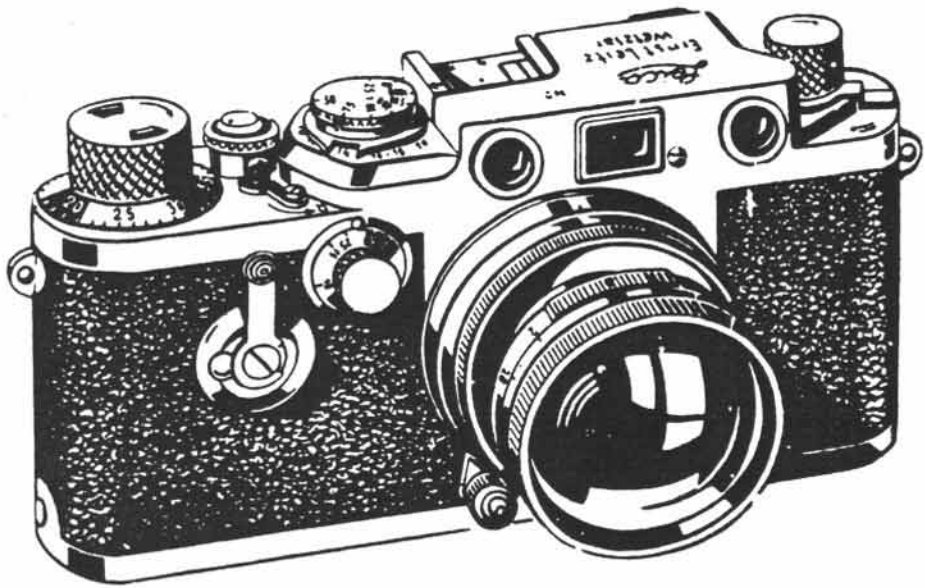


Leica III f



Servicing Instructions

ERNST LEITZ GMBH WETZLAR

Introduction

This folder contains Servicing Instructions and Spare Parts Lists for the Leica IIIf, IIIf and If miniature cameras.










The Servicing Instructions describe and illustrate assembly, adjustment, and repair procedures. The tools listed can be ordered from us.

Individual components and sub-assemblies should be cleaned with lead-free petrol or petroleum spirit after removal from the body unit. Escapements and delayed action mechanisms should not be dismantled for cleaning. Lacquered and engraved parts must not be treated with petrol, and should therefore be cleaned with a soft dry piece of leather or a brush.

All parts to be lubricated must be dry.

Shutter blinds must not come into contact with petrol, oil, or grease.

The following lubricants are required, and can only be ordered from us:

No.300 (Symbol )	No.460 (Symbol )	No.704 (Symbol )
No.301 (Symbol )	No.601 (Symbol )	
No.330 (Symbol )	No.602 (Symbol )	
No.340 (Symbol )	No.618 (Symbol )	

No other lubricants must be used, as perfect working is guaranteed only with the lubricants tested by us.

Note that many lubricants attack various types of plastics and may under certain conditions dissolve them or cause them to swell. The lubricants must therefore come into contact only with the surfaces indicated in the lubrication charts. Storage for longer than a year should be avoided. Spare parts showing a grey sheen on their surfaces do not require lubrication.

The following adhesives are needed for servicing:

A	Araldit 103 Hardener 953	Messrs. Ciba Ag., Basle
B	Protective lacquer Thinner 13 652	} Only available from E. Leitz GmbH Wetzlar
F	Teroson fluid special Terokal thinner D	
E	Adhesive EC 880 Thinner MB	
U	UHU-hart	UHU, H.& M. Fischer, Bühl (Baden)

Components which are specified in the Spare Parts List as requiring treatment with adhesives must be free from grease. Remnants of hardened adhesive or cements should be removed with the appropriate thinner. Follow the instructions carefully to ensure perfect adhesion.
(Instruction for the use of adhesives see Servicing Instructions for the Leica M 2)

In the Spare Parts List every illustration page is accompanied by an itemized parts list. The illustration pages show the individual parts and sub-assemblies in their correct order of assembly. Points requiring application of lubricants or adhesives are marked by the appropriate symbols (e.g. ⊙⊙⊙) or letters (e.g. F) respectively. The itemized parts list pages indicate the part numbers and the description of any part that may have to be ordered, as well as the quantity required for the particular Leica model.

The part numbers shown on every illustration page are the same as those on the corresponding parts list.

Spare parts should always be ordered by reference to these lists only. If, for instance, speed dials are required, proceed as follows: As the speed dial is mounted on the cover plate, it will be found - from the contents list - to be on sheet 3. If the serial No. of the Leica to be serviced is below 615 000, the part No. of the speed dial is 42 531-329 (see sheet 3.1), with the serial No above 615 000 up to 671 030, the part No. is 42 531-330 (see sheet 3.2) and with the serial No. above 671 031, the part No. is 42 531-326 (see sheet 3.3).

After the part number has been located on the illustrated page the description must be found in the parts list where the items are listed in numerical sequence. In the spare parts price list the price group can also be found and from the Price Group Index the DM price can be determined. The order in this case reads as follows:

Pos.	Qty.	Price/item DM	Part-No.	Description
1	10	1.80	42 531-329	Speed dial

Only the components and sub-assemblies shown here can be ordered from us. Main body units and cover plates are supplied only on return of the damaged part.

Removing and Refitting the Cover Plate

Sheet 1 to 3

Spanners and Tools

- | | |
|-----------------------------|---------------|
| 1. Spanner | 42 75-26 W1 |
| 2. Spanner | 42 216-307 W3 |
| 3. Spanner | 42 216-472 W1 |
| 4. Spanner | 42 216-530 W5 |
| 5. Soldering iron | |
| 6. Screw driver 1.4 mm dia. | |
| 7. Screw driver 1.8 mm dia. | |
| 8. Screw driver 2.2 mm dia. | |
| 9. Screw driver 2.8 mm dia. | |

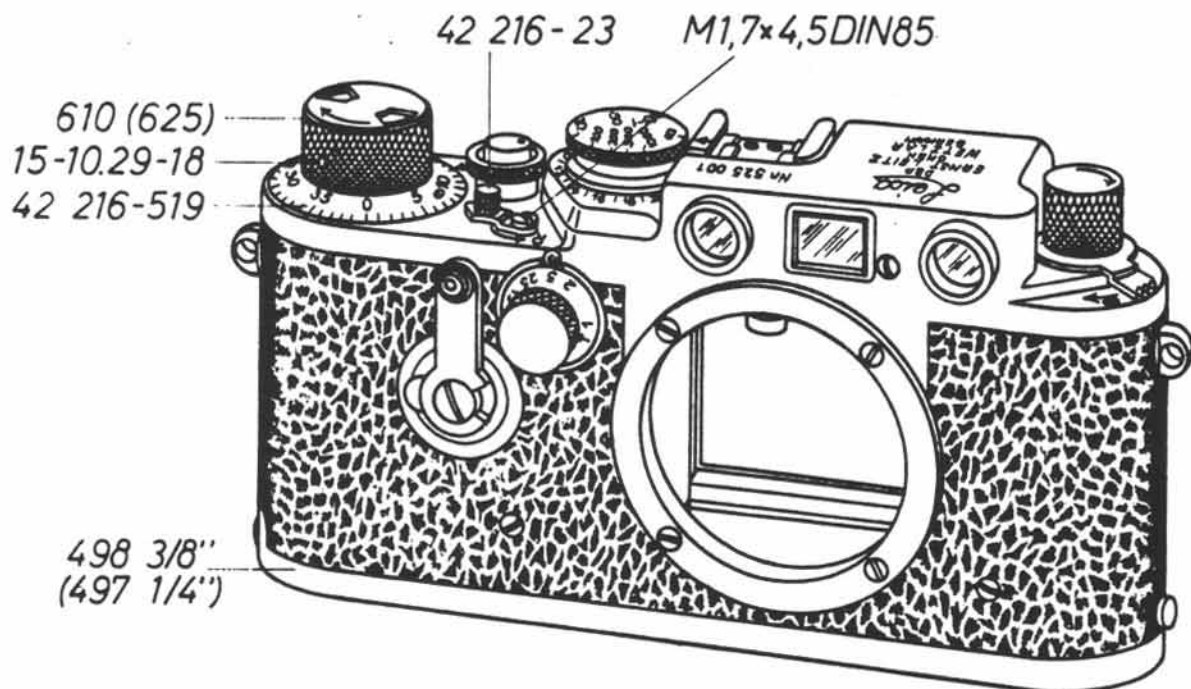


Fig. 1.1

Sequence of Operations

Base plate 498

Remove the base plate 498, and take out the take-up spool 05-4.

Winding knob 610 (625)

Tension the Leica shutter. Slacken the grub screw 15-10.29-18 on the winding knob 610 through two turns by means of the 1.8 mm dia. screw driver. Hold fast the winding shaft 42 216-83 and unscrew the winding knob 610 anti-clockwise.

Lift off the counting disc 42 216-519. Screw on again the winding knob 610.

Reversing lever 42 216-23

Set the reversing lever to "A", unscrew the screw M 1.7 x 4.5 DIN 85 with the 2.8 mm dia. screw driver, and lift off the reversing lever 42 216-23 and the intermediate ring 42 216-27.

Removing and Refitting the Cover Plate

Continued from sheet 1

Release guard 42 216-530

Unscrew the release guard with the spanner 42 216-530 W5.

Speed dial 326

Unscrew the three grub screws M 1.4 x 1.8 DIN 553 on the speed dial 326 with the 1.4 mm dia. screw driver, and lift off the speed dial 326. Raise and disengage the cam 327 situated under the speed dial 326. Unscrew the three grub screws M 1.7 x 1.8 DIN 553 with the 1.4 mm dia. screw driver, and lift off the cam 327.

Accessory shoe 42 216-482

Remove the four screws 15-10.175-10 with the 1.8 mm dia. screw driver, lift off the accessory shoe 42 216-482, and the washer 42 216-491 (when needed).

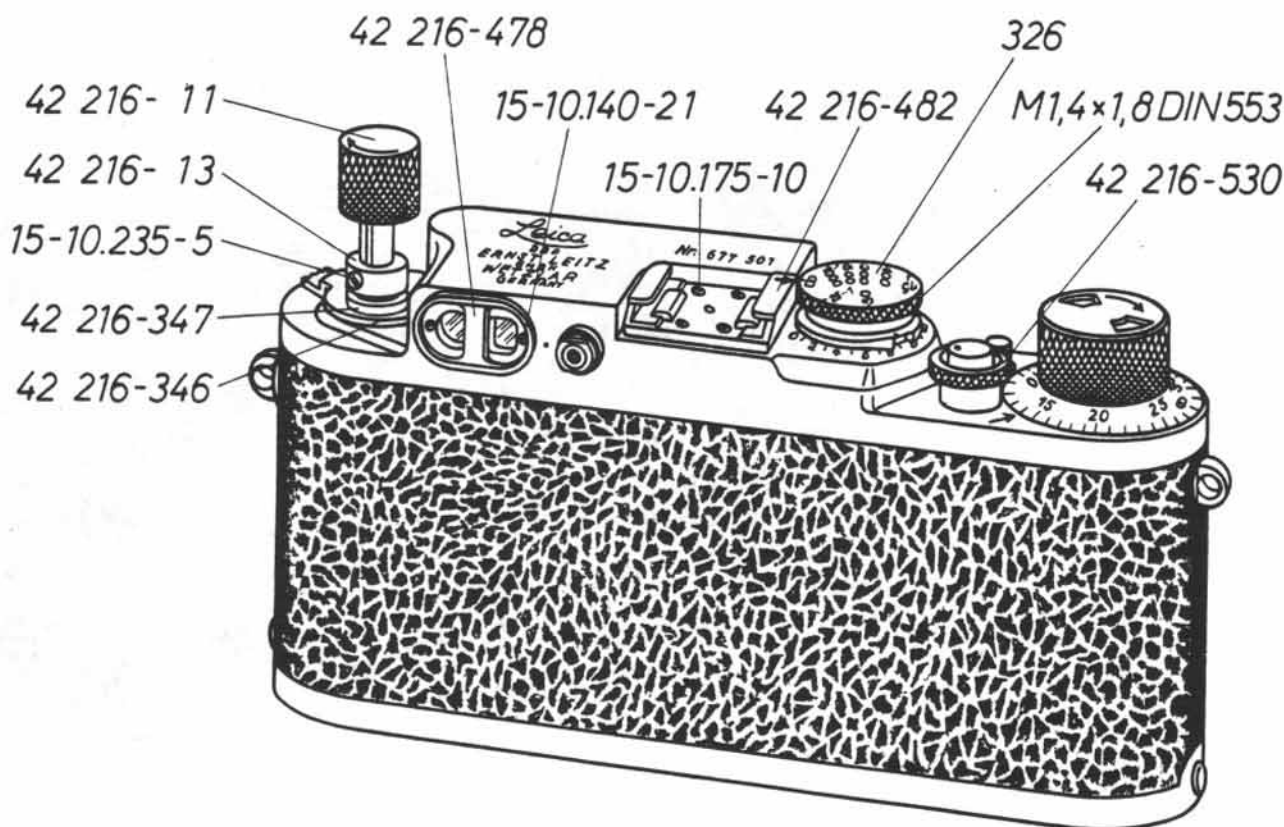


Fig. 2.3

Eye-piece shell 42 216-478

With the 1.8 mm dia. screw driver unscrew the two screws 15-10.140-21 from the eyepiece shell 42 216-478, and lift off the eyepiece shell 42 216-478.

Rewind knob 42 216-11

Pull up the rewind knob 42 216-11, and unscrew the screw 15-10.235-5 with the 2.8 mm dia. screw driver. Lift off the rewind knob 42 216-11 and the sleeve 42 216-13. Press out downwards the rewind shaft 42 216-10, the washer 15-12.06-19/1, and the friction spring 42 216-19. Remove the nut 42 216-347 with the spanner 42 75-26 W1, and lift off the eyepiece focusing lever 42 216-346.

Removing and Refitting the Cover Plate

Continued from sheet 1

Release guard 42 216-530

Unscrew the release guard with the spanner 42 216-530 45.

Speed dial 329

Unscrew the three grub screws M 1.4 x 1.8 DIN 553 on the speed dial 329 with the 1.4 mm dia. screw driver, and lift off the speed dial 329. Raise and disengage the cam 327 situated under the speed dial 329. Unscrew the three grub screws M 1.7 x 1.6 DIN 553 with the 1.4 mm dia. screw driver, and lift off the cam 327.

Accessory shoe 42 216-482

Remove the four screws 15-10.175-10 with the 1.8 mm dia. screw driver, lift off the accessory shoe 42 216-482, and the washer 42 216-491 (when needed).

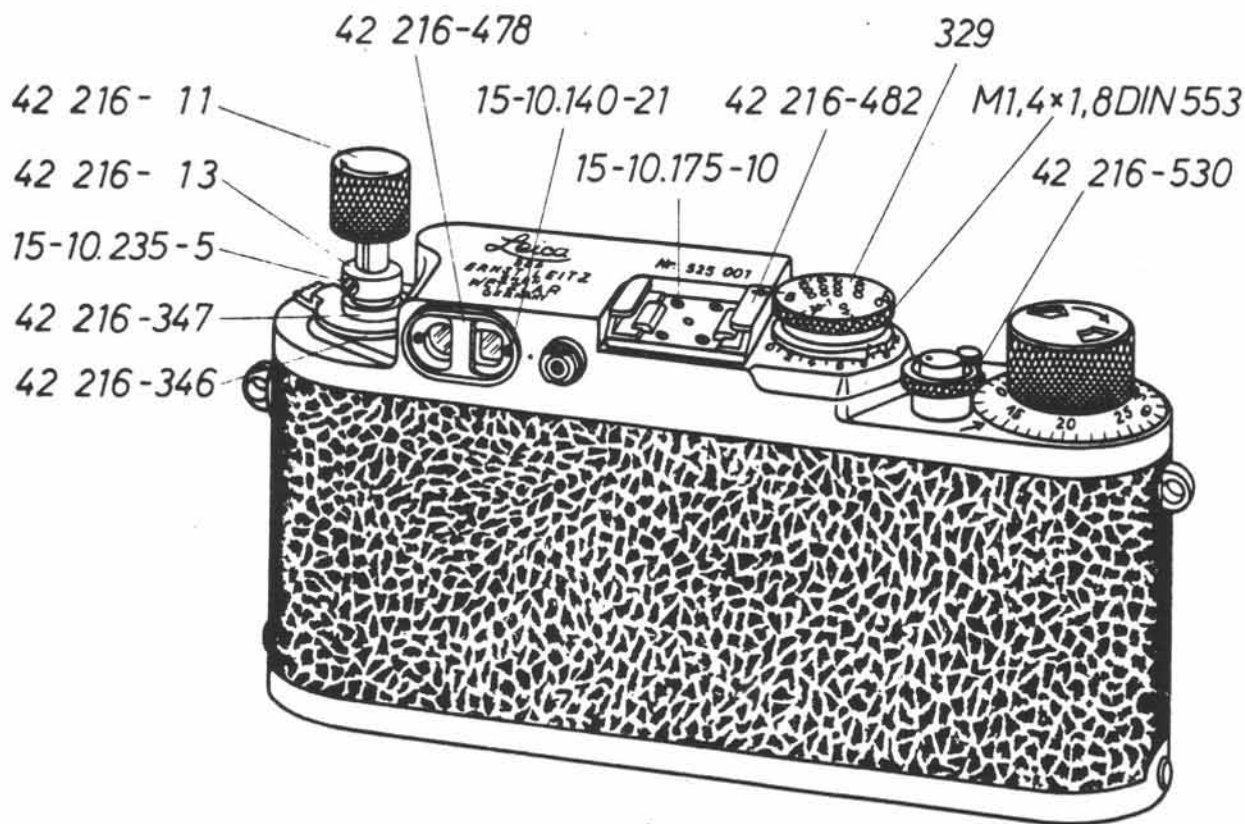


Fig. 2.1

Eyepiece shell 42 216-478

With the 1.8 mm dia. screw driver unscrew the two screws 15-10.140-21 from the eyepiece shell 42 216-478, and lift off the eyepiece shell 42 216-478.

Rewind knob 42 216-11

Pull up the rewind knob 42 216-11, and unscrew the screw 15-10.235-5 with the 2.8 mm dia. screw driver. Lift off the rewind knob 42 216-11 and the sleeve 42 216-13. Press out downwards the rewind shaft 42 216-10, the washer 15-12.06-19/1, and the friction spring 42 216-19. Remove the nut 42 216-347 with the spanner 42 75-26 71, and lift off the eyepiece focusing lever 42 216-346.

Removing and Refitting the Cover Plate

Continued from sheet 1

Release guard 42 216-530

Unscrew the release guard with the spanner 42 216-530 W5.

Speed dial 330

Unscrew the three grub screws M 1.4 x 1.8 DIN 553 on the speed dial 330 with the 1.4 mm dia. screw driver, and lift off the speed dial 330. Raise and disengage the cam 327 situated under the speed dial 330. Unscrew the three grub screws M 1.7 x 1.8 DIN 553 with the 1.4 mm dia. screw driver, and lift off the can 327.

Accessory shoe 42 216-482

Remove the four screws 15-10.175-10 with the 1.8 mm dia. screw driver, lift off the accessory shoe 42 216-482, and the washer 42 216-491 (when needed).

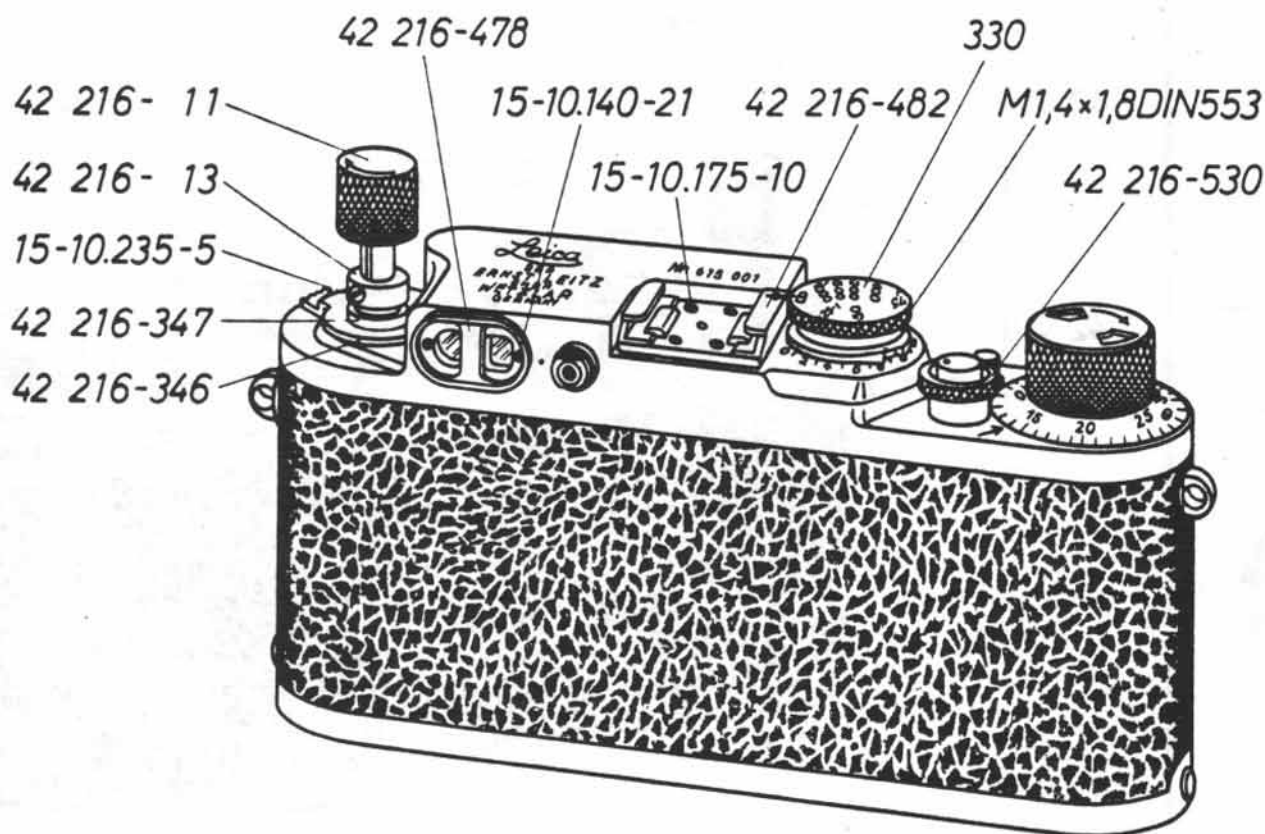


Fig. 2.2

Eyepiece shell 42 216-478

With the 1.8 mm dia. screw driver unscrew the two screws 15-10.140-21 from the eyepiece shell 42 216-478, and lift off the eyepiece shell 42 216-478.

Rewind knob 42 216-11

Pull up the rewind knob 42 216-11, and unscrew the screw 15-10.235-5 with the 2.8 mm dia. screw driver. Lift off the rewind knob 42 216-11 and the sleeve 42 216-13. Press out downwards the rewind shaft 42 216-10, the washer 15-12.06-19/1, and the friction spring 42 216-19. Remove the nut 42 216-347 with the spanner 42 75-26 W1, and lift off the eyepiece focusing lever 42 216-346.

Removing and Refitting the Cover Plate

Continued from sheets 1 and 2

Plain window mount 42 216-303

Unscrew the locking ring 42 216-472 with the spanner 42 216-472 W1, and unscrew the plain window mount 42 216-303 with the spanner 42 216-304 W1.

Prism window mount 42 216-307

Unscrew the locking ring 42 216-473 with the spanner 42 216-472 W1. Lift out the prism window mount 42 216-307 with the spanner 42 216-307 W3.

Cover plate 469

With the 2.2 mm d.a. screw driver remove one screw 15-10.174-11 situated under the eyepiece focusing lever 42 216-346 and screwed in from inside the cassette chamber, and one screw 15-10.174-14 underneath the counting disc. If the cover plate is fixed from the outside with four screws 15-10.175-9, unscrew the latter with the 2.2 mm dia. screw driver (see Fig. 3.1).

Solder the connection between the flash socket 540 and the contact spring 670, visible underneath the accessory shoe, with a soldering iron.

Carefully lift off the cover plate 469 from above. If necessary, screw driver 1.4 mm dia. on the protruding bearing bush of the rewind knob 42 216-18 and, without forcing, gently prise the cover plate 469 upwards.

Refit the cover plate by proceeding in the reverse order.

Check Rangefinder
 Winding mechanism
 Rewind mechanism
 Synchronization

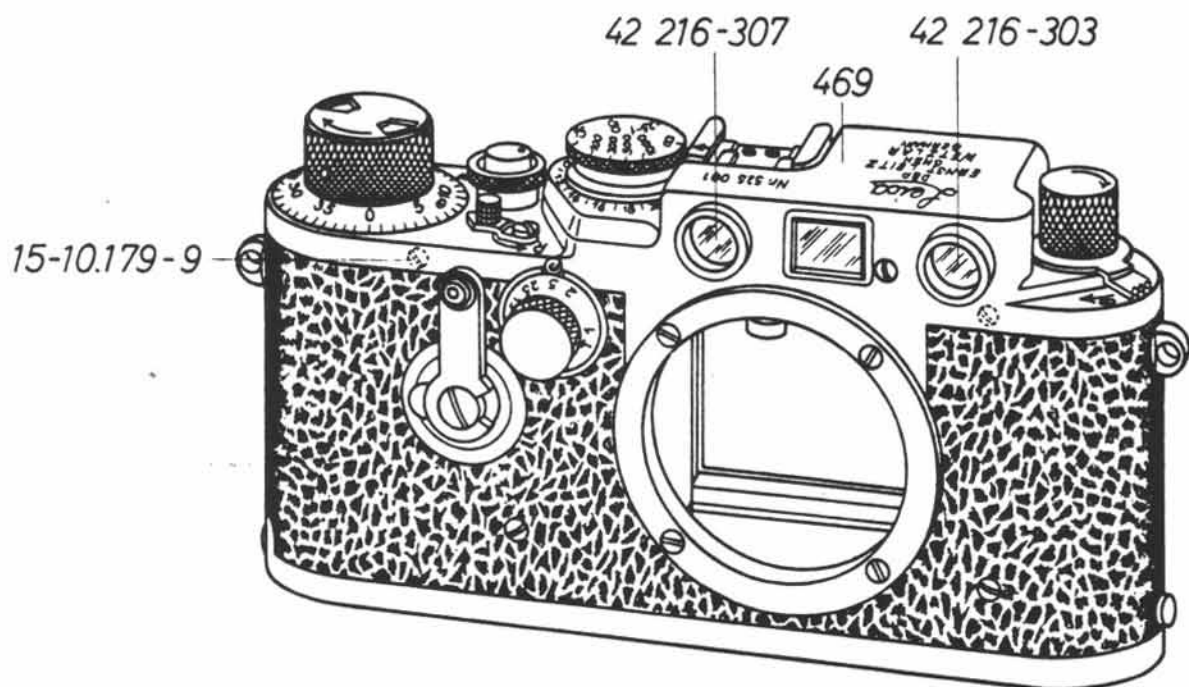


Fig. 3.1

Removing and Refitting the Housing
Sheets 4 and 5

Tools

1. Screw driver 2.2 mm dia.

Sequence of Operations

Base plate 498

Remove the base plate 498, and take out the take-up sprocket 05-4.

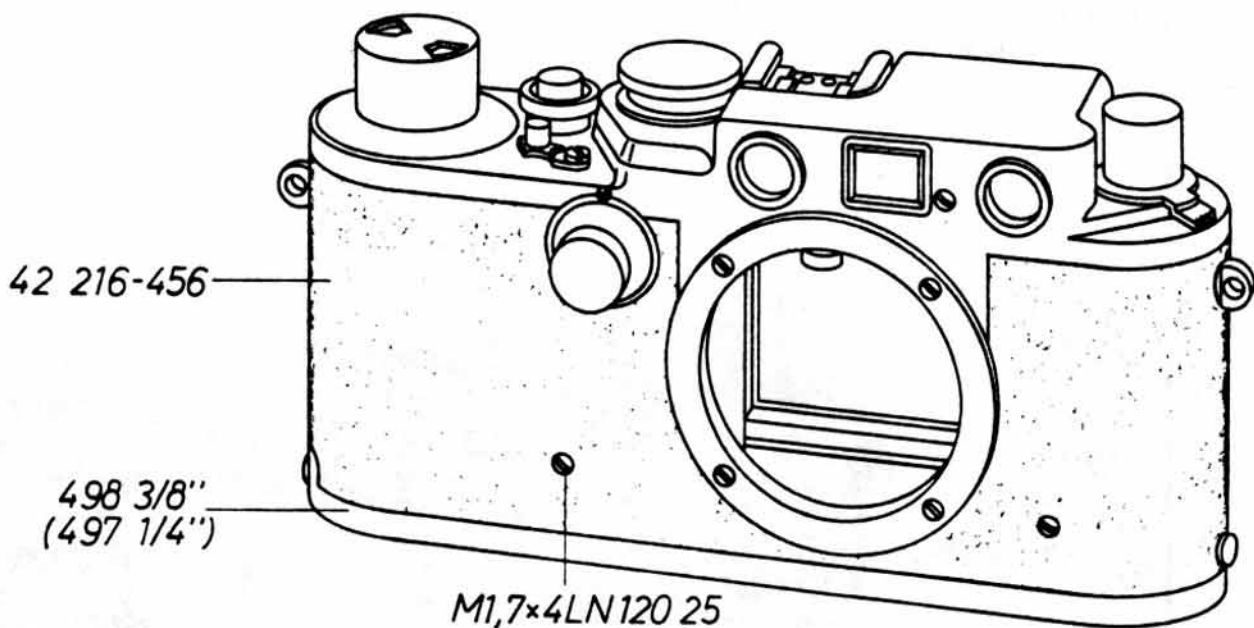


Fig. 4.1

Removing and Reinstalling the Housing

Sheets 4 and 5

Spanners and Tools

1. Screw driver 2.2 mm dia.
2. Screw driver 2.8 mm dia.
3. Tweezers
4. 5 1/4 in. length of Leica Film

Sequence of Operations

Base plate 498

Remove the base plate 498, and take out the take-up spool 15-10.

Self-timer 42 491

Tension the self-timer 42 491-5. with the 2.8 mm dia. screw driver unscrew the screw 15-10.173-10 (see Fig. 4.2). Lift off the tensioning lever 42 491-97 and the two tensioning cams 42 491-96. Unscrew the screw 15-10.140-19 with the 2.2 mm dia. screw driver, and take off the washer 42 491-94. Unscrew the three screws 15-10.174-12 with the 2.8 mm dia. screw driver, lift off the bearing plate 42 491-92, the plate 42 491-101, the coupling shaft 42 491-91 and the coupling piece 42 491-81.

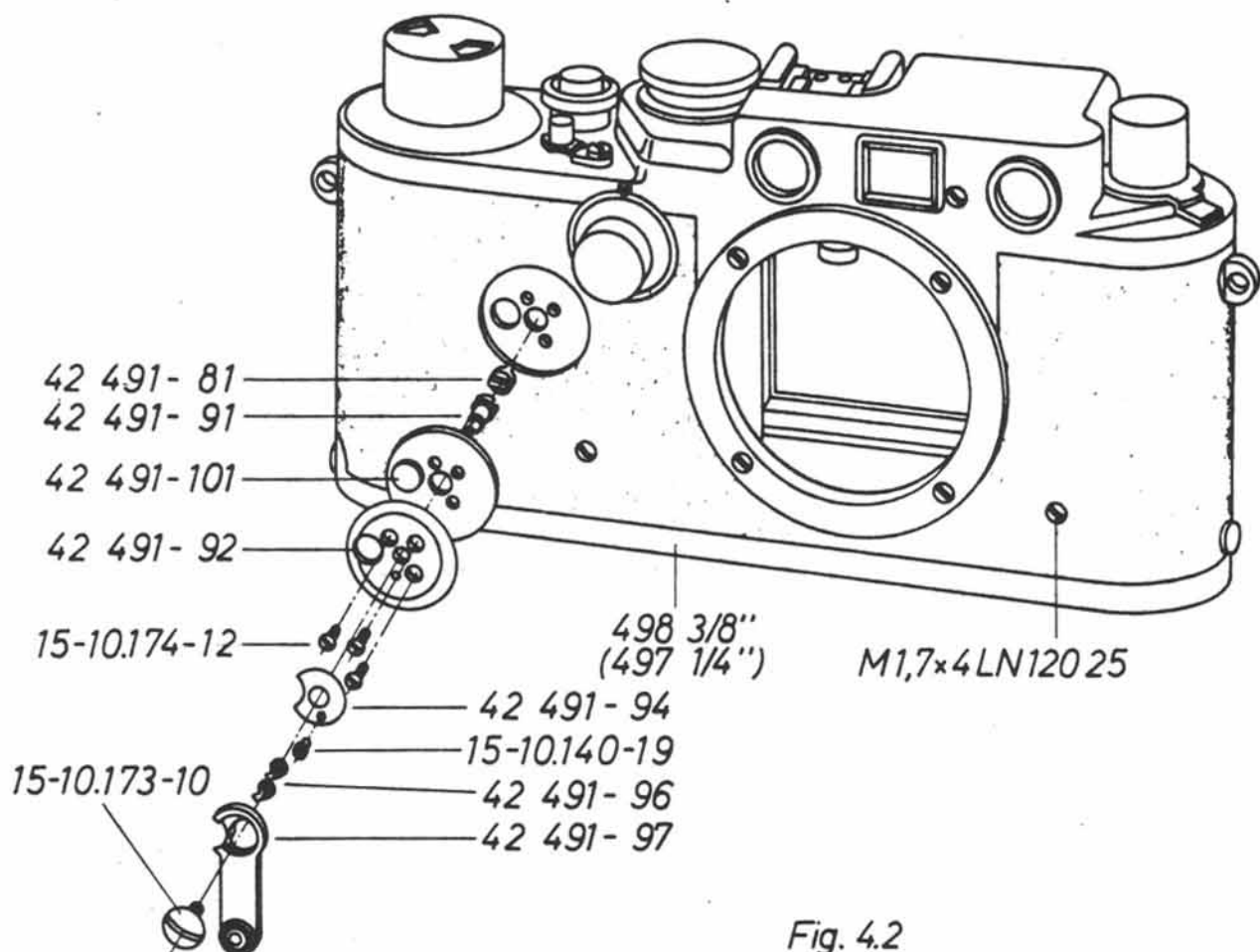


Fig. 4.2

Removing and Refitting the Housing

Continued from sheet 4

Housing 42 491-80 (42 216-456)

Remove the two screws M 1.7 x 4 LN 120 25 with the 2.2 mm dia. screw driver. Insert the piece of film into the film track between the main body and the pressure plate 42 216-463. Carefully draw off the housing from below.

Remove the pressure plate 42 216-463 and the two leaf springs 42 216-462.

Refit the housing by proceeding in the reverse order; note that the self-timer 42 491-5 must be tensioned for this purpose.

Check Setting of the self-timer (see sheet 9 to 10)

Positioning of lens mounting ring 42 216-466 relative to film plane (see sheet 6)

Fitting the Lens Mounting Ring

Sheet 6

Tools Appliances, and Measuring Instruments

- | | |
|--|---------------------|
| 1. Measuring instrument for zero setting | 42 216 -Z 1 A55 |
| 2. Auto-collimator telescope | 42-582.01-Z 1 W 4 * |
| 3. Turning attachment
(state receiving thread of lathe) | 42-700.01-652 W 4 |
| 4. Screw driver 2.8 mm dia. | |
| 5. Mirror 3 mm | 42-582.01 Z1 W6 |

Sequence of Operations

Tension the Leica shutter.

Set the speed dial 326 to $\frac{1}{25}$ ($\frac{1}{30}$) second, the slow speed dial 443 to T, and press the release button.

Screw down the mounting ring 42 216-466 with four screws 15-10.20-16.

Set the dial gauge 42 216-Z1 A55 to 28.80 mm, fit it into the screw mounting ring, and check the distance. If necessary, turn down the mounting ring 42 216-466 on the turning attachment 42-700.01-652 W4 until the setting of 28.80 ± 0.005 mm (see fig. 5.1) is correct with the mounting ring 42 216-466 screwed down.

Place a mirror on the pressure plate 42 216-463 3 mm from the screw mounting ring.

Fit the auto-collimator telescope 42-582.01-Z1 W4 in the mounting ring, and check that the mounting ring and the pressure plate are parallel. Deviations up to half the thickness of the line are permissible.

After fitting of the mounting ring 42 216-466 check the rangefinder (see sheets 20 to 23).

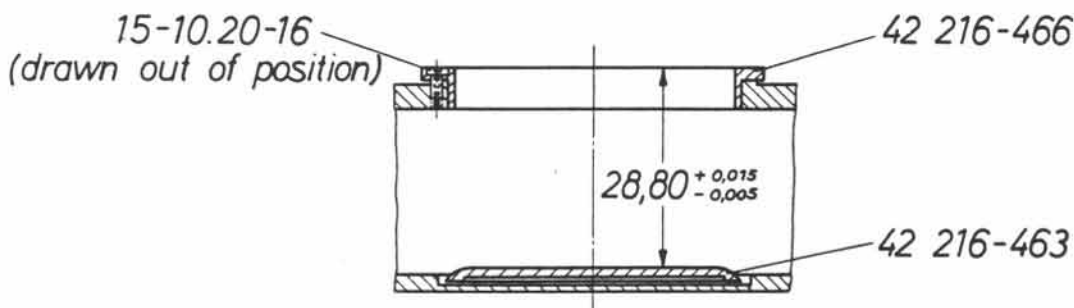


Fig 5.1

* The auto-collimator telescope 107.14 can also be used.

Setting and Checking the Release Mechanism

Sheet 19

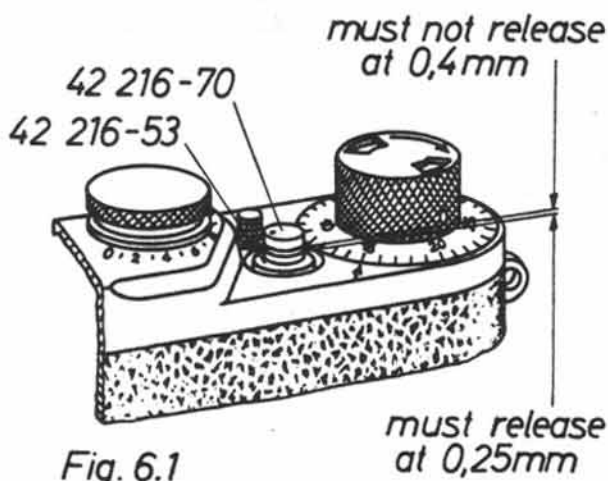
Tools and Gauges

- | | |
|----------------------------------|----------------|
| 1. Feeler gauge, 0.25 and 0.4 mm | 42 216-Z 1 A 2 |
| 2. Test weight 220 + 65 grams | 42 216-Z 1 A45 |
| 3. Spanner | 42 216-530 W 5 |
| 4. Screw driver 2.8 mm dia. | |

Sequence of Operations

Unscrew the release guard 42 216-530 with the spanner 42 216-530 W5.

1. Tension the shutter of the Leica. Place the 0.4 mm blade of the feeler gauge 42 216-Z1 A2 between the release button 42 216-70 and the top of the threaded sleeve 42 216-53. Press the release button. The shutter must not run down.
2. Place the 0.25 mm blade of the feeler gauge 42 216-Z1 A2 between the release button 42 216-70 and the top of the threaded sleeve 42 216-53. Press the release button. The shutter must run down.



If the Leica shutter is released with the 0.4 mm blade in position, push the leaf spring 42 216-270 away from the locking pawl 42 216-217 (see Spare Parts List, sheet 8). If the shutter does not run down with the 0.25 mm blade in position, push the leaf spring closer to the locking pawl. Slacken the two screws M 1.7 x 5 DIN 84 for this purpose with the 2.8 mm dia. screw driver. If further adjustment is needed, move the leaf spring towards the centre of the release shaft, and bend the long arm of the locking pawl as required.

3. Tension the shutter of the Leica. Place the test weight 42 216-Z1 A45 with 220 grams on top of the release button. The shutter must not run down.
4. Place the test weight with 220 + 65 grams on top of the release button. The shutter must run down.

If the shutter of the Leica is released already by a pressure of 220 grams, remove the two screws M 1.7 x 5 DIN 84 with the 2.8 mm dia. screw driver. Take off the washers 15-12.02-22/2 and the leaf spring 42 216-270. Bend the spring so as to increase the counter pressure against the release shaft. If the shutter is not released by a pressure of 285 grams, bend the spring in the opposite way.

Removing and Refitting the Front Plate

Sheet 8

Tools

1. Screw driver 1.8 mm dia.
2. Screw driver 2.2 mm dia.
3. Screw driver 2.8 mm dia.

Sequence of Operations

Remove the housing (see sheets 4 and 5)

Unscrew the four screws 15-10.20-16 with the 2.8 mm dia. screw driver (see sheet 6, Fig. 5). Take off the lens mounting ring 42 216-466.

Remove the three screws 15-10.175-10 and one screw M 1.7 x 4 LN 120 19 with the 1.8 mm dia. screw driver (see Fig. 7.1). Unscrew six screws 15-10.170-20, one screw 15-10.170-19, and one screw 15-10.174-12 with the 2.2 mm dia. screw driver.

Lift off the front plate 42 216-430.

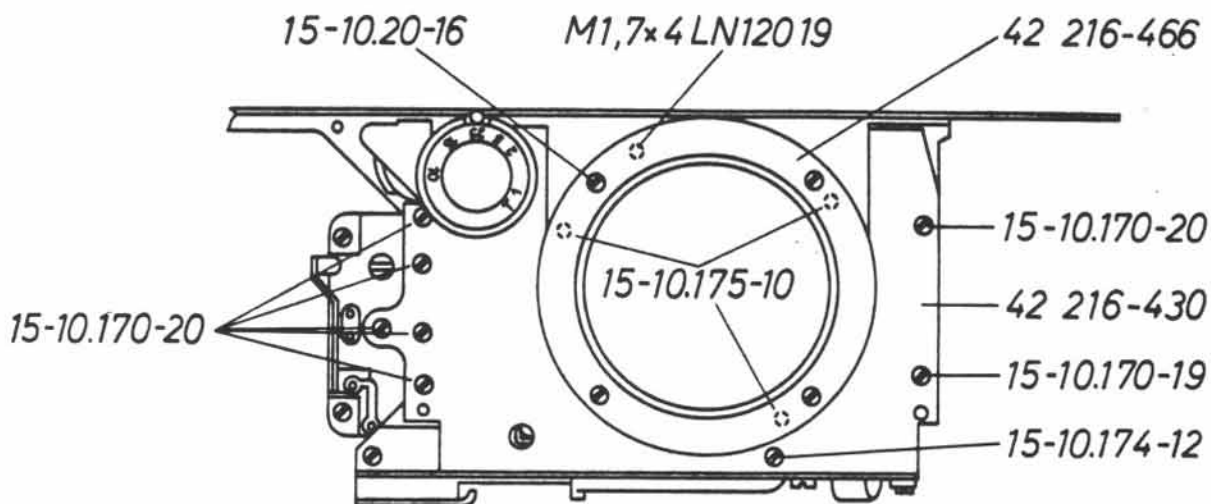


Fig. 7.1

Refit the front plate 42 216-430 by proceeding in the reverse order.

For refitting of the lens mounting ring 42 216-466 see sheet 6.

Assembling and Testing the Delayed Action Mechanism

Sheet 9 and 10

Tools

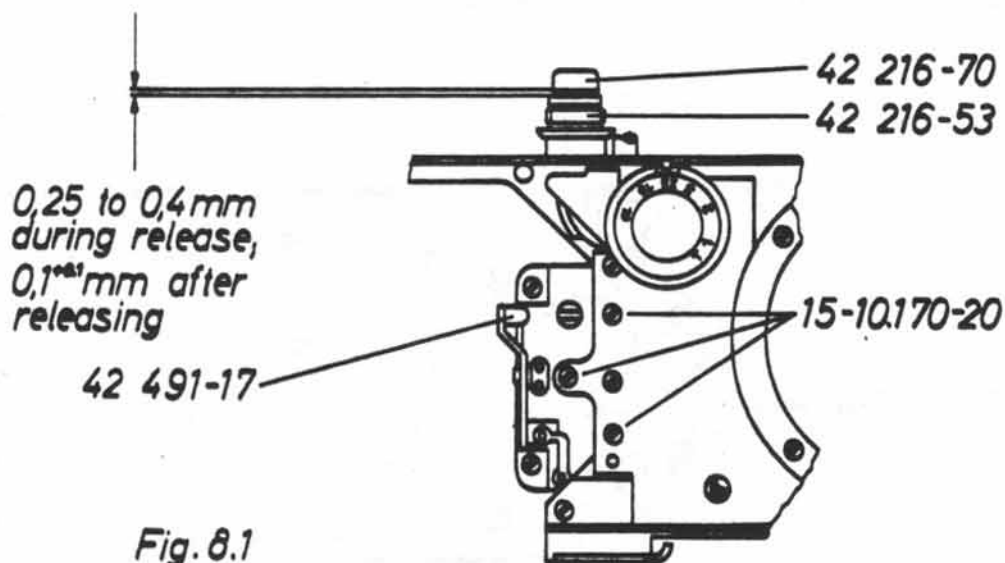
1. Hammer, weight 50 grams
2. Screw driver 2.2 mm dia.
3. Screw driver 2.8 mm dia.
4. Screw driver 3.5 mm dia.

Note

Before assembling and testing the delayed action release, the release mechanism must be properly set and checked (see sheet 7).

Sequence of Operations

Screw the delayed action mechanism 42 491-5 to the front plate 42 216-430 with three screws 15-10.170-20, using the 2.2 mm dia. screw driver (see Fig. 8.1).



Tension the delayed action mechanism with the 3.5 mm dia. screw driver.
Tension the shutter of the Leica.

Set the shutter speed dial to $\frac{1}{25}$ second.

Press the lever 42 491-17 against the delayed action mechanism until the shutter runs down. Make sure that the distance between the release button 42 216-70 and the threaded sleeve 42 216-53 is 0.25 to 0.4 mm. during releasing; after releasing the distance should be 0.1 ± 0.1 mm.

If the shutter is not released, slacken the three screws 15-10.170-20 with the 2.2 mm dia. screw driver. Adjust the position of the delayed action mechanism, screw down tight, and release it as described above.

Assembling and Testing the Delayed Action Mechanism

Continued from sheet 9

If the shutter does not release properly, remove the screw 15-10.140-18 with the 2.8 mm dia. screw driver. Lift off the release cam 42 491-77 (see Fig. 9.1).

Extend the cam with the 50 gram hammer if the shutter is not released with the shutter speed dial set to $\frac{1}{25}$ ($\frac{1}{30}$) second.

Shorten the cam if the delayed action mechanism does not run down and the release button 42 216-70 is in contact with the top of the threaded sleeve 42 216-53.

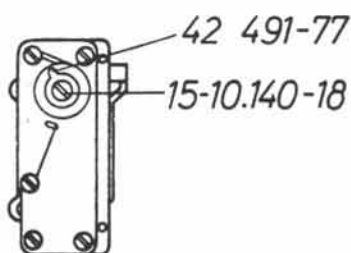


Fig. 9.1

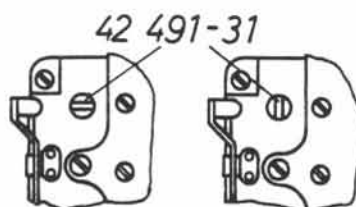


Fig. 10.1

Fully tension the delayed action mechanism and let it run down until the slot in the shaft 42 491-31 is either horizontal or vertical (see Fig. 10.1).

Fit the housing (see sheets 4 and 5).

Testing

Tension the shutter of the Leica, and set the shutter speed dial to B.

Press the release pin 42 491-89 (see Spare Parts List, sheet 4.2), let the delayed action mechanism run down, and observe the shutter blinds. See Fig. 11.1 for the correct position of the tensioning lever 42 491-97 as the shutter blinds run down.

Position of release



Fig. 11.1

Removing and Refitting the Escapement Mechanism

Sheet 11

Tool

1. Screw driver 2.8 mm. dia.

Sequence of Operations

Remove the housing (see sheets 4 and 5)

Remove the front plate (see sheet 8)

Carefully lift out the mask 42 216-421 and the mask 42 216-422 (see Fig.12.1).

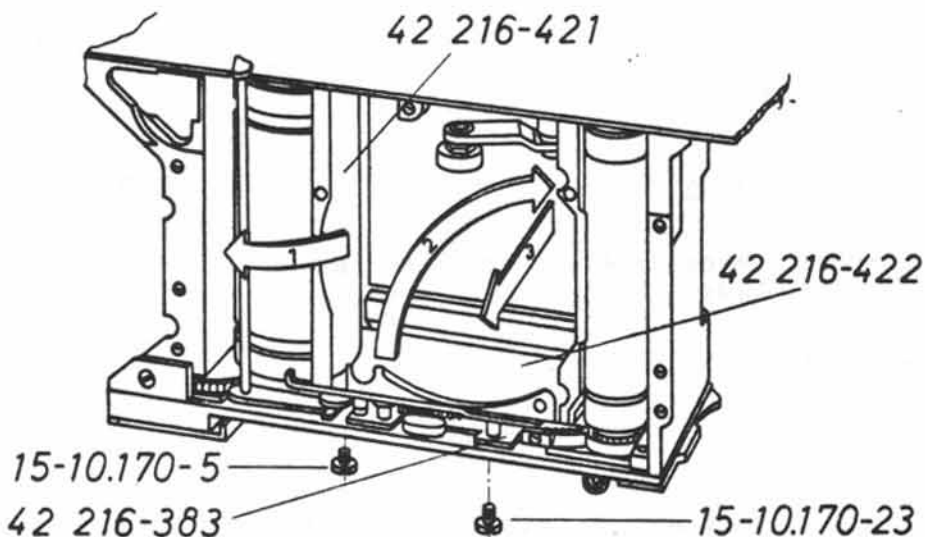


Fig.12.1

Remove the screws 15-10.170-23 and 15-10.170-5 with the 2.8 mm. dia. screw driver.

Take out the escapement mechanism 42 216-383.

Refit the escapement mechanism 42 216-383 by proceeding in the reverse order.

Check: Positioning of the lens mounting ring 42 216-466 (see sheet 6)
Shutter speeds (see sheets 12 to 14)
Rangefinder (see sheets 20 to 23)

Removing and Refitting the Escapement Mechanism

Sheet 11

Tool

1. Screw driver 2.8 mm. dia.

Sequence of Operations

Remove the housing (see sheets 4 and 5)

Remove the front plate (see sheet 8)

Carefully lift out the mask 42 216-421 and the mask 42 216-422 (see Fig.12.2).

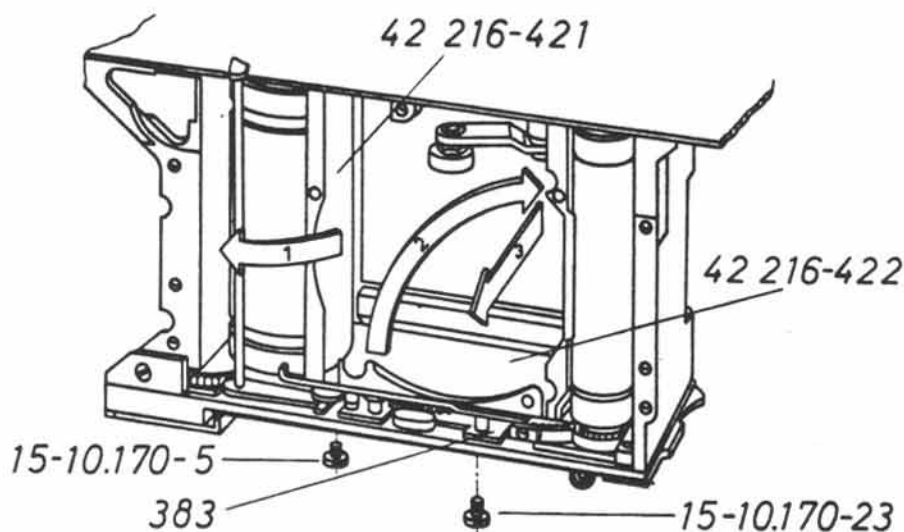


Fig.12.2

Remove the screws 15-10.170-23 and 15-10.170-5 with the 2.8 mm. dia. screw driver.

Take out the escapement mechanism 383.

Refit the escapement mechanism 383 by proceeding in the reverse order.

Check: Positioning of the lens mounting ring 42 216-466 (see sheet 6)
Shutter speeds (see sheets 12 to 14)
Rangefinder (see sheets 20 to 23)

Setting and Testing the Shutter Speeds

Sheets 12 to 14

Testing Instruments, and Tools

1. Spring tension gauge	42 216	-Z1 W 42
2. Mirror	42 216	-Z1 W 46
3. Light drum	42-253.01-Z1	W100
4. Slow speed testing instrument	42-253.01-Z1	W111*
5. Speed pattern	42 531	-Z1 A 32
6. Mirror	42-700.01-Z1	W 25
7. Contact gauge	20	- 250 grams
8. Screw driver 1.4 mm dia.		
9. Screw driver 1.8 mm dia.		
10. Screw driver 2.8 mm dia.		
11. Screw driver 3.5 mm dia.		

Fast Shutter Speeds

The speeds $\frac{1}{1000}$, $\frac{1}{500}$, and $\frac{1}{250}$ second are checked with the light drum 42-253.01-Z1 W100 running at 280 revolutions per minute.

The list of tools specifies the latest model of the light drum 42-253.01-Z1 W100. Any older type of light drum may be used equally well, provided the running speed can be set accurately.

Sequence of Operations

Remove the housing (see sheets 4 and 5).

Unscrew two screws 15-10.174-9 and one screw 15-10.170-5 with the 1.8 mm dia. screw driver (see Fig. 13.1). Take off the cover plate 42 216-493.

Test the tension of the spring roller 170 of the second shutter blind with the spring tension gauge 42 216-Z1 W42. The spring tension gauge should indicate 6 ± 1 with the blind run down.

To increase the blind tension turn the tensioning helix 42 216-197 to the right with the 2.8 mm dia. screw driver.

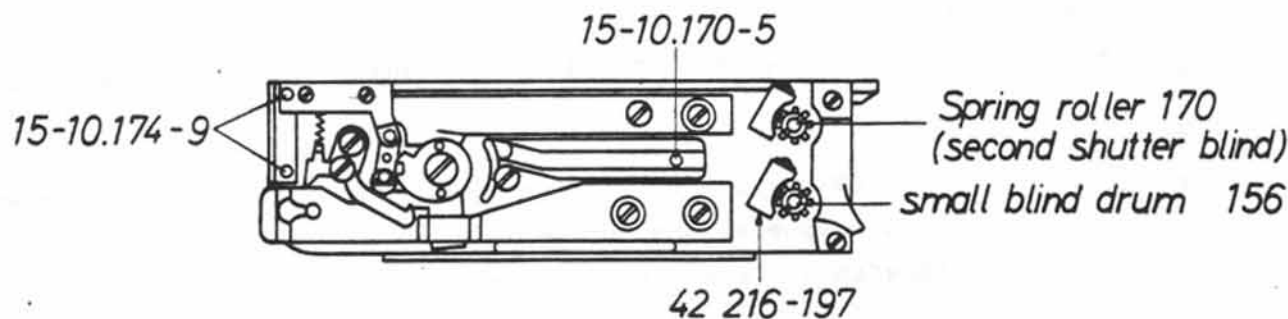


Fig. 13.1

* The slow speed testing instrument can also be used.

Setting and Testing the Shutter Speeds

Continued from sheet 12

Tension the shutter of the Leica, set the speed dial to $\frac{1}{500}$ second, and check by locking through the camera whether the shutter opens. Increasing the tension of the small spring roller 156 will open the shutter.

Insert the speed pattern 42 531-Z1 A32 from the back into the film aperture of the camera, and check the curve of the second shutter blind with the light drum 42-253.01-Z1 W100. If the shutter curve of the Leica is flatter than the pattern, the tension must be decreased.

The image of the slit at the lower edge of the picture frame must be somewhat wider than at the top. The drum images (see Fig. 14.1) clearly show this pattern. Increasing the tension of the spring roller of the first shutter blind widens the image of the slit at the lower edge of the picture frame, decreasing the tension makes it narrower.



Fig.14.1

If the width of the slit does not correspond to the drum image for $\frac{1}{500}$ second (see Fig. 14.1), the cover plate must be taken off (see sheets 1 to 3).

Adjust the eccentric cam 42 216-255 ($\frac{1}{500}$ second) with the 2.8 mm dia. screw driver until the width of the slit matches the drum image. To avoid bending the locking pawl while making this adjustment, place a spacer underneath (see Fig. 15.1). Check the lateral spring pressure on the locking pawl with the contact gauge; measured at the eccentric cam 42 216-255 this pressure should be 50 ± 10 grams.

The axial spring pressure on the locking pawl should be $150 + 30$ grams. If the $\frac{1}{1000}$ second setting needs adjustment on checking, carry this out by turning the eccentric cam 42 216-256 to the left or right with the 2.8 mm dia. screw driver.

Slow Shutter Speeds

The speeds of $\frac{1}{30}$, $\frac{1}{20}$, $\frac{1}{15}$, $\frac{1}{10}$, $\frac{1}{4}$, $\frac{1}{2}$, and 1 second (from Nos. 615 001 $\frac{1}{25}$, $\frac{1}{15}$, $\frac{1}{10}$, $\frac{1}{5}$, $\frac{1}{2}$, and 1 second) are checked with the slow speed testing instrument 42-253.01-Z1 W111.

The basic setting for the slow speeds is 1 second. This setting is carried out on the slow speed dial as follows.

Unscrew the grub screw 15-10.146-7 with the 1.4 mm dia. screw driver, and unscrew the protective cap 42 216-448 by turning to the left (see Fig. 16.1). Slacken the screw 15-10.24-7 with the 3.5 mm dia. screw driver. Adjust the setting nut 42 216-446, and tighten the screw 15-10.24-7 again. Check on the slow speed testing instrument that the pointer reading is within the limits of $0.3 \text{ mA} \pm 10\%$ on the scale.

Setting and Testing the Shutter Speeds

Continued from sheets 12 and 13

At the T setting of the dial the shutter must not run down. If necessary, move the impact plate 42 216-379 so as to arrest the locking lever. The collecting of dirt in the escapement mechanism may result in a change of shutter speeds, i.e. speeds will run to long. For cleaning the escapement mechanism must be removed (see sheet 11). The escapement mechanism should be washed in a special cleaning fluid (see sheet 50).

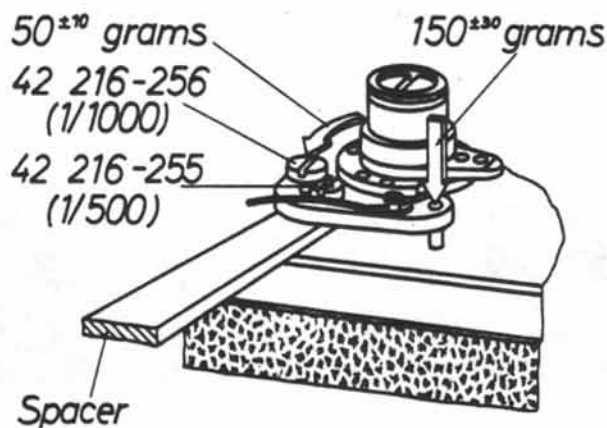


Fig. 15.1

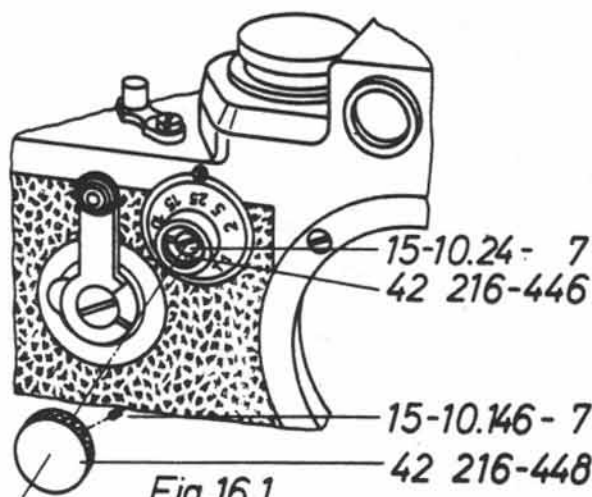


Fig. 16.1

Refit the housing (see sheets 4 to 5).
Check all operations of the camera.

Refit the cover plate (see sheets 1 to 3).

Insert the mirror 42 216-Z1 W46 into the focal plane between the main body and the pressure plate.

Tension the shutter of the Leica,
set the speed dial to $\frac{1}{500}$ second,
and fit the Leica to the light drum.

Press the release button, and check whether the shutter curve matches the drum image (Fig. 14.1). Repeat with the shutter speed dial set to $\frac{1}{1000}$ and to $\frac{1}{200}$ second.

To test the slow shutter speeds with the housing in place, tension the shutter of the Leica, set the speed dial to B, and press the release button. Insert the mirror 42-700.01-Z1 W25 into the open film aperture, and lock in place.

Check the shutter speeds from $\frac{1}{25}$ to 1 second with the slow speed testing instrument, The pointer reading must be within the limits of $0.3 \pm 10\%$ mA on the scale.

Check: Fitting the lens mounting ring (see sheet 6).
Adjusting the rangefinder (see sheet 20 to 23).
The synchronization (see sheet 15 to 18).

Checking the Synchronization

Sheet 15 to 18

Testing Instruments, Accessories, and Tools

1. Gauge 0.75 mm and 1.0 mm	42 216	- Z1 A 40
2. Pattern	42-253.01-	Z1 W 66 U63
3. Synchro test unit	42-253.01-	Z1 W109 *
4. Gauge 0.5 mm and 1.1 mm	42 531	- Z1 A 7
5. Contact test meter	42 531	- Z1 W 13
6. Adjusting bracket	42 531	-248 W 13
7. Flash cable (CNOOS) 15520 N	42 531	-561
8. Cable with probing points	103.25.18	
9. Soldering iron		
10. Screw driver 1 mm dia.		

Notes

This checking procedure assumes that the shutter speeds have been tested for absolute accuracy (see sheet 12 to 14).

The check with the synchro test unit 42-253.01-Z1 W109 can only be carried out with the Leica housing and pressure plate in position.

Before releasing the shutter of the Leica, make sure that the indicator lamp of the synchro test unit lights up to show that the instrument is ready for use.

After moving the lever between "D", "I", and "L" on the contact test meter 42 531-Z1 W13 always operate the discharge button.

Sequence of Operations

Refit the cover plate (see sheet 1 to 3).

Before fitting the accessory shoe, solder the lead of the flash socket to the contact strip.

Set the switch on the contact test meter to 1000 volts.

1. With the contact test meter 42 531-Z1 W131.1 Mounting the cam plate

1.11 Set the lever of the contact test meter to "D".

Plug the flash cable into the flash socket of the contact test meter and of the Leica.

Tension the Leica shutter.

1.12 Press the release button and keep it pressed down. The pointer must read more than 50 on the scale.

1.13 Set lever to "I", tension the shutter of the Leica.

1.14 Press the release button and keep it pressed down: the pointer must read 100 on the scale, and the indicator lamp must light up.

Turn the synchro-setting ring from 0 to 20: the indicator lamp must stay alight.

* Alternatively, the synchro test units 42-253.01-Z1 W66 or 42-253.01-Z1 W98 can be used.

Checking the Synchronization

Continued from sheet 15

- 1.15 Set lever to "L", tension the shutter of the Leica, and engage the release arm at the $\frac{1}{1000}$ second setting. Mount the setting piece 42 531-248 W13 on the release arm, and turn it without allowing the contact lever to enter the cut-out of the setting piece. At the same time also turn the synchro-setting ring from 0 to 20, and check that the contact lever and contact ring do not make contact anywhere (see fig. 17.1).

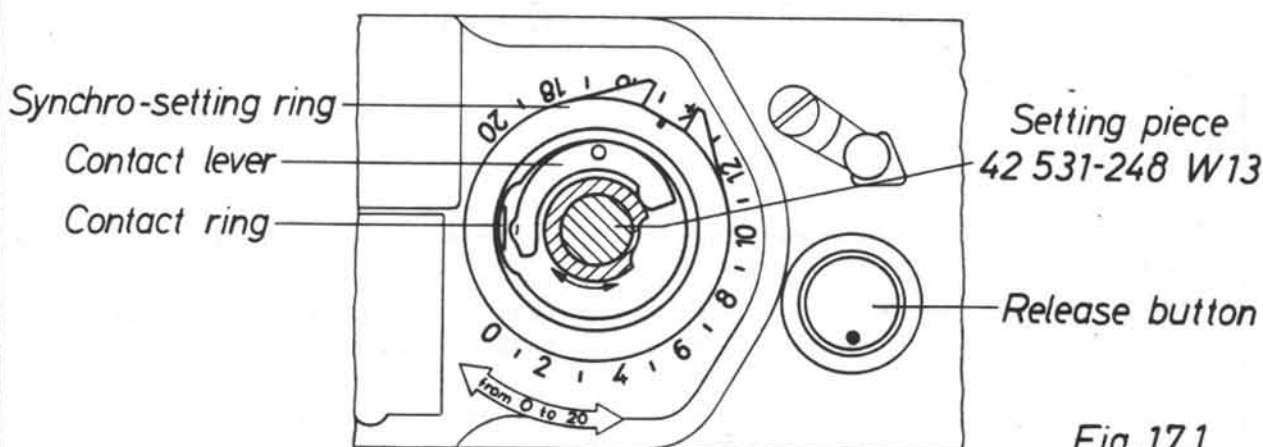


Fig. 17.1

- 1.16 Press the release button and keep it pressed down. Turn the setting piece; when the contact lever enters the cut-out of the setting piece, the indicator lamp must light up.
- 1.17 Place the 0.75 mm feeler gauge under the release button and depress the release button. The indicator lamp must light up.
- 1.18 Repeat with the 1.0 mm feeler gauge; the indicator lamp must not light up.
- 1.19 Move the synchro-setting ring to 3.5, tension the shutter, place the 0.75 mm feeler gauge under the release button, and hold it in place by depressing the release button. Place the cam plate over the release arm, and turn anti-clockwise until the indicator lamp is extinguished. Then fasten the cam plate with three screws M 1.7 x 1.8 DIN 553. Fit the speed dial 329 with three screws M 1.4 x 1.8 DIN 553.

1.2 Testing the circuit resistance

- 1.21 Set lever to "D", tension the Leica shutter, and set the shutter speed dial to $\frac{1}{30}$ second, move the synchro-setting ring to 2.
- 1.22 Press the release button and keep it pressed down. The pointer must read 50 on the scale.
- 1.23 Possible causes of faults shown on testing of circuit resistance:
Dirty contacts, poor connection between plug and socket, poor or broken soldering connection. Faults not listed above must be traced with the aid of the probing points 103.25.18 by testing the connections and contact components.

Checking the Synchronization

Continued from sheets 15 and 16

1.3 Testing the insulation resistance

- 1.31 Set the lever to "I", tension the Leica shutter, set the speed dial to $\frac{1}{30}$ second, and the synchro-setting ring to 2.
- 1.32 Press the release button, the pointer must read 100 on the scale.
- 1.33 Place the 0.75 mm feeler gauge under the release button.
- 1.34 Press the release button, the pointer must read 50 on the scale. Remove the feeler gauge.
- 1.35 Press the release button, the pointer must read 50 on the scale.
- 1.36 After letting go of the release button and depressing it again with the shutter run down, the contact test meter may not register any reading. This does not matter from the point of view of operation.
- 1.37 Possible causes of faults shown on testing insulation resistance:
Short circuit due to faulty insulation, contact spring touches the cover plate, plug or cable of the plug is defect.
Faults not listed above must be traced with the aid of the probing points 103.25.18 by testing the connections and contact components.

1.4 Testing for Operation

- 1.41 Set the lever to "L", tension the Leica shutter, set the speed dial to $\frac{1}{1000}$ second, and the synchro-setting ring to 3, place the 0.75 mm feeler gauge under the release button.
- 1.42 Press the release button: the indicator lamp must not light up. On moving the speed dial with the release arm within the available backlash, indicator lamp again must not light up.
- 1.43 Continue turning the synchro-setting ring. The indicator lamp must only light up on reaching the 3.5 setting.
- 1.44 Tension the Leica shutter, set the speed dial to $\frac{1}{500}$ second, and the synchro-setting ring to 4.
- 1.45 Press the release button, and slow down the movement of the shutter speed dial by hand for better observation. The indicator lamp must only light up after the speed dial has started to turn.
- 1.46 Repeat steps 1.44 and 1.45, but with the following combinations of shutter speed and synchronizing settings:
- | | | | | | | | |
|--------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|
| Speed dial | $\frac{1}{200}$ | $\frac{1}{100}$ | $\frac{1}{60}$ | $\frac{1}{40}$ | $\frac{1}{30}$ | $\frac{1}{30}$ | $\frac{1}{30}$ |
| Synchro dial | 5 | 7.5 | 11 | 15 | 20 | 15 | 2 |
- 1.47 Set the lever to "I", the speed and synchro-setting to $\frac{1}{30}$ and 20, and tension the shutter of the Leica.
- 1.48 Press the release button and keep it depressed. Turn the synchro-setting ring to 2. Between settings 5 and 6 the pointer must register 100 on the scale; this reading must be maintained right through to the 2 setting.

Checking the Synchronization

Continued from sheets 15, 16, and 17

2. With the synchro test unit 42-253.01-Z1 W109

2.1 Checking the correct contact position for flash bulbs

2.11 Fit the plug to the accessory shoe socket, and press the key 6.

Insert the template 42-253.01-Z1 W66 U63 into the focal plane between the pressure plate and the main body, and align with the shutter blinds open.

2.12 Speed dial to $\frac{1}{30}$ second, set the synchro-setting ring to 2.

Mount the Leica with the front aperture on the synchro test unit.

2.13 Press the release button; the two slots of the template must be illuminated at each side.

Checking the Synchronization

Continued from sheet 15

- 1.15 Set lever to "L", tension the shutter of the Leica, and engage the release arm at the $\frac{1}{1000}$ second setting. Mount the setting piece 42 531-248 W13 on the release arm, and turn it without allowing the contact lever to enter the cut-out of the setting piece. At the same time also turn the synchro-setting ring from 0 to 20, and check that the contact lever and contact ring do not make contact anywhere (see fig. 17.2).

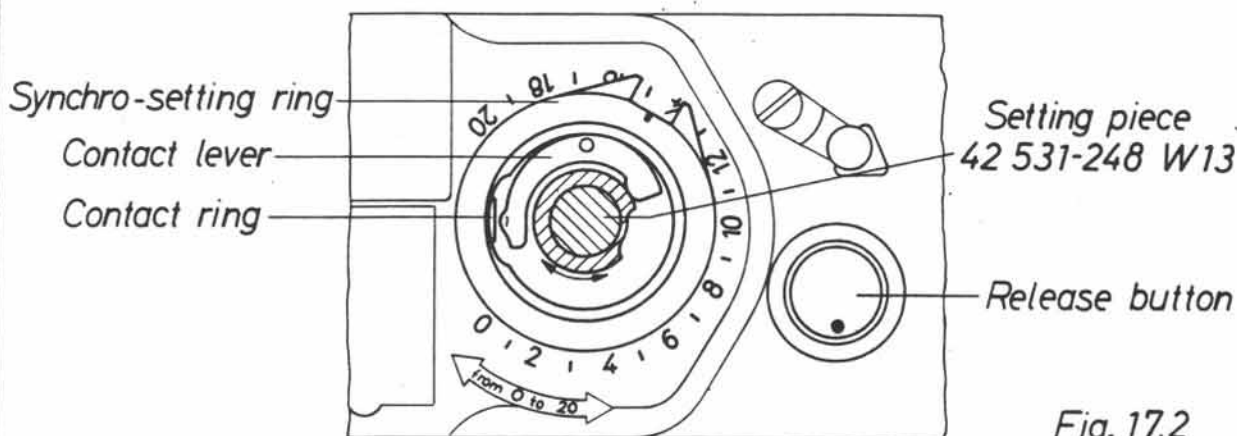


Fig. 17.2

- 1.16 Press the release button and keep it pressed down. Turn the setting piece; when the contact lever enters the cut-out of the setting piece, the indicator lamp must light up.
- 1.17 Place the 0.75 mm feeler gauge under the release button and depress the release button. The indicator lamp must light up.
- 1.18 Repeat with the 1.0 mm feeler gauge; the indicator lamp must not light up.
- 1.19 Move the synchro-setting ring to 0.3, tension the shutter, place the 0.75 mm feeler gauge under the release button, and hold it in place by depressing the release button. Place the cam plate over the release arm, and turn anti-clockwise until the indicator lamp is extinguished. Then fasten the cam plate with three screws M 1.7 x 1.8 DIN 553. Fit the speed dial 330 with three screws M 1.4 x 1.8 DIN 553.

1.2 Testing the circuit resistance

- 1.21 Set lever to "D", tension the Leica shutter, and set the shutter speed dial to $\frac{1}{25}$ second, move the synchro-setting ring to 0.
- 1.22 Press the release button and keep it pressed down. The pointer must read 50 on the scale.
- 1.23 Possible causes of faults shown on testing of circuit resistance:
Dirty contacts, poor connection between plug and socket, poor or broken soldering connection. Faults not listed above must be traced with the aid of the probing points 103.25.18 by testing the connections and contact components.

Checking the Synchronization

Continued from sheets 15 and 16

1.3 Testing the insulation resistance

- 1.31 Set the lever to "I", tension the Leica shutter, set the speed dial to $\frac{1}{25}$ second, and the synchro-setting ring to 0.
- 1.32 Press the release button, the pointer must read 100 on the scale.
- 1.33 Place the 0.75 mm feeler gauge under the release button.
- 1.34 Press the release button, the pointer must read 50 on the scale.
Remove the feeler gauge.
- 1.35 Press the release button, the pointer must read 50 on the scale.
- 1.36 after letting go of the release button and depressing it again with the shutter run down, the contact test meter may not register any reading. This does not matter from the point of view of operation.
- 1.37 Possible causes of faults shown on testing insulation resistance:
Short circuit due to faulty insulation, contact spring touches the cover plate, plug or cable of the plug is defect.
Faults not listed above must be traced with the aid of the probing points 103.25.18 by testing the connections and contact components.

1.4 Testing for Operation

- 1.41 Set the lever to "L",
tension the Leica shutter, set the speed dial to $\frac{1}{1000}$ second, and the synchro-setting ring to 0, place the 0.75 mm feeler gauge under the release button.
- 1.42 Press the release button: the indicator lamp must not light up. On moving the speed dial with the release arm within the available backlash, indicator lamp again must not light up.
- 1.43 Continue turning the synchro-setting ring. The indicator lamp must only light up on reaching the 0.3 setting.
- 1.44 Tension the Leica shutter, set the speed dial to $\frac{1}{500}$ second, and the synchro-setting ring to 1.
- 1.45 Press the release button, and slow down the movement of the shutter speed dial by hand for better observation. The indicator lamp must only light up after the speed dial has started to turn.
- 1.46 Repeat steps 1.44 and 1.45, but with the following combinations of shutter speed and synchronizing settings:
- | | | | | | | | | |
|--------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Speed dial | $\frac{1}{200}$ | $\frac{1}{100}$ | $\frac{1}{75}$ | $\frac{1}{50}$ | $\frac{1}{50}$ | $\frac{1}{25}$ | $\frac{1}{25}$ | $\frac{1}{25}$ |
| Synchro dial | 2 | 4 | 7 | 13 | 20 | 16 | 0 | 9 |
- 1.47 Set the lever to "I", the speed and synchro-setting to $\frac{1}{25}$ and 16, and tension the shutter of the Leica.
- 1.48 Press the release button and keep it depressed. Turn the synchro-setting ring to 0. Between settings 2 and 3 the pointer must register 100 on the scale; this reading must be maintained right through to the 2 setting.

Checking the Synchronization

Continued from sheets 15, 16, and 17

2. With the synchro test unit 42-253.01-Z1 #109

2.1 Checking the correct contact position for flash bulbs

2.11 Fit the plug to the accessory shoe socket, and press the key 6.

Insert the template 42-253.01-Z1 #66 U63 into the focal plane between the pressure plate and the main body, and align with the shutter blinds open.

2.12 Speed dial to $\frac{1}{25}$ second, set the synchro-setting ring to 0.

Mount the Leica with the front aperture on the synchro test unit.

2.13 Press the release button; the two slots of the template must be illuminated at each side.

2.14 Repeat steps 2.12 and 2.13 with the setting of the speed dial to $\frac{1}{50}$ second and the synchro-setting ring to 20.

Checking the Synchronization

Continued from sheet 15

- 1.15 Set lever to "L", tension the shutter of the Leica, and engage the release arm at the $\frac{1}{1000}$ second setting. Mount the setting piece 42 531-248 W13 on the release arm, and turn it without allowing the contact lever to enter the cut-out of the setting piece. At the same time also turn the synchro-setting ring from 0 to 20, and check that the contact lever and contact ring do not make contact anywhere (see fig. 17.3).

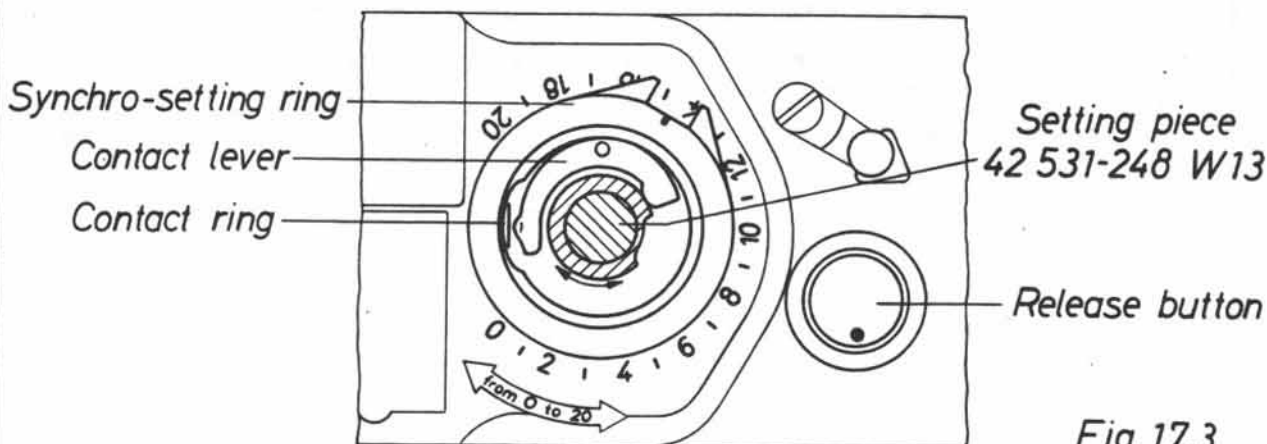


Fig. 17.3

- 1.16 Press the release button and keep it pressed down. Turn the setting piece; when the contact lever enters the cut-out of the setting piece, the indicator lamp must light up.
- 1.17 Place the 0.75 mm feeler gauge under the release button and depress the release button. The indicator lamp must light up.
- 1.18 Repeat with the 1.0 mm feeler gauge; the indicator lamp must not light up.
- 1.19 Move the synchro-setting ring to 0.8, tension the shutter, place the 0.75 mm feeler gauge under the release button, and hold it in place by depressing the release button. Place the cam plate over the release arm, and turn anti-clockwise until the indicator lamp is extinguished. Then fasten the cam plate with three screws M 1.7 x 1.8 DIN 553. Fit the speed dial 326 with three screws M 1.4 x 1.8 DIN 553.

1.2 Testing the circuit resistance

- 1.21 Set lever to "D", tension the Leica shutter, and set the shutter speed dial to $\frac{1}{25}$ second, move the synchro-setting ring to 0.
- 1.22 Press the release button and keep it pressed down. The pointer must read 50 on the scale.
- 1.23 Possible causes of faults shown on testing of circuit resistance:
Dirty contacts, poor connection between plug and socket, poor or broken soldering connection. Faults not listed above must be traced with the aid of the probing points 103.25.18 by testing the connections and contact components.

Checking the Synchronization

Continued from sheets 15 and 16

1.3 Testing the insulation resistance

- 1.31 Set the lever to "I", tension the Leica shutter, set the speed dial to $\frac{1}{25}$ second, and the synchro-setting ring to 0.
- 1.32 Press the release button, the pointer must read 100 on the scale.
- 1.33 Place the 0.75 mm feeler gauge under the release button.
- 1.34 Press the release button, the pointer must read 50 on the scale. Remove the feeler gauge.
- 1.35 Press the release button, the pointer must read 50 on the scale.
- 1.36 After letting go of the release button and depressing it again with the shutter run down, the contact test meter may not register any reading. ~~This~~ does not matter from the point of view of operation.
- 1.37 Possible causes of faults shown on testing insulation resistance:
Short circuit due to faulty insulation, contact spring touches the cover plate, plug or cable of the plug is defect.
Faults not listed above must be traced with the aid of the probing points 103.25.18 by testing the connections and contact components.

1.4 Testing for Operation

- 1.41 Set the lever to "L", tension the Leica shutter, set the speed dial to $\frac{1}{1000}$ second, and the synchro-setting ring to 0, place the 0.75 mm feeler gauge under the release button.
- 1.42 Press the release button: the indicator lamp must not light up. On moving the speed dial with the release arm within the available backlash, indicator lamp again must not light up.
- 1.43 Continue turning the synchro-setting ring. The indicator lamp must only light up on reaching the 0.8 setting.
- 1.44 Tension the Leica shutter, set the speed dial to $\frac{1}{500}$ second, and the synchro-setting ring to 1.
- 1.45 Press the release button, and slow down the movement of the shutter speed dial by hand for better observation. The indicator lamp must only light up after the speed dial has started to turn.
- 1.46 Repeat steps 1.44 and 1.45, but with the following combinations of shutter speed and synchronizing settings:
- | | | | | | | | | |
|--------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Speed dial | $\frac{1}{200}$ | $\frac{1}{100}$ | $\frac{1}{75}$ | $\frac{1}{50}$ | $\frac{1}{50}$ | $\frac{1}{25}$ | $\frac{1}{25}$ | $\frac{1}{25}$ |
| Synchro dial | 2 | 4 | 7 | 13 | 20 | 16 | 9 | 0 |
- 1.47 Set the lever to "I", the speed and synchro-setting to $\frac{1}{25}$ and 16, and tension the shutter of the Leica.
- 1.48 Press the release button and keep it depressed. Turn the synchro setting ring to 0. Between settings 2 and 3 the pointer must register 100 on the scale; this reading must be maintained right through to the 0 setting.

Removing and Refitting the Rangefinder

Sheet 19

Tools

1. Screw Driver 42-253.01-630 w6
2. Screw driver 2.2 mm diameter

Sequence of operations

- Remove the cover plate (see sheets 1 to 3)
- Remove the bearing (see sheets 4 and 5)
- Remove the front plate (see sheet 8)

With the screw driver 2.2 mm unscrew one screw 15-10.174-7 and two screws 15-10.170-21 (see fig 18.1). With screw driver 42-253.01-630 w6 unscrew the screw M2x 3.5 LN120 25, remove the washer 15-12.02-18/3 and the rangefinder coupling lever 42-700.01-482.

Lift off the rangefinder 42 216-279

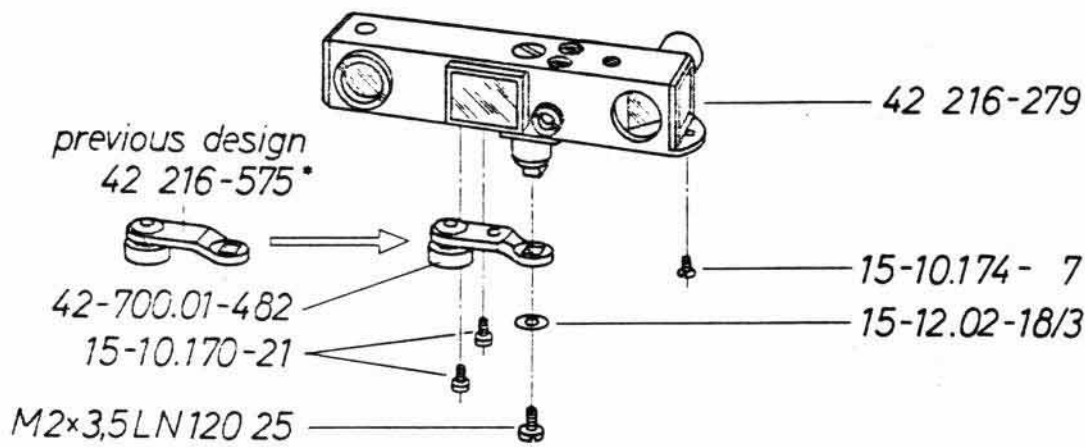


Fig. 18.1

Refit the rangefinder by proceeding in the reverse order.

- Adjusting the rangefinder (see sheet 20 to 23)
- Setting and testing the shutter speeds (see sheet 12 to 14)
- Checking the synchronization (see sheet 15 to 18)

* No longer available as spare part.

Adjusting the Rangefinder

Sheet 20 to 22

Setting Instruments and Tools

1. Gauge	42 216	-	Z1 A12
2. Tweezers	42 216	-	Z1 A32
3. Spanner	42 216	-	304 W 1
4. Spanner	42 216	-	307 W 3
5. Focusing mount	42 216	-	307 W 4
6. Bending tool	42 216	-	U318 W 1
7. Spanner	42 216	-	U575 W 3
8. Table stand	42-253.01-	Z1	W 7
9. Camera holder	42-253.01-	Z1	W 9
10. Graticule housing (1 metre)	42-253.01-	Z1	W 3
11. Bending tool	42-253.01-	700	W 2
12. Distance setting gauge	42-700.01-	Z1	A 6
13. Housing	42-700.01-	Z1	W 8
14. Plate	42-700.01-	Z1	W 18
15. Graticule (1 metre)	42-700.01-	Z1	W 20
16. Screw driver	42-700.01-	478	W 1
17. Spanner	42-700.01-	482	W 1
18. Graticule housing (10 metre)	103.25.	Z	
19. Graticule (10 metre)	103.25.16		
20. Screw driver 1.8 mm dia.			
21. Screw driver 2.2 mm dia.			
22. Screw driver 2.8 mm dia.			

Sequence of Operations

Place the rangefinder 42 216-279 on the main body 2, making sure that the rangefinder is positioned parallel to the front edge of the main body without protruding in front of it. Screw the finder unit to the main body with the screw 15-10.174-7, and two screws 15-10.170-21, using the 2.8 mm dia. screw driver.

Screw in the plain window mount 42 216-303 with the spanner 42 216-304 W1. Screw the main body to the distance setting gauge 42-700.01-Z1 A5. Insert the two together in the housing 42-700.01-Z1 W8, and place on the camera holder. On the ground glass screen align the frame outline on the graticule 42-700.01-Z1 W20 accurately with the film aperture of the camera. For this purpose the camera holder can be adjusted vertically and horizontally by means of two milled screws fitted on the right hand side.

Measuring Distances

Check the vertical positioning of the roller of the rangefinder coupling lever 42-700.01-482 (or 42 216-575) with the gauge 42 216-Z1 A12. On attaching the wastage side, the gauge must not be able to fit into the screw mounting ring of the Leica.

If necessary, adjust the coupling lever with the bending tool 42-253.01-700 W7 (for the coupling lever 42 216-575 use the bending tool 42 216-U318 W1).

Place the gauge 42 216-Z1 A25 in the screw mounting ring of the Leica so that the measuring block bears on the roller of the rangefinder coupling lever. Move the gauge up and down in the screw mounting ring: the rangefinder image in the Leica must remain unchanged in the two end positions.

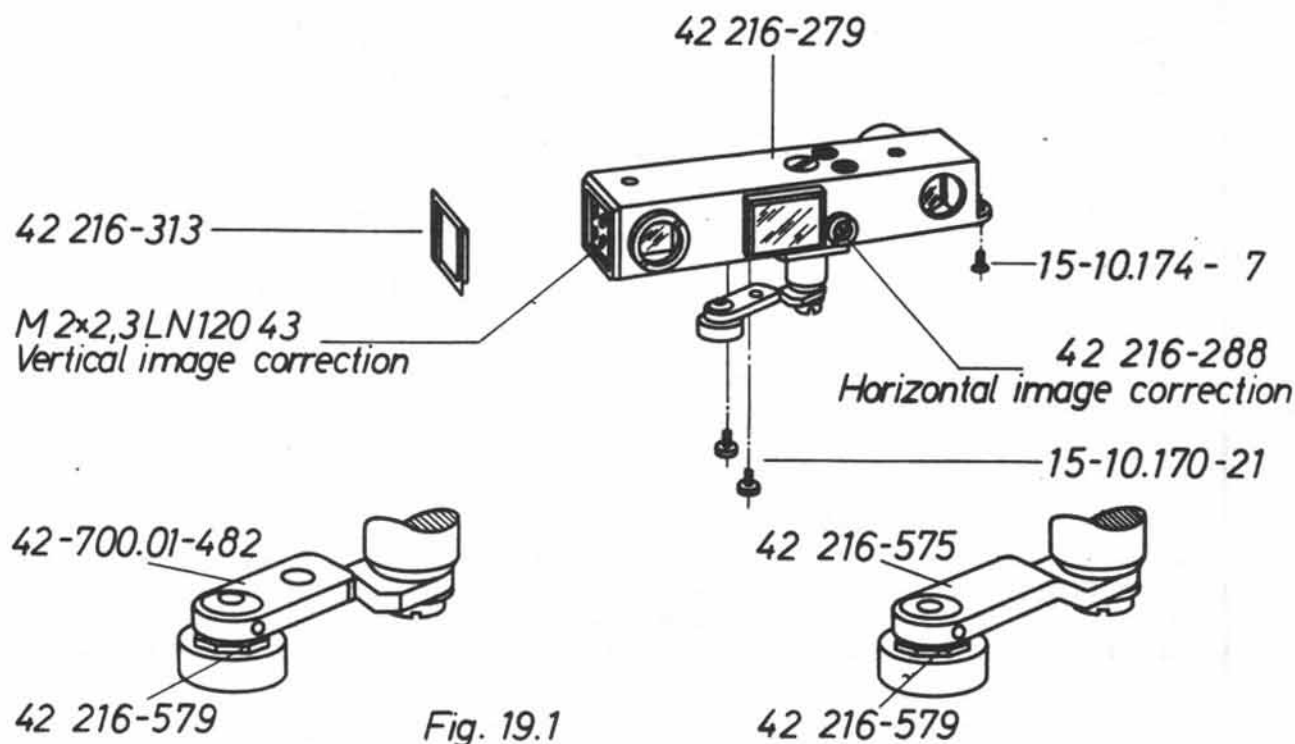
If the rangefinder image moves, bend the rangefinder coupling lever into the correct position with the bending tool.

Re-check the vertical positioning of the coupling lever with the gauge 42 216-Z1 A12.

Adjusting the Rangefinder

Continued from sheet 20

Re-check the infinity setting on the 10-metre graticule with the supplementary telescope. Make any adjustment necessary on the eccentric 42 216-579 by turning it to the left or right with the spanner 42 216-U575 W3 until the rangefinder images co-incide.



Swing the supplementary telescope out of the way of the rangefinder eyepiece, and set the distance setting gauge to 1 metre. The cross-lines must co-incide exactly on the 1-metre graticule, using the thin lines at the side as sighting targets. Again adjust the eccentric 42 216-579 as required by turning it to the left or right with the spanner 42 216-U575 W3, and adjusting the screw 42 216-288 with the screw driver 42-700.01-478 W1. Alternately repeat the correction of the infinity and the 1 metre settings until the marks co-incide in both positions.

Vertical image position

When adjusting the rangefinder settings between infinity and 1 metre, look out for errors in the vertical image position. In case of major displacements first try whether the error can be corrected by interposing a washer between the rangefinder and the main body on one of the fixing screws 15-10.170-21 or 15-10.174-7. Secure the washer with lacquer.

Adjusting the Rangefinder

Continued from sheets 20 and 21

A correction can be effected by adjusting the position of the prism lever 42 216-290 by adjusting the four setting screws M 2-x2.3 LW 120 43. This is done with the 1.8 mm dia. screw driver.

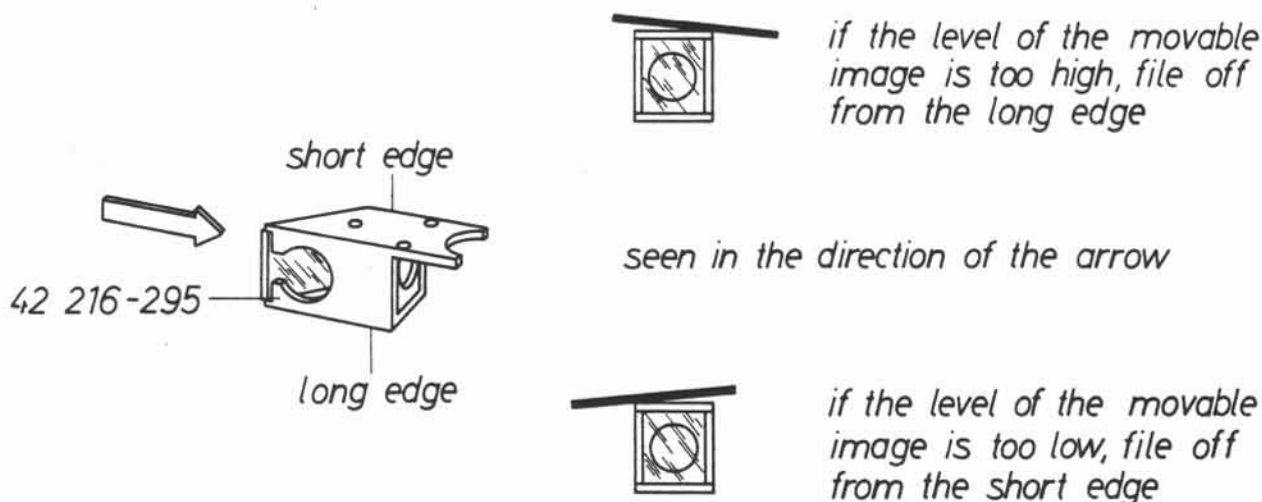


Fig. 20.1

If the setting screws provided do not effect adequate adjustment, the reflector cage 42 216-295 must be taken out. Unscrew two screws 15-10.170-22 and one screw 15-10.174-12 with the 2.2 mm dia. screw driver, and remove the reflector cage.

If the level of the movable image is too high, file off the cage from the side of the long edge; if the image level is too low, file off from the short edge (see fig. 20.1).

Full the rangefinder coupling lever 42-700.01-482 and let it rebound strongly; then check whether the setting has changed.

Check all functions of the rangefinder.

Seal all setting and fastening screws with lacquer.

Fit the cover 42 216-313 and seal with lacquer.

With the cover plate fitted, any vertical error can be corrected by rotating the prism window mount 42 216-307 with the focusing mount 42 216-U307 W4.

To fit the prism window mount use the spanner 42 216-307 W3.

To test the rangefinder on the fully assembled Leica, clip the place 42-700.01-Z1 W18 on the back of the camera holder 42-253.01-Z1 W9.

Correct any horizontal error by adjusting the screw 42 216-288 with the screw driver 42-700.01-478 W1.

Make any necessary adjustments on the eccentric cam 42 216-579 with the spanner 42 216-U575 W3.

Cleaning and Lubricating the Escapement

Sheet 50

Note

Dirt in the escapement mechanism can result in increased exposure times. The escapement must be cleaned in perfectly pure cleaning petrol, and lubricated only with the lubricants listed below.

Cleaners and Lubricants

1. Lead-free cleaning petrol
2. Medium No. 100
3. Lubricant No. 601 (△△△)
4. Lubricant No. 602 (⊙⊙⊙)
5. Lubricant No. 704 (●●●)
6. Brush

Sequence of Operations

Remove the escapement mechanism from the camera (see sheet 11).

Place the escapement mechanism for 15 minutes in a bath of cleaning petrol. Wind up the escapement several times while in this bath, and let it run down with the escapement anchor engaged.

Let the escapement mechanism dry out.

Apply the medium No. 100 drop by drop with a brush to all bearings and let it dry thoroughly.

Apply lubricant No. 602 to the two cups of the ratchet wheel bearings (see fig. 70.1).

Lubricate all other bearings lightly with lubricant No. 601.

The use of an OBAMA oil injector (scale setting 10 is recommended for this purpose).

Coat the contact rivet of the drive segment and the bent-down edge of the sliding member with lubricant No. 704 (see fig. 70.1).

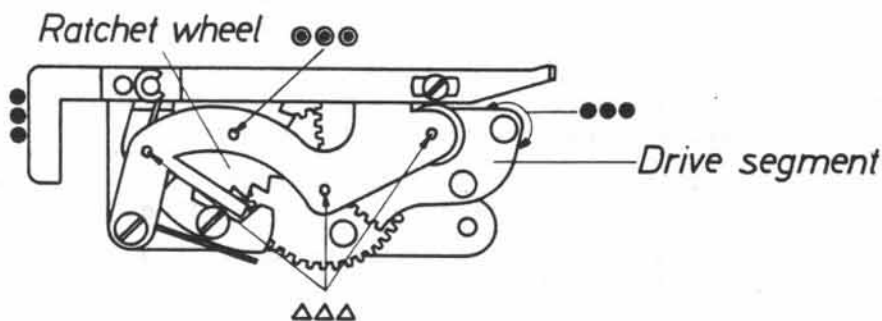


Fig. 70.1

Refit the escapement mechanism (see sheet 11).

Eliminating Light Leaks

Sheet 51

Spare Part and Materials

1. Velvet strip 42-700.01-665
2. Wax 637
3. Cement EC 880
Thinner M

After servicing, every Leica should be made light-tight as described below. In dismantling take special care not to allow any wax to get into the shutter mechanism.

1. Housing

Cement the velvet strip 42-700.01-665 into the housing with cement EC 880 (see fig. 71.1). This velvet strip must be attached as close as possible to the cut-out for the slow-speed setting knob.

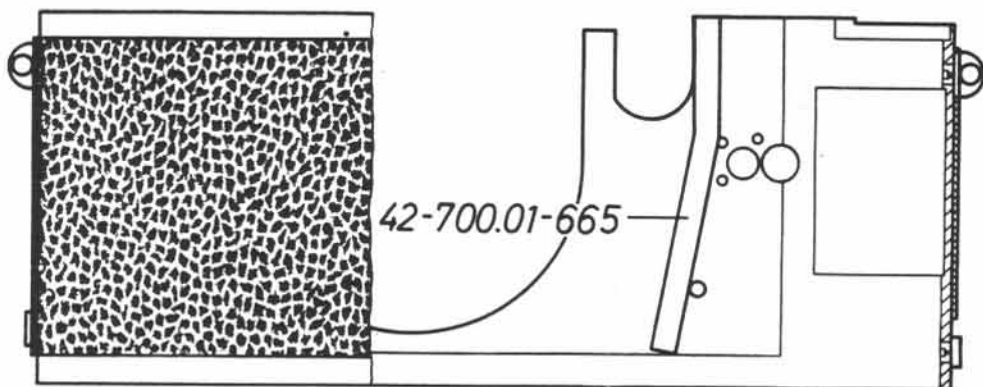


Fig. 71.1

2. After fitting the housing and the cover plate, seal off all gaps between the cover, slow speed setting knob and screw mounting ring on the one hand, and the leather covering of the housing on the other (see fig. 72.1).

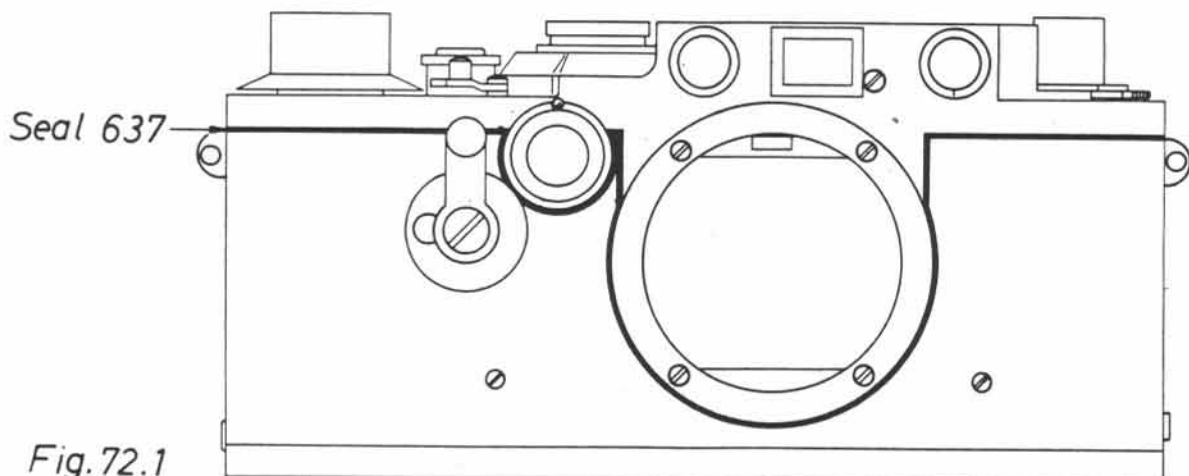


Fig. 72.1

Adapting and Insulating the Leica III f for up to 1000 Volts

Sheet 52 to 56

Tools and Aids

1. Screwdriver 1.8 \emptyset	
2. Screwdriver 2.8 \emptyset	
3. Screwdriver 3.5 \emptyset	
4. Twist drill 1.7 \emptyset	
5. Twist drill 1.4 \emptyset	
6. Screw-tap M 1.7	
7. Tweezers	
8. Flat pliers, small, 120 mm	
9. Cylindrical cutter	4 \emptyset DIN 844 Type W
10. Facing cutter	1.35 x 4.2 LN 144.33
11. Feeler tips	103.25.18
12. Countersinker	16 \emptyset LN 144.46
13. Bracing tool	42 531 U468 W1
14. Backstop	42 531 U468 W2
15. Teroson Fluid, special	
16. Lubricant 301	
17. Setting gauge	42 531 Z1 A31
18. Dull lacquer, black	5308 - 54 892
19. UHU hard	

The following parts are required:

1. 1 Locking lever	42 216-252
2. 1 Setting ring	42 531-231
3. 1 Small cover plate	42 531-232
4. 2 Bush	42 531-267
5. 1 Plug bush	42 531-240
6. 1 Contact spring	42 531-670
7. 1 Insulating plate	42 531-671
8. 1 Contact spring	42 531-672
9. 1 Plate washer	42 531-673
10. 2 Fillister head screw, burnished	15-10.170-24
11. 2 Washer	15-12.02-11/1

Note

Measures for safeguarding the Leica for up to 1000 volts are best carried out in conjunction with overhaul work (i.e. complete dismantling of the camera). During the milling of the main body to accept the 1000 volt contact, it is possible for shavings to penetrate into the shutter interior and to hinder the shutter run-off. If a large-scale repair is to be carried out on a Leica III f safeguarded for up to 500 volts only, it is advisable to recommend 1000 volt adaptation to the client.

Adapting and Insulating the Leica III f for up to 1000 Volts

Continuation of Sheet 52.

Sequence of Operation1. Checking the camera

- 1.1 Check shutter speeds (see sheet 12 to 14).
- 1.2 Check rangefinder (see sheet 20 to 22).
- 1.3 Check zero setting (see sheet 6).

2. Dismantling the Leica

- 2.1 Removing the cover plate (see sheet 1 to 3).
- 2.2 Using screwdriver 2.8 ϕ unscrew screw 15-10.179-9. Remove spring 42 216-258 and locking lever (old) 42 216-252 and, using screwdriver 1.8 ϕ unscrew screw 15-10.179-10. Using screwdriver 3.5 ϕ unscrew screw 15-10.170-24 and detach the old flash contact (see Spare Parts List, Sheet 11).

3. Milling and Drilling the Main Body

- 3.11 Mount the Leica securely from the cover plate side, seal off all opening giving access to the shutter and using cylindrical cutter 4 ϕ DIN 844 W proceed to mill in accordance with Fig. 73.1.
- 3.12 Should the Leica be due for complete dismantling, lay the main body with the film channel facing downwards and clamp the main body firmly from the shutter side with a plate in such a manner, that the camera can be milled, as shown in Fig. 73.1.

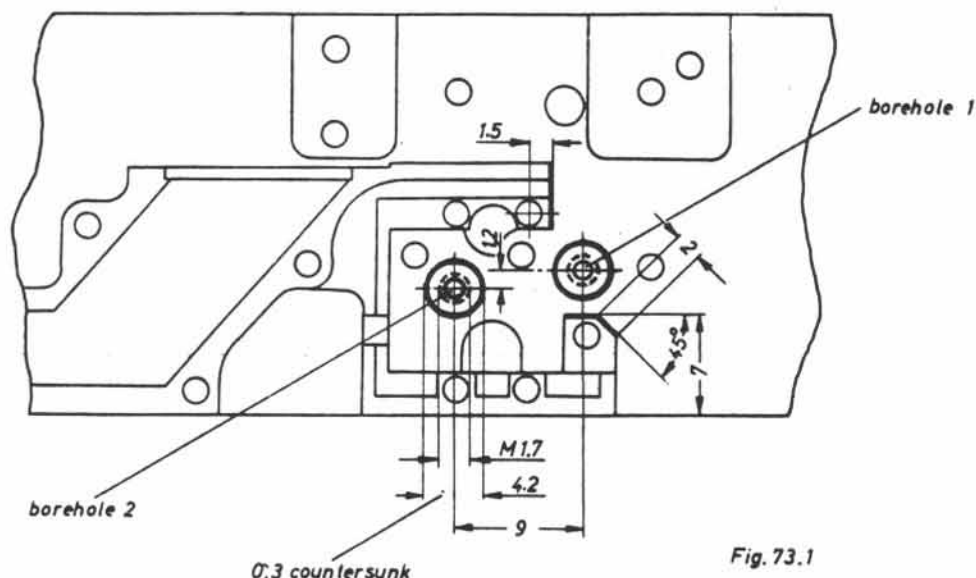


Fig. 73.1

Adapting and Insulating the Leica III f for up to 1000 Volts

Continuation of Sheet 52 and 53

- 3.2 Screw and secure the pre-assembled contact sub-group (see Fig. 74.1) in borehole 1 (see Fig. 73.1) with the aid of screw 15-10.170-24 on the main body.
- 3.3 Using twist drill 1.7 ϕ countersink the second borehole, unscrew the flash contact and bore through the main body, using twist drill 1.4 ϕ . Using facing cutter 1.35 x 4.2 LN 144.33 countersink both boreholes to a depth of 0.3 mm. Cut a thread M 1.7 in borehole 2.
- 3.4 Finish the machined parts in dull lacquer, black, 5308 - 54 892.

4. Pre-assembly of the Contact Sub-group

- 4.1 The pre-assembly of the contact sub-group takes place in the sequence shown in Fig. 74.1, whereby insulating lacquer is applied to the contact surfaces facing the main body, between the individual components.
- 4.2 The two protruding tags of the plate washer 42 531-673 must be bent upwards at right angles with a pair of tweezers (see Fig. 75.1).
- 4.3 Using tweezers, bend the contact spring 42 531-672 in the foremost half of the lower contact arm upwards at an angle of about 50° - 100° (see Fig. 76.1).
- 4.4 Using flat pliers, bend the lower bend of the z-shaped angle of the contact spring upwards and, extending it, bend it again in such a way that the lower edge of the contact spring rests fully on the plate washer 42 531-673 (main body). The contact arm, from the direction of the angled portion, must be bent upwards at an angle of about 20° - 25° (see Fig. 76.1).

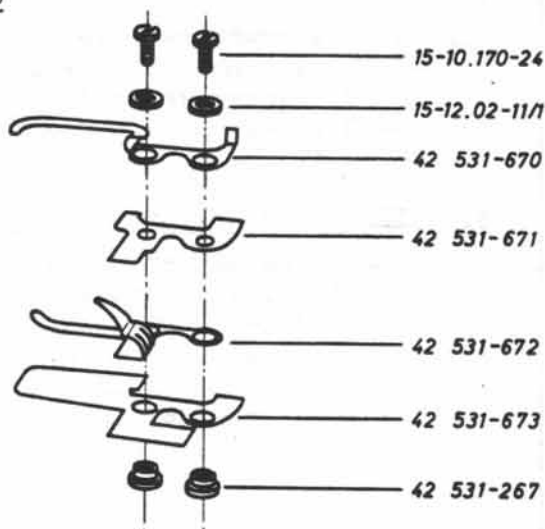


Fig. 74.1



Fig. 75.1

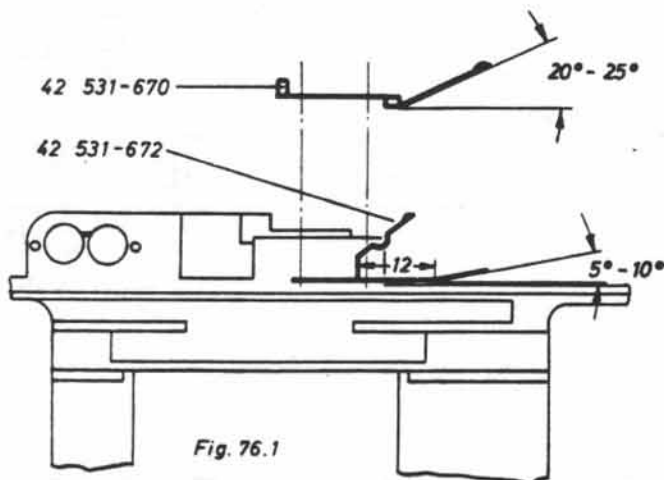


Fig. 76.1

Adapting and Insulating the Leica III f for up to 1000 Volts

Continuation of Sheet 52 to 54

5. Assembling the Contact Sub-group

- 5.1 Place the contact sub-group on the main body and secure it with two screws 15-10.170-24. Check that the contact sub-group does not protrude beyond the outer edge of the main body.
- 5.2 Screw in the stop screw 15-10.179-10. Insert the new locking lever 42 216-252 (recognizable by the insulation plate on the underside; the old version was finished in insulating lacquer only) and secure the spring 42 216-258 with screw 15-10.179-9 (see Spare Parts List, Sheet 11.1).
- 5.3 Set shutter to „B“. Adjust the length of the locking lever in such a way that the vertical „play“ (i.e. the amount of vertical travel of the release shaft at the release button after the second shutter curtain has run off) amounts to about 0.3 mm.
- 5.4 Check that the movement of the locking lever does not affect the contact spring adversely.

6. Setting and Checking the Shutter Speeds (see Sheet 12 to 14)

For this fit a shutter speed dial.

7. Checking the Synchronizing System

- 7.1 Align the contact springs well under the locking lever i. e. the lower contact lever must be 0.75 from the upper, according to insert gauge 42 531 Z1 A7, the springs must touch each other. When the release button is depressed, the upper contact spring must not touch the locking lever except at the insulation plate, must rest firmly at the bend and provide sound contact i. e. the contact surface must be as large as possible.
- 7.2 Switch contact test set 42 531 Z1 W1 to 1000 volts and „I“. With the feeler tips 103.25.18, check for short-circuiting between the upper and lower contact springs. Check both contact springs for short circuiting with the main body.
- 7.3 Introduce insert gauge with measure 0.75 mm below the release button and depress the release button. Apply one feeler tip to the soldering tag of the upper contact spring and the other to any part of the main body. The indicator should strike out to 100 on the scale.
- 7.4 Repeat the same procedure with the insert gauge 1.1 mm. The indicator must not strike out nor must the red test light glow.
- 7.5 Screw the setting gauge 42 531 Z1 A31 for the contact spring on to thread intended for the cable release. Align the contact arm, which points upwards, of the contact spring 42 531-672 in such a way, that, when the arm is depressed, its foremost edge just passes the milled off surface of the setting gauge and stands laterally exactly in the middle of the milled out portion.

Adapting and Insulating the Leica III f for up to 1000 Volts

Continuation of Sheet 52 to 55

8. Assembling the new Setting Ring on the Cover Plate

- 8.1 Using the countersinker 16 ϕ LN 144.46, lower the old setting ring 42 531-231 from the inside of the cover plate and press it out.
Caution! Do not countersink the borehole in the cover plate further!
- 8.2 Detach the old small cover plate 42-531-232. Clean the cover plate thoroughly.
- 8.3 Cement a new small cover plate 42 531-232 on to the cover plate proper with Teroson Fluid special. Coat the small cover plate thinly with UHU hard and allow to dry.
- 8.4 Apply lubricant 301 sparingly to the countersunk part from within the cover plate.
Mount the setting ring complete 42 531-231 on the cover plate. Chuck the bracing tool 42 531 U468 W1 in the lathe (or drilling machine) and operate at lowest speed. Press the cover plate and setting ring against the bracing tool with the aid of the back stop 42 531 U468 W2 (see Fig. 77.1). Meanwhile check that the setting ring rotates smoothly and yet firmly.

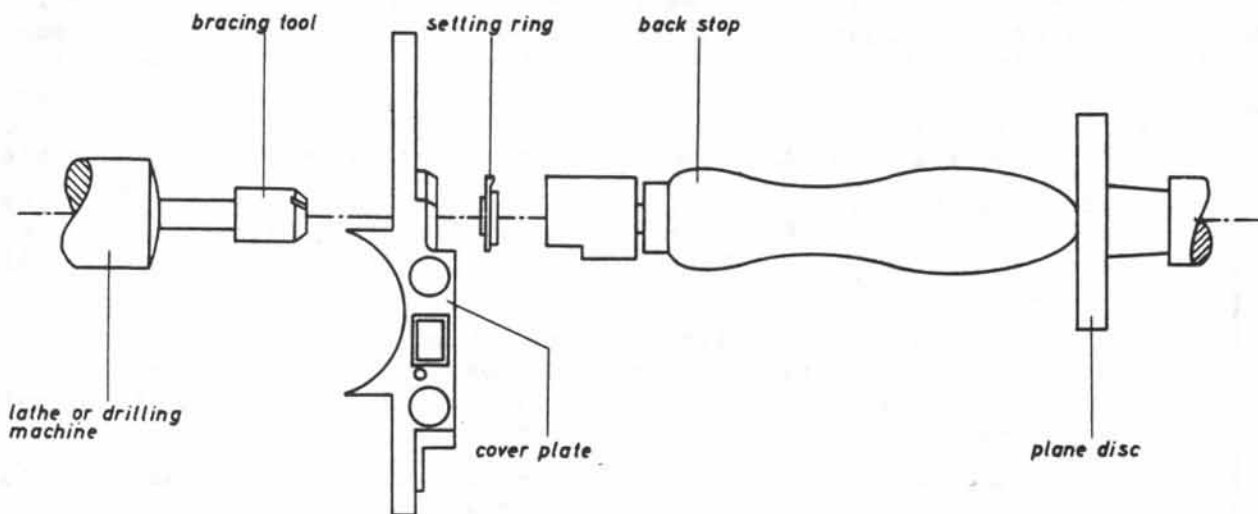
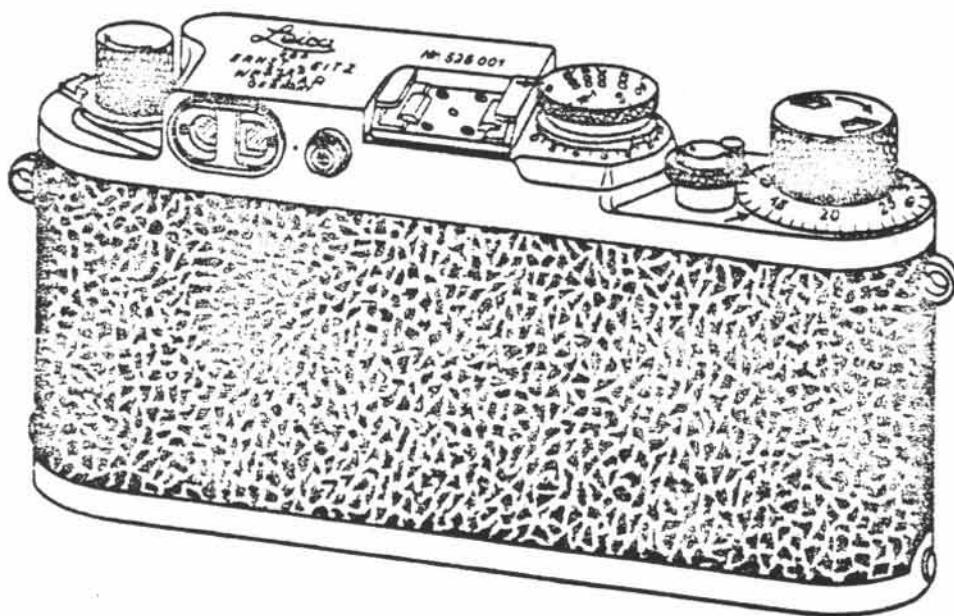
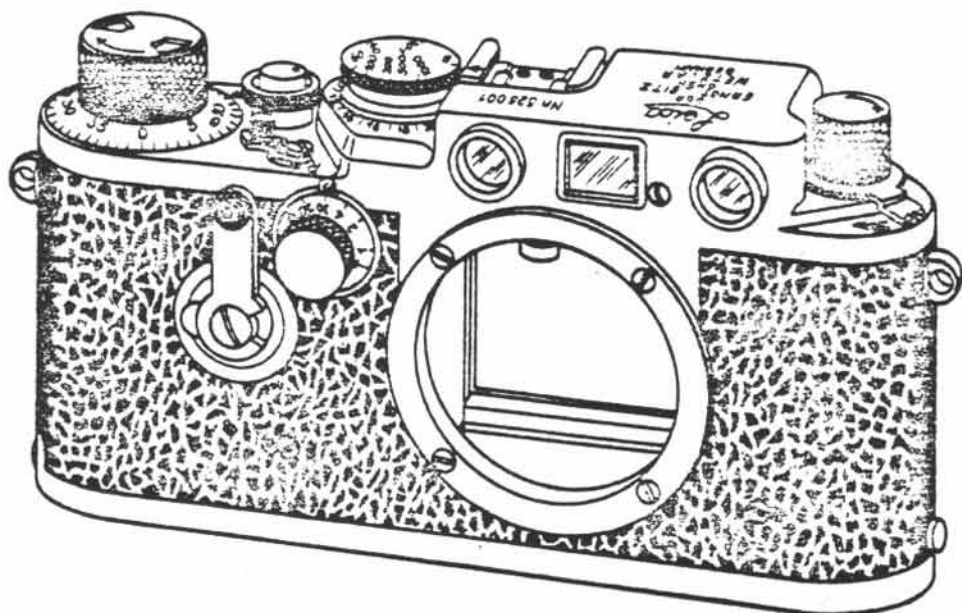
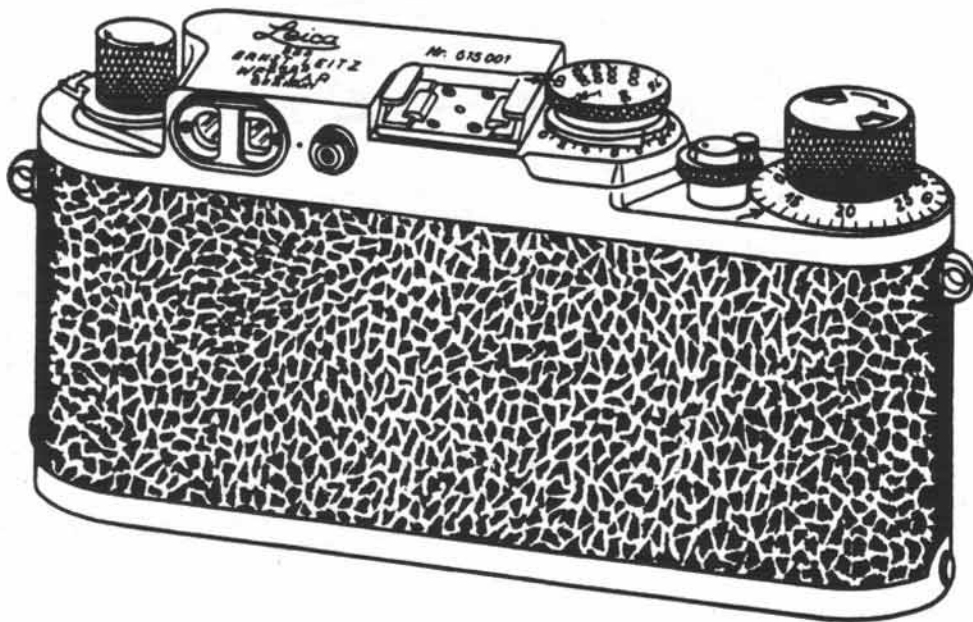
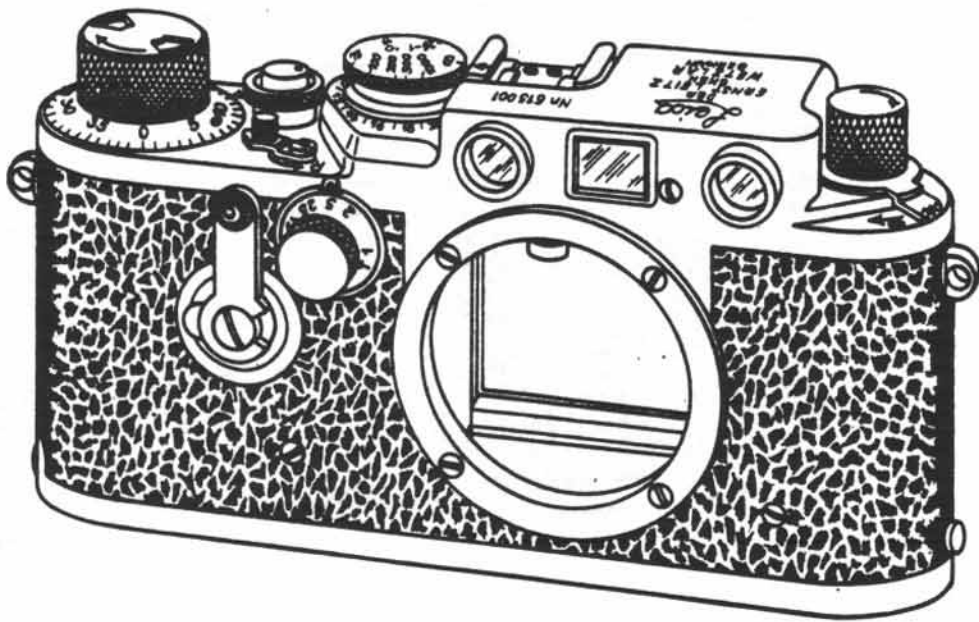
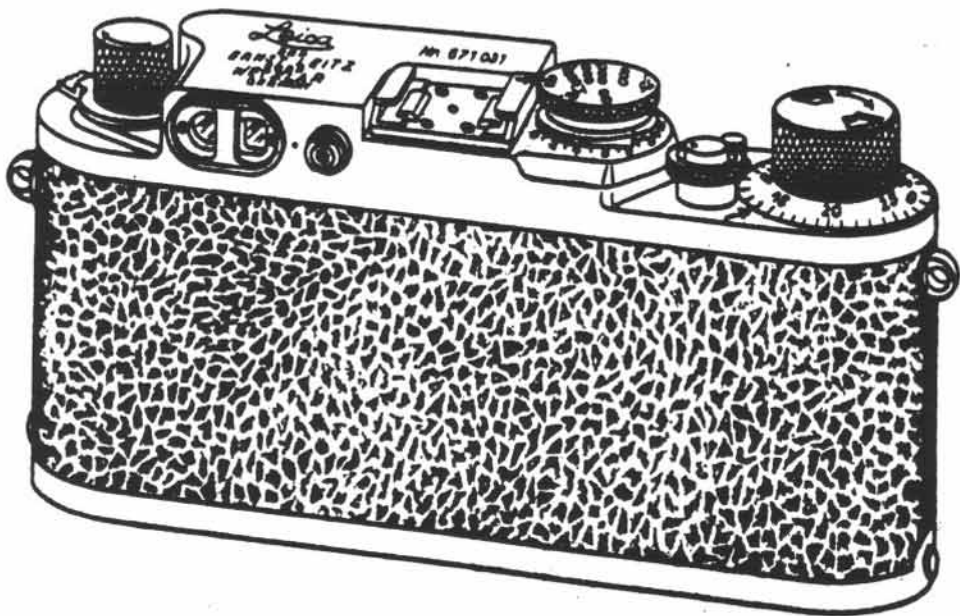
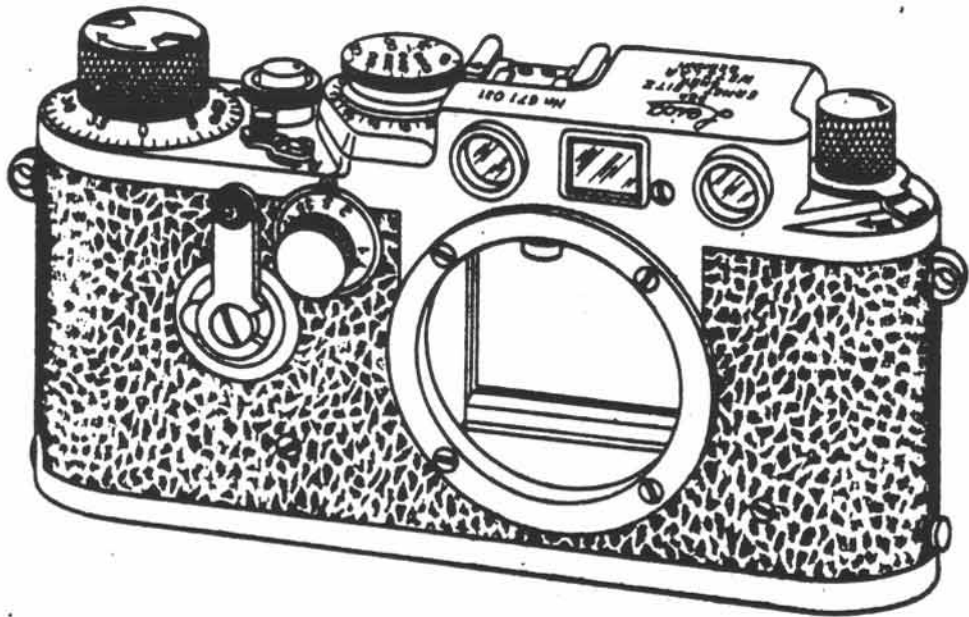


Fig. 77.1

- 8.5 Exchange the old plug bush 42 531-540 against a new one.
9. Mounting the cover plate, see Sheet 1 to 3.
10. Setting and testing the synchronizing system, see Sheet 15 to 18.
11. Check the Leica for perfect functioning in all parts.

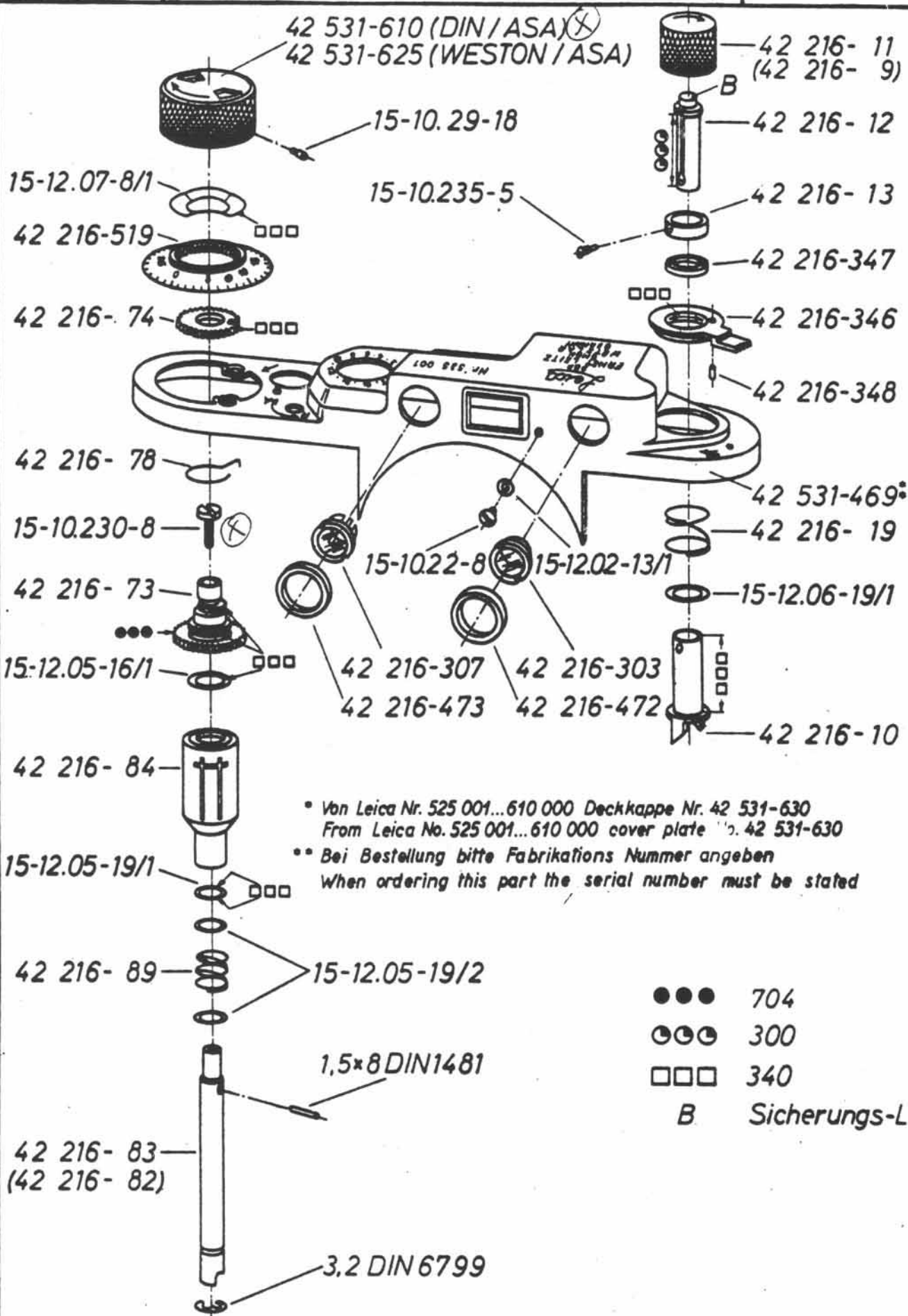






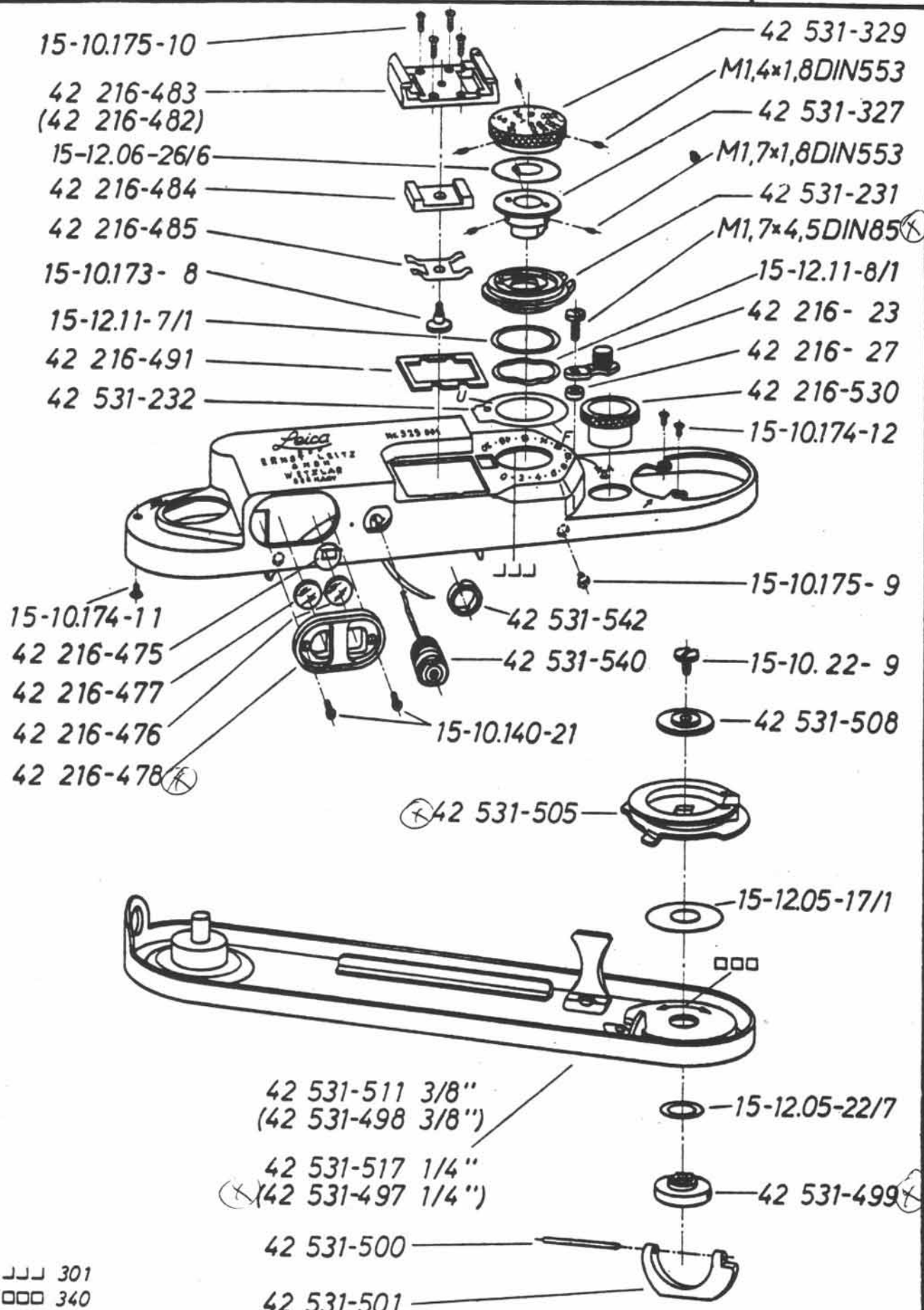
Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III f	II f	I f	III g	I g	III c	II c	I c
42 216- 9	Rückwicklung, komplett, bestehend aus: rewind mechanism, complete, ass. of: 42 216-10; 42 216-11, 42 216-12, 42 216-13, 42 216-18, 42 216-19, 15-10.235-5, 15-12.06-19/1	1	1	1			1	1	1
42 216- 10	Spulenmitnehmer rewind shaft	1	1	1	-		1	1	
42 216- 11	Rückwickelknopf rewind knob	1	1	1	-	-	1	1	1
42 216- 12	Führungsstift guide pin	1	1	1	-	-	1	1	1
42 216- 13	Hülse sleeve	1	1	1	-	-	1	1	1
42 216- 19	Friktionsfeder friction spring	1	1	1	1	1	1	1	1
42 216- 73	Aufzugsrad winding gear	1	1	1	-	-	1	1	1
42 216- 74	Zahnkranz gear ring	1	1	1	1	1	1	1	1
42 216- 78	Feder spring	1	1	1	1	1	1	1	1
42 216- 82	Aufzugsachse, komplett, bestehend aus: winding shaft, complete, ass. of: 42 216-73, 42 216-83, 42 216-84, 42 216-89, 15-12.05-19/1, 15-12.05-16/1, 15-12.05-19/2, 15-10.230-8, 1,5x8DIN 1481, 3,2 DIN 6799	1	1	1	-	-	1	1	1
42 216- 83	Aufzugachse winding shaft	1	1	1	-	-	1	1	1
42 216- 84	Spulenhalter spool holder	1	1	1	-	-	1	1	1
42 216- 89	Friktionsfeder friction spring	1	1	1	-	-	1	1	1
42 216-303	Deckglasfassung plain window mount	1	1	-	-	-	1	1	1
42 216-307	Keilglasfassung prism window mount	1	1	-	1	-	1	1	-
42 216-346	Einstellhebel focusing lever	1	1	-	-	-	1	1	-
42 216-347	Mutter nut	1	1	-	-	-	1	1	-
42 216-348	Mitnehmerstift coupling pin	1	1	-	1	-	1	1	-
42 216-472	Vorschraubmutter locking ring	1	1	-	-	-	1	1	-
42 216-473	Vorschraubmutter locking ring	1	1	-	-	-	1	1	-
42 216-519	Zähleinrichtung, montiert counting mechanism, ass.	1	1	1	1	1	1	1	1
42 531-469	Deckkappe, genietet cover plate, riveted	1	1	-	-	-	-	-	-
42 531-610	Aufzugsknopf, montiert winding knob, ass.	1	1	1	-	-	-	-	-
42 531-625	Aufzugsknopf, montiert winding knob, ass.	1	1	1	-	-	-	-	-
42 531-630	Deckkappe, genietet cover plate, riveted	1	1	-	-	-	-	-	-
15-10.22 - 8	Linsenschraube, verchromt oval head screw, chrome-plated	1	1	-	-	-	1	1	-

Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III f	II f	I f	III g	I g	III c	II c	I c
15-10.29 -18	Schraube screw	1	1	1	-	-	-	-	-
15-10.230- 8	Zylinderschraube cylindrical head screw	1	1	1	1	1	1	1	1
15-10.235- 5	Führungsschraube, verchromt guide screw, chrome-plated	1	1	1	1	1	1	1	1
15-12.02 -13/1	Unterlegscheibe washer	1	1	-	-	-	1	1	-
15-12.05 -16/1	Unterlegscheibe washer	1	1	1	-	-	1	1	1
15-12.05 -19/1	Unterlegscheibe washer	1	1	1	-	-	1	1	1
15-12.05 -19/2	Unterlegscheibe washer	2	2	2	-	-	2	2	2
15-12.06 19/1	Unterlegscheibe washer	1	1	1	1	1	1	1	1
15-12.07 8/1	Federscheibe spring washer	1	1	1	1	1	1	1	1
1,5 x 8 DIN 1481	Spannstift tensioning pin	1	1	1	1	1	1	1	1
3,2 DIN 6799	Sicherungsscheibe retaining washer	1	1	1	-	-	1	1	1



Bestell-Nr Part-No	Beschreibung Description	Leica - Modell								
		III f	III f	If	III c	Ig	III c	III c	Ic	
42 216- 23	Entkupplungshebel reversing lever	1	1	1	-	-	1	1	1	
42 216- 27	Zwischenring intermediate ring	1	1	1	-	-	1	1	1	
42 216-475	Blende mask for view finder	1	1	-	-	-	1	1	-	
42 216-476	Augenlinse view finder eye lens (positive)	1	1	-	-	-	1	1	-	
42 216-477	Okularlinse view finder eye lens (negative)	1	1	-	-	-	1	1	-	
42 216-478	Okularfassung eyepiece shell	1	1	-	-	-	1	1	-	
42 216-482	Befestigungsklemme, kompl. accessory shoe, compl.	1	-	-	-	-	1	-	-	
42 216-483	Befestigungsklemme accessory shoe	1	-	-	-	-	1	-	-	
42 216-484	Druckbacke pressure cheek	1	-	-	-	-	1	-	-	
42 216-485	Druckfeder pressure spring	1	-	-	-	-	1	-	-	
42 216-491	Unterlegplättchen 0,1; 0,3; 0,5 n. Bed. small plate 0.1; 0.3; 0.5 when needed	1	-	-	-	-	1	-	-	
42 216-530	Schutzhülse release guard	1	1	1	-	-	1	1	1	
42 531-231	Einstellring, kompl. scale ring, compl.	1	1	1	-	-	-	-	-	
42 531-232	Abdeckplättchen small plate	1	1	-	-	-	-	-	-	
42 531-327	Kurvenscheibe cam	1	1	1	-	-	-	-	-	
42 531-329	Zeitscheibe speed dial	1	-	-	-	-	-	-	-	
42 531-497	Deckel, kompl. 1/4 " base plate, compl. 1/4 "	1	1	1	1	1	-	-	-	
42 531-498	Deckel, kompl. 3/8 " base plate, compl. 3/8 "	1	1	1	1	1	-	-	-	
42 531-499	Knebel toggle	1	1	1	1	1	1	1	1	
42 531-500	Lagerbolzen bearing pin	1	1	1	1	1	1	1	1	
42 531-501	Klappbügel folding bracket	1	1	1	1	1	1	1	1	
42 531-505	Verriegelung lock	1	1	1	1	1	1	1	1	
42 531-508	Unterlegscheibe washer	1	1	1	1	1	1	1	1	
42 531-511	Deckel, punktgeschweißt 3/8 " base plate, spot welded 3/8 "	1	1	1	1	1	-	-	-	
42 531-517	Deckel, punktgeschweißt 1/4 " base plate, spot welded 1/4 "	1	1	1	1	1	-	-	-	
42 531-540	Steckerbuchse plug socket	1	1	-	1	1	-	-	-	
42 531-542	Schlitzmutter slotted nut	1	1	-	1	1	-	-	-	
M 1,4 x 1,8 DIN 553	Gewindestift, verchromt grub screw, chrome-plated	3	3	3	3	3	-	-	-	
M 1,7 x 1,8 DIN 553	Gewindestift, brüniert grub screw, burnished	3	3	3	3	3	-	-	-	
M 1,7 x 4,5 DIN 85	Linienkopfschraube, verchromt oval head screw, chrome-plated	1	1	1	-	-	1	1	1	

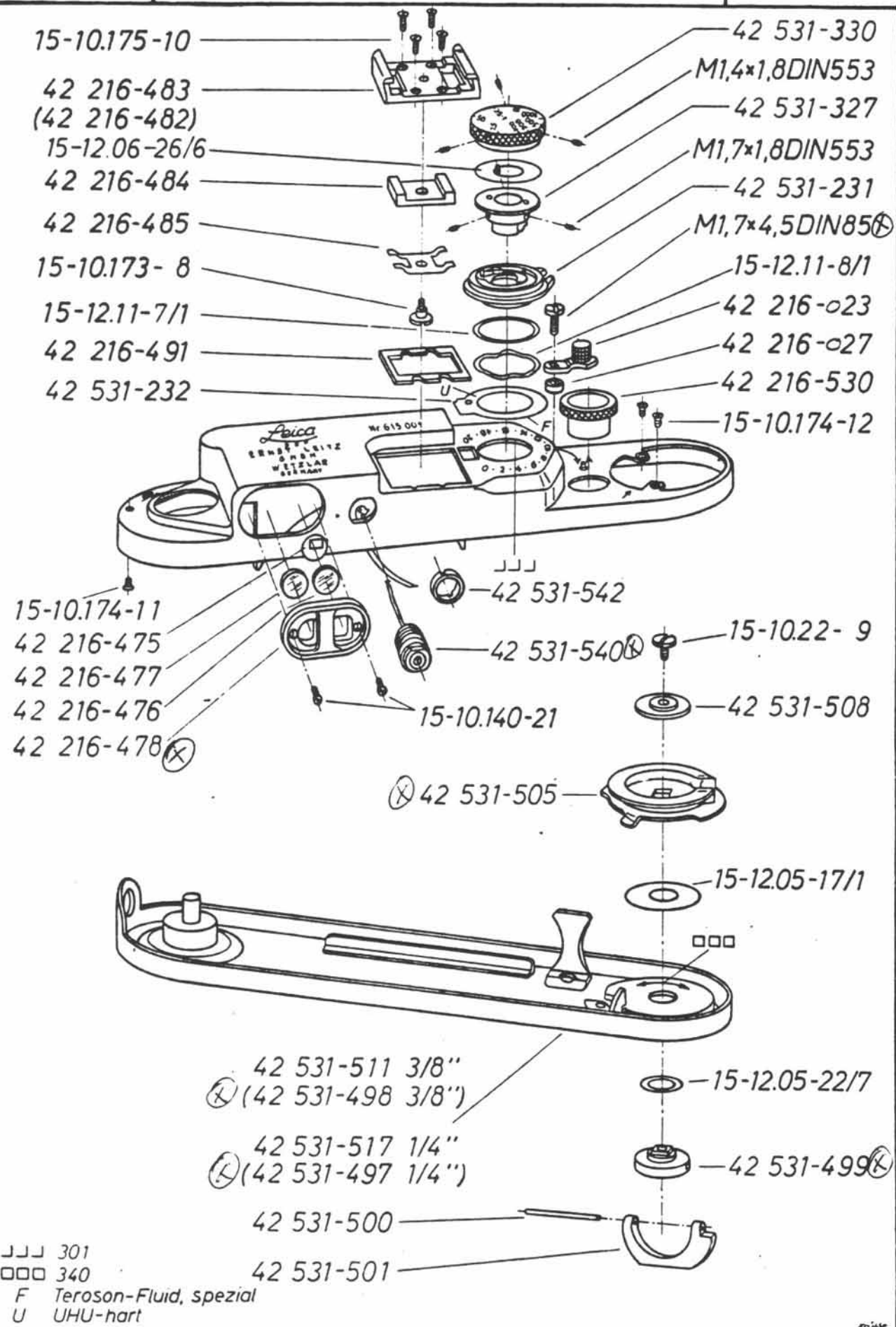
Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III f	II f	I f	III g	I g	III c	II c	I c
15-10.140-21	Zylinderschraube, schwarz halbmatt fillister head cap screw, black semi.	2	2	-	-	-	2	2	-
15-10.173- 8	Linsenkopfschraube, verchromt oval head cap screw, chrome-pl.	1	-	-	-	-	1	-	-
15-10.174-11	Senkschraube, verchromt countersunk screw, chrome-plated	1	1	-	1	-	1	1	-
15-10.174-12	Senkschraube, brüniert countersunk screw, burnished	2	2	2	2	2	2	2	2
15-10.175- 9	Linsenkopfschraube, verchromt oval head screw, chrome-plated	4	4	4	-	-	4	4	4
15-10.175-10	Linsenschraube, verchromt oval head screw, chrome-plated	4	-	-	4	8	4	-	-
15-10.22 - 9	Linsenkopfschraube, schwarz halbm. oval head screw, black semi mat.	1	1	1	1	1	1	1	1
15-12.05-17/1	Scheibe washer	1	1	1	1	1	1	1	1
15-12.05-22/7	Scheibe washer	1	1	1	1	1	1	1	1
15-12.06-26/6	Scheibe, Messing, bei Bedarf washer, brass, when needed	1	1	1	-	-	-	-	-
15-12.11- 7/1	Gleitscheibe washer	1	1	1	-	-	-	-	-
15-12.11- 8/1	Federscheibe spring washer	1	1	1	-	-	-	-	-

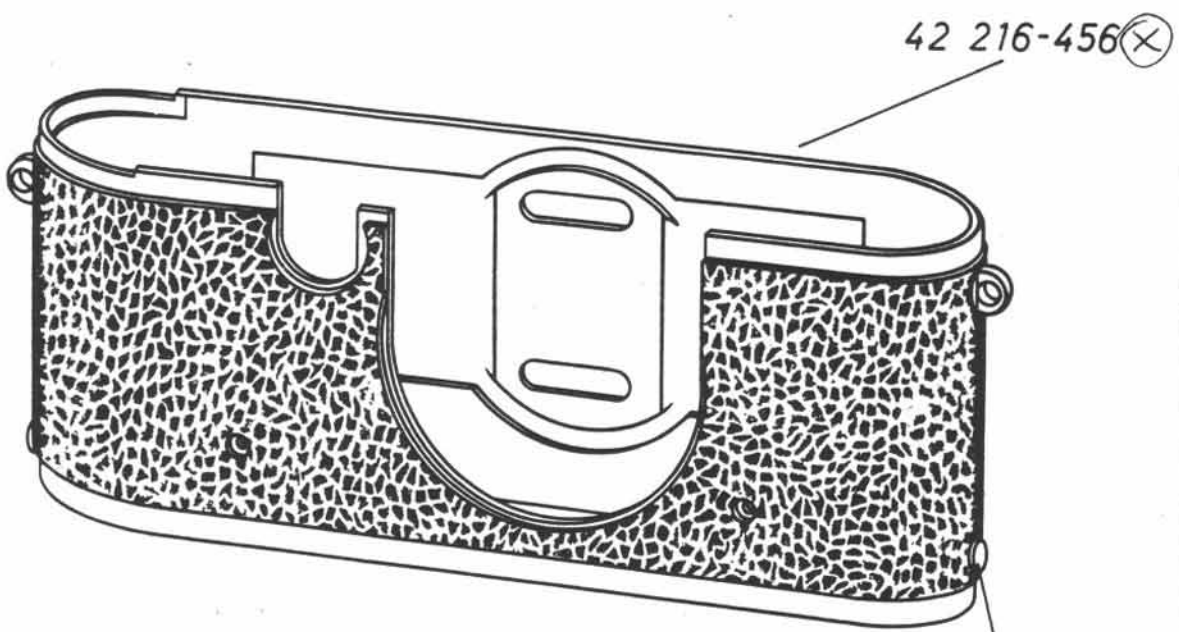


JJJ 301
 OOO 340
 F Teroson-Fluid, spezial
 U UHU-hart

Bestell-Nr Part-No	Benennung Description	Leica - III f								
		III f	III f	III f	III g	III g	III c	III c	III c	III c
42 216- 23	Entkupplungshebel reversing lever	1	1	1	-	-	1	1	1	
42 216- 27	Zwischenring intermediate ring	1	1	1	-	-	1	1	1	
42 216-475	Blende mask for view finder	1	1	-	-	-	1	1	-	
42 216-476	Augenlinse view finder eye lens (positive)	1	1	-	-	-	1	1	-	
42 216-477	Okularlinse view finder eye lens (negative)	1	1	-	-	-	1	1	-	
42 216-478	Okularfassung eyepiece shell	1	1	-	-	-	1	1	-	
42 216-482	Befestigungsklemme, kompl. accessory shoe, compl.	1	-	-	-	-	1	-	-	
42 216-483	Befestigungsklemme accessory shoe	1	-	-	-	-	1	-	-	
42 216-484	Druckbacke pressure cheek	1	-	-	-	-	1	-	-	
42 216-485	Druckfeder pressure spring	1	-	-	-	-	1	-	-	
42 216-491	Unterlegplättchen 0,1; 0,3; 0,5 n. Bed. small plate 0.1; 0.3; 0.5 when needed	1	-	-	-	-	1	-	-	
42 216-530	Schutzhülse release guard	1	1	1	-	-	1	1	1	
42 531-231	Einstellring, kompl. scale ring, compl.	1	1	1	-	-	-	-	-	
42 531-232	Abdeckplättchen small plate	1	1	-	-	-	-	-	-	
42 531-327	Kurvenscheibe cam	1	1	1	-	-	-	-	-	
42 531-330	Zeitscheibe speed dial	1	-	-	-	-	-	-	-	
42 531-497	Deckel, kompl. 1/4 " base plate, compl. 1/4 "	1	1	1	1	1	-	-	-	
42 531-498	Deckel, kompl. 3/8 " base plate, compl. 3/8 "	1	1	1	1	1	-	-	-	
42 531-499	Knebel toggle	1	1	1	1	1	1	1		
42 531-500	Lagerbolzen bearing pin	1	1	1	1	1	1	1	1	
42 531-501	Klappbügel folding bracket	1	1	1	1	1	1	1	1	
42 531-505	Verriegelung lock	1	1	1	1	1	1	1	1	
42 531-508	Unterlegscheibe washer	1	1	1	1	1	1	1		
42 531-511	Deckel, punktgeschweißt 3/8 " base plate, spot welded 3/8 "	1	1	1	1	1	-	-	-	
42 531-517	Deckel, punktgeschweißt 1/4 " base plate, spot welded 1/4 "	1	1	1	1	1	-	-	-	
42 531-540	Steckerbuchse plug socket	1	1	-	1	1	-	-	-	
42 531-542	Schlitzmutter slotted n.t.	1	1	-	1	1	-	-	-	
M1,4x1,8 DIN 553	Gewindestift, verchromt grub screw, chrome-plated	3	3	3	-	-	-	-	-	
M1,7x1,8 DIN 553	Gewindestift, brüniert grub screw, burnished	3	3	3	3	3	-	-	-	
M1,7x4,5 DIN 85	Linienkopfschraube, verchromt oval head screw, chrome-plated	1	1	1	-	-	1	1	1	

Bestell-Nr Part-No	Bezeichnung Description	Leica - Modell								
		III f	III f	If	III g	Ig	III c	III c	Ic	
15-10.140-21	Zylinderschraube, schwarz halbmatt fillister head cap screw black semim.	2	2	-	-	-	2	2	-	
15-10.173- 8	Linienkopfschraube, verchromt oval head cap screw, chrome-plated	1	-	-	-	-	1	-	-	
15-10.174-11	Senkschraube, verchromt countersunk screw, chrome-plated	1	1	-	1	-	1	1	-	
15-10.174-12	Senkschraube, brüniert countersunk screw, burnished	2	2	2	2	-	2	2	2	
15-10.175-10	Linienkopfschraube, verchromt oval head screw, chrome-plated	4	-	-	-	8	-	-	-	
15-10.22 - 9	Linienkopfschraube, schwarz halbmatt oval head screw, black semimat	1	1	1	1	-	1	1	1	
15-12.05- 7/1	Scheibe washer	1	1	1	1	1	1	1	1	
15-12.05-22/7	Scheibe washer	1	1	1	1	1	1	1	1	
15-1 .06-26/6	Scheibe, Messing, bei Bedarf washer, brass, when needed	1	-	1	-	-	-	-	-	
15-12.11- 7/1	Gleitscheibe washer	1	1	1	-	-	-	-	-	
15-12.11- 8/1	Federscheibe spring washer	1	1	1	-	-	-	-	-	

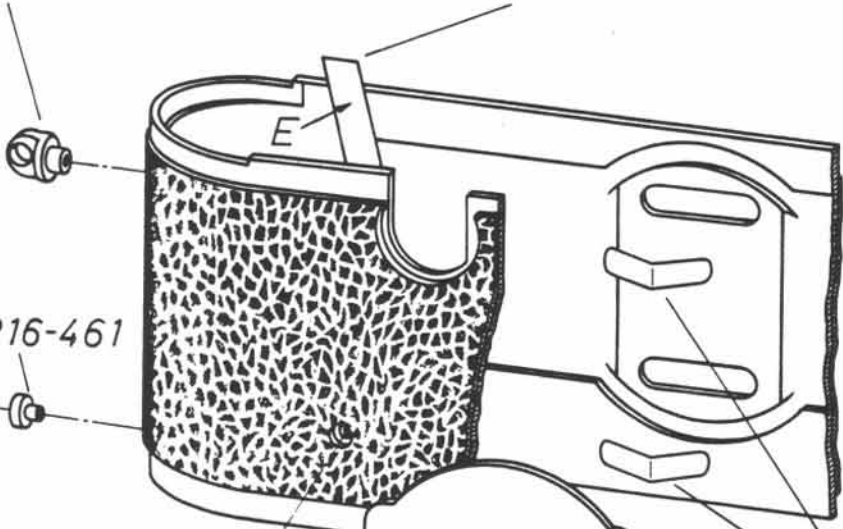




42 216-460 ⊗

42-700.01-665

42-253.01-562



42 216-461

42 216-462

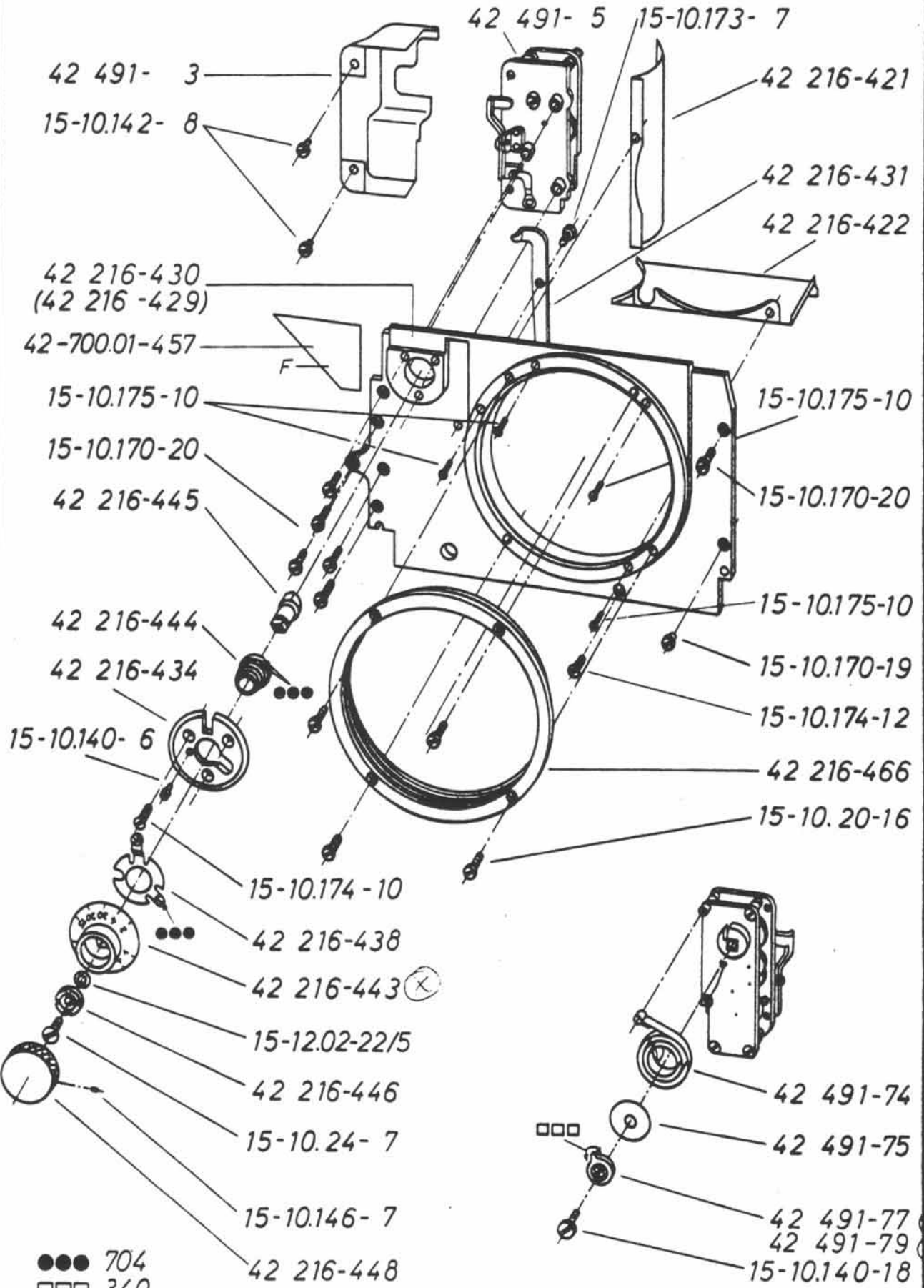
42 216-463

M1,7×4LN12025

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Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III	II	I	III	I	II	I	I
42 216-421	Blende light shield	1	1	1	1	1	1	1	1
42 216-422	Blende light shield	1	1	1	1	1	1	1	1
42 216-429	Frontplatte, komplett front plate, complete	1	-	-	-	-	1	-	-
42 216-430	Frontplatte front plate	1	1	1	-	-	1	1	1
42 216-431	Hebel lever	1	-	-	-	-	1	-	-
42 216-434	Lagerplatte bearing plate	1	-	-	-	-	1	-	-
42 216-438	Rastfeder pawl spring	1	-	-	-	-	1	-	-
42 216-443	Teilscheibe slow speed dial	1	-	-	-	-	1	-	-
42 216-444	Lagermutter bearing nut	1	-	-	-	-	1	-	-
42 216-445	Kurve cam	1	-	-	-	-	1	-	-
42 216-446	Einstellmutter adjusting nut	1	-	-	1	1	1	-	-
42 216-448	Schutzkappe cover	1	-	-	1	1	1	-	-
42 216-466	Anschraubring mounting ring	1	1	1	-	-	1	1	1
42 491- 3	Schutzkappe clutch cover	1	-	-	1	-	-	-	-
42 491- 5	Vorlaufwerk, montiert delayed action mechanism, ass.	1	-	-	1	-	-	-	-
42 491- 74	Feder spring	1	-	-	1	-	-	-	-
42 491- 75	Scheibe, vernickelt disc, nickel-plated	1	-	-	1	-	-	-	-
42 491- 77	Auslösenocke release cam	1	-	-	1	-	-	-	-
42 491- 79	Auslösenocke, bei Bedarf release cam, when needed	1	-	-	1	-	-	-	-
41-700.01-457	Abdeckfolie, bei Bedarf cover foil, when needed	1	1	1	1	1	1	1	1
15-10.140- 6	Anschlagschraube, brüniert stop screw, burnished	1	-	-	-	-	1	-	-
15-10.140-18	Zylinderschraube, brüniert cylindrical head screw, burnished	1	-	-	1	-	-	-	-
15-10.142- 8	Zylinderschraube, brüniert cylindrical head screw, burnished	2	-	-	2	-	-	-	-
15-10.146- 7	Gewindestift, verchromt grub screw, chrome-plated	1	-	-	1	1	1	-	-
15-10.170-19	Zylinderschraube, brüniert cylindrical head screw, burnished	1	1	1	1	1	1	1	1
15-10.170-20	Zylinderschraube, brüniert cylindrical head screw, burnished	6	3	3	6	3	3	3	3
15-10.173- 7	Achsschraube, brüniert shaft screw, burnished	1	-	-	1	1	1	-	-
15-10.174-10	Senkschraube, brüniert countersunk screw, burnished	3	-	-	-	-	3	-	-
15-10.174-12	Senkschraube, brüniert countersunk screw, burnished	1	4	4	1	1	1	4	4
15-10.175-10	Schraube, brüniert screw, burnished	4	4	4	3	3	4	4	4

Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III f	III g	III g	III g	III g	III g	III g	III g
15-10.20-16	Zylinderschraube, verchromt cylindrical head screw, chrome-plated	4	4	4	4	4	4	4	4
15-10.24- 7	Senkschraube, brüniert countersunk screw, burnished	1	-	-	1	1	1	-	-
15-12.02-22/5	Unterlegscheibe washer	1	-	-	1	1	1	-	-



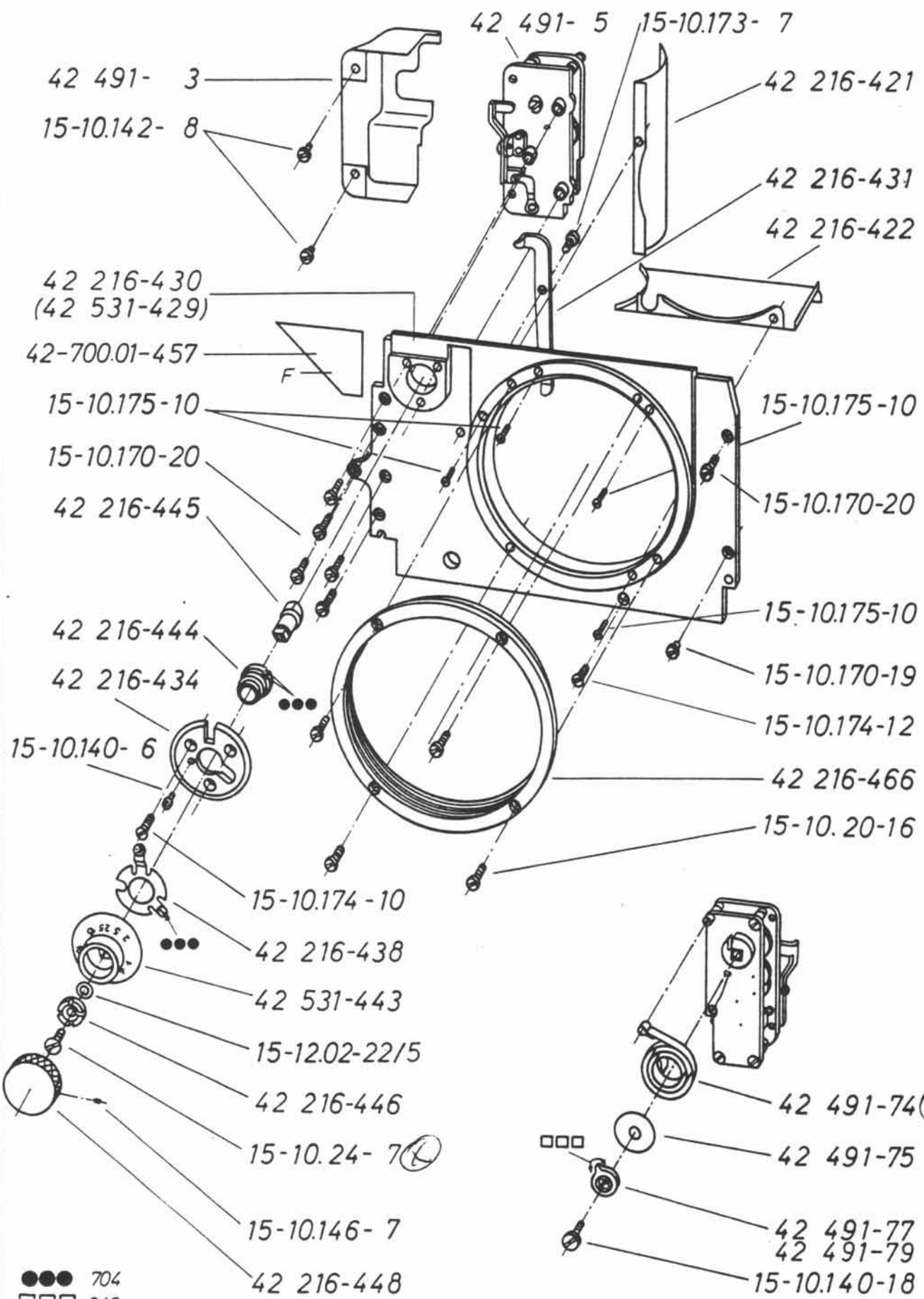
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F Teroson-Fluid, spezial

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Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III f	III f	III f	III f	III f	III f	III f	III f
42 216-421	Blende light shield	1	1	1	1	1	1	1	1
42 216-422	Blende light shield	1	1	1	1	1	1	1	1
42 216-430	Frontplatte front plate	1	1	1	-	-	1	1	1
42 216-431	Hebel lever	1	-	-	-	-	1	-	-
42 216-434	Lagerplatte bearing plate	1	-	-	-	-	1	-	-
42 216-438	Rastfeder pawl spring	1	-	-	-	-	1	-	-
42 216-444	Lagermutter bearing nut	1	-	-	-	-	1	-	-
42 216-445	Kurve cam	1	-	-	-	-	1	-	-
42 216-446	Einstellmutter adjusting nut	1	-	-	1	1	1	-	-
42 216-448	Schutzkappe cover	1	-	-	1	1	1	-	-
42 216-466	Anschraubring mounting ring	1	1	1	-	-	1	1	1
42 491- 3	Schutzkappe clutch cover	1	-	-	1	-	-	-	-
42 491- 5	Vorlaufwerk, montiert delayed action mechanism, ass.	1	-	-	1	-	-	-	-
42 491- 74	Feder spring	1	-	-	1	-	-	-	-
42 491- 75	Scheibe, vernickelt disc, nickel-plated	1	-	-	1	-	-	-	-
42 491- 77	Auslösenocke release cam	1	-	-	1	-	-	-	-
42 491- 79	Auslösenocke, bei Bedarf release cam, when needed	1	-	-	1	-	-	-	-
42 531-429	Frontplatte, komplett front plate, complete	1	-	-	-	-	-	-	-
42 531-443	Teilscheibe slow speed dial	1	-	-	-	-	-	-	-
42-700.01-457	Abdeckfolie, bei Bedarf cover foil, when needed	1	1	1	1	1	1	1	1
15-10.140- 6	Anschlagschraube, brüniert stop screw, burnished	1	-	-	-	-	1	-	-
15-10.140-18	Zylinderschraube, brüniert cylindrical head screw, burnished	1	-	-	1	-	-	-	-
15-10.142- 8	Zylinderschraube, brüniert cylindrical head screw, burnished	2	-	-	2	-	-	-	-
15-10.146- 7	Gewindestift, verchromt grub screw, chrome-plated	1	-	-	1	1	1	-	-
15-10.170-19	Zylinderschraube, brüniert cylindrical head screw, burnished	1	1	1	1	1	1	1	1
15-10.170-20	Zylinderschraube, brüniert cylindrical head screw, burnished	6	3	3	6	3	3	3	3
15-10.173- 7	Achsschraube, brüniert shaft screw, burnished	1	-	-	1	1	1	-	-
15-10.174-10	Senkschraube, brüniert countersunk screw, burnished	3	-	-	-	-	3	-	-
15-10.174-12	Senkschraube, brüniert countersunk screw, burnished	1	4	4	1	1	1	4	4
15-10.175-10	Schraube, brüniert screw, burnished	4	4	4	3	3	4	4	4

Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		IIIr	IIIf	If	IIIg	Ig	IIIc	Ic	Ic
15-10.20-16	Zylinderschraube, verchromt cylindrical head screw, chrome-plated	4	4	4	4	4	4	4	4
15-10.24- 7	Senkschraube, brüniert countersunk screw, burnished	1	-	-	1	1	1	-	-
15-12.02-22/5	Unterlegscheibe washer	1	-	-	1	1	1	-	-

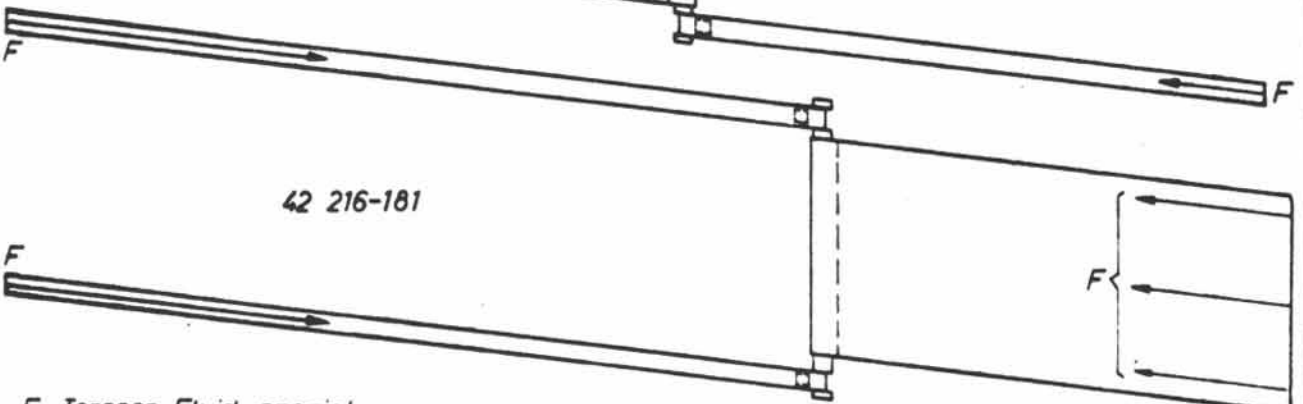
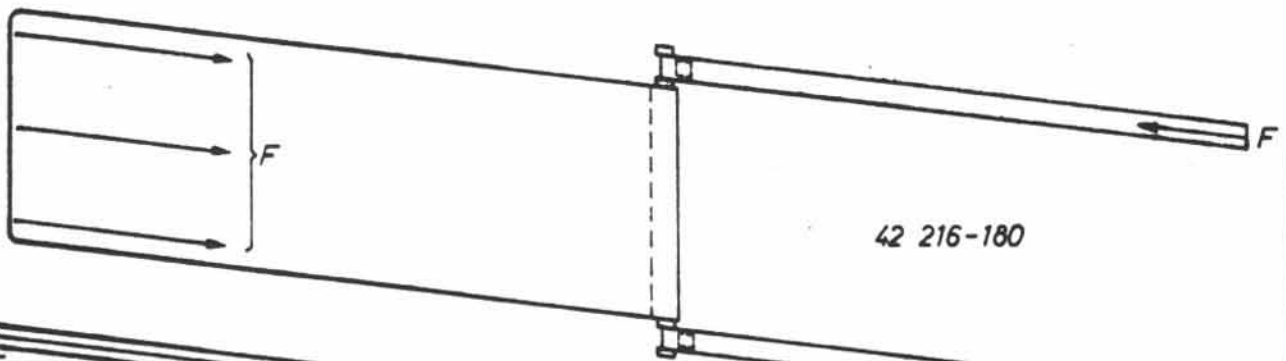
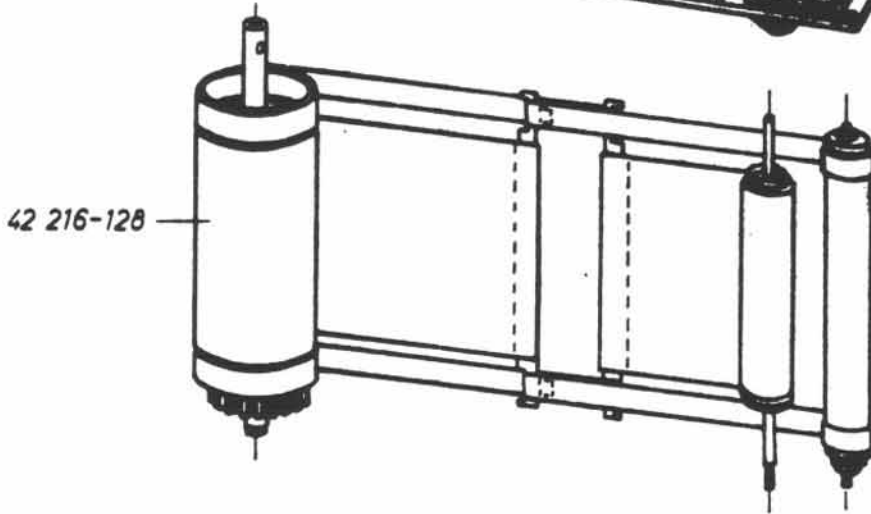
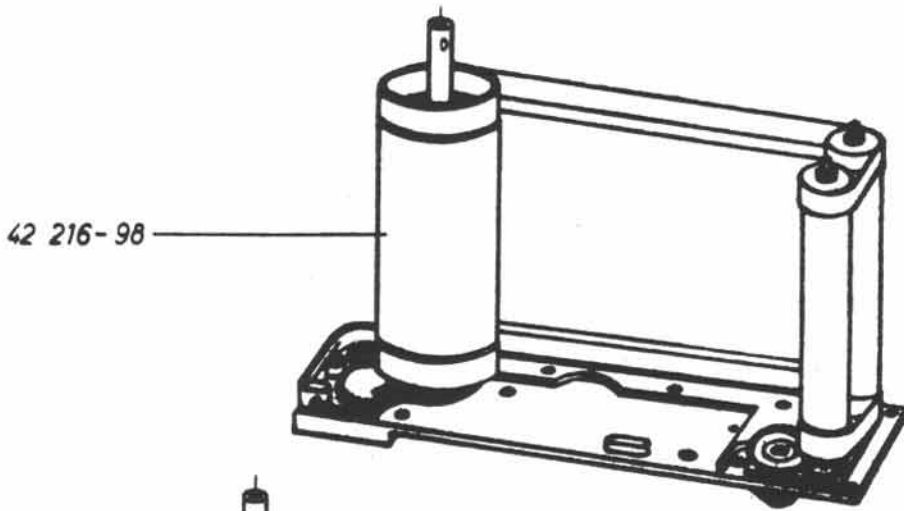


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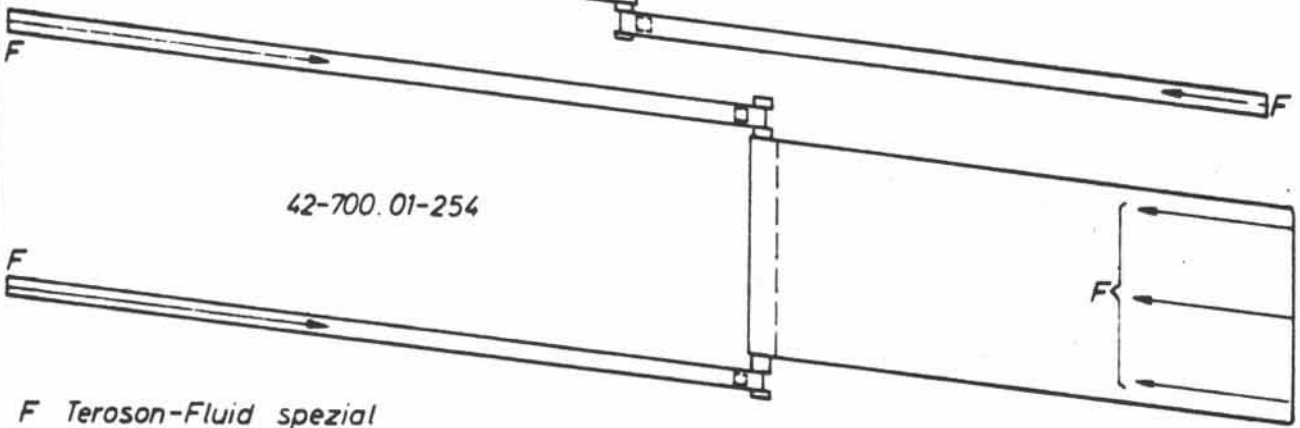
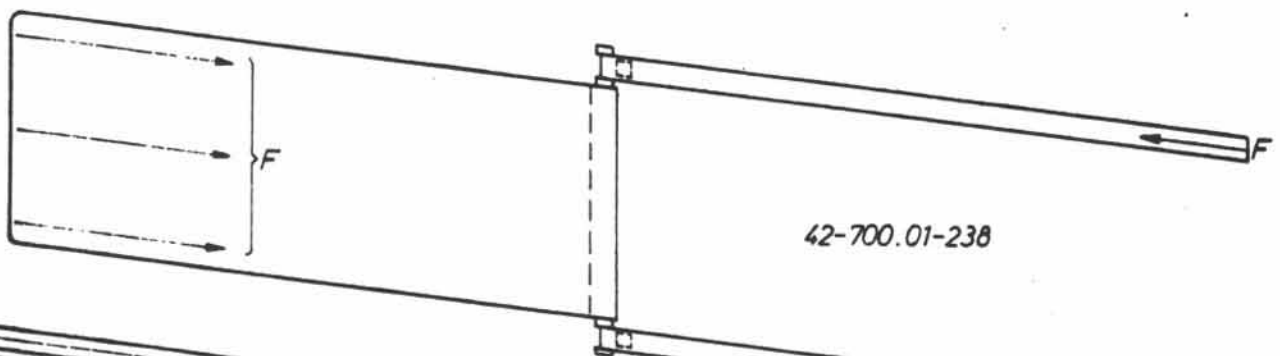
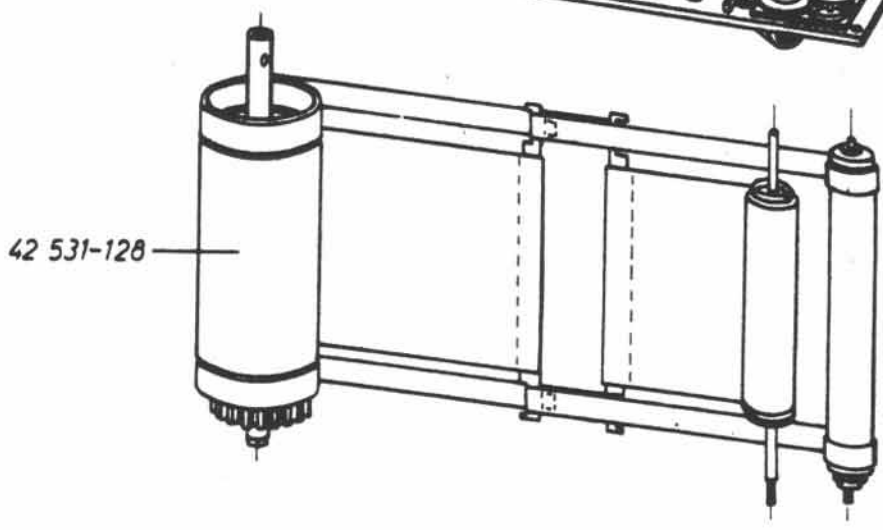
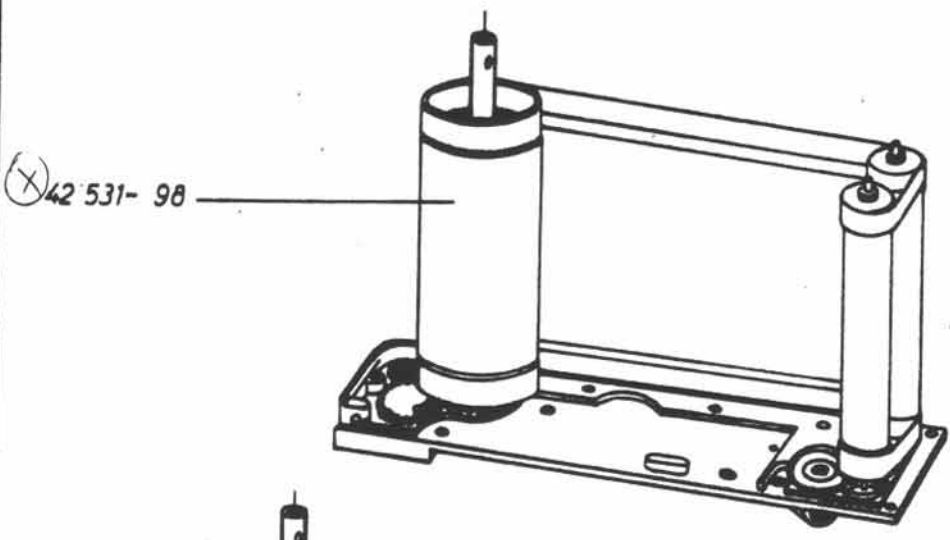
F Teroson-Fluid, spezial

Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III f	II f	I f	III c	I g	III c	II c	I c
42 216- 98	Grundplatte mit Verschluss mounting plate with shutter	1	1	1	-	-	1	1	1
42 216-128	Verschluss, Untergruppe shutter sub-assembly	1	1	1	-	-	1	1	1
42 216-180	Rollotuch shutter blind fabric	1	1	1	-	-	1	1	1
42 216-181	Rollotuch shutter blind fabric	1	1	1	-	-	1	1	1

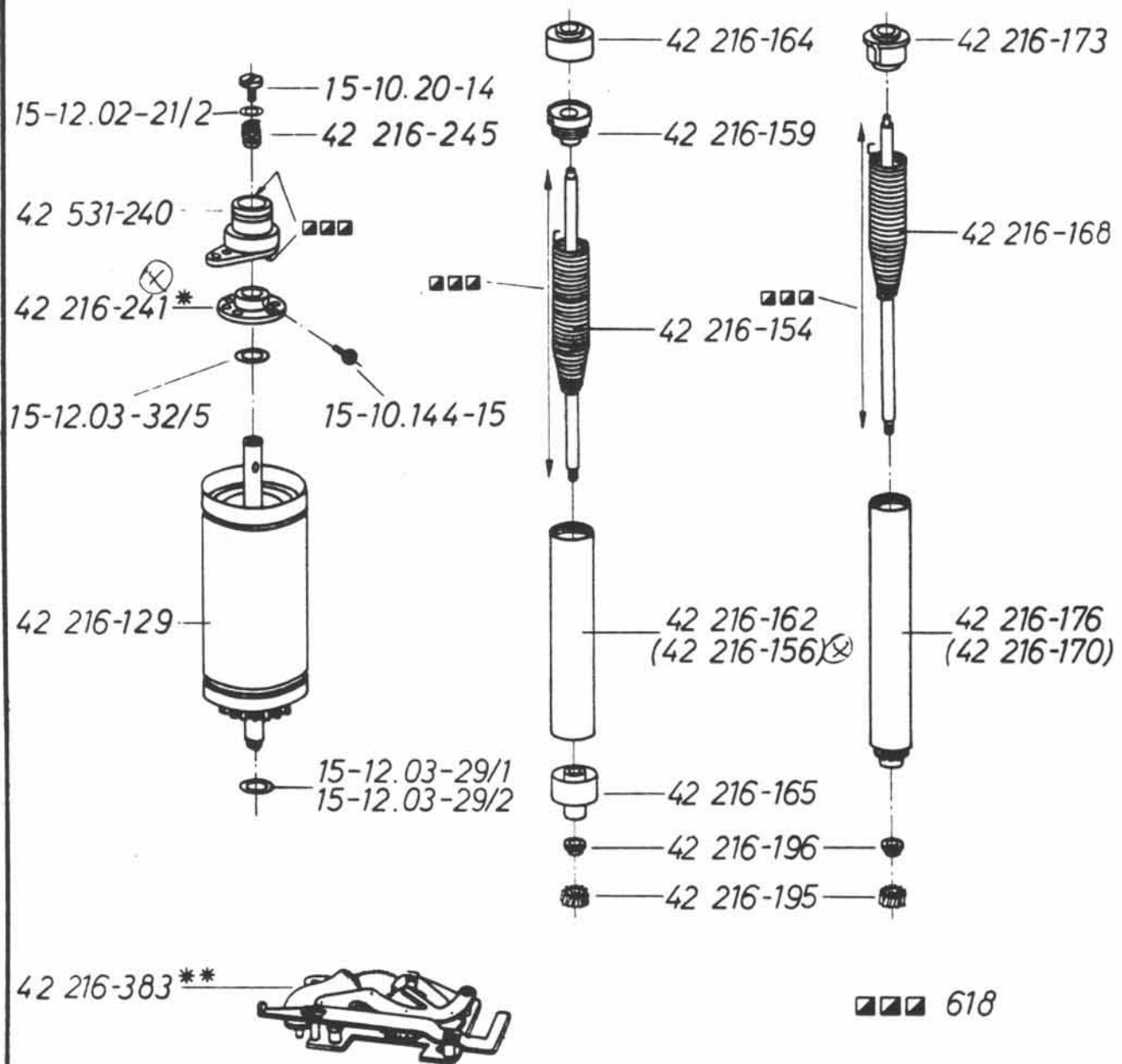


F Teroson-Fluid spezial

Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III f	II f	I f	III g	I g	III c	II c	I c
42 531- 98	Grundplatte mit Verschluss mounting plate with shutter	1	1	1	-	-	-	-	-
42 531-128	Verschluss, kompl. shutter, compl.	1	1	1	-	-	-	-	-
42-700.01-238	Rollotuch shutter blind fabric	1	1	1	1	1	-	-	-
42-700.01-254	Rollotuch shutter blind fabric	1	1	1	1	1	-	-	-



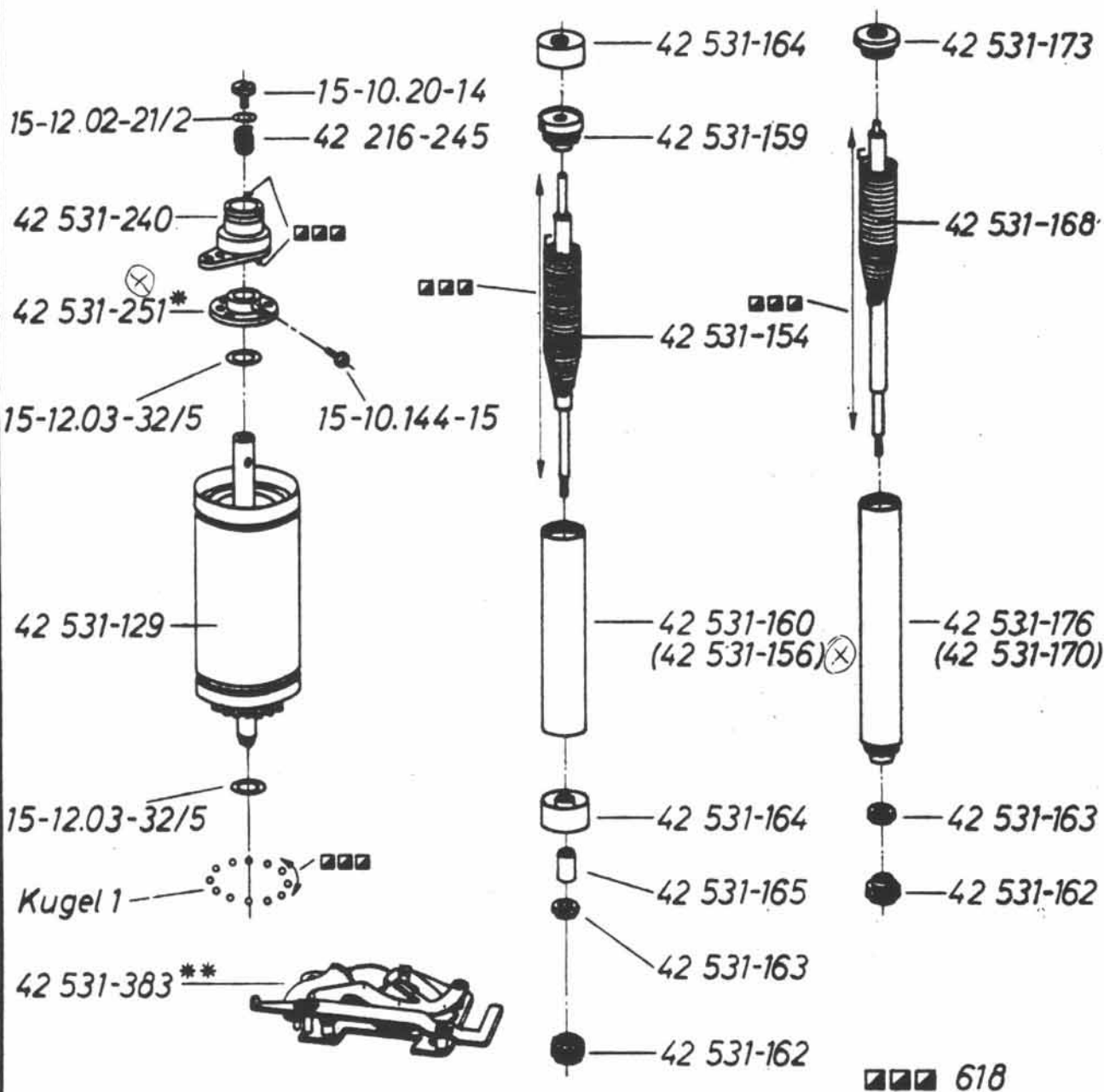
F Teroson-Fluid spezial



- * Leica Mod. IIf 451 001...574 400 42 483-241
- Leica Mod. IIf 574 401...675 790 42 486-238⊗
- Leica Mod. If 562 801...575 000 42 483-241
- Leica Mod. If 575 001...579 870 42 486-238⊗
- Leica Mod. If 579 871...851 000 42 486-230⊗

- ** Leica Mod. IIf 574 401...822 000 42 483-383 ⊗
- Leica Mod. If 575 001...851 000 42 483-383 ⊗

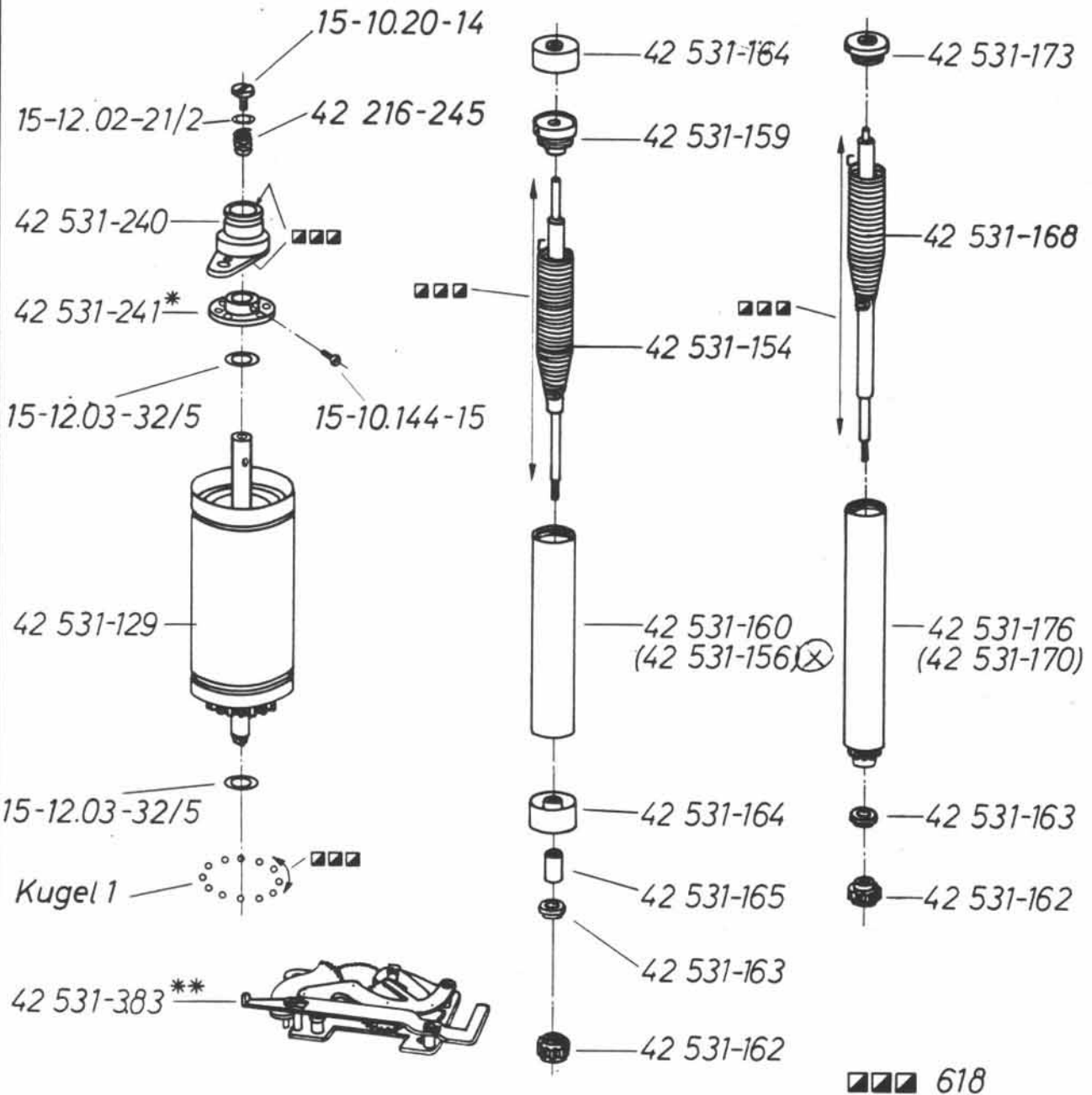
Schmierung siehe Rep.-Anltg., Blatt 50.1
Lubricating see-Servicing Inst., sheet 50.1



* Leica Mod. IIf 574 401...675 790 42 486-238 ⊗
 Leica Mod. If 579 871...851 000 42 486-230 ⊗

** Leica Mod. IIf 474 401...822 000 42 483-383 ⊗
 Leica Mod. If 575 001...851 000 42 483-383 ⊗

Schmierung siehe Rep.-Anltg., Blatt 50.1
 Lubricating see Servicing Inst., sheet 50.1

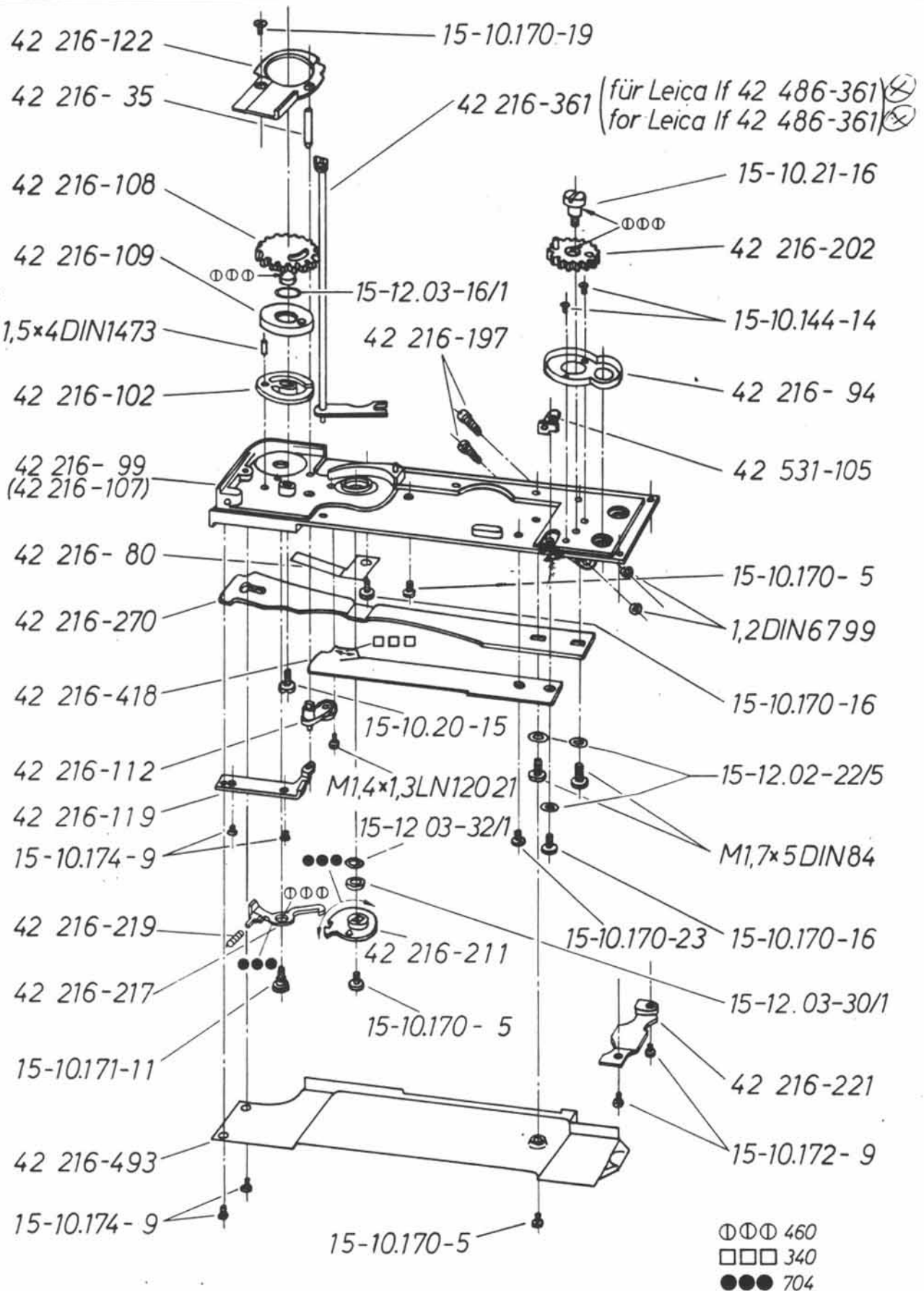


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 Leica Mod. IIf 677 501...822 000 42 531-241
 Leica Mod. If 579 871...851 000 42 486-230 X

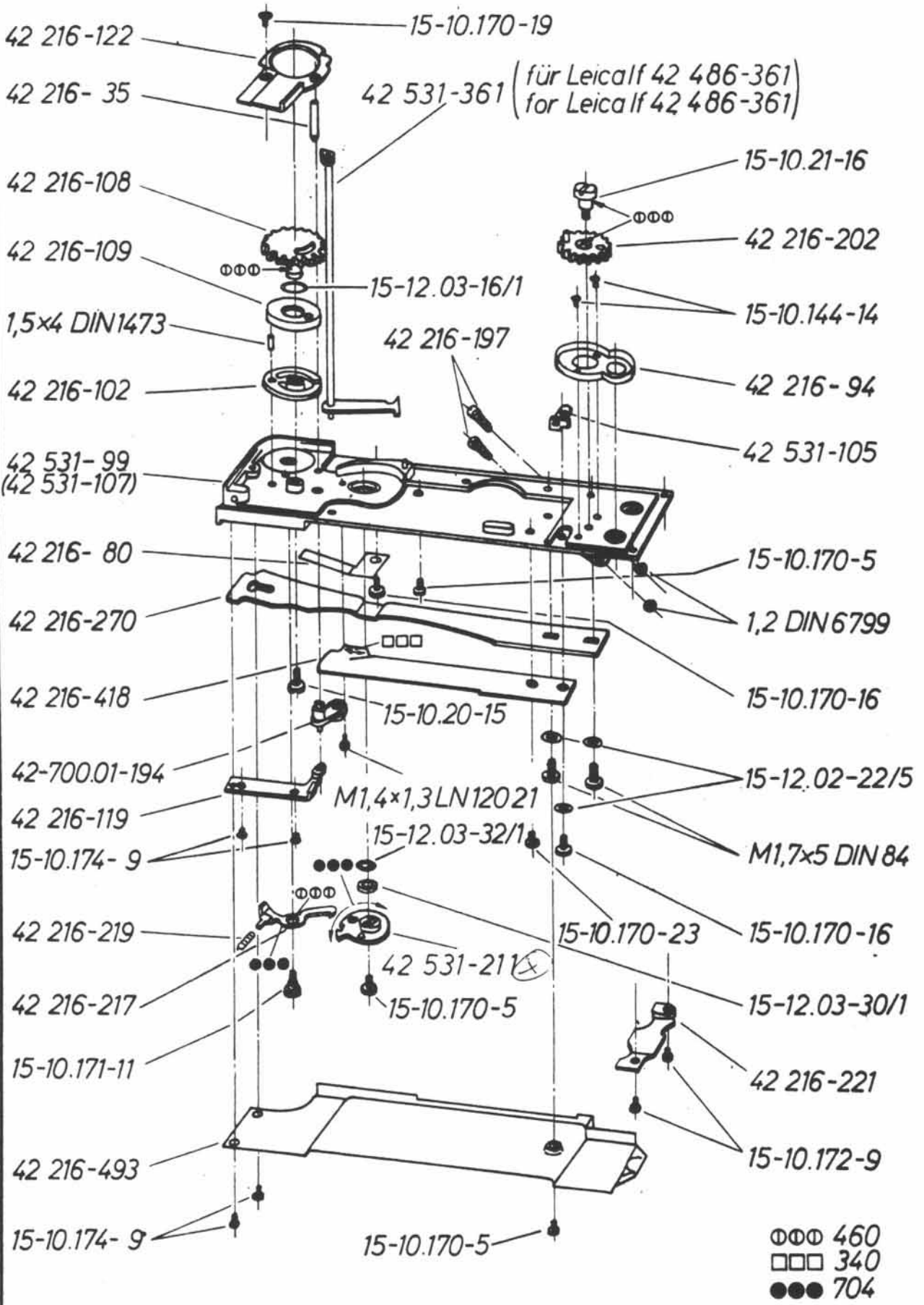
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 Leica Mod. If 575 001...851 000 42 483-383 X

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 Lubricating see Servicing Inst., sheet 50.1

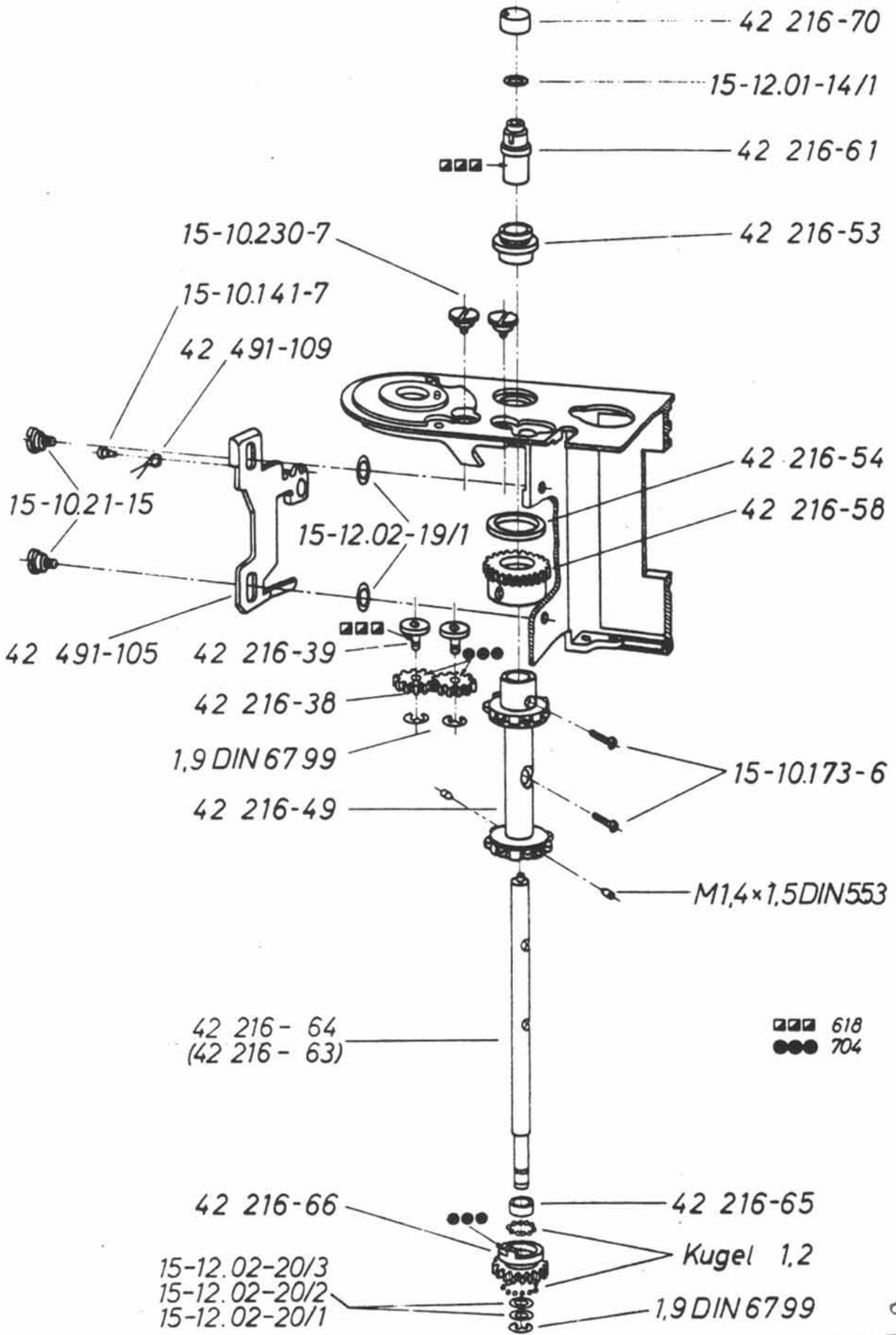
Bestell-Nr Part-No	Benennung Description	Leica - Modell								
		IIIg	IIIc	IIIe	IIIg	IIIc	IIIe	IIIg	IIIc	IIIe
15-10.171-11	Achsschraube, brüniert shaft screw, burnished	1	1	1	1	1	1	1	1	1
15-10.172- 9	Schraube, brüniert screw, burnished	2	2	2	2	2	2	2	2	2
15-10.174- 9	Schraube, brüniert screw, burnished	4	4	4	4	4	4	4	4	4
15-10.20 -15	Schraube, brüniert screw, burnished	1	1	1	1	1	1	1	1	1
15-10.21 -16	Schraube, brüniert screw, burnished	1	1	1	1	1	1	1	1	1
15-12.02-22/5	Unterlegscheibe, bei Bedarf washer, when needed	3	3	3	3	3	3	3	3	3
15-12.03-16/1	Unterlegscheibe, bei Bedarf washer, when needed	1	1	1	1	1	1	1	1	1
15-12.03-30/1	Zwischenring, bei Bedarf intermediate ring, when needed	1	1	1	1	1	1	1	1	1
15-12.03-32/1	Unterlegscheibe, bei Bedarf washer, when needed	1	1	1	1	1	1	1	1	1
1,2 DIN 6799	Sicherungsscheibe retaining washer	2	2	2	2	2	2	2	2	2
1,5 x 4 DIN 1473	Kerbstift grooved pin	1	1	1	1	1	-	-	-	-



Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III f	II f	I f	III g	I g	III c	II c	I c
15-10.171-11	Achsschraube, brüniert shaft screw, burnished	1	1	1	1	1	1	1	1
15-10.172- 9	Schraube, brüniert screw, burnished	2	2	2	2	2	2	2	2
15-10.174- 9	Schraube, brüniert screw, burnished	4	4	4	4	4	4	4	4
15-10.20 -15	Schraube, brüniert screw, burnished	1	1	1	1	1	1	1	1
15-10.21 -16	Schraube, brüniert screw, burnished	1	1	1	1	1	1	1	1
15-12.02-22/5	Unterlegscheibe, nach Bedarf washer, when needed	3	3	3	3	3	3	3	3
15-12.03-16/1	Unterlegscheibe, bei Bedarf washer, when needed	1	1	1	1	1	1	1	1
15-12.03-30/1	Zwischenring, nach Bedarf intermediate ring, when needed	1	1	1	1	1	1	1	1
15-12.03-32/1	Unterlegscheibe, nach Bedarf washer, when needed	1	1	1	1	1	1	1	1
1,2 DIN 6799	Sicherungsscheibe retaining washer	2	2	2	2	2	2	2	2
1,5 x 4 DIN 1473	Kerbstift grooved pin	1	1	1	1	1	-	-	-



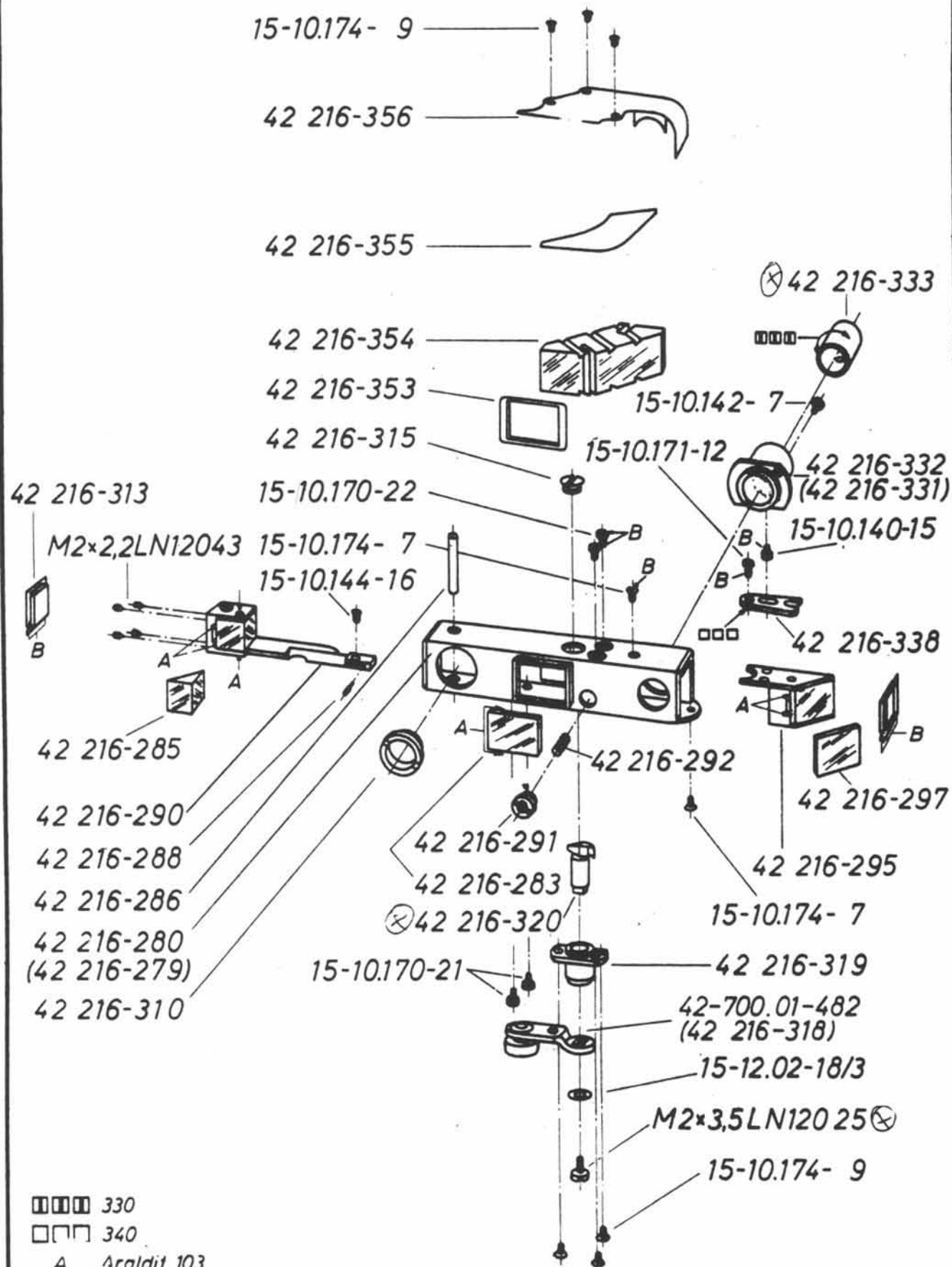
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Bestell-Nr Part-No	Benennung Description	Leica - Bestell							
		1	2	3	4	5	6	7	8
42 216-279	Entfernungsmesser, kompl. ohne range finder, compl. with out 42 216-310 42 216-310	1	1	-	-	-	-	1	-
42 216-280	Hauptkörper main body	1	1	-	-	-	-	1	1
42 216-283	Negativlinse negative lens	1	1	-	-	-	-	1	1
42 216-285	Prisma prism	1	1	-	-	-	-	1	1
42 216-286	Achse shaft	1	1	-	-	-	-	1	1
42 216-288	Stellschraube adjusting screw	1	1	-	-	-	-	1	1
42 216-290	Prismenhebel, gekittet prism lever, cemented	1	1	-	-	-	-	1	1
42 216-291	Federbuchse spring bush	1	1	-	-	-	-	1	1
42 216-292	Druckfeder pressure spring	1	1	-	1	-	-	1	1
42 216-295	Spiegelstuhl, gekittet mirror cage, cemented	1	1	-	-	-	-	1	1
42 216-297	Spiegel mirror	1	1	-	-	-	-	1	1
42 216-310	Gewindebuchse threaded bushing	1	1	-	1	-	-	1	1
42 216-313	Verschlußdeckel cover plate	2	2	-	-	-	-	2	2
42 216-315	Verschlußmutter cover nut	1	1	-	-	-	-	1	1
42 216-318	Hebelübertragung, kompl., best. aus: actuating arm, compl., ass. of: 42 216-319; 42 216-320; 15-12.02-18/3 42-700.01-182; M 2 x 3,5 LN 120 25	1	1	-	-	-	-	1	1
42 216-319	Flanschenlager flange bearing	1	1	-	-	-	-	1	1
42 216-320	Achse, zusammen mit 42 216 319 shaft, together with 42 216-319	1	1	-	-	-	-	1	1
42 216-331	Fernrohrobektiv, komplett range finder lens, complete	1	1	-	-	-	-	1	1
42 216-332	Führungsstutzen guide tube	1	1	-	-	-	-	1	1
42 216-333	Objektivfassung lens mount	1	1	-	-	-	-	1	1
42 216-338	Objektivhebel lens lever	1	1	-	1	-	-	1	1
42 216-353	Abdichträhmchen small seal frame	1	1	-	-	-	-	1	1
42 216-354	Prisma prism	1	1	-	-	-	-	1	1
42 216-355	Haltefeder flat spring	1	1	-	-	-	-	1	1
42 216-356	kleine Deckplatte small cover plate	1	1	-	-	-	-	1	1
42-700.01-482	Einstellhebel mit Exzenter range finder coupling lever with excentric cam	1	1	-	1	-	-	1	1
15-10.140-15	Mitnehmerschraube, brüniert coupling screw, burnished	1	1	-	-	-	-	1	1

Bestell-Nr Part-No	Bezeichnung Description	Leica - Modell							
		III f	III f	If	III g	Ig	III c	Ic	Ic
15-10.142- 7	Linienkopfschraube, brüniert oval head cap screw, burnished	1	1	-	-	-	1	1	-
15-10.144-16	Senkschraube, brüniert countersunk screw, burnished	1	1	-	-	-	1	1	-
15-10.170-21	Zylinderschraube, brüniert fillister head cap screw, burnish d	2	2	-	-	-	2	2	-
15-10.170-22	Zylinderschraube, brüniert fillister head cap screw, burnished	2	2	-	2	-	-	2	-
15-10.171-12	Achsschraube, brüniert shaft screw, burnished	1	1	-	1	-	1	1	-
15-10.174- 7	Senkschraube, brüniert countersunk screw, burnished	2	2	-	-	-	2	2	-
15-10.174- 9	Senkschraube, brüniert countersunk screw, burnished	6	6	-	-	-	6	6	-
M2 x 2,2 LN 12043	Gewindestift, brüniert grub screw, burnished	4	4	-	4	-	4	4	-
M2 x 3,5 LN 120 25	Linienkopfschraube, brüniert oval head screw, burnished	1	1	-	1	-	1	1	-
15-12.02-18/3	Unterlegscheibe washer	1	1	-	1	-	1	1	-

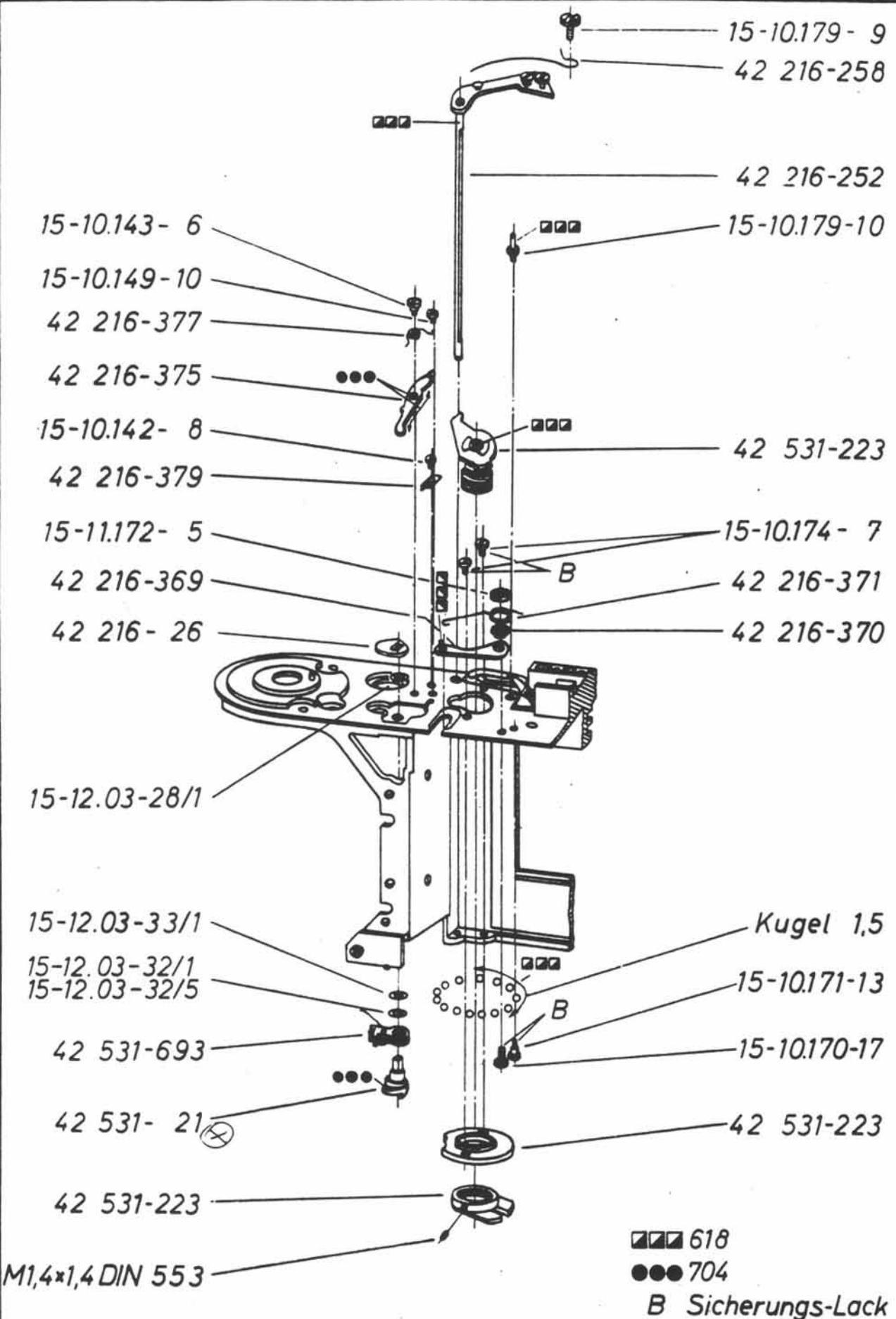


□□□□ 330

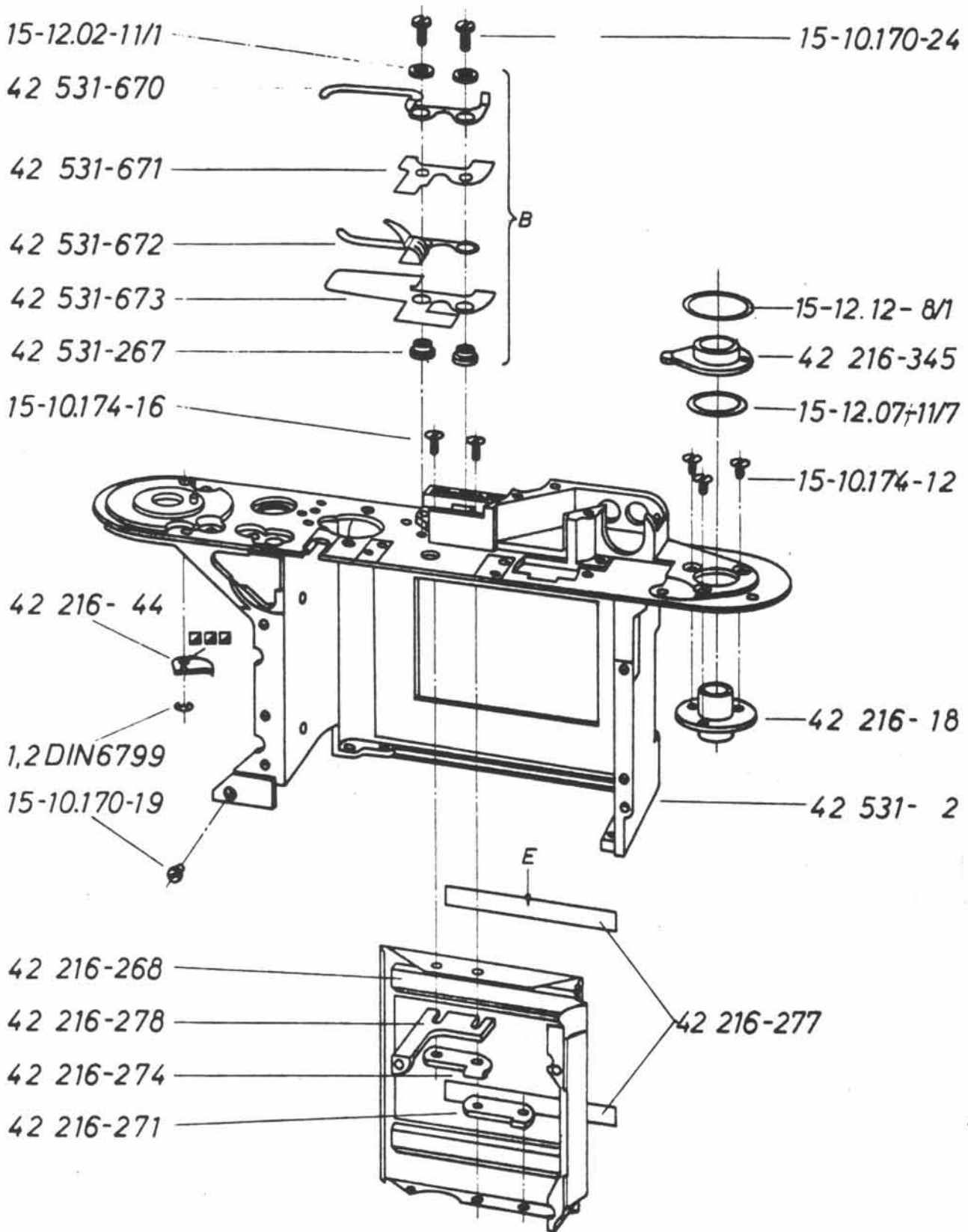
□□□ 340

A Araldit 103

B Sicherungslack



qx



■■■ 618
 E EC 880.
 B Sicherungslack

Anmerkung

In der Ersatzteilliste zur Leica II f sind nur die Blätter aufgeführt, auf denen Abweichungen gegenüber der Leica III f zu verzeichnen sind.

Die Teil-Nummern für die verschiedenen Ausführungen der Hemmwerke und Lochstellscheiben zur Leica II f sind auf Blatt 7 aufgeführt.

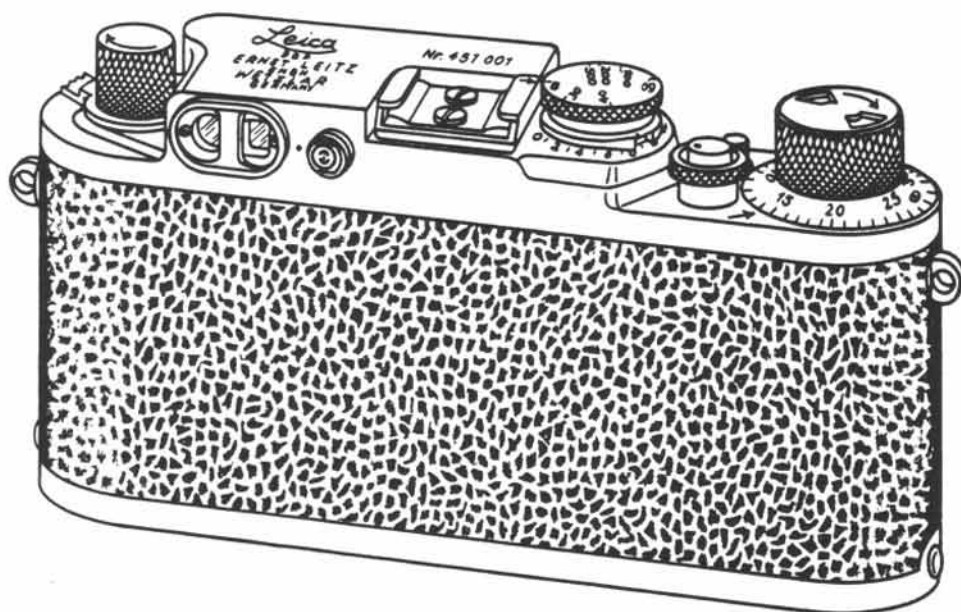
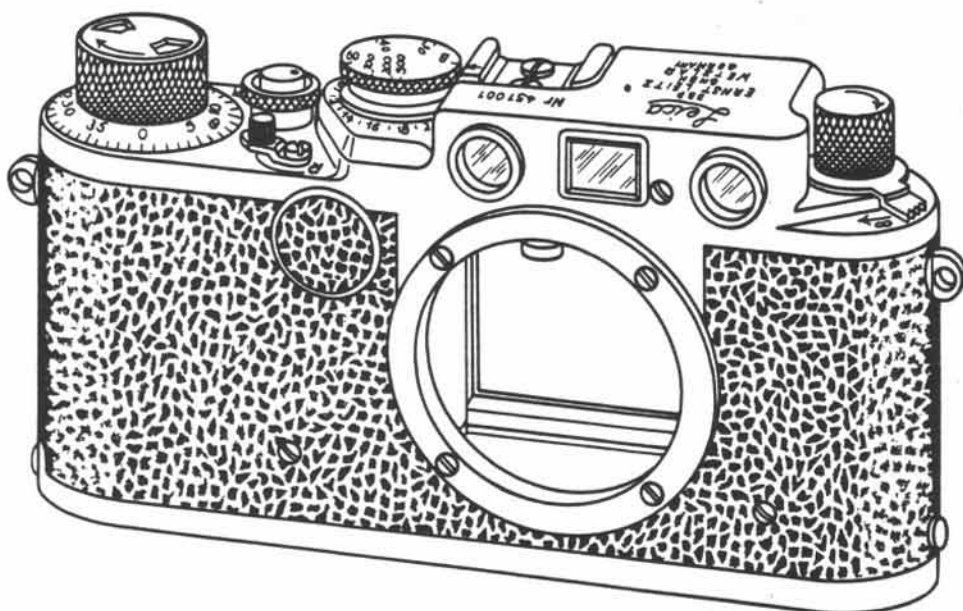
Hinweise auf Reinigung der Einzelteile, Schmiermittel, Klebemittel und Ersatzteilbestellung siehe Einführung zur Ersatzteilliste zur Leica III f.

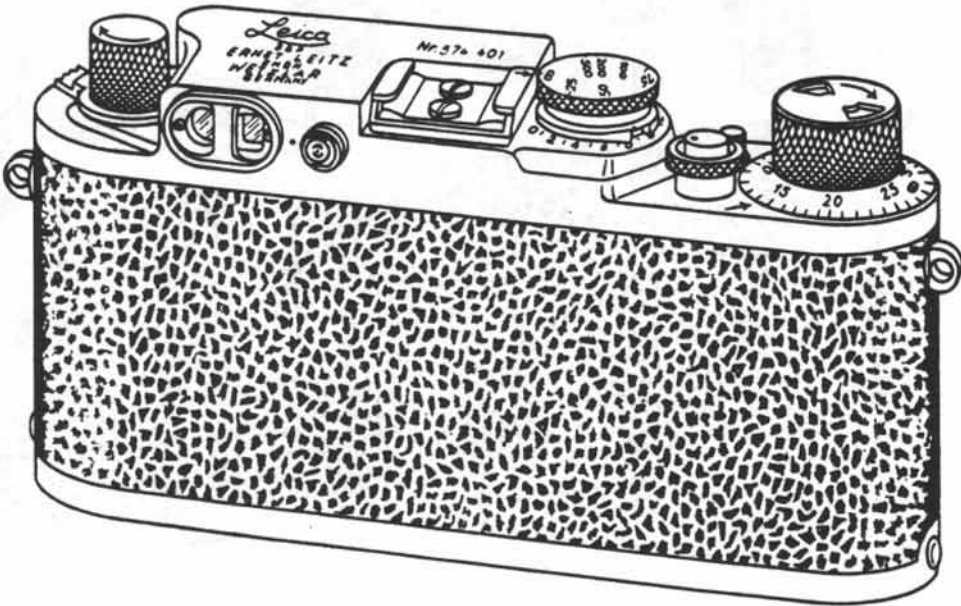
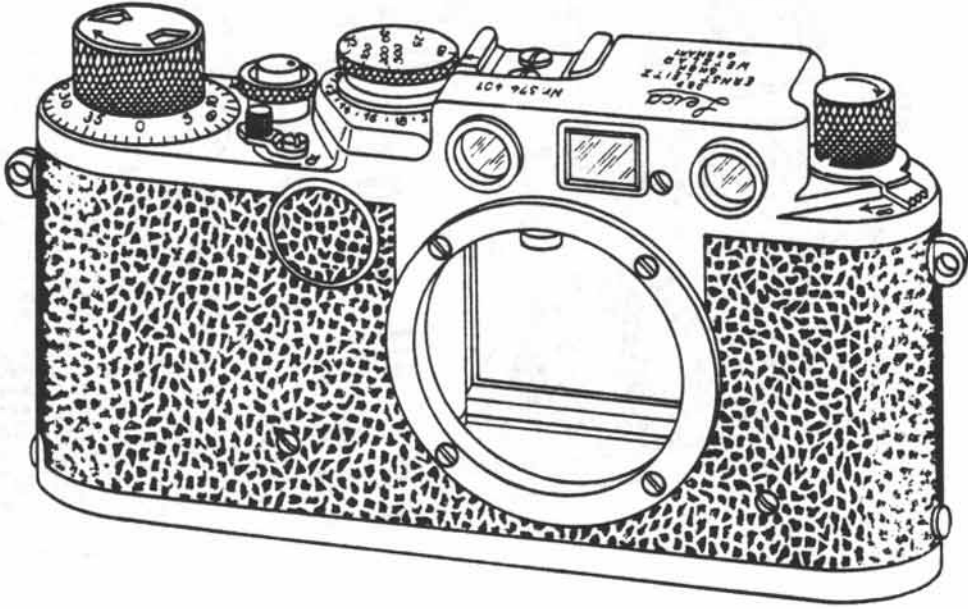
Notes

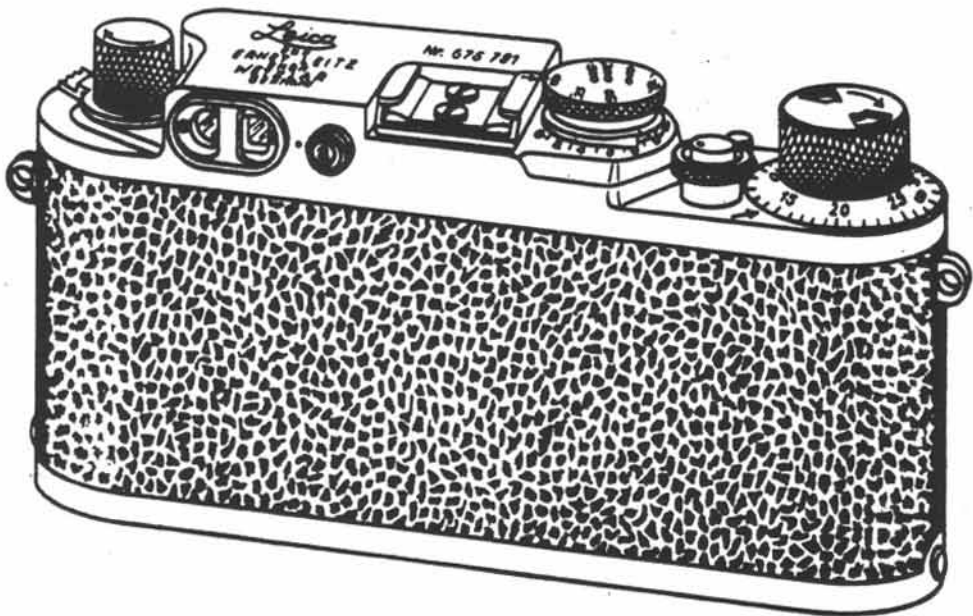
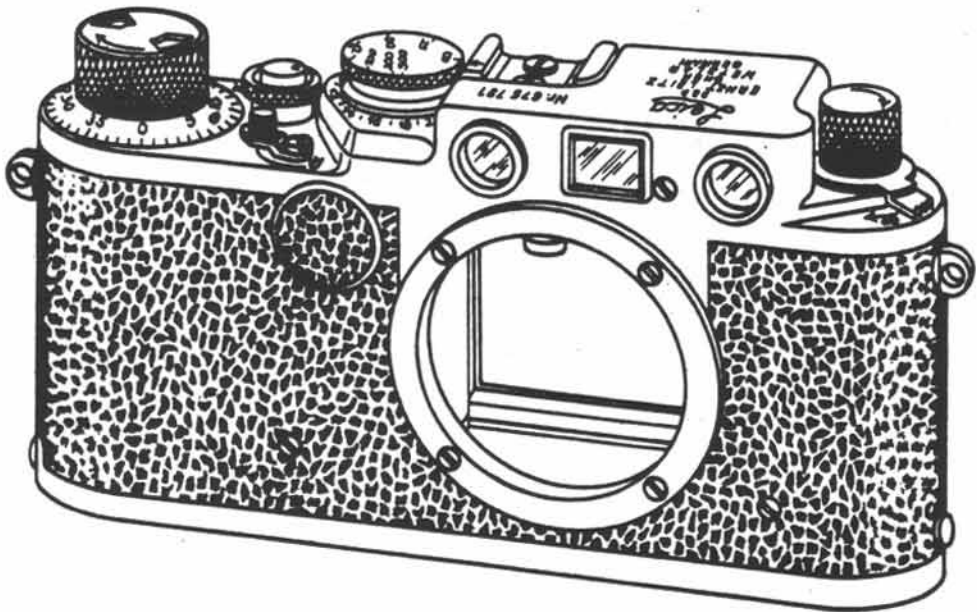
The spare parts lists for the Leica II f only contain those sheets which differ from the corresponding sheets for the Leica III f.

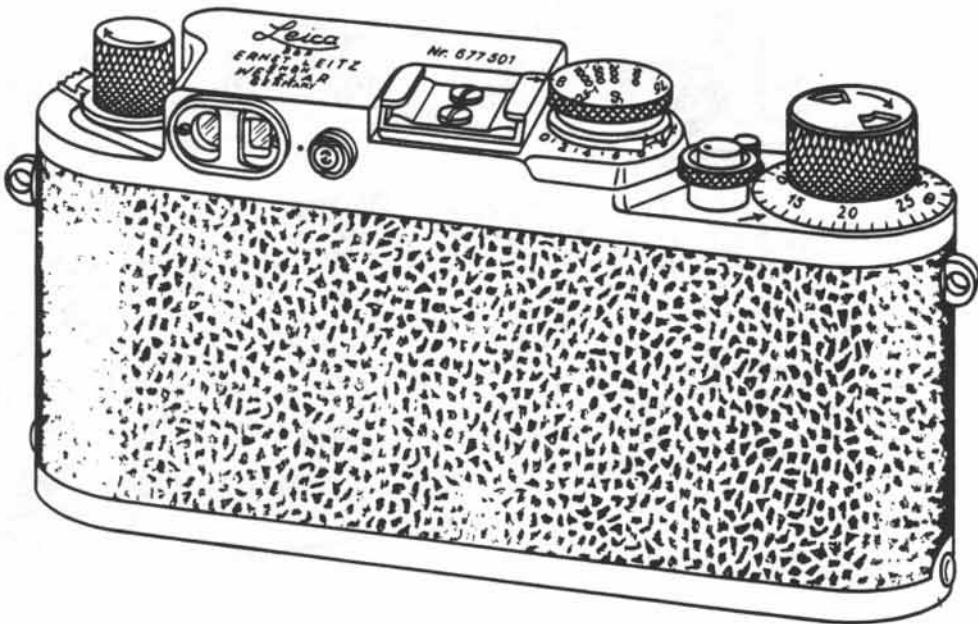
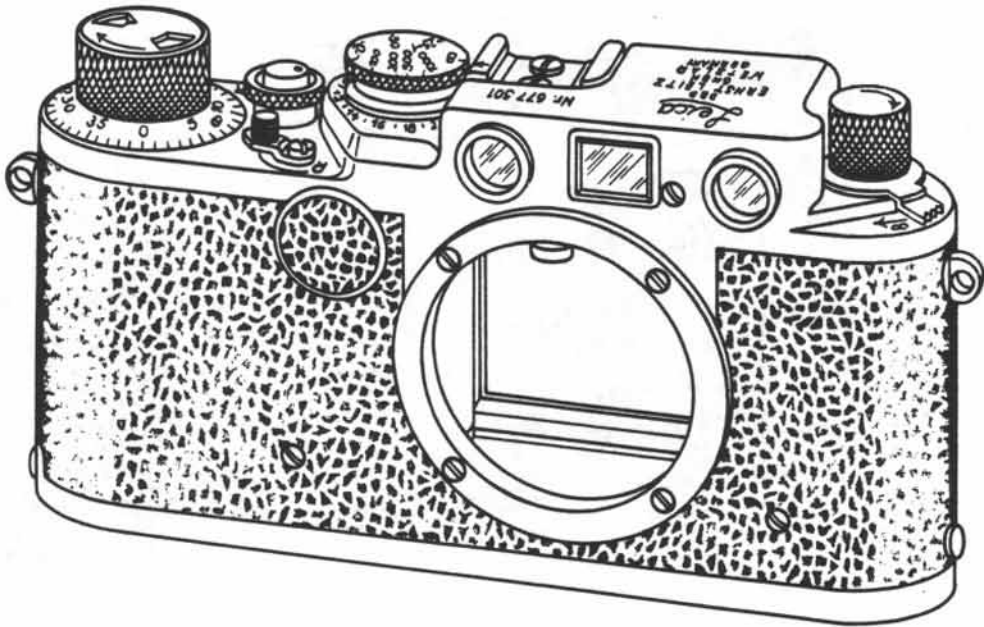
The part Nos. for the various designs of the escapement mechanisms and perforated setting discs for the Leica II f are listed on page 7.

For notes on cleaning of individual components, lubricants, adhesives, and ordering of spare parts, see the introduction to the spare parts lists for the Leica III f.



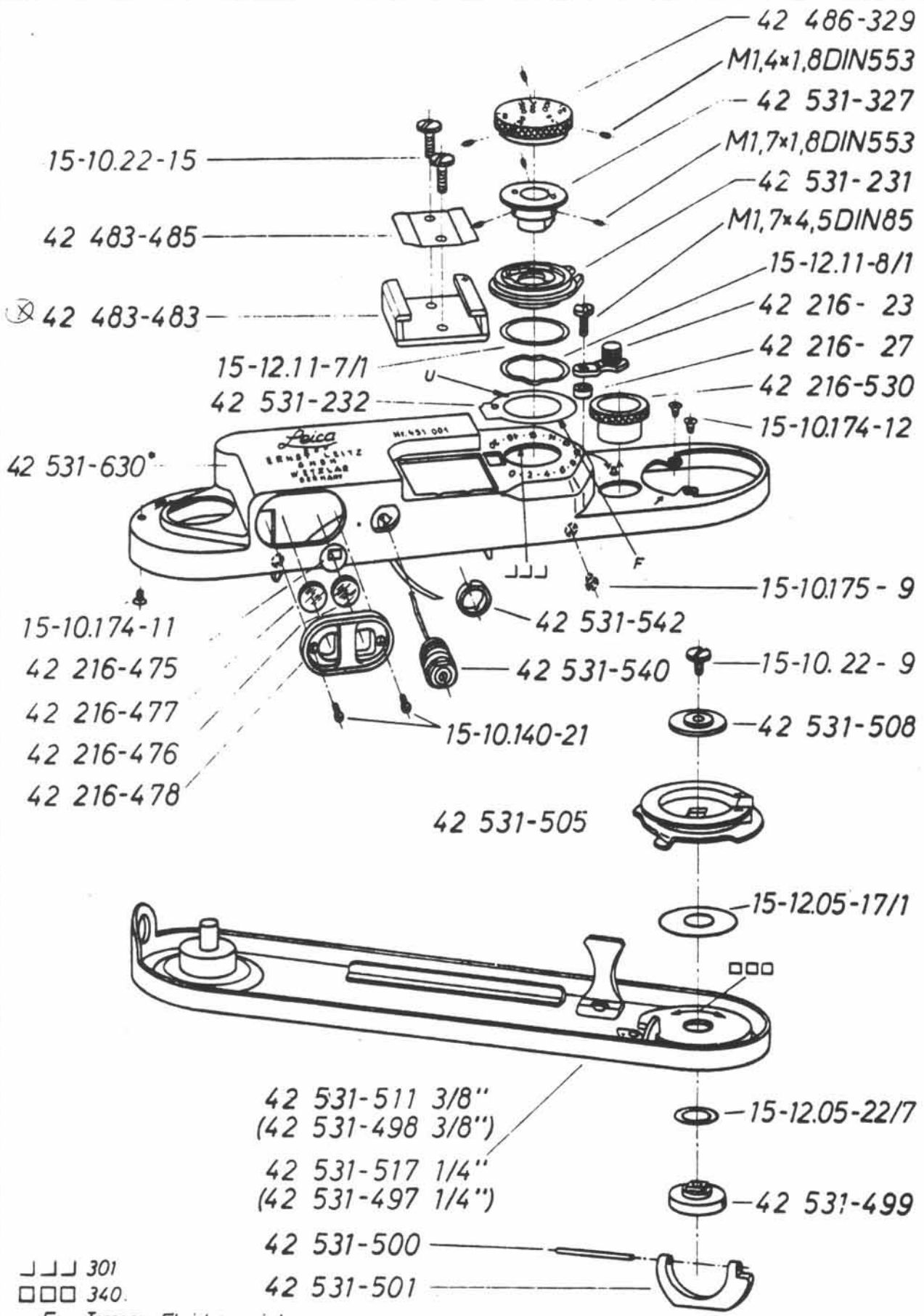






Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		If	If	IIIr	IIIg	Ig	IIIc	IIc	Ic
42 216- 23	Entkupplungshebel reversing lever	1	1	1	-	-	1	1	1
42 216- 27	Zwischenring intermediate ring	1	1	1	-	-	1	1	1
42 216-475	Blende mask for view finder	1	-	1	-	-	1	1	-
42 216-476	Augenlinse view finder eye lens (positive)	1	-	1	-	-	1	1	-
42 216-477	Okularlinse view finder eye lens (negative)	1	-	1	-	-	1	1	-
42 216-478	Okularfassung eye piece shell	1	-	1	-	-	1	1	-
42 216-530	Schutzhülse release guard	1	1	1	-	-	1	1	1
42 483-483	Befestigungsklemme accessory shoe	1	-	-	-	-	-	1	-
42 483-485	Druckfeder pressure spring	1	-	-	-	-	-	1	-
42 486-329	Zeitscheibe speed dial	1	1	-	-	-	-	-	-
42 531-231	Einstellring, komplett scale ring, complete	1	1	1	-	-	-	-	-
42 531-232	Abdeckplättchen small plate	1	-	1	-	-	-	-	-
42 531-327	Kurvenscheibe cam	1	1	1	-	-	-	-	-
42 531-497	Deckel, komplett 1/4 " base plate, complete 1/4 "	1	1	1	1	1	-	-	-
42 531-498	Deckel, komplett 3/8 " base plate, complete 3/8 "	1	1	1	1	1	-	-	-
42 531-499	Knebel toggle	1	1	1	1	1	1	1	1
42 531-500	Lagerbolzen bearing pin	1	1	1	1	1	1	1	1
42 531-501	Klappbügel folding bracket	1	1	1	1	1	1	1	1
42 531-505	Verriegelung lock	1	1	1	1	1	1	1	1
42 531-508	Unterlegscheibe washer	1	1	1	1	1	1	1	1
42 531-511	Deckel, punktgeschweißt 3/8 " base plate, spot welded 3/8 "	1	1	1	1	1	-	-	-
42 531-517	Deckel, punktgeschweißt 1/4 " base plate, spot welded 1/4 "	1	1	1	1	1	-	-	-
42 531-540	Steckerbuchse plug socket	1	-	1	1	1	-	-	-
42 531-542	Schlitzmutter slotted nut	1	-	1	1	1	-	-	-
42 531-630	Deckkappe, genietet cover plate, riveted	1	-	1	-	-	-	-	-
M1,4x1,8 DIN 553	Gewindestift, verchromt grub screw, chrome-plated	3	3	3	3	3	-	-	-
M1,7x1,8 DIN 553	Gewindestift grub screw	3	3	3	3	3	-	-	-
M1,7x4,5 DIN 85	Linienkopfschraube, verchromt oval head screw, chrome-plated	1	1	1	-	-	1	1	1
15-10.140-21	Zylinderschraube fillister head cap screw	2	-	2	-	-	2	2	-
15-10.174-11	Senkschraube countersunk screw	1	-	1	-	-	1	1	-

Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		II f	I f	III f	III g	I g	III c	II c	I c
15-10.174-12	Senkschraube countersunk screw	2	2	2	2	2	2	2	2
15-10.175- 9	Linsenkopfschraube, verchromt oval head screw, chrome-plated	4	4	4	-	-	4	4	4
15-10.22 - 9	Linsenkopfschraube oval head screw	1	1	1	1	1	1	1	1
15-10.22 -15	Linsenkopfschraube, verchromt oval head screw, chrome-plated	2	-	-	-	-	-	2	-
15-12.05 -17/1	Scheibe washer	1	1	1	1	1	1	1	1
15-12.05 -22/7	Scheibe washer	1	1	1	1	1	1	1	1
15-12.11 - 7/1	Gleitscheibe washer	1	1	1	-	-	-	-	-
15-12.11 - 8/1	Federscheibe spring washer	1	1	1	-	-	-	-	-



- 42 486-329
- M1,4x1,8DIN553
- 42 531-327
- M1,7x1,8DIN553
- 42 531-231
- M1,7x4,5DIN85
- 15-12.11-8/1
- 42 216- 23
- 42 216- 27
- 42 216-530
- 15-10.174-12
- 15-10.175- 9
- 15-10.22- 9
- 42 531-508
- 15-12.05-17/1
- 15-12.05-22/7
- 42 531-499

- 15-10.22-15
- 42 483-485
- ⊗ 42 483-483
- 15-12.11-7/1
- 42 531-232
- 42 531-630*
- 15-10.174-11
- 42 216-475
- 42 216-477
- 42 216-476
- 42 216-478

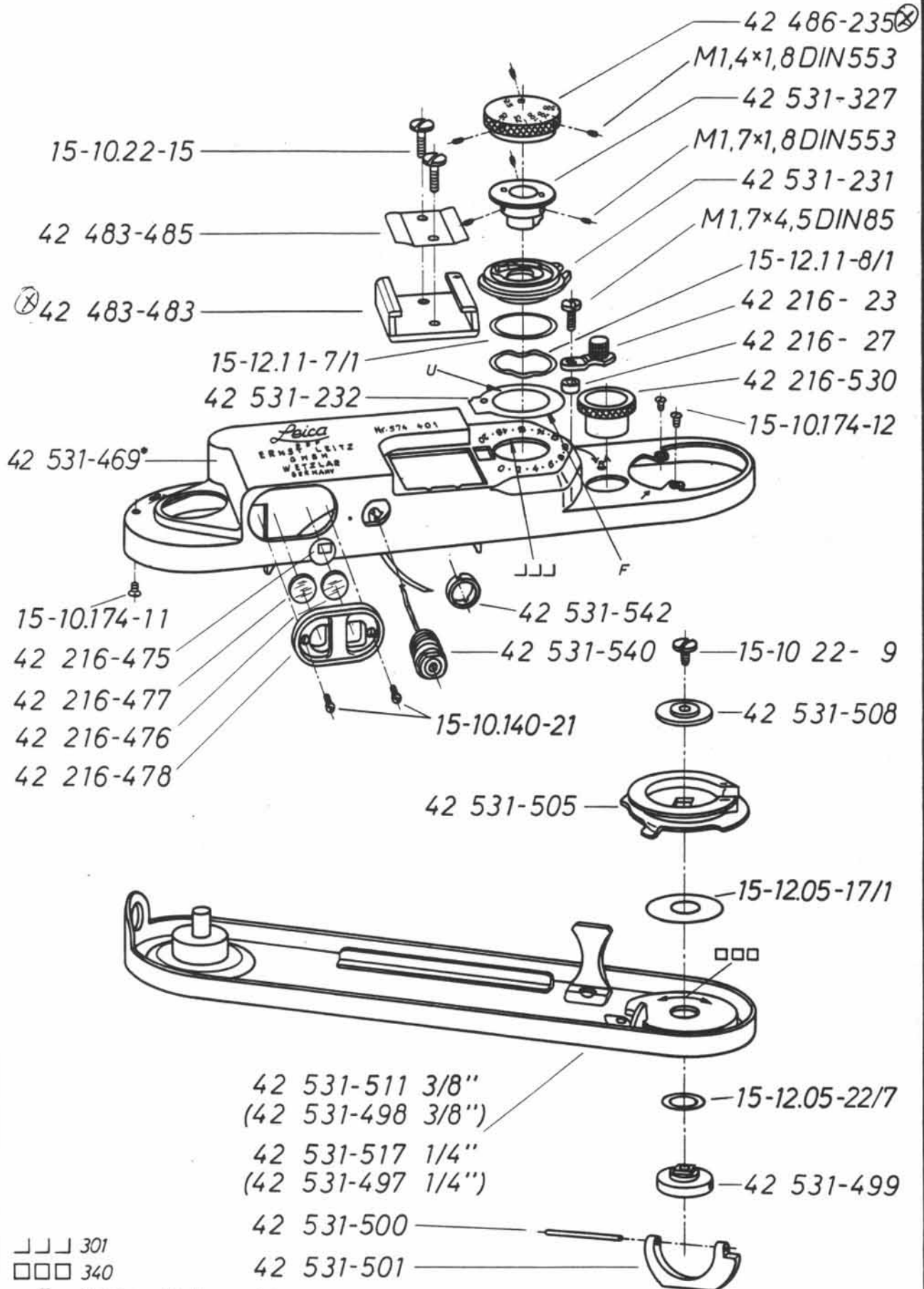
- 42 531-511 3/8"
- (42 531-498 3/8")
- 42 531-517 1/4"
- (42 531-497 1/4")
- 42 531-500
- 42 531-501

JJJ 301
 □□□ 340.
 F Teroson-Fluid, spezial
 U UHU-hart

* Bei Bestellung bitte Fabrikationsnummer angeben
 When ordering this part the serial number must be stated

Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		II f	I f	III f	III g	I g	III c	II c	I c
42 216- 23	Entkupplungshebel reversing lever	1	1	1	-	-	1	1	1
42 216- 27	Zwischenring intermediate ring	1	1	1	-	-	1	1	1
42 216-475	Blende mask for view finder	1	-	1	-	-	1	1	-
42 216-476	Augenlinse view finder eye lens (positive)	1	-	1	-	-	1	1	-
42 216-477	Okularlinse view finder eye lens (negative)	1	-	1	-	-	1	1	-
42 216-478	Okularfassung eye piece shell	1	-	1	-	-	1	1	-
42 216-530	Schutzhülse release guard	1	1	1	-	-	1	1	1
42 483-483	Befestigungsklemme accessory shoe	1	-	-	-	-	-	1	-
42 483-485	Druckfeder pressure spring	1	-	-	-	-	-	1	-
42 486-235	Zeitscheibe speed dial	1	1	-	-	-	-	-	-
42 531-231	Einstellring, komplett scale ring, complete	1	1	1	-	-	-	-	-
42 531-232	Abdeckplättchen small plate	1	-	1	-	-	-	-	-
42 531-327	Kurvenscheibe cam	1	1	1	-	-	-	-	-
42 531-469	Deckkappe, genietet cover plate, riveted	1	-	1	-	-	-	-	-
42 531-497	Deckel, komplett 1/4 " base plate, complete 1/4 "	1	1	1	1	1	-	-	-
42 531-498	Deckel, komplett 3/8 " base plate, complete 3/8 "	1	1	1	1	1	-	-	-
42 531-499	Knebel toogle	1	1	1	1	1	1	1	1
42 531-500	Lagerbolzen bearing pin	1	1	1	1	1	1	1	1
42 531-501	Klappbügel folding bracket	1	1	1	1	1	1	1	1
42 531-505	Verriegelung lock	1	1	1	1	1	1	1	1
42 531-508	Unterlegscheibe washer	1	1	1	1	1	1	1	1
42 531-511	Deckel, punktgeschweißt 3/8 " base plate, spot welded 3/8 "	1	1	1	1	1	-	-	-
42 531-517	Deckel, punktgeschweißt 1/4 " base plate, spot welded 1/4 "	1	1	1	1	1	-	-	-
42 531-540	Steckerbuchse plug socket	1	-	1	1	1	-	-	-
41 531-542	Schlitzmutter slotted nut	1	-	1	1	1	-	-	-
M1,4x1,8 DIN553	Gewindestift, verchromt grub screw, chrome-plated	3	3	3	3	3	-	-	-
M1,7x1,8 DIN553	Gewindestift grub screw	3	3	3	3	3	-	-	-
M1,7x4,5 DIN 85	Linsenkopfschraube, verchromt oval head screw, chrome-plated	1	1	1	-	-	1	1	1
15-10.140-21	Zylinderschraube fillister head cap screw	2	-	2	-	-	2	2	-
15-10.174-11	Senkschraube countersunk screw	1	-	1	-	-	1	1	-

Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		II f	If	III f	III g	Ig	III c	II c	Ic
15-10.174-12	Senkschraube countersunk screw	2	2	2	2	2	2	2	2
15-10.22 - 9	Linsenkopfschraube oval head screw	1	1	1	1	1	1	1	1
15-10.22 -15	Linsenkopfschraube, verchromt oval head screw, chrome-plated	2	-	-	-	-	-	2	-
15-12.05 -17/1	Scheibe washer	1	1	1	1	1	1	1	1
15-12.05 -22/7	Scheibe washer	1	1	1	1	1	1	1	1
15-12.11 - 7/1	Gleitscheibe washer	1	1	1	-	-	-	-	-
15-12.11 - 8/1	Federscheibe spring washer	1	1	1	-	-	-	-	-

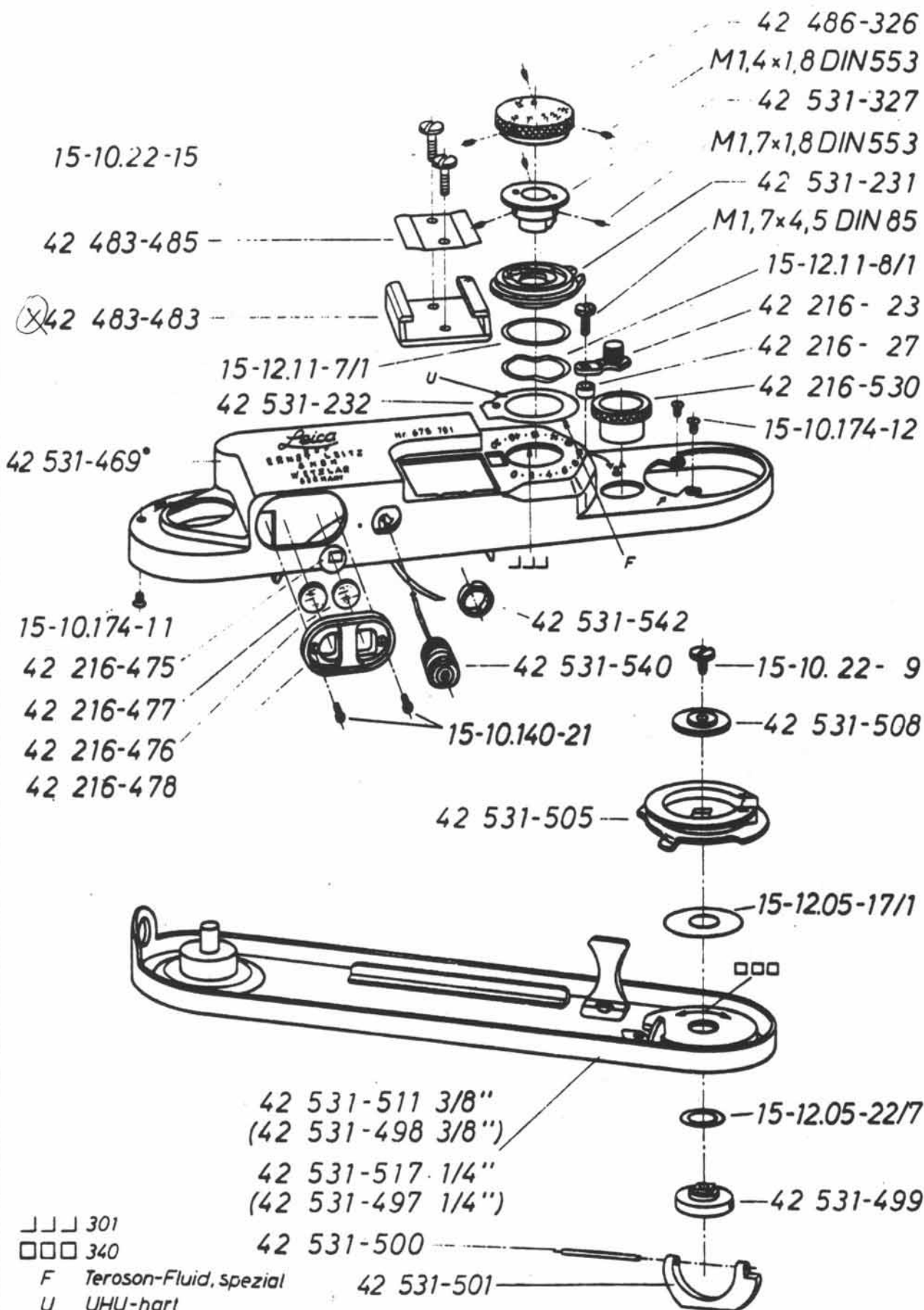


* Bei Bestellung bitte Fabrikationsnummer angeben
When ordering this part the serial number must be stated

Bestell-Nr Part-No	Description	1	2	3	4	5	6	7	8	9	10
42 216- 23	Entkupplungshebel reversing lever	1	1	1	-	-	1	1	1		
42 216- 27	Zwischenring intermediate ring	1	1	1	-	-	1	1	1		
42 216-475	Blende mask for view finder	1	-	1	-	-	1	1	-		
42 216-476	Augenlinse view finder eye lens (positive)	1	-	1	-	-	1	1	-		
42 216-477	Okularlinse view finder eye lens (negative)	1	-	1	-	-	1	1	-		
42 216-478	Okularfassung eye piece shell	1	-	1	-	-	1	1	-		
42 216-530	Schutzhülse release guard	1	1	1	-	-	1	1	1		
42 483-483	Befestigungsklemme accessory shoe	1	-	-	-	-	-	1	-		
42 483-485	Druckfeder pressure spring	1	-	-	-	-	-	1	-		
42 486-326	Zeitscheibe speed dial	1	1	-	-	-	-	-	-		
42 531-231	Einstellring, komplett scale ring, complete	1	1	1	-	-	-	-	-		
42 531-232	Abdeckplättchen small plate	1	-	1	-	-	-	-	-		
42 531-327	Kurvenscheibe cam	1	1	1	-	-	-	-	-		
42 531-469	Deckkappe, genietet cover plate, riveted	1	-	1	-	-	-	-	-		
42 531-497	Deckel, komplett 1/4 " base plate, complete 1/4 "	1	1	1	1	1	-	-	-		
42 531-498	Deckel, komplett 3/8 " base plate, complete 3/8 "	1	1	1	1	1	-	-	-		
42 531-499	Knebel toggle	1	1	1	1	1	1	1	1		
42 531-500	Lagerbolzen bearing pin	1	1	1	1	1	1	1	1		
42 531-501	Klappbügel folding bracket	1	1	1	1	1	1	1	1		
42 531-505	Verriegelung lock	1	1	1	1	1	1	1	1		
42 531-508	Unterlegscheibe washer	1	1	1	1	1	1	1	1		
42 531-511	Deckel, punktgeschweißt 3/8 " base plate, spot welded 3/8 "	1	1	1	1	1	-	-	-		
42 531-517	Deckel, punktgeschweißt 1/4 " base plate, spot welded 1/4 "	1	1	1	1	1	-	-	-		
42 531-540	Steckerbuchse plug socket	1	-	1	1	1	-	-	-		
42 531-542	Schließmutter slotted nut	1	-	1	1	1	-	-	-		
M1,4x1,8 DIN 553	Gewindestift, verchromt grab screw, chrome-plated	3	3	3	3	3	-	-	-		
M1,7x1,8 DIN 553	Gewindestift grab screw	3	3	3	3	3	-	-	-		
M1,7x4,5 DIN 85	Linienkopfschraube, verchromt oval head screw, chrome-plated	1	1	1	-	-	1	1	1		
15-10.140-21	Zylinderschraube cylinder head cap screw	2	-	2	-	-	2	2	-		
15-10.140-11	Senkschraube countersink head cap screw	1	-	1	-	-	1	1	-		

TECHNISCHE ZEITUNG

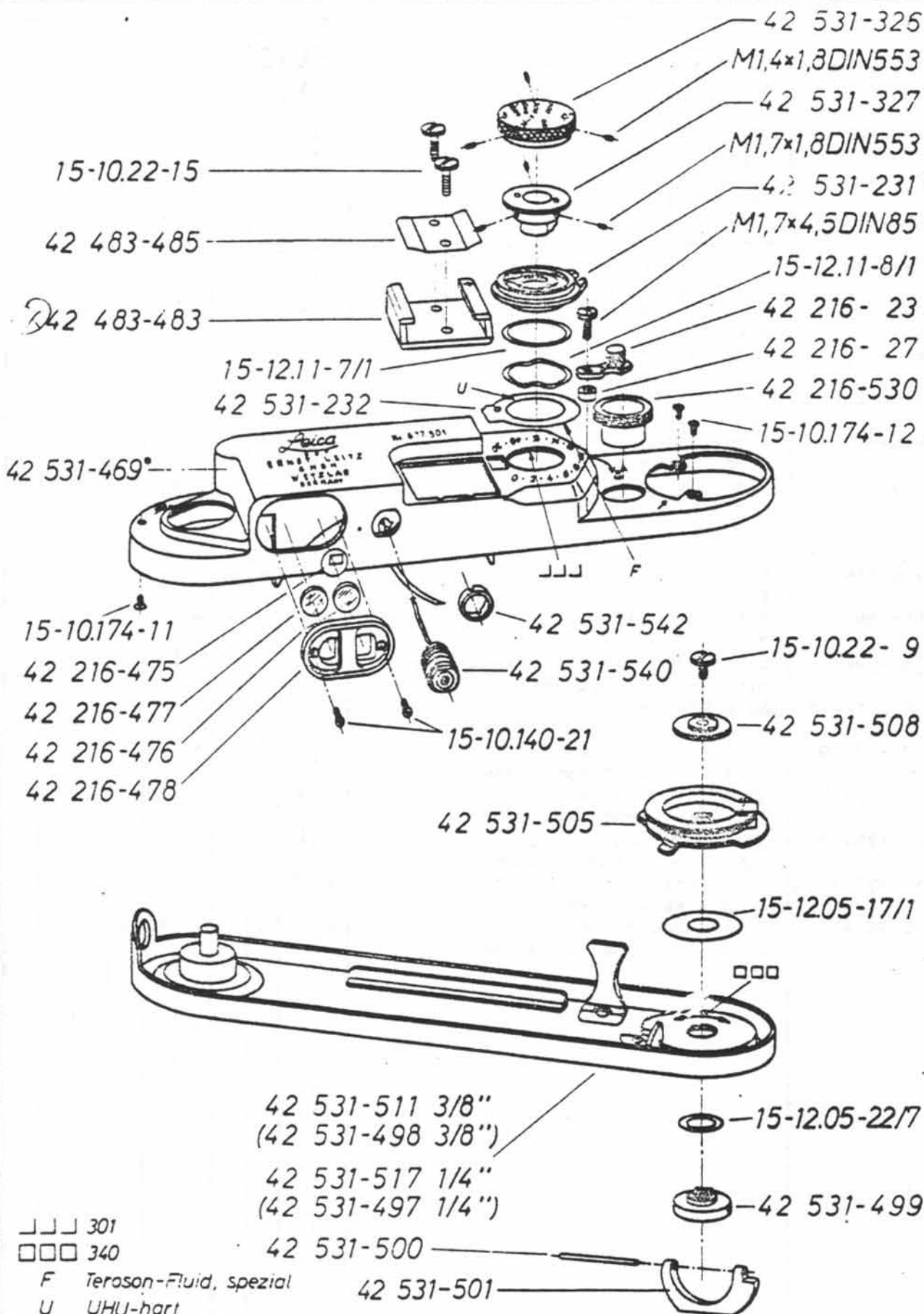
Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		Wf	If	Wf	Wg	Ig	Wc	Wc	Ic
15-10.174-12	Senkschraube countersunk screw	2	2	2	2	2	2	2	2
15-10.22 - 9	Linsenkopfschraube oval head screw	1	1	1	1	1	1	1	1
15-10.22 -15	Linsenkopfschraube, verchromt oval head screw, chrome-plated	2	-	-	-	-	-	2	-
15-12.05 -17/1	Scheibe washer	1	1	1	1	1	1	1	1
15-12.05 -22/7	Scheibe washer	1	1	1	1	1	1	1	1
15-12.11 - 7/1	Gleitscheibe washer	1	1	1	-	-	-	-	-
15-12.11 - 8/1	Federscheibe spring washer	1	1	1	-	-	-	-	-



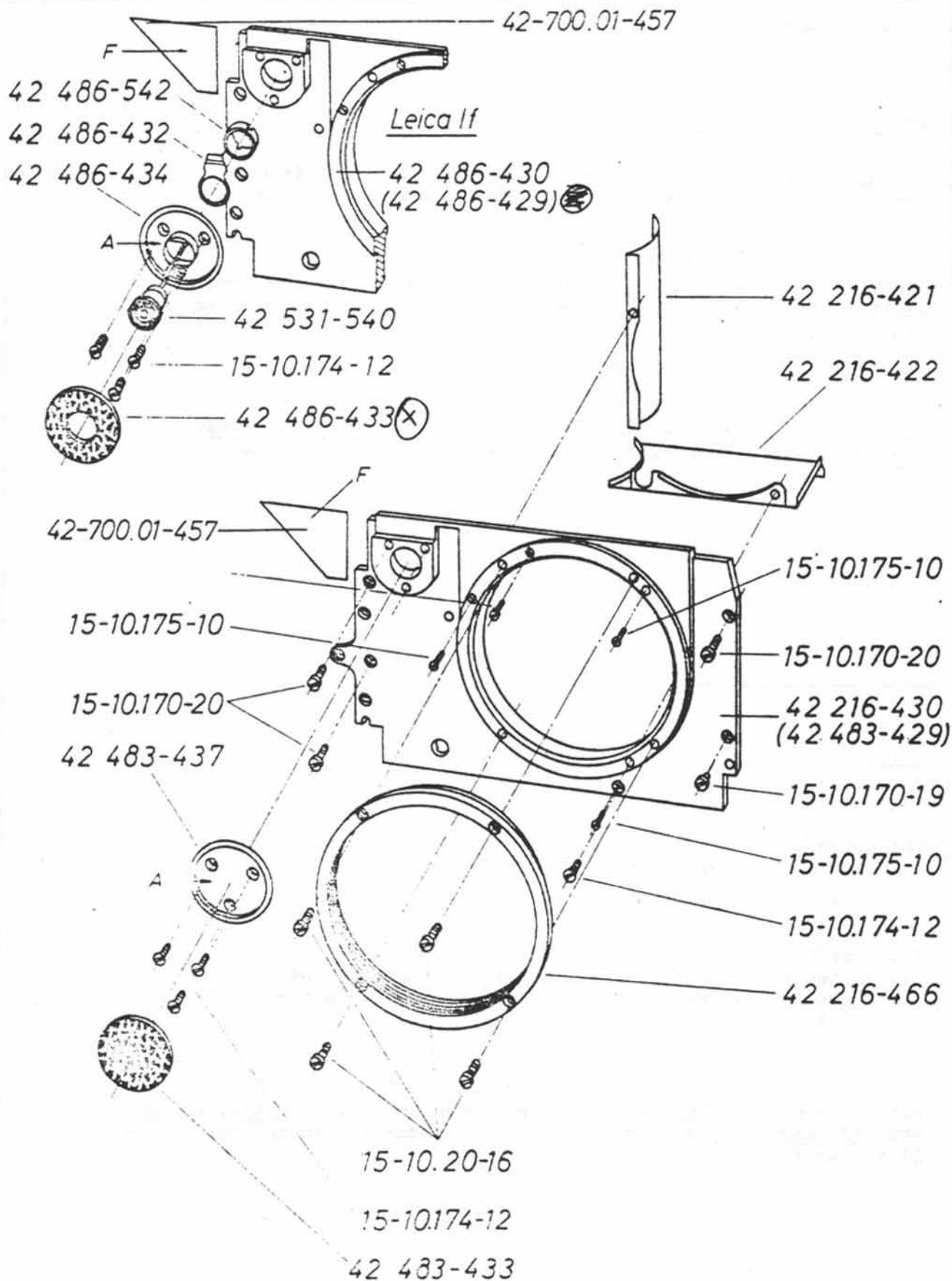
* Bei Bestellung bitte Fabrikationsnummer angeben
When ordering this part the serial number must be stated

Bestell-Nr Part-No	Benennung Description	Leica - Model							
		If	Ic	IIIc	IIIg	Ig	IIIc	Ic	Ic
42 216-23	Entkupplungshebel reversing lever	1	1	1	-	-	1	1	1
42 216-27	Zwischenring intermediate ring	1	1	1	-	-	1	1	1
42 216-475	Blende mask for view finder	1	-	1	-	-	1	1	-
42 216-476	Augenlinse view finder eye lens (positive)	1	-	1	-	-	1	1	-
42 216-477	Okularlinse view finder eye lens (negative)	1	-	1	-	-	1	1	-
42 216-478	Okularfassung eye piece shell	1	-	1	-	-	1	1	-
42 216-530	Schutzhülse release guard	1	1	1	-	-	1	1	1
42 483-483	Befestigungsklemme accessory shoe	1	-	-	-	-	-	1	-
42 483-485	Druckfeder pressure spring	1	-	-	-	-	-	1	-
42 531-231	Einstellring, komplett scale ring, complete	1	1	1	-	-	-	-	-
42 531-232	Abdeckplättchen small plate	1	-	1	-	-	-	-	-
42 531-326	Zeitscheibe speed dial	1	-	1	-	-	-	-	-
42 531-327	Kurvenscheibe cam	1	1	1	-	-	-	-	-
42 531-469	Deckkappe, genietet cover plate, riveted	1	-	1	-	-	-	-	-
42 531-497	Deckel, komplett 1/4 " base plate, complete 1/4 "	1	1	1	1	1	-	-	-
42 531-498	Deckel, komplett 3/8 " base plate, complete 3/8 "	1	1	1	1	1	-	-	-
42 531-499	Knebel toggle	1	1	1	1	1	1	1	1
42 531-500	Lagerbolzen bearing pin	1	1	1	1	1	1	1	1
42 531-501	Klappbügel folding bracket	1	1	1	1	1	1	1	1
42 531-505	Verriegelung lock	1	1	1	1	1	1	1	1
42 531-508	Unterlegscheibe washer	1	1	1	1	1	1	1	1
42 531-511	Deckel, punktgeschweißt 3/8 " base plate, spot welded 3/8 "	1	1	1	1	1	-	-	-
42 531-517	Deckel, punktgeschweißt 1/4 " base plate, spot welded 1/4 "	1	1	1	1	1	-	-	-
42 531-540	Steckerbuchse plug socket	1	-	1	1	1	-	-	-
42 531-542	Schlitzmutter slotted nut	1	-	1	1	1	-	-	-
M1,4x1,8 DIN 553	Gewindestift, verchromt grub screw, chrome-plated	3	3	3	3	3	-	-	-
M1,7x1,8 DIN 553	Gewindestift grub screw	3	3	3	3	3	-	-	-
M1,7x4,5 DIN 85	Linienkopfschraube, verchromt oval head screw, chrome-plated	1	1	1	-	-	1	1	1
15-10.140-21	Zylinderschraube fillister head cap screw	2	-	2	-	-	2	2	-
15-10.174-11	Senkschraube countersunk screw	1	-	1	-	-	1	1	-

Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		III f	III f	III f	III f	III f	III f	III f	III f
15-10.174-12	Senkschraube countersunk screw	2	2	2	2	2	2	2	2
15-10.22 - 9	Linienkopfschraube oval head screw	1	1	1	1	1	1	1	1
15-10.22 -15	Linienkopfschraube, verchromt oval head screw, chrome-plated	2	-	-	-	-	-	2	-
15-12.05 -17/1	Scheibe washer	1	1	1	1	1	1	1	1
15-12.05 -22/7	Scheibe washer	1	1	1	1	1	1	1	1
15-12.11 - 7/1	Gleit scheibe washer	1	1	1	-	-	-	-	-
15-12.11 - 8/1	Federscheibe spring washer	1	1	1	-	-	-	-	-



• Bei Bestellung bitte Fabrikationsnummer angeben
When ordering this part the serial number must be stated



Anmerkung

In der Ersatzteilliste zur Leica I f sind nur die Blätter aufgeführt, auf denen Abweichungen gegenüber der Leica III f und II f zu verzeichnen sind.

Die Teil-Nummern für die verschiedenen Ausführungen der Hemmwerke und Lochstellscheiben zur Leica I f sind auf Blatt 7, für die Schwingachse auf Blatt 8 und für die Frontplatte auf Blatt 15 aufgeführt.

Hinweise auf Reinigung der Einzelteile, Schmiermittel, Klebstoffe und Ersatzteilbestellung siehe Einführung zur Ersatzteilliste zur Leica III f.

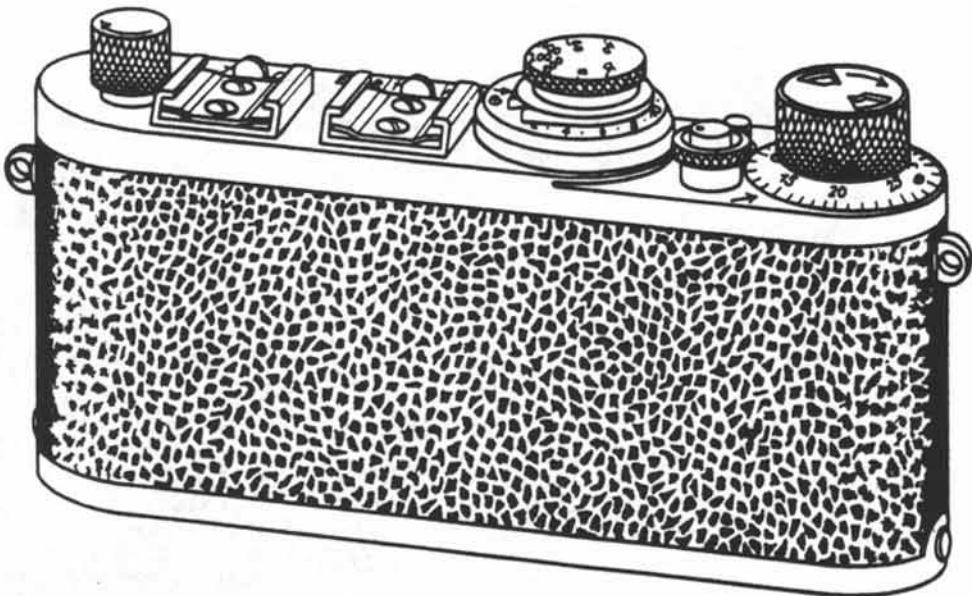
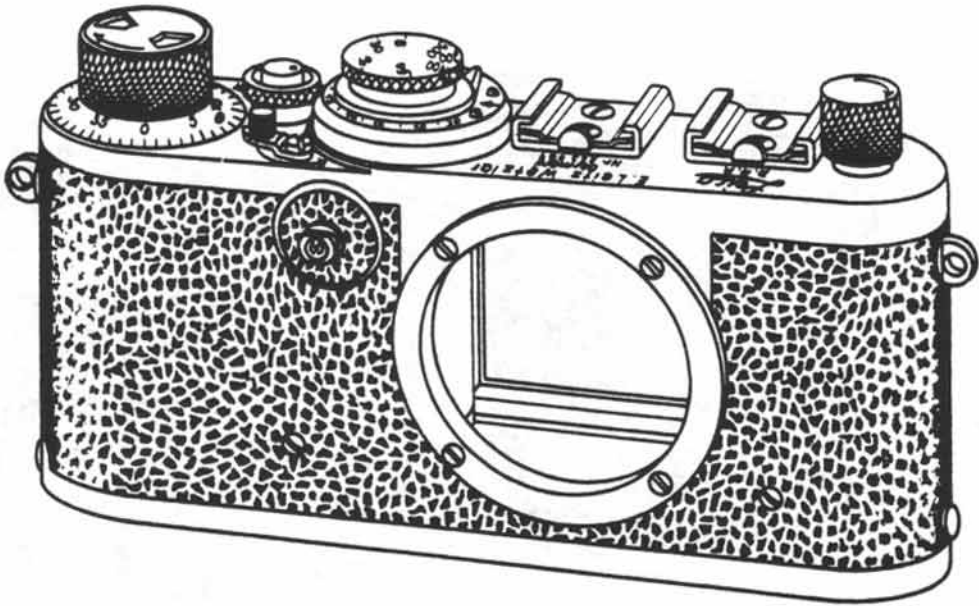
Notes

The spare parts lists for the Leica I f only contain those sheets which differ from the corresponding sheets for the Leica III f and II f.

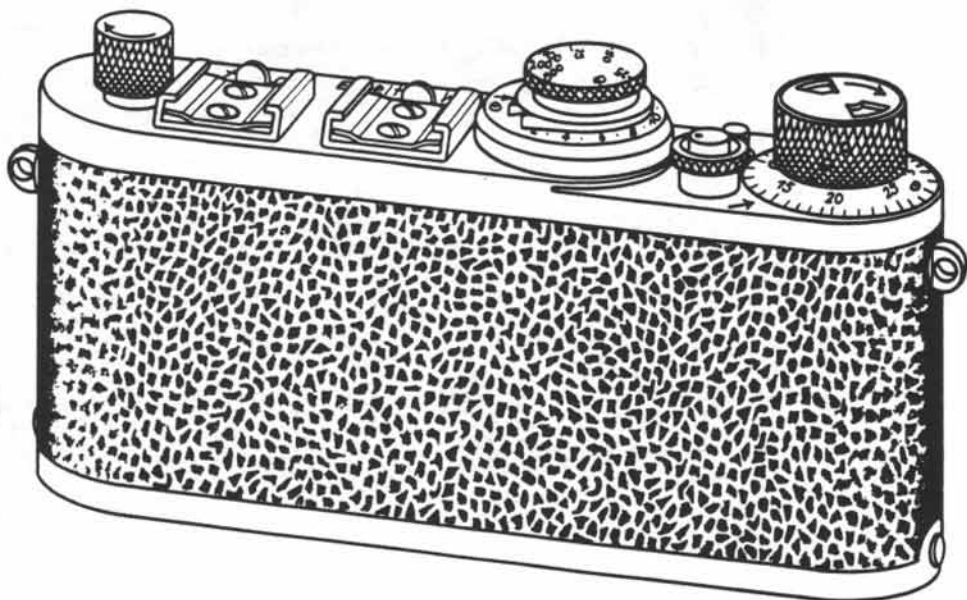
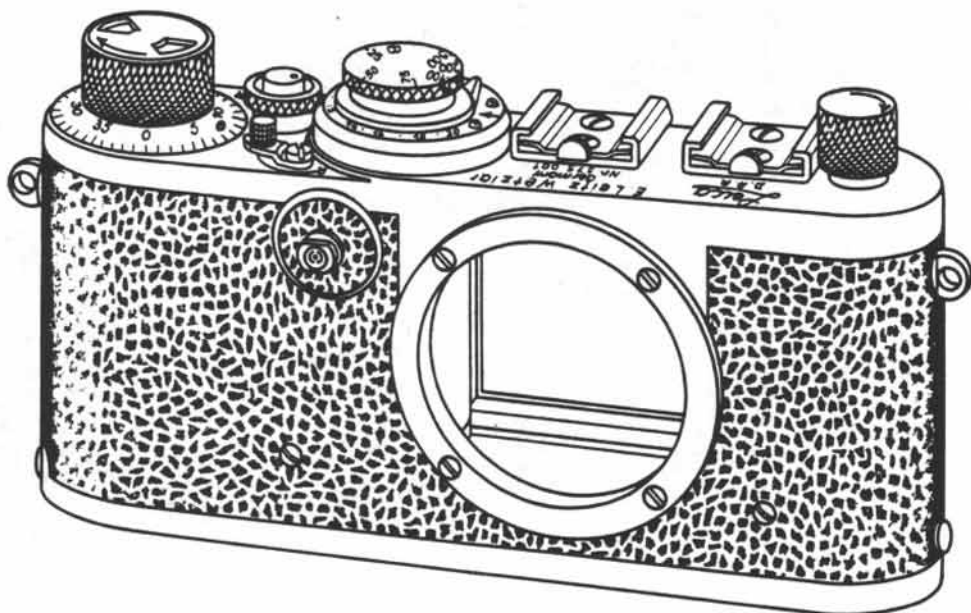
The part Nos. for the various designs of the escapement mechanisms and perforated setting discs for the Leica I f are listed on page 7. Those for the swinging shaft are listed on page 8, those for the front plate on page 15.

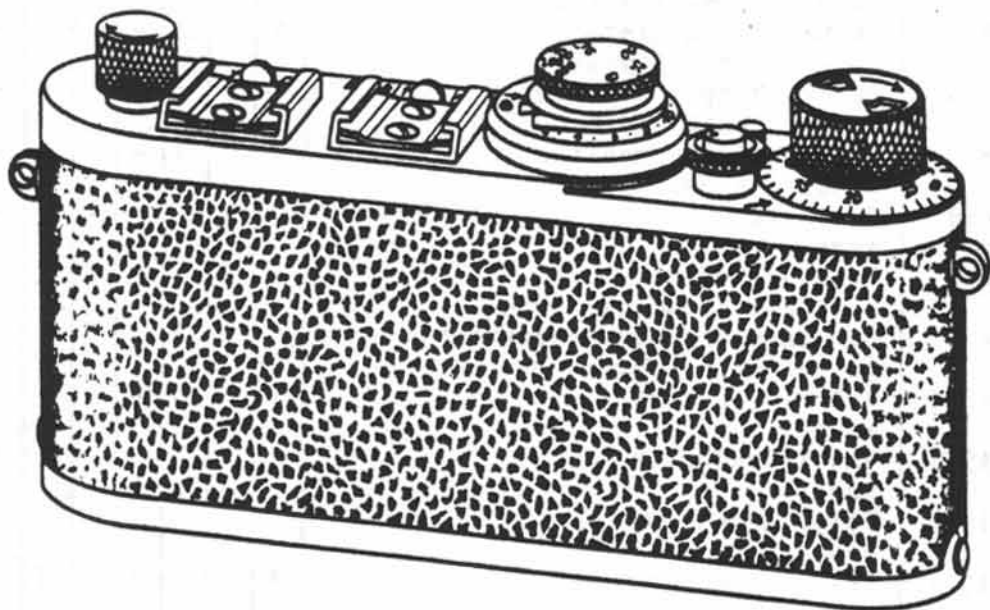
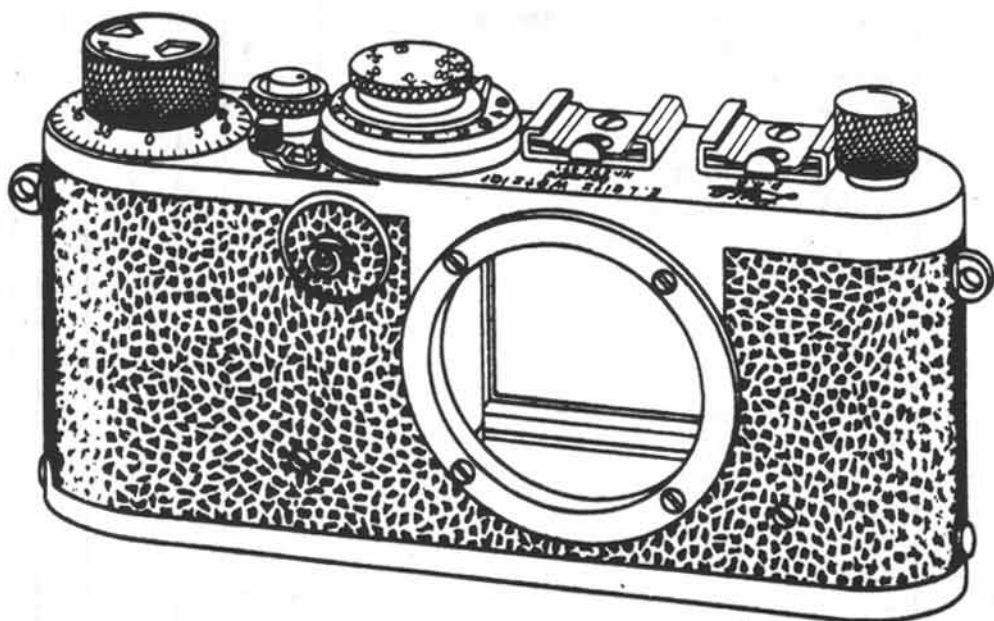
For notes on cleaning of individual components, lubricants, adhesives, and ordering of spare parts, see the introduction to the spare parts lists for the Leica III f.

Black dial

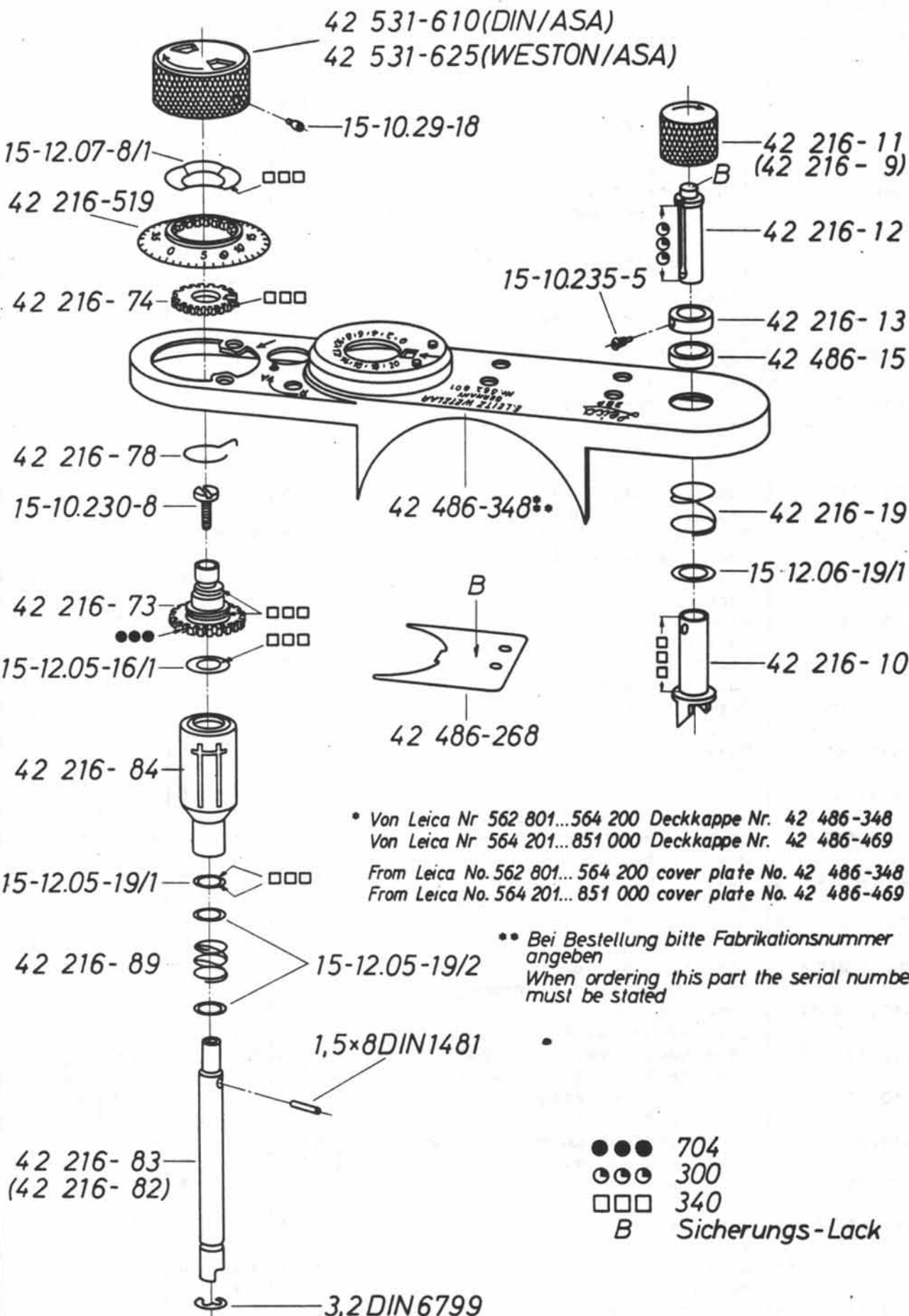


feed dial

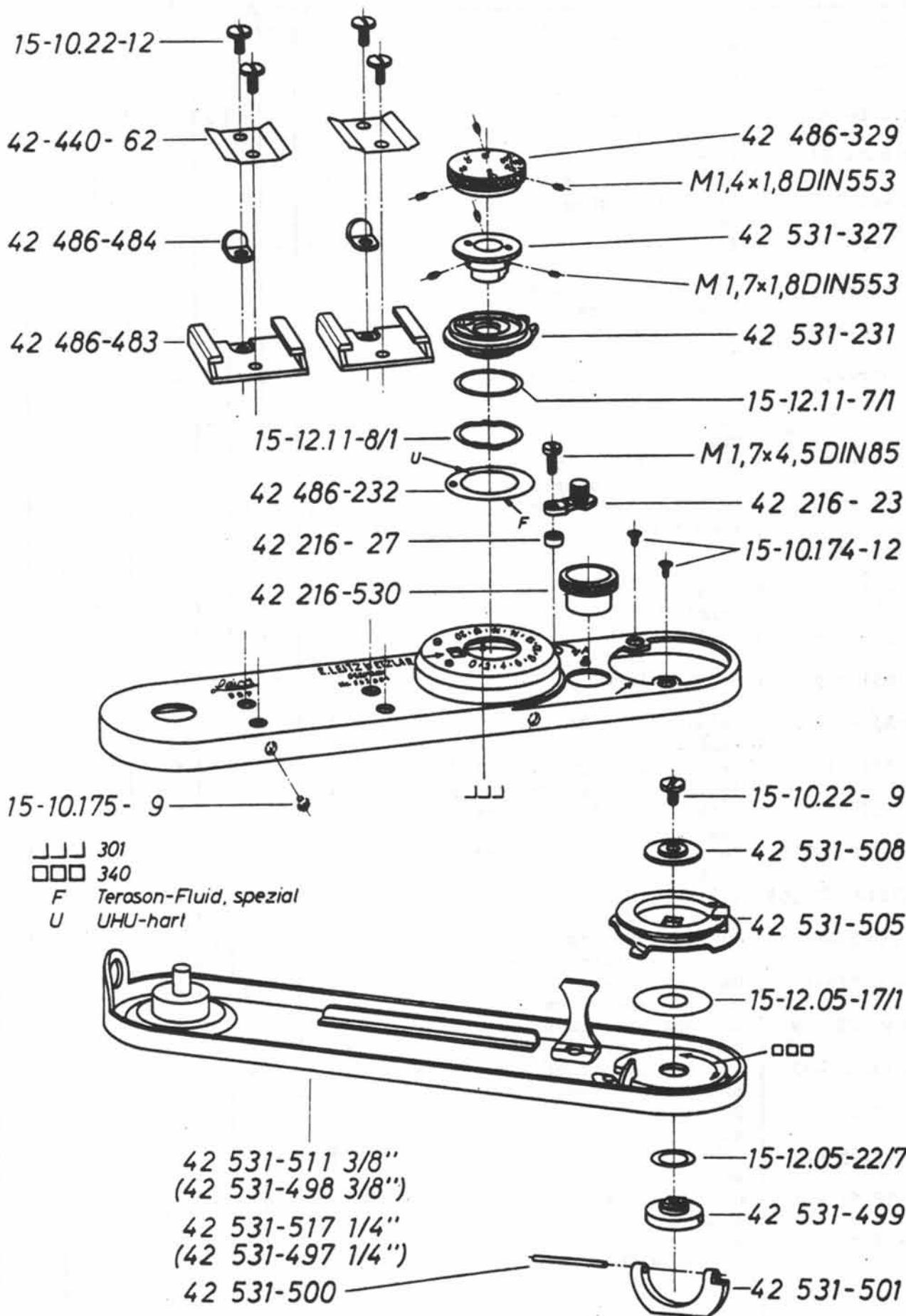




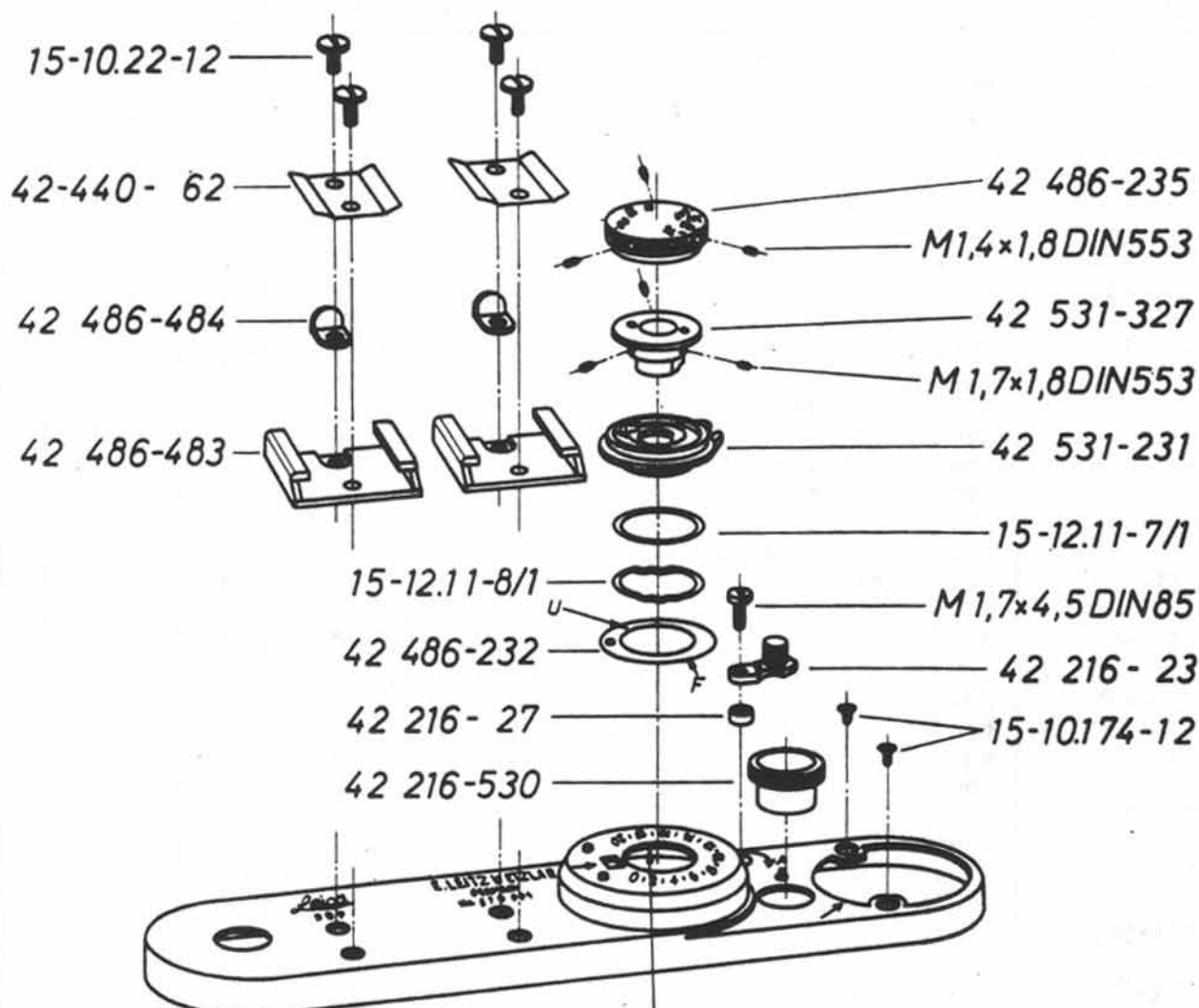
Bestell-Nr. Part-No	Benennung Description	Leica - Modell							
		If	IIf	III f	III g	Ig	III c	IIc	Ic
42 216- 9	Rückwicklung, kompl. rewind knob, compl.	1	1	1	-	-	1	1	1
42 216- 10	Spulenmitnehmer / rewind shaft	1	1	1	-	-	1	1	1
42 216- 11	Rückwickelknopf / rewind knob	1	1	1	-	-	1	1	1
42 216- 12	Führungsstift guide pin	1	1	1	-	-	1	1	1
42 216- 13	Hülse sleeve	1	1	1	-	-	1	1	1
42 216- 19	Friktionsfeder friction spring	1	1	1	1	1	1	1	1
42 216- 73	Aufzugsrad winding gear	1	1	1	-	-	1	1	1
42 216- 74	Zahnkranz gear ring	1	1	1	1	1	1	1	1
42 216- 78	Feder spring	1	1	1	1	1	1	1	1
42 216- 82	Aufzugsachse, komplett winding shaft, complete	1	1	1	-	-	1	1	1
42 216- 83	Aufzugsachse winding shaft	1	1	1	-	-	1	1	1
42 216- 84	Spulenhalter spool holder	1	1	1	-	-	1	1	1
42 216- 89	Friktionsfeder friction spring	1	1	1	-	-	1	1	1
42 216-519	Zähleinrichtung, montiert counting mechanism, ass.	1	1	1	1	1	1	1	1
42 486- 15	Hülse sleeve	1	-	-	-	-	-	-	1
42 486-268	Isolierplättchen insolation plate	1	-	-	-	-	-	-	-
42 486-348	Deckkappe, genietet cover plate, riveted	1	-	-	-	-	-	-	-
42 486-469	Deckkappe, genietet cover plate, riveted	1	-	-	-	-	-	-	-
42 531-610	Aufzugsknopf, montiert winding knob, ass.	1	1	1	-	-	-	-	-
42 531-625	Aufzugsknopf, montiert winding knob, ass.	1	1	1	-	-	-	-	-
15-10.29 -18	Schraube screw	1	1	1	-	-	-	-	-
15-10.230- 8	Zylinderschraube fillister head cap screw	1	1	1	1	1	1	1	1
15-10.235- 5	Führungsschraube, verchromt guide screw, chrome-plated	1	1	1	1	1	1	1	1
15-12.05-16/1	Unterlegscheibe washer	1	1	1	-	-	1	1	1
15-12.05-19/1	Unterlegscheibe washer	1	1	1	-	-	1	1	1
15-12.05-19/2	Unterlegscheibe washer	2	2	2	-	-	2	2	2
15-12.06-19/1	Unterlegscheibe washer	1	1	1	1	1	1	1	1
15-12.07- 8/1	Federscheibe spring washer	1	1	1	1	1	1	1	1
1,5 x 8 DIN 1481	Spannstift tensioning pin	1	1	1	1	1	1	1	1
3,2 DIN 6799	Sicherungsscheibe c. clip	1	1	1	-	-	1	1	1



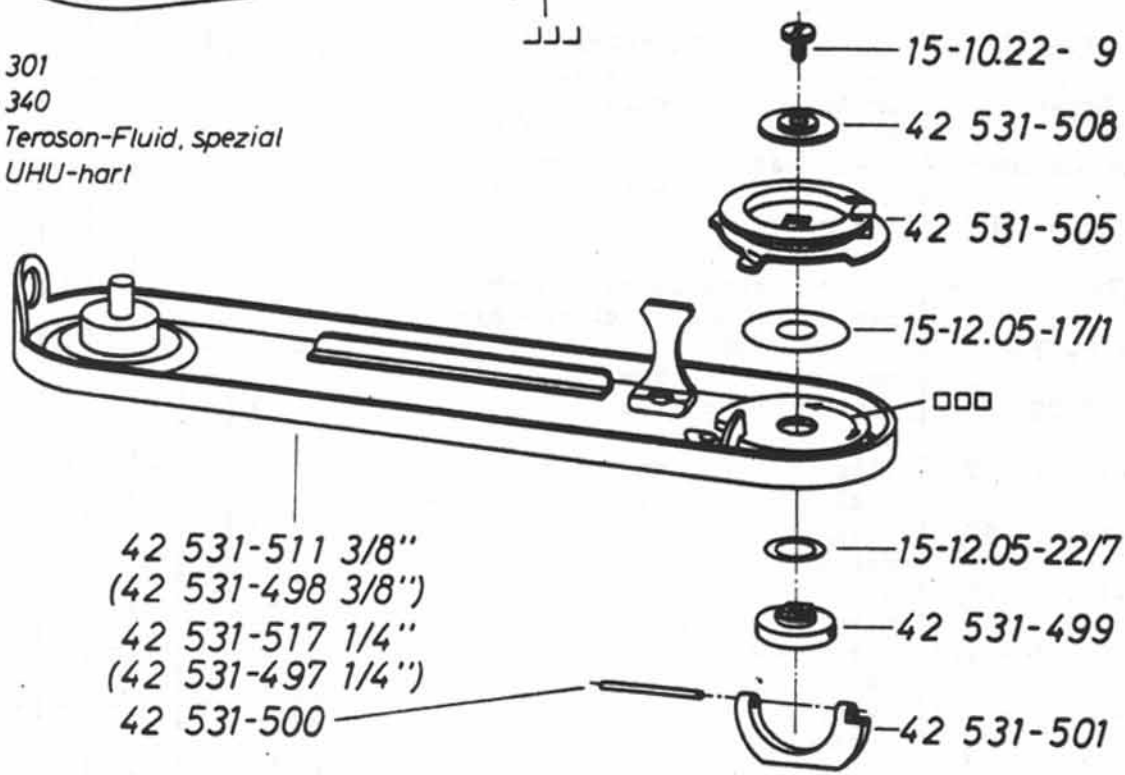
Bestell-Nr Part-No	Benennung Description	Leica - Modell							
		11	11f	11ff	11g	11g	11c	11c	11c
42 216- 23	Entkupplungshebel reversing lever	1	1	1	-	-	1	1	1
42 216- 27	Zwischenring intermediate ring	1	1	1	-	-	1	1	1
42 216-530	Schutzhülse release guard	1	1	1	-	-	1	1	1
42-440- 62	Klemmfeder pressure spring	2	-	-	-	-	-	-	2
42 486-232	Abdeckplättchen small plate	1	-	-	-	-	-	-	-
42 486-329	Zeitscheibe speed dial	1	1	-	-	-	-	-	-
42 486-483	Befestigungsklemme accessory shoe	2	-	-	-	-	-	-	2
42 486-484	Anschlagwinkel stop bracket	2	-	-	-	-	-	-	2
42 531-231	Einstellring, kompl. scale ring, compl.	1	1	1	-	-	-	-	-
42 531-327	Kurvenscheibe cam	1	1	1	-	-	-	-	-
42 531-497	Deckel, kompl. 1/4 " base plate, compl. 1/4 "	1	1	1	1	1	-	-	-
42 531-498	Deckel, kompl. 3/8 " base plate, compl. 3/8 "	1	1	1	1	1	-	-	-
42 531-499	Knebel toggle	1	1	1	1	1	1	1	1
42 531-500	Lagerbolzen bearing pin	1	1	1	1	1	1	1	1
42 531-501	Klappbügel folding bracket	1	1	1	1	1	1	1	1
42 531-505	Verriegelung lock	1	1	1	1	1	1	1	1
42 531-508	Unterlegscheibe washer	1	1	1	1	1	1	1	1
42 531-511	Deckel, punktgeschw. 3/8 " base plate, spot welded 3/8 "	1	1	1	1	1	-	-	-
42 531-517	Deckel, punktgeschw. 1/4 " base plate, spot welded 1/4 "	1	1	1	1	1	-	-	-
M1,4x1,8 DIN 553	Gewindestift, verchromt grub screw, chrome-plated	3	3	3	3	3	-	-	-
M1,7x1,8 DIN 553	Gewindestift grub screw	3	3	3	3	3	-	-	-
M1,7x4,5 DIN 85	Linsenkopfschraube, verchromt oval head screw, chrome-plated	1	1	1	-	-	1	1	1
15-10.174-12	Senkschraube countersunk screw	2	2	2	2	2	2	2	2
15-10.175- 9	Linsenschraube, verchromt oval head screw, chrome-plated	4	4	4	-	-	4	4	4
15-10.22 - 9	Linsenkopfschraube oval head screw	1	1	1	1	1	1	1	1
15-10.22 -12	Linsenkopfschraube, verchromt oval head screw, chrome-plated	4	-	-	-	-	-	-	4
15-12.05 -17/1	Scheibe washer	1	1	1	1	1	1	1	1
15-12.05 -22/7	Scheibe washer	1	1	1	1	1	1	1	1
15-12.11 - 7/1	Gleitscheibe washer	1	1	1	-	-	-	-	-
15-12.11 - 8/1	Federscheibe spring washer	1	1	1	-	-	-	-	-



Bestell-Nr Part-No	Bezeichnung Description	Leica - Modell									
		If	IIf	IIIIf	IIIf	Ig	IIf	IIIIf	IIIf	Io	
42 216 23	Entkupplungshebel reversing lever	1	1	1		-	1	1	1		
42 216- 27	Zwischenring intermediate ring	1	1	1	-	-	1	1	1		
42 216-530	Schutzhülse release guard	1	1	1	-	-	1	1	1		
42-440- 62	Klemmfeder pre sure spring	2	-			-	-	-	-	2	
42 486-232	Abdeckplättchen small plate	1	-				-	-	-		
42 486-235	Zeitscheibe speed dial	1	1			-	-	-			
42 486-483	Befestigungsklemme accessory shoe	2	-			-	-	-	-	2	
42 486-484	Anschlagwinkel stop bracket	2	-			-	-	-	-	2	
42 531-231	Einstellring, kompl. scale ring, compl.	1	1	1	-	-	-	-	-		
42 531-327	Kurvenscheibe cam	1	1	1	-	-	-	-	-		
42 531-497	Deckel, kompl. 1/4 " base plate, compl. 1/4 "	1	1	1	1	1	-	-	-		
42 531-498	Deckel, kompl. 3/8 " base plate, compl. 3/8 "	1	1	1	1	1	-	-	-		
42 531-499	Keibel toggle	1	1	1	1	1	1	1	1	1	
42 531-500	Lagerbolzen bearing pin	1	1	1	1	1	1	1	1	1	
42 531-501	Flappbügel folding bracket	1	1	1	1	1	1	1	1	1	
42 531-505	Verriegelung lock	1	1	1	1	1	1	1	1	1	
42 531-508	Unterlegscheibe washer	1	1	1	1	1	1	1	1	1	
42 531-511	Deckel, punktgeschw. 3/8 " base plate, spot welded 3/8 "	1	1	1	1	1	-	-	-		
42 531-517	Deckel, punktgeschw. 1/4 " base plate, spot welded 1/4 "	1	1	1	1	1	-	-	-		
M1,4x1,8 DIN 553	Gewindestift, verchromt grub screw, chrome-plated	3	3	3	3	3	-	-	-		
M1,7x1,8 DIN 553	Gewindestift grub screw	3	3	3	3	3	-	-	-		
M1,7x4,5 DIN 85	Linienkopfschraube, verchromt oval head screw, chrome-plated	1	1	1	-	-	1	1	1		
15-10.174-12	Senkschraube countersunk screw	2	2	2	2	2	2	2	2		
15-10.22 - 9	Linienkopfschraube oval head screw	1	1	1	1	1	1	1	1		
15-10.22 -12	Linienkopfschraube, verchromt oval head screw, chrome-plated	4	-	-	-	-	-	-	-	4	
15-12.05 -17/1	Scheibe washer	1	1	1	1	1	1	1	1		
15-12.05 -22/7	Scheibe washer	1	1	1	1	1	1	1	1		
15-12.11 - 7/1	Gleitscheibe washer	1	1	1	-	-	-	-	-		
15-12.11 - 8/1	Federscheibe spring washer	1	1	1	-	-	-	-	-		



JJJ 301
 □□□ 340
 F Terason-Fluid, spezial
 U UHU-hart



Bestell-Nr Part-No	Benennung Description	Leica - Modell								
		If	If	III	III	Ig	Ig	IIc	IIIc	Ic
42 216- 23	Entkupplungshebel reversing lever	1	1	1	-	-	1	1	1	
42 216- 27	Zwischenring intermediate ring	1	1	1	-	-	1	1	1	
42 216-530	Schutzhülse release guard	1	1	1	-	-	1	1	1	
42-440- 62	Klemmfeder pressure spring	2	-	-	-	-	-	-	2	
42 486-232	Abdeckplättchen small plate	1	-	-	-	-	-	-	-	
42 486-326	Zeitscheibe speed dial	1	1	-	-	-	-	-	-	
42 486-483	Befestigungsklemme accessory shoe	2	-	-	-	-	-	-	2	
42 486-484	Anschlagwinkel stop bracket	2	-	-	-	-	-	-	2	
42 531-231	Einstellring, kompl. scale ring, compl.	1	1	1	-	-	-	-	-	
42 531-327	Kurvenscheibe cam	1	1	1	-	-	-	-	-	
42 531-497	Deckel, kompl. 1/4 " base plate, compl. 1/4 "	1	1	1	1	1	-	-	-	
42 531-498	Deckel, kompl. 3/8 " base plate, compl. 3/8 "	1	1	1	1	1	-	-	-	
42 531-499	Knebel toggle	1	1	1	1	1	1	1	1	
42 531-500	Lagerbolzen bearing pin	1	1	1	1	1	1	1	1	
42 531-501	Klappbügel folding bracket	1	1	1	1	1	1	1	1	
42 531-505	Verriegelung lock	1	1	1	1	1	1	1	1	
42 531-508	Unterlegscheibe washer	1	1	1	1	1	1	1	1	
42 531-511	Deckel, punktgeschw. 3/8 " base plate, spot welded 3/8 "	1	1	1	1	1	-	-	-	
42 531-517	Deckel, punktgeschw. 1/4 " base plate, spot welded 1/4 "	1	1	1	1	1	-	-	-	
M1,4x1,8 DIN 553	Gewindestift, verchromt grub screw, chrome-plated	3	3	3	3	3	-	-	-	
M1,7x1,8 DIN 553	Gewindestift grub screw	3	3	3	3	3	-	-	-	
M1,7x4,5 DIN 85	Linsenkopfschraube, verchromt oval head screw, chrome-plated	1	1	1	-	-	1	1	1	
15-10.174-12	Senkschraube countersunk screw	2	2	2	2	2	2	2	2	
15-10.22 - 9	Linsenkopfschraube oval head screw	1	1	1	1	1	1	1	1	
15-10.22 -12	Linsenkopfschraube, verchromt oval head screw, chrome-plated	4	-	-	-	-	-	-	4	
15-12.05 -17/1	Scheibe washer	1	1	1	1	1	1	1	1	
15-12.05 -22/7	Scheibe washer	1	1	1	1	1	1	1	1	
15-12.11 - 7/1	Gleitscheibe washer	1	1	1	-	-	-	-	-	
15-12.11 - 8/1	Federscheibe spring washer	1	1	1	-	-	-	-	-	

15-10.22-12

42-440-62

42 486-484

42 486-483

15-12.11-8/1

42 486-232

42 216-27

42 216-530

42 486-326

M1,4x1,8 DIN553

42 531-327

M1,7x1,8 DIN553

42 531-231

15-12.11-7/1

M1,7x4,5 DIN85

42 216-23

15-10.174-12

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□□□ 340

F Teroson-Fluid, spezial

U UHU-hart

15-10.22-9

42 531-508

42 531-505

15-12.05-17/1

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42 531-511 3/8"
(42 531-498 3/8")

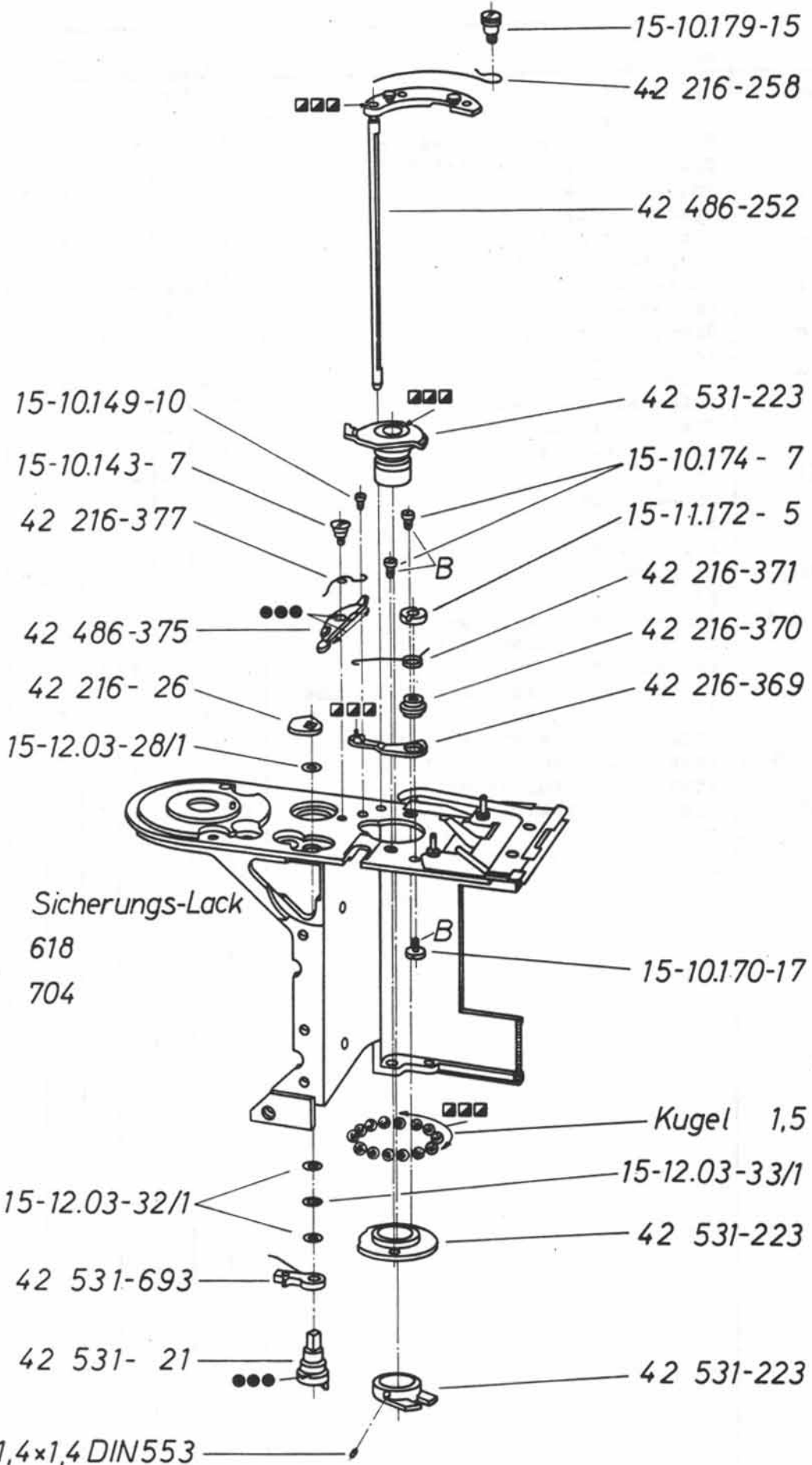
42 531-517 1/4"
(42 531-497 1/4")

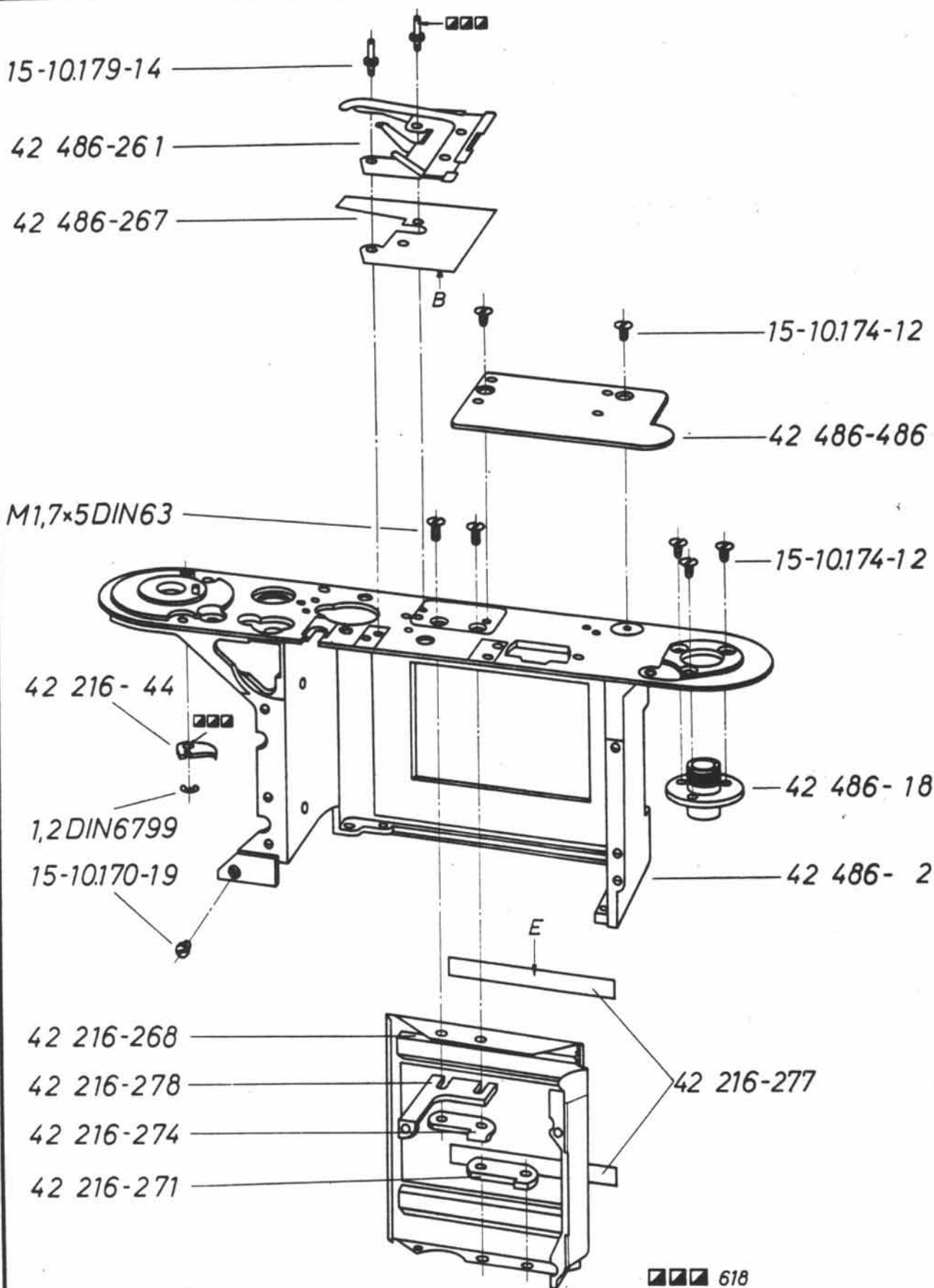
42 531-500

15-12.05-22/7

42 531-499

42 531-501





▣▣▣ 618

B Sicherungslack

E Kleber EC 880