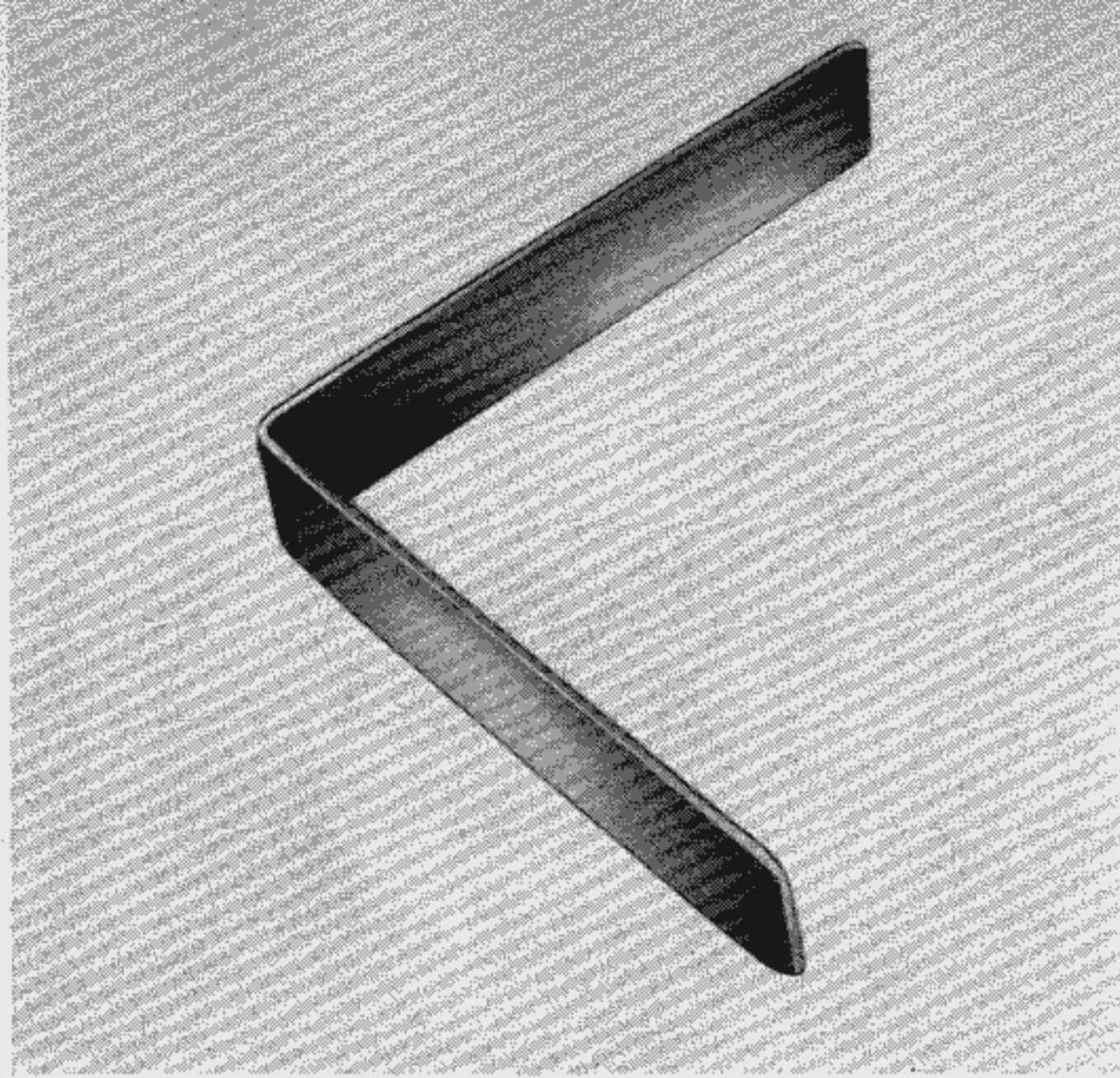


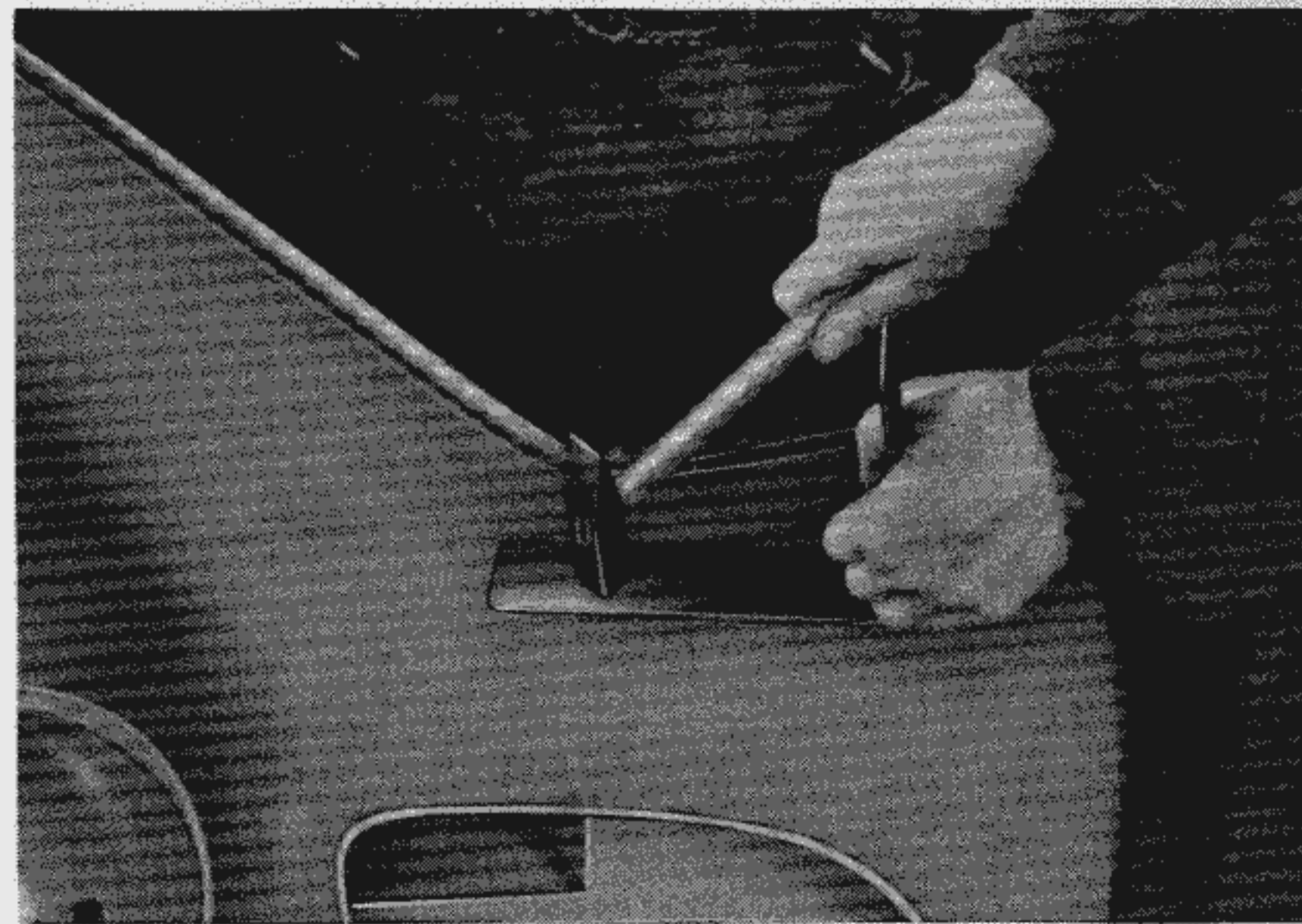
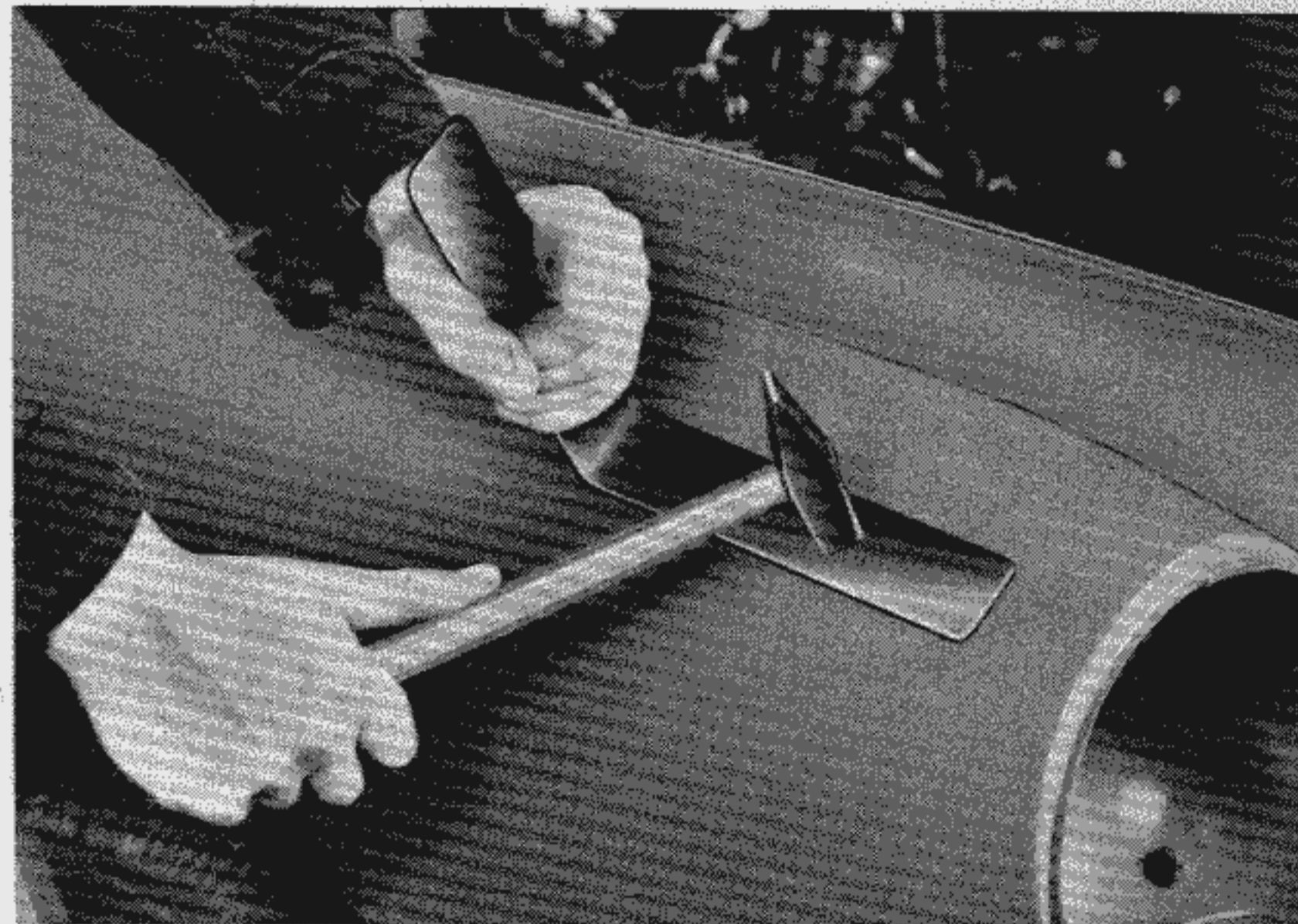
LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



Finishing Iron
Types 1, 2, 3

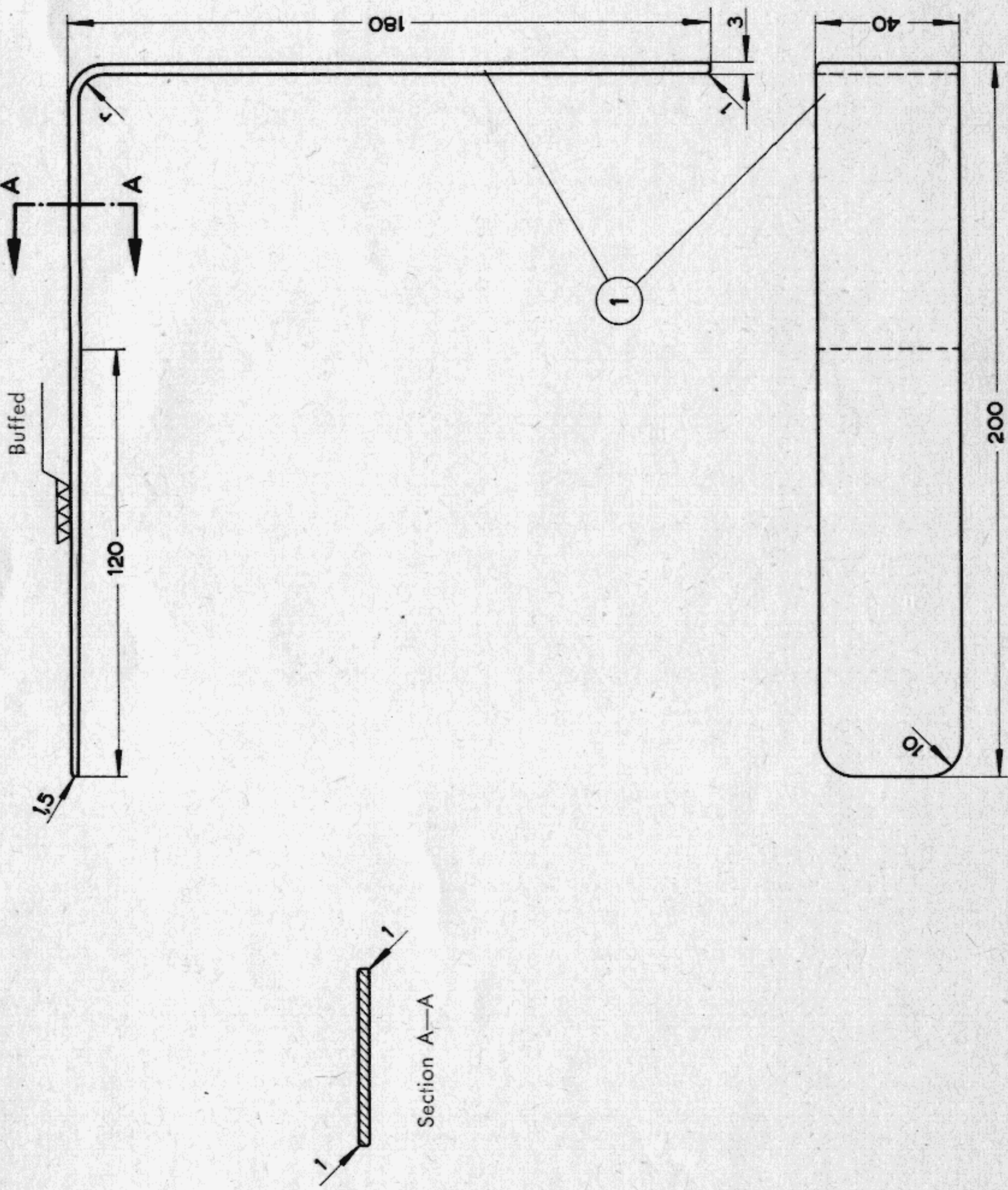
Slightly distorted painted surfaces can be straightened and smoothed out by using the polished surface of the finishing iron.

The polished surface of the finishing iron is placed on the distorted surface, which is then smoothed out by giving the tool light taps with a hammer.



Construction Details for VW 780

- 1 — Cut flat steel as detailed in parts list.
- 2 — Bend flat steel as shown in drawing.
- 3 — Buff the surface of tool as shown in drawing.
- 4 — Temper the tool and clean off scale.
- 5 — Treat with rust preventative.



Tempered 100—120 kg/mm²

1	1	Finishing Iron 40 X 3 X 350	C 45
Port No.	Description	Material	
No. required			
		Finishing Iron	
		VW 750	

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WOLFSBURG
 Service Department

Drawn by:
 14. 2. 62 Weinstock

Checked by:
 8. 3. 62 Giesecking

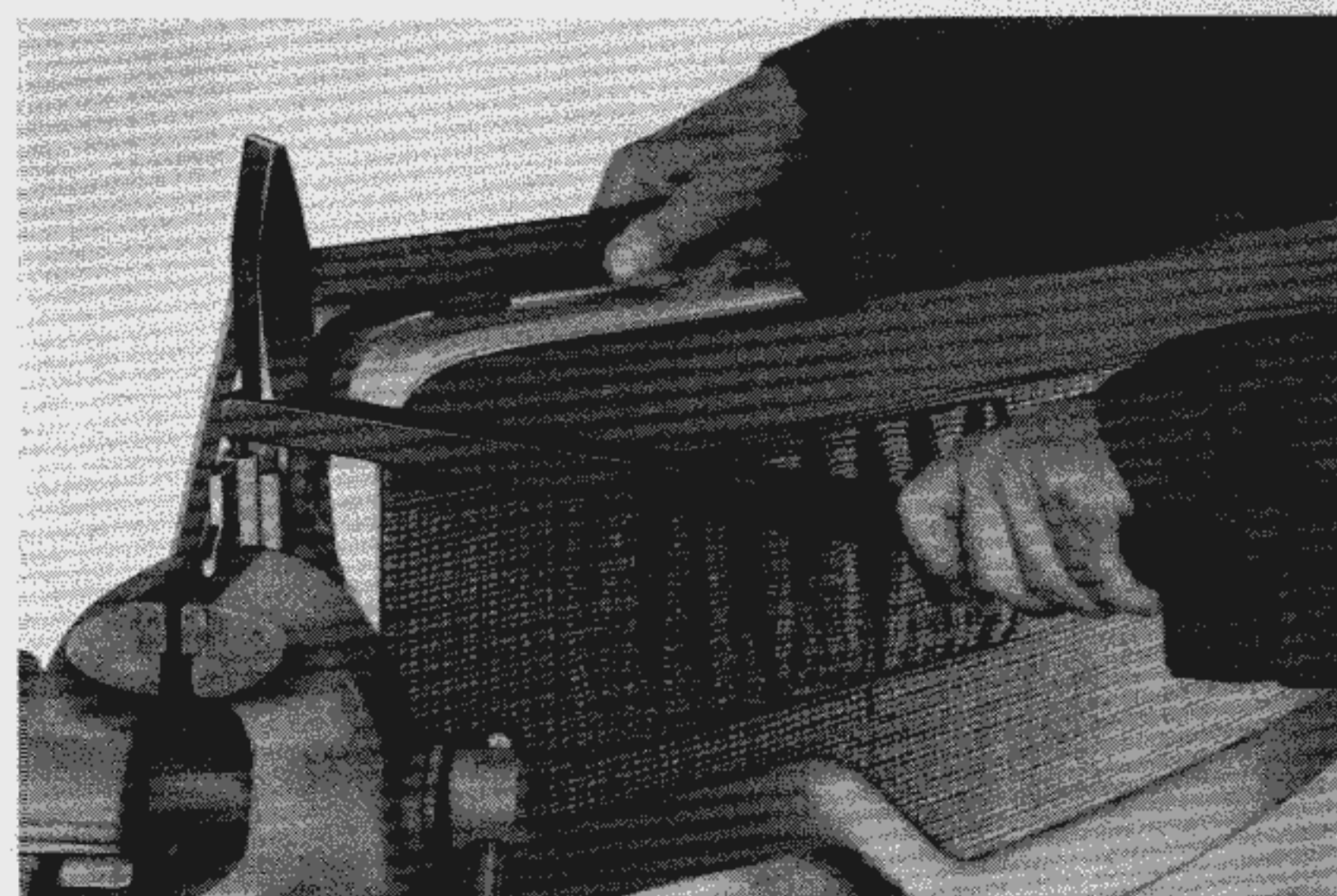
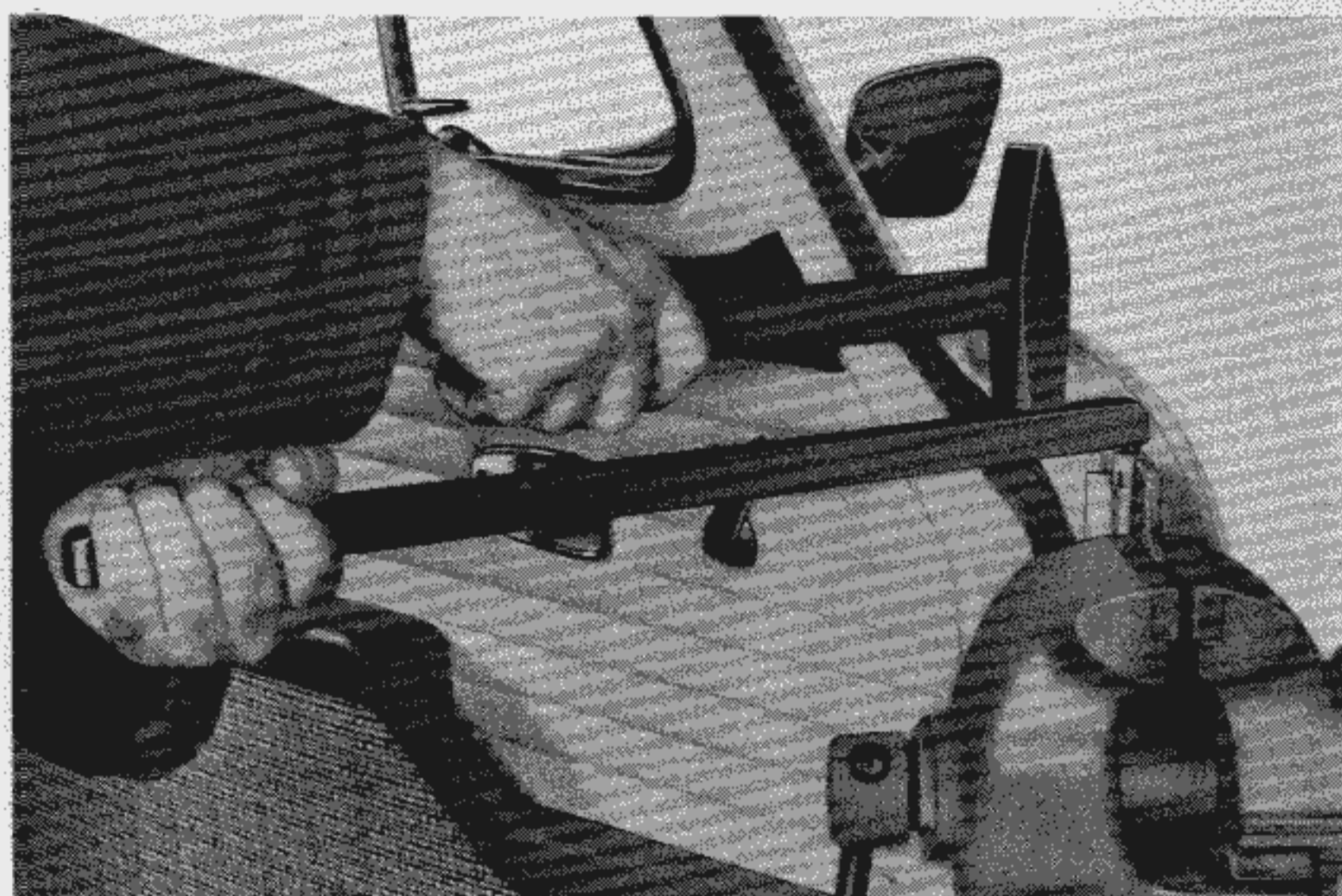


Hinge Pin Removal and Installation Tool, Type 3

The removal and installation tool is used in conjunction with a driving pin for knocking out the door hinge pins. The spring clips on the upper side of the tool are for storing the loose driving pins.

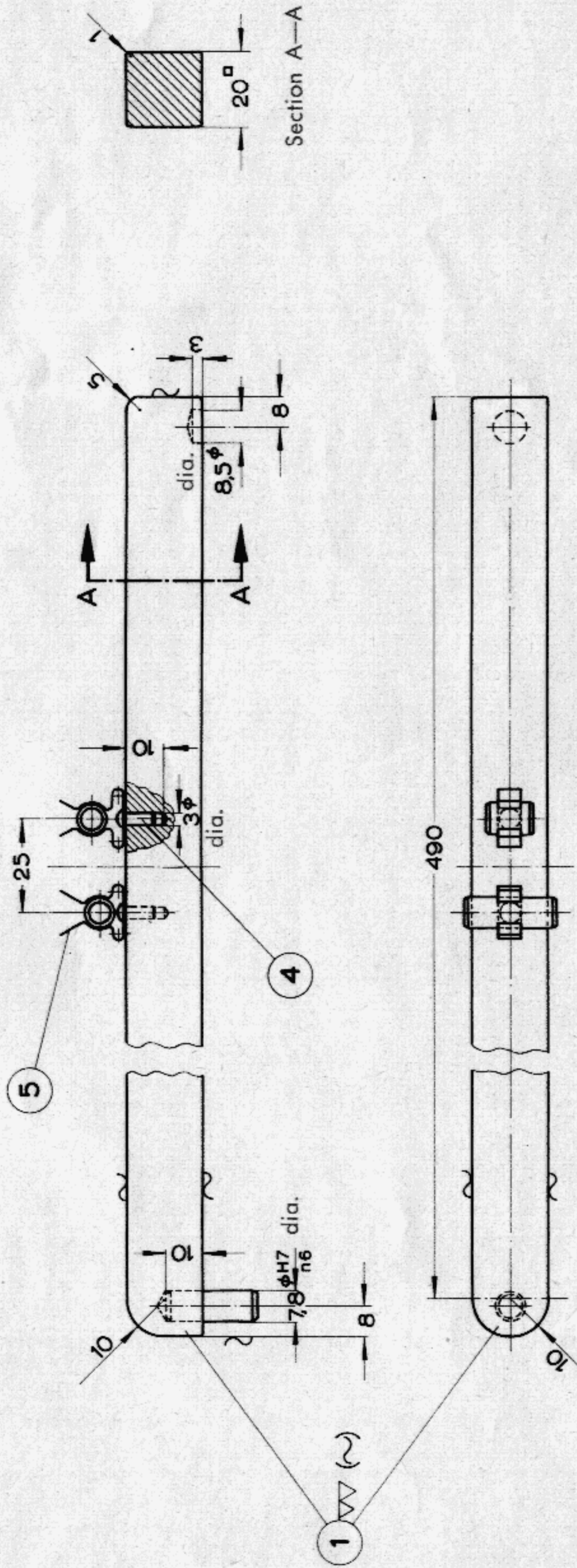
The top hinge pin is driven out with the tool by knocking it downwards, and the pin of the lower hinge is driven upwards to remove it. After the hinge pin has been driven out as far as possible with the tool a loose driving pin is inserted above the countersunk hinge pin thus enabling it to be driven right out.

The free end of the tool is provided with a 8.5 mm diameter blind hole. This hole is for the reception of the hinge pin when it is being reinstalled. When reinstalling the hinge pins the procedure is reversed and they are driven in from the opposite side. The last part of the pin which is still protruding is driven in with the flat side of the tool.



Construction Details for VW 751

- 1 — Cut all parts as detailed in parts list and have standard parts ready to hand.
- 2 — Mark out and work part (1) as shown in drawing.
- 3 — Mark out blind hole as shown, bore and remove burrs.
- 4 — Turn and harden part (2) and (3) as detailed in drawing.
- 5 — Treat all parts with a rust preventive.
- 6 — Press in part (2).
- 7 — Rivet part (5) onto tool.



Section A—A

No.	Part	Description	Material	Part No. or standard spec.	Remarks
5	2	Spring clip	No. 1		local purchase
4	2	Half round rivet	3 X 8	MU St 34	
3	1	Drive pin	10 dia. X 20	C 45	DIN 660
2	2	Drive pin	10 dia. X 30	C 45	
1	1	Arm	20 X 505	St 60	

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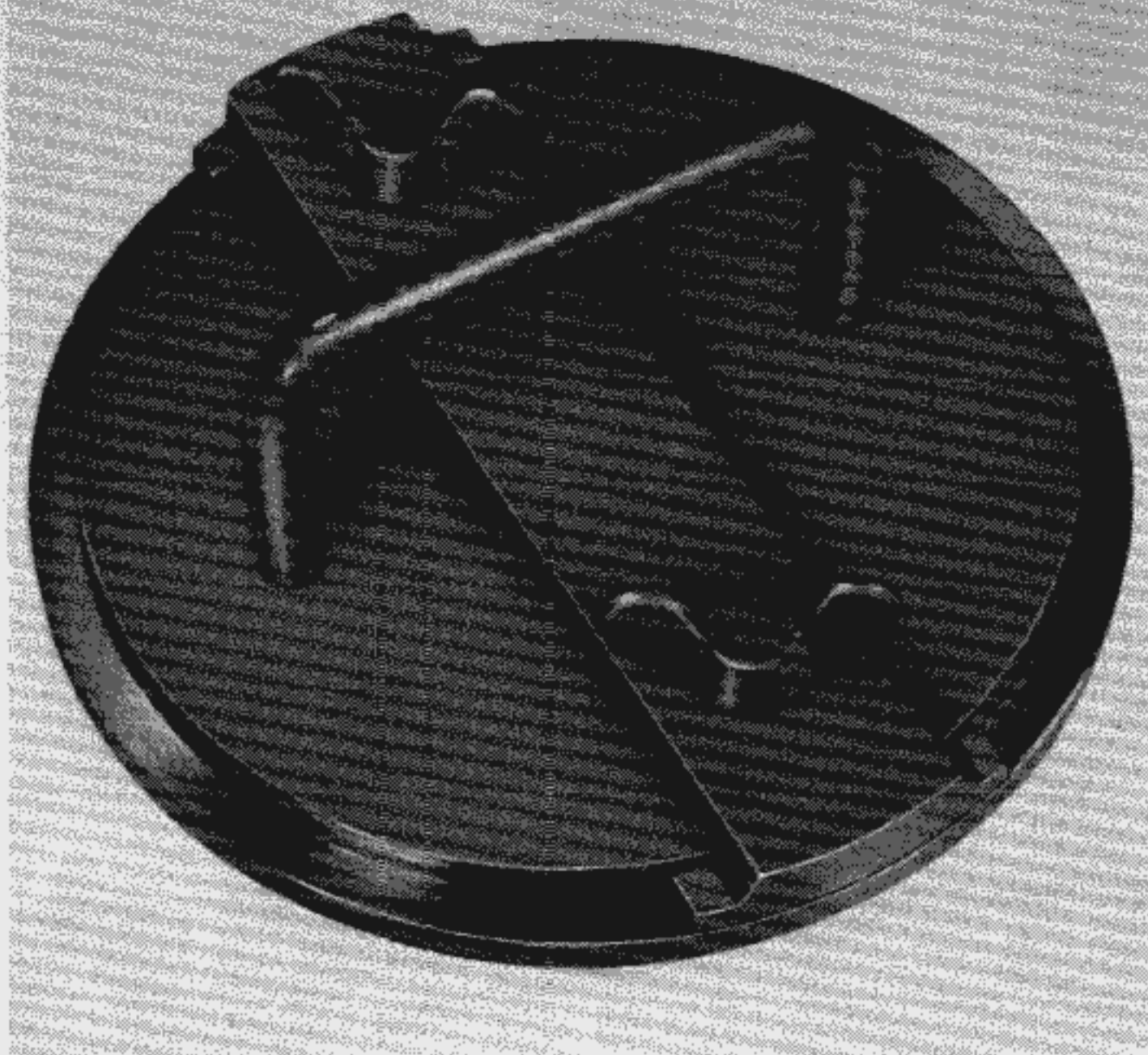
Drawn by: 22. 2. 63 Krumbholz
 Checked by: 27. 2. 63 Giesecking

Hinge Pin Removal and Installation Tool, Type 3

VW 751

Sheet No. 1
 No. of Sheets 1

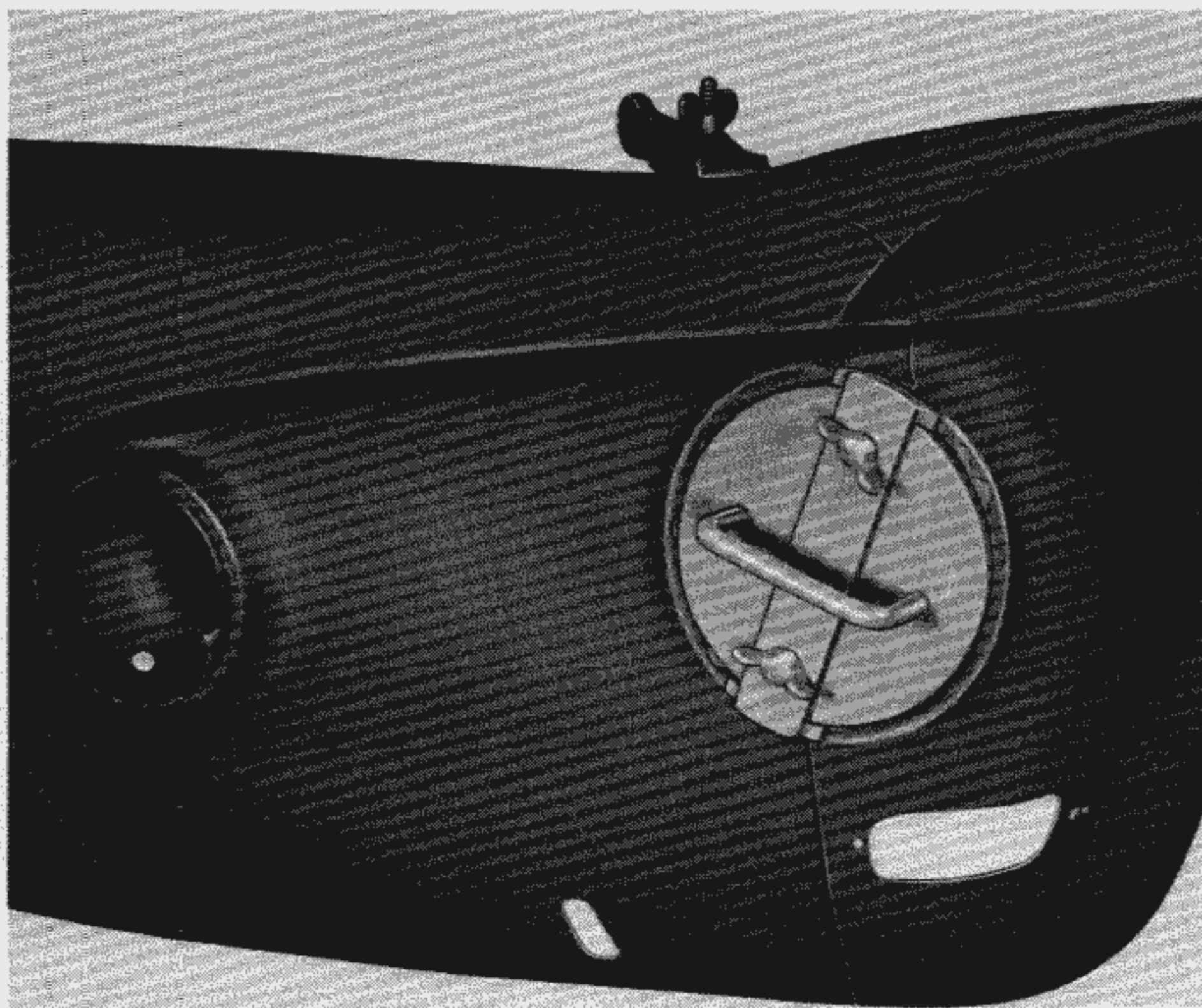
LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



Centering Device for
Headlamp Opening
Type 3 (Model 34)

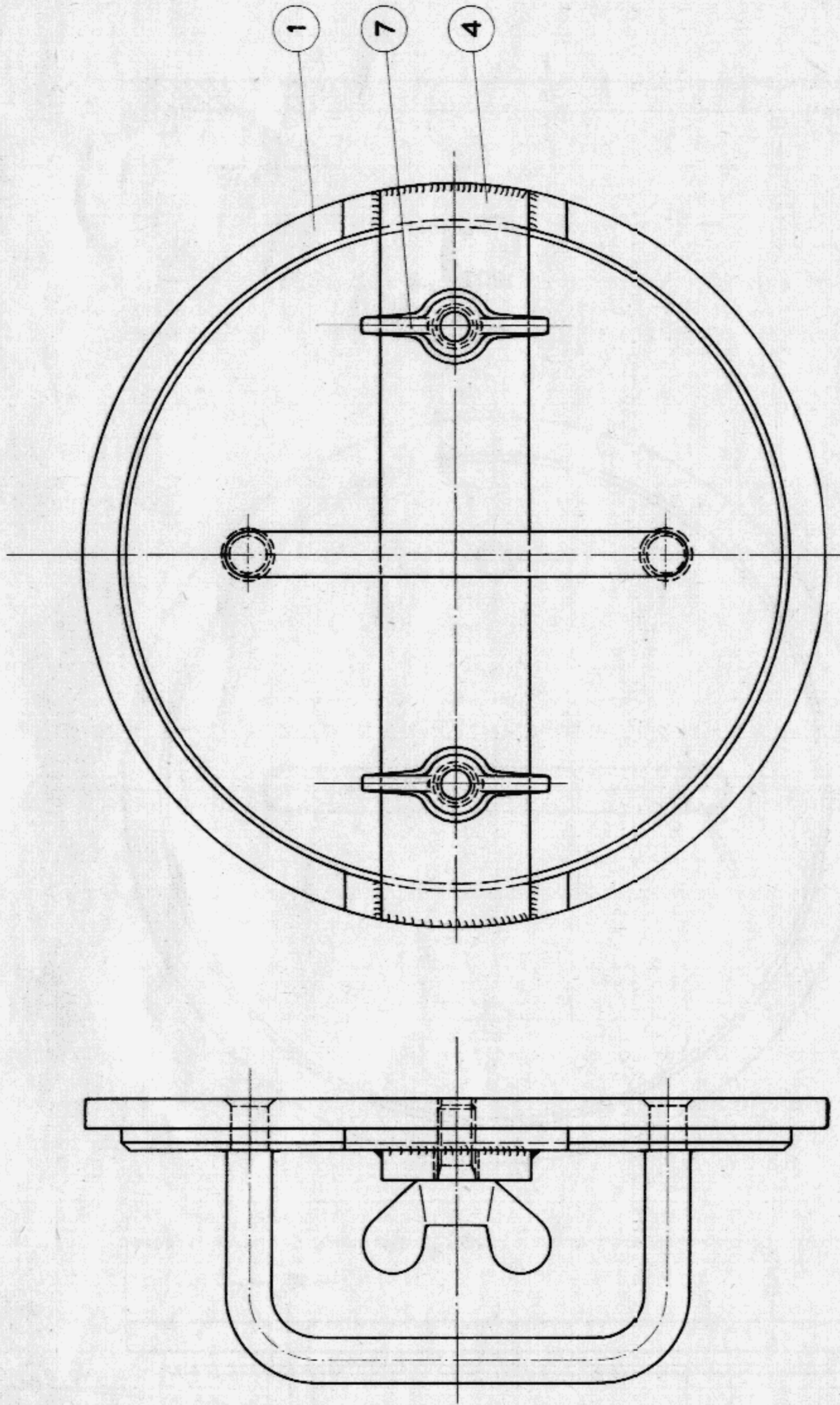
The centering device enables an exact fit and correct welds to be made when welding the left or right fender to the front panel.

The centering of the headlamp opening ensures that the headlamp housing will be correctly positioned.



Construction Details for VW 752

- 1 — Cut all parts as detailed in the list of parts and have part 7 ready to hand.
- 2 — Turn out part 2.
- 3 — Mark off and drill 10 mm and 8.1 mm (M 10) holes.
- 4 — Cut M 10 thread.
- 5 — Turn out and bend part 3.
- 6 — Rivet handle in position.
- 7 — Prepare and weld parts 5 and 6 together.
- 8 — Finish off parts 5 and 6.
- 9 — Mark out and bore 11 mm holes.
- 10 — Assemble the centering device and give it a coat of paint.



Part No.	No. required	Description	Material	Part No. or standard spec.	Remarks
7	2	Wing bolts	M 10 X 20	DIN 316 mg 4 D	
6	2	Clamp jaw	20 X 10 X 65 C 15		
5	1	Clamp bar	40 X 10 X 200 C 15		
4	1	Welded piece			Parts 5 and 6
3	1	Hand grip	12 dia. X 260 C 15		
2	1	Centering plate	200 dia. X 18 C 15		
1	1	Riveted piece			Parts 2 and 3

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WOLFSBURG
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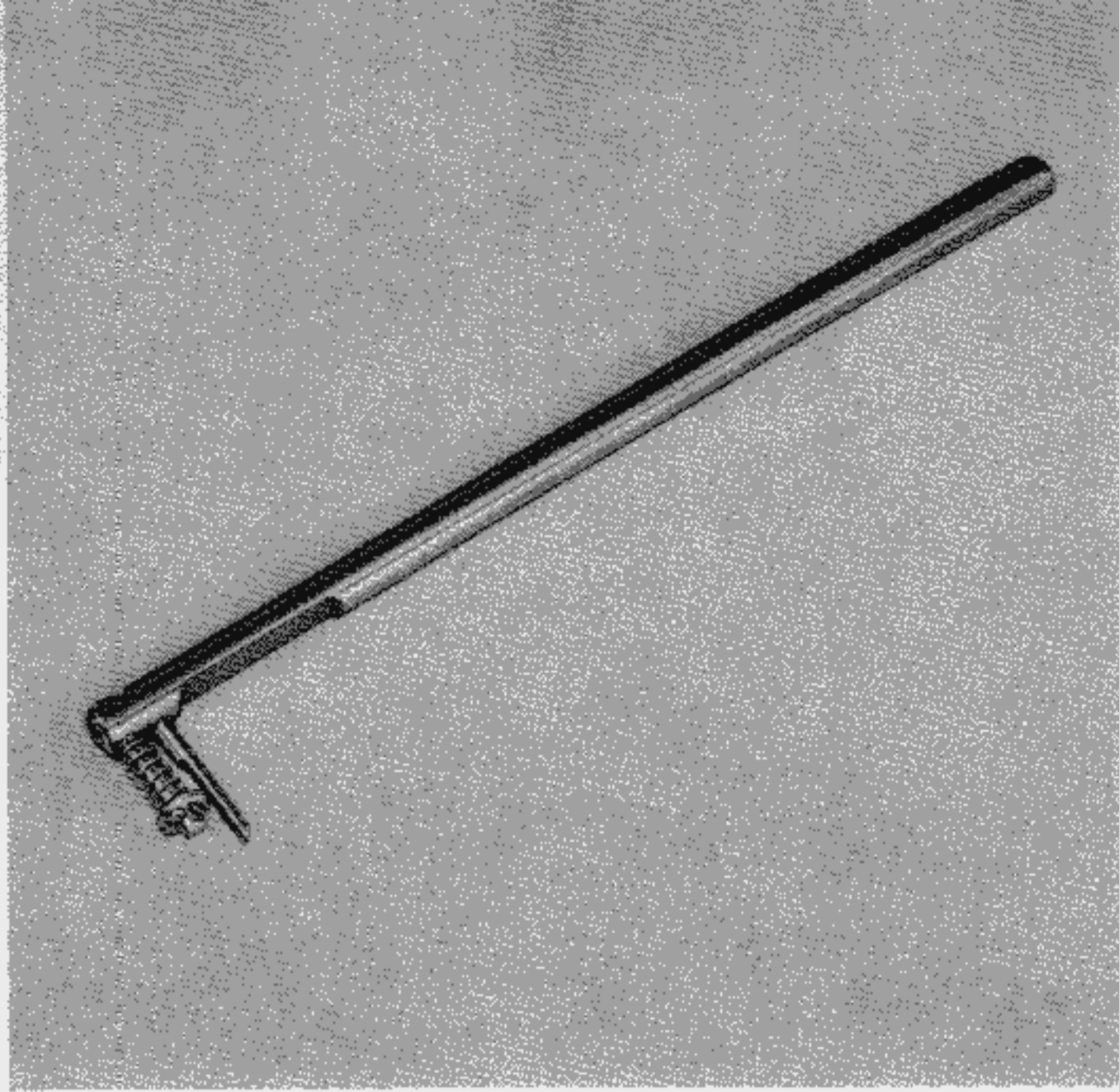
Drawn: **27.1.64 Krumbholz** Checked: **30.1.64 Giesecking**

Centering Device for Headlamp Opening

VW 752

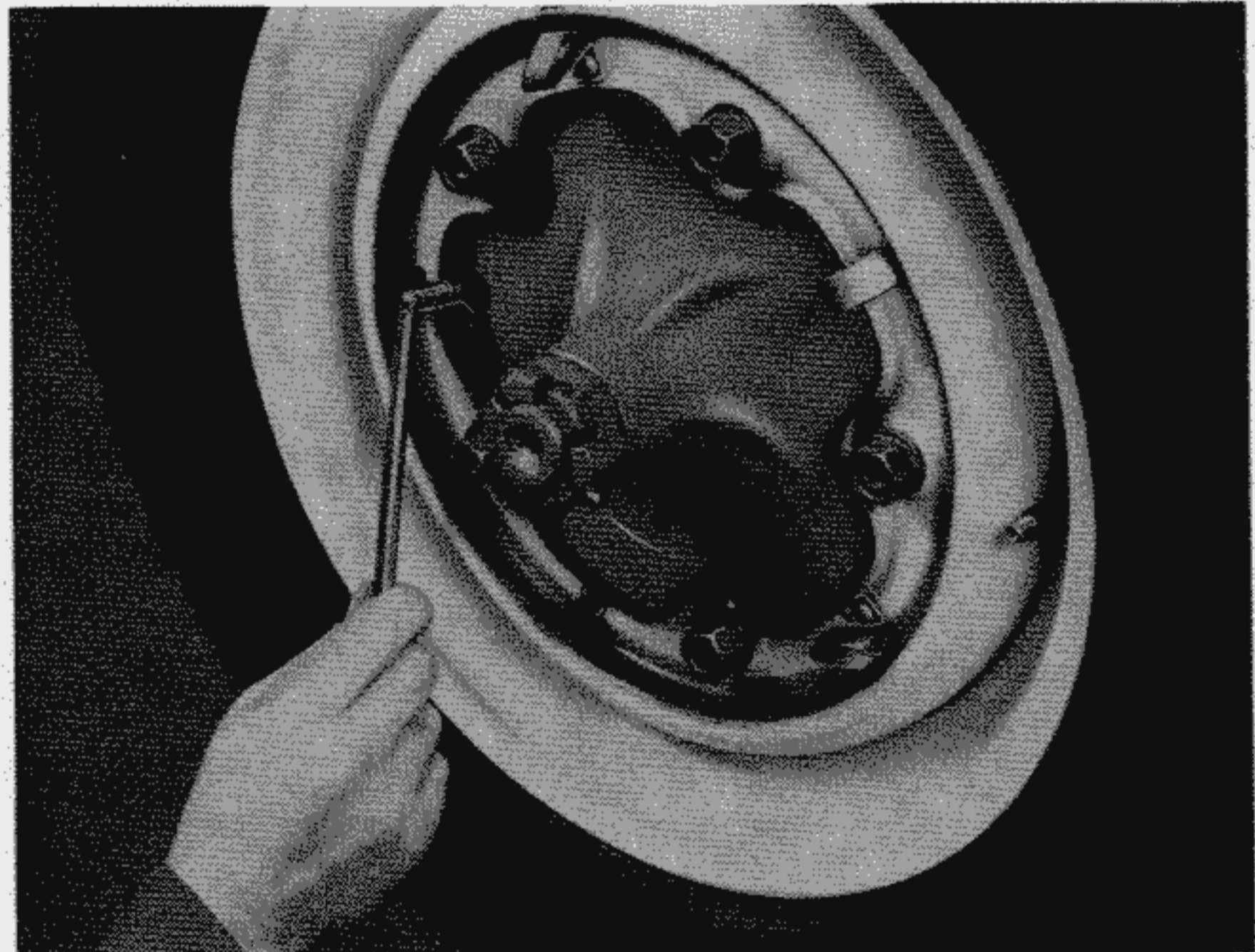
No. of Sheets 2
 Sheet No. 1

MAY 11 1965



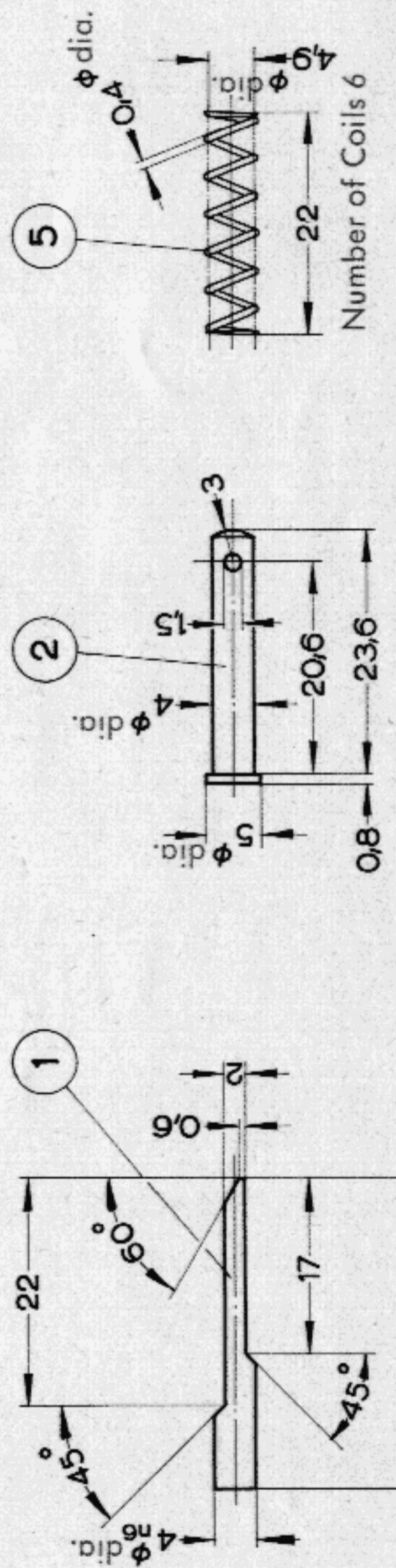
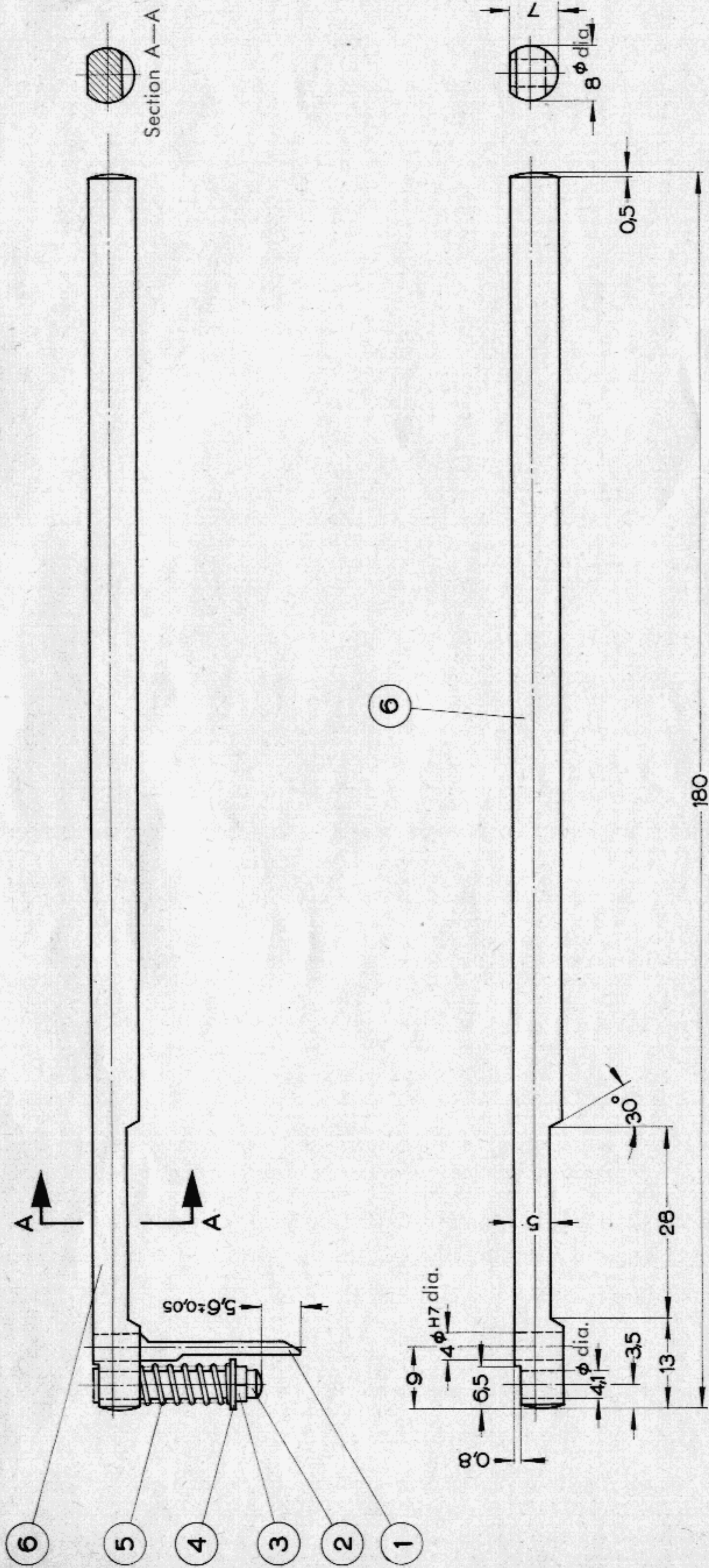
Appliance for Checking Brake Lining Wear
Type 2 - Brake Drum 250 mm dia.
Type 3 - Brake Drum 248 mm dia.

With this appliance the thickness of the brake lining can be checked with the brake drum assembled. The appliance is inserted through the adjustment hole in the brake drum. Before checking the brake shoes must be correctly adjusted.



Construction Details for VW 753

- 1 — Cut all parts as detailed in parts list and have standard parts ready to hand.
- 2 — Turn down part 1 and rework.
- 3 — Turn down part 2 and drill.
- 4 — Make part 5.
- 5 — Assemble the appliance.
- 6 — Electro galvanize the appliance.



Edges broken



6	1	Bar	8 dia. X 182	C 45 K
5	1	Pressure spring	0.4 dia. X 150	spring wire
4	1	Washer		
3	1	Coiler pin		
2	1	Checking pin	6 dia. X 30	C 45 K
1	1	Fixed pin	6 dia. X 35	C 45 K

Pl. No. 111 129 147
N 125 071

Part No. required	Description	Material

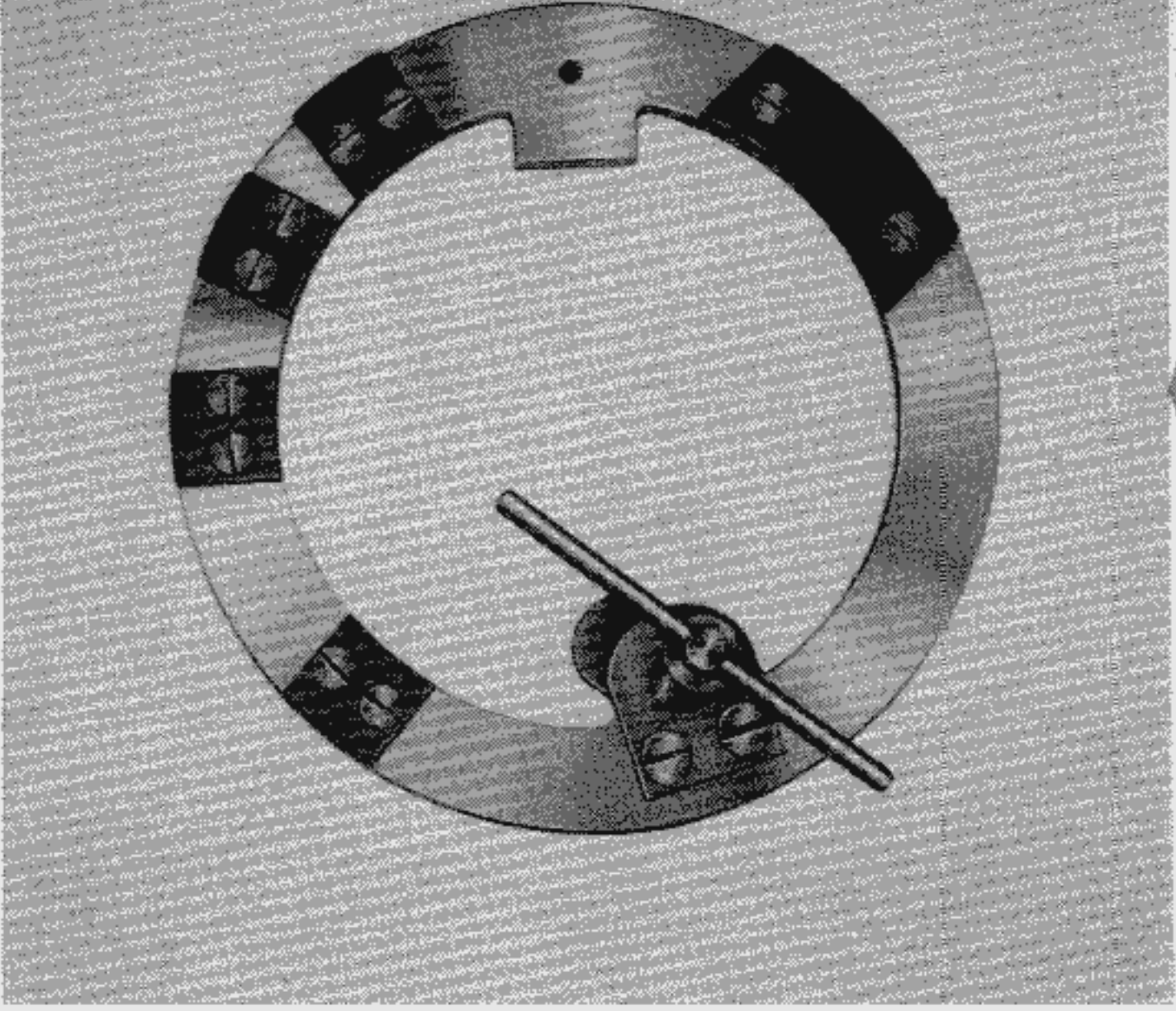
Appliance for Checking Brake Lining Wear
Type 2, 250 Brake Drum dia.
Type 3, 248 Brake Drum dia.

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Drawn: 16. 9. 64 Krumbholz
Checked: 23. 9. 64 Giesecking

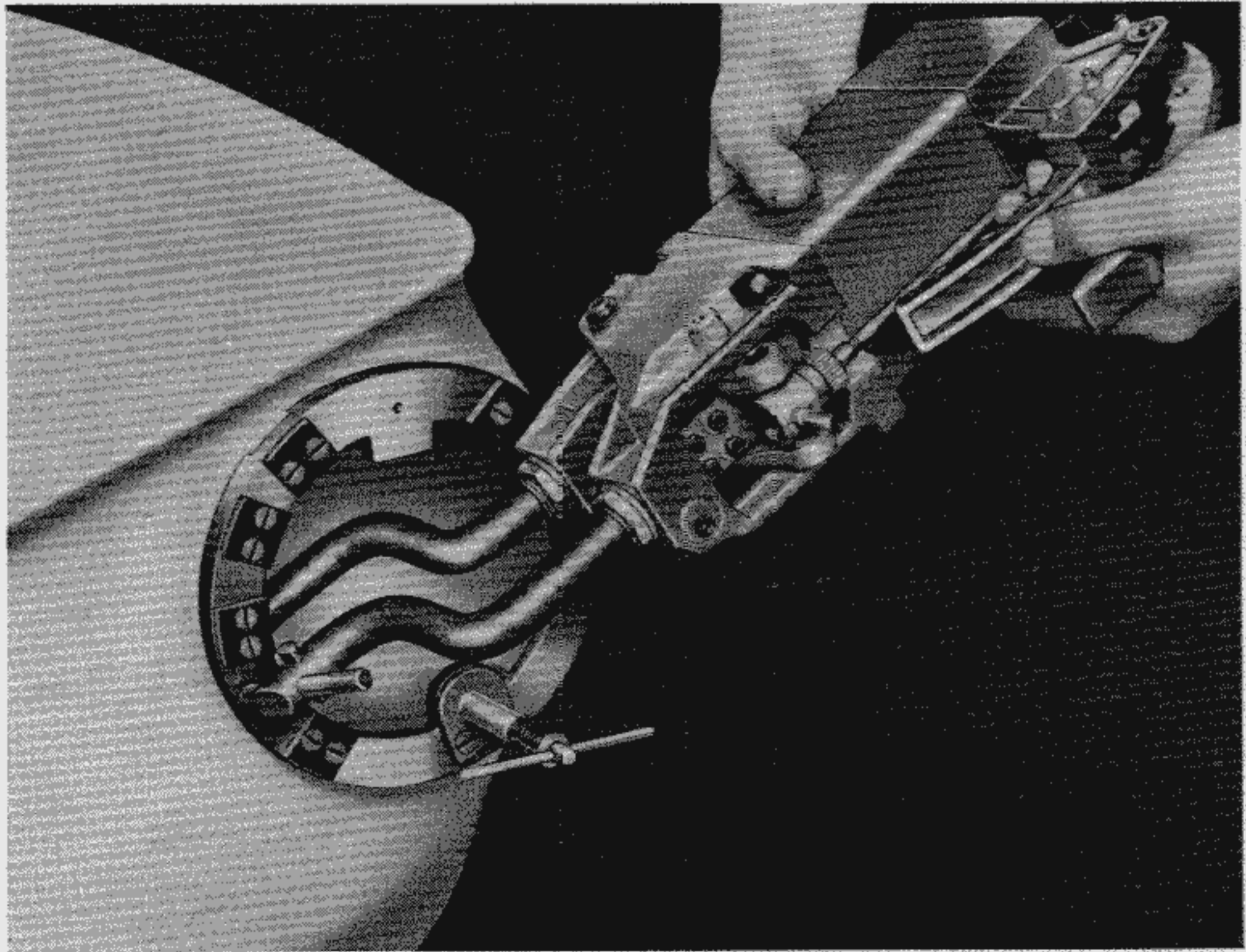
VW 753

Part No. or standard spec.



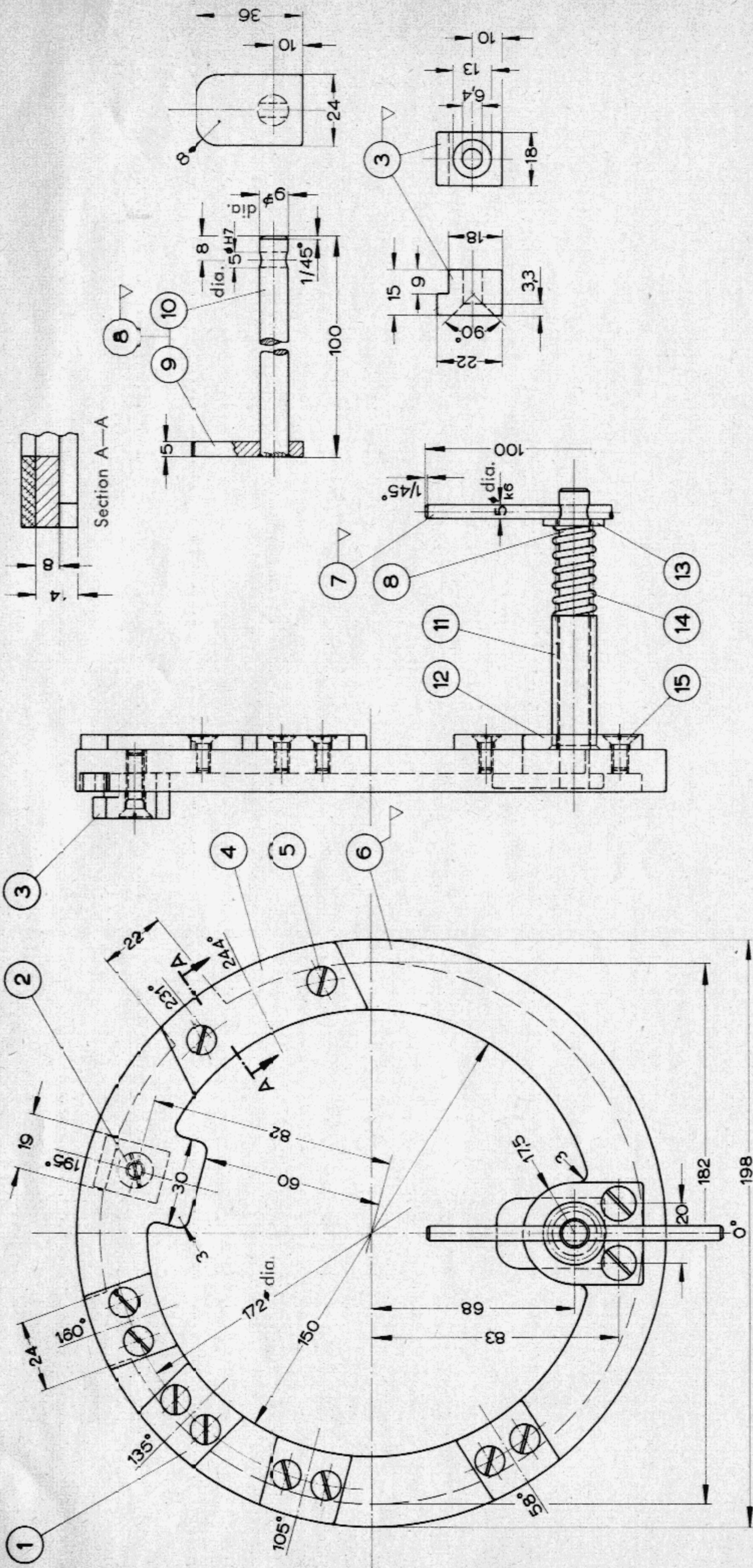
**Headlamp Housing Jig
Type 3 (models 343 to 346)**

The device pulls the headlamp housing up against the front panel. The copper ring prevents the usual pressure spots occurring when spot welding so that a completely smooth outer surface is maintained. Due to the hard fibre segments the welding area is limited.



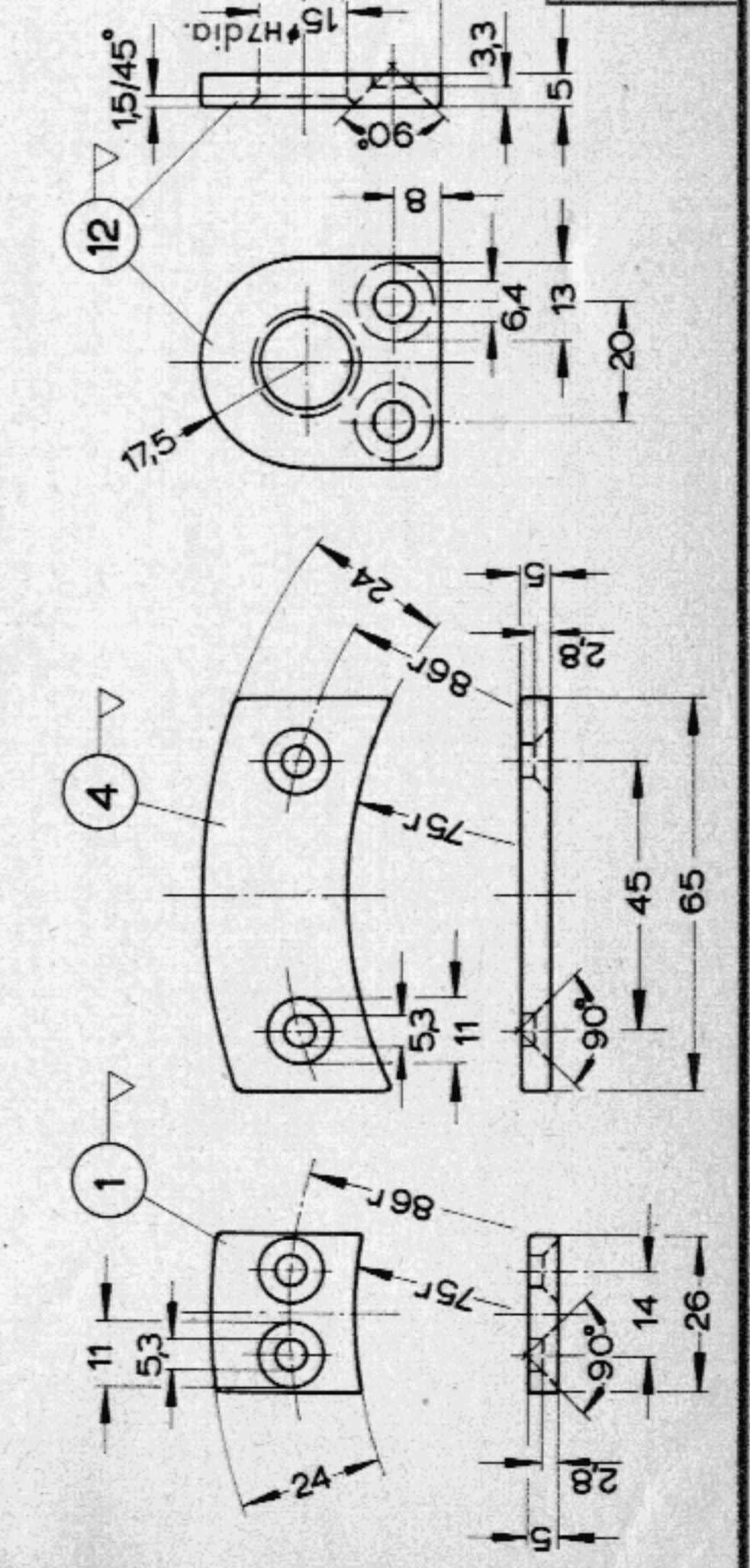
Construction Details for VW 754

- 1 — Cut all parts to size as detailed in the parts list and have standard parts ready to hand.
- 2 — Mark out and make part 6. When using flat copper: bend, braze and re-machine.
- 3 — Mark out all drillings, drill and cut internal threads.
- 4 — Mark out grooves and rework.
- 5 — Finish off part 1 and 4.
- 6 — Finish off part 3.
- 7 — Finish off welded part 8.
- 8 — Finish off parts 11 and 12 and rivet together.
- 9 — Paint all parts of the appliance except the copper ring and the hard fiber segments.
- 10 — Assemble the appliance.



15	2	Counter sunk screw	M 6 X 12	DIN 87-55
14	1	Spring		Part No. 113721575 55 long
13	1	Washer	10.5	DIN 125-S1
12	1	Clamp plate	40 X 5 X 45	C 15
11	1	Guide tube	16 X 3.5 X 50	St 35
10	1		round 10 X 105	C 15
9	1		flat 25 X 5 X 40	C 15
8	1	Welded part		Part 9 and 10
7	1	Round steel	round 5 X 100	9 S 20 K
6	1	Welding ring	round 200 X 18	Copper alloy
5	10	Counter sunk screw	M 5 X 12	DIN 87-55
4	1	Segment	35 X 5 X 70	Hard fibre
3	1	stop	square 25 X 18	C 15
2	1	Counter sunk screw	M 6 X 22	DIN 87-55
1	4	Segments	30 X 5 X 28	Hard fibre

Part No. re-Description	Material	Part No. or standard spec.	Remarks
No. quired			



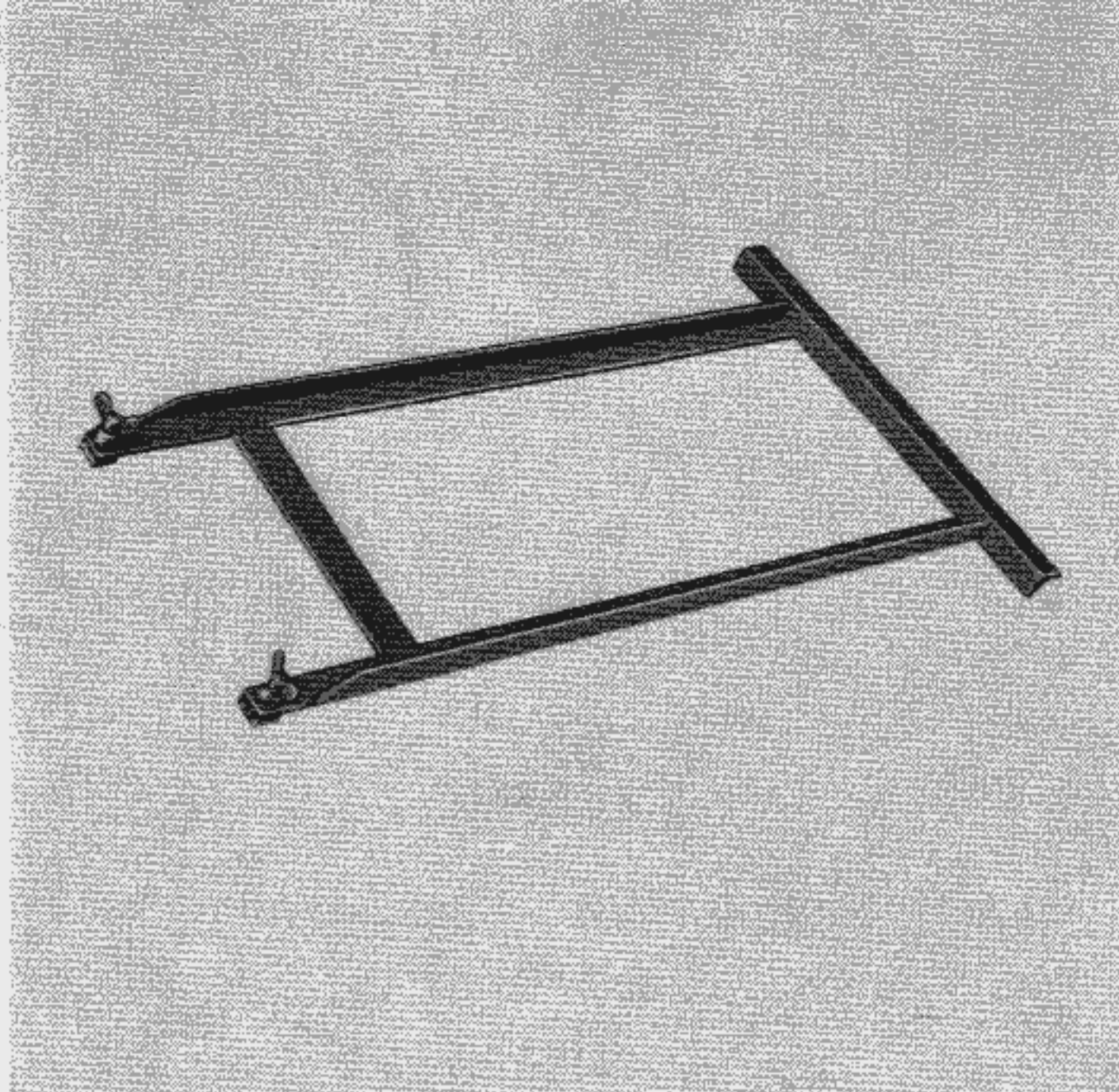
VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn: 5. 3. 64 Gieseking
Checked: 6. 3. 64 Ratte

Headlamp Housing Jig

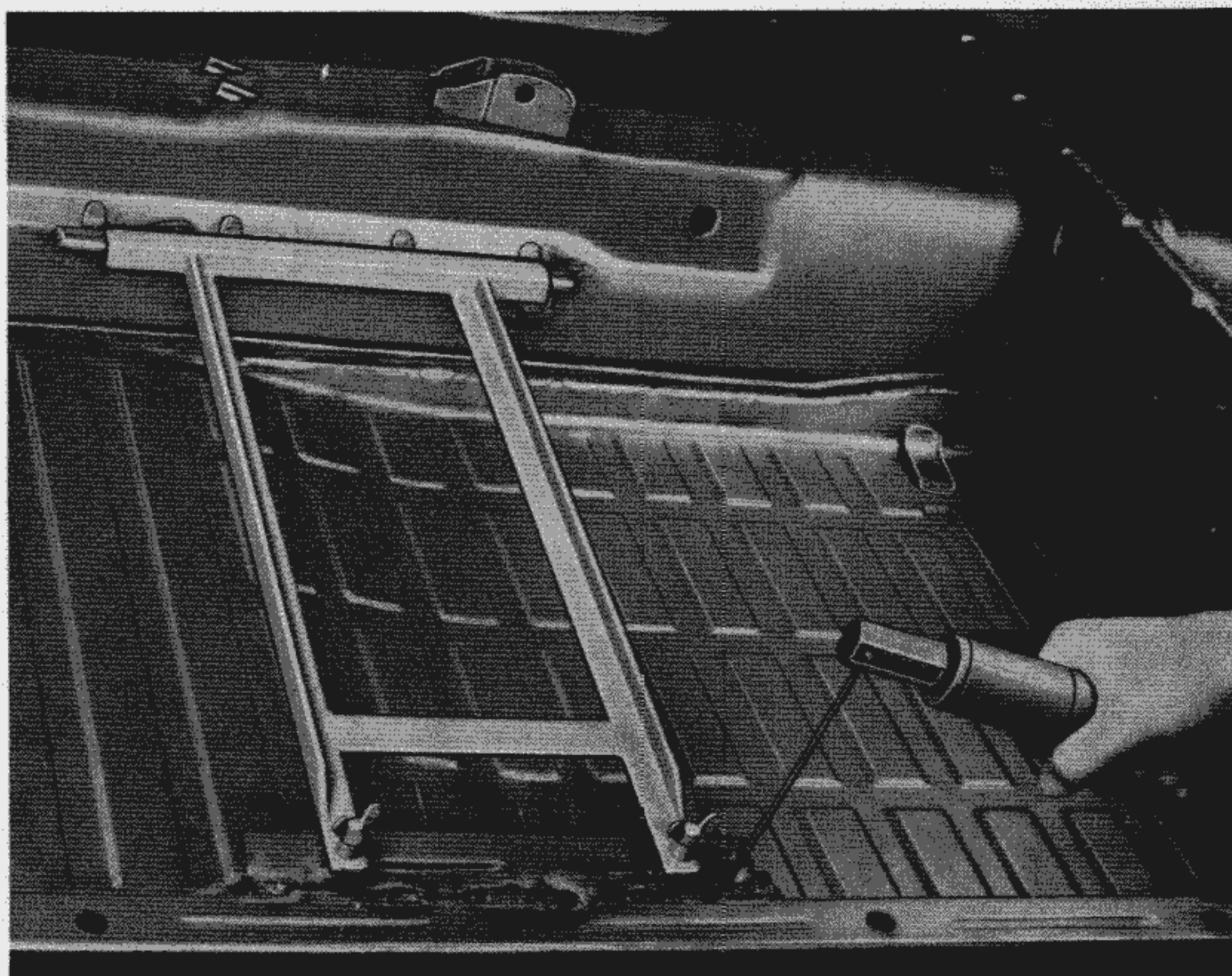
VW 754

No. of Sheets 1
Sheet No. 1



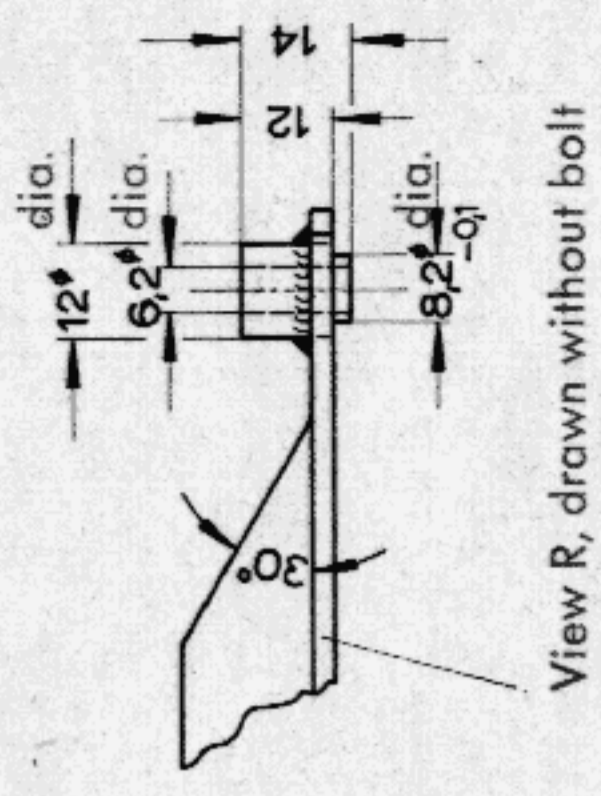
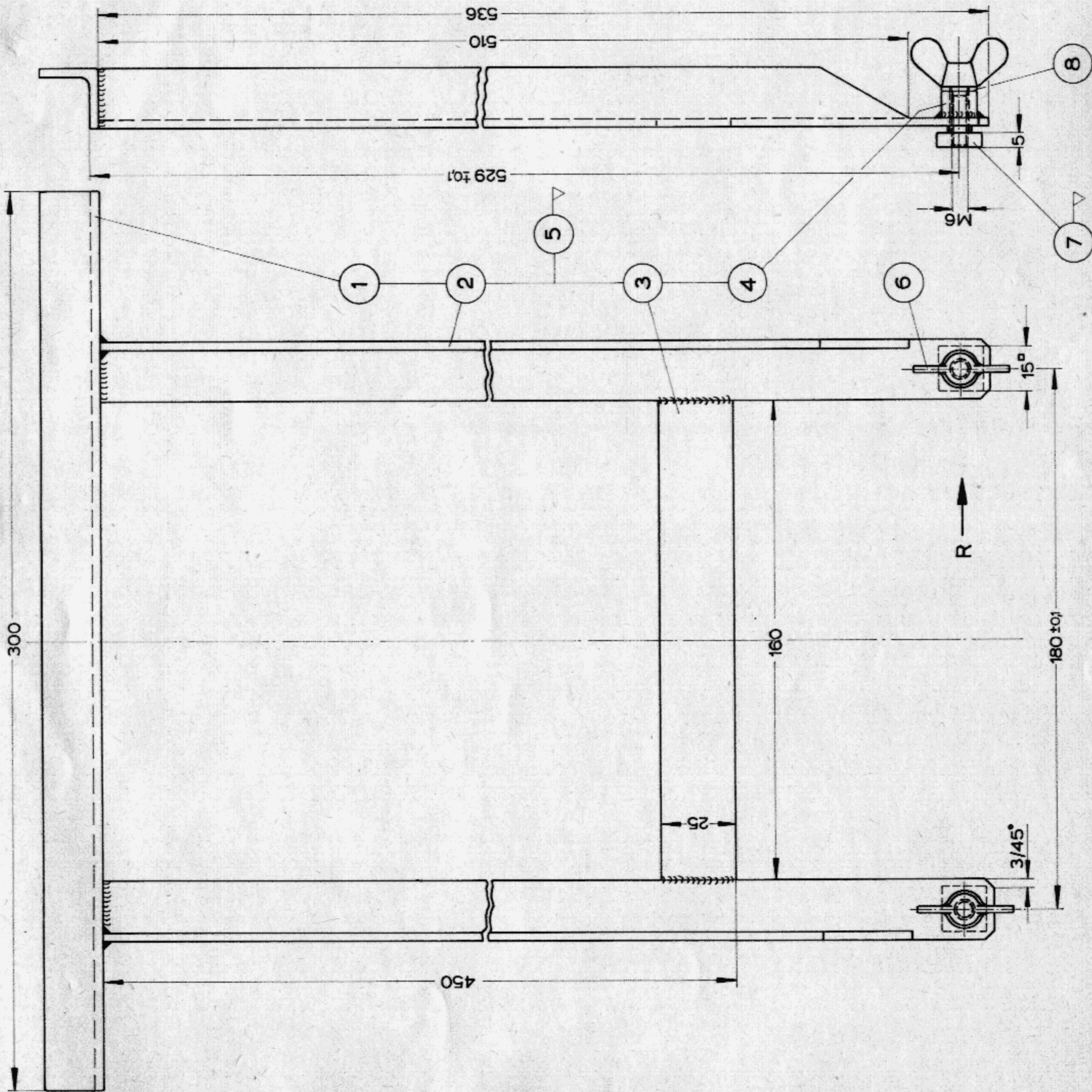
Outer Seat Runner Welding Jig
Type 3 (except model 34)

The welding jig is necessary when welding the outer seat runners to the left and right hand floor plates. This appliance enables the correct distance between the inner and outer runner to be maintained. The appliance should be pressed lightly against the inner seat runner when tack welding the outer runner to the floor plate.



Construction Details for VW 755

- 1 — Cut all parts to dimensions given in list of parts; have standard parts ready to hand.
- 2 — Turn down part 4 to 8.2 mm dia. as detailed in drawing.
- 3 — Make welded part 5.
- 4 — Smooth down welded seams.
- 5 — Mark out and drill 8.2 mm dia. holes.
- 6 — Paint the welding jig, with the exception of the contact surfaces.



View R, drawn without bolt

Chamfer edges

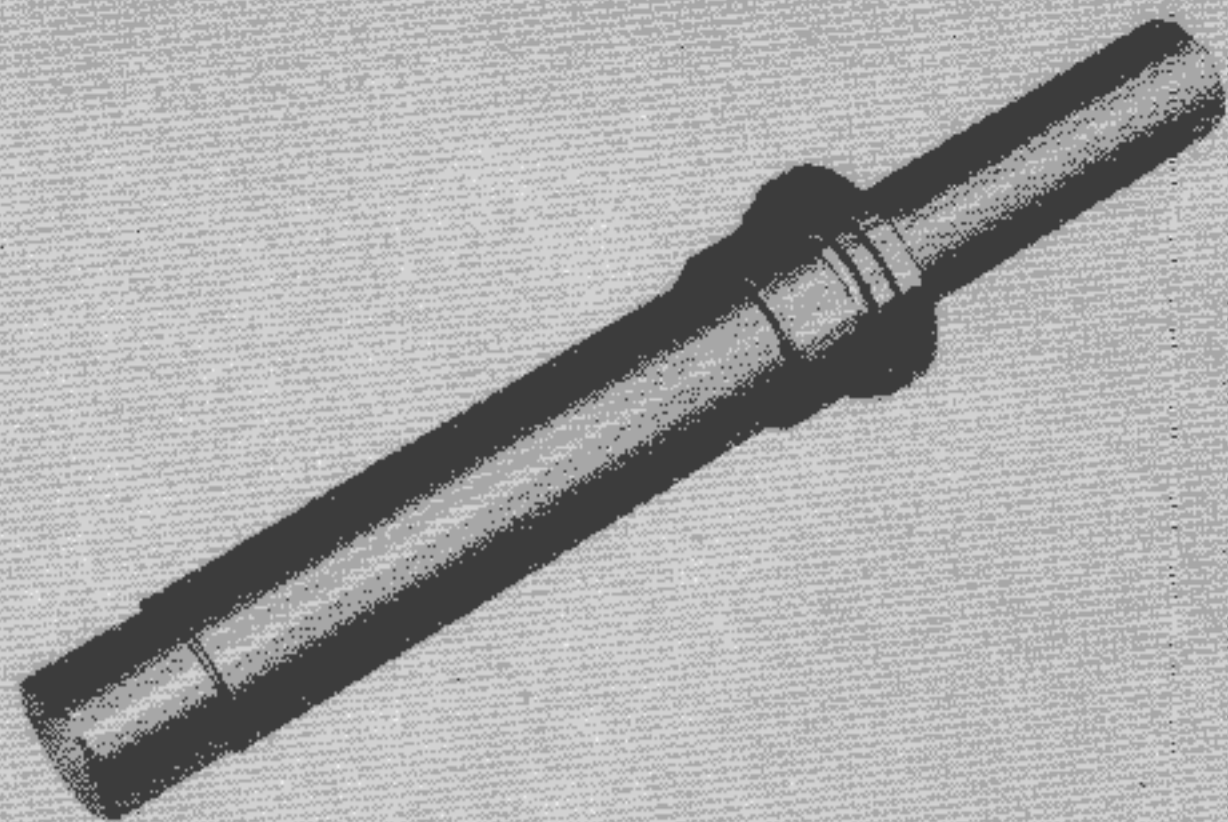
8	2	Washers	6.4	DIN 125 St
7	2	Threaded plate	20 X 6	C 15
6	2	Wing bolt	M 6 X 20	DIN 316 mg 4 D
5	1	Welded part		Parts 1 to 4
4	2	15 dia. X 18	C 15	
3	1	25 X 3 X 165	St 37	
2	2	L 20 X 3 X 540	St 37	right and left
1	1	L 20 X 3 X 305	St 37	
Part No. re-quired		Description	Material	Part number or standard spec.
				Remarks

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 Service Department
 Dm. 9.1.64 Giesekeing Ckd. 9.1.64 Ratte

Outside Seat Runner Welding Jig

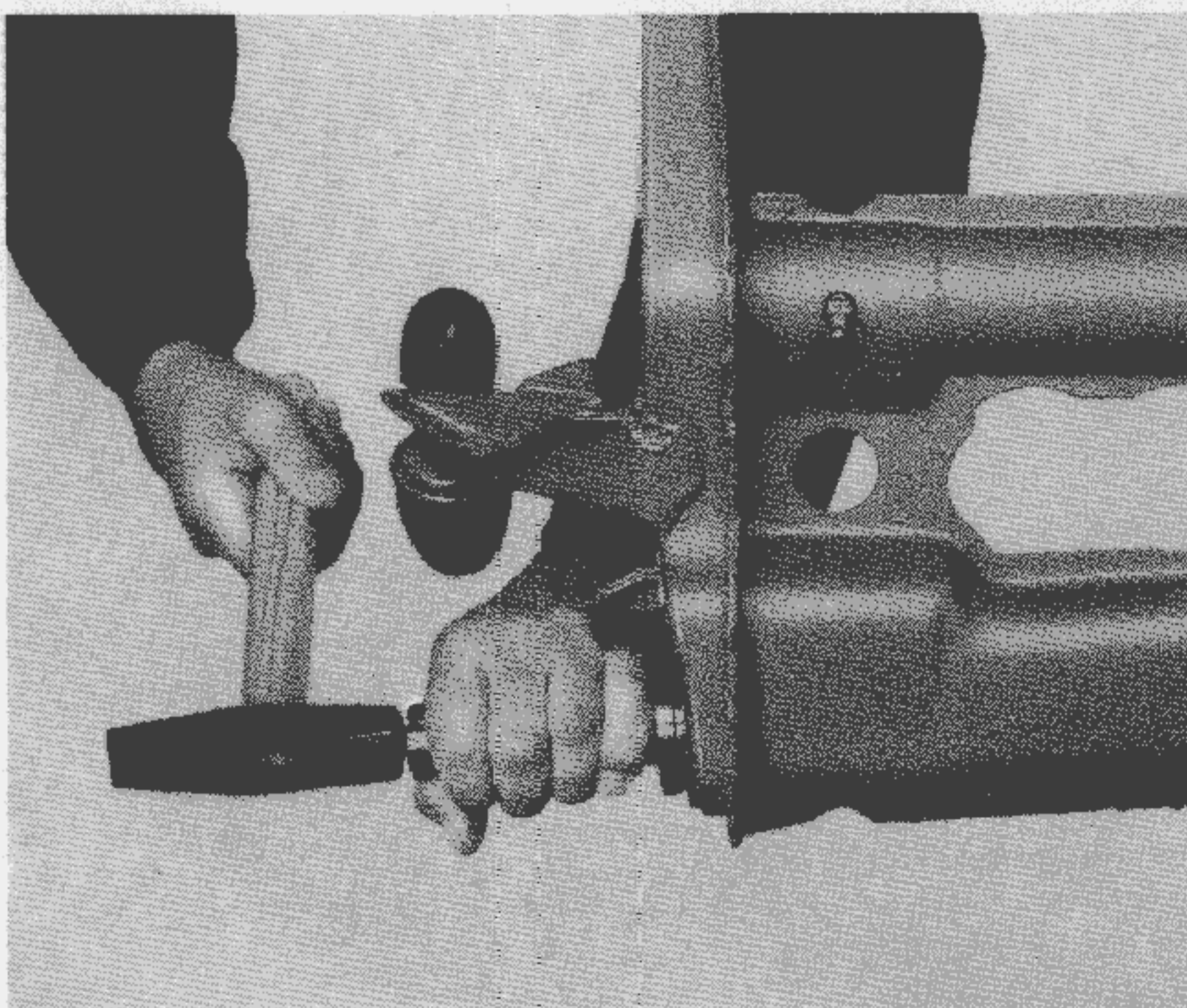
VW 755

No. of sheets 1
 Sheet No. 1



Drift for DU Bearings and Needle Bearings, lower, Type 3

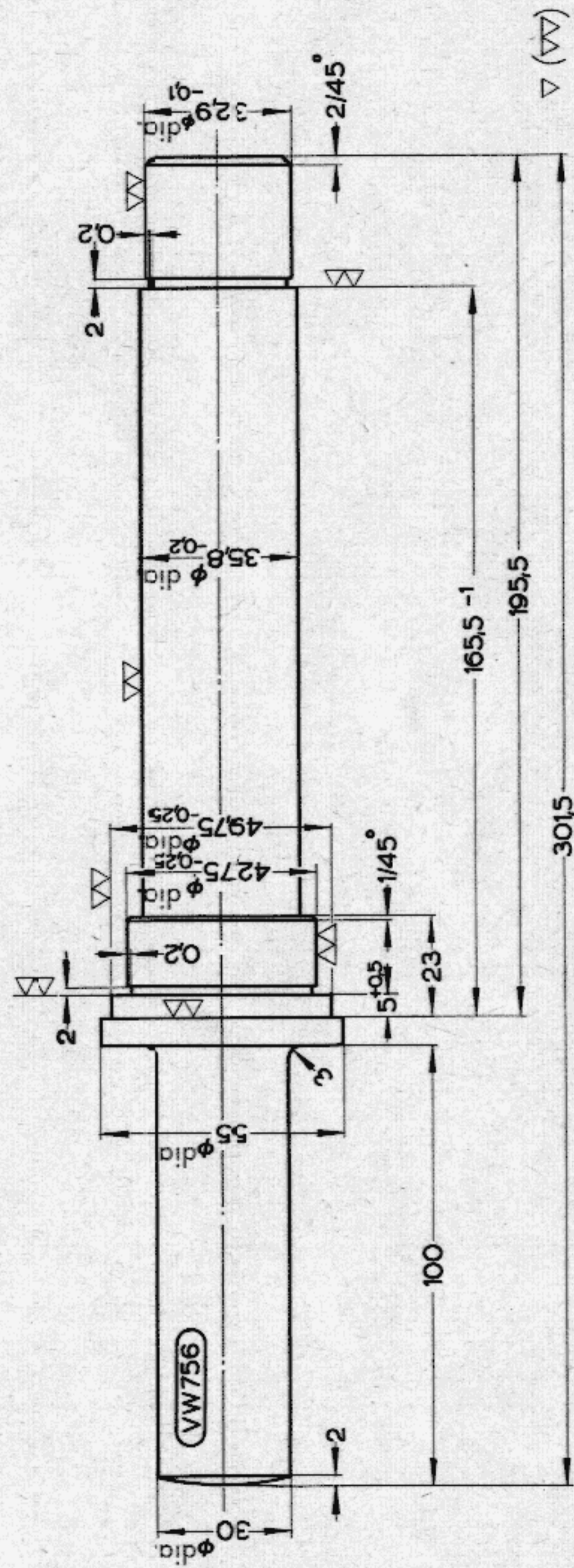
The DU and needle bearings are driven into the front axle tubes with this drift. The drift is provided with a shoulder which acts as a limit gauge thus ensuring that the bearings are installed and driven in up to the specified limit.



Construction Detail for VW 756

1 — Turn part.

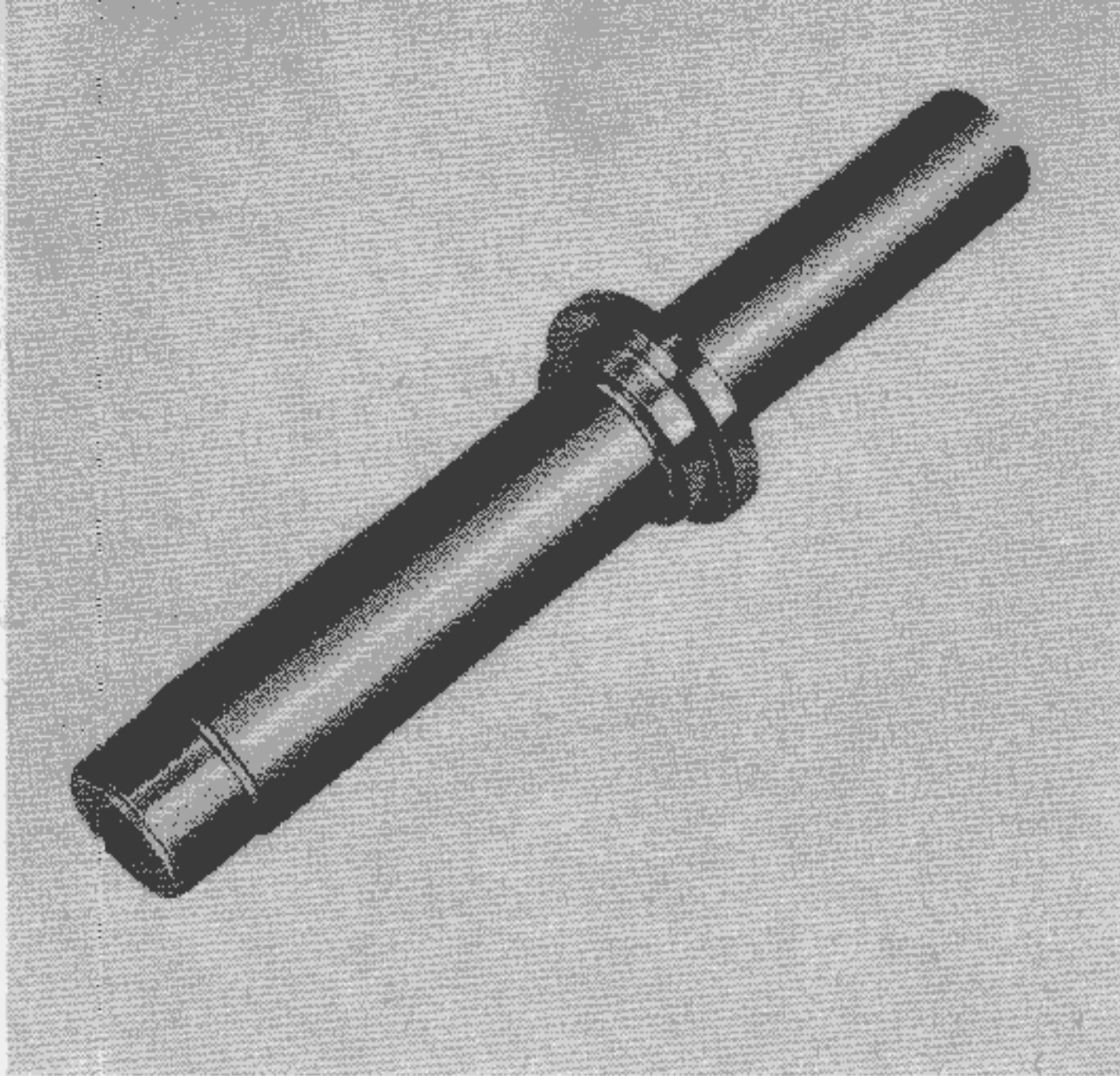
2 — Blacken with oil.



Part No.	No. required	Description	Material
		rd 60 X 305	C 45
Drift for DU Bearings and Needle Bearings, lower			
VW 756			

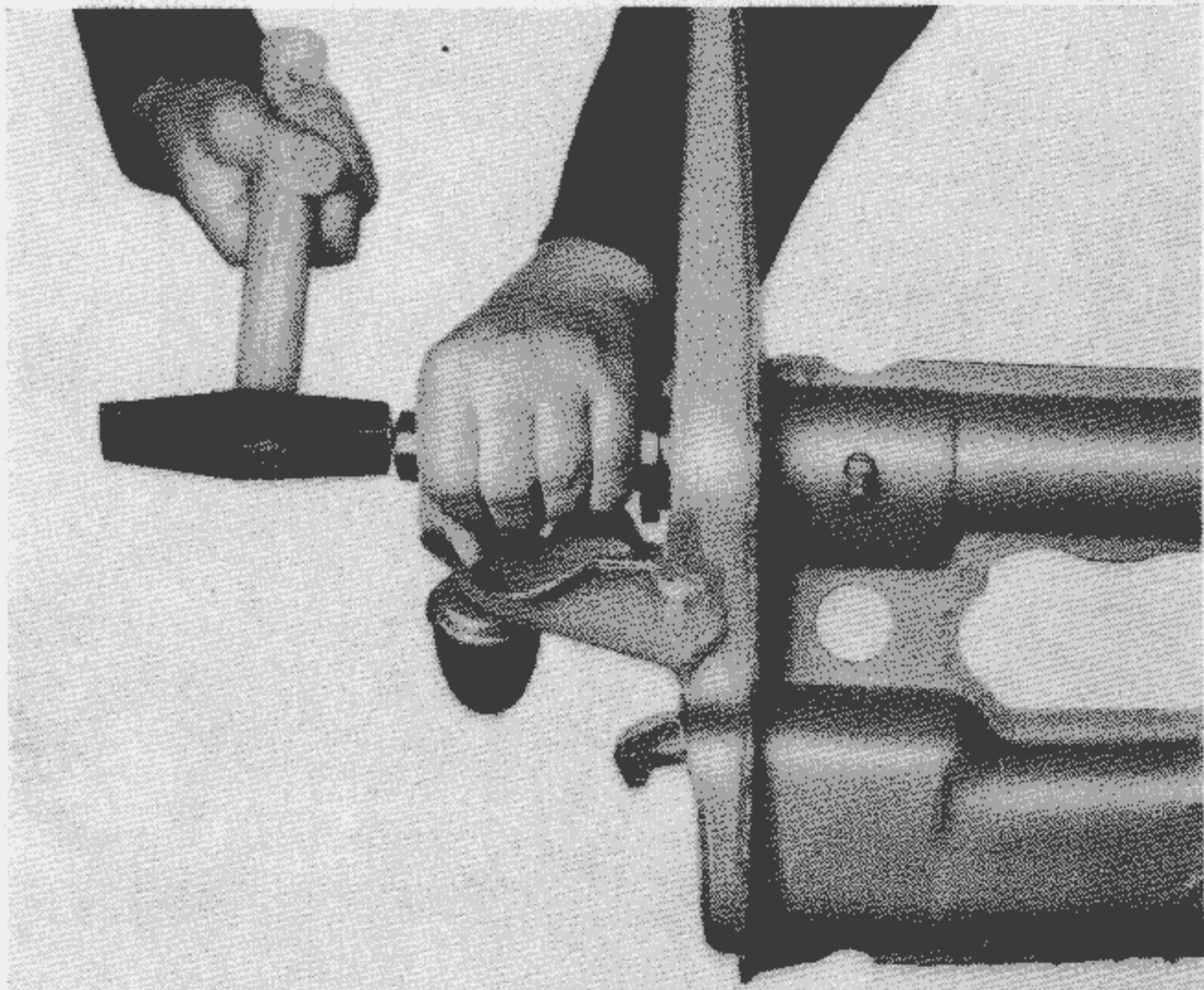
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WOLFSBURG
 Service Department

Drawn: **3.7.64 Krumbholz** Checked: **8.7.64 Giesecking**



Drift for DU Bearings and Needle Bearings, upper, Type 3

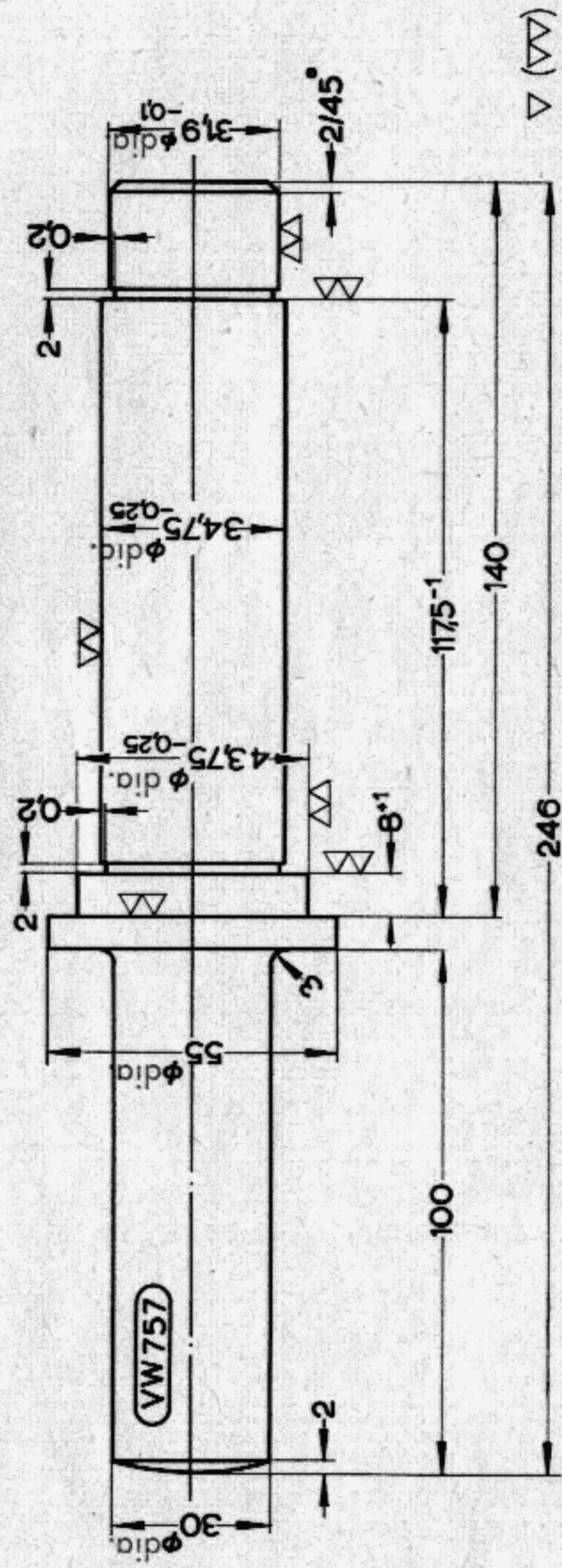
The DU and needle bearings are driven into the front axle tubes with this drift.
The drift is provided with a shoulder which acts as a limit gauge thus ensuring that the bearings are installed and driven in up to the specified limit.



Construction Detail for VW 757

1 — Turn part.

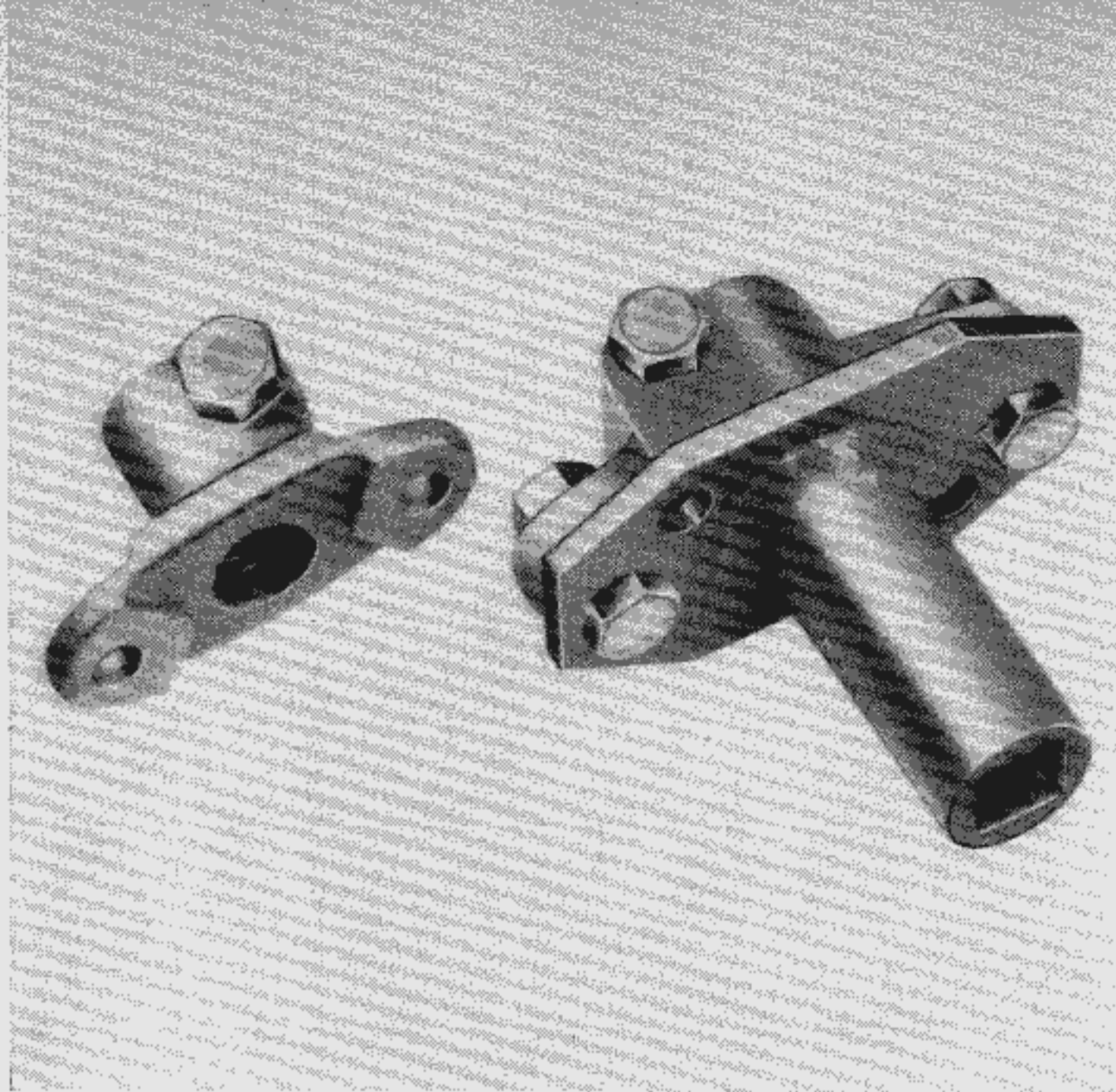
2 — Blacken with oil.



1	1	Rd 60 X 250	C 45
Part No.	No. required	Description	Material
		Drift for DU Bearings and Needle Bearings, upper	
		VW 757	

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Drawn: 3.7.64 Krumbholz
 Checked: 8.7.64 Gioseking

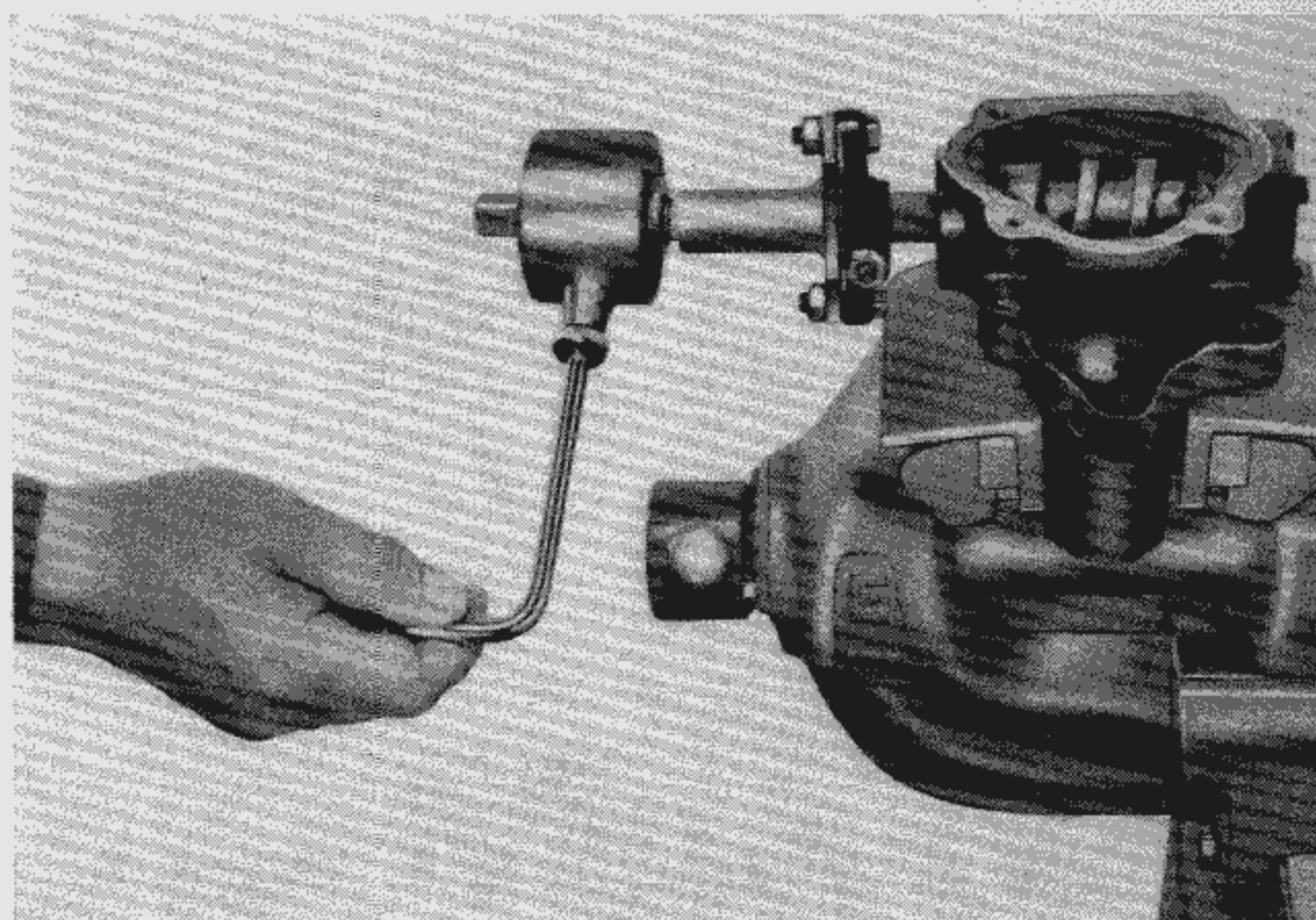
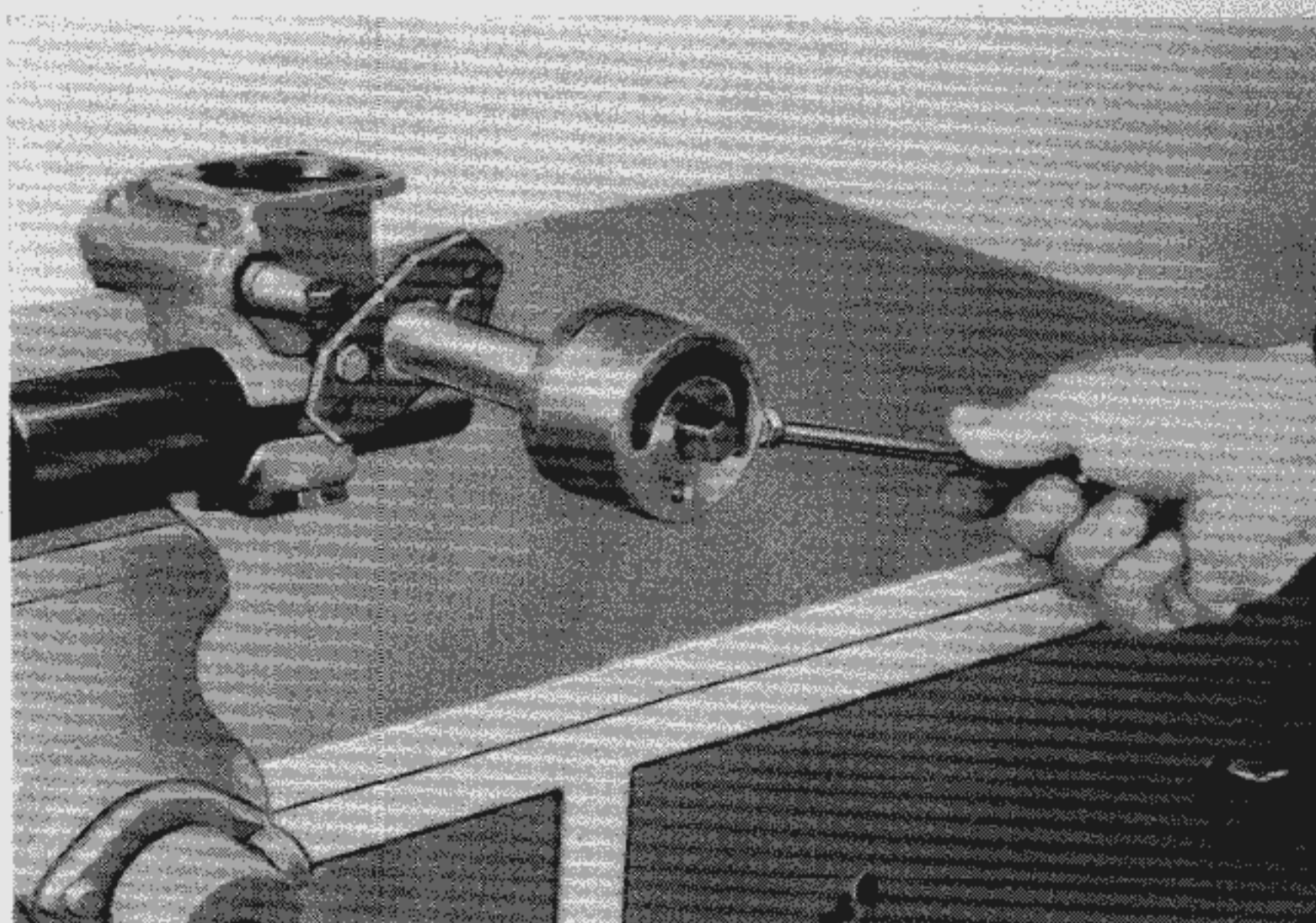


Adapter for Steering Worm
Types 1, 2, 3

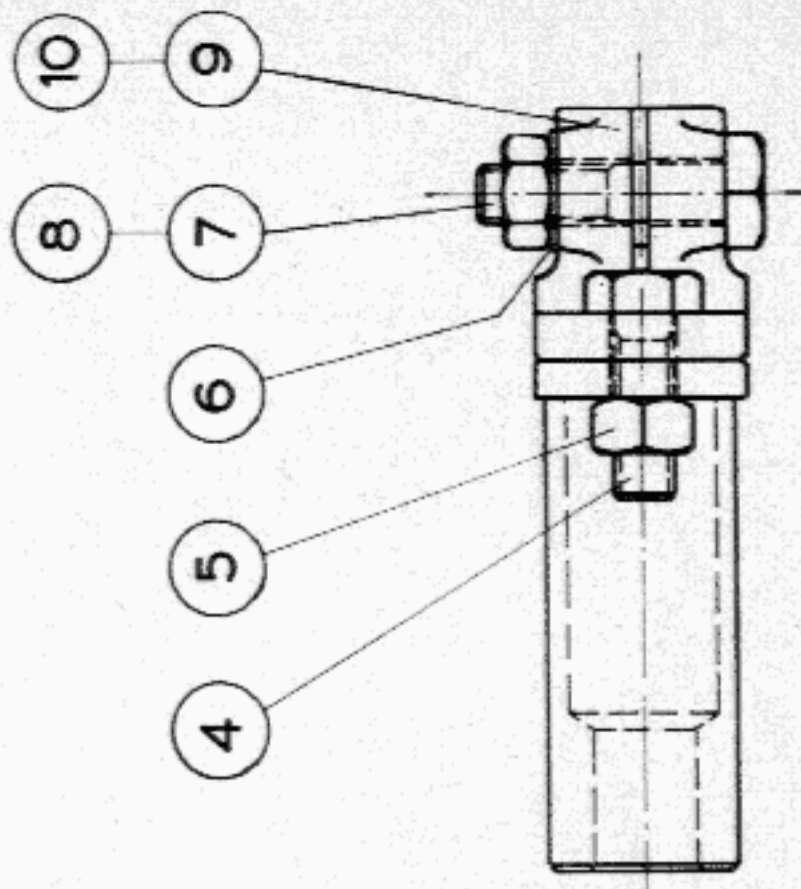
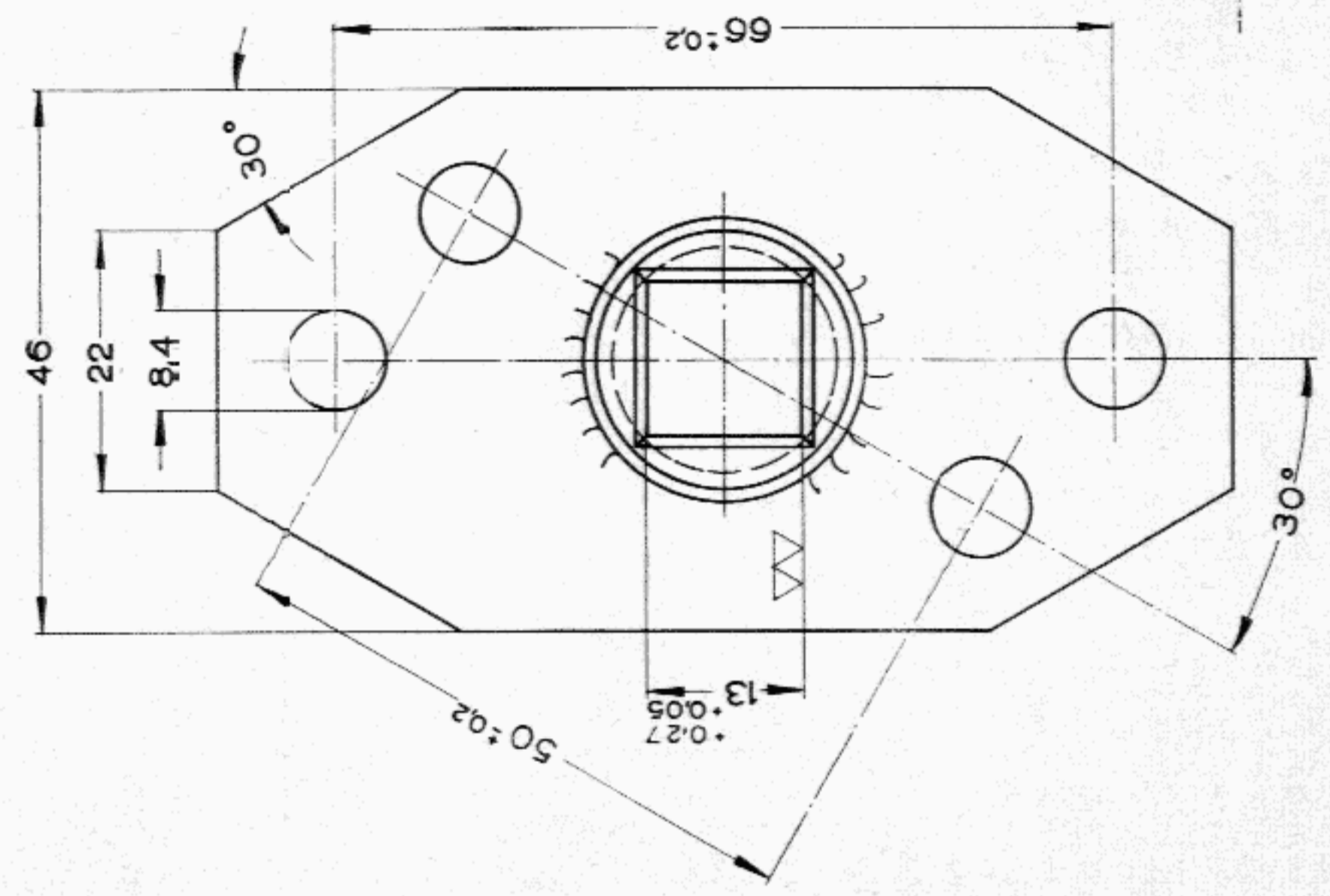
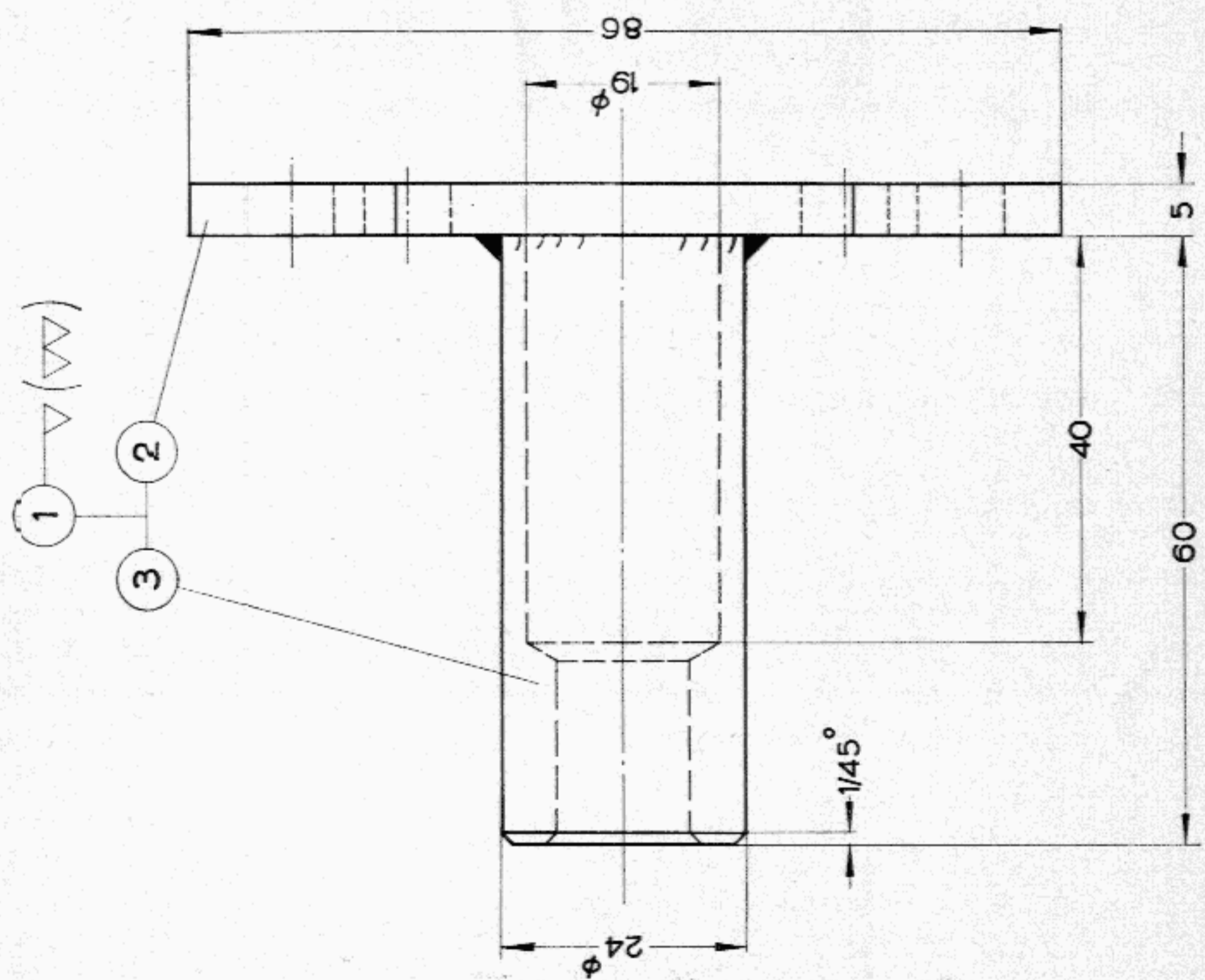
The adaptor is used in conjunction with a torque gauge when making adjustments to the steering gear. This adaptor makes the connection between the steering gear and the torque gauge.

Note:

The genuine VW spare parts listed under 4 to 10 in the drawing specification list are not supplied with the appliance when it is obtained from the Matra-Werke GmbH, Frankfurt/Main. For reasons of cost, the above mentioned parts should be obtained and fitted by the workshop itself.



8 Date: 19. 6. 67
 Description of modification: Adapter piece altered was VW 758



Chamfer edges

1	Flange	10	Pl. No. 211 415 409
1	Flange, lower	9	Pl. No. 111 415 409
1	Hex. bolt	M 8x42	Pl. No. 211 415 421
1	Hex. bolt	M 8x32	Pl. No. 111 415 421
2	Washer	8.4	N 11526 2
4	Hex. Nut	M 8	DIN 934-4D
2	Hex. bolt	M 8x22	DIN 933-5D
1		FI 50x5x90	3 C 15
1		Rd 25x65	2 St 37
1	Welded part	1	Parts 2 and 3

When no limit is given tolerance ±0.25; ±30' applies

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 Drawn: 18. 9. 64 Krumbholz
 Checked: 23. 9. 64 Giesecking

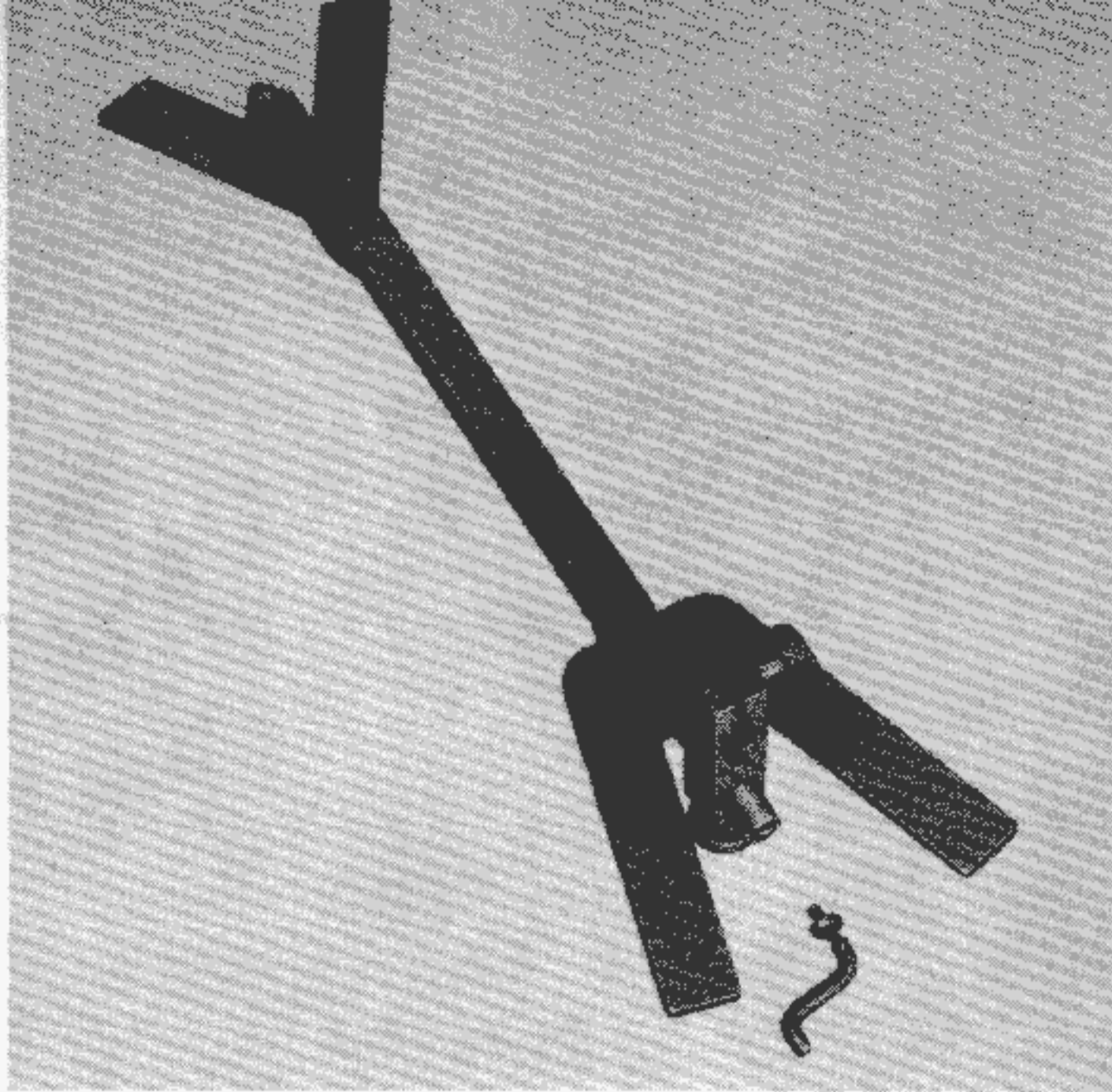
Colour identification marks
 (01) orange RAL 2004
 (02) blue RAL 5015
 (03) violet RAL 4003
 (04) green RAL 6018
 (05) black RAL 9005
 Surfaces in given colours (synthetic resin) shown thus

Adapter for steering worm

VW 758/1

Qty.	Designation	Part	Material	Part No. or Standard spec.	Remarks
1	Welded part	1			Parts 2 and 3

No. of Sheets 1
 Sheet no. 1



MAY 11 1965 VW 759

MAY 11 1965

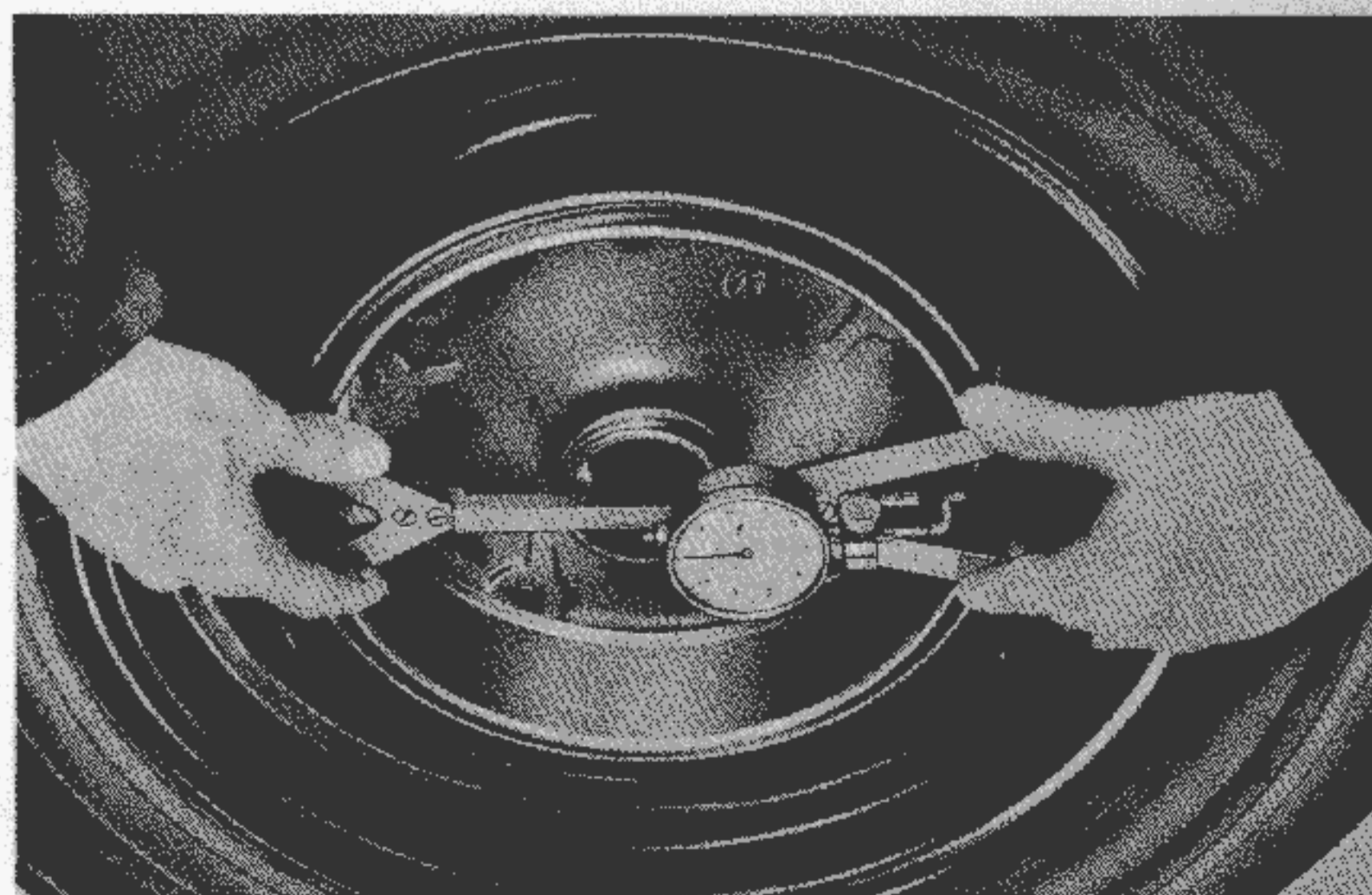
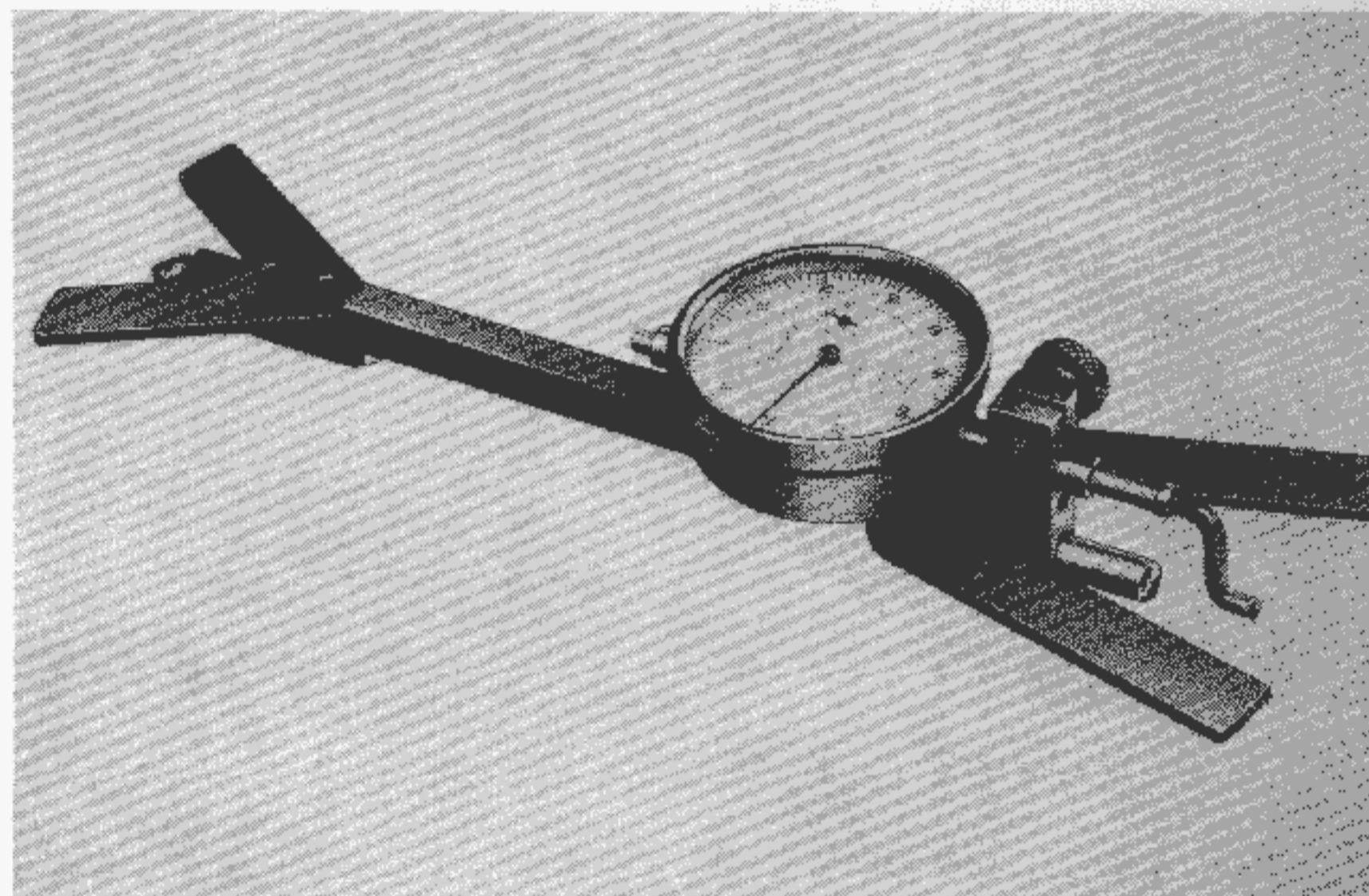
Appliance for Checking Brake Drum Ovality Types 1, 2, 3

With this appliance the ovality of the brake drum can be checked with the brake drum still screwed onto the wheel disc.

The checking appliance is inserted in the brake drum so that the fixed point rests on the inside surface of the brake drum. The other end, on which is an extension pin, is moved backwards and forwards until the largest diameter is found. At this point the scale of the gauge is set at zero.

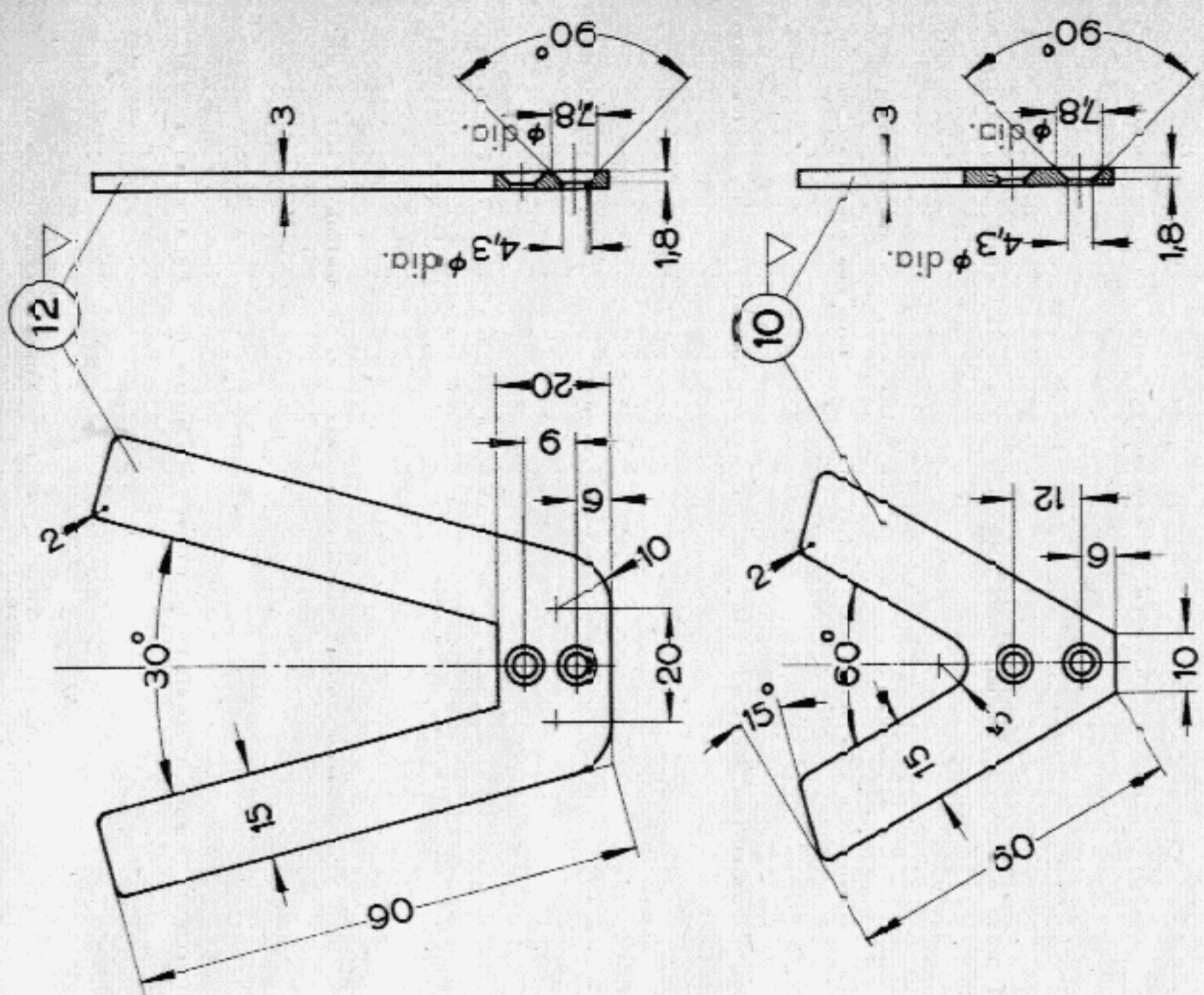
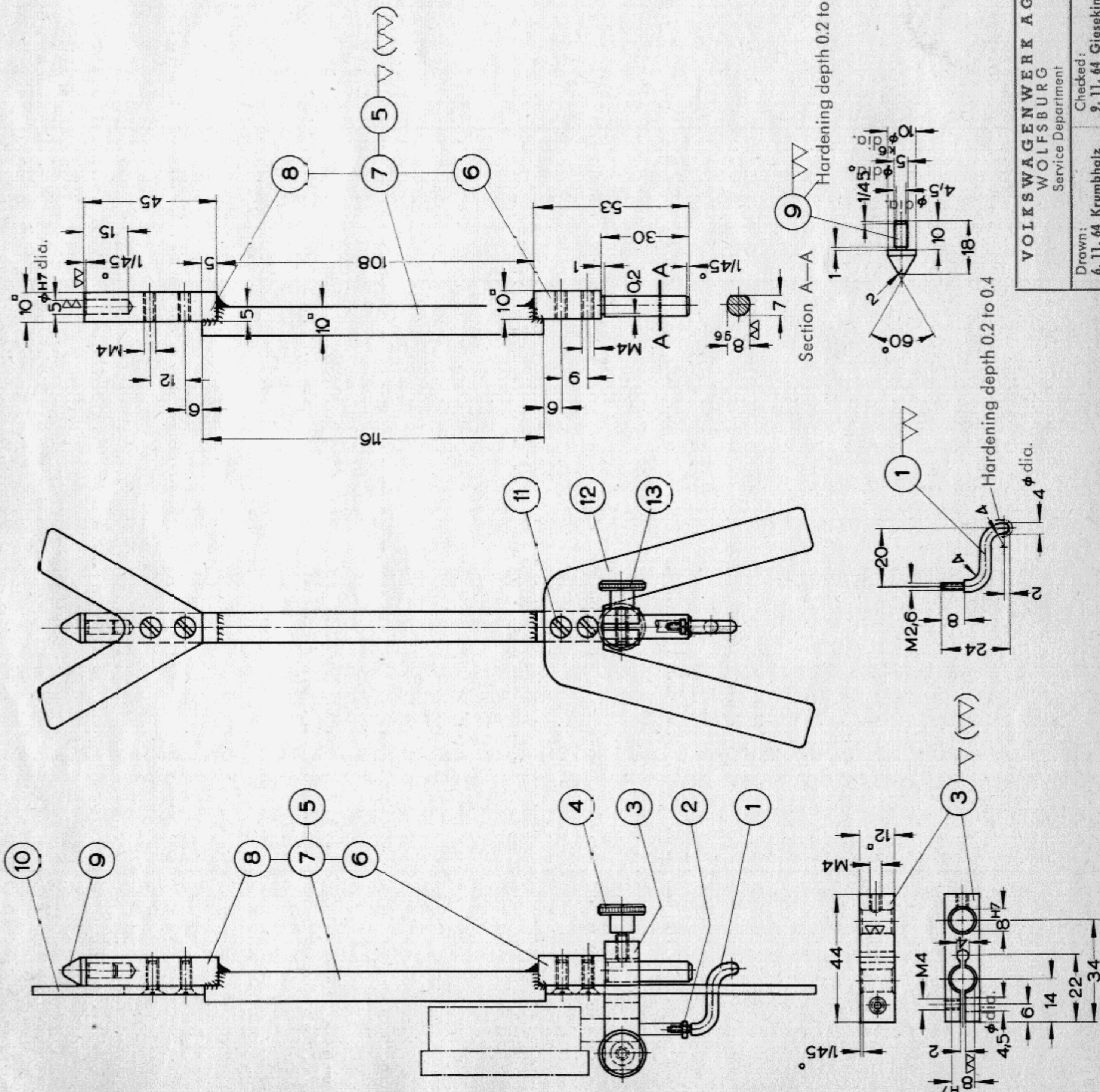
The checking procedure is carried out several times in other positions. It must be noted that the scale must not be reset.

The movement of the pointer of the gauge to either plus or minus shows the ovality of the brake drum.



Construction Details for VW 759

- 1 — Cut all parts to sizes given in parts list and have standard parts ready to hand.
- 2 — Make part 5 by welding parts 6, 7, 8 together.
- 3 — Rework part 1, bend to shape and cut M 2.6 thread.
- 4 — Turn down part 9.
- 5 — Case harden parts 1 and 9 as detailed in drawing.
- 6 — Make part 3.
- 7 — Make parts 10 and 12.
- 8 — Treat all parts with anti-corrosion solution.
- 9 — Assemble appliance.



13	1	Knurled headed screw	M 4 X 12	DIN 464 - 5 S
12	1	Locating plate	85 X 3 X 95	TU St 37
11	4	Countersunk screw	M 4 X 12	DIN 63 - 5 S
10	1	Locating plate	60 X 3 X 75	TU St 37
9	1	Bolt	12 dia. X 22	C 15
8	1	Welded part	10 dia. X 48	C 15
7	1	Welded part	10 dia. X 120	C 15
6	1	Welded part	10 dia. X 56	C 15
5	1	Welded part		
4	1	Knurled headed screw	M 4 X 10	DIN 464 - 5 S
3	1	Holder	12 dia. X 48	C 15
2	1	Hex nut	M 2,6	DIN 934 - 4 D
1	1	Extension pin	6 dia. X 45	C 15

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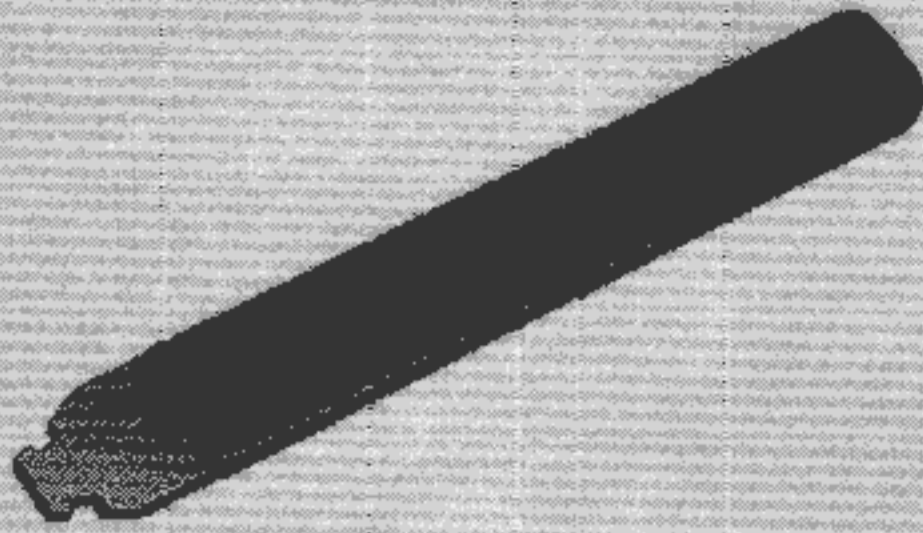
Drawn: 6.11.64 Krumbholz
 Checked: 9.11.64 Giesecking

Appliance for Checking Brake Drum Ovality

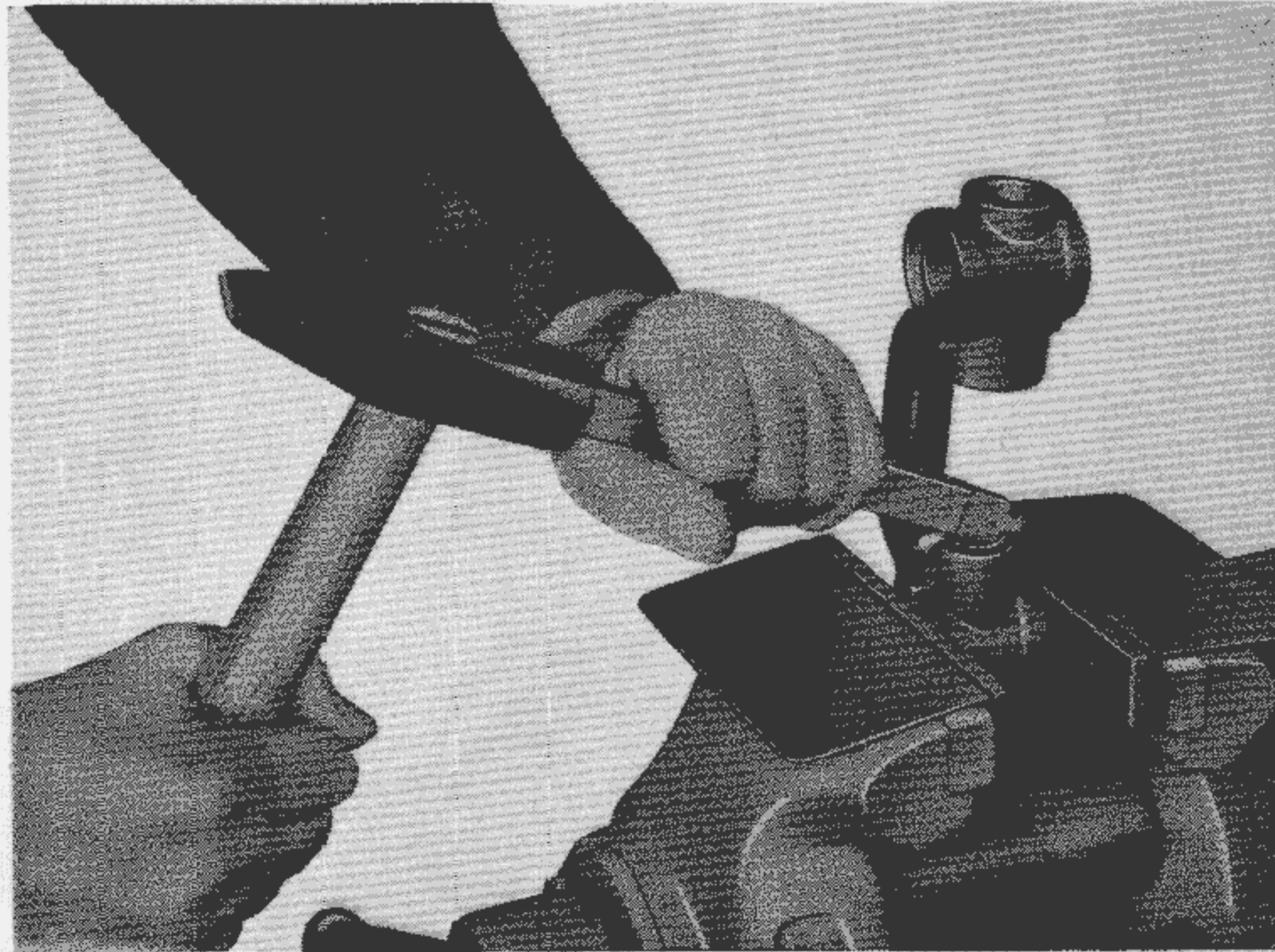
VW 759

Part No. or No. required	Description	Material	Part No. or Standard spec.	Remarks
13	1	Knurled headed screw	M 4 X 12	DIN 464 - 5 S
12	1	Locating plate	85 X 3 X 95	TU St 37
11	4	Countersunk screw	M 4 X 12	DIN 63 - 5 S
10	1	Locating plate	60 X 3 X 75	TU St 37
9	1	Bolt	12 dia. X 22	C 15
8	1	Welded part	10 dia. X 48	C 15
7	1	Welded part	10 dia. X 120	C 15
6	1	Welded part	10 dia. X 56	C 15
5	1	Welded part		
4	1	Knurled headed screw	M 4 X 10	DIN 464 - 5 S
3	1	Holder	12 dia. X 48	C 15
2	1	Hex nut	M 2,6	DIN 934 - 4 D
1	1	Extension pin	6 dia. X 45	C 15

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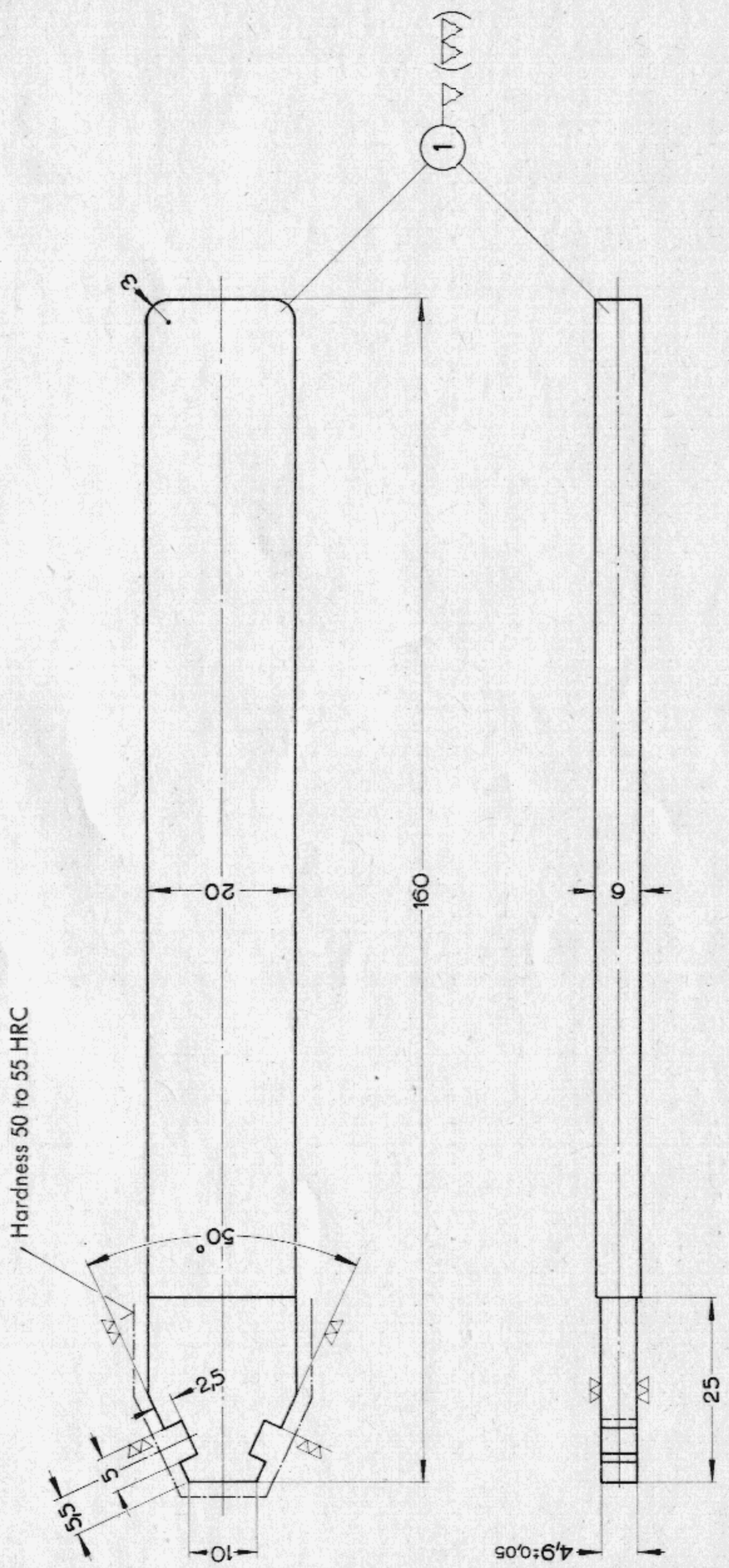
**King Pin Bush Slotting Tool
Type 1**

The slots in the upper king pin bushes are cut out with this slotting tool. The tool is applied in such a manner that the material is removed by knocking it out towards the outside.



Construction Details for VW 760

- 1 — Cut flat steel.
- 2 — Mark out and work.
- 3 — Harden as shown in drawing.
- 4 — Treat slotting tool with a rust preventive.



Part No.	20 X 6 X 165	C 35
Description	King Pin Bush Slotting Tool	
No. required	Material	

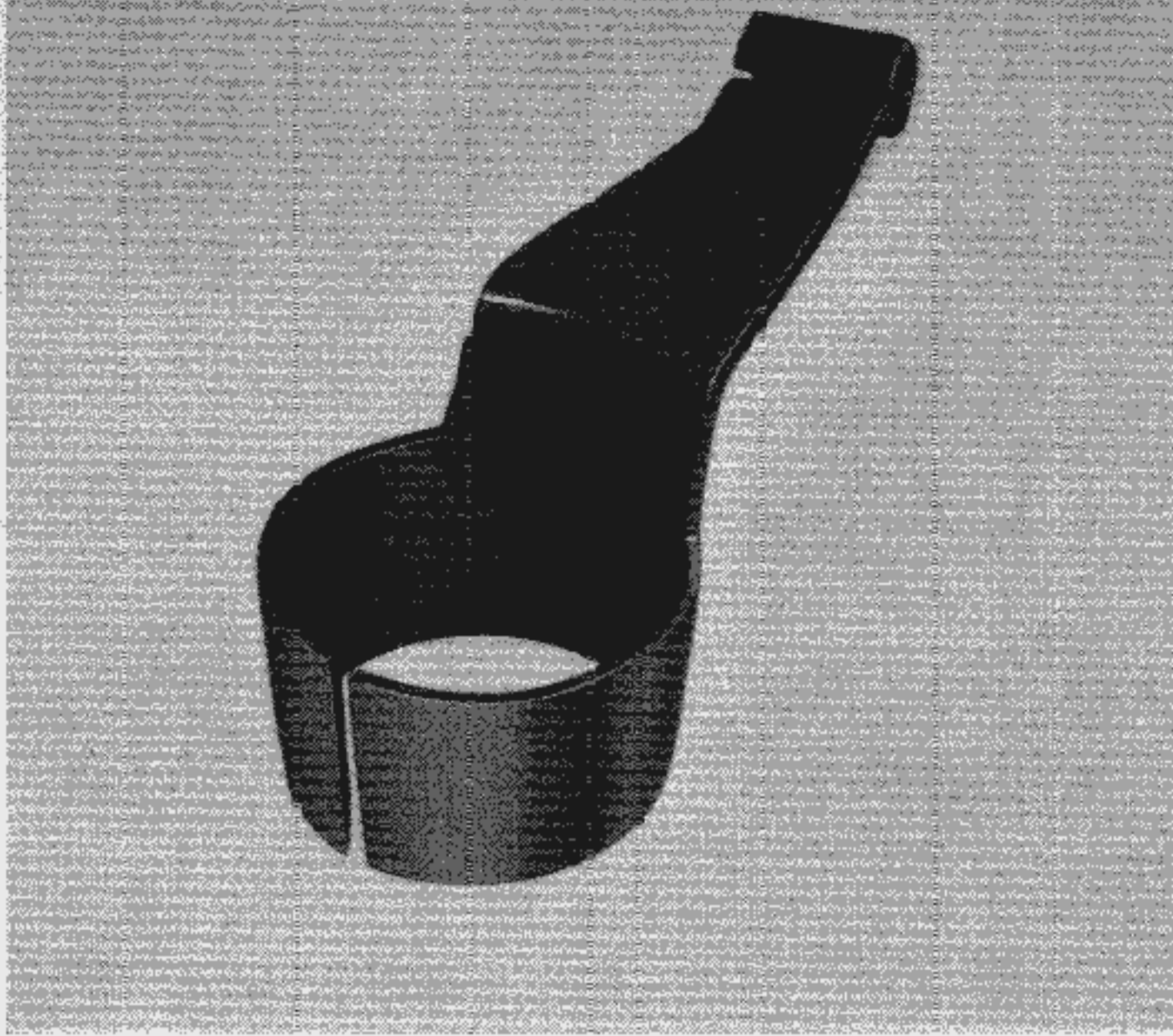
VOLKSWAGENWERK AG
WOLFSBURG
 Service Department

Drawn: 11. 12. 64 Krumbholz
 Checked: 15. 1. 65 Giesekeing

VW 760

AUG 11 1968

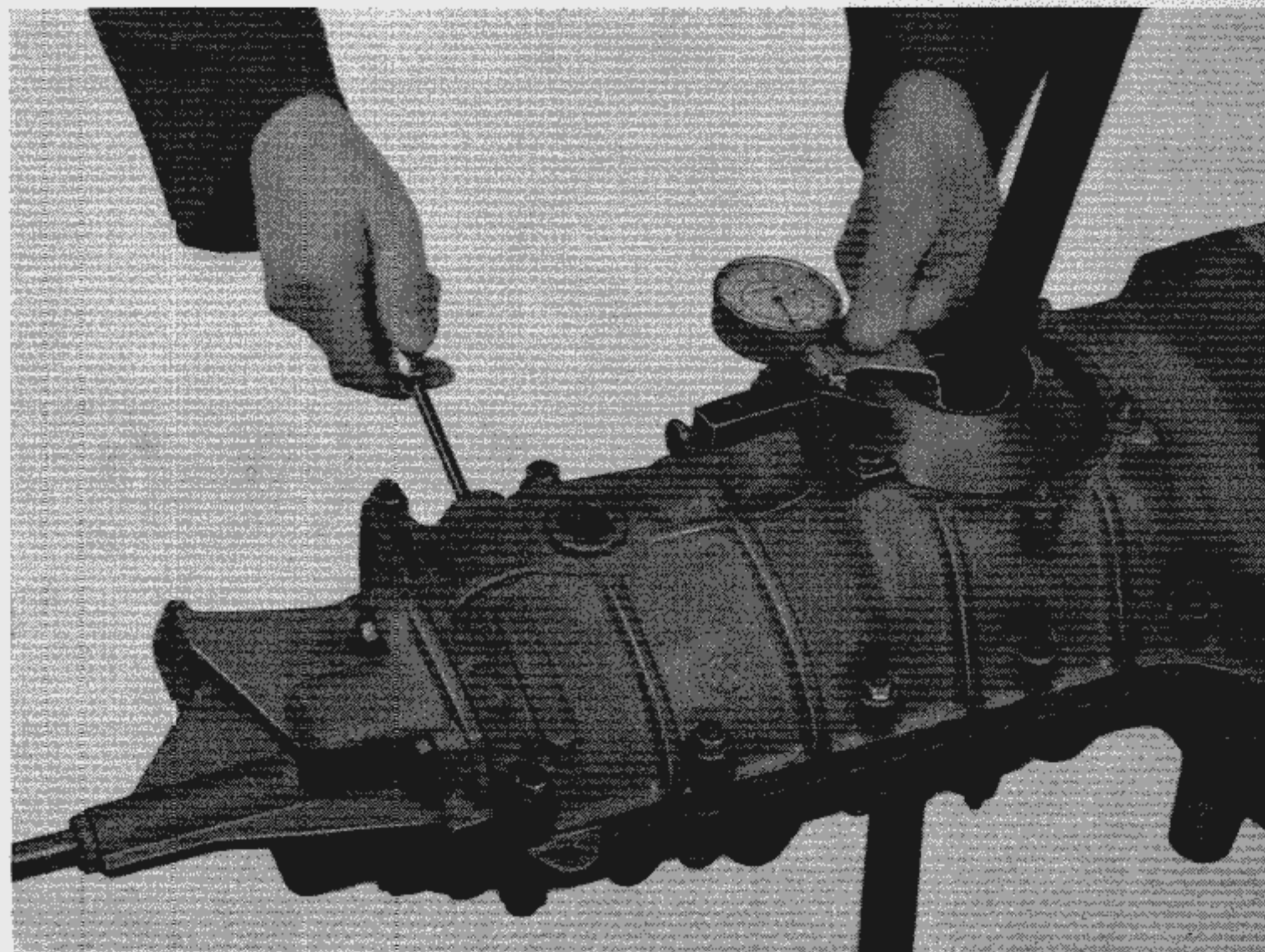
Bracket for Dial Gauge When Checking Backlash
 Type 1 - up to Chassis No. 3192 506
 Type 2 - up to Chassis No. 469 505



The backlash between the drive pinion and ring gear can be measured on all VW automobiles with non-synchromesh and partial synchromesh transmissions by using a dial gauge and this bracket. The bracket is pressed firmly into the differential housing and the drive pinion is locked so that it cannot turn.

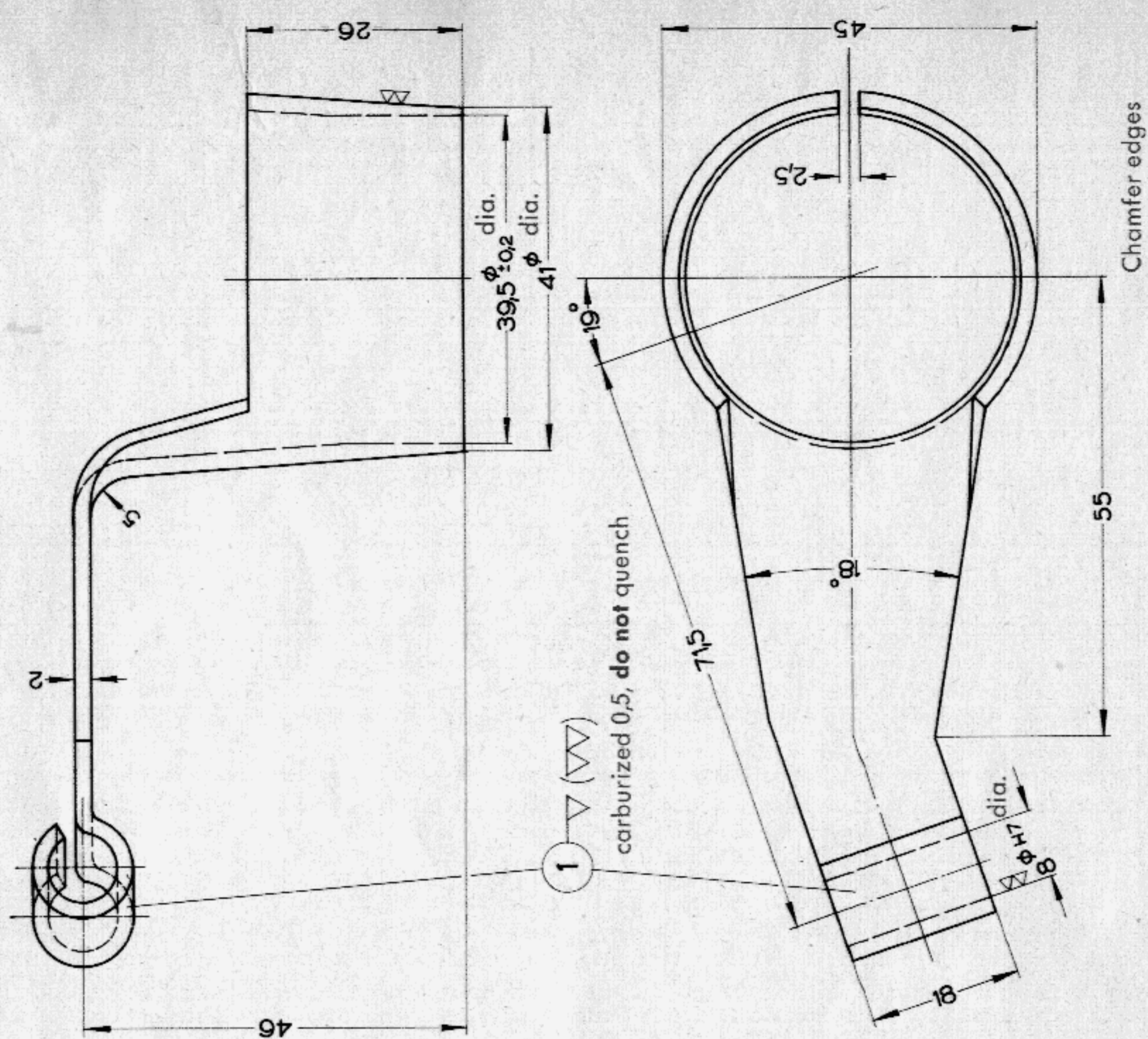
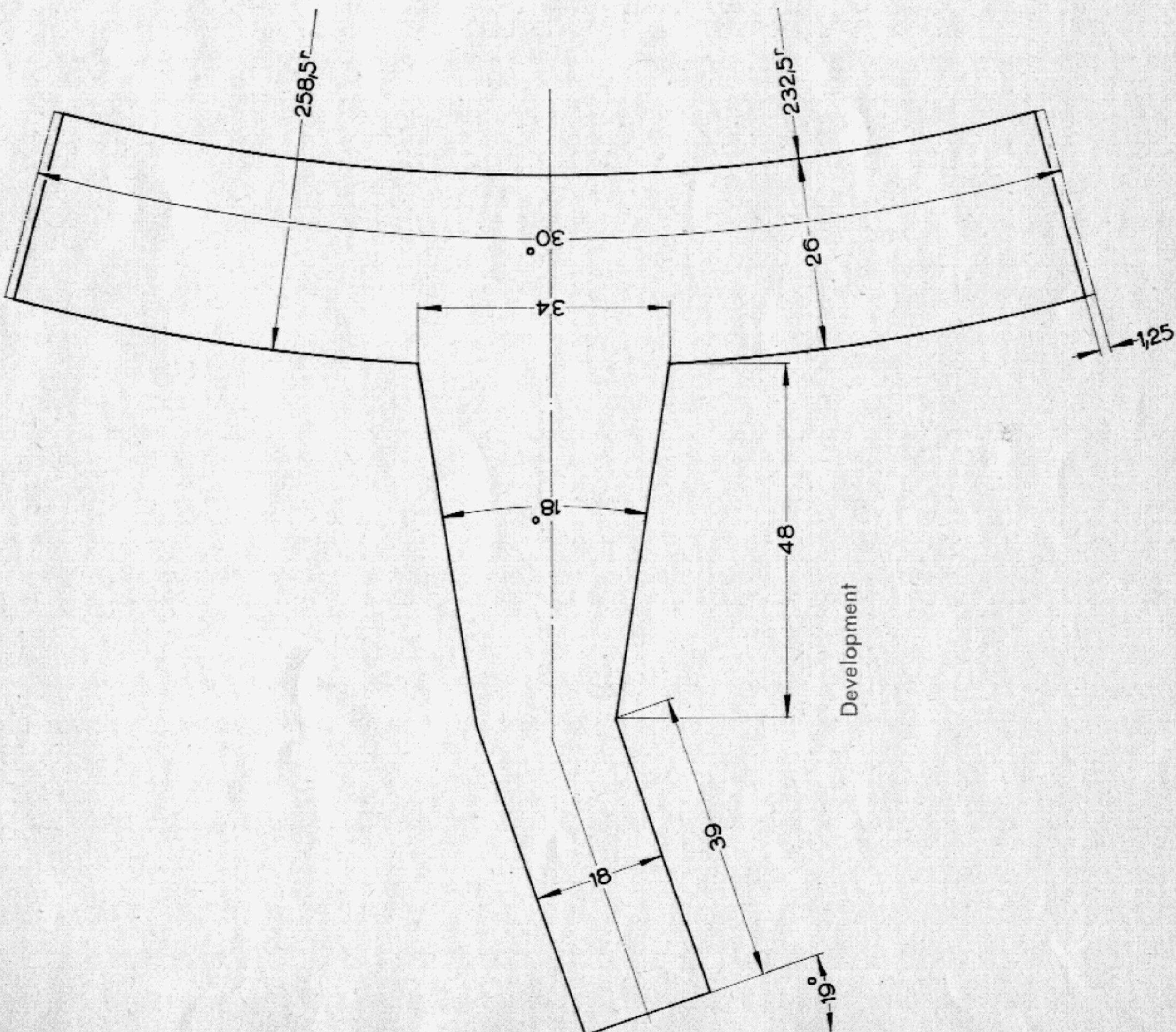
The tracer pin of the dial gauge is brought into contact with the indicator gauge bracket from VW 297 (VW special tools).

By lightly moving the dial gauge backward and forwards, the amount of backlash is shown on the dial gauge.



Construction Details for VW 761

- 1 — Mark out sheet metal plate and cut out.
- 2 — Bend to shape and rework.
- 3 — 0.5 mm carburize, **do not** quench.
- 4 — Treat the bracket with a rust preventative.



1 ∇ (∇)
 carburized 0,5, do not quench

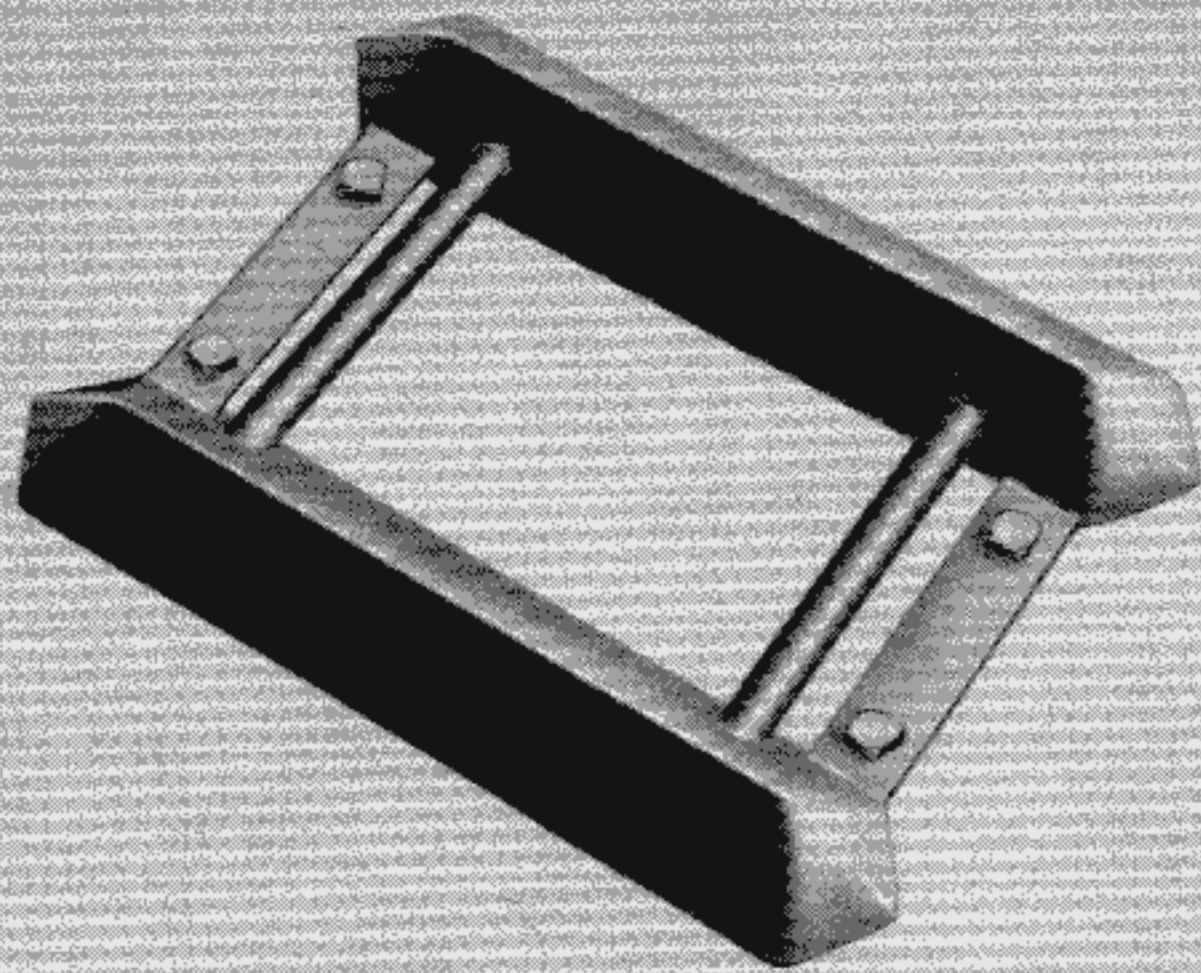
Chamfer edges

1	Sheet Metal 2 X 130 X 150	MU Sf 1203
Part No.	Description	Material
Bracket for Dial Gauge When Checking Backlash		

VOLKSWAGENWERK AG
WOLFSBURG
 Service Department

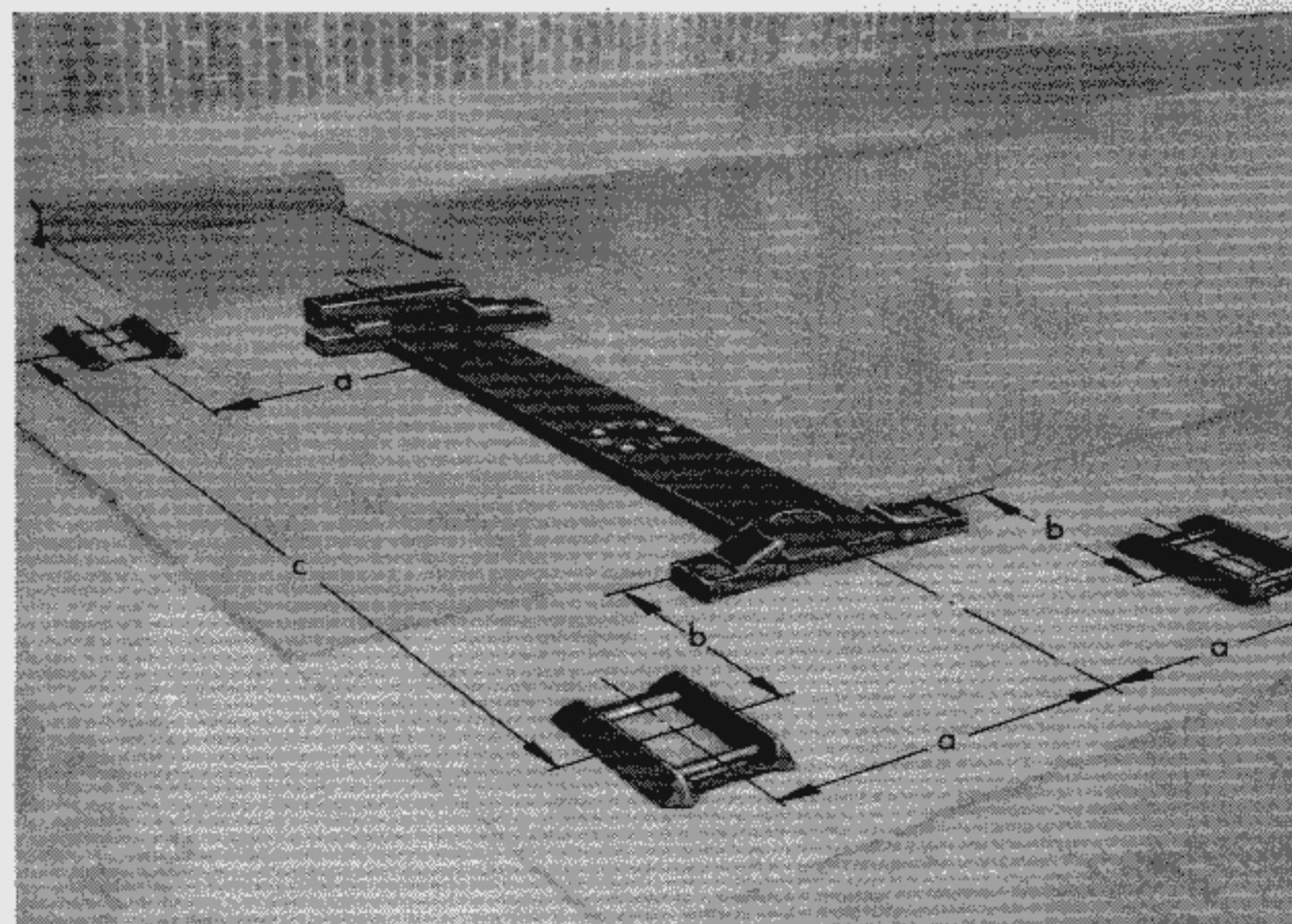
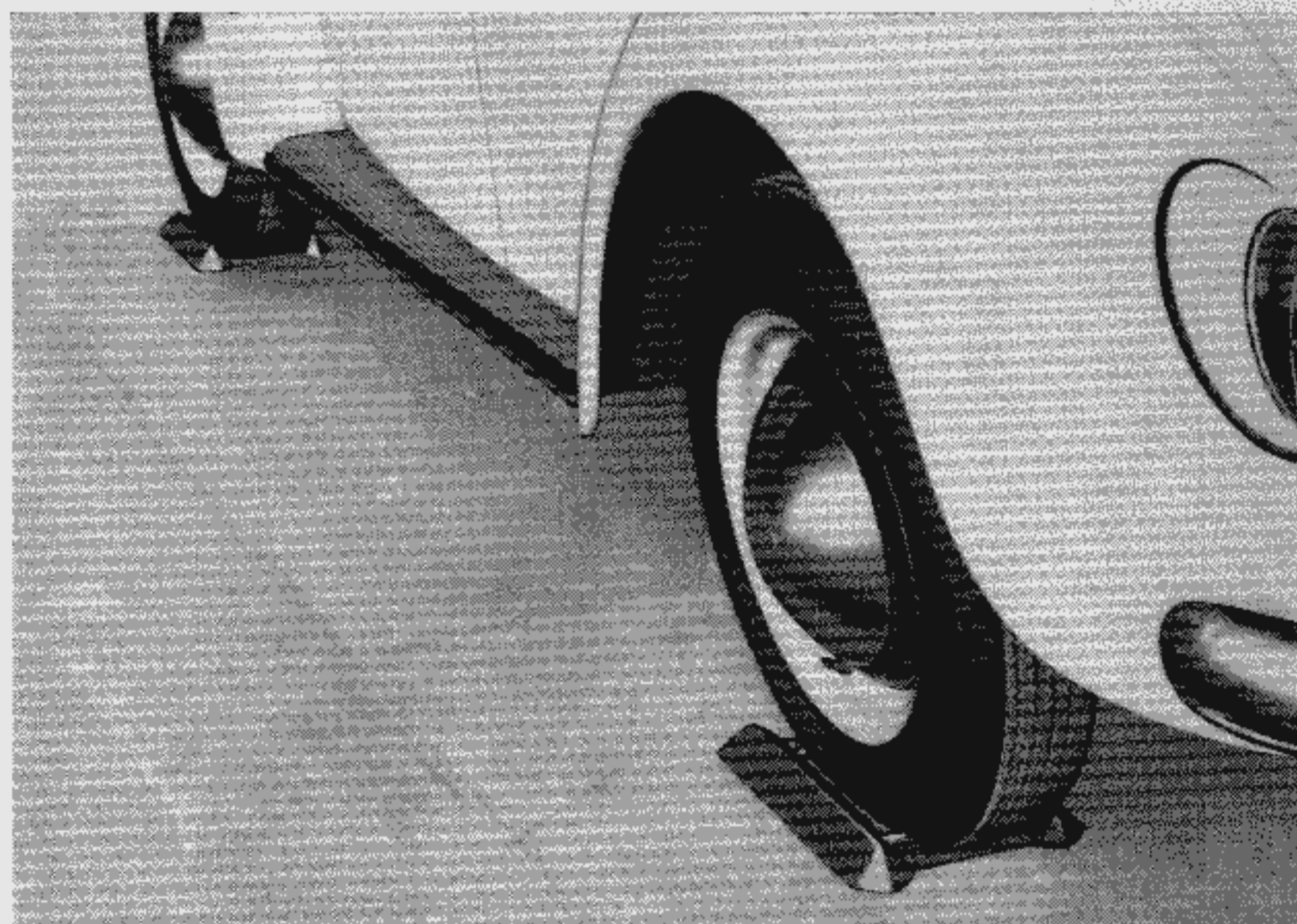
Drawn: 5. 2. 65 Krumbholz
 Checked: 9. 2. 65 Giesecking

VW 761



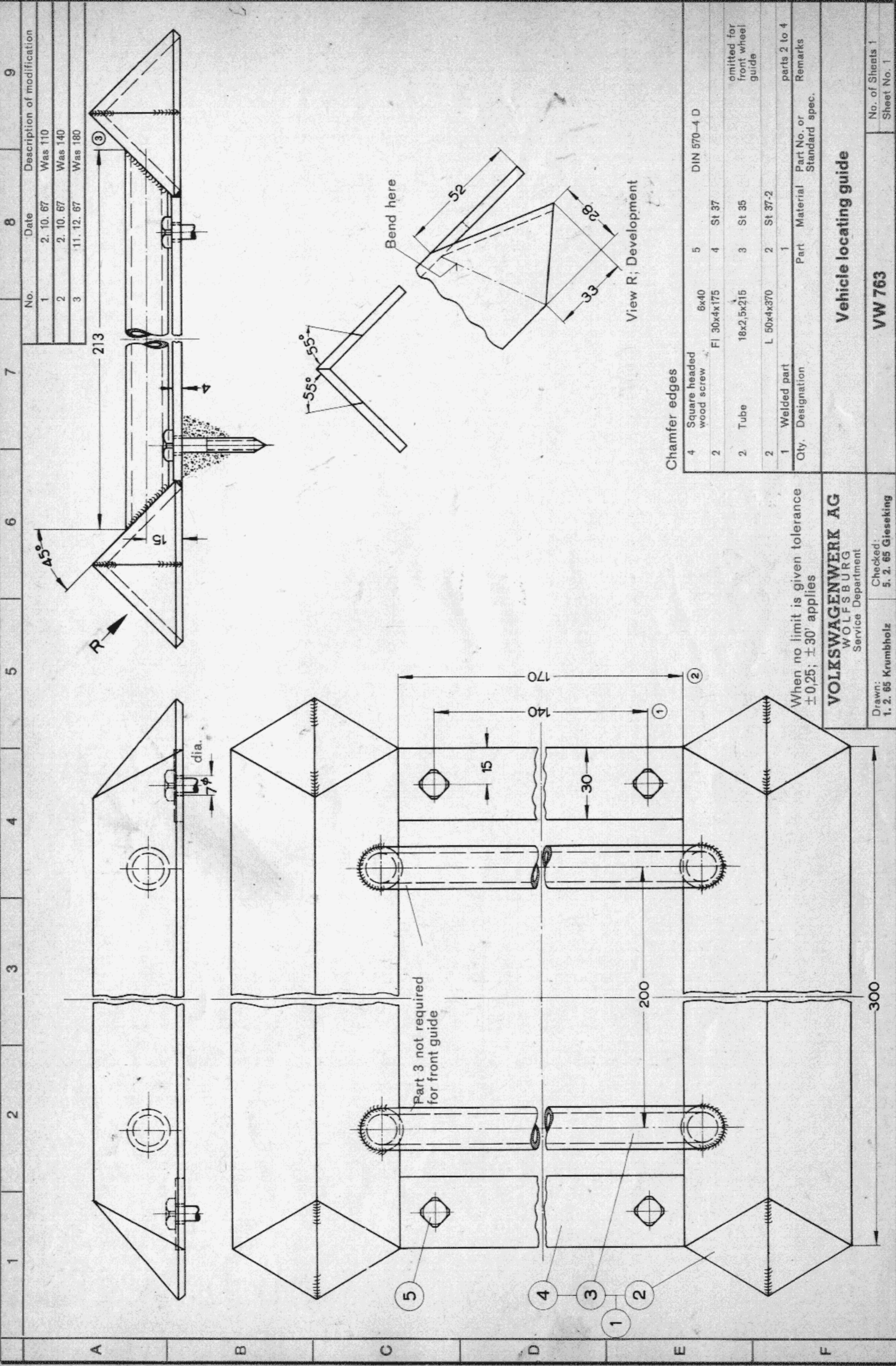
Vehicle locating guide for Types 1, 2 and 3

The vehicle locating guides locate the wheels of VW automobiles when they are driven into the work bay. The vehicle is then correctly positioned for being raised with the vehicle hoist. If you wish to save money, you can manage with three guides per work bay, in which case only one locating guide is required for the front wheels and this should be screwed onto the workshop floor to take the front wheel on the steering wheel side. The tube part No. 3 in drawing is not required for the front wheel locating guide.



Installation measurement:

- a = 665 mm
- b = 420^{±5} mm
- c = 2400 mm



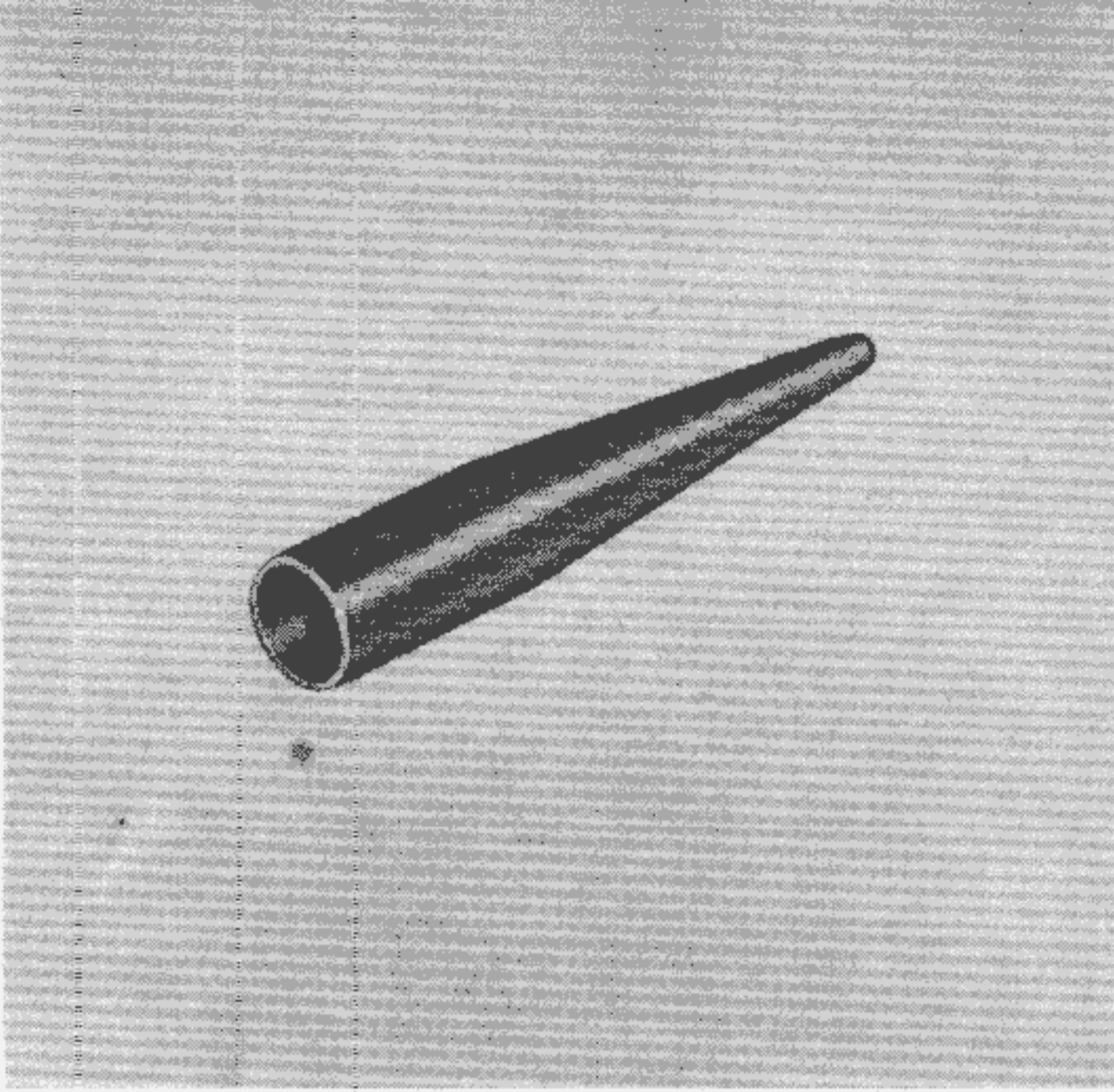
No.	Date	Description of modification
1	2. 10. 67	Was 110
2	2. 10. 67	Was 140
3	11. 12. 67	Was 180

Chamfer edges

Qty.	Designation	Part	Material	Part No. or Standard spec.	Remarks
4	Square headed wood screw	6x40	5	DIN 570-4 D	
2		Fl 30x4x175	4	St 37	
2	Tube	18x2,5x215	3	St 35	omitted for front wheel guide
2		L 50x4x370	2	St 37-2	
1	Welded part		1		parts 2 to 4

Vehicle locating guide

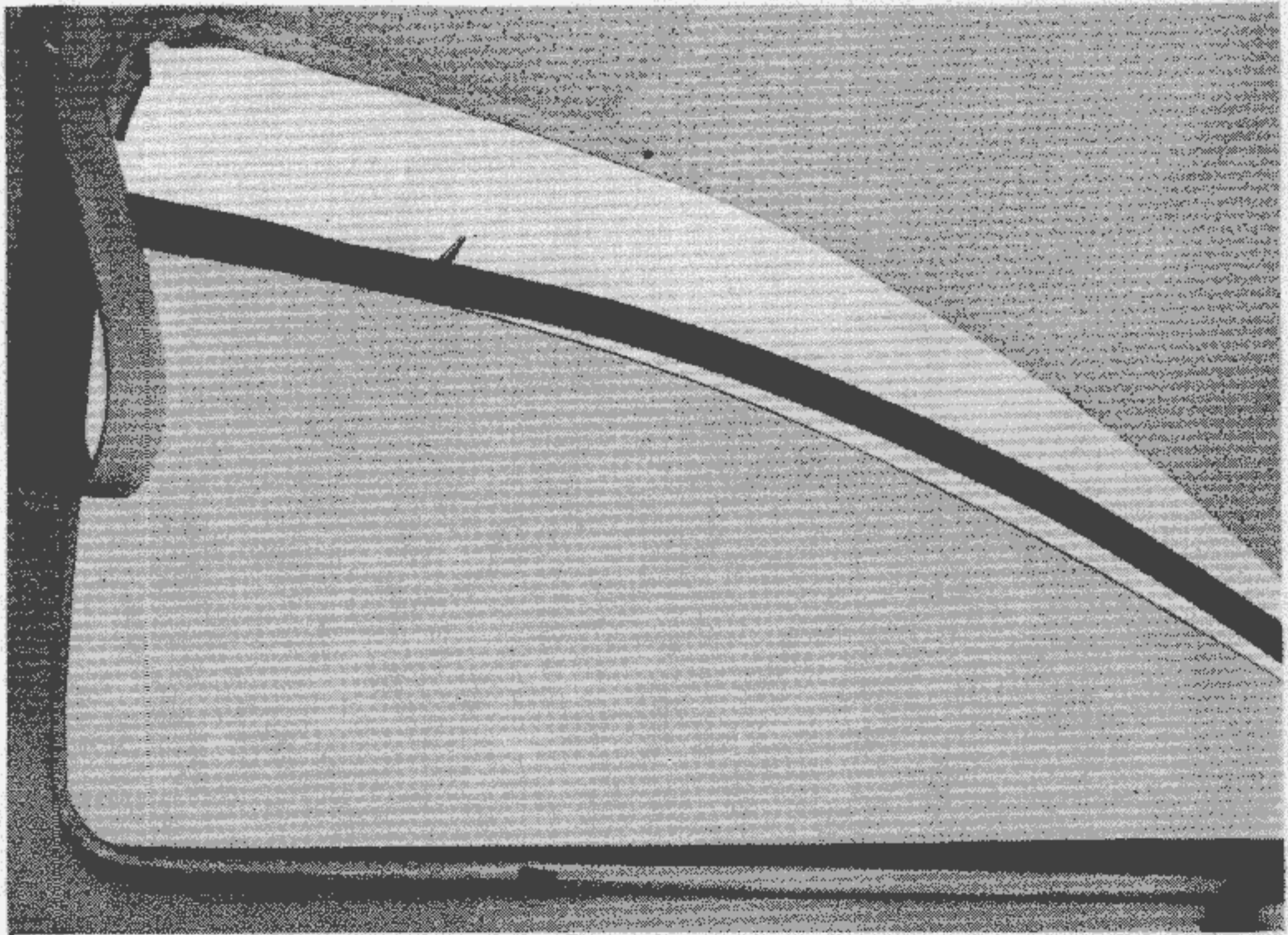
VOLKSWAGENWERK AG WOLFSBURG Service Department		Drawn: 1. 2. 65 Krumbholz	Checked: 5. 2. 65 Giesekeing
When no limit is given tolerance ±0,25; ±30' applies		VW 763	
No. of Sheets 1 Sheet No. 1		parts 2 to 4 Remarks	



Mounting sleeve for
flexible quarter window,
Type 3/1400 II

APR 11 1966

When fitting the quarter windows the threaded bolts of the window frame must be guided into the holes provided in the bodywork. This work is easily carried out if beforehand a mounting sleeve is fitted over each of the threaded bolts. The thread of the bolt is thereby protected against damage. Two of these mounting sleeves are necessary when installing the quarter window. The contact pressure of the weather seal prevents them from falling off whilst the windows are being fitted.



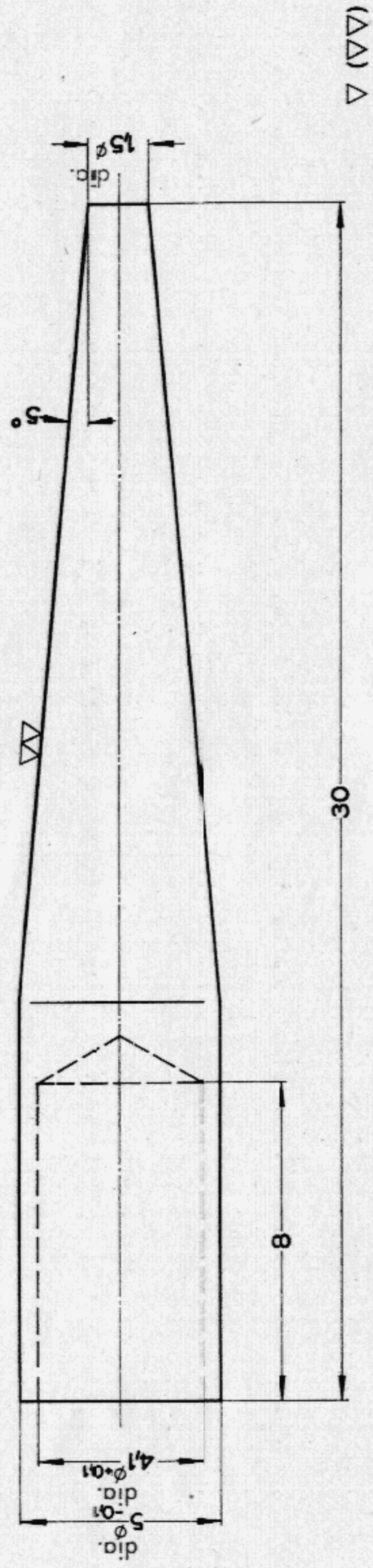
Construction Details for VW 764

1 — Turn.

2 — Blacken with oil.

1 2 3 4 5 6 7 8 9

A B C D E



Colour identification marks

- (01) orange RAL 2004
- (02) blue RAL 5015
- (03) violet RAL 4003
- (04) green RAL 6018
- (05) black RAL 9005

Surfaces in given colours
(synthetic resin) shown thus

When no limit is given tolerance
± 0.25; ± 30' applies

quantity	Description	Part	Material
1	8 dia. X 35	1	C 15

VOLKSWAGENWERK AG
WOLFSBURG
 Service Department

Drawn:
 6. 9. 65 Krumbholz

Checked:
 6. 9. 65 Giesekeing

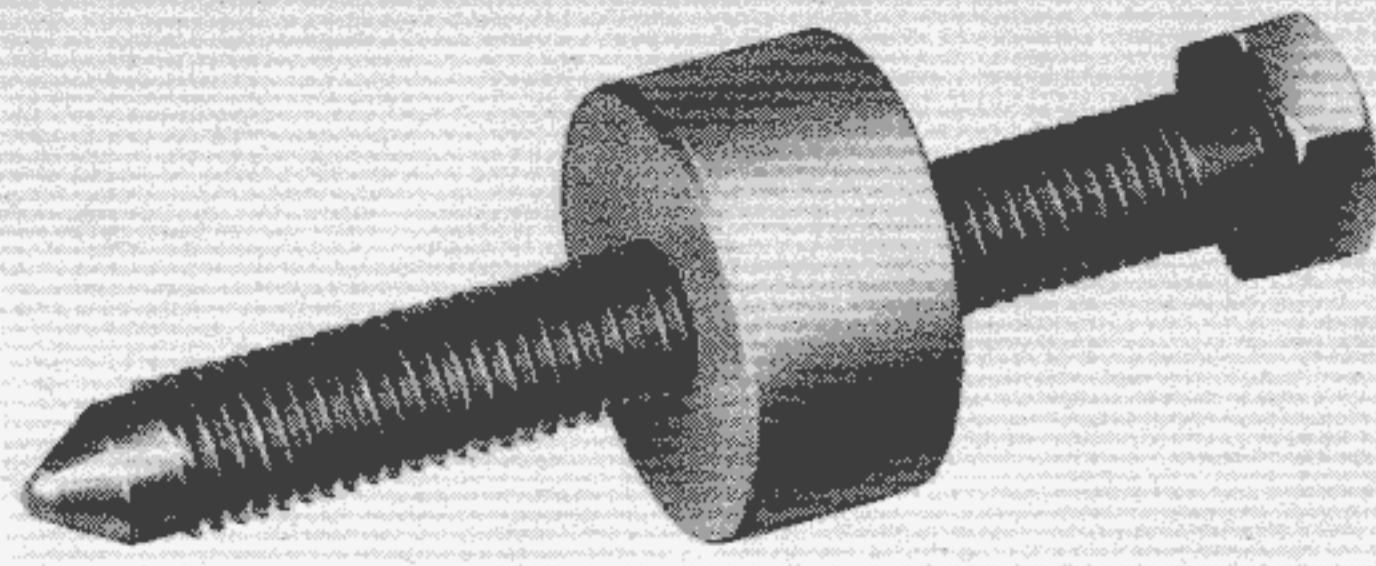
Mounting Sleeve for Flexible Quarter Windows

VW 764

No. of sheets 1
 Sheet No. 1

DEC 10 1965

LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT

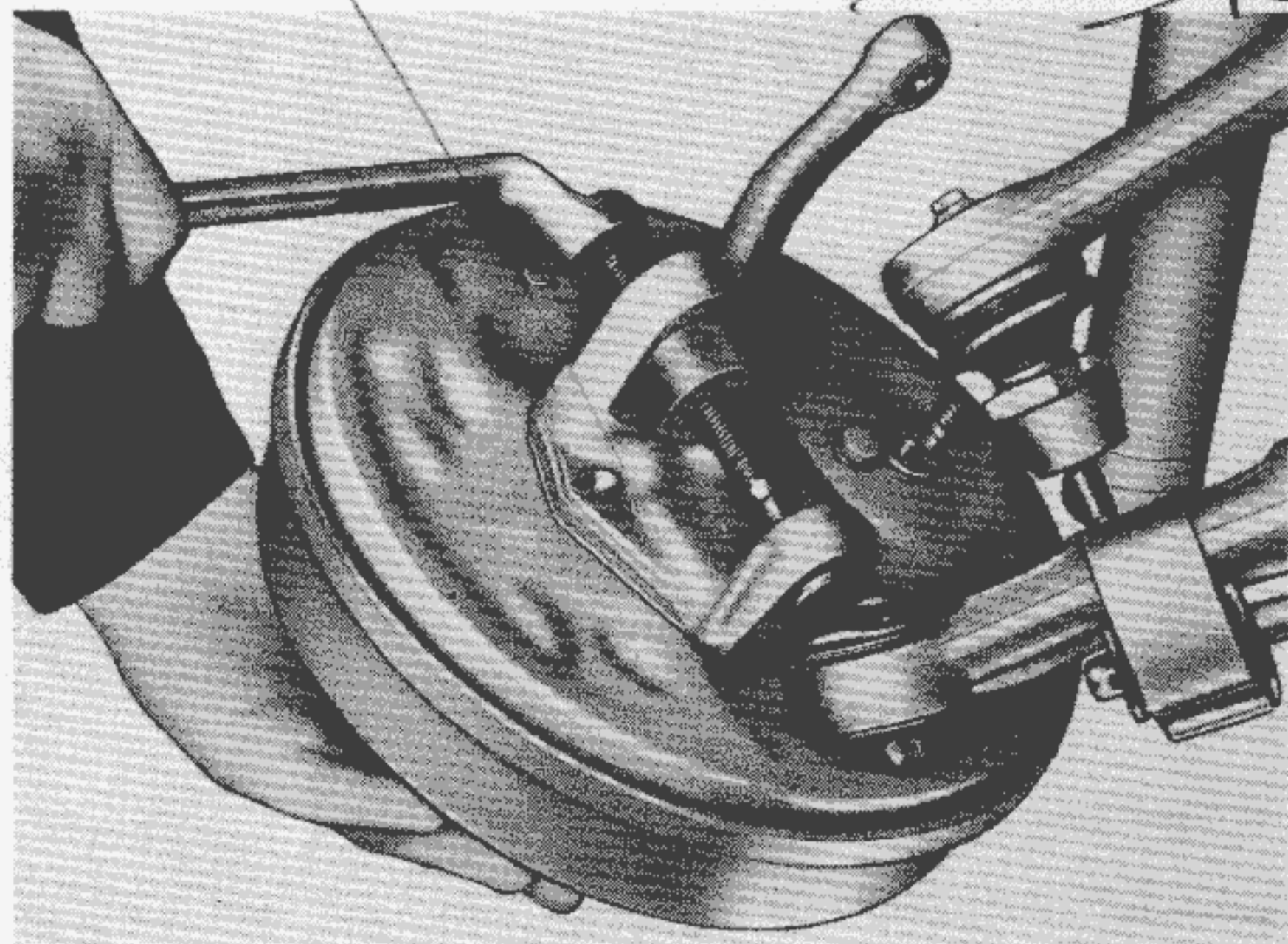


Removal Appliance for Ball Joint, lower Type 1

JUL 25 1966

With this appliance the lower ball joint can be pressed out of the steering knuckle. First the upper ball joint must be removed. The head of the bolt must be inserted in the top bore of the steering knuckle from underneath and then adjust the appliance so the pointed end of the bolt engages in the central boring of the lower ball joint pin.

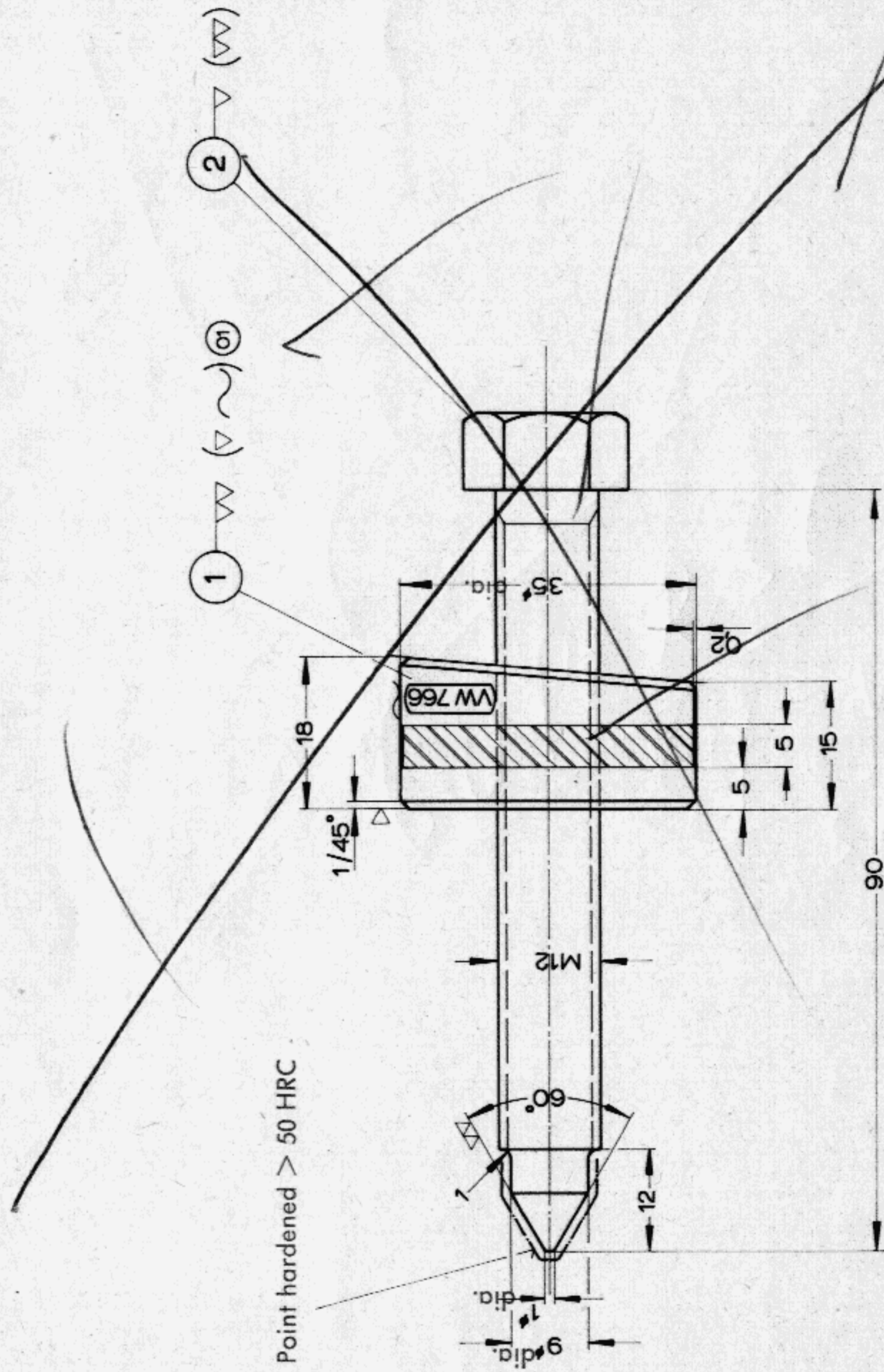
~~SUPERSEDED~~
VW 267
SEE SERVICE LETTER T-208
TK



USE VW 267
as per # T-208

Construction Details for VW 766

- 1 — Turn part 1 and cut M 12 thread.
- 2 — Taper part 1.
- 3 — Paint part 1 dark green (RAL 6011) except contact surface.
- 4 — Rework point on part 2 and harden.



When no limit is given tolerance
 ± 0.25 ; $\pm 30'$ applies

Colour identification marks

- (01) orange RAL 2004
- (02) blue RAL 5015
- (03) violet RAL 4003
- (04) green RAL 6018

black RAL 9005

Surfaces in given colours
 (synthetic resin) shown thus



VOLKSWAGENWERK AG
WOLFSBURG
 Service Department

Drawn: 17.5.65 Giesekeing
 Checked: 19.5.65 Ratte

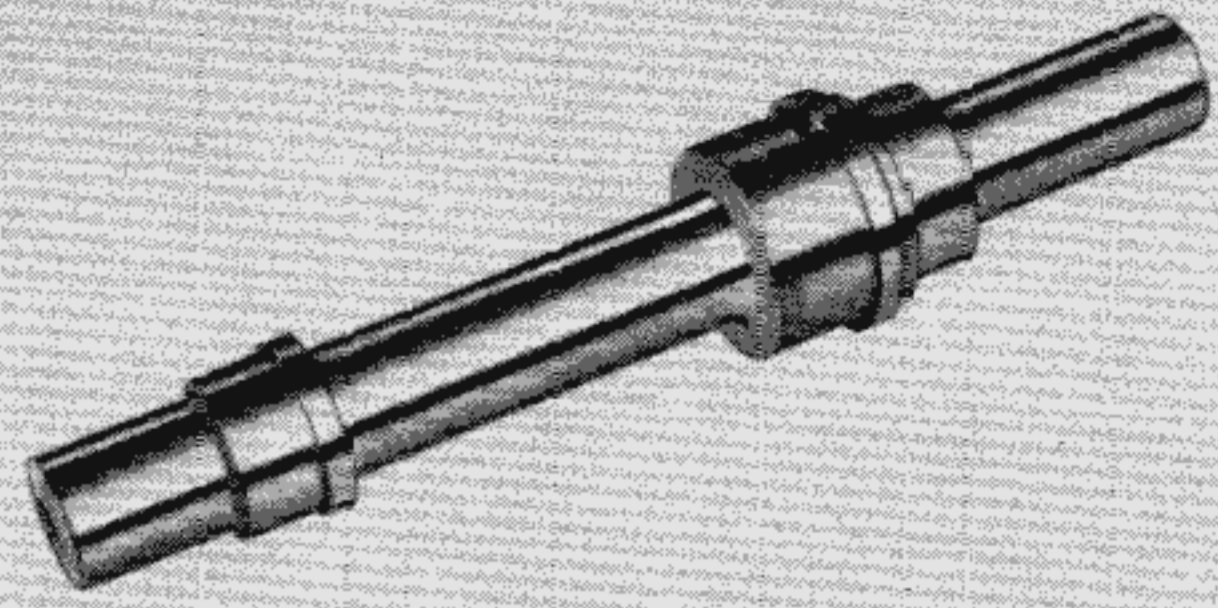
Hex bolt	B M 12 X 90	2	DIN 913	Rework
quantity	Rd 35 dia. X 20	1	C 15	
Description	Part	Material	Rough size or standard spec.	Remark
Removal Appliance for Ball Joint, Lower				
VW 766				

cc: M.K.
E.L.

E. Kahlke
Nov. 30/65

VW 767

DEC 10 1965



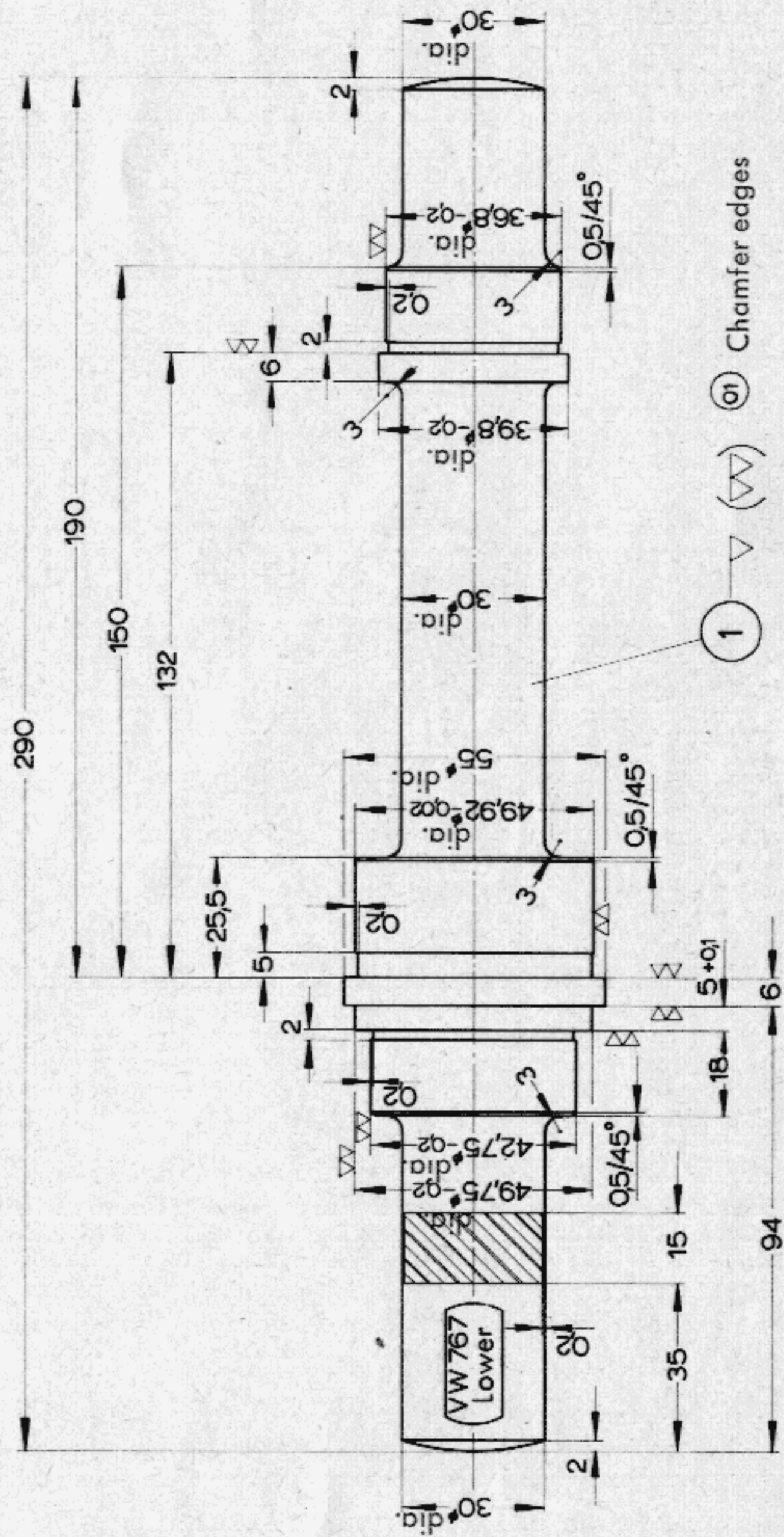
Drift for DU Bearings
and Needle Bearing, Lower
Type 1

The lower DU and needle bearings are driven into the front axle tubes with this drift. One end of the drift is for the DU bearing the other end being used for the needle bearing. The drift is provided with a shoulder which acts as a limit gauge thus ensuring that the bearing is installed and driven in up to the specified limit.



Construction Details for VW 767

- 1 — Turn down part.
- 2 — Blacken with oil.



Colour identification marks

- (01) orange RAL 2004
- (02) blue RAL 5015
- (03) violet RAL 4003
- (04) green RAL 6018

- (05) black RAL 9005

Surfaces in given colours
(synthetic resin) shown thus

When no limit is given tolerance
± 0.25; ± 30' applies

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

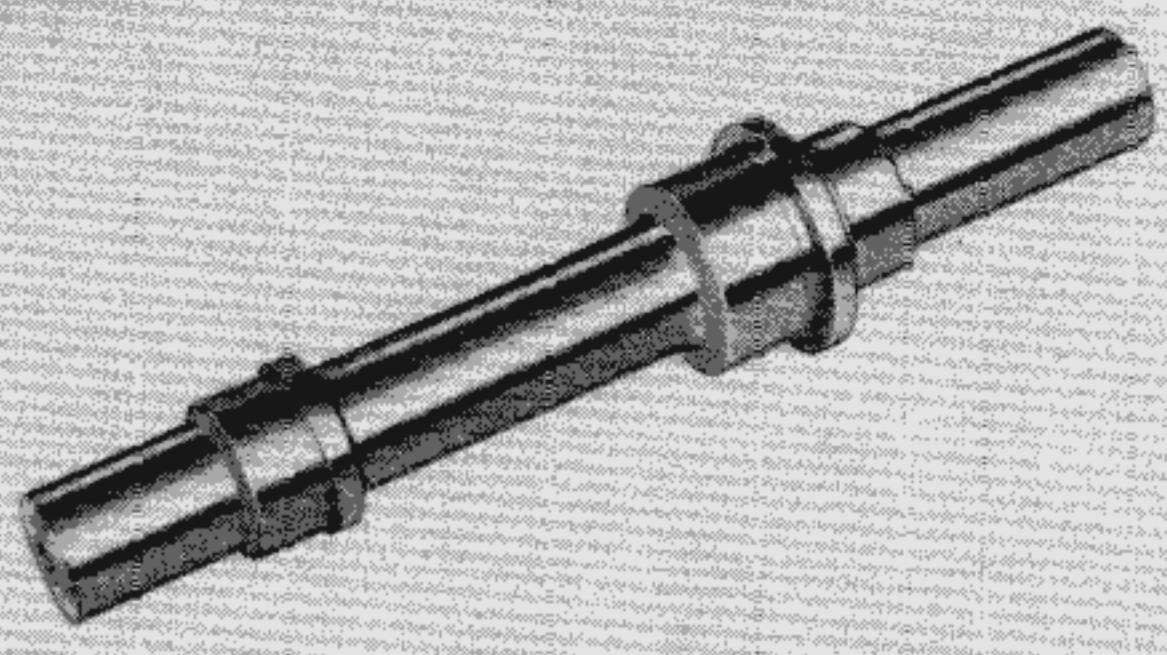
Drawn: 11. 5. 65 Giesecking
Checked: 12. 5. 65 Ratte

quantity	Description	Part	Material
1	Rd 60 X 295		C. 45
Drift for DU Bearings and Needle Bearing, lower			
VW 767			

DEC 1 0 1965

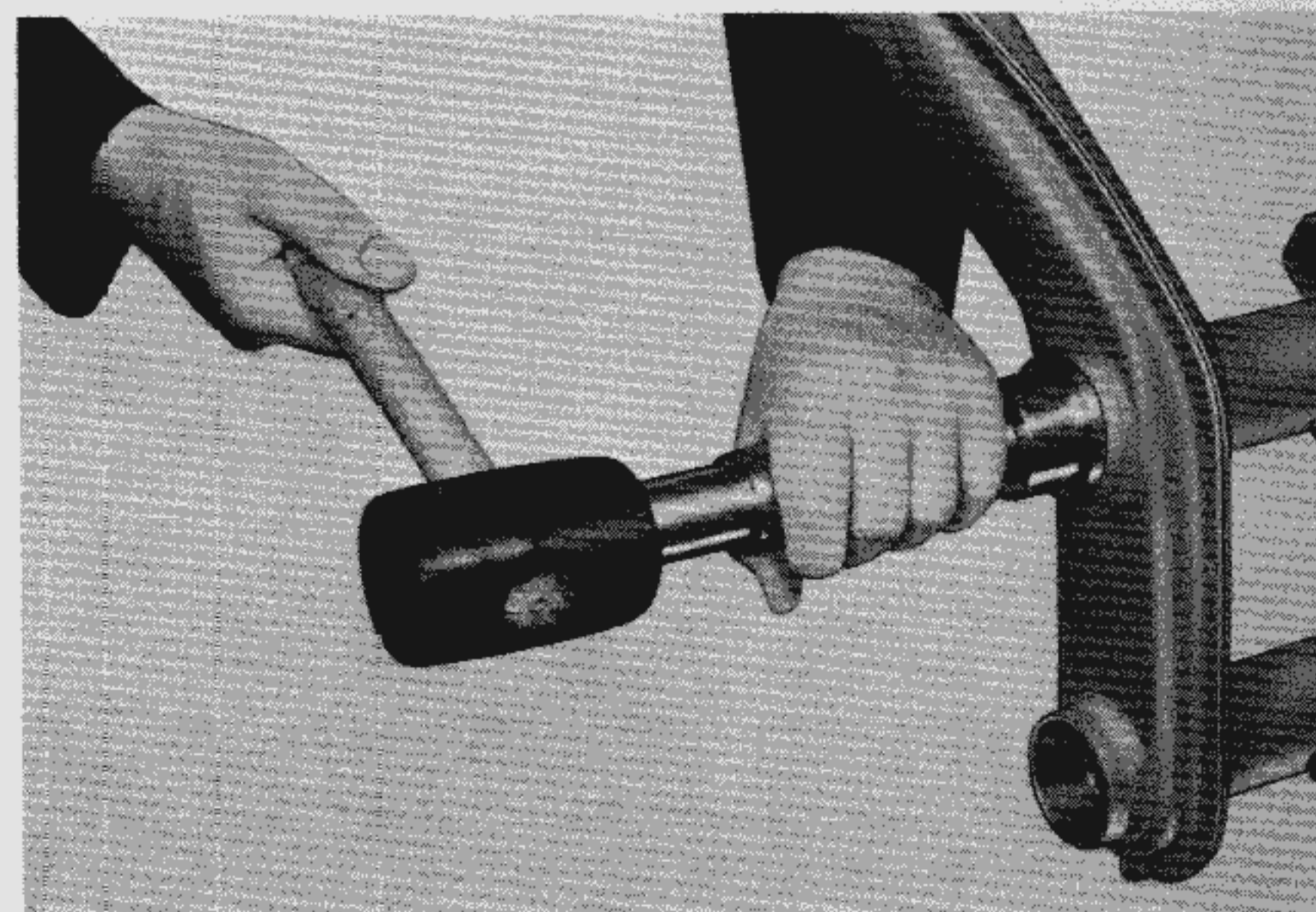
VW 768

LOCAL MANUFACTURE OF WORKSHOP EQUIPMENT



Drift for DU Bearings and Needle Bearing, Upper Type 1

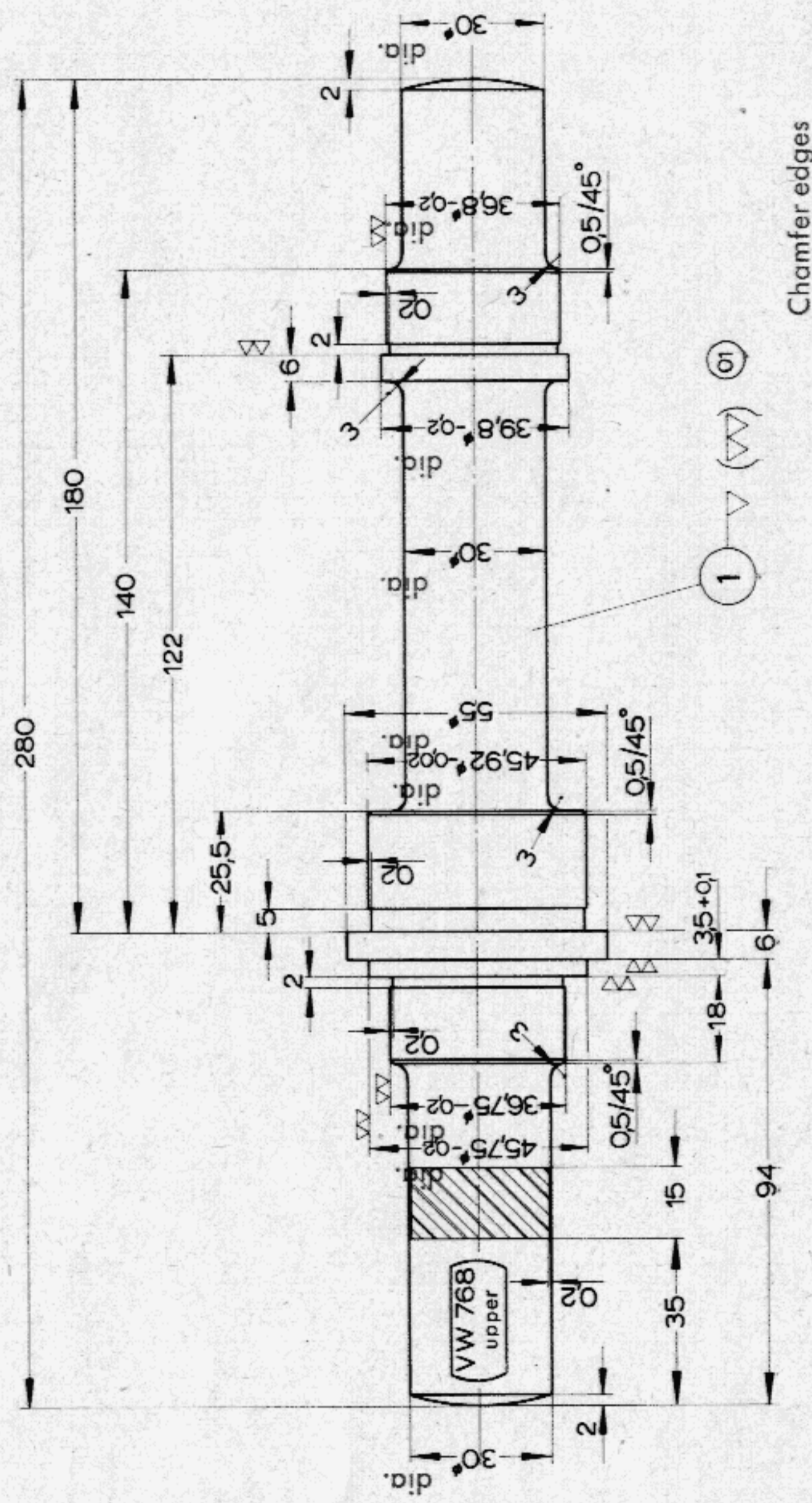
The lower DU and needle bearings are driven into the front axles tubes with this drift. One end of the drift is for the DU bearing the other end being used for the needle bearing. The drift is provided with a shoulder which acts as a limit gauge thus ensuring that the bearing is installed and driven in up to the specified limit.



Construction Details for VW 768

1 — Turn down port.

2 — Blacken with oil.



Chamfer edges

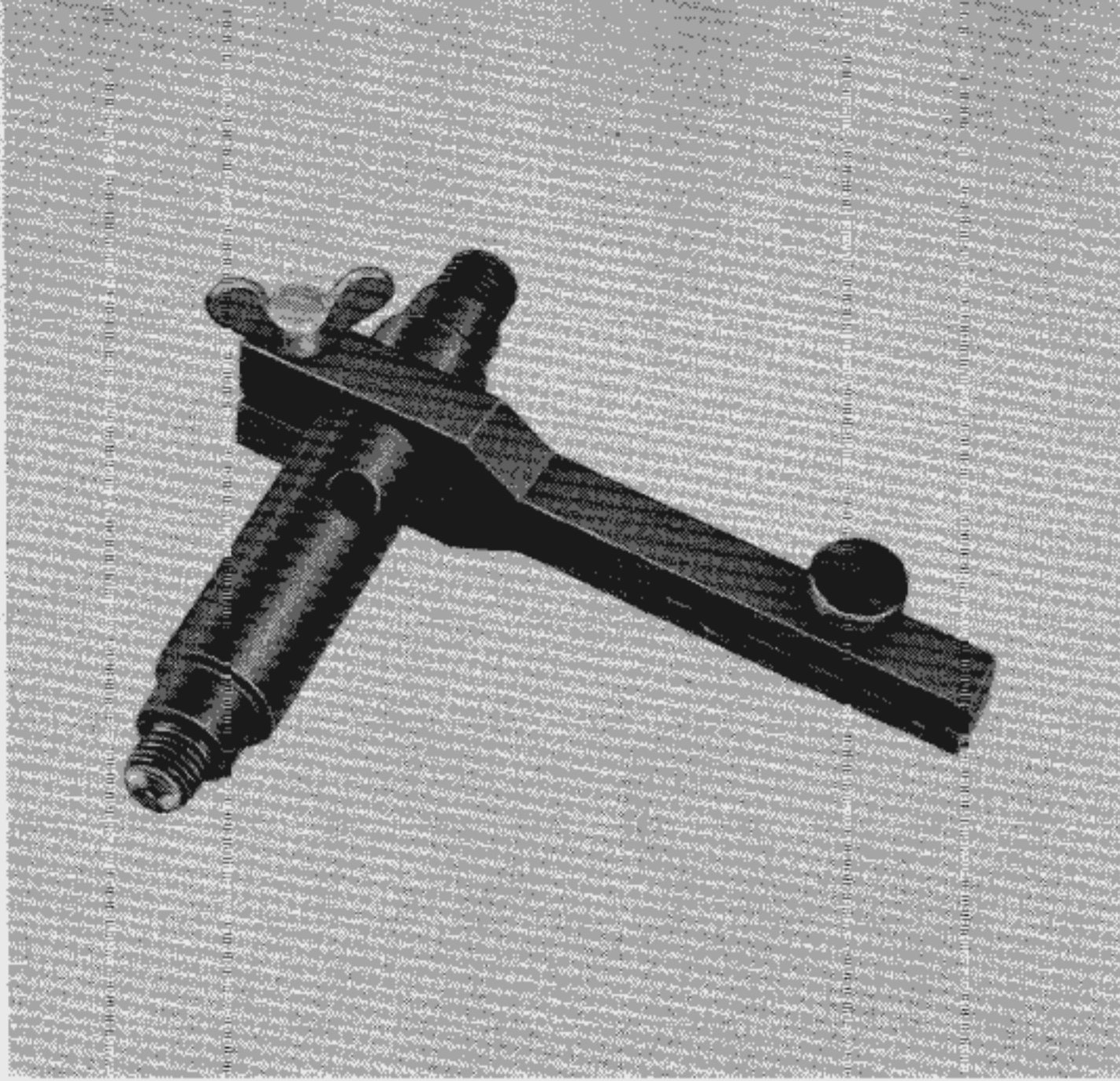
Colour identification marks

- (01) orange RAL 2004
- (02) blue RAL 5015
- (03) violet RAL 4003
- (04) green RAL 6018
- (05) black RAL 9005
- (06) Surfaces in given colours (synthetic resin) shown thus

When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies

Part No. No. required	Description	Material
1	Drift for DU Bearings and Needle Bearing, upper	

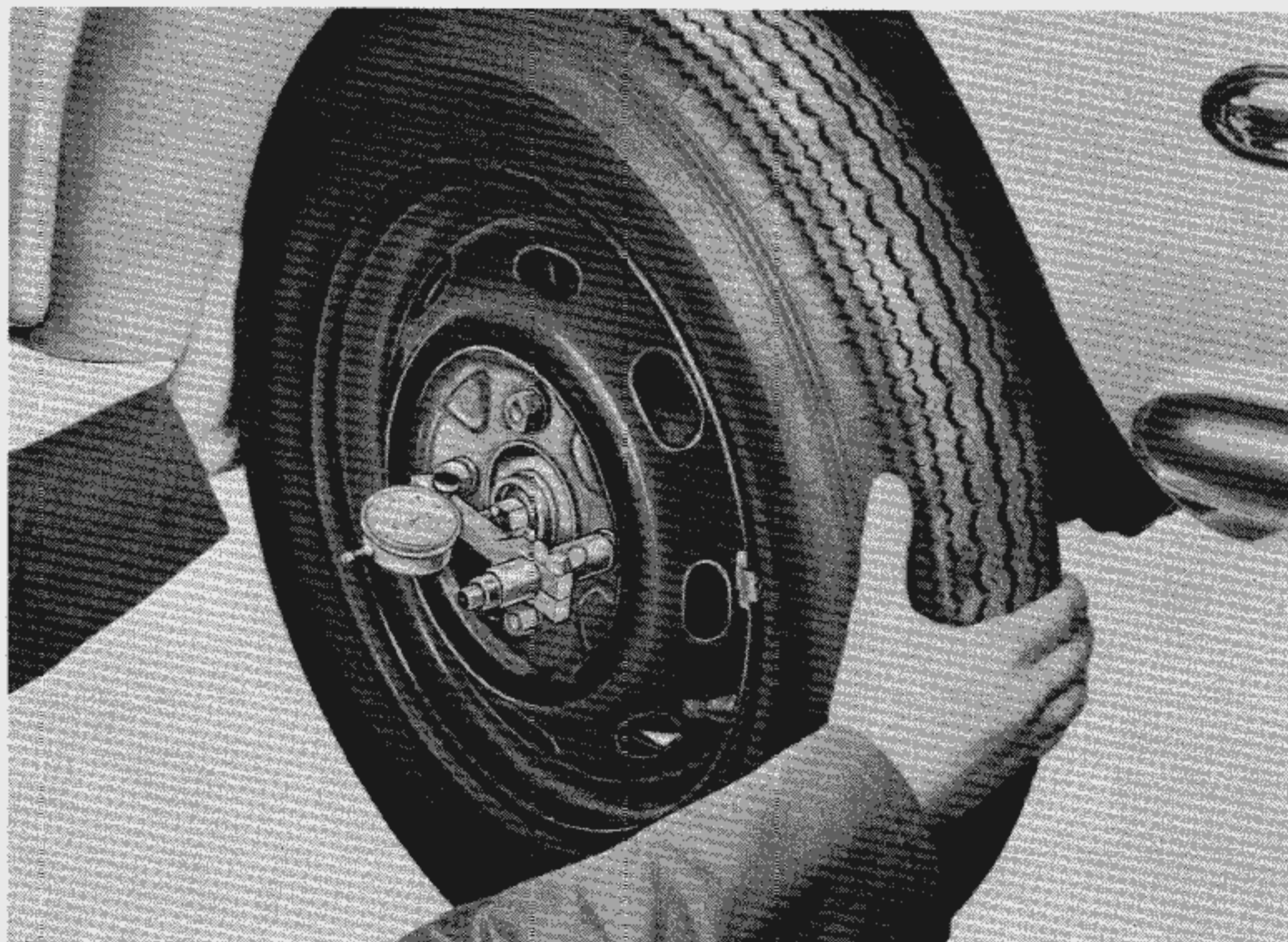
VOLKSWAGENWERK AG WOLFSBURG Service Department		Checked: 12. 5. 65 Ratte
Drawn: 11. 5. 65 Giesecking		VW 768



DEC 10 1965 VW 769

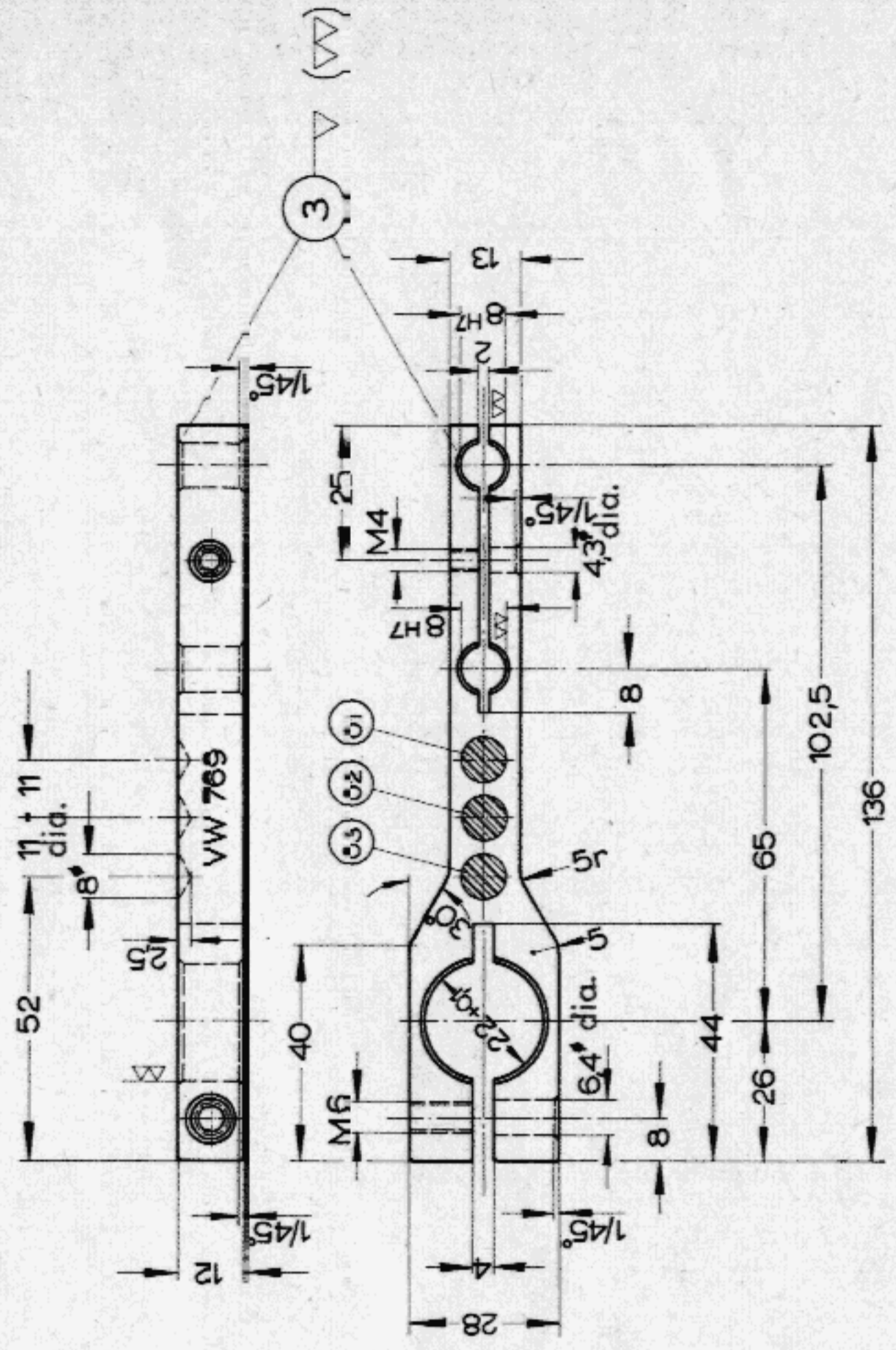
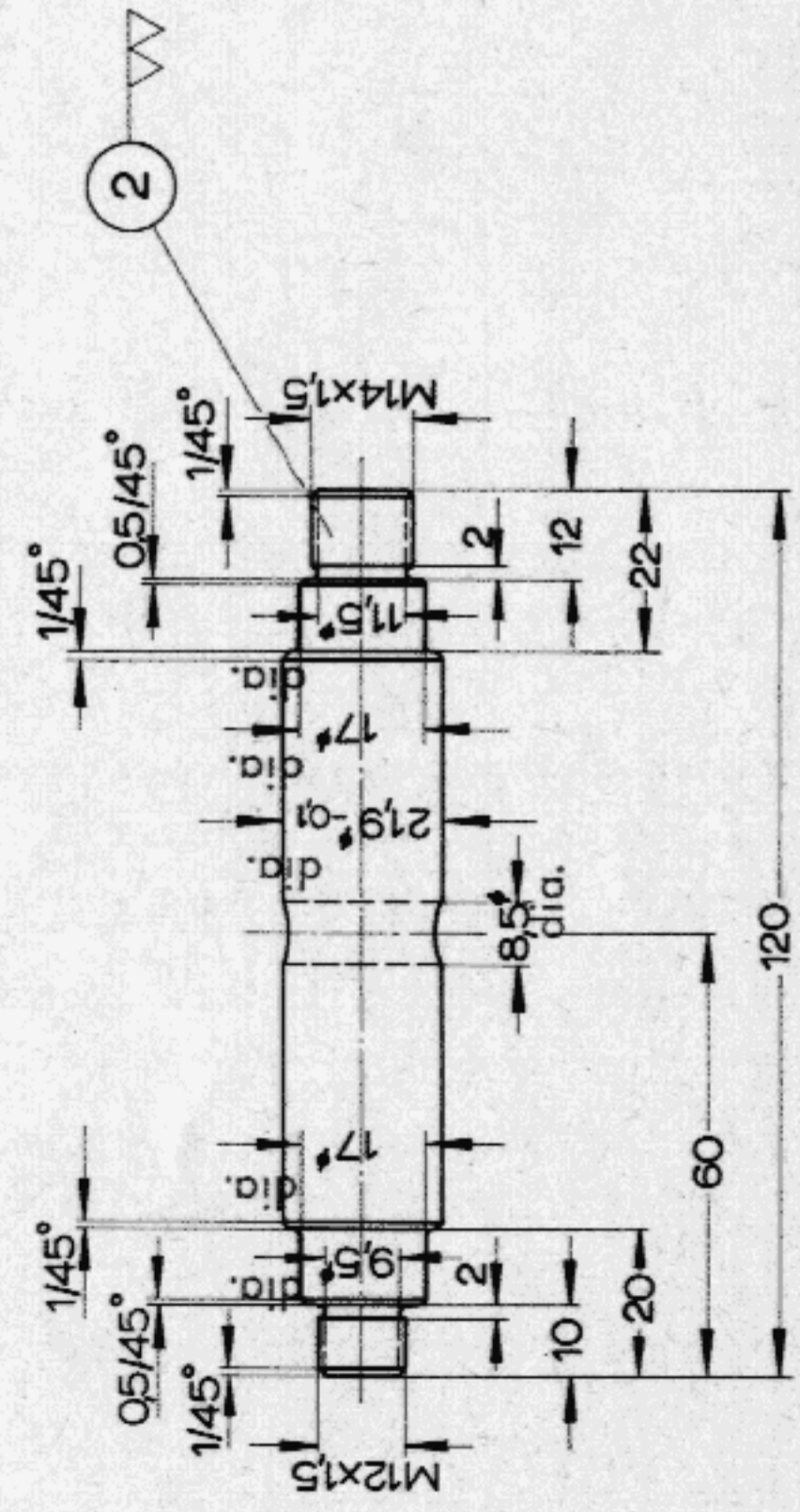
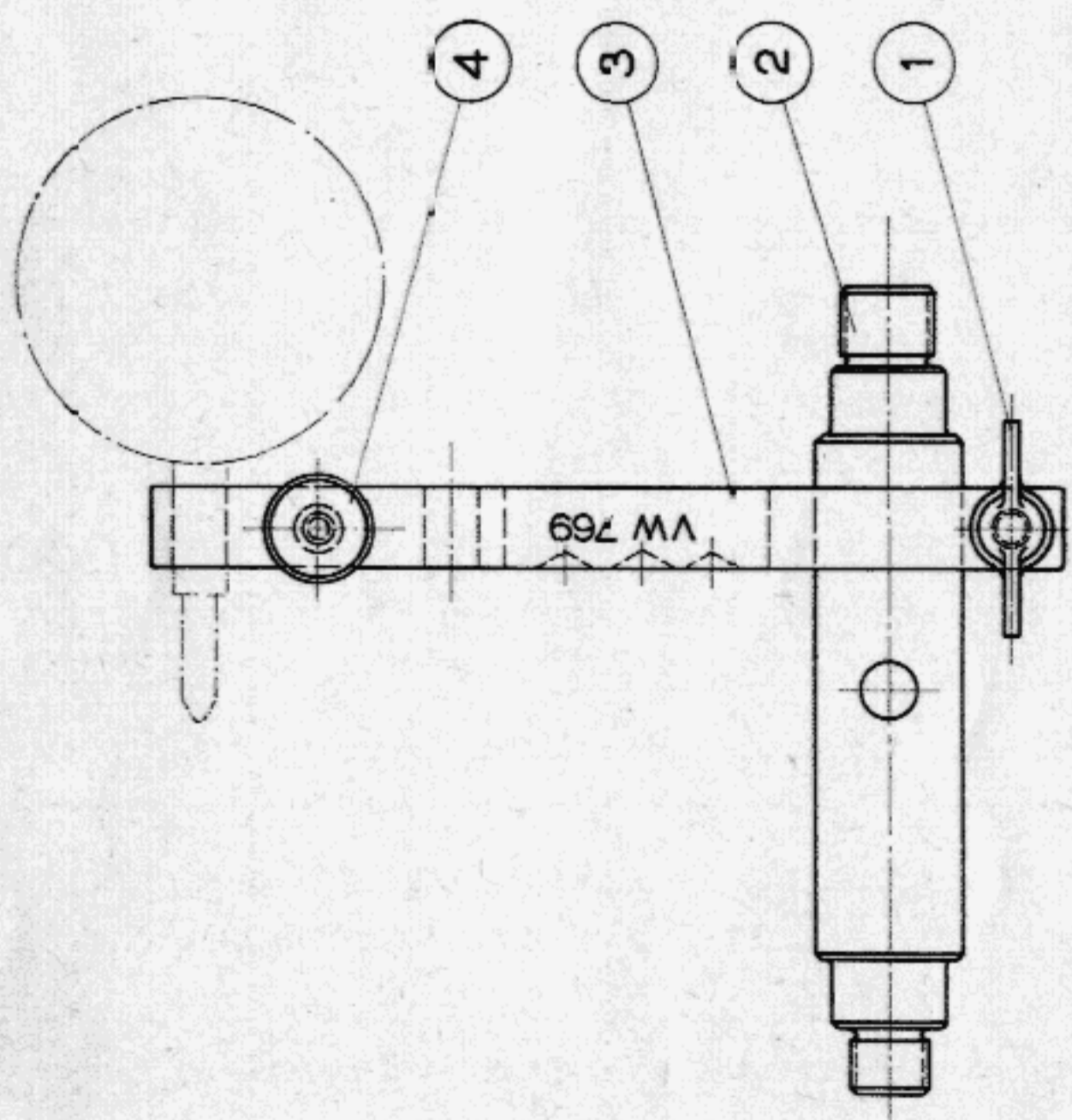
Dial Gauge Bracket for Use When Adjusting Wheel Bearing Play Types 1, 2 and 3

The dial gauge bracket is used in conjunction a dial gauge when adjusting the front wheel bearing play. The threaded end of the bracket is screwed into the wheel in place of the wheel bolt. The bracket is then set so that the feeler pin of the dial gauge touches the hexagonal nut or the clamp nut. If the wheel is moved backward and forwards in the axial direction, the play in the front wheel bearing can be read off the dial gauge.



Construction Details for YW 769

- 1 — Cut parts 2 and 3 and have standard parts to hand.
- 2 — Mark out the outside shape of part 3, centre punch and rework.
- 3 — Mark out drillings and clamping slot and centre punch.
- 4 — Drill 7.8 mm holes and ream up to 8 H7.
- 5 — Drill 22 mm hole and countersink 8 mm holes.
- 6 — Drill holes for M 4 and M 6 threads.
- 7 — Cut out 2 mm and 4 mm clamping slots.
- 8 — Bore out one side of thread holes to 4.3 mm and 6.4 mm dia.
- 9 — Cut M 4 and M 6 threads.
- 10 — Turn down part 2, cut thread and drill 8.5 mm hole.
- 11 — Blacken the bracket in oil.



When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies

1	Knurled headed screw M 4 X 12	4	DIN 464-55
1	Fl 30 X 15 X 140	3	C 15
1	Rd 25 X 125	2	C 15
1	Wing headed screw M 6 X 25	1	DIN 316 mg 4 D

Dial Gauge Bracket for Use When Adjusting Wheel Bearing Play

VW 769

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn: 20. 5. 65 Gieseeking
Checked: 21. 5. 65 Ratte

Colour identification marks

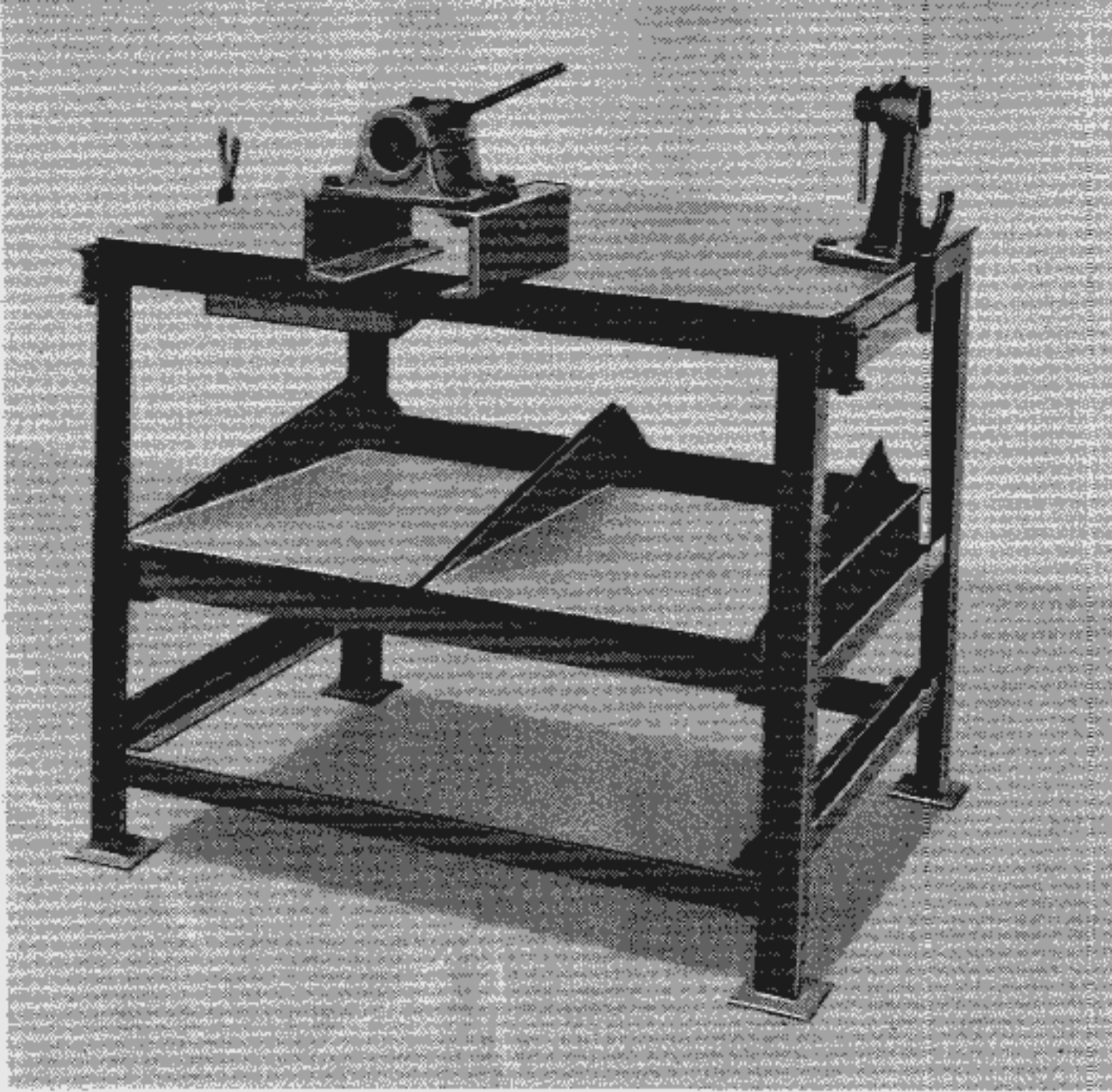
- (01) orange RAL 2004
- (02) blue RAL 5015
- (03) violet RAL 4003
- (04) green RAL 6018
- (05) black RAL 9005

Surfaces in given colours (synthetic resin) shown thus



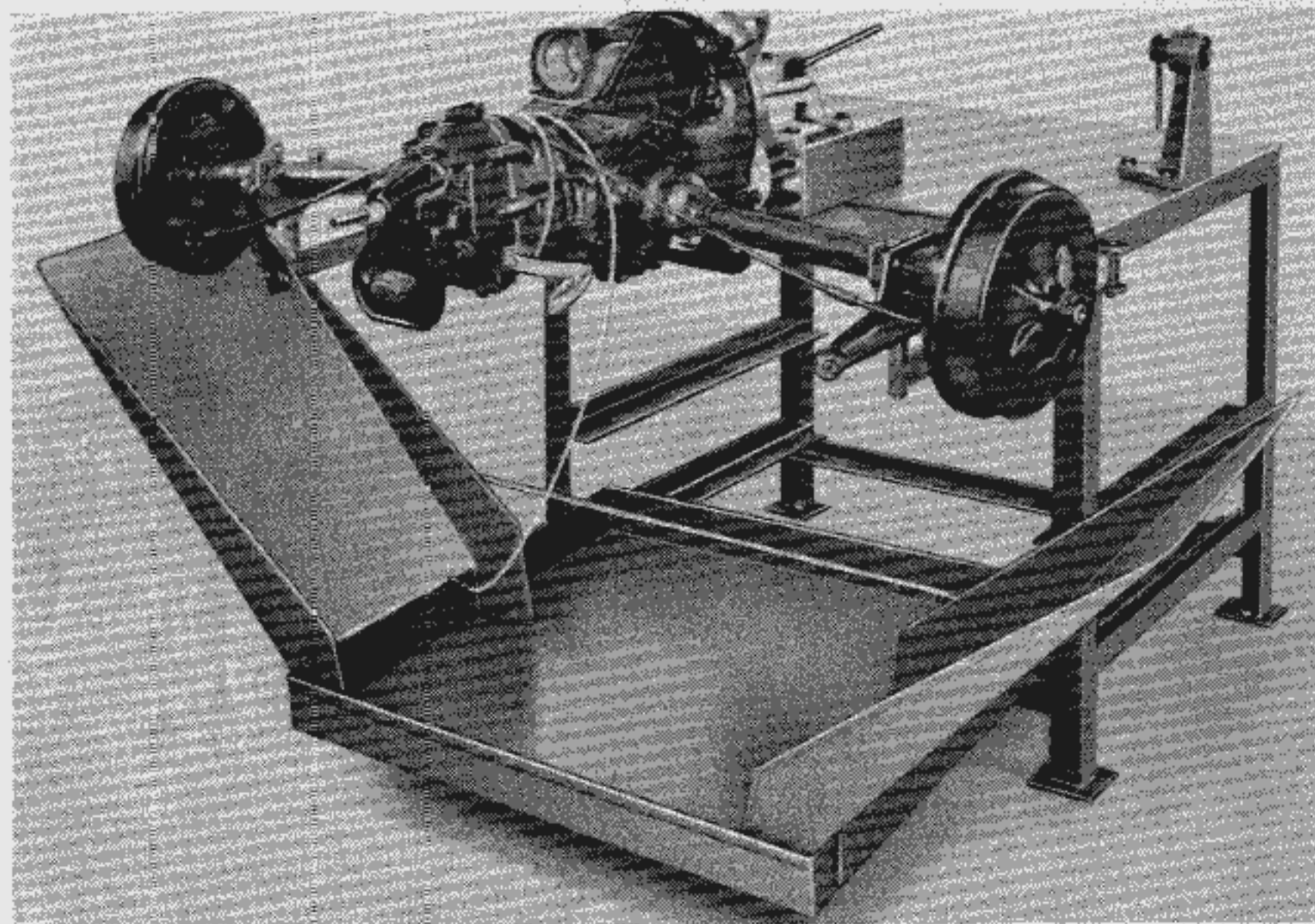
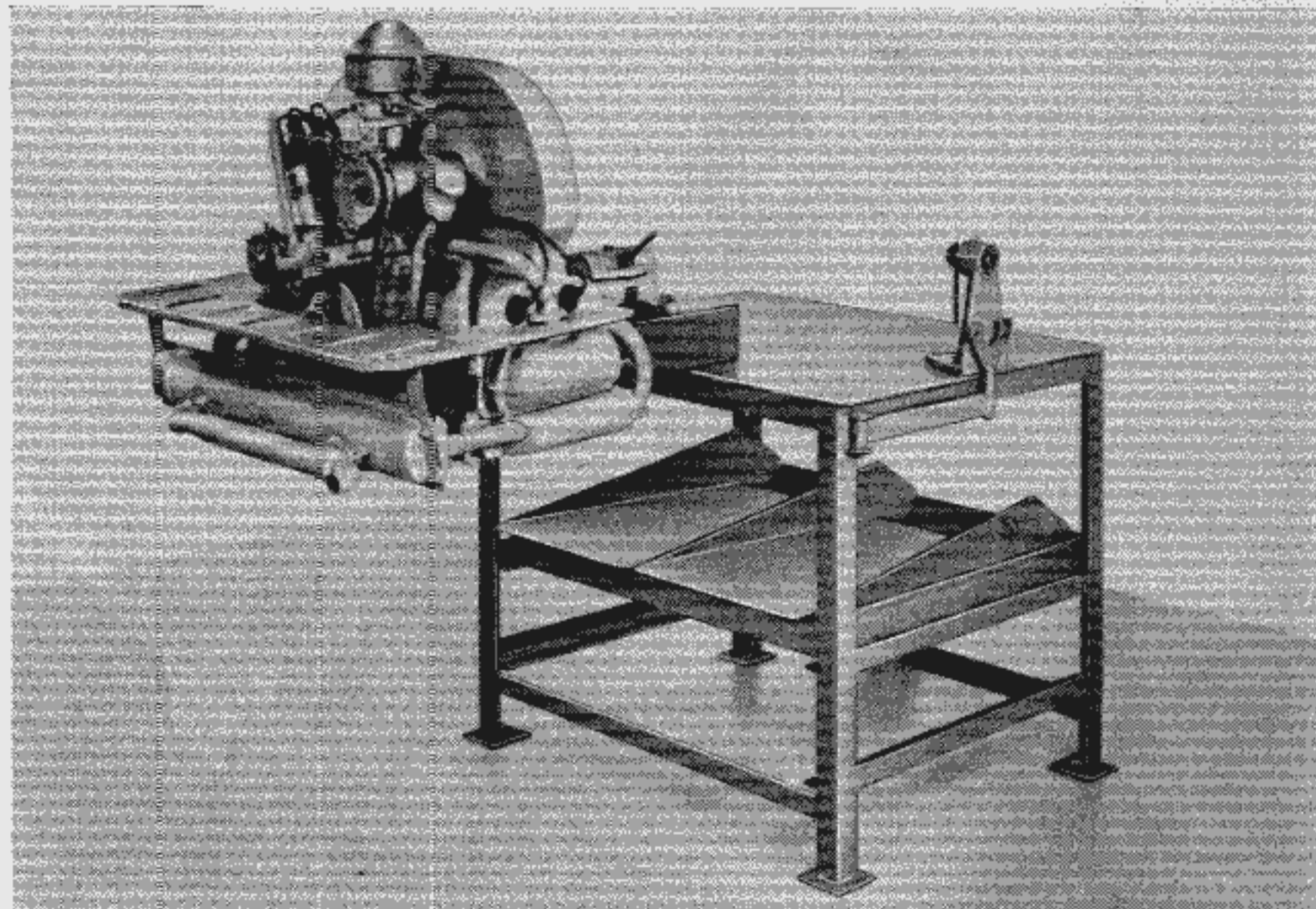
FEB 28 1966

Assembly Bench
Types 1, 2, 3, 122, 124, 126



The assembly bench is designed for holding the engine, rear axle complete with transmission and also the front axle. It is equipped with a drip tray and two oil deflector plates. In addition it has a container for the washing of parts, this is designed as a drawer. All pieces of equipment necessary for the carrying out of repairs to the units can be bolted onto the top plate of the bench. A vice can also be mounted if necessary. The bench is fastened to the floor with four bolts.

Each workshop now has the possibility of choosing between the simple assembly stand VW 643 and the more practical assembly bench.

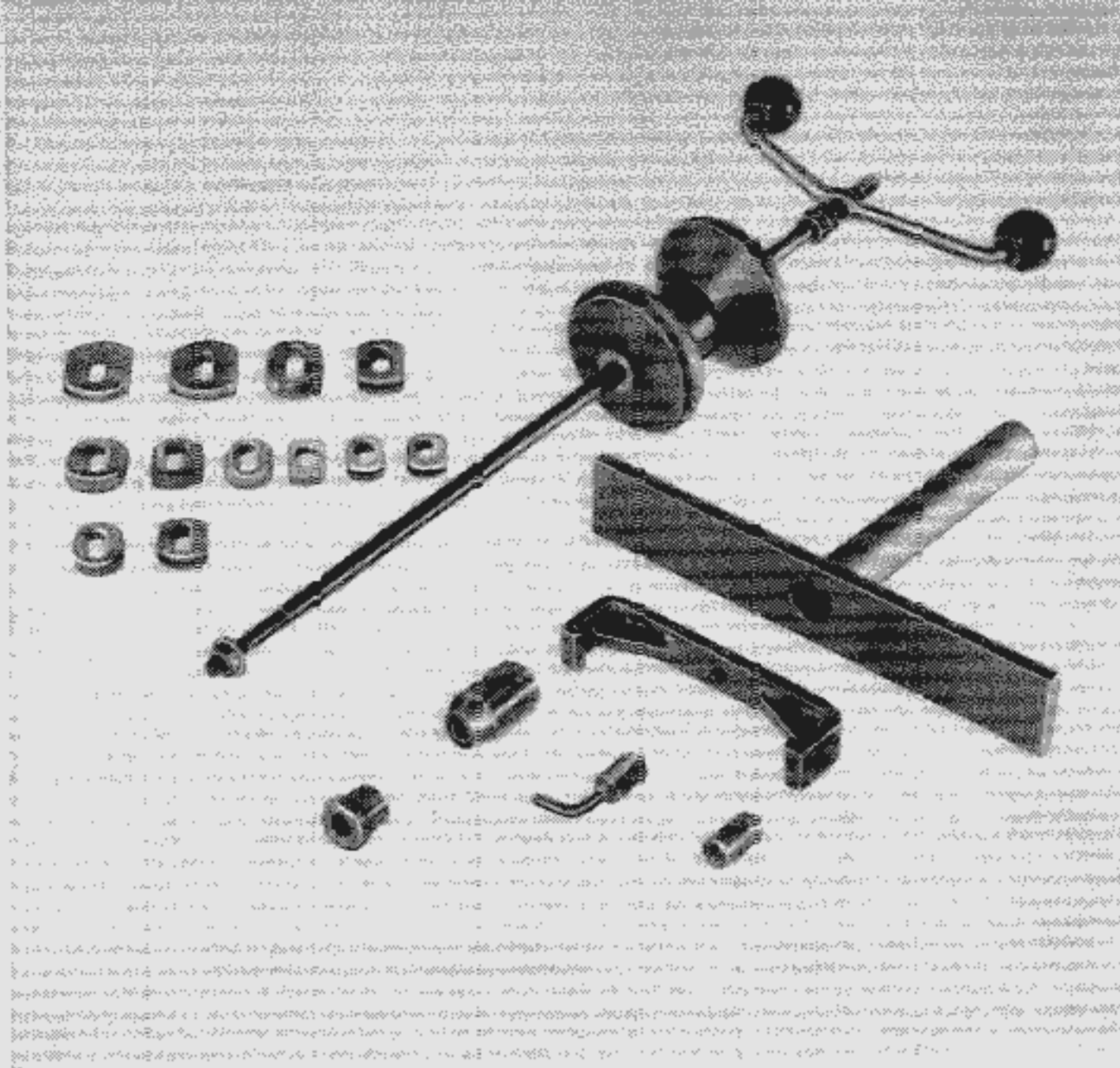


Sets of drawings for VW 770 Assembly Bench can, if required, be obtained from

Volkswagenwerk AG

318 Wolfsburg

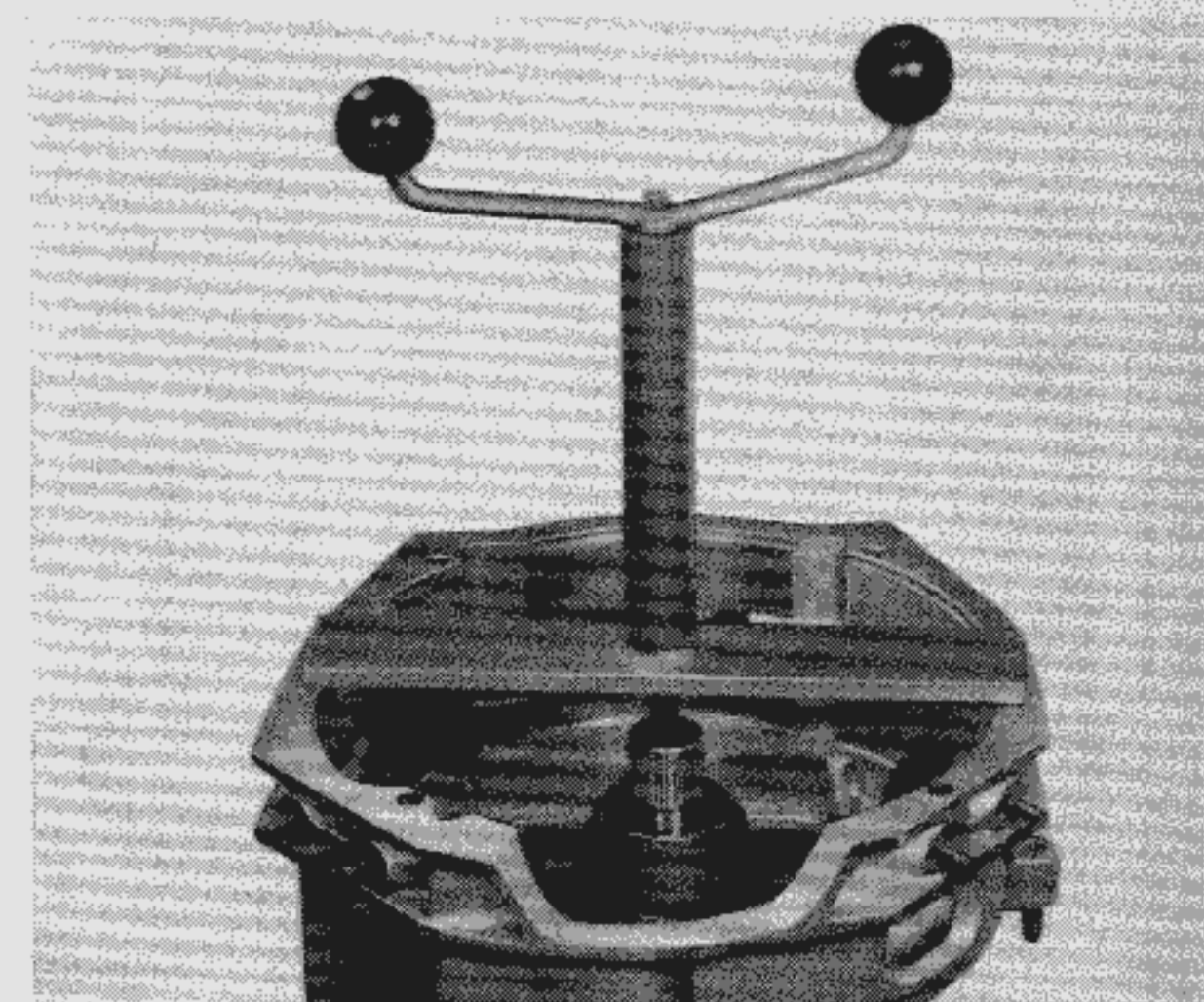
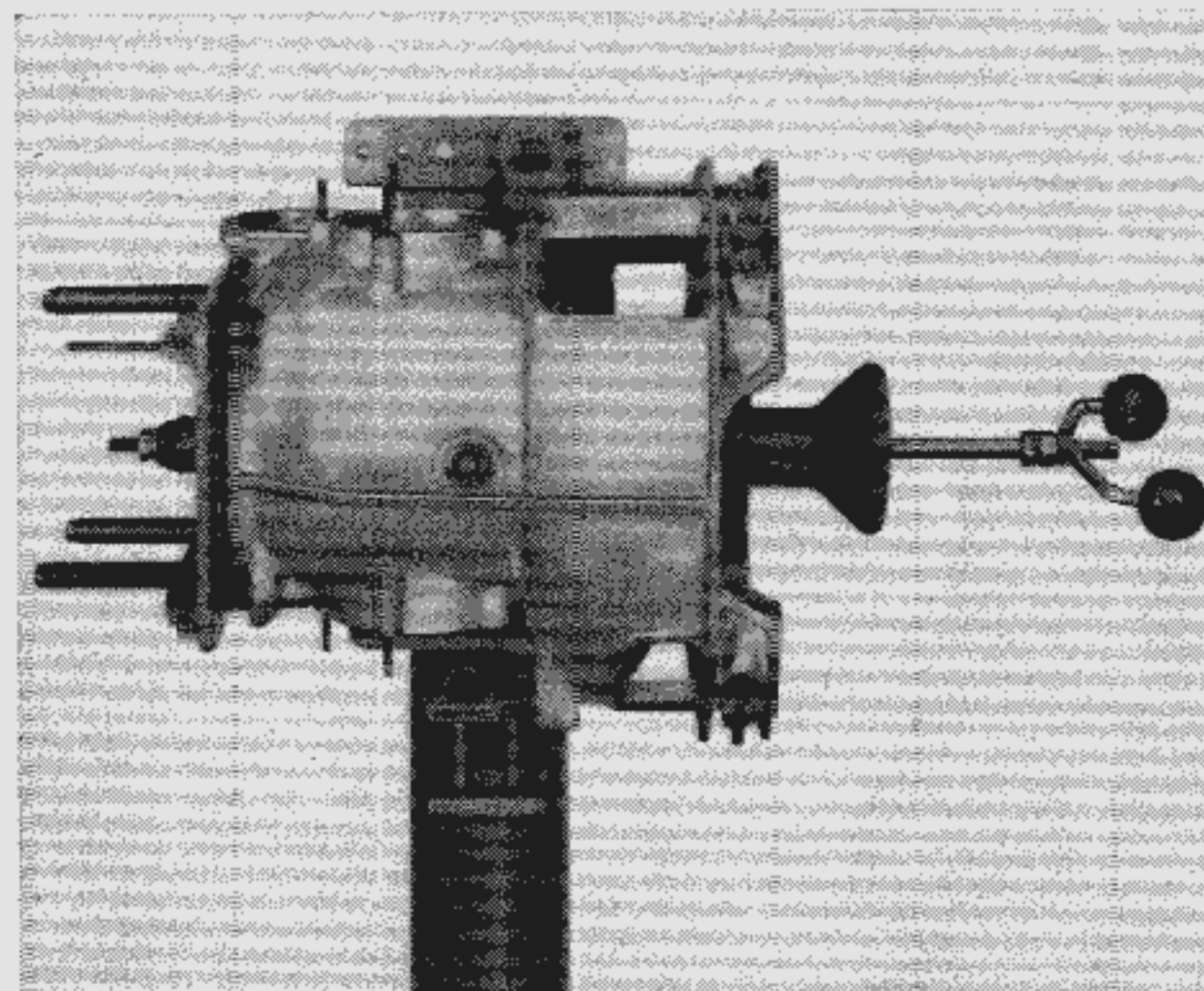
Kundendienst — Technische Abteilung.

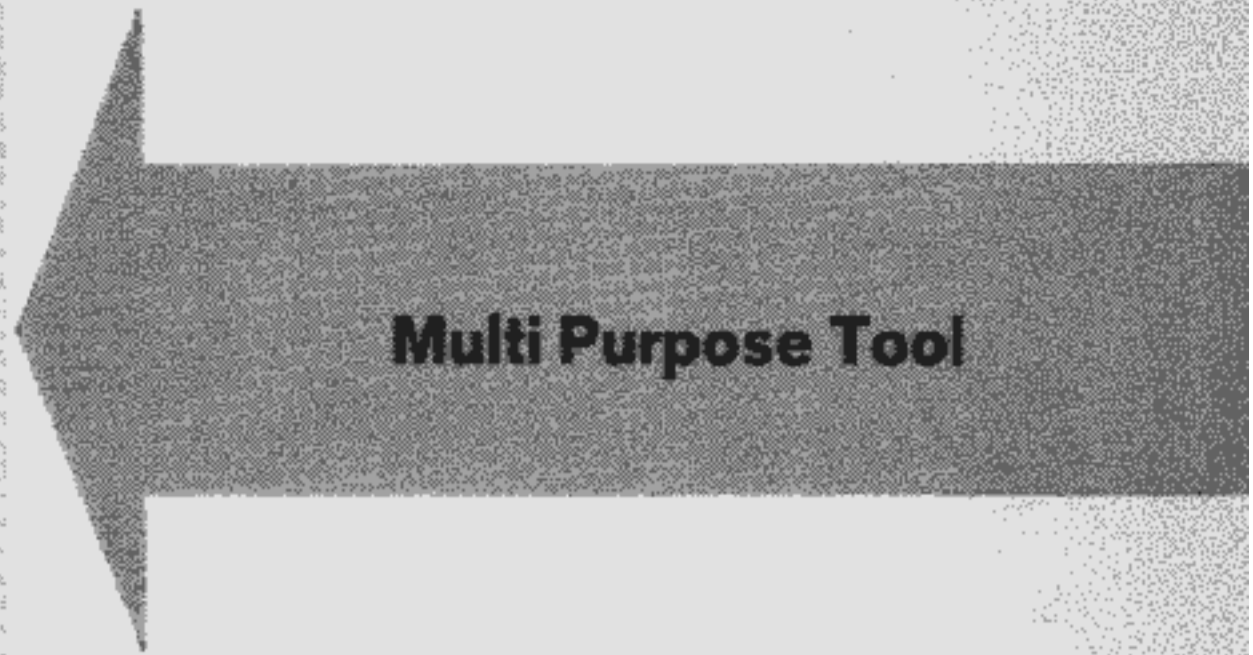
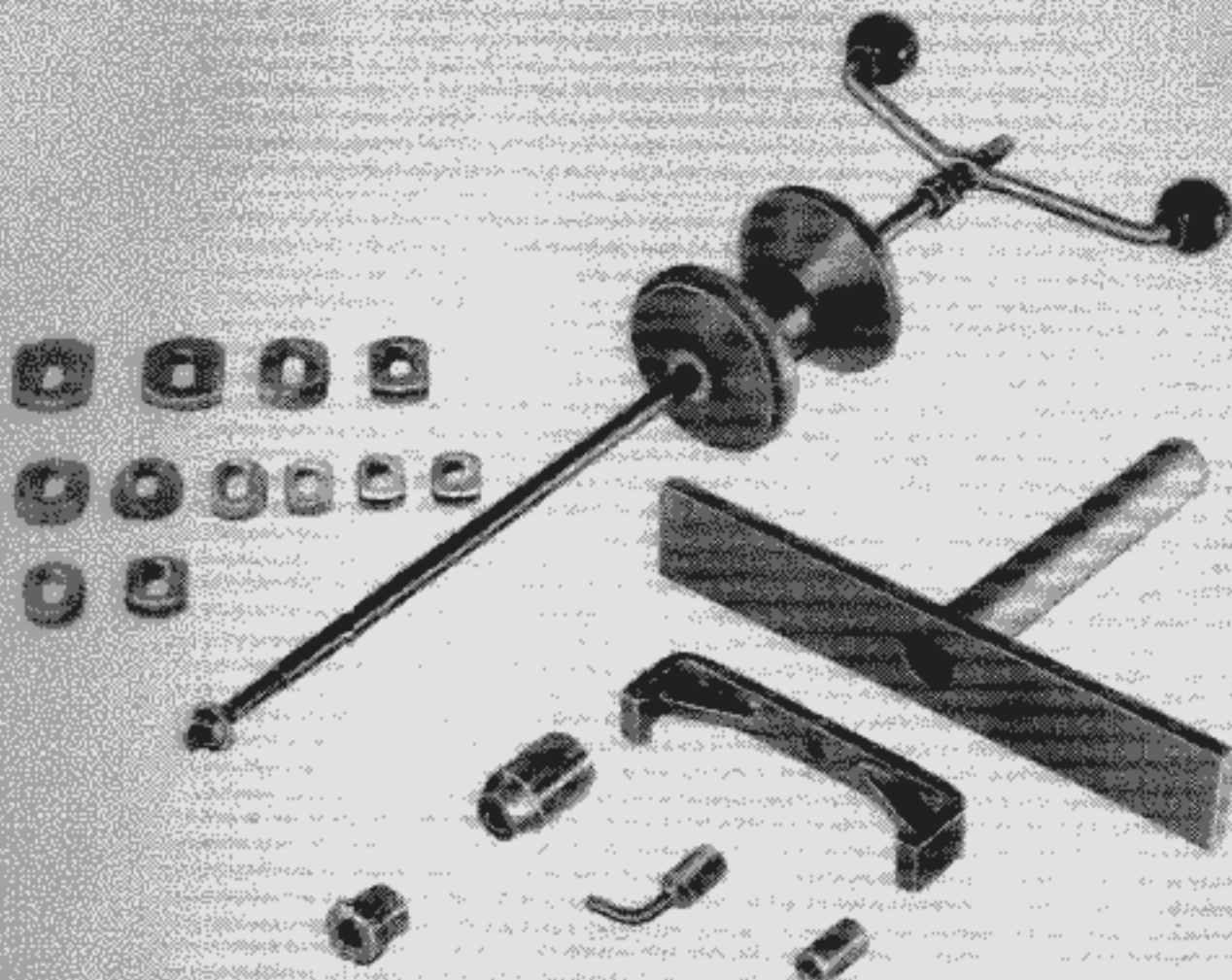


Reference: VW 771

The previous tools VW 638 and VW 639 have been replaced by the multi-purpose tool VW 771. The following points should therefore be noted.

- 1 — The contact plates 21/1, 21/4, 21/10, 21/11 and 21/12 have been added.
- 2 — The contact plates 21/10 and 21/11 replace the star piece, part 6 on page 3 and part 1 on page 4 of the VW 639 tool.
- 3 — The contact plates 2, 3 and 7 from VW 639 have not been altered and can be — except for the identification marks — taken over for VW 771.
- 4 — The contact plates 2, 3, 5 and 6 from VW 638 have not been altered except for the 6.5 mm elongated hole. They are to be provided with a 10.5 mm long elongated hole as shown in drawing VW 771 page 5.
- 5 — The markings of all contact plates must be in accordance with drawing VW 771. The previous markings of VW 638 and VW 639 are no longer valid.
- 6 — Other identification markings in old Workshop Manuals are to be altered where necessary to bring them in line with the table on the reverse side of VW 771.





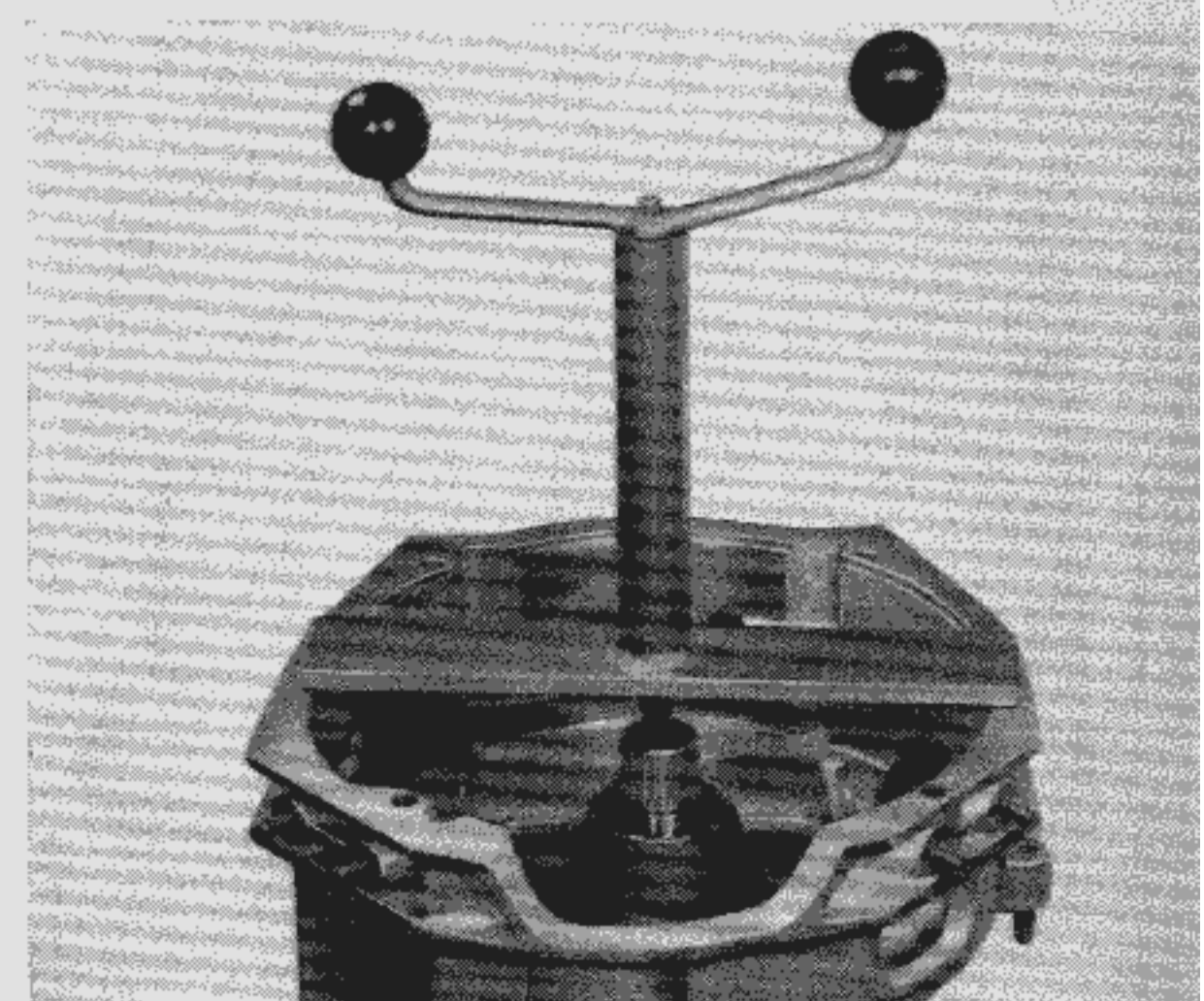
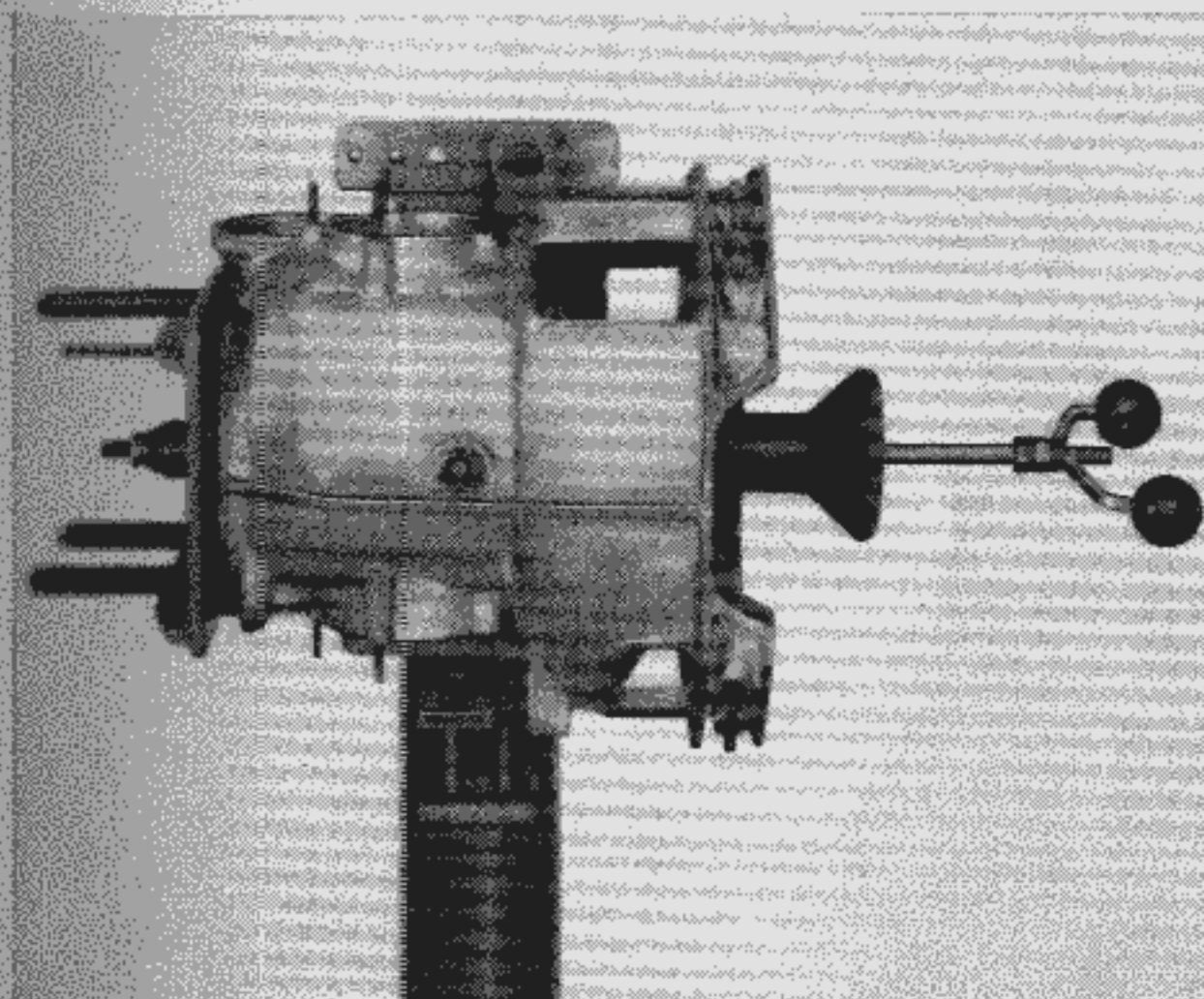
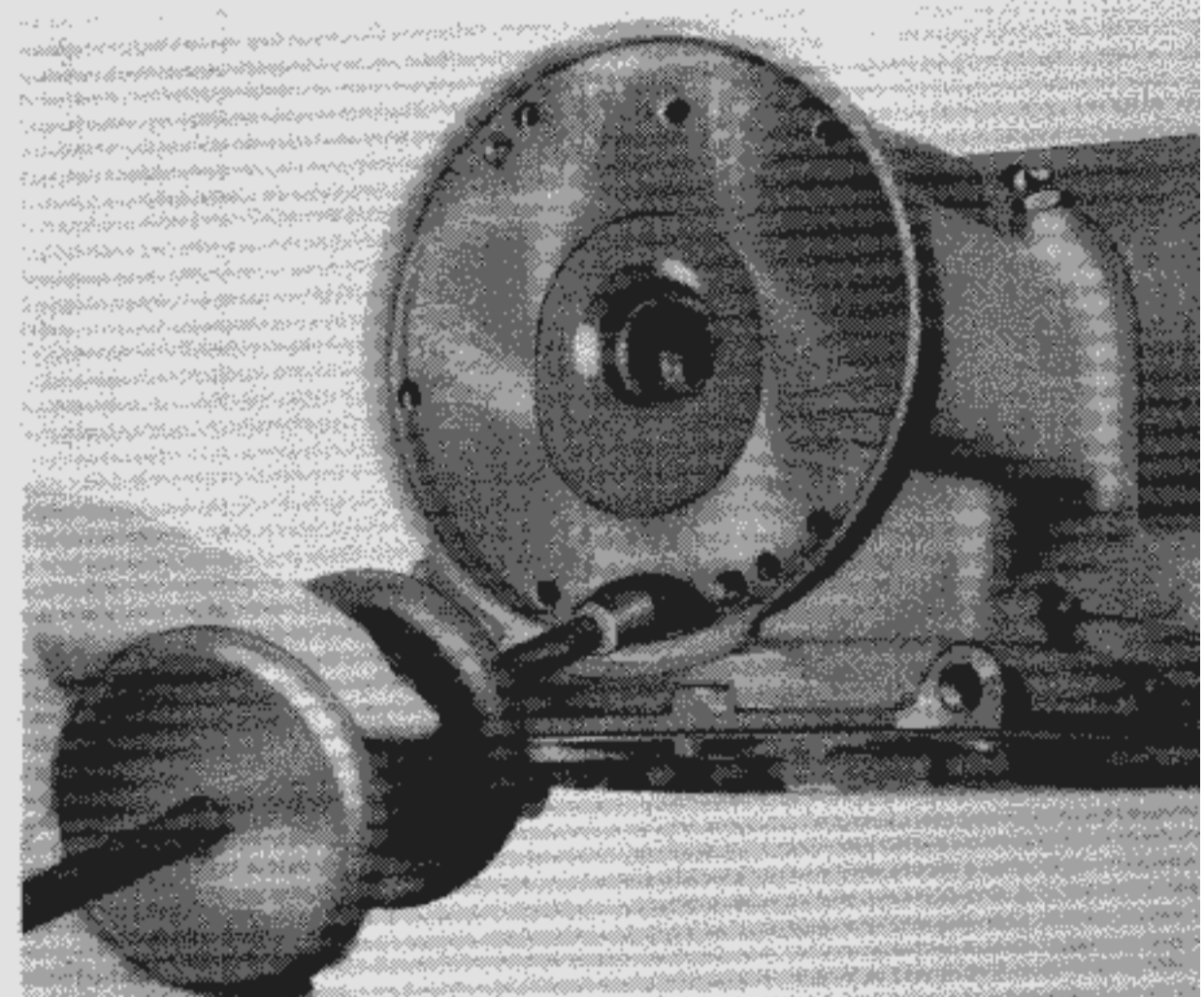
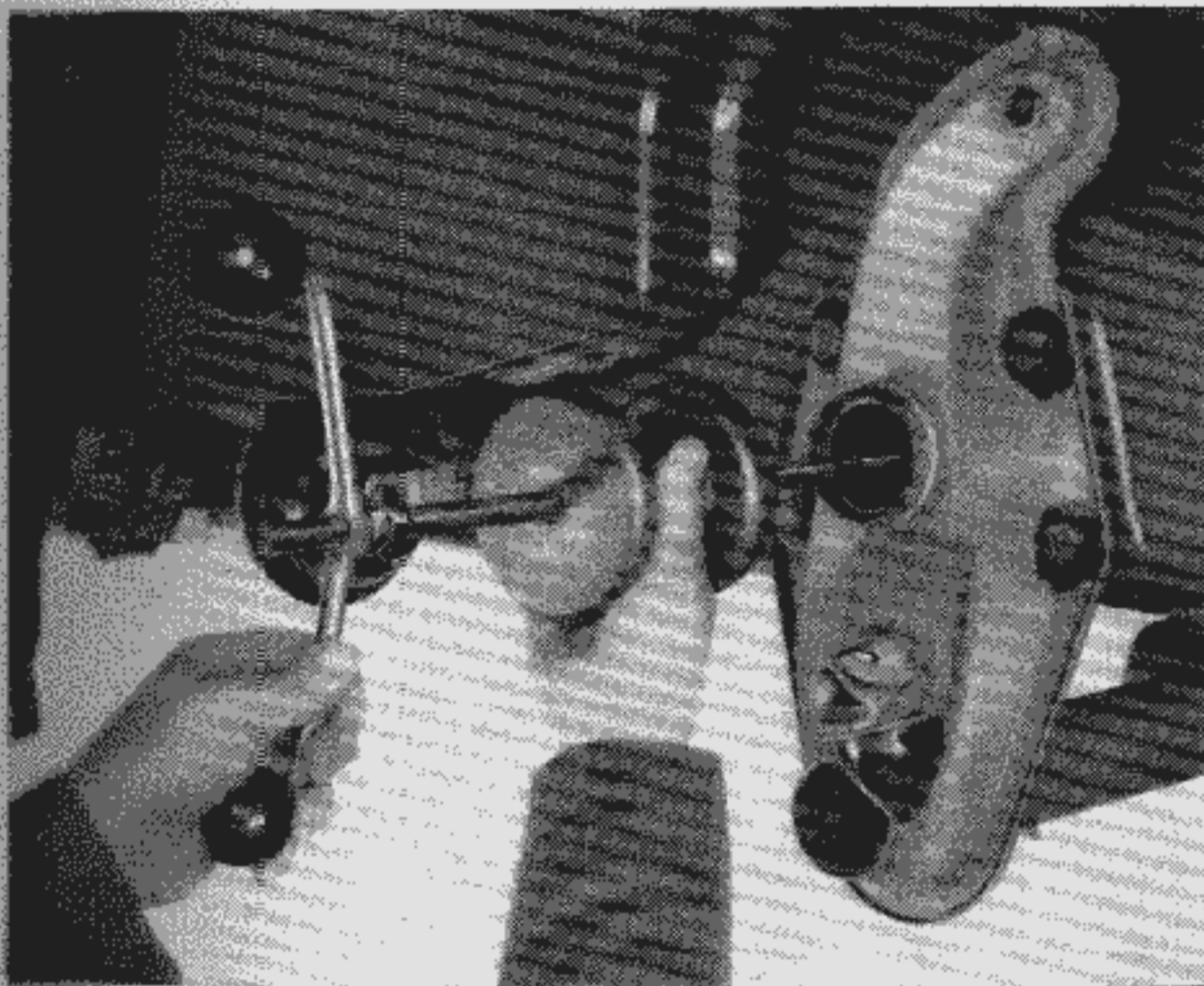
The multi purpose tool together with the additional parts, as shown in above illustration, is required for various repair operations. How the tool is used, is shown in part in the lower illustrations. All the possible applications are described in detail in the Workshop Manual.

On the reverse side of this page is a table, which shows, which contact plates and drifts have to be used for the various VW Automobiles. For this reason, it is absolutely necessary, that the plates are marked with the part numbers laid down in the drawing.

The same applies for parts 6, 10, 13, 14, 15 and 16.

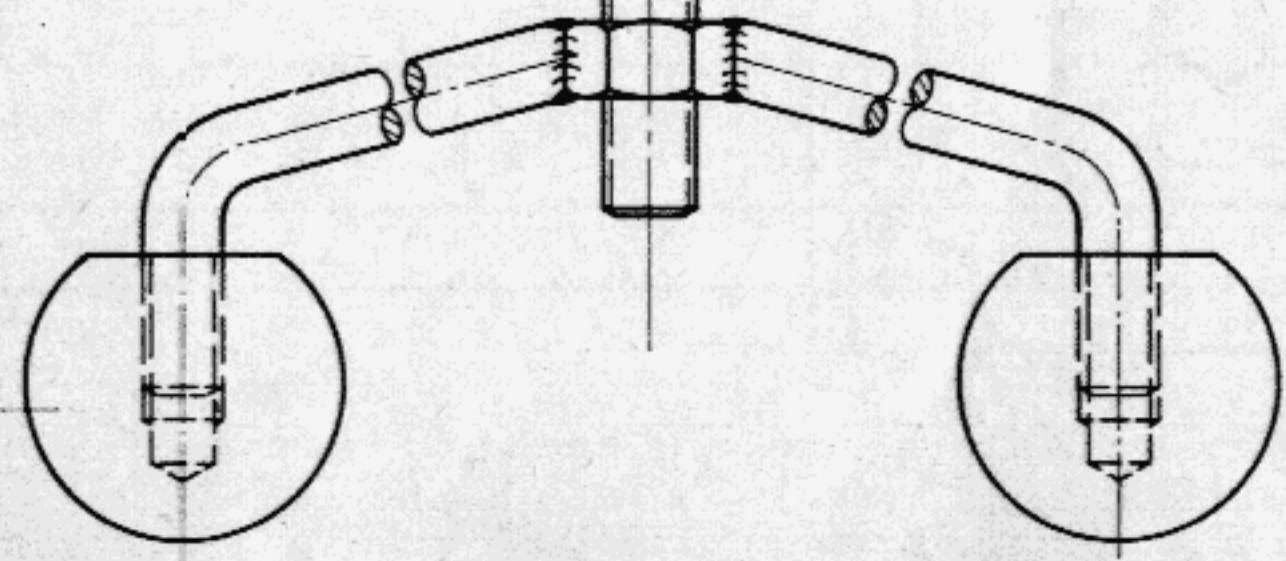
A container is provided for the storage of the contact plates. It can be obtained from the firm

Matra-Werke G.m.b.H.
6000 Frankfurt/Main-Ost
Postfach 9195

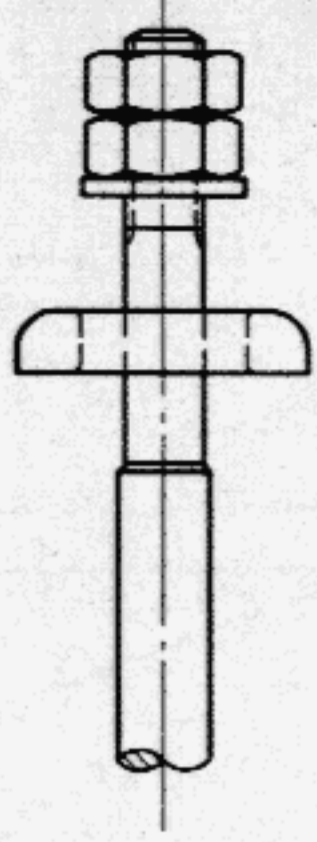
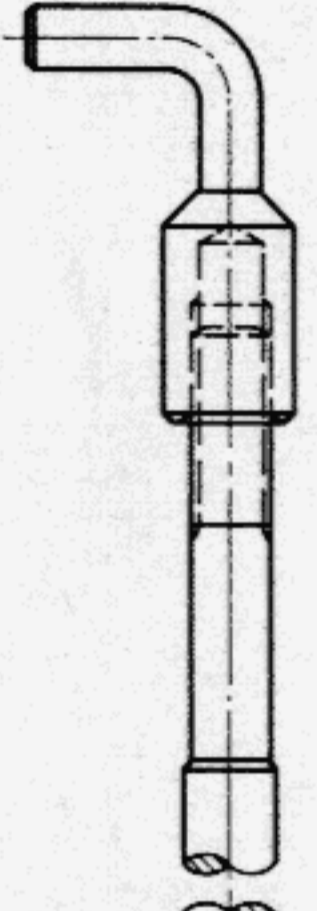
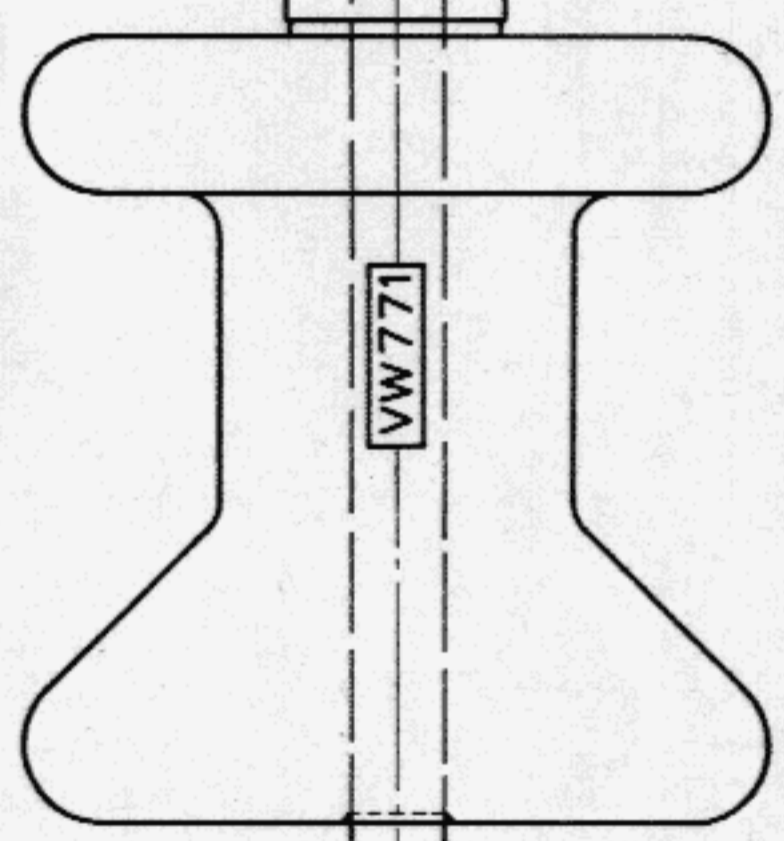
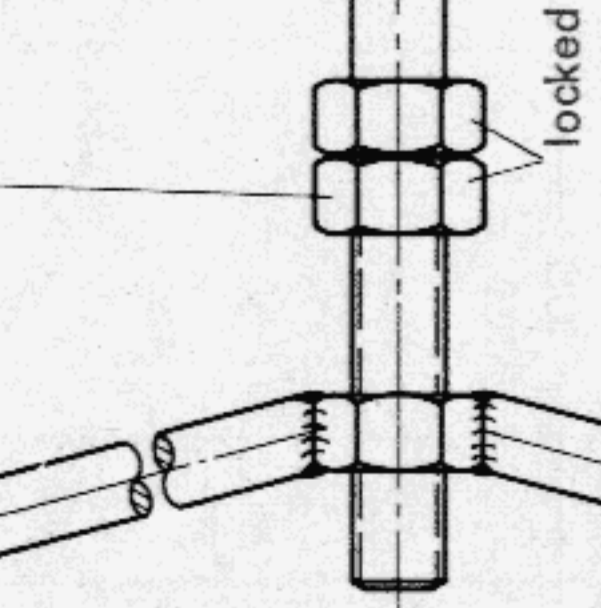


Type	Front axle Version	Tool	bearing upper		bearing lower	
			outer	inner	outer	inner
1	King joints	Plate	21/3			
		Drift	VW 273 a			
	Ball joints	Plate	21/3	21/6	21/7	21/6
		Drift	VW 768		VW 767	
2	Rubber for torsion arm stop	round	21/2			
		square	VW 273 b			
		Plate	21/5	21/2	21/5	21/2
		Drift	VW 273 b			
	Ball joints	Plate	21/4	21/2	21/4	21/2
		Drift	VW 772			
3	Grease nipple outside axle retainer	Plate	21/9	21/7 21/8*	21/1	
		Drift	VW 273 d		VW 273 c	
	inside axle retainer	Plate	21/9	21/11	21/7	21/10
		Drift	VW 757		VW 756	
* For bearing tube 47 mm dia. (Production upto December 1962)						

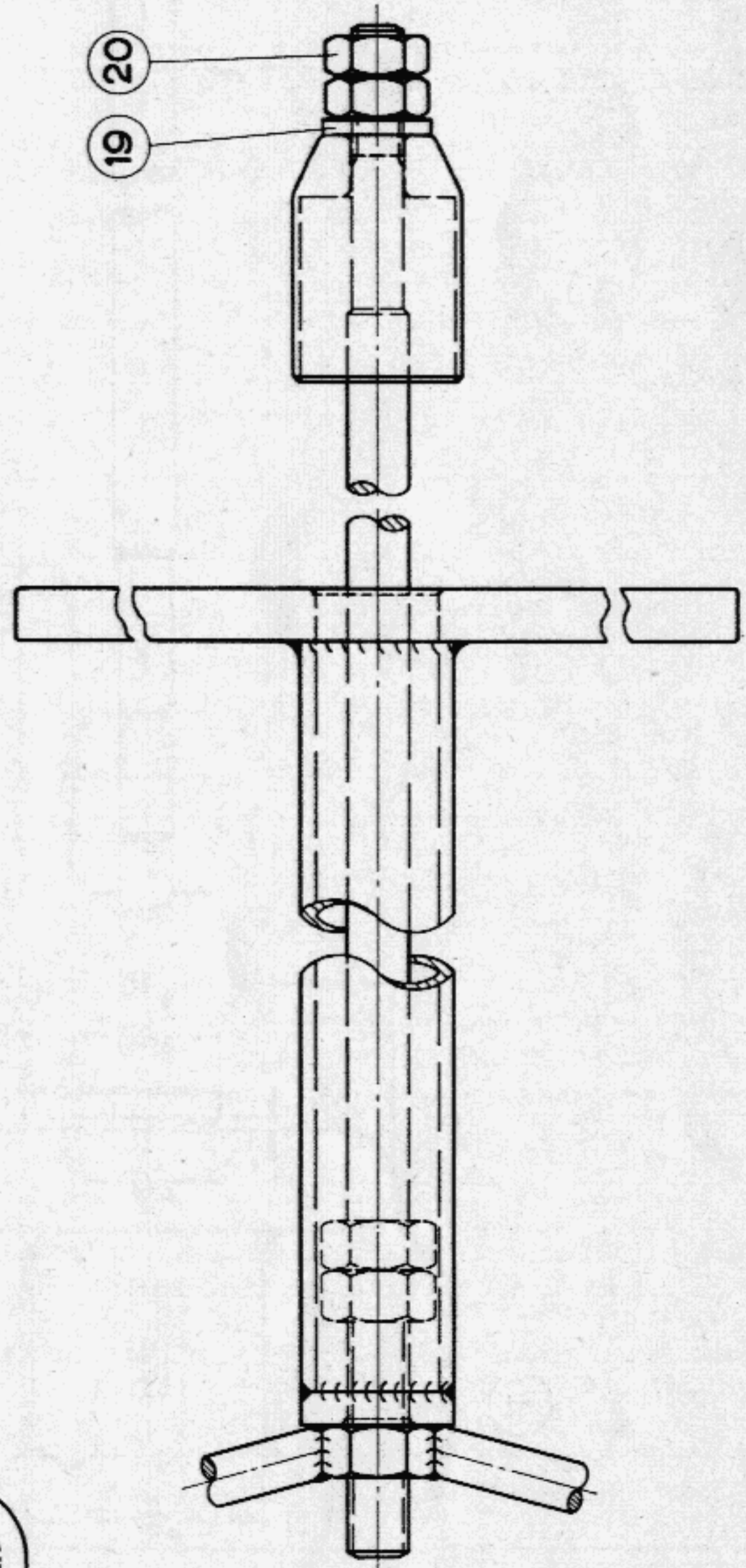
17



18



19 20



When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies

Qty.	Designation	Part	Material	Part No. or Standard spec.	Remarks
1	Rd 50x15	21/12	C 45		
1	Rd 40x15	21/11	C 45		
1	Rd 40x15	21/10	C 45		
1	Rd 45x13	21/9	C 45		
1	Rd 50x13	21/8	C 45		
1	Rd 50x13	21/7	C 45		
1	Rd 45x15	21/6	C 45		
1	Rd 55x13	21/5	C 45		
1	Rd 60x13	21/4	C 45		
1	Rd 45x13	21/3	C 45		
1	Rd 55x15	21/2	C 45		
1	Rd 40x13	21/1	C 45		
2	Hex. nut	M 10		DIN 934-5S	
1	Washer	10,5		DIN 125-St	
2	Hex. nut	M 12		DIN 934-5S	
2	Knob	C 40	Plastic		
1	Rd 30x30	16	C 45		
1	17,2x4,5x30	15	St 35		
1	Rd 35x53	14	34 Cr 4		
1	Rd 18x80	13	C 15		
1	Fl 25x8x60	12	MR St 37-2	Separate	
1	Fl 25x8x280	11	MR St 37-2		
1	Welded part	10		Parts 11 a, 12	
1	Rd 30x6	9	C 15		
1	Tube 30x3x190	8	St 35		
1	Fl 50x10x305	7	MR St 37-2		
1	Welded part	6		Parts 7 to 9	
1	Hex. nut	M 12		DIN 934-5S	
2	Rd 10x130	4	C 15		
1	Welded part	3		Parts 4 and 5	
1	Rd 12x585	2	C 45		
1	Rd 100x113	1	34 Cr 4		

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn: 9. 6. 67 Krumbholz Checked: 9. 6. 67 Giesecking

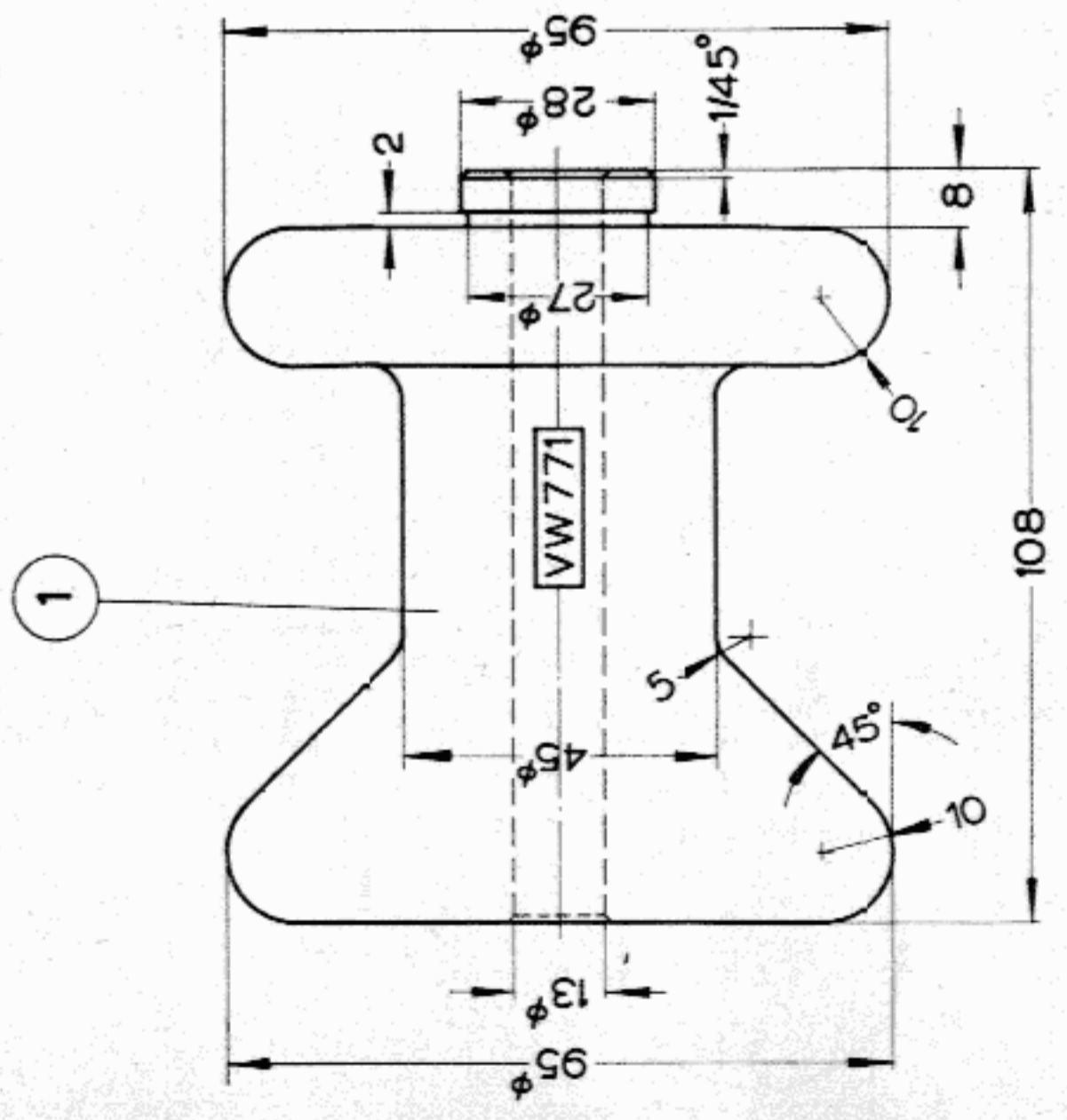
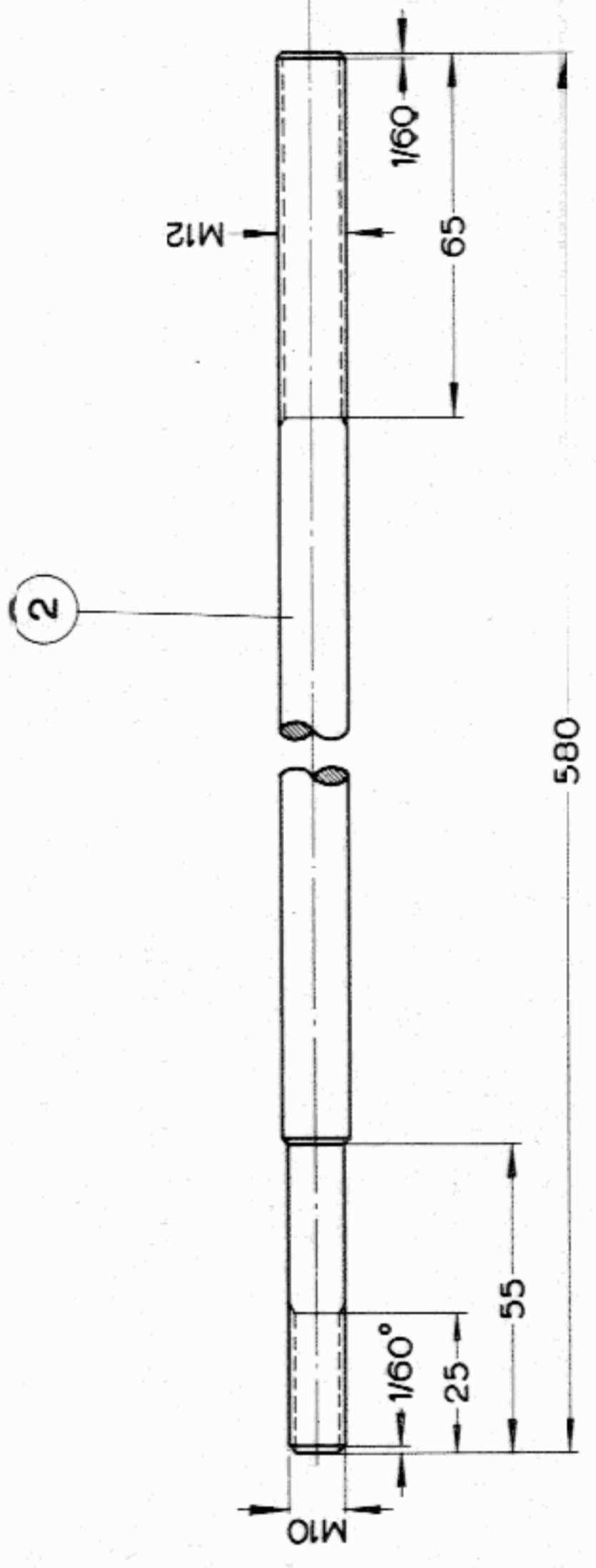
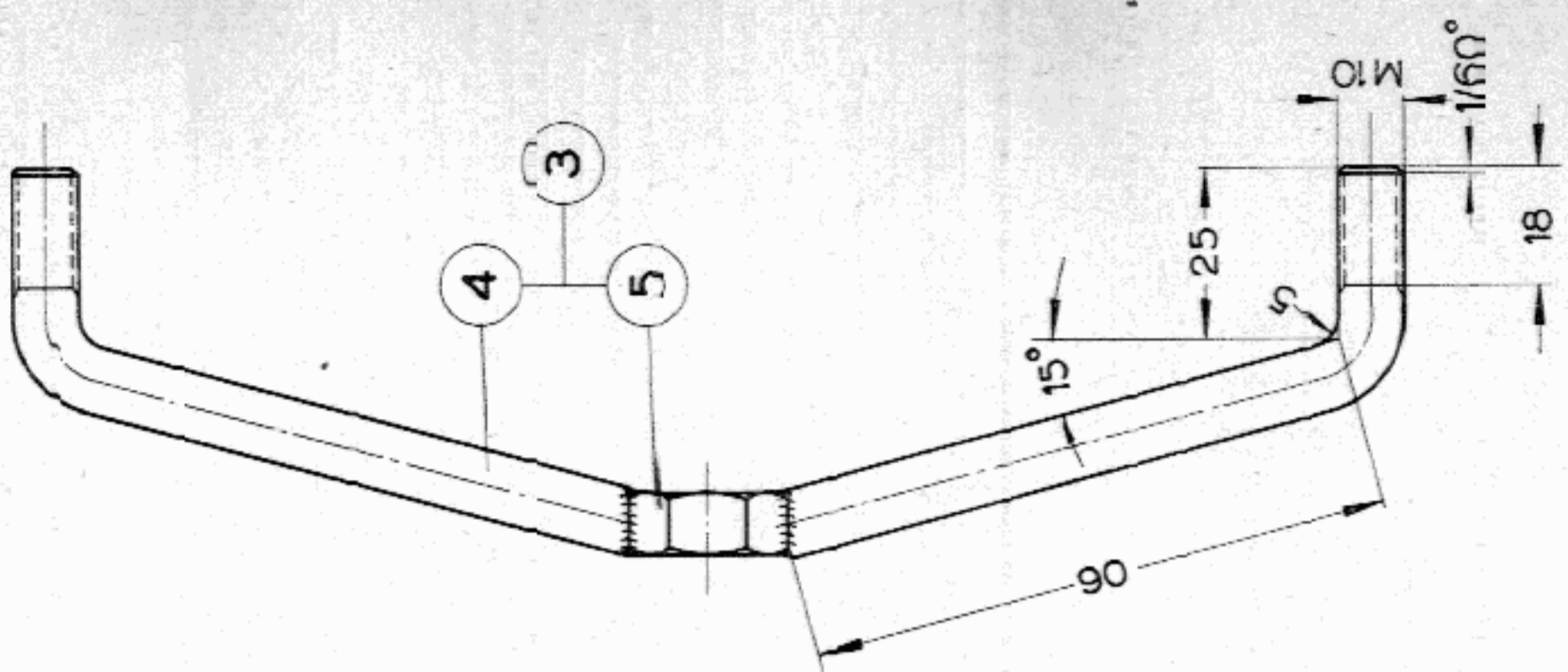
Multi Purpose Tool

VW 771

No of sheets 5
Sheet No. 1

1 2 3 4 5 6 7 8 9

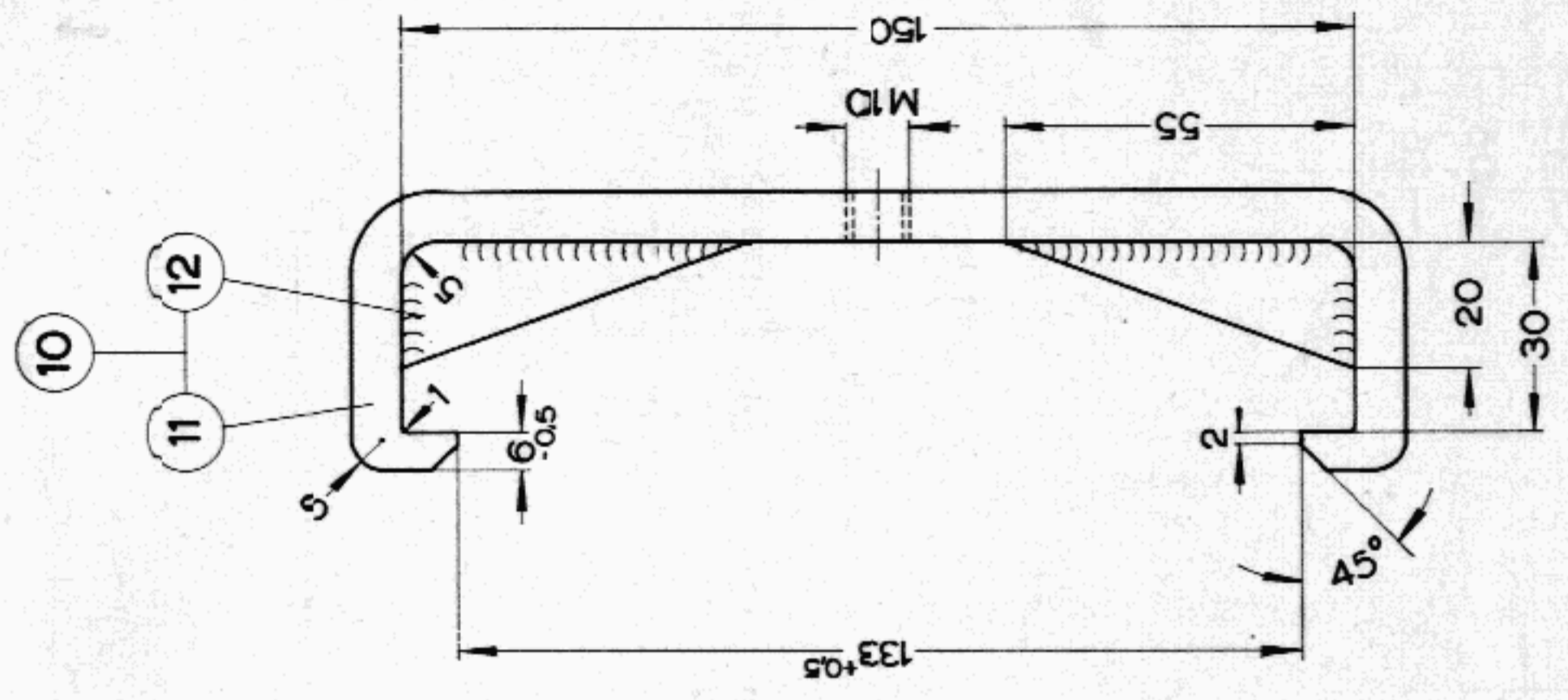
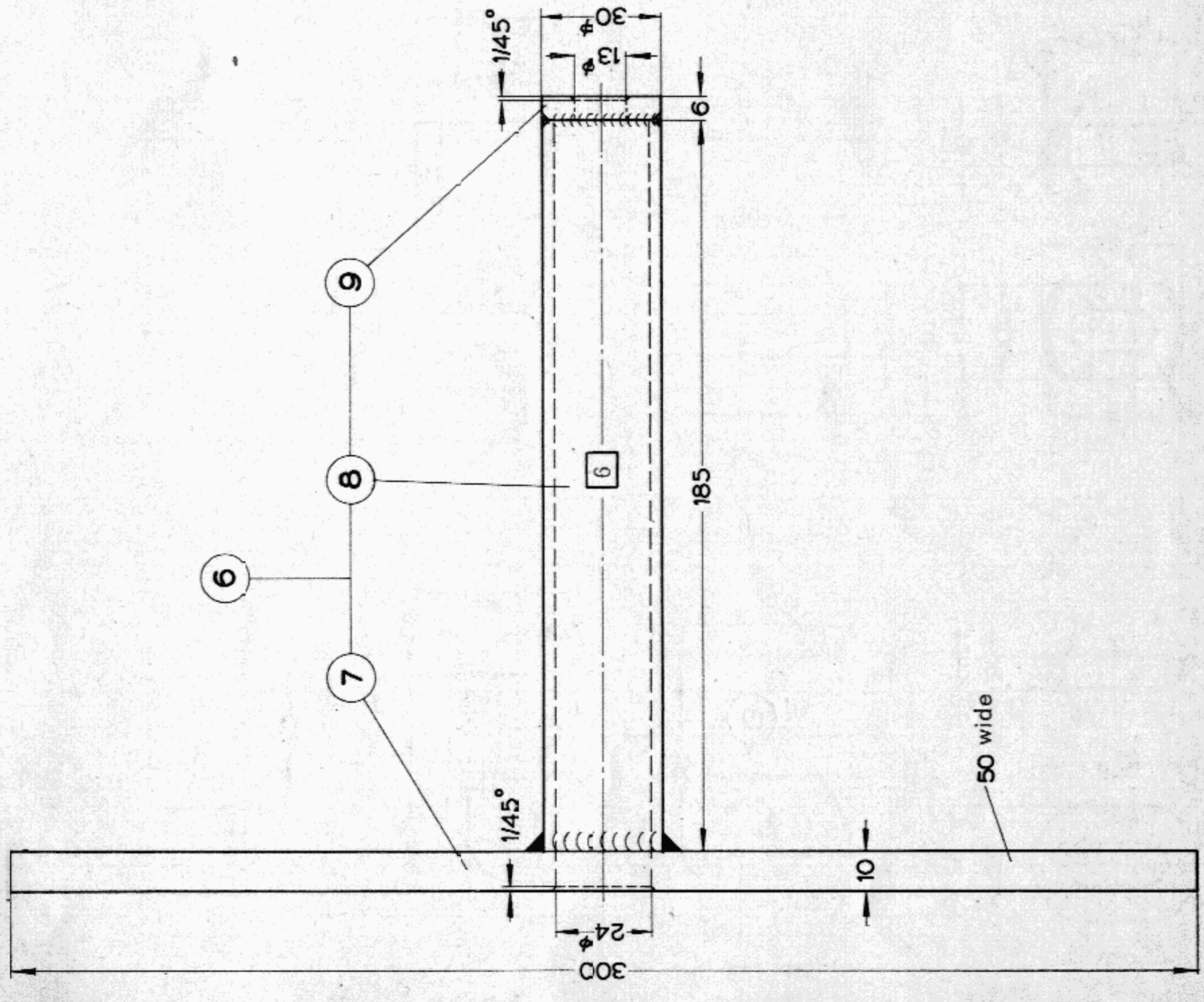
A B C D E F



When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies
 Chamfer edges

VOLKSWAGENWERK AG WOLFSBURG Service Department		Multi Purpose Tool
Drawn: 9. 6. 67 Krumbholz	Checked: 9. 6. 67 Giesecking	VW 771
		No of sheets 5 Sheet No. 2

1 2 3 4 5 6 7 8 9



When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies

Chamfer edges

VOLKSWAGENWERK AG
 WOLFSBURG
 Service Department

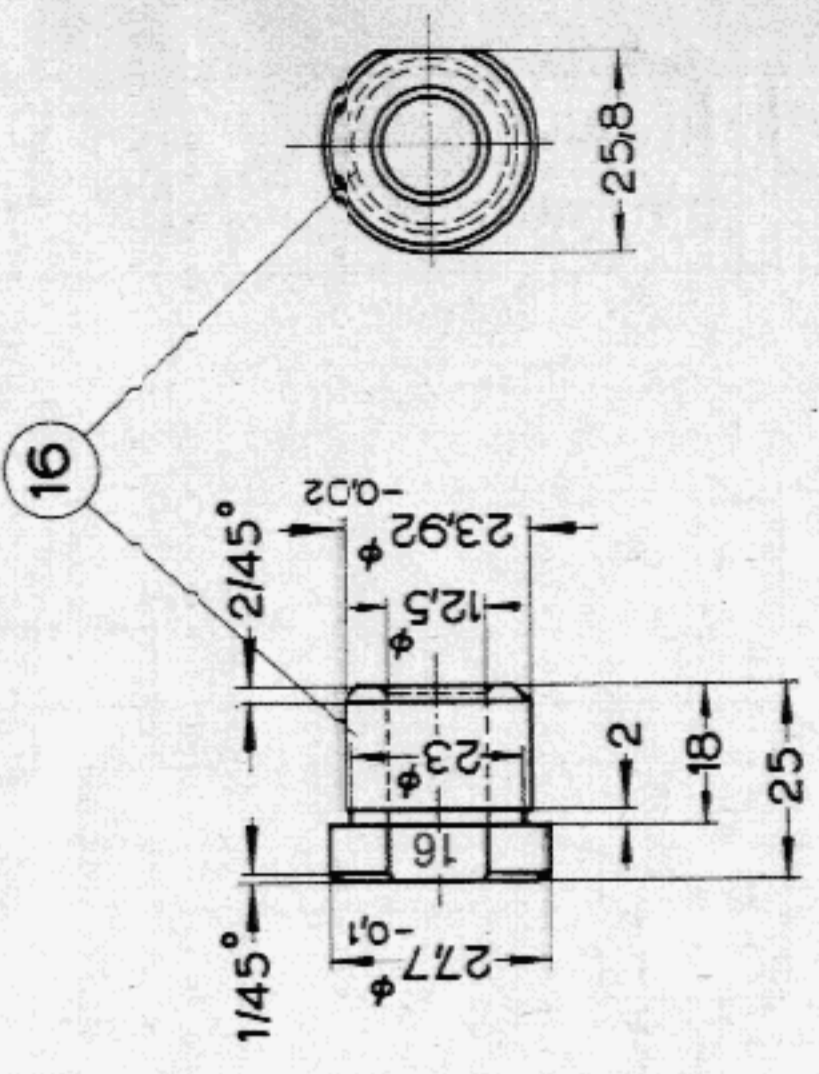
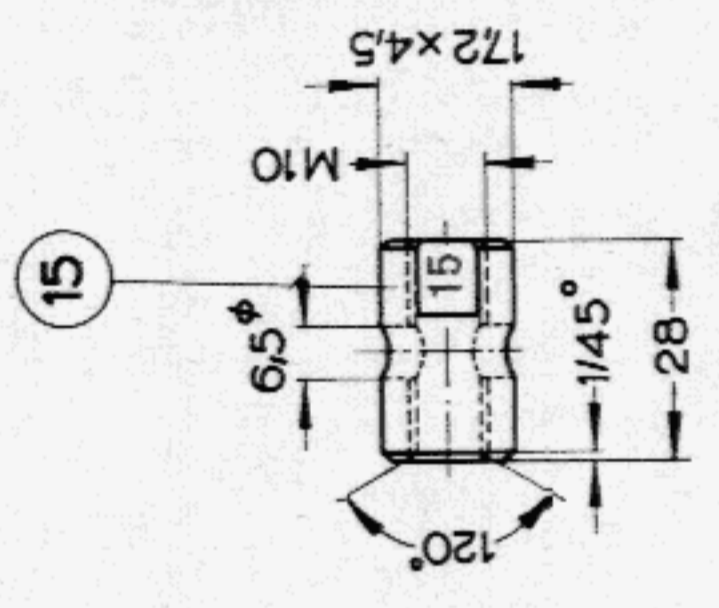
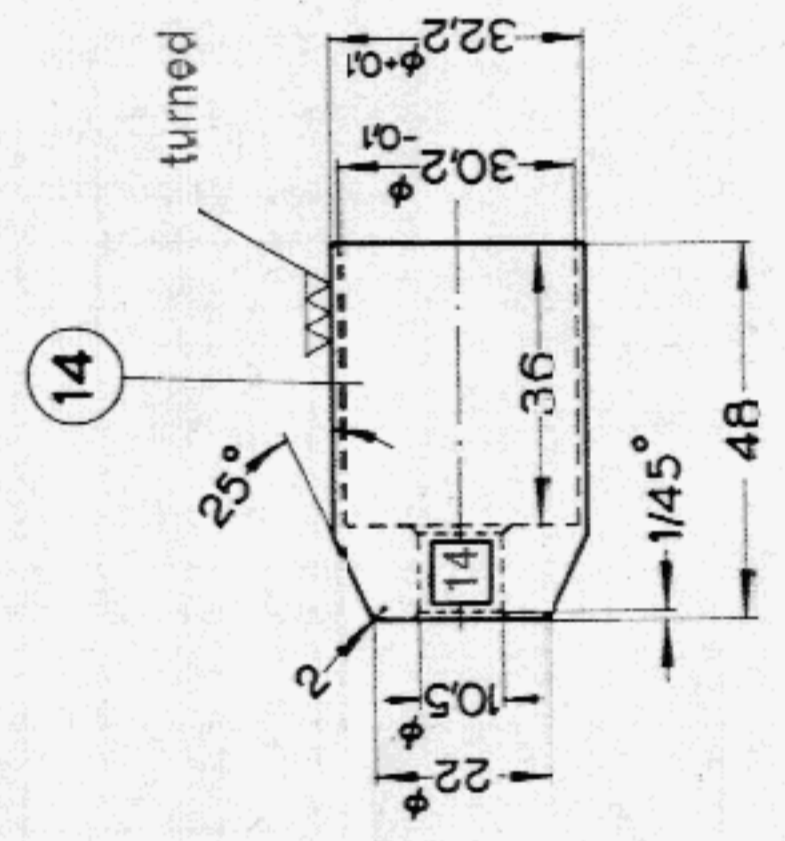
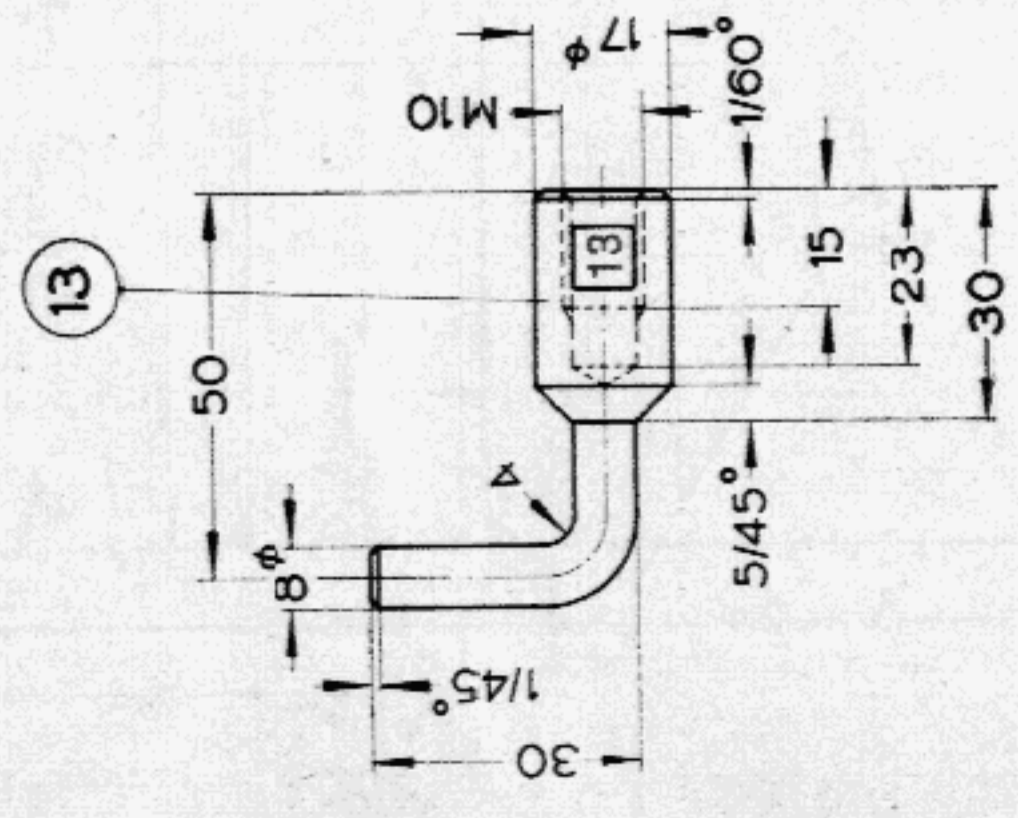
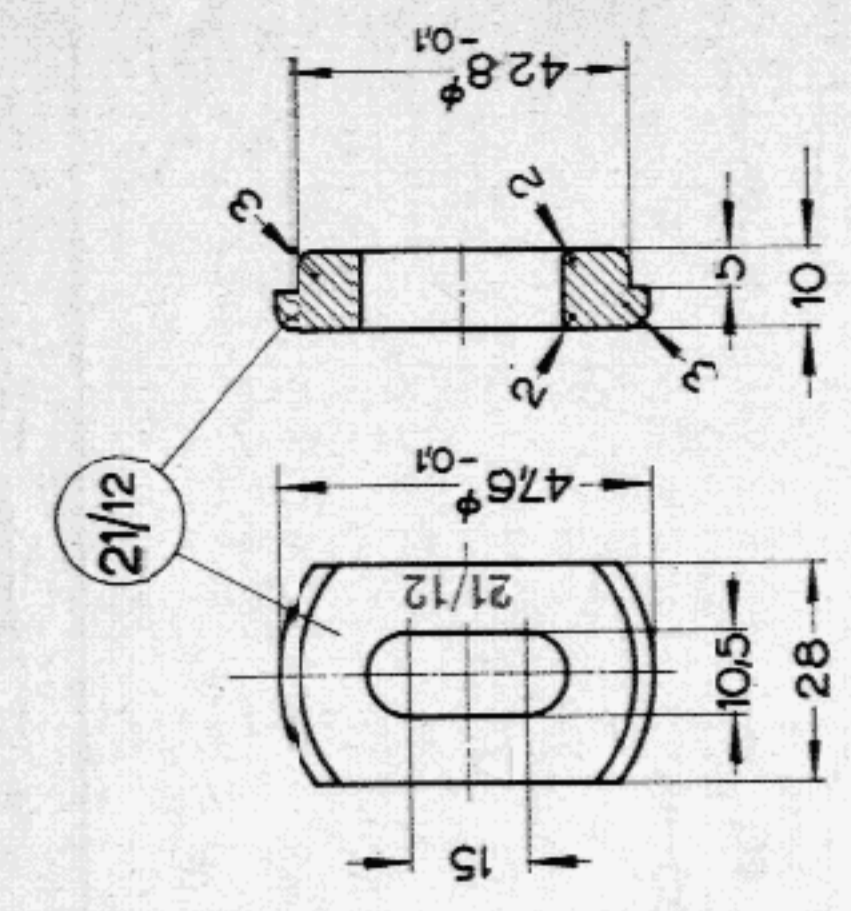
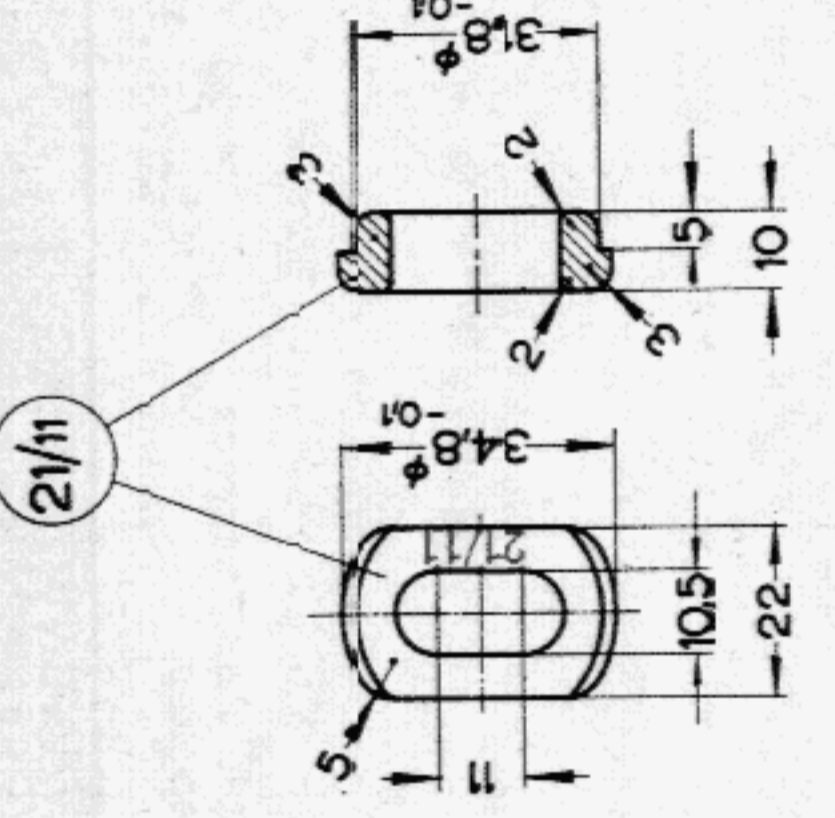
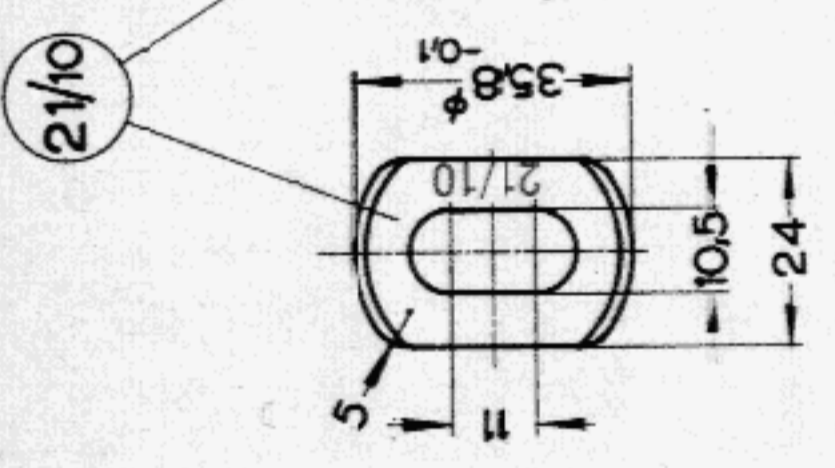
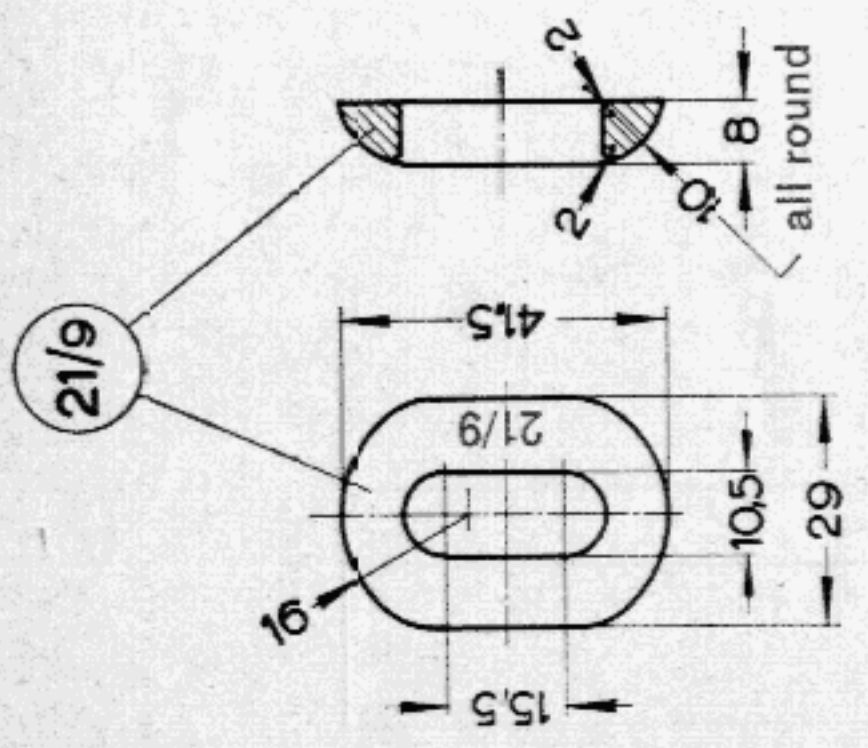
Drawn: 9. 6. 67 Krumbholz
 Checked: 9. 6. 67 Giesecking

Multi Purpose Tool

VW 771

No of sheets 5
 Sheet No. 3

1 2 3 4 5 6 7 8 9



When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies

Chamfer edges

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

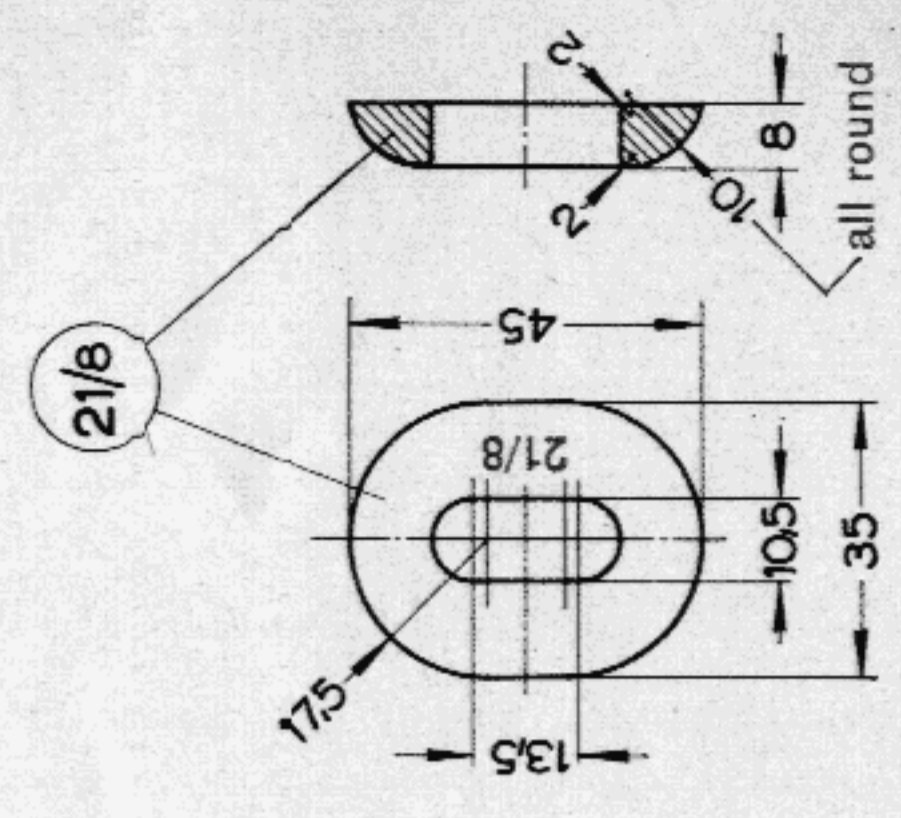
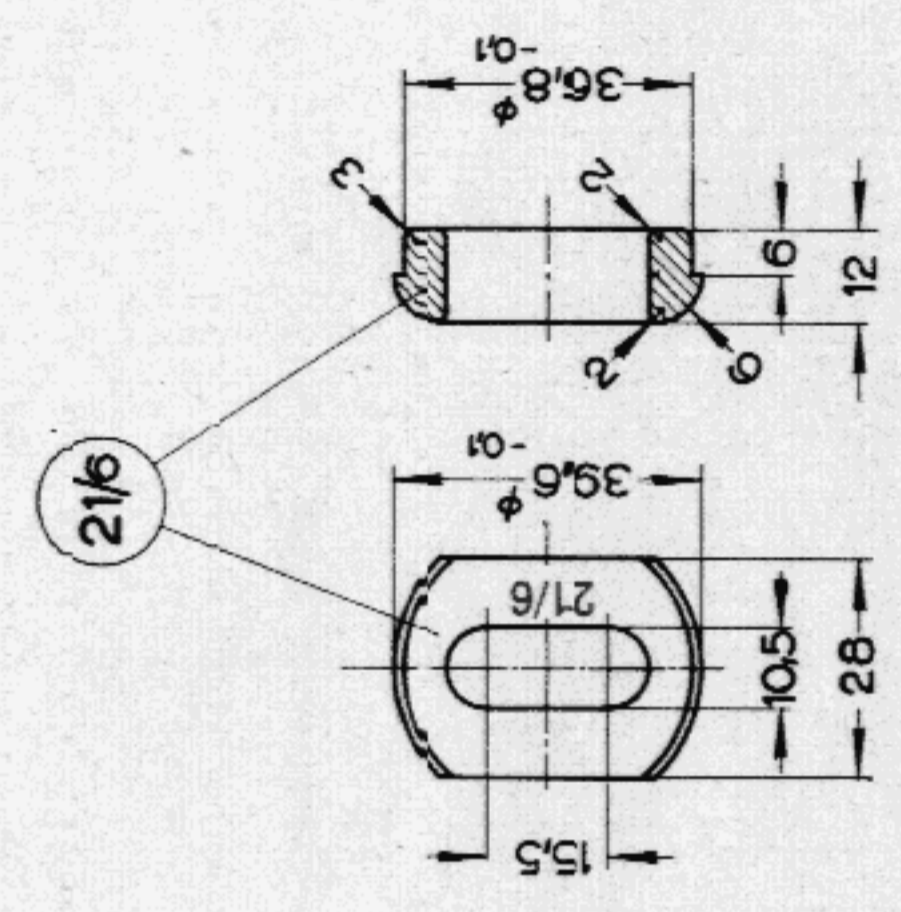
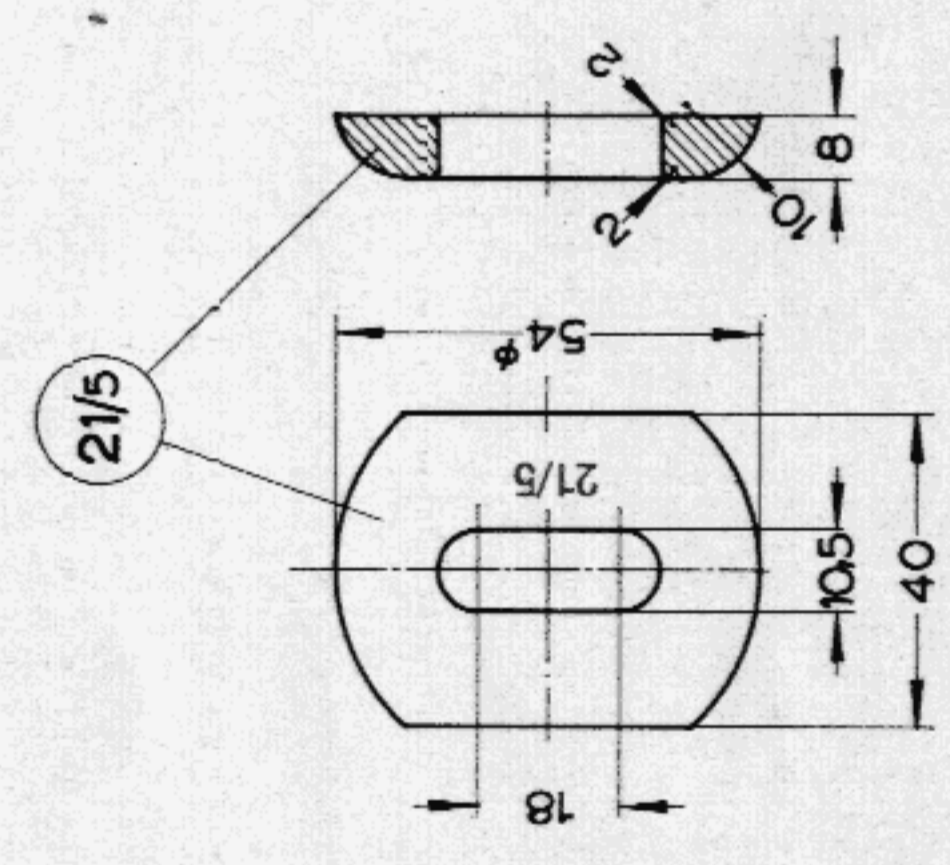
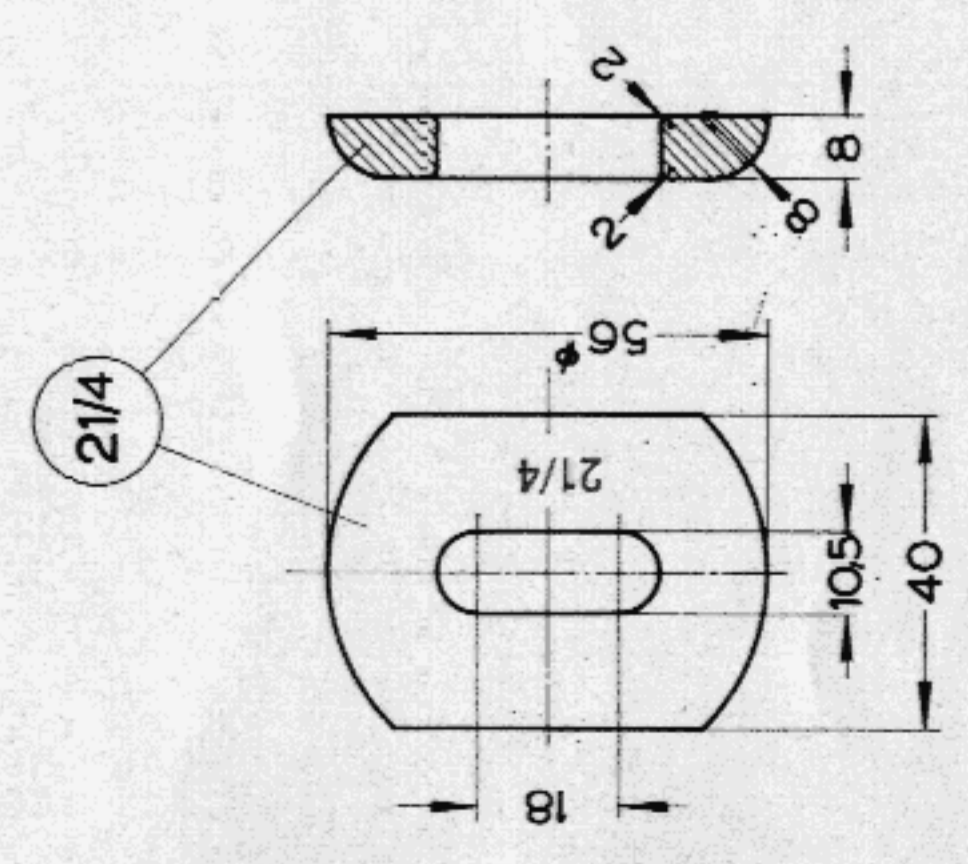
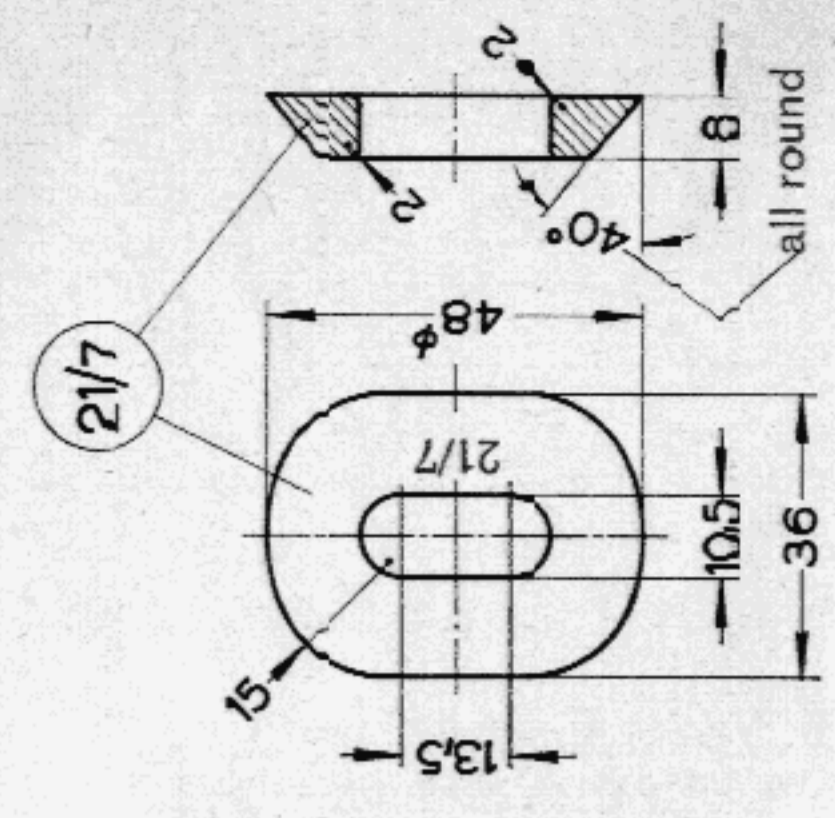
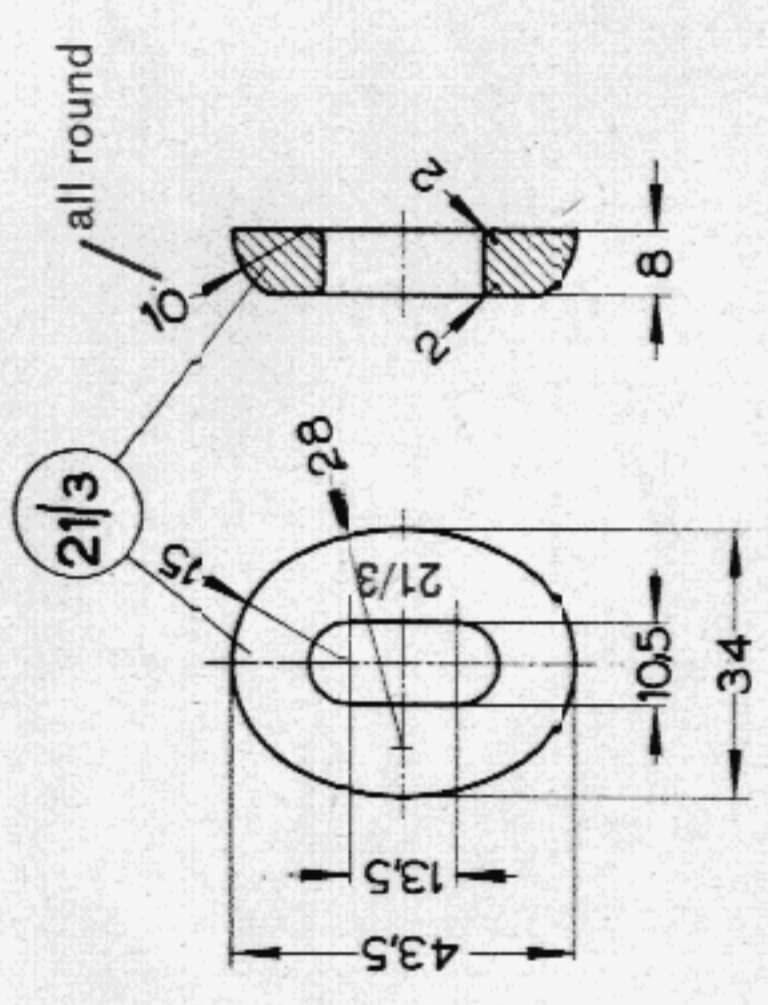
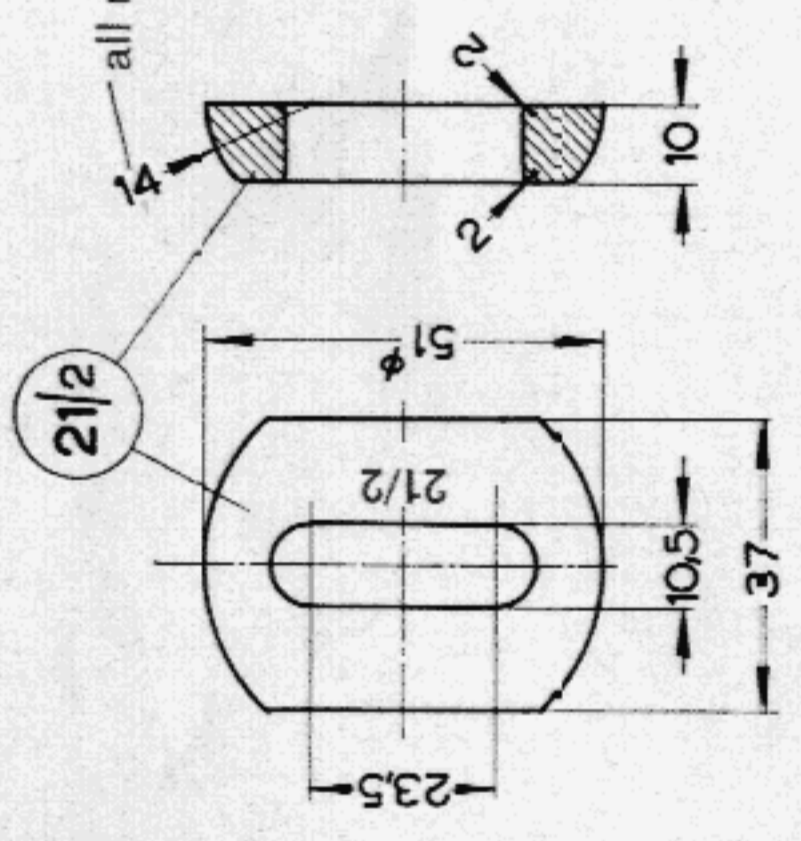
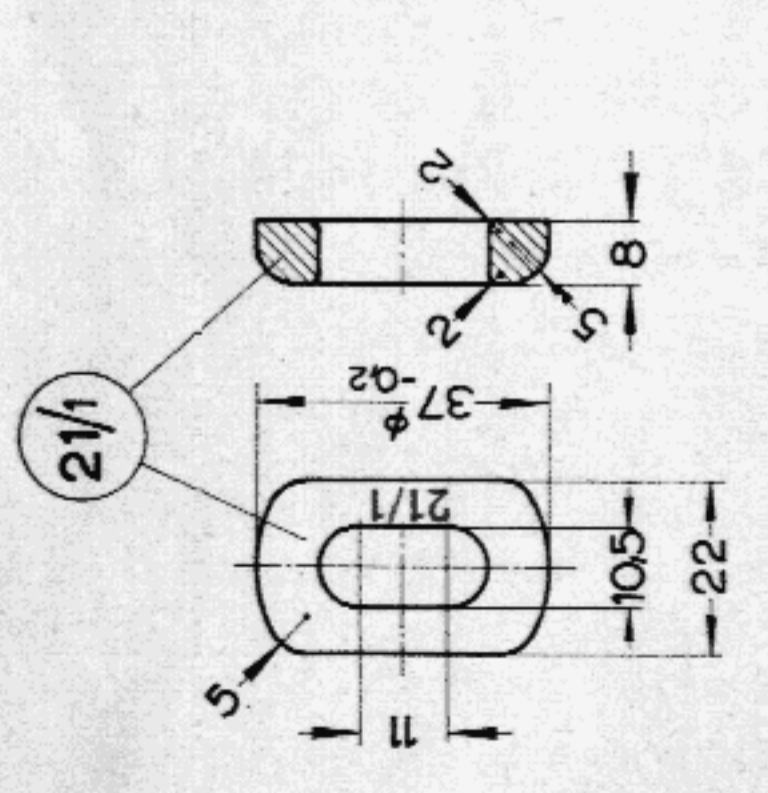
Drawn: 9. 6. 67 Krumbholz
Checked: 9. 6. 67 Giesekeing

Multi Purpose Tool

Nr. of sheets 5
Sheet No. 4

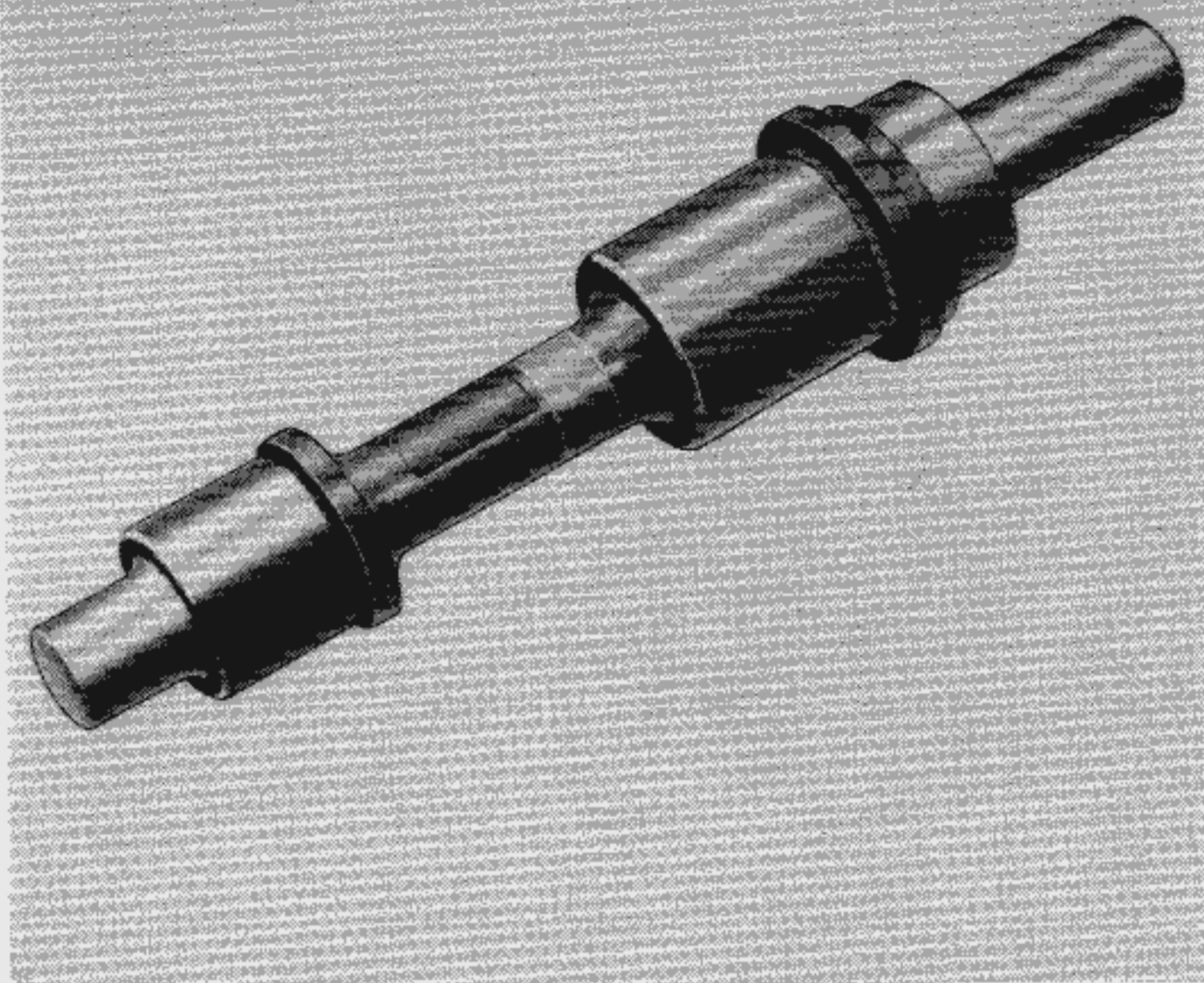
VW 771

1 2 3 4 5 6 7 8 9



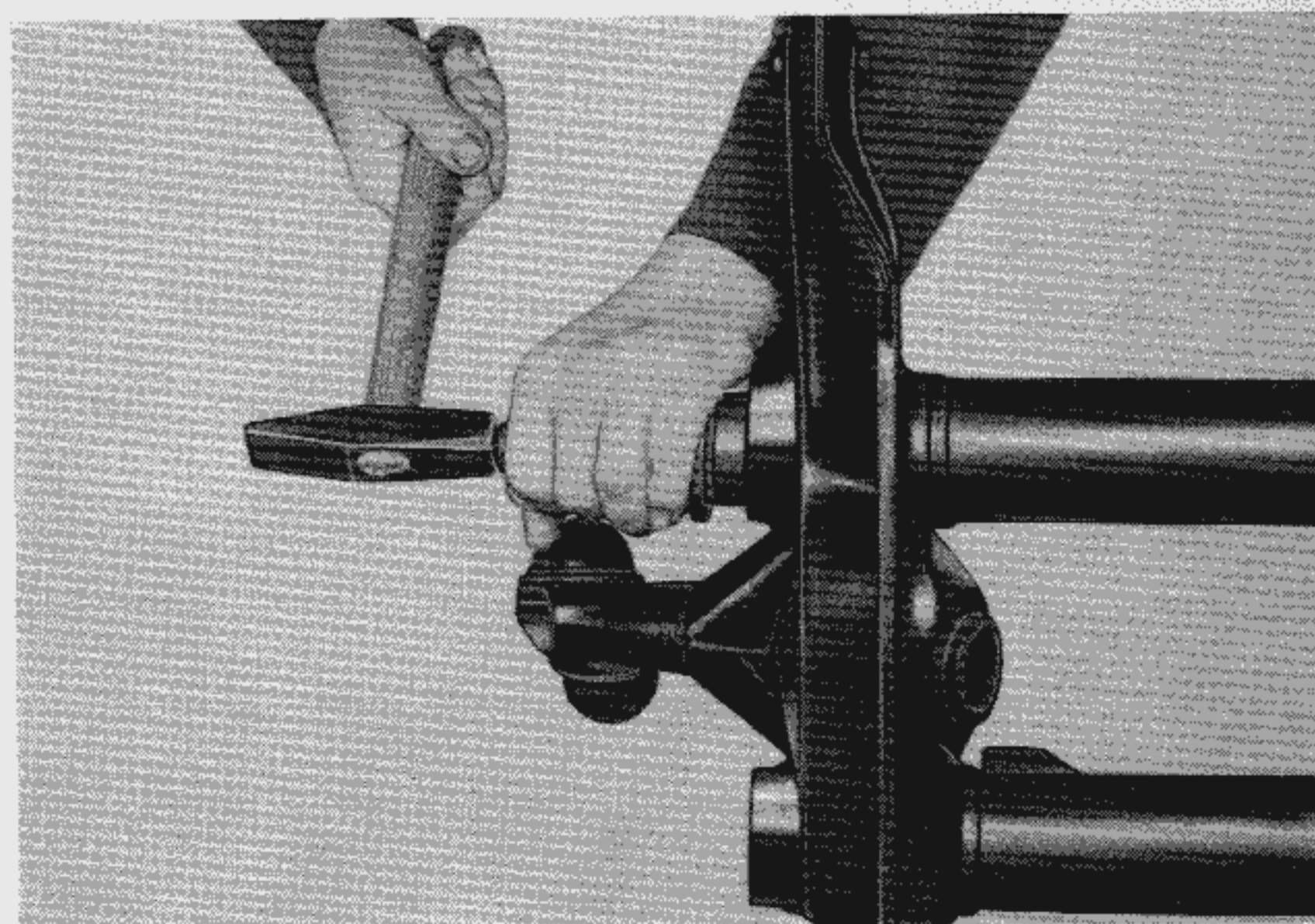
When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies
 Chamfer edges

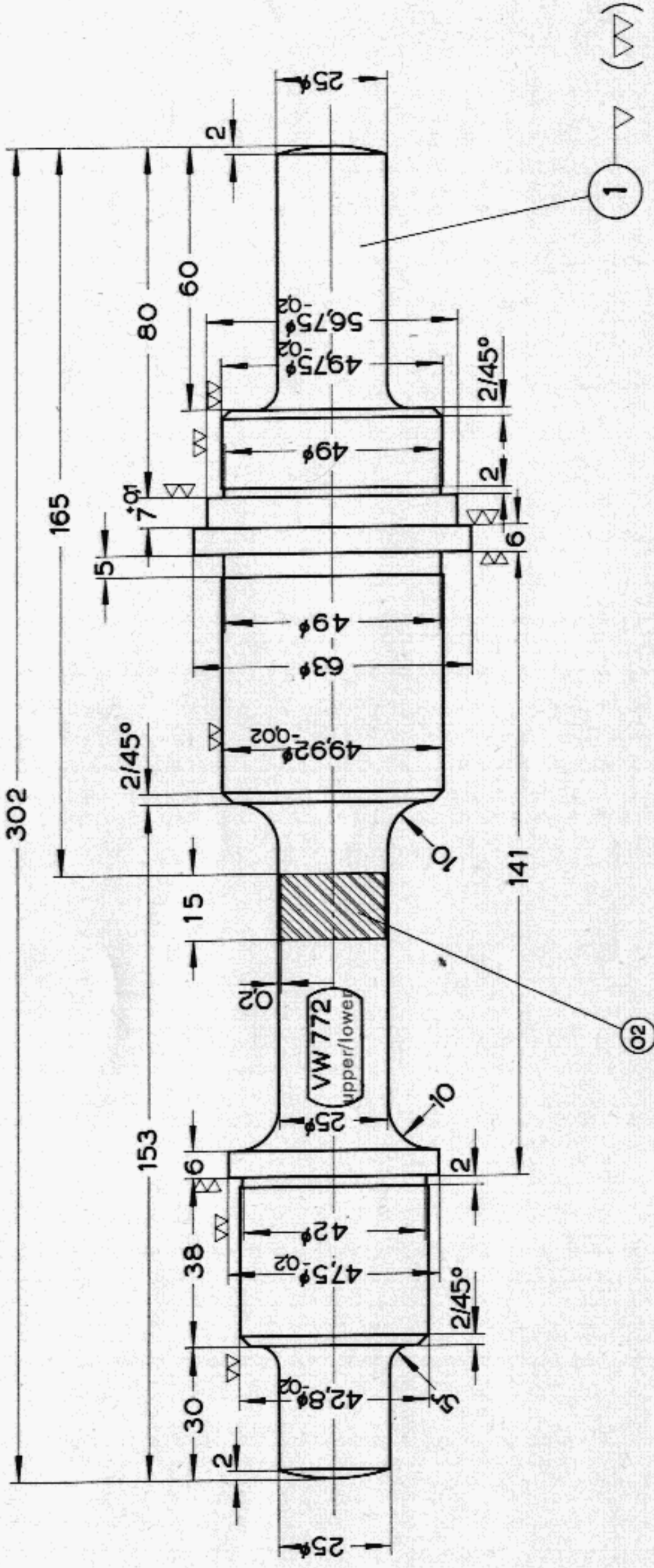
F	VOLKSWAGENWERK AG WOLFSBURG Service Department		Multi Purpose Tool VW 771
E	Drawn: 9. 6. 67 Krumbholz	Checked: 9. 6. 67 Giesecking	No of sheets 5 Sheet No. 5



Drift for Installing DU Bushes and Needle Bearing, upper and lower - Type 2

The upper and lower DU bushes and needle bearings are driven into the axle beam with this drift. One end of the drift is used for the DU bushes, the other end being used for the needle bearings. The drift has a shoulder which acts as a limit when driving in the bushes or bearings. This enables them to be driven in to the specified dimension.





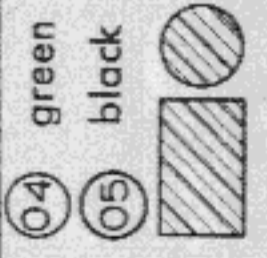
Chamfer edges

When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies

Colour identification marks

01	orange	RAL 2004
02	blue	RAL 5015
03	violet	RAL 4003
04	green	RAL 6018
05	black	RAL 9005

Surfaces in given colours (synthetic resin) shown thus



VOLKSWAGENWERK AG
WOLFSBURG
Service Department

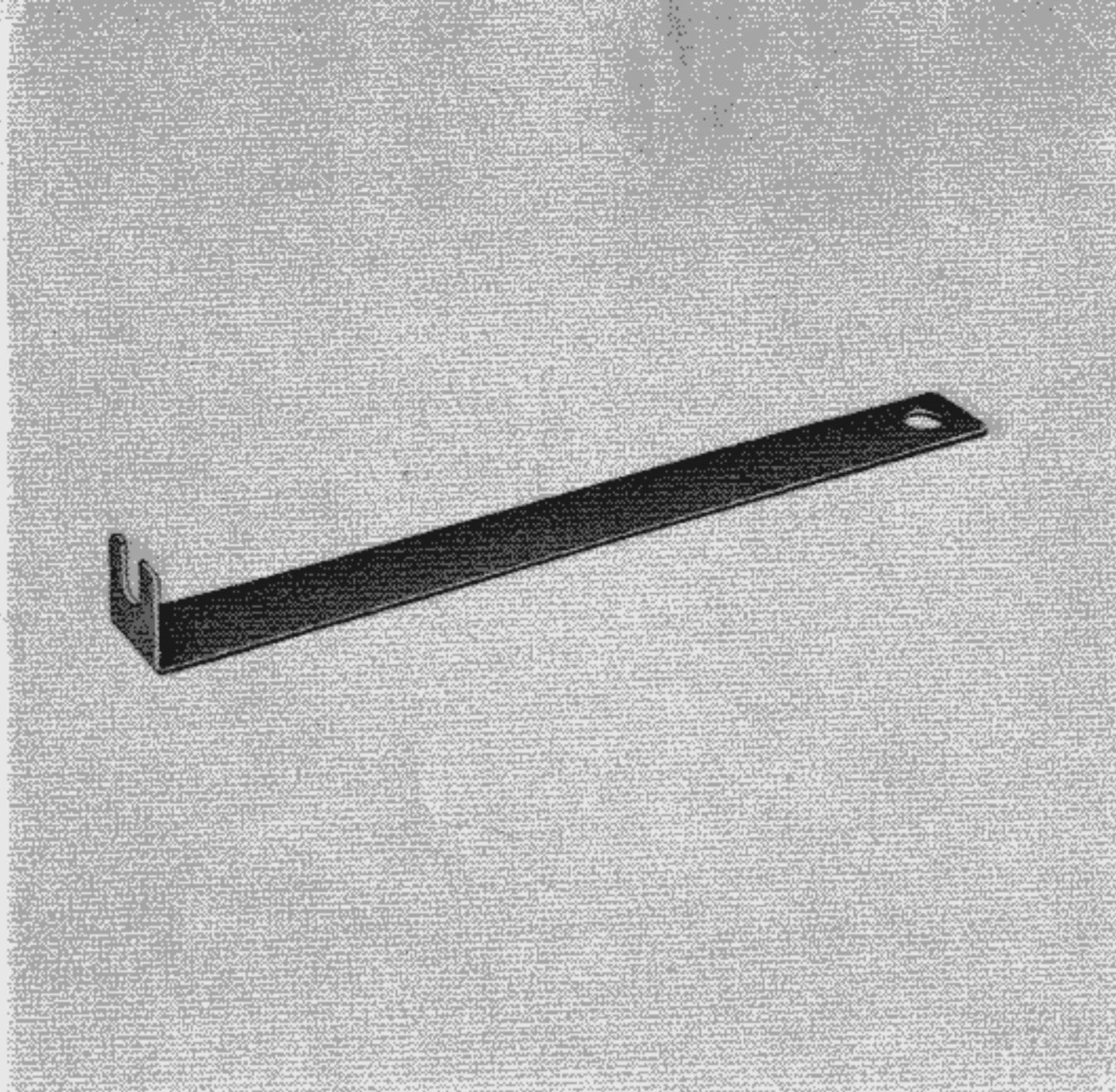
Drawn: 14. 2. 67 Busse
Checked: 14. 2. 67 Giesekeing

Drift for Installing DU Bushes and Needle Bearing, upper and lower

VW 772

No. of Sheets 1
Sheet no. 1

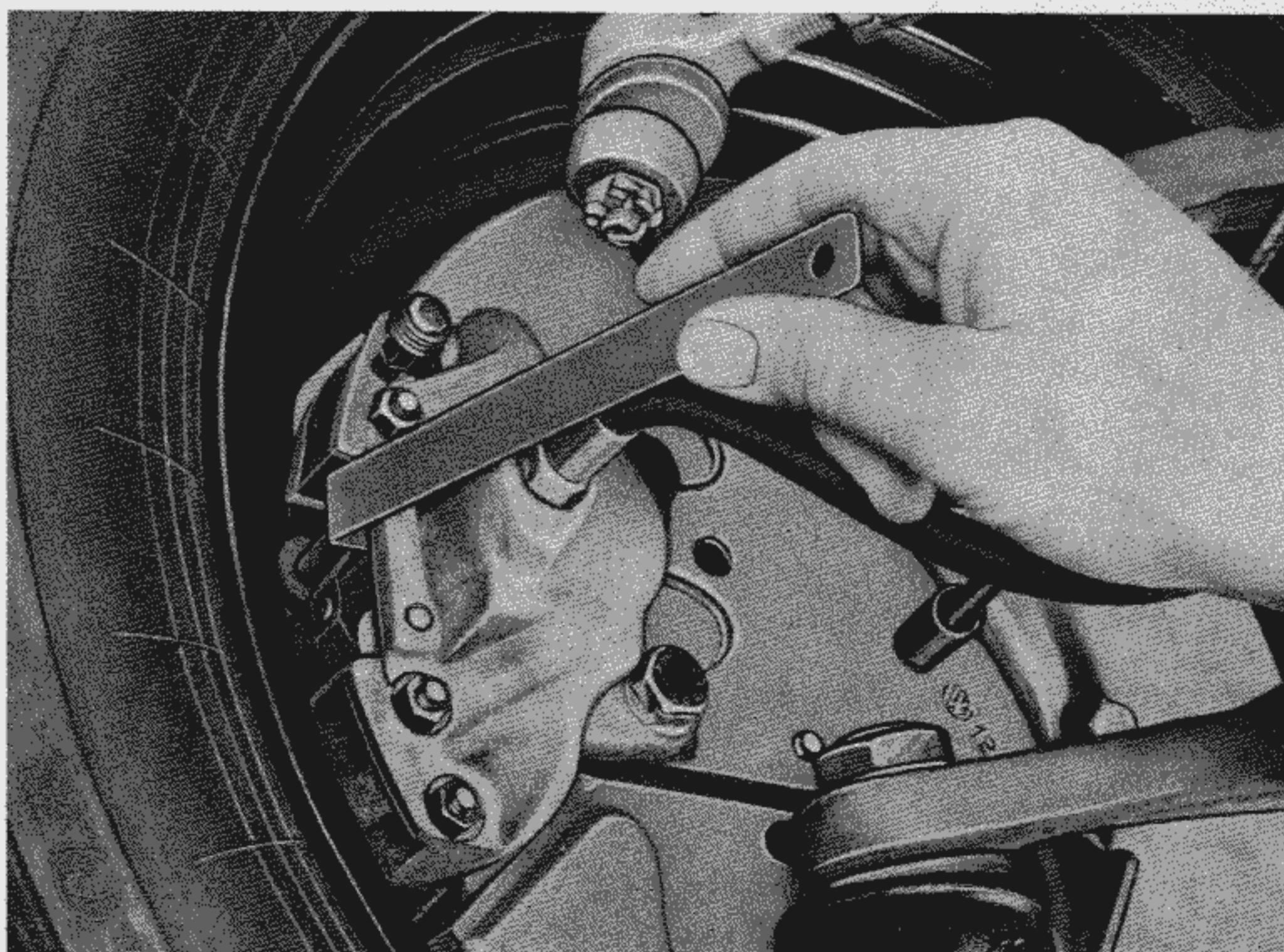
1	Qty.	Designation	Rd 65x305	Part	Material	Part No. or Standard spec.



APR 27 1966 VW 774

Tool for Checking Disc
Brake Pad Wear
Type 3

With this tool the thickness of the brake pads can be checked with the front wheels fitted. Through the automatic adjustment of the disc brakes, the distance between the pad plate and the spreader spring become smaller as the pads are used up. The pads are checked at 4 positions over the retaining pins. By moving the tool backwards and forwards in an axial direction it is possible to check whether there is still a clearance. If the tool cannot be inserted at any one of the 4 positions it denotes that the pads are worn out and must be replaced on both wheels.



Construction Details for VW 774

- 1 — Mark out and work to shape.
- 2 — Bend to shape.
- 3 — Remove scale from gauge surface and grease.
- 4 — Paint whole of tool, except gauge surface, dark green (RAL 6011).

1 2 3 4 5 6 7 8 9

A

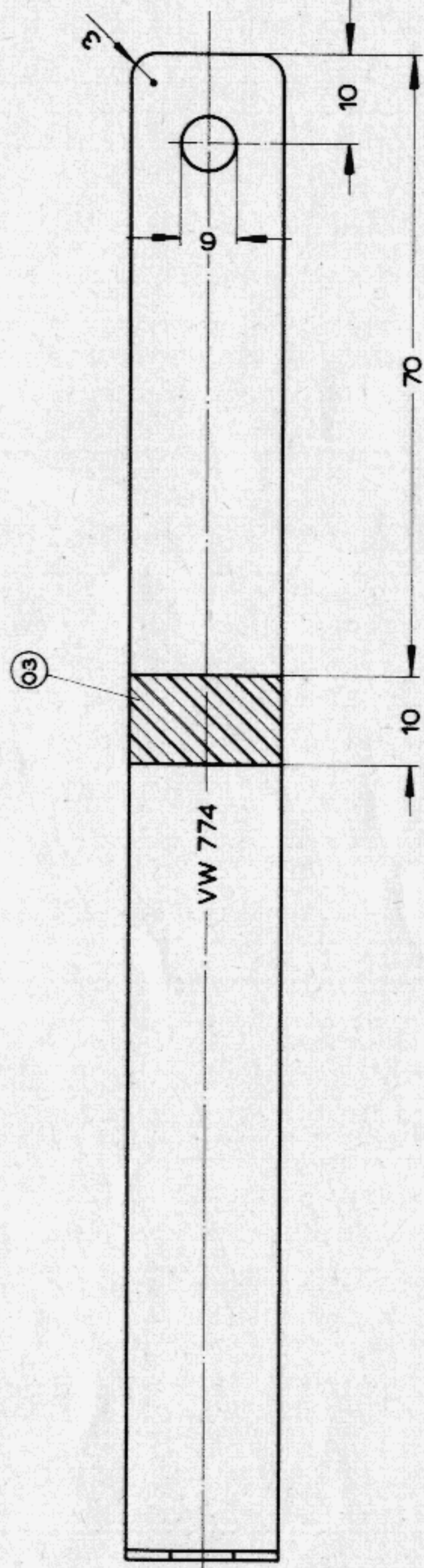
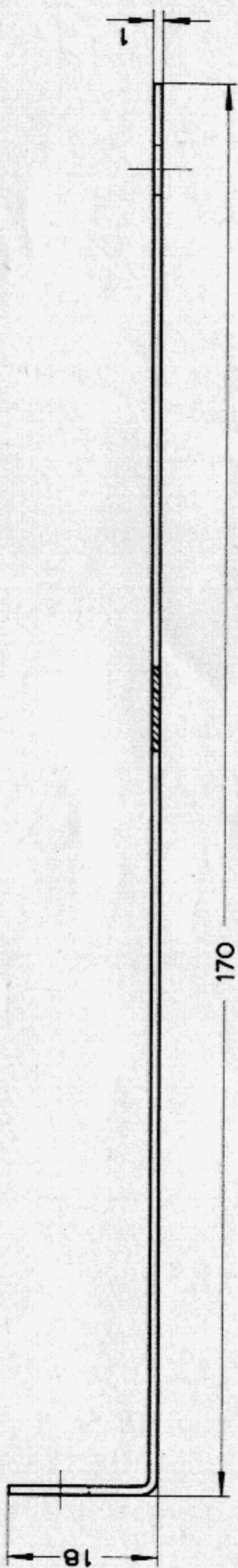
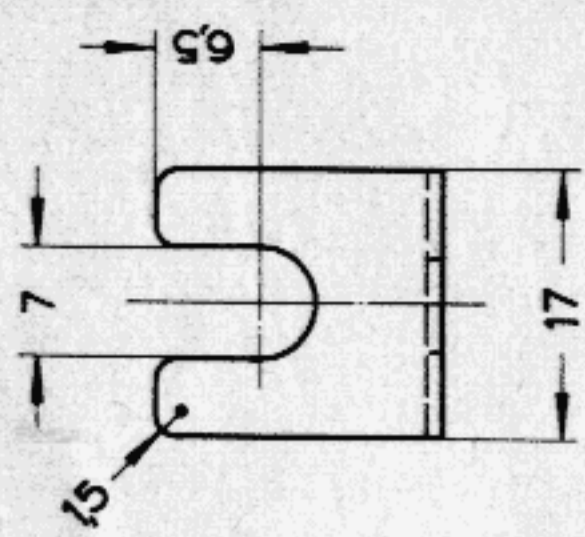
B

C

D

E

F



Remove sharp edges

When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies.

Colour identification marks

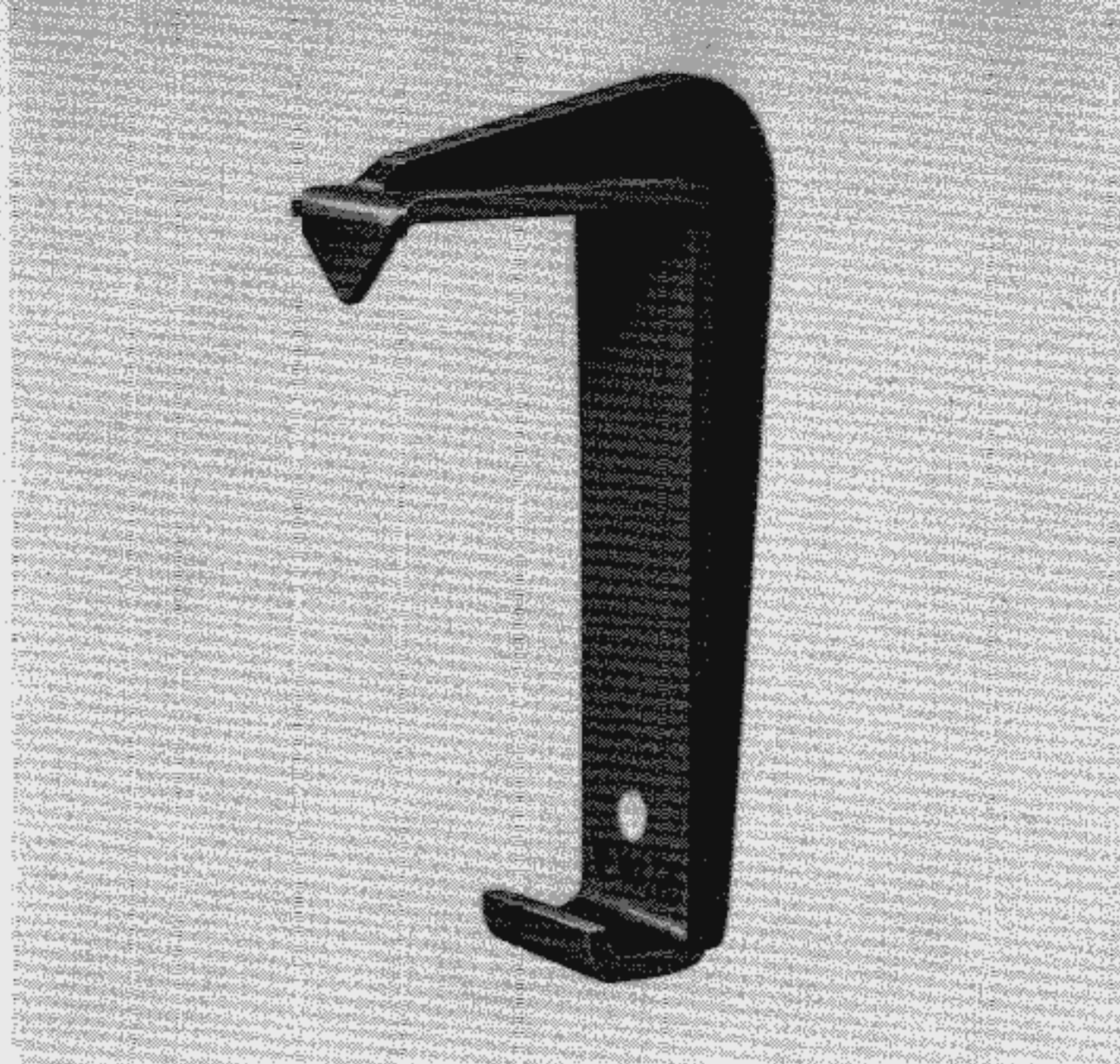
(01) orange	RAL 2004	(05) black	RAL 9005
(02) blue	RAL 5015	(06) hatched	Surfaces in given colours (synthetic resin) shown thus.
(03) violet	RAL 4003	(07) hatched	
(04) green	RAL 6018		

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WOLFSBURG
Service Department

Drawn: 28. 10. 65 Lempertz
Checked: 2. 11. 65 Giesecking

No. Req.	sheet metal 20X1X385	T St 1002
Description		Part. No. Material
Tool for Checking Disc Brake Pad Wear Type 3		
		No. of sheets 1
		Sheet 1

VW 774



JUL 6 1966

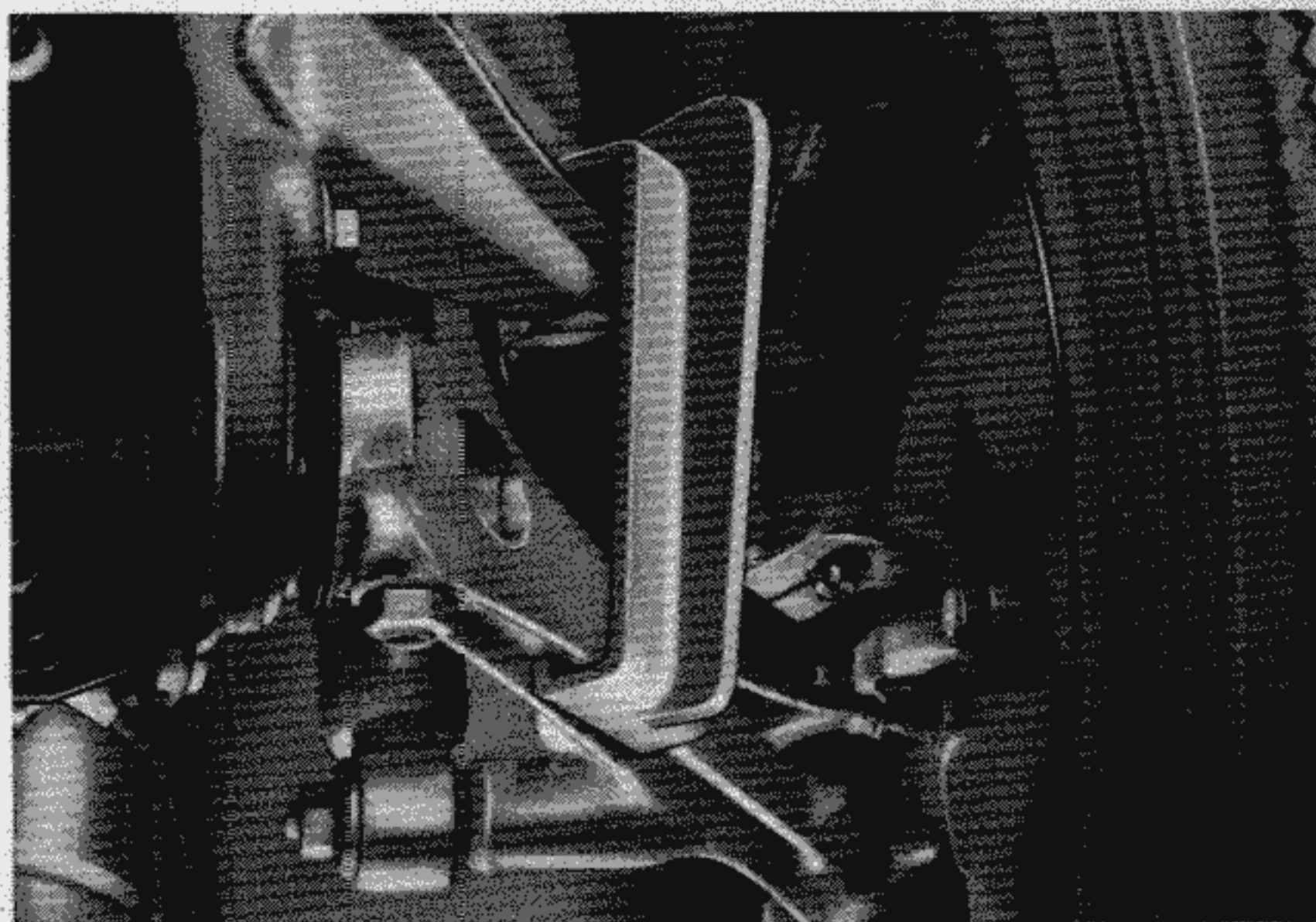
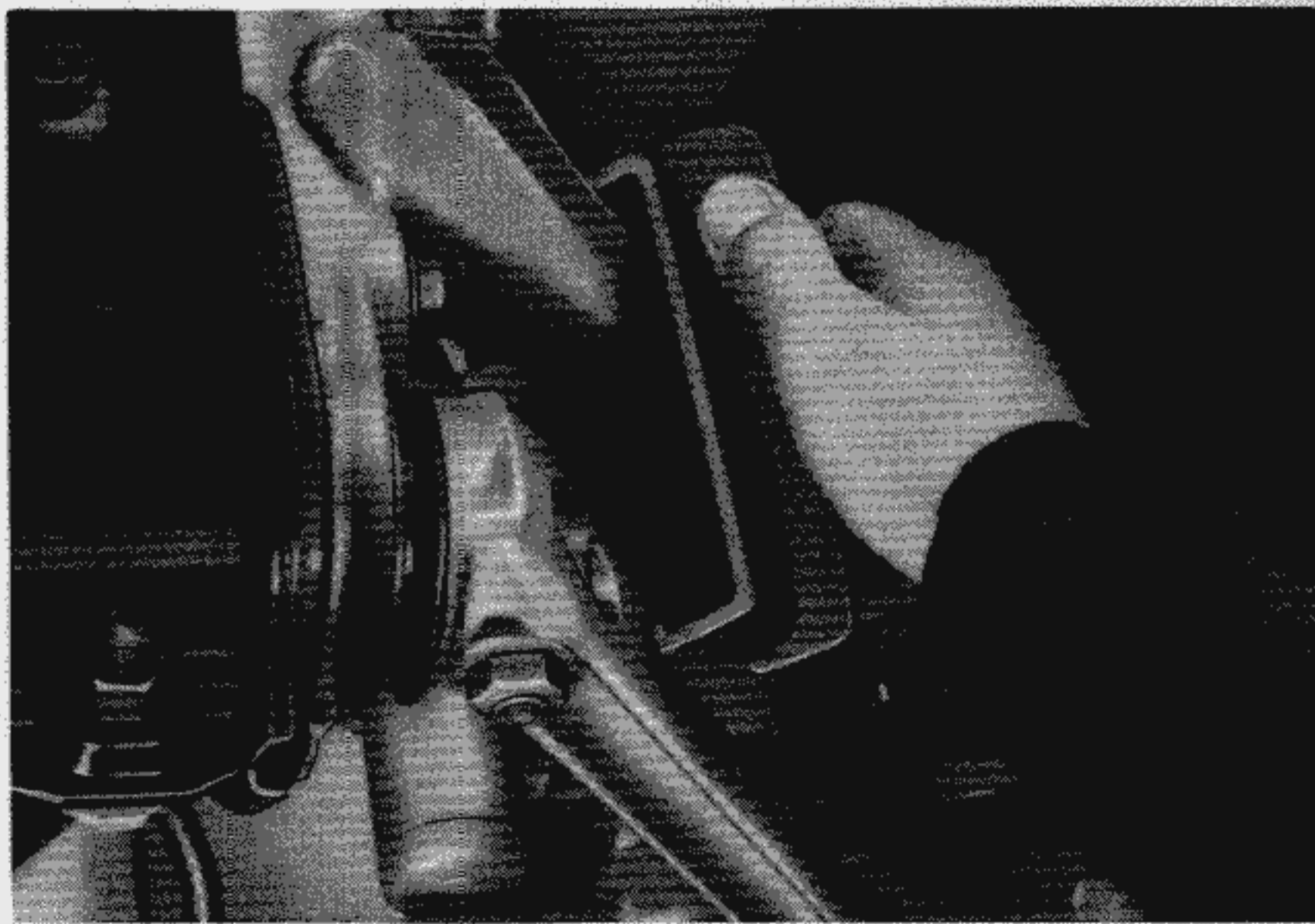
VW 776

Retaining Bracket for Lower
Torsion Arm
Type 3

When checking and adjusting the axial play of the upper torsion arms it is normal to do it with the axle loaded.

The retaining bracket makes it possible to carry out this work even when the vehicle is raised on a hoist. The bracket is installed on the automobile before it is raised.

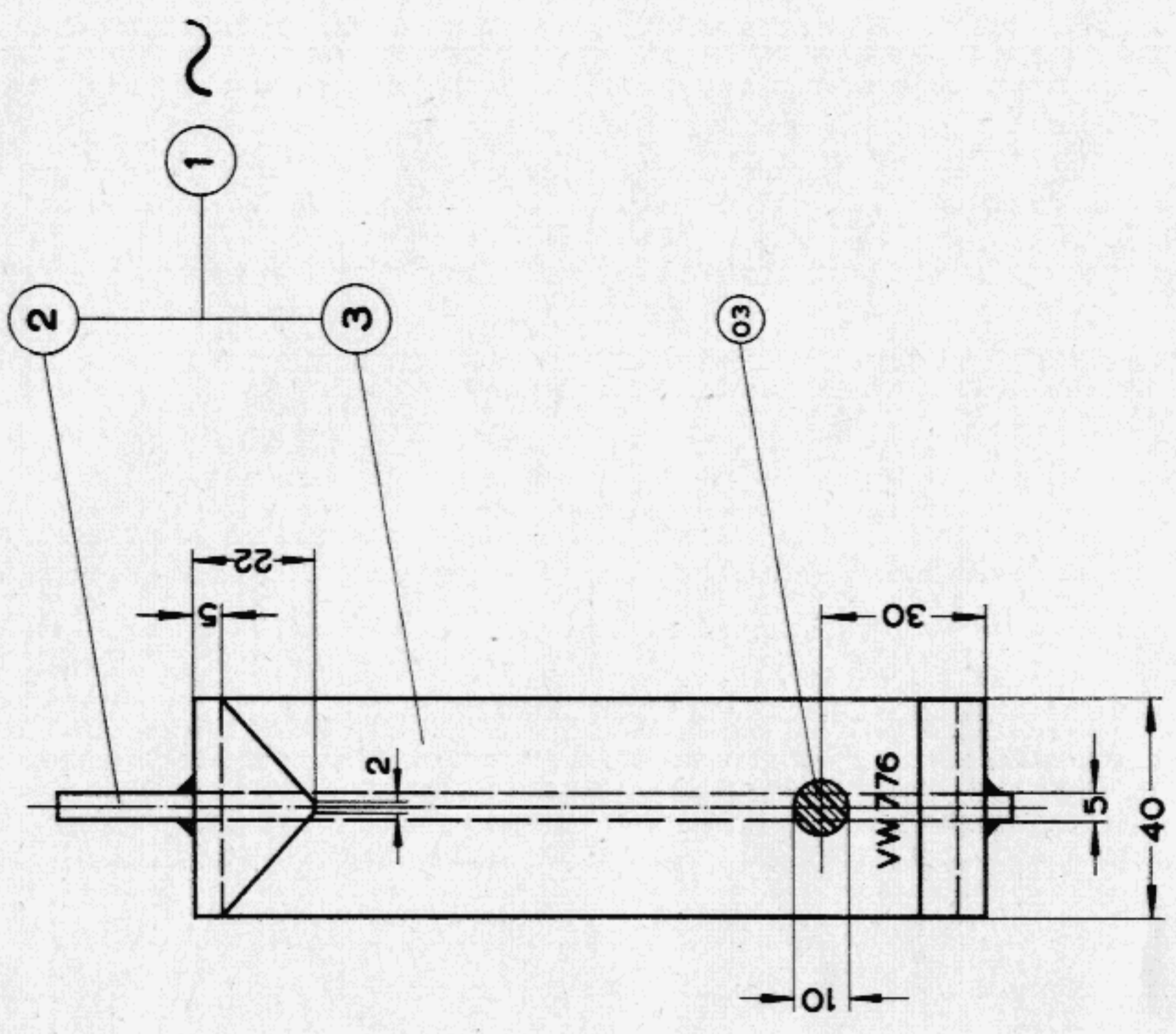
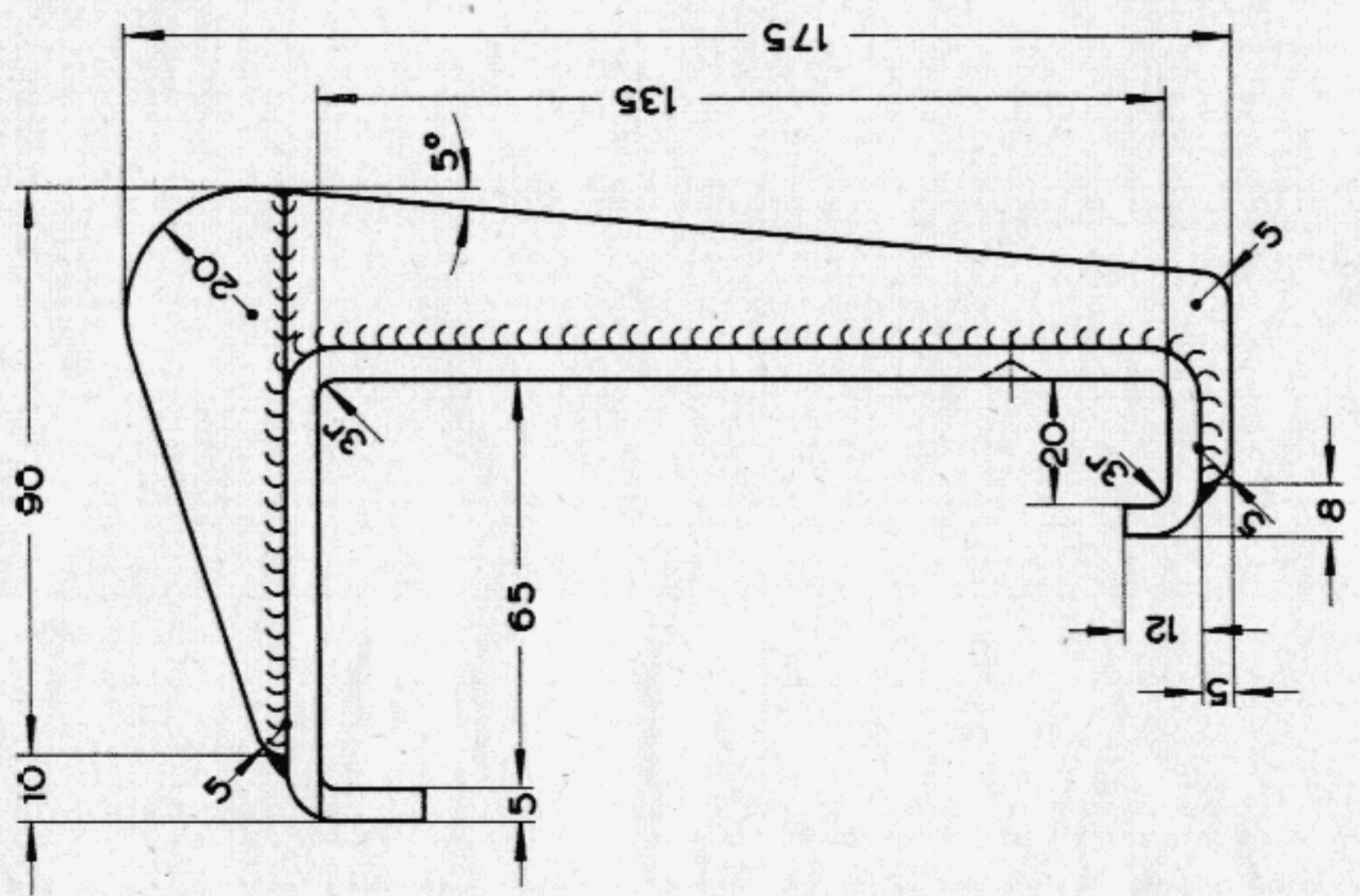
The long arm of the retaining bracket grips over the bracket of the torsion arm stop and the other end of the retaining bracket locates in the groove on the underside of the lower torsion arm. Thus when the vehicle is raised on the hoist the upper torsion arm cannot rest on the rubber stop. This has the same effect as when the axle is under load.



Construction Details for YW 778

- 1—Cut parts 2 and 3 to size.
- 2—Sand part 3.
- 3—Mask out and work parts 2 and 3.
- 4—Carry out welding work.
- 5—Paint retaining bracket dark green (RAL 6011).

A B C D E



Colour identification marks

- (01) orange RAL 2004
- (02) blue RAL 5015
- (03) violet RAL 4003
- (04) green RAL 6018
- (05) black RAL 9005



Surfaces in given colours (synthetic resin) shown thus

When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

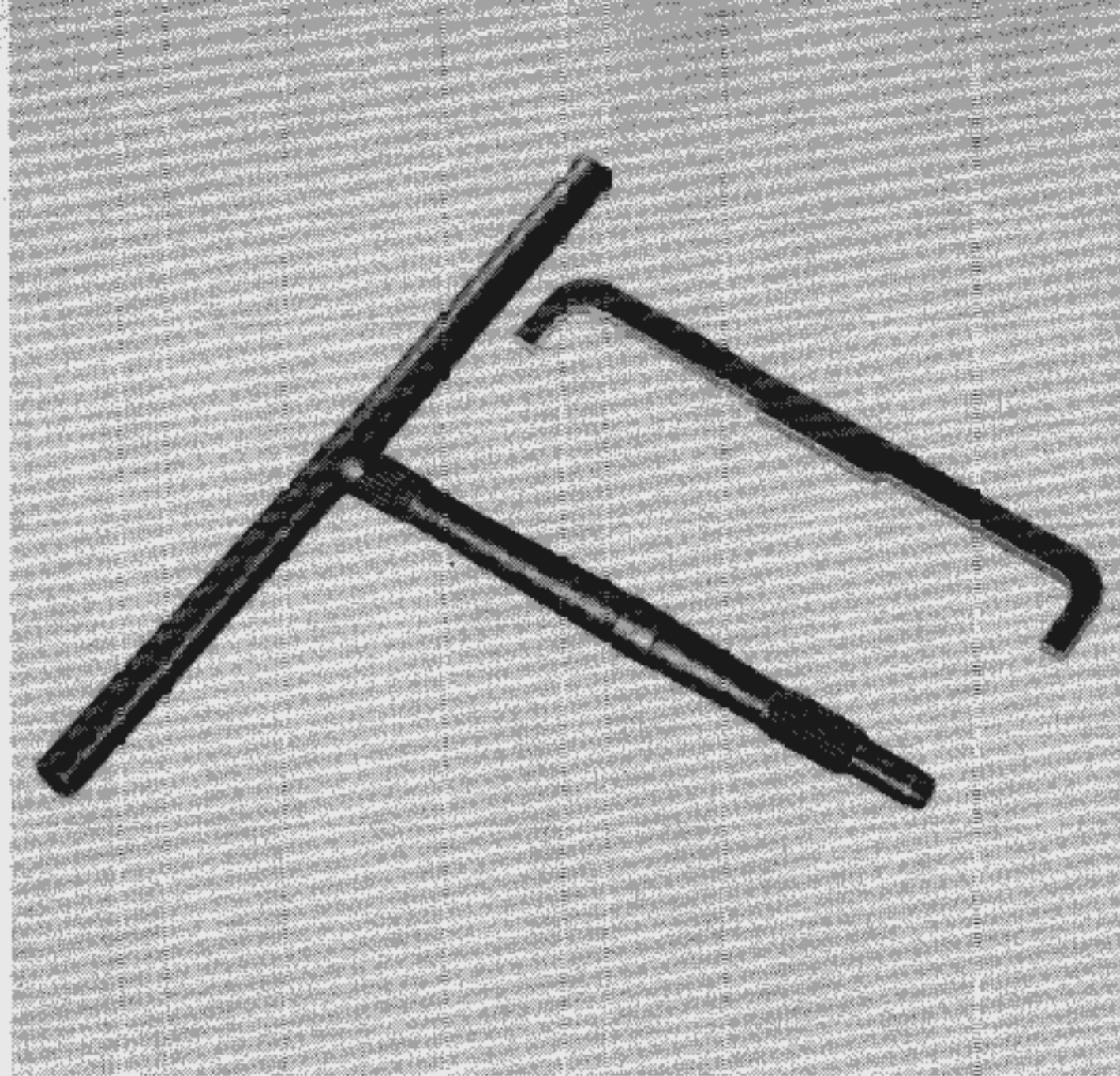
Drawn: 29. 10. 65 Lemper
Checked: 23. 11. 65 Giesecking

1	Fl 40 X 5 X 270	3	MR St 37-2
1	Fl 40 X 5 X 255	2	MR St 37-2
1	Welded part	1	Parts 2 & 3
Quantity	Designation	Part No.	Material

Retaining Bracket for Lower Torsion Arm

VW 776

No. of sheets 1
Sheet No. 1

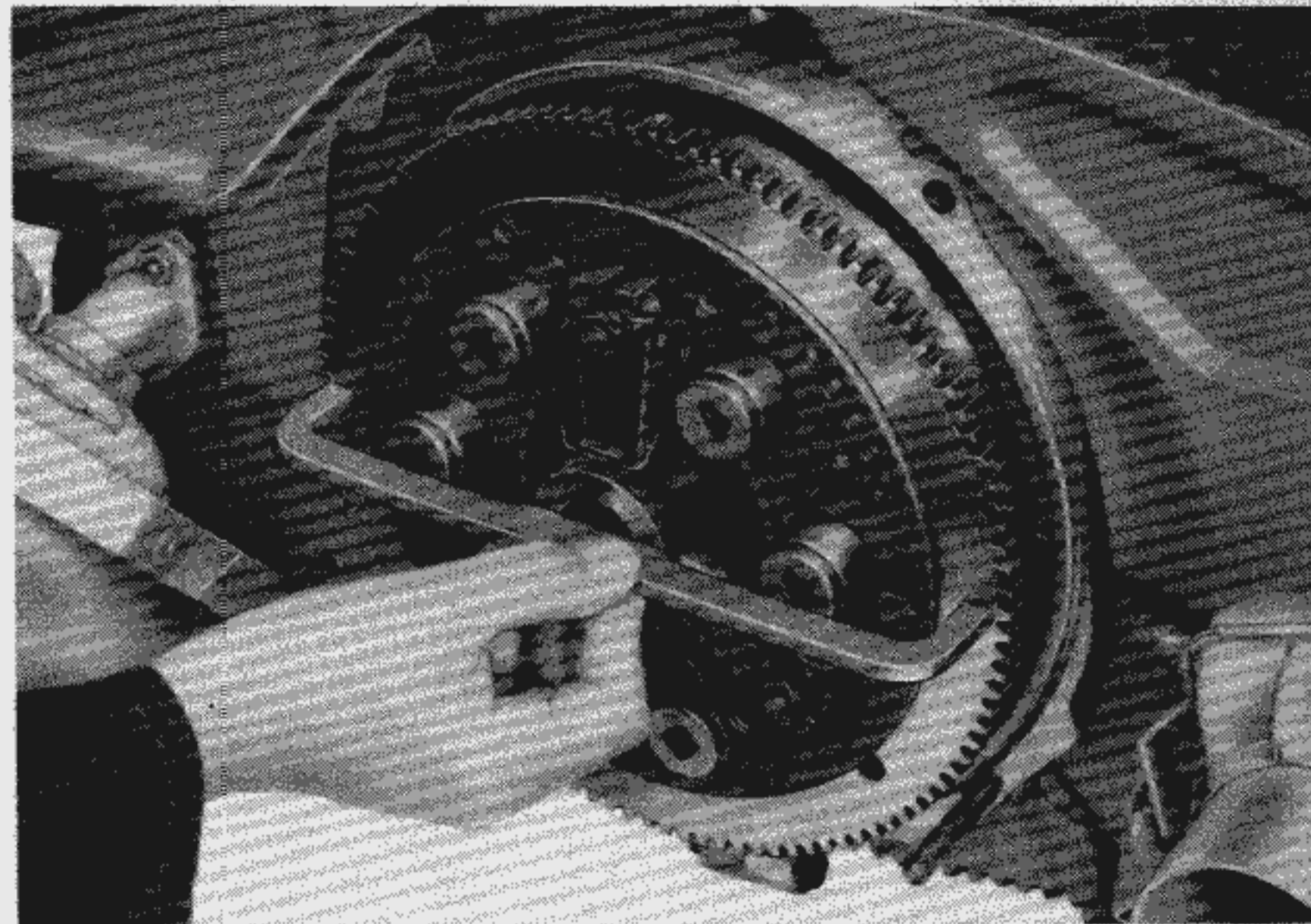


Measuring Bridge and Clutch Cranking Handle
Types 1, 2, 3, 122, 124, 126

A measuring bridge and clutch cranking handle are used in conjunction with bracket VW 659/2 and a dial gauge for checking and adjusting the clutch release plate.

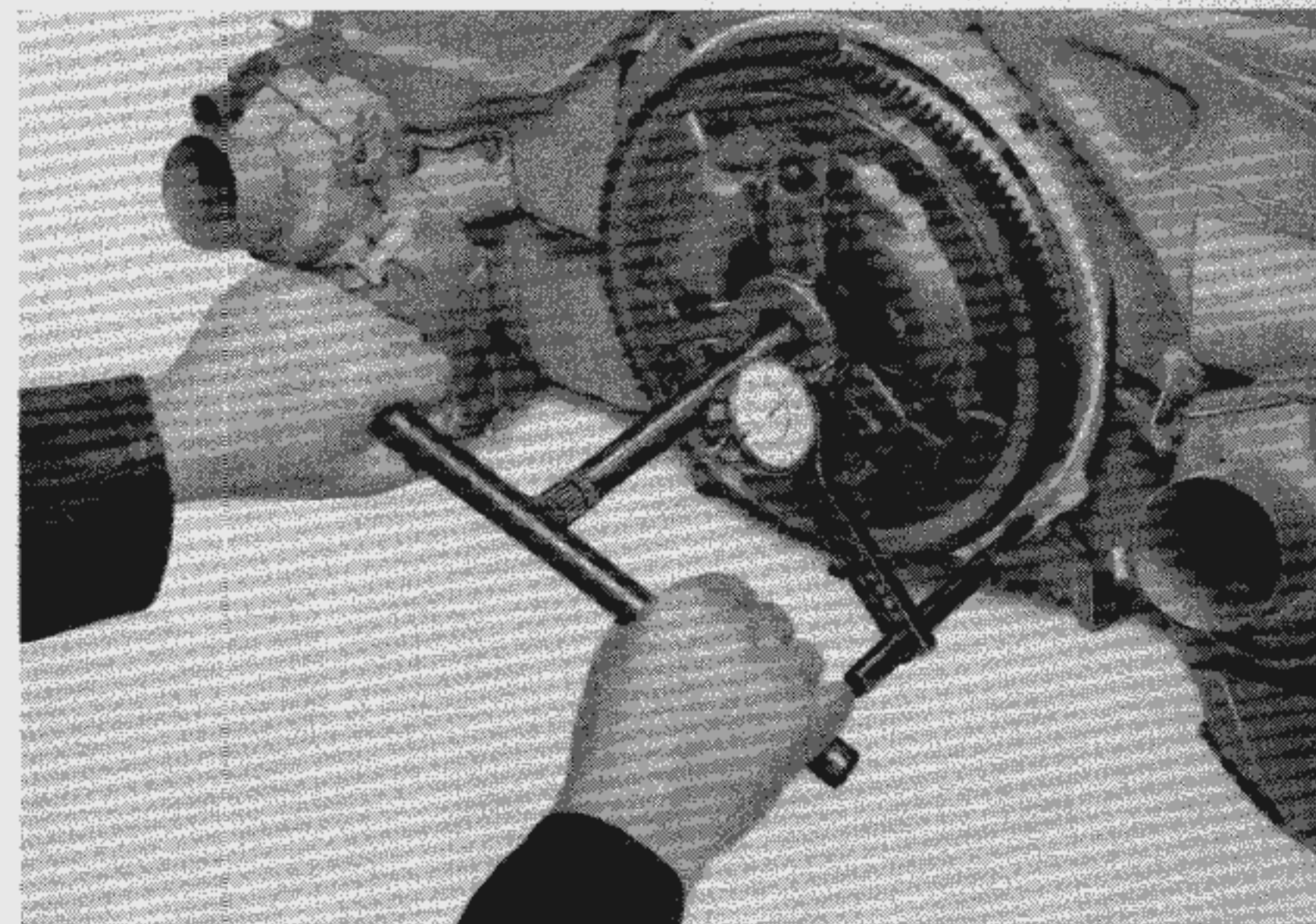
1 — Measuring bridge

The specified distance from the clutch release plate to the end face of the flywheel is checked with the aid of the measuring bridge. The measuring bridge is used for the operations formerly carried out with the clutch adjustment gauge VW 254 a. This measuring bridge is only required if the special tool VW 254/a is not available.



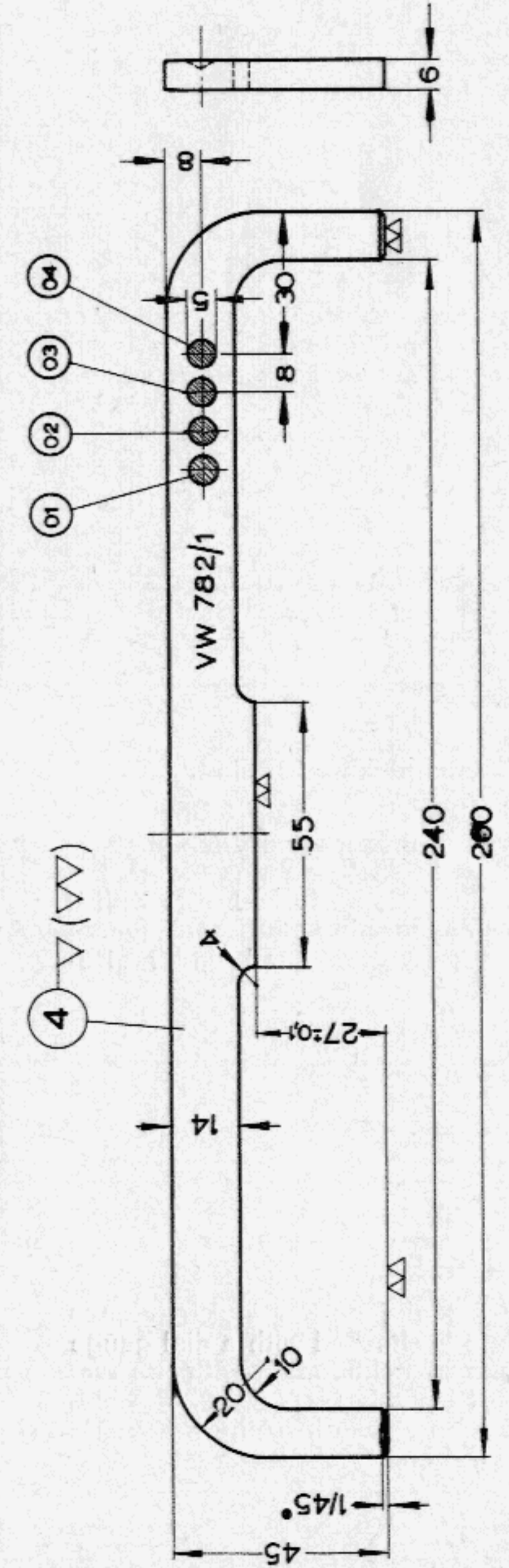
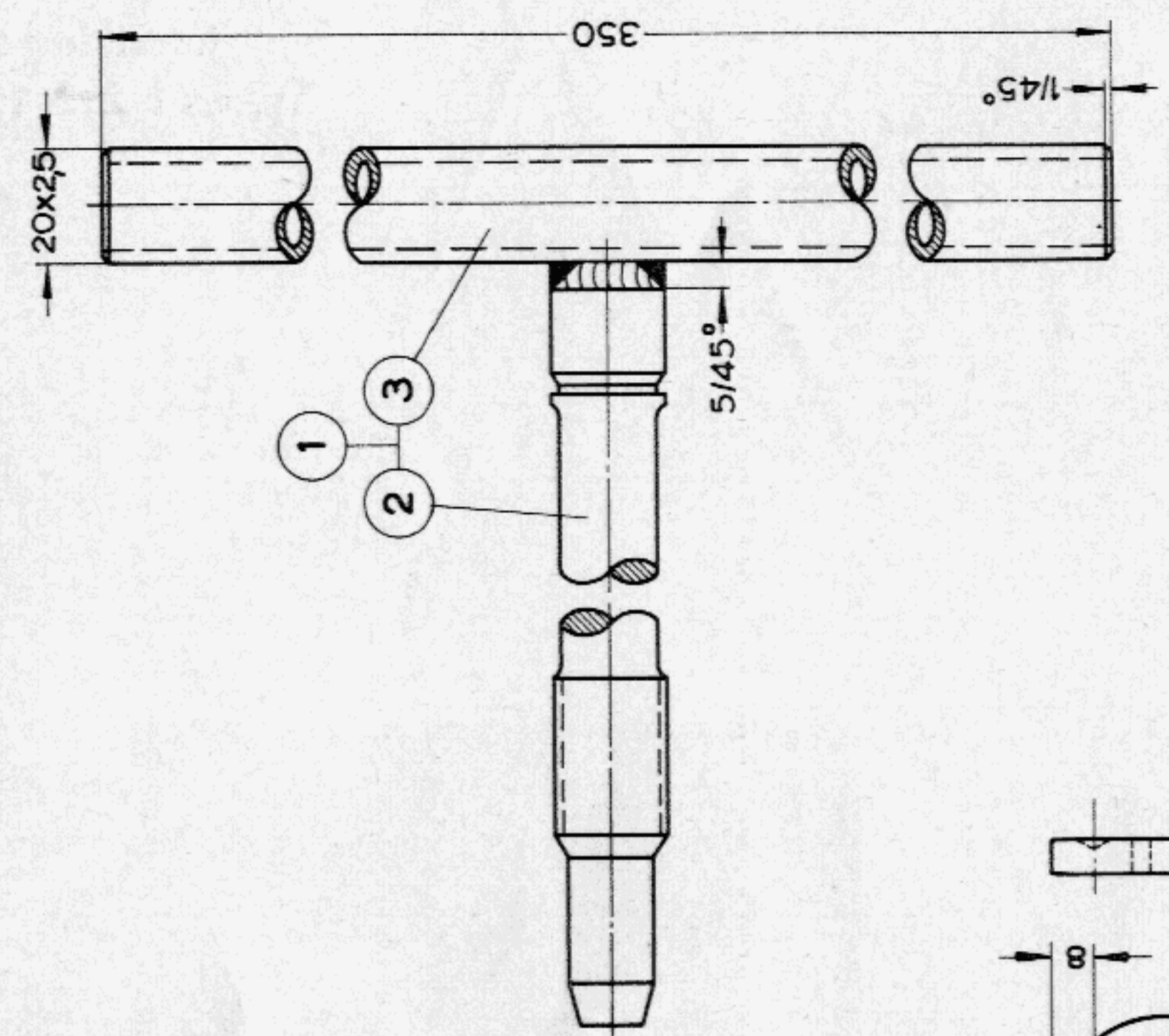
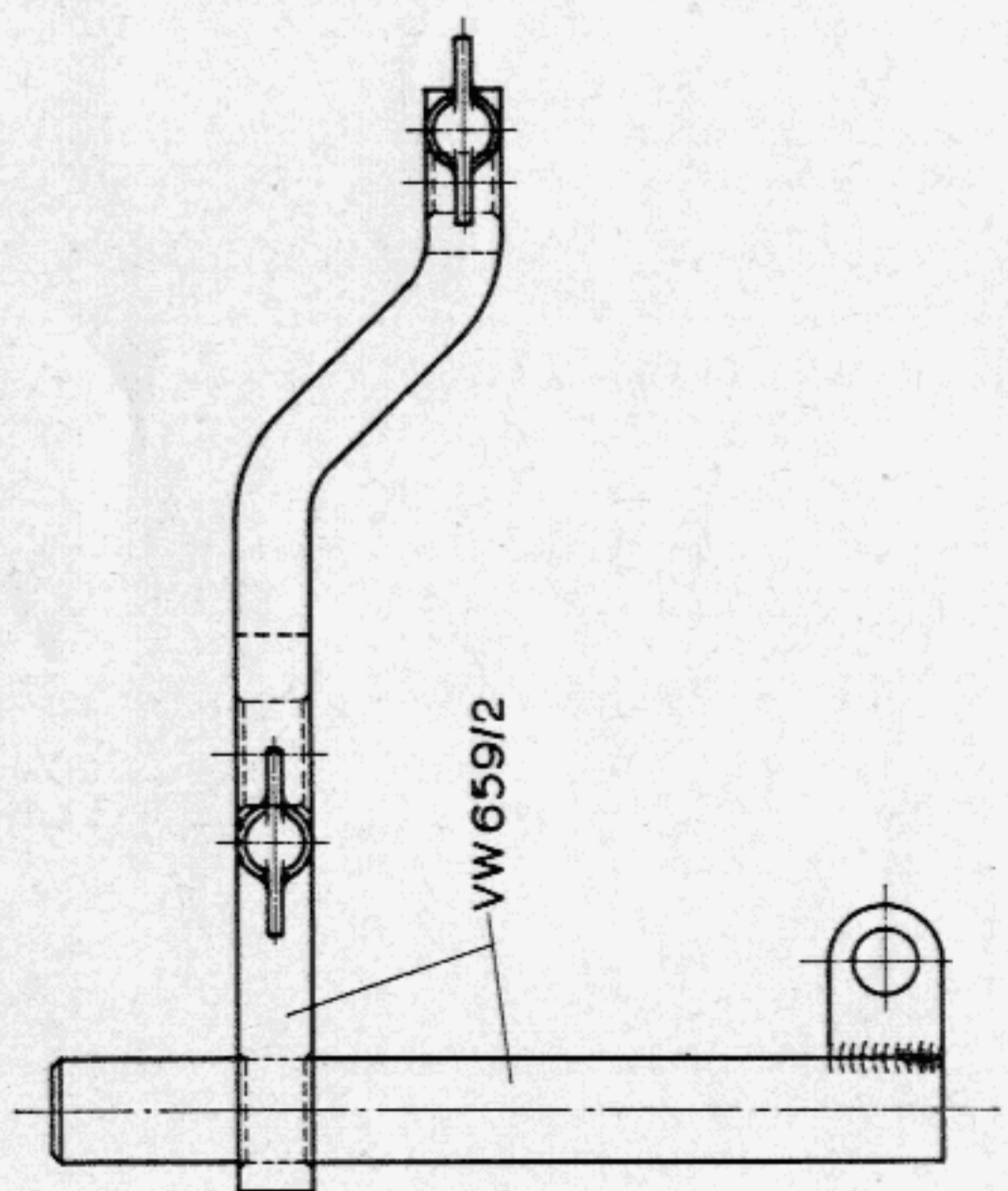
2 — Clutch cranking handle

The clutch cranking handle consists of a rear main drive shaft to which a tube has been welded. The engine can be turned over with it whilst carrying out the runout check as mentioned under „Remarks“.



Remarks

The runout on the clutch release plate is checked with a dial gauge used in conjunction with the dial gauge bracket VW 659/2. The illustration shows how the bracket is bolted on.



Chamfer edges

When no limit is given tolerance ± 0.25 ; $\pm 30'$ applies

1	FI	45x6x282	4	St 37 K
1	Tube	20x2,5x350	3	St 35
1	Main drive shaft, rear		2	Pt. No. 113 311 105
1	Welded part		1	Parts 2 and 3
Qty.	Designation	Part	Material	Part No. or Standard spec.

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WOLFSBURG
Service Department

Drawn: 9. 6. 67 Krumbholz
Checked: 17. 5. 67 Giesecking

Colour identification marks

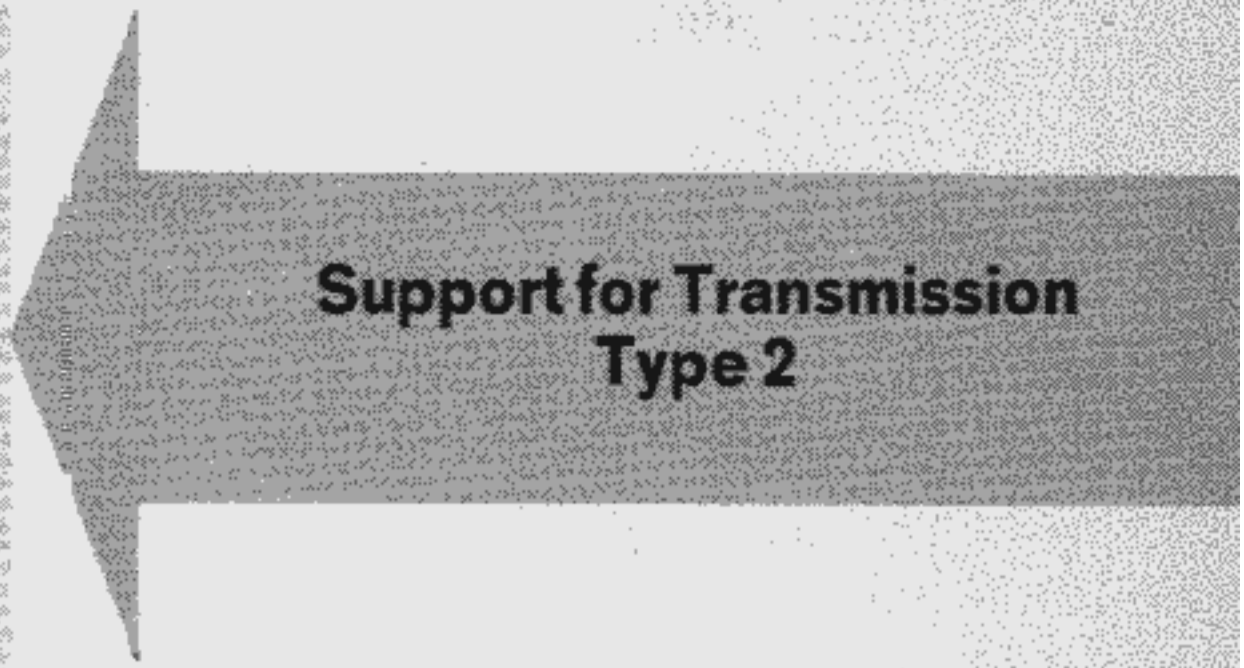
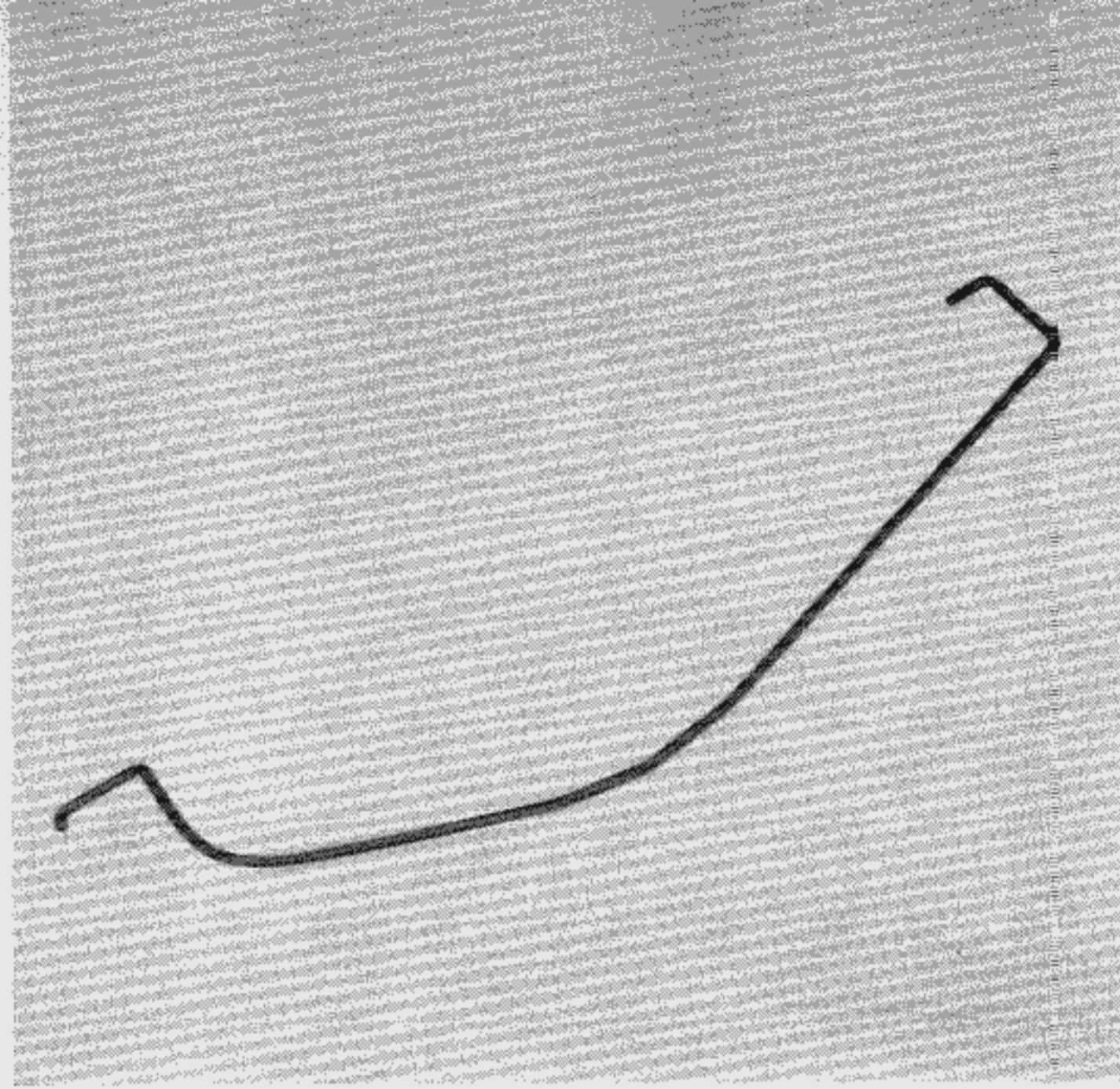
01	orange	RAL 2004	04	green	RAL 6018
02	blue	RAL 5015	05	black	RAL 9005
03	violet	RAL 4003			

Surfaces in given colours (synthetic resin) shown thus

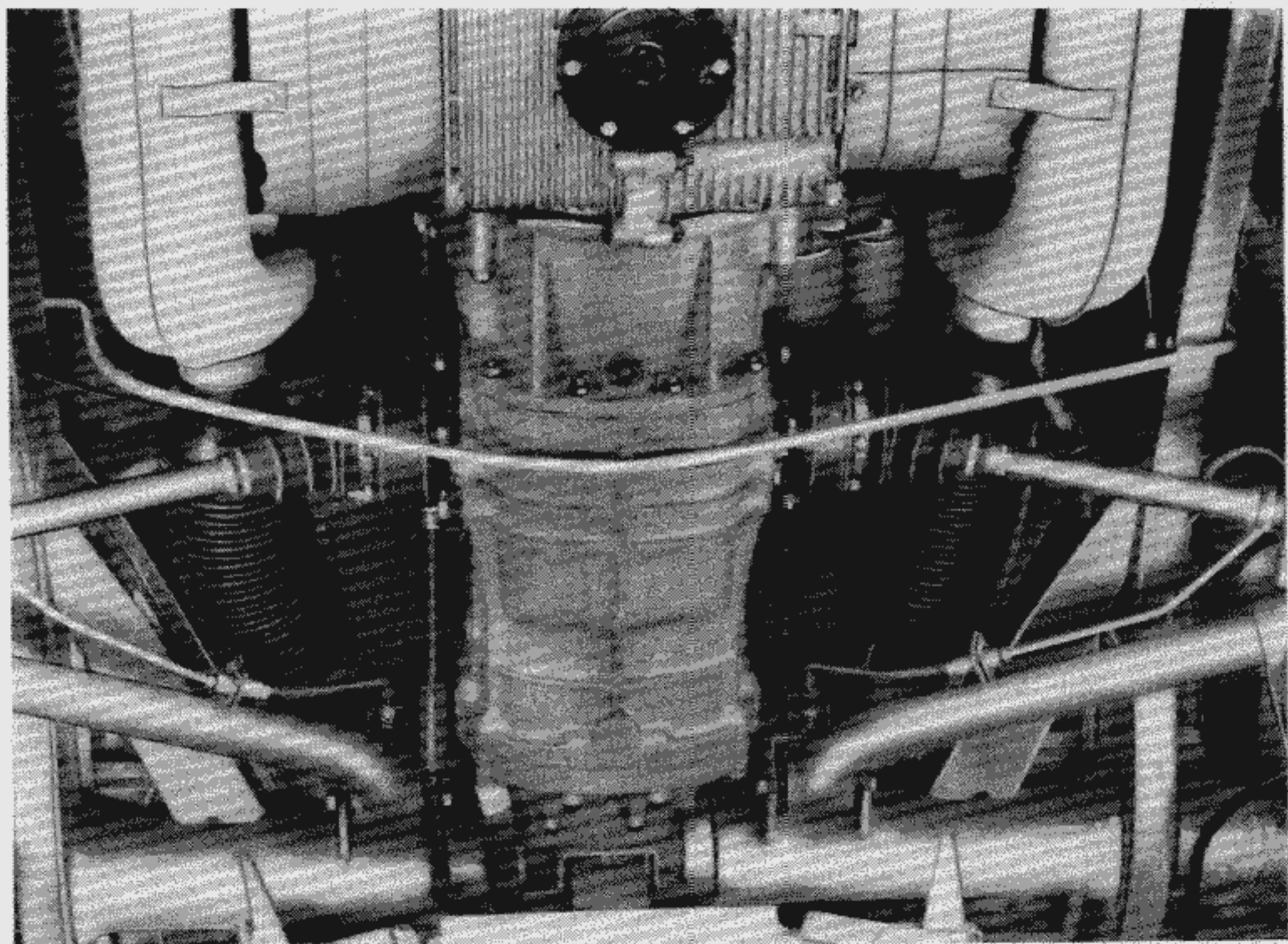
Measuring Bridge and Clutch Cranking Handle

VW 782/1

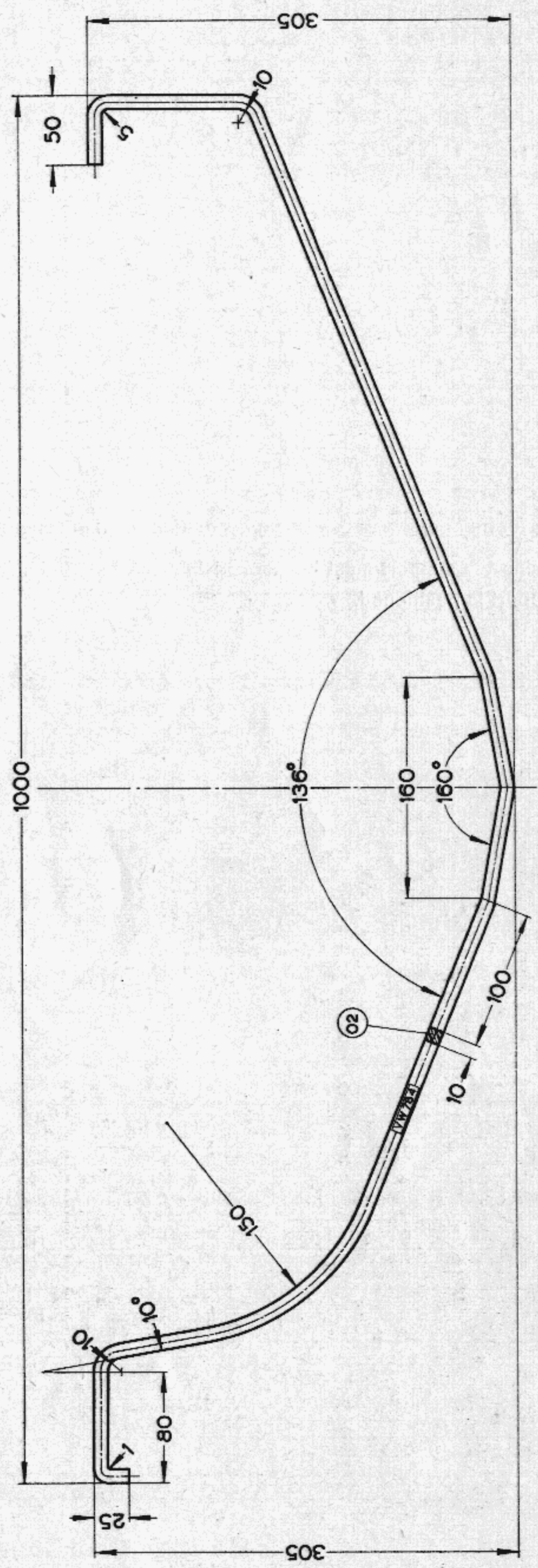
No. of Sheets 1
Sheet no. 1



The support is necessary for holding the transmission in position when the engine is removed. Before removing the engine the support must be hooked into the longitudinal members. The illustration shows where the support is positioned.



1 2 3 4 5 6 7 8 9



When no limit is given tolerance
±0.25; ±30' applies

VOLKSWAGENWERK AG
WOLFSBURG
Service Department
Checked:
9. 6. 67 Giesecking

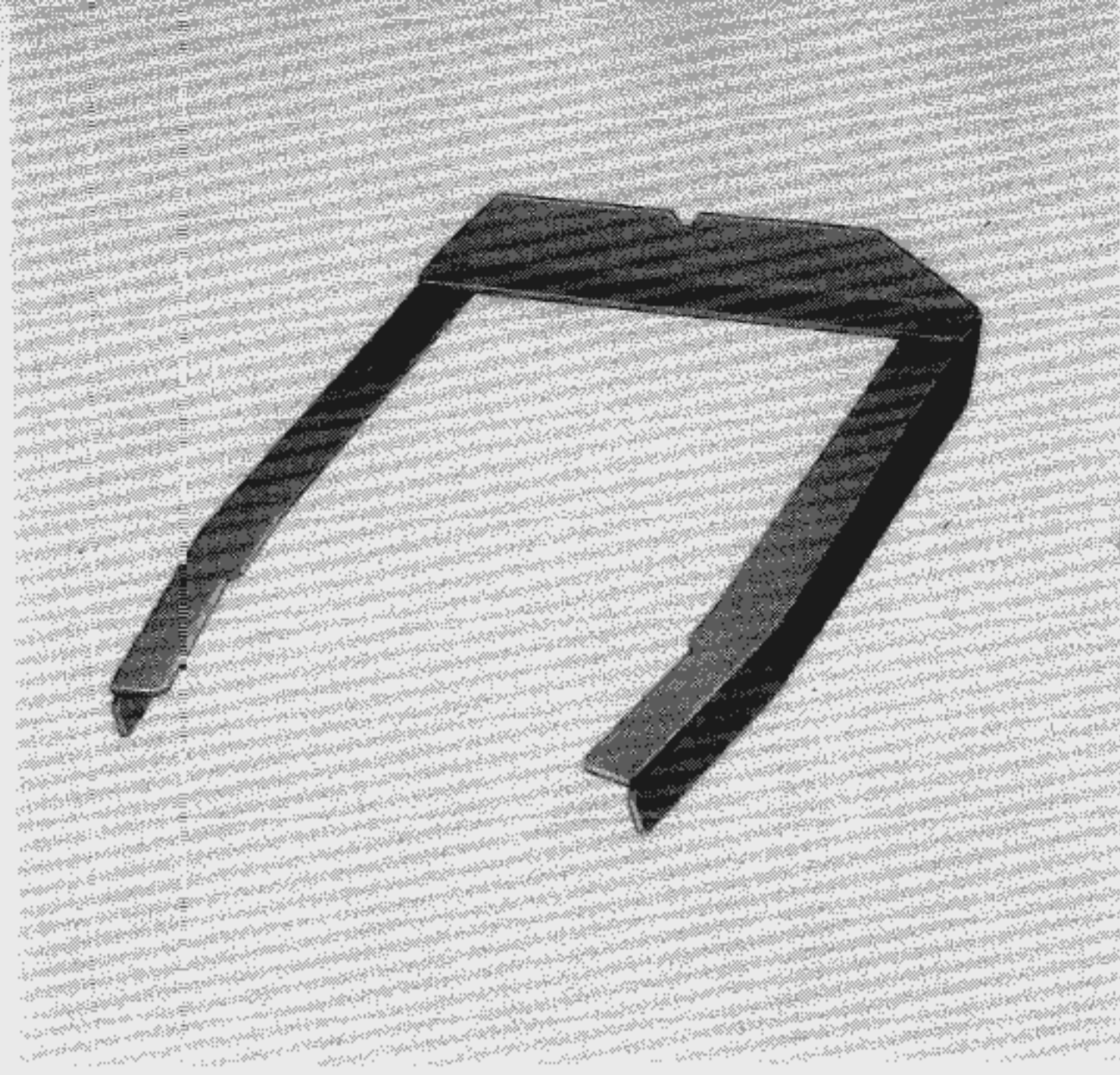
Colour identification marks

01	orange	RAL 2004
02	blue	RAL 5015
03	violet	RAL 4003
04	green	RAL 6018
05	black	RAL 9005

Surfaces in given colours
(synthetic resin) shown thus

1	Rd 10x1400	1	C 15 K
Qty.	Designation	Part	Material
Support for Transmission (Engine removed)			
			No. of Sheets 1
			Sheet No. 1

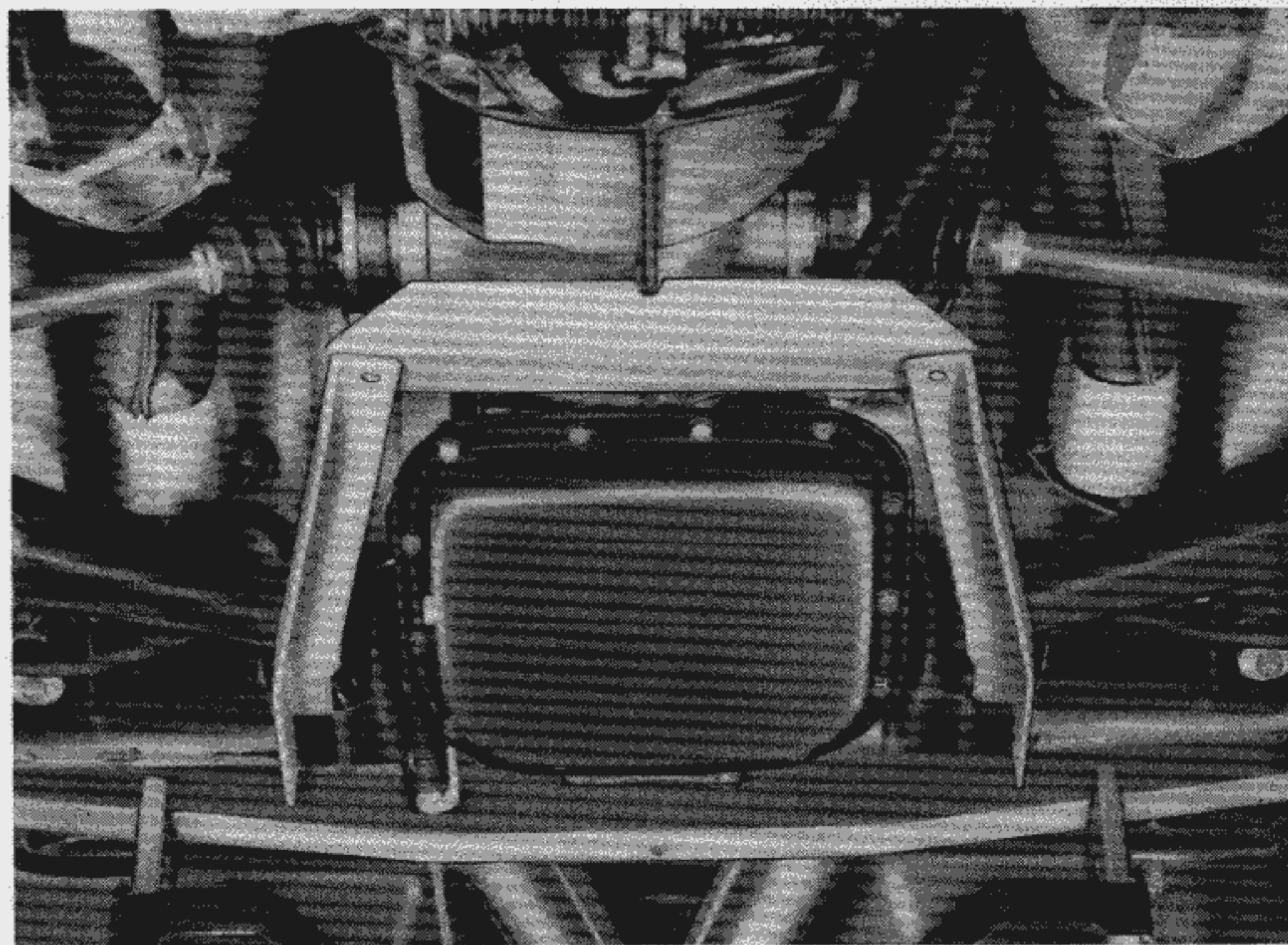
VW 784



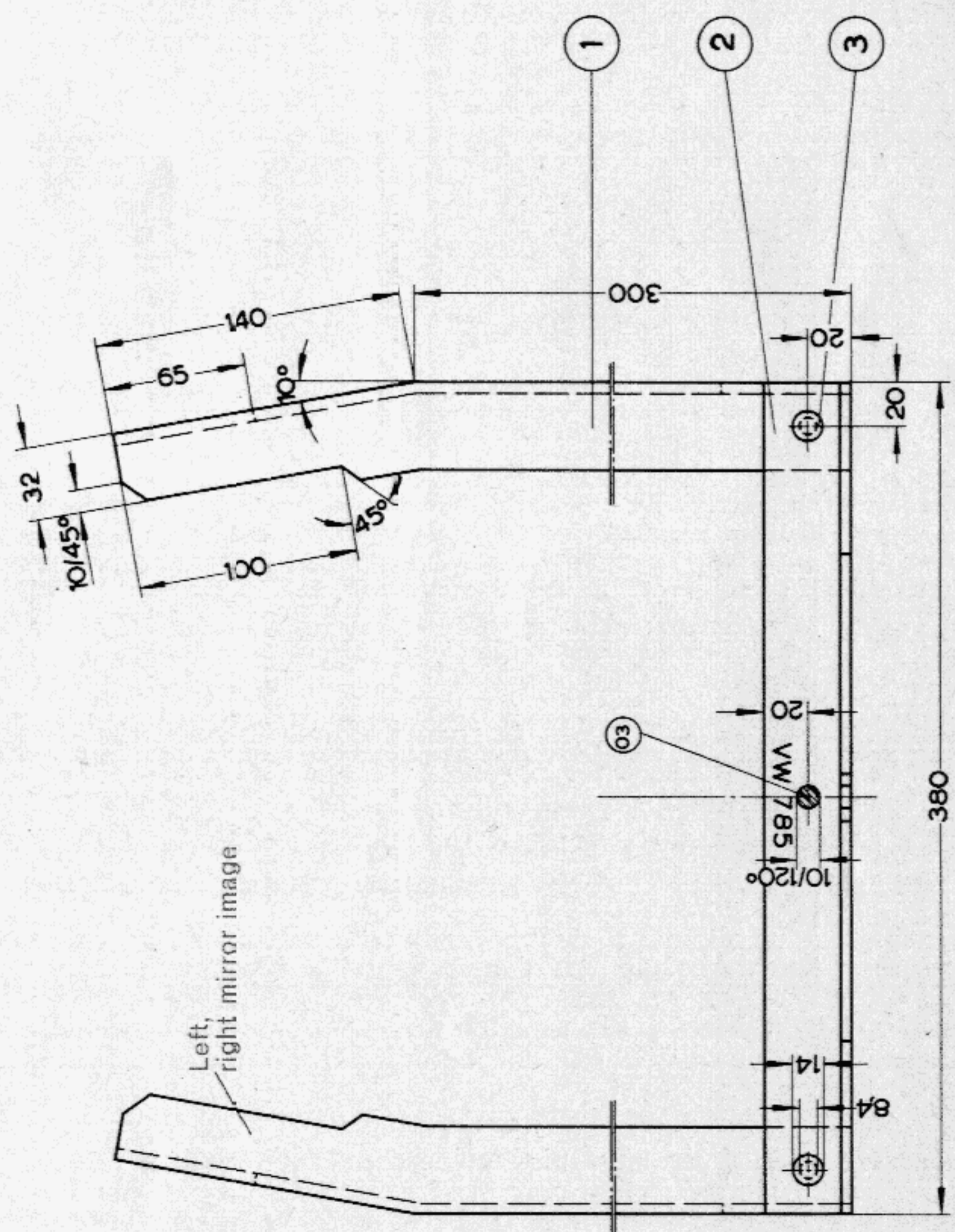
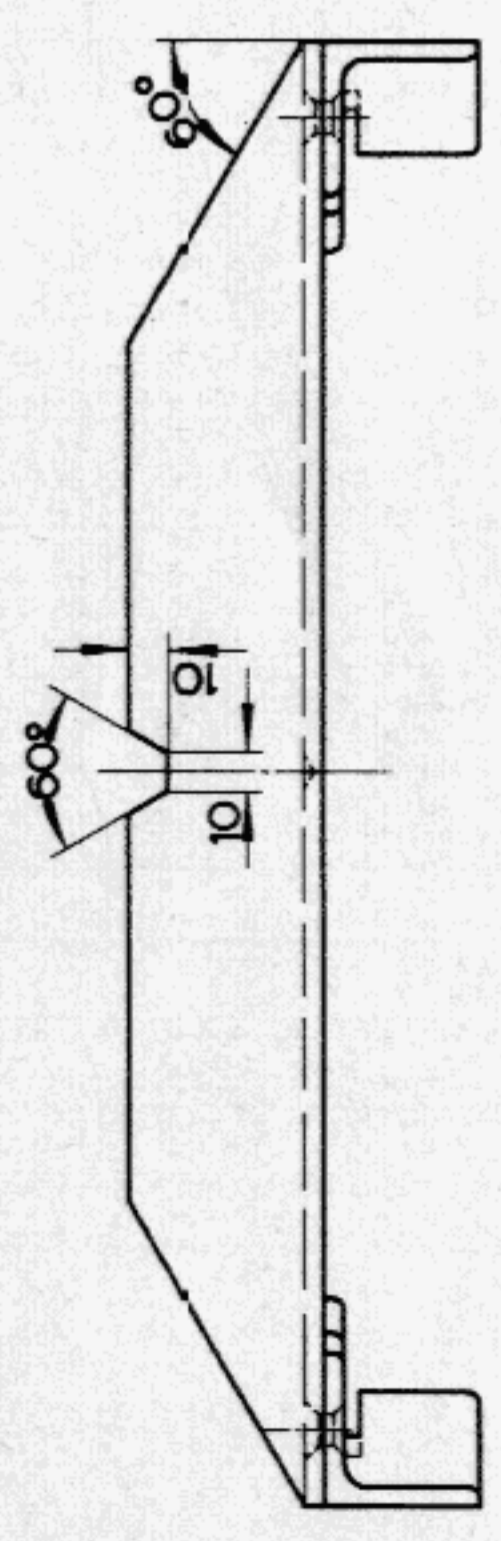
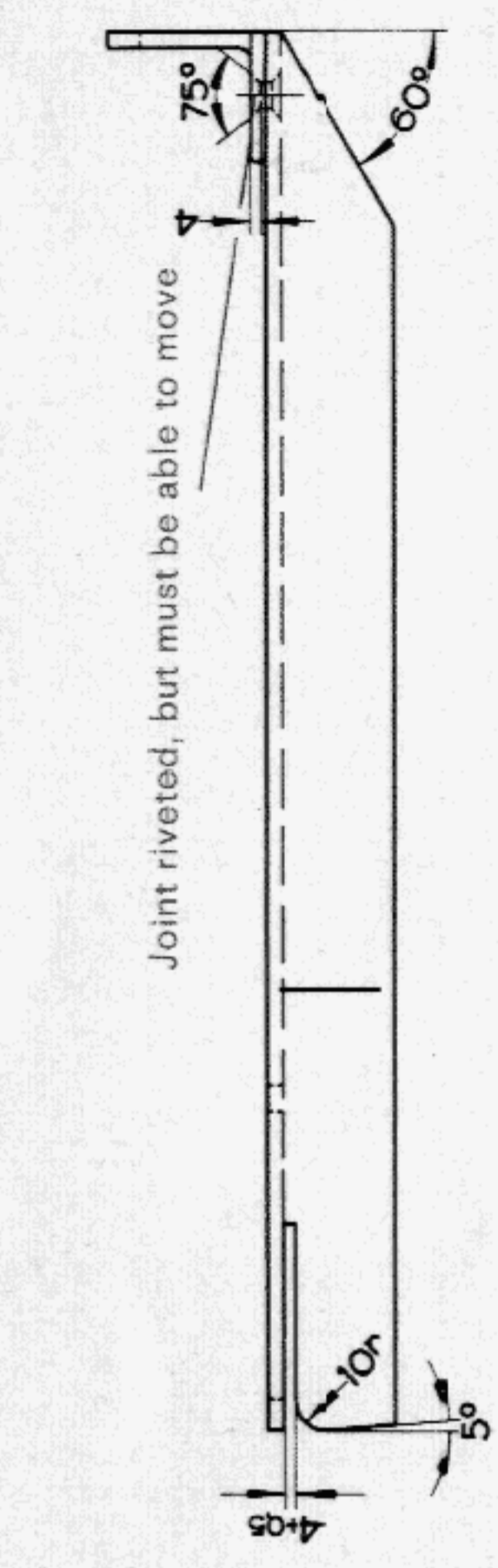
**Transmission Support
Type 3 - Automatic - VW 1600**

The support is required for holding the transmission in position whilst removing the engine.

Before attempting to remove the engine, the support must be inserted in the mounting brackets of the control arms — as shown in the illustration.



1 2 3 4 5 6 7 8 9



▽ Chamfer edges

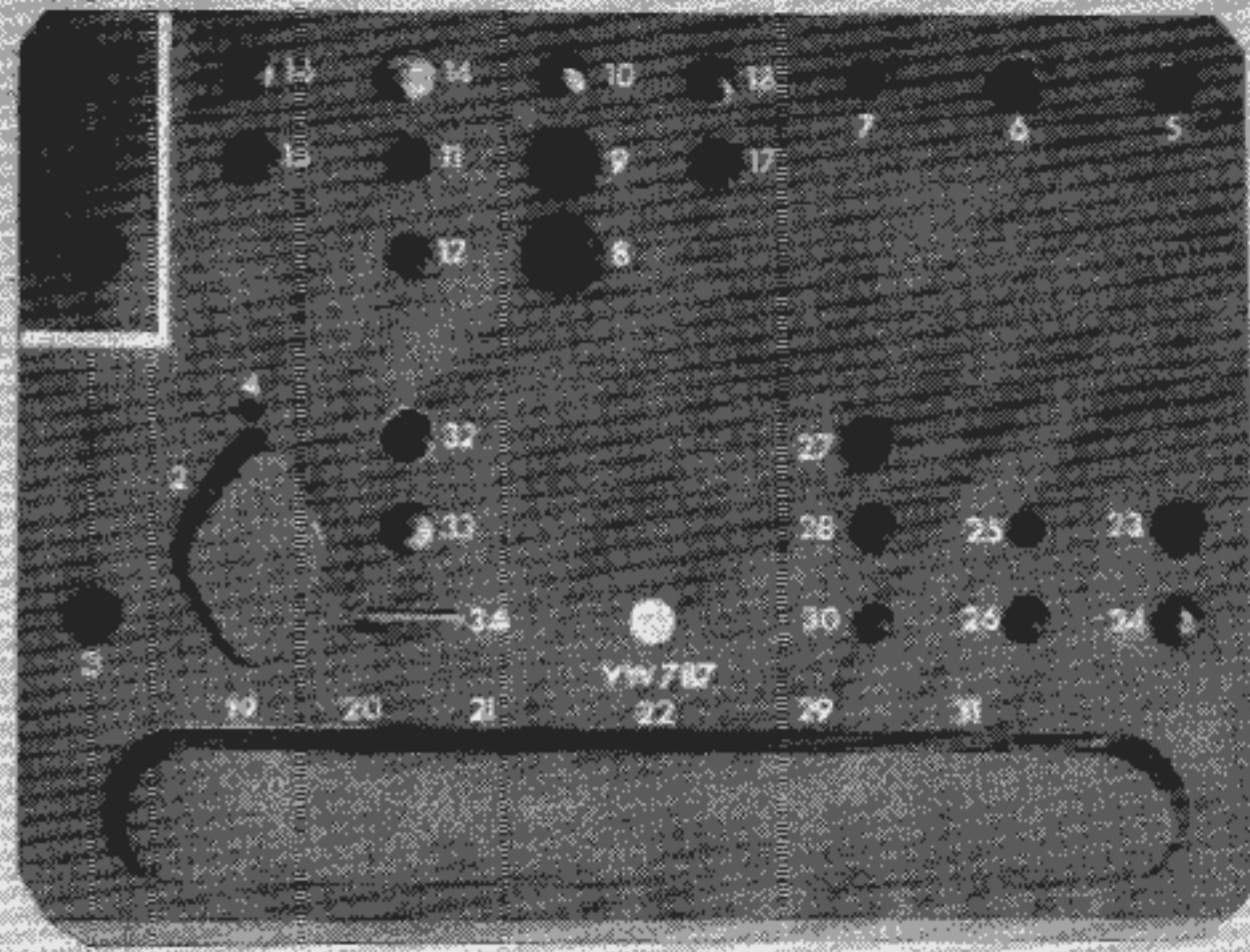
Qty.	Designation	Part	Material	Part No. or Standard spec.	Remarks
2	Countersunk rivet	8x15	MU St 34	DIN 661	
1	L 50x40x5x385	2	St 37-2	DIN 1029	left and right
2	L 40x5x445	1	St 37-2	DIN 1028	

Transmission Support (Engine removed)
VW 785
 No. of Sheets 1
 Sheet no. 1

When no limit is given tolerance ±0.25; ±30' applies

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 WOLFSBURG
 Service Department
 Drawn: 20. 6. 67 Busse
 Checked: 20. 6. 67 Giesecking

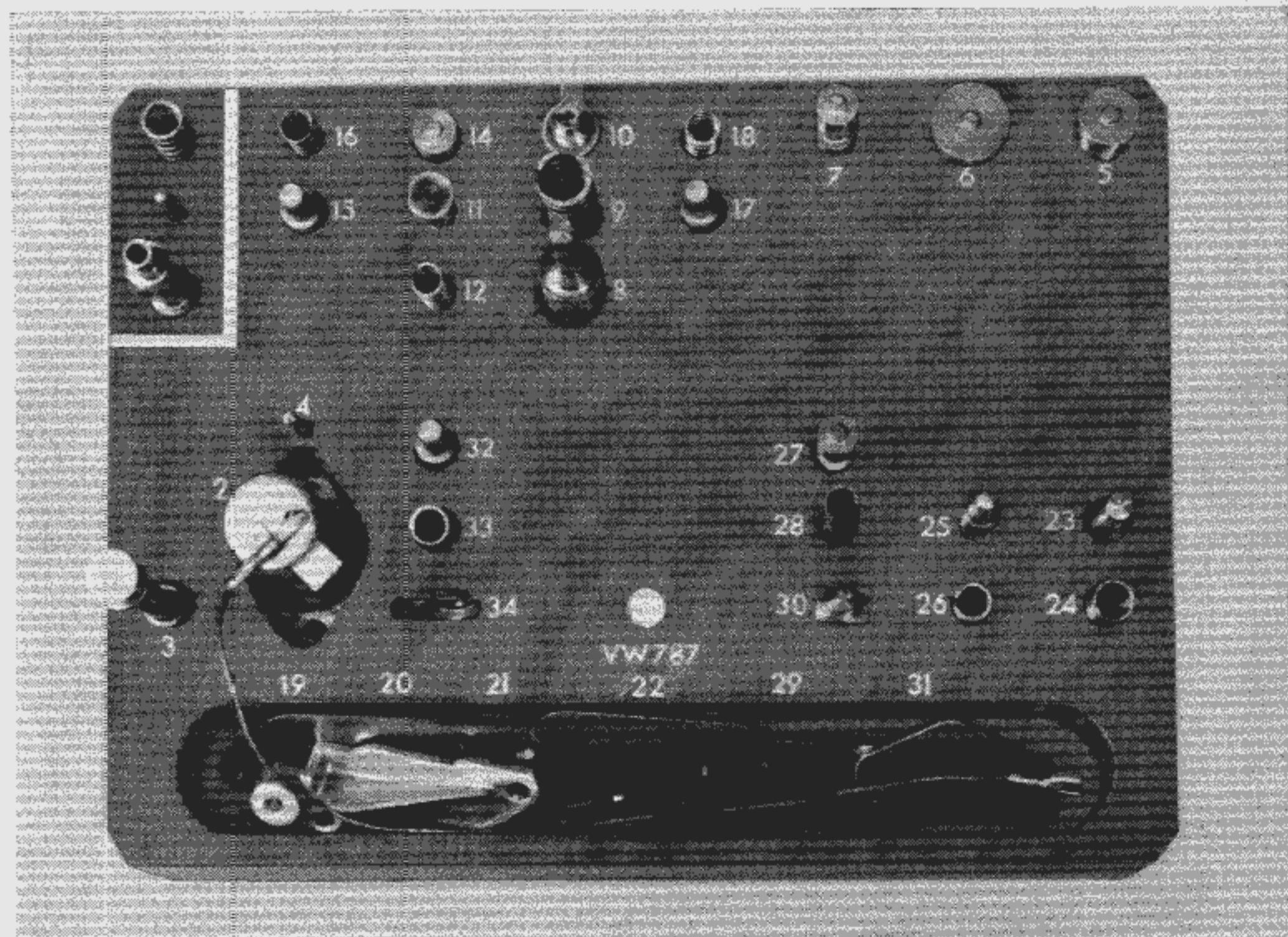
Colour identification marks
 (01) orange RAL 2004
 (02) blue RAL 5015
 (03) violet RAL 4003
 (04) green RAL 6018
 (05) black RAL 9005
 Surfaces in given colours (synthetic resin) shown thus



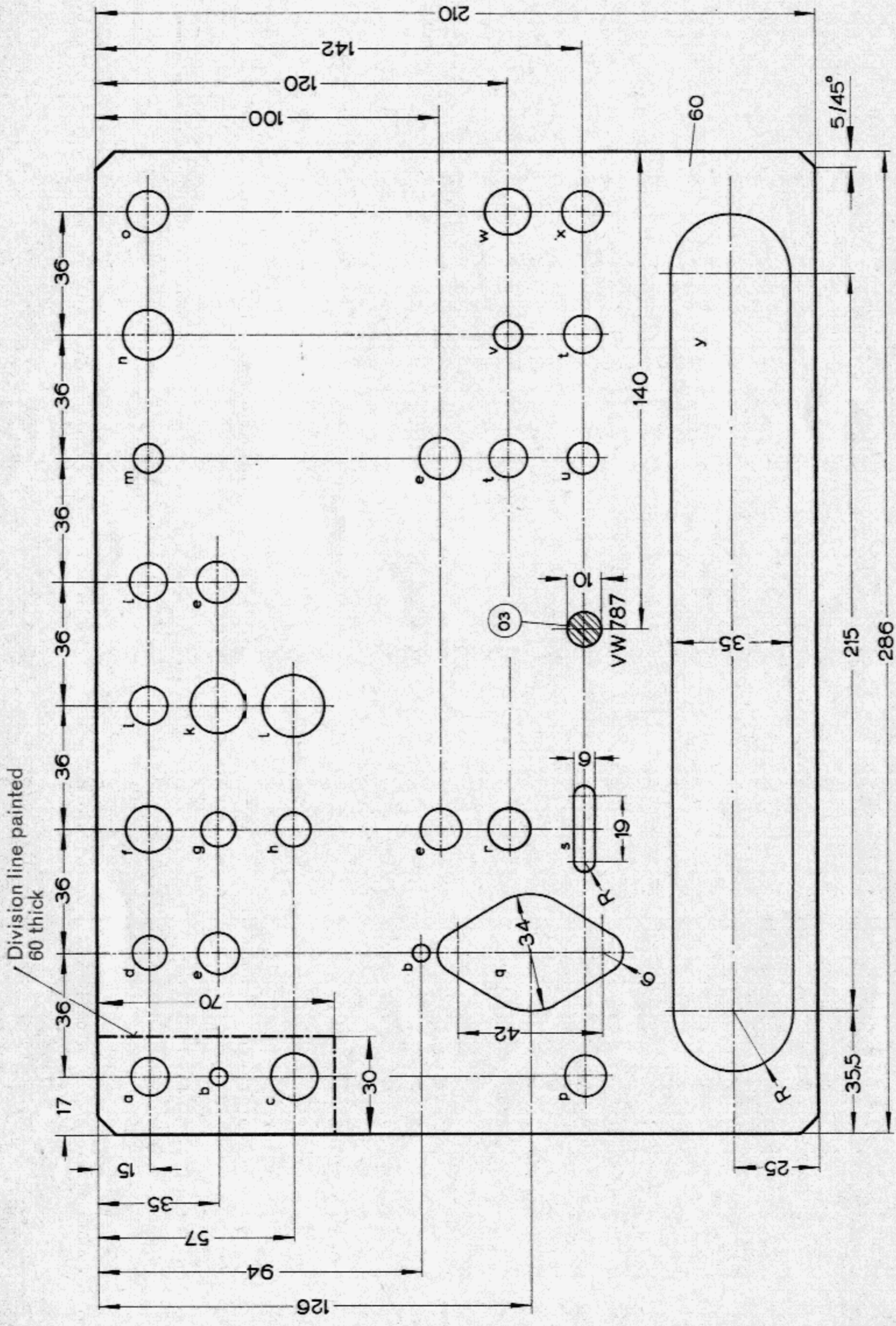
Tray for Parts of the Automatic Transmission Type 3 -- VW-1600-Automatic

The tray serves as a receptacle for the valves, springs and screws after they have been removed from the transmission control. The arrangement of the parts in the tray ensures that the parts, which are already run-in, are reinstalled in the correct position when reassembling.

Note: The round and elongated holes in the tray are to be marked with the numbers shown in the illustration. The numbers correspond to the numbers in the illustrations and the list of parts given in section "Valve Body Assembly" in the Provisional Workshop Manual VW 1600 Automatic Rear Axle and Transmission.



Date	Drawn	Description of Modification
26. 1. 68	Kr	Now letters for dimensions of holes



No.	Hole dia.	depth
a	11	15
b	5	15
c	13,5	30
d	10	12
e	12	22
f	13,5	7
g	10	32
h	10	15
i	11	12
k	16	38
l	18	45
m	8,5	20
n	14,5	25
o	12	26
p	12	48
q	*	20
r	12	12
s	*	8
t	11	16
u	9	10
v	8	30
w	12,5	32
x	12	11
y	*	30

* For dimensions see drawing

Note: The round and elongated holes are to be marked with the numbers given in the illustration on the front page.

Break edges

Colour identification marks			
(01) orange	RAL 2004	(04) green	RAL 6018
(02) blue	RAL 5015	(05) black	RAL 9005
(03) violet	RAL 4003	(06) hatched	Surfaces in given colours (synthetic resin) shown thus

When no limit is given, tolerance $\pm 0,25$; $\pm 30'$ applies

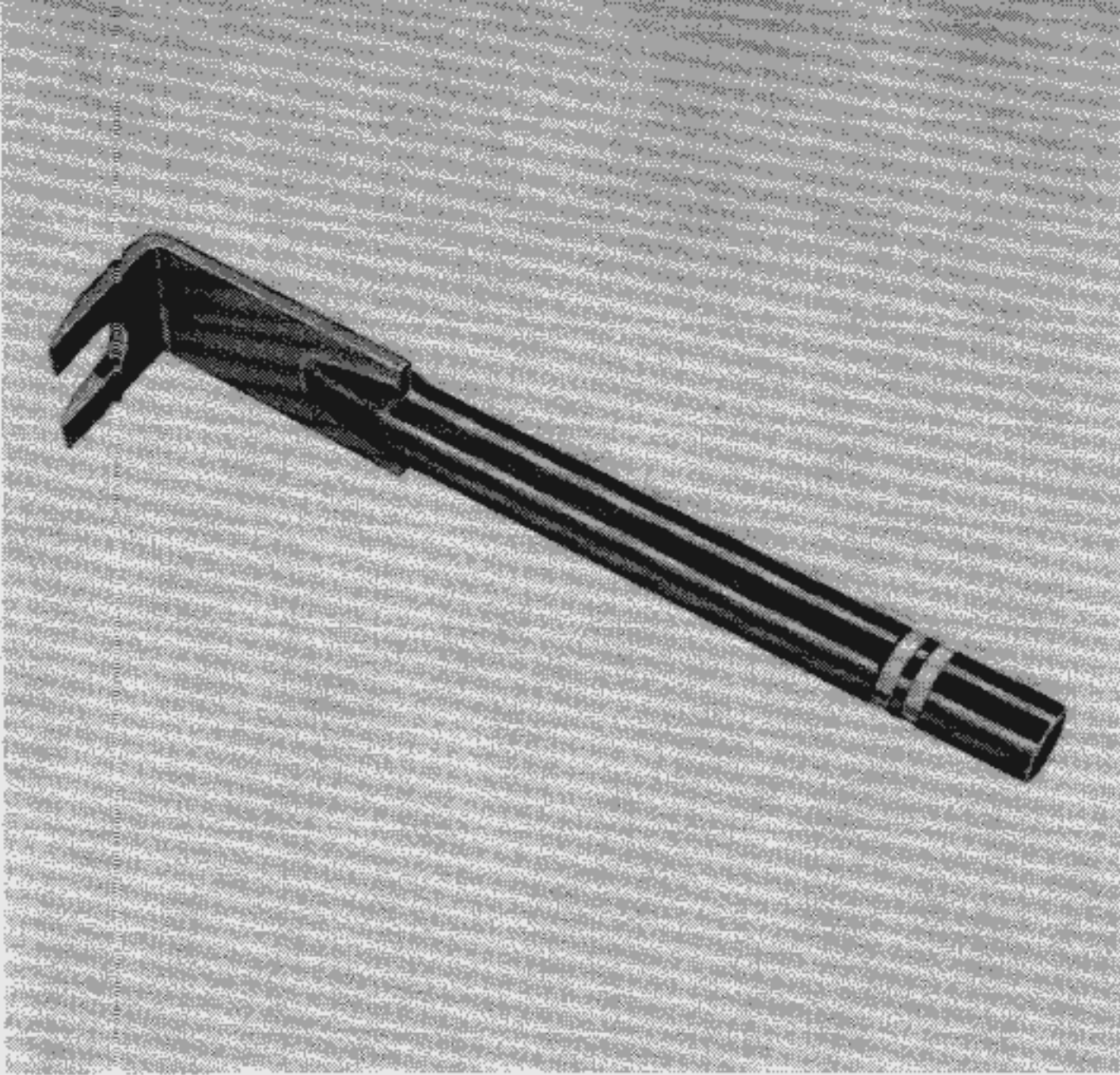
VOLKSWAGENWERK AG
 WOLFSBURG
 Service Department
 Drawn: 4. 9. 67 H. Krumbholz
 Checked: 5. 9. 67 Giesecking

Qty.	Designation	Part	Material	Part No. or Standard spec.
1	FI 210x60x286	1	Obo hard timber	

Tray for parts of the automatic transmission

VW 787

No. of Sheets 1



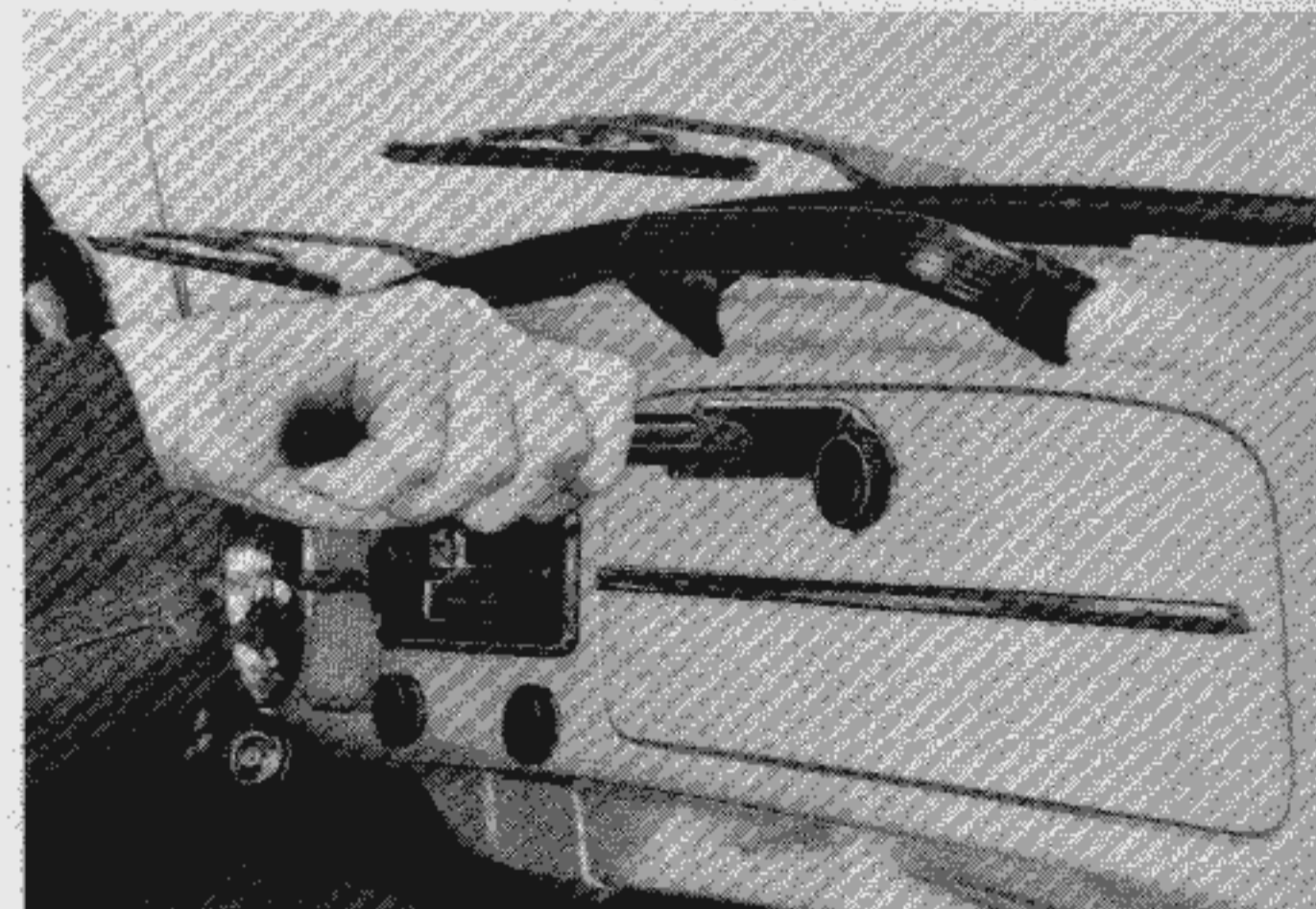
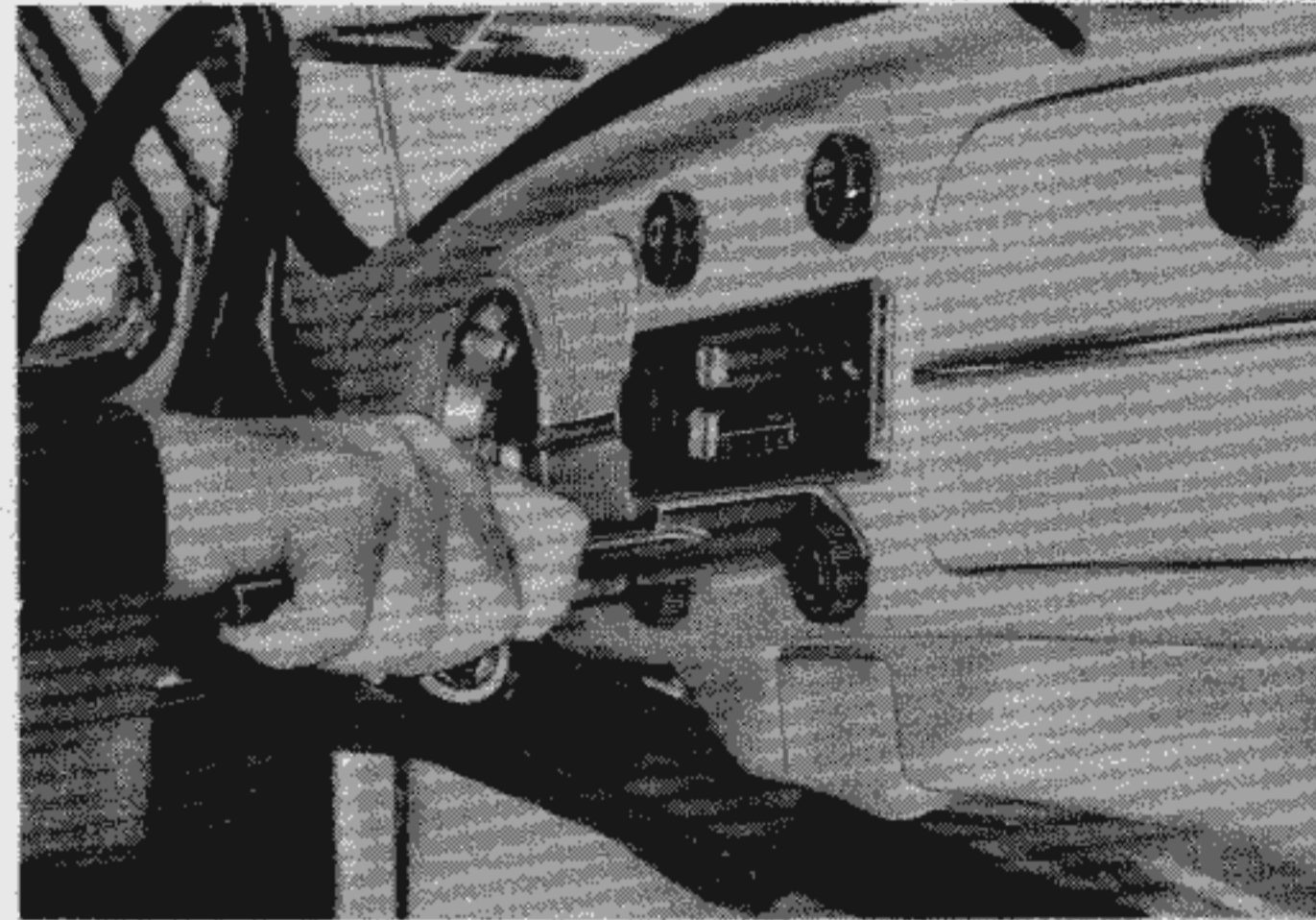
Plastic knob removing tool
for Type 1 and 3 vehicles

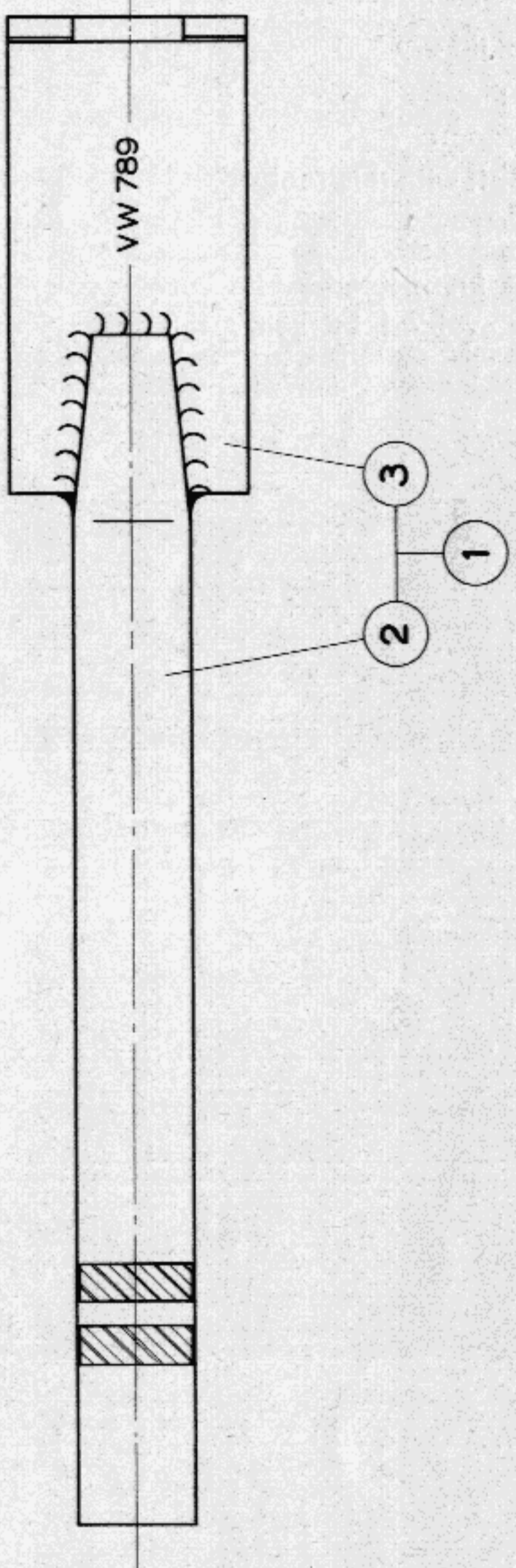
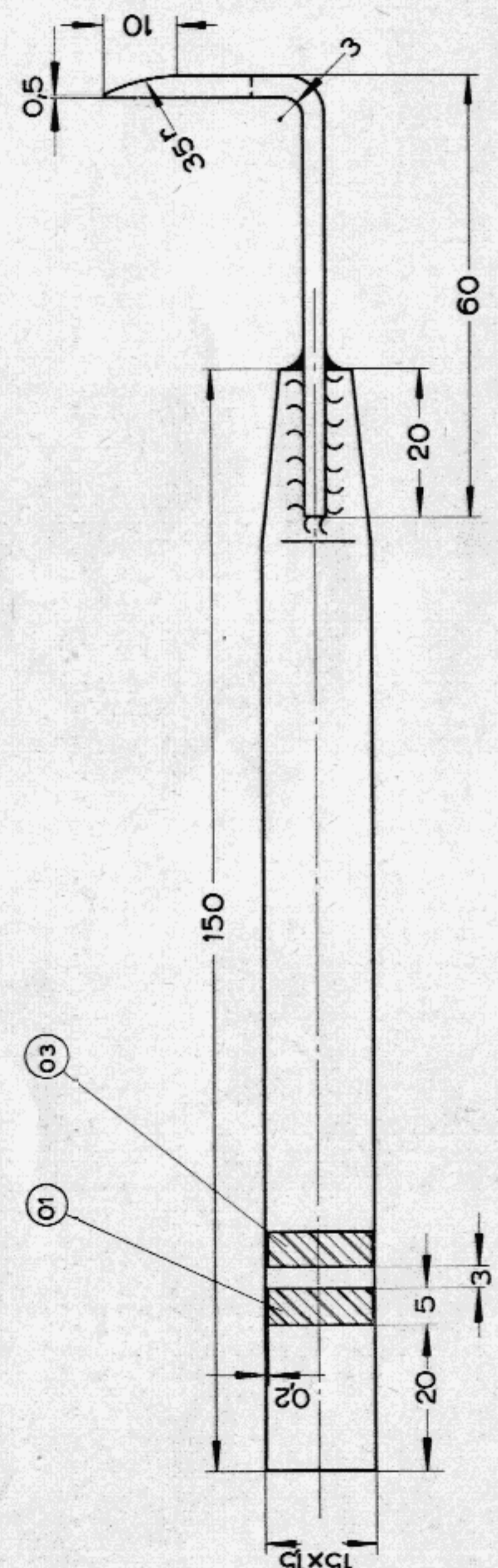
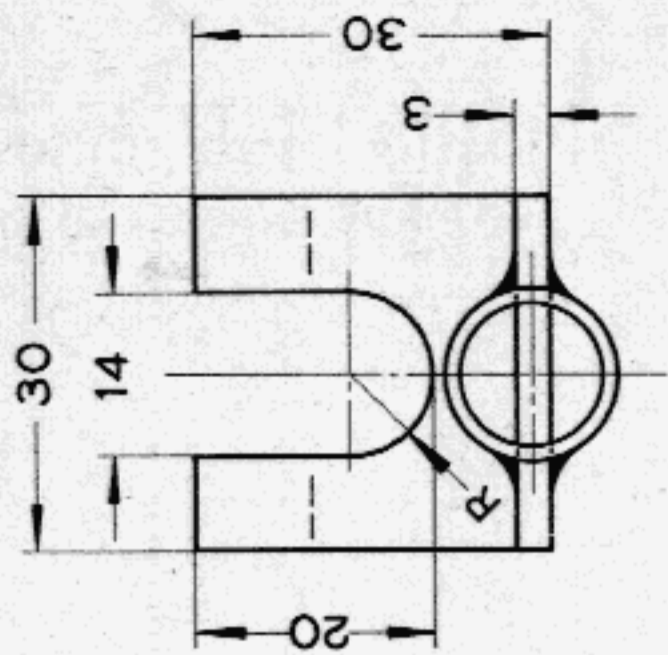
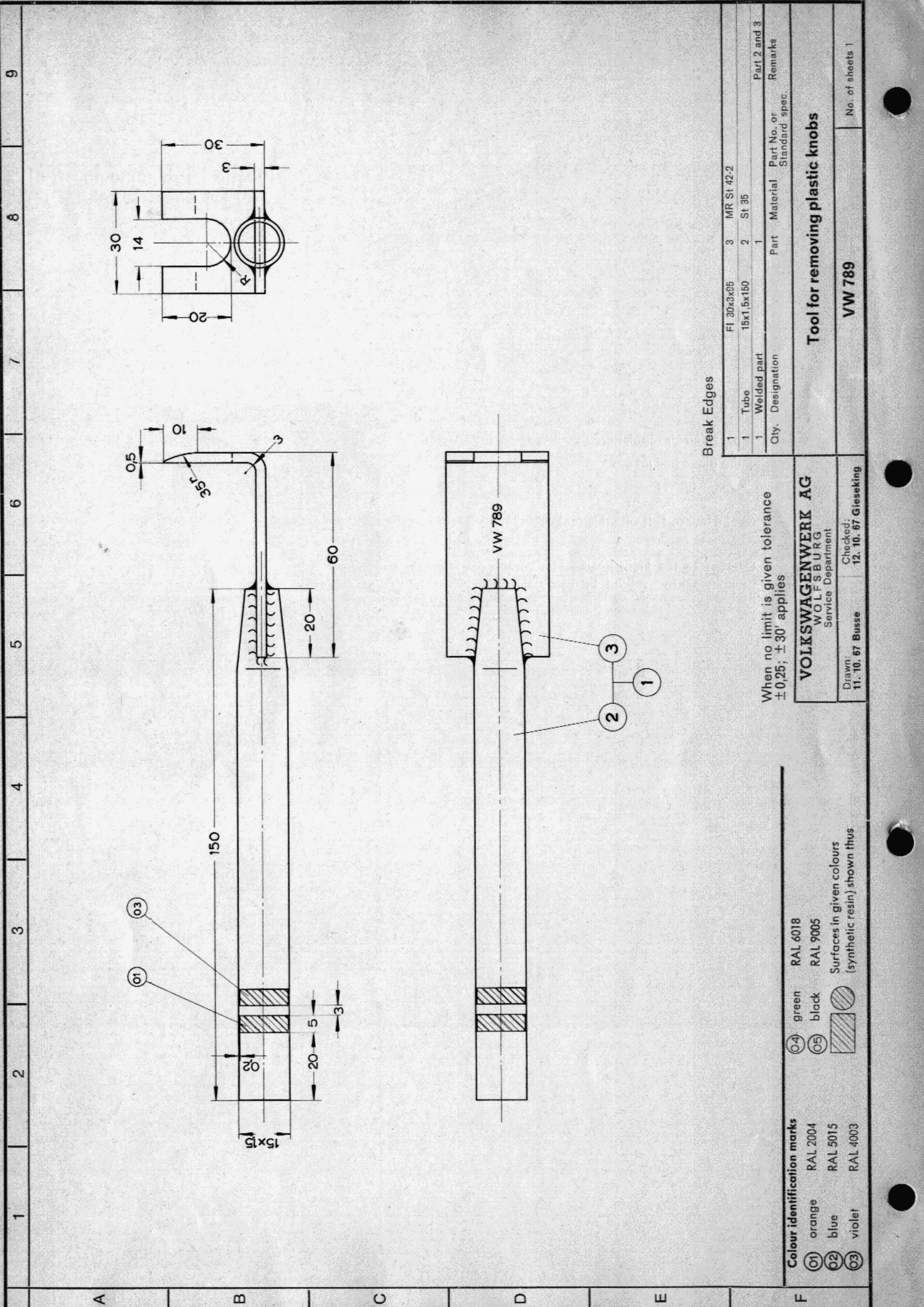
The plastic knobs for

- the fresh air regulation
- the glove box lid or
- the backrest lock

can be levered off with this tool.

Damage to the knob itself or its surroundings are avoided by using this tool.





Break Edges

Qty.	Designation	Part	Material	Part No. or Standard spec.	Remarks
1	FI 30x3x05	3	MR St 42-2		Part 2 and 3
1	Tube	2	St 35		
1	Welded part	1			

When no limit is given tolerance $\pm 0,25$; $\pm 30'$ applies

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn: 11. 10. 67 Busse
Checked: 12. 10. 67 Giesecking

Colour identification marks

04	green	RAL 6018
01	orange	RAL 2004
02	blue	RAL 5015
03	violet	RAL 4003
05	black	RAL 9005

Surfaces in given colours (synthetic resin) shown thus

Tool for removing plastic knobs

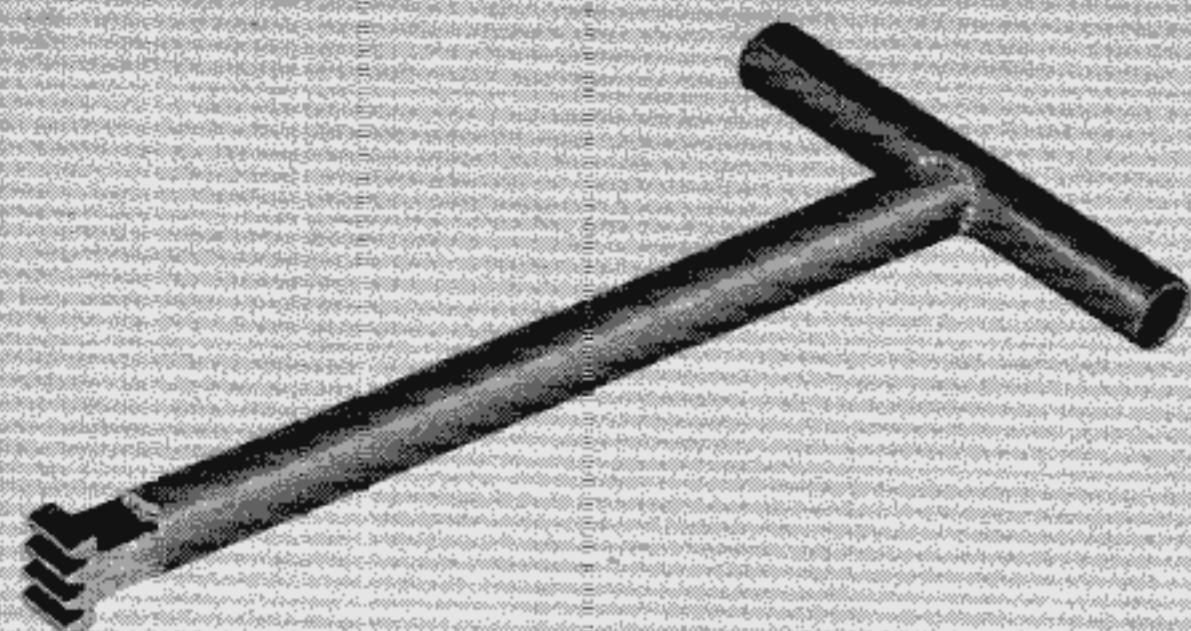
VW 789

No. of sheets 1

1 2 3 4 5 6 7 8 9

A B C D E

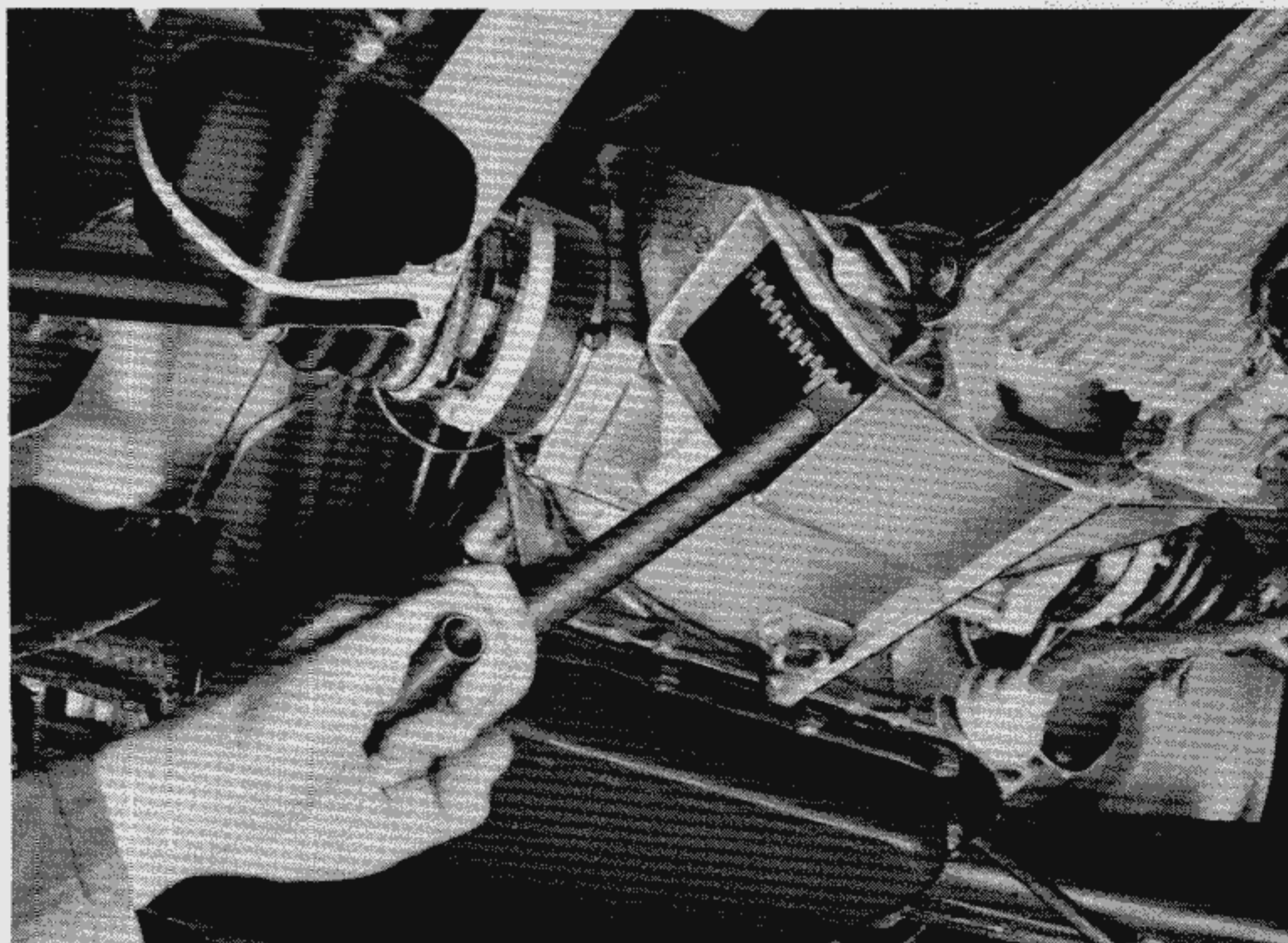
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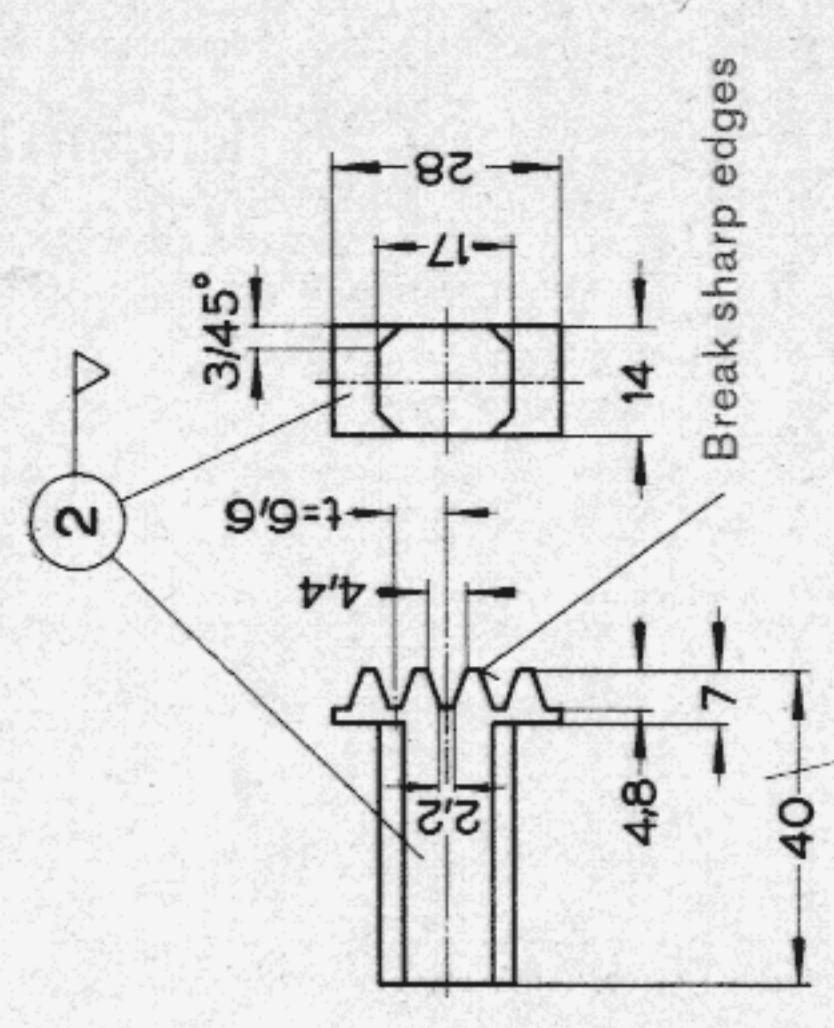
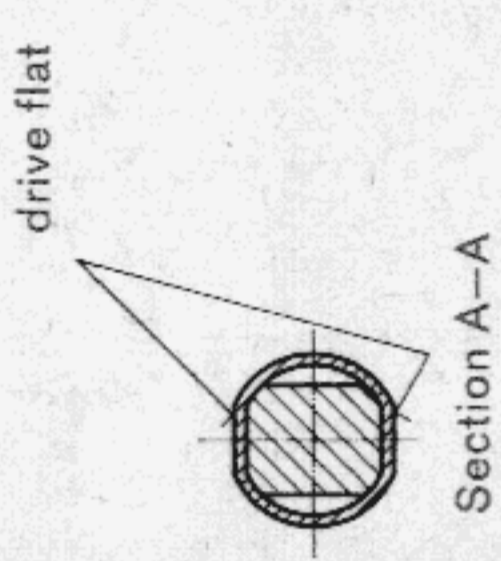
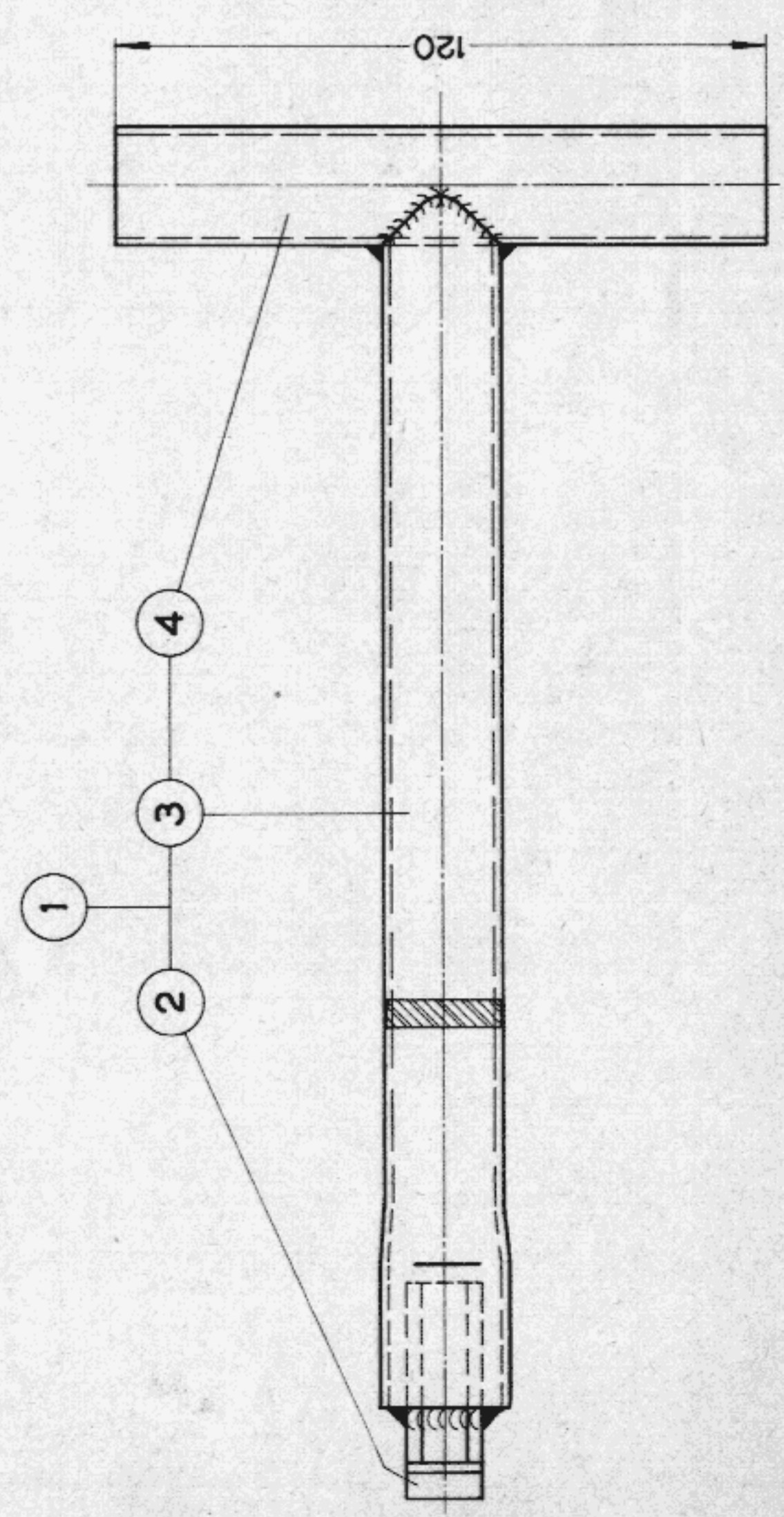
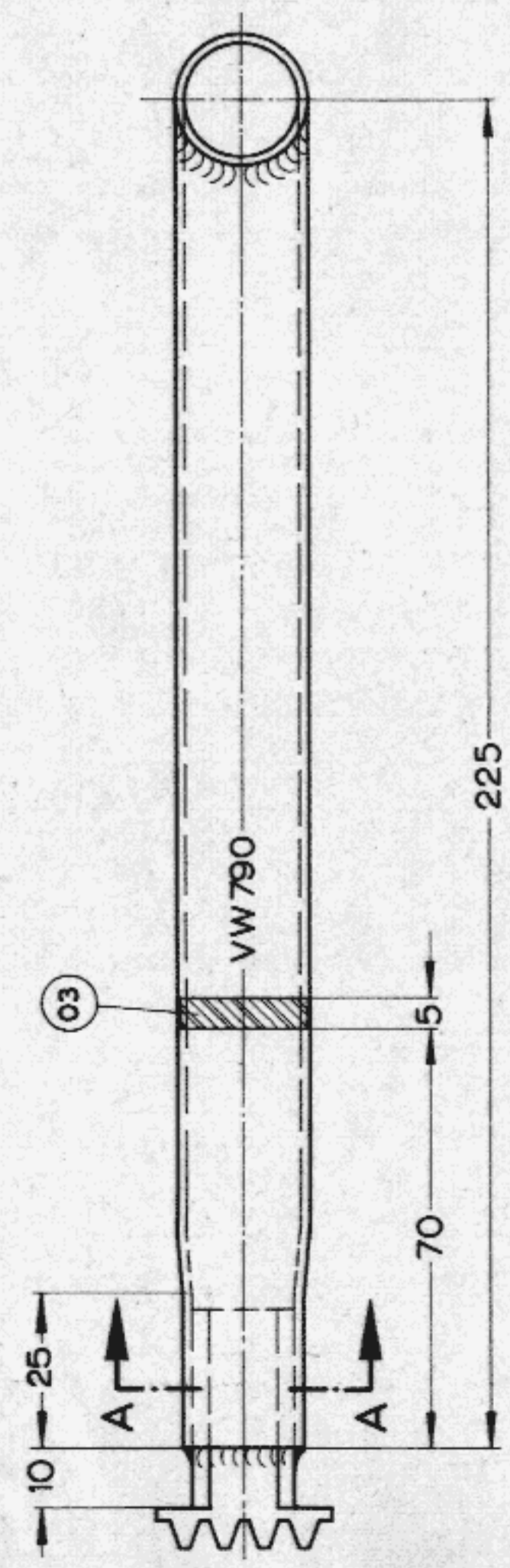
**Engine turning lever
Type 3 – Automatic**

The turning lever is required for turning the engine when checking and adjusting the valve clearance on vehicles with automatic transmissions during servicing.

Where and how the turning lever is applied can be seen in the illustration.



A B C D E



Can also be obtained from:
Messrs. Matra-Werke
6 Frankfurt/Main
Dieselstraße 30-40
under part no. VW 307/7.

Break sharp edges

Break edges

Qty.	Designation	Part	Material	Part No. or Standard spec.	Remarks
1	Tube	22x1,5x120	4	St 35	Part 2 to 4
1	Tube	22x1,5x225	3	St 35	
1	Tooth segment	Fl 30x15x45	2	C 15	
1	Welded part		1		

When no limit is given, tolerance $\pm 0,25$; $\pm 30'$ applies

VOLKSWAGENWERK AG
WOLFSBURG
Service Department
Drawn: 15. 12. 67 Krumbholz
Checked: 5. 1. 68 Gieseking

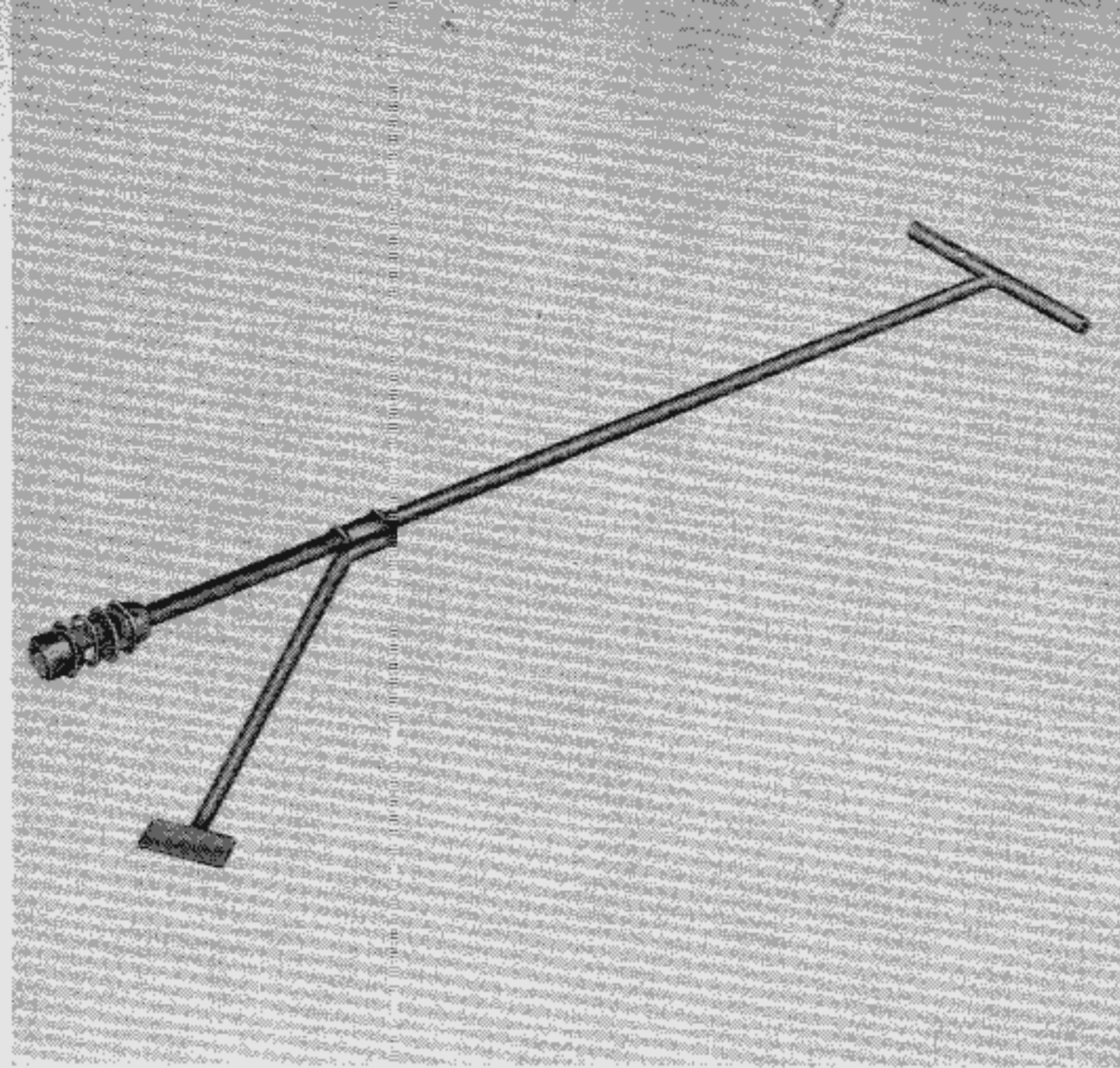
Colour identification marks

01 orange	RAL 2004	04 green	RAL 6018
02 blue	RAL 5015	05 black	RAL 9005
03 violet	RAL 4003	Surfaces in given colours (synthetic resin) shown thus	

Engine Turning Lever

VW 790

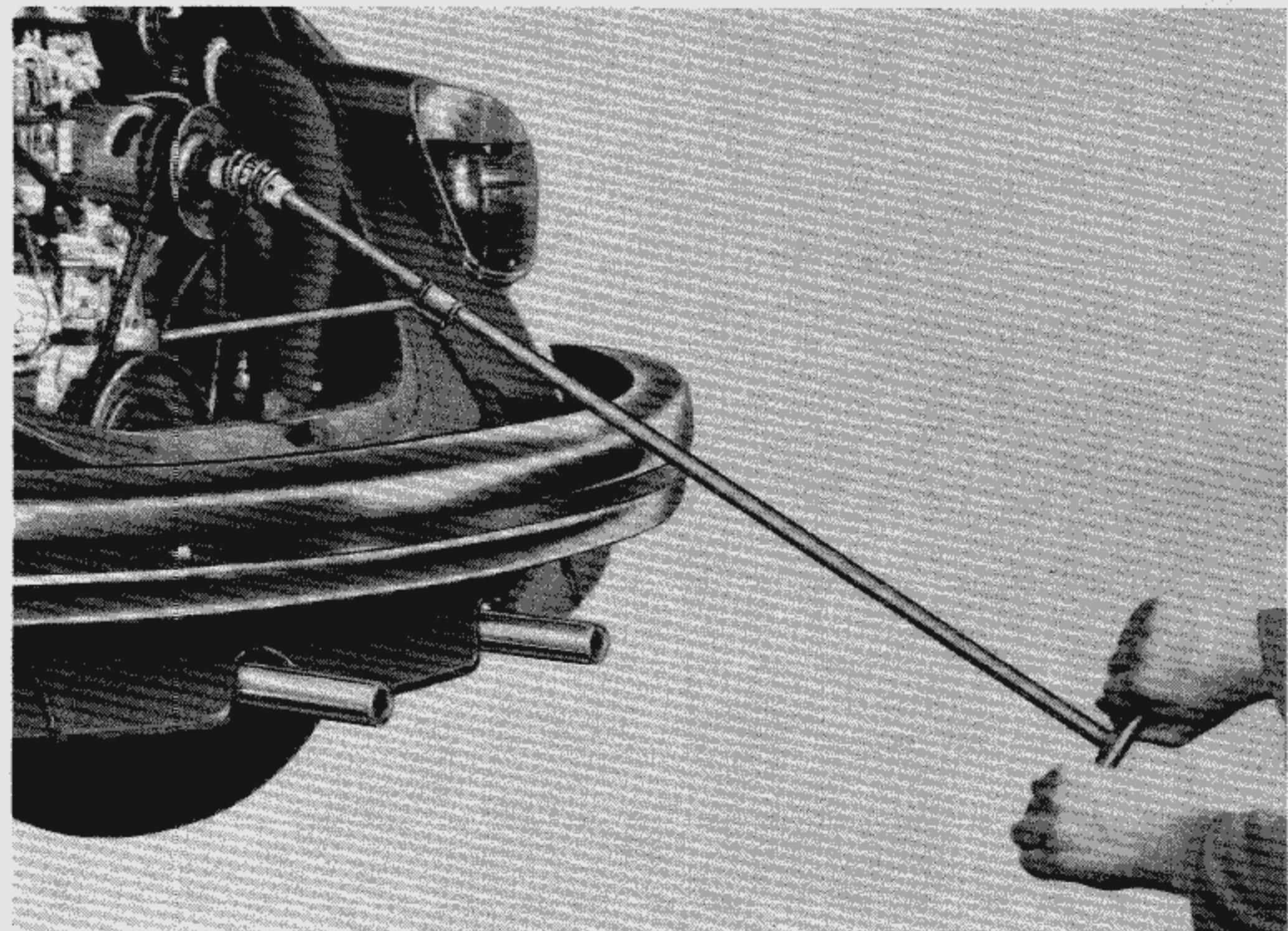
No. of Sheets 1

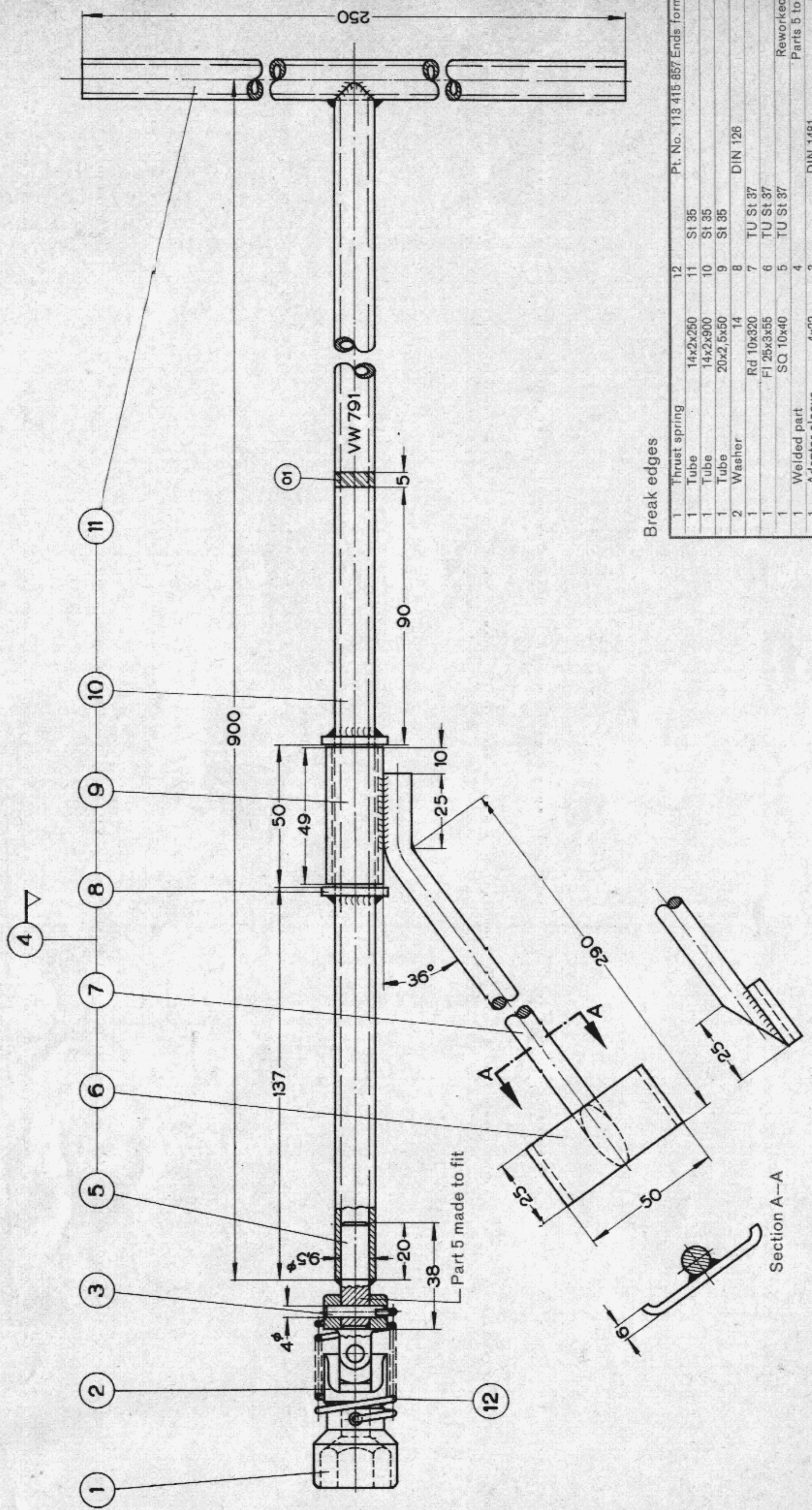


**Universal joint-socket
for turning engine
Type 1 – Automatic**

The universal joint socket is required for turning over the engines of vehicles with automatic transmission – when checking or adjusting the valve clearance during the course of the maintenance service. It is put on the nut of the generator pulley and turned in a clockwise direction. Any slipping of the vee belt which may occur can be overcome, if the belt is tensioned with the outrigger on the handle of the socket.

The illustration shows how the socket wrench is applied.





Break edges

Qty.	Designation	Part	Material	Part No. or Standard spec.	Remarks
1	Thrust spring	12			Pt. No. 113 415 857 Ends formed
1	Tube	11	St 35		
1	Tube	10	St 35		
1	Tube	9	St 35		
2	Washer	14			
1		8	DIN 126		
1		7	TU St 37		
1		6	TU St 37		
1		5	TU St 37		
1	Welded part	4			Reworked Parts 5 to 11
1	Adapter sleeve	3			
1	Universal joint	2			Through trade
1	Hexagon socket	1			Through trade

When no limit is given, tolerance $\pm 0,25$; $\pm 30'$ applies

VOLKSWAGENWERK AG
WOLFSBURG
Service Department

Drawn: 11.1.68 Krumbholz
Checked: 11.1.68 Giesecking

Colour identification marks

01	orange	RAL 2004
02	blue	RAL 5015
03	violet	RAL 4003
04	green	RAL 6018
05	black	RAL 9005

Surfaces in given colours (synthetic resin) shown thus

Universal joint socket for turning engine

VW 791

No. of Sheets 1