panel right
- 1 Clamp for parapet batten
- 3 Batten screws M 4x80, complete with rubber and U washer
- 1 "Isabella" sign
- 8 "Atoco" locking washers 2.5 / Areca 5107
- 8 Paddings for sign

Mount ornamental batten
front wing, door and rear
wing left and right

C 65.41-208

E 65.41-492

C 65.41-299

C 35

E 65.41-492

- 1 Orn. batten, front wing left
- 2 Clamps - orn. batten
- 1 Orn. batten, front wing right
- 2 Clamps - orn. batten

Attach parapet orn. batten
to door left and right

B 65.42-81

B 65.42-82

E 65.41-492

- 6 Orn. batten screws M 4 x 15 with rubber-U-washer
- 1 Orn. batten rear wing, left
- 1 ditto right
- 22 Clamps - orn batten
- 4 Batten screws M 4x15 with rubber-U-washer

- 15 -

Install parapet sheet on
door window left and right

- 14 -

See working process 31
GA 65.45-111U

C 65.45-208

C 32

- 1 (ea) Parapet complete
- 2 Rubber strips on upper parapet
- 8 Cylinder bolts M 6x12 DIN 84 (rustproofed 6 x 12)
- 8 Washers 6.4 DIN 125 (galvanized)
- 8 Toothed washers A 6.4 DIN 6797 (phosphate)
- 2 Countersunk sheet screws 2 3.5 x 13 DIN 7972
- 2 ditto 2.2 x 9,5 DIN 7972

Mount rhomboid and chromium profile on grille (U frame)

2 GA 65.41-52 U

C 33

- 1 Rhomboid with ornamental batten, complete
- 16 Washers 5.8 DIN 440 (galvanized)
- 16 Nuts hex. M 5 DIN 934
- 16 Toothed washers A 5.3 DIN 6797
- 1 frame, left
- 1 frame right

65.41-180
65.41-181

Mount windscreen pillar panel ornamental batten left and right. Attach "Isabella" sign on trunk lid

65.44-32
65.44-49
65.44-35

C 34

D 65.41-174
E 65.41-391

- 1 Orn. batten on windscreen pillar panel left
- 1 Orn. batten on windscreen pillar panel right
- 1 Clamp for parapet batten
- 3 Batten screws M 4x80, complete with rubber and U washer
- 1 "Isabella" sign
- 8 "Ateco" locking washers 2.5 ø Areca 5107
- 8 Paddings for sign

Mount ornamental batten front wing, door and rear wing left and right

C 65.41-208
E 65.41-492
C 65.41-299
E 65.41-492

C 35

- 1 Orn. batten, front wing left
- 2 Clamps - orn. batten
- 1 Orn. batten, front wing right
- 2 Clamps - orn. batten

Attach parapet orn. batten to door left and right

B 65.42-81
B 65.42-82
E 65.41-492

- 6 Orn. batten screws M 4 x 15 with rubber-U-washer
- 1 Orn. batten rear wing, left
- 1 ditto right
- 22 Clamps - orn batten
- 4 Batten screws M 4x15 with rubber-U-washer

- 15 -
- GA 65.45-145 1 Orn. batten-outer sheet left
- GA 65.45-146 1 Orn. batten-outer sheet, right
- 14 Clamps, orn. batten

Attach rear parapet ornamental batten

C 36

- 65.44-33 1 Parapet orn.batten rear, left
- 65.44-34 1 Parapet orn.batten rear right
- 65.44-35 1 Clamp for parapet batten
- 21 Batten screws M 4 x 15 rubber and U-washer compl.

Align trunk lid and adjust to fit properly equalize with remaining body, install protection cap for locking device

Attach Bowden cable and handle in rear of car

C 37

- D 65.42-141 Cover plate for trunk locking device
- 2 Button head cutting screws CM 4x10 DIN 7513
- 2 Button head sheet screws 4.2x9.5 DIN 7974
- D 65.42-112 U 1 Bowden cable complete for trunk locking device
- E 65.42-130 1 Handle for Bowden cable
- 2 Nuts hex. M 4 DIN 934
- 1 Toothed washer A 4.3 DIN 6797
- 1 Nut hex. for handle M 5 DIN 934
- 1 Toothed washer A 5.3 DIN 6797
- 2 Cylinder bolts for Bowden cable attachment M4x15 DIN 84

Installation and connection of dipper switch, blinker automatics and terminal strip.

Connection of existing cables

C 38

- DIN 72758 1 Foot dipper switch
- 2 Bolts, hex. M 6x15 DIN 933 (atrament.)
- 2 Nuts, hex. M 6 DIN 934 (atrament.)
- 2 Toothed washers A 6.4 DIN 6797
- 38.41-490 1 Cable connector, 6 poles SK 2211
- 2 Cylinder sheet screws 2 3.5 x 25 DIN 7971
- E 38.48-273 1 Blinker transmitter
- 1 Cylinder bolt M 4x10 DIN 83
- 1 Nut, hex. M 4 DIN 934
- 1 Toothed washer A 4.3 DIN 6797
- E 65.47-92 1 Felt pad under cable connector
- E 38.48-182 1 Door contact
- E 38.48-357 1 Rubber insert for door contact
- 2 Cylinder sheet screws 2 3.5 x 9.5 DIN 7911 (Chromium plated)

Attach roof moulding
and ornamental batten
to hood.
Attach "Borgward" letters
to hood

C 39

C 61.41-662 U
D 38.48-161

D 65.41-193
D 65.41-648

2 E 38.48-58
E 65.41-391

1 Hood moulding
1 Rubber pad for above
3 Bolts, hex. 5x12 DIN 933
3 Toothed washers 15.3 DIN 6797
1 Ornamental batten-hood
3 Attachment screws for above
4 Nuts hex. M 4 DIN 934
4 Toothed washers I 4.3 DIN 6797
1 Set "Borgward" letters
16 Pads for above
16 "Ateco" locking washers 2.5 Ateco 5107

Mount rear blinkers
left and right

C 40

C 65.42-102
D 65.42-140

2 Rear blinkers
2 Gasket frames for rear blinker
4 Button head bolts A M 5 x 10 DIN 86
4 Toothed washers A 5.3 DIN 6797
2 Lenshead c. sk. bolts M 4 x 20 DIN 91 (Head chrome plated bright polish)
2 Lenshead c. sk. screws M 4 x 18 DIN 91 (Finish as above)
2 Bulbs, Bayonet type for tail lamp 6V 5W No. 6416
2 Bulbs Bayonet type, for brake and blinker lamp 6V 15 W No. 6452

Mount and connect
head lamp and front
blinker left and
right

C 41

C 65.41-544
E 38.48-93

E 38.48-65
6 V 35 W
No. 7324
6 V 2 W
No. 3895
E 65.41-401 U
6 B 15 W
No. 7520

2 Head lamps complete
2 Rubber grommets in head lamp container
2 ditto
2 Bulbs "Bilux" for headlamp
2 Bulbs park light
2 Blinkers, front
2 Bulbs, blinker front

Install wiper mo-
tor, wiper axles
and wiper arms

65.41-184
E 65.4.-380

1 Wiper motor with clamp,
compl.
Clamp

Contact wiper motor
(Electrically)

C 42

65.41-186
65.41-190
65.41-189
65.41-191

E 38.42-76

65.41-185
65.41-187
E 65.41-389

2 Wiper axles
1 Wiper linkage rod, right
1 ditto, left
2 Windscreenwiper blade
4 Bolts hex. M 6 x 10 DIN 933
4 Nuts, hex. M 6 DIN 934
4 Toothed washers 6.4 DIN 6797
1 Rubber grommet for cable for wiper motor
1 Swing bearing
2 Windscreen wiper arms
1 Rubber insert for "Bosch" wiper Motor

Sliding roof in-
stallation of complete
guide frame, alignment
of guide channels, align-
ment of rear attachment
channel.

After the rubber strip
was pasted on, drill
and tighten guide chan-
nels.

Mounting of sliding lid
panel

C 43

E 65.44-214

E 65.44-215

E 65.44-222

65.44-226

65.44-227

E 65.44-186

Roof rubber strip By meter
opp. 3800 mm Golde Nr. or
appr. 12 1/2 inch rubber strip
Rubber strip on front of
member By meter
2 Guide channels with tail
Golde No. 35-100-33-5
1 Attachment channel rear 70x2
Golde No. 35.300-005-4
12 Lenshead c. sk. screws
1 front cover channel with
2 arches
Golde No. 35-100-045-5
1 Coverplate
2 Lenshead c.sk. screws
M 4 x 6 DIN 91
22 Countersunk sheet screws
for guide channel (galvan.)
1 Cover plate
Adhesive

Install defroster, heater E 65.41-410U
and starter (Choke) /411 U
cables on instrument pa- E 61.41-754
nel

C 44

E 21.34-87

E 21.34-88

1 (ea.) Defroster cable
2 Clamps for defroster cable
2 Cylinder bolts M 4 x 10
2 Nuts hex. M 4 DIN 934
2 Toothed washers A 4.3 DIN 6798
1 Clamp for defroster cable
1 x 7 DIN 72571
1 Cylinder sheet screw S 3.5 x 25
2 Clamp screws (Defroster cable attachment)
2 Bushes for clamp screw
2 Washers 4.3 DIN 125
2 Toothed washers A 4.3 DIN 6797

- E 38.48-185 1 Cover for sheet screw
- E 65.41-412 U 1 Heater cable with ratchet
- E 65.41-754 1 Clamp
- C 44 1 Cylinder bolt M 4 x 10 DIN 83
- 1 Nut hex. M 4 DIN 934
- 1 Toothed washer A 4.3 DIN 6797
- E 65.41-376 U 1 Starter cable
- E 38.42-76 1 Grommet for starter cable

Installation of step board battens

GA 65.43-126/
127

C 45

- 1 (ea) Stepboard batten
- 2 Lenshead c.sk. screws (Phillips type) S 3.9 x 13 B DIN 7983 (Chrome plated)
- Plastic rubber
- Sealing compound

E 65.45-191

- 2 Rubber buffers for door check

65.41-124

- 2 Pull rods for door check

65.41-510

- 2 Washers " " "
- 1 Split pin 4 x 25 DIN 94
- 2 Lenshead stepped screws M 4 x 8 DIN 923 (galvan.)
- 2 Washers M 4 x 8 DIN 923 (galvanized)
- 2 Washers M 4 x 3 DIN 125 (galvanized)
- 2 Toothed washers A 4.3 DIN 6797 (phosphate)
- 2 Nuts hex. M 4 DIN 934 (galv.)

Installation of door brake left and right

Installation of door covers left and right

C 65.45-170

- 1 Door cover, complete, left
- 1 ditto , right

C 65.45-171

C 46

- 30 Cloth protecting washer Brass nickel plated "Hap-pich" No. 32643

E 65.45-193

- 30 Slip in nuts
- 30 Lenshead c.sk. sheet screws Head chromed and polished Z 4 x 15 DIN 7983

Alignment of door

C 47

E 65.40-150

- 2 Packings on rear door frame
- 12 Toothed washers A 6.4 DIN 6797
- 4 ditto V 6.4 DIN 6797

Adapt all plastic parts and if necessary grind to fit after previous unpacking

C 53

Special tools:
grinding wheel with exhaustor device.

Installation and connection of clock, combination instrument, speedometer ignition lock with starter. Mounting and connection of switch for headlamps, panel lamp installation and connection of warning lights

C 54

- C 65.41-322 1 Instrument insert
- C 65.41-362 1 Clock
- C 65.41-363 U 1 Combination instrument
- C 65.41-364 U 1 Speedometer
- D 65.41-419 U 1 Ignition lock complete
- E 65.41-439 1 Guide plate for above
- E 38.41-463 1 1 Push switch for instrument lamp
- E 38.41-463 1 ditto for wiper operation
- E 38.41-462 1 Light push switch
- E 38.48-1 1 Cigarette lighter with plug socket
- E 65.41-336 1 Button for instrument panel
- E 65.41-337 1 ditto
- E 65.41-384 1 Charge control lamp
- E 65.41-385 1 Oil control lamp
- E 65.41-414 2 Rubber insert for instrument yoke
- 6 V 0 6 W No. 3798 9 Bulbs for instrument illumination

Inspection of the complete electrical system and elimination resp. repair of all faults

C 55

Install ventilating (swivel) window left and right

- GA 65.42-76 U 1 Side window, compl.left
- GA 65.42-77 U 1 ditto ,compl.right
- 4 Counter sk. screws M 3 x 5 DIN 63
- 4 Counter sk. screws M 3x5 DIN 63

C 56

State of body after pos. 56
Engine room see photo 1353/1
Trunk room see photo 1353/5

Install sun visor,
rear view mirror,
cloth hanger left
and right
Install and connect
door contact rubber
and roof lamp

C 57

- | | |
|----------------|---|
| C 65.47-67 U | 1 Sun visor |
| | 3 Lenshead c.sk. cutting screw 5 x 15 DIN 7513, Head chromed and polished |
| D 38.48-46 | 1 Rear vision mirror |
| | 3 Lenshead c. sk. cutting screw EM 4 x 15 DIN 75 B. Head chromed and polished |
| E 61.47-18 | 2 Cloth hangers |
| | 1 Counter sunk sheet screw S 3.9 x 16 DIN 7972 |
| 2E 38.48-44 | 1 Roof lamp with switch |
| | 1 Cylinder sheet screw S 3.9 x 16 DIN 7972 |
| 6 V SW No 6416 | 1 Bulb, bajonet type |
| E 65.45-194 | 1 Buffer for door contact |
| | 2 Cylinder sheet screw Z 3.5 x 19 DIN 7971 |
| | 2 Washers 3.2 DIN 125 |

State after pos. 57 see photo 1353/13 outside, photo 1346/4 inside, front
1346/5 inside, rear

Preparation for assembly line

- | | | | |
|------------------------------|------------|------------------|-------------|
| Completion of fuel tank, VDO | E 65.43-81 | 1 Fuel Tank unit | Support for |
| installation of fuel gauge | E 65.83-82 | Sealing washer | fuel tank |
| tank unit with sealing | | 5 Bolts hex. | (Special |
| washer and 5 hex. bolts, | | M 5 x 15 DIN 933 | equipment) |
| connect cable to flange | | Sealing washer | |
| provided for. D 1 c | | A 5 x 9 DIN 7603 | |

- | | | |
|---|---------------|---|
| Screw suction pipe for fuel pipe to flange after assembly | E 65.43-133 U | Fuel short feed pipe with pipe complete |
| | | 1 Union A M 18 x 1,5 DIN 7604 |
| | | Gasket C 18 x 22 DIN 7603 |
| | | Seal ring C 18 x 22 DIN 7603 |

- | | | |
|---------------------|-------------|-------------------------------|
| Screw in drain plug | E 65.43-87 | Gasket |
| Paste on strips | | 4 Bolt, hex. M 5 x 12 DIN 933 |
| | | 4 Seal ring A 5 x 9 DIN 7603 |
| | E 65.43-117 | 2 Anti Rattle strips |

- | | | |
|--|------------|------------------|
| Paste on rubber buffers for fuel tank suspension | E 65.43-77 | 3 Rubber buffers |
|--|------------|------------------|

Attach cable for fuel
gauge
Attach fuel pipe, rear

E 65.48-8 Cable
C 55.33-5 U Fuel pipe

Engine rigging

Attach speedometer
cable
Attach Bowden cable
for gear change

D 16

D 38.41-510U 1 Speedometer drive Special
cable equipment
1 Clip for cable Transport-
1 x 7 DIN 72571 able engine
1 Rubber jacket for stand see
speedocable photo
1 Round headed bolt 1333/7
M 4 x 10 DIN 86
1 Nut, hex. M 4 DIN 934
Toothed washer A 4,3 DIN
6797
D 55.22-106U Push-pull cable for Assembly
selector motion stand
1 Nut, hex. M 5 DIN for
934 frontale
Ball cup A 8 DIN
71805
E 38.48-92 1 Rubber ring for ball socket
E 21.34-87 Clamping screw
E 21.34-88 1 Bush for above
1 Nut hex. for above M 4 DIN
934
1 Washer for clamping screw
4.3 DIN K 25

Screw on exhaust
manifold
Install clutch
cylinder

D 55.31-52 U 1 Clutch cylinder compl.
(A 36 427 A 54)
1 Bolt hex. M 8 x 20 DIN 931
1 Bolt hex. M 8 x 25 DIN 931
2 Toothed washers A 8.4 DIN
6797
E 55.31-36 1 Support Plate for tension
spring
E 61.41-390 1 Tension spring
E 55.26-51 1 Brake hose for clutch cylin-
der (A 72610)
E 55.26-42 1 Ring socket (A 33911)
E 55.31-33 1 Threaded declutch rod
1 Nut, hex. M 8 DIN 934
E 28.31-138 1 Adjusting nut for clutch
adjustment
E 28.31-140 1 Bolt for clutch adjustment
E 55.22-1164 1 Lower shift rod, complete
1 Washer 7 DIN 1440
E 28.22-793 1 Toothed washer
1 Split pin 3 x 15 DIN 94
4 Bolts, hex. M 10 x 18 DIN 933
4 Nuts, hex. M 10 DIN 934
5 Toothed washers, A 10.5 DIN
6797

E 55.36-1U	1 Exhaust manifold
E 28.36-18	1 Sealing ring
	2 Bolts, hex. M 8 x 35 DIN 931
	2 Nuts hex. M 8 DIN 934 (Copperized)

Mount engine to front axle, rubber buffers, lighter and secure nuts

Delivery volume:

1 Front axle, complete
1 Engine, complete

Inspection

Put front axle with engine in rigged condition (see FP) on the previously set up containers of the assembly line by means of the trolley hoist.

E 55.24-69
E 55.24-71

1 Front carriage, complete	Special equipment
1 Rear axle, compl.	
8 Rubber buffers	
4 Spacers	Transport device

D 1

See photo 1244/5

Put rear axle in previously set up containers of the assembly line by means of the trolley hoist

Sealing compound	Transport device
------------------	------------------

Put body, complete, from 403 on trestle. Fasten oil pressure and fuel pipes

C 55.26-56 U
D 55.33-3 U

1 Body, complete	Body
1 Brake pipe, centre complete	trestle
1 Brake pipe rear, complete	Electric drill

D 2

Attach Bowden cable for hand-brake
Install fuel tank

E 51.31-316 U	1 Pull rod, front complete
E 51.31-49 U	1 Pull rod, rear, complete
E 51.31-337 U	1 Guidance for pull rod
E 51.31-353	1 Turnbuckle nut
	1 Nut hex. M 8 DIN 934
	See photo 1345/1
	1 Nut hex. M 8 DIN 934
	(Left hand thread)
	See photo 1343/3
E 51.31-311	1 Equalizer for handbrake cable
C 55.31-48 U	1 Continuous brake cable
	1 Bolt 8 h 11 x 20 x 15.5 DIN 1436

- E 51.31-343
- 1 Bolt 8 h 11 x 20 x 17 DIN 1436
 - 2 Washers 8 DIN 1440
 - 2 Split pins 2 x 22 DIN 94
 - 1 Return spring
 - 3 Buttonhead bolts 5 x 12 DIN 85
 - 3 Nuts hex. M 5 DIN 934
 - 3 Toothed washers A 5.3 DIN 6797
- A 65.43-49 U
- 1 Fuel tank, complete

Drill out holes for axle attachment bolts.
Re-tap several threads.

Push propeller shaft Opti-) C 55.23-5 1 Propeller shaft
into shaft tunnel onal) C 55.23-6

Put body by means of trolley hoist on front- and rear axles which are already set up on assembly line

See photo
1345/7

work shop
equipment
trolley hoist

D 3

Bolt rear axle with 2 bolts and secure with split pins, left and right

D 3

- 4 Bolts, hex. M 10 x 62 S DIN 931 Electric screw driver
- 4 Washer 10.5 DIN 125
- 4 Castellated nuts M 10 DIN 935
- 4 Split pins 2 x 22 DIN 94

Bolt on radius rod after insertion of rubber dishes and attachment plates, left and right

- 2E 55.30-74 U 2 Bearing cups
- 2E 55.30-84 U 4 Rubber rings
- 8 Bolts, hex. 10 K M 8 x 30 DIN 931
- 8 Spring washers B 8 DIN 127
- 2 Bolts 8 h 11 x 20 x 17 DIN 1436
- 2 Washers 8,4 DIN 1440
- 2 Split pins 2 x 22 DIN 94

Inspection

Bolt front axle with 2 bolts each to body and secure with split pins, left and right

D 3

- 4 Bolts, hex. M 12 x 1,5 x 13,5 S DIN 960
- 4 Centering cups
- 4 Washers 12 DIN 1440 Trolley hoist
- 4 Castellated nuts M 12 x 1,5 DIN 935 - 25 -

4 Split pins 3 x 25 DIN 94

Bolt gear box suspension to body. Allen type bolts

D 4

2 Allen type bolts
M 10 x 25 DIN 912
2 Spring washers B 10 DIN 127

Bolt propeller shaft to gearbox flange and secure with locking plates

E 55.23-3

E 55.23-2

4 Bolts, hex.
4 Nuts, hex. M 10 DIN 934
2 Locking plates

Equip stabilizer with rubber bushes.
Fit spacer bolts and bushes cups and rubber washers left and right
Bolt complete stabilizer with 2 clamps and 4 bolts to body
Bolt spacer bolts to front axle and secure with split pins

D 5

2D 55.30-35

2E 55.30-46

E 55.30-37

E 55.30-39

E 51.30-46

E 51.30-44

E 55.30-38

1 Stabilizer Retracting
2 Rubber bearings device for
2 Bearing yokes rubber
2 Spacer tubes bushes
8 Cups
8 Rubber rings
2 Bolts, hex.
4 Bolts, hex. M 8 x 15 DIN 931
2 Castellated nuts M 8 DIN 937
2 Split pins 2 x 22 DIN 94
4 Toothed washers A 8.4 DIN 6797

Connect brake hose left and right to brake drum (Union)
Fasten brake hose with clamp on front axle

D 5

2 Clip strips 9 x 420
2 Hose clips W 89

Fit exhaust pipe to silencer after reaming.
Suspension centre and attachment clamp, slip on tail.
Mount exhaust pipe. Bolt on elastic suspension centre and tail

C 55.36-4U

D 55.36-7U

E 51.36-15U

E 55.36-8U

E 55.36-6

E 55.36-9

E 51.36-16

E 28.36-18

1 Exhaust pipe rear Special
1 Silencer equipment:
2 Rubber tongues Reaming
2 Rubber suspensions device
2 Tube clamps
1 Clamp
1 Silencer clamp
1 Seal ring
2 Bolts, hex. M 8 x 36 DIN 931
2 Bolts, hex. M 8 x 22 DIN 931
3 Bolts, hex. M 6 x 18 DIN 931
3 Bolts, hex. M 8 x 15 DIN 933
1 Bolt, hex. M 8 x 25 DIN 931
2 Nuts, hex. M 8 DIN 934
(Copperized)
3 Nuts, hex. M 6 DIN 934
4 Nuts, hex. M 8 DIN 934

3 Toothed washers A 6.3 DIN 6797
6 ditto A 8.4 DIN 6797

Inspection

Mount neck journal. Bolt D 55.24-77
neck-clamp and rubber 55.24-79U
ring to body D 4 Clamp
Clamp
1 Bolt hex. M 10 x 28 S DIN 931

Attach fuel tank by
tightening turnbuckle
on strap, realign
tank and secure with
lock nuts D 2 E 65.43-113
E 24.33-7 2 Castellated nuts M 10
DIN 935
2 Split pins 2 x 22 Electric
DIN 94 screw
1 Guide bar driver
2 Support plates

Connect measuring cable
for fuel gauge by means
of porcelain insulator
and protect against
moisture with insulat- B 54.43-237
ing tape. Porcelain insulator
Attach rubber (Commercial grade)
Insulating type.
(Commercial grade)
Spray protector

Bolt propeller shaft with E 55.23-2
flange to differential E 55.23-3
casing and secure D 4 2 Locking plates
4 Bolts, hex.
4 Nuts hex. M 10 DIN 934
1 Nut hex. M 8 DIN 555
1 Toothed washer A 8.4 DIN
6797

Connect oilpressure pipe
on body by means of in-
termediate pipe to rear
axle oil-pressure pipe.
D 5

Inspection

Completion of radiator on C 55.32-13
tool bench. 1 Radiator with trans- Electric
Screw in water drain cock E 28.32-17 1 Water drain cock screw
"Curil jointing driver
compound
See photo B 45/9
D 1e

Cut 6 strips 9 x 350
"Beru" hose strip to be
used as clamps

W S 9

"Beru" hose clip
"Beru" hose strip 9 mm per
metre run

Fit bend pipe-rubber
hose, bend rubber hose
and rubber hose to
radiator and attach
with 4 clamps

D 55.32-18 U
E 55.32-14
E 55.31-30

1 Bend pipe
1 Bend rubber hose
2 Rubber hose
1 piece 80 mm or 3 5/32"
1 piece 100 mm or 3 15/16"
1 Bolt, hex. M 8 x 30 DIN 931

Install radiator. Tighten
centre attachment
with bolts, spacer
tubes 2 rubber rings
and toothed washer.

E 51.30-46
55.32-3
E 55.32-2

1 Toothed washer A 8 and DIN
6797
3 Cups
3 Spacer tubes
6 Rubber rings
2 Bolts, hex. M 8 x 35 DIN 931
4 Nuts, hex. M 8 DIN 936

Bolt radiator left
and right to body beam
and secure with lock-
nuts.

Attach bend rubber hose
and rubber hose with
2 clamps to engine. D 6

Clamps on engine

Installation of hose
connections (heater)
Manufacture of clamps,
cut rubber hose to
length and put on con-
nection tube, Attach-
ment with clamps.
Screw in bleeder bolt.
Installation between
cooling system and
heat interchanger

D 55.32-21U

1 Connecting pipe, front
1 Bolt, hex. M 6 x 8 DIN 933
(galvanized)

cut rubber hose to
length and put on con-
nection tube, Attach-
ment with clamps.

C 55.32-24U

1 Seal ring C 6 x 12 DIN 7603
1 Connecting pipe, rear
1 Bolt, hex. M 6 x 8 DIN 933
(galvanized)

Screw in bleeder bolt.
Installation between
cooling system and
heat interchanger

E 51.32-7

1 Seal ring C 6 x 12 DIN 7603
4 Rubber hoses 85 mm or appr.
3 3/8"

Attachment with clamps.

D 7

E 55.32-26

1 ditto 190 mm or 7 1/2"
1 ditto 130 mm or 5 1/8"
12 Hose strips 5 x 200
12 Hose clips WS 5
2 Clamps
1 Buttonhead bolt M 4 x 20 DIN
86
1 Nut hex. M 4 DIN 934
1 Toothed washer A 4.3 DIN
6797
1 Attachment clamp for speedo-
meter cable 1 x 7 DIN 72571

- 1 Buttonhead bolt M 4 x 10 DIN 86
- 1 Nut, hex. M 4 x 10 DIN 934
- 1 Toothed washer A 4.3 DIN 6797

Mark chassis and engine Nos.
on plate and attach on R.H.
heater channel
under engine hood

Inspection

- | | | |
|--|-------------|---|
| Connect voltage regulator to dynamo. | E 21.35-29 | 1 Rubber cover for starter cable |
| Attach accelerator linkage. | E 21.34-4 | 1 Rubber grommet for speedo-cable |
| Attach heater cable. | E 21.35-24 | 1 Rubber cover for speedo-cable |
| Cut choke cable to length and attach to carburettor. | E 21.35-24 | 1 Rubber cover for thermometer tubing |
| Connect fuel pump to fuel pipe. | E 28.22-793 | 1 Seal ring for thermometer connection A 14 x 18 DIN 7603 |
| Connect speedometer cable to combination instrument. Connect cable for oil pressure gauge. | | 1 Spring washer for clutchrod |
| Remote control thermometer connection: | | 1 Split pin 3 x 15 DIN 94 |
| Install element and fasten tubing. | | 1 Washer 7 DIN 1440 |
| | | 1 Adjusting rod. compl. Sealing compound |
- D 9

Inspection

- | | | |
|---|-------------|--|
| Steering installation: | E 65.41-382 | 1 Steering column with steering wheel gearshift end joint complete (Electric drill and screw driver) |
| Adapt steering column, drill attachment holes in front wall and bolt. | | |
| Attach steering column tube in bearing, underneath instrument panel. | E 65.41-383 | 1 Rubber hose for steering column attachment |
| Attach gearshift to shift lever in wing room, front, left and adjust. | | 1 Ball socket for selector cable |
| | E 55.22-77 | 1 Nut, hex. M 5 DIN 934 |
| | | 1 grommet for selector cable |
| | | 1 Upper shiftrod |
| | | 1 Nut, hex. M 6 DIN 934 |
| | | 1 Nut hex. M 6 DIN 934 (Left hand thread) |
- D 8

Bolt steering column with joint to steering gear. Tighten after adjustment and secure. Connect blinker switch electrically with terminal and pull in horn button cable in steering column and connect.

E 65.41-485
E 65.41-486

4 Bolts hex. M 6 x 20 DIN 933
4 Nuts hex. M 6 DIN 934
4 Toothed washers A 6.3 DIN 6797
2 Bearing sheels
1 Threaded pin
2 Bolts, hex. M 6 x 60 DIN 931
2 Spring washers B 6 DIN 127

Inspection
Insert horn button

2E 28.27-16U 1 Horn button

Mount front bumper, align attachment angle, insert 2 rubber buffers wing, front. Tighten front bumper, 4 bolts and nuts, adjust bumpers on body edge.

D 10

GH 65.43-99U

Bumper front, complete
2 Bolts, hex. M 10 x 25 DIN 931
2 Toothed washers A 10.5 DIN 6797
2 Washer 10.5 DIN 125
2 Rubber buffers
2 Bolts hex. M 10 x 45 DIN 931
2 Washers
2 Toothed washers A 10.5 DIN 6797

Bolt rear bumper, after attachment of 2 rubber buffers with 4 bolts to wing

GA 65.43-100U

Bumper rear, compl.
2 Bolts, hex. M 10 x 25 DIN 931
2 Toothed washers A 10.5 DIN 6797
2 Washers 10.5 DIN 125

Adjust bumper to body. Bolt on rear wing support

E 65.43-97

E 65.43-96

2 Rubber buffers
2 Bolts, hex. M 10 x 45 DIN 931
2 Washers
2 Toothed washers A 10.5 DIN 6797

Bleeding of brakes: Fill up hydraulic system with brake fluid, bleed brake cylinder and pipe on each brake pipe and connect again.

D 11

0.3 Ltr. Brake fluid "Ate"

Special Equipment: Brake bleeding apparatus

Attach clutch pedal (pump) to oil pressure system. Attach rubber apron (Splash protection) for propeller shaft.

C 65.43-331

Splash protection

Attach cover plate
in left wingroom
front on top of gear-
shift lever

C 65.41-432/
506

- 1 Cover plate (Electric screw driver)
- 4 Nuts, hex. M 5 DIN 934 (galvanized)
- 4 Toothed washers J 5.3 DIN 6797
- 4 Washers R 5.8 DIN 440 (galvan)
- Soft soap
- Spring yoke, L.H.
ditto R.H.
- 2 Bolts, hex. M 5 x 15 DIN 933
- 2 Nuts, hex. M 5 DIN 934
- 2 Toothed washers A 5.3 DIN 6797
- 2 Washers 5.8 DIN 440

Attach tension spring
for cable brake on
rear brake hose left
and right.
Adjust handbrake

D 11

Inspection

Tyre mounting in tyre
stock
Unpack tyres, insert
inner tube with talcum
powder, insert valves

C 55. 28-1/4J 13

Rim
Tyre 5.90x13
Inner tube 5.90x13
Valve 16.5x38
Talcum powder

Wheel moun-
ting device
Balancing
machine

Mount tyre and inner tube
one side by hand on rim

D 1 a

Place rim with pre-
mounted tyre on wheel
mounting device, set up
guide pulleys, let rim
rotate.
Take off wheel and in-
flate to correct pressure.
Balance on balancing
machine.

Weights to requirements
See photo 1353/11

Pressure
limiting
device
for
inflator
device

Mount 4 wheels
Fit wheels

C 55.28-1

D 12

E 55.24-52

5 Wheel disks 4 J 13
complete with tyres
Wheel nuts
Electric
screw -
driver
on
Spring
pull

Tighten wheel nuts
with electric screw
driver.
Place spare wheel in
container
Cover with cover plate
and tighten.

B 65.43-59U

- 1 Cover complete
- 1 Bolt, hex. M 10x50 DIN 931
(Rust proofed)
- 1 Washer 10.5 DIN 125

Inspection

Measurement of track
and adjustment

D 13

-
- 1 Set track measurement and
adjustment devices
See photo 1345/13

Measurement, adjustment and
securing of Castor, camber
and toe-in

-
- 1 Adjusting device for toe-in
and castor

Spray bottom of car
with anti-corrosion
preservative

-
- "Kolossol" preservative
(Spraying device)

Inspection

Bremen, January 17th, 1956