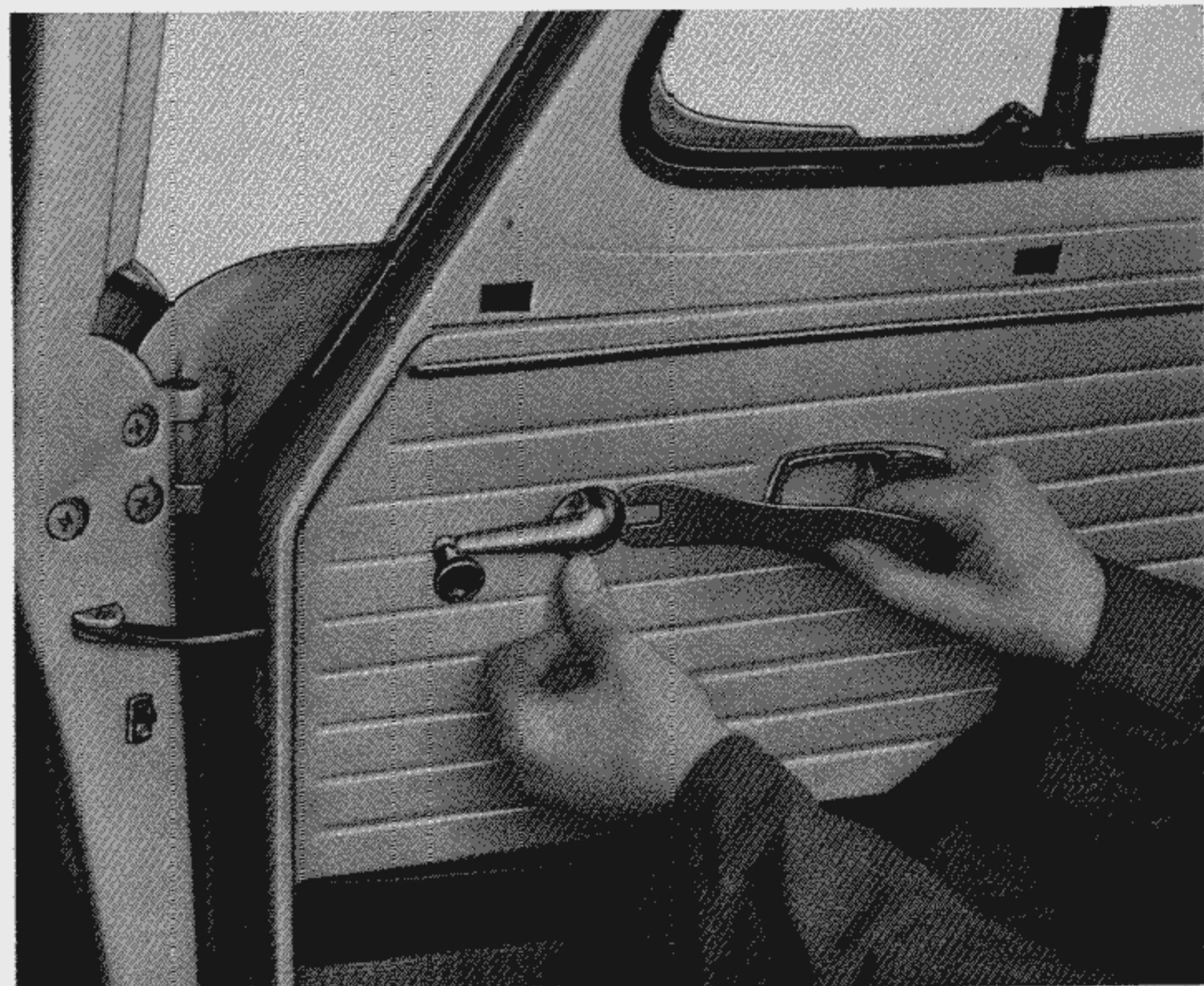


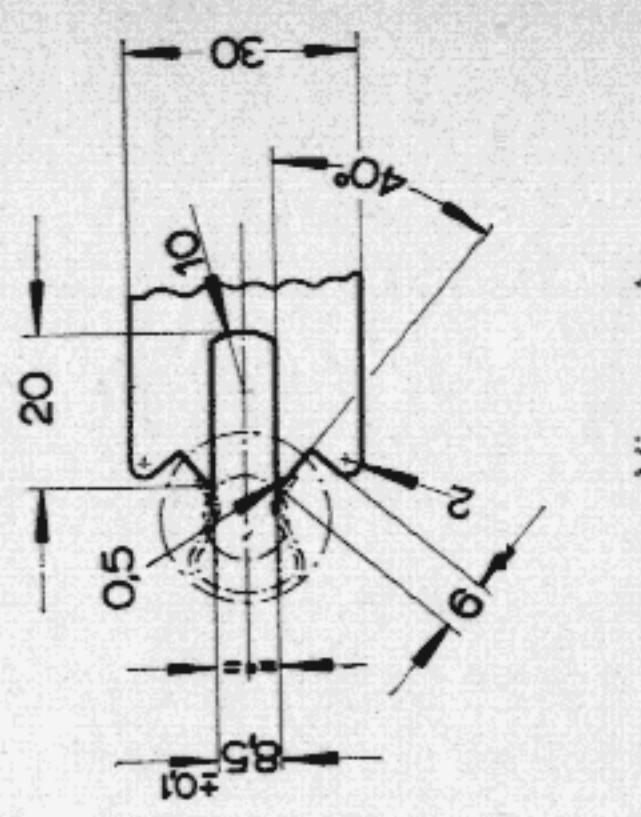
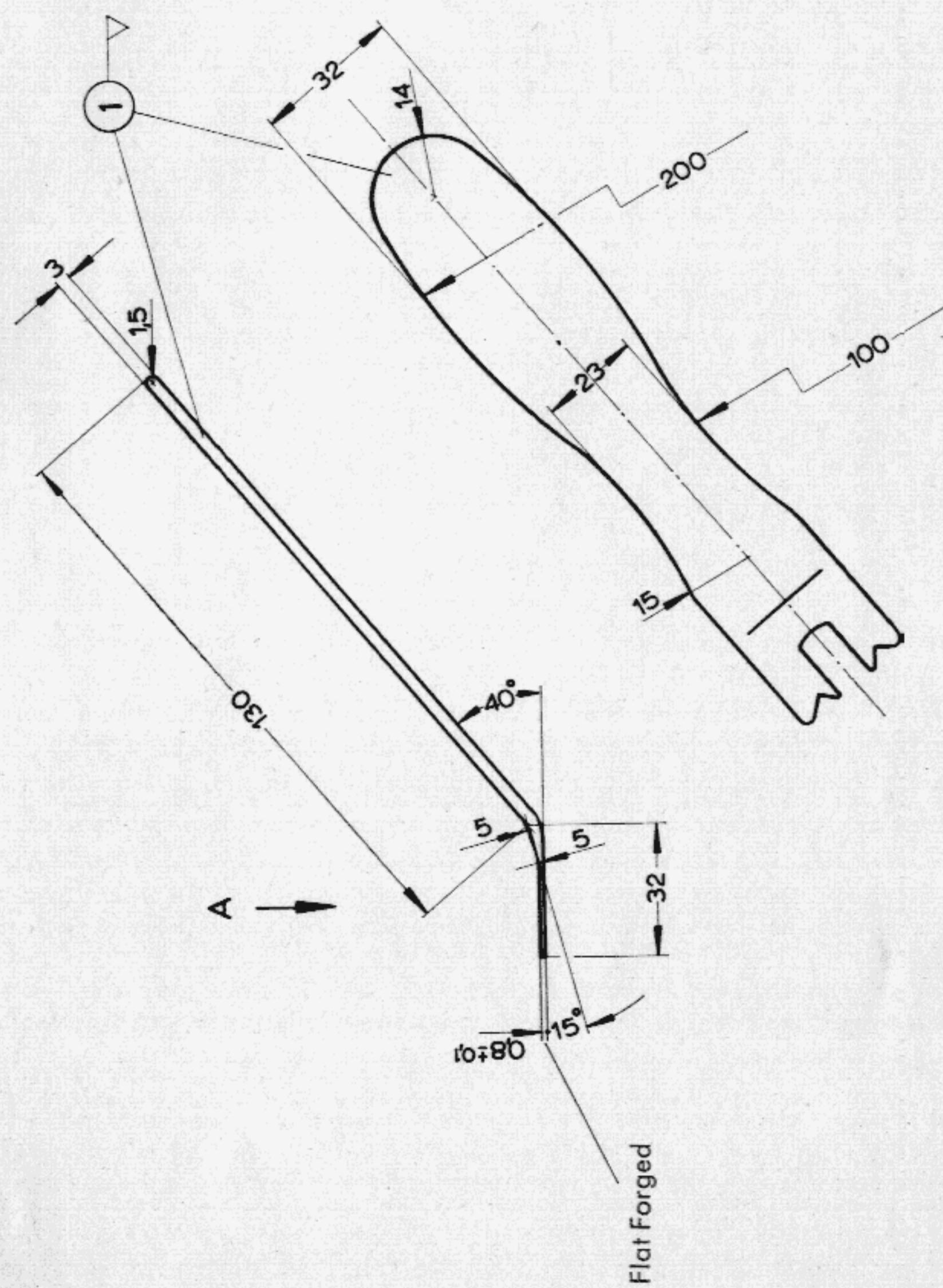
Disassembly Tool for Window Handles

The tool is used when removing the window winder handles. It is inserted between the trim panel and the handle escutcheon thereby pushing the securing spring out of the slot in the handle.



Construction Details for VVV 705

- 1 — Cut part 1 to size as shown in parts list.
- 2 — Forge end to 8 mm thickness as shown in drawing.
- 3 — Mark out and centre punch as shown.
- 4 — Saw out and file.
- 5 — Counter edges.
- 6 — Bend to shape.
- 7 — Paint grip.



View — A

Chamfer Edges

1	1	Disassembly tool 35 × 3 × 165	S 37
Part No.	Description		Material
No. required			
VOISWAGENWERK AG WOLFSBURG Service — Department			
Drawn 28.4.61 Giesecking	Checked 2.5.61 Sent	VW 705	

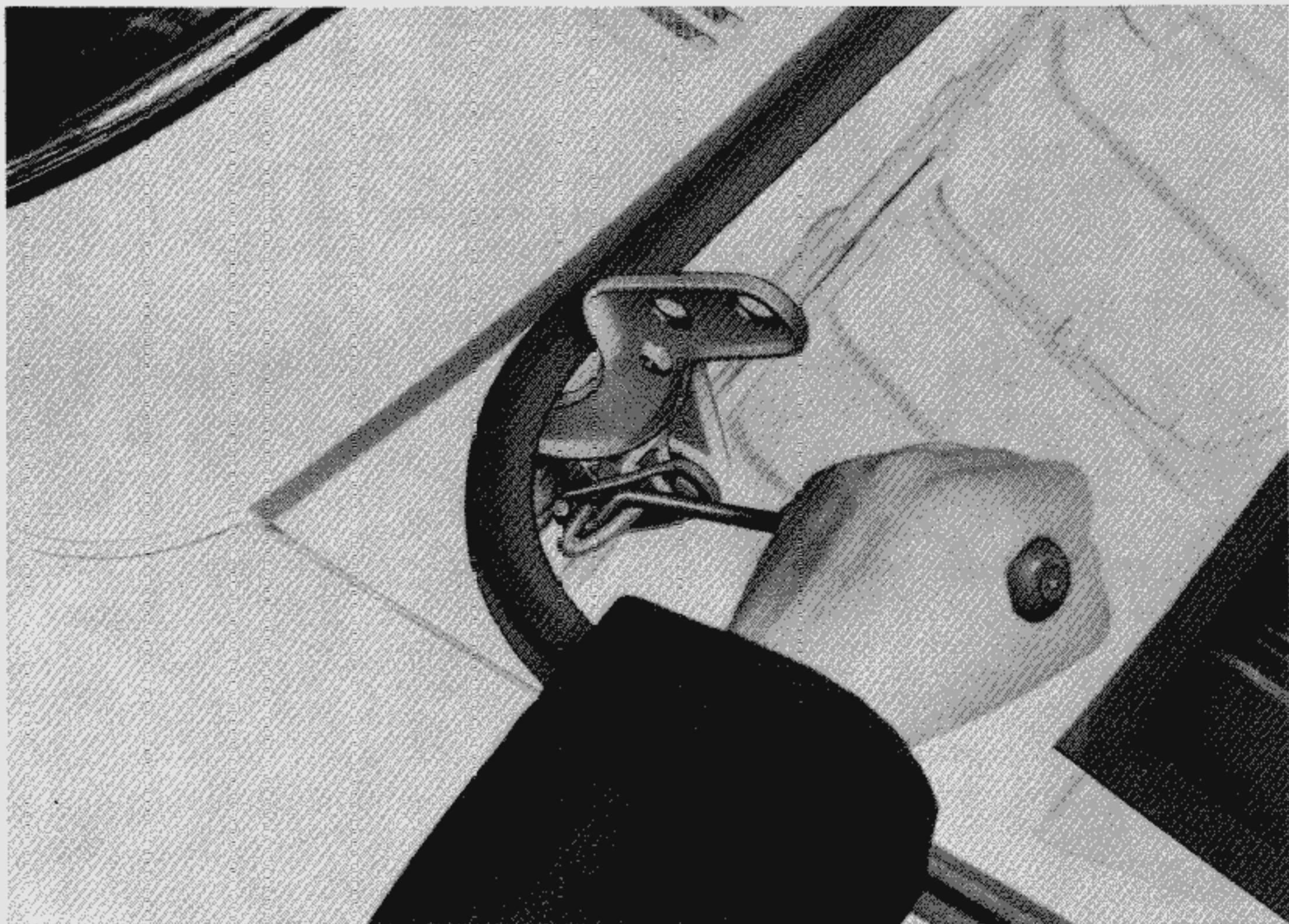
LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT

VW 709



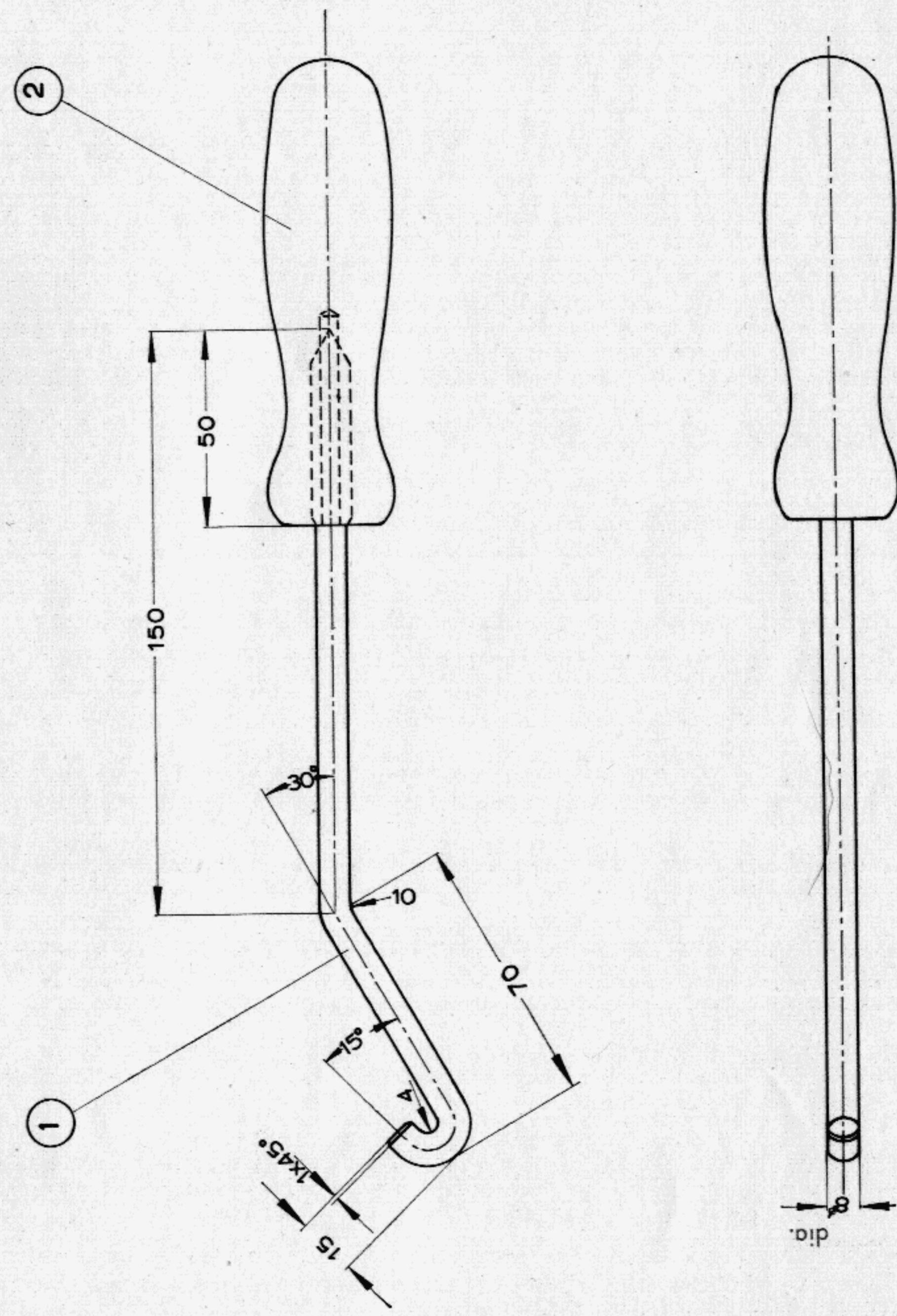
Torsion Bar Tensioning Tool

When the front hood is removed or installed the torsion bar is tensioned with the tool. Thus the load is removed from the torsion bar fixing bolts allowing them to be screwed in and out easily.



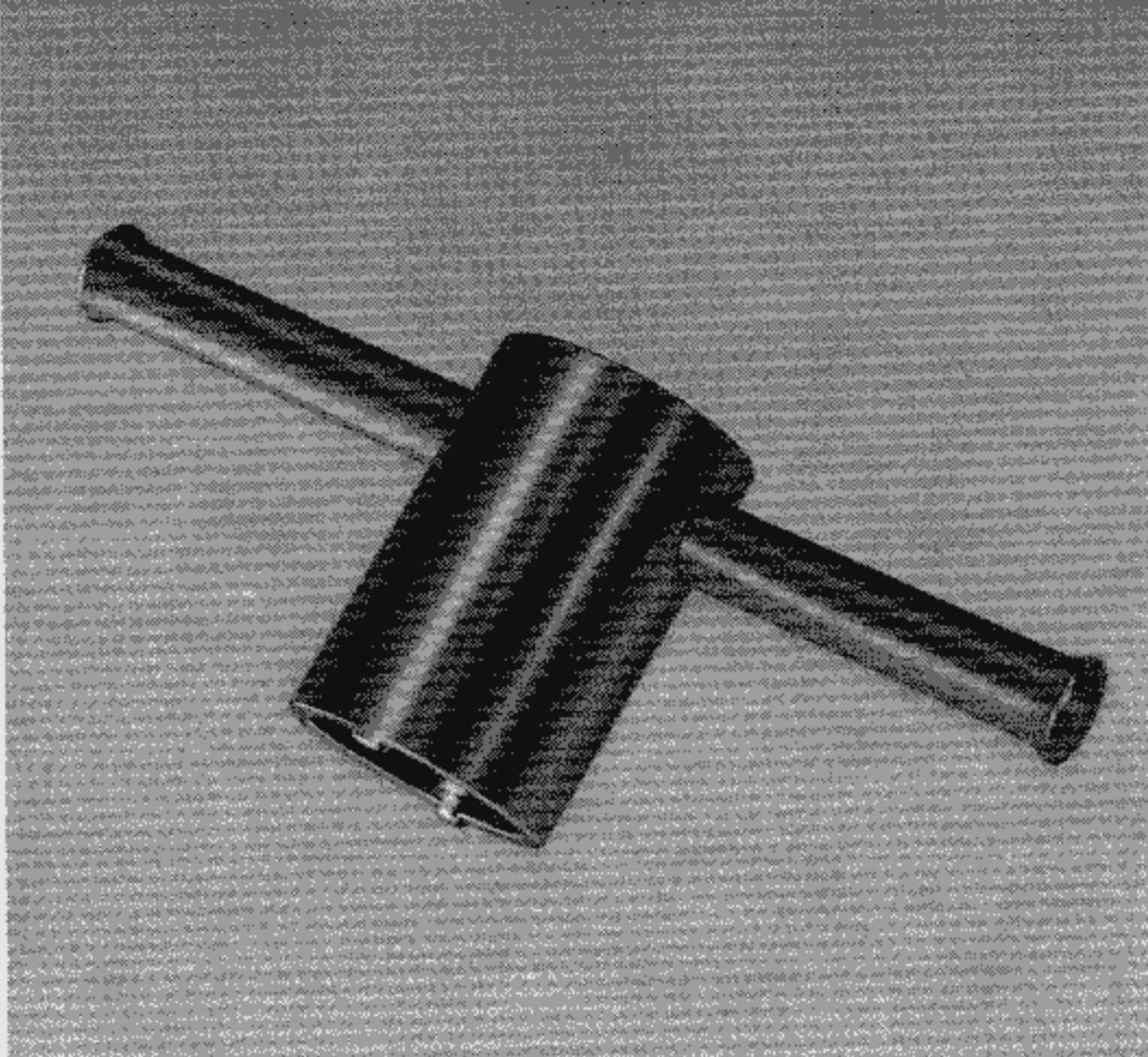
Construction Details for VW 700

- 1 — Have parts 1 and 2 as detailed in parts list ready to hand.
- 2 — Bend part 1 to shape.
- 3 — Flatten handle end of lever.
- 4 — Fit file handle.
- 5 — Paint the tool.



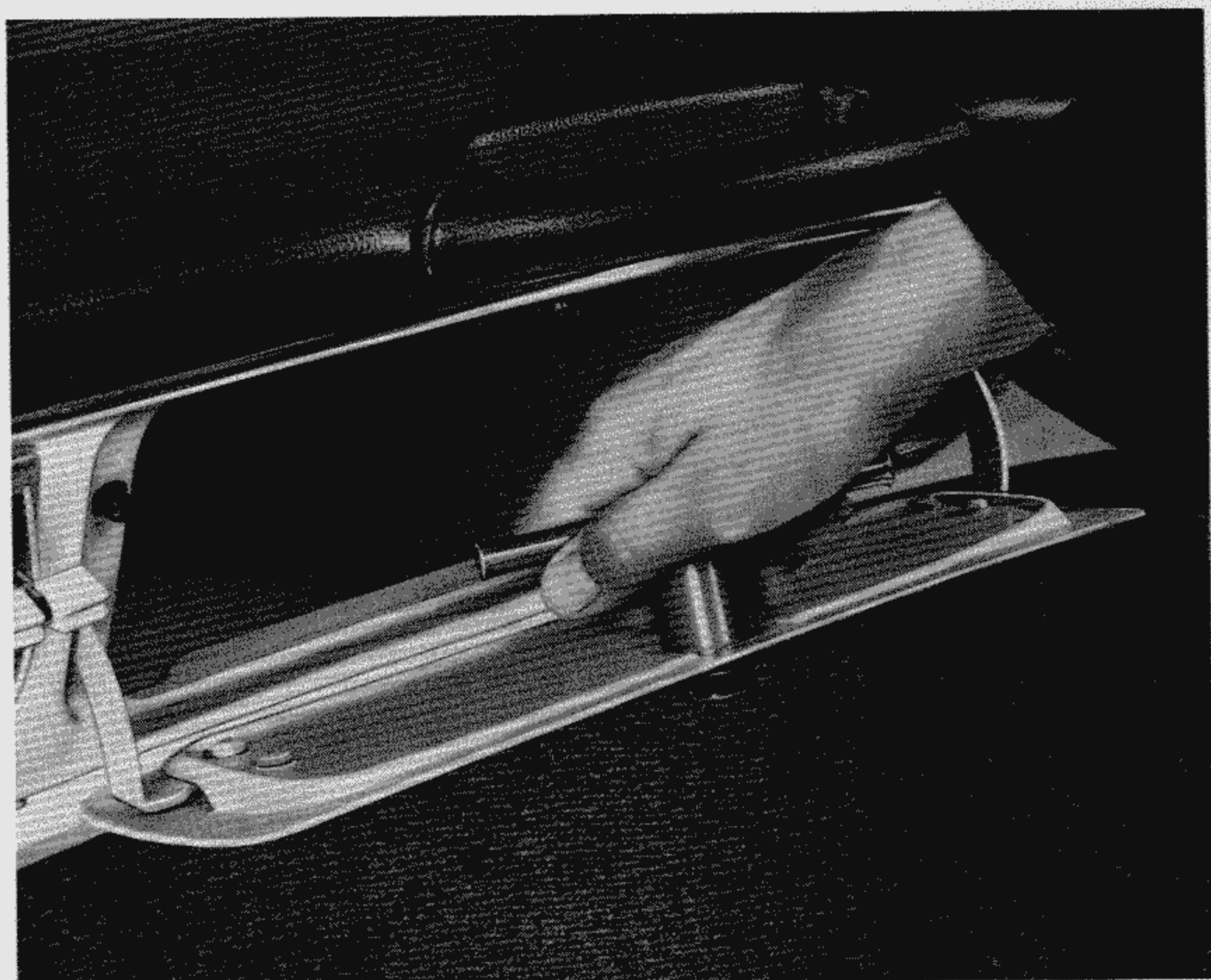
Torsion Bar Tensioning Tool			
2	1	File handle	32
1	1	Lever 8 dia. X 240	C 45
Part No. required	Part No.	Description	Material
			Part No. or standard spec.
VOLKSWAGENWERK AG			
WOLFSBURG			
Service — Department			
Drawn 13. 6. 61 Raebel	Checked 14. 6. 61 Giesecking		
VW 709			

LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



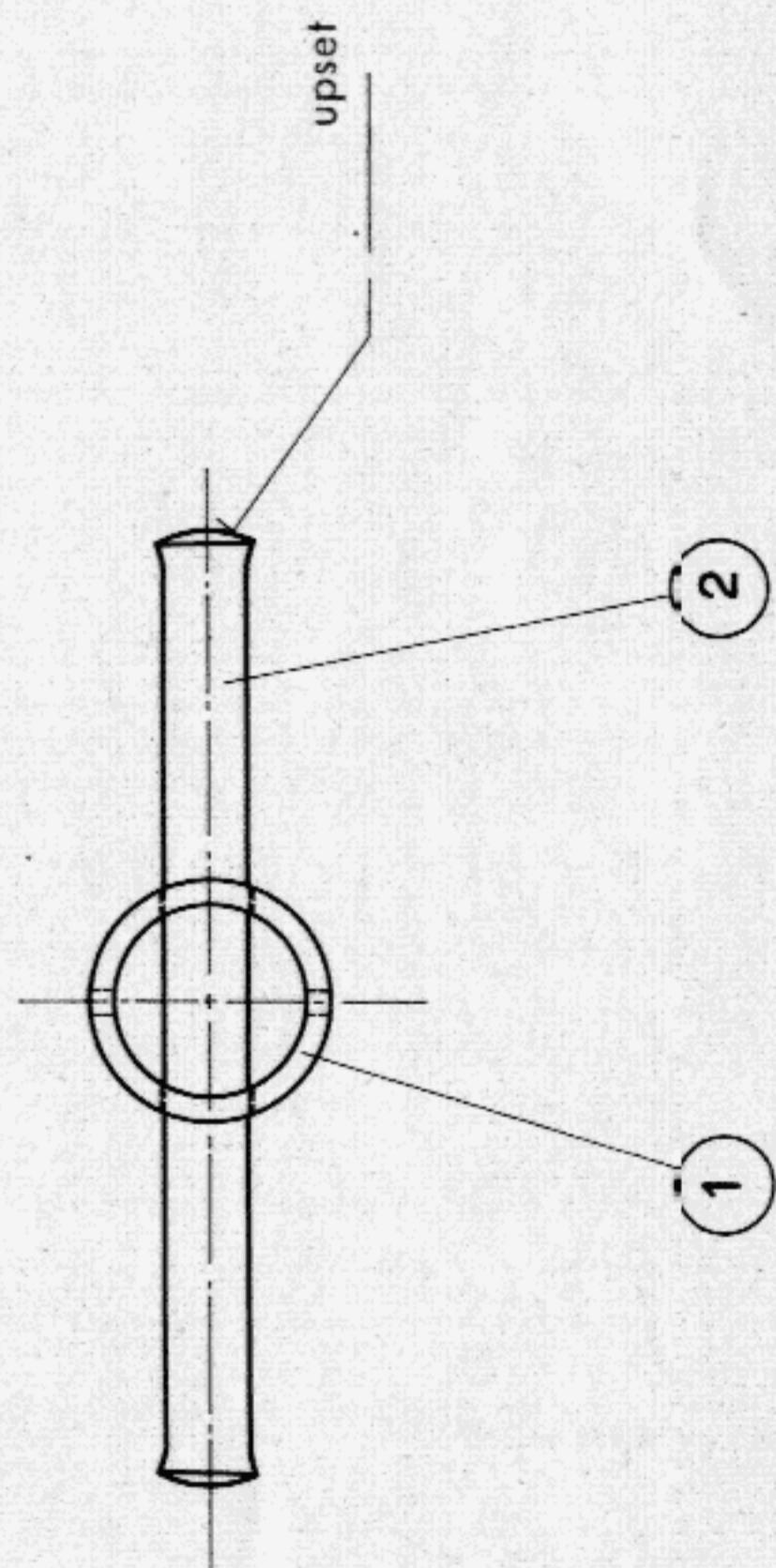
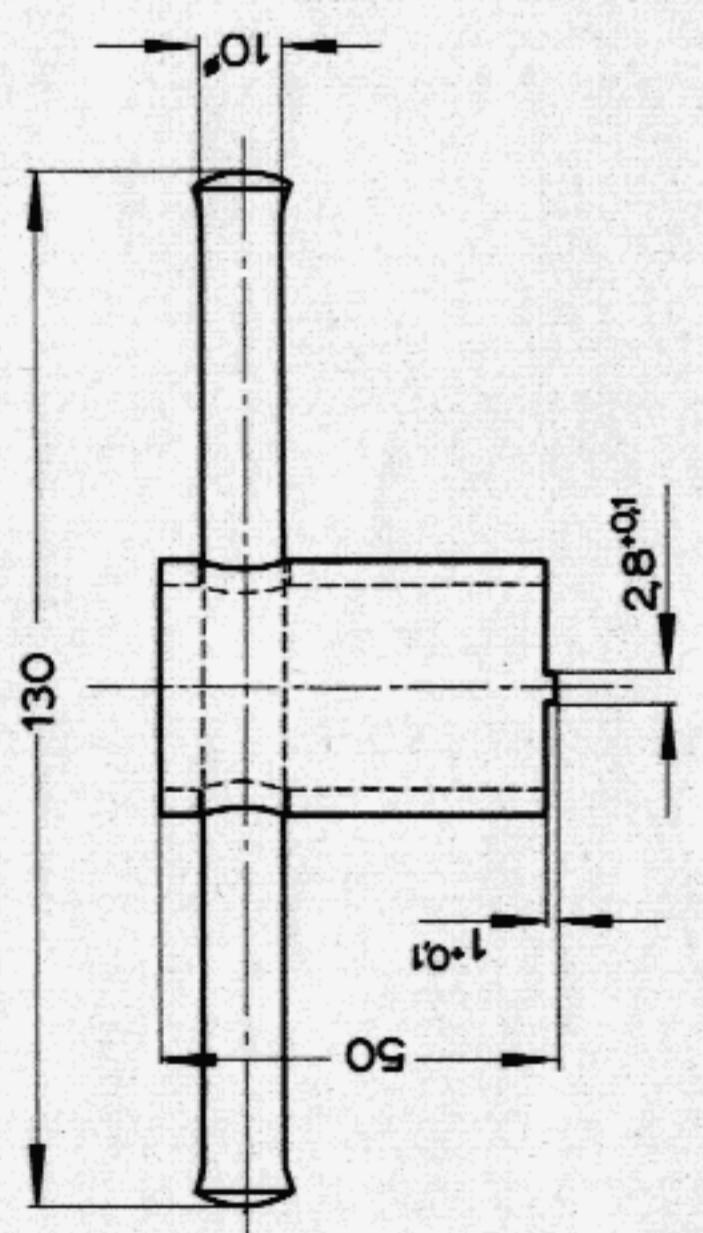
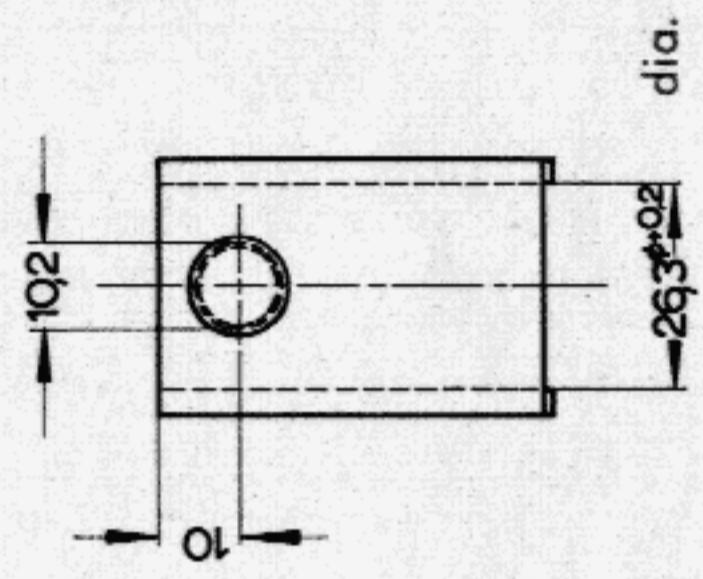
VW 710
Assembly wrench for glove compartment lid lock

By using this wrench the lock of the glove compartment lid can be installed or removed with the lid in situ or disassembled. The wrench is placed on the lock so that the pins locate in the recesses of the locking ring.



Construction Details for VW 710

- 1 — Cut parts 1 and 2 as detailed in list of parts.**
- 2 — Turn part 2 as shown in drawing.**
- 3 — Mark out 10.2 mm hole, drill out and trim.**
- 4 — Mark out pins and finish as shown.**
- 5 — Upset one end of part 2.**
- 6 — Insert the handle into wrench and upset the second end.**
- 7 — Burnish or lightly grease the wrench.**

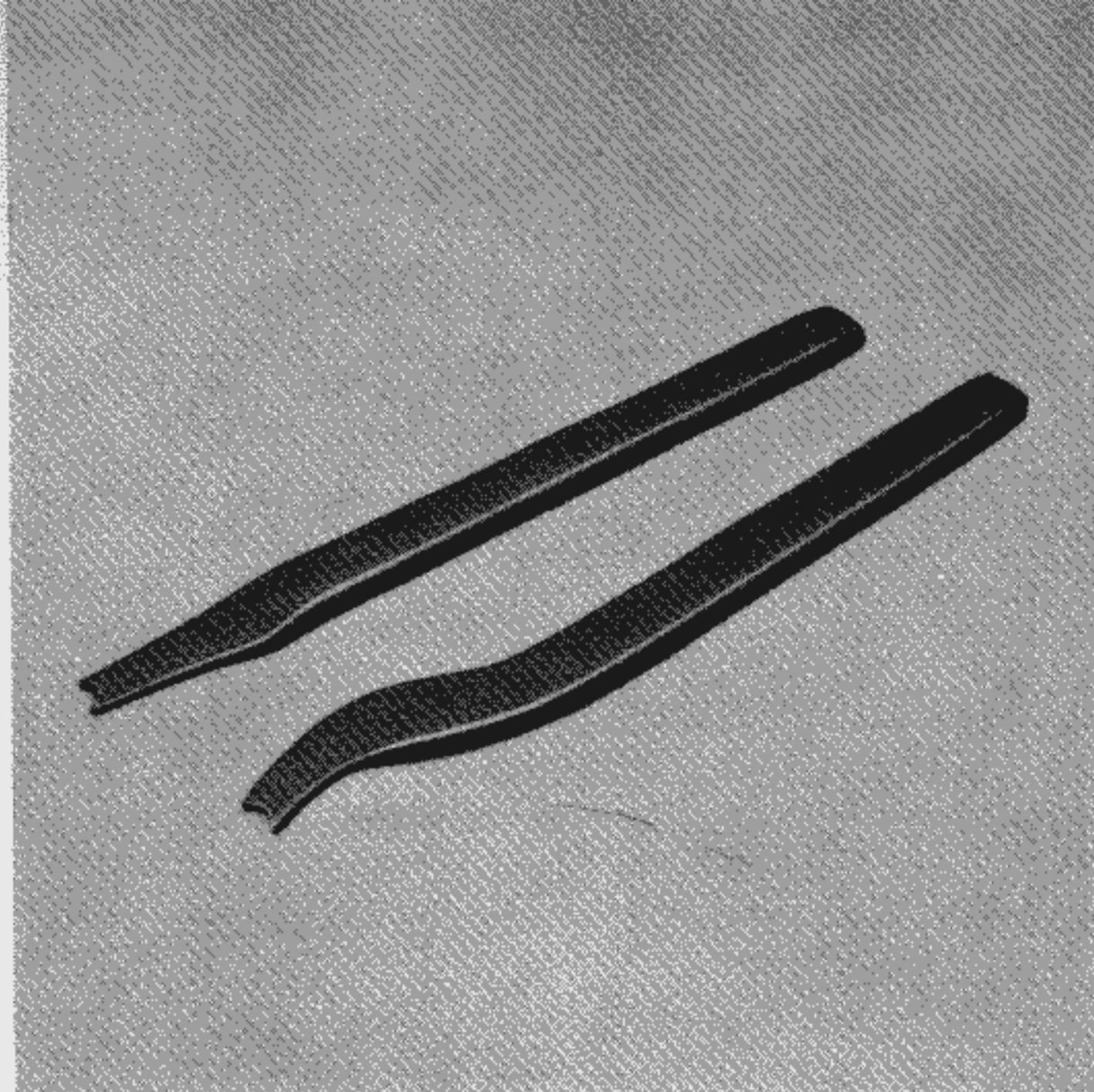


Part No. required	Description	Part No. or standard spec.	Material
2	Handle	10 ϕ X 140	St 37
1	Wrench Body	32 X 3 X 55	St 35 DIN 2385

VOLKSWAGENWERK AG
WOLFSBURG
Service — Department

Drawn 14. 9. 61 Raebel	Checked 15. 9. 61 Giesecking
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Assembly Wrench for Glove Compartment Lid Lock
VW 710



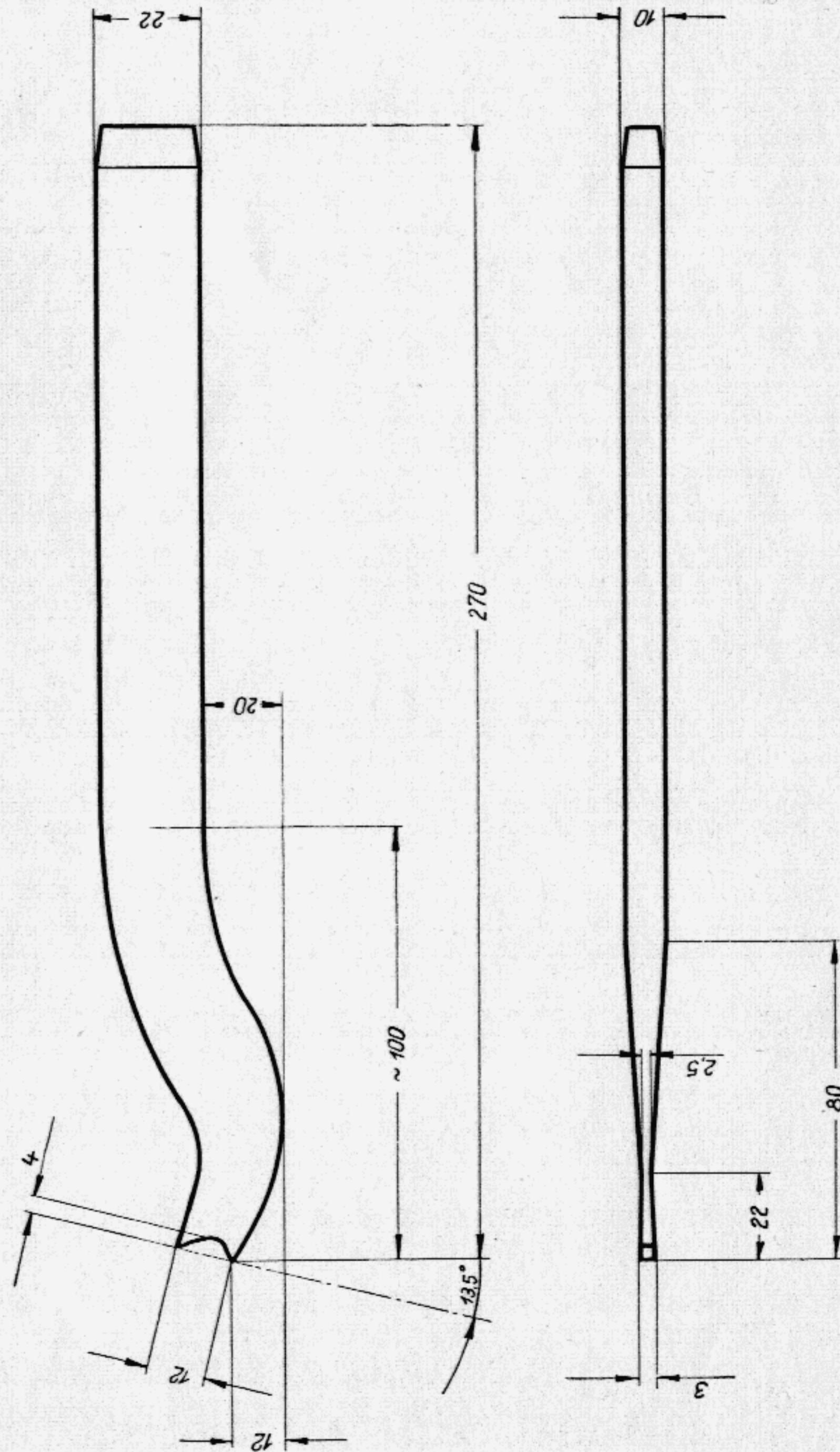
Body Parting Tool

The tool takes the form of a chisel which enables sections of the body panelling to be cut out manually if damaged beyond repair as a result of an accident or some other mishap. If necessary, a hole of approximately 3 mm diameter should be drilled at the commencement of the cut.



Construction Details for VW 732

- 1 – Cut strip to dimensions given in list of parts.**
- 2 – Forge as shown in drawing. Give the cutting edge a clean finish and then harden.**
- 3 – Paint handle of tool in prevailing colour of equipment and machines in the shop.**



Part No.	Description	Rough Size or Standard Spec.	Remarks
1 1	Chisel	10 x 22 x ~300	St.C. 60. 61

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WOLFSBURG
Service Department

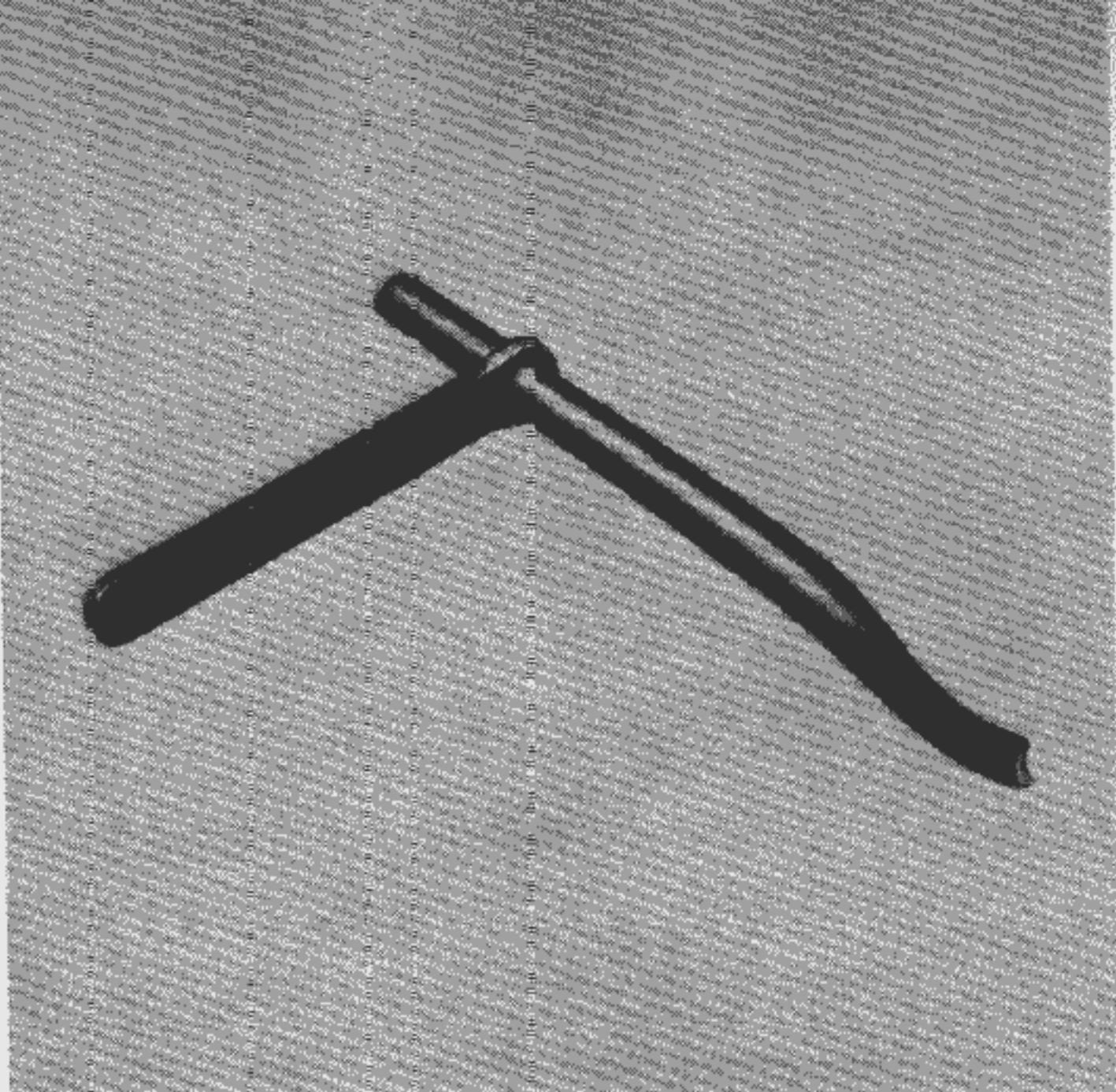
Drawn:	Checked:
24 Oct., 50 Kohl	Semf

Body Parting Tool

VW 732

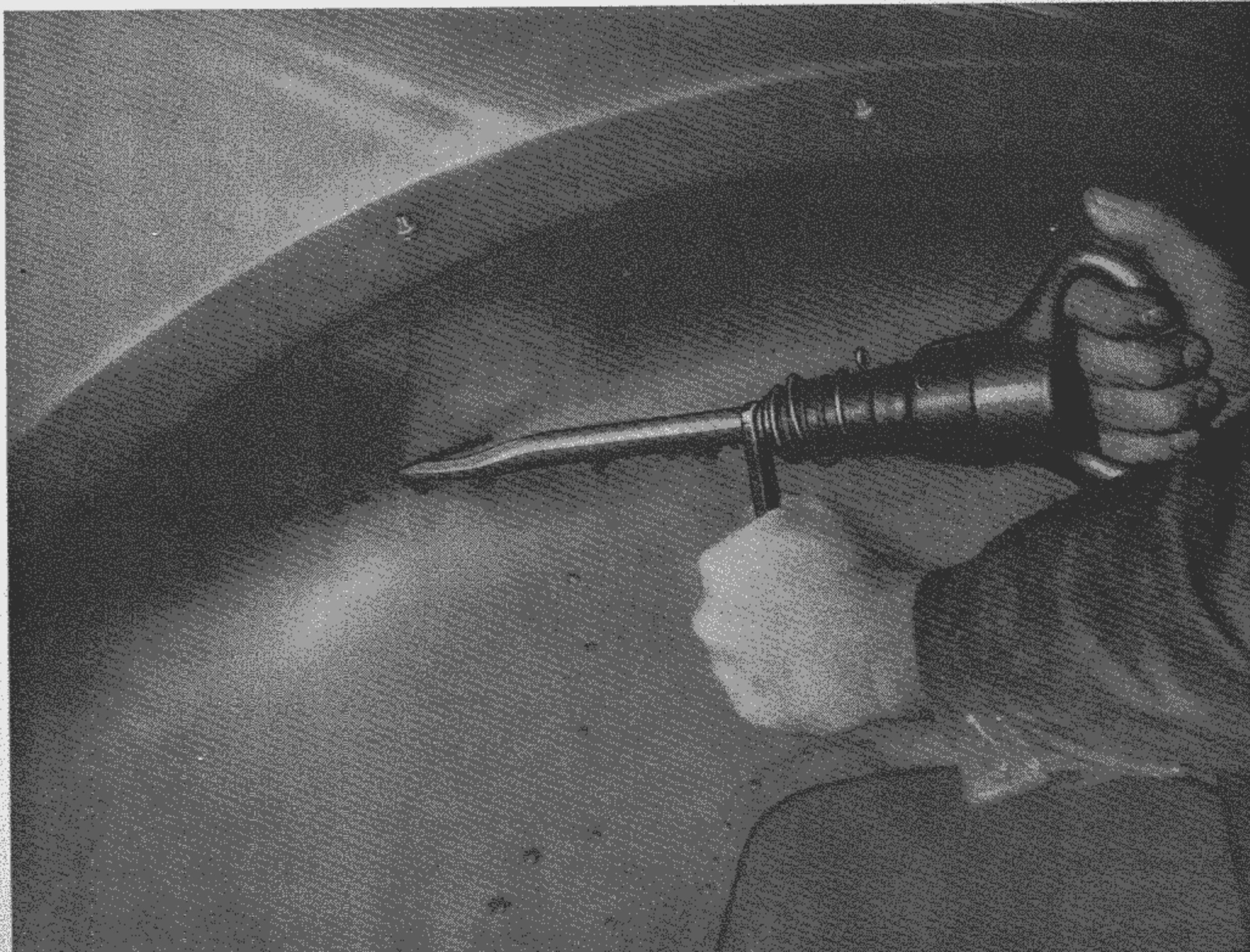
LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT

VW 733



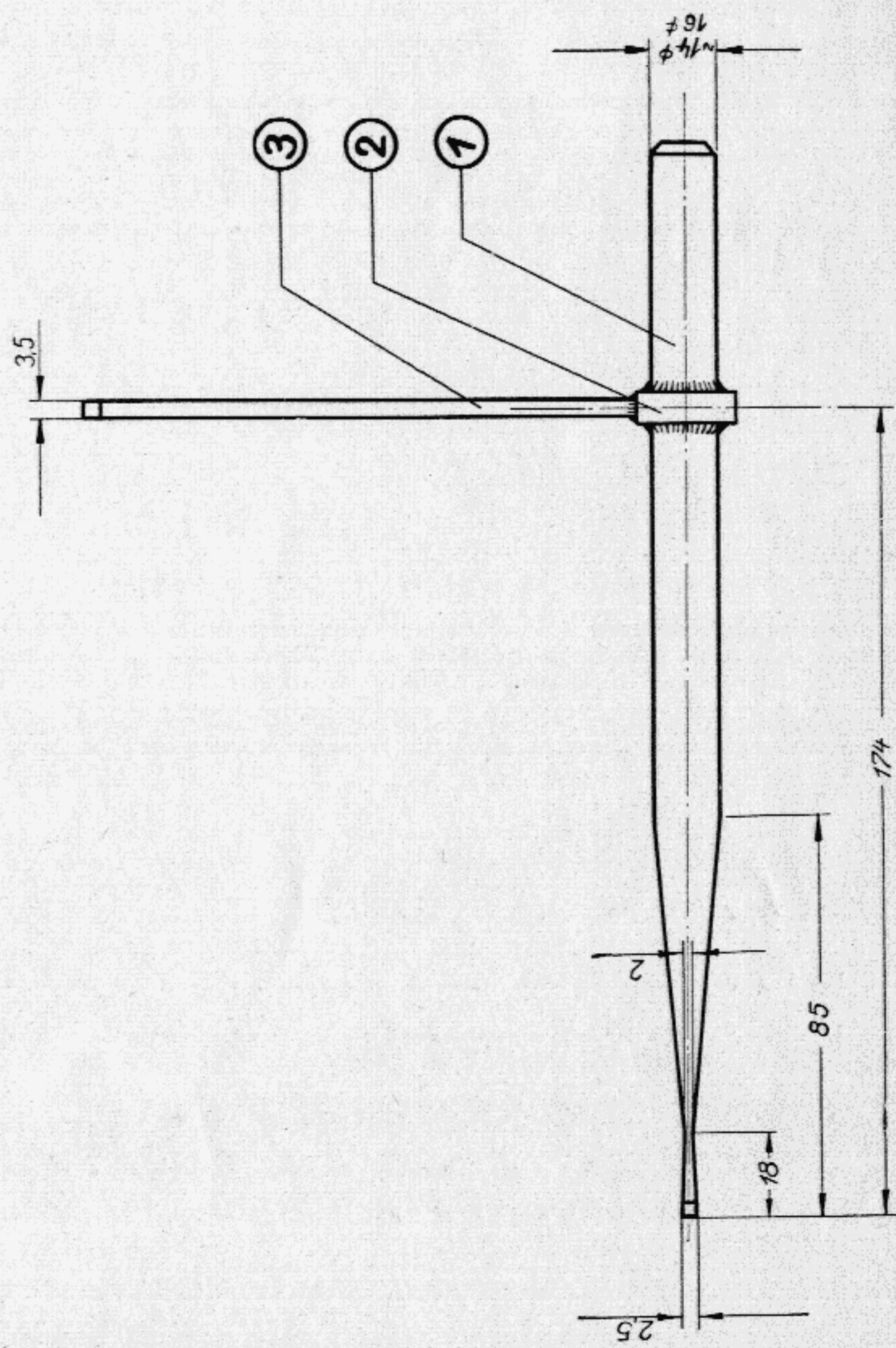
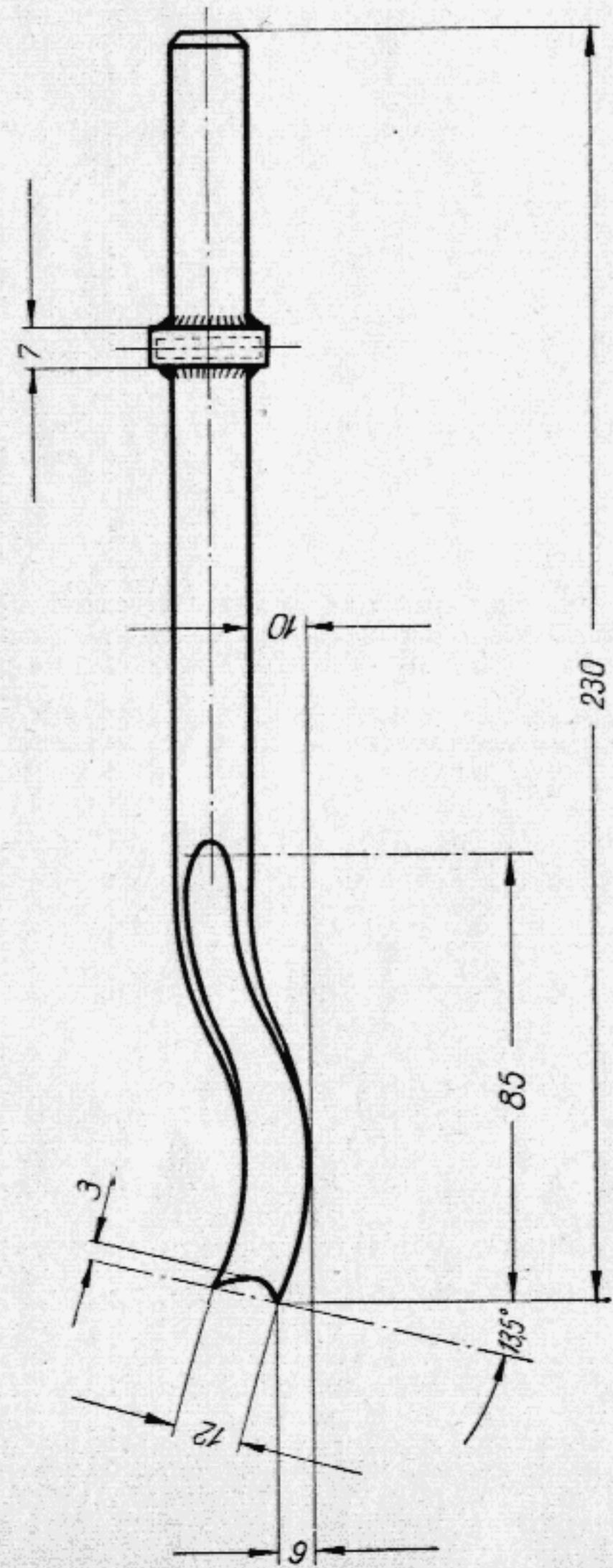
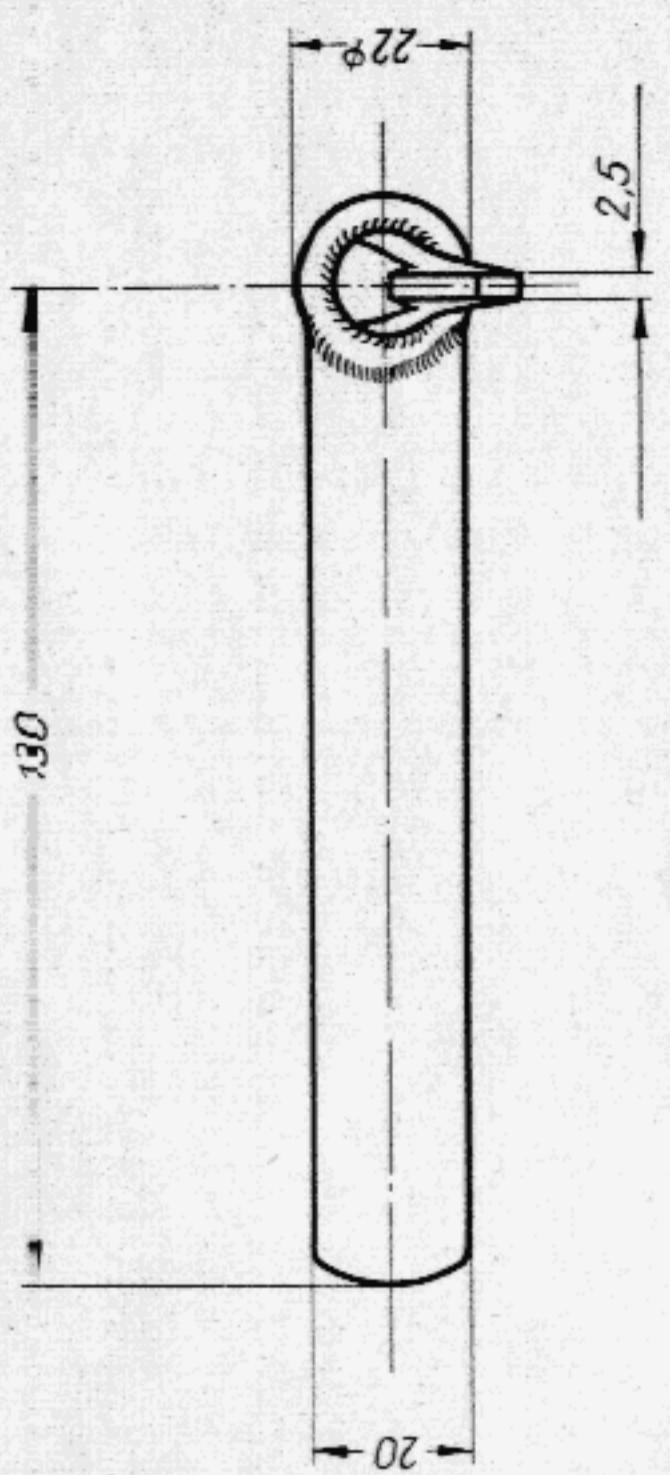
Body Parting Tool (Pneumatic)

This tool is used in conjunction with a pneumatic hammer for cutting out sections of the body panelling which have been damaged beyond repair as a result of an accident or other mishap.



Construction Details for VW T39

- 1 – Cut collar, bar and strip to dimensions given in list of parts.**
- 2 – Forge round bar (1) as shown in drawing. Give the cutting edge a clean finish and then harden.**
- 3 – Weld collar (2) to bar (1) as shown in drawing.**
- 4 – Weld strip (3) to collar (2) at an angle of 90° to the cutting edge.**
- 5 – Paint shank and handle of tool in prevailing colour of equipment and machines in the shop.**

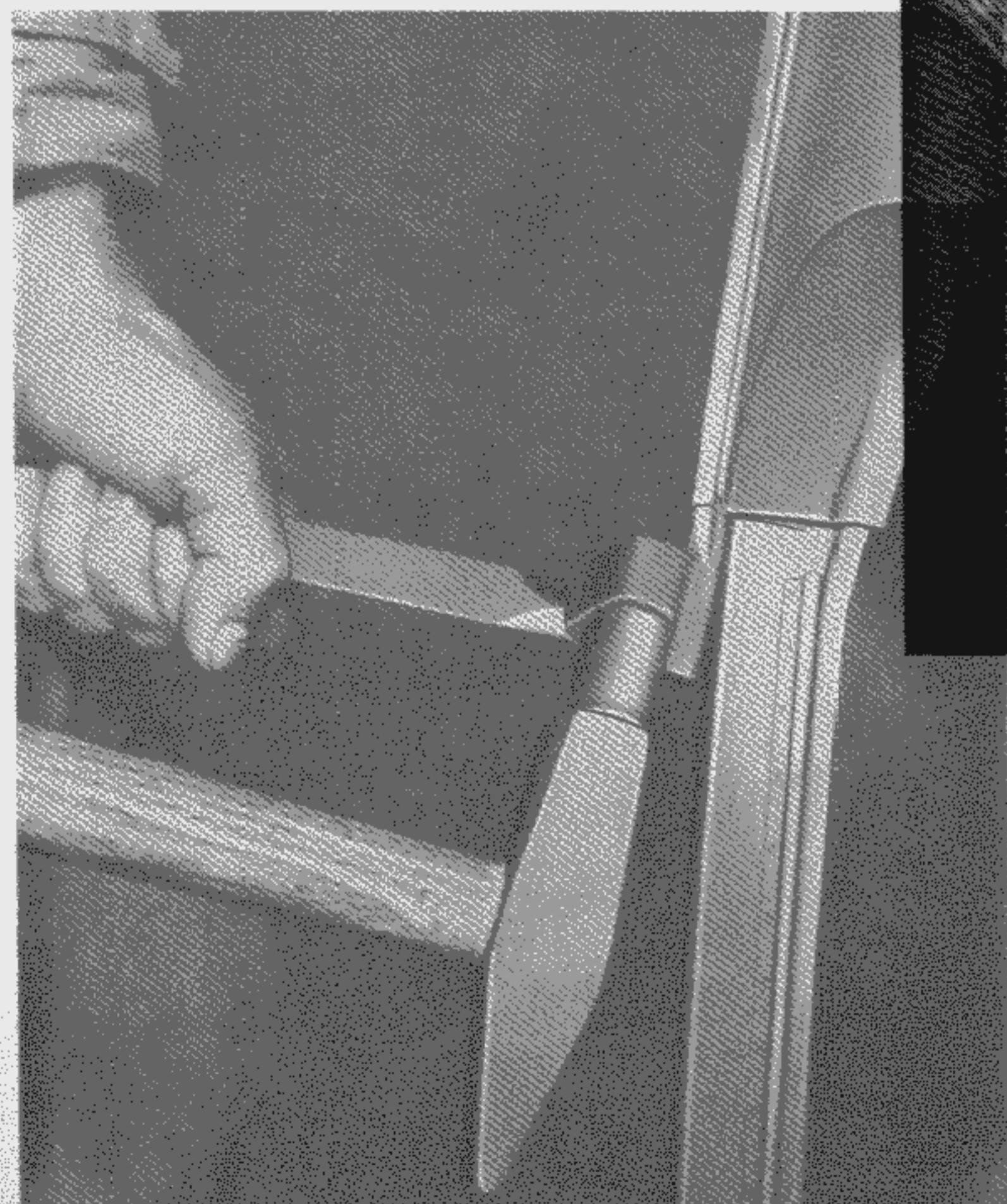


Part No.	No. Required	Description	Rough Size or Standard Spec.	Remarks
3	1	Handle	3,5 x 20 x 130	MS strip
2	1	Collar	14φ x 22φ x 7	Welded on
1	1	Chisel	14φ x ~250	Si.C. 60.61

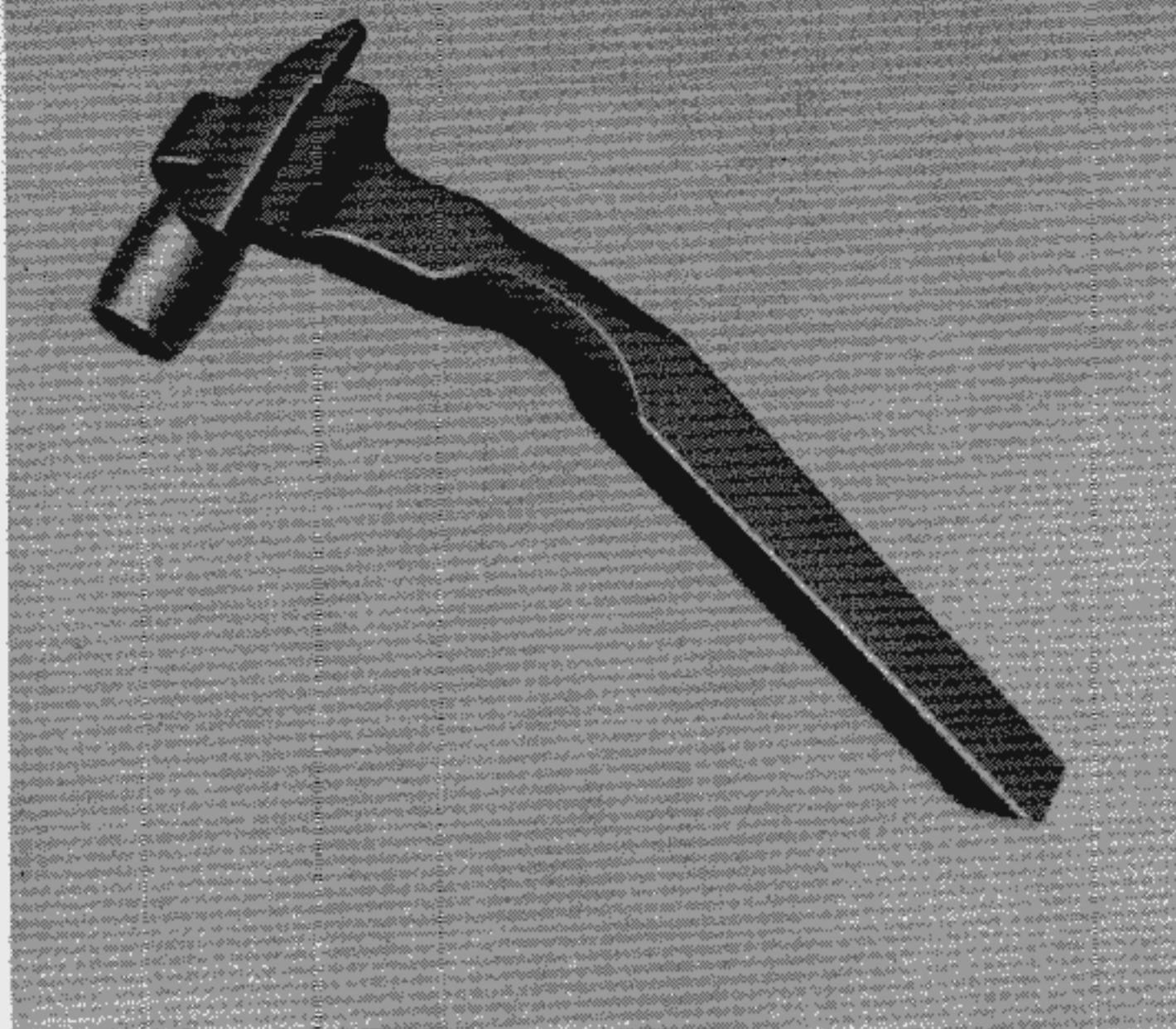
Body Parting Tool (Pneumatic)

VOLKSWAGENWERK GMBH
WOLFSBURG
Service Department

Drawn:
2 Nov., 50 Kohl
Checked:
Senf
VW 733



The tool is used for removing the roof of damaged vehicles. The operation is commenced on the right-hand side at the outlet of the drip mould after opening up the flange for a distance of approximately 60 mm (2 $\frac{1}{4}$ in.) by some alternative method in order to allow the parting tool to be entered above the top door hinge. On the left-hand side a start is made at the rear outlet of the drip mould by knocking the point of the parting tool into the end of the flange which is covered with paint.

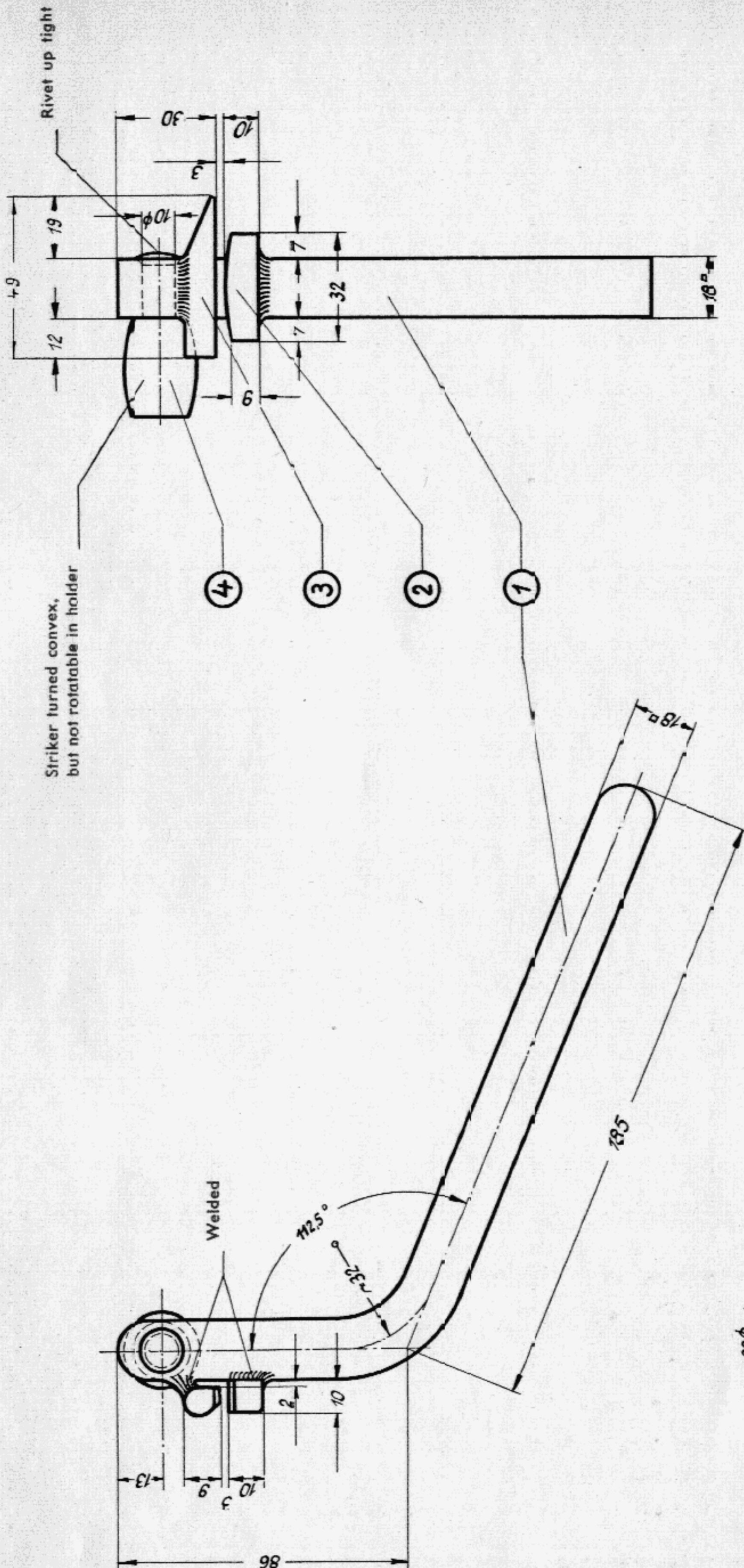


Rain Drip Mould Deflanging Tool



Construction Details for VW 734

- 1 - Cut round and square bar to dimensions given in list of parts.
- 2 - Drill a 10 mm ($\frac{25}{16}$ in.) hole in bar (1). Countersink hole on one side to a depth of approximately 2 mm ($\frac{5}{64}$ in.).
- 3 - Bend bar (1) as shown in drawing.
- 4 - Turn striker (4) from round bar as shown in drawing.
- 5 - Make back-up jaw (2) from square bar as shown in drawing.
- 6 - Make bead lifter (3) from square bar as shown in drawing.
- 7 - Insert parallel shank of striker (4) into hole in bar (1) and rivet over projecting portion of shank on countersunk side of hole.
- 8 - Weld parts (2) and (3) to bar (1) as shown in drawing. Harden point of part (3).
- 9 - Paint handle of deflanging tool in prevailing colour of equipment and machines in the shop.



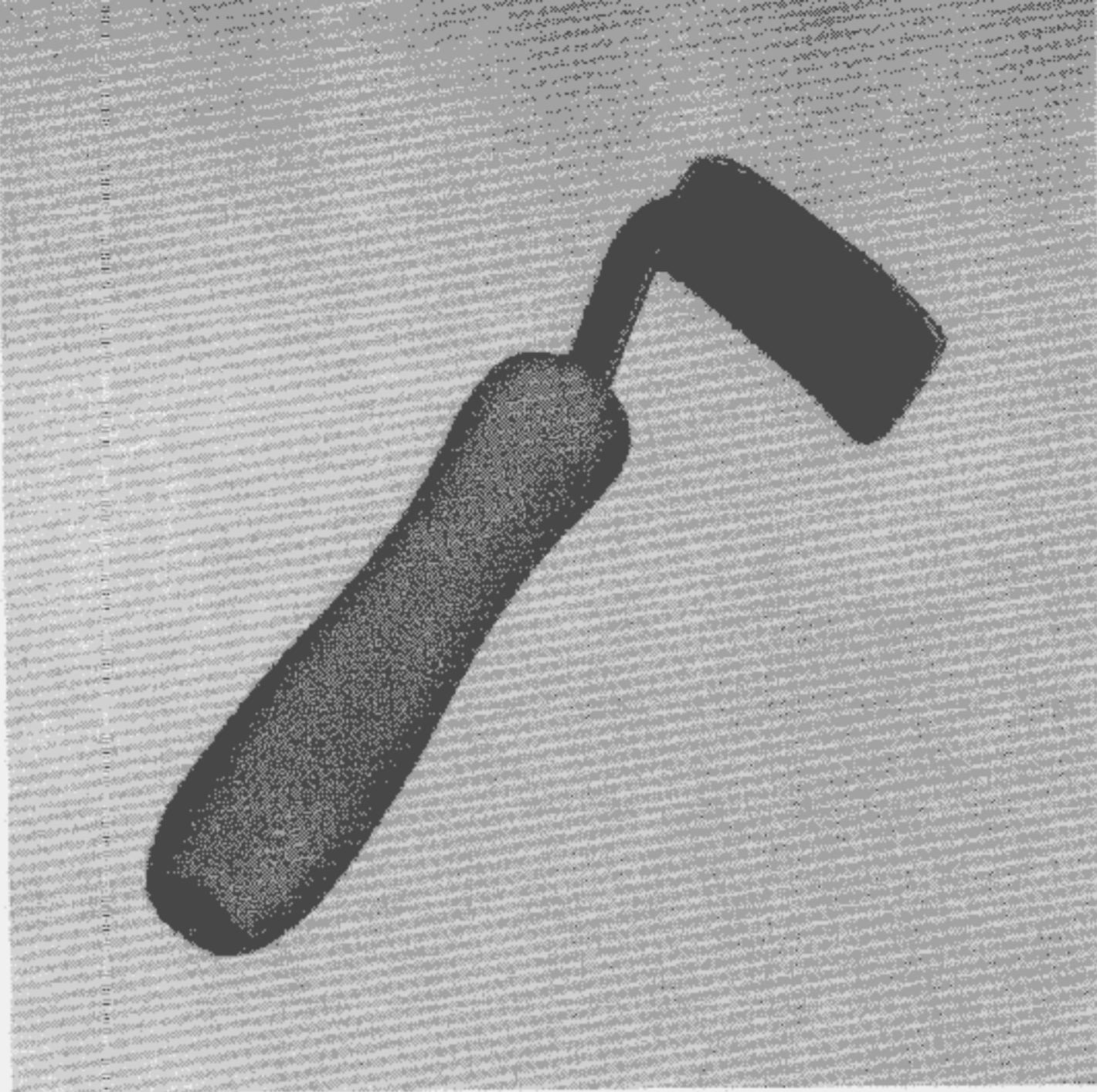
4		1	Striker	22ø x 50	Riveted up tight
3		1	Bead lifter	9x9x50	Steel. Tip hardened
2		1	Back-up jaw	10x10x32	MS strip
1		1	Tool holder	18x18x280	MS strip
Part No.	No. Required	Description		Rough Size or Standard Spec.	Remarks

VOLKSWAGENWERKE GMBH.

Rain Drip Mould Deflanging Tool

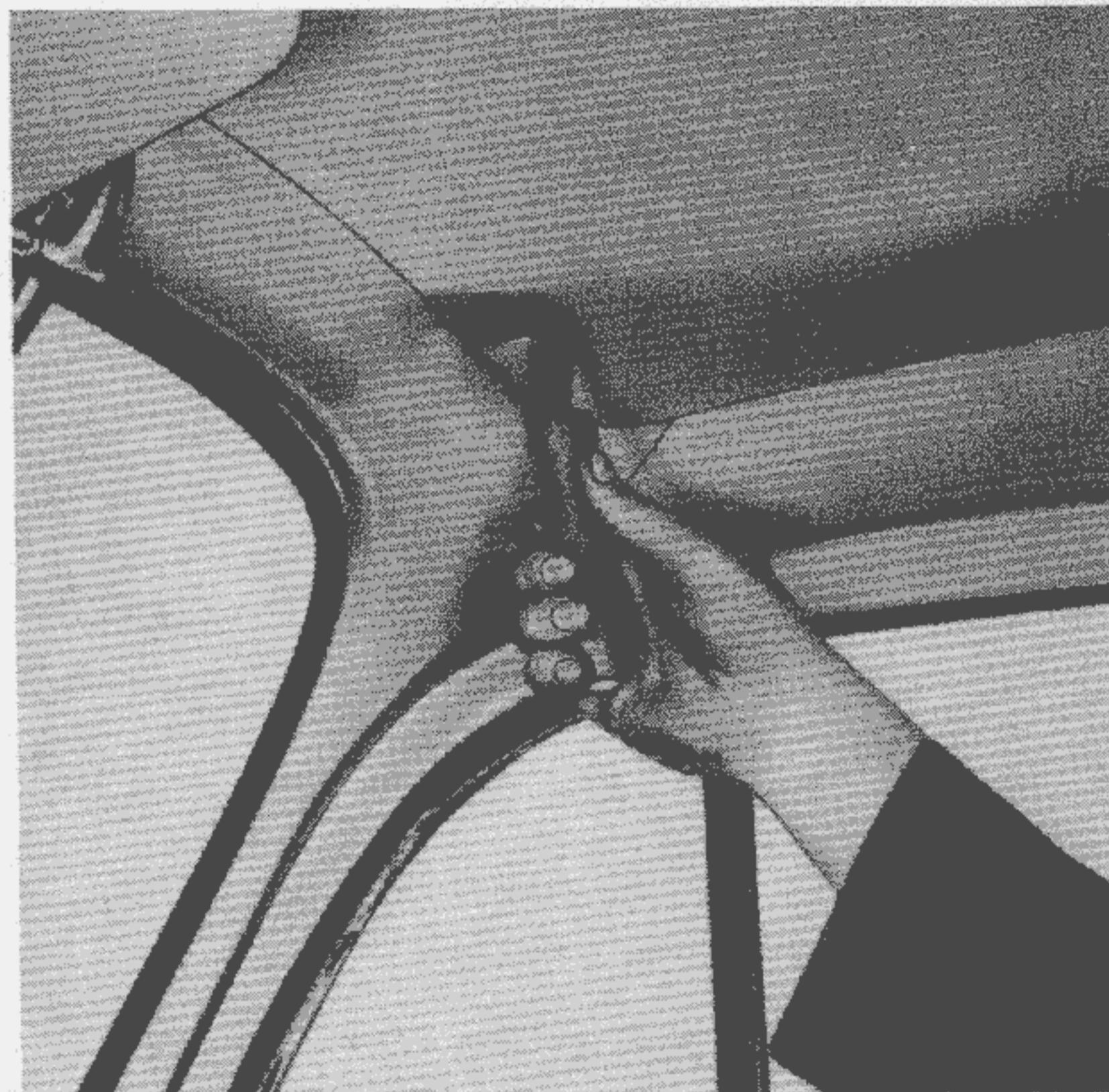
VW 734
Drawn: Checked:

● LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



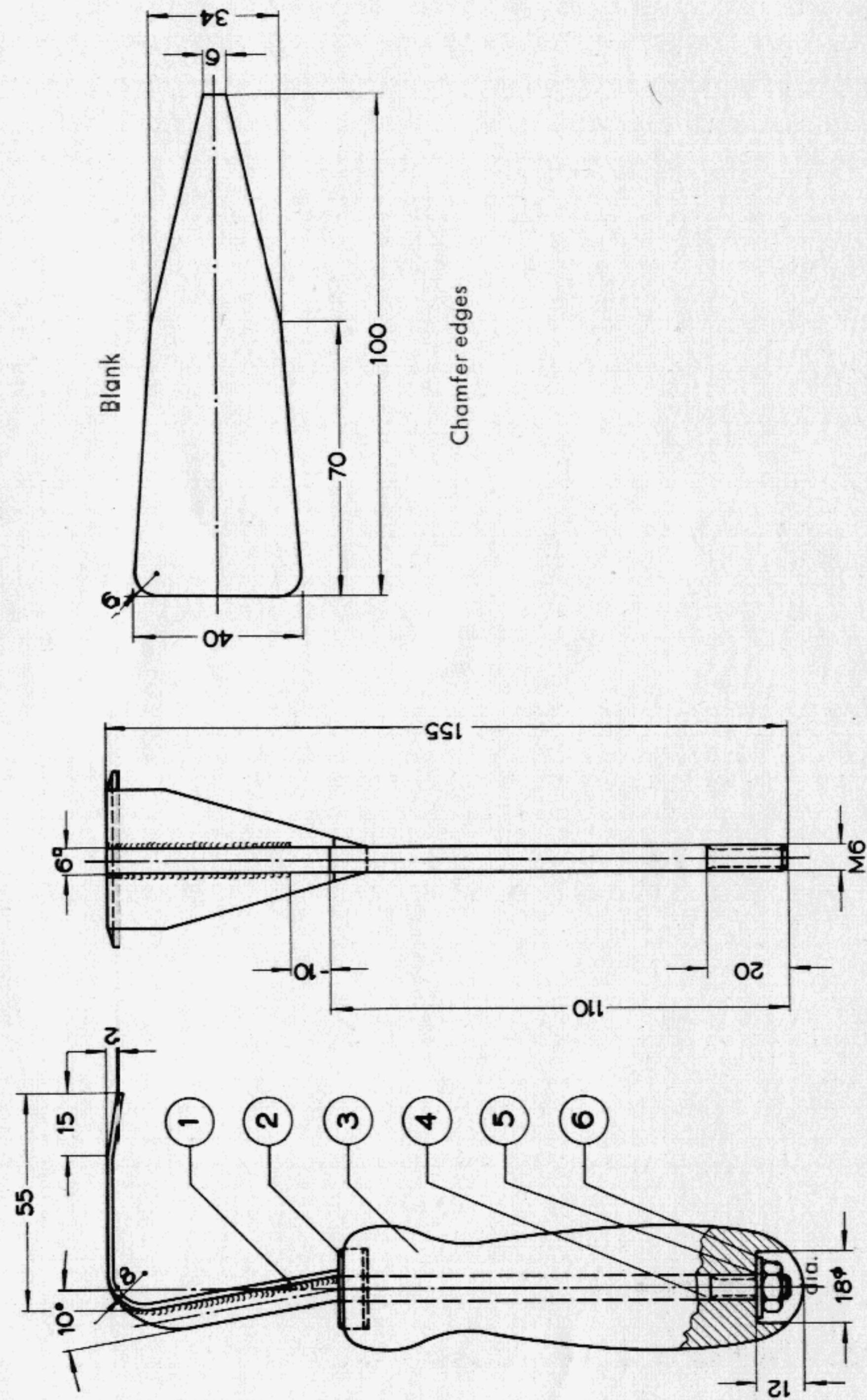
Headlining Tool

The tool simplifies the removal and fitting of the headlining.



Construction Details for VW 736/1

- 1 — Cut spring steel and square steel bar as detailed in list of parts.
- 2 — Weld the square steel bar (2) to spring steel (1) as shown on drawing. Shape spring steel as shown, anneal, bend and temper, clean and smooth welded seams. Cut a thread M 6 on square steel bar as shown on drawing.
- 3 — Drill wooden handle (3) using 5 mm dia. drill. Drive in ferrule (4) and at the other end of the handle, bore out as shown on drawing using a 18 mm dia. drill.
- 4 — Push the blade into wooden handle, fit a washer (6) over end of shaft, tighten hexagon nut (5).



6	1	Nut	M 6	DIN 934
5	1	Washer	6.4	DIN 125
4	1	Square steel bar	6 X 6 X 160	DIN 178
3	1	Wooden handle	32 dia.	DIN 395
2	1	Ferrule	20 dia.	DIN 396
1	1	Spring steel	40 X 1.5 X 110	DIN 17222
Part No.	Description		Rough size or standard spec.	Remarks
No. required				

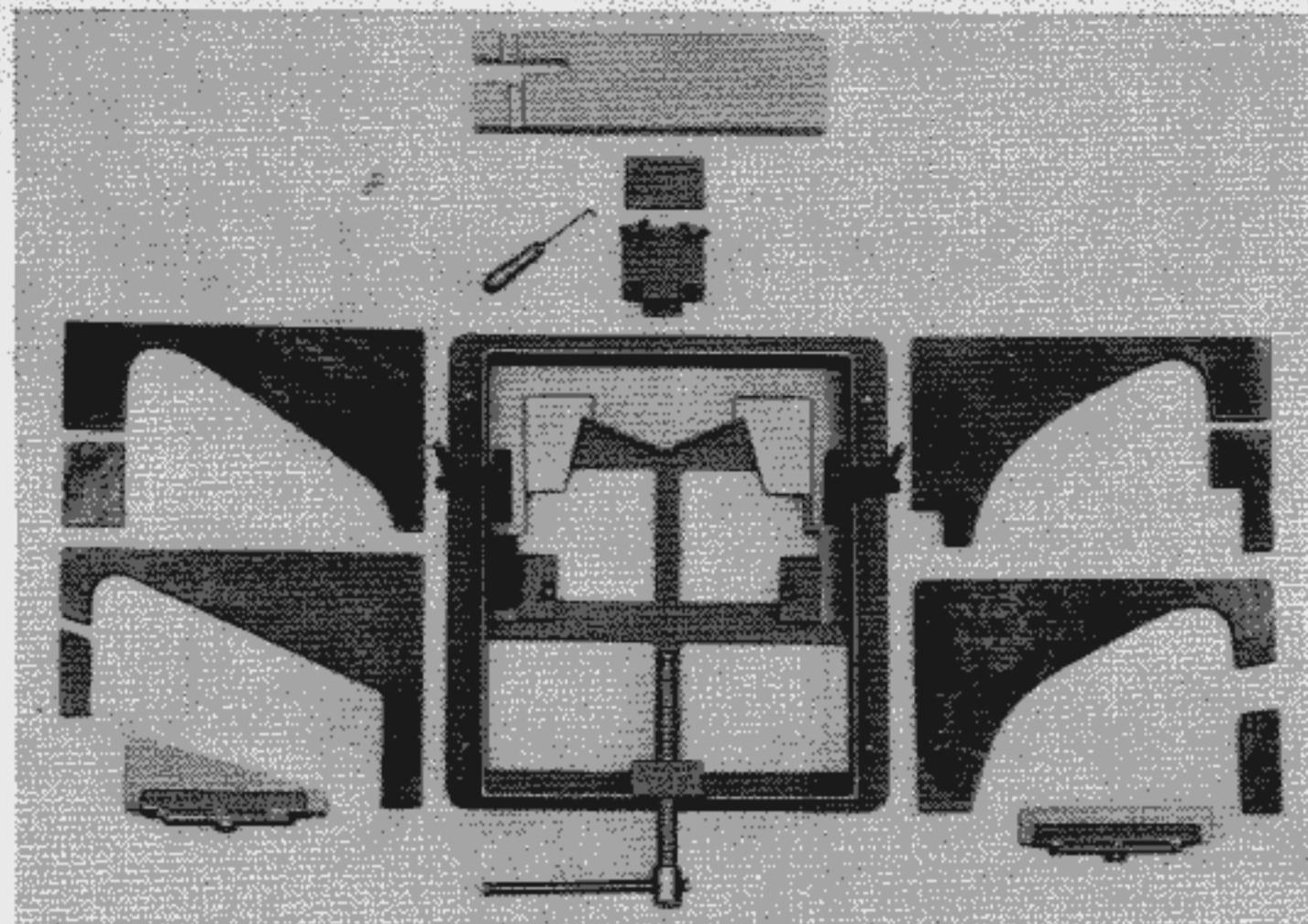
VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn 1.3.60 Weinstock
Checked 7.3.60 Kühn

Headlining Tool

VW 736/1

LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



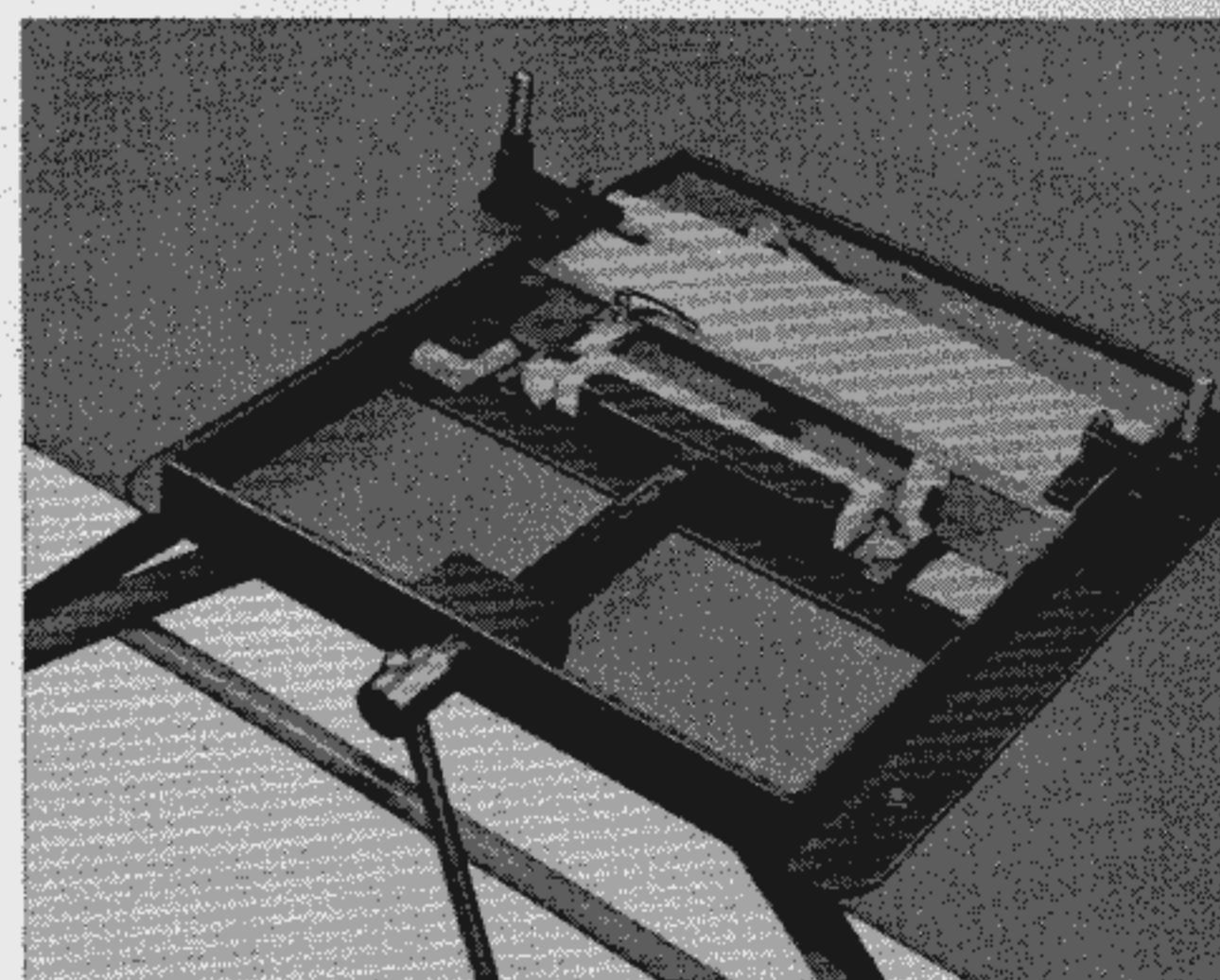
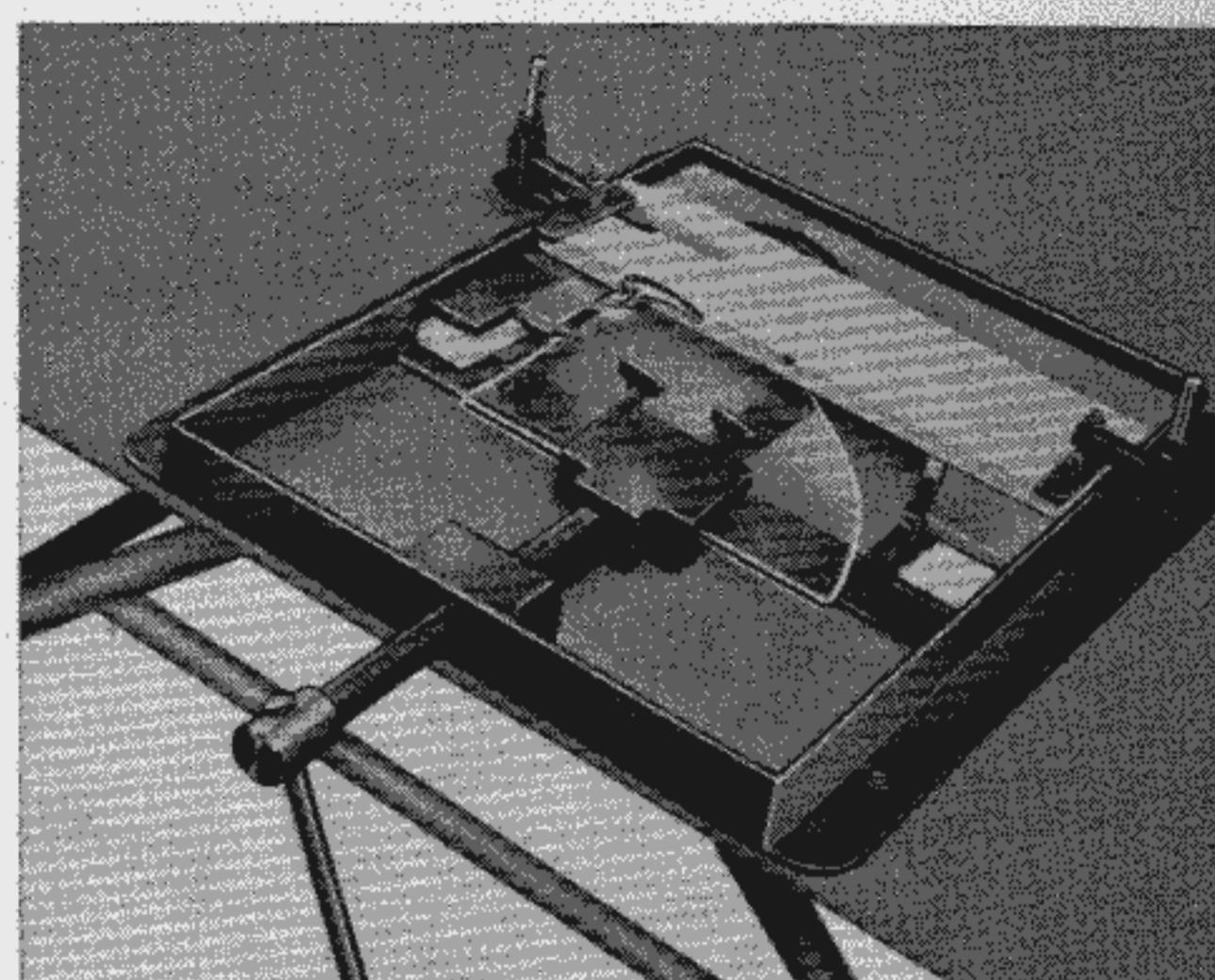
**Tool for Installing and Removing
Vent Wing Glass
Type 1, 2, 3**

This appliance facilitates the removal of the glass and re-installation of same in the various vent wing frames.

The sets of parts necessary for removing and installing the glass in the various vent wings are shown in the following table.

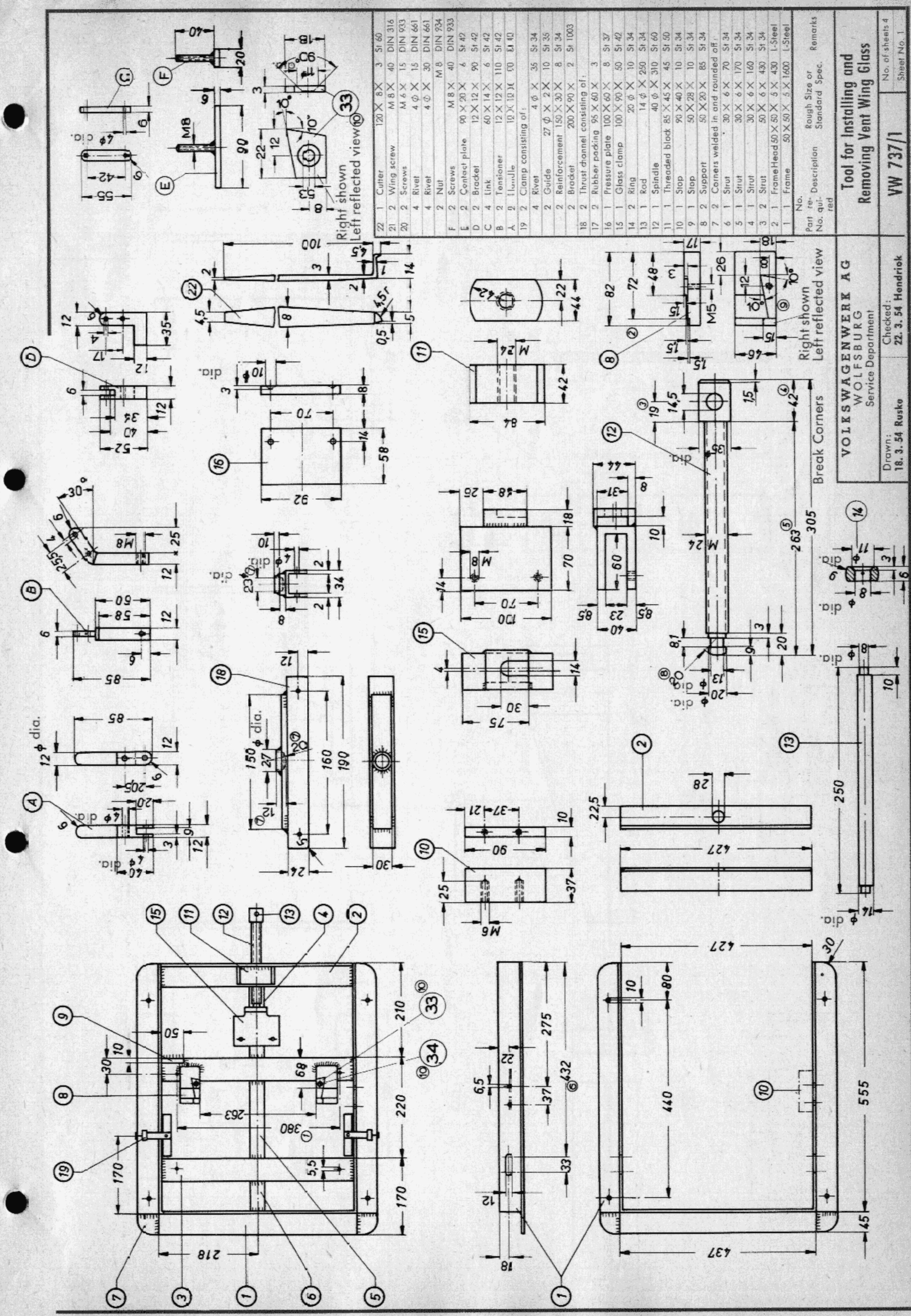
Part No.	Type of vehicle							
	1		from Aug. 64		2		3	
	R	I	R	I	R	I	R	I
1, sheet 3							x	x
2, sheet 3							x	x
1, sheet 4			x	x				
2, sheet 4			x	x				
10					x	x		
15	x		x		x	x	x	
24					x	x		
25	x	x						
26					x			
27	x	x						
28					x	x		
29		x		x				x
30	x	x	x	x	x	x	x	x
33	x	x						

R = Remove
I = Instal



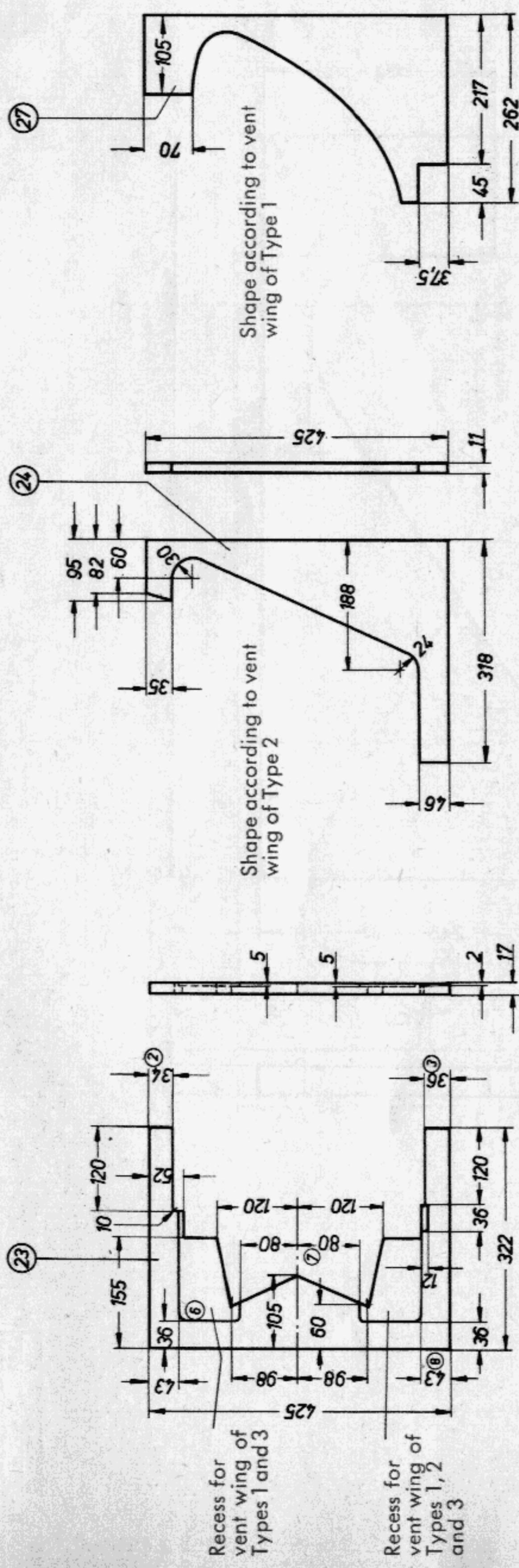
Construction Details for VW 737/1

- 1 — Cut or prepare material as detailed in list of parts.
- 2 — Drill holes in angle for frame (1) according to the drawing with drills of 6.5 mm (.26"), 10 mm (.4") and 12 mm (.47") dia. The 12 mm holes should be elongated with a file.
- 3 — Drill hole in angle for frame head (2) as shown in the drawing, using a 28 mm dia. (1.1") drill.
- 4 — Make parts A, B, C, D, E and F for the clamps (19), assemble clamps and make sure the linkage moves freely.
- 5 — Cut angles for frame (1) according to the drawing. Weld corners (7) and clamps (19) in position. Straighten the frame.
- 6 — Make the threaded block (11).
- 7 — Make spindle (12), rod (13), and rings (14) and assemble these parts. Rivet the two rings (14) to the rod (13).
- 8 — Drill two holes of 5.5 mm dia. (.22") into each of the two struts (3) and countersink them for the countersunk wood screws (31). Weld the struts (4), (5), and (6) to the two struts (3). Straighten the struts and weld them to the frame.
- 9 — Weld the threaded block (11) to the frame head (2). Straighten the frame head.
- 10 — Weld frame head (2) to the frame (1) and to the strut (4). Straighten the frame.
- 11 — Make glass clamp (15) and slide it in the annular groove of the spindle.
- 12 — Make pressure plate (16).
- 13 — Make pressure bar (18).
- 14 — Make parts (8), (9), (10) and 33.
- 15 — Forge the cutter (22) and bend it pre-grind the cutting edge harden it and grind sharp.
- 16 — Make the base plate (23) from ply-wood as shown on the drawing. The recesses for the rain drip channel of the vent wing frame must have a depth of 5 mm (.2").
- 17 — Make adaptors (24) and (27) as well as part (1) on sheet 3 and 4 from resin compregnated laminated wood as shown in the drawing (the recesses must be made so as to insure a snug fit around the vent wing frame).
- 18 — Make adaptor pieces (25) and (28) as well as part 2 on sheet 3 and 4 from resin compregnated laminated wood as shown in drawing. When adaptor piece (24), (27) or part 1 on page 3 and 4 are fitted into the appliance the complete Vent Wing should have a light press fit.
- 19 — Place supports (8) in the tool as shown in the drawing with the vent wing of the passenger car already in position. Mark the lower edge of the support (8) on the strut (3).
- 20 — Place stop (10) in the tool with the vent wing of the Transporter already in position, check the fit and secure it with two screws.
- 21 — Place stop (9) in the tool with the vent wing of the Transporter already in position and mark it on the strut (3) and on the frame (1).
- 22 — Weld support (8) and stop (9) in position as marked under points 19 and 21. Straighten frame and strut.
- 23 — Prime-coat the tool and attach the base plate (23) with four wood screws (31) to the two struts (3).
- 24 — Make thrust angle (26) and thrust bar (29) from hardwood and rivet them to the thrust channels (18) with two rivets each.
- 25 — Make thrust plate (30).
- 26 — Provide the cutter (22) with a wooden handle as used for a file etc.
- 27 — Provide glass clamp (15) with two wing screws (21).
- 28 — Mark parts listed in table on page 1 with their corresponding part number.
- 29 — Paint the tool varnish wooden parts.
- 30 — Oil spindle and joints of clamps.

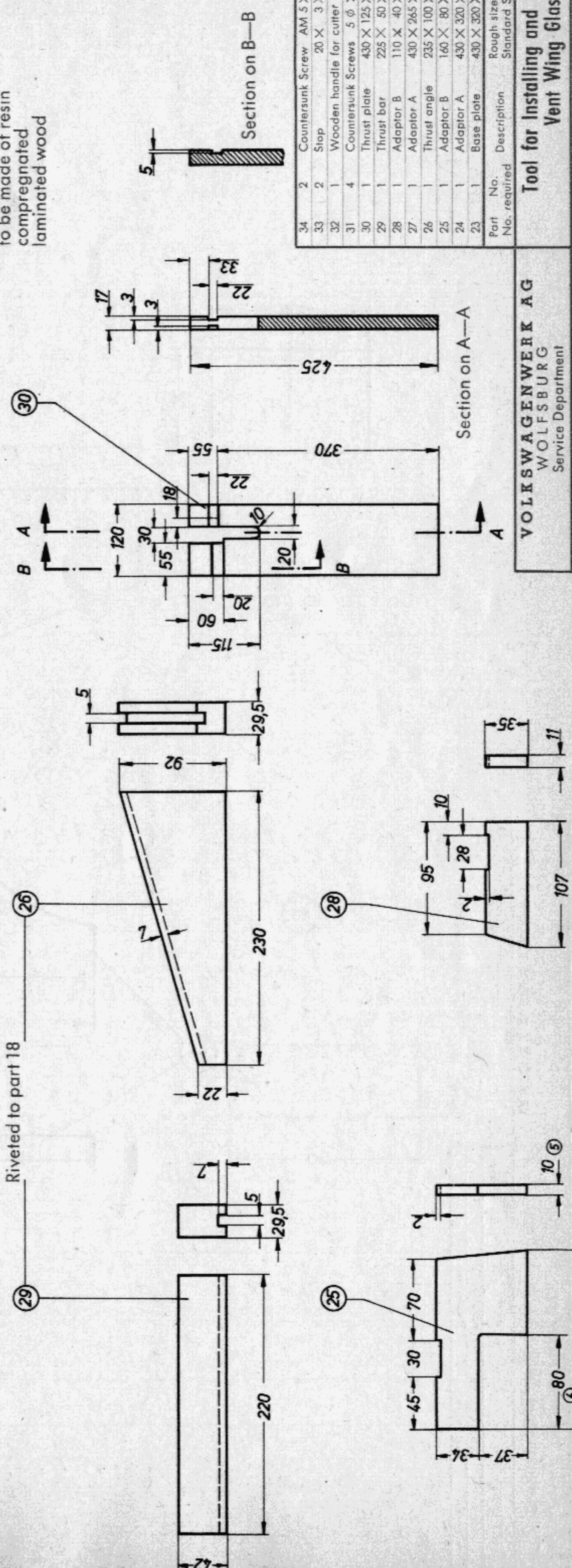


No.	Date	Description of alteration
1	24.7.61	Was 370
2	24.7.61	Part 8 redrawn
3	24.7.61	Was 22
4	24.7.61	Was 45
5	24.7.61	Was 260
6	26.9.62	Was 452
7	9.6.64	Measurement 12, 20 and 23 added
8	9.6.64	Measurement 20 added
9	9.6.64	Cutout and drillings added
10	9.6.64	Parts M and N added

No.	Date	Description of alteration
1	24. 7. 61	Type 3 added
2	24. 7. 61	Was 52
3	24. 7. 61	Was 44
4	24. 7. 61	Was 50
5	24. 7. 61	Was 11
6	9. 6. 64	Recess Widened
7	9. 6. 64	Measurement 80 added
8	9. 6. 64	Was 46



Parts 24, 25, 27 and 28
to be made of resin
compregnated
laminated wood



VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn:
14.1.55 Mosuch

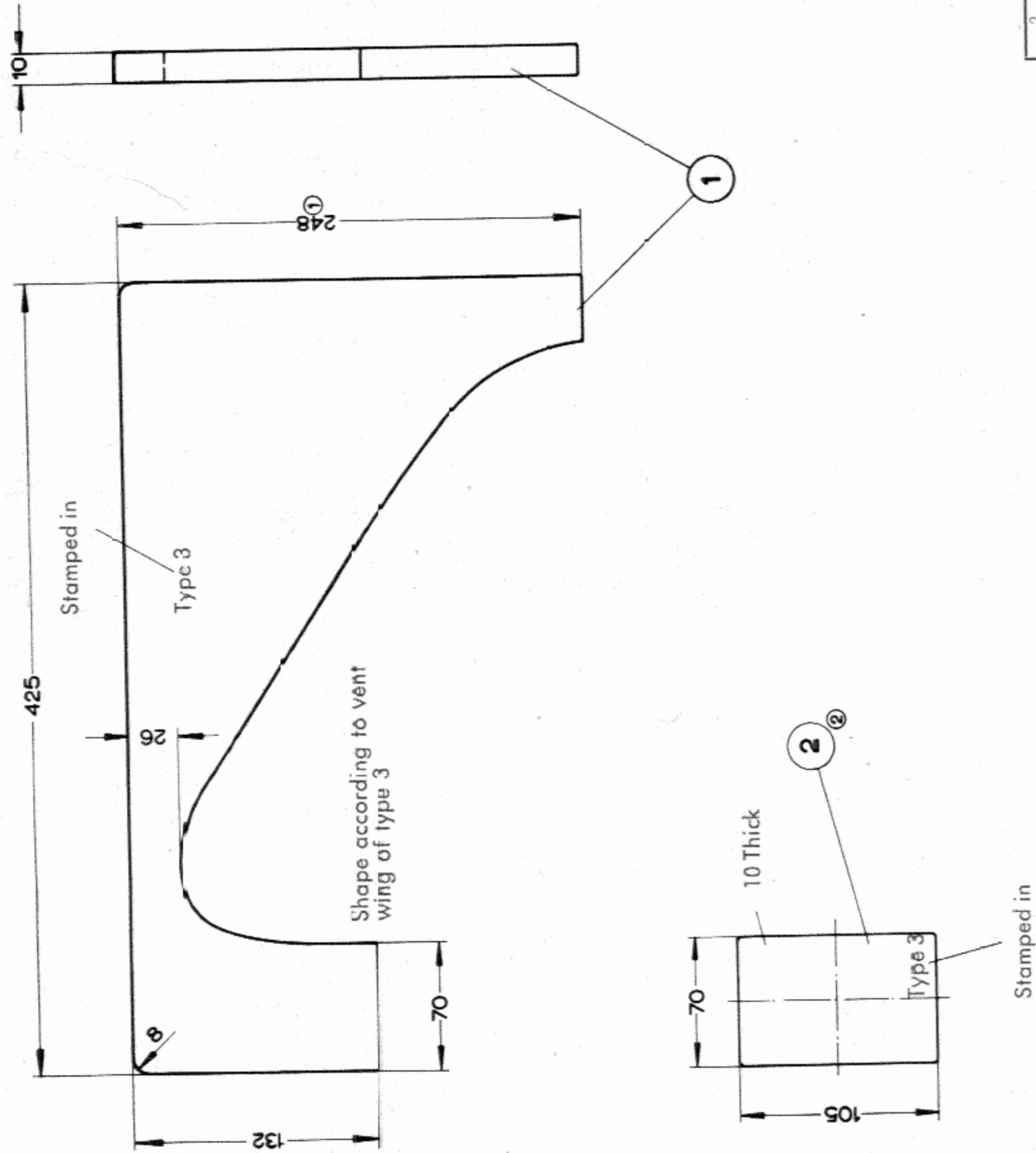
Checked:
15.1.55 Hendrik

No. of sheets 4
Sheet No. 2

Tool for Installing and Removing Vent Wing Glass

WW 737/1

Description of alteration	
No.	Date
1	9. 6. 64 Was 216
2	9. 6. 64 Part 2 added



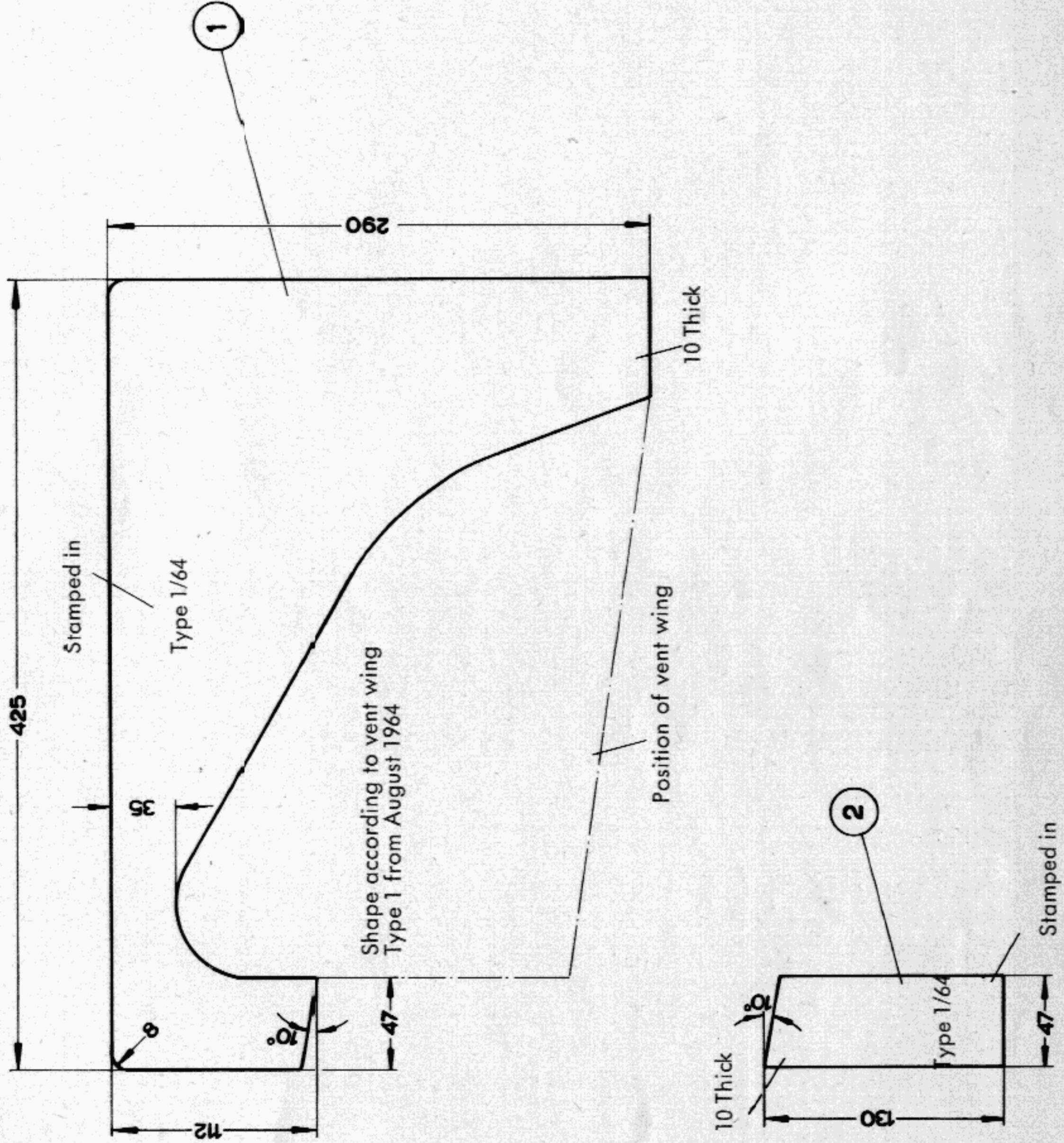
2	1	extension	75 X 10 X 110	wood
1	1	adaptor piece	255 X 10 X 430	wood
Part No. required		Description		Material

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn: 24. 7. 61 Giesecking
Checked: 10. 10. 61 Ratté

Adaptor for Vent Wing Glass Removal
and Installing Tool

No. of sheets 4
Sheet No. 3



Part No.	No. required	Description	Material
2	1	Extension	50 X 10 X 135
1	1	Adaptor	295 X 10 X 430

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn:
10. 6. 64 Giesecking

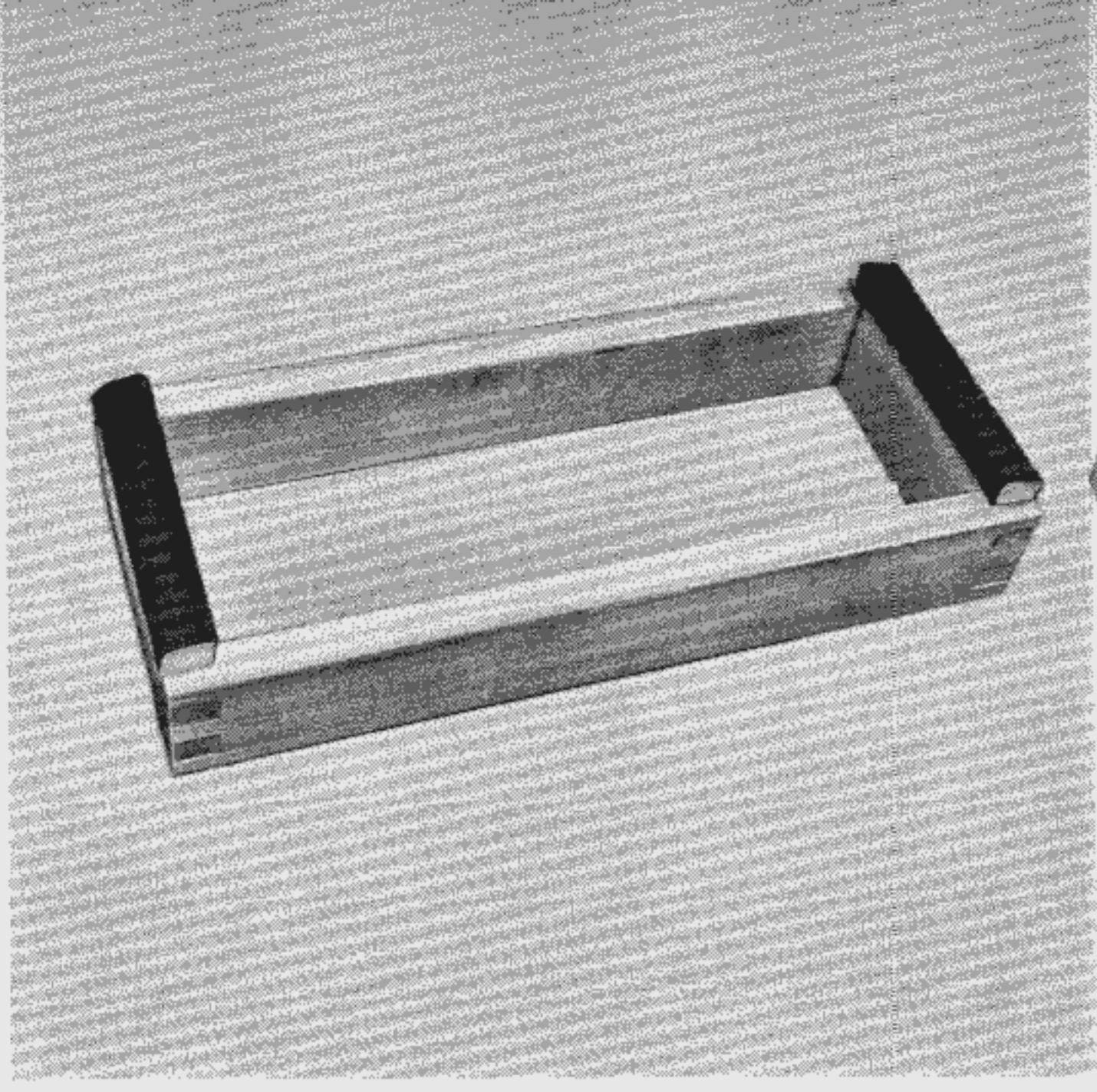
Checked:
6. 7. 64 Rante

Tool for Installing and Removing
Vent Wing Glass

VW 737/1

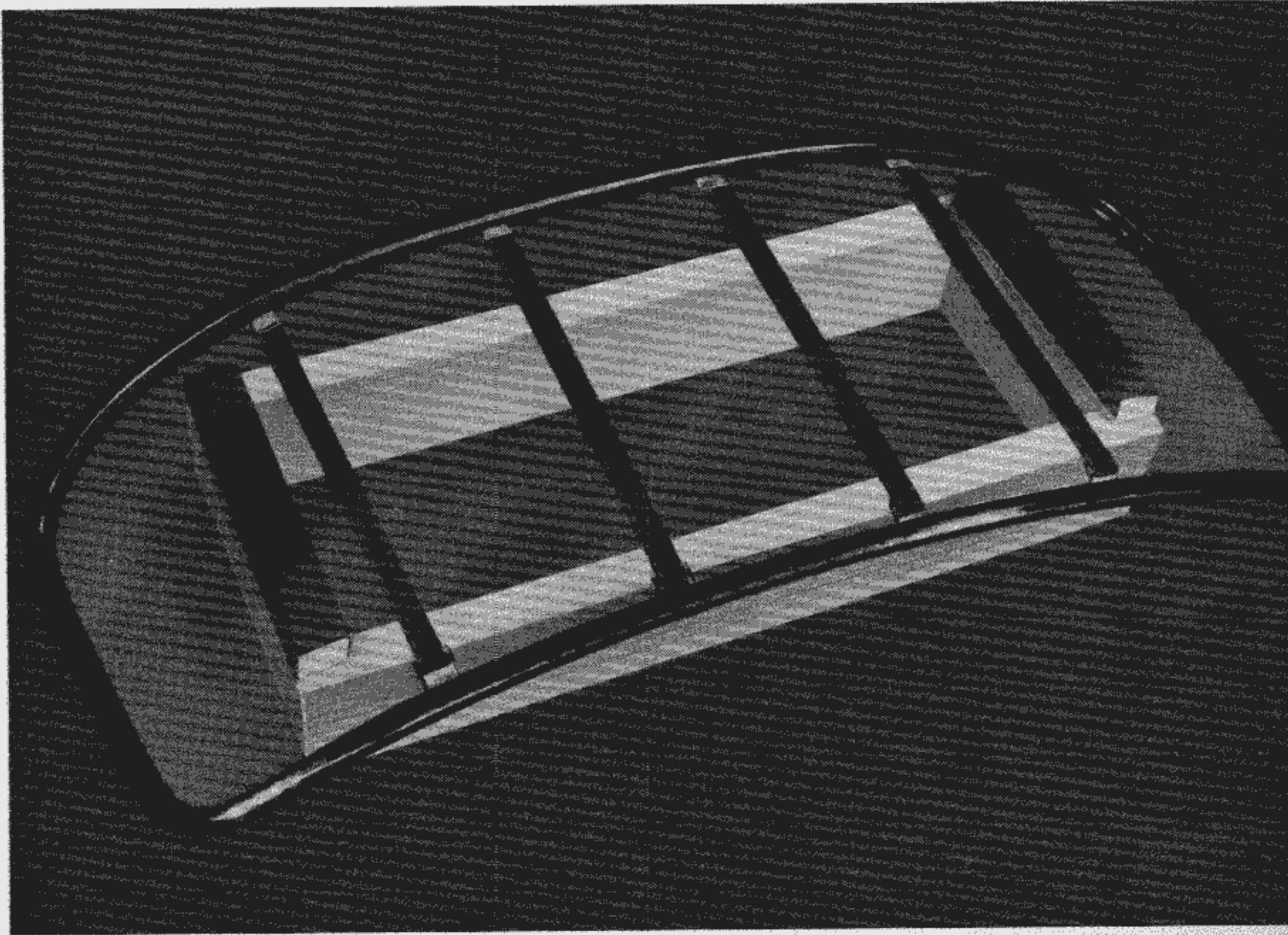
No. of sheets 4
Sheet No. 4

LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



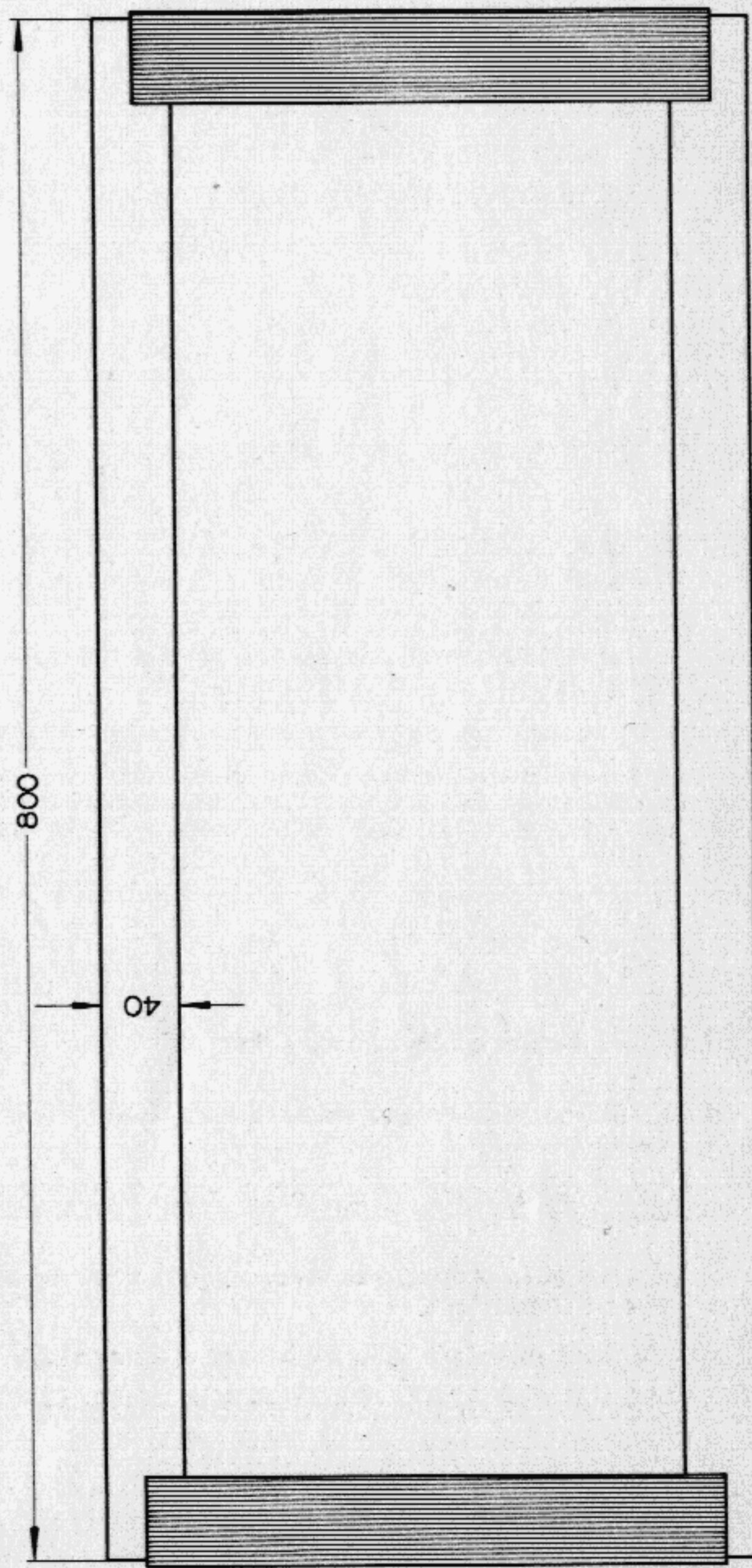
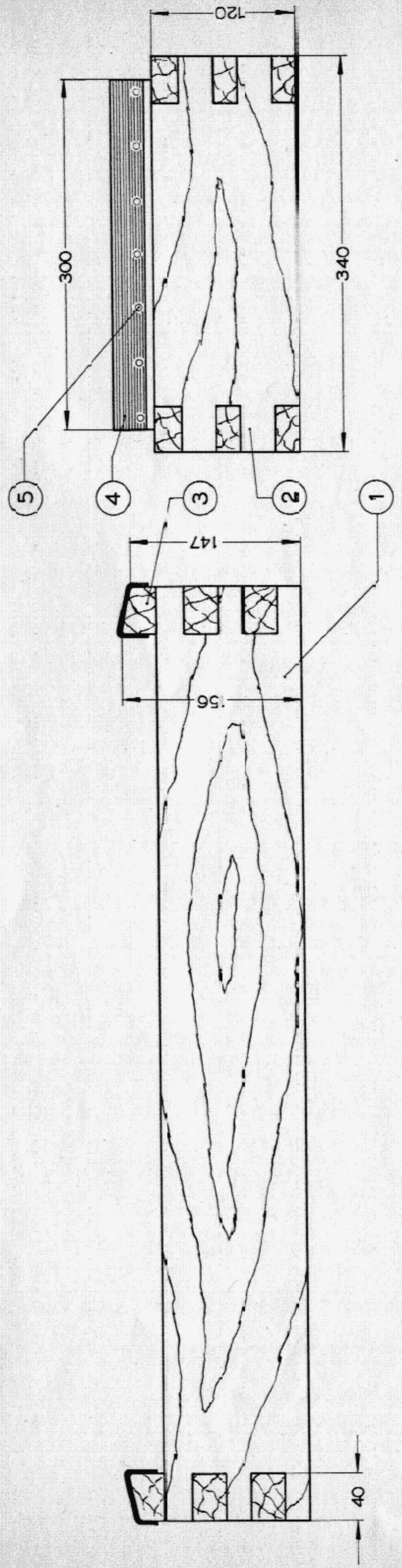
Assembly Jig for Windshield and Rear View Window of Karmann-Ghia-Coupe

A troublefree installation of the rubber and garnish mouldings on windshield and rear view window of the Karmann-Ghia-Coupe is insured by using the Assembly Jigs in connection with the Installation Tools VW 739/1.



Construction Details for VW 738/1

- 1 – Cut wooden parts and rubber lining as specified in the parts list, and have accessories ready.**
- 2 – Join wooden parts (1) and (2) by tongue-and-groove or similar arrangement, and glue them together.**
- 3 – Cut wooden strips (3) as shown in the drawing and glue them to the frame formed by parts (1) and (2).**
- 4 – Pull rubber lining (4) over the wooden strips (3) and fasten it by means of tacks (5).**
- 5 – Paint wooden parts in prevailing color of equipment and machinery in the shop.**



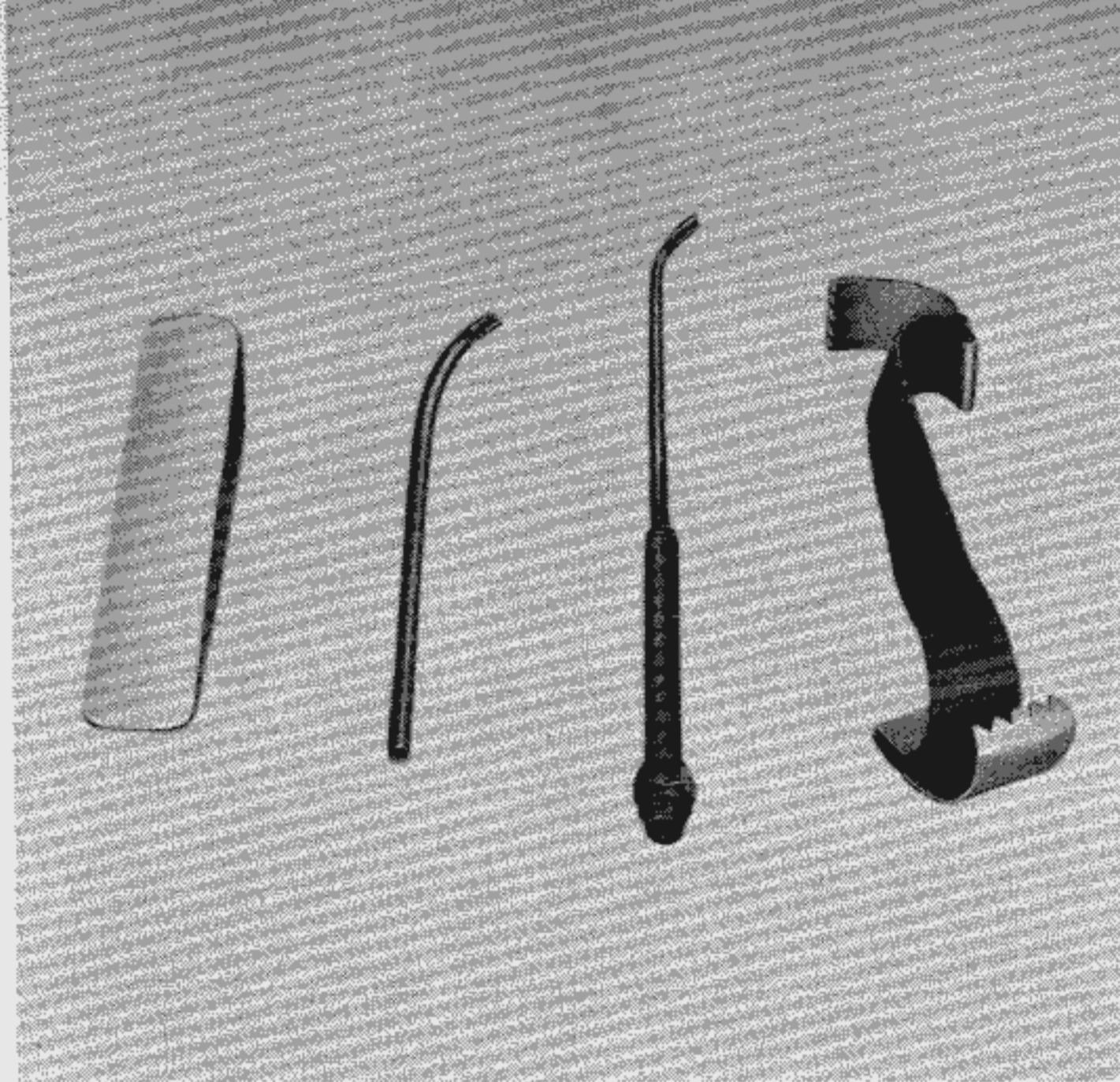
Part No.	Required	Description	Rough size or Standard Spec.	Remarks
5	28	Tacks, 10-12 mm ($13/64$ " - $15/32$ ") long		
4	2	Rubber lining	.60 x 300	Ribbed
3	2	Wooden parts	.40 x .40 x .300	Wood
2	2	Wooden parts	.40 x .120 x .340	Wood
1	2	Wooden parts	.40 x .120 x .800	Wood

Assembly Jig for Windshield and Rear Window of Karmann-Ghia-Coupe

VOLKSWAGEN GMBH.
WOLFSBURG
Service Department

Drawn:
April 23, 57 Sandau
Checked:
April 24, 57 Hendriks
April 25, 57 Senf

VW 738/1

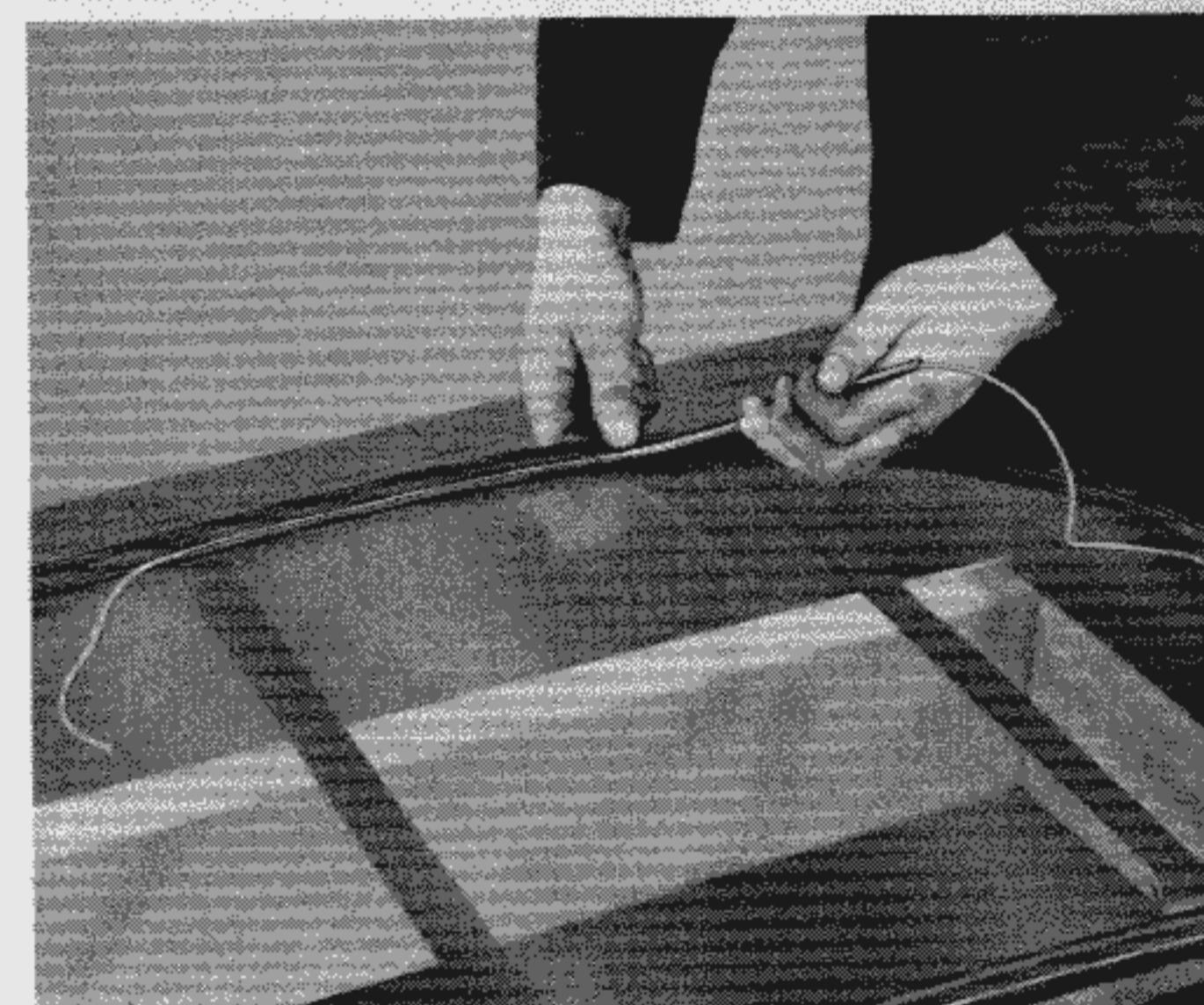


Installation Tools for Windshield and Windows of Karmann-Ghia-Coupe

The seating of the profiled rubber moulding is corrected with the wooden wedges.



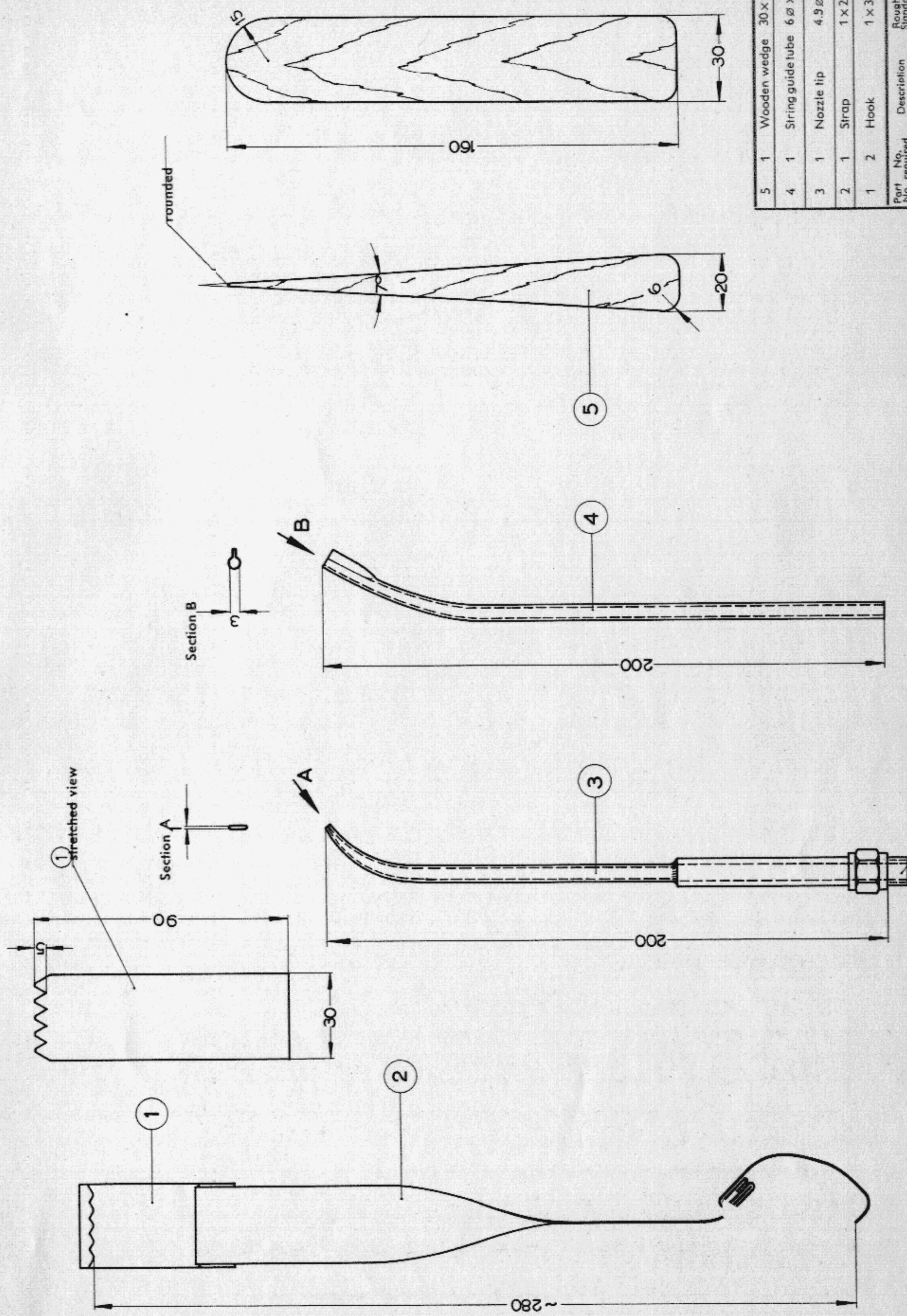
The rubber straps have hooks which prevent the rubber seal on the pane from sliding out of position when the garnish mouldings are mounted.



The putty D 10 can easily be inserted in the profiled rubber moulding by means of a hand press fitted with a nozzle tip.

Construction Details for VW 739/1

- 1 – Make the material specified in the parts list ready for use.
- 2 – Make the wooden wedge (5) from a piece of beechwood as specified in the drawing.
- 3 – The string guide tube (4) is to be cut from the spare part and one end is to be bent as shown in the drawing. Shorten the diameter of the outlet end as shown in section B.
- 4 – Elongate the nozzle tip of an available hand press by fitting a tube (3) as shown in the drawing. Bend the end of the tube as specified in the drawing and shorten the diameter of the outlet opening as shown in section A.
- 5 – Cut sheet metal and rubber to the specifications of the parts list.
- 6 – Prepare and bend hooks (1) as shown in the drawing.
Cut the strap (2) and insert it into the hooks (1) as shown in the drawing.
- 7 – Paint guide tube (4) and nozzle tip (3) in prevailing color of equipment and machinery in the shop. Grease thread slightly.
- 8 – Tools of the parts numbers 1, 3 and 5 are also to be painted in the prevailing color.



Part No.	No. required	Description	Rough size or Standard Spec.	Remarks
5 1	1	Wooden wedge	30x160	Beechwood
4 1	1	String guide tube	6 Ø x 210	Spare Part No. 111127511 A
3 1	1	Nozzle tip	4.9 Ø x 140	Spare Part No. 113611805 A
2 1	1	Strap	1 x 25 x 280	Rubber
1 2	2	Hook	1 x 30 x 90	Galvanized sheet metal

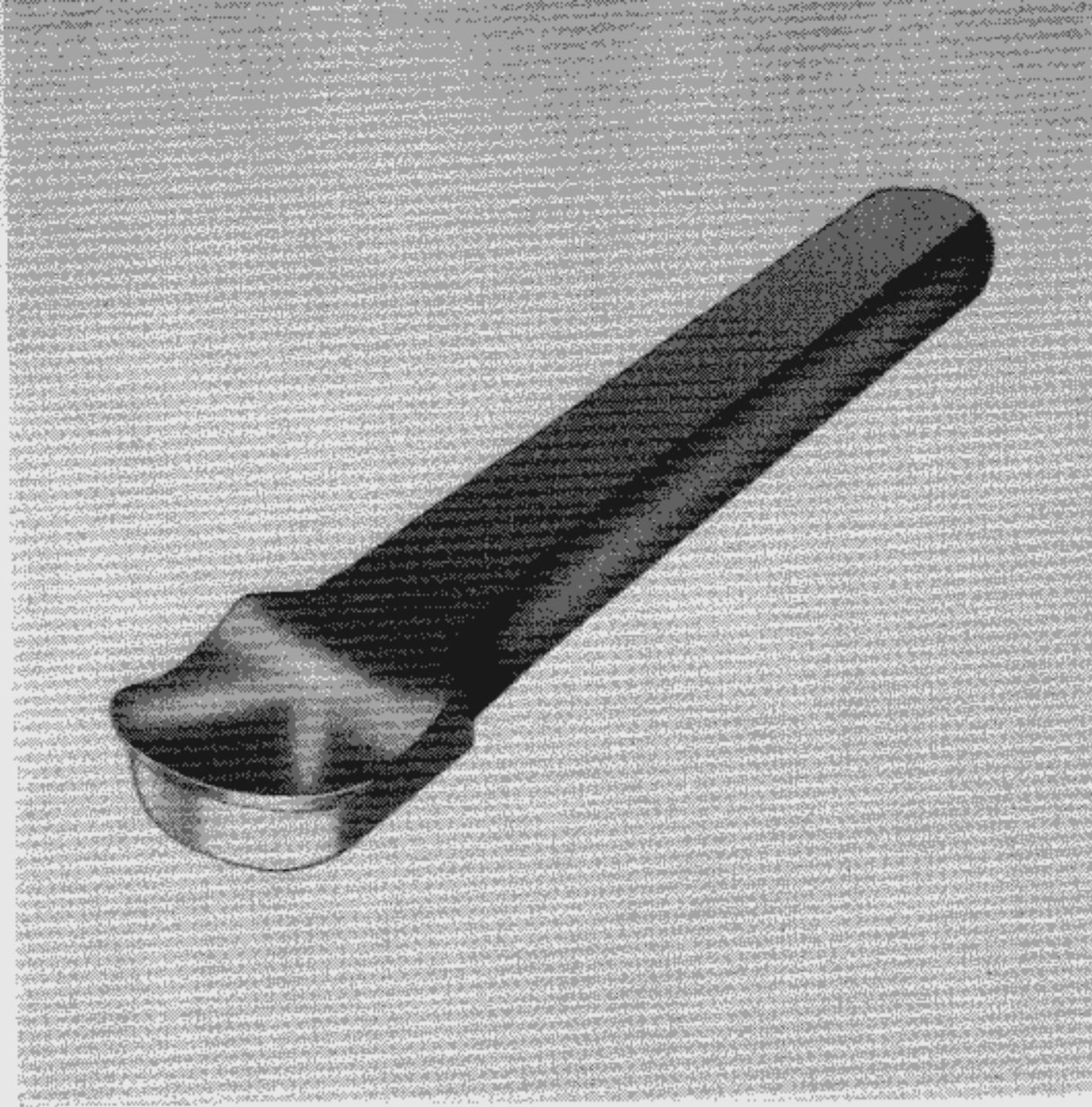
Installation Tools for Windshield and Windows of Karmann-Ghia-Coupe

VOLKSWAGENWERK GMBH.
WOLFSBURG
Service Department

Drawn: April 23, 57 Sandau	Checked: April 26, 57 Hendrik

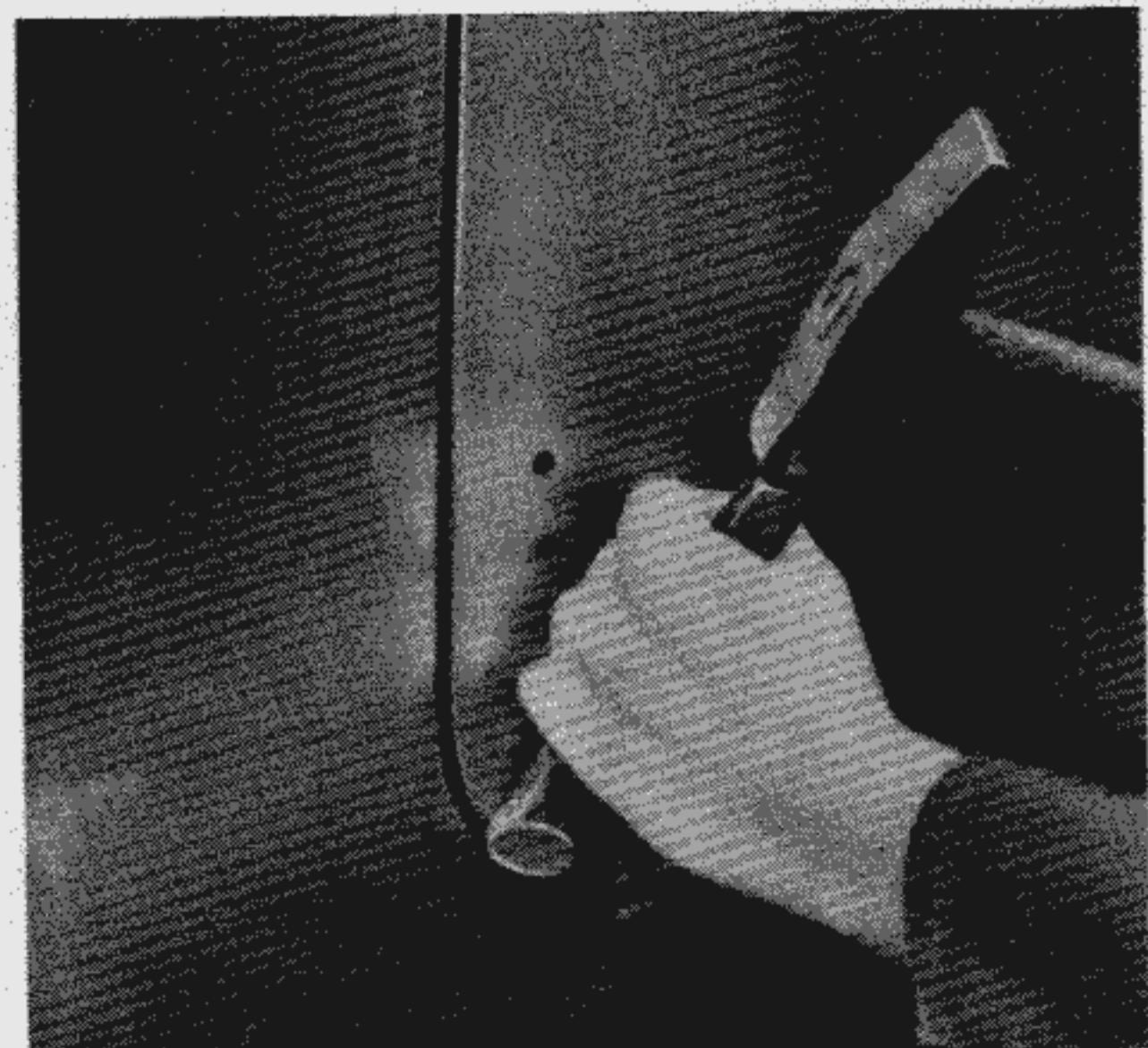
VW 739/1

● LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



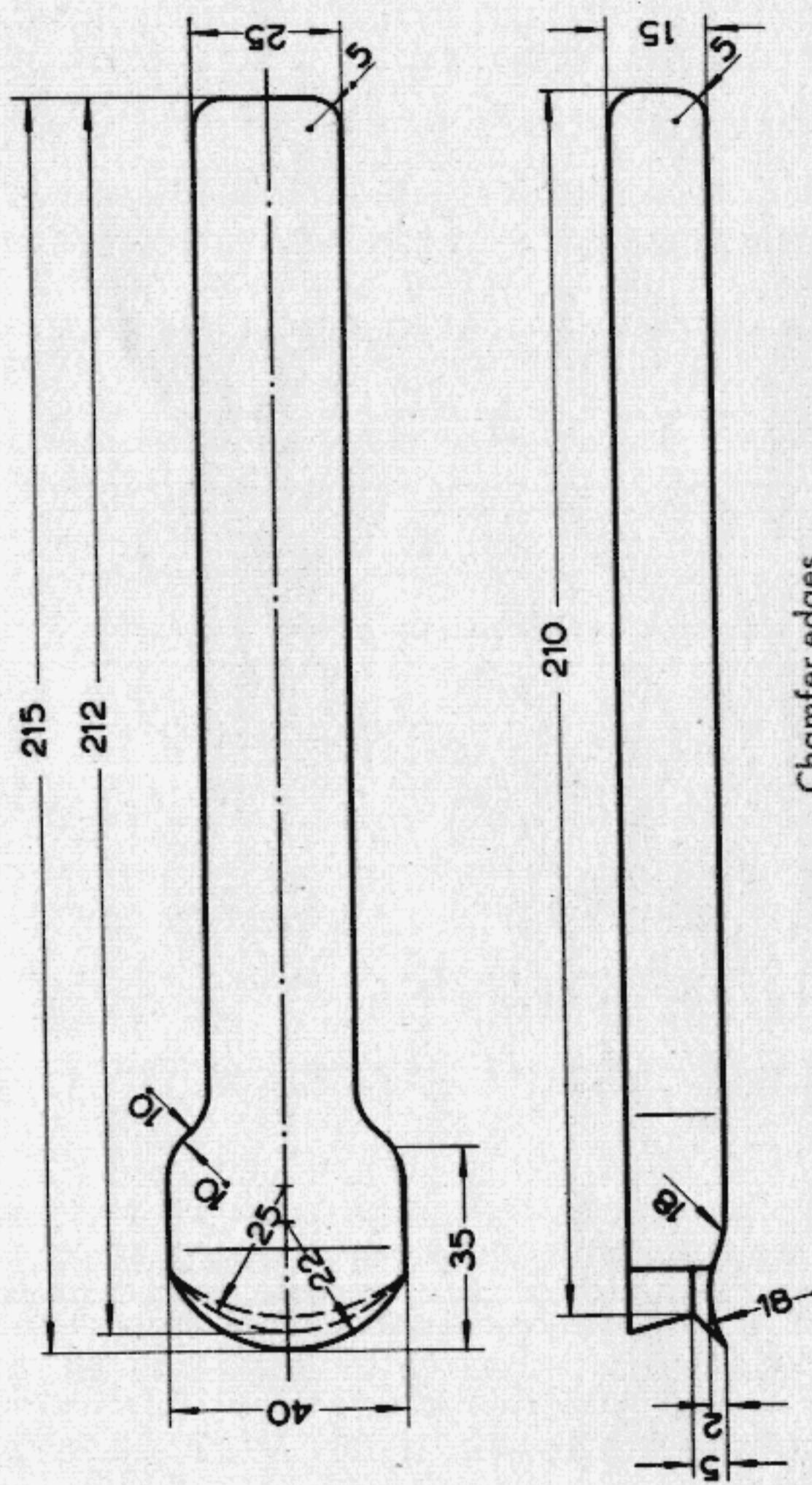
Door frame
Forming Tool

With the door frame forming tool the folded edge of the front side panel on the Karmann Ghia can be reshaped.



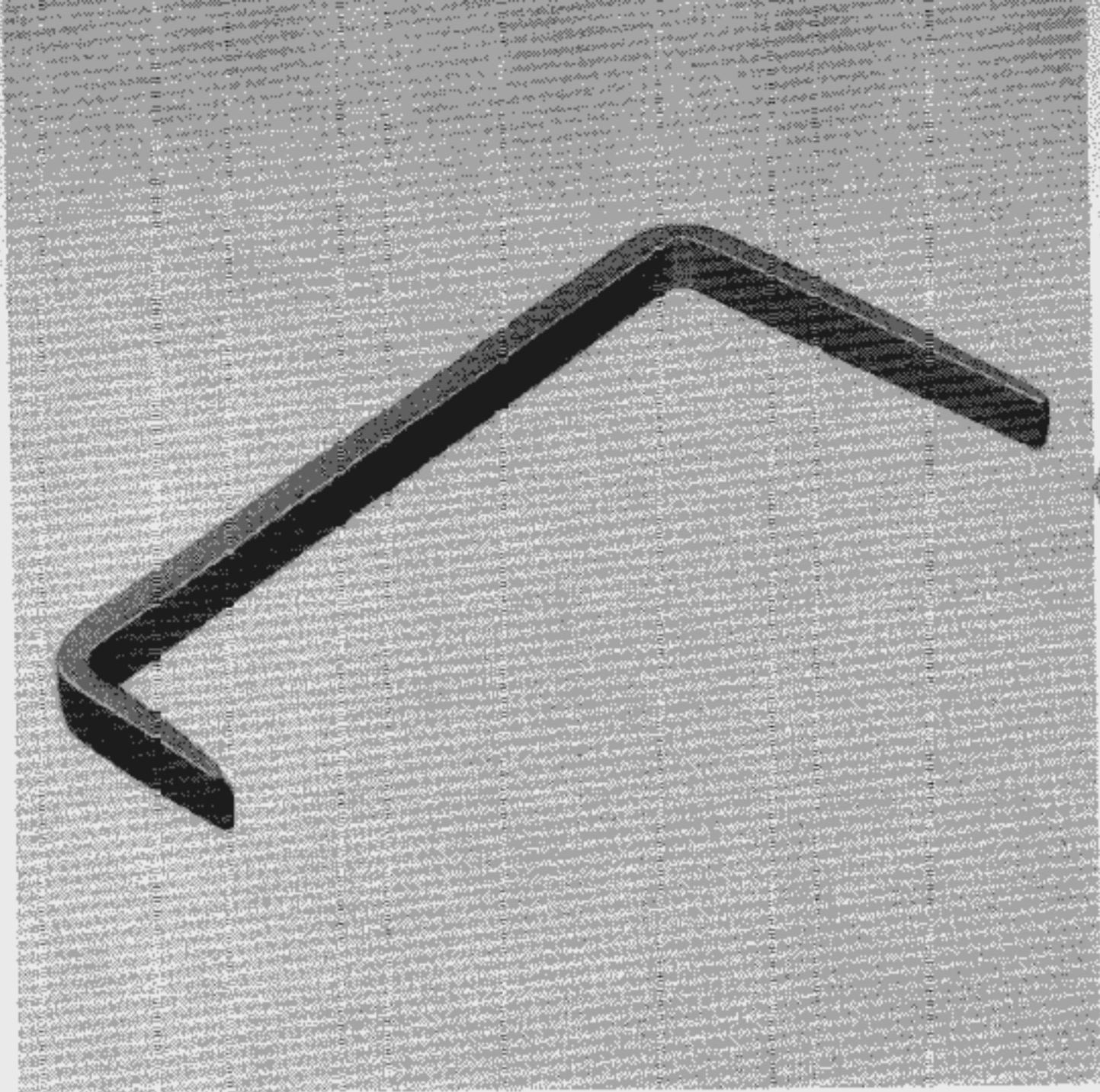
Construction Details for VW 740

- 1 — Cut flat steel as detailed in list of parts.
- 2 — Forge flat steel as specified in drawing.
- 3 — Shape the reworked steel as specified in drawing.

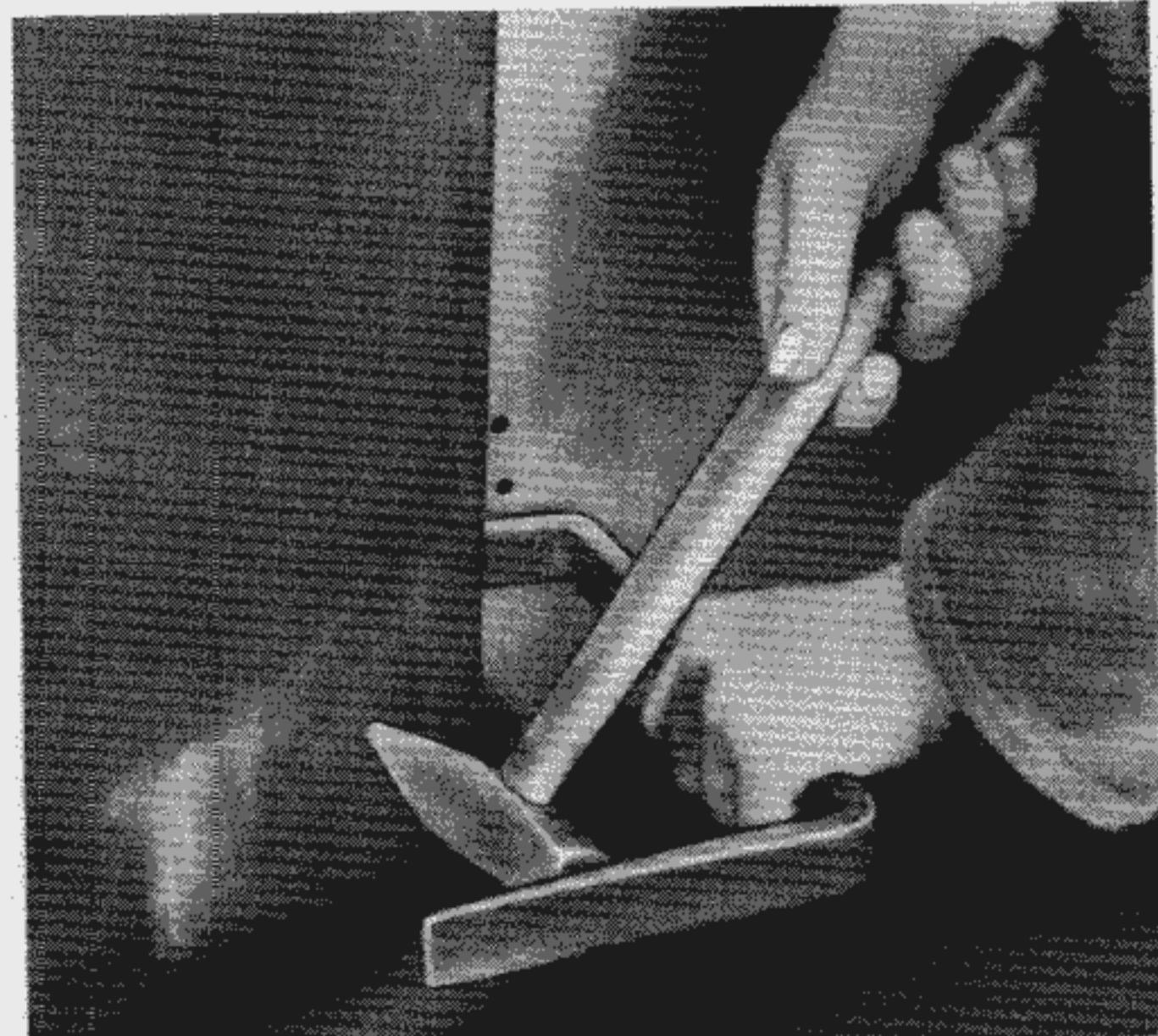


Part No.	Description	Rough size or standard spec.	DIN 1017
1	1 Flat steel	25 X 15 X 250	
Door Frame Forming Tool for Karmann Ghia			
VOLKSWAGENWERK AG			
WOLFSBURG Service Department			
Drawn 14.7.59	Weinstock	Checked 19.7.59	Kühn VW 740

LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT

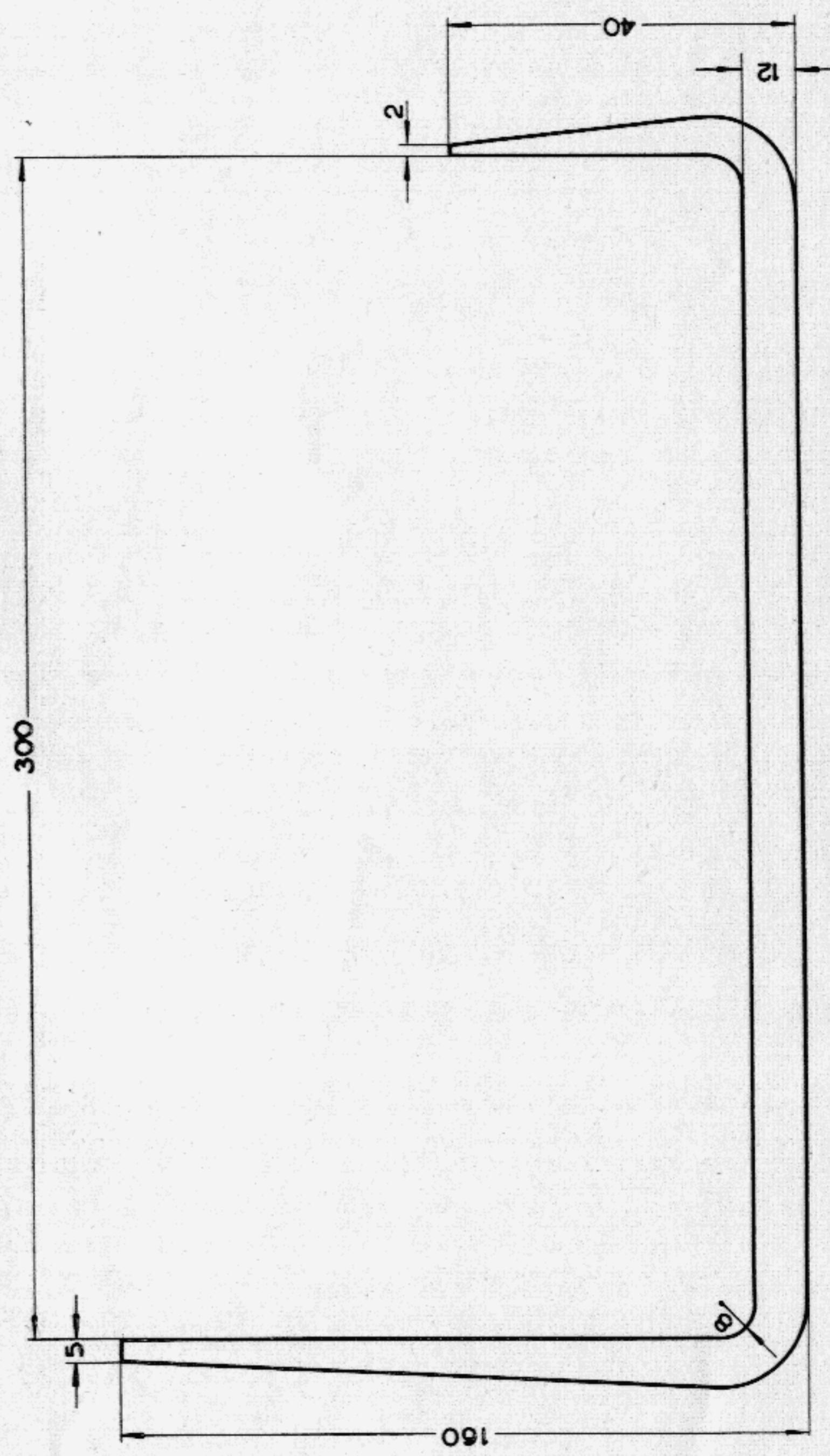


The front side panel adjacent to the door opening on the Karmann Ghia can be pulled outwards with the bending bar.

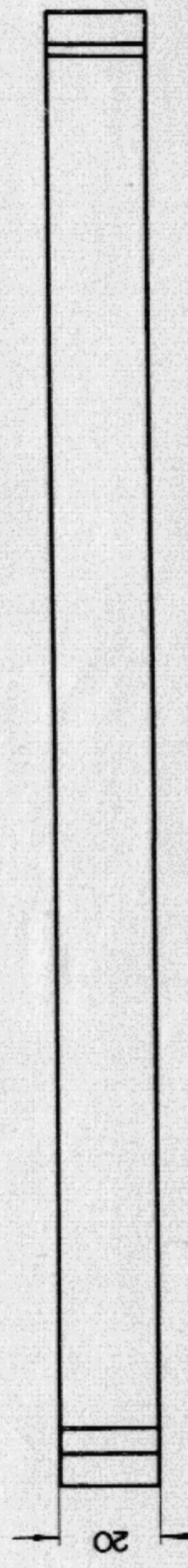


Construction Details for VV1741

- 1 — Cut flat steel as detailed in list of parts.
- 2 — Forge ends and bend as specified on drawing.



Chamfer edges



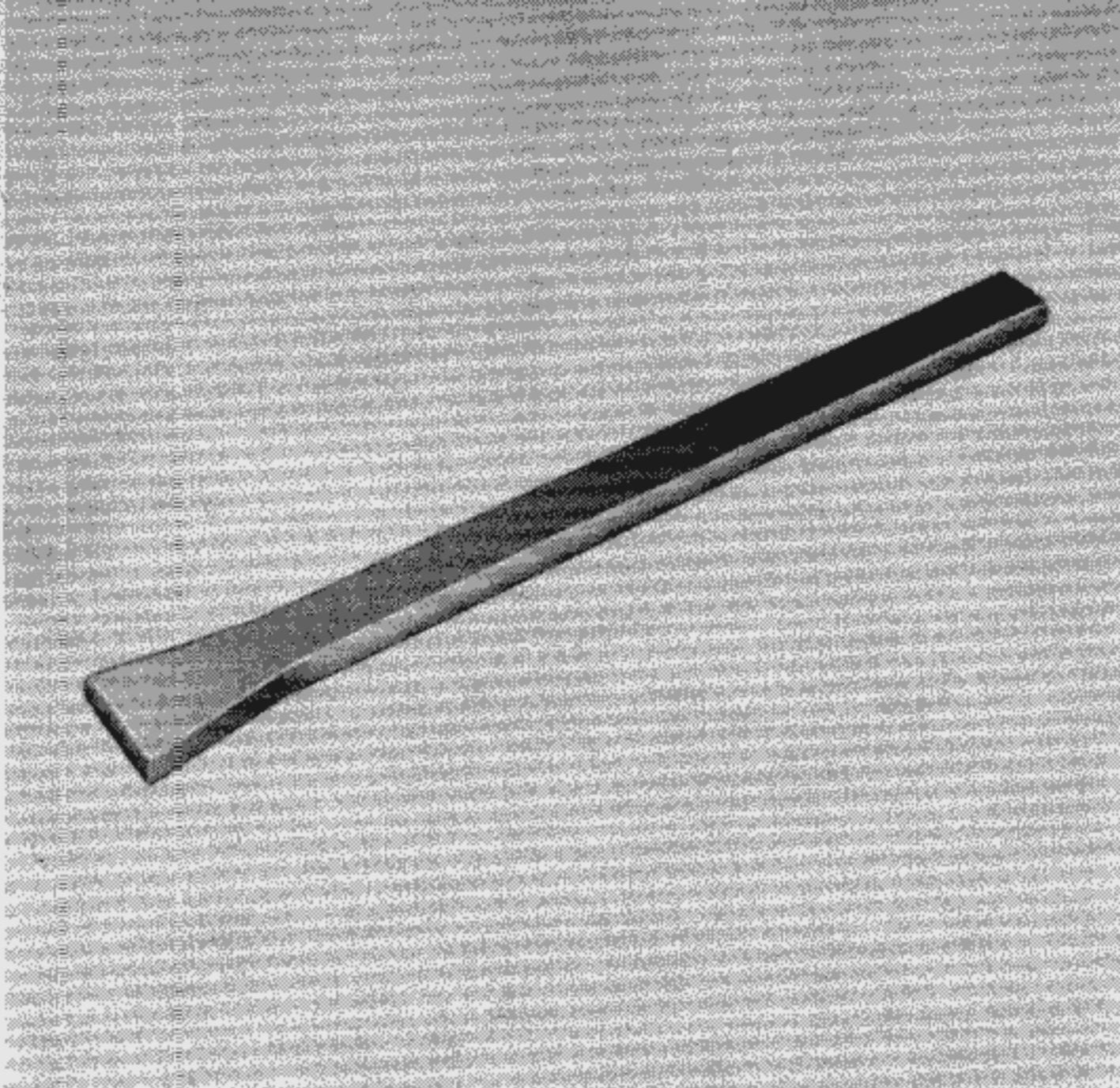
Part No.	Description	Rough size or standard spec.	DIN 1017
1	Flat steel No. required	20 X 12 X 520	

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn 14.7.59 Weinstock
Checked 19.7.59 Kühn

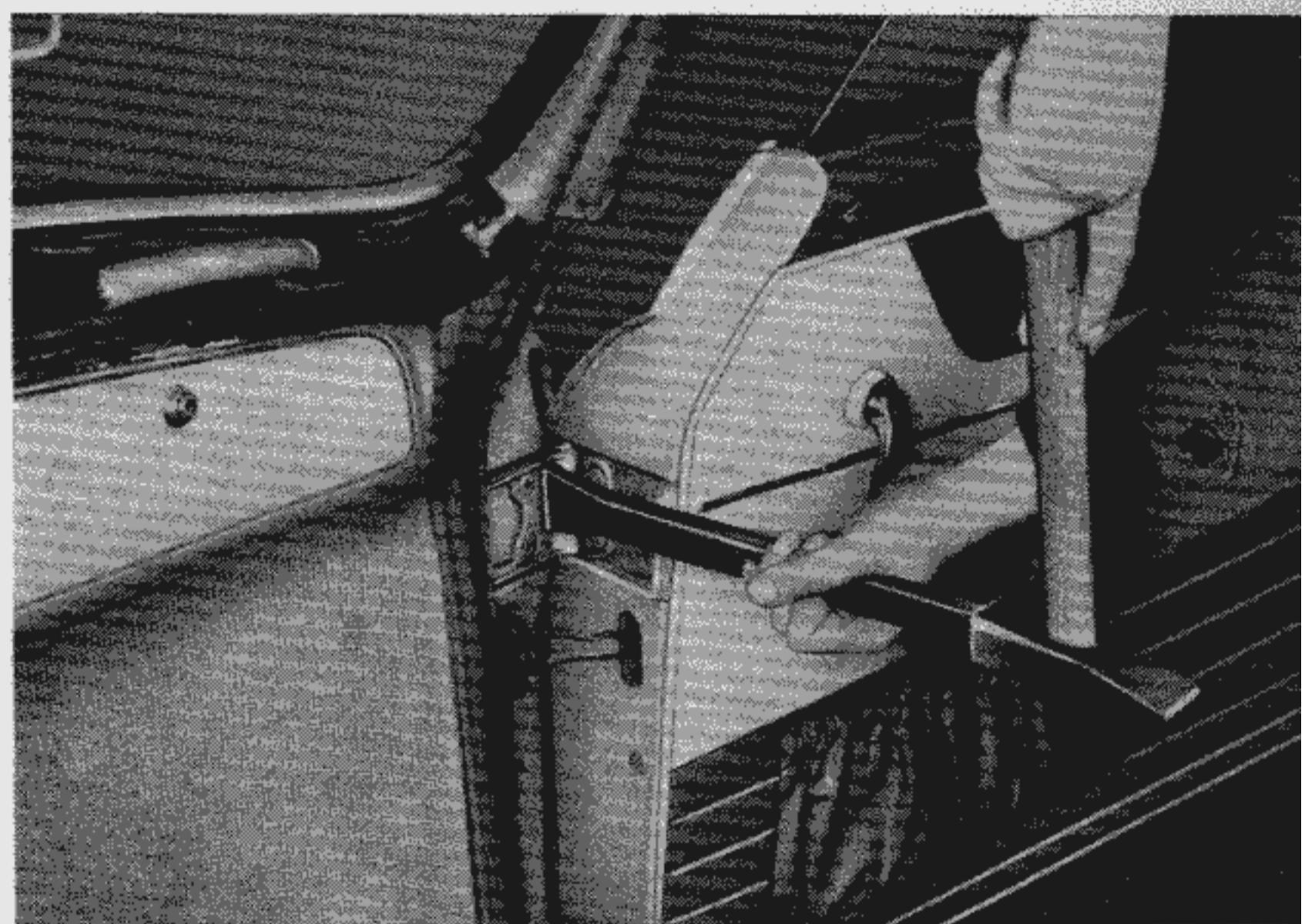
Bending Bar - Karmann Ghia

VW 741



**Forming Tool
For Types 1, 2 and 3**

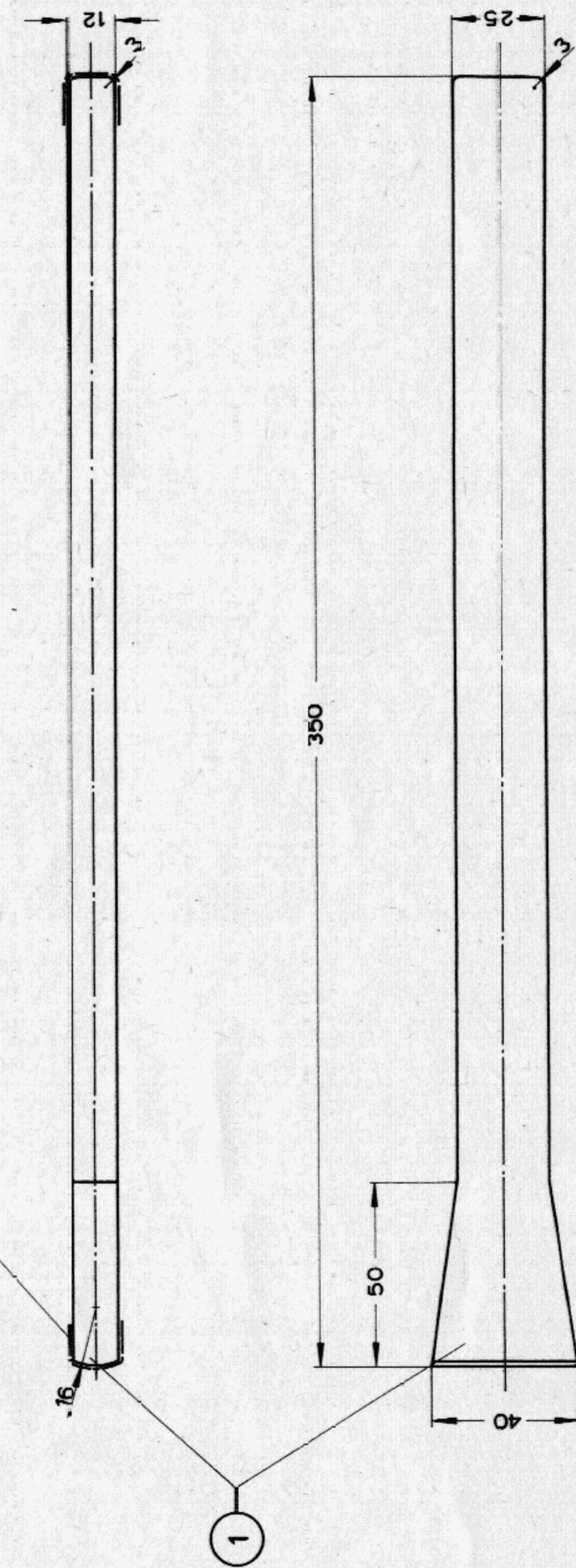
This forming tool is suitable for various straightening work on all types of bodies. Due to its neutral shape it can be used universally. The pictures show how it can be used for straightening a door hinge.



Construction Details for VW 742

- 1 — Cut steel bar as detailed in parts list.
- 2 — Forge one end of steel bar.
- 3 — Finish off rough forging as shown in drawing.
- 4 — Temper the forming tool and harden as detailed in drawing.
- 5 — Clean scale from hardened surface.
- 6 — Treat tool with rust preventive.

Harden 55—58 HRC

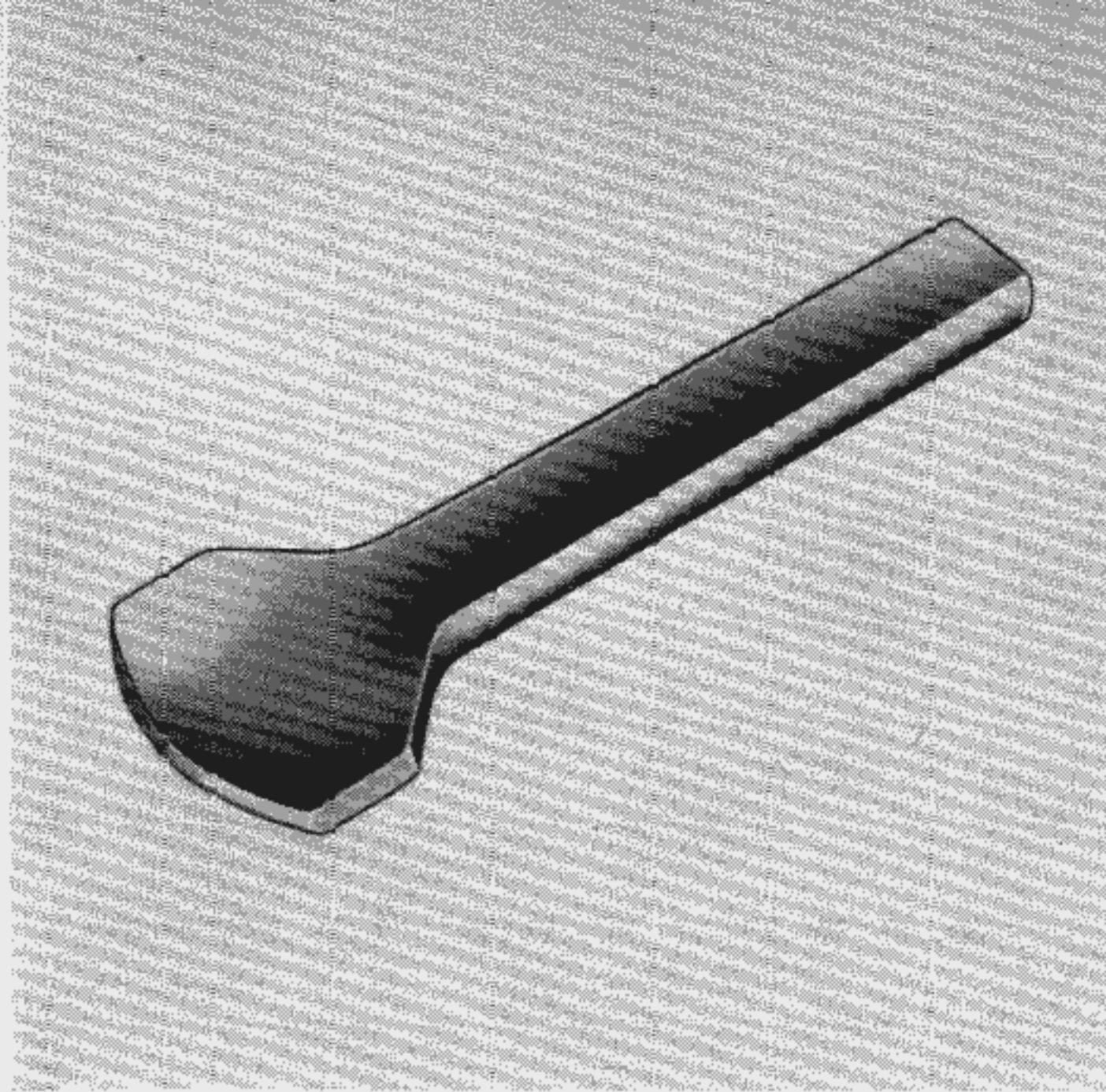


Tempered 80—100 kg/mm²

Part No.	Description	Material No. required	Material
1	Forming tool 25×12×370	C 45	
VOLKSWAGENWERK AG WOLFSBURG Service Department			
Drawn by: 1.3.62 Raebel			Checked by: 8.3.62 Giesecking
Forming Tool			VW 742

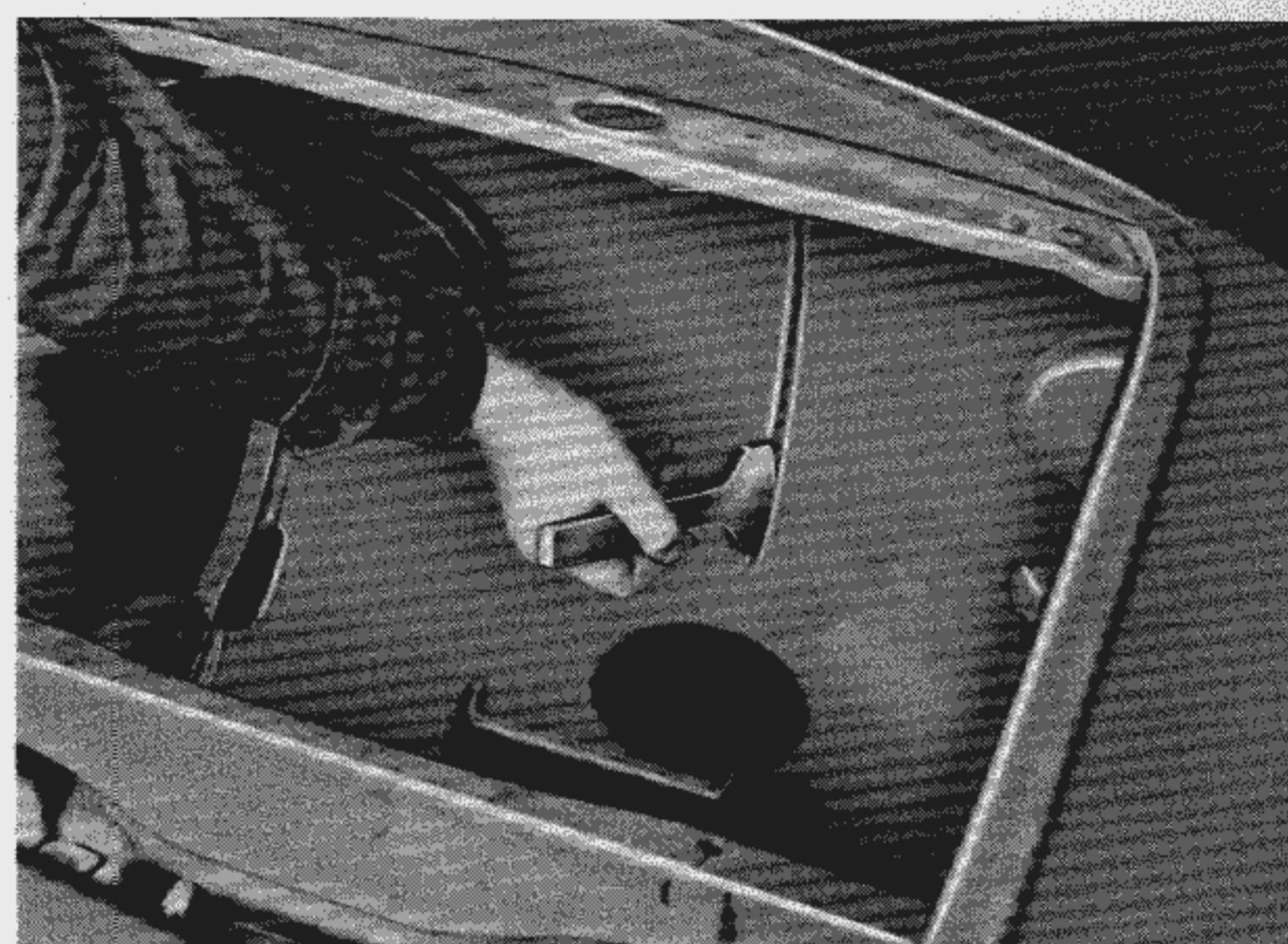
LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT

VW 743



Rib Forming Tool

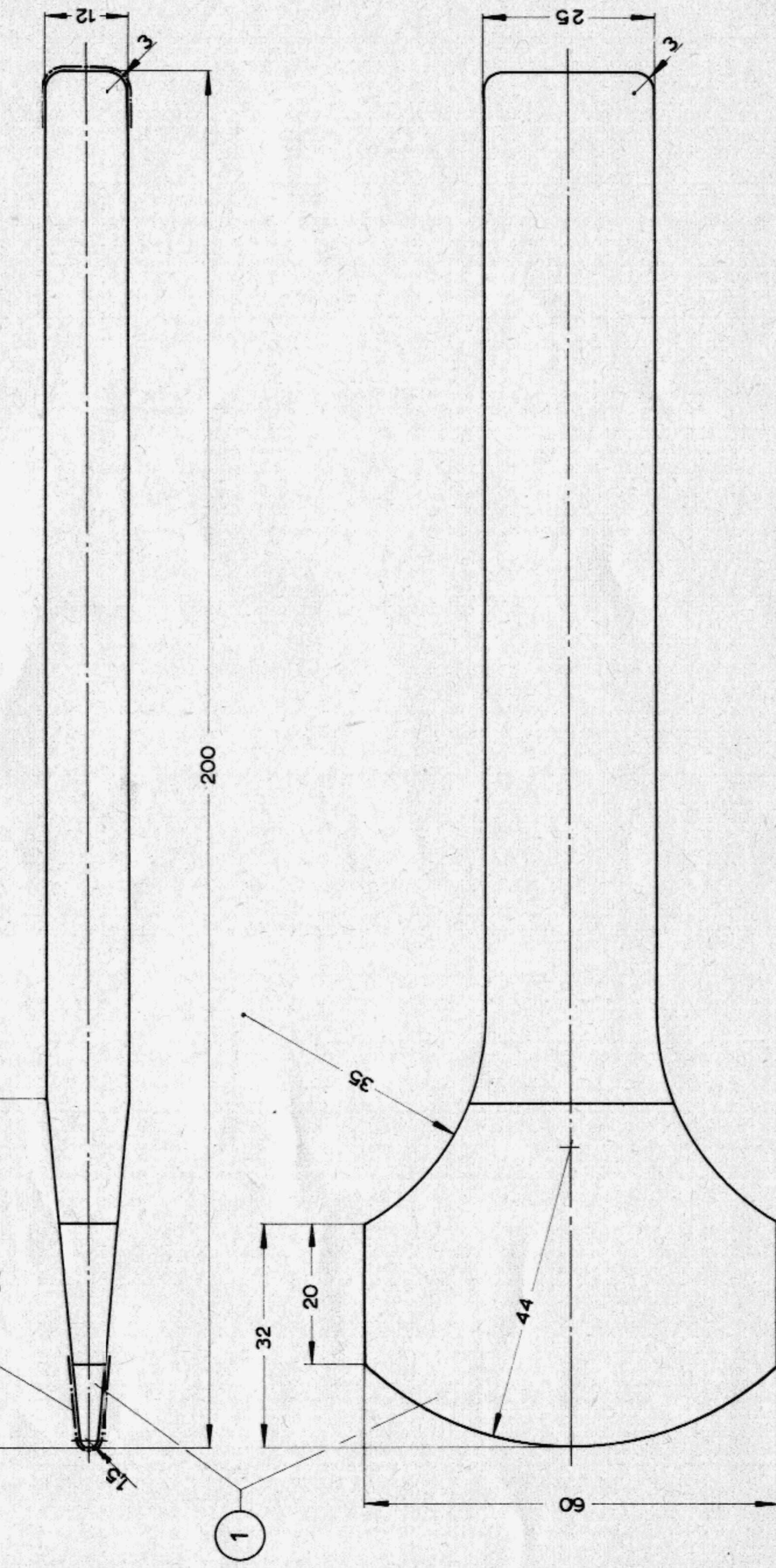
This tool is specially designed for the finishing-off work on the rib of the front panel and hood of type 14.



Construction Details for VW 743

- 1 — Cut steel bar as detailed in parts list.
- 2 — Forge one end of steel bar.
- 3 — Finish off rough forging as shown in drawing.
- 4 — Temper the forming tool and harden as detailed in drawing.
- 5 — Clean scale from hardened surface.
- 6 — Treat tool with rust preventive.

Harden 55—58 HRC



Tempered 80—100 kg/mm²

1	1	Forming Tool 12 X 240	C.45
Part No.	No. required	Description	Material

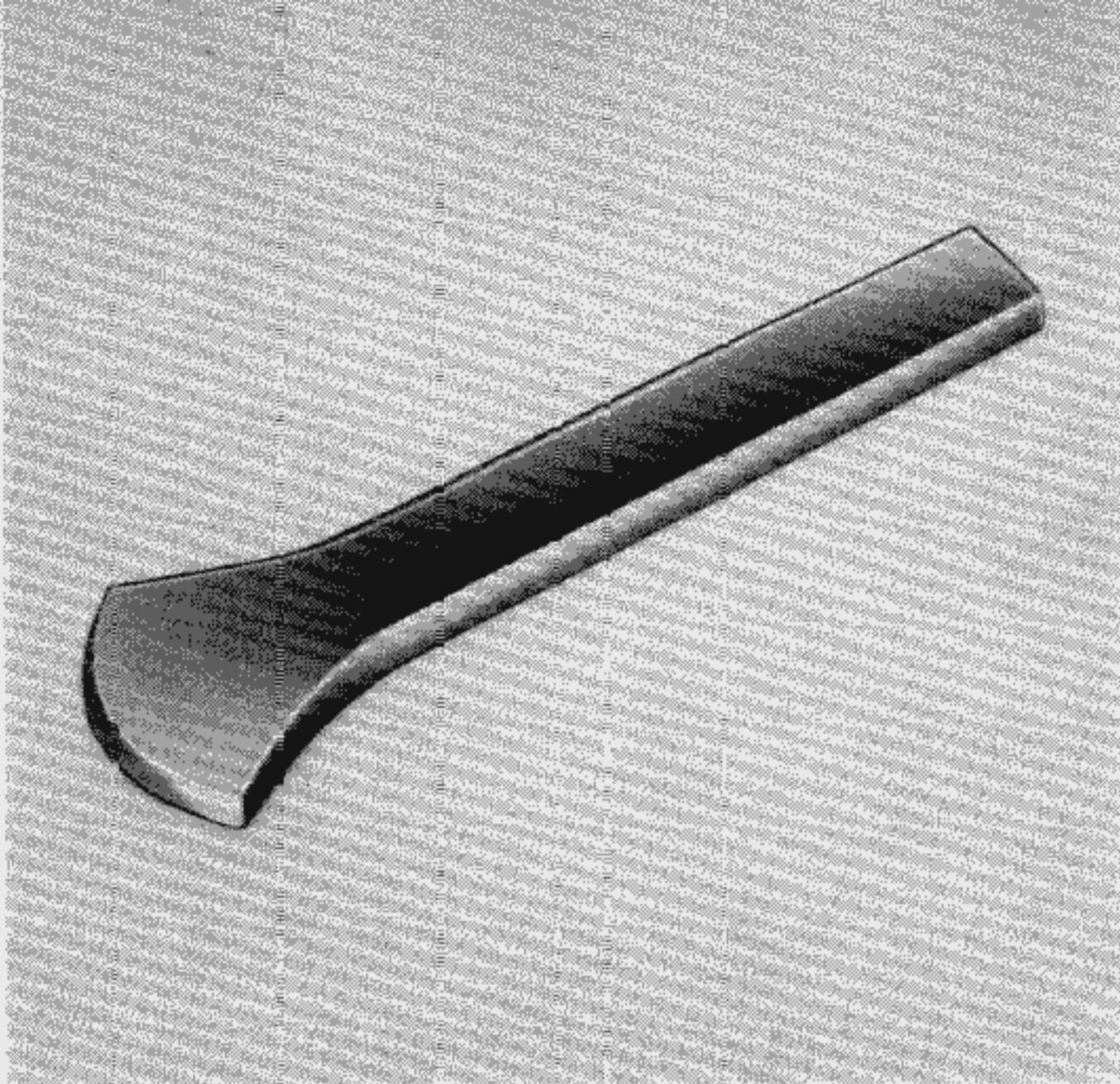
VOLKSWAGENWERK AG
WOLFSBURG
Service — Department

Drawn by: 2.3.62 Ruebel | Checked by: 8.3.62 Giesecking

Rib Forming Tool

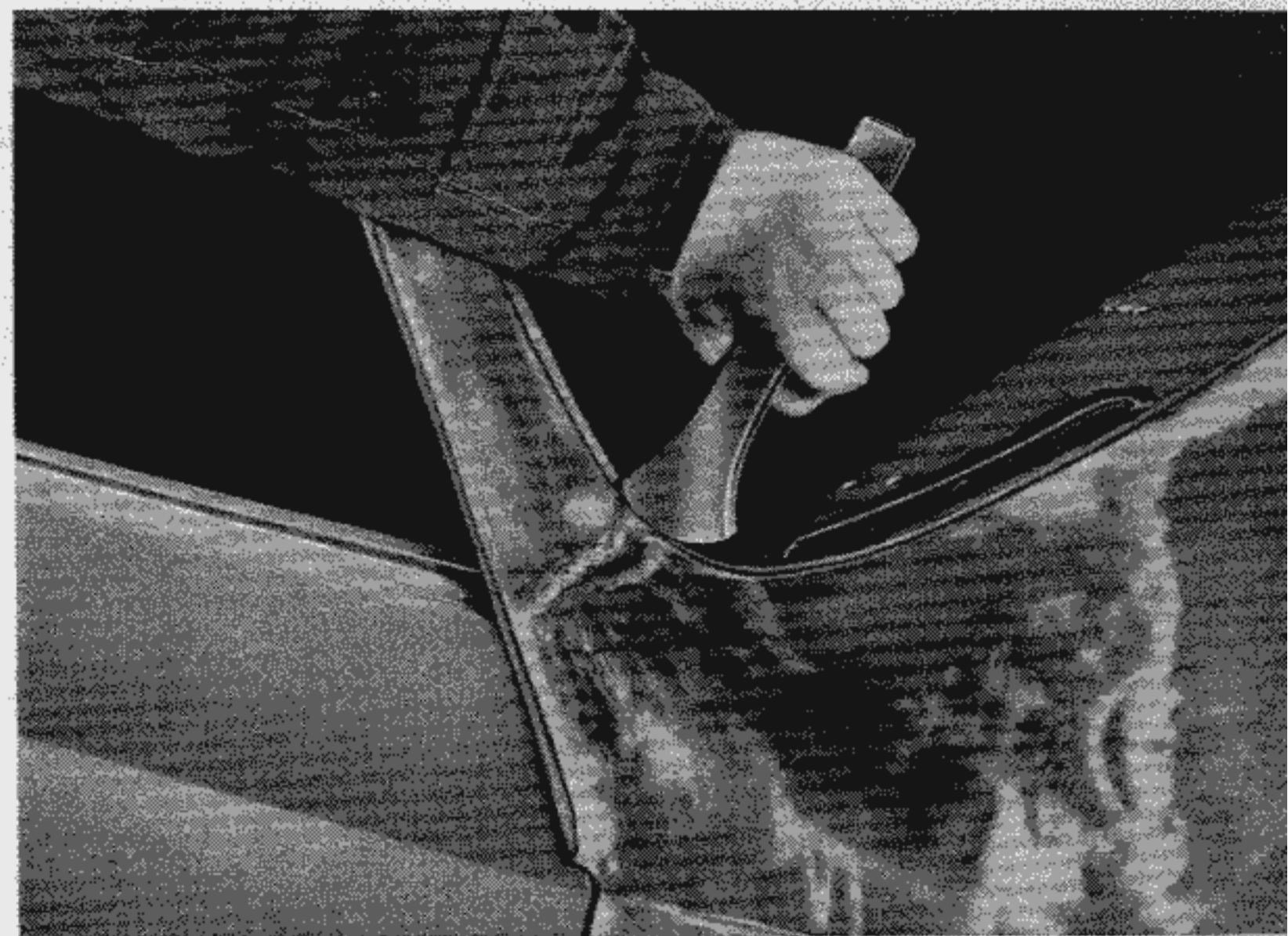
VW 743

LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



**Window Frame Forming Tool
(Round Nose)**

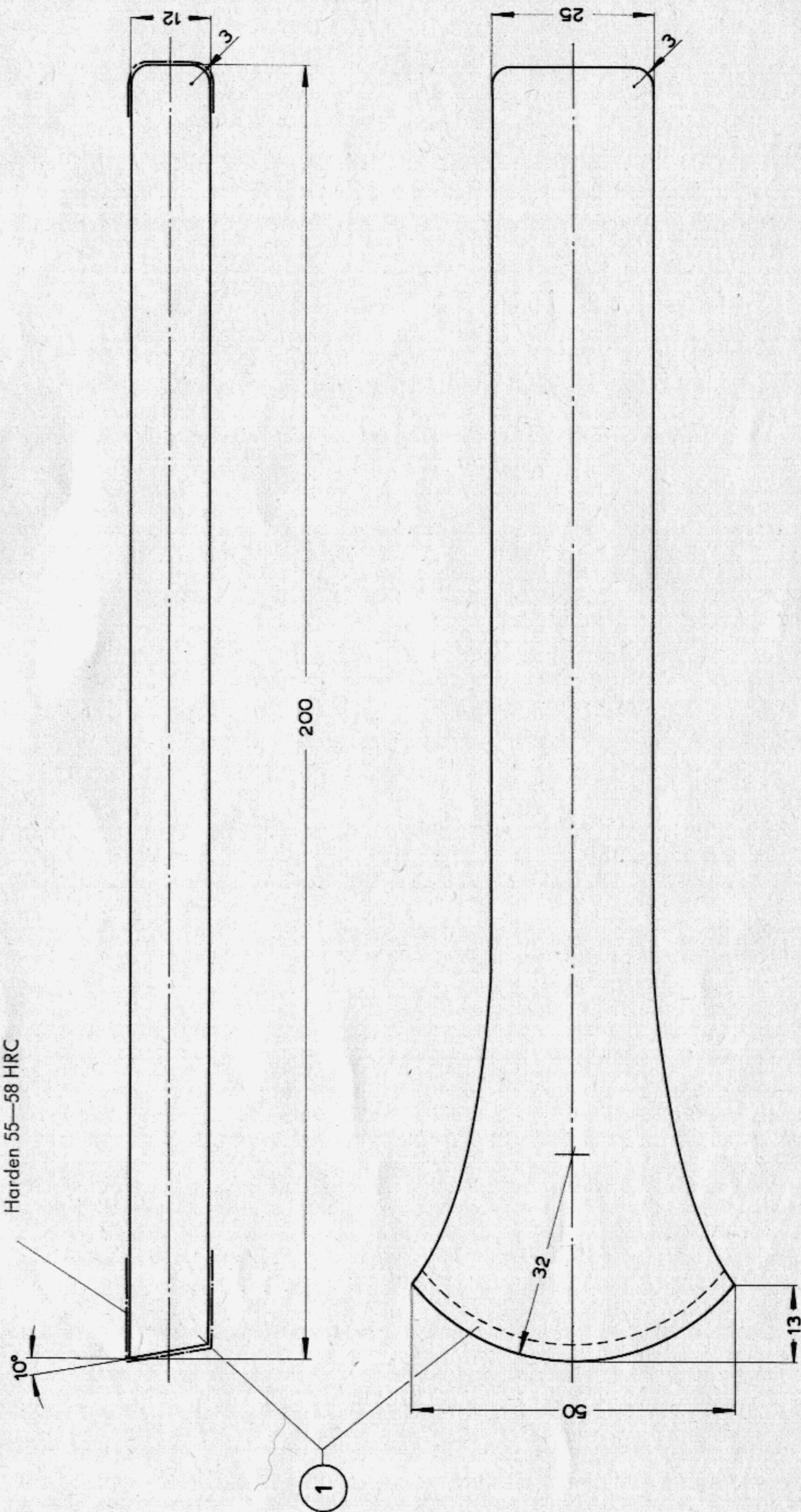
The forming tool is used for finishing-off work on the rounded corners of the window frames of types 1, 2 and 3.



Construction Details for VW 744

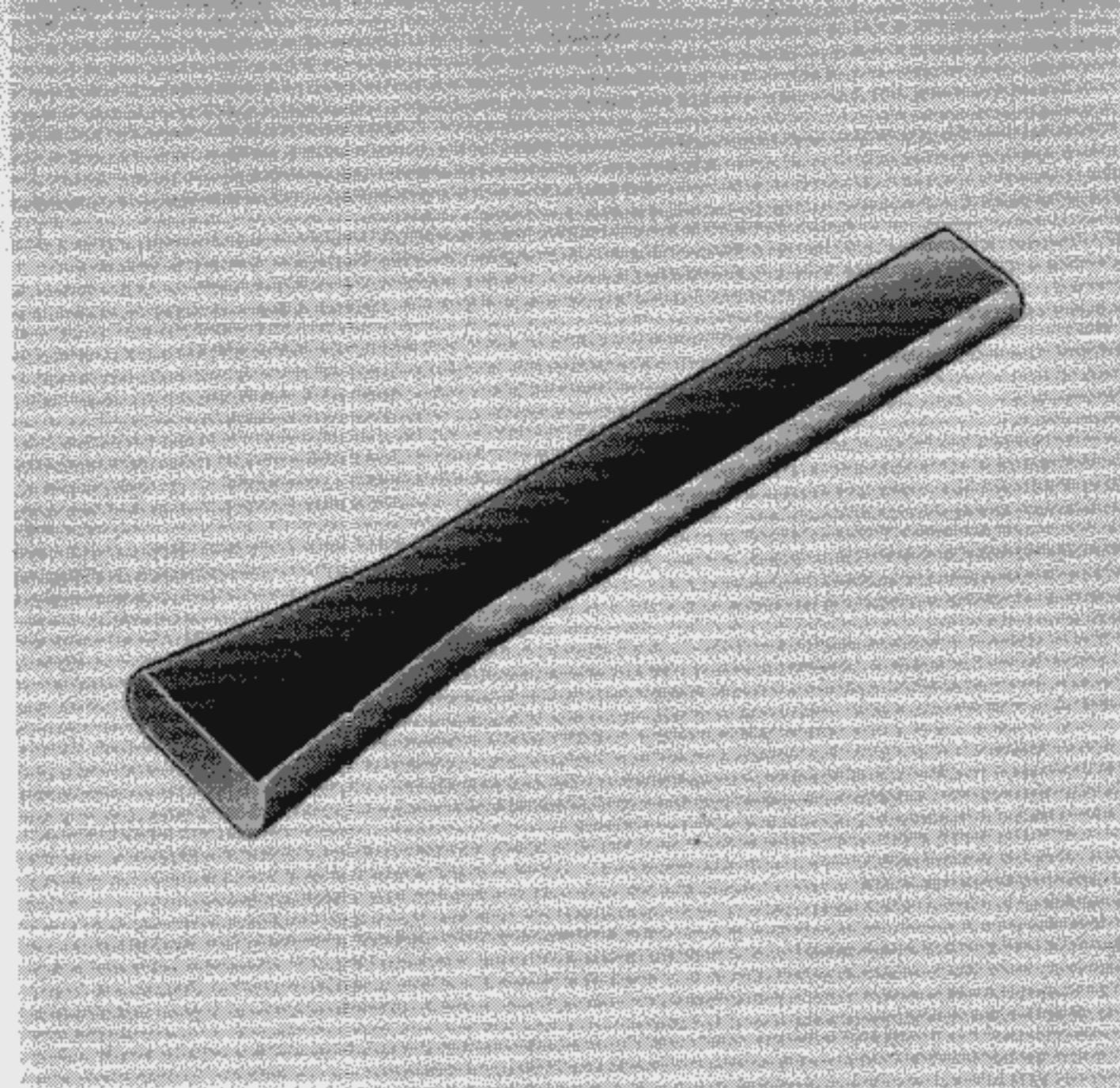
- 1 — Cut steel bar as detailed in parts list.
- 2 — Forge one end of steel bar.
- 3 — Finish off rough forging as shown in drawing.
- 4 — Temper the forming tool and harden as detailed in drawing.
- 5 — Clean scale from hardened surface.
- 6 — Treat tool with rust preventive.

Harden 55—58 HRC



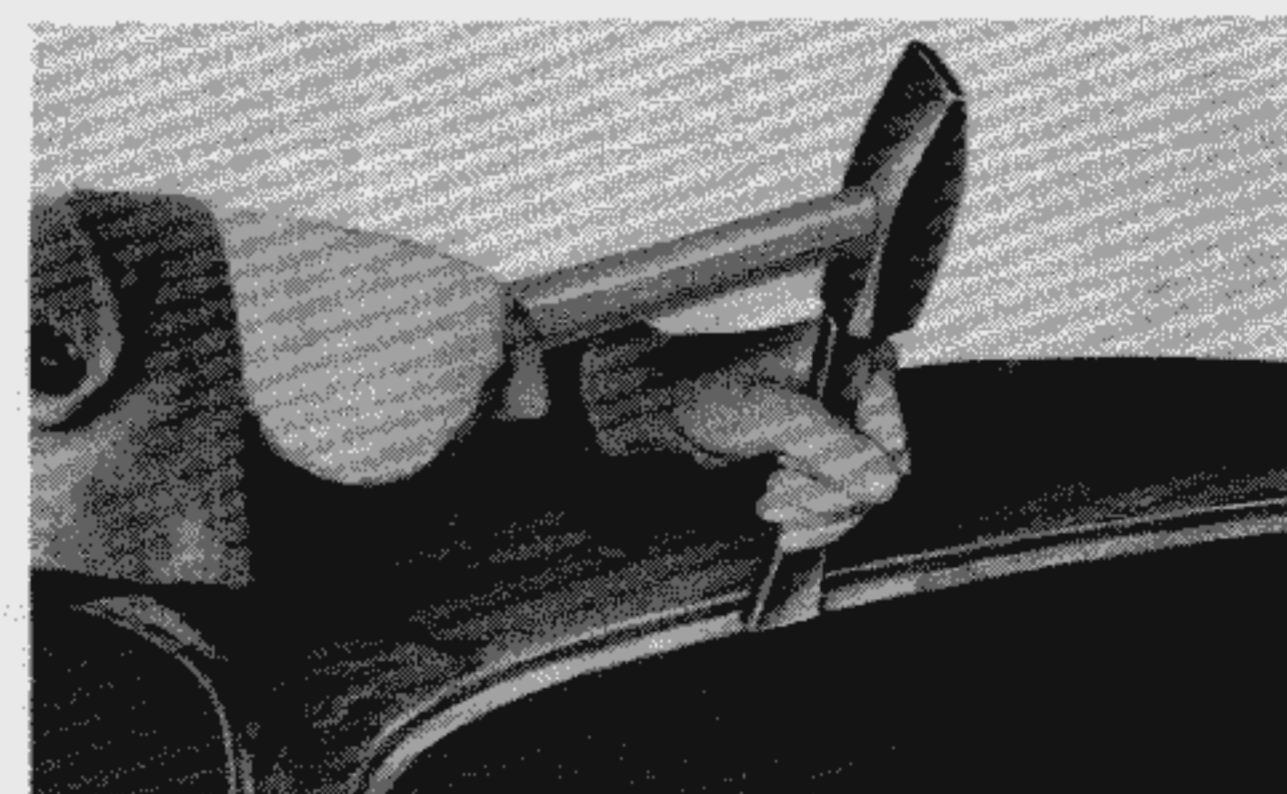
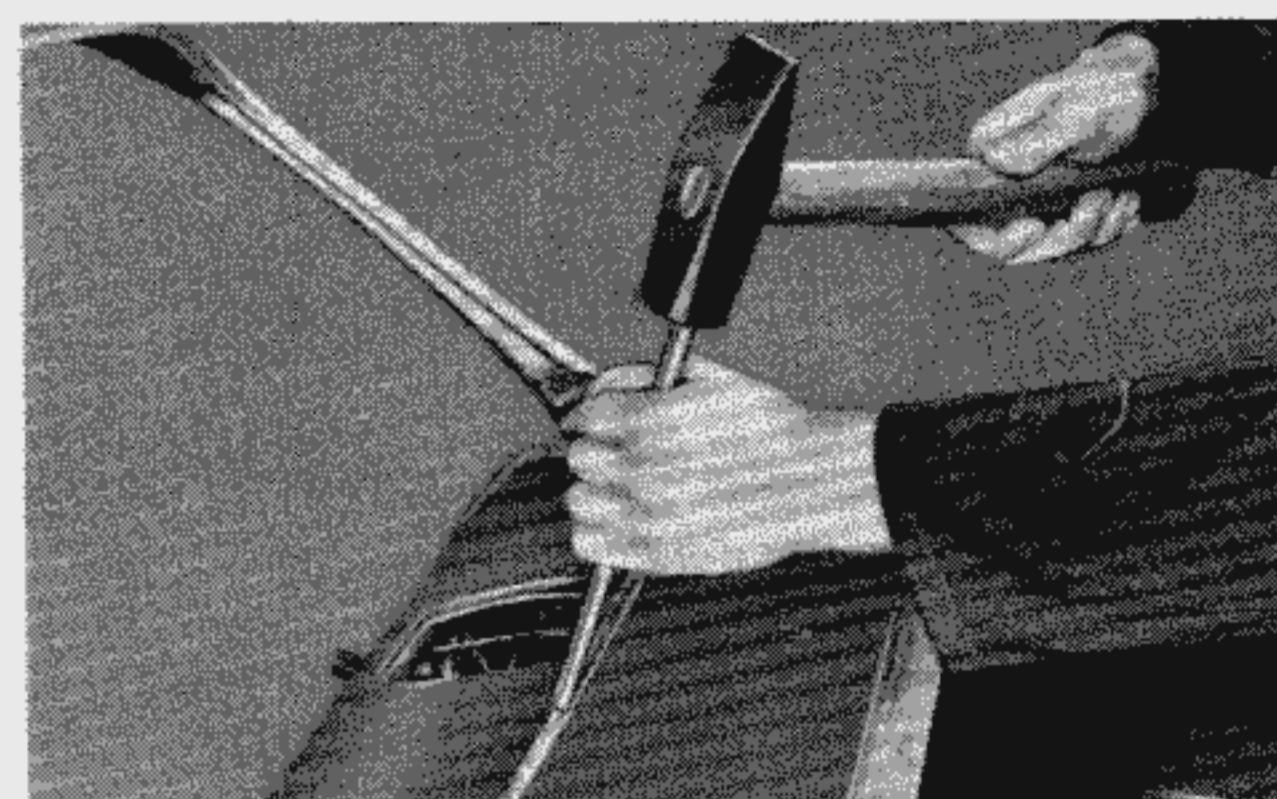
Tempered 80—100 kg/mm²

Part No.	Description	Material No. required	Forming Tool 25 X 12 X 220	C 45
1				
Window Frame Forming Tool (Round Nose)				VOLKSWAGENWERK AG
WOLFSBURG Service Department				Drawn by: 2. 3. 62 Raebel
Checked by: 8. 3. 62 Giesecking				VW 744



**Window Frame Forming Tool
(Straight Nose)**

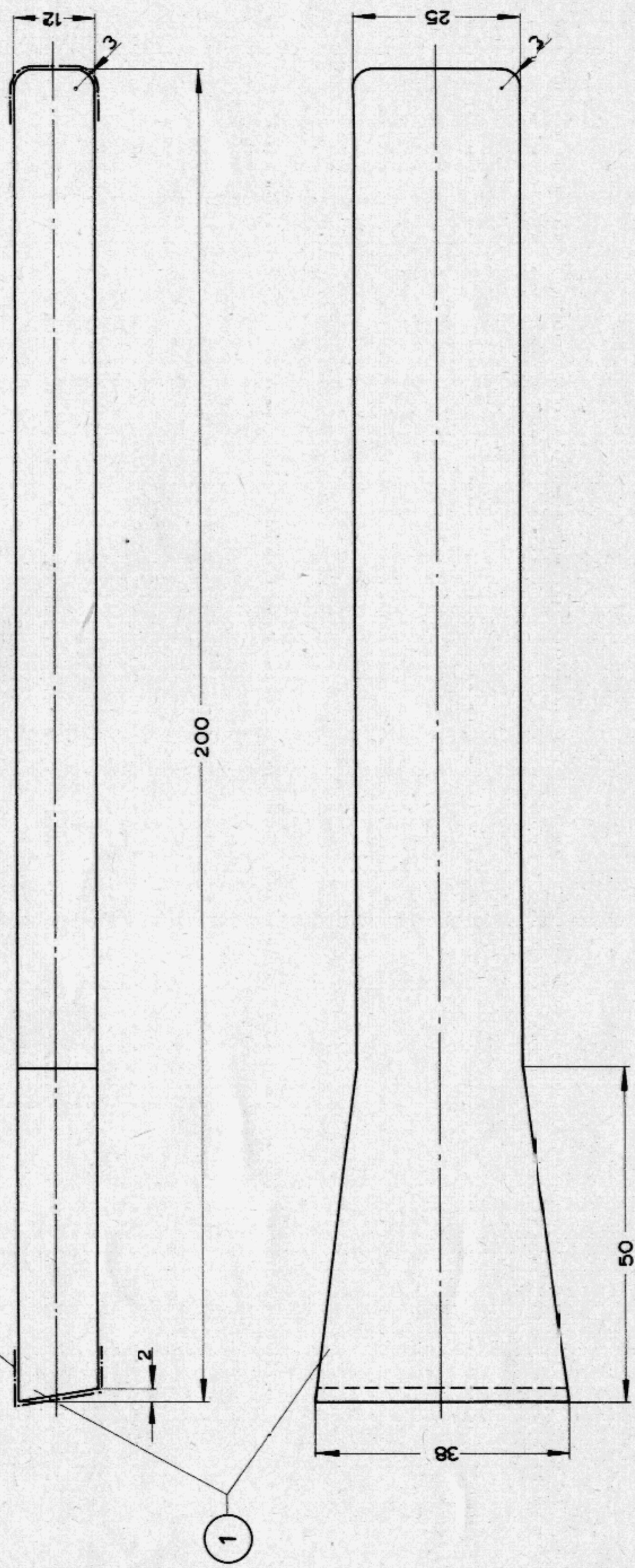
This forming tool is suitable for straightening window frames on type 1, 2 and 3. Only straight or slightly curved sections can be reworked with it.



Construction Details for VW 745

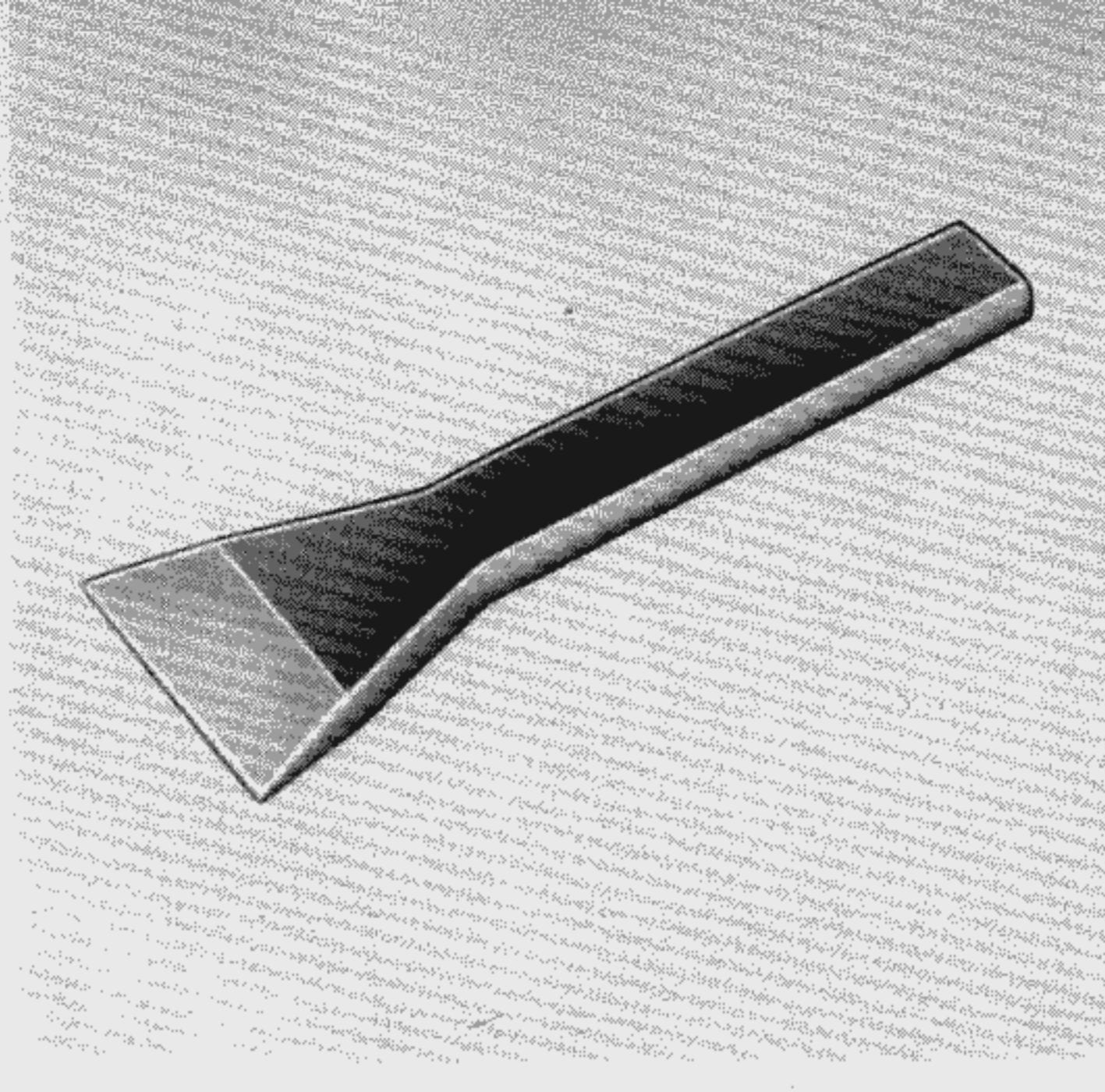
- 1 — Cut steel bar as detailed in parts list.
- 2 — Forge one end of steel bar.
- 3 — Finish off rough forging as shown in drawing.
- 4 — Temper the forming tool and harden as detailed in drawing.
- 5 — Clean scale from hardened surface.
- 6 — Treat tool with rust preventive.

Harden 55—58 HRC



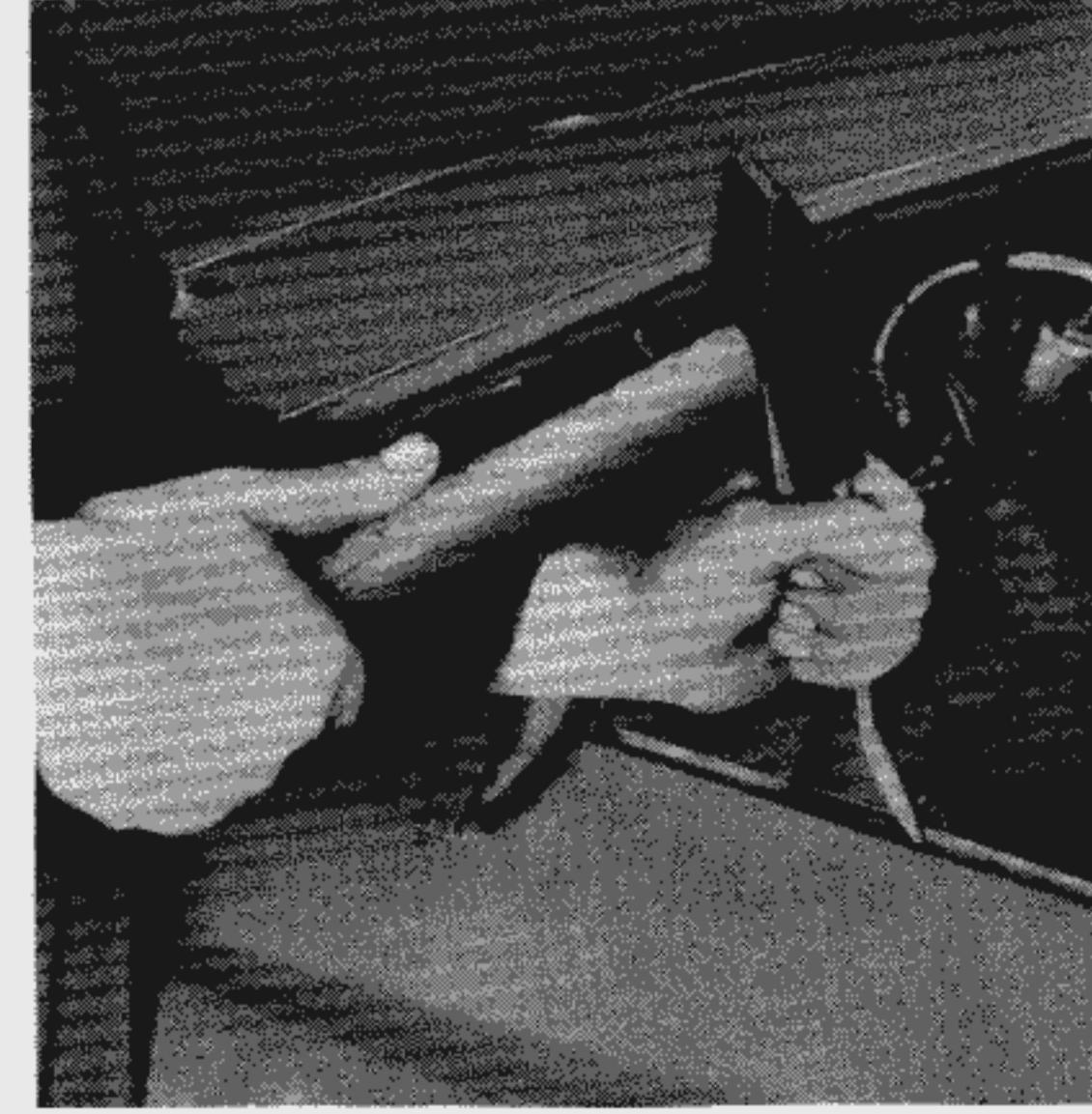
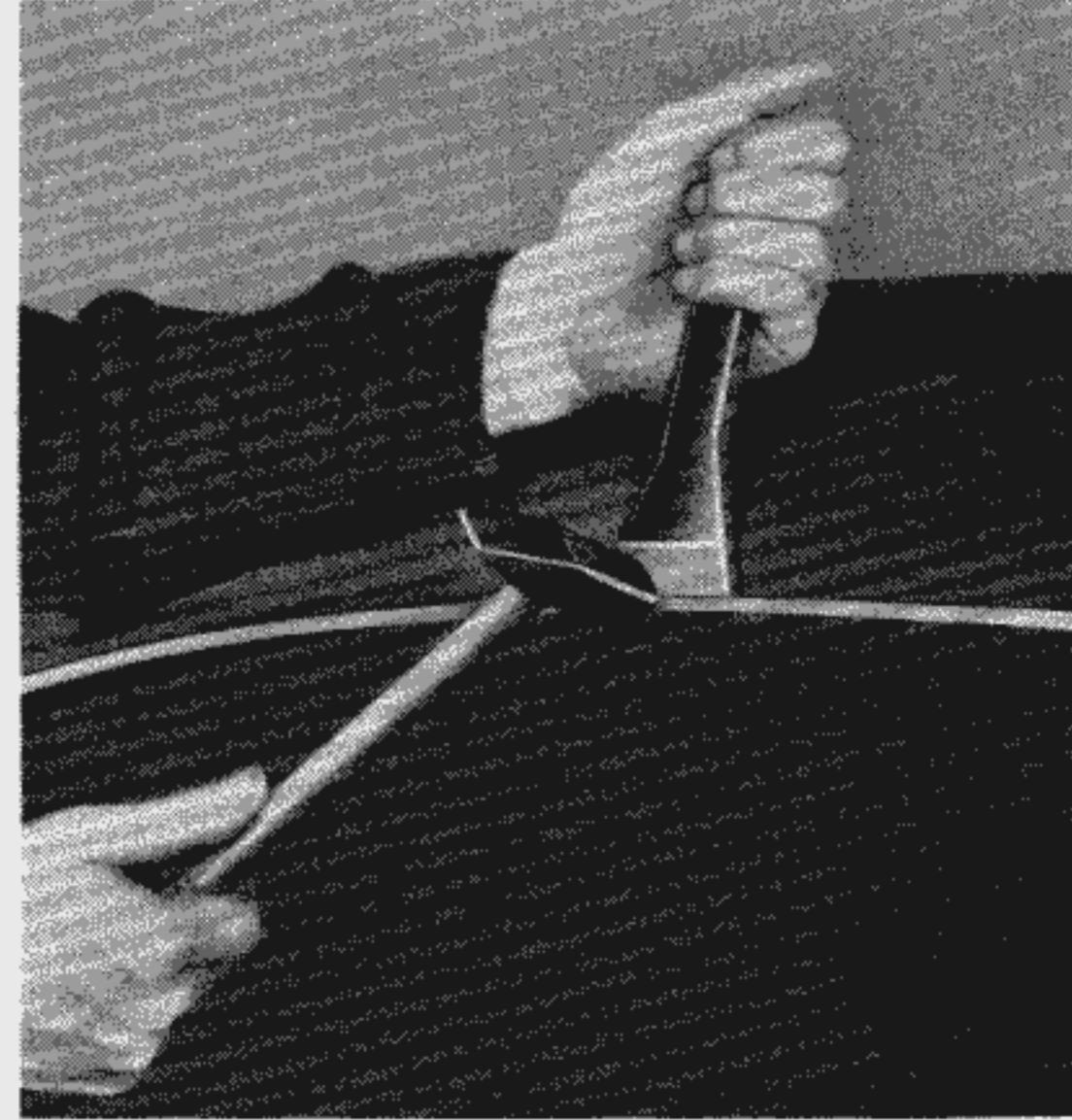
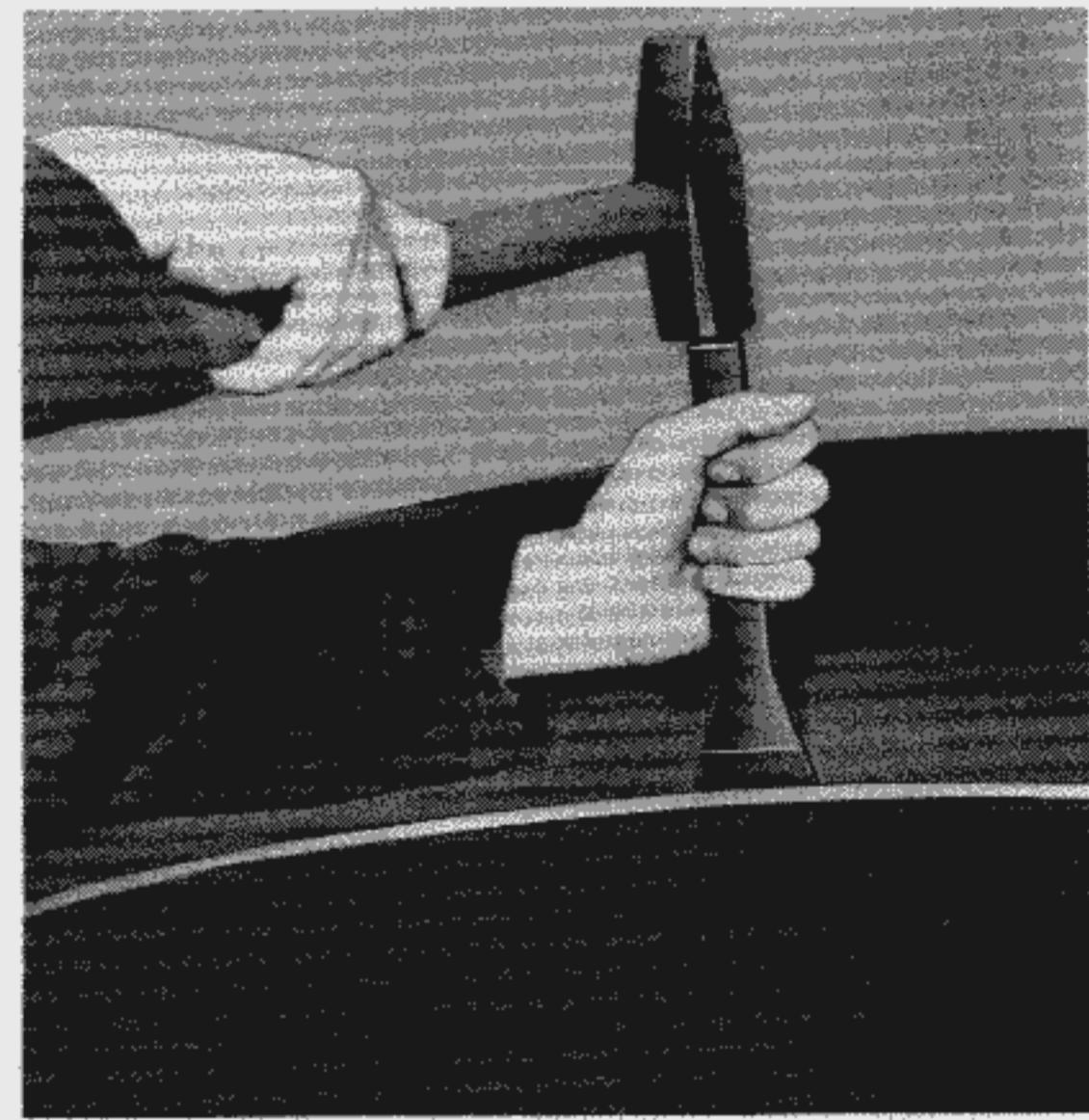
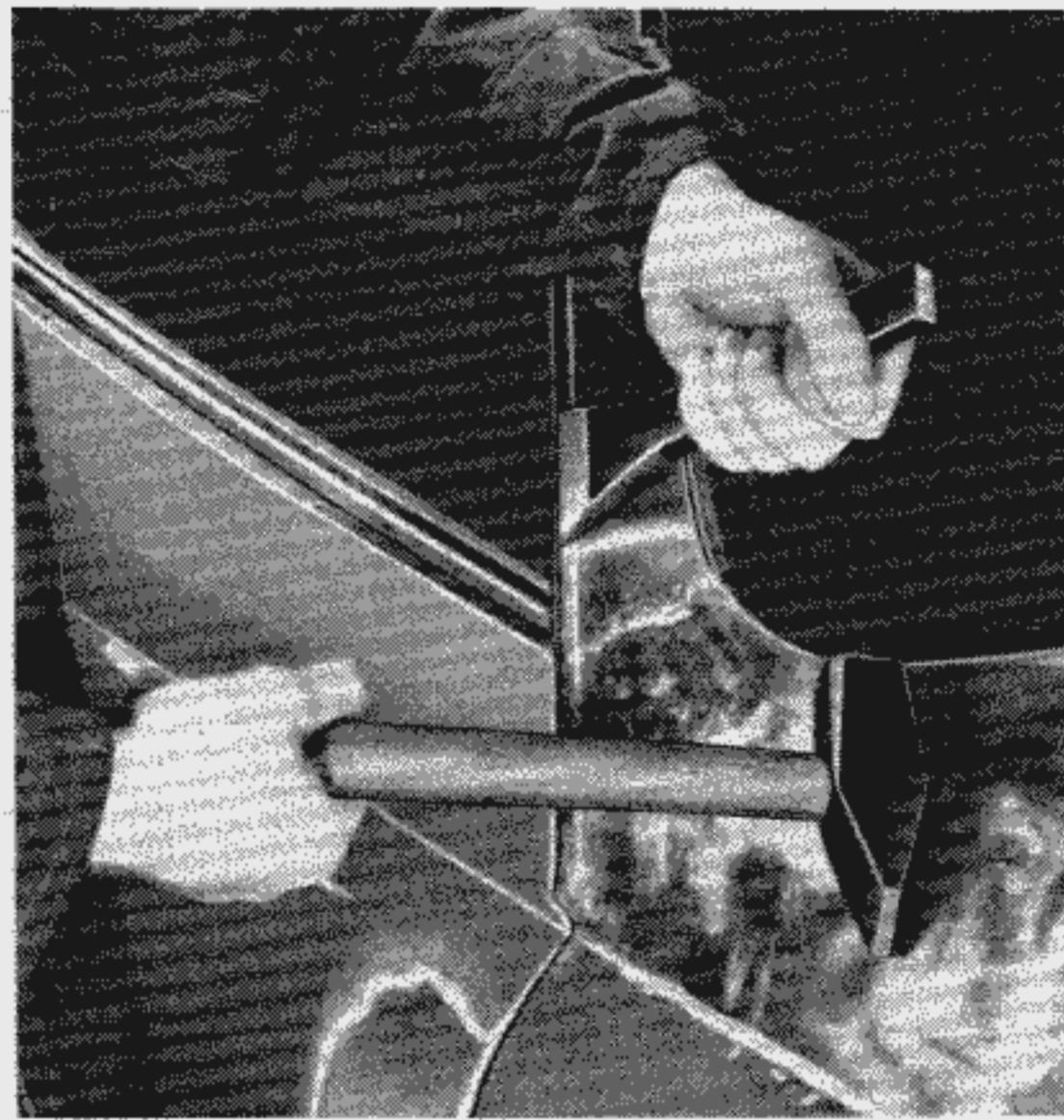
Tempered 80—100 kg/mm²

1	1	Forming Tool 25X12X220	C 45
Part No.	Description	Material	
VOLKSWAGENWERK AG WOLFSBURG Service Department			Window Frame Forming Tool (Straight Nose)
Drawn by: 2.3.62 Raebel	Checked by: B.3.62 Giesecking	VW 745	



Forming Tool for Ribs and Folded Edges

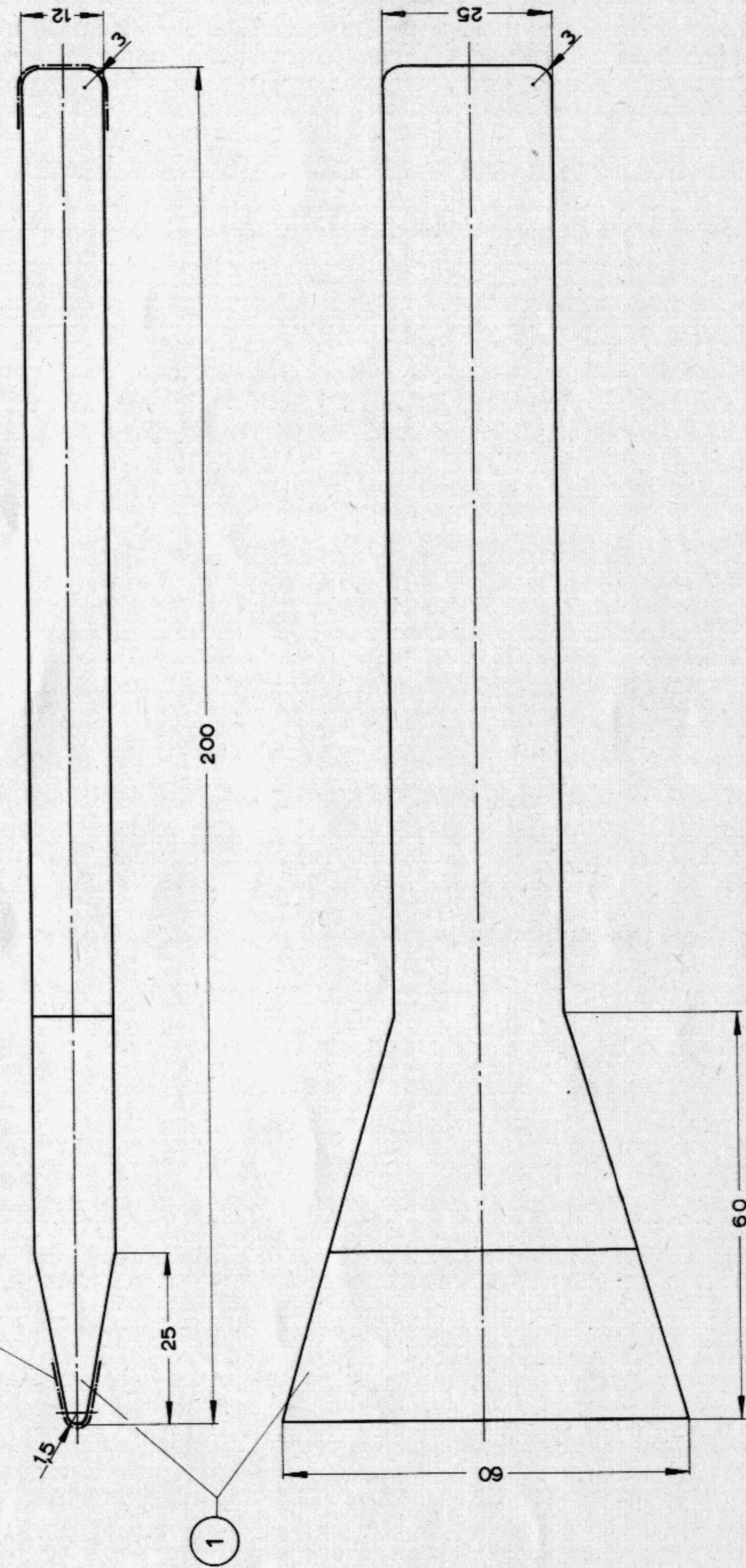
With this forming tool the ribs and folded edges on type 1, 2 and 3 can be reshaped. The pictures show various possible usages.



Construction Details for VW 746

- 1 — Cut steel bar as detailed in parts list.
- 2 — Forge one end of steel bar.
- 3 — Finish off rough forging as shown in drawing.
- 4 — Temper the forming tool and harden as detailed in drawing.
- 5 — Clean scale from hardened surface.
- 6 — Treat tool with rust preventitive.

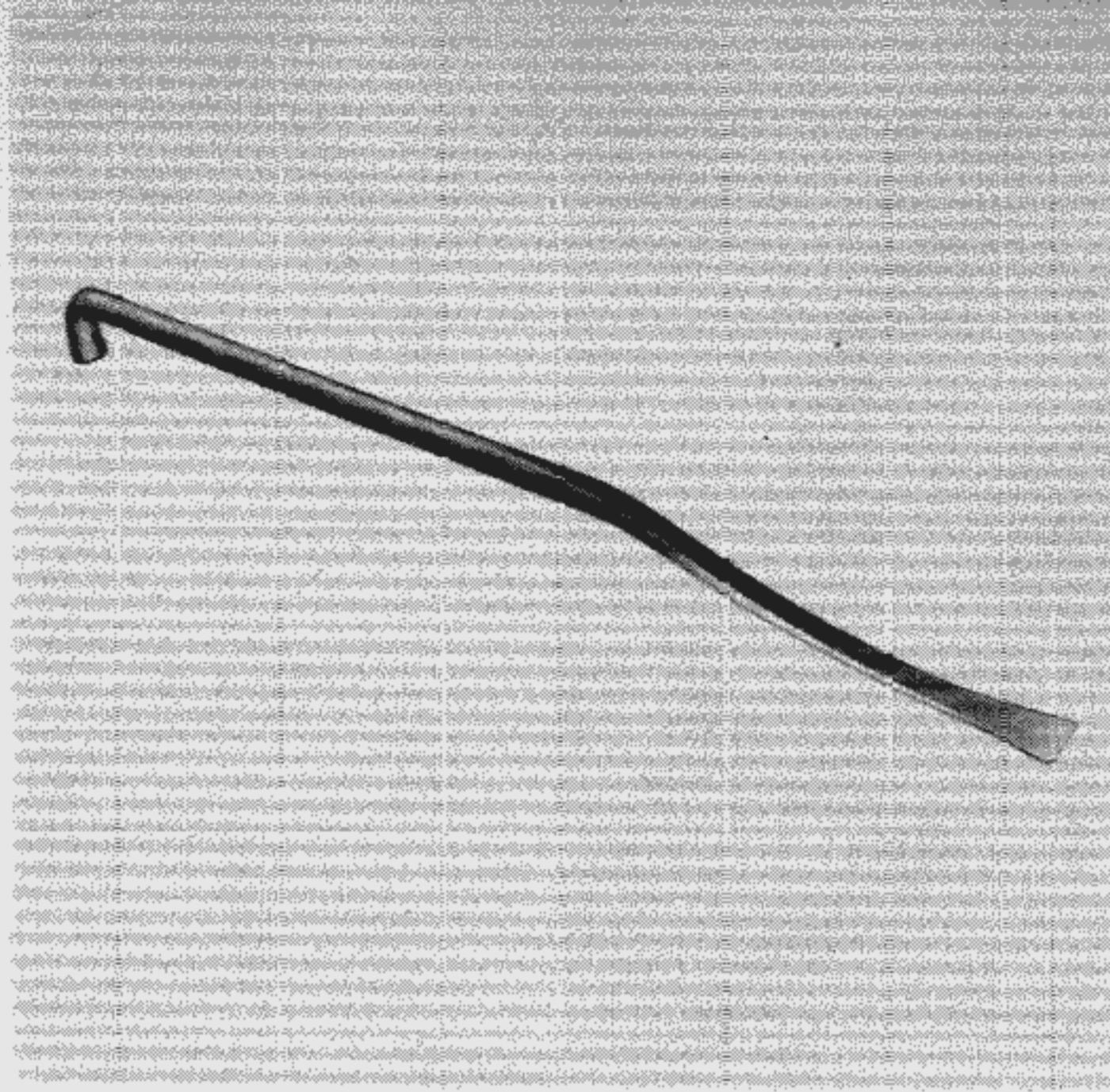
Harden 55—58 HRC



Tempered 80—100 kg/mm²

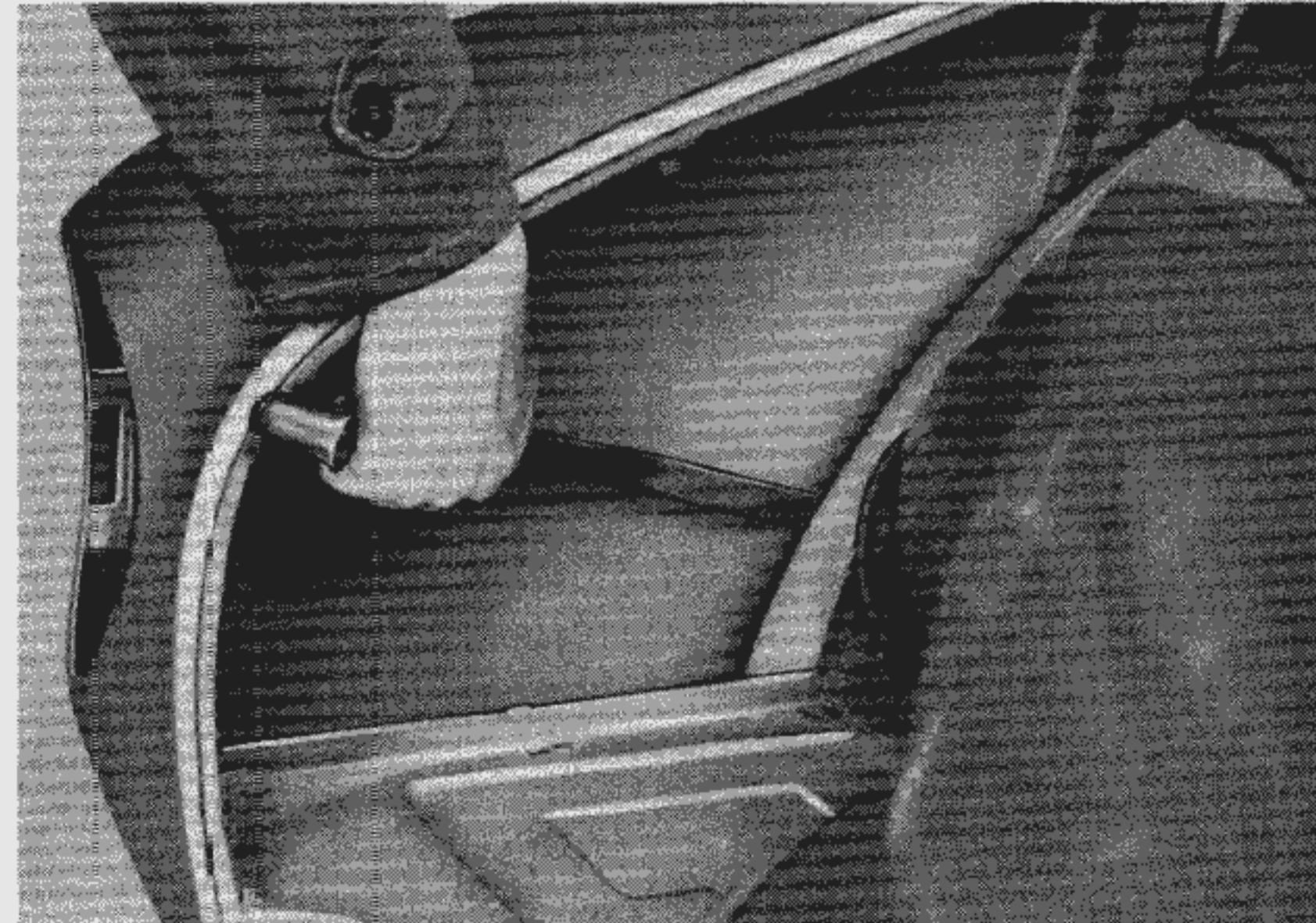
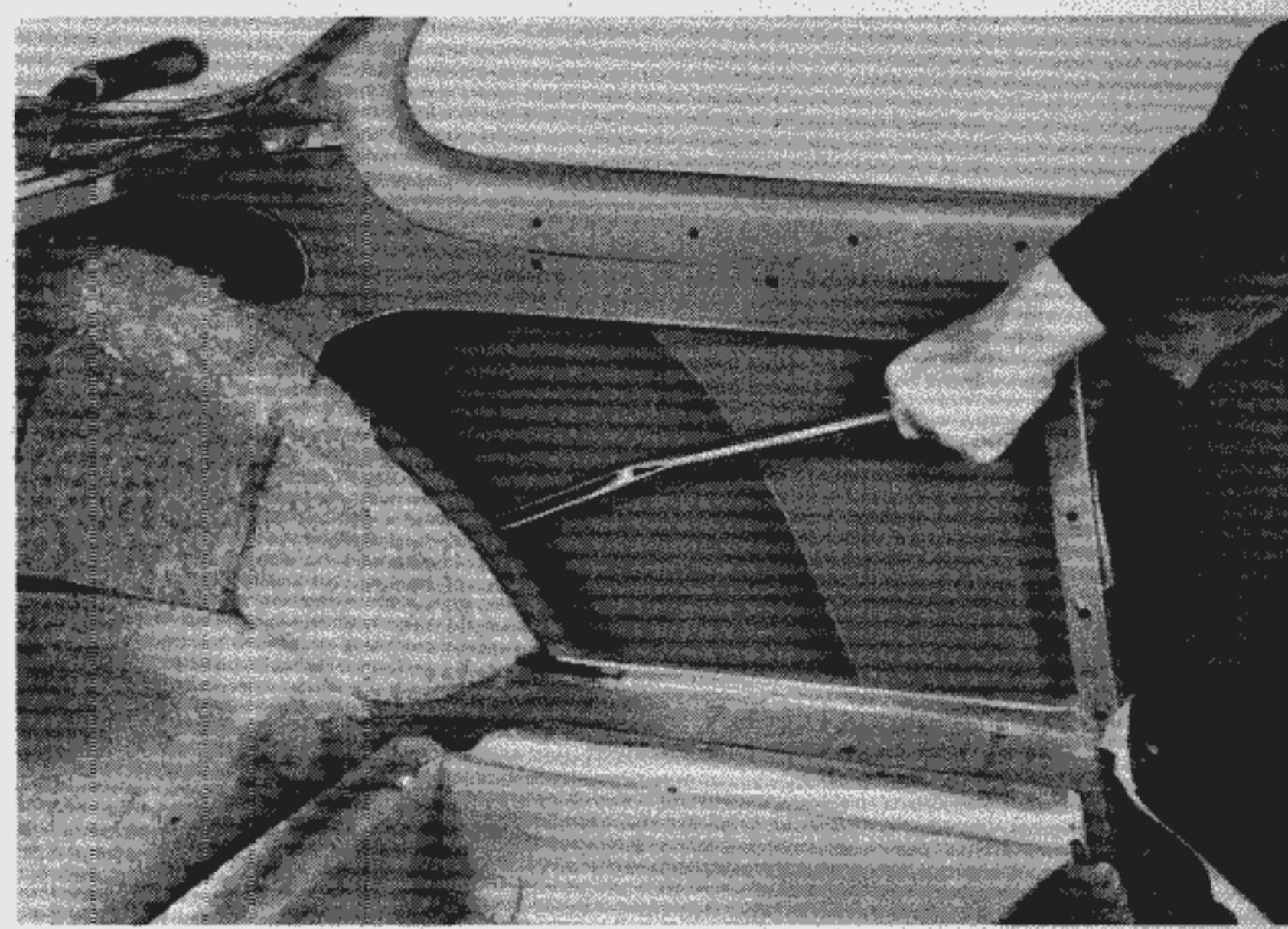
1	1	Forming Tool 25 X 12 X 235	C 45
		Part No.	Description
		No. required	Material
VOLKSWAGENWERK AG			
WOLFSBURG			
Service Department			
Forming Tool for Ribs and Folded Edges			
VW 746			
Drawn by:		Checked by:	
1.3.62 Raebel		8.3.62 Giesecking	

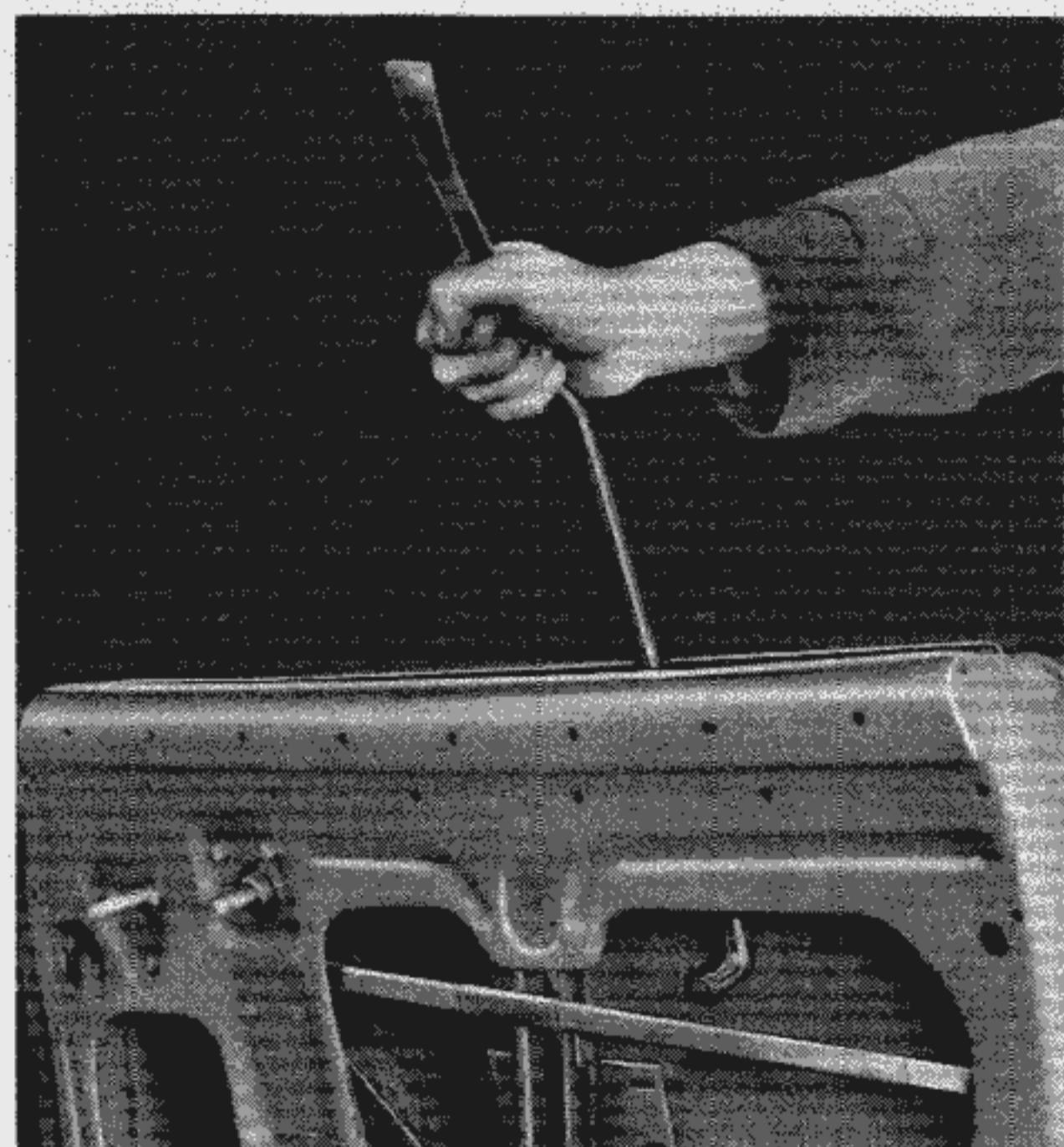
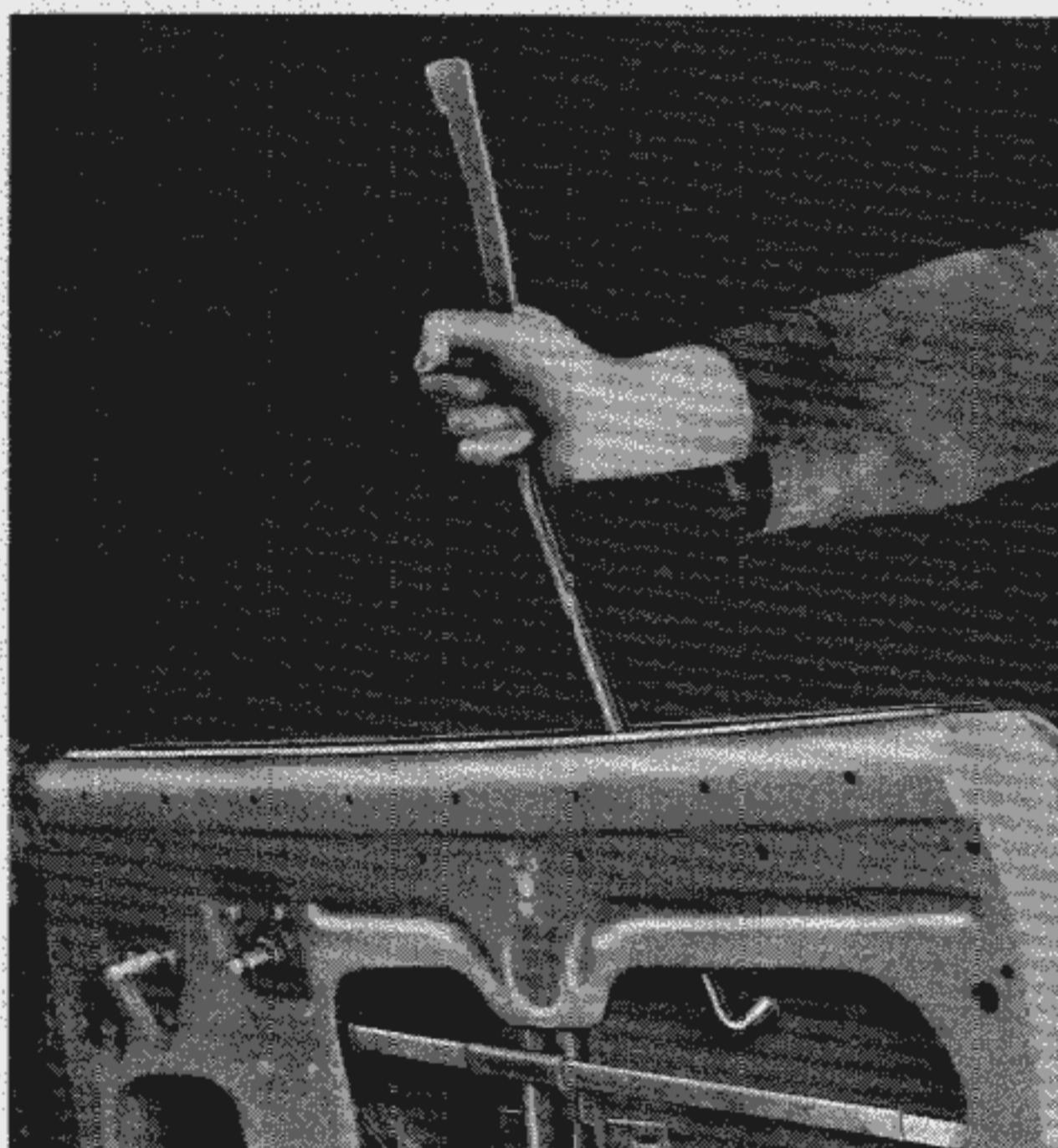
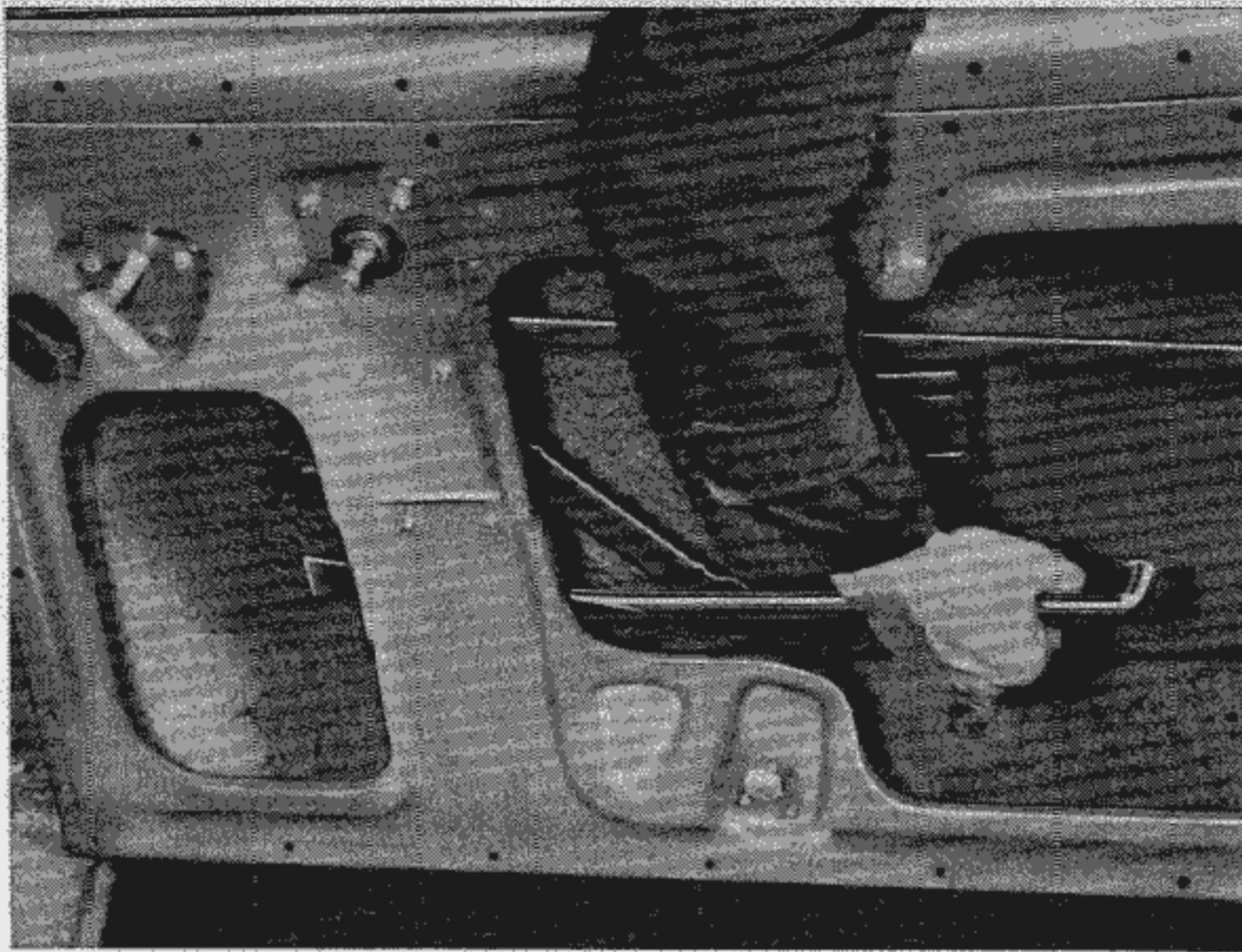
LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



Bending Iron

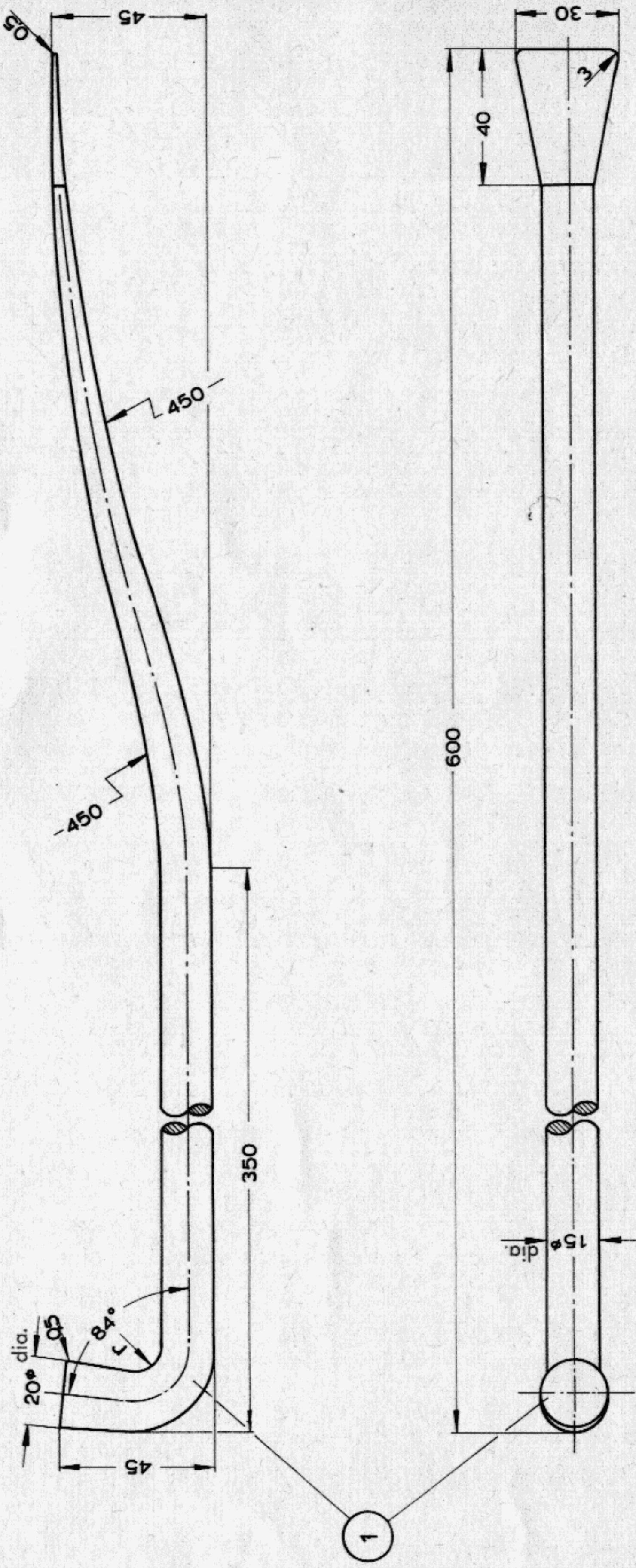
This bending iron can be used for pushing or prizing out misshapen parts on the body work of types 1, 2 and 3. The design of the bending iron enables it to be used on hollow parts such as, doors side panels and wheel housings.





Construction Details for VW 747

- 1 — Cut round steel rod as detailed in parts list.
- 2 — Forge round steel rod as shown in drawing.
- 3 — Finish off rough forging as shown in drawing.
- 4 — Temper bending iron, clean off scale.
- 5 — Treat bending iron with rust preventive.

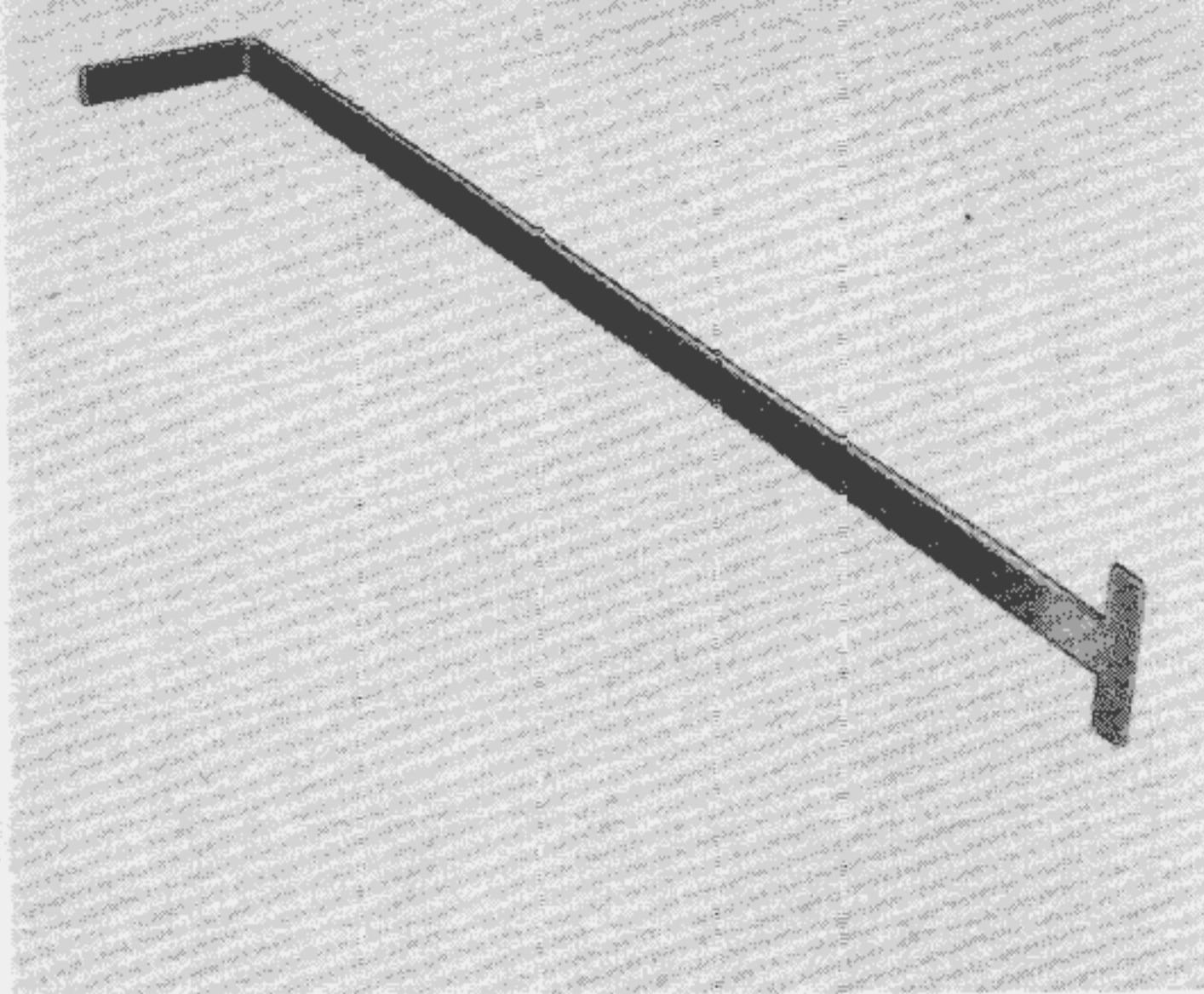


Tempered 80—100 kg/mm²

Part No.	Description	Material
1	Bending Iron 15 dia. X 660	C 45
VOLKSWAGENWERK AG WOLFSBURG Service Department		Bending Iron
Drawn by: 5.3.62 Raebel	Checked by: 8.3.62 Giesecking	VW 747

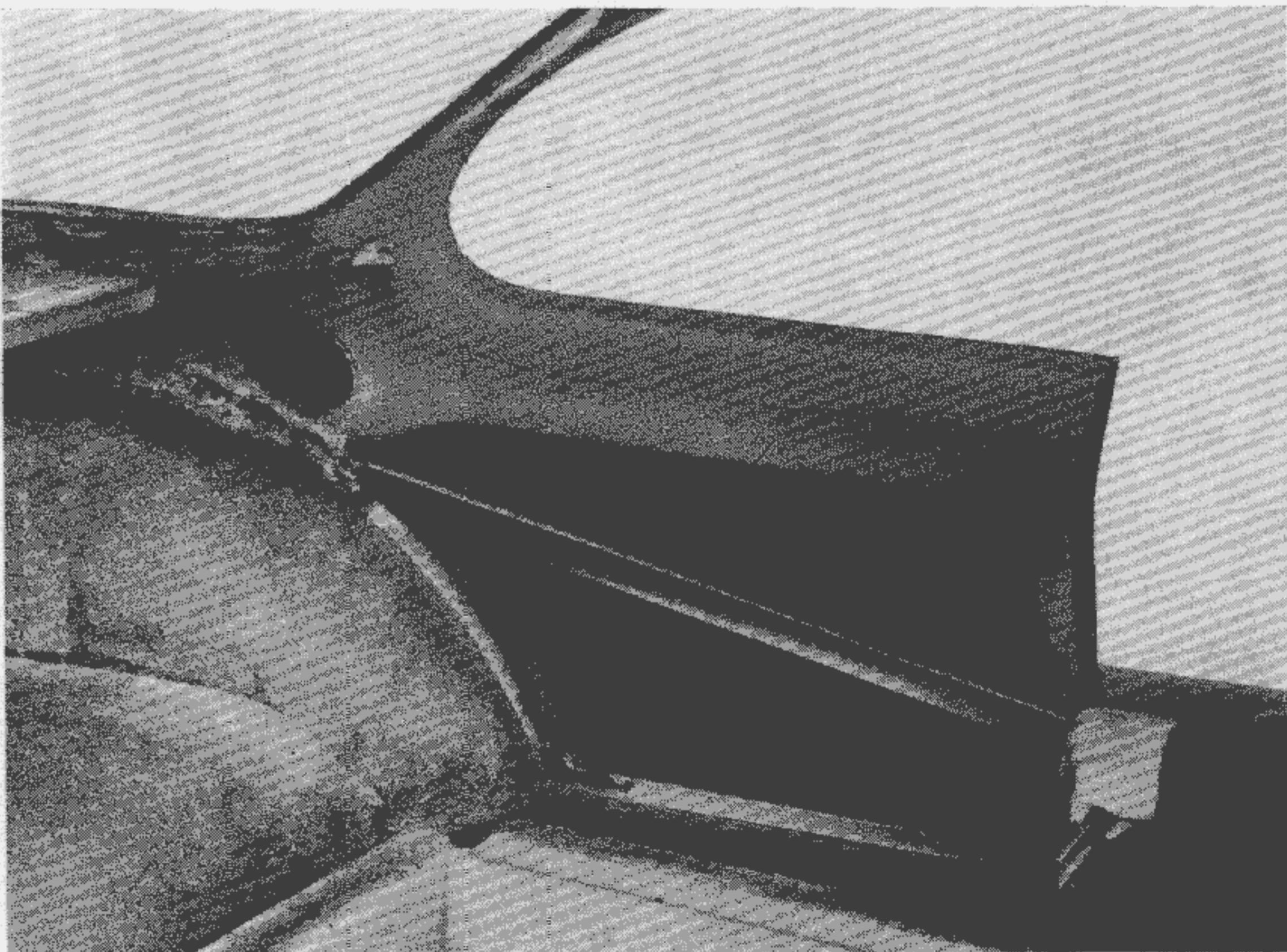
LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT

VW 748



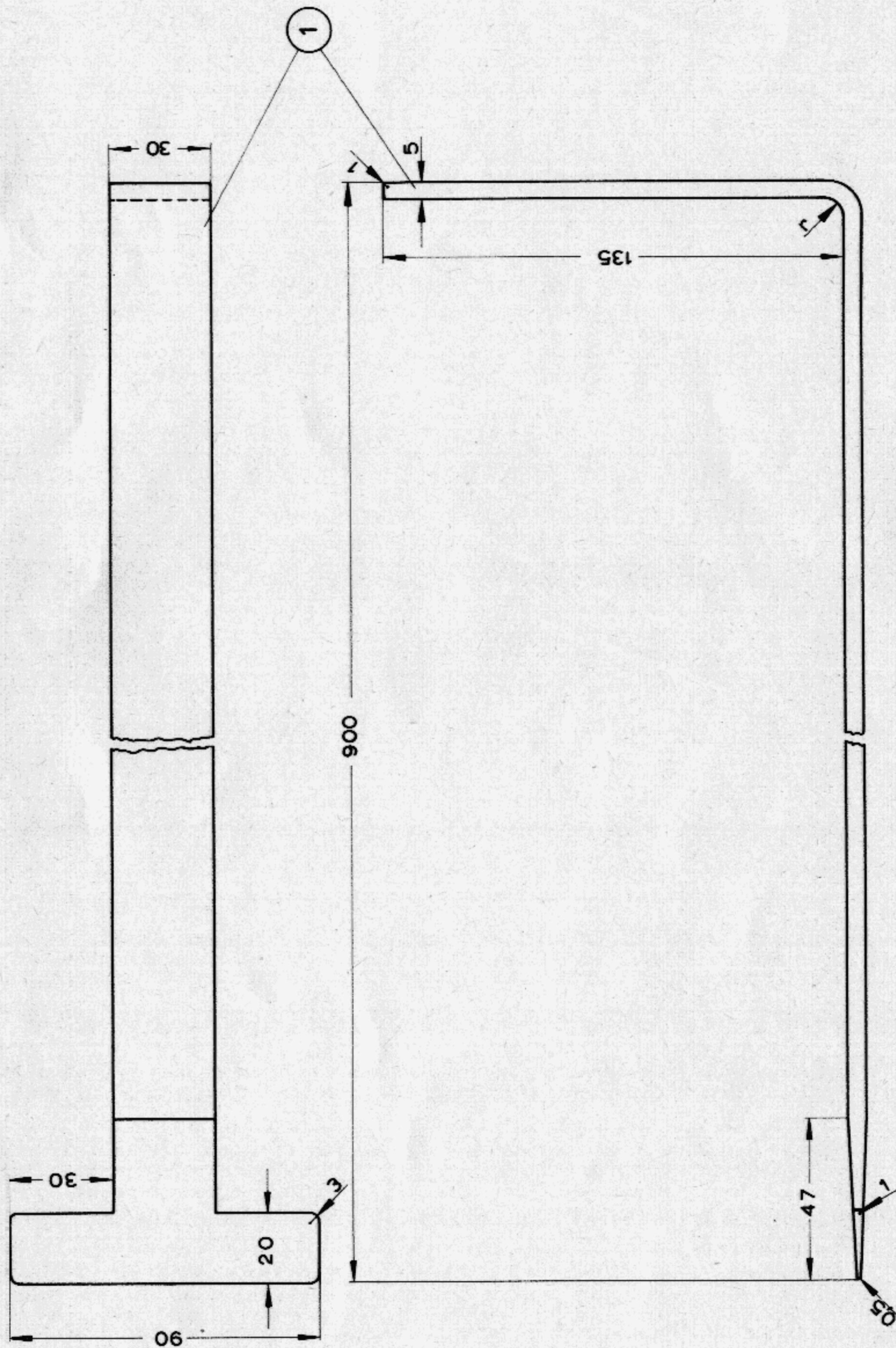
**Bending Hook
(Straight)**

Then bending hook is used for pushing out deformed parts of the wheel housing of type 14. It is inserted between the side panel and wheel housing and used according to the type of damage. Owing to its spring like construction the tool adapts itself to the contour of the body work.



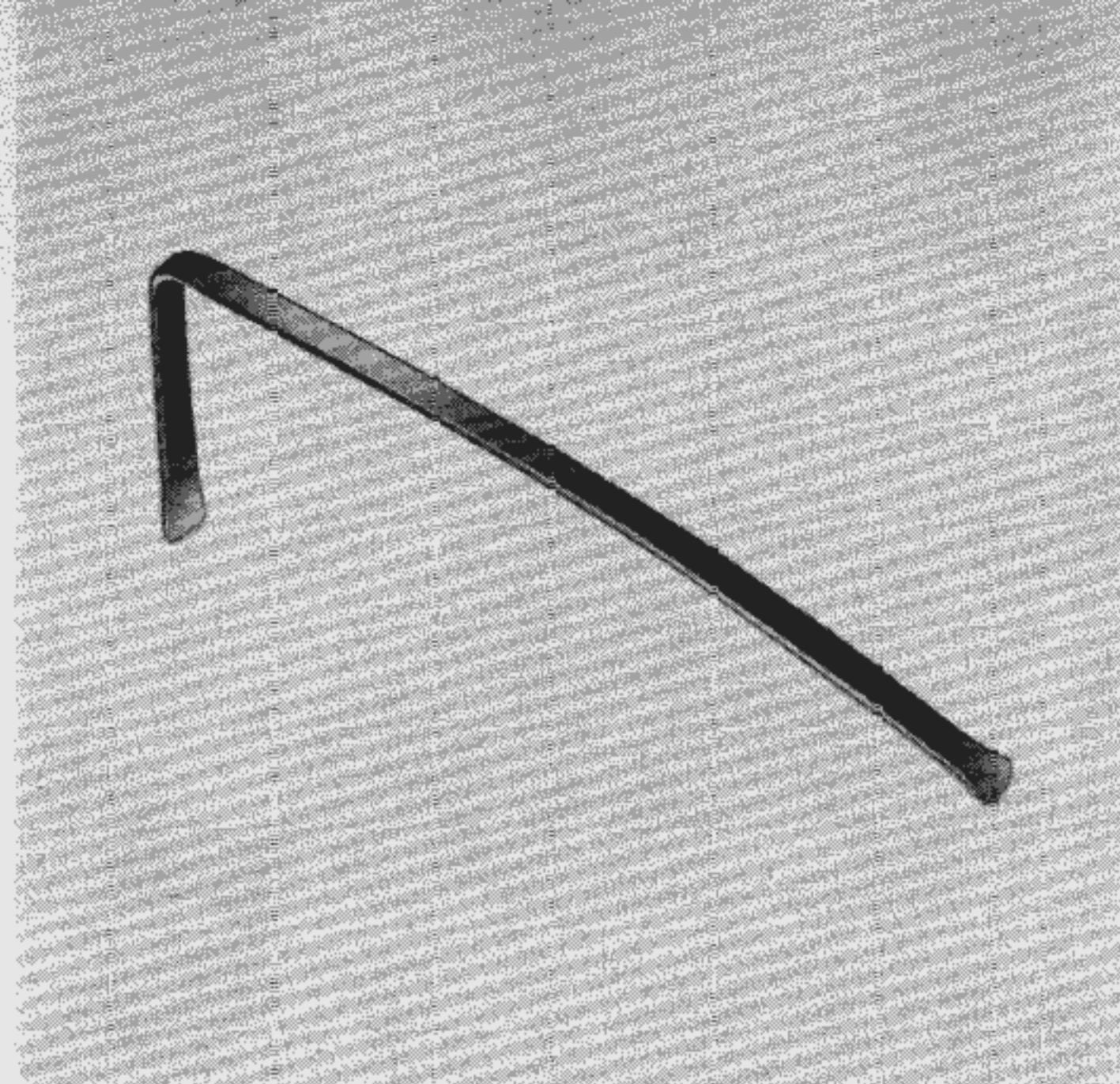
Construction Details for Vise

- 1 — Cut flat steel as detailed in parts list.
- 2 — Forge flat steel as shown in drawing.
- 3 — Finish off rough forging as shown in drawing.
- 4 — Temper the bending hook, clean off scale.
- 5 — Treat bending hook with rust preventive.



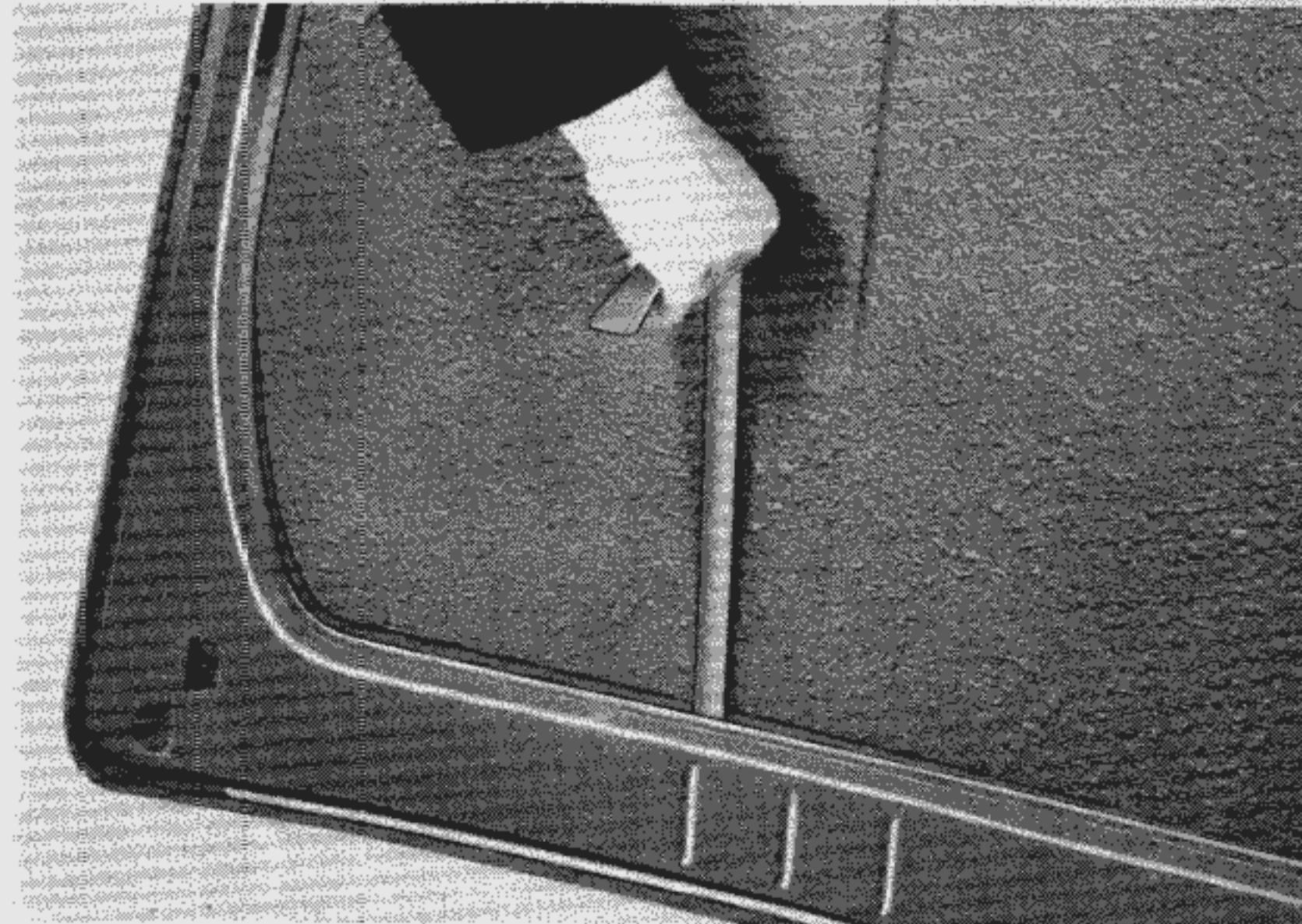
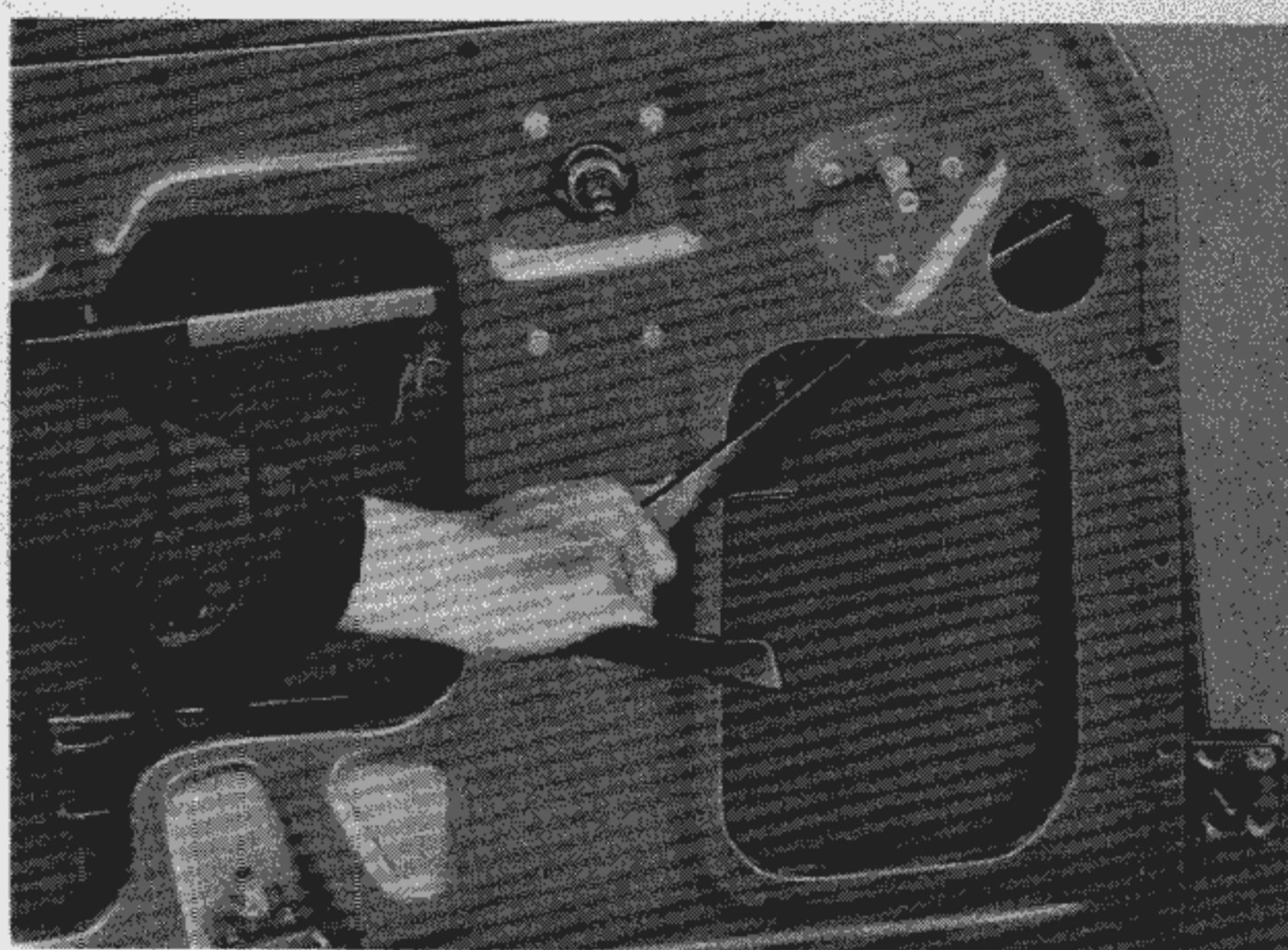
Part No.	Description	Material
1 1	Bending Hook 30 X 5 X 1100	C 45
No. required		
VOLKSWAGENWERK AG WOLFSBURG Service Department		Bending Hook, Straight
Drawn by: 7.3.62 Ruebel	Checked by: 8.3.62 Gieseking	VW 748

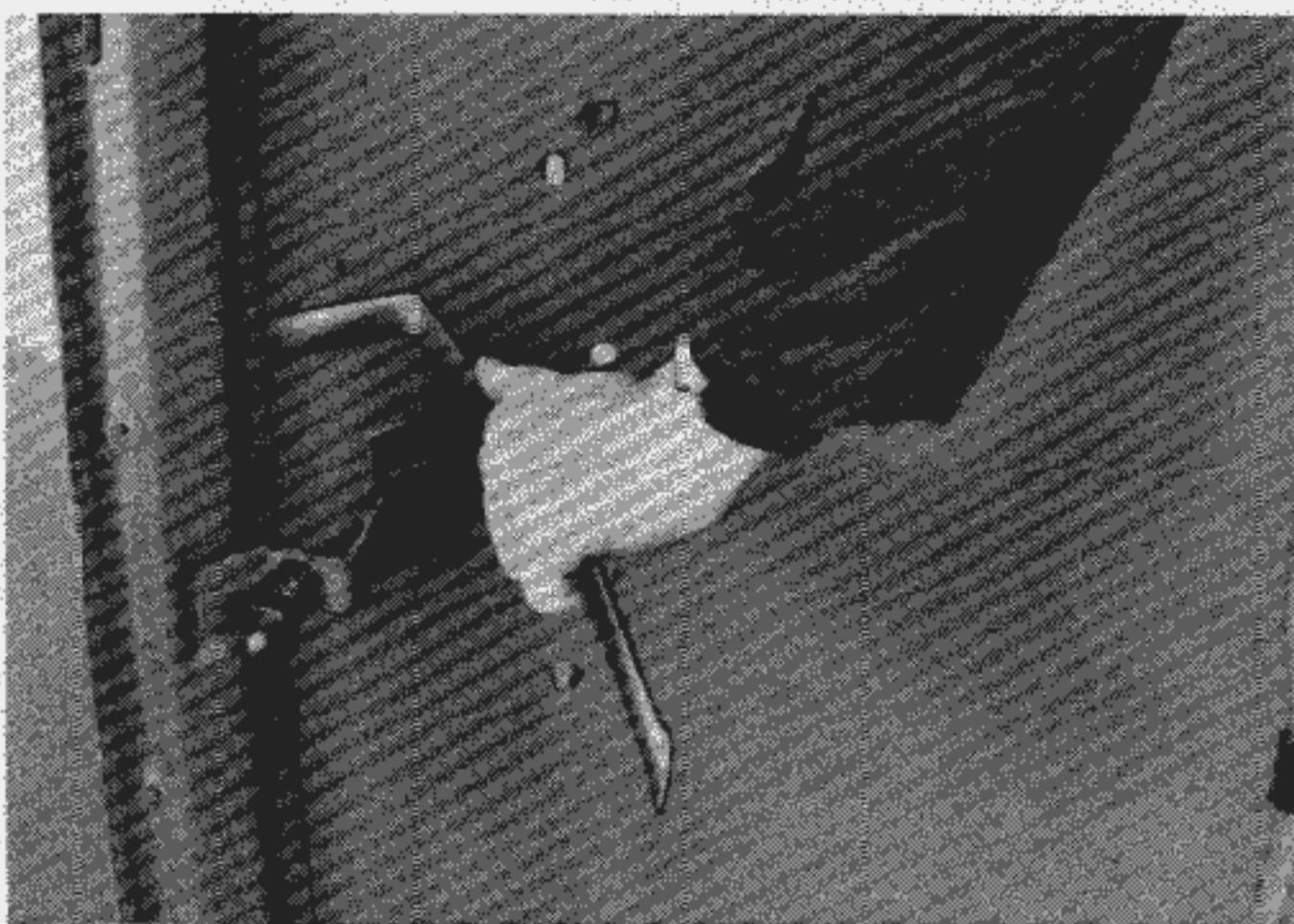
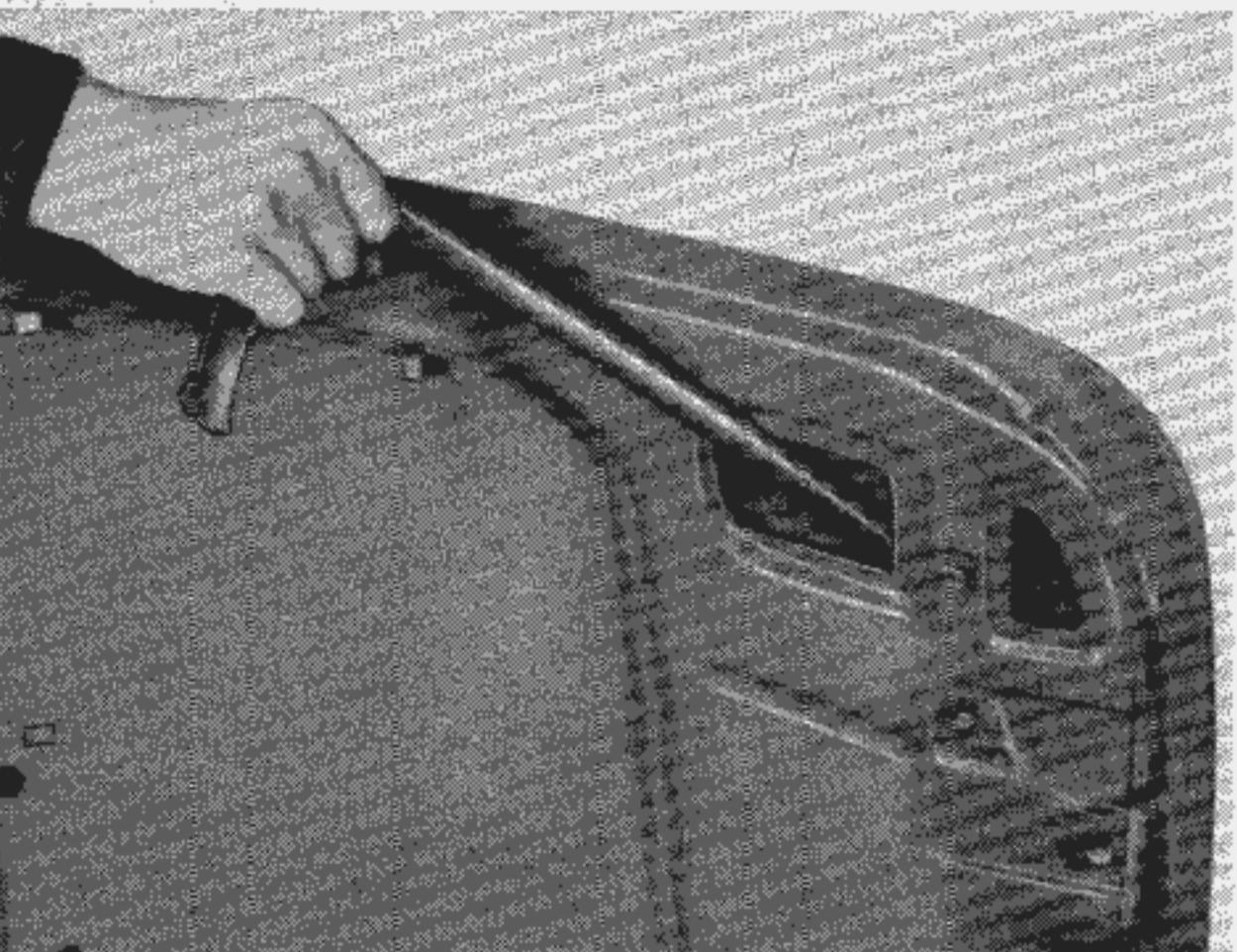
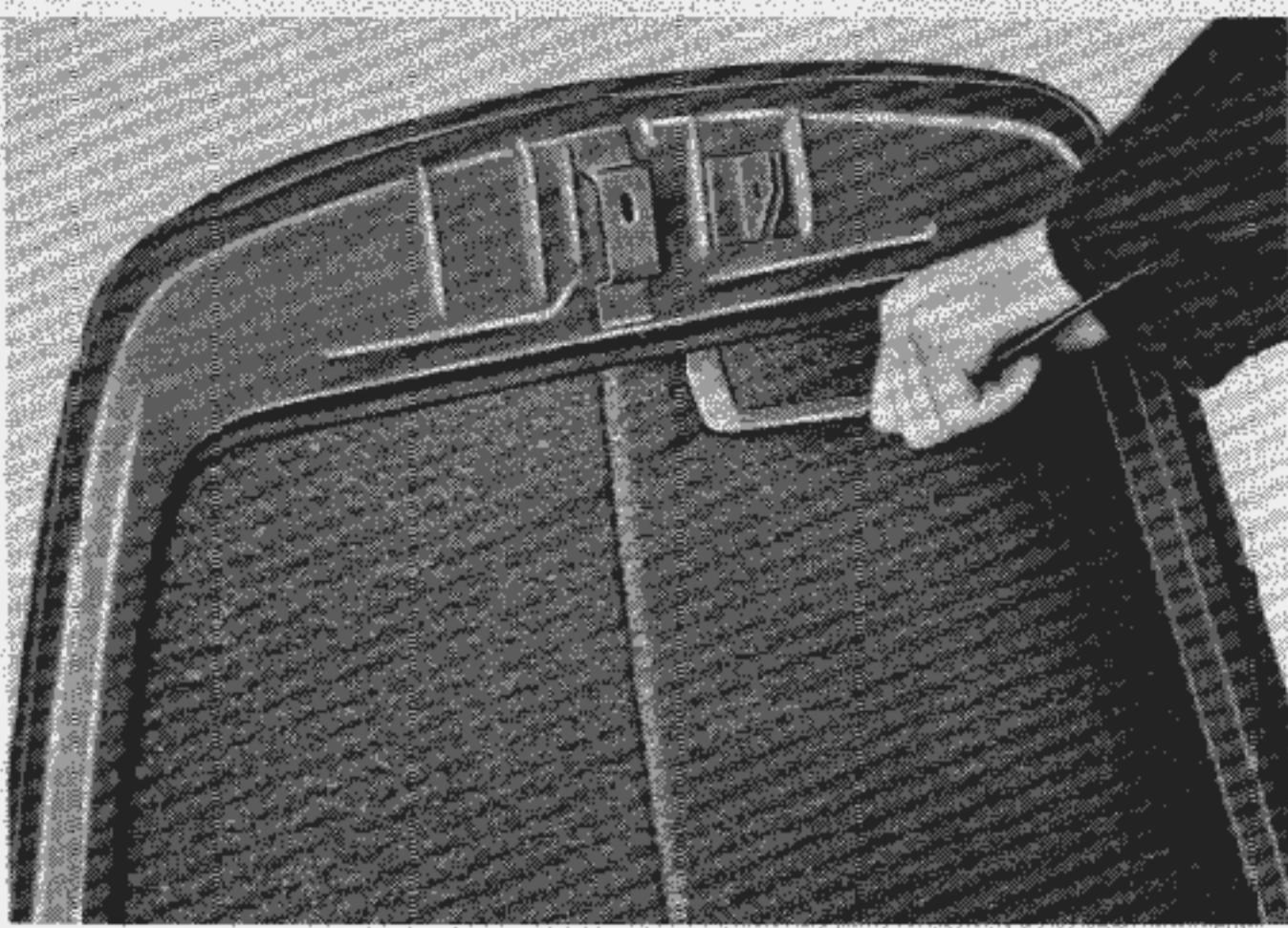
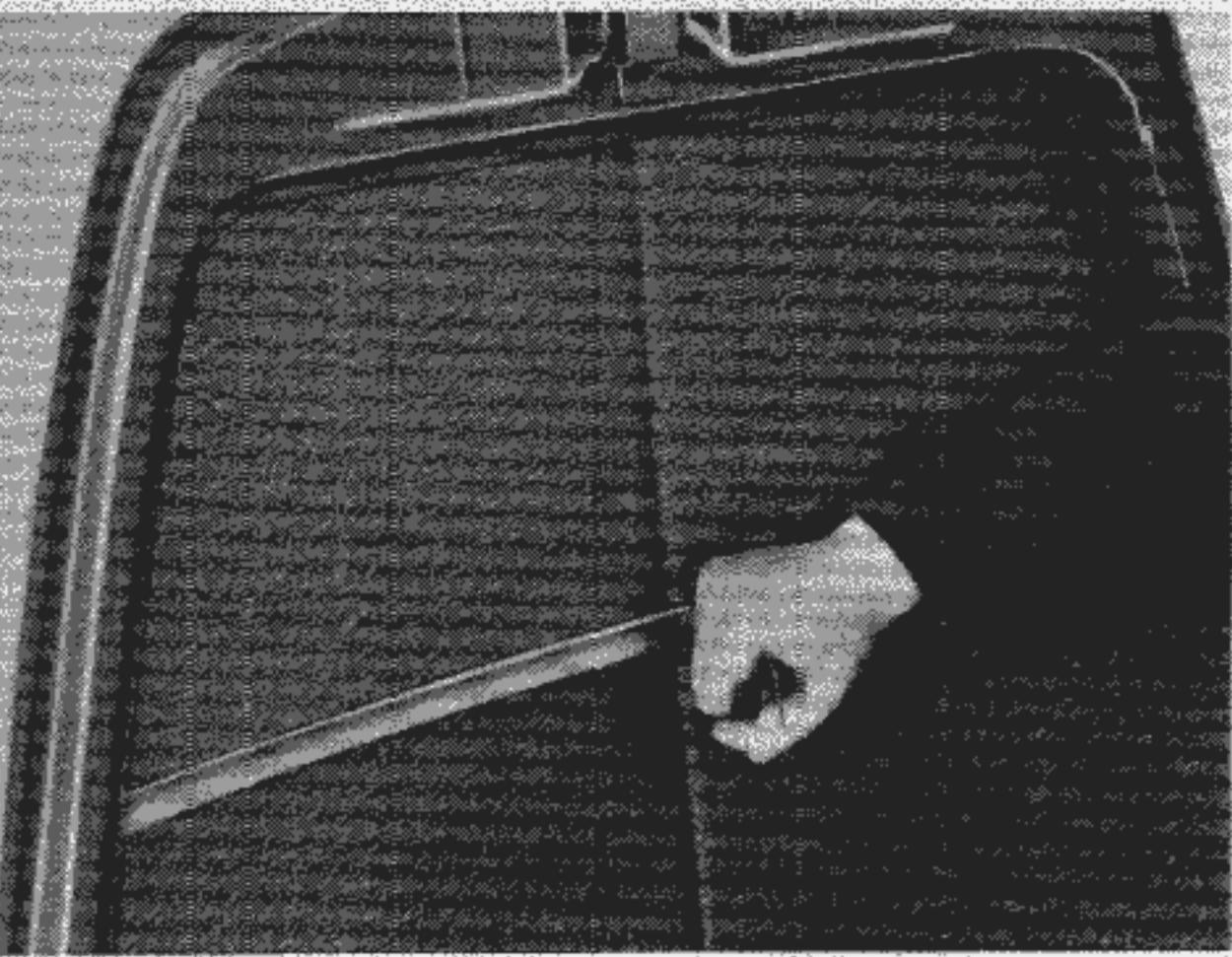
LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



Bending Hook (Curved)

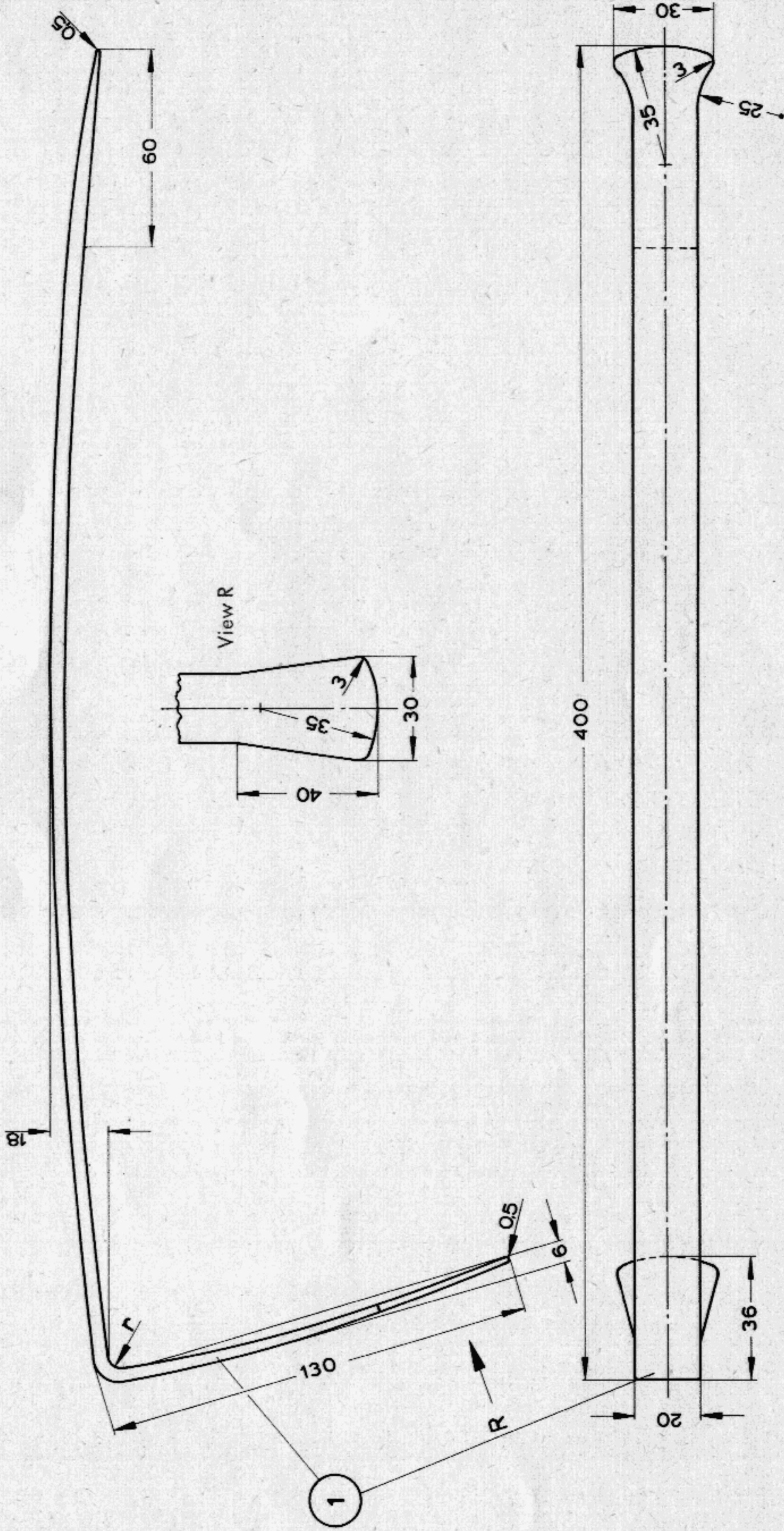
Damage to the outer door panel of type 14 near the hinge reinforcement can be eliminated by using this bending hook. The pictures also show the bending hook inserted in the front and rear hood.





Construction Details for VW 749

- 1 — Cut flat steel as detailed in parts list.
- 2 — Forge and bend flat steel as shown in drawing.
- 3 — Finish off rough forging as shown in drawing.
- 4 — Temper bending hook, clean off scale.
- 5 — Treat bending hook with rust preventive.



Tempered 80—100 kg/mm²

Part No.	Description	Material No. required
1	Bending Hook	20 X 5 X 560 C 45

Bending Hook, Curved

VOLKSWAGENWERK AG WOLFSBURG Service Department	Checked by:
6.3.62 Raebel	8.3.62 Giesecking

VW 749