

Service Information

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Ausgabe / edition			Ausgabe / edition		
A 01		20. Feb. 1997	A 01		07.Oct.1994
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A 3.1		-	A 3.1		-
A 4.1		-	A 4.1		-
B 01		20. Feb. 1997	B 01		07.Oct.1994
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B 1.2	20. Feb. 1997	20. Feb. 1997			
B 3.1		20. Feb. 1997	B 3.1		07.Oct.1994
B 4.2	20. Feb. 1997	20. Feb. 1997			
B 4.3	20. Feb. 1997	20. Feb. 1997			
B 11.1		20. Feb. 1997	B 11.1		07.Oct.1994
B 17.1	20. Feb. 1997	20. Feb. 1997			
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D 01		20. Feb. 1997			
D 1.1		20. Feb. 1997			
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D 3.1		20. Feb. 1997			
D 4.1		20. Feb. 1997			
D 5.1		20. Feb. 1997			
G 1.1		20. Feb. 1997			
H 1.2	20. Feb. 1997				
H 1.3	20. Feb. 1997				
			H 2.1	07.Oct.1994	

Änderungszustand / Revision No. 02

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Ausgabe / edition			Ausgabe / edition		
A 01		15. Mai. 1997	A 01		20. Feb. 1997
A 02		15. Mai. 1997			
B 4.2		15. Mai. 1997	B 4.2		20. Feb. 1997
B 4.3		15. Mai. 1997	B 4.3		20. Feb. 1997
B 5.1		15. Mai. 1997	B 5.1		20. Feb. 1997
B 6.1		15. Mai. 1997	B 6.1		20. Feb. 1997

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B 01		15. Jun. 1998	B 01		20. Feb. 1997
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Änderungszustand / Revision No. 05

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Ausgabe / edition			Ausgabe / edition		
A 01		04. Jan. 1999	A 01		15. Jun. 1998
A 02		04. Jan. 1999	A 02		20. Feb. 1997
A 03		04. Jan. 1999	A 02		15. May. 1997
A 04		04. Jan. 1999	A 02		06. Aug. 1997
A 05		04. Jan. 1999	A 02		15. Jun. 1998
A 06		04. Jan. 1999			
K 1.1		04. Jan. 1999			
K 2.1		04. Jan. 1999			
K 3.1		04. Jan. 1999			
K 4.1		04. Jan. 1999			
K 5.1		04. Jan. 1999			
K 6.1		04. Jan. 1999			
K 7.1		04. Jan. 1999			

The information in this manual is subject to change without notice.

This manual and its descriptions of functions, data and illustrations are intended to help the user understand the instrument and its use, but imply no claim to accuracy or completeness in detail.

No claim of any kind shall be admissible on the grounds of anything contained in this manual or omitted therefrom.

Exclusion of liability for consequential damage

Leica Mikroskopie und Systeme GmbH hereby expressly excludes the admissibility of any claim for damages or compensation on the grounds of injury, loss, or damage that may arise from the use of the present manual, or from the failure or inability - for whatever reason - to use or understand it properly. This exclusion applies without limitation even if the user or its representative or agent has notified Leica Mikroskopie und Systeme GmbH of the risk or likelihood of such damage, and shall include any claims for damages and/or compensation for loss of profits, operational shutdown, or other financial loss.

Only properly trained, skilled specialist personnel are authorized to serve or repair the open instrument and/or its live components, or perform other work thereon.

The mere possession and/or use of this manual does not convey any qualification upon its user as an authorized, properly trained, skilled specialist. Such qualifications are obtainable only by attendance at and successful completion of service-training courses organized by Leica Mikroskopie und Systeme GmbH. This manual forms part of the basic documentation issued for and used in such courses.

The chapters of the service manual presented in this folder are marked with an **[x]** in the table of contents A 01.

All indications of pages consist of a capital letter stating the chapter according to the table of contents A 01 and a number.

The pages are numbered as follows (e.g. 1.1 or 1.2): the number before the dot is the number of the page. Pages with the number 1 behind the dot deal with the basic state of the instrument, component group or procedure concerned. In case of constructive or production alterations a supplementary page will be prepared which will have the next following number behind the dot.

The alterations have been marked on the illustration pages by providing the part number with one or two little lines:

One line underneath the number:

25 Part has been modified,
can be installed into old instruments.

One line on top of the number:

25 Part has been modified,
cannot be installed into old instruments.
(see chapter "Modification instructions")

One line each underneath and on top of the number:

25 Part has been added.
can be also installed into old instruments.
(see chapter "Modification instructions")

One line each beside the number:

[25] Part has been added,
cannot be installed into old instruments.

An individual parts list is belonging to every illustrated page. On the illustrated page the spare parts are marked with numbers, which correspond to those listed in the 1. column of the parts list. Numbers in brackets mark the component group. Numbers in a circle mark a superior component group (instrument or sales article).

Electrical components are marked with a code according to the circuit diagram in the column "Remarks".

The spare parts list includes the part numbers and part names needed in case of a spare parts order and the required quantity per illustrated page.

If several part numbers are listed underneath an illustration number, pay attention to the differences in the columns "Description" or "Remarks".

A little star * behind a number listed in the 1. column of the parts list means that this part is not presented on the illustrated page or that it is not marked with a number.

In most cases you will find the encoded information on the quality of the standard parts' surface in the 7. to 9. number of the part number. When the colours of the instruments or components are different a corresponding surface quality of the parts to be delivered cannot be guaranteed.

In the column "Remarks" letters and numbers give information on:

Component groups
Membership of component groups
Manufacturing states
Possibilities of replacement
Availability
Orders

The letters have got the following meaning:

- a = from serial number ...
= from state of manufacture ...
= from date/year of manufacture ...
- b = up to serial number ...
= up to state of manufacture ...
= up to date/year of manufacture ...
- E = Replacement for current no. ...
- f = is required for current no. ...
- G = Component group
= this article consists of several parts.
The next following numbers indicate the items (current no. or page no. and current no. of the illustrated page) belonging to this component group.
- i = included in current no. ...
- k = to complete this item current number (s) ...is (are) ...required
- m = to be assembled with current no. ...
- N = no longer available
- NE = no longer available, replacement see current no. ...
- o = but without current no. ...
= this part number does not include the items...
- S = part with the serial number engraved
= part with special engraving
Ordering these parts the serial number or special engraving must be indicated.
The defective engraved part must be enclosed with the order.

- U = the current number(s) is (are) to be replaced with this part
- V = Sales article
The 6-digit part number must be used as long as it is included in the "List of outfits"
- w = by choice - as required
- \$ = electr. component, can be found on the illustrated page underneath the electrical code

The Service Manual describes and illustrates assembly, adjustment, repair and modification procedures. The listed tools can be obtained from the Technical Service.

Those code numbers with an oblique stroke in between are no part numbers. They only serve to help in finding the said part within the spare parts list.

Please note that
before the stroke / behind the stroke
the number of page. the number of illustration.

for example B 1.1/5

is indicated. This example means that the component concerned can be found on page B 1.1, current no. 5.

Individual parts and sub-groups have to be cleaned with unleaded petrol, if possible outside the housing. Lacquered parts and such ones with coloured engraving mustn't be cleaned wet, but only with a dry smooth leather or a brush. Dirty external surfaces with structured enamel finished may be cleaned with an oily rag and rubbed dry.

Parts made of glass and rubber mustn't come into contact with petrol, oil or lubricants.

Such points to be provided with lubricants or adhesive are marked with numbers (311) or letters. These auxiliaries are obtainable from the Technical Service. Any other auxiliaries are not allowed as they do not guarantee a faultless function. The parts to be lubricated must be clean and dry.

Please note that a lot of lubricants do not harmonize with several plastic materials that is to say that they possibly dissolve them or cause their swelling. The lubricants should come into contact with the marked surfaces only. Components to be provided with adhesives have to be free of lubricant. Residual adhesive has to be removed with thinner.

Spare part order

Spare parts have to be ordered by the customer's number and the kind of shipment you prefer. Orders are accepted at department TS-Logistik (Fax no ++49 6441 29 2853). You will find the names and part numbers of the part to be ordered in the spare parts list.

In case of orders for articles that are delivered by the metre, 1 piece means 1 metre.

Let us have a special notice if you do not want a part-delivery. In case of any checkbacks with regard to spare parts orders please refer to the TS-order number and the date of the order concerned.

Sales articles (see "List of outfits") must be ordered only for exchange with the Technical Service Division.

We are not obliged to supply you with all parts and component groups included in the spare parts list. In case of orders for parts that are not available, we reserve the right to deliver such parts that include or replace the one you have ordered. In this case the label on the part and the invoice and/or listing will inform you accordingly.

Safety hints

Before you open the instrument pull off the mains plug and/or disconnect the unit from the mains. If a repair, an adjustment or a maintenance procedure of the open instrument is unavoidable these procedure should only be performed by experts who are familiar with possible dangers.

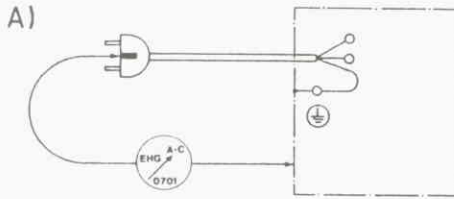
If a harmless operation of the instrument can no longer be ensured, it has to be switched off and secured against unintended starting.

As a matter of principle the national and international safety rules have to be observed.

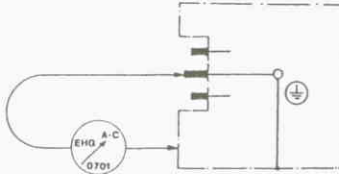
Remark: Even when the instrument has already been switched off, some internal parts, such as capacitors, might be still current-carrying.

Safety hints

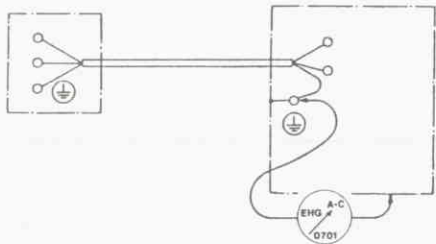
- 1.) After the repair and/or maintenance the instrument must be in accordance with those safety regulations that were in force at the time of the instrument's delivery.
- 2.) In case of maintenance that could be possibly performed by the customer himself, please observe the hints given in the operating instructions.
- 3.) All electronic equipment is subject to safety regulations in accordance with IEC 1010-1 / EN 61010-1 (Safety regulations for electronic surveying and controlling instruments).
Lamps with high-pressure bulbs are subject to IEC 598-1 / EN 60598-1.
- 4.) As a matter of principle all parts, such as transformers, anti-interference filters, which do have direct contact with mains voltage have to be checked after the repair of the instrument and/or exchange of parts.
 - A) Check of the earth conductor connection $\leq 0,3 \Omega$ (with mains cable)
 - B) Measurement of the insulating resistance $R_{isol} \geq 10 M\Omega$
 - C) Measurement of the leakage current:
 $I_{max} = 3,5 mA$ fortified instruments
 $I_{max} = 0,75 mA$ movable instruments
- 5.) For these checks use appropriate testing tools such as EHG-tester VDE 0701.
- 6.) Whenever you carry out leakage current measurement by means of EHG-Tester in accordance with VDE 0701 (B.)
 - a) the current will be higher than in case of measured as test value B, which is caused by the paralleling of the two feeders. Therefore the maximum values for every instrument have to be stipulated.During the measurement the instrument to be tested has to be switched on. Mains connectors have to be bridged.
- 7.) In case of repairs inside circuits (such as the exchange of IC's) carrying signal- or low voltage = 42V, the afore-said tests are unnecessary if all safety regulations have been observed.
- 8.) Anyway, correctly connect the earth conductor connections (green/yellow) and/or put toothed washers underneath the screws when you screw up the parts. If you are not sure, check by means of an appropriate testing instrument!
Moreover do not forget to re-establish all potential compensating lines.
- 9.) Caution !
To prevent malfunctions and/or electrical interference, systems installed or assembled by the user/operator must not exceed the limits specified for class B equipment in the DIN 57871 and VDE 0871 standards.



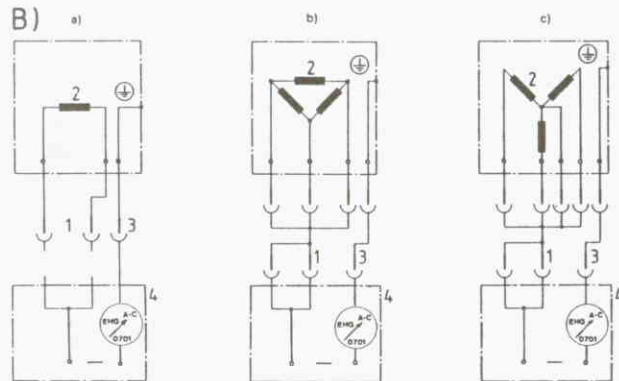
Measurement of the earthed conductor-resistance of instruments with the mains connection cable fixed ($\leq 0.3 \Omega$).



Measurement of the earthed conductor-resistance of instruments with detachable mains connection cable ($\leq 0.2 \Omega$).

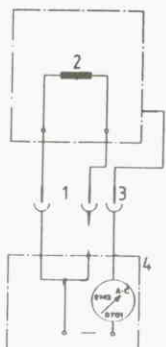


Measurement of the earthed conductor resistance of instruments permanently connected ($\leq 0.2 \Omega$).



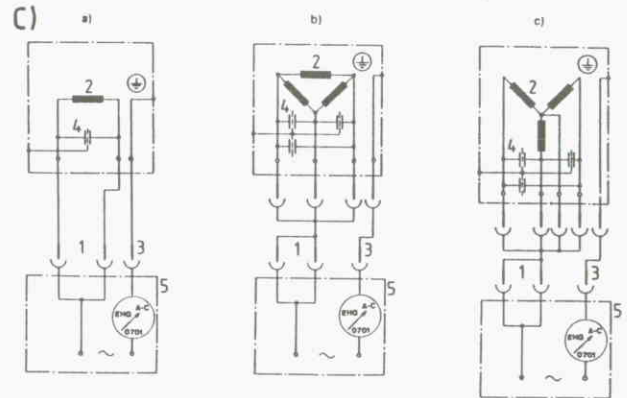
- 1 Connection between surveying instrument and the instrument to be checked.
- 2 Internal circuit.
- 3 Connection between surveying instrument and the earthed conductor connection and/or the touchable metal parts
- 4 EHG instrument

Measurement of the insulating resistance; protection category I.



- 1 Connection between surveying instrument and the instrument to be checked.
- 2 Internal circuit.
- 3 Connection between surveying instrument and touchable metal parts.
- 4 EHG-instrument.

Measurement of the insulating resistance; protection category II and III.



- 1 Connection between surveying instrument and the instrument to be checked.
- 2 Internal circuit.
- 3 Connection between surveying instrument and the earthed conductor connection and/or the touchable metal parts.
- 4 Capacitor
- 5 EHG-instrument

Measurement of the leakage-current

How to prevent components from being destroyed by electrostatic charge:

In case of repair please observe the following instructions.

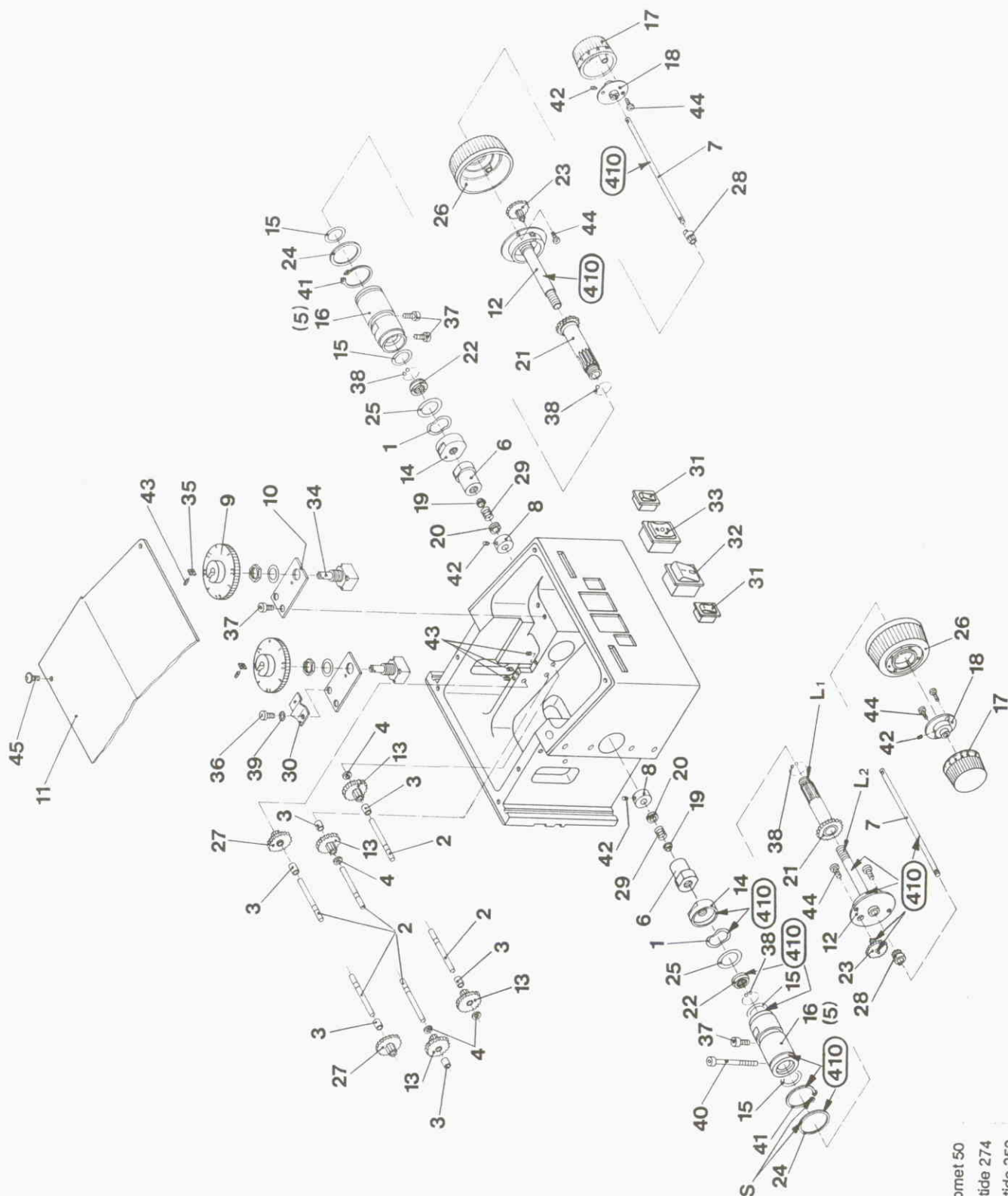
- 1.) Working with components or component groups sensitive to electrostatic charge is only advisable at a workshop place, particularly intended for that purpose. It must be equipped with

- a) a grounded, conductive table coating.
- b) an armlet connected to the table coating.

The pre-resistance of the connection cable between table and ground should be 200kΩ to 1MΩ.

- 2.) Before you start working switch off the instrument and/or pull off the mains plug.
- 3.) Do only insert and/or solder IC's with the armlet put on and the soldering iron grounded.
- 4.) Exclusively use conductive, antistatic special packings with clear markings to pack up spare parts and components after repair and check.

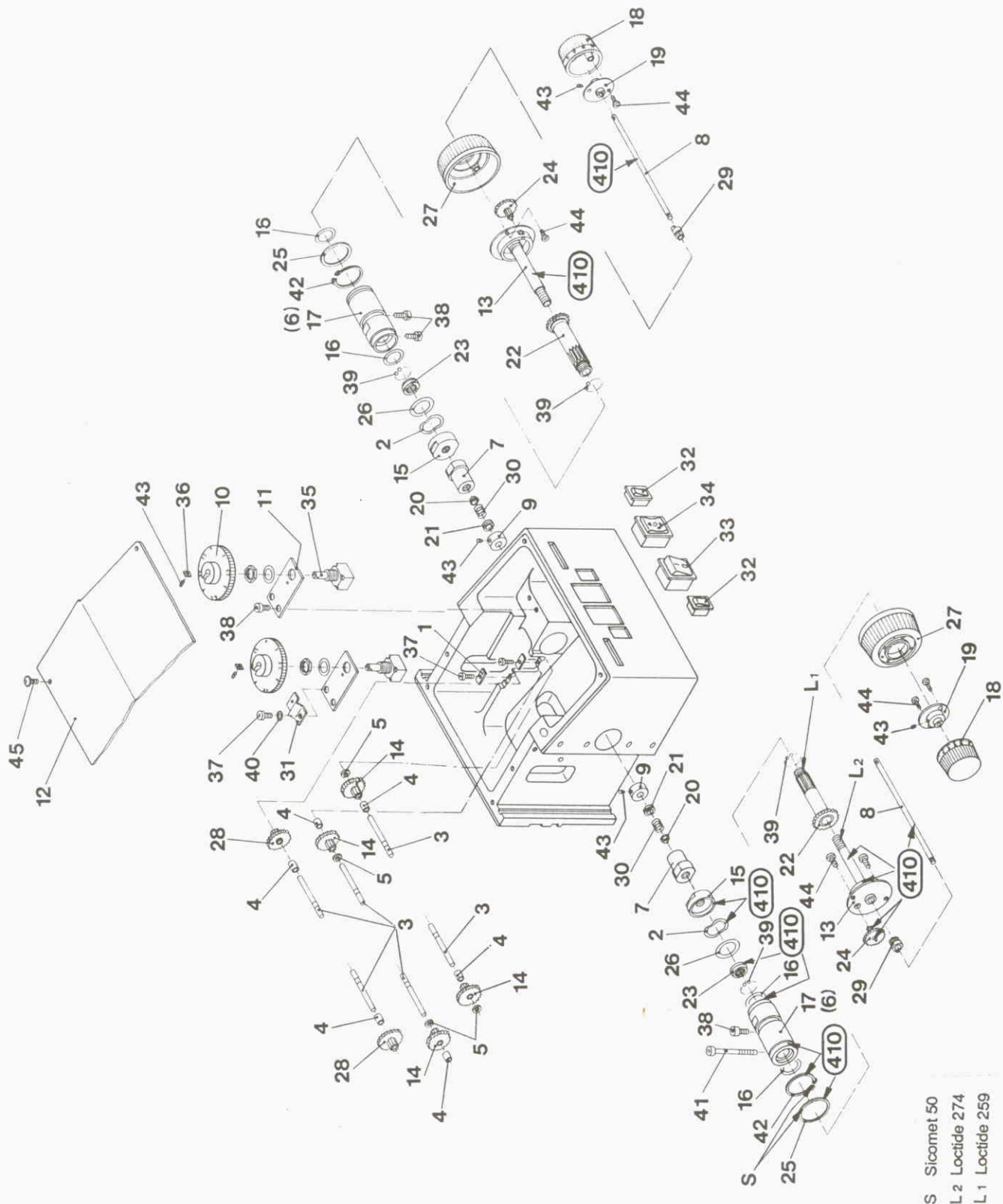
Benennung Name	Kapitel / Abschnitt Chapter / Section	Seitenanzahl Page amount
Grundstativ/Z-Trieb stand mot/z-drive	B 1.1	3
Grundstativ/Führungen stand mot/guide	B 2.1	3
Grundstativ/Säule mit Motor stand mot/column wiht motor	B 3.1	3
Bodenplatte (elektrisch) base plate (electroic)	B 4.1 B 4.2 B 4.3	2 2 2
Kreuztisch rechts mechanical stage right	B 5.1	3
Kreuztisch links mechanical stage left	B 6.1	3
Vergleichsbrücke comparison device	B 7.1	4
Durchlichtbeleuchtung comparison device	B 8.1	2
Kugeltische ball stage	B 9.1	2
Drehtisch rotating stage	B 10.1	2
Objektiv Makrozoom macrozoom objectiv	B 11.1	2
Auflichtbeleuchtung incident light illuminator	B 12.1	4
Lampenhaus lamp housing	B 13.1	3
Zubehör accessory	B 14.1	3
Zubehör accessory	B 15.1	2
Zubehör accessory	B 16.1	3
Rast-Vorrichtung clickstop devices	B 17.1 B 17.2	2 2
Tubus C 3T 20 tube C 3T 20	B 18.1	3
Augenweiteneinstellung HC interpupillary adjustment HC	B 19.1	2



S Sicomat 50
L₂ Loctide 274
L₁ Loctide 259

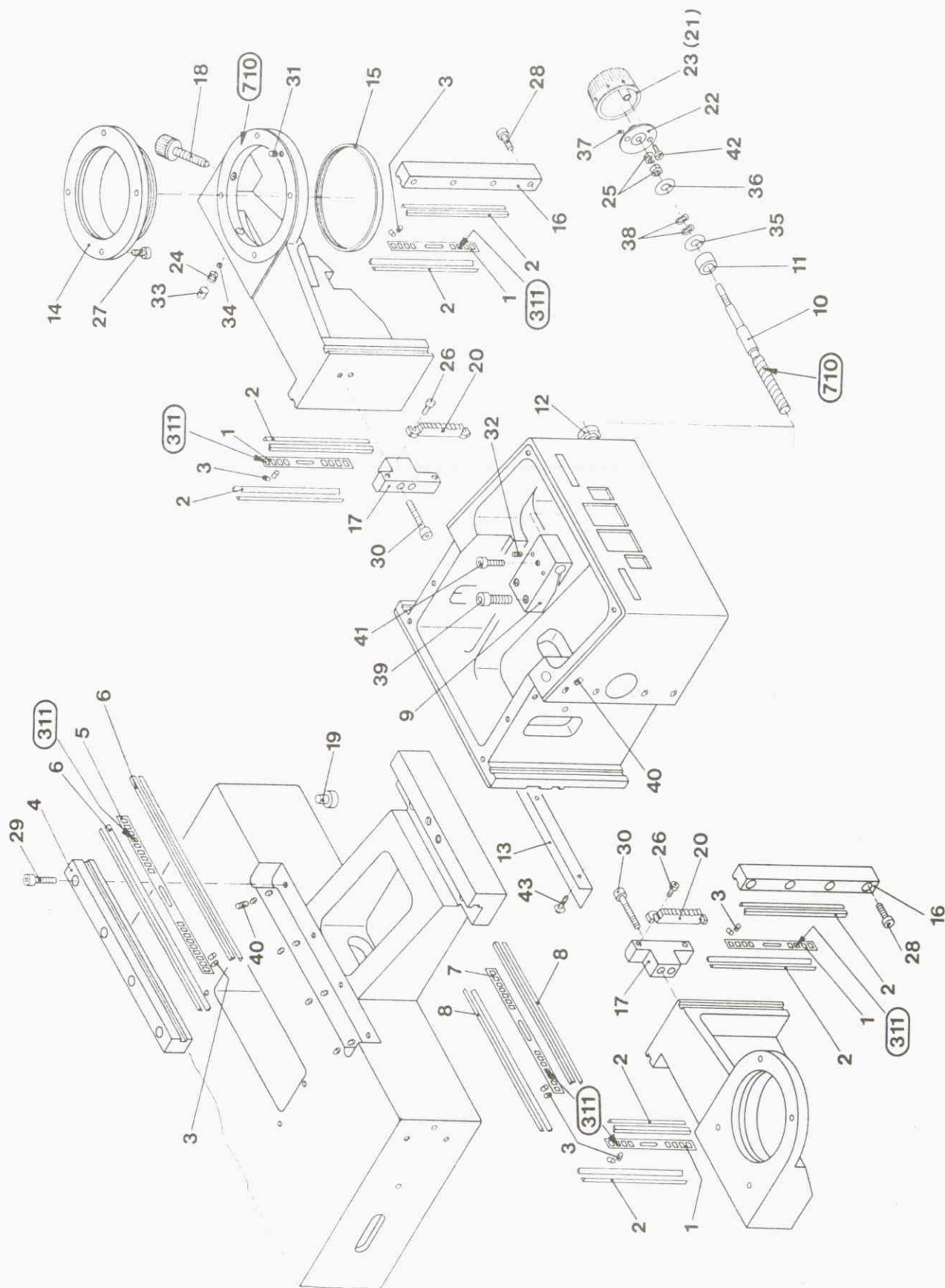
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-444.010-136	2	Wellenfeder sinous spring	ressort sinueux muelle de onda	
2	020-462.001-070	6	Achse axis	axe eje	
3	020-462.001-071	6	Hülse,lang sleeve	douille vaina	
4	020-462.001-072	6	Hülse,kurz sleeve	douille vaina	
5	020-462.001-073	2	Getriebe gearing	engrenage mecanismo	G 1,6...8,12,14...17,19...26, 28,29,38,41,42,44
6	020-462.001-074	2	Zwischenstück spacer	pi'ece intermediaire pieza intermedia	
7	020-462.001-075	2	Achse axis	axe eje	
8	020-462.001-076	2	Flansch flange	bride- brida	
9	020-462.001-077	2	Rad gear	roue rueda	
10	020-462.001-078	2	Aufnahme mount	monture montura	
11	020-462.001-079	1	Deckel cover	couvercle tapa	
12	020-505.801-005	2	Welle shaft	arbre arbol	G
13	020-507.010-021	4	Zwischenrad intermediate gear	roue intermediaire rueda intermedia	
14	020-507.010-025	2	Kappe cap	couvercle capa	
15	020-507.010-027	4	Scheibe washer	rondelle arandela	
16	020-507.010-028	2	Lager bearing	coussinet cojinete	
17	020-507.010-034	2	Triebknopf,klein control knob	bouton de commande boton de mando	G
18	020-507.010-035	2	Zwischenring spacer	bague intermediaire anillo intermedio	
19	020-507.010-043	2	Buchse bushing	douille casquillo	
20	020-507.010-044	2	Gewinding threaded ring	bague filetee anillo con rosca	
21	020-580.010-037	2	Zahntrieb rack and pinion	pignon et cremail'ere pinon y cremallera	
22	020-580.010-040	2	Lagerring bearing ring	bague coussinet anillo de apoyo	
23	020-580.010-043	2	Zahnrad mit Ritzel gear	roue dentee rueda dentada	G
24	020-580.010-048	2	Scheibe mit Nocken washer	rondelle arandela	
25	020-580.010-049	2	Scheibe washer	rondelle arandela	
26	020-580.010-052	2	Triebknopf,groß control knob	bouton de commande boton de mando	
27	020-580.010-053	2	Zwischenrad intermediate gear	roue intermediaire rueda intermedia	
28	020-580.010-064	2	Zahnrad 1 gear	roue dentee rueda dentada	
29	032-154.014-051	2	Druckfeder pressure spring	ressort de pression muelle de compresion	
30	302-021.056-005	1	Schelle clip	bride de serrage abrazadera	

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
31	302-023.150-005	2	Umschalter toggle switch	commutateur conmutador	
32	302-023.150-031	1	Schalter switch	interrupteur interruptor	
33	302-023.150-032	1	Taster push button	palpeur palpador	
34	303-099.208-004	2	Widerstand resistor	resistance resistencia	R1/R2 1k-Lin.
35	702-752.630-000	2	Mutter nut	ecrou tuerca	DIN 562 M3
36	703-109.630-000	2	Schraube screw	vis tornillo	DIN 912 M 3x10
37	703-123.630-000	7	Schraube screw	vis tornillo	DIN 912 M 4x10
38	704-617.000-000	60	Kugel ball	bille bola	DIN 5401 3mmIII
39	704-741.220-000	2	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 3,2
40	705-712.630-000	1	Schraube screw	vis tornillo	DIN 912 M 4x50
41	707-212.163-000	2	Sicherungsring safety ring	anneau de securite anillo de seguridad	DIN 471 25x1,2
42	707-516.630-000	3	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 916 M3x5
43	707-516.630-000	8	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 916 M3x5
44	709-968.630-000	6	Schraube screw	vis tornillo	LN 12080 3x9,5
45	710-246.630-000	4	Schraube screw	vis tornillo	LN 12027 M3x6



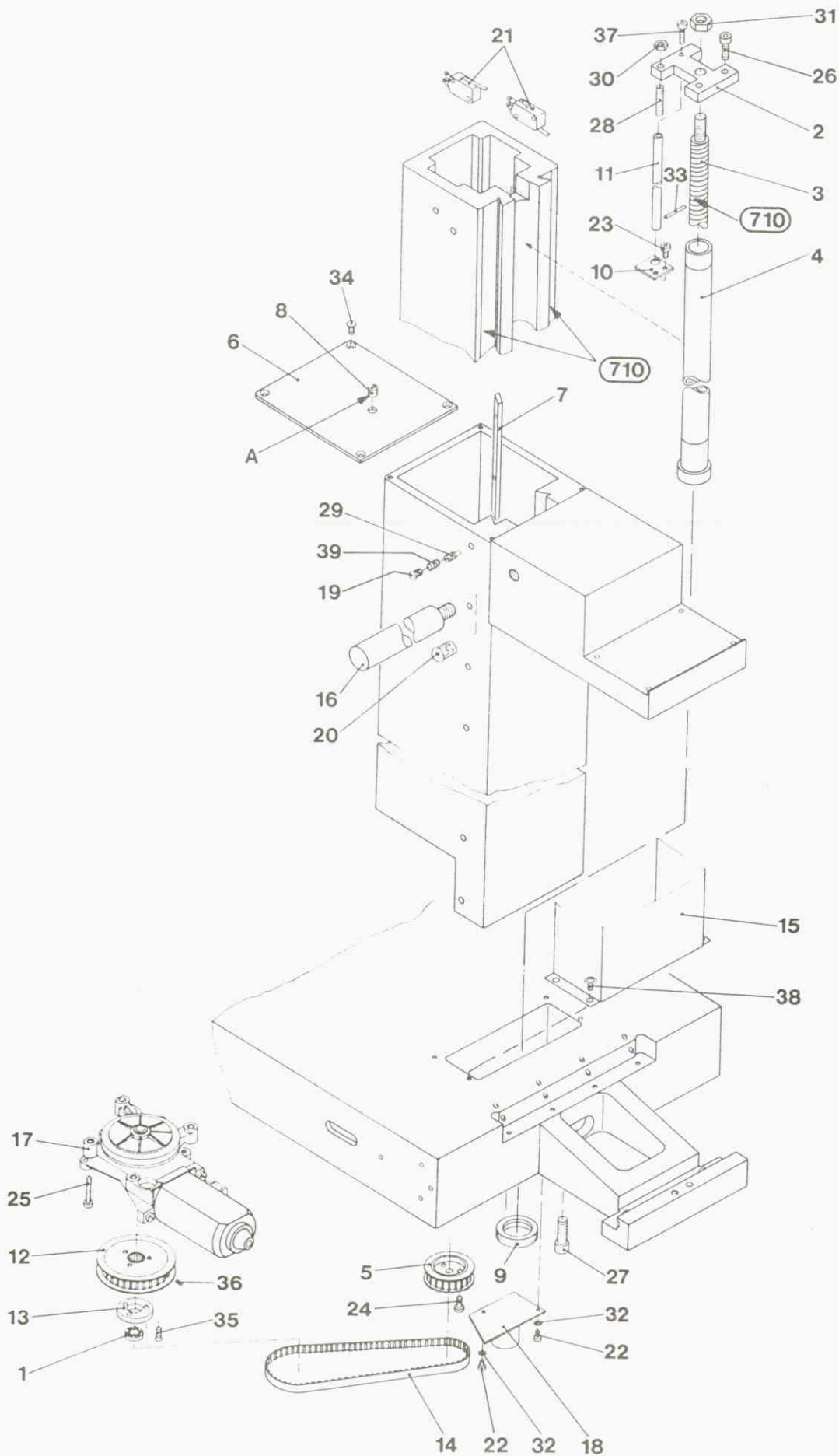
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-387.400-036	4	Platte plate	plaque placa	
2	020-444.010-136	2	Wellenfeder sinous spring	ressort sinueux muelle de onda	
3	020-462.001-069	6	Achse axis	axe eje	
4	020-462.001-071	6	Hülse,lang sleeve	douille vaina	
5	020-462.001-072	6	Hülse,kurz sleeve	douille vaina	
6	020-462.001-073	2	Getriebe gearing	engrenage mecanismo	G2,7...9,13,15...18,20...27, 29,30,39,42...44
7	020-462.001-074	2	Zwischenstück spacer	pi'ce intermediaire pieza intermedia	
8	020-462.001-075	2	Achse axis	axe eje	
9	020-462.001-076	2	Flansch flange	bride brida	
10	020-462.001-077	2	Rad gear	roue rueda	
11	020-462.001-078	2	Aufnahme mount	monture montura	
12	020-462.001-079	1	Deckel cover	couvercle tapa	
13	020-505.801-005	2	Welle shaft	arbre arbol	G
14	020-507.010-021	4	Zwischenrad intermediate gear	roue intermediaire rueda intermedia	
15	020-507.010-025	2	Kappe cap	couvercle capa	
16	020-507.010-027	4	Scheibe washer	rondelle arandela	
17	020-507.010-028	2	Lager bearing	coussinet cojinete	
18	020-507.010-034	2	Triebknopf,klein control knob	bouton de commande boton de mando	G
19	020-507.010-035	2	Zwischenring spacer	bague intermediaire anillo intermedio	
20	020-507.010-043	2	Buchse bushing	douille casquillo	
21	020-507.010-044	2	Gewinding threaded ring	bague filetee anillo con rosca	
22	020-580.010-037	2	Zahntrieb rack and pinion	pignon et cremaill'ere pinon y cremallera	
23	020-580.010-040	2	Lagerring bearing ring	bague coussinet anillo de apoyo	
24	020-580.010-043	2	Zahnrad mit Ritzel gear	roue dentee rueda dentada	G
25	020-580.010-048	2	Scheibe mit Nocken washer	rondelle arandela	
26	020-580.010-049	2	Scheibe washer	rondelle arandela	
27	020-580.010-052	2	Triebknopf,groß control knob	bouton de commande boton de mando	
28	020-580.010-053	2	Zwischenrad intermediate gear	roue intermediaire rueda intermedia	
29	020-580.010-064	2	Zahnrad 1 gear	roue dentee rueda dentada	
30	032-154.014-051	2	Druckfeder pressure spring	ressort de pression muelle de compresion	

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
31	302-021.056-005	1	Schelle clip	bride de serrage abrazadera	
32	302-023.150-005	2	Umschalter toggle switch	commutateur conmutador	
33	302-023.150-031	1	Schalter switch	interrupteur interruptor	
34	302-023.150-032	1	Taster push button	palpeur palpador	
35	303-099.208-004	2	Widerstand resistor	resistance resistencia	R1/R2 1k-Lin.
36	702-752.630-000	2	Mutter nut	ecrou tuerca	DIN 562 M3
37	703-109.630-000	10	Schraube screw	vis tornillo	DIN 912 M 3x10
38	703-123.630-000	7	Schraube screw	vis tornillo	DIN 912 M 4x10
39	704-617.000-000	60	Kugel ball	bille bola	DIN 5401 3mmIII
40	704-741.220-000	2	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 3,2
41	705-712.630-000	1	Schraube screw	vis tornillo	DIN 912 M 4x50
42	707-212.163-000	2	Sicherungsring safety ring	anneau de securite anillo de seguridad	DIN 471 25x1,2
43	707-516.630-000	6	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 916 M3x5
44	709-968.630-000	6	Schraube screw	vis tornillo	LN 12080 3x9,5
45	710-246.630-000	4	Schraube screw	vis tornillo	LN 12027 M3x6



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-435.020-094	4	Rollenkäfig roller cage	cage 'a rouleau jaula p. rodillos	
2	020-435.020-097	16	Leiste ledge	liteau varilla	
3	020-448.025-137	62	Rolle roller	rouleau rodillo	
4	020-462.001-056	1	Leiste ledge	liteau varilla	
5	020-462.001-057	1	Rollenkäfig, lang roller cage	cage 'a rouleau jaula p. rodillos	
6	020-462.001-058	4	Leiste, lang ledge	liteau varilla	
7	020-462.001-059	1	Rollenkäfig, kurz roller cage	cage 'a rouleau jaula p. rodillos	
8	020-462.001-060	4	Leiste, kurz ledge	liteau varilla	
9	020-462.001-063	1	Mitnehmer fork	ergot entraineur arrastrador	
10	020-462.001-064	1	Achse axis	axe eje	
11	020-462.001-065	1	Zwischenstück spacer	pi'ece intermediaire pieza intermedia	
12	020-462.001-066	1	Gewindebuchse threaded bushing	douille filetee casquillo con rosca	
13	020-462.001-080	1	Winkel bracket	equerre angulo	
14	020-462.001-088	1	Flansch flange	bride brida	
15	020-462.001-089	1	Vorschraubring retaining ring	bague filetee anillo de retencion	
16	020-462.001-090	2	Führungsleiste guide ledge	liteau de guidage liston de guia	
17	020-462.001-091	2	Aufnahme mount	monture montura	
18	020-462.001-096	1	Rändelschraube mit Druckstück knurled screw	vis moletee tornillo moleteado	
19	020-462.001-109	6	Puffer vibration buffer	amortisseur metallique amortiguador de vibrac.	
20	020-505.020-017	2	Zahnstange rack	cremaill'ere cremallera	
21	020-507.010-037	1	Triebknopf, klein rechts control knob	bouton de commande boton de mando	G
22	020-507.010-038	1	Zwischenring spacer	bague intermediaire anillo intermedio	
23	020-580.010-061	1	Triebknopf, klein control knob	bouton de commande boton de mando	
24	090-916.015-009	1	Druckfeder pressure spring	ressort de pression muelle de compresion	
25	702-214.630-000	2	Mutter nut	ecrou tuerca	DIN 439 BM 5
26	703-109.630-000	4	Schraube screw	vis tornillo	DIN 912 M 3x10
27	703-122.630-000	6	Schraube screw	vis tornillo	DIN 912 M 4x8
28	703-127.630-000	8	Schraube screw	vis tornillo	DIN 912 M 4x20
29	703-129.630-000	4	Schraube screw	vis tornillo	DIN 912 M 4x25
30	703-146.630-000	4	Schraube screw	vis tornillo	DIN 912 M 5x35
31	703-277.630-000	1	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 913 M 4x8

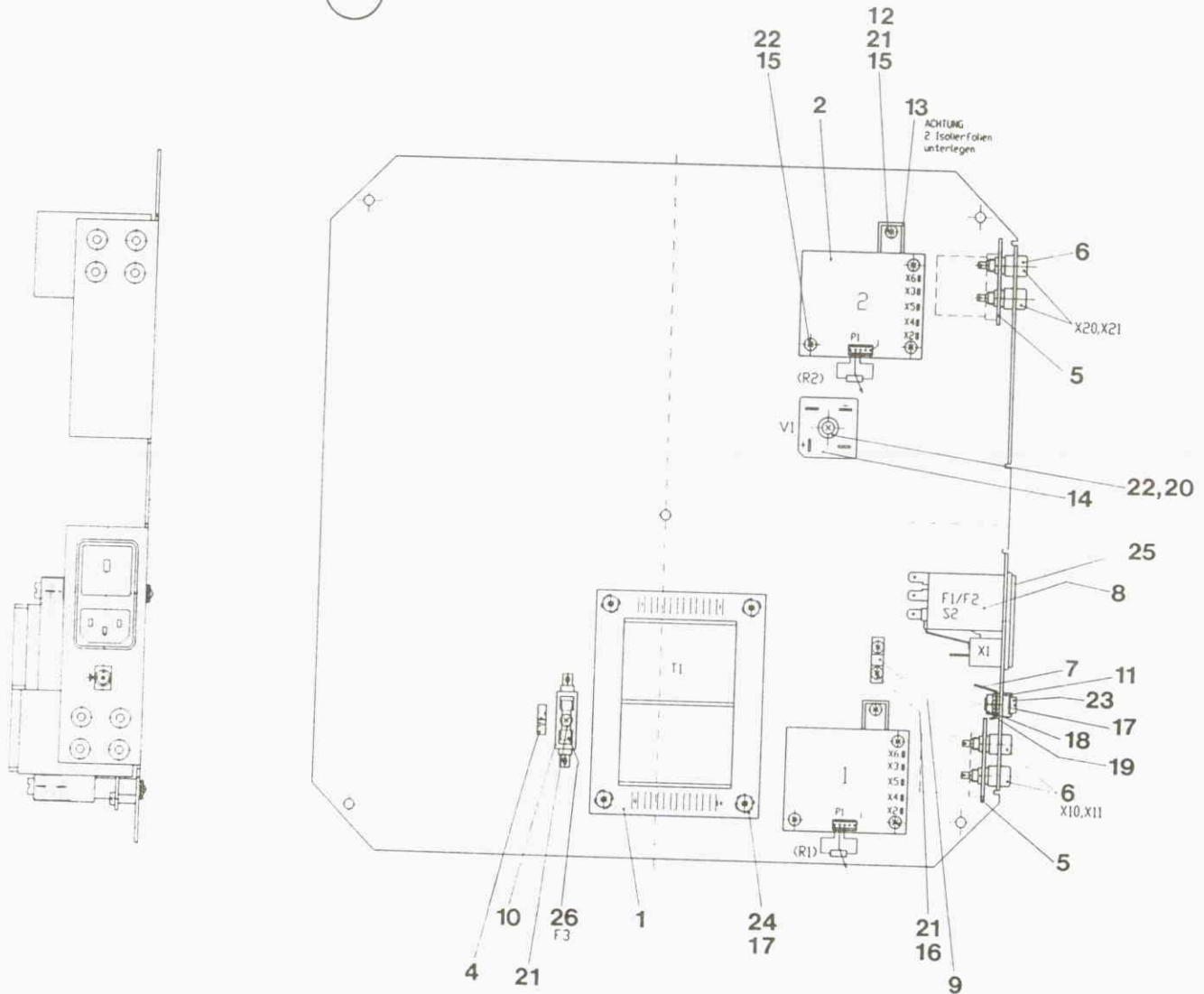
Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
32	703-278.630-000	2	Gewindestift threaded pin	goupille filetee perno con rosca DIN 913 M 4x10
33	703-282.630-000	1	Gewindestift threaded pin	goupille filetee perno con rosca DIN 913 M 5x6
34	704-623.000-000	1	Kugel ball	bille bola DIN 5401 4mm III
35	705-688.000-000	4	Sattelfeder spring	015-125.064-362
36	706-687.220-000	1	Scheibe washer	rondelle arandela 015-121.059-175
37	707-516.630-000	1	Gewindestift threaded pin	goupille filetee perno con rosca DIN 916 M 3x5
38	707-736.000-000	2	Scheibe washer	rondelle arandela 015-121.063-142
39	708-821.630-000	2	Schraube screw	vis tornillo DIN 912 M 6x20
40	708-874.630-000	12	Gewindestift threaded pin	goupille filetee perno con rosca DIN 913 M 4x16
41	709-919.630-000	1	Schraube screw	vis tornillo DIN 912 M 4x16
42	709-968.220-000	2	Schraube screw	vis tornillo LN 12080 3x9,5
43	710-246.630-000	4	Schraube screw	vis tornillo LN 12027 M 3x6



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-200.001-080	1	Kugellager ball bearing	palier 'a billes cojinetep. bolillas	
2	020-462.001-013	1	Halter holder	support soporte	
3	020-462.001-014	1	Spindel spindle	pivot pivote	
4	020-462.001-018	1	Rohr, kompl. tube	tube tubo	G
5	020-462.001-024	1	Zahnscheibe 1 toothed disc	disque dente rueda dentada	
6	020-462.001-025	1	Deckel cover	couvercle tapa	
7	020-462.001-026	1	Leiste ledge	litageau varilla	
8	020-462.001-027	1	Gewindestift threaded pin	goupille filetee perno con rosca	
9	020-462.001-029	1	Gewinding threaded ring	bague filetee anillo con rosca	
10	020-462.001-030	1	Platte plate	plaque placa	
11	020-462.001-031	1	Stab rod	barre varilla	
12	020-462.001-036	1	Zahnscheibe 2 toothed disc	disque dente rueda dentada	
13	020-462.001-037	1	Lagerscheibe bearing disc	rondelle d'appui anillo cojinete	
14	020-462.001-043	1	Zahnriemen gear belt	courroie crantee correa dentada	
15	020-462.001-045	1	Abdeckblech cover plate	tole de fermeture chapa cobertora	
16	020-462.001-093	2	Stange bar	barre barra	G
17	020-462.001-102	1	Motor motor	moteur motor	
18	301-376.030-000	1	Entstörfilter anti-interference filter	filtre deparasitant filtro anti-parasitario	G
19	302-004.045-060	7	Abdeckkappe cover	bouchon capa protectora	
20	302-004.045-061	2	Stopfen plug	bouchon tapon	
21	302-023.048-061	2	Schalter switch	interrupteur interruptor	
22	703-109.630-000	2	Schraube screw	vis tornillo	DIN 912 M 3x10
23	703-122.630-000	2	Schraube screw	vis tornillo	DIN 912 M 4x8
24	703-123.630-000	3	Schraube screw	vis tornillo	DIN 912 M 4x10
25	703-127.630-000	4	Schraube screw	vis tornillo	DIN 912 M 4x20
26	703-159.630-000	2	Schraube screw	vis tornillo	DIN 912 M 6x25
27	703-173.630-000	4	Schraube screw	vis tornillo	DIN 912 M 8x25
28	703-295.630-000	1	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 913 M 6x25
29	703-351.630-000	7	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 914 AM 6x12
30	704-243.630-000	1	Mutter nut	ecrou tuerca	DIN 934 M 6

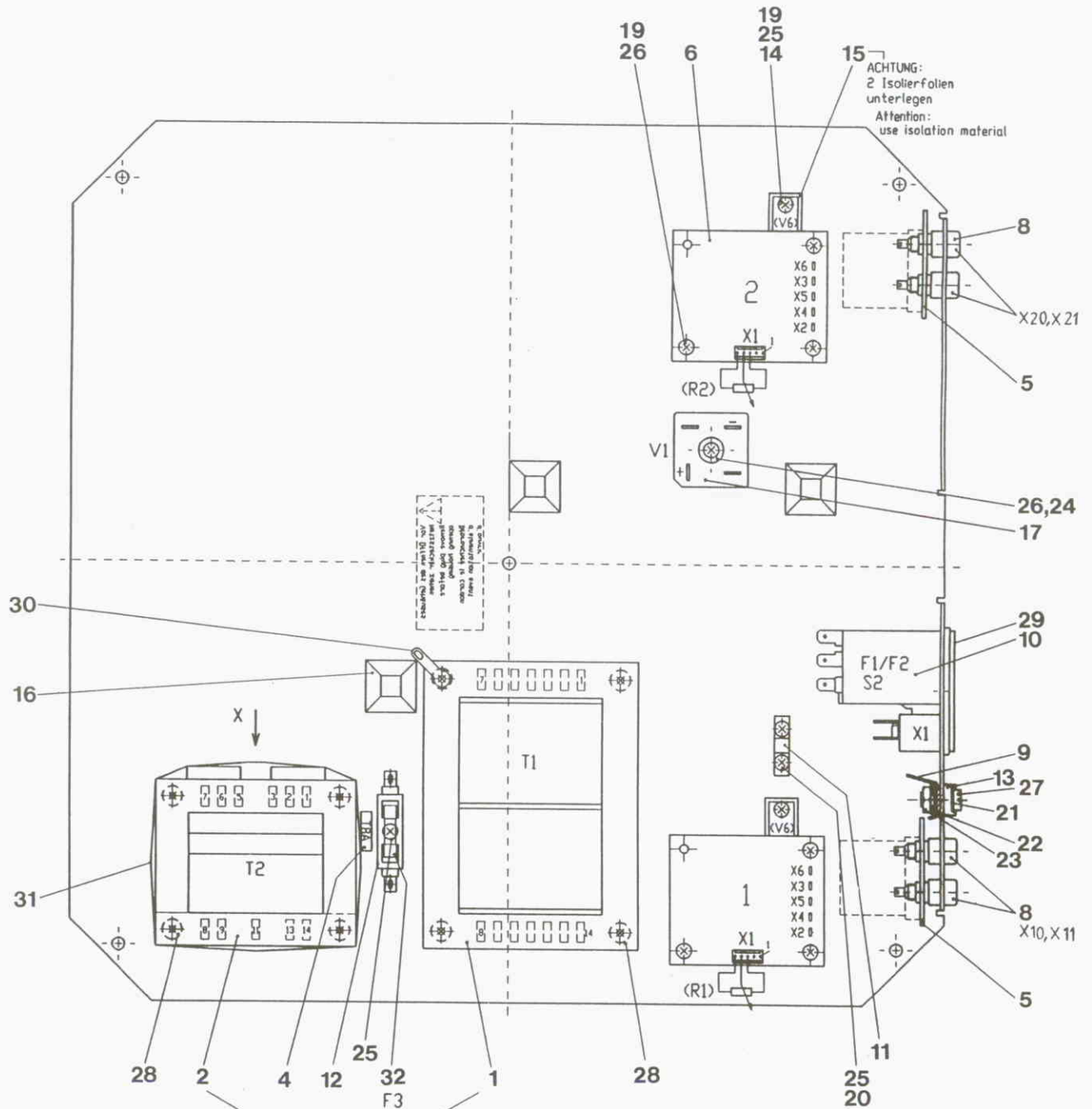
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
31	704-248.630-000	1	Mutter nut	ecrou tuerca	DIN 934 M 10
32	704-741.220-000	2	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 3,2
33	705-239.000-000	1	Spannstift pin	cheville de tension perno tensor	DIN 7343 4x24
34	707-939.213-000	4	Schraube screw	vis tornillo	LN 12015 M 2x5
35	707-998.630-000	3	Schraube screw	vis tornillo	DIN 965 M 3x10
36	708-874.630-000	1	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 913 M 4x16
37	709-433.630-000	1	Schraube screw	vis tornillo	DIN 912 M 5x20
38	710-247.630-000	4	Schraube screw	vis tornillo	LN 12027 M4x10
39	710-375.630-000	9	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 913 M6x6

3



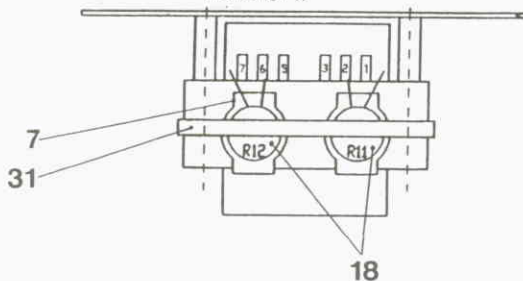
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	301-003.415-000	1	Transformator transformer	transformateur transformador	T1
2	301-373.020-000	2	Platine plate	platine platina	G
3	301-376.020-000	1	Bodenplatte base plate	plateau de base placa-base	B 4.1
4	301-376.020-029	1	Schild shield	plaque rotulo	
5	301-376.025-000	2	Platine plate	platine platina	G
6	302-013.047-003	8	Buchse jack	prise enchufe	X10,X11,X20,X21
7	302-016.045-026	1	Stecker plug	fiche enchufe	
8	302-016.059-022	1	Gerätestecker plug	fiche d'appareil enchufe	X1/F1-F2/S2
9	302-021.056-005	1	Schelle clip	bride de serrage abrazadera	
10	302-029.009-001	1	Sicherungshalter fuse holder	support de fusible portafusible	
11	302-060.032-002	1	Bolzen bolt	boulon perno	
12	302-060.112-001	2	Isolierbuchse insulating bushing	douille d'isolation casquillo aislante	
13	302-060.112-008	4	Folie foil	feuille lamina	
14	302-062.107-010	1	Gleichrichter rectifier	redresseur rectificador	V1 100V-25A
15	701-860.220-000	8	Federscheibe spring washer	rondelle 'a ressort arandela elastica	DIN 137 A 3
16	704-741.220-000	2	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 3,2
17	704-745.220-000	5	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 4,3
18	704-753.220-000	2	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 6,4
19	705-411.220-000	1	Mutter nut	ecrou tuerca	015-011.060-005
20	706-121.220-000	1	Scheibe washer	rondelle arandela	015-121.038-425
21	707-951.220-000	5	Schraube screw	vis tornillo	DIN 7985 M 3x5
22	707-953.220-000	7	Schraube screw	vis tornillo	DIN 7985 M 3x8
23	707-959.220-000	1	Schraube screw	vis tornillo	DIN 7985 M 4x6
24	710-247.213-000	4	Schraube screw	vis tornillo	LN 12027 M4x10
25	826-252.000-000	2	Sicherung fuse	fusible fusible	T800mA DIN 41662 F1,F2
26	864-947.000-000	1	Sicherung fuse	fusible fusible	T8A DIN 41662 F3

3



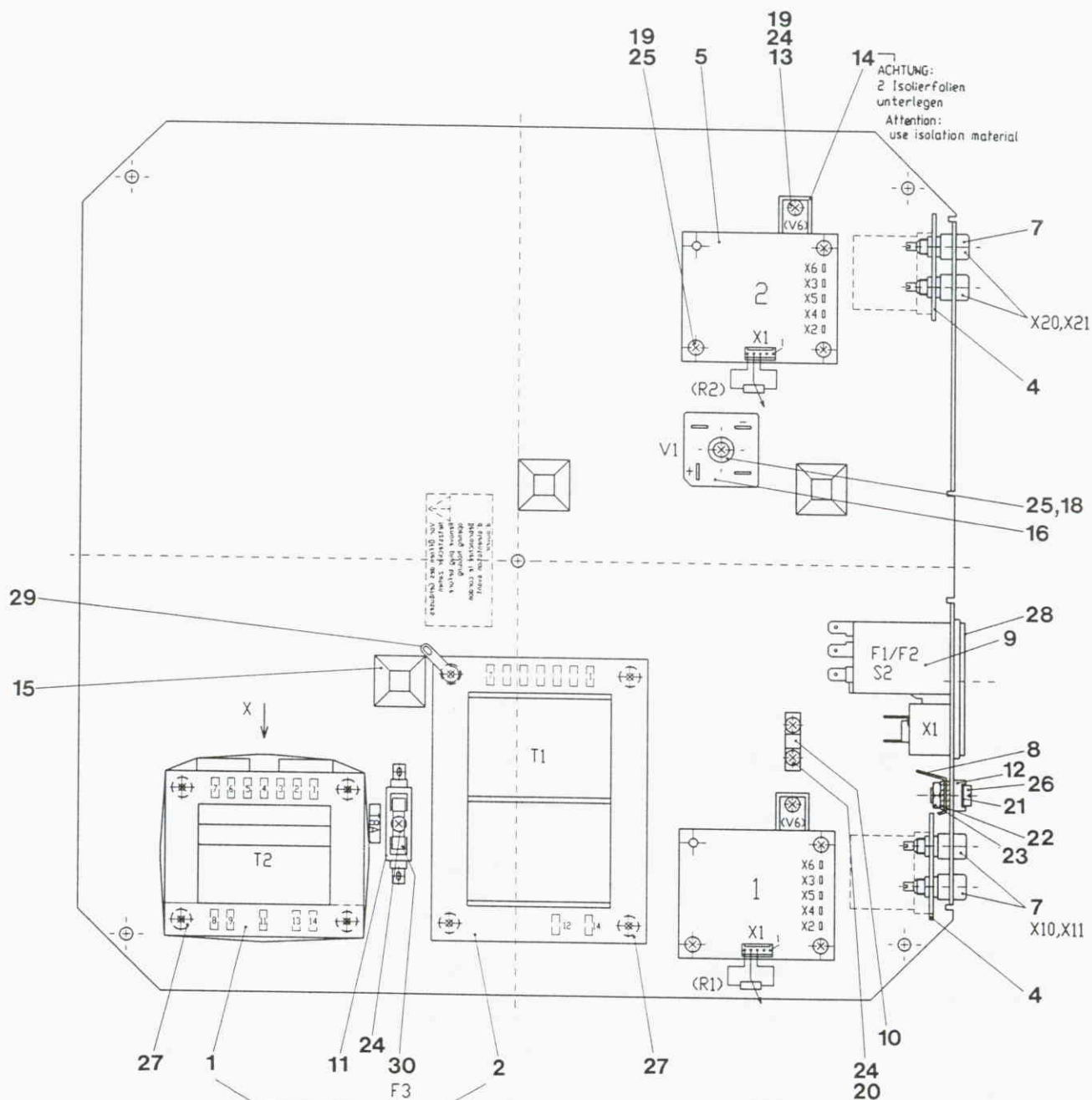
Ansicht des Trafos T2 / View of Transformer T2 in Pfeilrichtung "X"

Trafos T1 und T2 mit Lötlösen in Richtung Chassis montieren / soldering connections of Transformer T1 and T2 must be in direction of cover

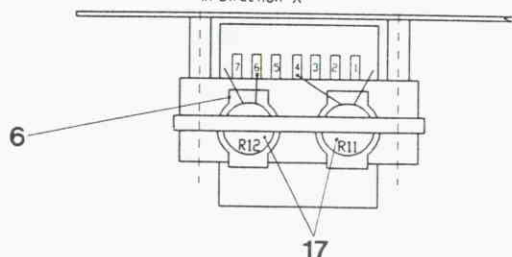


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	301-003.415-000	1	Transformator transformer	transformateur transformador	T1
2	301-003.419-000	1	Transformator transformer	transformateur transformador	T2
3	301-376.020-000	1	Bodenplatte base plate	plateau de base placa-base	B 4.2
4	301-376.020-029	1	Schild shield	plaque rotulo	
5	301-376.025-000	2	Platine plate	platine platina	G
6	301-376.040-000	2	Platine plate	platine platina	G Paarweise tauschen change in pairs
7	302-004.035-008	2	Schrumpfschlauch shrink-on tubing	tuyau frette tubo encogible	
8	302-013.047-003	8	Buchse jack	prise enchufe	X10,X11,X20,X21
9	302-016.045-026	1	Stecker plug	fiche enchufe	
10	302-016.059-022	1	Gerätestecker plug	fiche d'appareil enchufe	X1/F1-F2/S2
11	302-021.056-005	1	Schelle clip	bride de serrage abrazadera	
12	302-029.009-001	1	Sicherungshalter fuse holder	support de fusible portafusible	
13	302-060.032-002	1	Anschlußbolzen bolt	boulon perno	
14	302-060.112-001	2	Isolierbuchse insulating bushing	douille d'isolation casquillo aislante	
15	302-060.112-008	4	Isolierfolie foil	feuille lamina	
16	302-060.117-022	3	Kabelhalter holder	support soporte	
17	302-062.107-010	1	Gleichrichter rectifier	redresseur rectificador	V1 100V-25A PB10
18	303-100.065-003	2	PTC-Widerstand resistor	resistance resistencia	R11,R12 B59840-C120-A70
19	701-860.220-000	8	Federscheibe spring washer	rondelle 'a ressort arandela elastica	DIN 137 A 3
20	704-741.220-000	2	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 3,2
21	704-745.220-000	1	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 4,3
22	704-753.220-000	2	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 6,4
23	705-411.220-000	1	Mutter nut	ecrou tuerca	015-011.060-005
24	706-617.630-000	2	Scheibe washer	rondelle arandela	DIN 125 4,3
25	707-951.630-000	5	Schraube screw	vis tornillo	DIN 7985 M 3x5
26	707-953.630-000	7	Schraube screw	vis tornillo	DIN 7985 M 3x8
27	707-959.630-000	1	Schraube screw	vis tornillo	DIN 7985 M 4x6
28	710-247.630-000	8	Schraube screw	vis tornillo	LN 12027 M4x10
29	826-252.000-000	2	Sicherung fuse	fusible fusible	F1,F2 DIN 41662 T800mA
30	842-761.000-000	1	Lötöse soldering lug	oeillet 'a souder ojal p. soldadura	4x18B1
31	857-451.000-000	1	Kabelbinder cable clip	cable 'a ruban sujecion cables	T50L
32	864-947.000-000	1	Sicherung fuse	fusible fusible	F3 DIN 41662 T8A

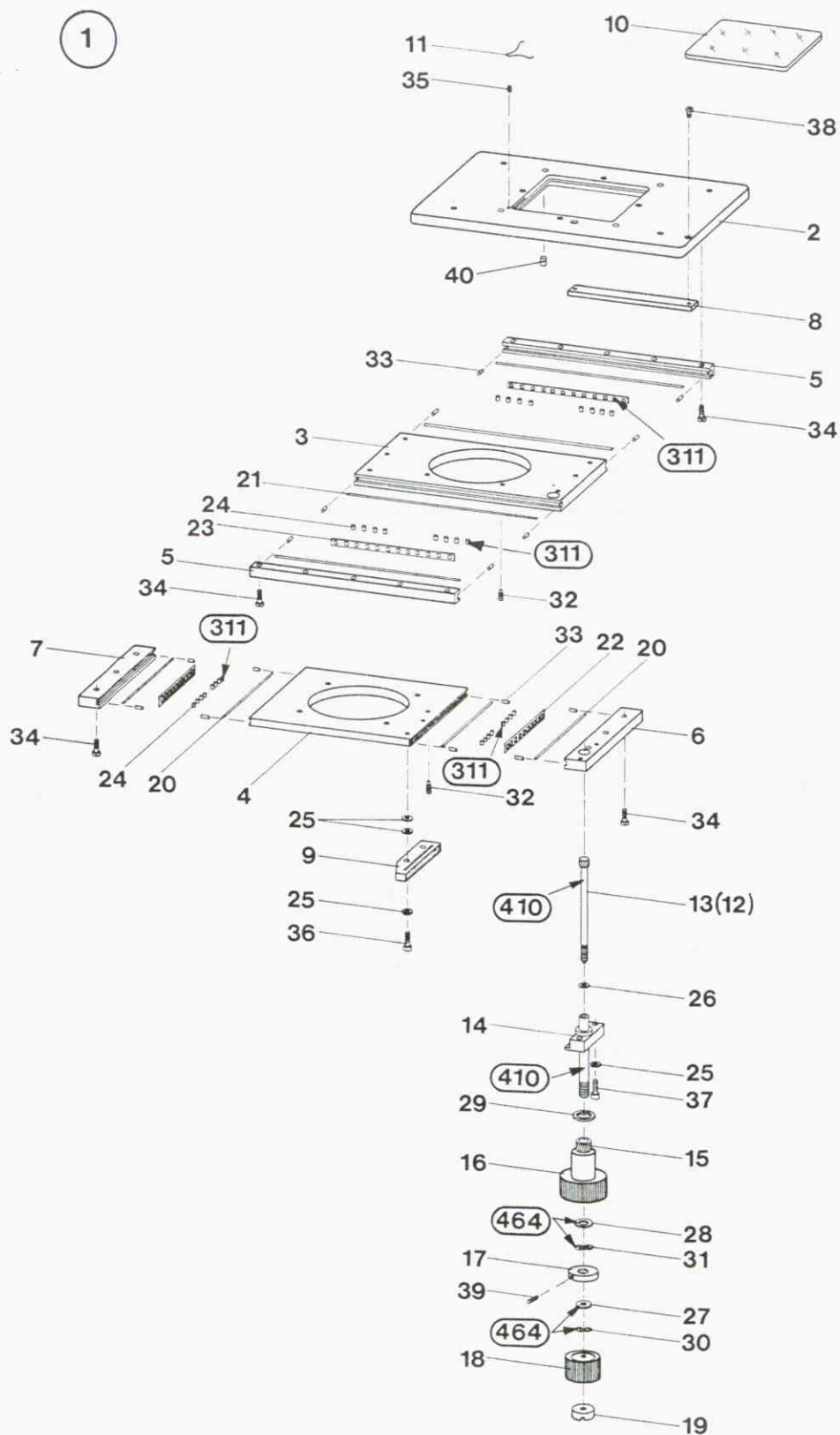
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Ansicht des Trafos T2 / View of Transformer T2 in Direction "X"
 Trafos T1 und T2 mit Lotösen in Richtung Chassis montieren / soldering connections of Transformer T1 and T2 must be in direction of cover



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	301-003.426-000	1	Transformator transformer	transformateur transformador	T2
2	301-003.427-000	1	Transformator transformer	transformateur transformador	T1
3	301-376.021-000	1	Bodenplatte base plate	plateau de base placa-base	B 4.3
4	301-376.025-000	2	Platte plate	plaque placa	G
5	301-376.040-000	2	Lamp-Power lamp-power		G Paarweise tauschen change in pairs
6	302-004.035-008	2	Siliconschutz protection	protection proteccion	
7	302-013.047-003	1	Buchse jack	prise enchufe	X10,X11,X20,X21
8	302-016.045-026	1	Stecker plug	fiche enchufe	
9	302-016.059-023	1	Stecker plug	fiche enchufe	X1/F1-F2/S2
10	302-021.056-005	1	Schelle clip	bride de serrage abrazadera	
11	302-029.009-001	1	Sicherungshalter fuse holder	support de fusible portafusible	f F3
12	302-060.032-002	1	Anschlußbolzen bolt	boulon perno	
13	302-060.112-001	2	Isolierbuchse insulating bushing	douille d'isolation casquillo aislante	
14	302-060.112-008	4	Isolierfolie foil	feuille lamina	
15	302-060.117-022	3	Kabelhalter holder	support soporte	
16	302-062.107-010	1	Gleichrichter rectifier	redresseur rectificador	V1 100V-25A PB10
17	303-100.065-003	2	PTC-Widerstand resistor	resistance resistencia	R11,R12 B59840-C120-A70
18	701-805.630-000	2	Scheibe washer	rondelle arandela	DIN 125 4,3
19	701-860.220-000	8	Federscheibe spring washer	rondelle 'a ressort arandela elastica	DIN 137 A 3
20	704-741.220-000	2	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 3,2
21	704-745.220-000	1	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 4,3
22	704-753.220-000	2	Zahnscheibe toothed disc	disque dente rueda dentada	DIN 6797 A 6,4
23	705-411.220-000	1	Mutter nut	ecrou tuerca	015-011.060-005
24	707-951.630-000	5	Schraube screw	vis tornillo	DIN 7985 M 3x5
25	707-953.630-000	7	Schraube screw	vis tornillo	DIN 7985 M 3x8
26	707-959.630-000	1	Schraube screw	vis tornillo	DIN 7985 M 4x6
27	710-247.630-000	8	Schraube screw	vis tornillo	LN 12027 M4x10
28	826-252.000-000	2	Sicherung fuse	fusible fusible	F1,F2 T800mA DIN 41662 f 230V
	826-790.000-000	2	Sicherung fuse	fusible fusible	F1,F2 T1,6A DIN 41662 f 115V
	826-347.000-000	2	Sicherung fuse	fusible fusible	F1,F2 T2,0A DIN 41662 f 100V
29	842-761.000-000	1	Lötöse soldering lug	oeillet 'a souder ojal p. soldadura	4x18B1
30	864-947.000-000	1	Sicherung fuse	fusible fusible	F3 T8A DIN 41662



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	026-407.157-000	1	Tisch EK 50 stage	platine platina	B 5.1
2	- . .	1	Oberteil upper part	partie superieure parte superior	31-22-409-0001
3	- . .	1	Mittelteil mid-piece	pi'ece moyenne pieza intermedia	31-22-409-0002
4	- . .	1	Unterteil lower part	partie inferieure parte inferior	31-22-409-0003
5	- . .	2	Leiste X ledge	litéau varilla	00-22-401-0004
6	- . .	1	Leiste Y, rechts ledge	litéau varilla	31-22-409-0006
7	- . .	1	Leiste Y, links ledge	litéau varilla	31-22-409-0007
8	- . .	1	Zahnstange X rack	cremail'ere cremallera	31-22-409-0008
9	- . .	1	Zahnstange Y rack	cremail'ere cremallera	31-22-409-0009
10	- . .	1	Glasplatte glass plate	plaque en verre placa de cristal	31-22-409-0810 75x75x3mm
11	- . .	1	Druckfeder pressure spring	ressort de pression muelle de compresion	00-22-401-0812
12	- . .	1	Trieb kompl. pinion	pignon pinon	31-22-409-1000
13	- . .	1	Trieb 76 lang pinion	pignon pinon	00-22-401-1801
14	- . .	1	Lagerflansch mit Lagerhals bearing flange	bride de palier brida de cojinete	31-22-409-1002
15	- . .	1	Hülse sleeve	douille vaina	00-22-101-1803
16	- . .	1	Triebknopf Y control knob	bouton de commande boton de mando	00-22-101-1004
17	- . .	1	Stellring adjusting ring	bague de reglage anillo de ajuste	00-22-101-1005
18	- . .	1	Triebknopf X control knob	bouton de commande boton de mando	00-22-101-1006
19	- . .	1	Mutter nut	ecrou tuerca	00-23-601-1013
20	- . .	8	Schiene Y (105lg.) ledge	litéau carril	00-99-105-6801
21	- . .	8	Schiene X (149lg.) ledge	litéau carril	00-99-149-6801
22	- . .	2	Rollenkäfig Y (74lg.) roller cage	cage 'a rouleau jaula p. rodillos	00-99-074-6830
23	- . .	2	Rollenkäfig X (88,8lg.) roller cage	cage 'a rouleau jaula p. rodillos	00-99-089-6830
24	- . .	32	Rolle roller	rouleau rodillo	00-99-925-6800 RD 2,5
25	701-801.220-000	8	Scheibe washer	rondelle arandela	DIN 125 A3,2
26	- . .	1	Scheibe washer	rondelle arandela	00-99-900-0806 RD 6x4,2x0,5
27	- . .	1	Scheibe washer	rondelle arandela	00-99-900-0810 RD 10x4,2x0,5
28	- . .	1	Scheibe washer	rondelle arandela	00-99-900-0812 RD 12x7,2x0,5
29	- . .	1	Scheibe washer	rondelle arandela	00-99-900-0815 RD 15x10,2x0,5
30	- . .	1	Federscheibe spring washer	rondelle 'a ressort arandela elastica	00-99-900-0813 RD 9x4,5x0,3
31	- . .	1	Federscheibe spring washer	rondelle 'a ressort arandela elastica	00-99-900-0829 RD 12x7,5x0,3

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
33	700-066.213-000	16	Zylinderstift straight pin	goupille cylindrique pasador cilindrio	DIN 7 1,5x3
34	700-720.163-000	16	Schraube screw	vis tornillo	DIN 84 M 3x10
35	702-518.163-000	1	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 551 M 2x4
36	703-109.220-000	2	Schraube screw	vis tornillo	DIN 912 M 3x10
37	703-110.220-000	2	Schraube screw	vis tornillo	DIN 912 M 3x12
38	707-415.163-000	2	Schraube screw	vis tornillo	DIN 84 M2,5x5
39	707-511.220-000	1	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 553 M 2,5x6
40	709-247.163-000	4	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 551 M 2,5x3

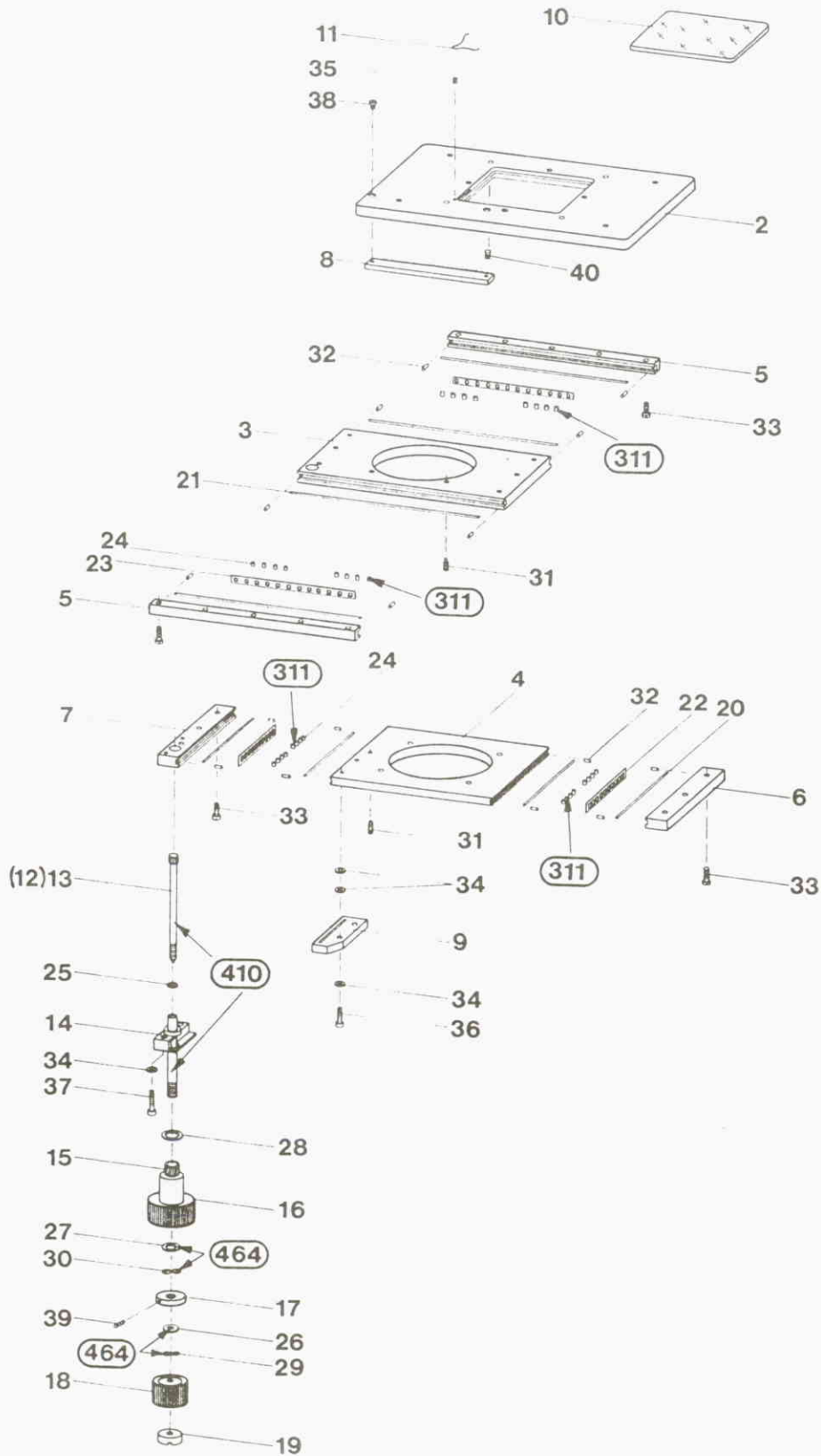
Achtung:

Die auf den Seiten B 5.1 aufgeführten Ersatzteile müssen mit der in der Bemerkungs-Spalte aufgeführten 11-stelligen Bestell-Nr. direkt bei Fa. MÄRZHÄUSER Wetzlar GmbH + Co KG, An den Fichten 35, 35579 Wetzlar, bestellt werden (außer Nr.1,25,33...40 = Bestellung bei Leica in Wetzlar).

Attention:

The spares listet on page B 5.1 have to be ordered with the 11-digit order No. in column "Bemerkung" directly from, Märzhäuser Wetzlar GmbH + Co KG, An den Fichten 35, 35579 Wetzlar, (except for No 1,25, 33-40 = order from Leica Wetzlar).

1



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	026-407.156-000	1	Tisch EK 50 stage	platine platina	B 6.1
2	- . .	1	Oberteil upper part	partie superieure parte superior	31-22-410-0001
3	- . .	1	Mittelteil mid-piece	pi'ece moyenne pieza intermedia	31-22-410-0002
4	- . .	1	Unterteil lower part	partie inferieure parte inferior	31-22-410-0003
5	- . .	2	Leiste X ledge	litéau varilla	00-22-401-0004
6	- . .	1	Leiste Y, rechts ledge	litéau varilla	31-22-409-0007
7	- . .	1	Leiste Y, links ledge	litéau varilla	31-22-410-0007
8	- . .	1	Zahnstange X rack	cremaill'ere cremallera	31-22-409-0008
9	- . .	1	Zahnstange Y rack	cremaill'ere cremallera	31-22-409-0009
10	- . .	1	Glasplatte glass plate	plaque en verre placa de cristal	31-22-409-0810 75x75x3mm
11	- . .	1	Feder spring	ressort muelle	00-22-401-0812
12	- . .	1	Trieb kompl. pinion	pignon pinon	00-22-401-1000
13	- . .	1	Trieb 76lang pinion	pignon pinon	00-22-401-1801
14	- . .	1	Lagerflansch mit Lagerhals bearing flange	bride de palier brida de cojinete	00-22-401-1002
15	- . .	1	Hülse sleeve	douille vaina	00-22-101-1803
16	- . .	1	Triebknopf Y control knob	bouton de commande boton de mando	00-22-101-1004
17	- . .	1	Stellring adjusting ring	bague de reglage anillo de ajuste	00-22-101-1005
18	- . .	1	Triebknopf X control knob	bouton de commande boton de mando	00-22-101-1006
19	- . .	1	Mutter nut	ecrou tuerca	00-23-601-1013
20	- . .	8	Schiene Y 105lang ledge	litéau carril	00-99-105-6801
21	- . .	8	Schiene X 149 lang ledge	litéau carril	00-99-149-6801
22	- . .	2	Rollenkäfig Y 74 lang roller cage	cage 'a rouleau jaula p. rodillos	00-99-074-6830
23	- . .	2	Rollenkäfig X 88,8 lang roller cage	cage 'a rouleau jaula p. rodillos	00-99-089-6830
24	- . .	32	Rolle roller	rouleau rodillo	00-99-925-6800 RD 2,5
25	- . .	1	Scheibe washer	rondelle arandela	00-99-900-0806 RD 6x4,2x0,5
26	- . .	1	Scheibe washer	rondelle arandela	00-99-900-0810 RD 10x4,2x0,5
27	- . .	1	Scheibe washer	rondelle arandela	00-99-900-0812 RD 12x7,2x0,5
28	- . .	1	Scheibe washer	rondelle arandela	00-99-900-0815 RD 15x10,2x0,5
29	- . .	1	Federscheibe spring washer	rondelle 'a ressort arandela elastica	00-99-900-0813 RD 9x4,5x0,3
30	- . .	1	Federscheibe spring washer	rondelle 'a ressort arandela elastica	00-99-900-0829 RD 12x7,5x0,3
31	- . .	3	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 915 M 3x8

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
32	700-066.213-000	16	Zylinderstift straight pin	goupille cylindrique pasador cilindrio	DIN 7 1,5x3
33	700-720.163-000	16	Schraube screw	vis tornillo	DIN 84 M 3x10
34	701-801.220-000	8	Scheibe washer	rondelle arandela	DIN 125 3,2
35	702-518.163-000	1	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 551 M 2x4
36	703-109.220-000	2	Schraube screw	vis tornillo	DIN 912 M 3x10
37	703-110.220-000	2	Schraube screw	vis tornillo	DIN 912 M 3x12
38	707-415.163-000	2	Schraube screw	vis tornillo	DIN 84 AM 2,5x5
39	707-511.220-000	1	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 553 M 2,5x6
40	709-247.163-000	4	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 551 M 2,5x3

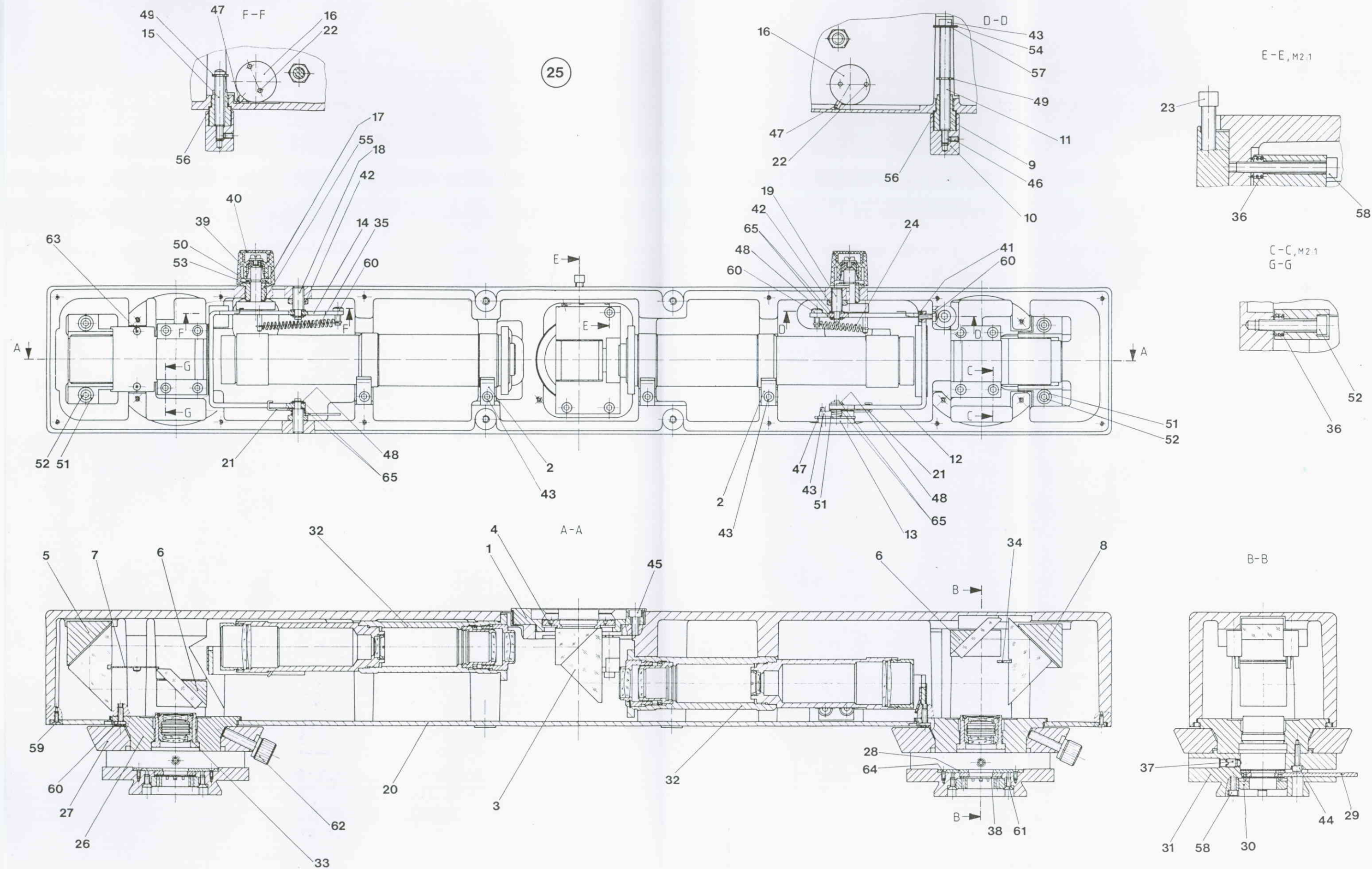
Achtung:

Die auf den Seiten B 6.1 aufgeführten Ersatzteile müssen mit der in der Bemerkungs-Spalte aufgeführten 11-stelligen Bestell-Nr. direkt bei Fa. MÄRZHÄUSER Wetzlar GmbH + Co KG, An den Fichten 35, 35579 Wetzlar bestellt werden (außer Nr.1,32..40 = Bestellung in Wetzlar).

Attention:

The spares listet on page B 6.1 have to be ordered with the 11-digit order No. in column "Bemerkung" directly from, Märzhäuser Wetzlar GmbH + Co KG, An den Fichten 35, 35579 Wetzlar, (except for No 1, 32-40 = order from Leica Wetzlar).

25

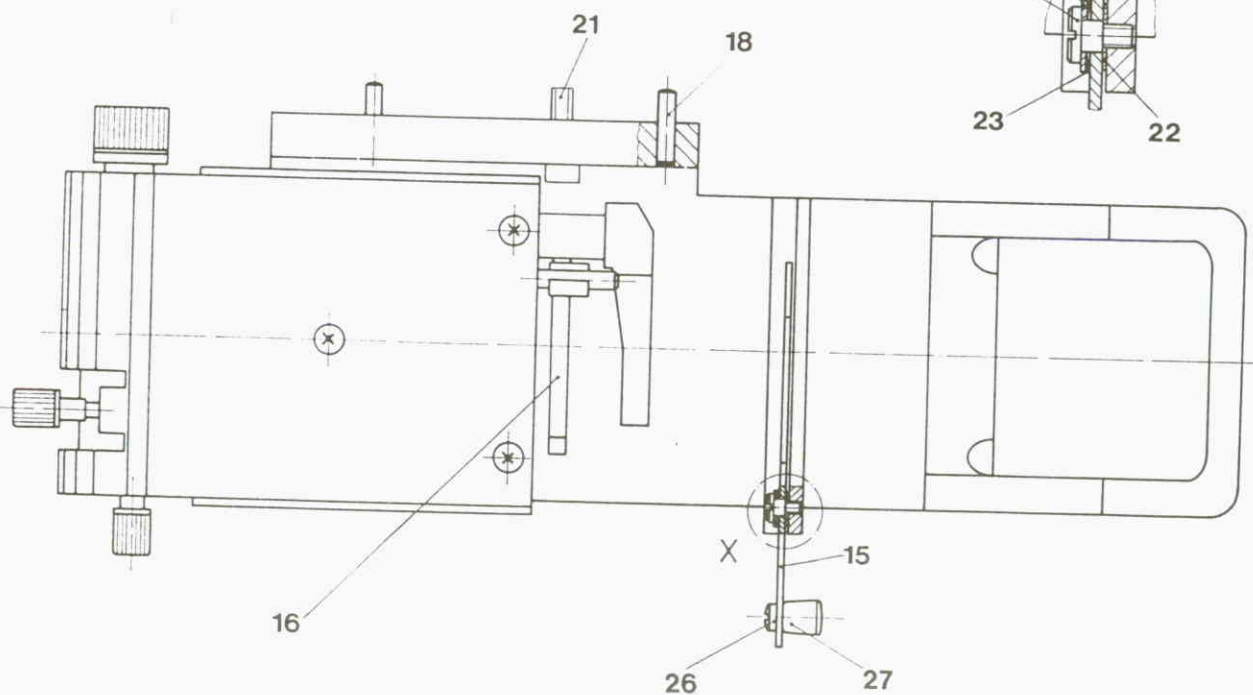
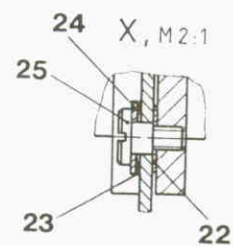
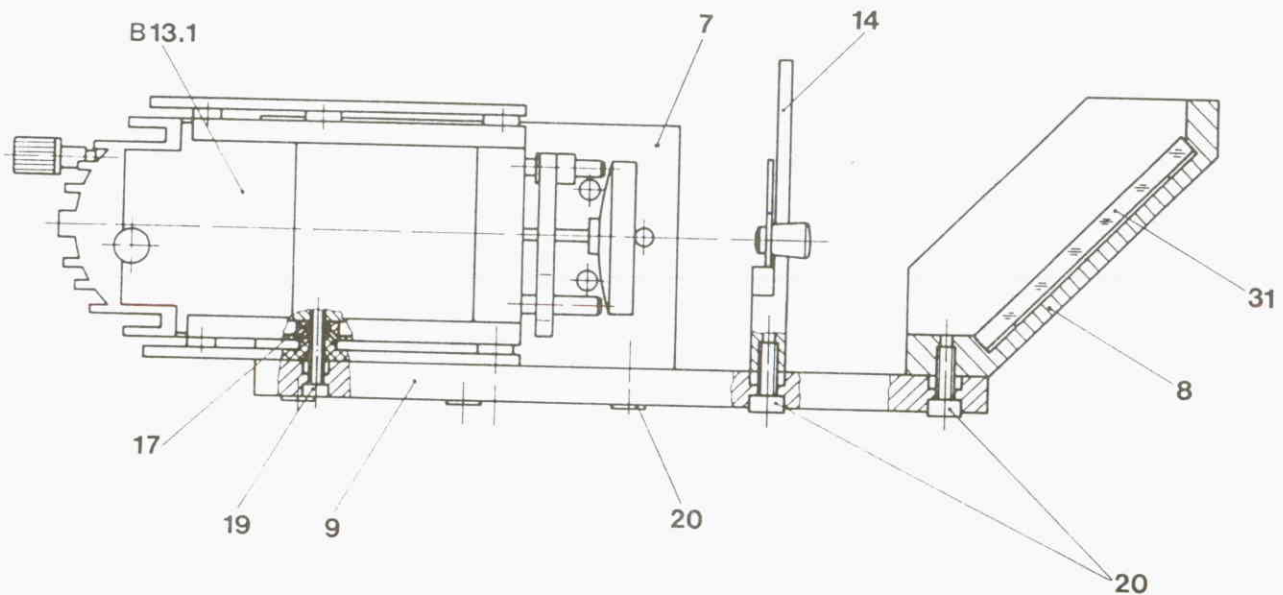
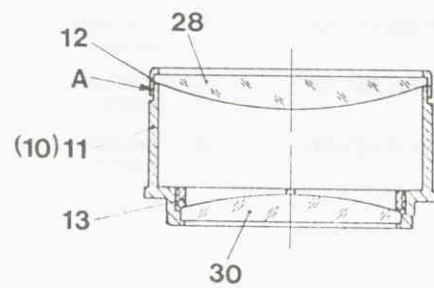
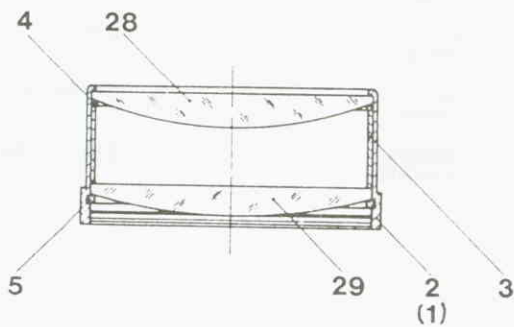


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-379.172-023	1	Wechselring flange ring	bague de changement anillo de cambio	
2	020-379.172-058	4	Halteblech holding sheet	tole de fixation chapa de sujecion	
3	020-379.206-008	1	Mittelprisma centre prism	prisme central prisma central	G
4	020-379.206-010	1	Blende diaphragm	diaphragme diafragma	
5	020-379.206-012	1	Prisma links prism	prisme prisma	G
6	020-379.206-015	2	Spiegel mirror	miroir espejo	G
7	020-379.206-018	1	Blende diaphragm	diaphragme diafragma	
8	020-379.206-021	1	Prisma rechts prism	prisme prisma	G
9	020-379.206-023	2	Gewindebuchse threaded bushing	douille filetee casquillo con rosca	
10	020-379.206-024	2	Rändelknopf knurled knob	bouton molette boton moleteado	
11	020-379.206-025	1	Spindel lang spindle	pivot pivote	G
12	020-379.206-028	1	Blende rechts, kompl. diaphragm	diaphragme diafragma	G
13	020-379.206-033	1	Platte mit Niet plate	plaque placa	G
14	020-379.206-037	1	Blende links, kompl. diaphragm	diaphragme diafragma	G
15	020-379.206-040	1	Spindel spindle	pivot pivote	
16	020-379.206-041	2	Flansch flange	bride brida	
17	020-379.206-042	2	Buchse bushing	douille casquillo	
18	020-379.206-043	2	Gewindestift threaded pin	goupille filetee perno con rosca	
19	020-379.206-044	1	Exzenterhebel eccentric lever	levier d'excentrique palanca excentrica	
20	020-379.206-049	1	Deckel cover	couvercle tapa	
21	020-379.206-051	2	Feder spring	ressort muelle	
22	020-379.206-053	2	Stift pin	goupille perno	
23	020-379.206-054	1	Schraube screw	vis tornillo	
24	020-379.206-056	1	Zugfeder pull spring	ressort de traction muelle de traccion	
25	020-379.207-000	1	Vergleichsbrücke Comparison device		V 581 001 B 7.1
26	020-379.207-005	2	Zwischenring spacer	bague intermediaire anillo intermedio	
27	020-379.207-006	2	Aufnahmering adapter ring	bague de montage anillo receptor	
28	020-379.207-008	2	Deckel cover	couvercle tapa	
29	020-379.207-009	2	Hebel lever	levier palanca	
30	020-379.207-010	2	Führungsring guide ring	bague de guidage anillo de guia	
31	020-379.207-011	2	Wechselring flange ring	bague de changement anillo de cambio	

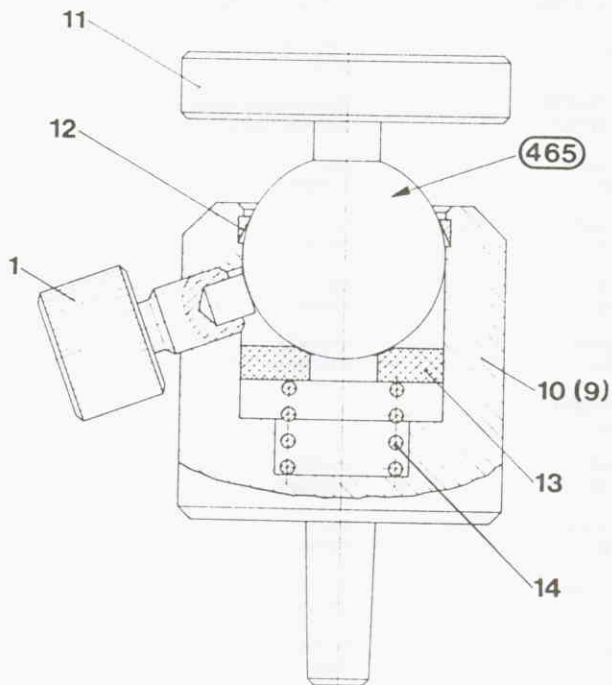
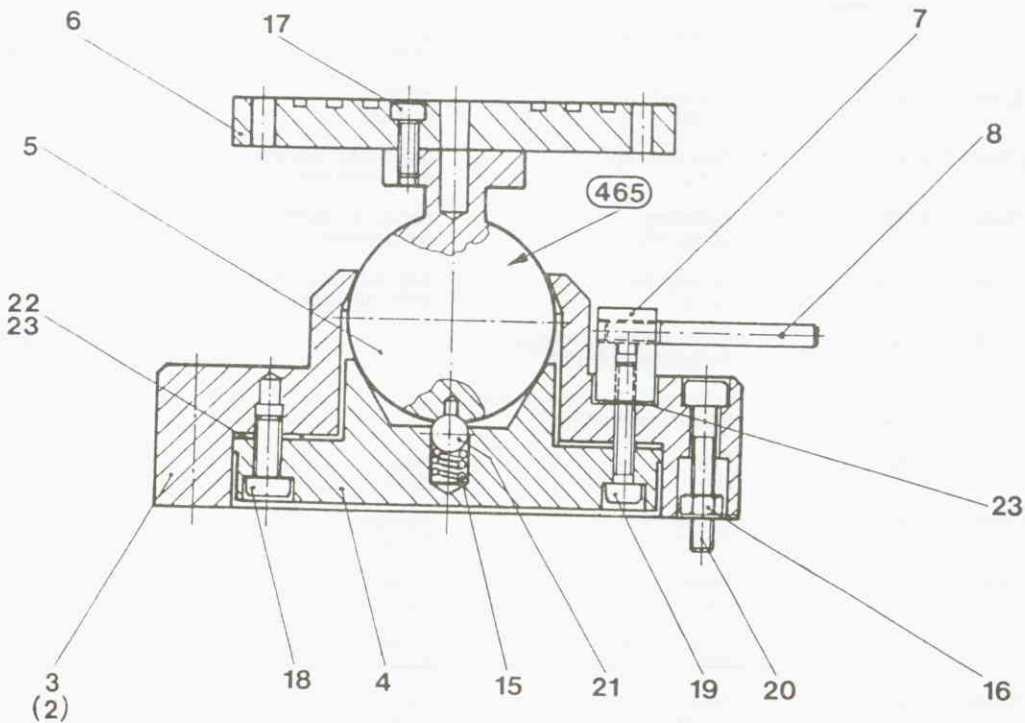
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
32	020-379.207-013	2	Tubuslinse 1x (DM C) lens	lentille de tube lente de tubo	G
33	020-379.207-020	2	Tubuslinse lens	lentille de tube lente de tubo	G
34	020-379.207-028	1	Blende diaphragm	diaphragme diafragma	
35	020-515.030-032	1	Zugfeder pull spring	ressort de traction muelle de traccion	
36	031-058.111-042	9	Feder spring	ressort muelle	
37	090-108.037-009	2	Rastung ratchet	encliquetage retencion	
38	090-400.019-049	20	Lamelle mit Niet leaf	lamelle laminilla	
39	302-031.089-107	2	Drehknopf rotating knob	bouton tournant boton giratorio	
40	302-031.089-338	2	Deckel cover	couvercle tapa	
41	702-206.630-000	1	Mutter nut	ecrou tuerca	DIN 439 BM 3
42	702-217.630-000	3	Mutter nut	ecrou tuerca	DIN 439 BM 6
43	703-108.630-000	7	Schraube screw	vis tornillo	DIN 912 M 3x8
44	703-110.631-000	2	Schraube screw	vis tornillo	DIN 912 M 3x12
45	703-123.630-000	3	Schraube screw	vis tornillo	DIN 912 M 4x10
46	703-340.630-000	2	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 914 M 3x6
47	704-445.220-000	3	Kerbstift grooved pin	goupille cannelée	DIN 1474 2,5x8
48	704-782.000-000	4	Sicherungsscheibe c-clip	disque de securite arandela de seguridad	DIN 6799 2,3
49	704-785.000-000	2	Sicherungsscheibe c-clip	disque de securite arandela de seguridad	DIN 6799 4
50	704-787.000-000	2	Sicherungsscheibe c-clip	disque de securite arandela de seguridad	DIN 6799 5
51	705-449.220-000	6	Scheibe washer	rondelle arandela	015-121.038-055
52	705-795.630-000	10	Schraube screw	vis tornillo	DIN 912 M 3x16
53	706-096.220-000	2	Scheibe washer	rondelle arandela	015-121.066-142
54	706-260.220-000	1	Scheibe washer	rondelle arandela	015-121.038-405
55	706-553.000-000	2	Sattelfeder spring		015-125.064-162
56	706-749.220-000	4	Scheibe washer	rondelle arandela	015-121.104-262
57	707-789.220-000	1	Scheibe washer	rondelle arandela	015-121.032-401
58	707-897.631-000	7	Schraube screw	vis tornillo	DIN 912 M 3x25
59	707-939.213-000	12	Schraube screw	vis tornillo	LN 12015 M 2x5
60	707-953.630-000	11	Schraube screw	vis tornillo	DIN 7985 M 3x8
61	707-996.631-000	8	Schraube screw	vis tornillo	DIN 965 M 3x6
62	708-184.214-000	2	Rändelschraube knurled screw	vis moletee tornillo moleteado	LN 12071 M 5x20

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
63	708-490.631-000	2	Schraube screw	vis tornillo	DIN 7985 M 2x5
64	708-511.631-000	8	Schraube screw	vis tornillo	DIN 965 M 2x5
65	709-716.220-000	8	Scheibe washer	rondelle arandela	015-121.036-052

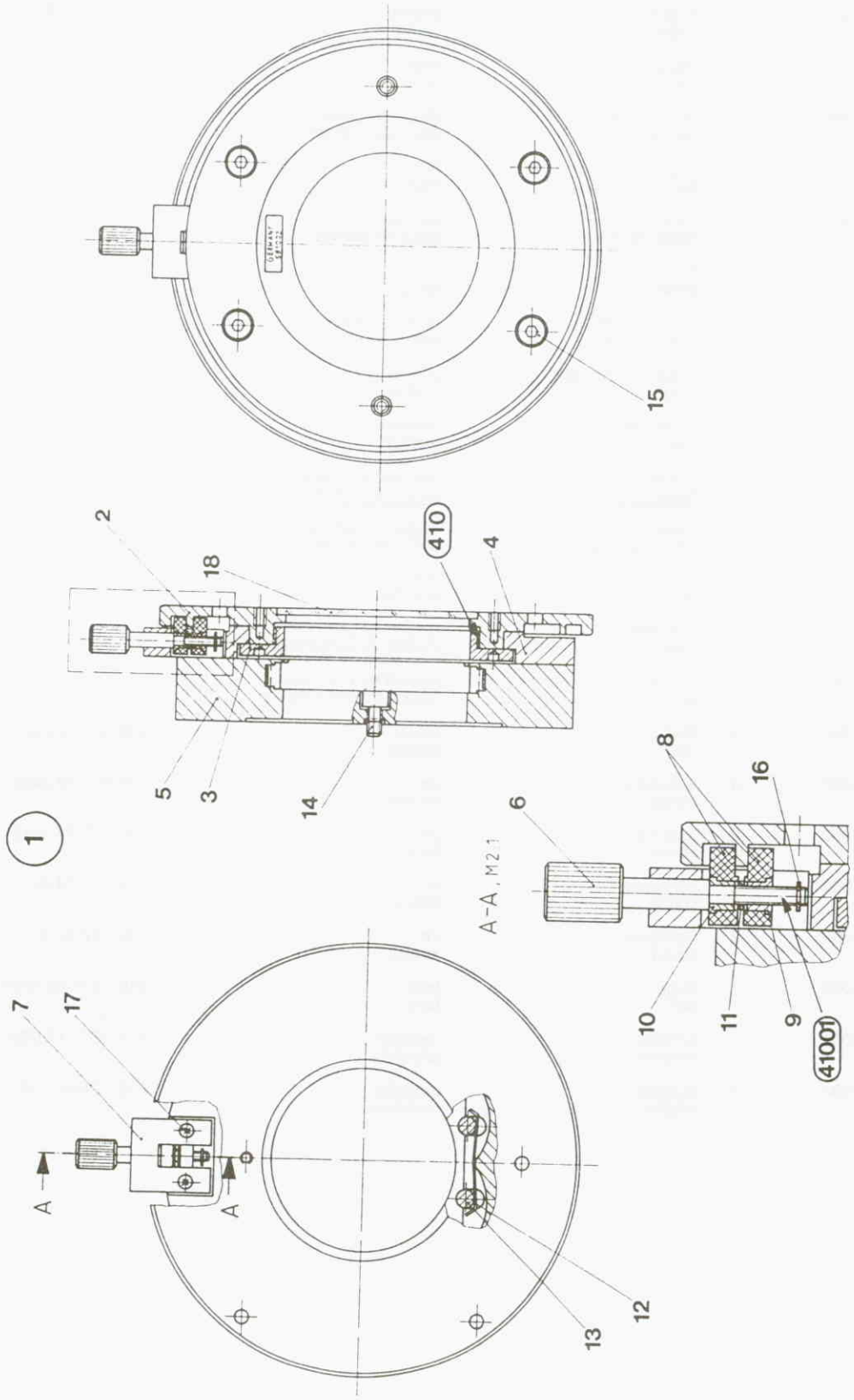
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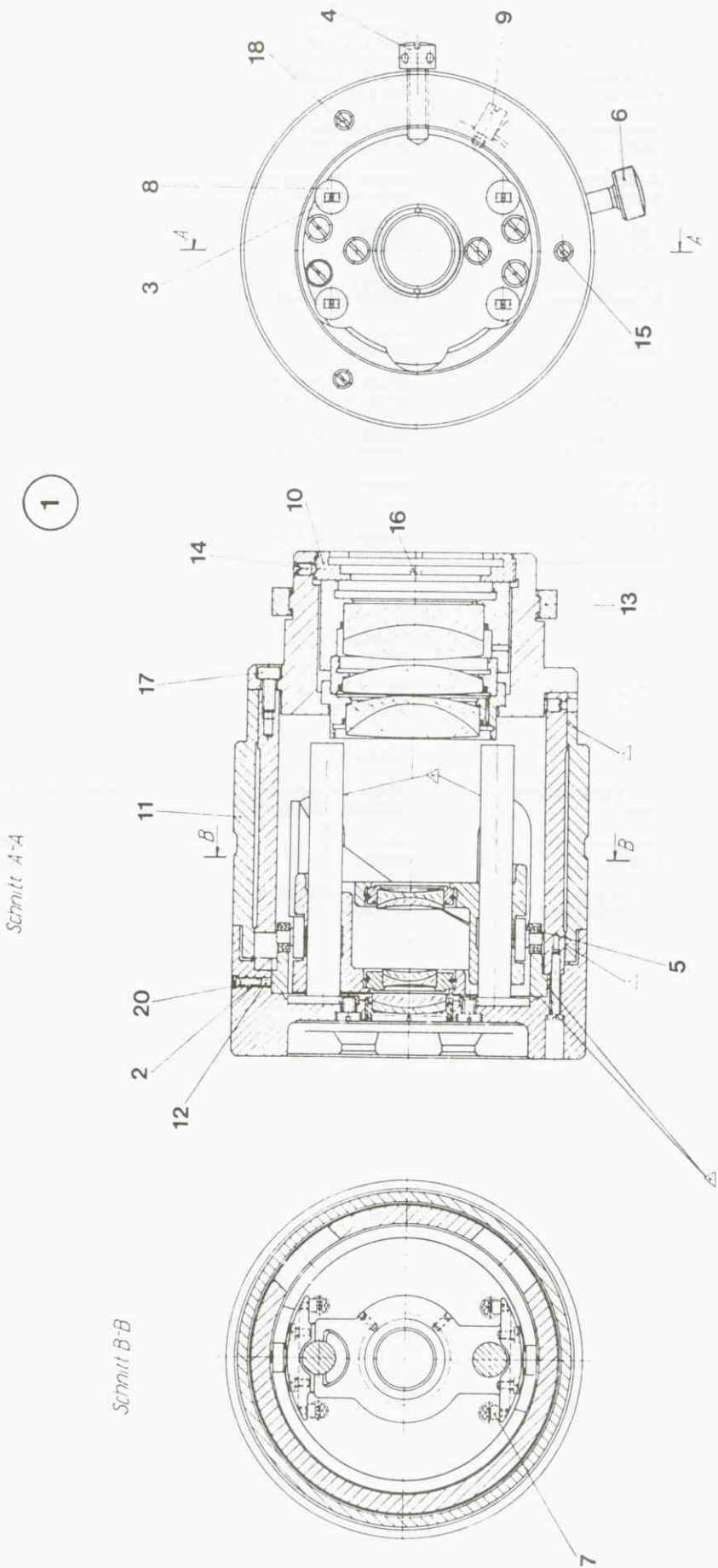
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-462.015-000	1	Vorsatzlinse, Objektiv 0,5X lens	lentille lente	V 581 005 G 2...5,28,29
2	020-462.015-005	1	Fassung mount	monture montura	
3	020-462.015-006	1	Zwischenring spacer	bague intermediaire anillo intermedio	
4	020-462.015-008	1	Federring spring ring	bague 'a ressort anillo elastico	
5	020-462.015-009	1	Sprengring circlip	bague de retenue anillo sujecion	
6	020-462.016-000	1	Durchlichtbeleuchtung links transmitted light unit		V 581 006 B 8.1 o 1, B 13.1
	020-462.017-000	1	Durchlichtbeleuchtung rechts transmitted light unit		V 581 007 B 8.1 o 1, B 13.1
7	020-462.016-005	1	Platte plate	plaque placa	
8	020-462.016-006	1	Aufnahme mount	monture montura	
9	020-462.016-008	1	Platte plate	plaque placa	
10	020-462.016-011	1	Vorsatzlinse, 1x lens	lentille lente	G 11...13,28,30
11	020-462.016-012	1	Fassung mount	monture montura	
12	020-462.016-013	1	Ring ring	rondelle anillo	
13	020-462.016-014	1	Vorschraubring retaining ring	bague filetee anillo de retencion	
14	020-462.016-017	1	Blendenaufnahme leaf holder	logement du diaphragme soporte para diafragma	
15	020-462.016-018	1	Blende diaphragm	diaphragme diafragma	
16	020-462.016-023	1	Streuscheibe diffusion filter	verre diffusant cristal dispersor	
17	020-462.016-027	1	Ring ring	rondelle anillo	
18	700-153.220-000	2	Zylinderstift straight pin	goupille cylindrique pasador cilindrico	DIN 7 m 6x16
19	703-113.630-000	3	Schraube screw	vis tornillo	DIN 912 M 3x20
20	703-124.630-000	8	Schraube screw	vis tornillo	DIN 912 M 4x12
21	703-127.630-000	2	Schraube screw	vis tornillo	DIN 912 M 4x20
22	705-425.000-000	1	Scheibe washer	rondelle arandela	015-121.023-312
23	705-644.220-000	1	Sattelfeder spring		015-125.043-222
24	706-287.220-000	1	Scheibe washer	rondelle arandela	015-121.036-352
25	707-553.213-000	1	Schraube screw	vis tornillo	DIN 923 M 2,5x2,5
26	707-952.630-000	1	Schraube screw	vis tornillo	DIN 7985 M 3x6
27	708-254.000-000	1	Knopf knob	bouton boton	LN 12518 8
28	940-192.110-010	2	Linse lens	lentille lente	
29	940-192.110-020	1	Linse lens	lentille lente	
30	940-192.111-020	1	Linse lens	lentille lente	
31	940-500.210-760	1	Spiegel mirror	miroir espejo	



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-387.001-054	1	Schraube screw	vis tornillo	
2	020-462.028-000	1	Kugeltisch stage	platine platina	G 3...8,15...23
3	020-462.028-005	1	Flansch flange	bride brida	
4	020-462.028-006	1	Druckstück pressure piece	pi'èce de pression pieza de presion	
5	020-462.028-007	1	Kugel ball	bille bola	
6	020-462.028-008	1	Tischplatte stage plate	plateau de platine placa de platina	
7	020-462.028-009	1	Klotz block	bloc tarngo	
8	020-462.028-010	1	Gewindestift threaded pin	goupille filetee perno con rosca	
9	020-462.029-000	1	Kugeltisch RD 25 stage	platine platina	G 1,10...14
10	020-462.029-005	1	Aufnahme mount	monture montura	
11	020-462.029-006	1	Tischplatte stage plate	plateau de platine placa de platina	
12	020-462.029-007	1	Klemmring clamping ring	bague de serrage anillo de fijacion	
13	020-462.029-008	1	Scheibe washer	rondelle arandela	
14	020-462.029-009	1	Druckfeder pressure spring	ressort de pression muelle de compresion	
15	020-517.030-093	1	Druckfeder pressure spring	ressort de pression muelle de compresion	
16	702-211.631-000	2	Mutter nut	ecrou tuerca	DIN 439 BM 4
17	703-109.631-000	3	Schraube screw	vis tornillo	DIN 912 M 3x10
18	703-124.631-000	2	Schraube screw	vis tornillo	DIN 912 M 4x12
19	703-127.631-000	1	Schraube screw	vis tornillo	DIN 912 M 4x20
20	703-129.631-000	2	Schraube screw	vis tornillo	DIN 912 M 4x25
21	704-629.000-000	1	Kugel ball	bille bola	DIN 5401-6mm-III
22	705-448.000-000	1	Scheibe washer	rondelle arandela	015-121.047-085
23	705-730.000-000	4	Scheibe washer	rondelle arandela	015-121.043-082



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-462.011-000	1	Drehtisch rotating stage	platine tournante platina giratoria	V 581 002 B 10.1
2	020-462.011-005	1	Tischplatte stage plate	plateau de platine placa de platina	
3	020-462.011-006	1	Vorschraubring retaining ring	bague filetee anillo de retencion	
4	020-462.011-007	1	Zwischenring spacer	bague intermediaire anillo intermedio	
5	020-462.011-008	1	Platte plate	plaque placa	
6	020-462.011-010	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	
7	020-462.011-011	1	Halter holder	support soporte	
8	020-462.011-012	2	Druckstück pressure piece	pièce de pression pieza de presion	
9	020-462.011-014	1	Gewindebuchse threaded bushing	douille filetee casquillo con rosca	
10	020-462.011-015	1	Buchse bushing	douille casquillo	
11	020-462.011-017	1	Druckfeder pressure spring	ressort de pression muelle de compresion	
12	020-462.011-021	2	Blattfeder leaf spring		
13	020-462.011-022	4	Rolle roller	rouleau rodillo	
14	020-462.031-007	2	Schraube screw	vis tornillo	
15	703-127.630-000	4	Schraube screw	vis tornillo	DIN 912 M 4x20
16	704-781.000-000	1	Sicherungsscheibe c-clip	disque de securite arandela de seguridad	DIN 6799 1,9
17	708-962.220-000	2	Schraube screw	vis tornillo	LN 12015 M 2x8
18	940-500.320-290	1	Schutzglas protective glass	verre de protection cristal protector	



△ geschliffen m. 1284,27 122-

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-462.067-000	1	Objektiv Makrozoom 1:5 objective	objectif objetivo	V 599 015 B 11.1, B 17.2
2	- . .	1	Druckfeder pressure spring	ressort de pression muelle de compresion	126 198
3	- . .	1	Zugfeder pull spring	ressort de traction muelle de traccion	127 458
4	- . .	1	Schraube screw	vis tornillo	162 301
5	- . .	1	Kugellager ball bearing	palier 'a billes cojinete p. bolillas	250 878
6	- . .	1	Schraube screw	vis tornillo	334 751
7	- . .	1	Schraube screw	vis tornillo	367 749
8	- . .	1	Scheibe washer	rondelle arandela	367 750
9	- . .	1	Mitnehmer fork	ergot entraineur arrastrador	367 752
10	- . .	1	Bajonettring mit Zylinderstift bayonet ring	bague 'a baionnette anillo bayoneta	376 762
11	- . .	1	Rohr tube	tube tubo	376 768
12	- . .	1	Bremsbolzen brake bolt	boulon de frein bulon de freno	376 771
13	- . .	1	Rändelring knurled ring	bague moletee anillo moleteado	391 267
14	- . .	1	Gewindestift threaded pin	goupille filetee perno con rosca	176 134 M 3x5
15	- . .	1	Schraube screw	vis tornillo	177 111 M 2x14
16	- . .	1	Gewindestift threaded pin	goupille filetee perno con rosca	177 899 M 3x5
17	- . .	1	Schraube screw	vis tornillo	188 840 M 3x8
18	- . .	1	Schraube screw	vis tornillo	192 239 M 2x12
20	- . .	1	Gewindestift threaded pin	goupille filetee perno con rosca	252 318 M 3x2,5

Achtung:

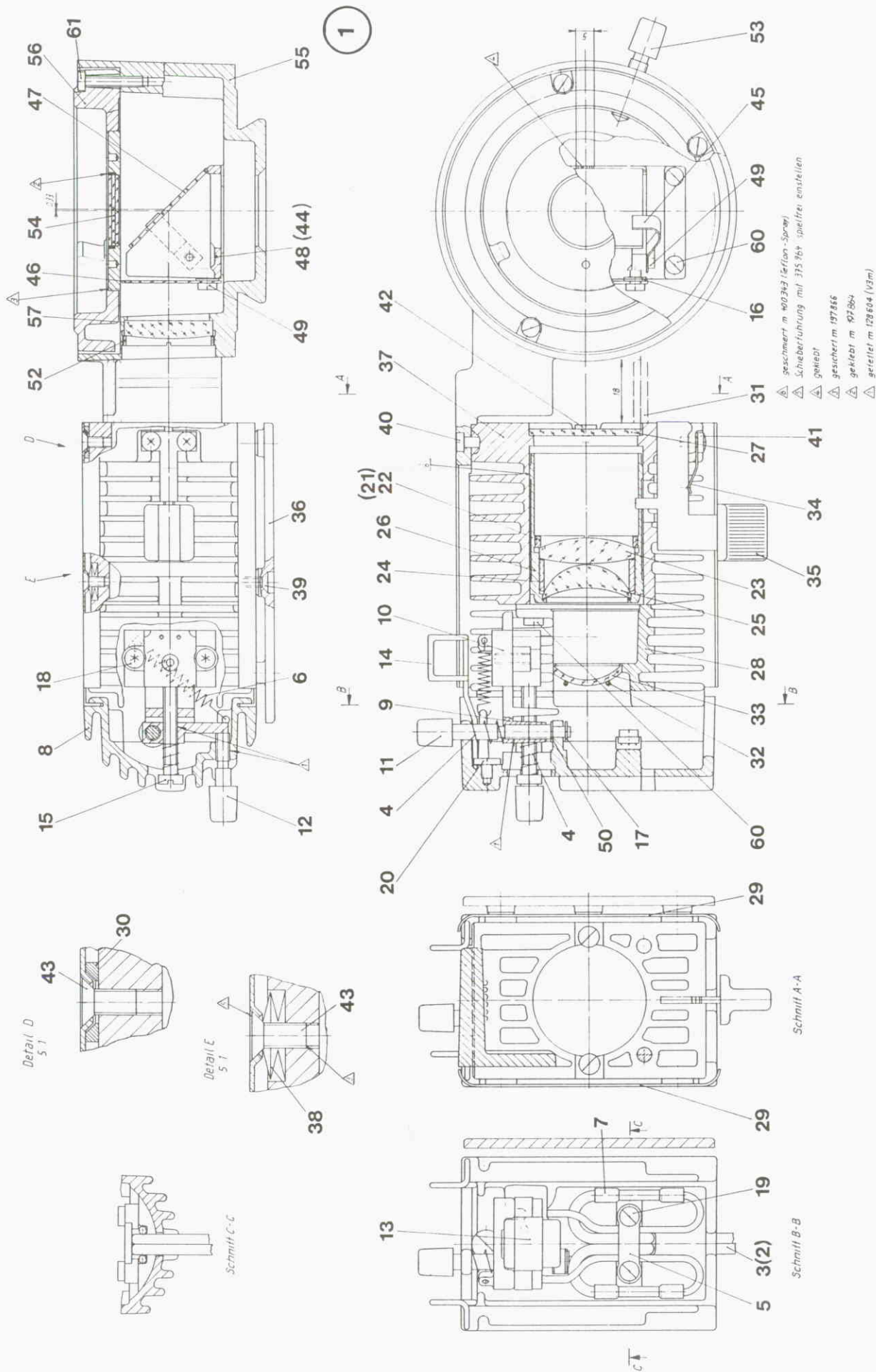
Die auf dieser Seite aufgeführten Ersatzteile müssen mit der in der Bemerkungs-Spalte aufgeführten 6-stelligen Bestell-Nr. direkt bei Leica AG in Heerbrugg bestellt werden (außer Nr.1 = Bestellung in Wetzlar).

Anfragen zu Ausbildung, Servicedokumentation, Garantieabwicklung etc. für diese Heerbrugg-Produkte sind ebenfalls direkt an Leica AG, Heerbrugg zu richten.

Attention:

The spares listet on this page have to be ordered directly from Leica AG, Heerbrugg with the 6-digit order No. of column " Bemerkung" (except for No 1 = order from Wetzlar).

Please address all inquiries regarding training, sevice documentation, warranty matters etc. for these products to Leica Heerbrugg AG.



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-462.071-000	1	Auflichteinrichtung incident light attach.	dispositif-Epi dispositivo-Epi	V 599 007
2	- . .	1	Deckel verdrahtet cover wired	couvercle tapa	398 170
3	- . .	1	Kabel mit Stecker cable with plug	cable cable	160 821
4	- . .	1	Druckfeder pressure spring	ressort de traction muelle de traccion	250 216
5	- . .	1	Schelle clip	bride de serrage abrazadera	313 640
6	- . .	1	Zugfeder pull spring	ressort de traction muelle de traccion	336 615
7	- . .	1	Kabelstossverbinder cabel connector		343 783
8	- . .	1	Deckel cover	couvercle tapa	386 517
9	- . .	1	Lampenaufnahme lamp mount	monture de lampe montura para lampara	386 519
10	- . .	1	Lampenhalter lamp holder	support de lampe soporte p. lampara	386 521
11	- . .	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	386 524
12	- . .	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	386 527
13	- . .	1	Lampenfassung lamp mount	douille de lampe portalamparas	393 483
14	- . .	1	Verschlussbügel locking bracket		394 022
15	- . .	1	Schraube screw	vis tornillo	427 478
16	- . .	1	Scheibe Ø3,2 washer	rondelle arandela	177 975
17	- . .	1	Sicherungsscheibe Ø2,3 c-clip	disque de securite arandela de seguridad	243 211
18	- . .	1	Schraube screw	vis tornillo	309 763 M 3x10
19	- . .	1	Schraube screw	vis tornillo	348 985 M 3x8
20	- . .	1	Schraube screw	vis tornillo	358 316 M 3x4
21	- . .	1	Kollektor collector	collecteur colector	246 635
22	- . .	1	Gewinding threaded ring	bague filetee anillo con rosca	127 506
23	- . .	1	Kollektorlinse collector lens	collecteur colector	181 241
24	- . .	1	Distanzring spacer	bague d'entretoise anillo distanciador	394 023
25	- . .	1	Kollektorlinse collector lens	collecteur colector	398 881
26	- . .	1	Kollektorfassung collector mount		432 067
27	- . .	1	Wärmeschutzfilter heat absorption filter	filtre anti-calorique filtro anticálorico	126 119
28	- . .	1	Lampenkühler lamp cooler		386 561
29	- . .	1	Abdeckung cover	couverture cubierta	246 635
30	- . .	1	Isolerring insulating ring	bague isolante anillo aislante	386 651
31	- . .	1	Rändelstift knurled pin		389 139
32	- . .	1	Drahtbügel wire clamp		394 026

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
33	- - -	1	Hohlspiegel reflector	miroir concave reflector	394 029
34	- - -	1	Feder spring	ressort muelle	398 843
35	- - -	1	Schieber slider	coulisseau corredera	412 002
36	- - -	1	Seitenplatte side cover		427 437
37	- - -	1	Lampengehäuse lamp housing		432 066
38	- - -	1	Tellerfeder saucer spring		169 912
39	- - -	1	Schraube screw	vis tornillo	251 684 M 3x10
40	- - -	1	Schraube screw	vis tornillo	296 953 M 3x8
41	- - -	1	Schraube screw	vis tornillo	372 446 M 3x5
42	- - -	1	Schraube screw	vis tornillo	398 981 M 2x4
43	- - -	1	Schraube screw	vis tornillo	375 964 M 3x6
44	- - -	1	Spiegelträger mirror carrier		398 364
45	- - -	1	Feder spring	ressort muelle	180 644
46	- - -	1	Polarisator polarizer	polarisateur polarizador	246 862
47	- - -	1	Strahlenteiler beam splitter		246 864
48	- - -	1	Spiegelträger mirror bracket	support de miroir portaespejos	400 125
49	- - -	1	Schraube screw	vis tornillo	175 868 M 3x6
50	- - -	1	Scheibe Ø3,2 washer	rondelle arandela	177 975
51	- - -	1	Niedervoltlampe low voltage lamp		398 365
52	- - -	1	Gewinding threaded ring	bage filetee anillo con rosca	127 506
53	- - -	1	Klemmschraube clamping screw		377 516
54	- - -	1	Zirkularpolfilter circular pol. filter		398 363
55	- - -	1	Gehäuse housing	boitier caja	400 122
56	- - -	1	Tubusträger tube carrier		400 124
57	- - -	1	Beleuchtungslinse illuminating lens	lentille d'eclairage lente de iluminacion	410 211
58	- - -	1	Schutzdeckel protective cap		424 316
59	- - -	1	Schutzdeckel protective cap		327 436
60	- - -	1	Schraube screw	vis tornillo	296 953 M 3x8
61	- - -	1	Schraube screw	vis tornillo	381 722 M 3x16

Achtung:

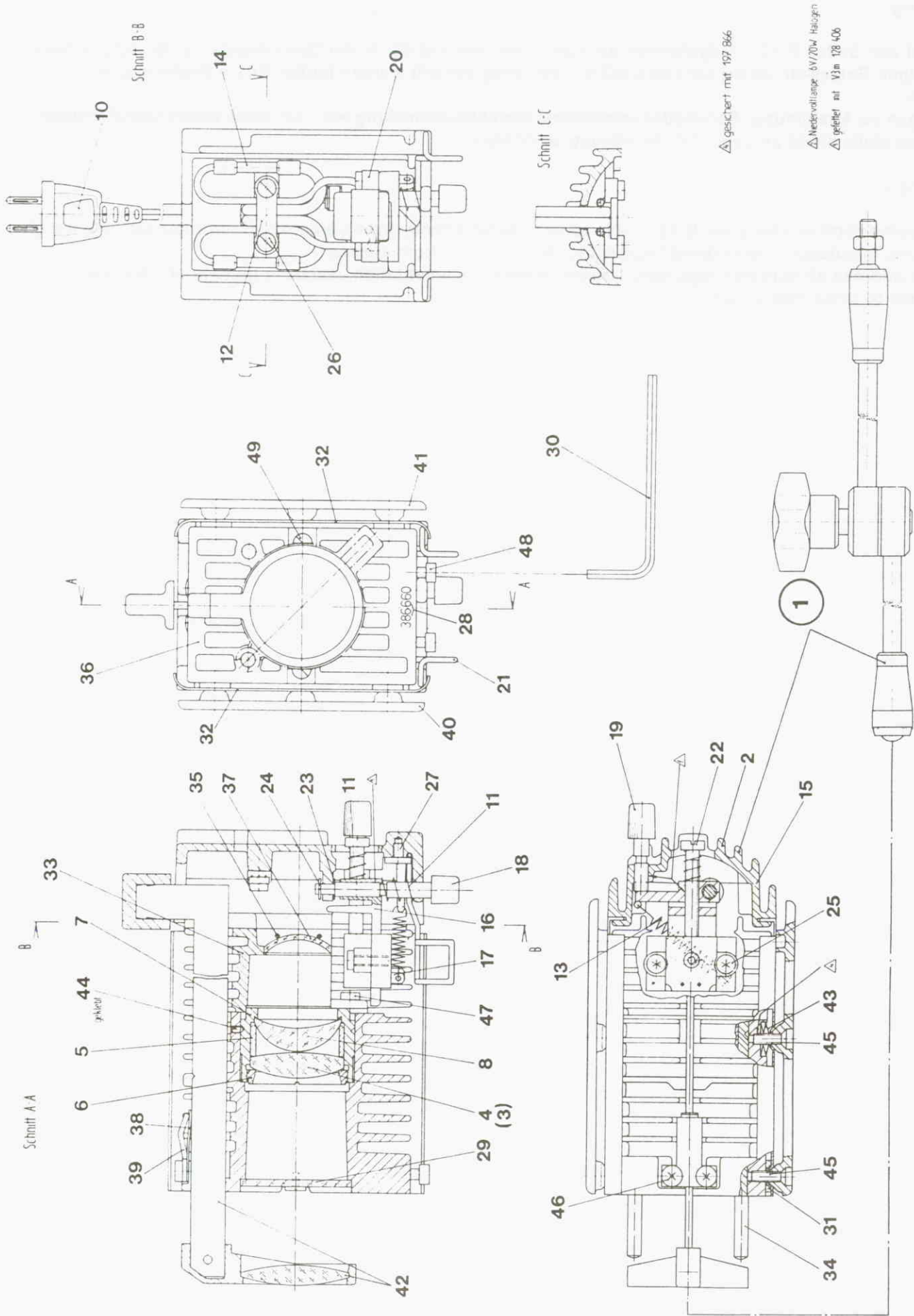
Die auf den Seiten B 12.1 aufgeführten Ersatzteile müssen mit der in der Bemerkungs-Spalte aufgeführten 6-stelligen Bestell-Nr. direkt bei Leica AG in Heerbrugg bestellt werden (außer Nr.1 = Bestellung in Wetzlar).

Anfragen zu Ausbildung, Servicedokumentation, Garantieabwicklung etc. für diese Heerbrugg-Produkte sind ebenfalls direkt an Leica AG, Heerbrugg zu richten.

Attention:

The spares listet on this page B 12.1 have to be ordered directly from Leica AG, Heerbrugg with the 6-digit order No. in column " Bemerkung" (except for No 1 = order from Wetzlar).

Please address all inquiries regarding training, service documentation, warranty matters etc. for these products to Leica Heerbrugg AG.



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-462.073-000	1	Lampenhaus mit Gelenkarm lamp housing	boitier de lampe caja de lampara	V 599 009
2	020-462.016-021	1	Lampenhaus lamp housing	boitier de lampe caja de lampara	
3	- . .	1	Kollektor collector	collecteur colector	398 169
4	- . .	1	Kollektorlinse collector lens		181 241
5	- . .	1	Distanzring spacer	bague d'entretoise anillo distanciador	394 023
6	- . .	1	Gewinding threaded ring	bague filetee anillo con rosca	394 025
7	- . .	1	Kollektorfassung collector mount		398 880
8	- . .	1	Kollektorlinse collector lens		398 881
9	- . .	1	Deckel cover	couvercle tapa	398 170
10	- . .	1	Kabel mit Stecker cable with plug	cable cable	160 821
11	- . .	1	Druckfeder pressure spring	ressort de pression muelle de compresion	250 216
12	- . .	1	Schelle clip	bride de serrage abrazadera	313 640
13	- . .	1	Zugfeder pull spring	ressort de traction muelle de traccion	336 615
14	- . .	1	Kabelstossverbinder cable connector		343 783
15	- . .	1	Deckel cover	couvercle tapa	386 517
16	- . .	1	Lampenführung lamp guide		386 519
17	- . .	1	Lampenträger lamp carrier		386 521
18	- . .	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	386 524
19	- . .	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	386 527
20	- . .	1	Lampenfassung lamp mount	douille de lampe portalamparas	393 483
21	- . .	1	Verschlussbügel locking bracket		394 022
22	- . .	1	Schraube screw	vis tornillo	427 478
23	- . .	1	Scheibe Ø 3,2 washer	rondelle arandela	177 975
24	- . .	1	Sicherungsscheibe c-clip	disque de securite arandela de seguridad	243 211
25	- . .	1	Schraube screw	vis tornillo	309 763 M 3x10
26	- . .	1	Schraube screw	vis tornillo	348 985 M 3x8
27	- . .	1	Schraube screw	vis tornillo	358 316 M 3x4
28	- . .	1	Niedervoltlampe low voltage lamp		386 660
29	- . .	1	Wärmeschutzfilter heat absorption filter	filtre anti-calorique filtro anticalorico	126 119
30	- . .	1	Inbusstiftschlüssel allen key		229 341
31	- . .	1	Lampenkühler lamp cooler		386 561

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
32	- - -	1	Abdeckung cover	couverture cubierta	386 562
33	- - -	1	Isolerring insulating ring	bague isolante anillo aislante	386 651
34	- - -	1	Rändelstift knurled pin		389 139
35	- - -	1	Drahtbügel wire clamp		394 026
36	- - -	1	Lampengehäuse lamp housing		394 028
37	- - -	1	Hohlspiegel reflector	miroir concave reflector	394 029
38	- - -	1	Feder spring	ressort muelle	398 843
39	- - -	1	Bride cable clip		421 828
40	- - -	1	Seitenplatte side plate		427 437
41	- - -	1	Seitenplatte beschriftet side plate		427 438
42	- - -	1	Schieber mit Beleuchtungslinse slide with illumination lens		438 111
43	- - -	1	Tellerfeder saucer spring		169 912
44	- - -	1	Gewindestift threaded pin	goupille filetee perno con rosca	176 091 M 2x3
45	- - -	1	Schraube screw	vis tornillo	251 684 M 3x10
46	- - -	1	Schraube screw	vis tornillo	276 159 M 3x6
47	- - -	1	Schraube screw	vis tornillo	296 953 M 3x8
48	- - -	1	Schraube screw	vis tornillo	309 763 M 3x10
49	- - -	1	Schraube screw	vis tornillo	398 981 M 2x4

Achtung:

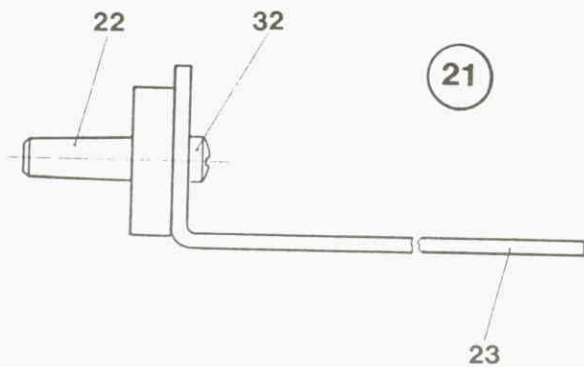
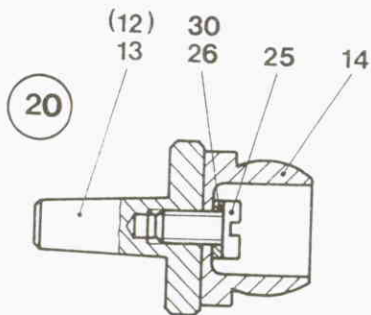
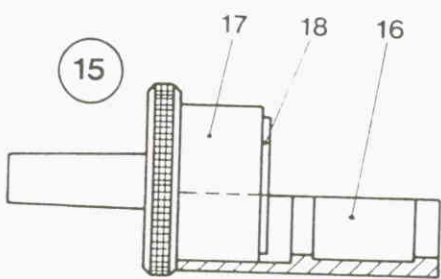
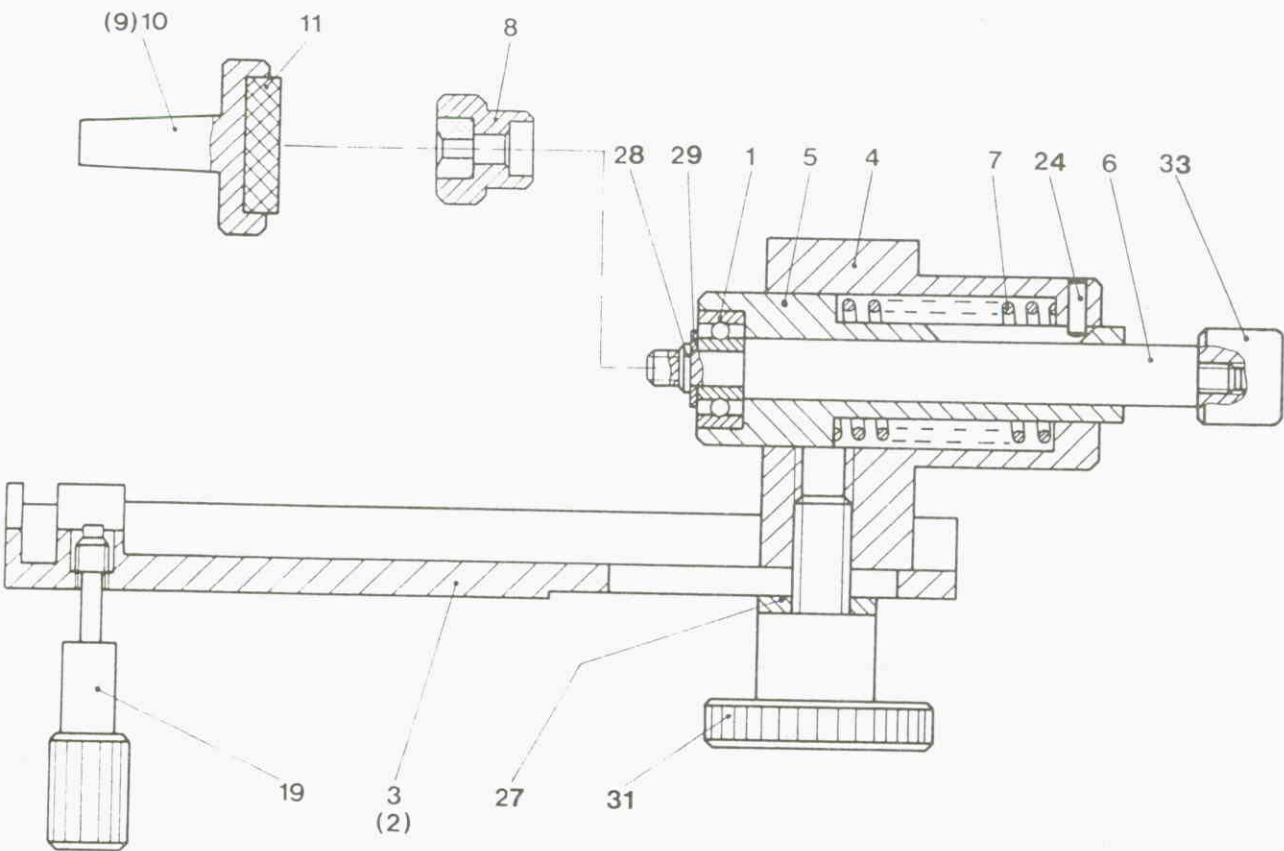
Die auf den Seiten B 13.1 aufgeführten Ersatzteile müssen mit der in der Bemerkungs-Spalte aufgeführten 6-stelligen Bestell-Nr. direkt bei Leica AG in Heerbrugg bestellt werden (außer Nr.1 und Nr.2 = Bestellung in Wetzlar).

Anfragen zu Ausbildung, Servicedokumentation, Garantieabwicklung etc. für diese Heerbrugg-Produkte sind ebenfalls direkt an Leica AG, Heerbrugg zu richten.

Attention:

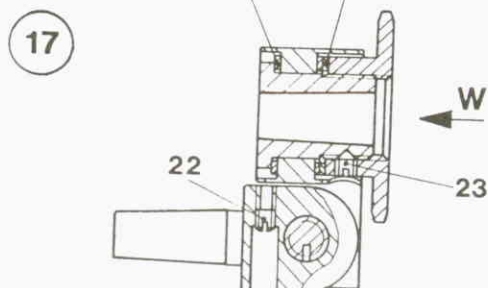
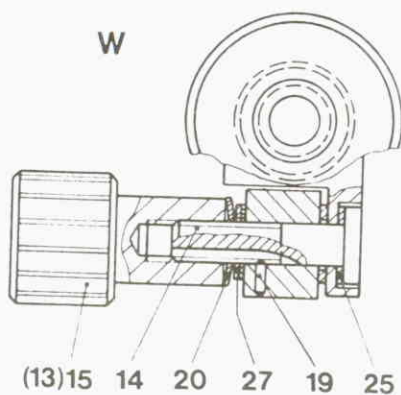
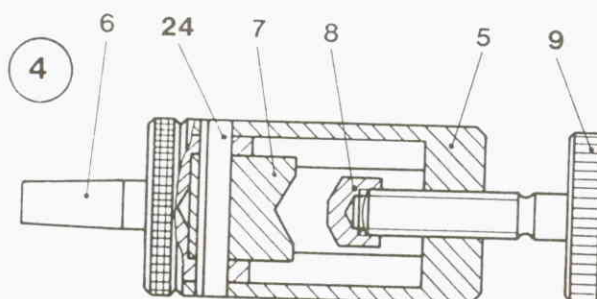
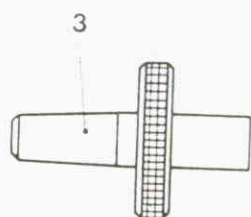
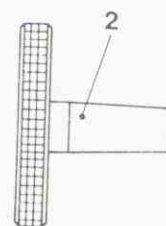
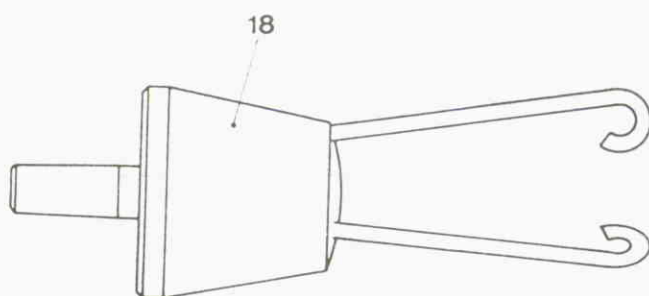
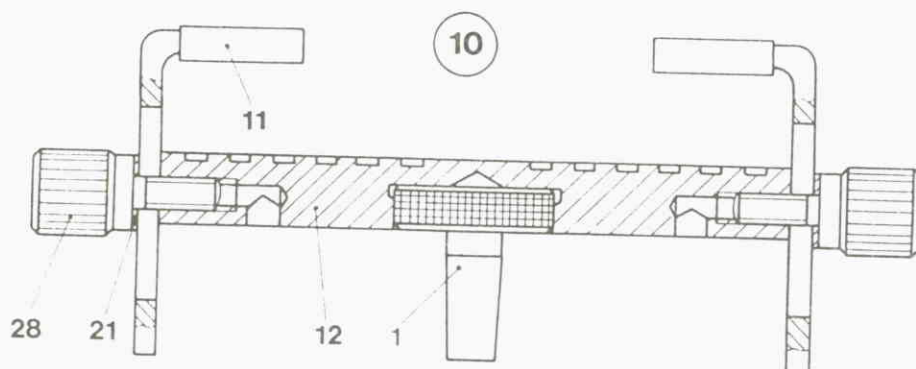
The spares listet on page B 13.1 have to be ordered directly from Leica AG, Heerbrugg with the 6-digit order No. of column " Bemerkung" (except for No 1 and 2 = order from Wetzlar).

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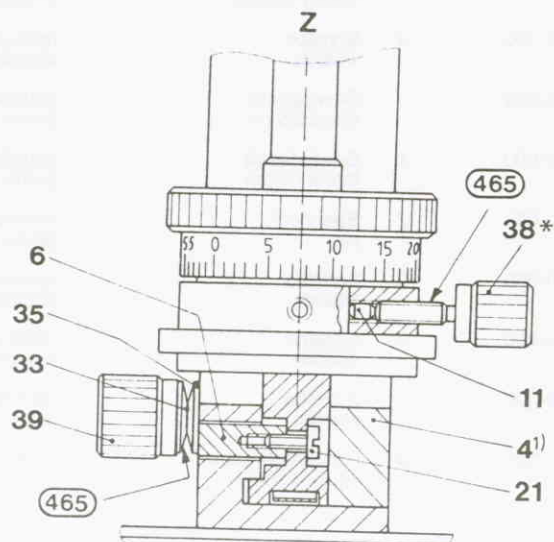
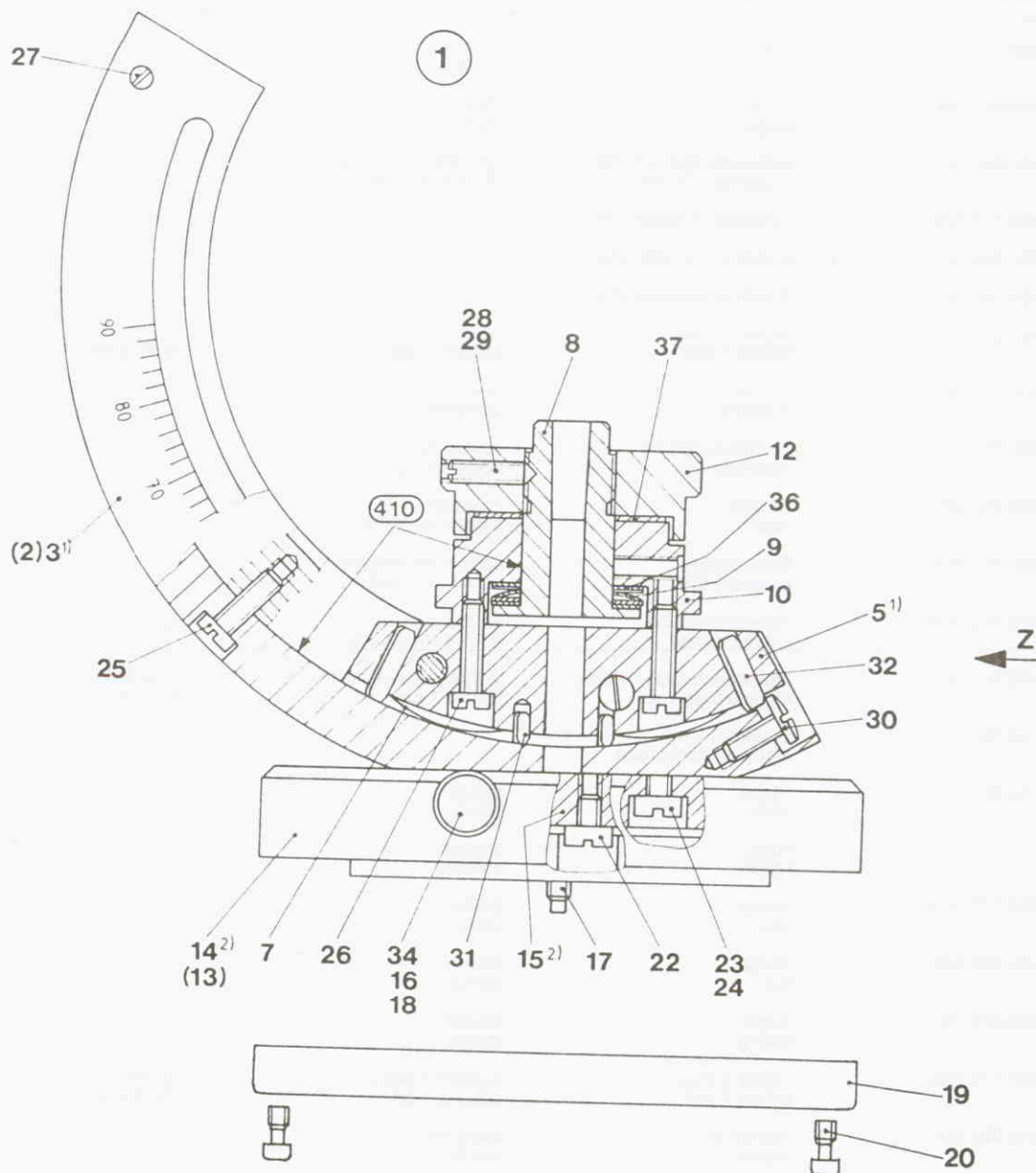


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-200.018-030	1	Rillenkugellager deep groove ball bear.	roulement rainuré a billes rodamiento acanalado	
2	020-460.034-000	1	Halter holder	support soporte	V 520 220 G 1,3...7,19,24,27...29, 31,33
3	020-460.034-005	1	Träger carrier	support soporte	
4	020-460.034-012	1	Gehäuse housing	boitier caja	
5	020-460.034-016	1	Buchse bushing	douille casquillo	
6	020-460.034-020	1	Welle shaft	arbre arbol	
7	020-460.034-024	1	Druckfeder pressure spring	ressort de pression muelle de compresion	
8	020-460.035-000	1	Zentriereinsatz centering insert	insert de centrage inserción de centrar	V 520 221
9	020-460.036-000	1	Andruckplatte pressure plate	plaque de pression placa de presion	V 520 222 G 10,11
10	020-460.036-001	1	Dorn lug	broche mandril	
11	020-460.036-002	1	Platte plate	plaque placa	
12	020-460.037-000	1	Aufnahmedorn 0,22 receiving lug	broche de montage mandril receptor	V 520 223 G 13,14,25,30
	020-460.038-000	1	Aufnahmedorn 6,35		V 520 224 G 13,14,25,26
	020-460.042-000	1	Aufnahmedorn 0,45		V 520 228 G 13,14,25,26
	020-460.041-000	1	Aufnahmedorn 9		V 520 227 G 13,14,25,26
	020-460.040-000	1	Aufnahmedorn 7,63 M		V 520 226 G 13,14,23,30
	020-460.039-000	1	Aufnahmedorn 7,65		V 520 225 G 13,14,25,26
13	020-460.037-001	2	Dorn 0,22 lug	broche mandril	f V 520 223
	020-460.038-001	2	Dorn 6,35		f V 520 224
	020-460.039-001	2	Dorn 7,65		f V 520 225
	020-460.040-001	2	Dorn 7,63M		f V 520 226
	020-460.041-001	2	Dorn 9		f V 520 227
	020-460.042-001	2	Dorn 0,45		f V 520 228
14	020-460.037-002	2	Aufnahme 0,22 mount	monture montura	f V 520 223
	020-460.039-002	2	Aufnahme 7,65		f V 520 225
	020-460.040-002	2	Aufnahme 7,63 M		f V 520 226
	020-460.038-002	2	Aufnahme 6,35		f V 520 224
	020-460.041-002	2	Aufnahme 9		f V 520 227
	020-460.042-002	2	Aufnahme 0,45		f V 520 228
15	020-460.043-000	1	Aufnahmhülse receiving sleeve	douille de montage vaina receptor	V 520 229 G 16...18
16	020-460.043-001	2	Träger carrier	support soporte	
17	020-460.043-002	2	Bolzen bolt	boulon perno	
18	020-460.043-005	2	Scheibe washer	rondelle arandela	
19	020-460.071-008	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
20	020-460.213-000	4	Aufnahme mount	monture montura	V 520 249 G 12,15
21	020-462.026-000	1	Aufnahme mount	monture montura	G 22,23,32
22	020-462.026-005	1	Aufnahme mount	monture montura	
23	020-462.026-006	1	Winkel bracket	equerre angulo	
24	700-070.220-000	1	Zylinderstift straight pin	goupille cylindrique pasador cilindrio	DIN 7 1,5m6x5
25	700-612.214-000	12	Schraube screw	vis tornillo	DIN 84 M 2x5
26	702-128.214-000	8	Scheibe washer	rondelle arandela	DIN 433 2,2
27	702-137.220-000	1	Scheibe washer	rondelle arandela	DIN 433 5,3
28	705-192.000-000	1	Spannstift pin	cheville de tension perno tensor	DIN 7343 1x4
29	706-043.000-000	1	Scheibe washer	rondelle arandela	015-121.036-072
30	706-742.214-000	2	Scheibe washer	rondelle arandela	015-121.024-132
31	707-184.214-000	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	LN 12069 M 5x10
32	707-952.631-000	2	Schraube screw	vis tornillo	DIN 7985 M 3x6
33	708-254.000-000	1	Knopf knob	bouton boton	LN 12518 8



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-460.037-006	2	Dorn lug	broche mandril	
2	020-460.045-000	1	Tisch Ø20 stage	platine platina	
3	020-460.046-000	1	Aufnahmezylinder Ø5 receiving cylinder	cylindre de montage cilindro receptora	
	020-460.047-000	1	Aufnahmezylinder Ø6		
	020-460.048-000	1	Aufnahmezylinder Ø8		
	020-460.049-000	1	Aufnahmezylinder Ø10		
4	020-460.052-000	1	Halter 1 Paar holder 1 pair	support 1 paire soporte 1 par	V 520 260 G 5...9,24
5	020-460.052-005	2	Buchse bushing	douille casquillo	
6	020-460.052-006	2	Aufnahmebolzen receiving bolt	boulon de montage perno receptora	
7	020-460.052-007	2	Einsatz insert	insertion pieza intermedia	
8	020-460.052-008	2	Druckbolzen pressure bolt	boulon de pression perno de presión	
9	020-460.052-009	2	Rändelschraube knurled screw	vis moletée tornillo moleteado	LN 12070 M 4x25
10	020-460.053-000	1	Objekttisch Ø60 1 Paar object stage 1 pair	platine porte-objet 1 paire platina 1 par	V 520 261 G 1,11,12,21,28
11	020-460.053-005	4	Spannwinkel tool orthogonal rake		
12	020-460.053-010	2	Platte plate	plaque placa	
13	020-460.072-000	1	Halter holder	support soporte	G 14...16,19,20,22,23 25...27
14	020-460.072-008	1	Bolzen bolt	boulon perno	
15	020-460.072-009	1	Mutter nut	écrou tuerca	
16	020-460.072-021	1	Feder spring	ressort muelle	
17	020-460.073-000	1	Halter 1 Paar holder 1 pair	support 1 paire soporte 1 par	V 520 328 G 13 (2x)
18	020-460.081-000	1	Aufnahme mount	monture montura	
19	700-190.220-000	1	Zylinderstift straight pin	goupille cylindrique pasador cilindrico	DIN 7 1m6x3
20	701-863.163-000	1	Federscheibe spring washer	rondelle 'a ressort arandela elastica	DIN 137 A 4
21	702-131.220-000	4	Scheibe washer	rondelle arandela	DIN 433 3,2
22	702-518.163-000	1	Gewindestift threaded pin	goupille filetée perno con rosca	DIN 551 M 2x4
23	705-175.163-000	1	Gewindestift threaded pin	goupille filetée perno con rosca	LN 12043 M 2x2,5
24	705-227.000-000	2	Spannstift pin	cheville de tension perno tensor	DIN 7343 3x16
25	705-604.000-000	3	Scheibe washer	rondelle arandela	015-122.046-261
26	706-137.000-000	2	Scheibe washer	rondelle arandela	015-122.086-211
27	706-185.220-000	1	Scheibe washer	rondelle arandela	015-121.046-262
28	708-170.214-000	4	Rändelschraube knurled screw	vis moletée tornillo moleteado	LN 12071 M 3x8



¹⁾Teile sind zueinander gepaßt

²⁾Teile sind zueinander gepaßt

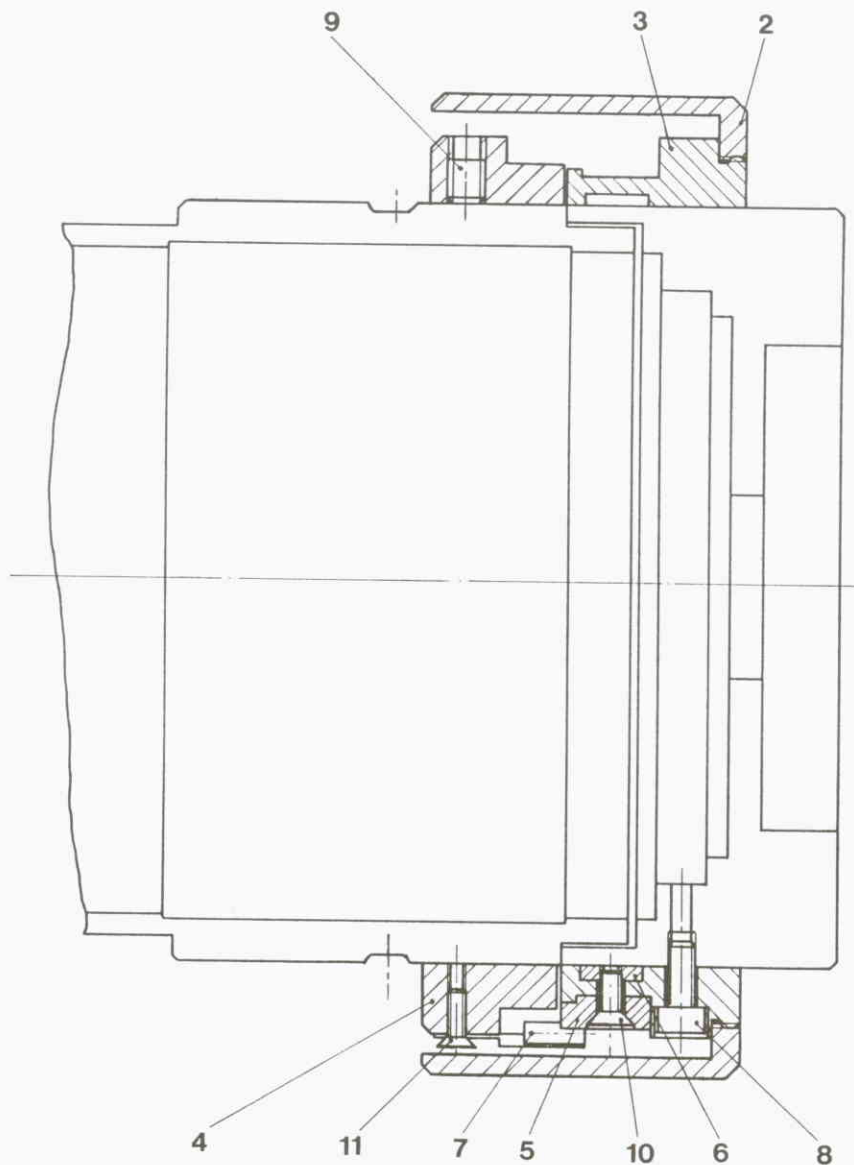
All parts are fitted together
Les pièces sont ajustées les unes pour les autres
Las piezas estan una con otra ajustadas

* versetzt gezeichnet / déplacé
out of position / fuera de lugar

Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-460.030-000	1	Halter holder	support soporte	V 520 219 B 16.1 o 19
2	020-460.032-000	1	Halter holder	support soporte	G 3..12,21,25...33 35...39
3	020-460.032-005	1	Halter holder	support soporte	
4	020-460.032-011	1	Führungsplatte guide plate	plaque de guidage placa de conduccion	
5	020-460.032-012	1	Führungselement guide element	élément de guidage elemento de conducción	
6	020-460.032-016	1	Träger carrier	support soporte	
7	020-460.032-020	2	Feder spring	ressort muelle	
8	020-460.032-021	1	Hülse sleeve	douille vaina	
9	020-460.032-022	1	Feder spring	ressort muelle	
10	020-460.032-030	1	Lager bearing	coussinet cojinete	
11	020-460.032-031	1	Bolzen bolt	boulon perno	
12	020-460.032-037	1	Skalenring scale ring	bague graduee anillo con escala	
13	020-460.071-000	1	Halter holder	support soporte	G 14..18,22,34
14	020-460.071-005	1	Platte plate	plaque placa	
15	020-460.071-006	1	Schieber slider	coulisseau corredera	
16	020-460.071-007	1	Stift pin	goupille perno	
17	020-460.071-008	2	Rändelschraube knurled screw	vis moletée tornillo moleteado	
18	020-460.071-009	1	Stift pin	goupille perno	
19	020-462.013-000	1	Zwischenplatte intermediate plate	plaque intermediaire placa intermedia	V 581 004 G 20
20	020-462.031-007	2	Schraube screw	vis tornillo	
21	700-616.163-000	1	Schraube screw	vis tornillo	DIN 84 M 2x6
22	700-702.163-000	1	Schraube screw	vis tornillo	DIN 84 M 3x4
23	700-705.163-000	2	Schraube screw	vis tornillo	DIN 84 M 3x5
24	700-717.163-000	2	Schraube screw	vis tornillo	DIN 84 M 3x8
25	700-720.213-000	3	Schraube screw	vis tornillo	DIN 84 M 3x10
26	700-724.163-000	2	Schraube screw	vis tornillo	DIN 84 M 3x12
27	702-525.213-000	2	Gewindestift threaded pin	goupille filetée perno con rosca	DIN 551 M 2x8
28	702-553.213-000	1	Gewindestift threaded pin	goupille filetée perno con rosca	DIN 551 M 3x10
29	702-683.213-000	1	Gewindestift threaded pin	goupille filetée perno con rosca	DIN 553 M 3x10
30	703-562.213-000	2	Schraube screw	vis tornillo	DIN 921 M 2,6x6
31	705-206.000-000	2	Spannstift pin	cheville de tension perno tensor	DIN 7343 2x4

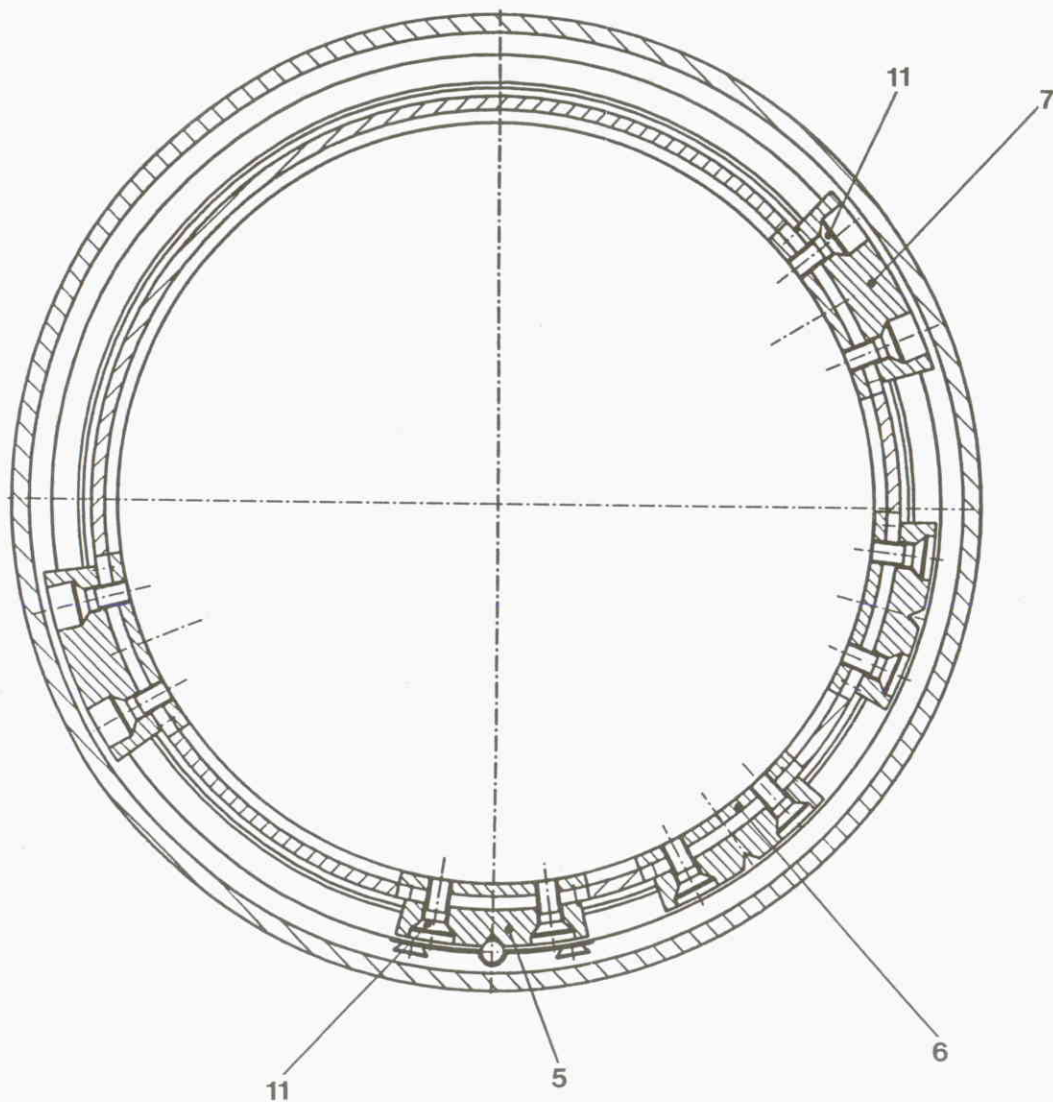
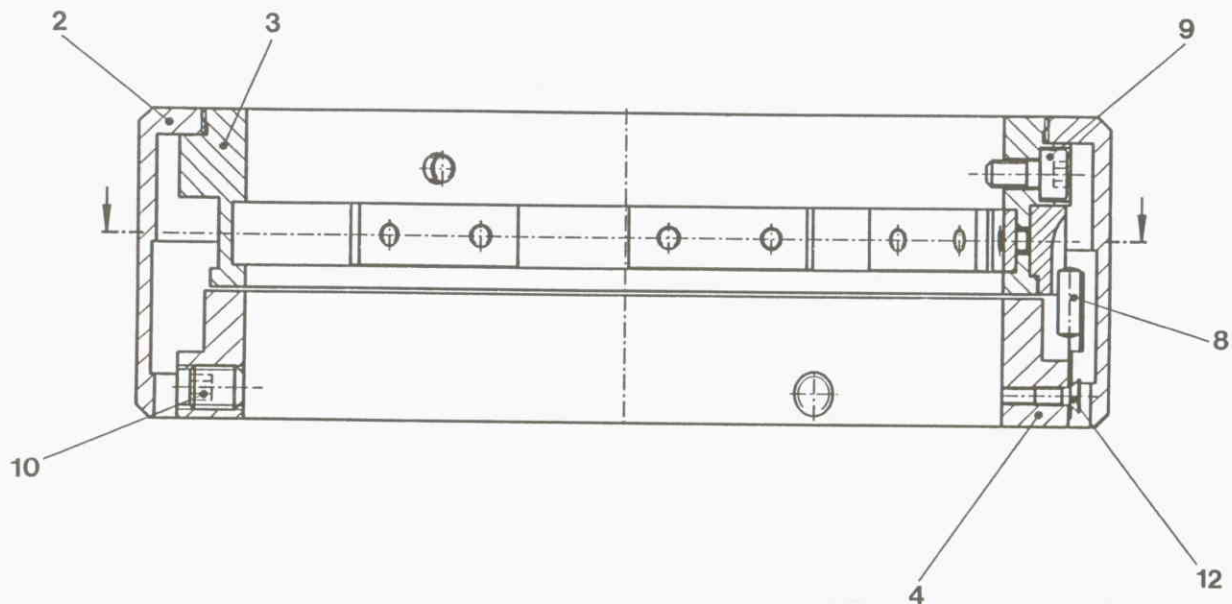
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
32	705-224.000-000	2	Spannstift pin	cheville de tension perno tensor	DIN 7343 3x10
33	705-644.220-000	2	Sattelfeder spring		015-125.043-222
34	705-794.000-000	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	015-010.047-044
35	708-104.000-000	2	Scheibe washer	rondelle arandela	015-122.046-193
36	708-137.000-000	4	Scheibe washer	rondelle arandela	015-122.126-053
37	708-139.000-000	1	Scheibe washer	rondelle arandela	015-122.126-063
38	708-171.213-000	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	LN 12071 M 3x10
39	708-178.213-000	1	Rändelschraube knurled screw	vis moletée tornillo moleteado	LN 12071 M 4x16

1

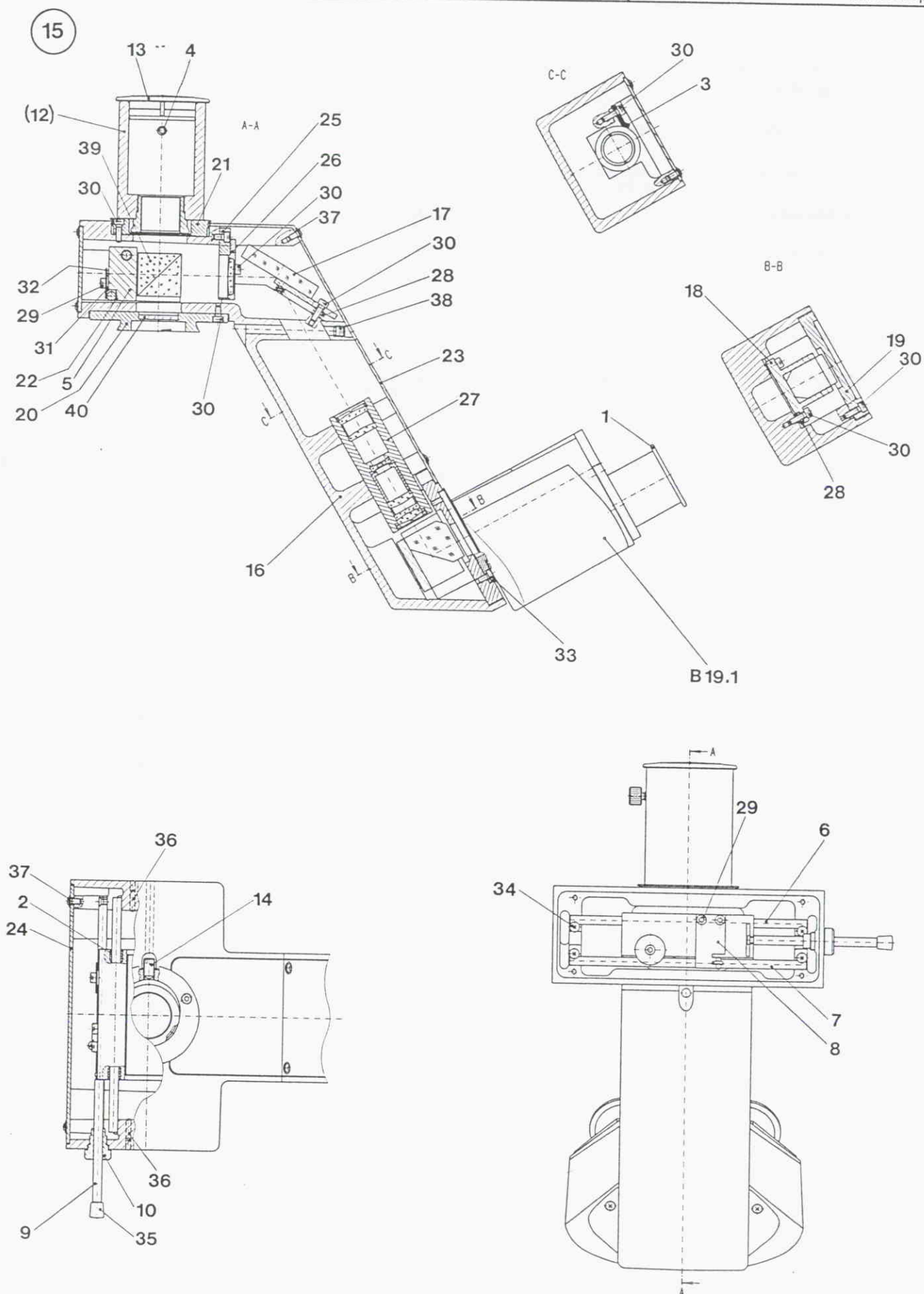


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-462.066-000	1	Rastvorrichtung clickstop devices		NE B 17.2
2	020-462.066-005	1	Überwurfring collar ring	bague-chapeau anillo cobertor	
3	020-462.066-006	1	Halter holder	support soporte	
4	020-462.066-007	1	Ring ring	rondelle anillo	
5	020-462.066-008	3	Rast-Segment segment	segment segmento	
6	020-462.066-009	3	Mutter nut	ecrou tuerca	
7	032-200.002-015	1	Rastfeder arresting spring	ressort d'arret muelle de retencion	
8	703-107.630-000	2	Schraube screw	vis tornillo	DIN 912 M 3x6
9	703-282.630-000	3	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 913 M 5x6
10	707-991.630-000	6	Schraube screw	vis tornillo	DIN 965 M 2,5x8
11	708-511.630-000	2	Schraube screw	vis tornillo	DIN 965 M 2x5

1



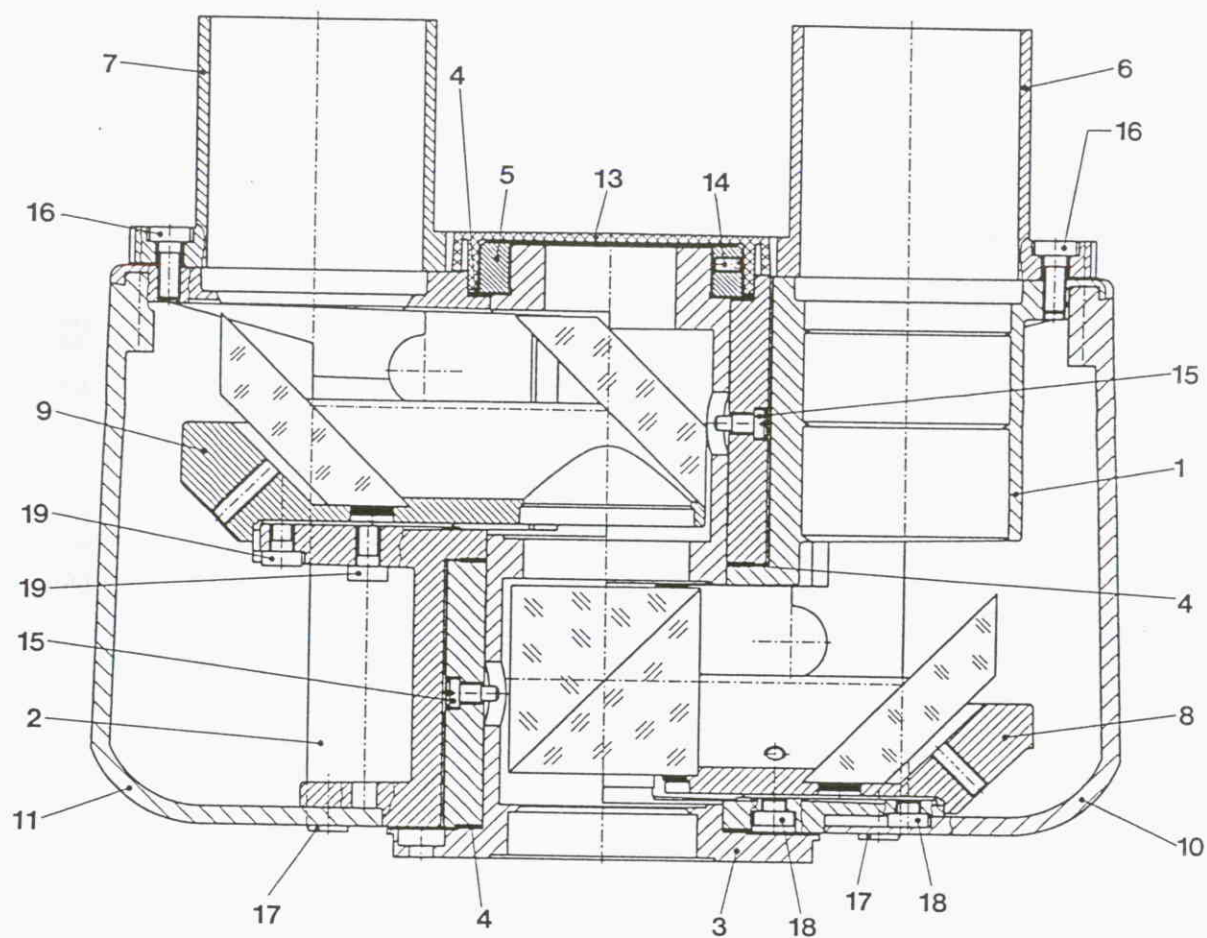
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	020-462.066-000	1	Rastvorrichtung clickstop devices		B 17.2
2	020-462.066-005	1	Überwurfring collar ring	bague-chapeau anillo cobertor	
3	020-462.066-006	1	Segment-Halter holder	support soporte	
4	020-462.066-007	1	Ring ring	rondelle anillo	
5	020-462.066-008	3	Rast-Segment segment	segment segmento	
6	020-462.066-009	5	Mutter nut	ecrou tuerca	
7	020-462.066-010	2	Anschlag stop	arret tope	
8	032-200.002-015	1	Rastfeder arresting spring	ressort d'arret muelle de retencion	
9	703-107.630-000	2	Schraube screw	vis tornillo	DIN 912 M 3x6
10	703-282.630-000	3	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 913 M 5x6
11	707-990.630-000	10	Schraube screw	vis tornillo	DIN 965 M 2,5x6
12	708-511.630-000	2	Schraube screw	vis tornillo	DIN 965 M 2x5



Nr.	Bestell - Nr.	Stück	Benennung		Bemerkung
1	016 - 016 . 005 - 300	2	Staubdeckel dust cover	pare-poussi`ere tapa	
2	016 - 203 . 050 - 100	2	Sinterlager sinter bearing	couche fritte cojinete sinter.	
3	020 - 379 . 172 - 058	2	Halteblech holding sheet	tole de fixation chapa de sujecion	
4	020 - 387 . 001 - 054	1	Schraube screw	vis tornillo	
5	020 - 387 . 405 - 185	1	Scheibe washer	rondelle arandela	
6	020 - 387 . 500 - 083	1	Achse axis	axe eje	
7	020 - 387 . 500 - 084	1	Achse axis	axe eje	
8	020 - 387 . 500 - 094	1	Rastfeder arresting spring	ressort d'arret muelle de retencion	G
9	020 - 387 . 500 - 103	1	Stange bar	barre barra	
10	020 - 387 . 500 - 104	1	Buchse 1 bushing	douille casquillo	
11*	020 - 387 . 500 - 119	1	Deckel cover	couvercle tapa	
12	020 - 387 . 527 - 000	1	Tubusrohr tube	tube tubo	G 4,13
13	020 - 387 . 527 - 012	1	Staubdeckel dust cover	pare-poussi`ere tapa	
14	020 - 387 . 564 - 040	1	Gewindestift threaded pin	goupille filetee perno con rosca	
15	020 - 462 . 033 - 000	1	Tubus tube	C 3T 20 tube tubo	V 581 043 B 18.1 o 11, B 19.1
16	020 - 462 . 033 - 006	1	Gehäuse housing	boitier caja	
17	020 - 462 . 033 - 008	1	Spiegel mirror	miroir espejo	G
18	020 - 462 . 033 - 011	1	Prisma prism	prisme prisma	G
19	020 - 462 . 033 - 014	1	Aufnahmestück changer	pi`ece receptrice pieza receptora	
20	020 - 462 . 033 - 015	1	Wechselring flange ring	bague de changement anillo de cambio	
21	020 - 462 . 033 - 017	1	Wechselring flange ring	oben bague de changement anillo de cambio	
22	020 - 462 . 033 - 019	1	Prismenstuhl prism mount	si`ege de prisme montura de prisma	
23	020 - 462 . 033 - 021	1	Deckel cover	couvercle tapa	
24	020 - 462 . 033 - 022	1	Deckel cover	hinten couvercle tapa	
25	020 - 462 . 033 - 024	1	Aufnahmestück changer	pi`ece receptrice pieza receptora	
26	020 - 462 . 033 - 025	1	Fassung mount	monture montura	G
27	020 - 462 . 033 - 029	1	Tubuslinse lens	1x lentille de tube lente de tubo	
28	031 - 058 . 111 - 042	6	Feder spring	ressort muelle	
29	703 - 107 . 630 - 000	8	Schraube screw	vis tornillo	DIN 912 M 3x6

Nr.	Bestell - Nr.	Stück	Benennung		Bemerkung
30	703 - 109 . 630 - 000	17	Schraube screw	vis tornillo	DIN 912 M 3x10
31	705 - 449 . 000 - 000	1	Scheibe washer	rondelle arandela	015-121.038-055
32	705 - 818 . 000 - 000	1	Scheibe washer	rondelle arandela	015-121.037-495
33	707 - 952 . 630 - 000	3	Schraube screw	vis tornillo	DIN 7985 M 3x6
34	707 - 999 . 630 - 000	4	Schraube screw	vis tornillo	DIN 965 M 3x12
35	708 - 254 . 000 - 000	1	Knopf knob	bouton boton	LN 12518 8
36	708 - 873 . 630 - 000	2	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 913 M 3x12
37	710 - 246 . 630 - 000	8	Schraube screw	vis tornillo	LN 12027 M3x6
38	710 - 375 . 630 - 000	1	Gewindestift threaded pin	goupille filetee perno con rosca	DIN 913 M 6x6
39	940 - 500 . 130 - 618	1	Ablenkprisma deviation prism	prisme de renvoi prisma de desviacion	G
40	940 - 500 . 390 - 060	1	Quarzscheibe quartz disc	disque de quartz disco de cuarzo	

12



Nr.	Bestell - Nr.	Stück	Benennung			Bemerkung
1	020 - 370 . 565 - 031	1	Gehäuse housing	rechts right	boitier caja	
2	020 - 370 . 565 - 034	1	Gehäuse housing	links left	boitier caja	
3	020 - 370 . 565 - 036	1	Achse axis		axe eje	
4	020 - 370 . 565 - 037	3	Scheibe washer		rondelle arandela	
5	020 - 370 . 565 - 039	1	Gewinding threaded ring		bague filetee anillo con rosca	
6	020 - 370 . 565 - 040	1	Okularhülse eyepiece sleeve	rechts right	douille d'oculaire vaina p. el ocular	
7	020 - 370 . 565 - 041	1	Okularhülse eyepiece sleeve	links left	douille d'oculaire vaina p. el ocular	
8	020 - 370 . 565 - 043	1	Prismenstuhl prism mount		siège de prisme montura de prisma	G
9	020 - 370 . 565 - 048	1	Spiegelträger mirror bracket		support de miroir portaespejos	G
10	020 - 370 . 565 - 053	1	Abdeckkappe cover	rechts right	bouchon capa protectora	
11	020 - 370 . 565 - 054	1	Abdeckkappe cover	links left	bouchon capa protectora	
12	020 - 370 . 570 - 026	1	Augenweiteneinstellg. interpupillary adjust.	HC	reglage interpupillaire reglaje interpupilar	B 19.1
13	020 - 370 . 570 - 028	1	Noniusträger vernier holder		support de vernier porta-nonio	
14	710 - 176 . 630 - 000	2	Gewindestift threaded pin		goupille filetee perno con rosca	DIN 913 M2x4
15	710 - 352 . 630 - 000	2	Schraube screw		vis tornillo	DIN 922 M 3x3x2,5
16	710 - 355 . 233 - 000	6	Schraube screw		vis tornillo	PAN HEAD M 3x8
17	710 - 364 . 630 - 000	4	Schraube screw		vis tornillo	PAN HEAD M 3x5
18	710 - 365 . 630 - 000	3	Schraube screw		vis tornillo	PAN HEAD M 3x6
19	710 - 366 . 630 - 000	3	Schraube screw		vis tornillo	PAN HEAD M 3x8

Demontage Z - Trieb Disassembly of z - drive	D 1
Demontage Z - Verstellung Disassembly of x - adjustment	D 2
Demontage Säule mit Motor Disassembly of column with motor	D 3
Zoom - Einrichtung Assembly of zoom device	D 4
Zoom - Einrichtung Assembly of zoom device	D 5

Disassembly of Z- drive, right-hand side

Unscrew the 4 screws (2) of the lid (1).
Slacken the screw (3) by about 3-4 rotations. Carefully pull out the axle (4), then remove the washer (5), gearwheel (6) and sleeve (7) one after the other.
Lay the microscope on its back and unscrew the base plate. Move the x adjustment to the centre position so that the screw holes of the coarse and fine drive coincide. Then unscrew the 2 screws (8) of the coarse and fine drive. Pull the drive out towards the right.
Slacken the screw (9) by about 3-4 rotations. Carefully pull out the axle (10), then remove the washer (11) and sleeve (12) one after the other. Then unscrew the 2 screws (14) holding the holder with the gearwheel (13). Slacken the 4 pressure screws (15) by about 5 rotations.
Unscrew the 4 screws (16). Remove the strip (17) with the stage bracket (18), roller cages (19) and rollers (20).
Clean all parts and grease with the specified lubricant. The components are reassembled in the reverse order.

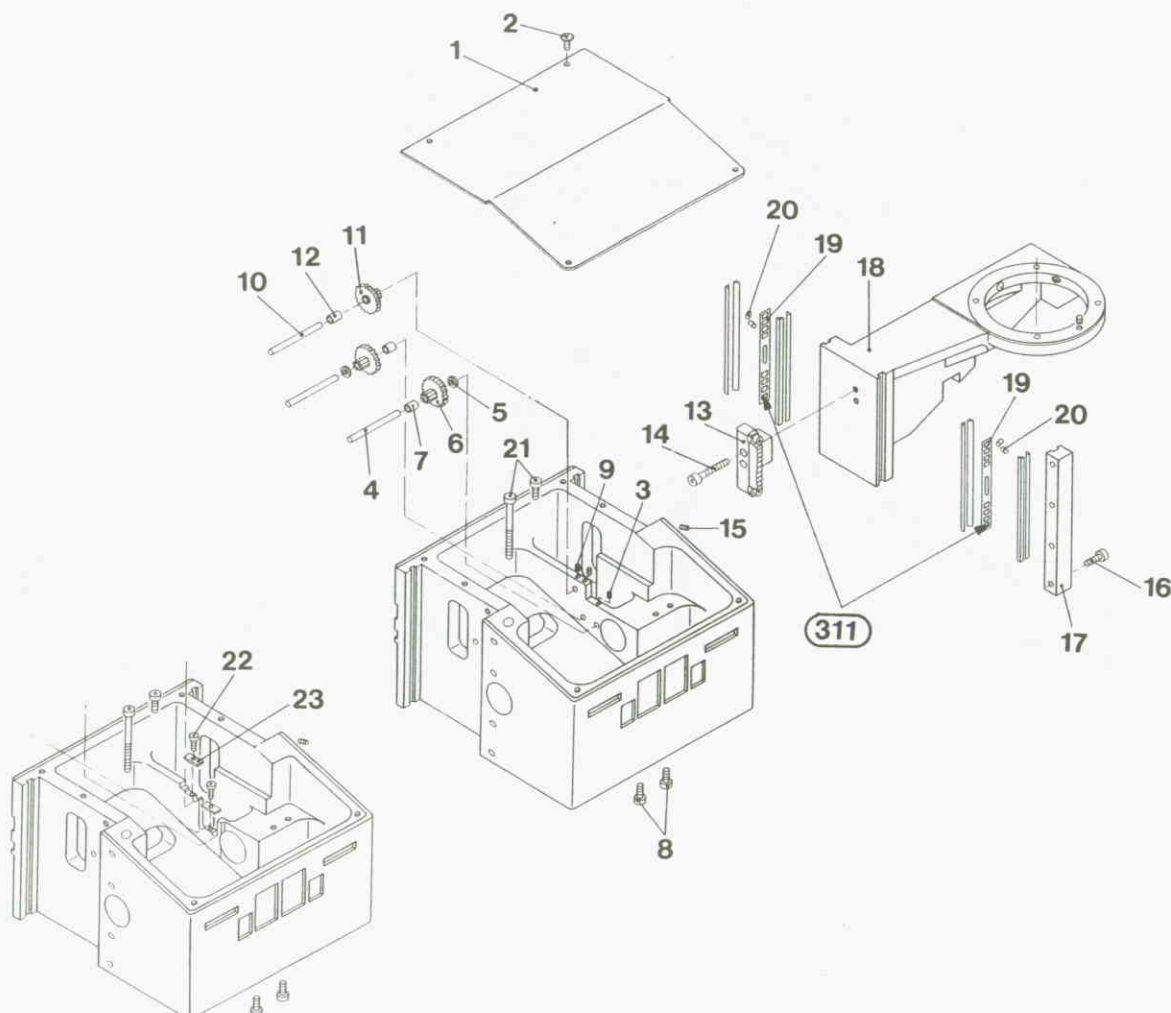
Disassembly of Z drive, left-hand side

The disassembly of the Z drive on the left-hand side is done in the same order, except that for the removal of the coarse and fine adjustment the 2 screws (21) have to be removed instead of the screws (8), and the microscope need not be laid on its back.

Attention !

The mounting of the axles (10) with the gearwheels (11) was modified from serial number 176897, construction date 11.96.

Before the gearwheels (11) can be disassembled, the screws (22) have to be unscrewed and then the retaining discs (23) removed.



Disassembly of x -adjustment

It is easier to disassemble or assemble the x adjustment if the two z adjustments on the left- and right-hand side are disassembled first. See page D 1.1.

Screw off the lid (1) with 4 screws (2).

Make a sketch of the wiring and write down the colours of the wires.

Pull the wires off the switches (3).

Unscrew the clamp fitting (4) with the screw (5). Unscrew the 2 screws (6) with the holders (7) and potentiometer (11) for light adjustment, then slacken the screw (8) and remove the graduated disk (9). Screw off the nut (10) and take the potentiometer (11) out of its holder (7).

Slacken the screw (12) in the knurled knob (13) of the x adjustment. Pull off the knob (13). Unscrew the 2 locknuts (14).

Unscrew the two screws (15) and take the spindle (16) with spindle nut (17) (upend) and the washer (27) out of the casing towards the left.

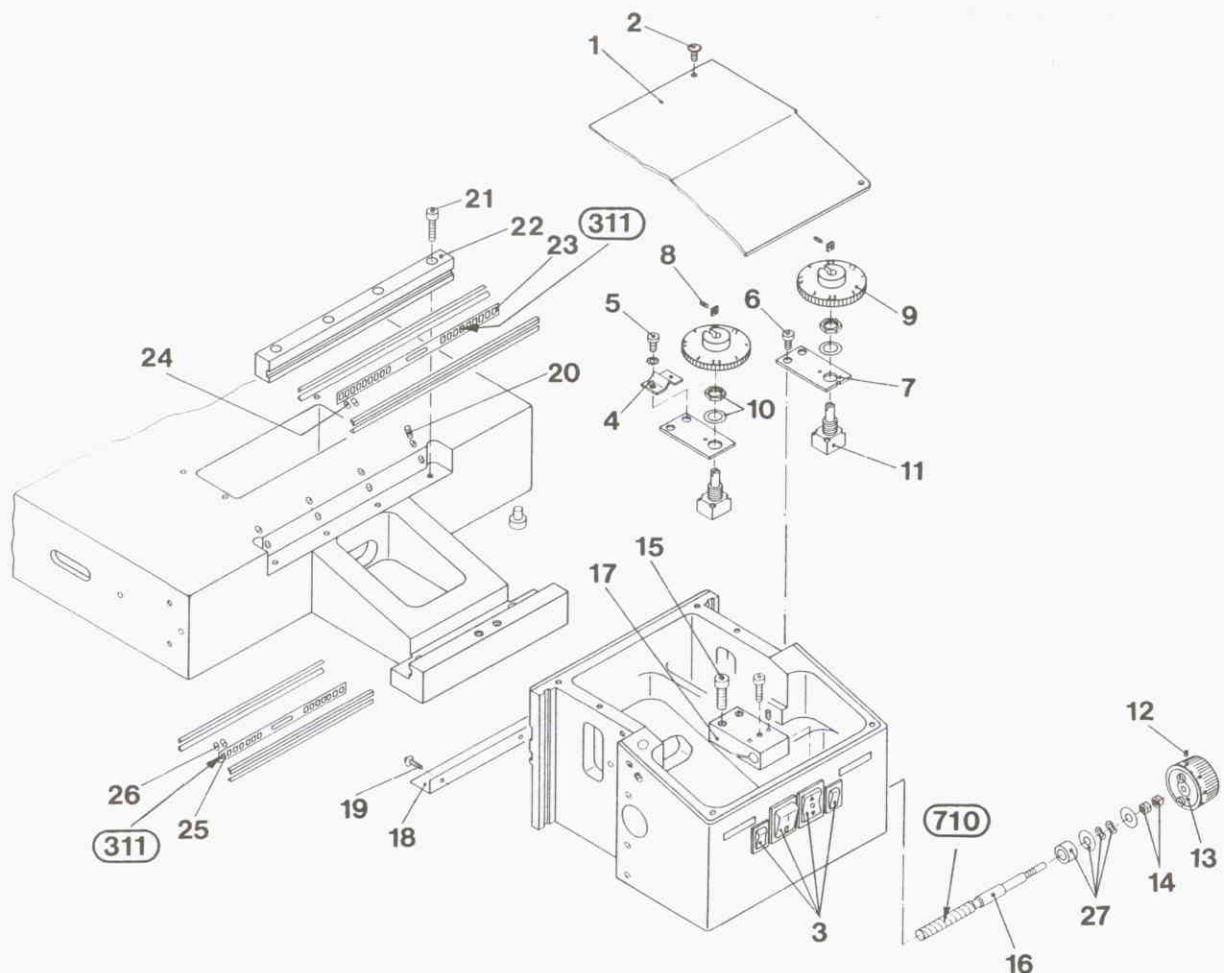
Unscrew the cover (18) with 3 screws (19).

Slacken 4 pressure screws (20) by about 5 rotations.

Remove 4 screws (21) and take out strip (22) with roller cage (23) and rollers (24).

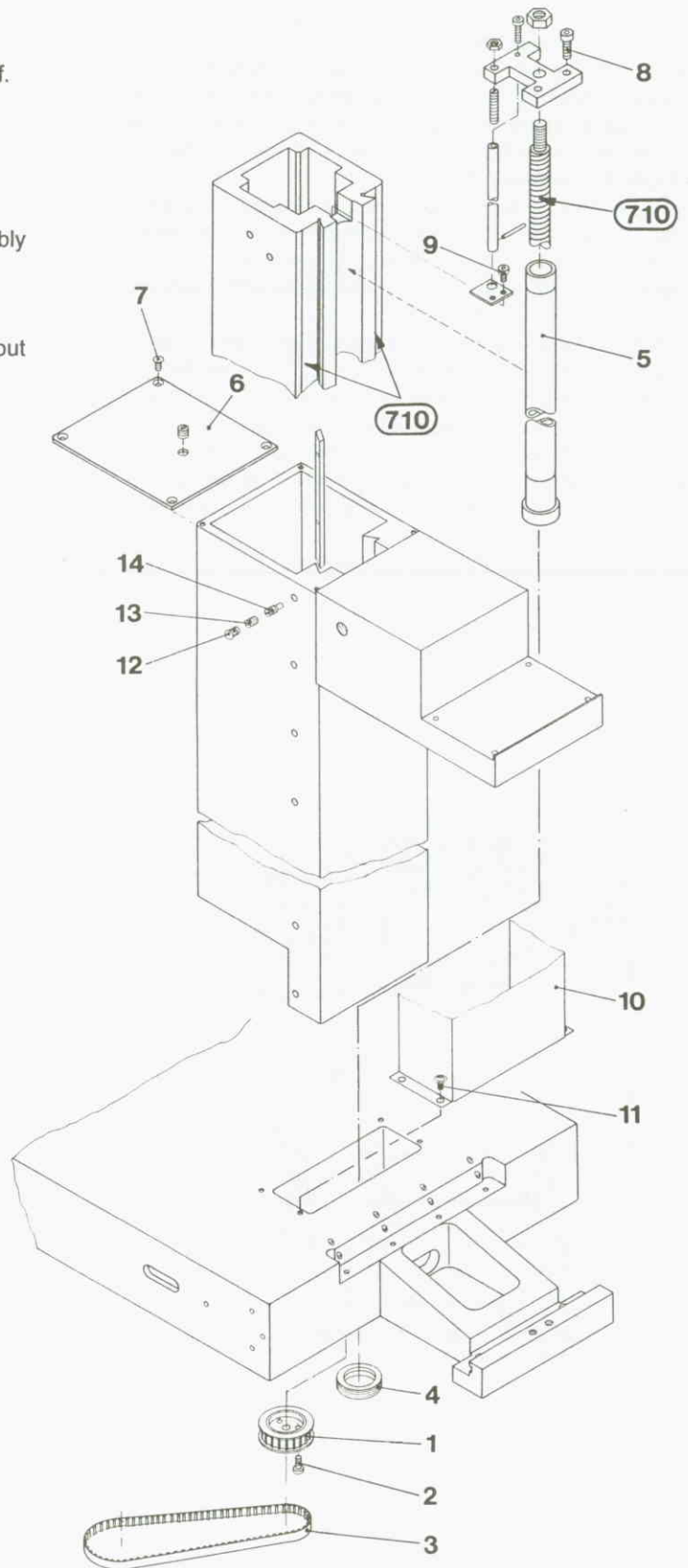
Push the gearbox to the back, pick up from the front and lift off upwards. Be careful not to drop the roller cage (25) and the rollers (26). Clean all parts and grease with specified lubricants.

The components are reassembled in the reverse



Disassembly of column with motor (z height adjustment)

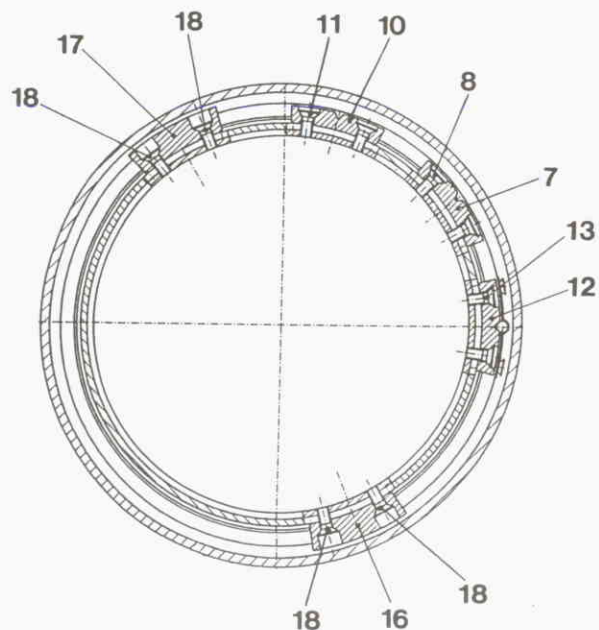
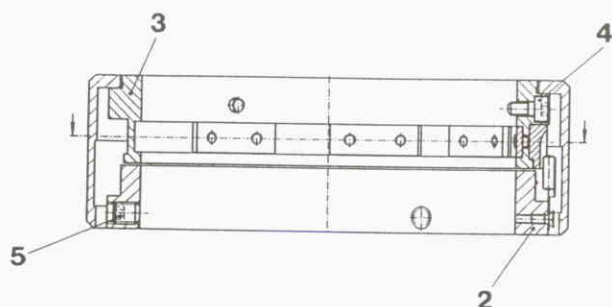
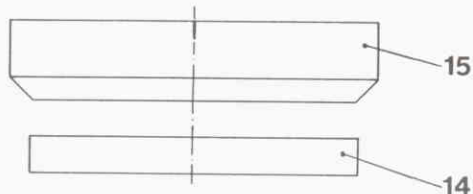
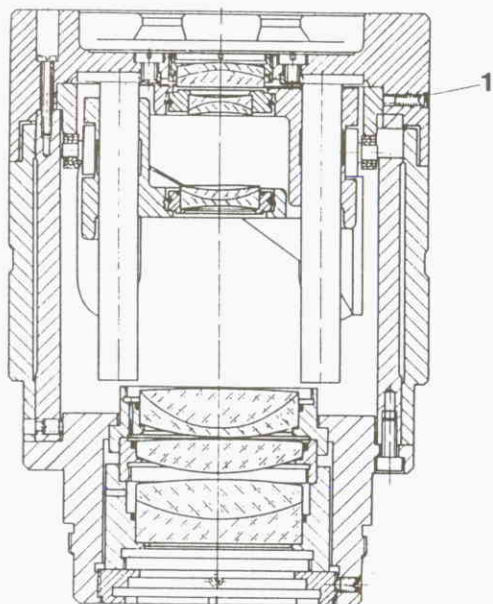
Screw off the comparison bridge with 4 screws.
Lay the microscope on its back and screw off the base plate.
Unscrew the crown gear (1) with 3 screws (2) and lift off.
Remove the toothed belt (3).
Unscrew the ring nut (4) and unscrew the tube (5) downwards.
Screw off the lid (6) with 4 screws (7).
Unscrew 2 screws (8).
Unscrew 2 screws (9), then lift out the whole subassembly with the spiral spindle.
Screw off the cover plate (10) with 4 screws (11).
Remove 7 caps (12), then unscrew 7 screws (13) and slacken 7 screws (14) by about 2 rotations. Then push out the outer column with support upwards.
Clean all parts and grease with the specified lubricants.
The components are reassembled in the reverse order.



Assembly of zoom device

Screw the two screws (1) of the zoom objective in as far as the stop and then screw back by $\frac{1}{2}$ rotation. Push the ring (2) over the objective from above (catch spring points upwards). Then push the clickstop ring (3) (clickstops point downwards) over the objective from above until the two drill holes of screw (4) coincide with the holes of screw (1). The ring (3) is secured in the screw holes of (1) with the two M 3x6 DIN 912 screws (4).

On the left-hand objective, push the lower ring (2) against the ring (3). Set the Makrozoom objective to magnification 12.5x, then engage the catch spring (6) and the middle clickstop (7) in this position and screw down with screws (8 and 9). Then tighten the lower ring (2) slightly with three M 5x6 DIN 913 screws (5). The distance between the two rings (2 and 3) should be between 0.1 and 0.2 mm. Now tighten the screws by an equal amount, making sure that the objective can still be easily rotated. Now set the objective magnification to 8x, engage the right-hand clickstop (10) under the catch spring (6) and screw tight with the screws (11). Now set the objective magnification to 20x, engage the left-hand clickstop (12) under the catch spring (6) and screw tight with the screws (13).



Adjustment: Right-hand objective

Screw the quarter-wave compensator off the objective, if applicable. Screw the ring (14) off the objective, then push a new index ring (15) onto the objective from the bottom and tighten slightly with the ring (14). Mount the objectives onto the comparison bridge and screw on with screw (16). Put stage micrometers on both stages and form an image with the split image setting of the comparison bridge. Align the scale marks of the stage micrometers along the dividing line between the two part images as shown in Fig. 1. Set the right-hand objective at magnification 12.5x. Engage the catch spring (6) in clickstop (12). Adjust the clickstop (12) by sliding to the right and left until the two stage micrometers are imaged in the same scale ratio. Then fix the clickstop position (12) with the screws (13). The clickstop positions for 8x and 20x are set in the same way.

Adjustment: Upper and lower stop

The upper and lower stops for the two objectives are determined by sliding the stops (16 and 17) towards each other until the two stage micrometers (Fig. 1) are imaged in the same scale ratio.

The stops (16 and 17) are then fixed in position with the screws (18).

Set the objective to magnification 12.5x. Make the graduation mark of the index ring (15) coincide with the 12.5x mark of the Makrozoom objective, the ring (14) is then turned firmly against it. Lightly lubricate the clickstops with grease 410/01. Unscrew both objectives from the comparison bridge with screw (16). Screw the cover (19) over the clickstop device from the top. Screw the quarter-wave compensator back onto the right-hand objective if appropriate. Mount the objectives back onto the comparison bridge and secure with screw (16). Check the adjustment.

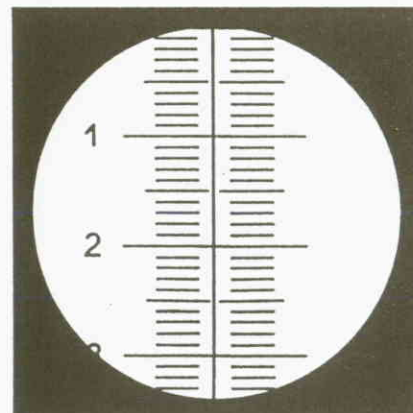
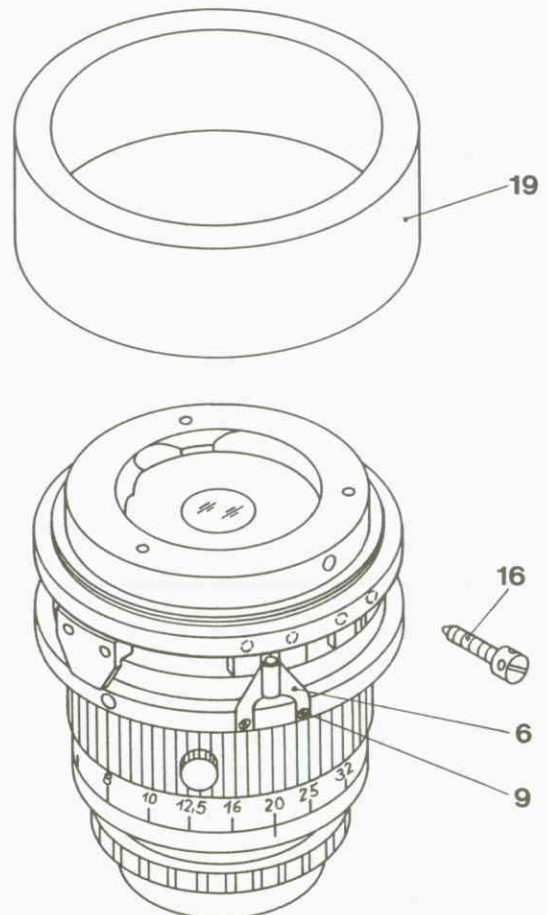


Fig. 1

The construction status of the microscope is indicated with a status number. This can be seen on the type plate on the back of the microscope after the letters BZ.

Construction status 00

Index number :

165 750 to 165 755

Construction status 01

Index number :

170 023 to 170 026
170 028 to 170 035
170 037 to 170 039

New additional transformer for the two 45 VA lamps.
See sheet B 4.2, item 2

Reason: elimination of brightness fall-off while
operating the Z height adjustment of the microscope.

Construction status 02

Index number:

171 466 to 171 473
171 477 to 171 506
176 816 to 176 908
193 577 to 193 533

Analog control 2x30 W power supply. See sheet B 4.2, item 6

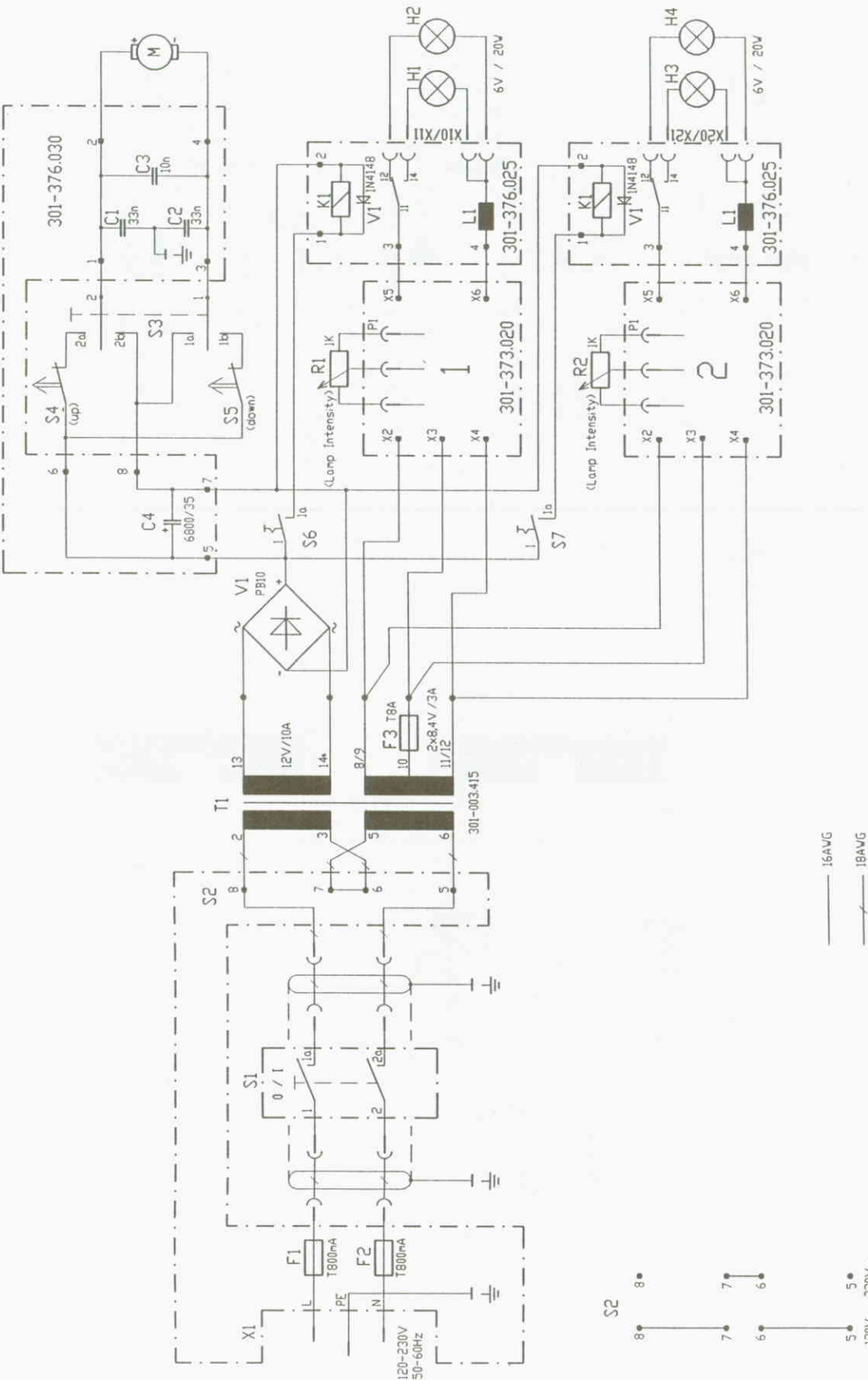
Reason: standardization of DM C board with that of DM IL

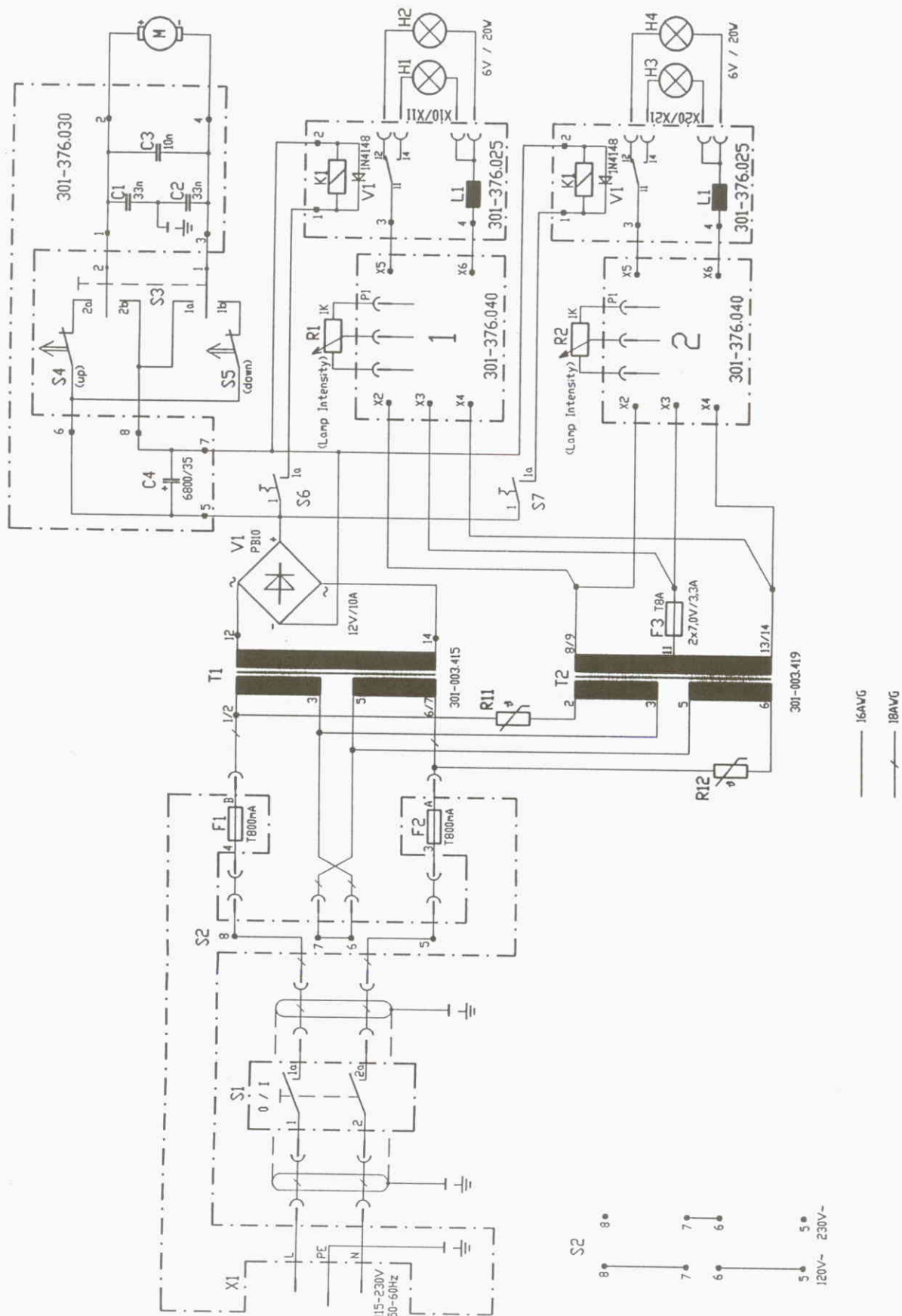
Construction status 03

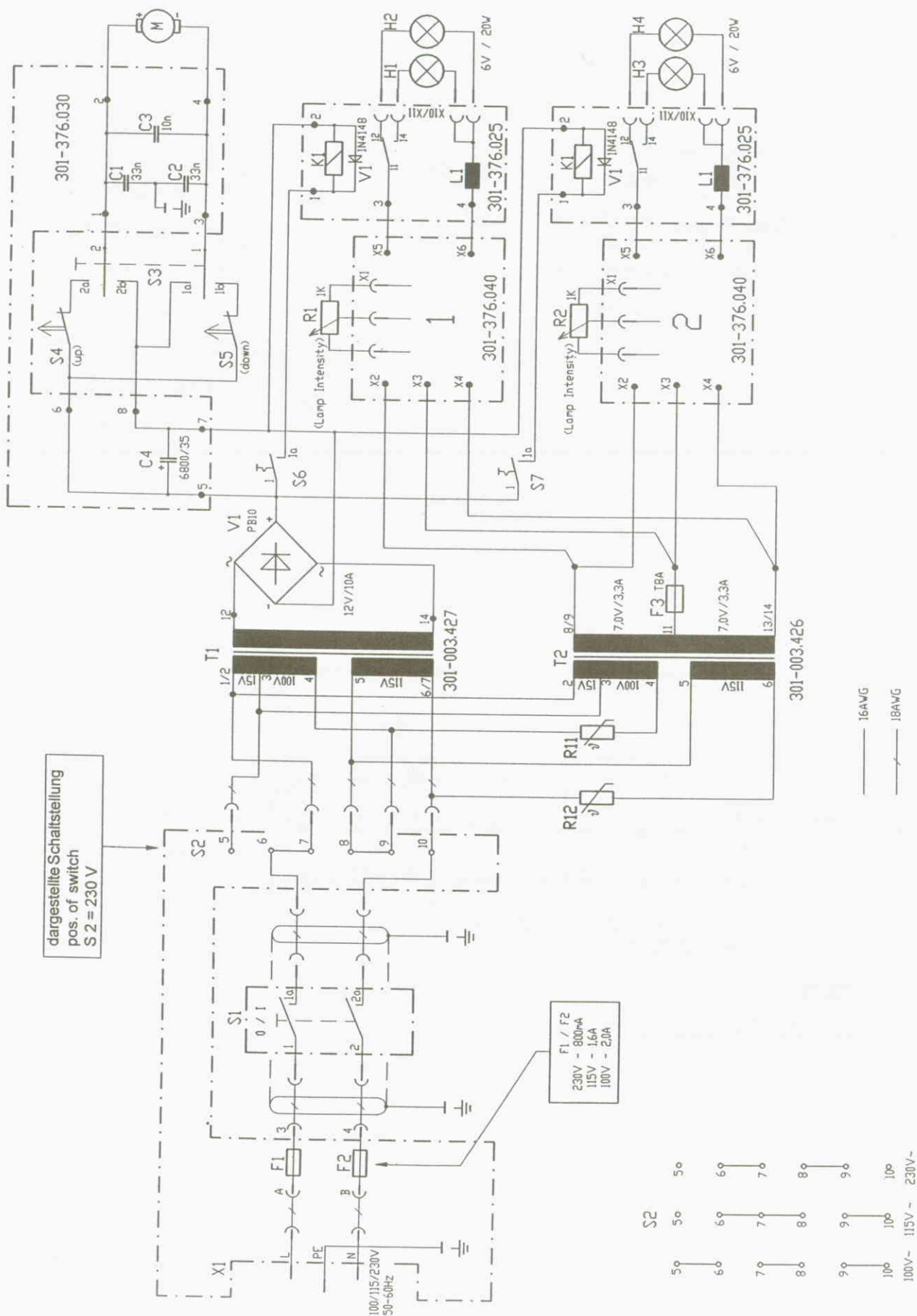
Index number:

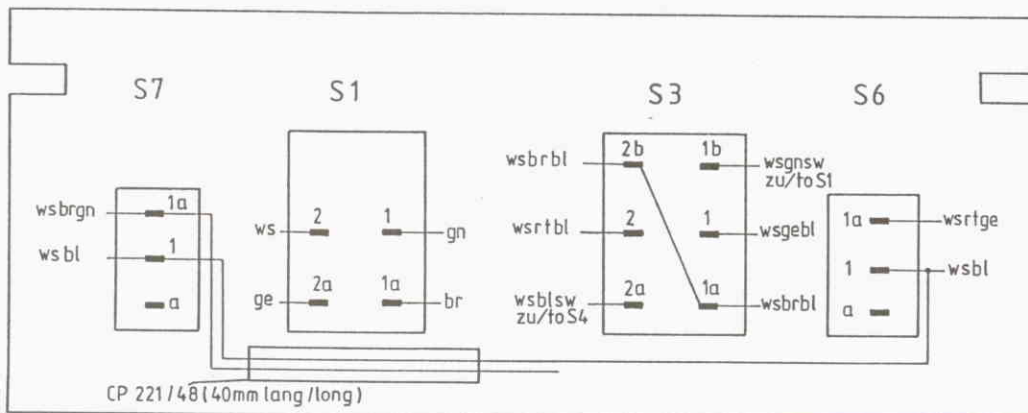
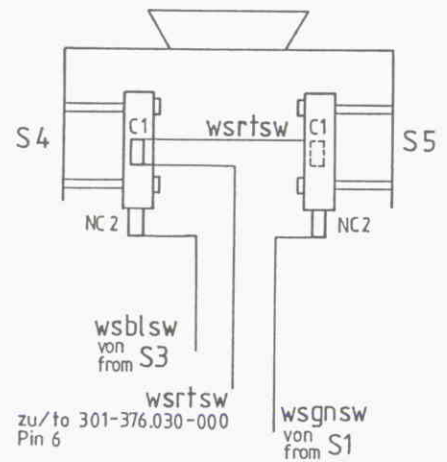
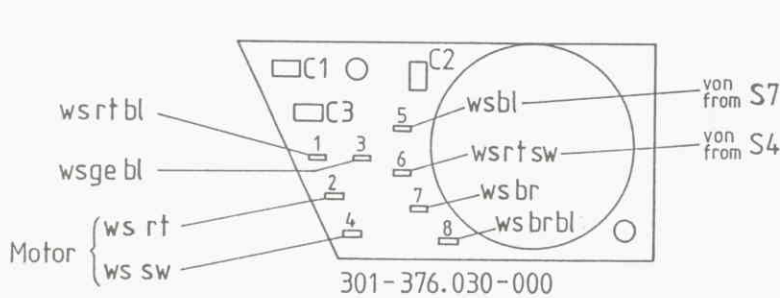
195 710 to --->

Use of transistors of only one manufacturer.
Reason: difference in light intensity between right- and left-hand
side.
See Service News MQM 03 FY 98









S1 Hauptschalter
main switch

S3 motorische Höhenverstellung
toggle switch for motorized height adjustment

Leica Makroskop DM C

Netzteil / power supplies

Makroskop Bauzustand 00 / macroscope stand status number 00	K 1.1
Lampensteuerung 301-373.020-000	K 2.1
Makroskop Bauzustand 01 / macroscope stand status number 01	K 3.1
Lamp Power 301-376.040-000	K 4.1
Makroskop Bauzustand 02 / macroscope stand status number 02	K 5.1
Netzteile Übersicht	K 6.1
Power supplies overview	K 7.1

Leica Makroskop DM C

Netzteil / power supplies

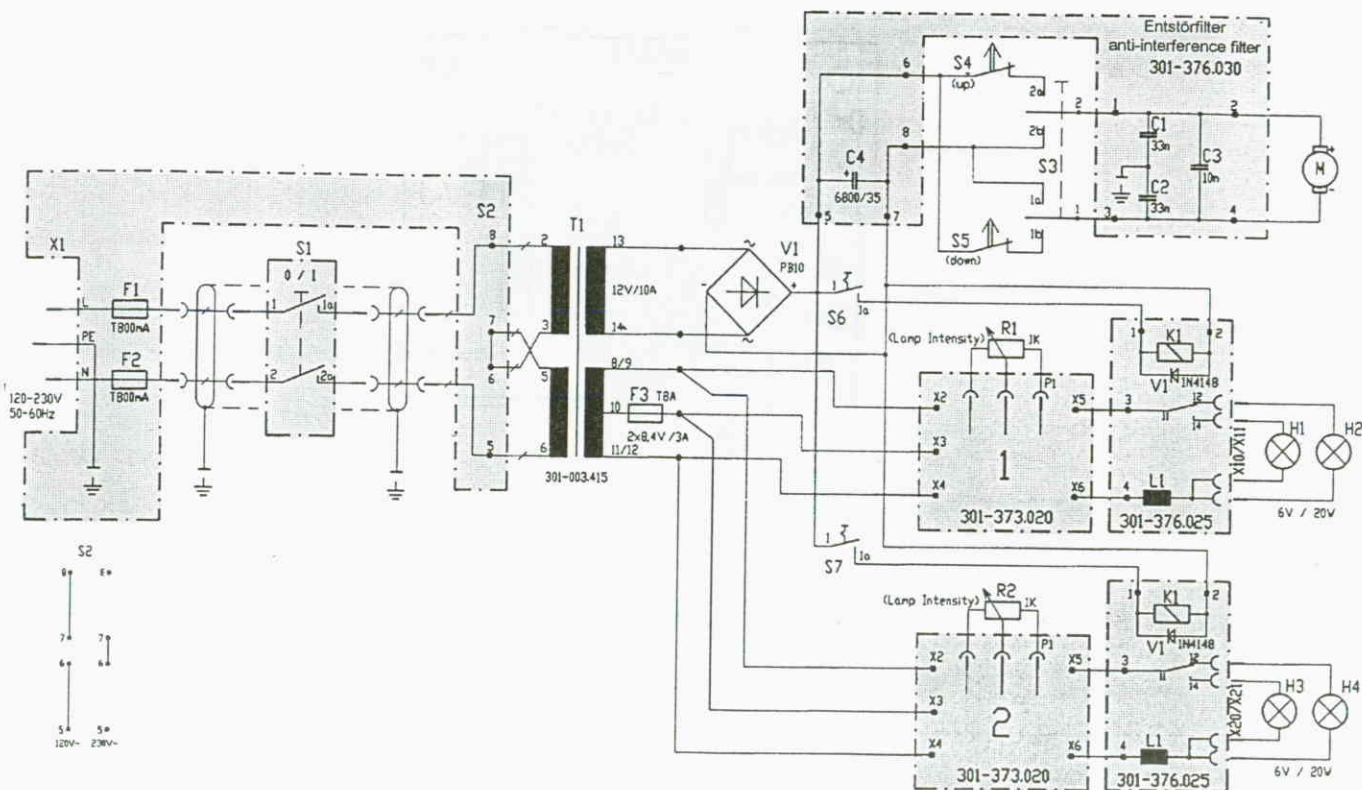
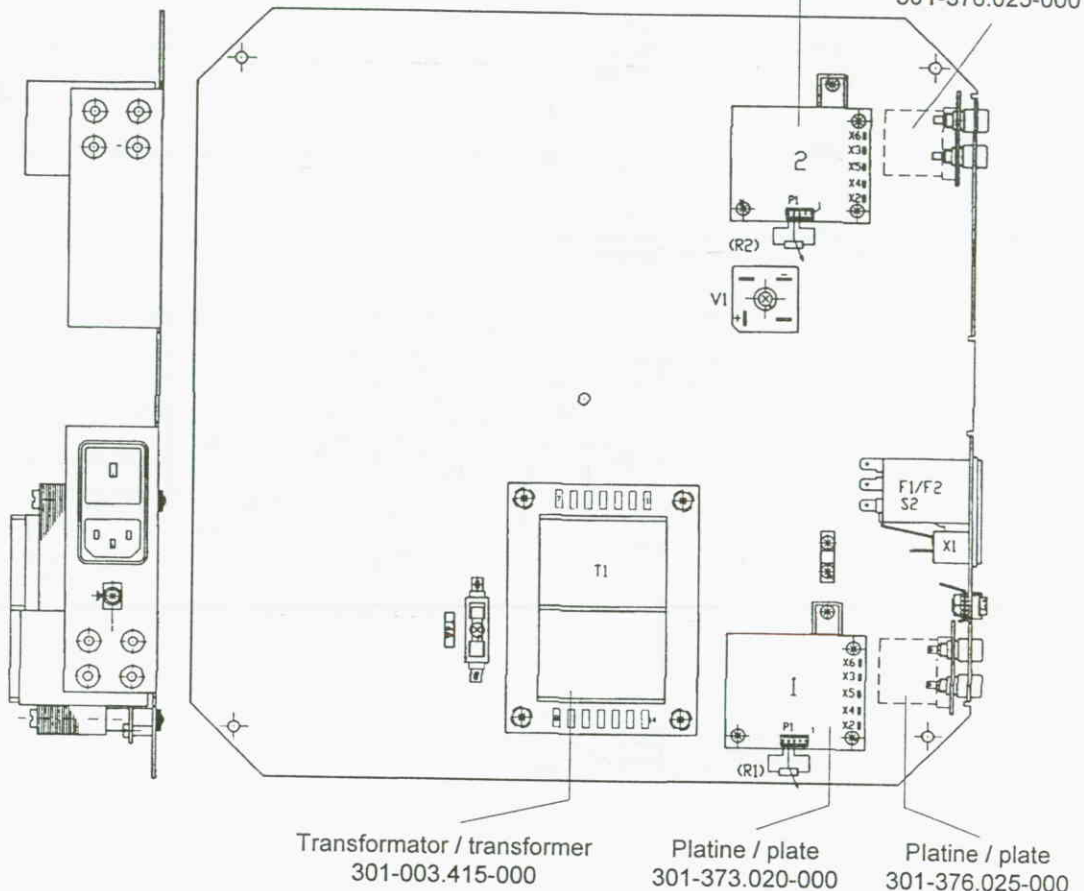
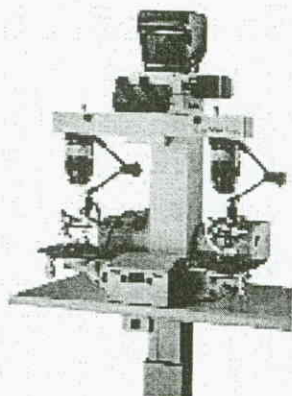
Makroskop Bauzustand 00 / macroscope stand status number 00	K 1.1
Lampensteuerung 301-373.020-000	K 2.1
Makroskop Bauzustand 01 / macroscope stand status number 01	K 3.1
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Makroskop Bauzustand 02 / macroscope stand status number 02	K 5.1
Netzteile Übersicht	K 6.1
Power supplies overview	K 7.1

Leica DM C

Stativ Bauzustand 00 / stand status number 00

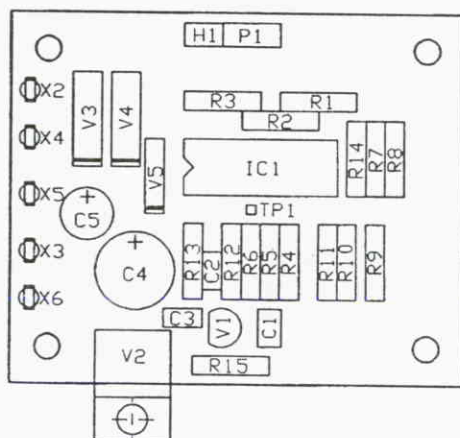
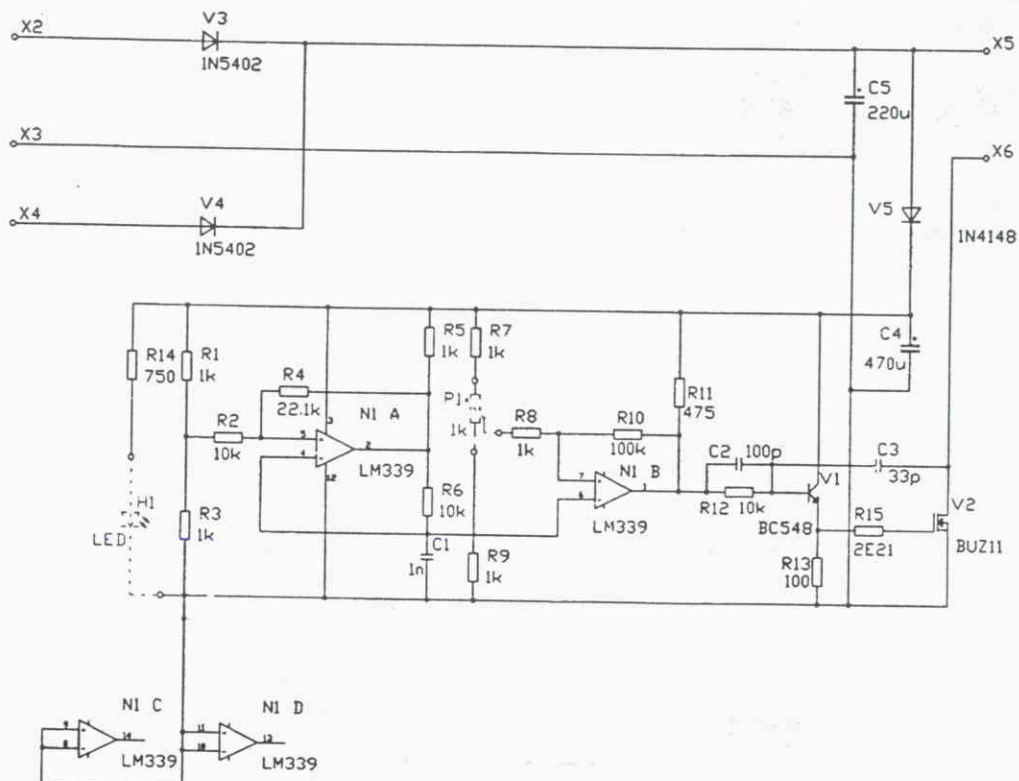
Platine / plate
301-373.020-000

Platine / plate
301-376.025-000



Lampensteuerung

301-373.020-000

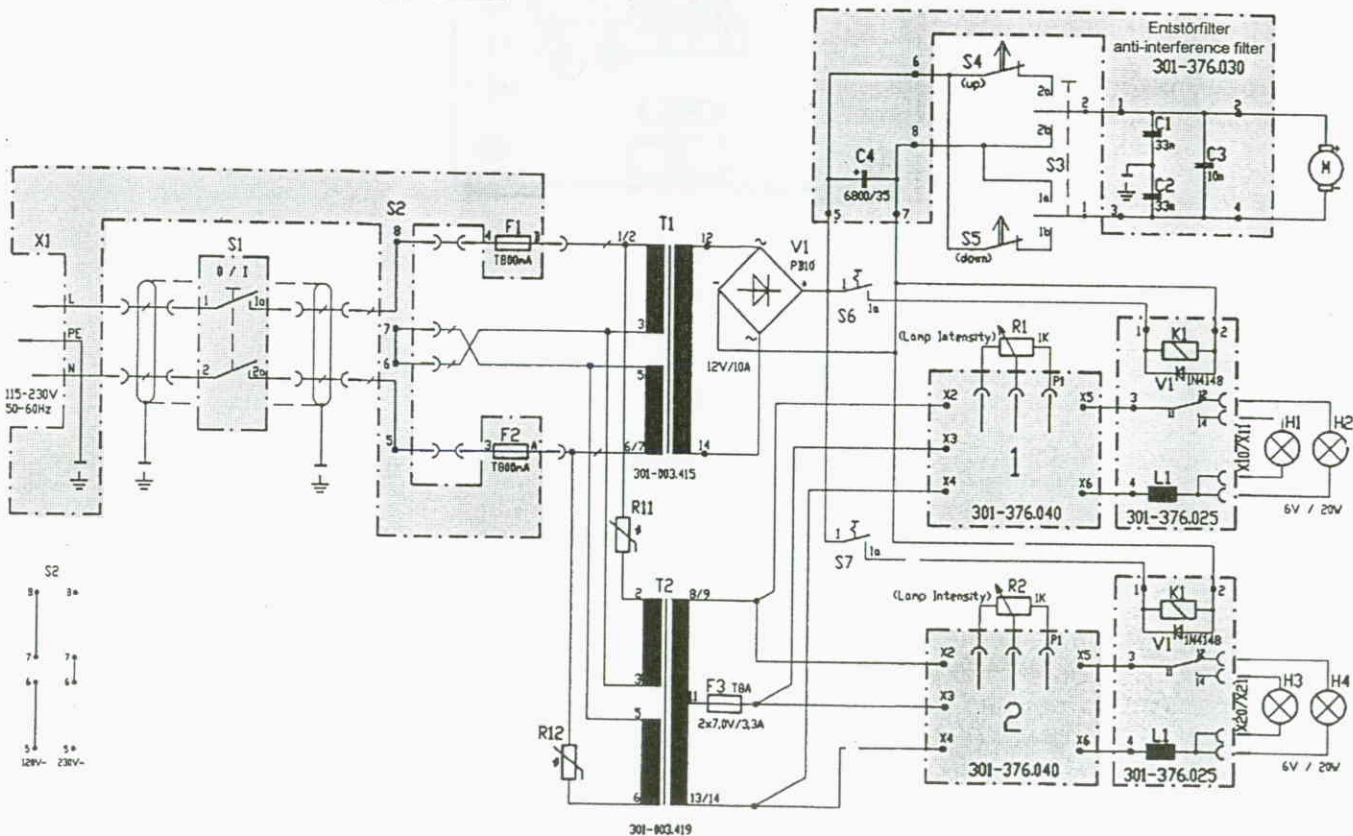
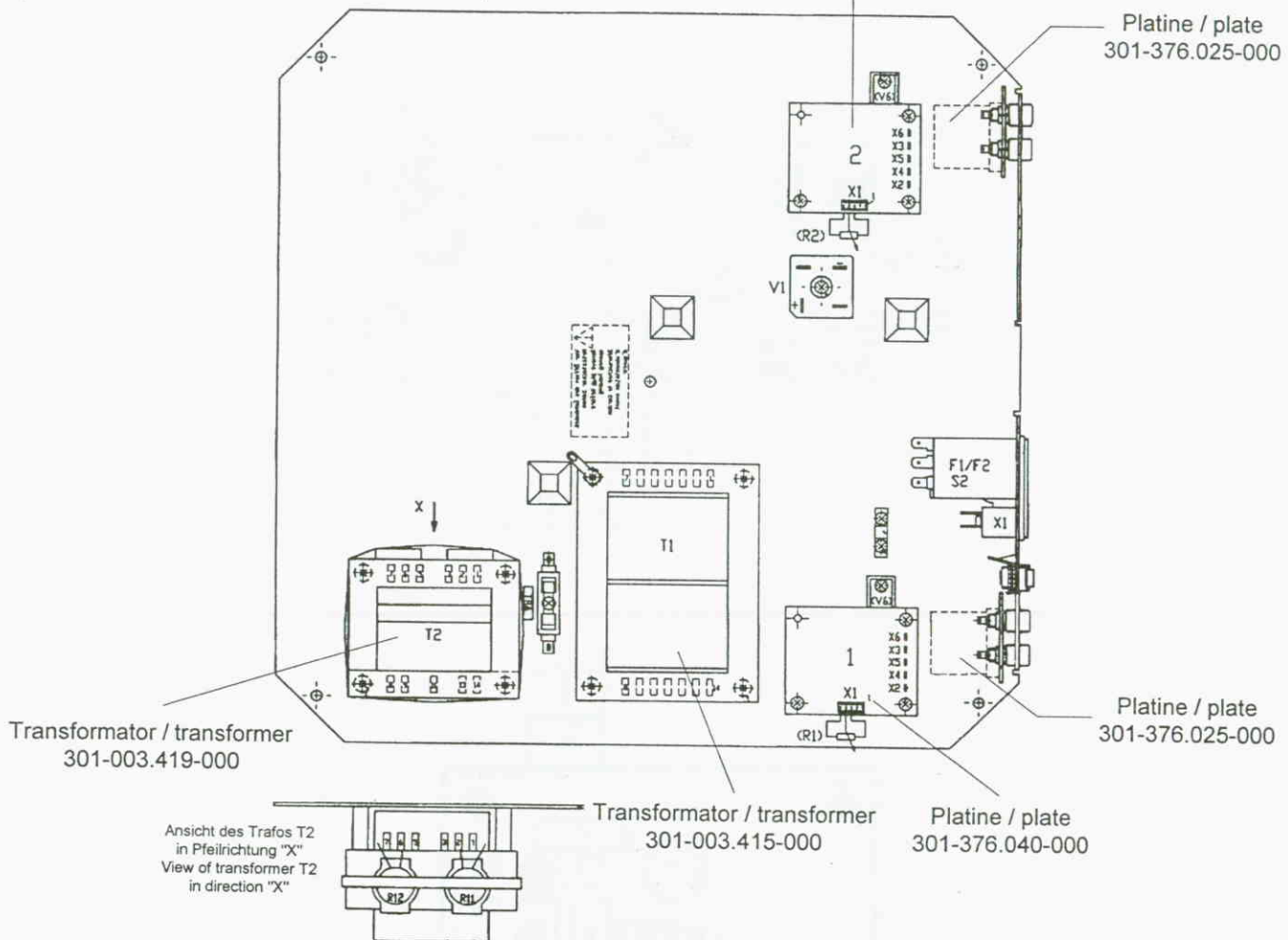


Leica DM C

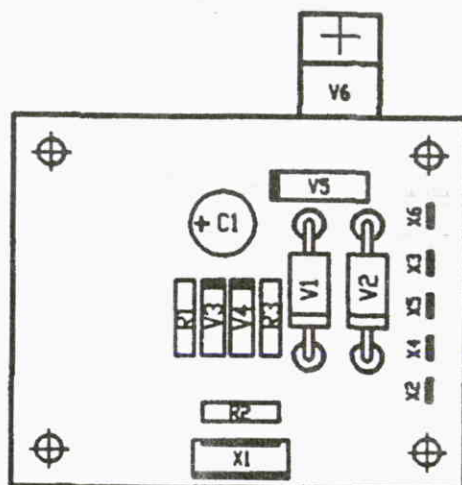
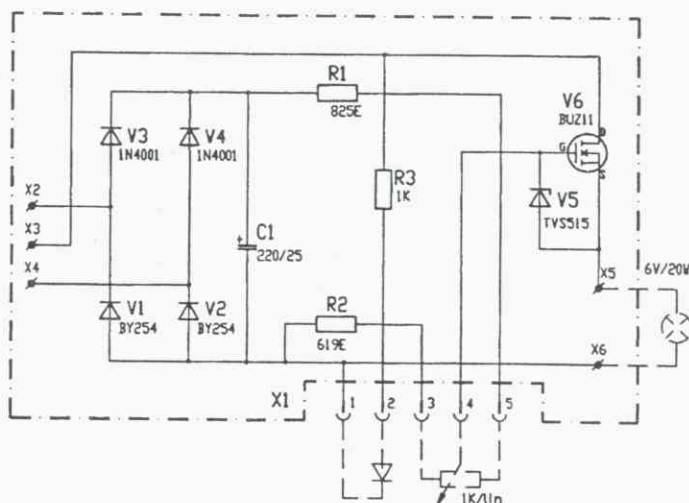
Stativ Bauzustand 01 / stand status number 01

Platine / plate
301-376.040-000

Platine / plate
301-376.025-000



Lamp Power 301-376.040-000



Stativ Bauzustand 02 und 03
stand status number 02 and 03



Netzteile Übersicht Leica DM C

Makroskop	DM C	DM C	DM C	DM C
Bauzustand	00	01	02	03
Gerätenummer	165 750 bis 165 755	170 023 bis 170 026 170 028 bis 170 035 170 037 bis 170 039	171 466 bis 171 473 171 477 bis 171 506 176 816 bis 176 908 193 533 bis 193 577	195 710 bis
Netzteilplatine Sachnummer	2x Lampensteuerung 301-373.020-000	2x Lampensteuerung 301-376.040-000* ⁶	2x Lampensteuerung 301-376.040-000* ⁶	
zusätzl. Bauteil	Transformator 301-003.415-000	Transformatoren 301-003.415-000 301-003.419-000	Transformatoren 301-003.427-000 301-003.426-000	
Absicherung	2x Gerätesicherung T800mA 826-252.000-000	2x Gerätesicherung T800mA 826-252.000-000	2x Gerätesicherung T800mA bei 230V 826-252.000-000 T1,6A bei 115V 825-790.000-000 T2,0A bei 100V 825-347.000-000	
	1x Lampenkreis T8A 864-947.000-000	1x Lampenkreis T8A 864-947.000-000	1x Lampenkreis T8A 864-947.000-000	
Leistung	2x 20W	2x 20W	2x 20W	
Lampen- spannung	2V ... 6V DC* ⁴	2V ... 6V DC* ⁴	2V ... 6V DC* ⁴	
stabilisiert	nein	nein	nein	
Netzeingangs- spannung	120V / 50-60Hz 230V / 50-60Hz	115V / 50-60Hz 230V / 50-60Hz	100V / 50-60Hz 115V / 50-60Hz 230V / 50-60Hz	
Merkmale			gleiche Transistoren für beide Platinen	
Bemerkung		zusätzlicher Trafo für beide Lampen	zusätzliche Netzeingangsspannung	
Nachrüstung von ----> nach			> (*a)	
			> (*a)	

(*a) 1 Chassis Power-Supply komplette 301-376.021-000

*⁴ reine Gleichspannung (messbar mit jedem Digitalvoltmeter)*⁶ Platinen müssen immer paarweise getauscht werden (gleicher Hersteller des Transistors V6 ist zwingend).

Power supplies overview Leica DM C

Macroscope	DM C	DM C	DM C	DM C
stand status	00	01	02	03
unit number	165 750 bis 165 755	170 023 bis 170 026 170 028 bis 170 035 170 037 bis 170 039	171 466 bis 171 473 171 477 bis 171 506 176 816 bis 176 908 193 533 bis 193 577	195 710 bis
power board	2x lampcontrol	2x lamp control	2x lamp control	
part number	301-373.020-000	301-376.040-000*6	301-376.040-000*6	
additional	transformer	transformers	transformers	
component	301-003.415-000	301-003.415-000 301-003.419-000	301-003.427-000 301-003.426-000	
fuses	2x unit fuses T800mA 826-252.000-000	2x unit fuses T800mA 826-252.000-000	2x unit fuses T800mA bei 230V 826-252.000-000 T1,6A bei 115V 825-790.000-000 T2,0A bei 100V 825-347.000-000	
	1x lamp fuse T8A 864-947.000-000	1x lamp fuse T8A 864-947.000-000	1x lamp fuse T8A 864-947.000-000	
power	2x 20W	2x 20W	2x 20W	
lamp	2V ... 6V	2V ... 6V	2V ... 6V	
voltage	DC*4	DC*4	DC*4	
stabilized	no	no	no	
mains	120V / 50-60Hz 230V / 50-60Hz	115V / 50-60Hz 230V / 50-60Hz	100V / 50-60Hz 115V / 50-60Hz 230V / 50-60Hz	
feature				same transistors for both boards
remarks		additional transformer for both lamps	additional mains voltage	
retrofit kit				
from ----> to				
				> (*a)
				> (*a)

(*a) 1 Chassis Power-Supply complete 301-376.021-000

*4 Pur DC voltage (measurable with DC voltmeter)

*6 Printed circuit boards have to be exchange parallel (same manufacturer of the transistors V6 are coercive).



Order No. of the edition in:
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