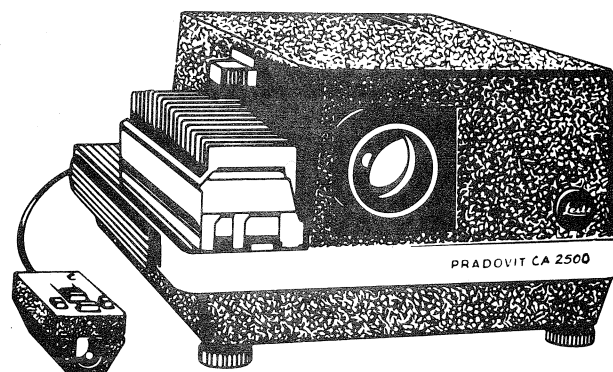


PRADOVIT C/CA



SERVICE INFORMATION



ERNST LEITZ WETZLAR GMBH

TECHN. SERVICE Dokumentation und Info



Inhalt	Contents Contenu Contenido		Introduction Introduction Introducción	☒	A
		Einführung			
		Ersatzteilliste	Spare parts list Liste de pièces détachées Lista de piezas de repuesto	☒	B
		Funktionsbeschreibung	Description of function Description du fonctionnement Descripción del funcionamiento	☒	C
		Montageanleitung	Assembly instructions Instructions pour le montage Instrucciones del montaje	☒	D
		Wartungsanleitung	Maintenance instructions Instructions pour l'entretien Instrucciones del entretenimiento	☒	E
		Funktionsstörungen	Malfunctions Problèmes de fonctionnement Problemas en el funcionamiento	☒	F
		Umbauten	Modifications Modifications Modificaciones	☒	G
		Stromlaufpläne	Circuit diagrams Diagrammes des connexions Esquemas del circuito	☒	H
		Werkzeuge	Tools Outils Herramientas	☒	J
		Sonstiges	Miscellaneous Divers Varios	☐	K

Weitergabe sowie Vervielfältigung dieser SERVICE-INFORMATION, Verwertung und Mitteilung ihres Inhaltes sind nur mit unserer Zustimmung gestattet. Alle Rechte vorbehalten, Zuwiderhandlungen verpflichten zum Schadenersatz.

Copying of this SERVICE-INFORMATION, and giving it to others and the use or communication of the contents thereof, are forbidden without express authority. Offenders are liable to the payment of damages.

Toute communication ou reproduction de cette SERVICE-INFORMATION, toute exploitation ou communication de son contenu sont interdites, sauf autorisation expresse. Tout manquement à cette règle est illicite et expose son auteur au versement de dommages et intérêts.

Sin nuestra expresa autorización, queda terminantemente prohibida la reproducción total o parcial de esta SERVICE-INFORMATION, así como su uso indebido y/o su exhibición o comunicación a terceros. De los infractores se exigirá el correspondiente resarcimiento de danos y perjuicios.

The service information presented in this folder is indicated with an ☒ in the table of contents.

All indications of pages consist of register letters according to the table of contents A 01 and of a number indication.

The system of numbering the pages is as follows: in 1.1, the number before the dot represents the consecutive page number. The page bearing the number 1 after the dot describes the original state of the instruments, component groups, or procedures illustrated or dealt with on this page. Constructive changes or changes due to production in opposite to the illustrations and statements on this page are contained on a supplementary page, bearing the next-higher constructive number after the dot.

Changes are indicated on the illustration page of the supplementary page by means of one or two line markings of the part number:

One line below the number:

25 Part has been changed,
can also be installed in earlier instruments.

A line above the number:

25 Part has been changed,
can not be installed in earlier instruments.
(see special modification instructions where available)

A line above and below the number:

25 Part has been added,
can also be installed in earlier instruments.
(see special modification instructions where available)

A line on both sides of the number:

|25| Part has been added,
can not be installed in earlier instruments.

In the spare parts list each page with illustrations has its own parts list.

On the illustration page the spare parts are labeled with numbers which correspond to the list of numbers in column 1 of the spare parts list. A number in brackets indicates a component group. A number in a circle indicates a superior component group (unit or modules).

Electrical components are labeled with a code - according to the circuit diagram - on the illustration page and under the remarks column.

Behind the table of contents of the spare parts the list of order numbers is filed. It contains all order numbers of this spare parts list with indications of the pages of the parts list on which they can be found.

For ordering spare parts the order numbers and descriptions as well as the required quantity each illustration page are indicated in the parts list.

If there are several order numbers with one Fig. no. indicated, the stated differences in the description and remarks column have to be regarded.

A star(*) after a number in column 1 of the parts list means either that this position is not represented on the illustration page or that it is represented but not labeled with the consecutive number.

The surface quality of the standard parts mostly is given in form of a code in position 7 to 9 of the order number according to the list of quality surfaces. Where the colour of instruments or components has been changed, we can not guarantee matching surface quality of the spare parts supplied.



In the "Remarks Column" code letters and numbers provide information about:

Component groups

Belonging to component groups

Belonging to manufacture states

Replacement possibilities

Availability

Ordering

The code letters stand for the following remarks and statements:

- a = from serial number ...
= from manufacture state ...
= from date of manufacture/year of manufacture ...
- b = to serial number ...
= to manufacture state ...
= to date of manufacture/year of manufacture ...
- E = replacement for consecutive no. ...
- f = required for consecutive no. ...
- G = component group
= the article with this order number consists of several individual parts.
The numbers after the "G" (consecutive number or page number and consecutive number on the illustration page) indicate the parts which constitute the article.
- i = included in consecutive no. ...
- k = for completion of this position the consecutive number(s) ... is (are) also required.

m = to be assembled with consecutive no. ...

N = no longer available

NE = no longer available, for replacement see consecutive number ...

o = but without consecutive number ...
= this order number does not contain the positions

§ part with engraved serial No.

= part with special engraving

Serial No. or special engraving is to be indicated when ordering.

The defective, engraved part must be enclosed with the order.

U = the following consecutive number(s) ... is (are) to be replaced concurrently with this part.

V = sales article

Please use the 5- or 6-digit order number as long as it is listed in the General Dealer Photo Catalogue or in the Micro/Measuring Instr. Price Lists.

w = optional - as required

§ = electrical component, it is to be found on the illustration page under its electrical code.

The service instructions describe and illustrate assembly, adjustment, repair and modification procedures. The tools listed can be obtained from us.

The number code divided by oblique lines used in the service instructions are n o order numbers. They serve only as an aid in finding the mentioned part in the spare parts list.

In this number combination it is to be noted that
before the oblique line / after the oblique line
the page number the illustration number

for example 1.1/5

is given. This example represents a component part found on spare parts list sheet 1.1, consecutive number 5.

Component parts and sub-assemblies are cleaned with lead-free petrol, if possible outside the housing. Varnished parts and those with colour engraving must not be cleaned wet but only with a dry piece of chamois leather or with a brush. Dirty external surfaces with structured enamel finish may be cleaned with an oily rag and rubbed dry.

Glass and rubber parts must not come into contact with petrol, oil or lubricants.

The points to be lubricated or to be adhered are indicated with three-figure numbers (320), symbols ($\triangle\triangle\triangle$) or letters on the illustration. These auxiliaries can be obtained from us. Other auxiliaries must not be used because perfect function is guaranteed only with those lubricants and adhesives, tested by us. The parts to be lubricated must be clean and dry.

It must be borne in mind that many lubricants are incompatible with a number of plastic substances and may dissolve them or induce their swelling. The lubricants should only come into contact with the surfaces indicated.

Components which are threaded with adhesives must be free from lubricants. Residual adhesive must be removed with the appropriate thinner.

Safety hints:

When using electrical instruments the mains plug has to be removed before opening and/or the unit has to be disconnected from mains.

If a repair, an adjustment or a maintenance procedure at the opened and switched on instrument is unavoidable these procedures only should be carried out by specialists who are familiar with the arising dangers.

If a dangerless function of the instrument is no longer guaranteed, the instrument has to be switched off and secured against unintended use.

Basically the national and international safety rules have to be regarded.

Remark: Although the instrument is switched off it may occur that internally some parts are still under voltage (e.g.: capacitors).

Caution! Attention when working with moveable parts e.g. microtome knives.



Spare parts orders should be written on the forms provided by us with indication of the customer's number. The order data should be taken from the current spare parts list; the illustration page is used for obtaining the order number and the designation from the parts list.

For a common rational spare parts ordering it is lucrative to order in high numbers. This especially counts for spare parts and small parts like screws, nuts and discs which are frequently required. Where the quantity is given in meters, one item should be inserted for one meter.

If there may no partial delivery be carried out we ask for a special remark.

If further information according spare parts orders are necessary, the indication of the order number and the indication of the TSE order number is required.

Sales articles (see General Dealer Photo Catalogue or Micro/Measuring Instr. Price List) may not be ordered in the Technical Service.

There is no obligation on our part to supply the parts and component groups listed in the spare parts list. We reserve the right to supply parts or component groups which functionally replace or incorporate the ordered unit in case of spare parts being out of stock. When receiving a replacement delivery the stickers of the part, the invoice and/or the list contain an according information.

Manufacturing states:

The manufacturing states are indicated with numbers which with state 1 are stamped on the base next to the current supply unit and from state 2 onwards on the column of the lamp housing.

State 1 from 28.01.1977

The lever B 8.1/5 has 3 springs. The belt disc B 3.1/13 is injection-diecast. The cam discs 1 and 2 as well as 4 and 5 are welded together. The drive gear B 9.2/6 moves freely on the spindle.

State 2 from 09.02.1977

With autofocus units, R 4 is a potentiometer 5k instead of the 320E fixed resistor. Furthermore, the play between cam disc B 3.1/2 and lens fork is eliminated by means of a spring.

State 3 from 22.03.1977

The drive motor B 10.1/4 is screwed on with only 3 screws. Washers B 10.1/1 and B 10.1/10 on the magnet are omitted. The position of the micro switch S 8 has been changed.

State 4 from 13.05.1977

The roller B 6.1/18 has hard chromium layer. The lower end of the lever B 8.1/15 has a collar that engages in slider B 5.1/8. The bore of the slider has been modified into a so-called keyhole. The changed lever has the part No. 031-049.347-010.

State 5 from 24.05.1977

The axis of the fan wheel is hardened and the calotte bearings are made of bronze.

State 6 from 28.06.1977

At voltage selector B 10.1/12, spring B 3.1/4 and plate B 7.1/14 the fixing screw on one side is replaced by a trunnion on the base. The screw B 2.1/25 on the lamp holder as well as the screw B 8.1/17 on the tension lever are also replaced by a bearing pin on the base. The terminal ledge B 2.1/7 is held on one side by a diecast bolt in the base. This replaces one screw B 2.1/22. The projectors are fitted with the micro switch S 14, which after removal of the magazine triggers an additional switching step for the ejection of a slide remaining in the slide changer. The spring B 4.1/6 is fitted with a stiffening corrugation to increase its positional stability.

State 7 from 22.08.1977

The terminal ledge B 2.1/7 is held in the base with bolts extruded onto both sides. Three guide bridges in the upper part improve stability. The axis B 9.1/17, the lever B 9.1/3 and the two micro switches S 10 and S 14 are fixed in position in the base by means of the cover shield 031-049.015-023. The screw B 9.1/23 is replaced by a cast lug extruded onto the base. The spring wire B 2.1/6 is no longer required. The concave mirror is attached with four tin tongues on the mirror mount.

State 8 from 07.09.1977

The spring B 3.2/9 on the lens carrier has been replaced by the spring B 3.3/9 and the rivet B 3.3/21. The soldering pin B 3.2/14 and soldering lug B 3.2/25 are no longer required. The lever B 9.1/3 has an extended movement owing to a widening of the cast recess in the base.

State 9 from 21.10.1977

The guide B 9.1/15 has been modified. It is now supported on the base with an arm extruded onto it. So that the support does not restrict the movement of the transport lever B 9.1/14, the edge of the latter has been recessed. In addition the new transport lever has a changed switch pawl, a different stop nipple, as well as a changed spring. The bracket B 9.1/4 is no longer required.

State 10 from 23.08.1978, Instrument No. 52200

The slide changing device has been provided with a new spring 031-049.022-015. Both legs of the spring intersect directly in front of the guide bridge on the modified switch panel 031-049.366-005. A support 031-049.022-024 has been placed between the lower axis B 6.2/15 and the plate 031-049.366-005. To accommodate this, a recess has been made in the switch B 6.2/3.

State 11 from 20.11.1978, instrument No. 59900

Owing to an alteration of the cam discs 3 and 4 the beginning of the magazine transport and the locking of the magazine have been advanced by 12°. The new cam disc 3 is distinguished by five punches next to the number, and the new cam disc 4 and 5 by one punch next to the number. The switch lever B 9.1/2 has been modified and can only be inserted in conjunction with the new guide 031-049.351-000, whereas the old switch lever can only be use with the guide 031-049.051-000.

State 12 from 08.01.1979, instrument No. 62250

In order to eliminate play in the fork drive, the following parts have been altered. Lever with bolt 031-049.041-000 and axis 031-049.040-005 have been modified to the sub-assemblies axis with lever 031-049.326-000 and bushing with lever 031-049.325-000 (see B 5.3/14,15). The conical connection can only be released by the pull-off device 031-049.001-000 W63 (see tools J 1.1).

State 13 from 25.06.1979, instrument No. 72860

To diminish the contact pressure the bolt with puncture for the c-clip was replaced by the sliding block 031-049.017-022. This bolt only continues to take over the bearing function for the sliding block.

State 14 from 12.09.1979, instrument No. 75800

For the long-running quality of the PRADOVIT A stop lever 031-049.001-037 and cover shield 031-049.015-023 were changed into stop lever 031-049.016-024 and cover shield 031-049.016-023. The parts cannot be interchanged.

State 15 from 22.01.1980, instrument No. 82770

Because of new VDE regulations, a 6mm high protective edge was added onto the drill hole for the temperature switch. The bracket 031-049.001-047 was fitted to the modified guide. The spool is covered with the cover 031-049.001-017.

PRADOVIT A

State 1

On plate B 7.3/11 the coupling was replaced by the pinion 031-058.001-027. The motor 031-049.032-000 has a protection switch.

State 2 from 25.06.1980, instrument No. 72860

The sliding block B 8.3/6 was placed between B 8.3/14 and B 8.3/18 as a new joining element.

Following parts were hardened:

lever B 5.4/14 B 16.2/4, B 16.2/14,
axis B 5.4/15

State 3 from 05.09.1980, instrument No. 96196

The slider B 16.2/9 has received a spring in order to avoid defective switching. Soldering ledge B 16.1/8 is no longer required. Lever B 9.4/7 has a stop nipple out of Lupolen. The strength of the spring B 9.4/4 has been increased. The anchor of the longlife magnet 031-049.145-000 has a teflon-coded surface.

State 4 from 25.09.1981, instrument No. 115500

The cam disc B 7.3/12 was changed so that the lever with bushing in addition to rivet bolt and ring rests atop the cam disc.

Owing to the modified cam disc, it was necessary to introduce a new fork 031-049.009-034.



Gehäuse Housing	Boitier Caja	B 1
Versorgungseinheit, Lampenhalter Supply unit, lamp holder	Unité d'alimentation, support de lampe Fuente de alimentación, soporte p. lámpara	B 2
Objektivträger Lens carrier	Porte-objectif Portaobjetivo	B 3
Autofocuseinrichtung Autofocus device	Installation de l'Autofocus Instalación de Autofocus	B 4
Diawechselung Slide changing device	Changement de diapositive Cambio de diapositiva	B 5
Diawechselung Slide changing device	Changement de diapositif Cambio de diapositiva	B 6
Kurvenscheibe Cam	Disque à came Leva de disco	B 7
Hebel Lever	Levier Palanca	B 8
Hebel Lever	Levier Palanca	B 9
Elektroteile Electrical parts	Parties électriques Partes electricas	B 10
Mikroschalter Micro switch	Microrupteur Micro interruptor	B 11
Beleuchtungsoptik Illumination optic	Optique d'éclairage Optica de iluminación	B 12

28.02.1984



Objektive Lenses	Objectifs Objetivos	B 13
Objektivstutzen Lens tube	Tube d'objectif Tubuladura para objetivo	B 14
Fernbedienung Remote control	Télécommande Control remoto	B 15
Steuerteile Control parts	Pièces de commande Partes de mando	B 16
Projektionsbox Projection box	Box de projection Caja p. proyección	B 17
Umbausatz D.U. 24 Conversion set D.U. 24	Jeu de transformation D.U. 24 Juego p. modificación D.U. 24	B 18



Bestell-Nr.	Seite	Bestell-Nr.	Seite	Bestell-Nr.	Seite
016-012.001-011	1.1, 1.2	031-049.003-036	3.3, 3.4	031-049.021-033	9.1, 9.2, 9.3, 9.4
016-012.001-018	17.1	031-049.003-051	2.1, 2.2, 2.3	031-049.021-034	7.1, 7.2, 7.3
016-018.033-040	8.1, 8.2, 9.1, 9.2, 9.3, 9.4	031-049.005-004	1.2	031-049.021-035	7.1, 7.2, 7.3
016-018.050-025	5.1, 5.2, 5.3, 5.4	031-049.005-033	3.3, 3.4	031-049.021-036	7.2, 7.3
016-204.060-022	3.1, 3.2, 3.3, 3.4	031-049.005-040	2.1, 2.2, 2.3	031-049.021-043	9.1, 9.2, 9.3, 9.4
031-048.001-035	1.2	031-049.006-004	1.2	031-049.021-044	9.1, 9.2, 9.3, 9.4
031-048.003-050	10.1	031-049.009-034	5.4	031-049.021-045	8.1, 8.2, 8.3
031-048.009-029	16.1, 16.2, 8.1, 8.2, 8.3	031-049.009-050	16.1, 16.2	031-049.021-046	8.1, 8.2, 8.3
031-048.032-024	6.2	031-049.015-010	9.2, 9.3, 9.4	031-049.021-047	9.1, 9.2, 9.3, 9.4
031-049.001-004	1.2	031-049.015-011	9.2, 9.3, 9.4	031-049.021-049	8.2, 8.3
031-049.001-017	10.4	031-049.015-016	8.1, 8.2, 8.3	031-049.022-000	5.1, 5.2, 5.3, 5.4, 6.1, 6.2
031-049.001-018	11.1, 11.2	031-049.015-017	3.2, 9.1, 9.2, 9.3, 9.4	031-049.022-009	6.1, 6.2
031-049.001-022	3.1, 3.2, 3.3, 3.4	031-049.015-018	9.1, 9.2, 9.3, 9.4	031-049.022-010	6.1, 6.2
031-049.001-023	10.1, 10.2, 10.3, 10.4	031-049.015-019	9.1, 9.2	031-049.022-011	6.1, 6.2
031-049.001-024	9.1, 9.2, 9.3	031-049.015-020	3.1, 3.2, 3.3, 3.4	031-049.022-012	6.1
031-049.001-026	3.1, 3.2, 3.3, 3.4	031-049.015-021	8.1, 8.2, 8.3	031-049.022-013	6.1, 6.2
031-049.001-027	1.1, 1.2	031-049.015-022	8.1, 8.2, 8.3	031-049.022-014	6.1
031-049.001-029	3.1, 3.2, 3.3, 3.4	031-049.015-023	9.3	031-049.022-015	6.2
031-049.001-030	3.1, 3.2, 3.3, 3.4	031-049.016-012	16.1, 16.2	031-049.022-016	6.1, 6.2
031-049.001-031	10.1, 10.2, 10.3, 10.4	031-049.016-013	16.1, 16.2	031-049.022-017	6.1
031-049.001-032	3.2, 3.3, 3.4	031-049.016-023	16.1, 16.2, 9.4	031-049.022-024	6.2
031-049.001-033	3.1, 3.2, 3.3, 3.4	031-049.016-024	16.1, 16.2, 9.4	031-049.022-025	6.1
031-049.001-034	5.1, 5.2, 5.3, 5.4	031-049.017-022	16.2, 8.3	031-049.023-000	6.2
031-049.001-035	1.1, 1.2	031-049.021-013	7.1	031-049.024-000	3.1, 3.2, 3.4, 4.1, 4.2
031-049.001-037	9.1, 9.2, 9.3	031-049.021-014	7.1	031-049.025-000	10.1, 10.2, 10.3, 10.4
031-049.001-038	2.1, 2.2, 2.3	031-049.021-015	7.1, 7.2, 7.3	031-049.025-006	10.4
031-049.001-039	2.1, 2.2, 2.3	031-049.021-016	7.1	031-049.026-000	10.1, 10.2, 10.3, 10.4
031-049.001-040	2.1, 2.2, 2.3	031-049.021-017	7.1	031-049.027-000	10.1, 10.2, 10.3, 10.4
031-049.001-042	2.1	031-049.021-018	7.1, 7.2, 7.3	031-049.028-000	1.1, 1.2
031-049.001-043	12.1, 2.1, 2.2, 2.3	031-049.021-019	1.1, 1.2	031-049.029-000	3.3, 3.4
031-049.001-044	2.1	031-049.021-020	7.1, 7.2, 7.3	031-049.030-005	1.1, 1.2
031-049.001-047	3.1, 3.2, 3.3, 3.4	031-049.021-023	7.1, 7.2, 7.3	031-049.030-011	1.1, 1.2
031-049.001-050	2.1, 2.2	031-049.021-024	7.1, 7.3	031-049.032-000	10.3, 10.4
031-049.001-052	8.1, 8.2, 8.3	031-049.021-025	7.1, 7.2, 7.3	031-049.033-000	2.1, 2.2, 2.3
031-049.001-053	2.3	031-049.021-026	8.1, 8.2, 8.3	031-049.034-000	16.1, 16.2
031-049.001-999	9.1, 9.2	031-049.021-027	8.1, 8.2, 8.3	031-049.036-005	10.1, 10.2, 10.3, 10.4
031-049.003-004	1.2	031-049.021-029	9.1, 9.2, 9.3, 9.4		
		031-049.021-030	8.1, 8.2, 8.3		
		031-049.021-031	8.1, 8.2, 8.3		
		031-049.021-032	9.1, 9.2, 9.3, 9.4		



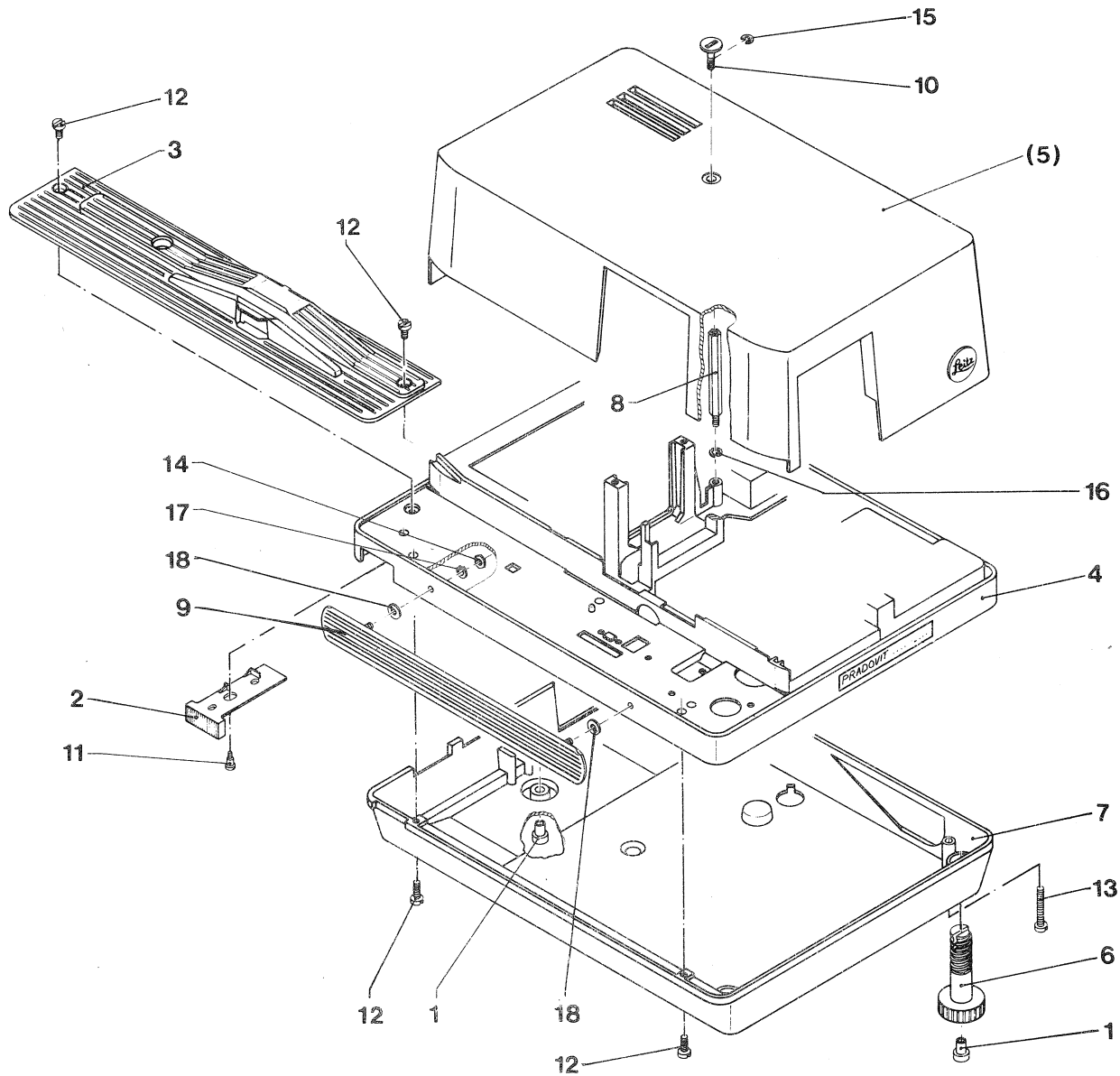
Bestell-Nr.	Seite	Bestell-Nr.	Seite	Bestell-Nr.	Seite
031-049.037-000	3.1, 3.2, 3.3, 3.4	031-049.065-020	6.1, 6.2	031-049.127-009	17.1
031-049.040-000	5.1, 5.2	031-049.066-000	6.1	031-049.128-000	17.1
031-049.041-000	8.1	031-049.067-000	6.1, 6.2	031-049.129-000	17.1
031-049.042-000	8.1, 8.3	031-049.071-000	15.1, 15.2	031-049.130-000	17.1
031-049.043-000	8.1	031-049.071-007	15.1, 15.2	031-049.131-000	17.1
031-049.044-000	8.1, 8.2	031-049.071-008	15.1, 15.2	031-049.132-008	17.1
031-049.045-000	7.1, 7.2, 7.3	031-049.071-009	15.1, 15.2	031-049.132-010	17.1
031-049.046-000	5.1, 5.2	031-049.071-010	15.1, 15.2	031-049.132-011	17.1
031-049.047-000	7.1, 7.2, 7.3	031-049.071-011	15.1, 15.2	031-049.133-000	17.1
031-049.048-000	7.2, 7.3	031-049.071-012	15.1, 15.2	031-049.134-000	17.1
031-049.049-000	7.2, 7.3	031-049.071-013	15.1, 15.2	031-049.136-000	17.1
031-049.050-000	9.1, 9.2	031-049.071-014	15.1, 15.2	031-049.139-000	16.1
031-049.051-000	9.1, 9.2	031-049.071-015	15.1, 15.2	031-049.140-000	16.1, 16.2
031-049.051-006	9.2, 9.3, 9.4	031-049.071-016	15.1, 15.2	031-049.145-000	10.4
031-049.051-008	9.1, 9.2, 9.3, 9.4	031-049.071-017	15.2	031-049.191-009	5.4, 6.2
031-049.052-000	2.1, 2.2, 2.3	031-049.071-020	15.1, 15.2	031-049.207-000	18.1
031-049.052-005	2.1, 2.2, 2.3	031-049.072-000	15.1, 15.2	031-049.207-013	18.1
031-049.053-000	3.1, 3.2, 3.3, 3.4	031-049.074-000	4.1, 4.2	031-049.207-021	18.1
031-049.053-005	3.1	031-049.076-000	4.1, 4.2	031-049.207-022	18.1
031-049.054-000	9.1	031-049.076-005	4.1, 4.2	031-049.207-023	18.1
031-049.056-000	3.1	031-049.076-006	4.1, 4.2	031-049.208-000	18.1
031-049.057-000	2.2, 2.3	031-049.076-007	4.1, 4.2	031-049.250-500	16.1, 16.2
031-049.060-005	6.1, 6.2	031-049.076-009	4.1, 4.2	031-049.250-501	16.1, 16.2
031-049.060-006	6.1, 6.2	031-049.076-011	4.2	031-049.250-502	16.2
031-049.060-007	6.1, 6.2	031-049.077-000	4.1, 4.2	031-049.250-503	16.1, 16.2
031-049.060-008	6.1, 6.2	031-049.077-005	4.1, 4.2	031-049.325-000	5.3, 5.4
031-049.061-000	5.1, 5.2, 5.3, 5.4	031-049.077-006	4.1, 4.2	031-049.326-000	5.3
031-049.061-007	5.1, 5.3, 5.4	031-049.077-009	4.1, 4.2	031-049.327-000	5.4
031-049.062-000	5.1, 5.2, 5.3, 5.4	031-049.077-011	4.1, 4.2	031-049.340-005	2.2, 2.3
031-049.063-000	5.1, 5.2, 5.3, 5.4	031-049.090-000	10.1, 10.2, 10.3	031-049.341-000	8.2, 8.3
031-049.064-000	5.1, 5.2, 5.3, 5.4	031-049.096-000	10.1, 10.2, 10.3, 10.4	031-049.342-000	8.2, 9.4
031-049.065-009	5.1, 5.2, 5.3, 6.1			031-049.343-000	8.2, 8.3
031-049.065-010	5.1, 5.2, 5.3, 5.4	031-049.097-000	10.1, 10.2, 10.3, 10.4	031-049.343-008	8.3
031-049.065-011	5.1, 5.2, 5.3, 5.4			031-049.344-000	16.1
031-049.065-012	6.1, 6.2	031-049.111-000	12.1	031-049.346-000	7.3
031-049.065-013	6.1, 6.2	031-049.112-000	12.1	031-049.347-000	8.3
031-049.065-014	6.1, 6.2	031-049.113-000	12.1	031-049.348-000	7.3
031-049.065-016	6.1, 6.2	031-049.114-000	12.1	031-049.349-000	9.4
031-049.065-017	6.1, 6.2	031-049.115-000	12.1	031-049.350-000	9.3, 9.4
031-049.065-018	5.1, 5.2, 5.3, 5.4	031-049.116-000	12.1	031-049.350-012	9.3, 9.4
031-049.065-019	5.1, 5.2, 5.3, 5.4	031-049.120-000	17.1	031-049.351-000	9.3, 9.4



Bestell-Nr.	Seite	Bestell-Nr.	Seite	Bestell-Nr.	Seite
031-049.354-000	16.2	301-003.308-000	10.1, 10.2, 10.3,	700-717.163-000	10.1, 10.2, 10.3,
031-049.355-000	8.3		10.4		10.4, 11.1, 1.1,
031-049.366-000	6.2	301-003.309-000	10.1, 10.2, 10.3,		2.1, 3.1, 6.1, 7.1,
031-049.843-005	9.2		10.4		9.1
031-049.843-006	10.4	302-003.312-000	10.4	700-720.163-000	2.1, 4.1
031-049.990-000	10.1	302-004.042-001	15.2	700-724.163-000	5.1
031-052.022-012	2.1, 2.2, 2.3	302-013.131-014	2.1, 2.2, 2.3	700-746.163-000	10.1, 10.2, 10.3,
031-054.005-000	13.1	302-013.131-016	2.1, 2.2, 2.3		10.4, 3.1
031-054.006-000	13.1	302-013.131-017	15.2	700-751.163-000	1.1
031-056.013-000	12.1	302-013.131-031	18.1	700-800.000-000	10.1, 10.2, 10.3,
031-056.014-000	12.1	302-016.036-005	10.1, 10.2, 10.3,		10.4
031-057.001-090	16.1, 16.2, 3.2		10.4	700-803.163-000	10.1, 10.2, 10.3,
031-058.001-027	7.3	302-023.045-002	11.1, 11.2		10.4
031-058.001-044	7.1, 7.2, 7.3	302-023.045-007	11.1, 11.2	701-801.163-000	10.1, 10.2, 10.3,
031-058.001-089	10.1	302-023.045-008	11.1, 11.2, 16.1,		10.4
031-058.003-030	1.1, 1.2		16.2	701-951.163-000	5.2
031-058.039-052	1.1, 1.2	302-023.087-003	10.1, 10.2, 10.3,	702-131.163-000	10.1, 2.2, 2.3, 3.1,
031-058.041-010	1.1, 1.2		10.4		3.2, 3.3, 3.4, 5.1,
031-058.055-000	14.1	302-023.150-001	10.1, 10.2, 10.3,		5.2, 5.3, 5.4, 6.1,
031-058.058-000	14.1		10.4		6.2, 9.1, 9.2, 9.3,
031-058.058-006	14.1	302-023.150-003	10.1, 10.2, 10.3,		9.4
031-058.065-000	14.1		10.4	702-135.163-000	17.1
031-058.065-007	14.1	302-023.209-001	15.1, 15.2	702-206.163-000	18.1, 9.1, 9.2, 9.3
031-058.066-000	14.1	302-033.070-001	2.1, 2.2, 2.3	702-214.163-000	17.1
031-058.067-000	14.1	302-052.035-000	2.1, 2.2, 2.3	702-217.163-000	17.1
031-900.003-000	13.1	302-053.034-002	4.1	702-309.220-000	2.1, 2.2, 2.3
031-900.053-000	13.1	302-055.049-051	3.1, 3.2, 3.3, 3.4	702-752.163-000	4.1, 5.1, 5.2, 5.3,
031-900.075-000	13.1	302-055.049-053	3.1, 3.2, 3.3, 3.4		5.4, 6.1, 6.2
031-900.077-000	13.1	302-056.018-004	10.1, 10.2, 10.3,	703-745.163-000	9.1
031-900.081-000	13.1		10.4	703-752.163-000	2.1
031-900.101-000	13.1	302-057.200-006	18.1	703-758.163-000	3.1, 3.2, 3.3, 3.4
031-900.103-000	13.1	302-062.103-007	18.1	703-801.163-000	6.2
031-900.107-000	13.1	302-062.105-037	2.1, 2.2, 2.3	704-054.163-000	9.1, 9.2, 9.3
031-900.113-000	13.1	302-062.115-017	4.1, 4.2	704-058.163-000	8.1, 8.2, 8.3
031-904.073-000	13.1	700-072.163-000	3.1, 3.2, 3.3, 3.4	704-179.163-000	6.1, 6.2
031-908.007-000	13.1	700-077.163-000	3.1, 3.2, 3.3, 3.4	704-236.163-000	1.1, 1.2, 3.1, 3.2,
031-908.102-000	13.1	700-432.163-000	16.1, 16.2		3.3, 3.4
038-101.093-000	2.1, 2.2, 2.3	700-699.163-000	6.1, 6.2	704-238.220-000	17.1
038-101.098-000	2.1, 2.2, 2.3	700-705.163-000	10.1, 1.1, 1.2, 2.1,	704-366.163-000	5.1, 5.2
038-101.133-000	15.1, 15.2		3.1, 5.1, 9.1	704-745.220-000	10.1, 10.2, 10.3,
060-645.071-045	9.1, 9.2				10.4, 3.1, 3.2, 3.3,
					3.4



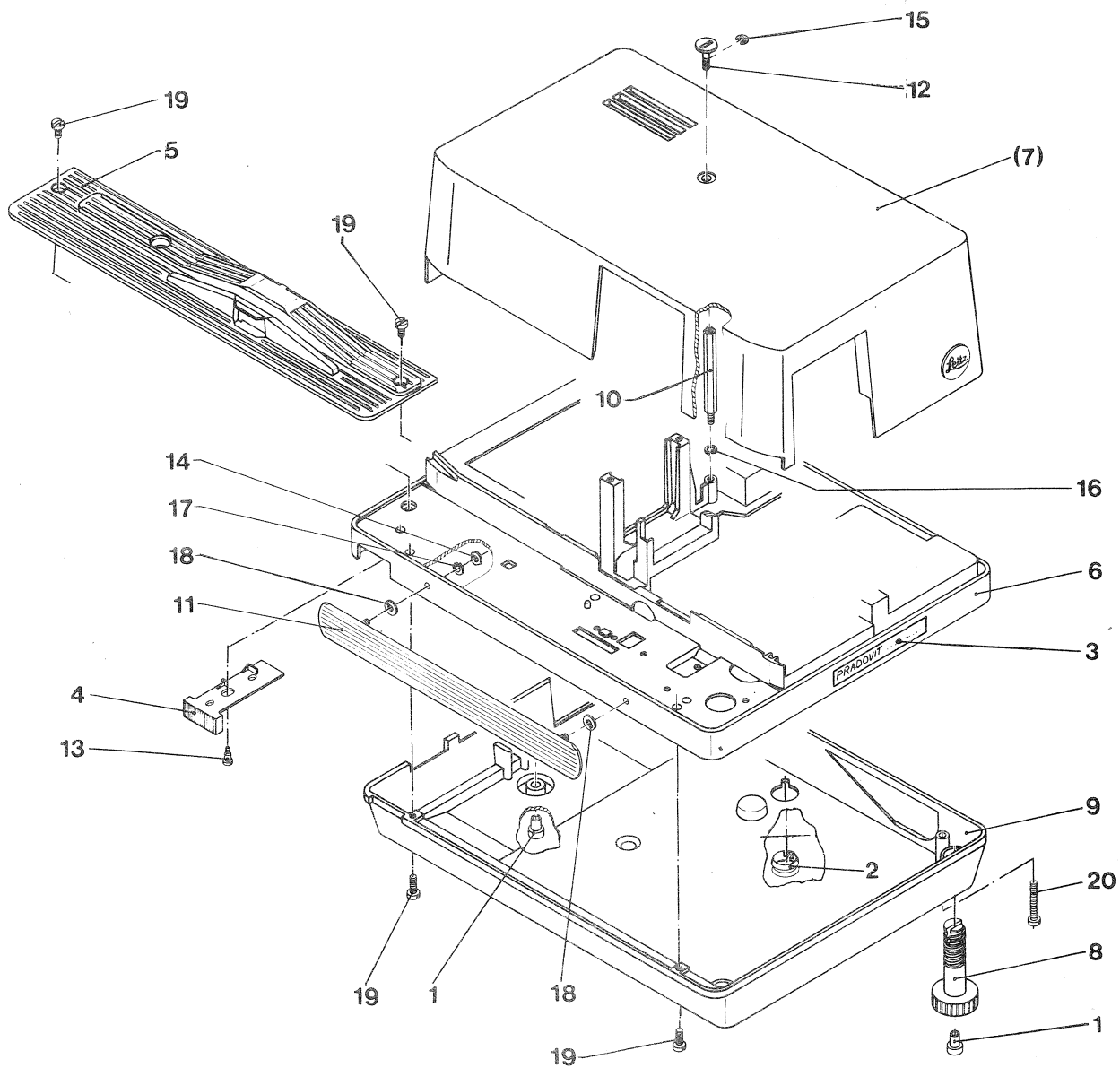
Bestell-Nr.	Seite	Bestell-Nr.	Seite	Bestell-Nr.	Seite
704-782.163-000	16.2, 8.3	706-831.163-000	4.1, 4.2, 7.2, 7.3	834-603.000-000	18.1
704-784.000-000	1.1, 1.2, 6.1, 6.2, 7.1, 7.2, 7.3	707-341.000-000	3.3, 3.4	851-937.000-000	18.1
704-785.000-000	9.1, 9.2, 9.3, 9.4	707-423.220-000	17.1	910-080.401-010	12.1
704-785.619-000	17.1	707-759.163-000	16.1, 16.2		
704-788.000-000	5.1, 5.2, 5.3, 5.4, 7.1, 7.2, 7.3, 8.2	707-910.163-000	17.1		
704-789.000-000	9.1, 9.2, 9.3, 9.4	707-951.000-000	2.2		
704-910.000-000	18.1, 2.1, 2.2, 2.3, 6.2, 7.1, 7.2, 7.3	707-951.163-000	10.2, 10.4, 16.1, 16.2, 3.2, 3.3, 3.4, 9.2, 9.3, 9.4		
704-910.163-000	10.1, 10.2, 10.3, 10.4	707-953.163-000	10.2, 10.3, 10.4, 11.2, 16.1, 16.2, 1.2, 2.2, 2.3, 3.2, 3.3, 3.4, 6.2, 9.2, 9.3, 9.4		
704-910.220-000	16.1, 16.2, 9.3, 9.4	707-954.163-000	11.2, 16.1, 16.2, 7.2, 7.3, 9.3, 9.4		
704-913.000-000	1.1, 1.2, 5.3, 5.4	707-955.163-000	5.2, 5.3, 5.4		
704-913.163-000	10.1, 10.2, 10.3, 10.4, 1.1, 1.2	707-956.163-000	16.1, 16.2		
705-349.163-000	10.1, 10.2, 10.3, 10.4	707-958.163-000	3.2, 3.3, 3.4		
705-448.220-000	1.1, 1.2, 5.3	707-962.163-000	5.3, 5.4		
705-449.163-000	16.1, 16.2	708-071.220-000	4.2		
705-450.000-000	10.4	708-101.000-000	3.1		
705-450.163-000	10.1, 10.2, 10.3	708-227.233-000	17.1		
705-472.163-000	6.1, 6.2	708-241.220-000	6.1, 6.2		
705-542.163-000	16.1, 16.2	708-362.220-000	6.1, 6.2		
705-560.163-000	8.1, 8.2, 8.3	708-385.220-000	4.2		
705-644.163-000	2.1, 2.2, 2.3, 9.4	709-045.163-000	16.1, 16.2		
705-646.233-000	17.1	709-066.163-000	10.4		
705-703.220-000	5.4	709-372.123-000	17.1		
705-818.163-000	2.1, 2.2, 2.3	709-393.163-000	6.1		
705-840.163-000	9.4	709-412.000-000	11.1, 11.2		
705-881.163-000	10.1, 10.2, 10.3, 10.4	709-483.163-000	1.2		
705-951.163-000	2.3	709-544.163-000	6.2		
706-121.163-000	11.2, 16.1, 16.2, 6.2, 9.3, 9.4	709-634.163-000	16.1, 16.2		
706-232.163-000	7.1, 7.2, 7.3	709-660.163-000	18.1		
706-318.220-000	17.1	709-716.163-000	16.2, 8.3		
706-367.163-000	7.1, 7.2, 7.3	803-887.000-000	10.1, 10.2, 10.3, 10.4		
706-449.163-000	5.1	803-913.000-000	3.2		
706-449.167-000	5.2	826-252.000-000	2.1, 2.2, 2.3		
		830-449.000-000	18.1		





Nr.	Bestell-Nr.	PG	Stück	Benennung		Bemerkung
1	016-012.001-011		3	Gummifuß rubber foot	pied en caoutchouc pie de goma	
2	031-049.001-027		1	Schieber slider	coulisseau corredera	
3	031-049.001-035		1	Magazinwanne magazine tub	couloir de magasin cuba p. cargador	
4	031-049.021-019		1	Grundteil base	bati pieza básica	
5	031-049.028-000		1	Oberteil upper part	partie supérieure parte superior	G 10,15
6	031-049.030-005		2	Fuß foot	pied pie	
7	031-049.030-011		1	Bodenplatte base plate	plateau de base placa-base	
8	031-058.003-030		1	Gewindestange threaded bar	tige filetée varilla c. rosca	
9	031-058.039-052		1	Griff handle	poignée mango	
10	031-058.041-010		1	Schraube screw	vis tornillo	
11	700-705.163-000		1	Schraube	M 3x5 DIN 84	
12	700-717.163-000		4	Schraube	M 3x8 DIN 84	
13	700-751.163-000		2	Schraube	M 3x30 DIN 84	
14	704-236.163-000		2	Mutter	M 4 DIN 934	
15	704-784.000-000		1	Sichg.Scheibe	3,2 DIN 6799	
16	704-913.000-000		1	Federring	4 DIN 7980	
17	704-913.163-000		2	Federring	4 DIN 7980	
18	705-448.220-000		2	Scheibe	015-121.047-085	

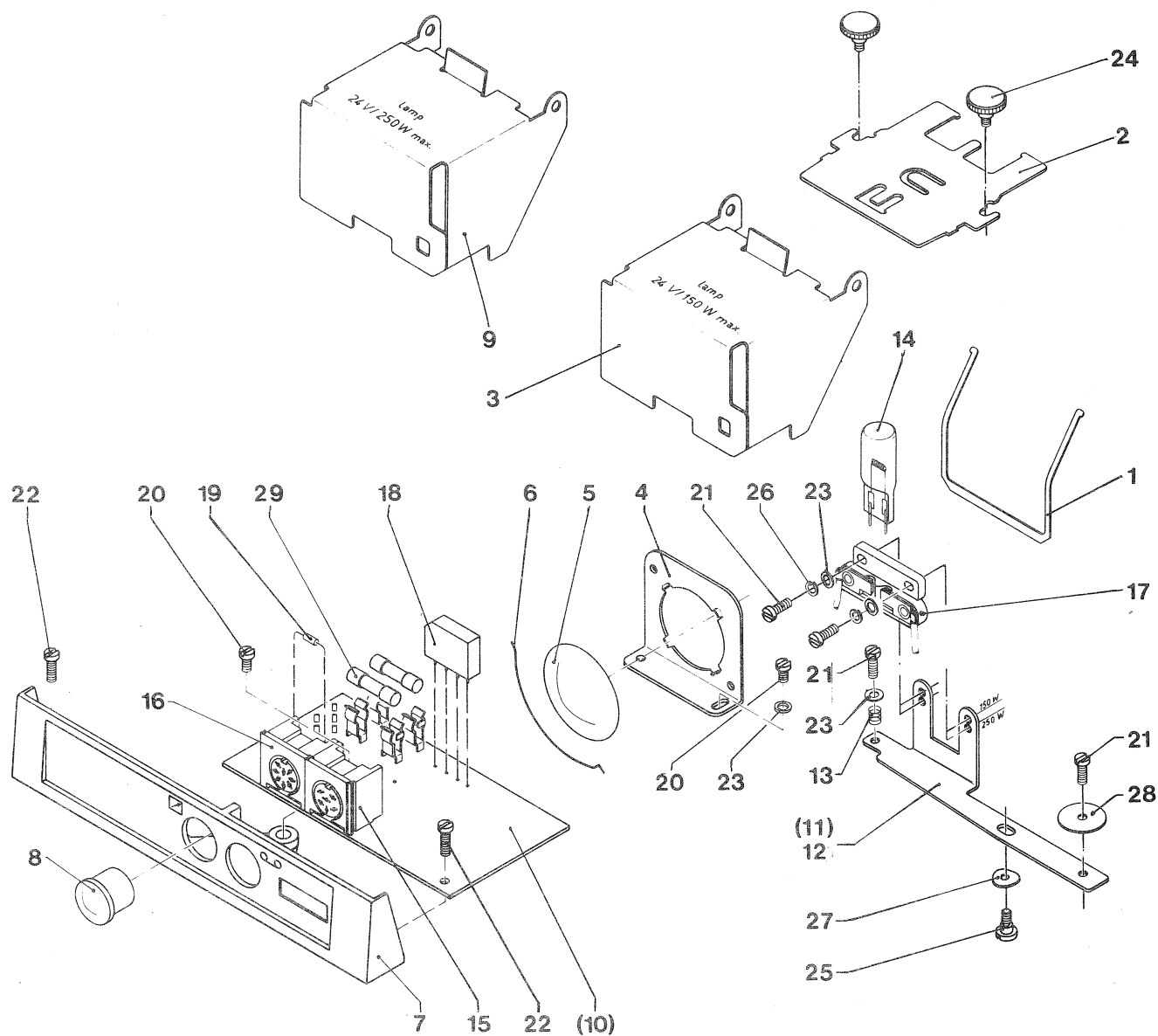
28.02.1984





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-012.001-011	3	Gummifuß rubber foot	pied en caoutchouc pie de goma	
2	031-048.001-035	1	Kappe cap	couvercle capa	
3	031-049.001-004	1	Schriftband C 1500 lettering band	bande gravée cinta grabado	
	031-049.003-004	1	Schriftband CA 1500		
	031-049.005-004	1	Schriftband C 2500		
	031-049.006-004	1	Schriftband CA 2500		
4	031-049.001-027	1	Schieber slider	coulisseau corredera	
5	031-049.001-035	1	Magazinwanne magazine tub	couloir de magasin cuba p. cargador	
6	031-049.021-019	1	Grundteil base	bati pieza básica	
7	031-049.028-000	1	Oberteil upper part	partie supérieure parte superior	G 12,15
8	031-049.030-005	2	Fuß foot	pied pie	
9	031-049.030-011	1	Bodenplatte base plate	plateau de base placa-base	
10	031-058.003-030	1	Gewindestange threaded bar	tige filetée varilla c. rosca	
11	031-058.039-052	1	Griff handle	poignée mango	
12	031-058.041-010	1	Schraube screw	vis tornillo	
13	700-705.163-000	1	Schraube	M 3x5 DIN 84	
14	704-236.163-000	2	Mutter	M 4 DIN 934	
15	704-784.000-000	1	Sichg.Scheibe	3,2 DIN 6799	
16	704-913.000-000	1	Federring	4 DIN 7980	
17	704-913.163-000	2	Federring	4 DIN 7980	
18	705-448.220-000	2	Scheibe	015-121.047-085	
19	707-953.163-000	4	Schraube	M 3x8 DIN 7985	
20	709-483.163-000	2	Schraube	M 3x30 DIN 7985	

28.02.1984



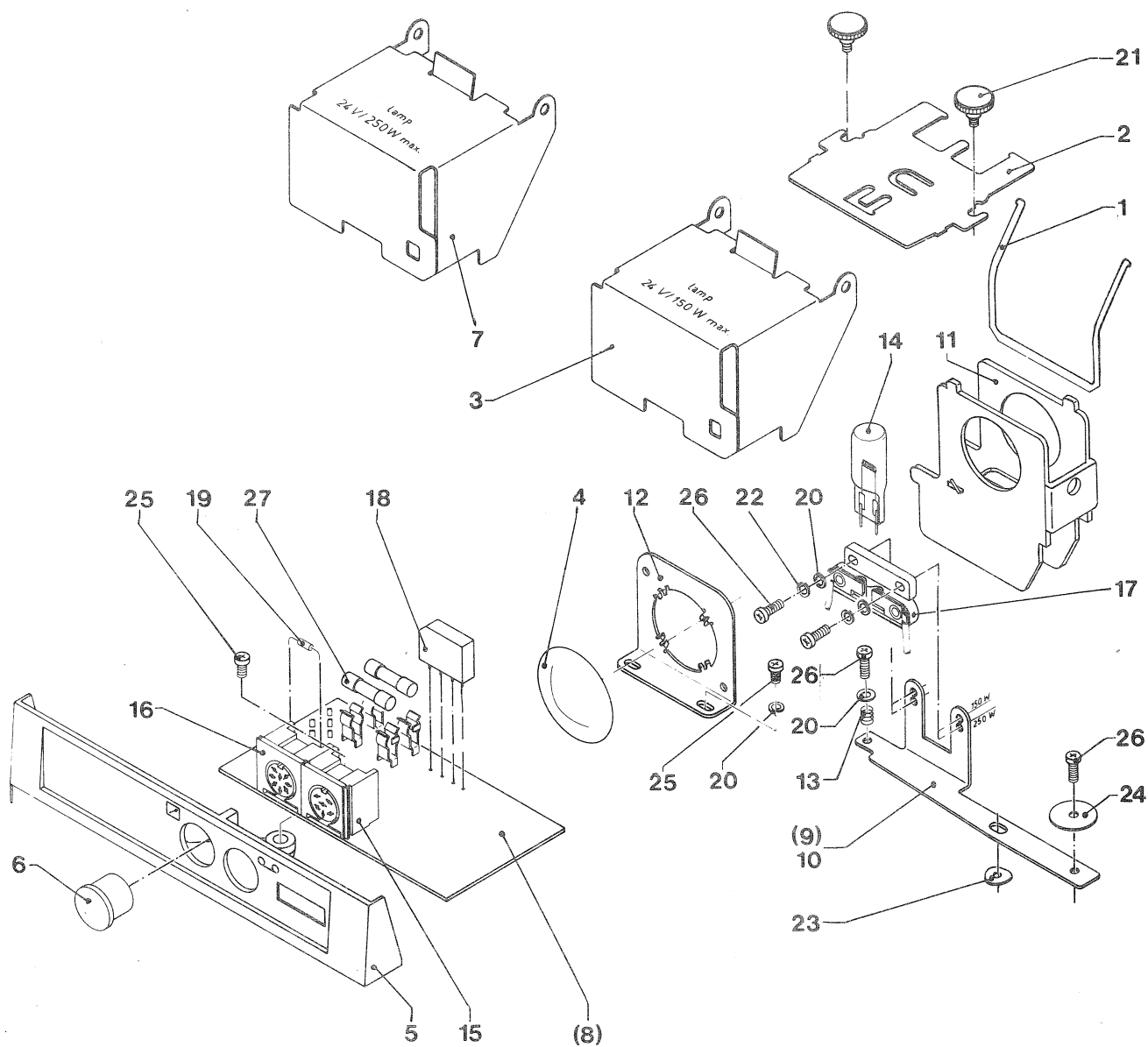


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.001-038	1	Federbügel bow	étrier à ressort estribo-muelle	
2	031-049.001-039	1	Deckplatte cover plate	plaque de couverture placa cobertora	
3	031-049.001-040	1	Lichtschutz light stop	protection pare-lumiere protecc. contra luz	
4	031-049.001-042	1	Spiegelfassung mirror mount	monture de miroir montura de espejo	
5	031-049.001-043	1	Hohlspiegel reflector	miroir concave reflector	
6	031-049.001-044	1	Federdraht spring wire	fil d'acier à ressort alambre de resorte	
7	031-049.001-050	1	Blendleiste terminal ledge	piece terminale pieza terminal	
8	031-049.003-051	1	Stecker plug	interrupteur interruptor	
9	031-049.005-040	1	Lichtschutz light stop	protection pare-lumiere protecc. contra luz	
10	031-049.033-000	1	Versorgungseinheit supply unit	unité d'alimentation fuente de alimentación	G 15,16,18,19,29
11	031-049.052-000	1	Lampenhalter lamp holder	support de lampe soporte p. lámpara	G 12,13,17,21,23,26
12	031-049.052-005	1	Lampenhalter lamp holder	support de lampe soporte p. lámpara	
13	031-052.022-012	1	Feder spring	ressort muelle	
14	038-101.093-000	1	Lampe lamp	lampe lámpara	w 24V/150W
	038-101.098-000	1	Lampe		w 24V/250W
15	302-013.131-014	1	Einbaubuchse insert socket	prise noyée enchufe embutido	
16	302-013.131-016	1	Einbaubuchse insert socket	prise noyée enchufe embutido	
17	302-033.070-001	1	Lampenfassung lamp mount	douille de lampe portalámparas	
18	302-052.035-000	1	Gleichrichter rectifier	redresseur rectificador	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	302-062.105-037	1	Diode diode	diode diodo 1 N 4001
20	700-705.163-000	2	Schraube	M 3x5 DIN 84
21	700-717.163-000	4	Schraube	M 3x8 DIN 84
22	700-720.163-000	2	Schraube	M 3x10 DIN 84
23	702-131.163-000	4	Scheibe	3,2 DIN 433
24	702-309.220-000	2	Schraube	M 3x6 DIN 464
25	703-752.163-000	1	Schraube	M 3x2,5 DIN 923
26	704-910.000-000	2	Federring	3 DIN 7980
27	705-644.163-000	1	Sattelfeder	015-125.043-222
28	705-818.163-000	1	Scheibe	015-121.037-495
29	826-252.000-000	2	Sicherung fuse	T 0,8A DIN 41662 fusible



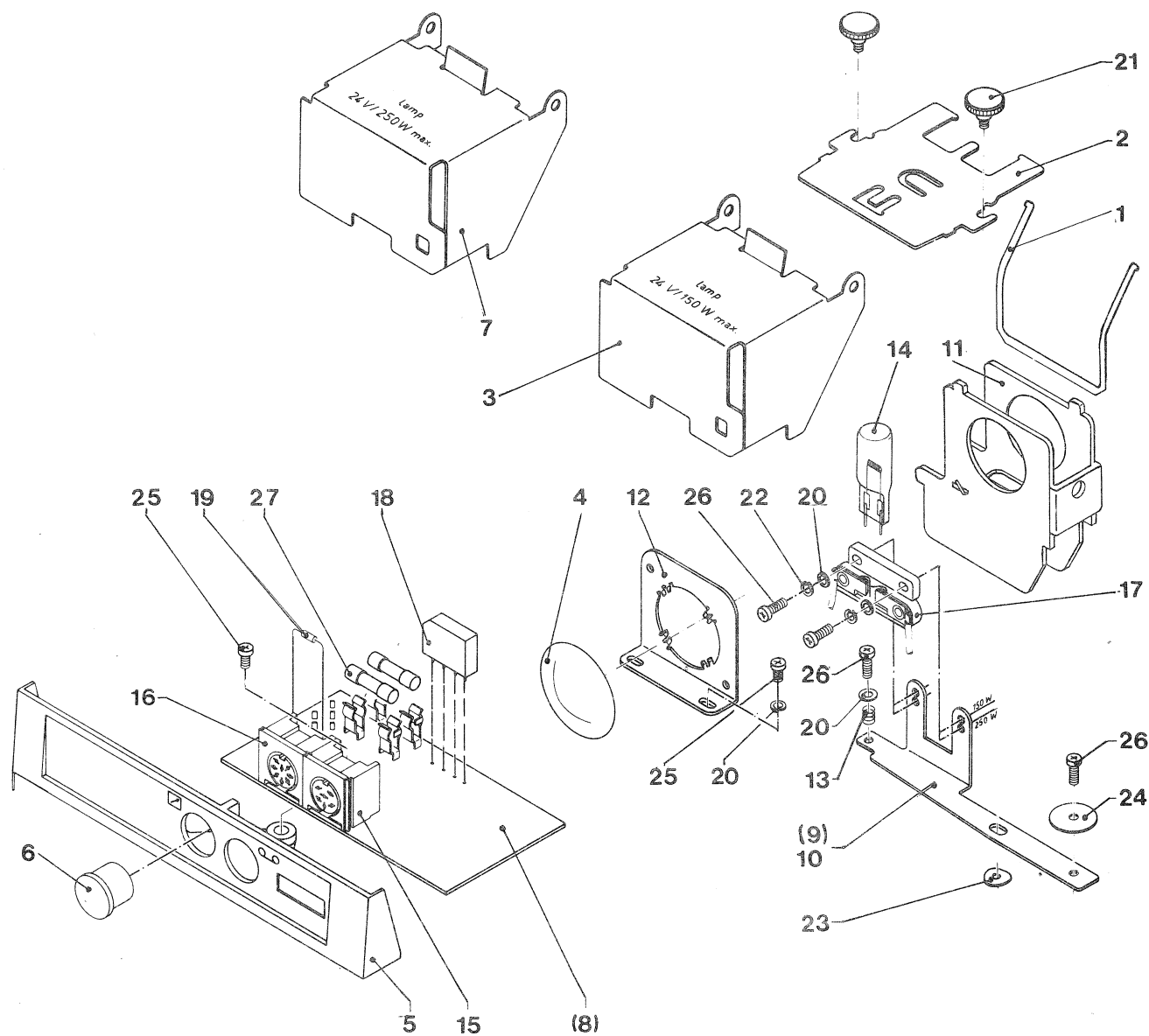


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.001-038	1	Federbügel bow	étrier à ressort estribo-muelle	
2	031-049.001-039	1	Deckplatte cover plate	plaque de couverture placa cobertora	
3	031-049.001-040	1	Lichtschutz light stop	protection pare-lumiere protecc. contra luz	
4	031-049.001-043	1	Hohlspiegel reflector	miroir concave reflector	
5	031-049.001-050	1	Blendleiste terminal ledge	pièce terminale pieza terminal	
6	031-049.003-051	1	Stecker plug	fiche enchufe	
7	031-049.005-040	1	Lichtschutz light stop	protection pare-lumiere protecc. contra luz	
8	031-049.033-000	1	Versorgungseinheit supply unit	unité d'alimentation fuente de alimentación	G 15,16,18,19,27
9	031-049.052-000	1	Lampenhalter lamp holder	support de lampe soporte p. lámpara	G 10,13,17,20,22,26
10	031-049.052-005	1	Lampenhalter lamp holder	support de lampe soporte p. lámpara	
11	031-049.057-000	1	Schutzblech shield	tole de protection chapa protectora	
12	031-049.340-005	1	Spiegelfassung mirror mount	monture de miroir montura de espejo	
13	031-052.022-012	1	Feder spring	ressort muelle	
14	038-101.093-000	1	Lampe lamp	lampe lámpara	w 24V/150W
	038-101.098-000	1	Lampe		w 24V/250W
15	302-013.131-014	1	Einbaubuchse insert socket	prise noyée enchufe embutido	
16	302-013.131-016	1	Einbaubuchse insert socket	prise noyée enchufe embutido	
17	302-033.070-001	1	Lampenfassung lamp mount	douille de lampe portalámparas	
18	302-052.035-000	1	Gleichrichter rectifier	redresseur rectificador	

28.02.1984



Nr.	Bestell-Nr.	PG	Stück	Benennung	Bemerkung
19	302-062.105-037		1	Diode diode	diode diodo 1 N 4001
20	702-131.163-000		4	Scheibe	3,2 DIN 433
21	702-309.220-000		2	Schraube	M 3x6 DIN 464
22	704-910.000-000		2	Federring	3 DIN 7980
23	705-644.163-000		1	Sattelfeder	015-125.043-222
24	705-818.163-000		1	Scheibe	015-121.037-495
25	707-951.000-000		2	Schraube	M 3x5 DIN 7985
26	707-953.163-000		4	Schraube	M 3x8 DIN 7985
27	826-252.000-000		2	Sicherung fuse	fusible fusible



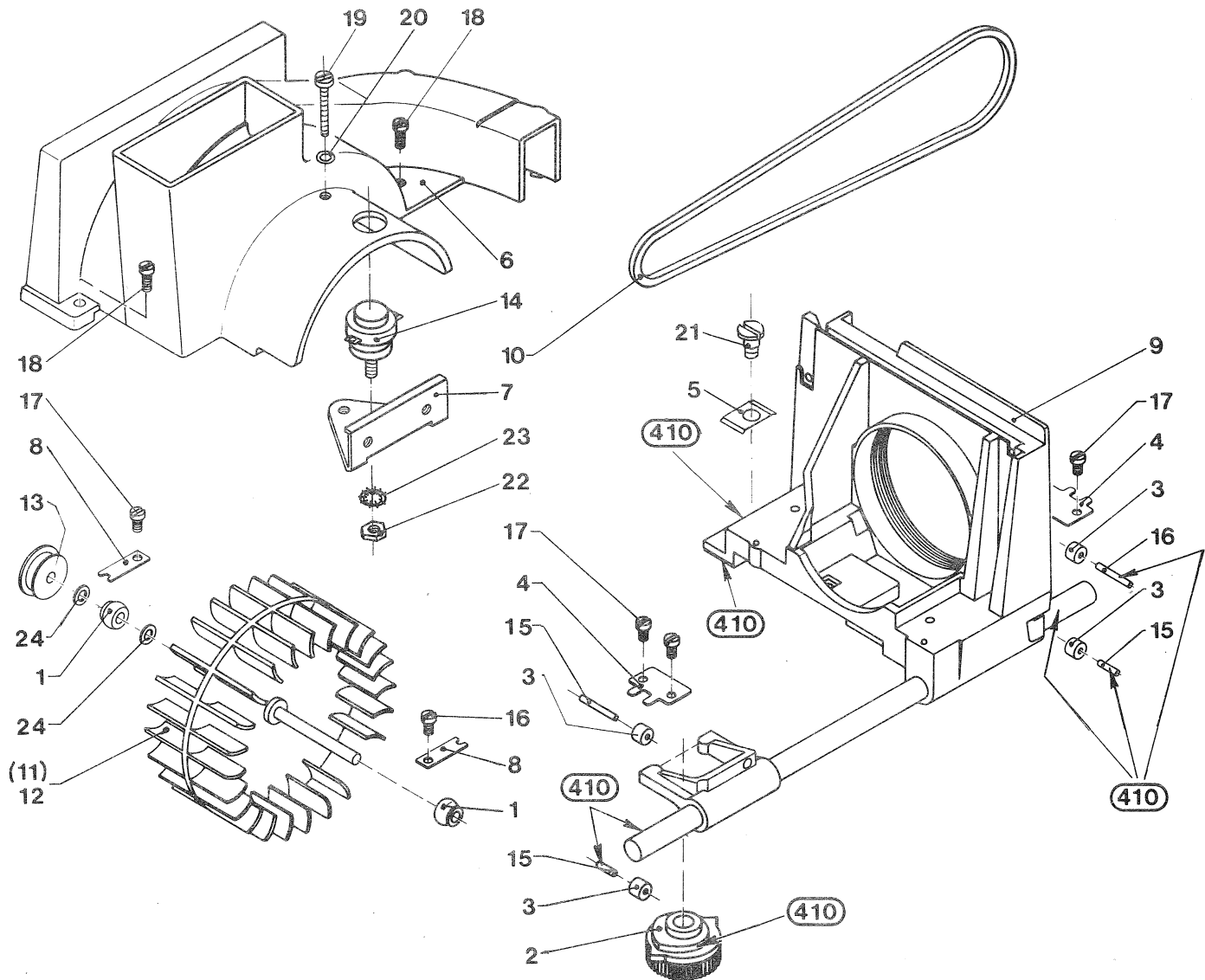


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.001-038	1	Federbügel bow	étrier à ressort estribo-muelle	
2	031-049.001-039	1	Deckplatte cover plate	plaque de couverture placa cobertora	
3	031-049.001-040	1	Lichtschutz light stop	protection pare-lumiere protecc. contra luz	
4	031-049.001-043	1	Hohlspiegel reflector	miroir concave reflector	
5	031-049.001-053	1	Blendleiste terminal ledge	pièce terminale pieza terminal	
6	031-049.003-051	1	Stecker plug	fiche enchufe	
7	031-049.005-040	1	Lichtschutz light stop	protection pare-lumiere protecc. contra luz	
8	031-049.033-000	1	Versorgungseinheit supply unit	unité d'alimentation fuente de alimentación	G 15,16,18,19,27
9	031-049.052-000	1	Lampenhalter lamp holder	support de lampe soporte p. lámpara	G 10,13,17,20,22,26
10	031-049.052-005	1	Lampenhalter lamp holder	support de lampe soporte p. lámpara	
11	031-049.057-000	1	Schutzblech shield	tole de protection chapa protectora	
12	031-049.340-005	1	Spiegelfassung mirror mount	monture de miroir montura de espejo	
13	031-052.022-012	1	Feder spring	ressort muelle	
14	038-101.093-000	1	Lampe lamp	lampe lámpara	w 24V/150W
	038-101.098-000	1	Lampe		w 24V/250W
15	302-013.131-014	1	Einbaubuchse insert socket	prise noyée enchufe embutido	
16	302-013.131-016	1	Einbaubuchse insert socket	prise noyée enchufe embutido	
17	302-033.070-001	1	Lampenfassung lamp mount	douille de lampe portalámparas	
18	302-052.035-000	1	Gleichrichter rectifier	redresseur rectificador	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
19	302-062.105-037	1	Diode diode	diode diodo	1 N 4001
20	702-131.163-000	4	Scheibe	3,2 DIN 433	
21	702-309.220-000	2	Schraube	M 3x6 DIN 464	
22	704-910.000-000	2	Federring	3 DIN 7980	
23	705-644.163-000	1	Sattelfeder	015-125.043-222	
24	705-818.163-000	1	Scheibe	015-121.037-495	
25	705-951.163-000	2	Schraube	M 3x5 DIN 7985	
26	707-953.163-000	4	Schraube	M 3x8 DIN 7985	
27	826-252.000-000	2	Sicherung fuse	fusible fusible	





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-204.060-022	2	Kalottenlager calotte bearing	coussinet de calotte cojinete de calota	
2	031-049.001-022	1	Kurvenscheibe cam	disque à came leva de disco	
3	031-049.001-026	4	Rolle roller	rouleau rodillo	
4	031-049.001-029	2	Feder spring	ressort muelle	
5	031-049.001-030	1	Feder spring	ressort muelle	
6	031-049.001-033	1	Abdeckung cover	couverture cubierta	
7	031-049.001-047	1	Winkel bracket	équerre ángulo	
8	031-049.015-020	2	Feder spring	ressort muelle	
9	031-049.024-000	1	Objektivträger lens carrier	porte-objectif portaobjetivo	
10	031-049.037-000	1	Antriebsriemen drive belt	courroie d'entrainement correa de transmision	
11	031-049.053-000	1	Windrad fan wheel	turbine de ventilateur hélice	G 1,13,24
12	031-049.053-005	1	Windrad fan wheel	turbine de ventilateur hélice	
13	031-049.056-000	1	Riemenscheibe belt disc	rondelle par courroie arandela para correa	
14	302-055.049-051	1	Temperaturwächter 150 temperature switch	controlleur de température control de temperatura	
	302-055.049-053	1	Temperaturwächter 250		
15	700-072.163-000	2	Stift	1,5m6 x8 DIN 7	
16	700-077.163-000	2	Stift	1,5m6 x16 DIN 7	
17	700-705.163-000	6	Schraube	M 3x5 DIN 84	
18	700-717.163-000	2	Schraube	M 3x8 DIN 84	
19	700-746.163-000	1	Schraube	M 3x25 DIN 84	
20	702-131.163-000	1	Scheibe	3,2 DIN 433	

28.02.1984

PRADOVIT C/CA

B 3.1

Objektivträger

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH

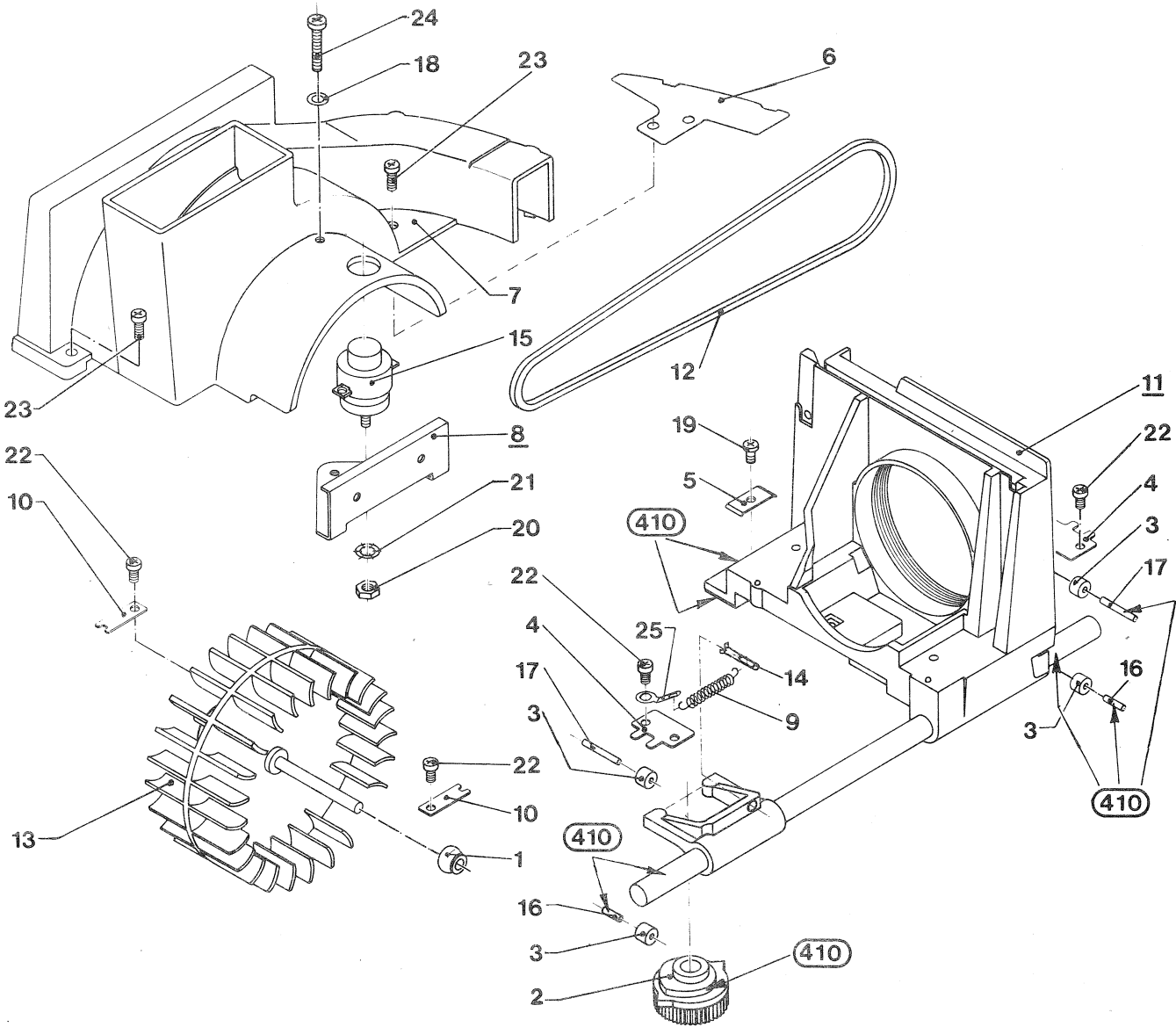
TECHNISCHER SERVICE

Dokumentation und Info



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
21	703-758.163-000	1	Schraube	M 3x4	DIN 923
22	704-236.163-000	1	Mutter	M 4	DIN 934
23	704-745.220-000	1	Zahnscheibe	A 4,3	DIN 6797
24	708-101.000-000	2	Scheibe	015-122.046-263	

28.02.1984



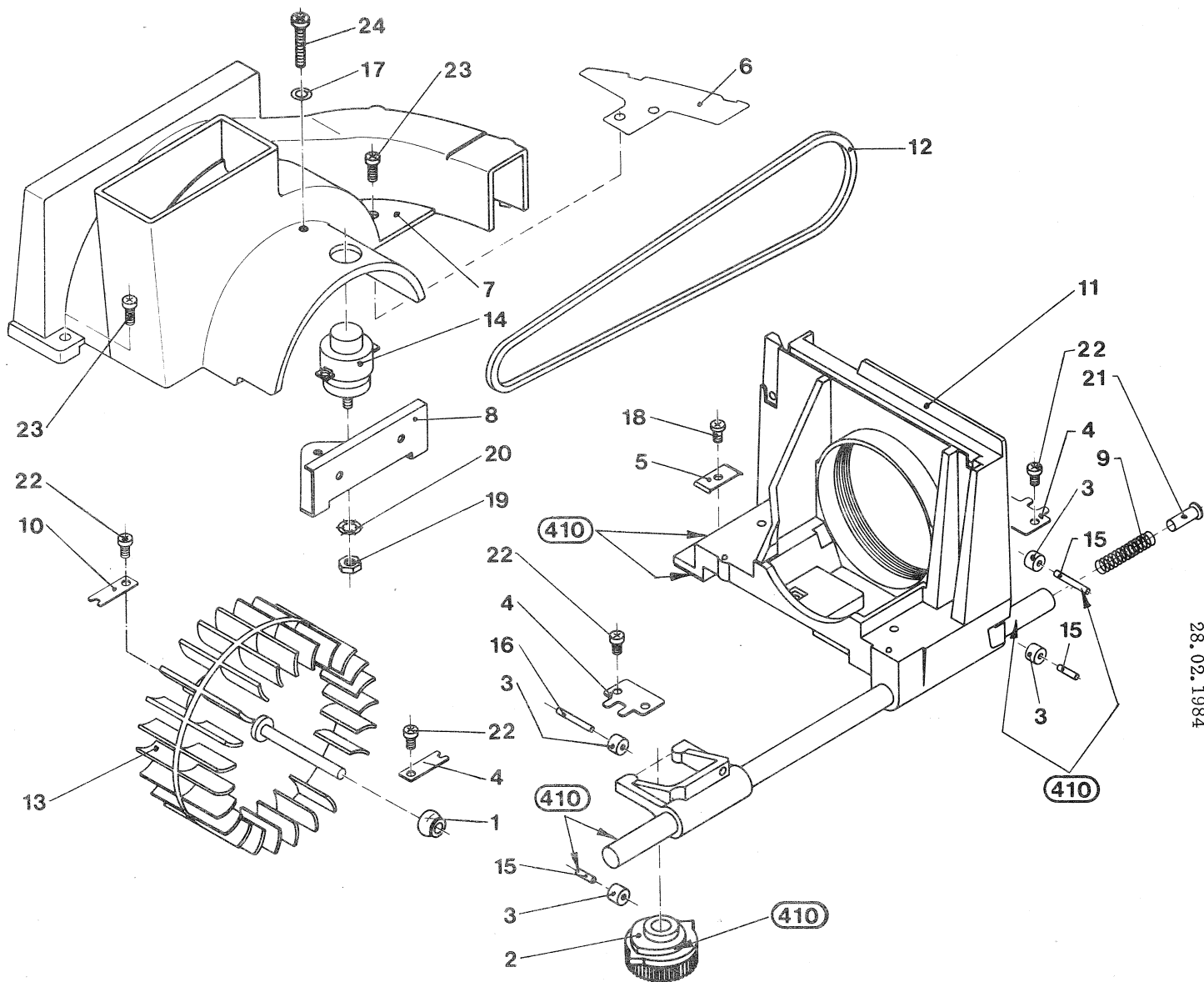


Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
1	016-204.060-022	2	Kalottenlager calotte bearing	coussinet de calotte cojinete de calota
2	031-049.001-022	1	Kurvenscheibe cam	disque à came leva de disco
3	031-049.001-026	4	Rolle roller	rouleau rodillo
4	031-049.001-029	2	Feder spring	ressort muelle
5	031-049.001-030	1	Feder spring	ressort muelle
6	031-049.001-032	1	Abdeckblech cover plate	tole de fermeture chapa cobertora
7	031-049.001-033	1	Abdeckung cover	couvercle cubierta
8	031-049.001-047	1	Winkel bracket	équerre ángulo
9	031-049.015-017	1	Feder spring	ressort muelle
10	031-049.015-020	2	Feder spring	ressort muelle
11	031-049.024-000	1	Objektivträger lens carrier	porte-objectif portaobjetivo
12	031-049.037-000	1	Antriebsriemen drive belt	courroie d'entraînement correa de transmision
13	031-049.053-000	1	Windrad fan wheel	turbine de ventilateur hélice
14	031-057.001-090	1	Lötstift soldering pin	goupille à souder perno p. soldadura
15	302-055.049-051	1	Temperaturwächter 150 temperature switch	controlleur de température control de temperatura
	302-055.049-053	1	Temperaturwächter 250	
16	700-072.163-000	2	Stift	1,5m6 x8 DIN 7
17	700-077.163-000	2	Stift	1,5m6 x16 DIN 7
18	702-131.163-000	1	Scheibe	3,2 DIN 433
19	703-758.163-000	1	Schraube	M 3x4 DIN 923

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
20	704-236.163-000	1	Mutter	M 4 DIN 934
21	704-745.220-000	1	Zahnscheibe	A 4,3 DIN 6797
22	707-951.163-000	6	Schraube	M 3x5 DIN 7985
23	707-953.163-000	2	Schraube	M 3x8 DIN 7985
24	707-958.163-000	1	Schraube	M 3x25 DIN 7985
25	803-913.000-000	1	Lötöse soldering lug	oeillet à souder ojal p. soldadura



28.02.1984

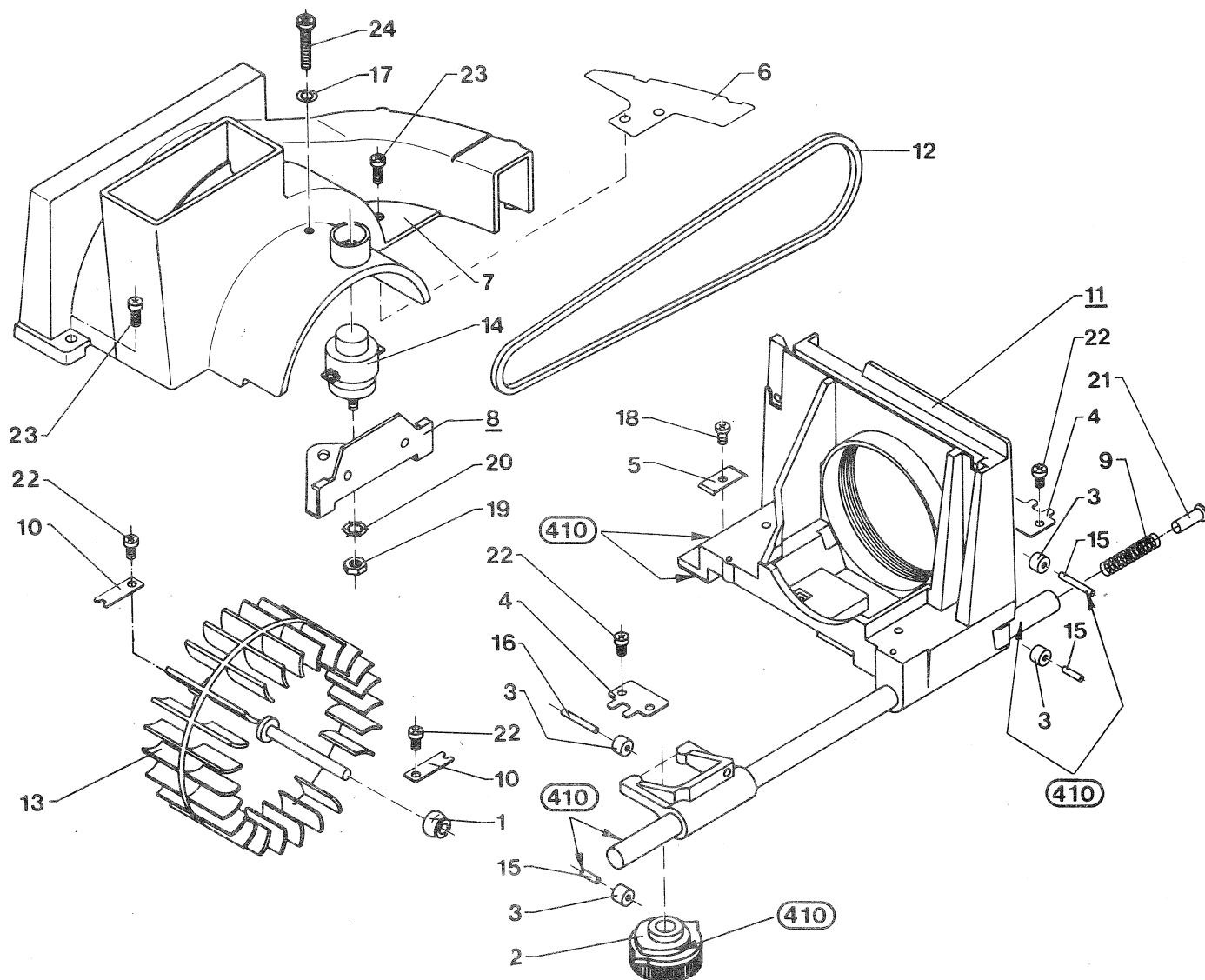


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-204.060-022	2	Kalottenlager calotte bearing	coussinet de calotte cojinete de calota	
2	031-049.001-022	1	Kurvenscheibe cam	disque à came leva de disco	
3	031-049.001-026	4	Rolle roller	rouleau rodillo	
4	031-049.001-029	2	Feder spring	ressort muelle	
5	031-049.001-030	1	Feder spring	ressort muelle	
6	031-049.001-032	1	Abdeckblech cover plate	tole de fermeture chapa cobertora	
7	031-049.001-033	1	Abdeckung cover	couverture cubierta	
	031-049.005-033	1	Abdeckung		
8	031-049.001-047	1	Winkel bracket	équerre ángulo	
9	031-049.003-036	1	Feder spring	ressort muelle	
10	031-049.015-020	2	Feder spring	ressort muelle	
11	031-049.029-000	1	Objektivträger lens carrier	porte-objectif portaobjetivo	
12	031-049.037-000	1	Antriebsriemen drive belt	courroie d'entrainement correa de transmision	
13	031-049.053-000	1	Windrad fan wheel	turbine de ventilateur hélice	G 1
14	302-055.049-051	1	Temperaturwächter 150 temperatur switch	controlleur de température control de temperature	
	302-055.049-053	1	Temperaturwächter 250		
15	700-072.163-000	2	Stift	1,5m6 x8 DIN 7	
16	700-077.163-000	2	Stift	1,5m6 x16 DIN 7	
17	702-131.163-000	1	Scheibe	3,2 DIN 433	
18	703-758.163-000	1	Schraube	M 3x4 DIN 923	
19	704-236.163-000	1	Mutter	M 4 DIN 934	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
20	704-745.220-000	1	Zahnscheibe	A 4,3 DIN 6797
21	707-341.000-000	1	Niet	A 4x0,4x12 DIN 7340
22	707-951.163-000	6	Schraube	M 3x5 DIN 7985
23	707-953.163-000	2	Schraube	M 3x8 DIN 7985
24	707-958.163-000	1	Schraube	M 3x25 DIN 7985





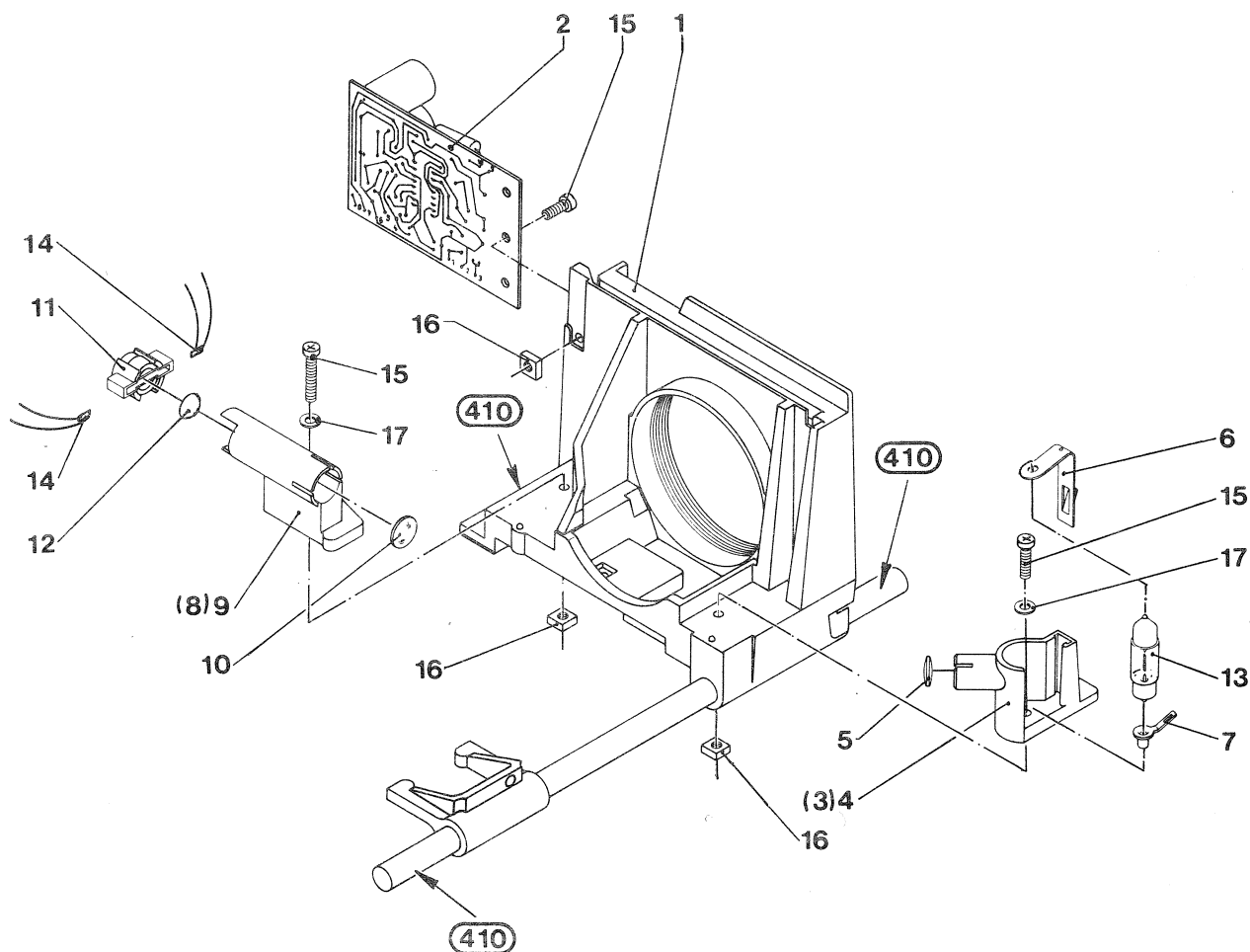
Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
1	016-204.060-022	2	Kalottenlager calotte bearing	coussinet de calotte cojinete de calota
2	031-049.001-022	1	Kurvenscheibe cam	disque à came leva de disco
3	031-049.001-026	4	Rolle roller	rouleau rodillo
4	031-049.001-029	2	Feder spring	ressort muelle
5	031-049.001-030	1	Feder spring	ressort muelle
6	031-049.001-032	1	Abdeckblech cover plate	tole de fermeture chapa cobertora
7	031-049.001-033	1	Abdeckung cover	couverture cubierta
	031-049.005-033	1	Abdeckung	
8	031-049.001-047	1	Winkel bracket	équerre ángulo
9	031-049.003-036	1	Feder spring	ressort muelle
10	031-049.015-020	2	Feder spring	ressort muelle
11	031-049.029-000	1	Objektivträger lens carrier	porte-objectif portaobjetivo
	031-049.024-000	1	Objektivträger	
12	031-049.037-000	1	Antriebsriemen drive belt	courroie d'entrainement correa de transmision
13	031-049.053-000	1	Windrad fan wheel	turbine de ventilateur hélice
14	302-055.049-051	1	Temperaturwächter 150	controlleur de température
	302-055.049-053	1	temperature switch Temperaturwächter 250	control de temperature
15	700-072.163-000	2	Stift	1,5m6 x8 DIN 7
16	700-077.163-000	2	Stift	1,5m6 x16 DIN 7
17	702-131.163-000	1	Scheibe	3,2 DIN 433
18	703-758.163-000	1	Schraube	M 3x4 DIN 923

28.02.1984

G



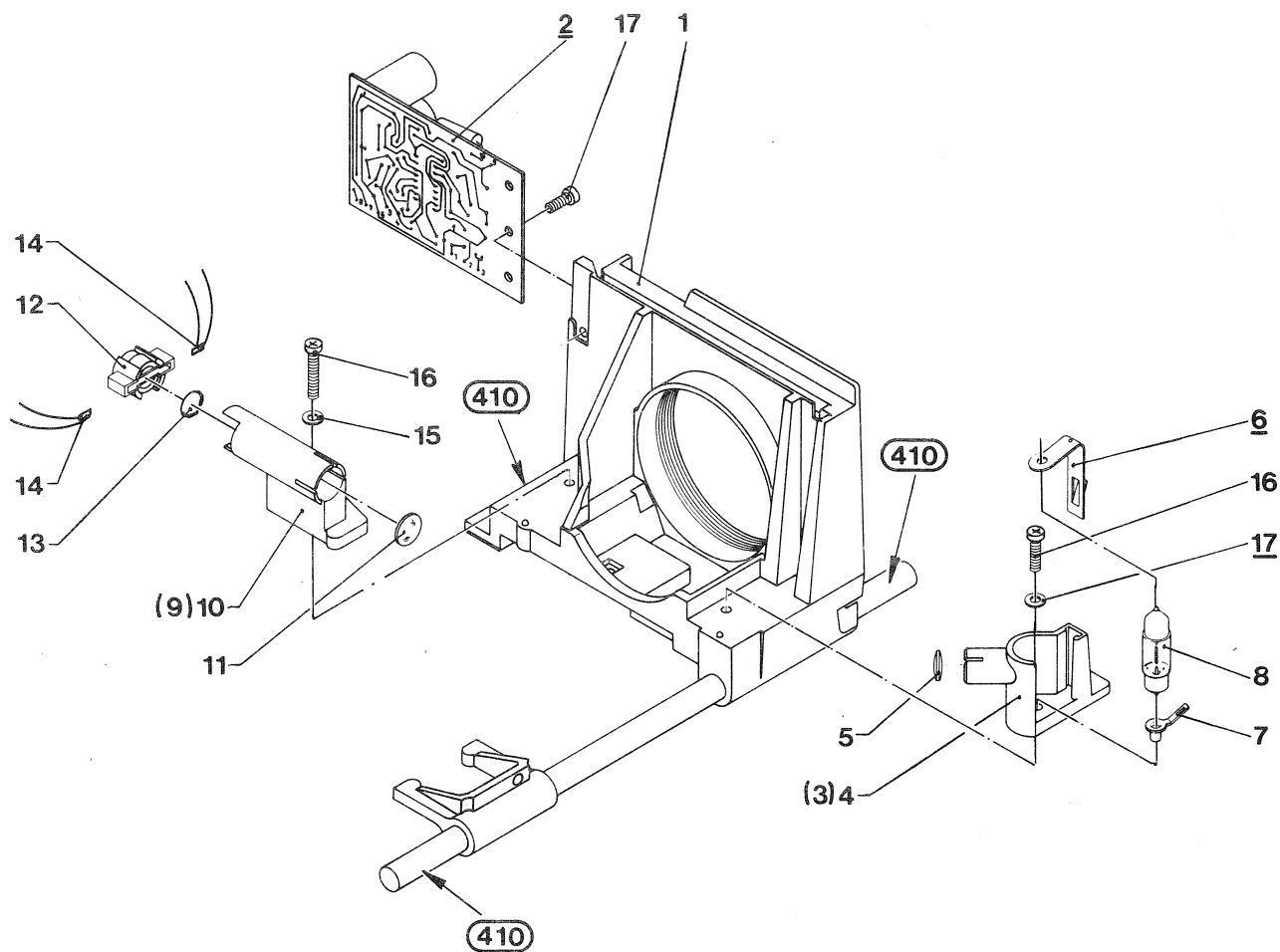
Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	704-236.163-000	1	Mutter	M 4 DIN 934
20	704-745.220-000	1	Zahnscheibe	A 4,3 DIN 6797
21	707-341.000-000	1	Niet	A 4x0,4x12 DIN 7340
22	707-951.163-000	6	Schraube	M 3x5 DIN 7985
23	707-953.163-000	2	Schraube	M 3x8 DIN 7985
24	707-958.163-000	1	Schraube	M 3x25 DIN 7985





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.024-000	1	Objektivträger lens carrier	porte-objectif portaobjetivo	
2	031-049.074-000	1	Verstärker amplifier	amplificateur amplificador	G
3	031-049.076-000	1	AF-Projektiv AF projective	projectif AF proyectivo AF	G 4...7,13
4	031-049.076-005	1	Halter holder	support soporte	
5	031-049.076-006	1	Linse lens	lentille lente	
6	031-049.076-007	1	Kontaktfeder contact spring	ressort de contact muelle de contacto	
7	031-049.076-009	1	Lötöse soldering lug	oeillet à souder ojal p. soldadura	
8	031-049.077-000	1	Empfänger receiver	récepteur receptor	G 9...12,14
9	031-049.077-005	1	Halter holder	support soporte	
10	031-049.077-006	1	Linse lens	lentille lente	
11	031-049.077-009	1	Kappe cap	couvercle capa	
12	031-049.077-011	1	IR Filter IR filter	filtre IR filtro IR	
13	302-053.034-002	1	Glühlampe 12V/3W bulb	lampe à incandescence bombilla incandesc.	
14	302-062.115-017	2	Lichtempfänger light receiver	récepteur de lumière receptor de luz	
15	700-720.163-000	3	Schraube	M 3x10 DIN 84	
16	702-752.163-000	3	Mutter	M 3 DIN 562	
17	706-831.163-000	3	Scheibe	015-121.036-422	

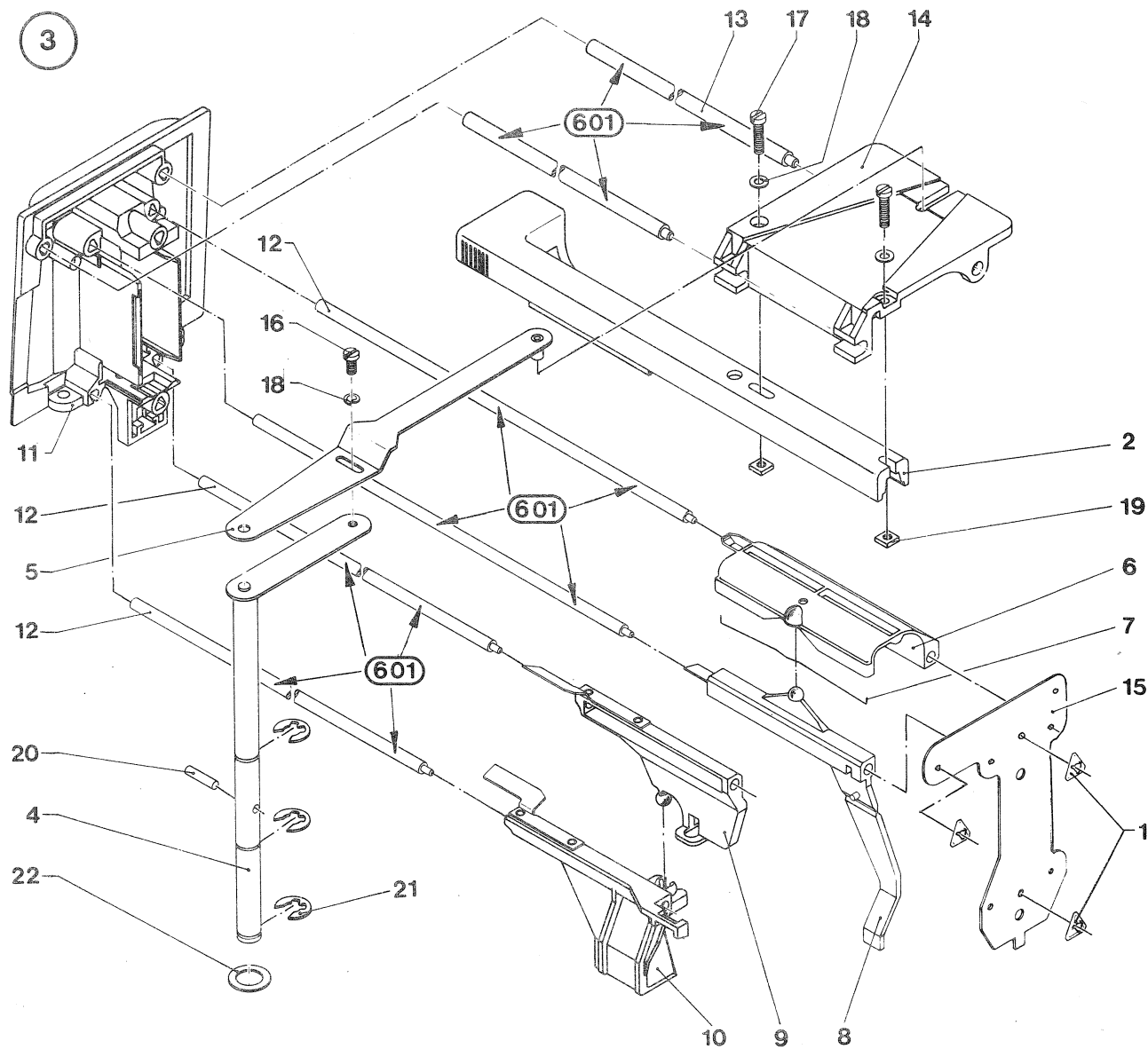
28.02.1984





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.024-000	1	Objektivträger lens carrier	porte-objectif portaobjetivo	
2	031-049.074-000	1	Verstärker amplifier	amplificateur amplificador	G
3	031-049.076-000	1	AF-Projektiv AF projective	projectif AF proyectivo AF	G 4...8
4	031-049.076-005	1	Halter holder	support soporte	
5	031-049.076-006	1	Linse lens	lentille lente	
6	031-049.076-007	1	Kontaktfeder contact spring	ressort de contact muelle de contacto	
7	031-049.076-009	1	Lötöse soldering lug	œillet à souder ojal p. soldadura	
8	031-049.076-011	1	Glühlampe 12V/3W bulb	lampe à incandescence bombilla incandesc.	
9	031-049.077-000	1	Empfänger receiver	récepteur receptor	G 10...14
10	031-049.077-005	1	Halter holder	support soporte	
11	031-049.077-006	1	Linse lens	lentille lente	
12	031-049.077-009	1	Kappe cap	couvercle capa	
13	031-049.077-011	1	IR Filter IR filter	filtre IR filtro IR	
14	302-062.115-017	2	Lichtempfänger light receiver	récepteur de lumière receptor de luz	
15	706-831.163-000	3	Scheibe	015-121.036-422	
16	708-071.220-000	2	Schraube	B 2,9x13 DIN 7981	
17	708-385.220-000	1	Schraube	B 2,9x9,5 DIN 7981	

28.02.1984





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-018.050-025	3	Seeger-Ring Seeger ring	rondelle Seeger anillo Seeger	
2	031-049.001-034	1	Mitnehmer fork	ergot entraineur arrastrador	
3	031-049.022-000	1	Diawechselung slide changing device	changement de diapositive cambio de diapositiva	G 5.1,6.1
4	031-049.040-000	1	Achse axis	axe eje	G 20
5	031-049.046-000	1	Hebel lever	levier palanca	
6	031-049.061-000	1	Schieber slider	coulisseau corredera	
7	031-049.061-007	1	Feder spring	ressort muelle	
8	031-049.062-000	1	Schieber slider	coulisseau corredera	
9	031-049.063-000	1	Schieber slider	coulisseau corredera	
10	031-049.064-000	1	Schieber slider	coulisseau corredera	
11	031-049.065-009	1	Portal gate	portique portal	
12	031-049.065-010	4	Achse axis	axe eje	
13	031-049.065-011	2	Achse axis	axe eje	
14	031-049.065-018	1	Führung guide	guidage guía	
15	031-049.065-019	1	Distanzplatte spacer plate	plaque d'entretoise placa distanciadora	
16	700-705.163-000	1	Schraube	M 3x5 DIN 84	
17	700-724.163-000	2	Schraube	M 3x12 DIN 84	
18	702-131.163-000	3	Scheibe	3,2 DIN 433	
19	702-752.163-000	2	Mutter	M 3 DIN 562	
20	704-366.163-000	1	Kerbstift	2,5 DIN 1472	

28.02.1984

PRADOVIT C/CA

B 5.1

Diawechselung

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH

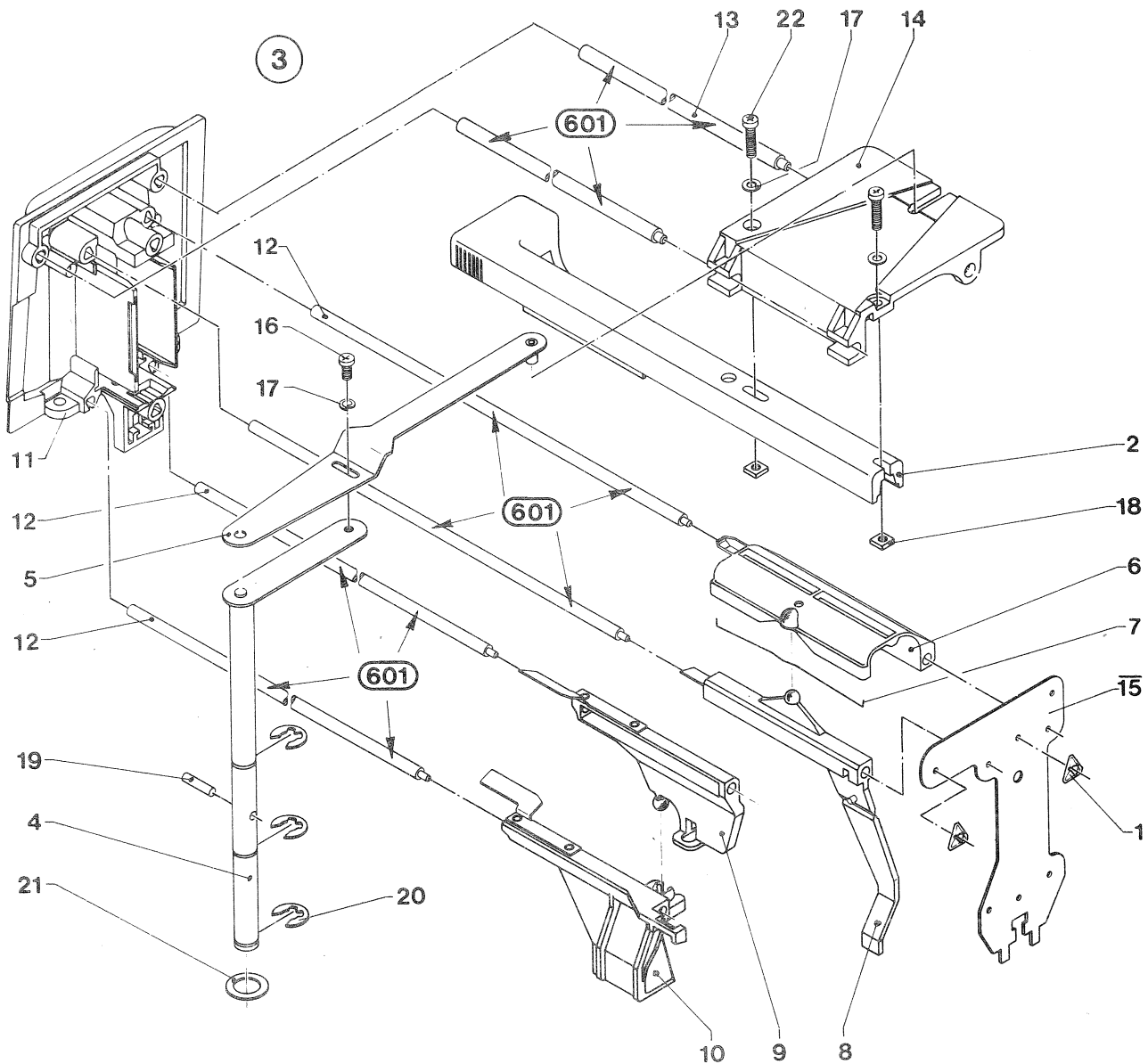
TECHNISCHER SERVICE

Dokumentation und Info



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
21	704-788.000-000	3	Sichg.Scheibe	6 DIN 6799
22	706-449.163-000	1	Scheibe	015-121.084-132

28.02.1984





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-018.050-025	2	Seeger-Ring Seeger ring	rondelle Seeger anillo Seeger	
2	031-049.001-034	1	Mitnehmer fork	ergot entraineur arrastrador	
3	031-049.022-000	1	Diawechsler slide changing device	changement de diapositive cambio de diapositiva	G 5.2,6.1
4	031-049.040-000	1	Achse axis	axe eje	G 19
5	031-049.046-000	1	Hebel lever	levier palanca	
6	031-049.061-000	1	Schieber slider	coulisseau corredera	
7	031-049.061-007	1	Feder spring	ressort muelle	
8	031-049.062-000	1	Schieber slider	coulisseau corredera	
9	031-049.063-000	1	Schieber slider	coulisseau corredera	
10	031-049.064-000	1	Schieber slider	coulisseau corredera	
11	031-049.065-009	1	Portal gate	portique portal	
12	031-049.065-010	4	Achse axis	axe eje	
13	031-049.065-011	2	Achse axis	axe eje	
14	031-049.065-018	1	Führung guide	guidage guia	
15	031-049.065-019	1	Distanzplatte spacer plate	plaque d'entretoise placa distanciadora	
16	701-951.163-000	1	Schraube	M 3x5 DIN 7985	
17	702-131.163-000	3	Scheibe	3,2 DIN 433	
18	702-752.163-000	2	Mutter	M 3 DIN 562	
19	704-366.163-000	1	Kerbstift	2,5x12 DIN 1472	
20	704-788.000-000	3	Sichg.Scheibe	6 DIN 6799	

28.02.1984

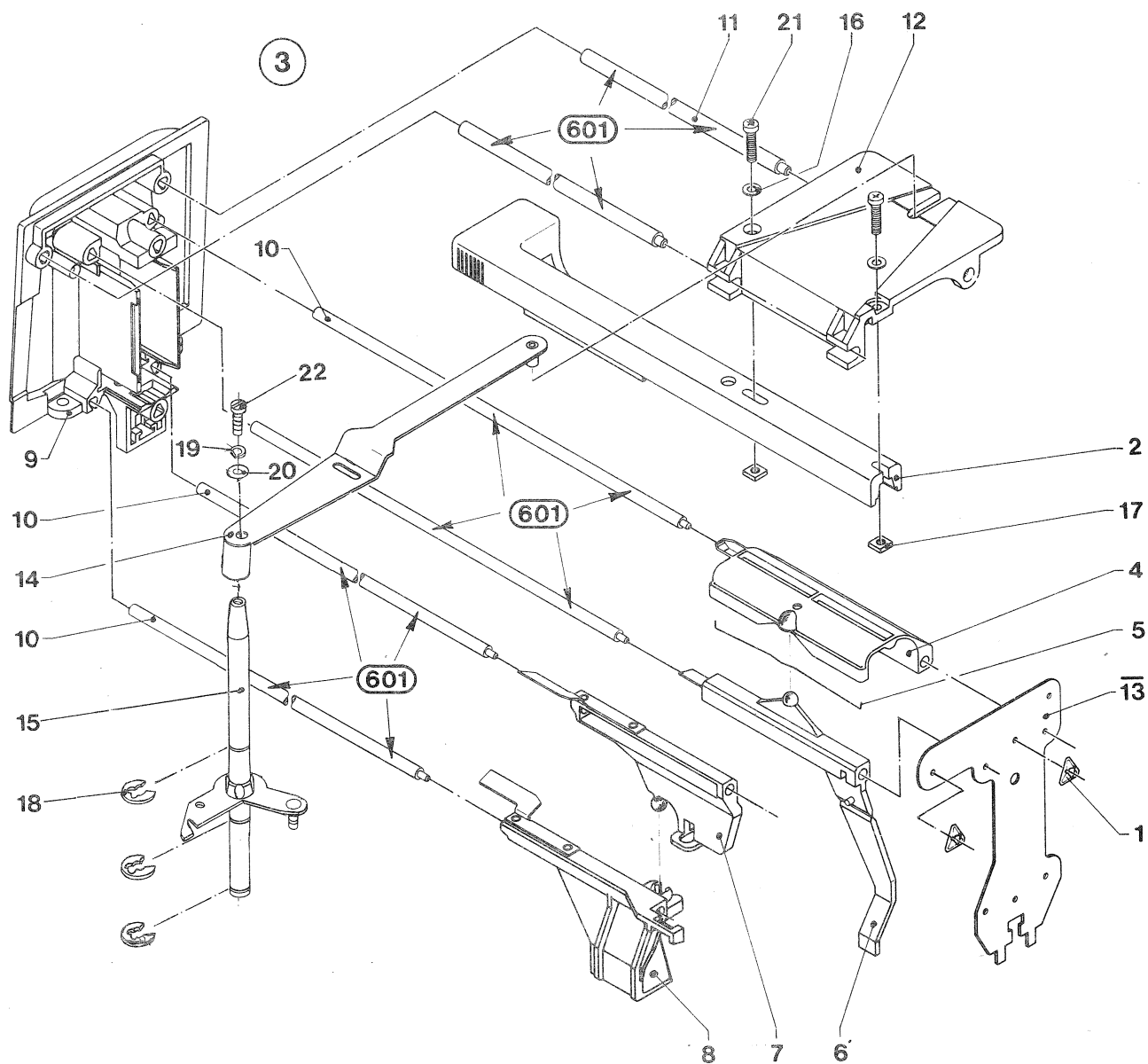
PRADOVIT C/CA
B 5.2
Diawechselung

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH
TECHNISCHER SERVICE
Dokumentation und Info



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
21	706-449.167-000	1	Scheibe	015-121.084-132
22	707-955.163-000	2	Schraube	AM 3x12 DIN 7985





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-018.050-025	2	Seeger-Ring Seeger ring	rondelle Seeger anillo Seeger	
2	031-049.001-034	1	Mitnehmer fork	ergot entraineur arrastrador	
3	031-049.022-000	1	Diawechslerung slide changing device	changement de diapositive cambio de diapositiva	G 5.3,6.2
4	031-049.061-000	1	Schieber slider	coulisseau corredera	
5	031-049.061-007	1	Feder spring	ressort muelle	
6	031-049.062-000	1	Schieber slider	coulisseau corredera	
7	031-049.063-000	1	Schieber slider	coulisseau corredera	
8	031-049.064-000	1	Schieber slider	coulisseau corredera	
9	031-049.065-009	1	Portal gate	portique portal	
10	031-049.065-010	4	Achse axis	axe eje	
11	031-049.065-011	2	Achse axis	axe eje	
12	031-049.065-018	1	Führung guide	guidage guía	
13	031-049.065-019	1	Distanzplatte spacer plate	plaque d'entretoise placa distanciadora	
14	031-049.325-000	1	Hebel lever	levier palanca	
15	031-049.326-000	1	Achse axis	axe eje	
16	702-131.163-000	2	Scheibe	3,2 DIN 433	
17	702-752.163-000	2	Mutter	M 3 DIN 562	
18	704-788.000-000	3	Sichg.Scheibe	6 DIN 6799	
19	704-913.000-000	1	Federring	4 DIN 7980	
20	705-448.220-000	1	Scheibe	015-121.047-085	

28.02.1984

PRADOVIT C/CA

B 5.3

Diawechselung

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH

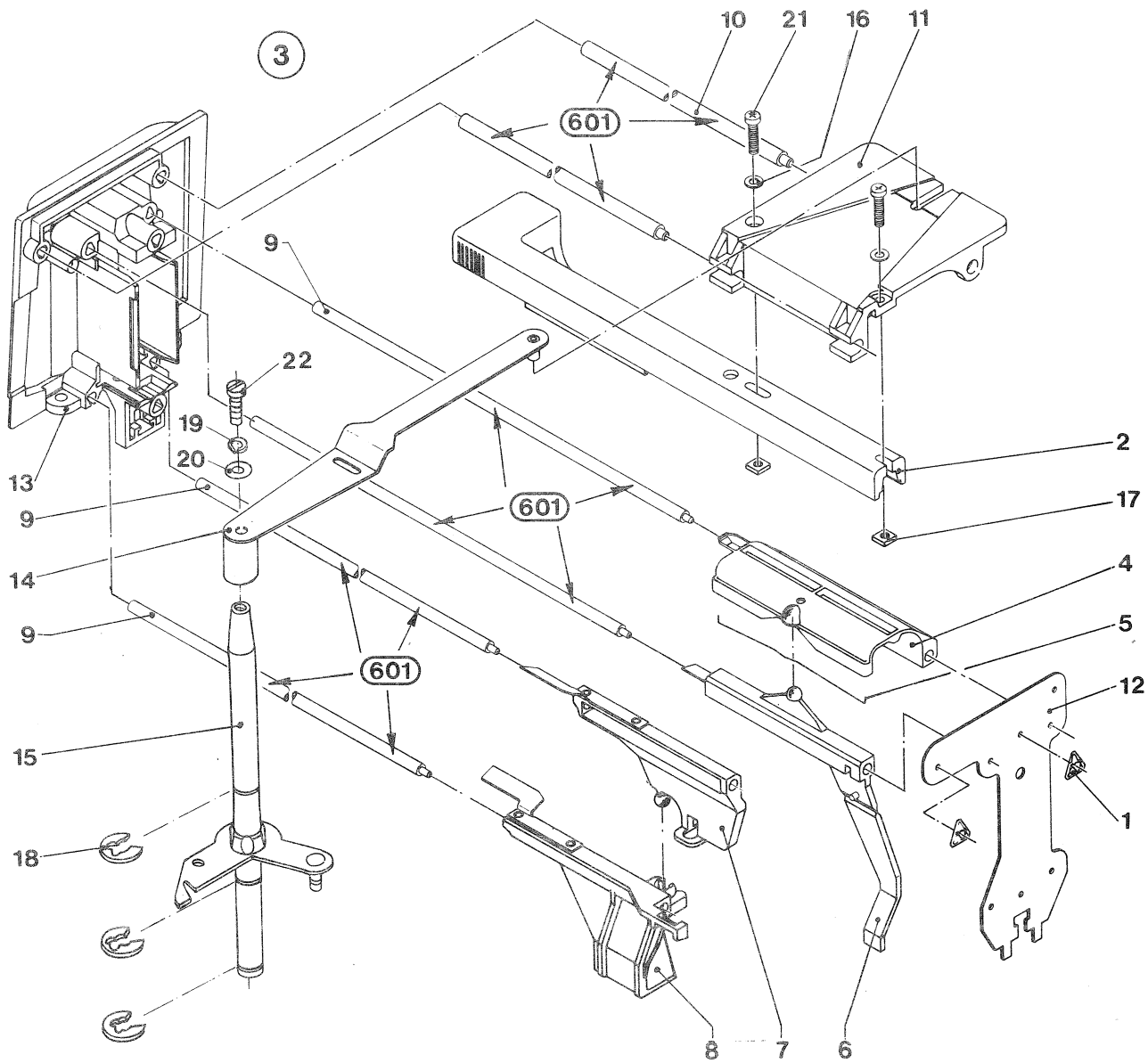
TECHNISCHER SERVICE

Dokumentation und Info



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
21	707-955.163-000	2	Schraube	AM 3x12 DIN 7985
22	707-962.163-000	1	Schraube	M 4x16 DIN 7985

28.02.1984





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-018.050-025	2	Seeger-Ring Seeger ring	rondelle Seeger anillo Seeger	
2	031-049.001-034	1	Mitnehmer fork	ergot entraineur arrastrador	f Pradovit A
	031-049.009-034	1	Mitnehmer		
3	031-049.022-000	1	Diawechslerung slide changing device	changement de diapositive cambio de diapositiva	G 5.4,6.2
4	031-049.061-000	1	Schieber slider	coulisseau corredera	
5	031-049.061-007	1	Feder spring	ressort muelle	
6	031-049.062-000	1	Schieber slider	coulisseau corredera	
7	031-049.063-000	1	Schieber slider	coulisseau corredera	
8	031-049.064-000	1	Schieber slider	coulisseau corredera	
9	031-049.065-010	4	Achse axis	axe eje	
10	031-049.065-011	2	Achse axis	axe eje	
11	031-049.065-018	1	Führung guide	guidage guía	
12	031-049.065-019	1	Distanzplatte spacer plate	plaque d'entretoise placa distanciadora	
13	031-049.191-009	1	Portal gate	portique portal	
14	031-049.325-000	1	Hebel lever	levier palanca	
15	031-049.327-000	1	Achse axis	axe eje	
16	702-131.163-000	2	Scheibe	3,2 DIN 433	
17	702-752.163-000	2	Mutter	M 3 DIN 562	
18	704-788.000-000	3	Sichg.Scheibe	6 DIN 6799	
19	704-913.000-000	1	Federring	4 DIN 7980	

28.02.1984

PRADOVIT C/CA

B5.4

Diawechselung

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH

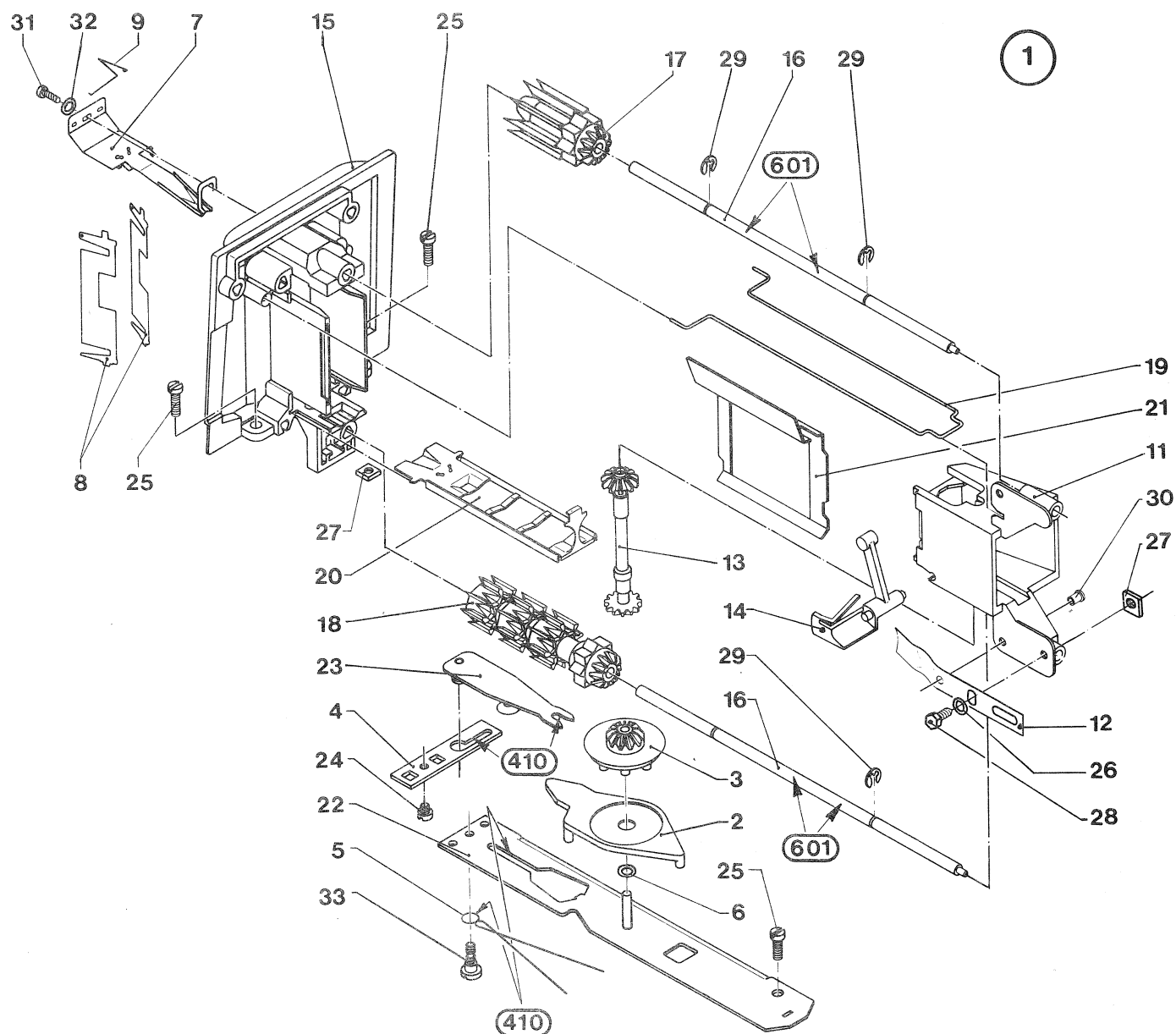
TECHNISCHER SERVICE

Dokumentation und Info



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
20	705-703.220-000	1	Scheibe	015-121.047-265
21	707-955.163-000	2	Schraube	AM 3x12 DIN 7985
22	707-962.163-000	1	Schraube	M 4x16 DIN 7985

28.02.1984



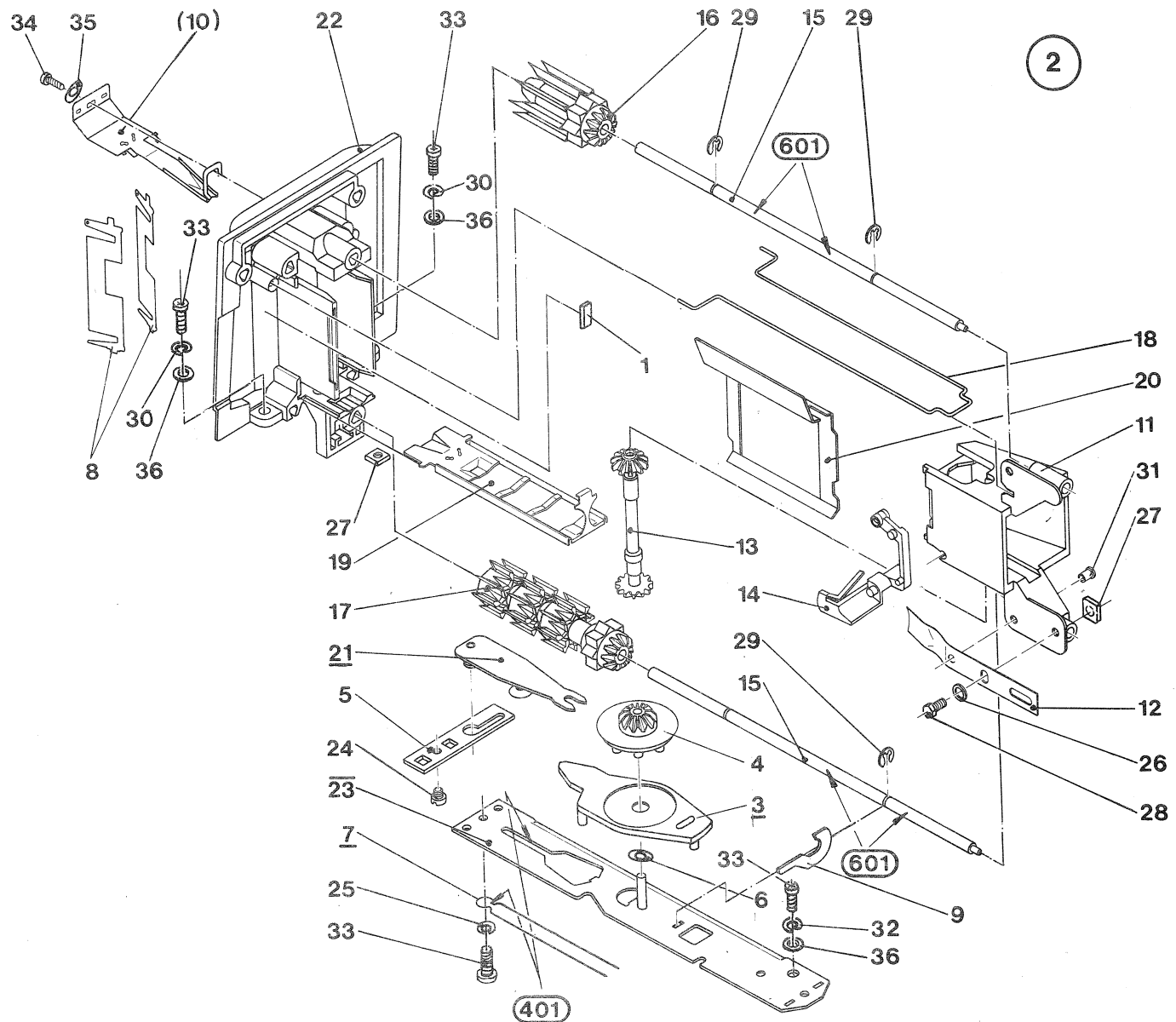


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.022-000	1	Diawechselung slide changing device	changement de diapositive cambio de diapositiva	G 5.1,6.1
2	031-049.022-009	1	Führung guide	guidage gufa	
3	031-049.022-010	1	Schaltnocken trip cam	came de contact leva de interruptor	
4	031-049.022-011	1	Leiste ledge	litageau varilla	
5	031-049.022-012	1	Feder spring	ressort muelle	
6	031-049.022-013	1	Scheibe washer	rondelle arandela	
7	031-049.022-014	1	Feder spring	ressort muelle	
8	031-049.022-016	2	Führungsblech guide sheet	tole de guidage chapa de conducción	
9	031-049.022-017	1	Feder spring	ressort muelle	
10*	031-049.022-025	1	Scheibe washer	rondelle arandela	w
11	031-049.060-005	1	Diaanschlag slide stop	butée de diapositive tope para diapositiva	
12	031-049.060-006	1	Rastfeder arresting spring	ressort d'arret muelle de retención	
13	031-049.060-007	1	Achse axis	axe eje	
14	031-049.060-008	1	Tasthebel key lever	levier de palpae palpanca palpadora	
15	031-049.065-009	1	Portal gate	portique portal	
16	031-049.065-012	2	Achse axis	axe eje	
17	031-049.065-013	1	Walze roller	tambour rodillo	
18	031-049.065-014	1	Walze roller	tambour rodillo	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	031-049.065-016	1	Feder spring	ressort muelle
20	031-049.065-017	1	Gleitplatte sliding plate	plaque coulissante placa deslizante
21	031-049.065-020	1	Blende baffle	diaphragme opaque diafragma opaco
22	031-049.066-000	1	Platine plate	platine platina
23	031-049.067-000	1	Schalthebel switch lever	levier d'interrupteur palanca interruptora
24	700-699.163-000	1	Schraube	M 3x3 DIN 84
25	700-717.163-000	3	Schraube	M 3x8 DIN 84
26	702-131.163-000	1	Scheibe	3,2 DIN 433
27	702-752.163-000	2	Mutter	M 3 DIN 562
28	704-179.163-000	1	Schraube	M 3x4 DIN 933
29	704-784.000-000	3	Sichg.Scheibe	3,2 DIN 6799
30	705-472.163-000	1	Niet	3x0,3x3 DIN 7340
31	708-241.220-000	1	Schraube	B 2,2x6,5 DIN 7981
32	708-362.220-000	1	Scheibe	2,7 DIN 433
33	709-393.163-000	1	Schraube	3x1,6x6 DIN 923



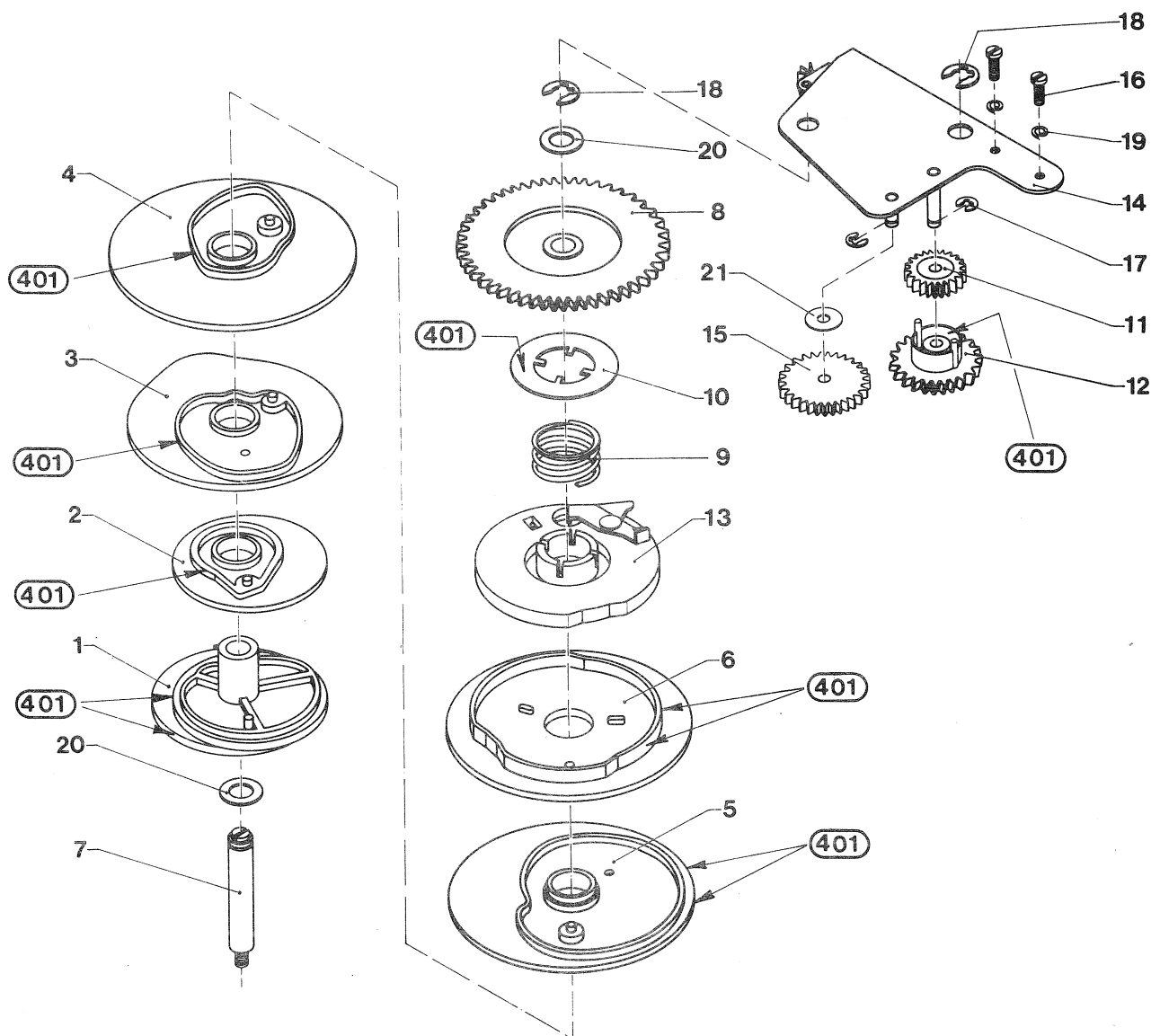


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-048.032-024	1	Anschlag stop	arret tope	
2	031-049.022-000	1	Diawechselung slide changing device	changement de diapositive cambio de diapositiva	G 5.1,6.2
3	031-049.022-009	1	Führung guide	guidage guía	
4	031-049.022-010	1	Schaltnocken trip cam	came de contact leva de interruptor	
5	031-049.022-011	1	Leiste ledge	litageau varilla	
6	031-049.022-013	1	Scheibe washer	rondelle arandela	
7	031-049.022-015	1	Feder spring	ressort muelle	
8	031-049.022-016	2	Führungsblech guide sheet	tole de guidage chapa de conducción	
9	031-049.022-024	1	Stütze support	support soporte	
10	031-049.023-000	1	Feder spring	ressort muelle	G
11	031-049.060-005	1	Diaanschlag slide stop	butée de diapositive tope para diapositiva	
12	031-049.060-006	1	Rastfeder arresting spring	ressort d'arret muelle de retención	
13	031-049.060-007	1	Achse axis	axe eje	
14	031-049.060-008	1	Tasthebel key lever	levier de palpation palpanca palpadora	
15	031-049.065-012	2	Achse axis	axe eje	
16	031-049.065-013	1	Walze roller	tambour rodillo	
17	031-049.065-014	1	Walze roller	tambour rodillo	
18	031-049.065-016	1	Feder spring	ressort muelle	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	031-049.065-017	1	Gleitplatte sliding plate	plaque coulissante placa deslizante
20	031-049.065-020	1	Blende baffle	diaphragme opaque diafragma opaco
21	031-049.067-000	1	Schalthebel switch lever	levier d'interrupteur palanca interruptora
22	031-049.191-009	1	Portal gate	portique portal
23	031-049.366-000	1	Platine plate	platine platina
24	700-699.163-000	1	Schraube	M 3x3 DIN 84
25	703-801.163-000	1	Scheibe	3,2 DIN 125
26	702-131.163-000	1	Scheibe	3,2 DIN 433
27	702-752.163-000	2	Mutter	M 3 DIN 562
28	704-179.163-000	1	Schraube	M 3x4 DIN 933
29	704-784.000-000	3	Sichg.Scheibe	3,2 DIN 6799
30	704-910.000-000	3	Federring	3 DIN 7980
31	705-472.163-000	1	Niet	A 3x0,3x3 DIN 7340
32	706-121.163-000	1	Scheibe	015-121.038-425
33	707-953.163-000	6	Schraube	M 3x8 DIN 7985
34	708-241.220-000	1	Schraube	B 2,2x6,5 DIN 7981
35	708-362.220-000	1	Scheibe	2,7 DIN 433
36	709-544.163-000	2	Scheibe	015-121.038-355





Nr.	Bestell-Nr.	PG	Stück	Benennung		Bemerkung
1	031-049.021-013		1	Kurvenscheibe cam	disque à came leva de disco	
2	031-049.021-014		1	Kurvenscheibe cam	disque à came leva de disco	
3	031-049.021-015		1	Kurvenscheibe cam	disque à came leva de disco	
4	031-049.021-016		1	Kurvenscheibe cam	disque à came leva de disco	
5	031-049.021-017		1	Kurvenscheibe cam	disque à came leva de disco	
6	031-049.021-018		1	Kurvenscheibe 6 cam	disque à came leva de disco	
7	031-049.021-020		1	Achse axis	axe eje	
8	031-049.021-023		1	Zahnrad gear	roue dentée rueda dentada	
9	031-049.021-024		1	Feder spring	ressort muelle	
10	031-049.021-025		1	Scheibe washer	rondelle arandela	
11	031-049.021-034		1	Nockenrad dog gear	roue à came engranaje de leva	
12	031-049.021-035		1	Zahnrad gear	roue dentée rueda dentada	
13	031-049.045-000		1	Kupplung coupling	bague de liaison embrague	
14	031-049.047-000		1	Platine plate	platine platina	G 11,12,15,17,21
15	031-058.001-044		1	Zahnrad gear	roue dentée rueda dentada	
16	700-717.163-000		2	Schraube	M 3x8 DIN 84	
17	704-784.000-000		2	Sichg.Scheibe	3,2 DIN 6799	
18	704-788.000-000		2	Sichg.Scheibe	6 DIN 6799	

28.02.1984

PRADOVIT C/CA

B 7.1

Kurvenscheibe

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH

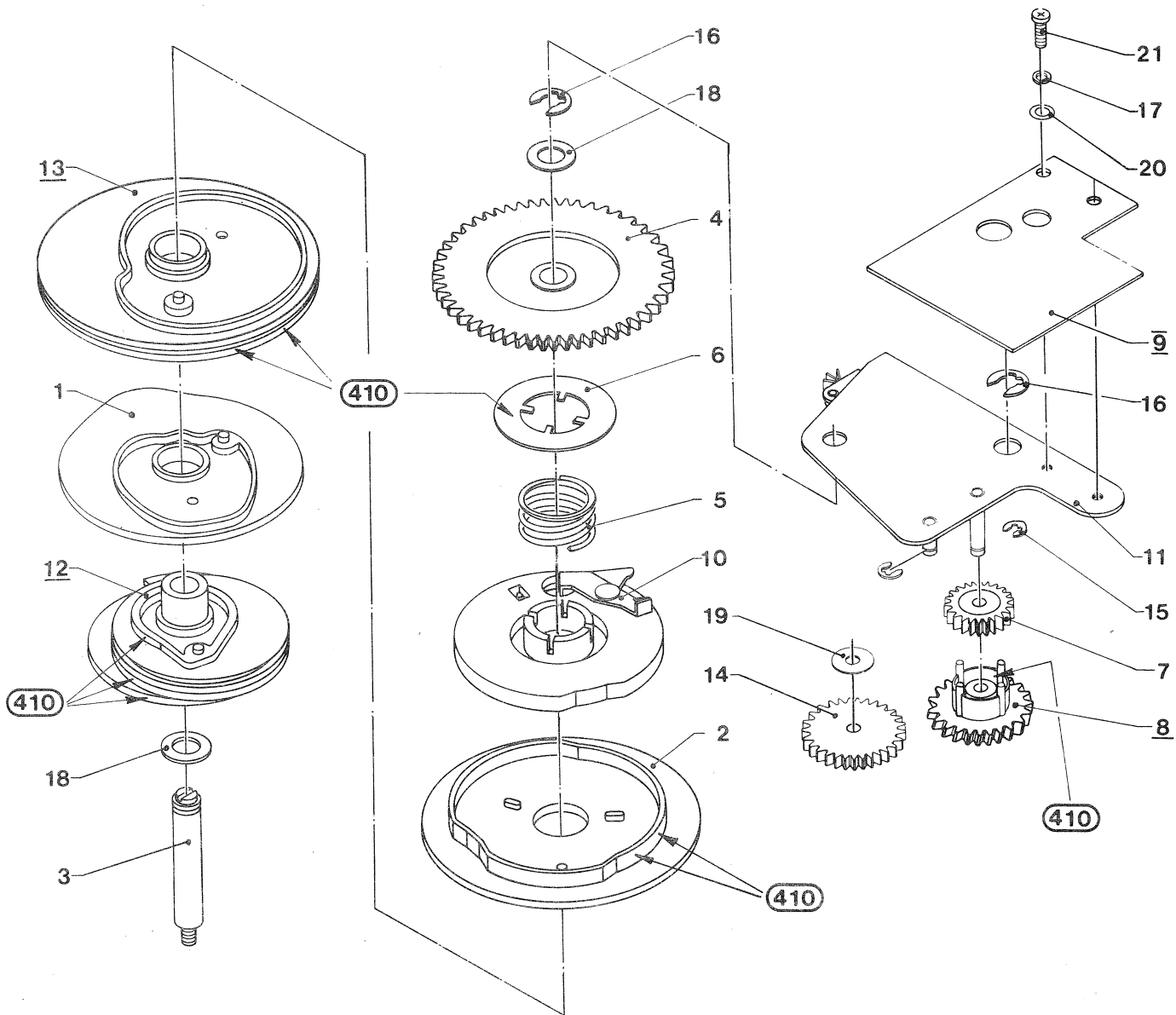
TECHNISCHER SERVICE

Dokumentation und Info



Nr.	Bestell-Nr.	PG	Stück	Benennung	Bemerkung
19	704-910.000-000		2	Federring	3 DIN 7980
20	706-232.163-000		2	Scheibe	015-121.083-132
21	706-367.163-000		1	Scheibe	015-121.043-292

28.02.1984





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.021-015	1	Kurvenscheibe cam	disque à came leva de disco	
2	031-049.021-018	1	Kurvenscheibe 6 cam	disque à came leva de disco	
3	031-049.021-020	1	Achse axis	axe eje	
4	031-049.021-023	1	Zahnrad gear	roue dentée rueda dentada	
5	031-049.021-024	1	Feder spring	ressort muelle	
6	031-049.021-025	1	Scheibe washer	rondelle arandela	
7	031-049.021-034	1	Nockenrad dog gear	roue à came engranaje de leva	
8	031-049.021-035	1	Zahnrad gear	roue dentée rueda dentada	
9	031-049.021-036	1	Platte plate	plaque placa	
10	031-049.045-000	1	Kupplung coupling	bague de liaison embrague	
11	031-049.047-000	1	Platine plate	platine platina	G 7,8,14,15
12	031-049.048-000	1	Kurvenscheibe cam	disque à came leva de disco	
13	031-049.049-000	1	Kurvenscheibe cam	disque à came leva de disco	
14	031-058.001-044	1	Zahnrad gear	roue dentée rueda dentada	
15	704-784.000-000	2	Sichg.Scheibe	3,2 DIN 6799	
16	704-788.000-000	2	Sichg.Scheibe	6 DIN 6799	
17	704-910.000-000	1	Federring	3 DIN 7980	
18	706-232.163-000	2	Scheibe	015-121.083-132	

28.02.1984

PRADOVIT C/CA

B 7.2

Kurvenscheibe

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH

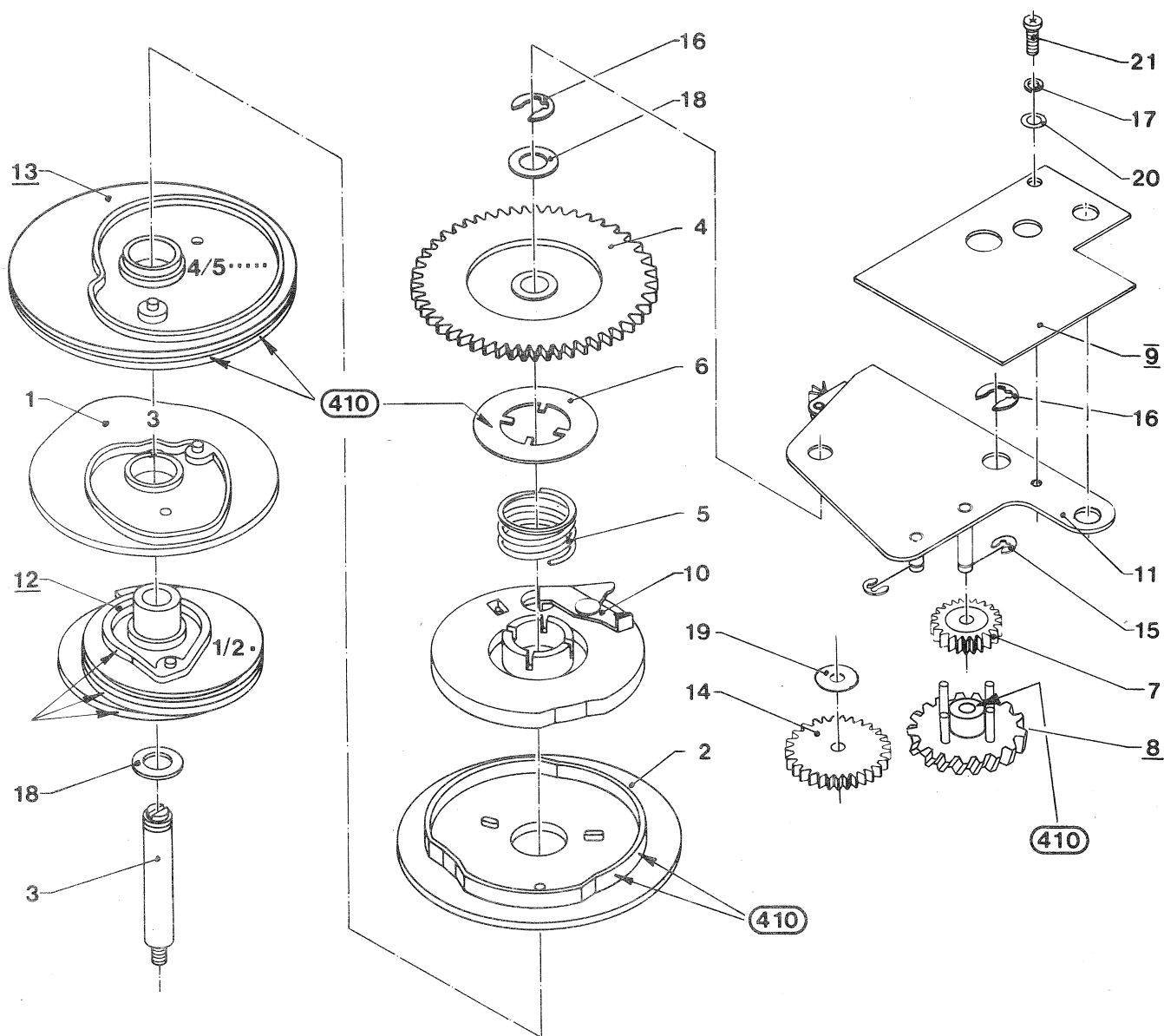
TECHNISCHER SERVICE

Dokumentation und Info



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	706-367.163-000	1	Scheibe	015-121.043-292
20	706-831.163-000	1	Scheibe	015-121.036-422
21	707-954.163-000	1	Schraube	M 3x10 DIN 7985

28.02.1984





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.021-015	1	Kurvenscheibe cam	disque à came leva de disco	
2	031-049.021-018	1	Kurvenscheibe 6 cam	disque à came leva de disco	
3	031-049.021-020	1	Achse axis	axe eje	
4	031-049.021-023	1	Zahnrad gear	roue dentée rueda dentada	
5	031-049.021-024	1	Feder spring	ressort muelle	
6	031-049.021-025	1	Scheibe washer	rondelle arandela	
7	031-049.021-034	1	Nockenrad dog gear	roue à came engranaje de leva	
8	031-049.021-035	1	Zahnrad gear	roue dentée rueda dentada	
9	031-049.021-036	1	Platte plate	plaque placa	
10	031-049.045-000	1	Kupplung coupling	bague de liaison embrague	
11	031-049.047-000	1	Platine plate	platine platina	G 7,8,15,16,20
	031-049.346-000	1	Platine		f Pradovit A
12	031-049.048-000	1	Kurvenscheibe cam	disque de came leva de disco	
	031-049.348-000	1	Kurvenscheibe		f Pradovit A
13	031-049.049-000	1	Kurvenscheibe cam	disque à came leva de disco	
14	031-058.001-044	1	Zahnrad gear	roue dentée rueda dentada	
	031-058.001-027	1	Zahnrad		f Pradovit A
15	704-784.000-000	2	Sichg.Scheibe	3,2 DIN 6799	
16	704-788.000-000	2	Sichg.Scheibe	6 DIN 6799	
17	704-910.000-000	1	Federring	3 DIN 7980	
18	706-232.163-000	2	Scheibe	015-121.083-132	

28.02.1984

PRADOVIT C/CA

B 7.3

Kurvenscheibe

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH

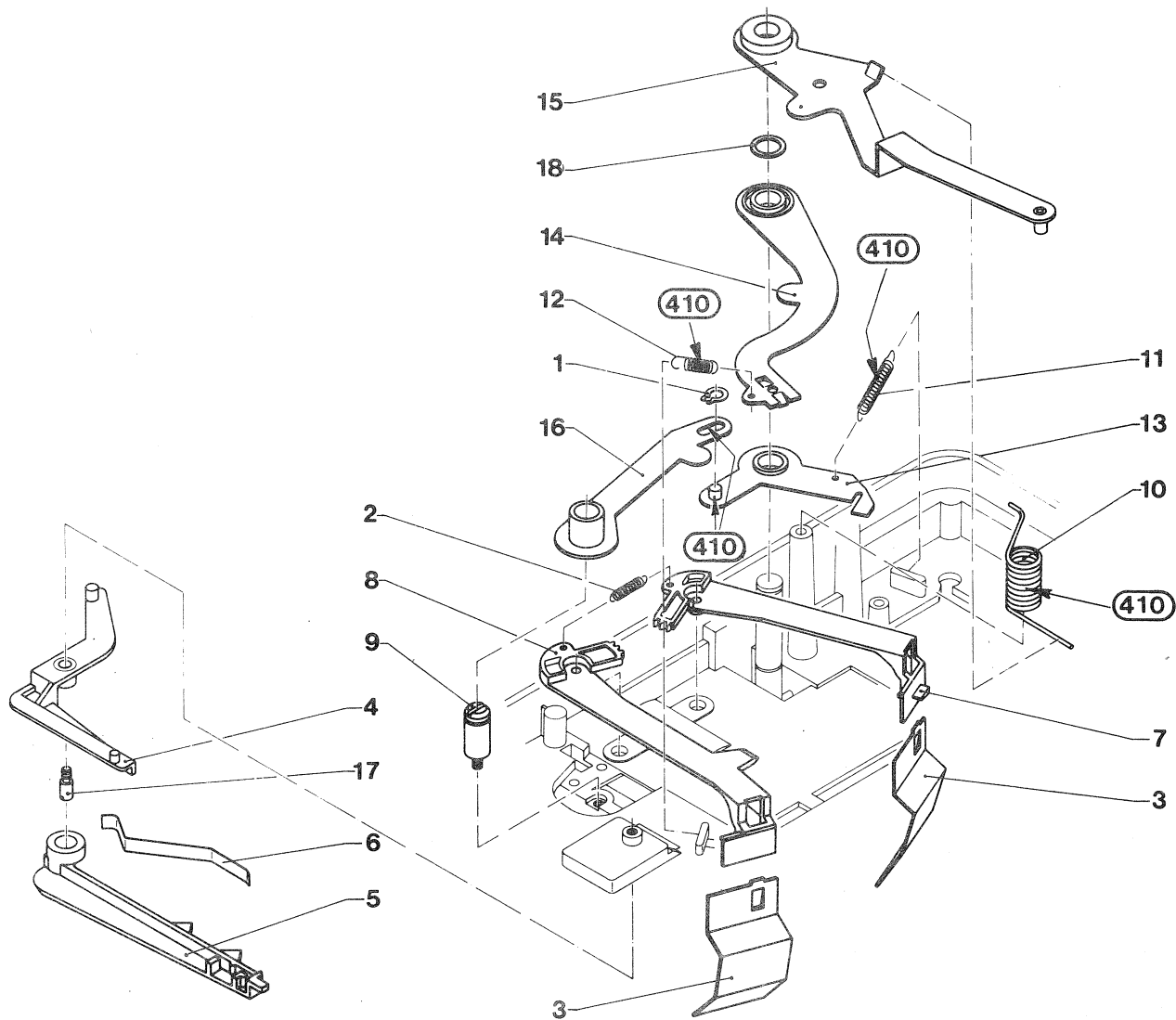
TECHNISCHER SERVICE

Dokumentation und Info



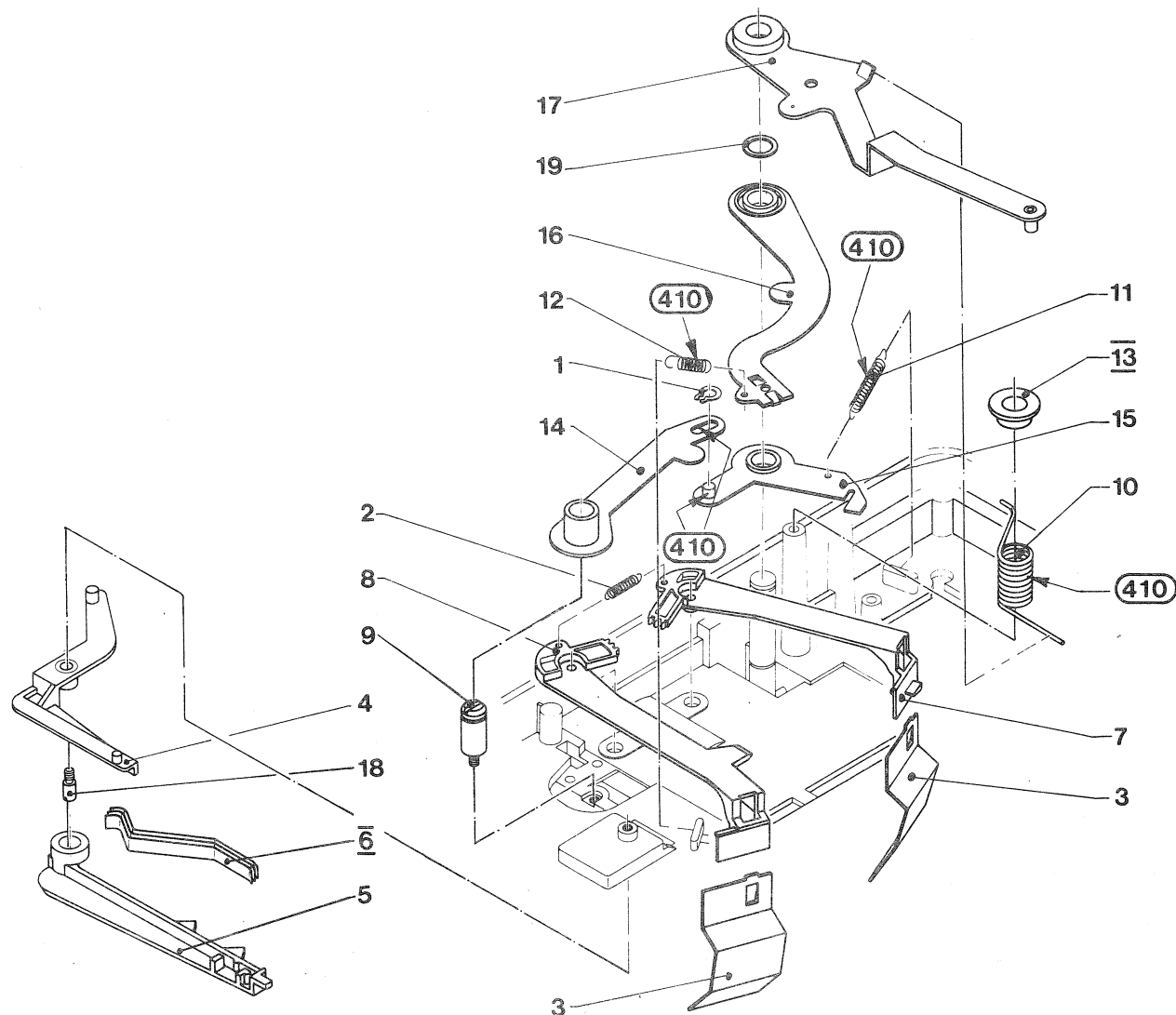
Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	706-367.163-000	1	Scheibe	015-121.043-292
20	706-831.163-000	1	Scheibe	015-121.036-422
21	707-954.163-000	1	Schraube	M 3x10 DIN 7985

28.02.1984





Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
1	016-018.033-040	1	Ring ring	rondelle anillo
2	031-048.009-029	1	Feder spring	ressort muelle
3	031-049.001-052	2	Blende baffle	diaphragme opaque diafragma opaco
4	031-049.015-016	1	Spannhebel tension lever	levier de serrage palanca tensora
5	031-049.015-021	1	Rasthebel stop lever	levier d'arret palanca-tope
6	031-049.015-022	3	Feder spring	ressort muelle
7	031-049.021-026	1	Blendenhebel 1 diaphragm lever	levier de diaphragme palanca de diafragma
8	031-049.021-027	1	Blendenhebel 2 diaphragm lever	levier de diaphragme palanca de diafragma
9	031-049.021-030	1	Gewindebolzen threaded bolt	broche filetée perno c. rosca
10	031-049.021-031	1	Feder spring	ressort muelle
11	031-049.021-045	1	Feder spring	ressort muelle
12	031-049.021-046	1	Feder spring	ressort muelle
13	031-049.041-000	1	Hebel lever	levier palanca
14	031-049.042-000	1	Hebel lever	levier palanca
15	031-049.043-000	1	Hebel lever	levier palanca
16	031-049.044-000	1	Hebel lever	levier palanca
17	704-058.163-000	1	Schraube	M 3x6 DIN 927
18	705-560.163-000	2	Scheibe	015-121.083-212





Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
1	016-018.033-040	1	Ring ring	rondelle anillo
2	031-048.009-029	1	Feder spring	ressort muelle
3	031-049.001-052	2	Blende baffle	diaphragme opaque diafragma opaco
4	031-049.015-016	1	Spannhebel tension lever	levier de serrage palanca tensora
5	031-049.015-021	1	Rasthebel stop lever	levier d'arret palanca-tope
6	031-049.015-022	3	Feder spring	ressort muelle
7	031-049.021-026	1	Blendenhebel 1 diaphragm lever	levier de diaphragme palanca de diafragma
8	031-049.021-027	1	Blendenhebel 2 diaphragm lever	levier de diaphragme palanca de diafragma
9	031-049.021-030	1	Gewindebolzen threaded bolt	broche filetée perno c. rosca
10	031-049.021-031	1	Feder spring	ressort muelle
11	031-049.021-045	1	Feder spring	ressort muelle
12	031-049.021-046	1	Feder spring	ressort muelle
13	031-049.021-049	1	Buchse bushing	douille casquillo
14	031-049.044-000	1	Hebel lever	levier palanca
15	031-049.341-000	1	Hebel lever	levier palanca
16	031-049.342-000	1	Hebel lever	levier palanca

28.02.1984

PRADOVIT C/CA

B8.2

Hebel

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH

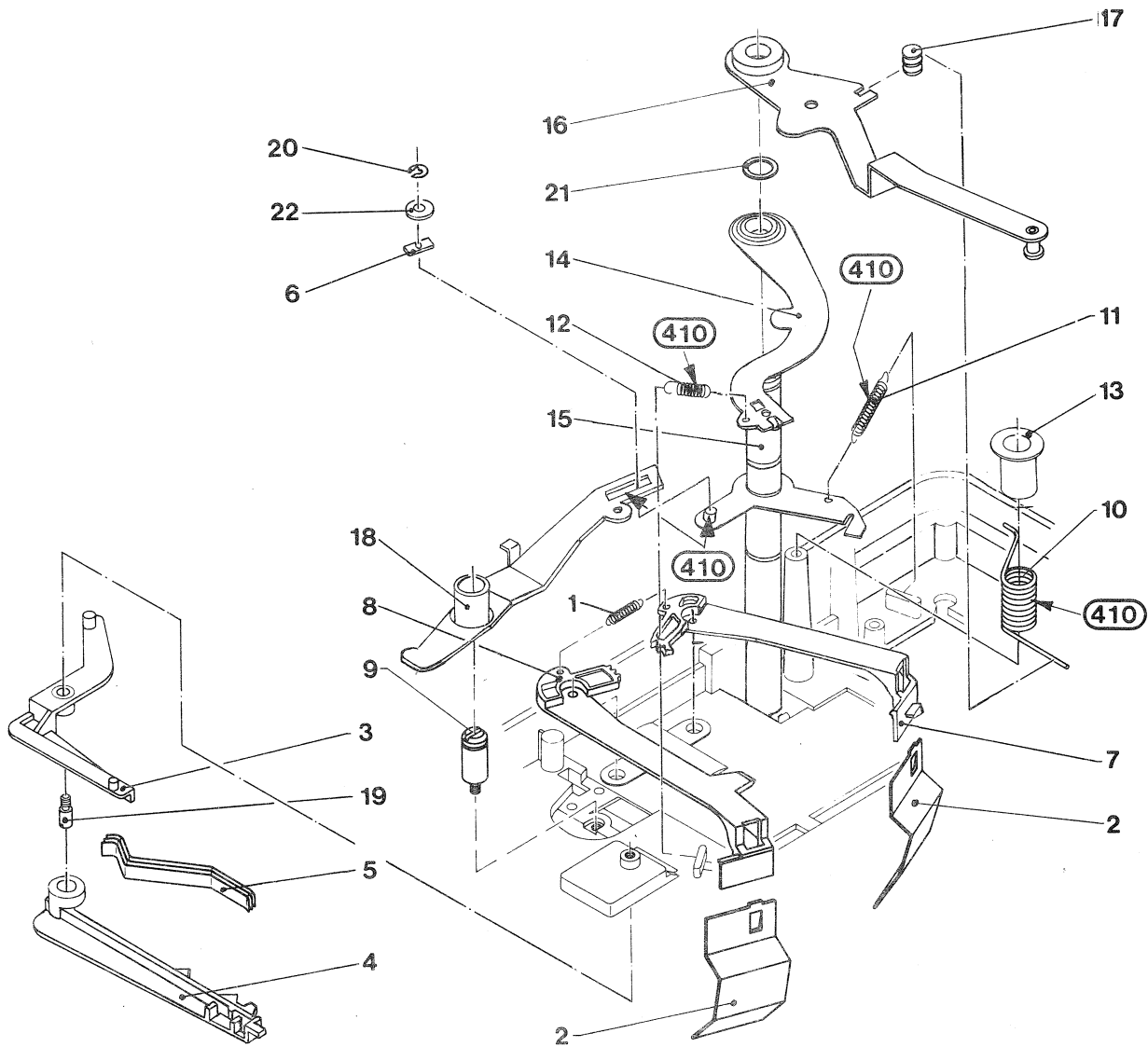
TECHNISCHER SERVICE

Dokumentation und Info



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
17	031-049.343-000	1	Hebel lever	levier palanca
18	704-058.163-000	1	Schraube	M 3x6 DIN 927
19	705-560.163-000	1	Scheibe	015-121.083-212

28.02.1984





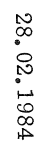
Nr.	Bestell-Nr.	PG	Stück	Benennung	Bemerkung
1	031-048.009-029		1	Feder spring	ressort muelle
2	031-049.001-052		2	Blende baffle	diaphragme opaque diafragma opaco
3	031-049.015-016		1	Spannhebel tension lever	levier de serrage palanca tensora
4	031-049.015-021		1	Rasthebel stop lever	levier d'arret palanca-tope
5	031-049.015-022		3	Feder spring	ressort muelle
6	031-049.017-022		1	Gleitstein sliding bar	tete coulissante deslizadera
7	031-049.021-026		1	Blendenhebel 1 diaphragm lever	levier de diaphragme palanca de diafragma
8	031-049.021-027		1	Blendenhebel 2 diaphragm lever	levier de diaphragme palanca de diafragma
9	031-049.021-030		1	Gewindebolzen threaded bolt	broche filetée perno c. rosca
10	031-049.021-031		1	Feder spring	ressort muelle
11	031-049.021-045		1	Feder spring	ressort muelle
12	031-049.021-046		1	Feder spring	ressort muelle
13	031-049.021-049		1	Buchse bushing	douille casquillo
14	031-049.042-000		1	Hebel lever	levier palanca
15	031-049.341-000		1	Hebel lever	levier palanca
16	031-049.343-000		1	Hebel lever	levier palanca
	031-049.347-000		1	Hebel	
17	031-049.343-008		1	Rolle roller	rouleau rodillo
18	031-049.355-000		1	Hebel lever	levier palanca

f Pradovit A

28.02.1984



Nr.	Bestell-Nr.	PG	Stück	Benennung	Bemerkung
19	704-058.163-000		1	Schraube	M 3x6 DIN 927
20	704-782.163-000		1	Sichg.Scheibe	2,3 DIN 6799
21	705-560.163-000		1	Scheibe	015-121.083-212
22	709-716.163-000		1	Scheibe	015-121.036-052





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-018.033-040	1	Ring ring	rondelle anillo	
2	031-049.001-024	1	Schalthebel switch lever	levier d'interrupteur palanca interruptora	
3	031-049.001-037	1	Anschlaghebel stop lever	levier d'arret palanca de tope	
4	031-049.001-999	1	Haltewinkel holding bracket	support en équerre ángulo de sujeción	
5	031-049.015-017	1	Feder spring	ressort muelle	
6	031-049.015-018	1	Rastfeder arresting spring	ressort d'arret muelle de retención	
7	031-049.015-019	2	Halteplatte set plate	plaque de fixation placa-soporte	
8	031-049.021-029	1	Bolzen bolt	boulon perno	
9	031-049.021-032	1	Hebel lever	levier palanca	
10	031-049.021-033	1	Hebel lever	levier palanca	
11	031-049.021-043	1	Feder spring	ressort muelle	
12	031-049.021-044	1	Feder spring	ressort muelle	
13	031-049.021-047	1	Feder spring	ressort muelle	
14	031-049.050-000	1	Transporthebel transport lever	levier de transport palanca transp.	G 18
15	031-049.051-000	1	Führung guide	guidage guía	
16	031-049.051-008	1	Feder spring	ressort muelle	
17	031-049.054-000	1	Achse axis	axe eje	
18	060-645.071-045	1	Feder spring	ressort muelle	

28.02.1984

PRADOVIT C/CA
B 9.1
Hebel

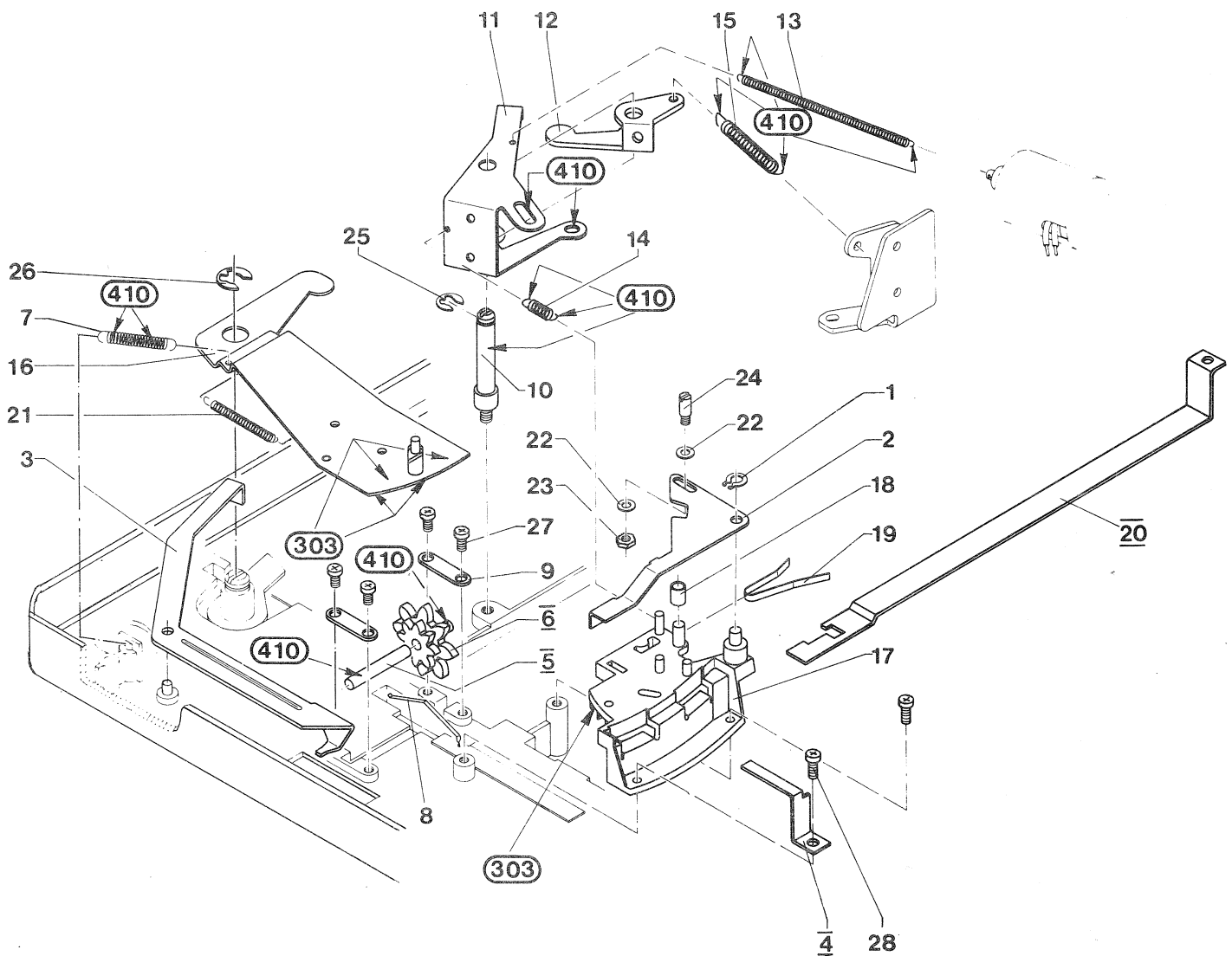
ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH
TECHNISCHER SERVICE
Dokumentation und Info



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
19	700-705.163-000	4	Schraube	M 3x5	DIN 84
20	700-717.163-000	2	Schraube	M 3x8	DIN 84
21	702-131.163-000	2	Scheibe	3,2	DIN 433
22	702-206.163-000	1	Mutter	BM 3	DIN 439
23	703-745.163-000	1	Schraube	M 3x1,6	DIN 923
24	704-054.163-000	1	Schraube	M 3x4	DIN 927
25	704-785.000-000	1	Sichg.Scheibe	4	DIN 6799
26	704-789.000-000	1	Sichg.Scheibe	7	DIN 6799

28.02.1984



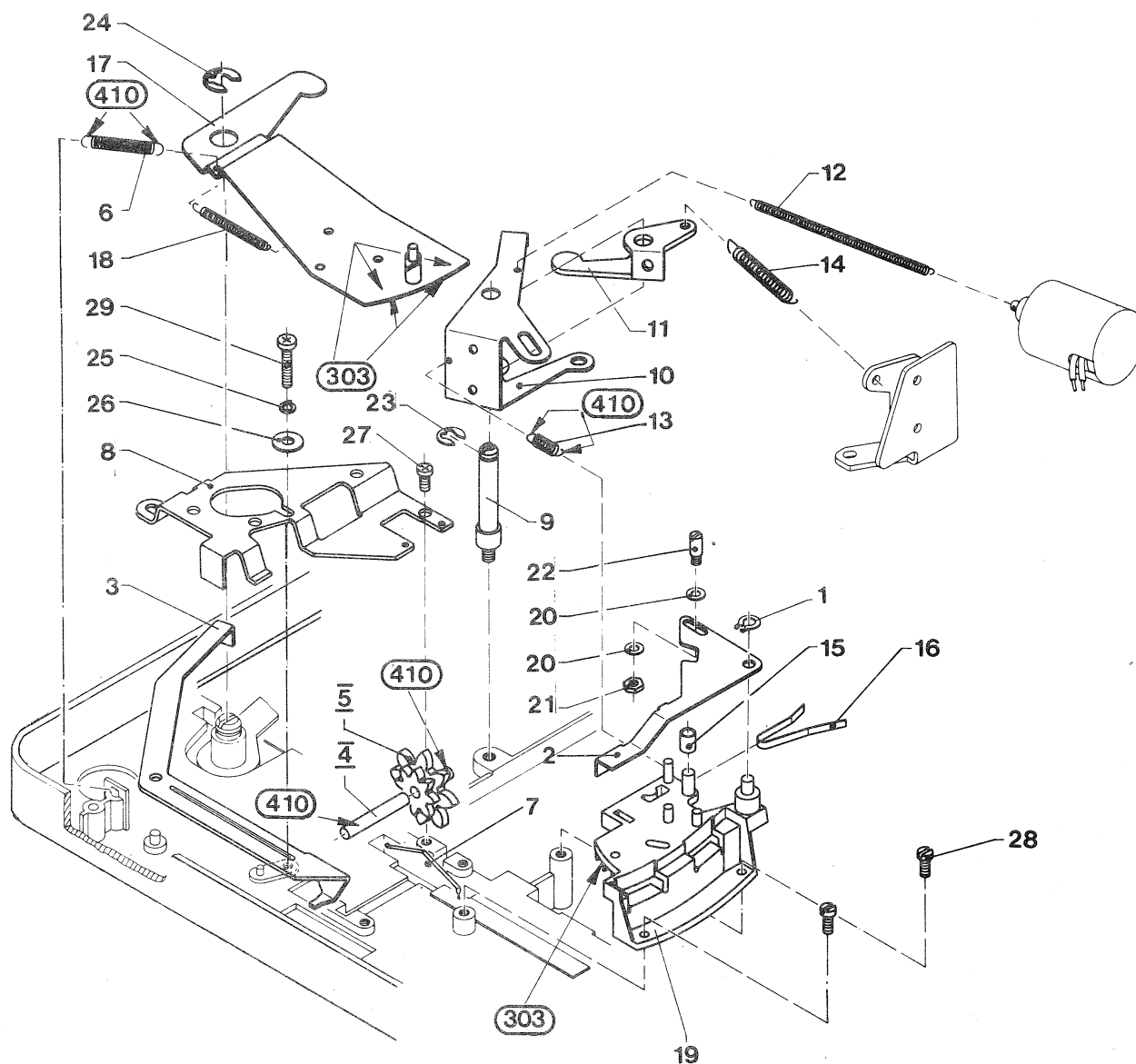


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-018.033-040	1	Ring ring	rondelle anillo	
2	031-049.001-024	1	Schalthebel switch lever	levier d'interrupteur palanca interruptora	
3	031-049.001-037	1	Anschlaghebel stop lever	levier d'arret palanca de tope	
4	031-049.001-999	1	Winkel bracket	équerre ángulo	
5	031-049.015-010	1	Achse axis	axe eje	
6	031-049.015-011	1	Antriebsritzel drive gear	pignon d'entrainement pinón de mando	
7	031-049.015-017	1	Feder spring	ressort muelle	
8	031-049.015-018	1	Rastfeder arresting spring	ressort d'arret muelle de retención	
9	031-049.015-019	2	Halteplatte set plate	plaque de fixation placa-soporte	
10	031-049.021-029	1	Bolzen bolt	boulon perno	
11	031-049.021-032	1	Hebel lever	levier palanca	
12	031-049.021-033	1	Hebel lever	levier palanca	
13	031-049.021-043	1	Feder spring	ressort muelle	
14	031-049.021-044	1	Feder spring	ressort muelle	
15	031-049.021-047	1	Feder spring	ressort muelle	
16	031-049.050-000	1	Transporthebel transport lever	levier de transport palanca transp.	G 21
17	031-049.051-000	1	Führung guide	guidage gufa	
18	031-049.051-006	1	Ring ring	rondelle anillo	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	031-049.051-008	1	Feder spring	ressort muelle
20	031-049.843-005	1	Winkel bracket	équerre ángulo
21	060-645.071-045	1	Feder spring	ressort muelle
22	702-131.163-000	2	Scheibe	3,2 DIN 433
23	702-206.163-000	1	Mutter	BM 3 DIN 439
24	704-054.163-000	1	Schraube	M 3x4 DIN 927
25	704-785.000-000	1	Sichg.Scheibe	4 DIN 6799
26	704-789.000-000	1	Sichg.Scheibe	7 DIN 6799
27	707-951.163-000	4	Schraube	M 3x5 DIN 7985
28	707-953.163-000	2	Schraube	M 3x8 DIN 7985



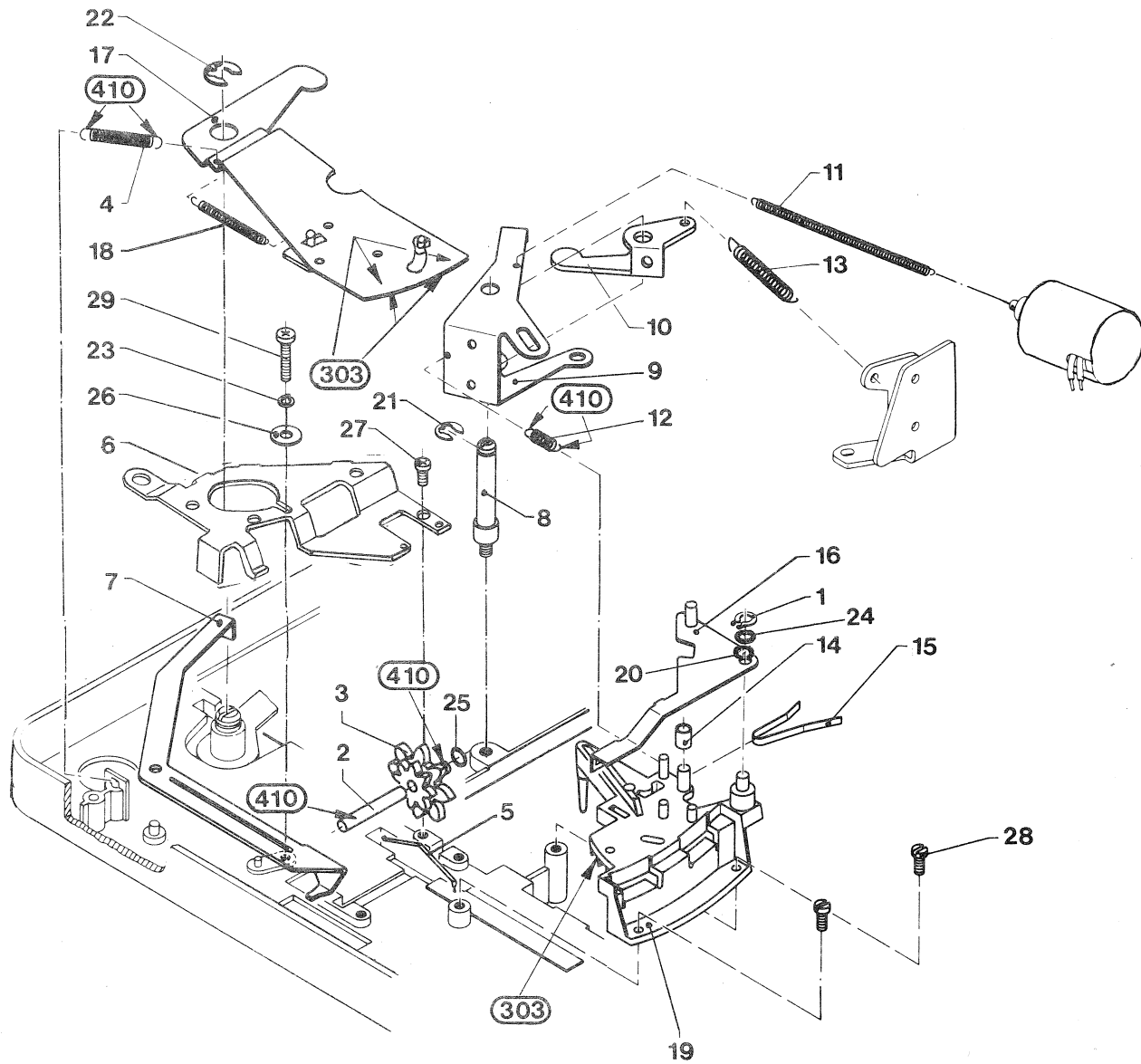


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-018.033-040	1	Ring ring	rondelle anillo	
2	031-049.001-024	1	Schalthebel switch lever	levier d'interrupteur palanca interruptora	
3	031-049.001-037	1	Anschlaghebel stop lever	levier d'arret palanca de tope	
4	031-049.015-010	1	Achse axis	axe eje	
5	031-049.015-011	1	Antriebsritzel drive gear	pignon d'entrainement pinón de mando	
6	031-049.015-017	1	Feder spring	ressort muelle	
7	031-049.015-018	1	Rastfeder arresting spring	ressort d'arret muelle de retención	
8	031-049.015-023	1	Abdeckplatte cover shield	plaque couvercle placa cobertora	
9	031-049.021-029	1	Bolzen bolt	boulon perno	
10	031-049.021-032	1	Hebel lever	levier palanca	
11	031-049.021-033	1	Hebel lever	levier palanca	
12	031-049.021-043	1	Feder spring	ressort muelle	
13	031-049.021-044	1	Feder spring	ressort muelle	
14	031-049.021-047	1	Feder spring	ressort muelle	
15	031-049.051-006	1	Ring ring	rondelle anillo	
16	031-049.051-008	1	Feder spring	ressort muelle	
17	031-049.350-000	1	Transporthebel transport lever	levier de transport palanca transp.	G 18
18	031-049.350-012	1	Feder spring	ressort muelle	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	031-049.351-000	1	Führung guide	guidage gufa
20	702-131.163-000	2	Scheibe	3,2 DIN 433
21	702-206.163-000	1	Mutter	BM 3 DIN 439
22	704-054.163-000	1	Schraube	M 3x4 DIN 927
23	704-785.000-000	1	Sichg.Scheibe	4 DIN 6799
24	704-789.000-000	1	Sichg.Scheibe	7 DIN 6799
25	704-910.220-000	1	Federring	3 DIN 7980
26	706-121.163-000	1	Scheibe	015-121.038-425
27	707-951.163-000	1	Schraube	M 3x5 DIN 7985
28	707-953.163-000	2	Schraube	M 3x8 DIN 7985
29	707-954.163-000	1	Schraube	M 3x10 DIN 7985



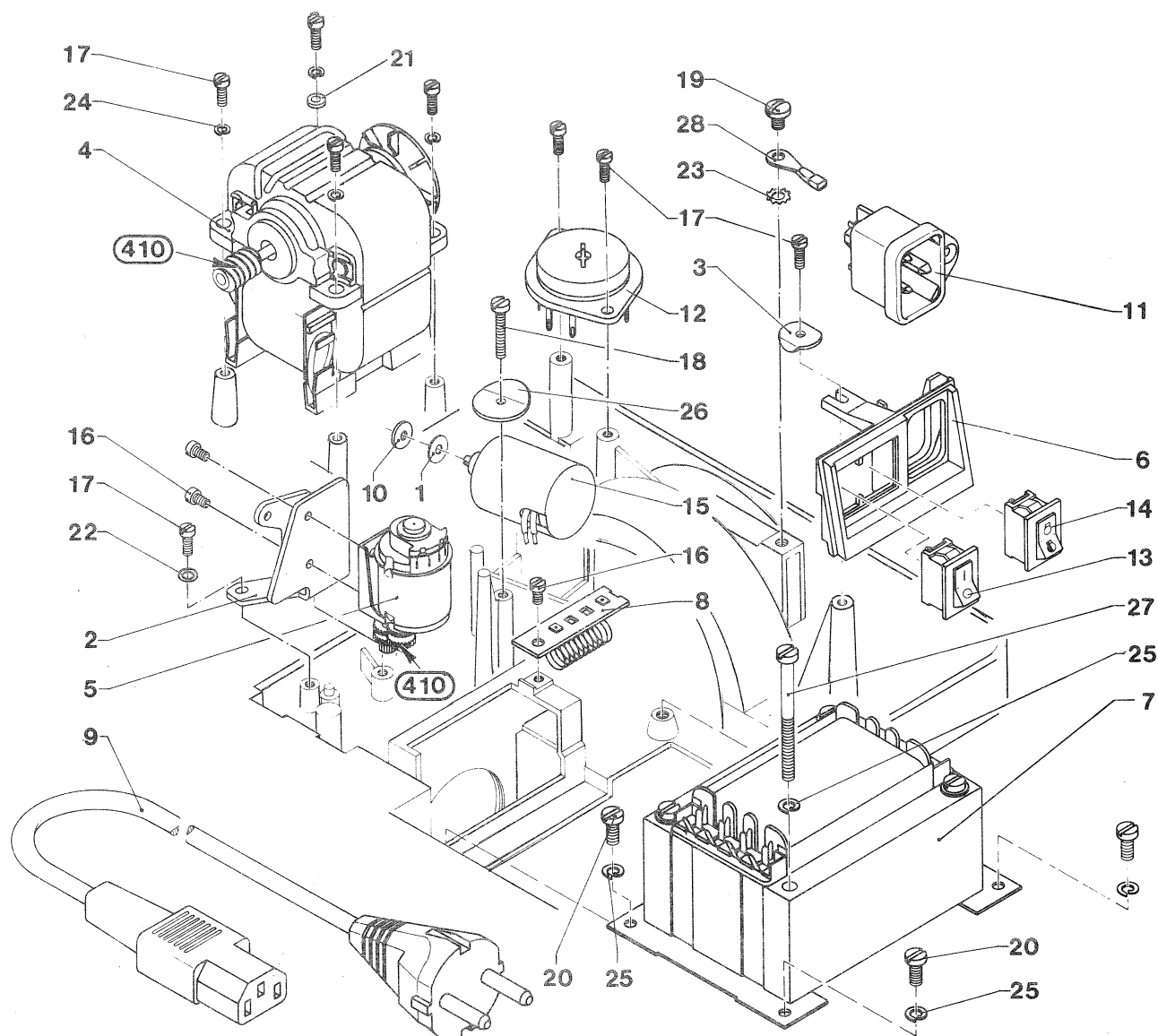


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-018.033-040	1	Ring ring	rondelle anillo	
2	031-049.015-010	1	Achse axis	axe eje	
3	031-049.015-011	1	Antriebsritzel drive gear	pignon d'entrainement pinón de mando	
4	031-049.015-017	1	Feder spring	ressort muelle	
5	031-049.015-018	1	Feder spring	ressort muelle	
6	031-049.016-023	1	Abdeckplatte cover shield	plaque couvercle placa cobertora	
7	031-049.016-024	1	Anschlaghebel stop lever	levier d'arret palanca de tope	
8	031-049.021-029	1	Bolzen bolt	boulon perno	
9	031-049.021-032	1	Hebel lever	levier palanca	
10	031-049.021-033	1	Hebel lever	levier palanca	
11	031-049.021-043	1	Feder spring	ressort muelle	
12	031-049.021-044	1	Feder spring	ressort muelle	
13	031-049.021-047	1	Feder spring	ressort muelle	
14	031-049.051-006	1	Zwischenring spacer	bague intermédiaire anillo intermedio	
15	031-049.051-008	1	Feder spring	ressort muelle	
16	031-049.342-000	1	Schalthebel switch lever	levier d'interrupteur palanca interruptora	
17	031-049.350-000	1	Transporthebel transport lever	levier de transport palanca transp.	G 18
	031-049.349-000	1	Transporthebel		f Pradovit A
18	031-049.350-012	1	Feder spring	ressort muelle	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	031-049.351-000	1	Führung guide	guidage gufa
20	704-785.000-000	1	Sichg.Scheibe	4 DIN 6799
21	704-789.000-000	1	Sichg.Scheibe	7 DIN 6799
22	704-910.220-000	1	Federring	3 DIN 7980
23	705-644.163-000	1	Sattelfeder	015-125.043-222
24	705-840.163-000	1	Scheibe	015-121.043-192
25	706-121.163-000	1	Scheibe	015-121.038-425
26	707-951.163-000	1	Schraube	M 3x5 DIN 7985
27	707-953.163-000	2	Schraube	M 3x8 DIN 7985
28	707-954.163-000	1	Schraube	M 3x10 DIN 7985



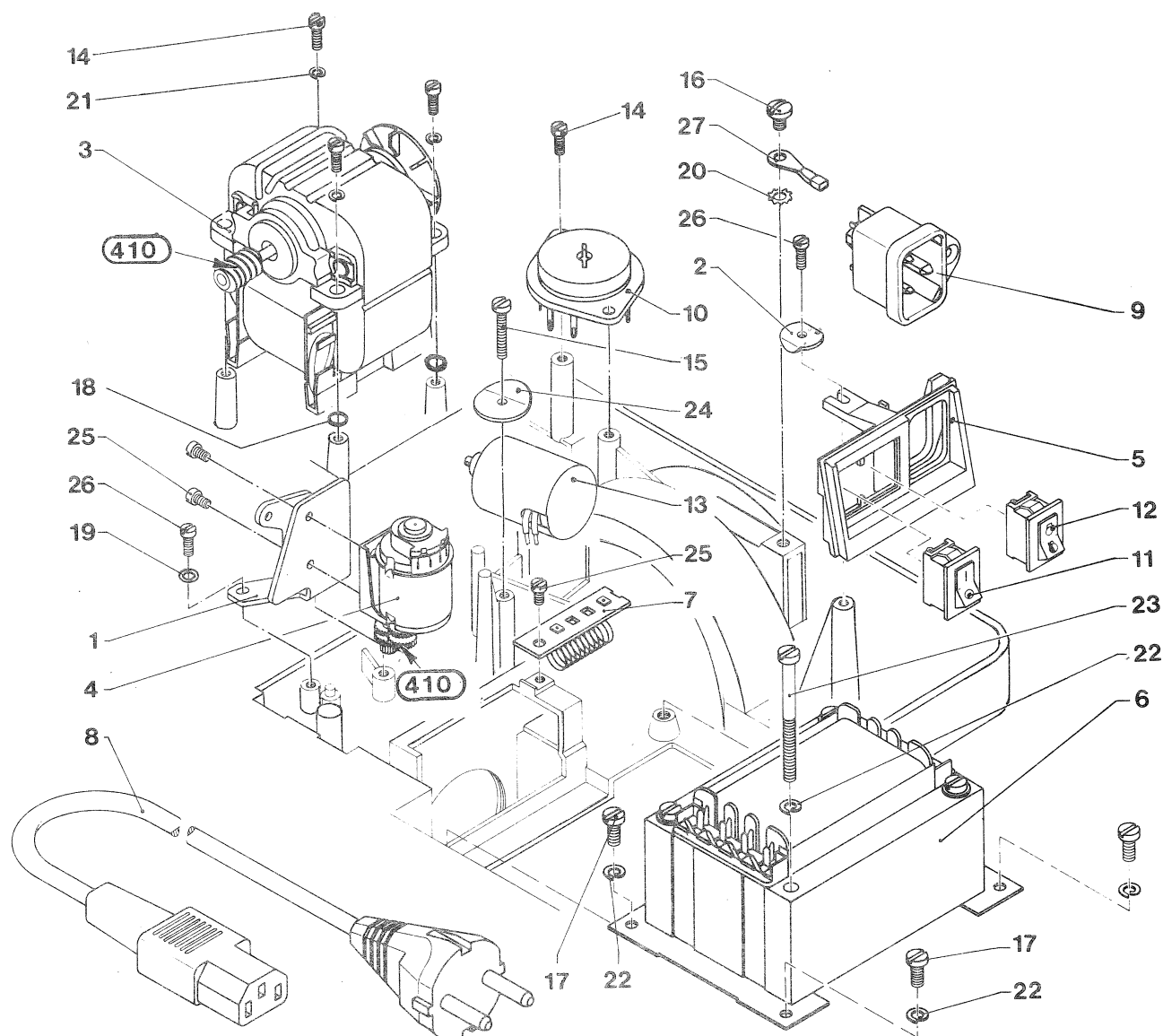


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-048.003-050	1	Scheibe washer	rondelle anillo	
2	031-049.001-023	1	Motorhalter motor holder	support de moteur soporte p. motor	
3	031-049.001-031	1	U-Scheibe U-washer	rondelle à U arandela de U	
4	031-049.025-000	1	Antriebsmotor driving motor	moteur d'entrainement motor de transmision	
5	031-049.026-000	1	FF-Motor motor	moteur motor	
	031-049.027-000	1	AF-Motor		
6	031-049.036-005	1	Träger carrier	support soporte	
7	031-049.090-000	1	Transformator transformer	transformateur transformador	220V/150W
	301-003.308-000	1	Transformator		110-240V/250W
	301-003.309-000	1	Transformator		110-240V/150W
8	031-049.096-000	1	Widerstand resistor	résistance resistencia	250W/0,155E
	031-049.097-000	1	Widerstand		150W
9	031-049.990-000	1	Anschlußleitung power cord	fil de connexion cable de conexión	V 37 644
10	031-058.001-089	1	Scheibe washer	rondelle arandela	
11	302-016.036-005	1	Gerätestecker plug	fiche d'appareil enchufe	
12	302-023.087-003	1	Spannungsschalter voltage selector	sélecteur de tension selector de voltaje	
13	302-023.150-001	1	Schalter switch	interrupteur interruptor	
14	302-023.150-003	1	Umschalter toggle switch	commutateur conmutador	
15	302-056.018-004	1	Magnet magnet	aimant imán	
16	700-705.163-000	3	Schraube	M 3x5 DIN 84	
17	700-717.163-000	7	Schraube	M 3x8 DIN 84	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
18	700-746.163-000	1	Schraube	M 3x25 DIN 84
19	700-800.000-000	1	Schraube	M 4x5 DIN 84
20	700-803.163-000	4	Schraube	M 4x6 DIN 84
21	701-801.163-000	4	Scheibe	3,2 DIN 125
22	702-131.163-000	2	Scheibe	3,2 DIN 433
23	704-745.220-000	1	Zahnscheibe	A 4,3 DIN 6797
24	704-910.163-000	4	Federring	3 DIN 7980
25	704-913.163-000	4	Federring	4 DIN 7980
26	705-450.163-000	1	Scheibe	015-121.038-494
27	705-881.163-000	4	Schraube	BM 4x55 DIN 84
28	803-887.000-000	1	Kabelschuh loop-tip terminal	cosse de cable terminal de cable



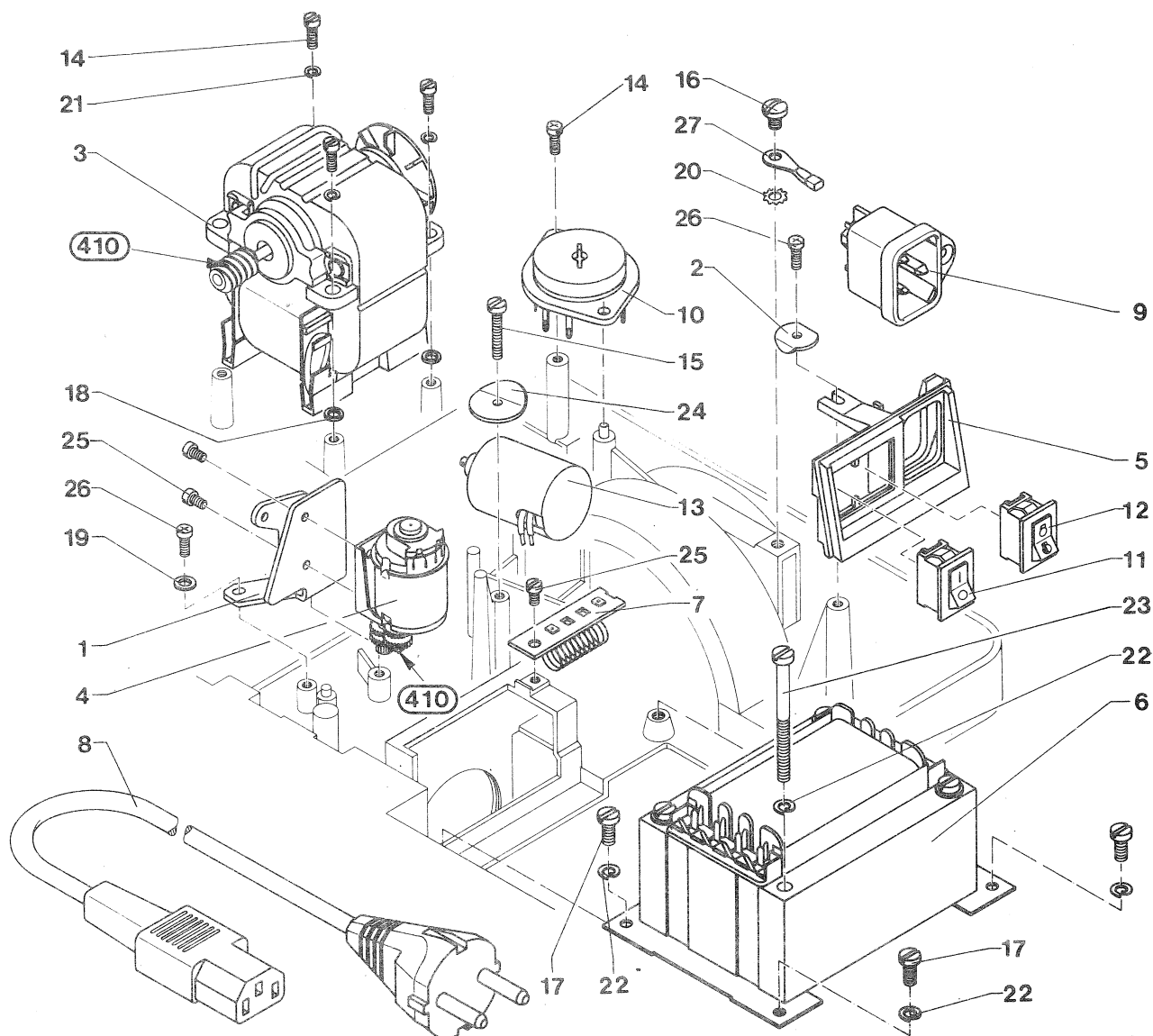


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.001-023	1	Motorhalter motor holder	support de moteur soporte p. motor	
2	031-049.001-031	1	U-Scheibe U-washer	rondelle à U arandela de U	
3	031-049.025-000	1	Antriebsmotor driving motor	moteur d'entrainement motor de transmision	
4	031-049.026-000	1	FF-Motor motor	moteur motor	
	031-049.027-000	1	AF-Motor		
5	031-049.036-005	1	Träger carrier	support soporte	
6	031-049.090-000	1	Transformator transformer	transformateur transformador	220V/150W
	301-003.308-000	1	Transformator		110-240V/250W
	301-003.309-000	1	Transformator		110-240V/150W
7	031-049.096-000	1	Widerstand resistor	résistance resistencia	250W/0,155E
	031-049.097-000	1	Widerstand		150W
8	031-049.990-000	1	Anschlußleitung power cord	fil de connexion cable de conexión	V 37 644
9	302-016.036-005	1	Gerätestecker plug	fiche d'appareil enchufe	
10	302-023.087-003	1	Spannungsschalter voltage selector	sélecteur de tension selector de voltaje	
11	302-023.150-001	1	Schalter switch	interrupteur interruptor	
12	302-023.150-003	1	Umschalter toggle switch	commutateur conmutador	
13	302-056.018-004	1	Magnet magnet	aimant imán	
14	700-717.163-000	4	Schraube	M 3x8 DIN 84	
15	700-746.163-000	1	Schraube	M 3x25 DIN 84	
16	700-800.000-000	1	Schraube	M 4x5 DIN 84	
17	700-803.163-000	4	Schraube	M 4x6 DIN 84	
18	701-801.163-000	4	Scheibe	3,2 DIN 125	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	702-131.163-000	2	Scheibe	3,2 DIN 433
20	704-745.220-000	1	Zahnscheibe	A 4,3 DIN 6797
21	704-910.163-000	3	Federring	3 DIN 7980
22	704-913.163-000	4	Federring	4 DIN 7980
23	705-349.163-000	4	Schraube	BM 4x35 DIN 84 w f 150W
	705-881.163-000	4	Schraube	BM 4x55 DIN 84 w f 250W
24	705-450.163-000	1	Scheibe	015-121.038-494
25	707-951.163-000	3	Schraube	M 3x5 DIN 7985
26	707-953.163-000	3	Schraube	M 3x8 DIN 7985
27	803-887.000-000	1	Kabelschuh loop-tip terminal	cosse de cable terminal de cable



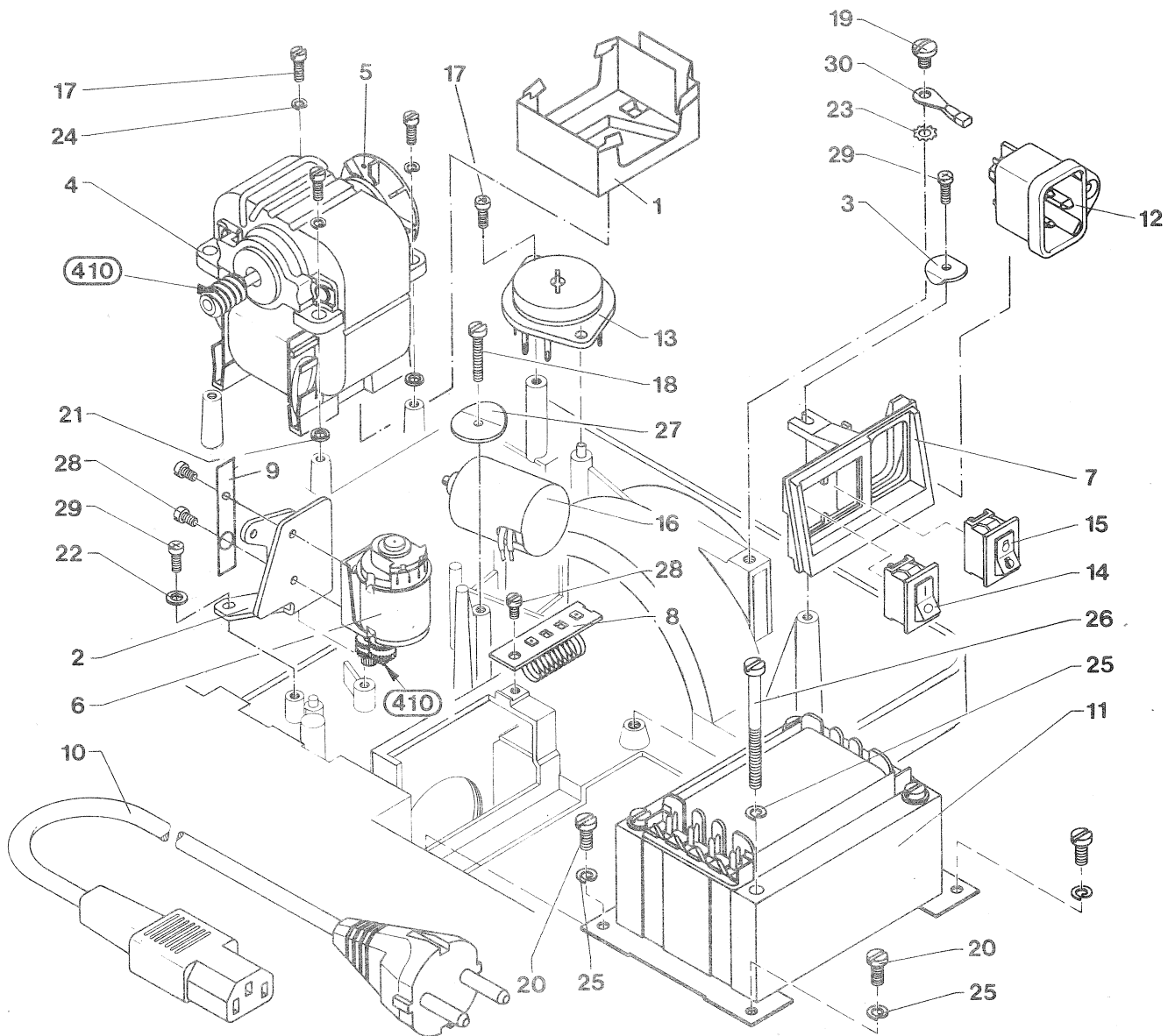


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.001-023	1	Motorhalter motor holder	support de moteur soporte p. motor	
2	031-049.001-031	1	U-Scheibe U-washer	rondelle à U arandela de U	
3	031-049.025-000	1	Motor motor	moteur motor	
	031-049.032-000	1	Motor		f Pradovit A
4	031-049.026-000	1	FF-Motor motor	moteur motor	
	031-049.027-000	1	AF-Motor		
5	031-049.036-005	1	Träger carrier	support soporte	
6	031-049.090-000	1	Transformator transformer	transformateur transformador	220V/150W
	301-003.308-000	1	Transformator		110-240V/250W
	301-003.309-000	1	Transformator		110-240V/150W
7	031-049.096-000	1	Widerstand resistor	résistance resistencia	250W/0,155E
	031-049.097-000	1	Widerstand		150W
8	031-049.990-000	1	Anschlußleitung power cord	fil de connexion cable de conexión	V 37 644
9	302-016.036-005	1	Gerätestecker plug	fiche d'appareil enchufe	
10	302-023.087-003	1	Spannungsschalter voltage selector	sélecteur de tension selector de voltaje	
11	302-023.150-001	1	Schalter switch	interrupteur interruptor	
12	302-023.150-003	1	Umschalter toggle switch	commutateur conmutador	
13	302-056.018-004	1	Magnet magnet	aimant imán	
14	700-717.163-000	4	Schraube	M 3x8 DIN 84	
15	700-746.163-000	1	Schraube	M 3x25 DIN 84	
16	700-800.000-000	1	Schraube	M 4x5 DIN 84	
17	700-803.163-000	4	Schraube	M 4x6 DIN 84	
18	701-801.163-000	4	Scheibe	3,2 DIN 125	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
19	702-131.163-000	2	Scheibe	3,2 DIN 433
20	704-745.220-000	1	Zahnscheibe	A 4,3 DIN 6797
21	704-910.163-000	3	Federring	3 DIN 7980
22	704-913.163-000	4	Federring	4 DIN 7980
23	705-349.163-000	4	Schraube	BM 4x35 DIN 84 w f 150W
	705-881.163-000	4	Schraube	BM 4x55 DIN 84 w f 250W
24	705-450.163-000	1	Scheibe	015-121.038-494
25	707-951.163-000	3	Schraube	M 3x5 DIN 7985
26	707-953.163-000	3	Schraube	M 3x8 DIN 7985
27	803-887.000-000	1	Kabelschuh loop-tip terminal	cosse de cable terminal de cable



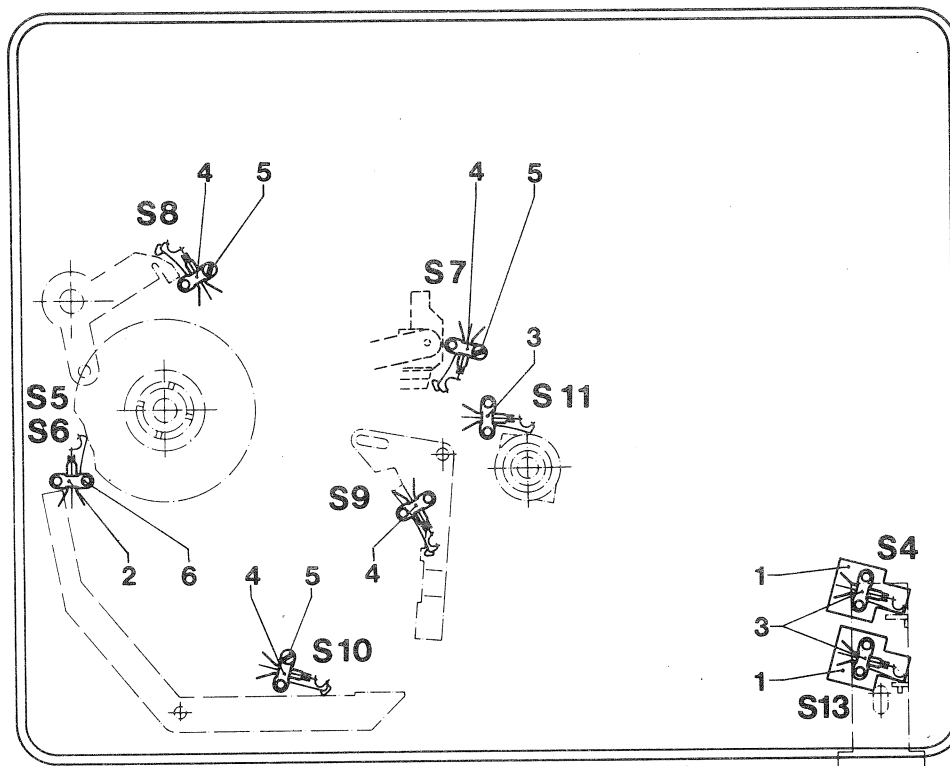


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.001-017	1	Abdeckung cover	couverture cubierta	
2	031-049.001-023	1	Motorhalter motor holder	support de moteur soporte p. motor	
3	031-049.001-031	1	U-Scheibe U-washer	rondelle à U arandela de U	
4	031-049.025-000	1	Motor motor	moteur motor	
	031-049.032-000	1	Motor		f Pradovit A
5	031-049.025-006	1	Riemenscheibe belt disc	rondelle par courroie arandela para correa	
6	031-049.026-000	1	FF-Motor motor	moteur motor	
	031-049.027-000	1	AF-Motor		
7	031-049.036-005	1	Träger carrier	support soporte	
8	031-049.096-000	1	Widerstand resistor	résistance resistencia	250W/0,155E
	031-049.097-000	1	Widerstand		150W
9	031-049.843-006	1	Stütze support	support soporte	
10	031-049.990-000	1	Anschlußleitung power cord	fil de connexion cable de conexión	V 37 644
11	302-003.312-000	1	Transformator transformer	transformateur transformador	220V/150W
	301-003.308-000	1	Transformator		110-240V/250W
	301-003.309-000	1	Transformator		110-240V/150W
12	302-016.036-005	1	Gerätestecker plug	fiche d'appareil enchufe	
13	302-023.087-003	1	Spannungsschalter voltage selector	sélecteur de tension selector de voltaje	
14	302-023.150-001	1	Schalter switch	interrupteur interruptor	
15	302-023.150-003	1	Umschalter toggle switch	commutateur conmutador	
16	302-056.018-004	1	Magnet magnet	aimant imán	
	031-049.145-000	1	Magnet		f Pradovit A

28.02.1984

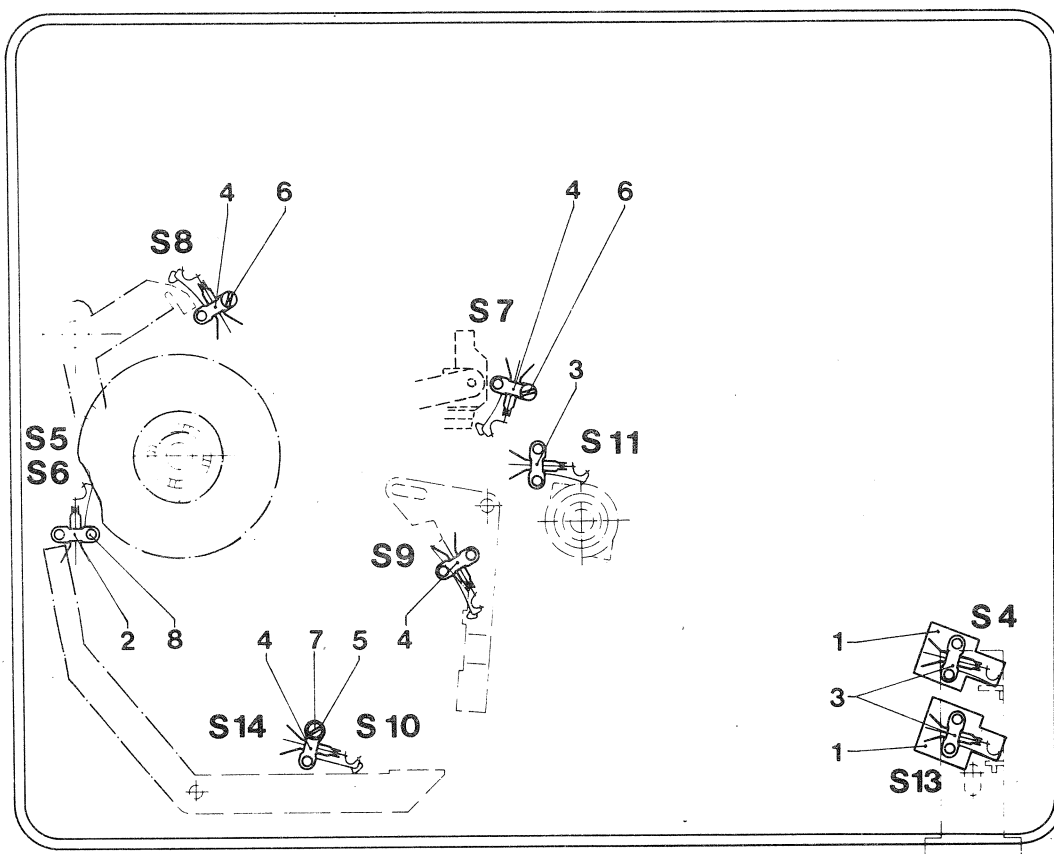


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
17	700-717.163-000	4	Schraube	M 3x8 DIN 84	
18	700-746.163-000	1	Schraube	M 3x25 DIN 84	
19	700-800.000-000	1	Schraube	M 4x5 DIN 84	
20	700-803.163-000	4	Schraube	M 4x6 DIN 84	
21	701-801.163-000	4	Scheibe	3,2 DIN 125	
22	702-131.163-000	2	Scheibe	3,2 DIN 433	
23	704-745.220-000	1	Zahnscheibe	A 4,3 DIN 6797	
24	704-910.163-000	3	Federring	3 DIN 7980	
25	704-913.163-000	8	Federring	4 DIN 7980	
26	705-349.163-000	4	Schraube	BM 4x35 DIN 84	w f 150W
	705-881.163-000	4	Schraube	BM 4x55 DIN 84	w f 250W
27	705-450.000-000	1	Scheibe	015-121.038-494	
28	707-951.163-000	3	Schraube	M 3x5 DIN 7985	w
	709-066.163-000	3	Schraube	M 3x4 DIN 7985	w
	707-953.163-000	3	Schraube	M 3x8 DIN 7985	
29	803-887.000-000	1	Kabelschuh loop-tip terminal	cosse de cable terminal de cable	





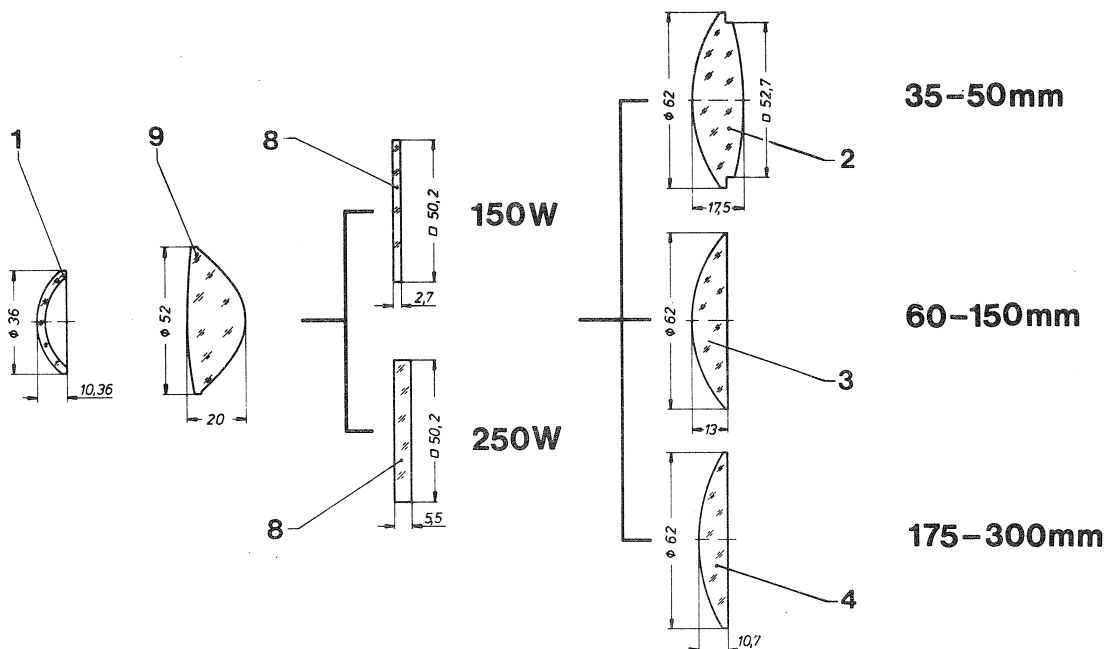
Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
1	031-049.001-018	2	Isolierplatte insulating plate	plaque isolante placa aislante
2	302-023.045-002	2	Schalter switch	interrupteur interruptor
3	302-023.045-007	4	Schalter switch	interrupteur interruptor
4	302-023.045-008	4	Schalter switch	interrupteur interruptor
5	700-717.163-000	3	Schraube	M 3x8 DIN 84
6	709-412.000-000	2	Niet	A 2x10,3x13 DIN 7340



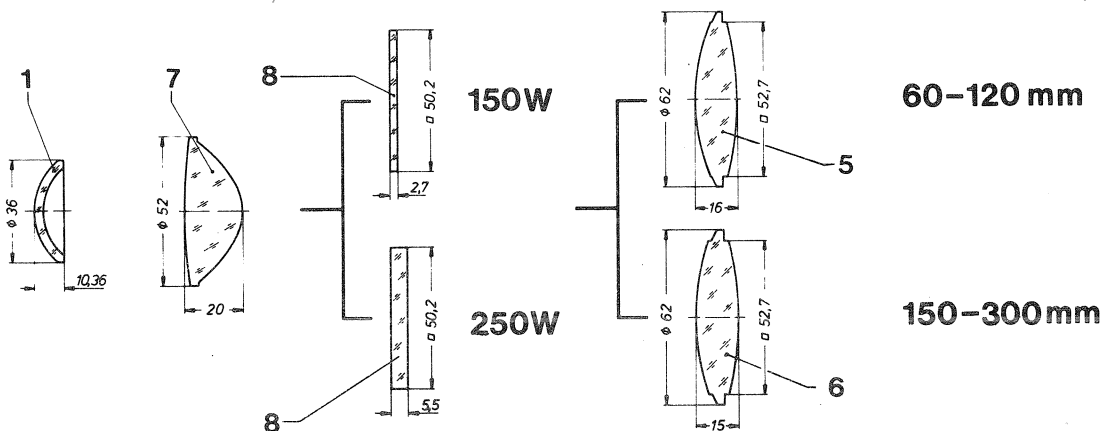


Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
1	031-049.001-018	2	Isolierplatte insulating plate	plaque isolante placa aislante
2	302-023.045-002	2	Schalter switch	interrupteur interruptor
3	302-023.045-007	4	Schalter switch	interrupteur interruptor
4	302-023.045-008	4	Schalter switch	interrupteur interruptor
5	706-121.163-000	1	Scheibe	015-121.038-425
6	707-953.163-000	3	Schraube	M 3x8 DIN 7985
7	707-954.163-000	1	Schraube	M 3x10 DIN 7985
8	709-412.000-000	2	Niet	A 2x10,3x13 DIN 7340

24 x 36 mm



40 x 40 mm



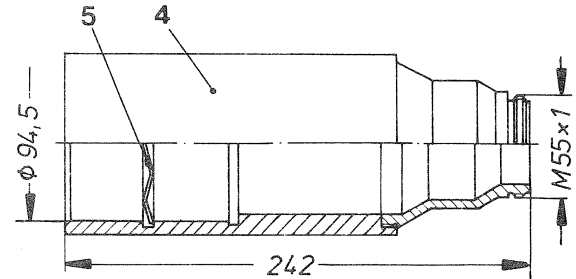
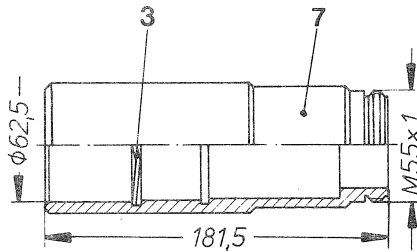
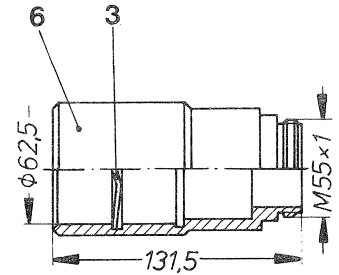
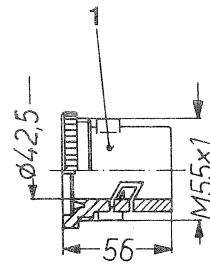
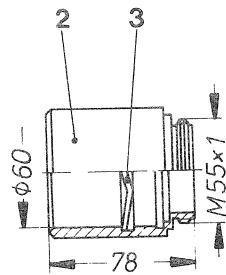


Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.001-043	1	Hohlspiegel reflector	miroir concave reflector	
2	031-049.111-000	1	Wechselkondensor interchange. condenser	condenseur interchangeable condensador intercambiable	V 37 223 35...50mm
3	031-049.112-000	1	Wechselkondensor interchange. condenser	condenseur interchangeable condensador intercambiable	V 37 224 60...150mm
4	031-049.113-000	1	Wechselkondensor interchange. condenser	condenseur interchangeable condensador intercambiable	V 37 225 175...300mm
5	031-049.114-000	1	Wechselkondensor interchange. condenser	condenseur interchangeable condensador intercambiable	V 37 227 60...120mm
6	031-049.115-000	1	Wechselkondensor interchange. condenser	condenseur interchangeable condensador intercambiable	V 37 228 150...300mm
7	031-049.116-000	1	Asphärische Linse aspherical lens	lentille asphérique lente asférica	V 37 226 40x40mm
8	031-056.013-000	1	Wärmefilter heat filter	filtre anti-calorique filtro anticalórico	w f 150W
	031-056.014-000	1	Wärmefilter		w f 250W
9	910-080.401-010	1	Asphärische Linse aspherical lens	lentille asphérique lente asférica	24x36mm

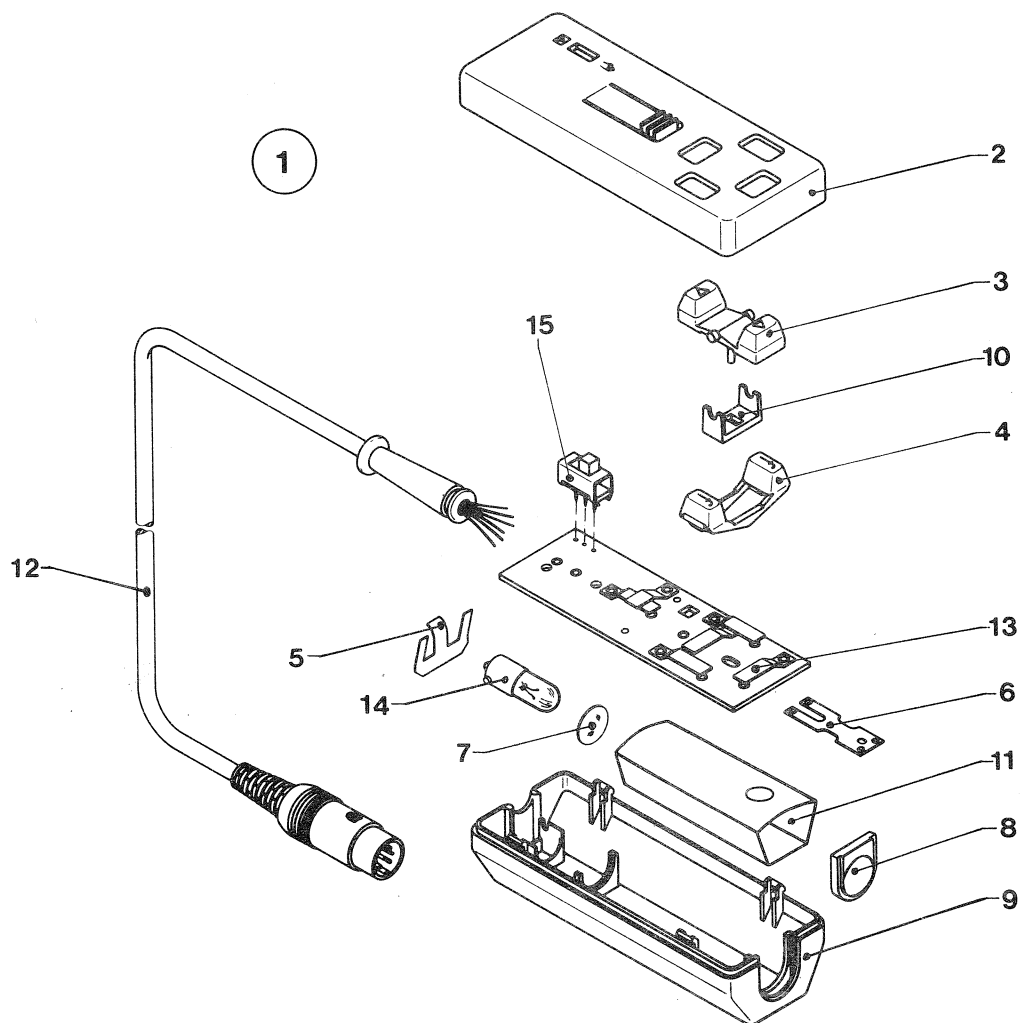
									
Elmaron	Elmaron	Elmaron	Elmaron	Colorplan	Elmaron	Elmaron	Elmaron	Elmaron	Epnor
1:2, 8/35	1:2, 8/50	1:2, 8/60	1:2, 8/85	1:2, 5/90	1:2, 8/120	1:2, 8/150	1:3, 6/200	1:4/250	1:4, 3/300
37 041	37 008	37 004	37 003	37 005	37 019	37 030	37 062	37 082	34 837

Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
1	031-054.005-000	1	Objektivdeckel lens cap	bouchon d'objectif tapa para objetivo
2	031-054.006-000	1	Objektivdeckel lens cap	bouchon d'objectif tapa para objetivo
3	031-900.003-000	1	ELMARON	1:2,8/150mm V 37 030 G 1
4	031-900.053-000	1	ELMARON	1:2,8/85mm V 37 003 G 13
5	031-900.075-000	1	COLORPLAN	1:2,5/90mm V 37 005 G 1
6	031-900.077-000	1	ELMARON	1:2,8/60mm V 37 004 G 1
7	031-900.081-000	1	ELMARON	1:2,8/120mm V 37 019 G 1
8	031-900.101-000	1	ELMARON	1:3,6/200mm V 37 062 G 2
9	031-900.103-000	1	ELMARON	1:4/250mm V 37 082 G 2
10	031-900.107-000	1	ELMARON	1:2,8/35mm V 37 041 G 1
11	031-900.113-000	1	ELMARON	1:2,8/50mm V 37 008 G 1
12	031-904.073-000	1	EPNOR	1:4,3/300mm V 34 837 G 14
13	031-908.007-000	1	Objektivdeckel lens cap	bouchon d'objectif tapa para objetivo
14	031-908.102-000	1	Objektivdeckel lens cap	bouchon d'objectif tapa para objetivo

28.02.1984



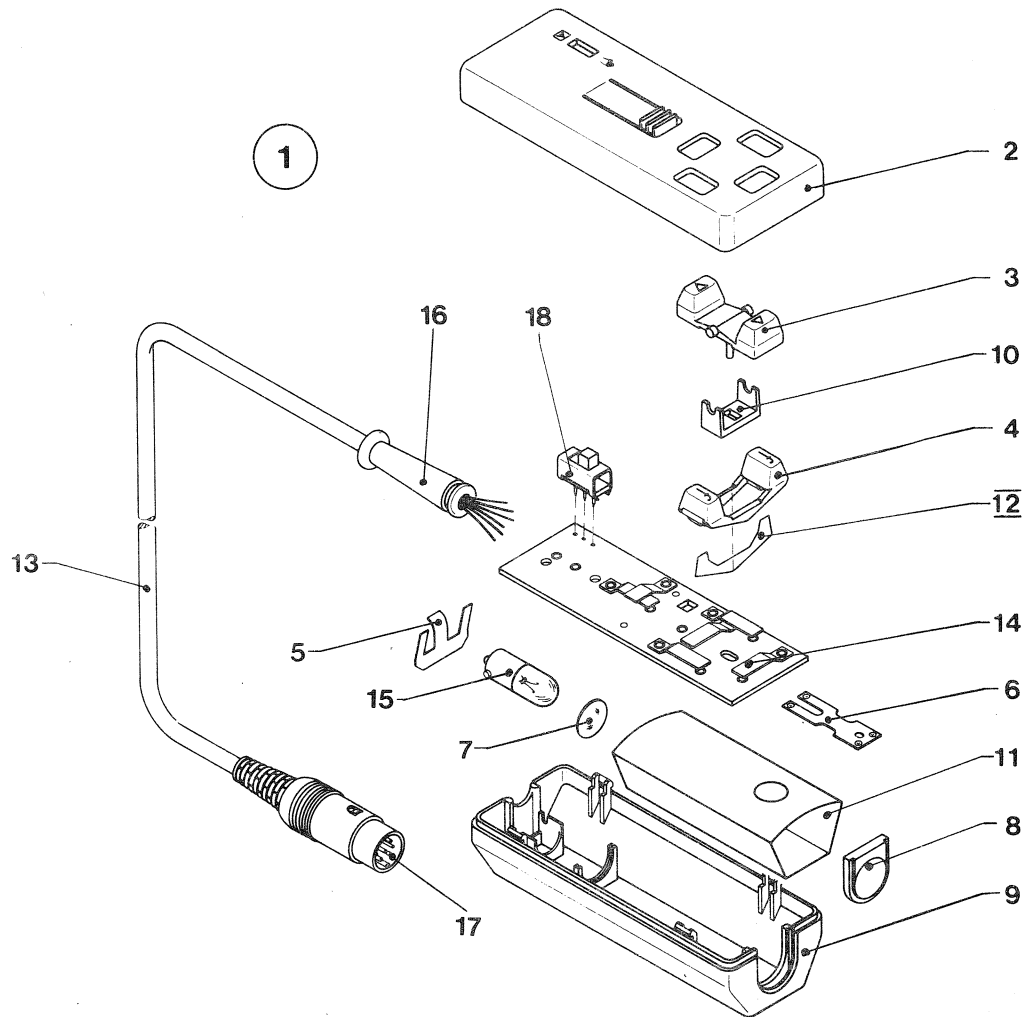
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-058.055-000	1	Objektivstutzen 35-120 lens tube	tube d'objectif tubuladura para objetivo	V 37 119
2	031-058.058-000	1	Objektivstutzen 150 lens tube	tube d'objectif tubuladura para objetivo	V 37 121 G 3
3	031-058.058-006	1	Führungsdraht guide rod	fil de guidage alambre de guía	f 2,6,7
4	031-058.065-000	1	Objektivstutzen 300 lens tube	tube d'objectif tubuladura para objetivo	V 34 640 G 5
5	031-058.065-007	1	Führungsdraht guide rod	fil de guidage alambre de guía	f 4
6	031-058.066-000	1	Objektivstutzen 200 lens tube	tube d'objectif tubuladura para objetivo	V 37 129 G 3
7	031-058.067-000	1	Objektivstutzen 250 lens tube	tube d'objectif tubuladura para objetivo	V 37 130 G 3





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.071-000	1	Fernbedienung remote control	télécommande control remoto	V 37 955 15.1
2	031-049.071-007	1	Oberteil upper part	partie supérieure parte superior	
3	031-049.071-008	1	Taste key	touche tecla	
4	031-049.071-009	1	Taste key	touche tecla	
5	031-049.071-010	1	Feder spring	ressort muelle	
6	031-049.071-011	1	Feder spring	ressort muelle	
7	031-049.071-012	1	Linse lens	lentille lente	
8	031-049.071-013	1	Linse lens	lentille lente	
9	031-049.071-014	1	Unterteil lower part	partie inférieure parte inferior	
10	031-049.071-015	1	Lagerbügel bearing bracket	étrier de palier estribo p. cojinete	
11	031-049.071-016	1	Lichtschutz light stop	protection pare-lumière protecc. contra luz	
12	031-049.071-020	1	Anschlußleitung power cord	fil de connexion cable de conexión	
13	031-049.072-000	1	Leiterplatte printed circuit	plaque à conducteurs circuito impreso	
14	038-101.133-000	1	Glühlampe bulb	lampe à incandescence bombilla incandesc.	V 37 740
15	302-023.209-001	1	Schalter switch	interrupteur interruptor	

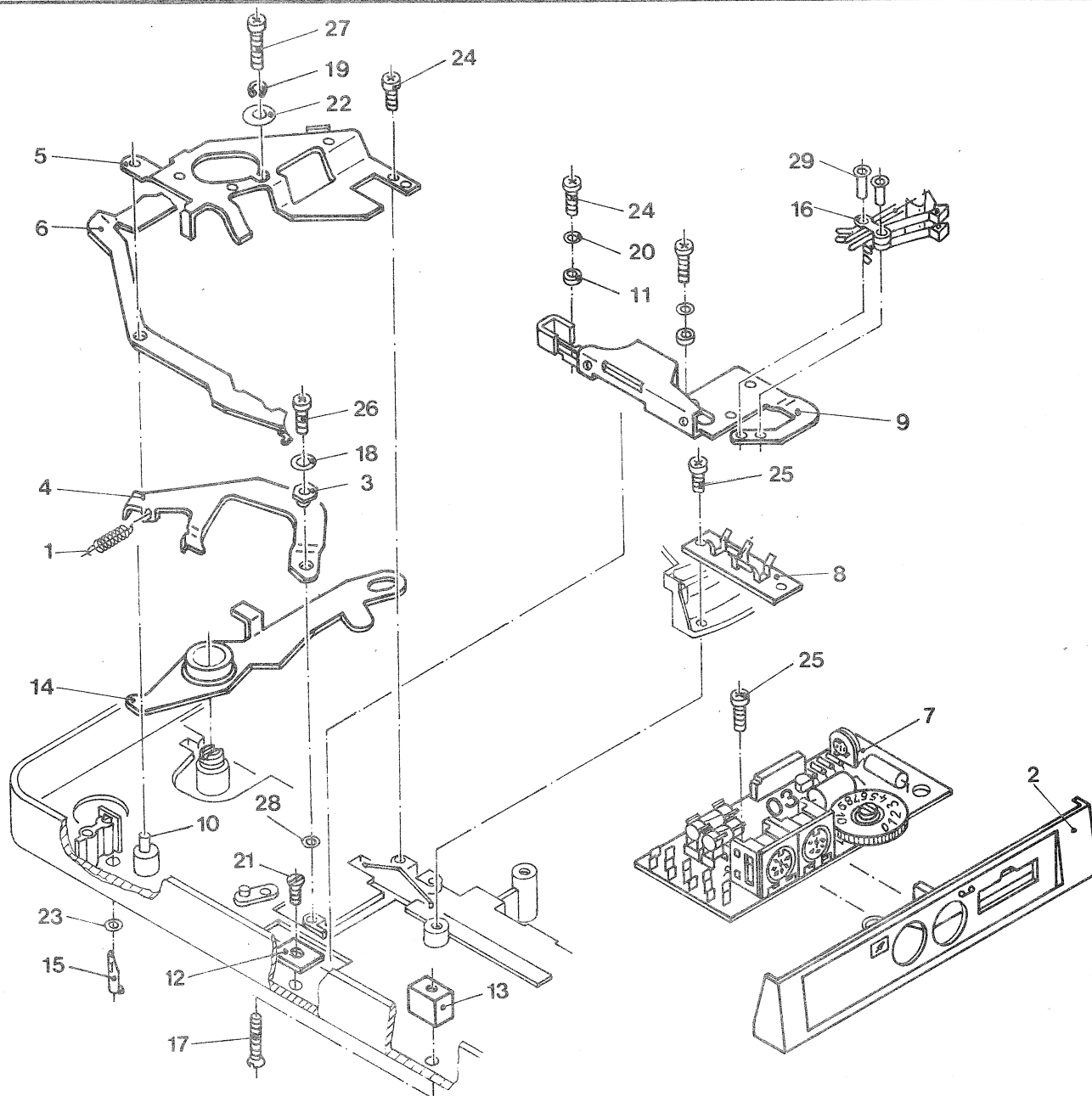
28.02.1984





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.071-000	1	Fernbedienung remote control	télécommande control remoto	V 37 955 15.2
2	031-049.071-007	1	Oberteil upper part	partie supérieure parte superior	
3	031-049.071-008	1	Taste key	touche tecla	
4	031-049.071-009	1	Taste key	touche tecla	
5	031-049.071-010	1	Feder spring	ressort muelle	
6	031-049.071-011	1	Feder spring	ressort muelle	
7	031-049.071-012	1	Linse lens	lentille lente	
8	031-049.071-013	1	Linse lens	lentille lente	
9	031-049.071-014	1	Unterteil lower part	partie inférieure parte inferior	
10	031-049.071-015	1	Lagerbügel bearing bracket	étrier de palier estribo p. cojinete	
11	031-049.071-016	1	Lichtschutz light stop	protection pare-lumiere protecc. contra luz	
12	031-049.071-017	1	Bügel handle	étrier manija	
13	031-049.071-020	1	Anschlußleitung power cord	fil de connexion cable de conexión	
14	031-049.072-000	1	Leiterplatte printed circuit	plaque à conducteurs circuito impreso	
15	038-101.133-000	1	Glühlampe bulb	lampe à incandescence bombilla incandesc.	V 37 740
16	302-004.042-001	1	Knickschutz cord protection	protection contre flexion protecc. contra acodamiento	
17	302-013.131-017	1	Stecker plug	fiche enchufe	
18	302-023.209-001	1	Schalter switch	interrupteur interruptor	

28.02.1984



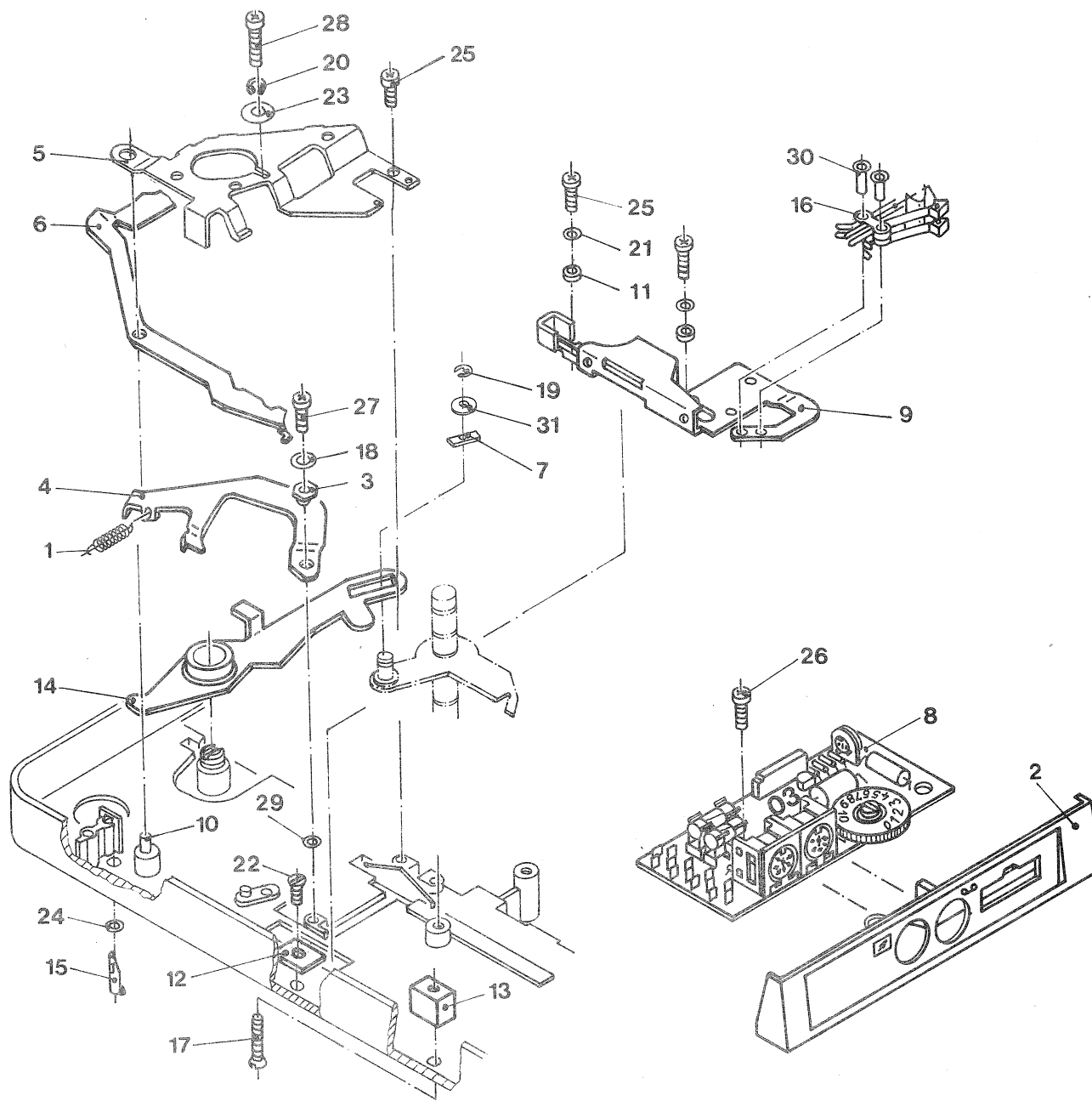


Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
1	031-048.009-029	1	Feder spring	ressort muelle
2	031-049.009-050	1	Blendleiste terminal ledge	pièce terminale pieza terminal
3	031-049.016-012	1	Exzenter eccentric	excentrique excéntrico
4	031-049.016-013	1	Hebel lever	levier palanca
5	031-049.016-023	1	Halteplatte set plate	plaque de fixation placa-soporte
6	031-049.016-024	1	Anschlaghebel stop lever	levier d'arret palanca de tope
7	031-049.034-000	1	Steuereinheit operating unit	unité de commande unidad de mando
8	031-049.139-000	1	Lötleiste soldering ledge	réglette à souder varilla p. soldar
9	031-049.140-000	1	Schieber slider	coulisseau corredera
10	031-049.250-500	1	Bolzen bolt	boulon perno
11	031-049.250-501	2	Rolle roller	rouleau rodillo
12	031-049.250-502	1	Gewindelager screw bearing	palier à pas de vis cojinete c. rosca
13	031-049.250-503	1	Anschlag stop	arret tope
14	031-049.344-000	1	Hebel lever	levier palanca
15	031-057.001-090	1	Lötstift soldering pin	goupille à souder perno p. soldadura
16	302-023.045-008	1	Mikroschalter micro switch	microrupteur micro interruptor
17	700-432.163-000	1	Schraube	M 3x12 DIN 63
18	702-131.163-000	1	Scheibe	3,2 DIN 433
19	704-910.220-000	1	Federring	3 DIN 7980

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
20	705-449.163-000	2	Scheibe	015-121.038-055
21	705-542.163-000	1	Schraube	M 3x4 DIN 63
22	706-121.163-000	1	Scheibe	015-121.038-425
23	707-759.163-000	1	Scheibe	015-121.028-315
24	707-951.163-000	3	Schraube	M 3x5 DIN 7985
25	707-953.163-000	2	Schraube	M 3x8 DIN 7985
26	707-954.163-000	1	Schraube	M 3x10 DIN 7985
27	707-956.163-000	1	Schraube	M 3x16 DIN 7985
28	709-045.163-000	1	Scheibe	015-121.037-054
29	709-634.163-000	2	Niet	A 3x0,3x13 DIN 7340





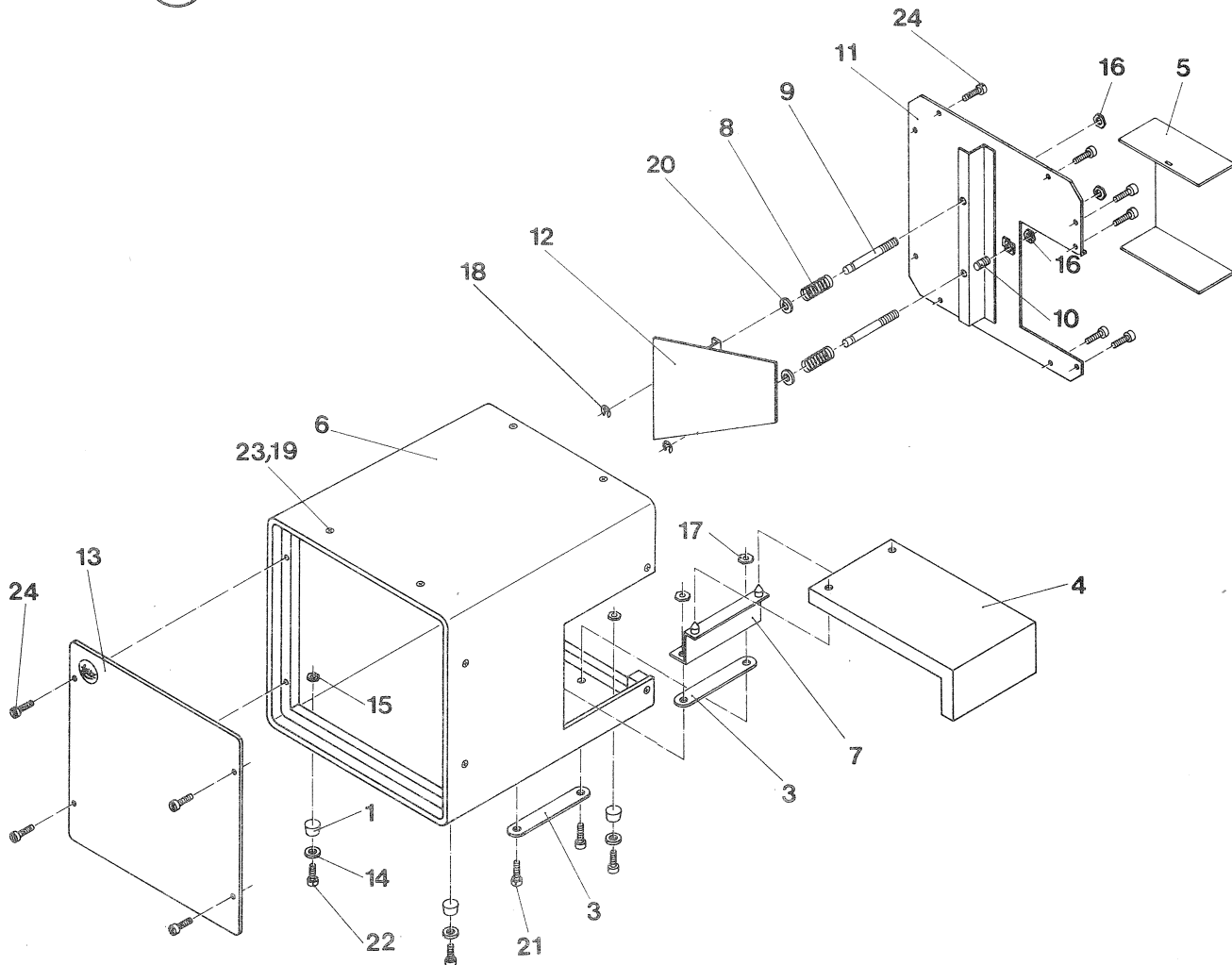
Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-048.009-029	1	Feder spring	ressort muelle	
2	031-049.009-050	1	Blendleiste terminal ledge	pièce terminale pieza terminal	
3	031-049.016-012	1	Exzenter eccentric	excentrique excéntrico	
4	031-049.016-013	1	Hebel lever	levier palanca	
5	031-049.016-023	1	Halteplatte set plate	plaque de fixation placa-soporte	
6	031-049.016-024	1	Anschlaghebel stop lever	levier d'arret palanca de tope	
7	031-049.017-022	1	Gleitstein sliding bar	tete coulissante deslizadera	
8	031-049.034-000	1	Steuereinheit operating unit	unité de commande unidad de mando	G
9	031-049.140-000	1	Schieber slider	coulisseau corredera	
10	031-049.250-500	1	Bolzen bolt	boulon perno	
11	031-049.250-501	2	Rolle roller	rouleau rodillo	
12	031-049.250-502	1	Gewindelager screw bearing	palier à pas de vis cojinete c. rosca	
13	031-049.250-503	1	Anschlag stop	arret tope	
14	031-049.354-000	1	Hebel lever	levier palanca	
15	031-057.001-090	1	Lötstift soldering pin	goupille à souder perno p. soldadura	
16	302-023.045-008	1	Mikroschalter micro switch	microrupteur micro interruptor	
17	700-432.163-000	1	Schraube	M 3x12 DIN 63	
18	702-131.163-000	1	Scheibe	3,2 DIN 433	
19	704-782.163-000	1	Sichg.Scheibe	2,3 DIN 6799	

28.02.1984



Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
20	704-910.220-000	1	Federring	3 DIN 7980
21	705-449.163-000	2	Scheibe	015-121.038-055
22	705-542.163-000	1	Schraube	M 3x4 DIN 63
23	706-121.163-000	1	Scheibe	015-121.038-425
24	707-759.163-000	1	Scheibe	015-121.028-315
25	707-951.163-000	3	Schraube	M 3x5 DIN 7985
26	707-953.163-000	1	Schraube	M 3x8 DIN 7985
27	707-954.163-000	1	Schraube	M 3x10 DIN 7985
28	707-956.163-000	1	Schraube	M 3x16 DIN 7985
29	709-045.163-000	1	Scheibe	015-121.037-054
30	709-634.163-000	2	Niet	A 3x0,3x13 DIN 7340
31	709-716.163-000	1	Scheibe	015-121.036-052

2





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	016-012.001-018	4	Gummipuffer rubber buffer	tampon en caoutchouc tope de caucho	
2	031-049.120-000	1	Projektionsbox projection box	box de projection caja de proyección	V 37 963 1.1
3	031-049.127-009	2	Platte plate	plaque placa	
4	031-049.128-000	1	Winkel bracket	équerre ángulo	
5	031-049.129-000	1	Haube hood	capot cubierta	
6	031-049.130-000	1	Gehäuse housing	boitier caja	G 1,14,22
7	031-049.131-000	1	Haltewinkel holding bracket	support en équerre ángulo de sujeción	
8	031-049.132-008	2	Feder spring	ressort muelle	
9	031-049.132-010	2	Schraube screw	vis tornillo	
10	031-049.132-011	1	Schraube screw	vis tornillo	
11	031-049.133-000	1	Rückwand rear	paroi arrière pared trasera	
12	031-049.134-000	1	Spiegel mirror	miroir espejo	
13	031-049.136-000	1	Mattscheibe ground-glass	verre dépoli cristal esmerilado	
14	702-135.163-000	4	Scheibe	4,3 DIN 433	
15	702-214.163-000	4	Mutter	BM 5 DIN 439	
16	702-217.163-000	3	Mutter	BM 6 DIN 439	
17	704-238.220-000	2	Mutter	M 5 DIN 934	
18	704-785.619-000	2	Sichg.Scheibe	4 DIN 6799	
19	705-646.233-000	16	Scheibe	015-015.003-005	
20	706-318.220-000	4	Scheibe	015-121.066-386	
21	707-423.220-000	2	Schraube	AM 5x16 DIN 84	

28.02.1984

PRADOVIT C/CA

B 17.1

Projektionsbox

ERSATZTEILLISTE

ERNST LEITZ WETZLAR GMBH

TECHNISCHER SERVICE

Dokumentation und Info

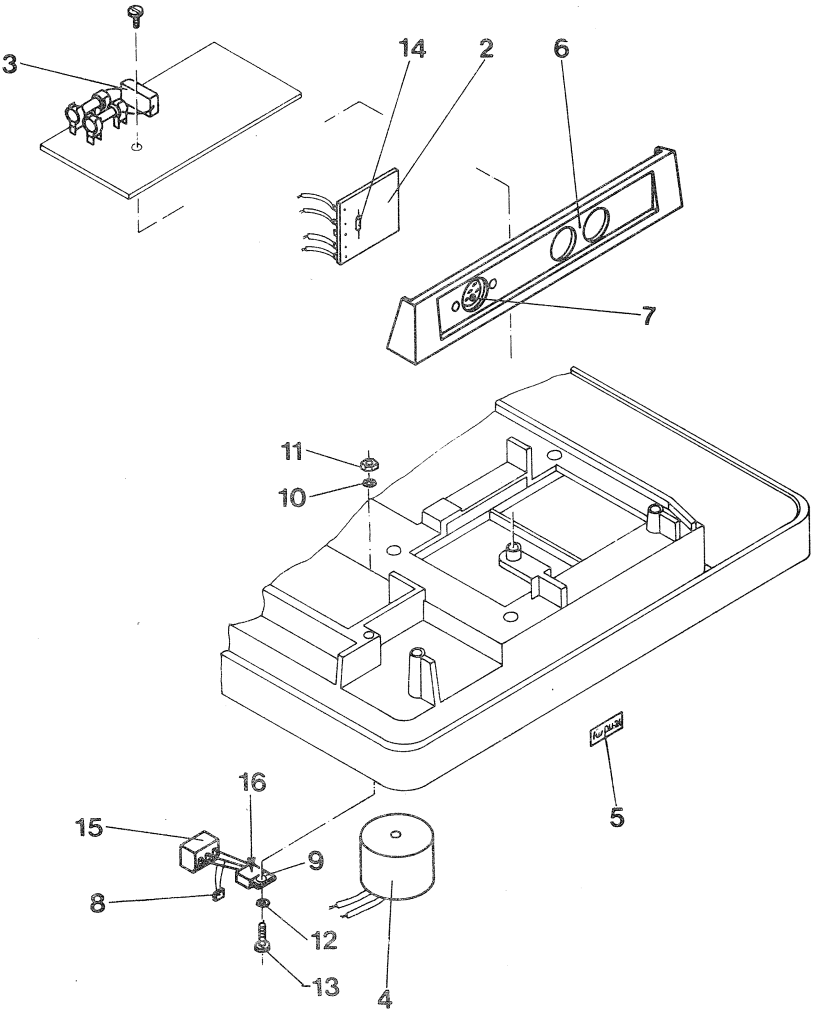


Nr.	Bestell-Nr.	Stück	Benennung	Bemerkung
22	707-910.163-000	4	Schraube	AM 4x16 DIN 84
23	708-227.233-000	16	Schraube	B 2,9x19 DIN 7982
24	709-372.123-000	13	Schraube	3x16 DIN 96

28.02.1984



1





Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	031-049.207-000	1	Umbausatz conversion set	jeu de transformation juego de modificación	G
2	031-049.207-013	1	Leiterplatte printed circuit	plaque à conducteurs circuito impreso	G 13
3	031-049.207-021	1	Kondensator capacitor	condensateur condensador	
4	031-049.207-022	1	Drossel choke	réactance bobina de reactancia	
5	031-049.207-023	1	Typenschild name plate	plaque données techniques placo de datos	
6	031-049.208-000	1	Blendleiste terminal ledge	piece terminale pieza terminal	
7	302-013.131-031	1	Buchse jack	prise enchufe	
8	302-057.200-006	1	Kondensator capacitor	condensateur condensador	
9	302-062.103-007	1	Triac triac	triac triac	
10	702-131.163-000	1	Scheibe	3,2 DIN 433	
11	702-206.163-000	1	Mutter	BM 3 DIN 439	
12	704-910.000-000	1	Federring	3 DIN 7980	
13	709-660.163-000	1	Schraube	AM 3x25 DIN 7985	
14	830-449.000-000	1	Widerstand resistor	résistance resistencia	
15	834-603.000-000	1	Klemmleiste clamping ledge	litéau de serrage varilla de fijación	
16	851-937.000-000		Wärmeleitpaste heat absorbing paste	pate absorbant pasta absorbente	

28.02.1984



Prüfhinweise

hints for checking

C 1...6

The description of electrical functions is divided into:

1. Current supply
2. Slide change with remote control
3. Slide change without remote control
4. Light pointer
5. Focusing
6. Checking the autofocus device

The electrical process is described in its operational sequence within each instrument function. This makes systematic fault tracing possible should the instrument have malfunction.

1. Current supply

The mains voltage is applied to the mains transformer Tr 1 via St 1, S 1 and in instruments with voltage selector S 2. The motor M 1 is connected to the 110V winding of the transformer (primary).

The secondary voltage of 24V is applied to the rectifier Gr 1 via the fuses Si 1 and Si 2. The projector lamp La 1 is connected to the 24V secondary winding of the transformer via R 8 (economy switch) or S 3.

The central tapping of the secondary winding of Tr 1 is the joint reference point for the + and - potential respectively of Gr 1. One side of the magnet KM 1 is permanently connected with the side of Gr 1 via the supply unit connection 6.

1.1 Measured values

The measuring points indicated with numbers in the description below agree with the identically-numbered contact and soldering points in the instrument wiring plan.

Voltages measured on the projector with voltmeter ($R_i > 1k$)

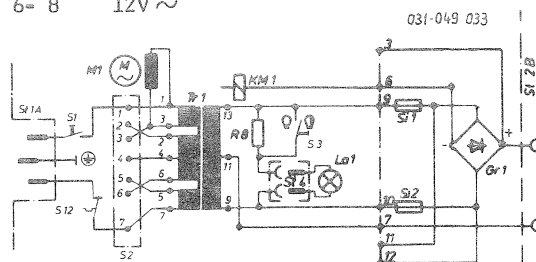
Measured values:

Supply unit:

9-10	24V ~
11-12	24V ~
6- 3	+22V
7- 3	+11V
7- 6	-11V

AF-amplifier:

9-10	10V ~
6- 7	12V ~
6- 8	12V ~



Current supply and measuring points on the supply unit
031-049.033-000

2. Slide change with remote control

The remote control unit is the same for alle PRADOVIT C and CA projectors.

2.1 Slide change forward (via remote control)

When the button S 20 in the remote controls unit is pressed the magnet KM 1 acquires positive potential from Gr 1 via St 2 (contact 3), S 25, S 20, St 2 (contact 2) and the switches S 8, S 7 and S 6. KM 1 becomes energized and closes S 9. This closes the holding circuit (S 9, S 6, KM 1). The cam set starts to move and initiates the slide change. S 7 and S 8 open so that a further control of S 20 of the remote control is no longer possible.

Cam disc 6 opens S 6 after about 15°, KM 1 becomes dead, drops, and opens S 9. After approx. 90° rotation of the cam disc 6 S 6 is closed again. But the circuit continues to be interrupted by S 7, S 8 or S 9. After 235° rotation of the cam disc 6 S 6 is opened again, and after 360° rotation the switches S 5 to S 8 are again in their starting position. Slide change forward is completed.

2.2 Slide change reverse (via remote control)

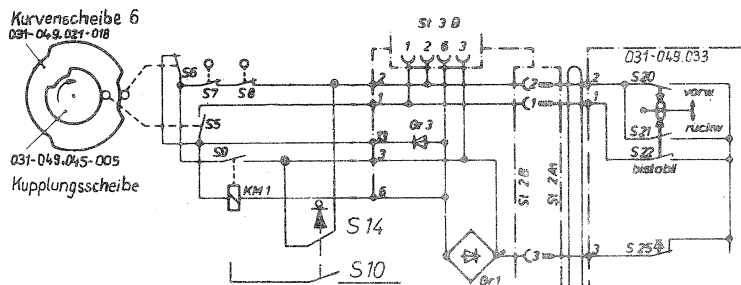
When the button S 21 is pressed in the remote control unit S 21 and S 22 are closed. S 22 moves ahead of S 21 and remains closed until the "slide change forward" button is pressed again.

The positive potential is applied across S 21, St 2 (contact 2) supply unit contact 2 and S 8, S 7 and S 6 on KM 1. The magnet becomes energized, closes S 9 (holding for KM 1) until S 6 is opened by the approaching cam disc 6 set. KM 1 drops again and opens S 9.

After about 75° rotation of the cam disc set S 5 is closed by the coupling plate and KM 1 acquires a positive potential via S 5, supply unit contact 1, St 2 (contact 1) and S 22. After 90° rotation S 6 is closed by the cam disc 6 and the holding circuit S 9, S 6, KM 1 is again established. At 110° S 5 is opened, the holding circuit is closed at 255° by th cam disc via S 6.

After 360° rotation of the cam set the switches S 5 - S 8 are again in their starting position. Slide change reverse is completed.

Slide change with remote control

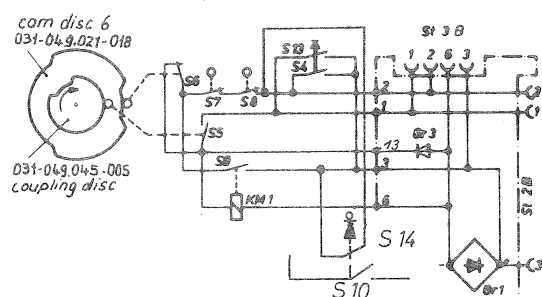


3. Slide change without remote control

The functions of switches S 20, S 21 and S 22 are taken over by the switches S 4 and S 13.

3.1 Slide change forward (by means of the button on the instrument)

Brief pressure on the slide changing button on the instrument applies a positive potential from Gr 1 via S 4, S 8, S 7, S 6 across KM 1. KM 1 becomes energized and closes S 9. This further process is the same as described under C 2.1/2.1.



3.2 Slide change reverse (by means of the button on the instrument)

Prolonged pressure on the slide-changing button on the instrument applies positive potential, as with "slide change forward", from Gr 1 via S 4, S 8, S 7, S 6 across KM 1. KM 1 becomes energized and via S 9 and S 6 becomes a holding circuit. After about 15° rotation of the cam disc set, cam 6 opens switch S 6 and holding of KM 1 is interrupted.

After about 75° rotation the coupling disc actuates switch S 5. Because S 4 and S 13 are still closed by the prolonged pressure on the slide changing button on the instrument, KM 1 receives positive potential via S 13 and S 5. KM 1 becomes energized and is held at about 90° rotation of the cam disc 6 via the closed S 6 and S 9. This renewed energization of KM 1 makes the reverse transport of the slide magazine possible.

After about 110° rotation S 5 is operated by the coupling disc, but KM 1 holds up to the 235° position of cam disc 6, where it opens S 6.

After 360° rotation of the cam disc set the switches S 5 - S 8 are again in their initial position. Slide change reverse is completed.

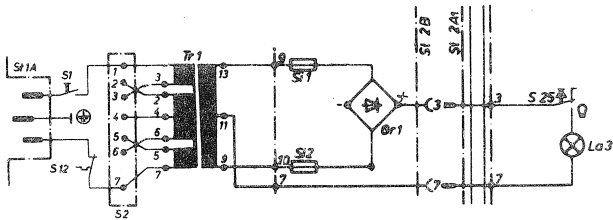
If a switch operation "slide change reverse" was carried out with remote control (S 22 is closed), "slide change forward" can not now be carried out via the slide changing button on the instrument. With the remote control connected, the slide changing button on the instrument can be used for both switches function only after a switch operation "slide change forward".

3.3 Automatic discharge of the last slide

From state 6 onwards all PRADOVIT C/CA projectors are equipped with the micro switch S 14. Instruments including state 5 can be subsequently equipped with this switch. After the magazine has been removed, KM 1 receives positive voltage over S 14, S 8, S 7 and S 6 and releases a switching step automatically in the discharge of a slide which remained in the slide change.

4. Light pointer

The light pointer is operated by pressure on button S 25 in the remote control unit. This applies 11V D.C. potential to lamp La 3 via St 2 contacts 3 and 7.



Light pointer

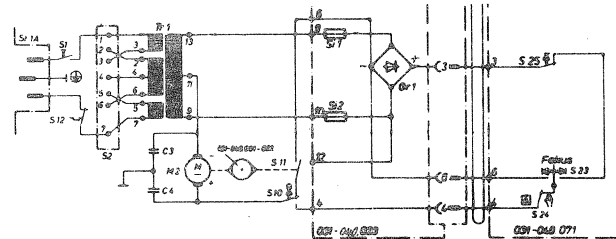
5. Focusing

For refocusing with the remote control unit the switch must be set at = manual.

With switch position = Autofocus, refocusing is automatic (only with PRADOVIT CA).

5.1 S 24 at position

The focusing motor can be manually operated with the rocker switch S 23 in the remote control unit. For this purpose however, the switch S 10 must be operated. This is done by the magazine on the magazine track. When S 23 is pressed the focusing motor M2 receives positive or negative potential by S 23, S 24 and S 10 according as the rocker switch is pressed on the right or on the left. The minus side of the focusing motor is on the joint reference point of the two potentials (with CA models: via R 15 of the AF amplifier 031-049.074-000).



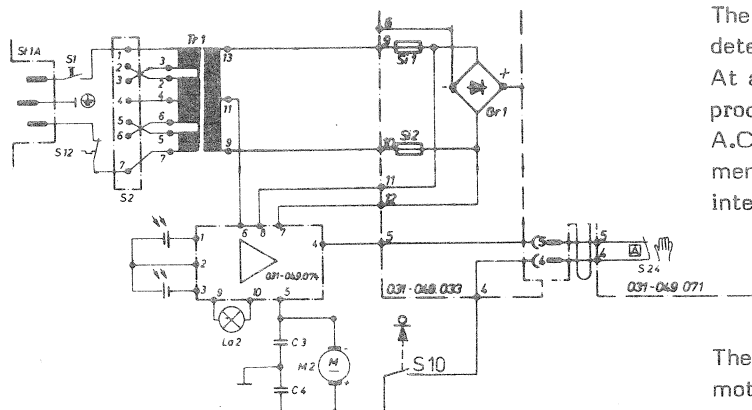
Manual focusing

5.2 S 24 at position

The contacts 4 and 5 of the supply unit are shorted by the switch position at . S 23 is out of action and the control of the focusing motor is taken over by the AF amplifier 031-049.074-000 (Applies only to CA projectors). An image of the filament of the lamp La 2 is formed by the AF projective, in the centre of the slide to be projected. An optical system receives the light reflected by the slide and directs it to two silicon photo-elements, which control a sum- and -difference amplifier.

If the slide is not precisely in the focal plane the light beam affects one of the two photo-elements more strongly. This changes the output potential of the AF amplifier towards + or -. Ts 1 or Ts 2 is conducting.

(For description of function AF amplifier, see page C 5.1). Accordingly positive or negative potential is applied to point 4 of the AF amplifier, which determines the rotation direction of the focusing motor.



Autofocus

The lens carrier is adjusted by the focusing motor until the slide is in the focal plane. The two photo-elements now receive light of equal brightness and no potential is applied to point 4 of the AF amplifier.

5.3 AF amplifier

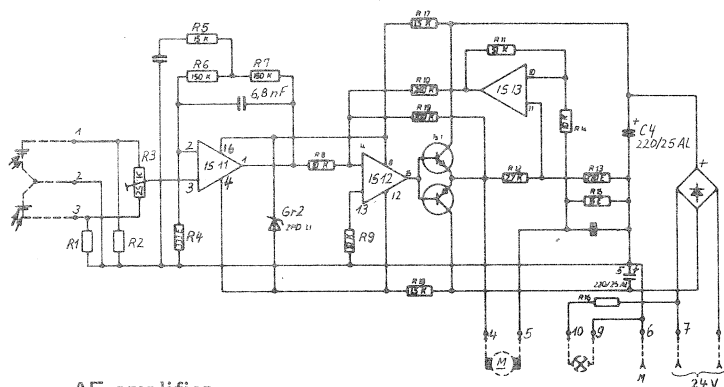
The silicon photo-elements are connected with the contact 2 of the AF amplifier through one connection each. When illuminated, the photo-element connected to point 1 with the second connection generates a negative potential there, the second photo-element generates a positive potential at point 3. As a result the focusing motor rotates clockwise or anti-clockwise via the AF amplifier, producing a linear displacement of the lens carrier.

The operational amplifier IS 1.1 is controlled more or less positively or negatively via R 3 depending on the intensity of the illumination of the photo-element.

The ratio of the respective distances R 6 plus R 7 to R 4 determines the value of the potential amplification of IS 1.1. At a resistor R 4 = 300E the amplification factor 1000 is produced. The capacitor C 2 is designed to short any possible A.C. potentials, so that these are not amplified. The RC-member R 5/C 1 produces a differential proportion in this internal automatic control system.

Because of the ratio of R 19 to R 8 the operational amplifier IS 1.2 has a potential amplification of 10 at a simultaneously high current intensification of the transistors Ts 1 and Ts 2.

These transistors control the focusing motor M 2. This motor has a starting potential of about $\pm 2,5-4V$, whereby the dead zone of the transistors of $\pm 0,7V$ base potential does not become apparent.



AF-amplifier

The Z diode Gr 2 is purely protective, With excess mains voltage and operation without projector lamp the operational potential may exceed the permissible data of IS 1. Gr 2 prevents the potential from rising to inadmissible values.



The AF amplifier up to state 1 according to circuit diagram H 7.1 have an additional amplification control in IS 1.3. This amplifier part is designed to influence the amplification, utilizing the counter-electromotive force of the motor. It is fed into the IS 1.2 at point 14.

6. Checking the autofocus device

Plug the remote control unit into the instrument.

6.1 Set switch S 24 at  and depress both keys of the remote control unit successively. The focusing motor must change its direction. If the instrument is defective, carry out fault tracing according to point 5.1 of the description of function.

6.2. If the lamp La 2 does not light up, check:

Continuity of the lamp.

Voltage according to point 1.1 of the description of function.

6.3 Check all the soldering point of the AF amplifier 031-049.074-000.

6.4 Continuity check of point 4 of the amplifier according to point 4 of the supply unit at position **A** of S 24 should be carried out.

6.5 Insert the test magazine into the projector and load it as follows:

Adjustment plate	031-049.001-000 A11
Adjustment mirror	031-049.001-000 A10
LEITZ test slide glassmounted	150-000.100-105
LEITZ test slide without glass	150-000.100-173

Insert the LEITZ test slide 150-000.100-105 in the optical path. Carry out voltage measurement with Unigor 3S, measuring unit 100mV, range:

Amplifier 031-049.074-000

Point 6 after point 3:

With continuous manual focusing with S 54 in one direction a voltage difference of about 40mV must occur between the maximum and the minimum value.

Point 6 after point 1:

In the same conditions as described above the voltage difference must also be about 40mV but with reversed polarity.

6.6 If these voltages cannot be measured, the adjustment of the autofocus device must be checked. It may be necessary to replace the AF amplifier.

6.7 If these measurements fail to trace the fault, the AF amplifier 031-049.074-000 must be exchanged.



Ausbau u. Demontage Diawechselung	removing and disassembling the slide changing dev.	D 1
Montage Diawechselung	Assembling the slide changing device	D 2
Kurven und Hebel	cams and levers	D 4

All number combinations given in the text and in the fig. refer to the spare parts list. Example: lever B 5.1/5, see spare parts list B 5.1, No. 5.

Removing and disassembling the slide changing device

Removal:

Unscrew lever B 5.1/5 (from state 12 onwards with pull-off device) and cover B 3.1/7.

Disconnect the screw connection between lever B 8.1/14 and ledge B 6.1/4 and swivel the ledge underneath the plate.

Unscrew the fixing screws B 6.1/25:

2 screws at the gate B 6.1/15 and 1 at the plate B 6.1/22.

Lift the slide changing device out of the instrument, the slider must be moved into the most favourable position.

Disassembly:

Unscrew screws B 5.1/17 (note nuts B 5.1/19).

Pull out fork B 5.1/2.

Unscrew screw B 6.1/31.

Unhook the eye of the spring B 6.1/7 from the roller axis and slowly pull the spring out off the gate B 6.1/15 until the guide sheets B 6.1/8 can be lifted out of the lower bearing. Now pull the spring together with the guide sheets out of the gate.

Unscrew screw B 6.1/33 and lift it out with the spring B 6.1/5. Bend the twisted holding lugs of the spacer plate B 5.1/15 straight and pull the entire plate out.

Lift the Seeger ring B 5.1/1 off and remove the spacer plate B 5.1/15.

Pull out guide B 5.1/14.

Pull the fork arm of the slider B 5.1/9 out of the slider B 5.1/10. Pull out the lower and upper pairs of sliders which must be bent straight outwards.

Pull all c-clips B 6.1/29 off both axes B 6.1/16.

Pull all the axes out of the gate. The axes B 6.1/16 must be last. The slide stop B 6.1/11, diaphragm B 6.1/21, spring B 6.1/19 and both rollers can now be removed.

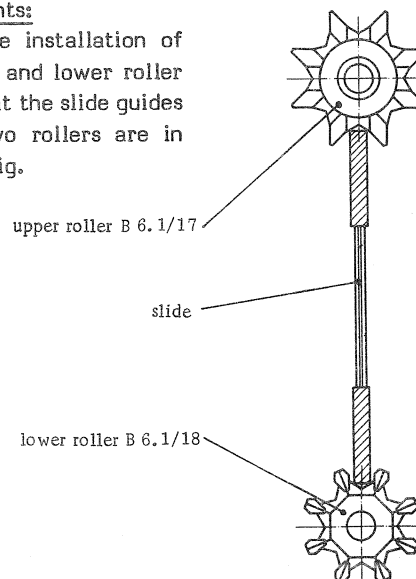
The sliding plate B 6.1/20 can now be pulled out of the gate. For disassembling the lever B 6.1/14 is pushed out of the stop bearing in the slide stop B 6.1/11.

Assembly:

Assembly is carried logically in the reverse order.

Special hints:

During the installation of the upper and lower roller ensure that the slide guides of the two rollers are in line, see fig.



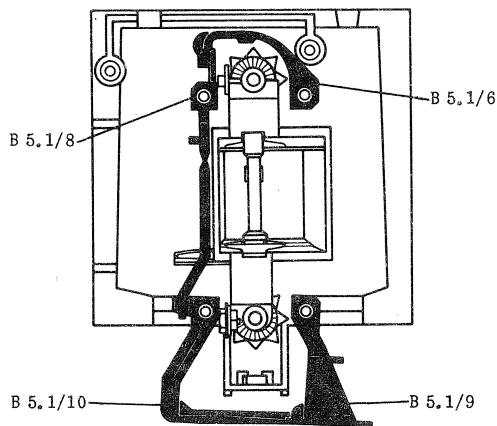
Arrangement of the sliders

Abb. 3

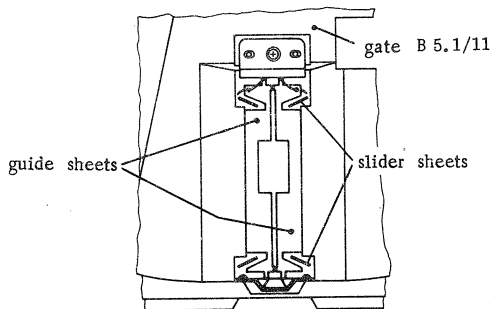


Abb. 4

When the trip cam B 6.1/3 is inserted, ensure that one tripping pin is in a central position to the switch lever, see fig. 1

If the trip cam is installed in an offset position (see fig. 2) the switch lever does not engage properly and slide transport will be disturbed.

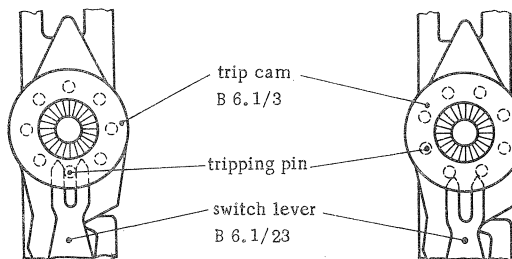


Abb. 1

Abb. 2

When the sliders are assembled please note:

- correct seating of the spring wire at the upper ball-plug connection B 5.1/6 and B 5.1/8
- free movement of the 4 slider sheets during passage through the guides and the gate, see fig. 4
- free movement in the sliding guide

The guide sheets B 6.1/8 must be checked after installation for free rotary movement and reliable spring function.

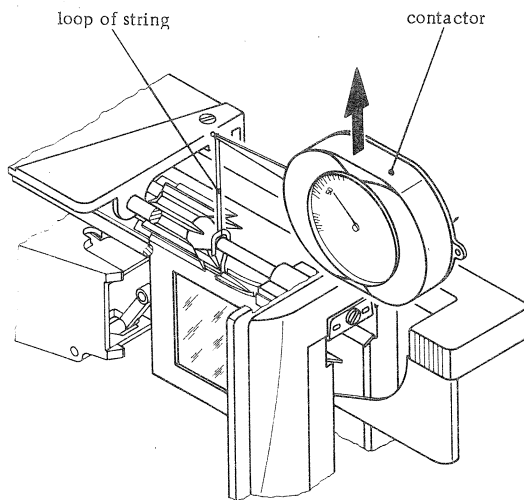


Fig. 2

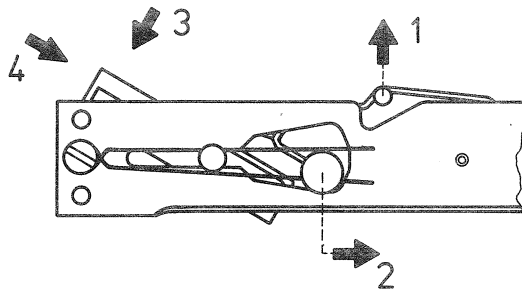


Fig. 3

The pressure of the spring B 6.1/7 on the slide must be checked with a contactor. To do this move the LEITZ-test slide into the optical path and hook an loop of string between the eye of the spring and the probe of the contactor, see fig. 1.

At the moment when the prism spring is lifted off the slide, read the spring tension on the contactor. It should be 0,5-0,6N (50-60g).

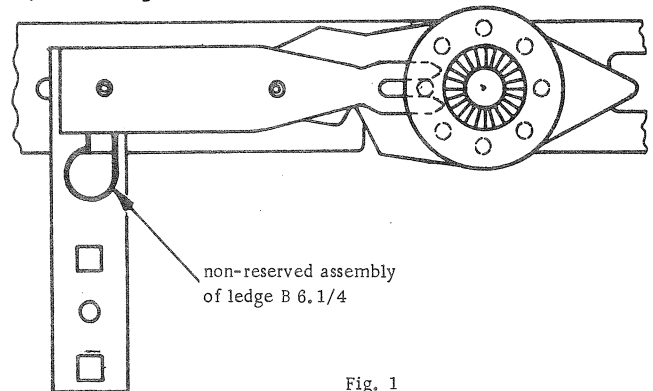


Fig. 1

To facilitate assembly, push the ledge B 6.1/4 underneath the plate B 6.1/20 before installing the slide changing device in the PRADOVIT C/CA, see fig. 3

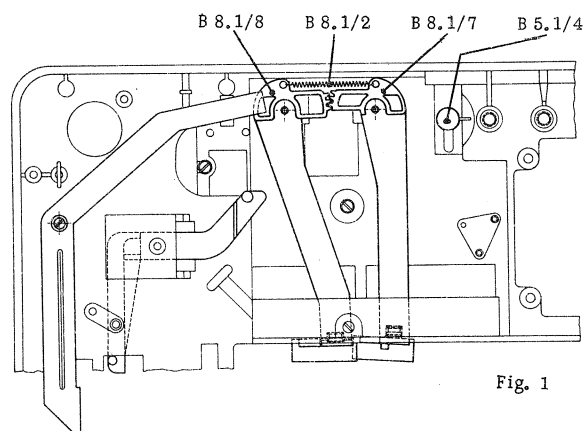


Fig. 1

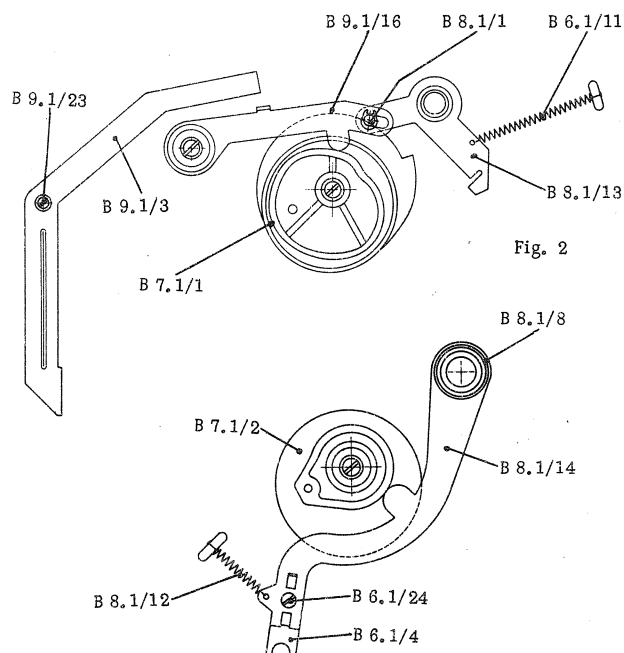


Fig. 2

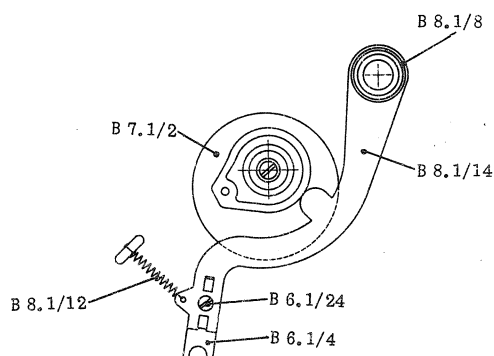


Fig. 3

Disassembling the cams and levers

Disassembly can be carried out after removal of plate B 7.1/14 and c-clips in the given sequence of the cams and levers arranged on top of each other.

Assembly of cams and levers

Screw the axes B 7.1/7 and B 8.1/9 into the base.

Push the washer B 7.1/20 onto the axis B 7.1/7. Push the axis B 5.1/4 into the base from above (from state 12 onwards from the lower side). Introduce the diaphragm levers B 8.1/7 and B 8.1/8 through the recesses A and B and push the journals into the bearing bushes of the base (the diaphragm levers can be removed and installed only when the slide changing device is removed). Note the position of the diaphragm levers with the diaphragm closed according to the illustration.

Hook spring B 8.1/2 in.

Push cam B 7.1/1 onto axis B 7.1/7. Push lever B 8.1/13 onto axis B 5.1/4 and lever B 8.1/16 onto B 8.1/9 (from stage 12 onwards lever B 8.1/13 is no longer required). Place the elongated hole of lever B 8.1/16 on the trunnion of lever B 8.1/13 and secure it with Seeger ring B 8.1/1.

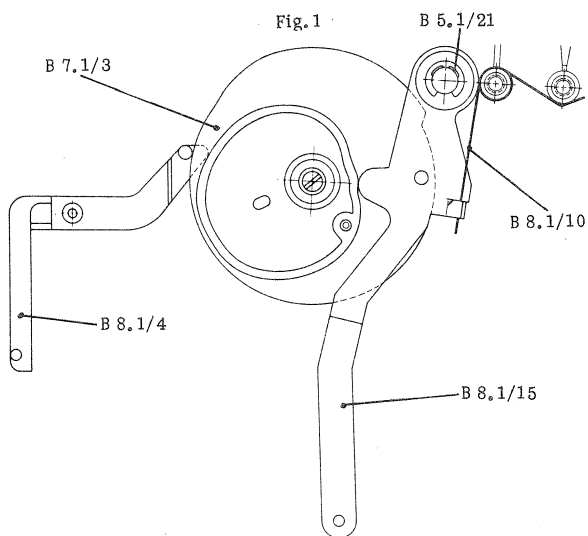
Hook spring B 8.1/11 in.

Fasten stop lever B 9.1/3 on the base with screw B 9.1/23, see fig. 2.

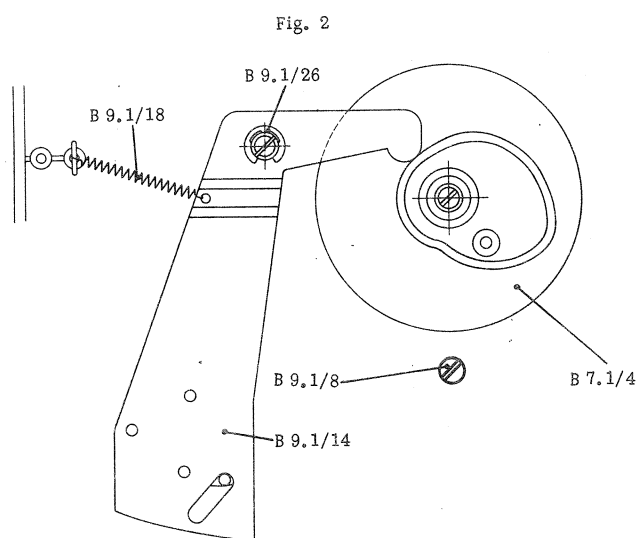
From state 1 cams 1 and 2 also cams 4 and 5 are attached to each other. The levers and cams from state 1 onwards are to be assembled accordingly.

Push cam B 7.1/2 in position and engage it in cam B 7.1/1. Push lever B 8.1/14 onto axis B 5.1/4 and fasten it with screw B 6.1/24 on the ledge B 6.1/4.

Hook spring B 8.1/12 in. Push washer B 8.1/18 onto axis B 5.1/4, see fig. 3.



Push cam B 7.1/3 on and engage it in cam B 7.1/2.
Push lever B 8.1/15 onto axis B 5.1/4. Push c-clip B 5.1/21 on. Push spring B 8.1/10 onto trunnion of base and tension it. Screw in axis B 9.1/8. Pass lever B 8.1/4 through the recess C of base (see fig. 1) and fasten it on top of the base with screw 8.1/17.



Push cam B 7.1/4 on and engage it in cam B 7.1/3.
Push transport lever B 9.1/14 onto axis B 8.1/9 and secure it with c-clip B 9.1/26.
Hook spring B 9.1/18 in.

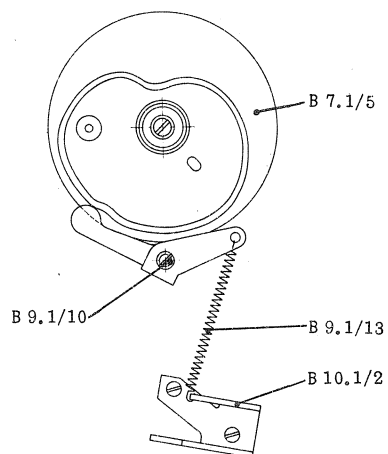


Fig. 1

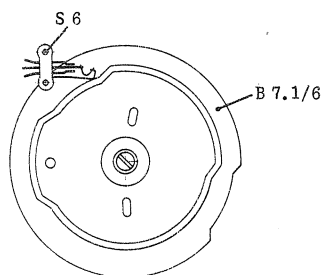


Fig. 2

Push cam B 7.1/5 on and engage it in cam B 7.1/4.

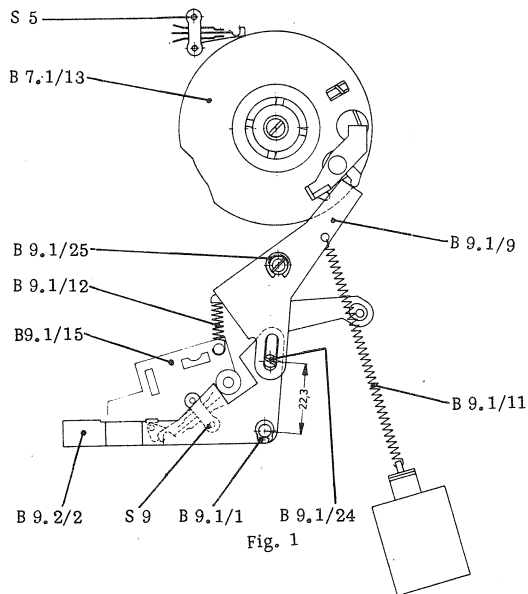
Push the 3-armed lever B 9.1/9 and two-armed lever B 9.1/10 together onto the axis B 9.1/8. Lever B 8.1/15 must be pushed to one side and then inserted in the elongated hole of the slider U-H B 5.1/9 together with lug. The lever must contact the slider without strain.

The elongated hole of the lever arm of lever B 9.1/9 must engage trunnion of switch B 6.1/2.

Insert c-clip B 9.1/25 in axis B 9.1/8.

Hook spring B 9.1/13 in.

Push cam B 7.1/6 on and engage it in cam B 7.1/5.



Push coupling B 7.1/13 in position and engage it in cam B 7.1/6. Push spring B 7.1/9, washer B 7.1/10, gear B 7.1/8 and washer B 7.1/20 in position and secure them with c-clip B 7.1/18.

When gear is placed in position ensure that coupling lever of B 7.1/13 engages in inner gear rim.

Connect switch lever B 9.1/2 with lever B 9.1/9. Insert the screw B 9.1/24 into the elongated hole from below. Insert the switch lever into the bearing trunnion of guide B 9.1/15 and secure it with Seeger ring B 9.1/1. Screw bracket B 9.1/4 with screw to guide.

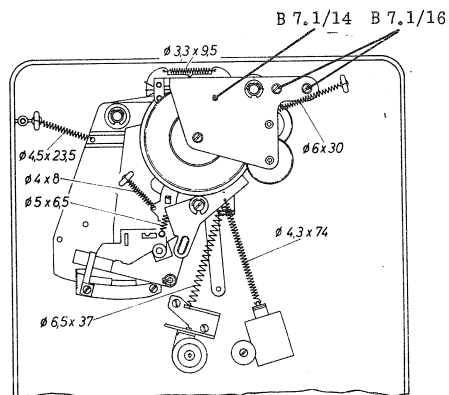
Check easy movement of levers and function of micro switch S 9.

Hook springs B 9.1/11 and B 9.1/12 in.

Place plate B 7.1/14 in position and secure it with two screws B 7.1/16.

Ensure:

1. correct engagement of micro switches S 5 and S 6
2. sufficient play between teeth of motor worm and gear B 7.1/12 and gears B 7.1/8 and B 7.1/15.





Justierung Diawechselung	adjusting the slide changing dev.	E 1
Justierung Mitnehmer	adjusting the fork	E 3
Justierung Projektionslampe	adjusting the projection lamp	E 4
Justierung Autofocus-Einrichtung	adjusting the Autofocusing device	E 5

Adjustment of the magazine tub

Release screws B 1.1/12 and push adjustment ledge 031-049.001-000 W9 on the magazine tub B 1.1/3 between the wall of the housing and the magazine guide from the rear.

Lightly press the magazine tub against the adjustment ledge and tighten both fixing screws. It must be possible to pull out the adjustment bar smoothly. Adjustment procedure can be neglected with angularly milled out magazine guides.

Adjustment of the slide changing device

Remove upper part B 1.1/5.

Insert mains plug and switch on main switch.

Pull out fork B 5.1/2 and insert the test magazine 031-049.001-000 W33 up to about slide compartment 15. Slowly release fork so that it can be pulled back into instrument. Push slider B 1.1/2 for slide change forward on the side of the instrument and briefly, before the fork is fully moved out,

switch off the main switch B 10.1/13.

As it stops the magazine must have been advanced through 1 step and the fork must have been completely moved out. If necessary turn the ventilator wheel manually until this magazine position is reached.

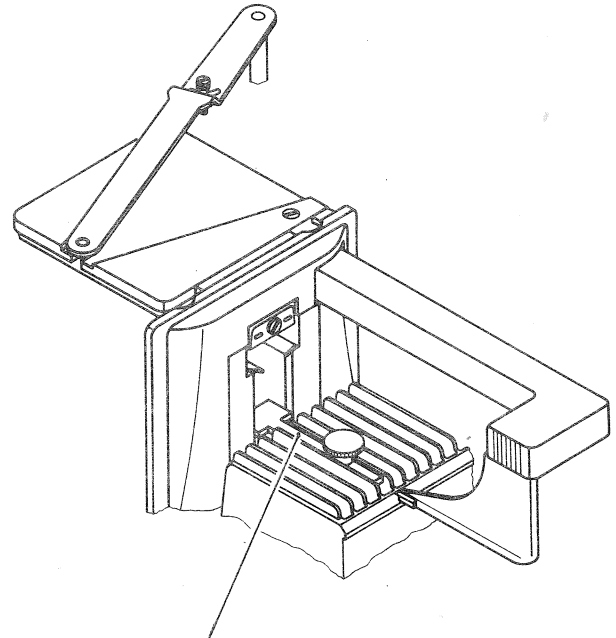
The magazine must not have longitudinal play.

If the magazine is not locked, the switch operation must be repeated, or the ventilator wheel turned to move the gear until the magazine is locked.

Insert the test gauge 031-049.001-000 W21 horizontally in the magazine compartment, which is aligned to the centre of the gate. The lettered side must point towards the slide entry slot of the gate.

The slide entry slot must be in line with the width of the gauge, see fig.

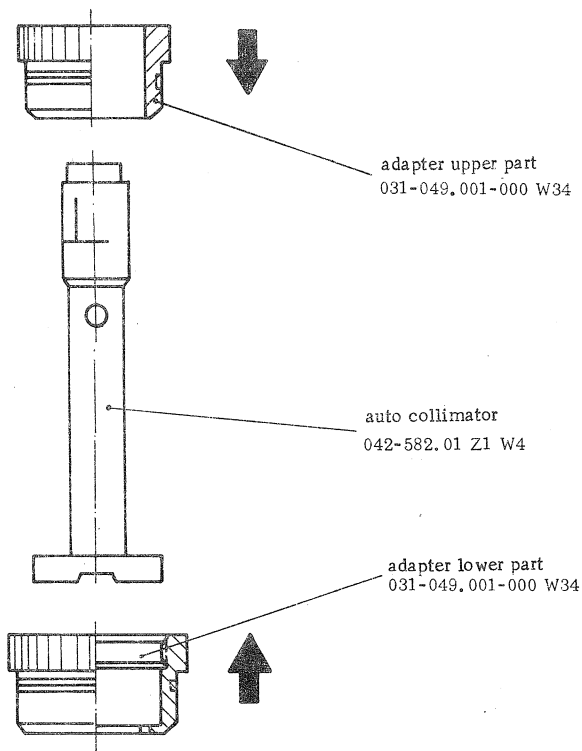
If it is laterally offset, release the two fixing screws B 6.1/25 and align the gate.



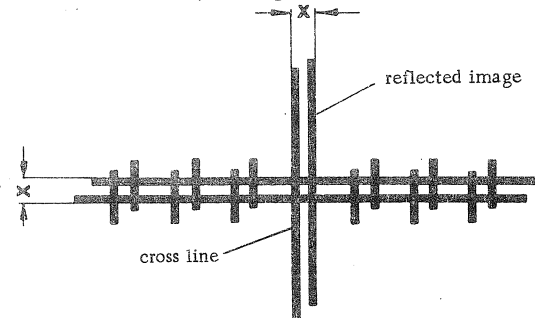
test gauge
031-049.001-000 W21

Fig. 1

Unscrew lens and lens tube from the projector. Screw the holder 031-049.001-000 W34 onto the autocollimator, see fig. and screw it into the lens carrier B 3.1/9.



Move the adjustment mirror 031-049.001-000 A10 into the optical path. Now adjust the slide changing device around the transverse and/or vertical axis until the reflected image is formed with the line image of the autocollimator within the tolerance limits, see fig.



X = maximum tolerance = 3 line latitudes

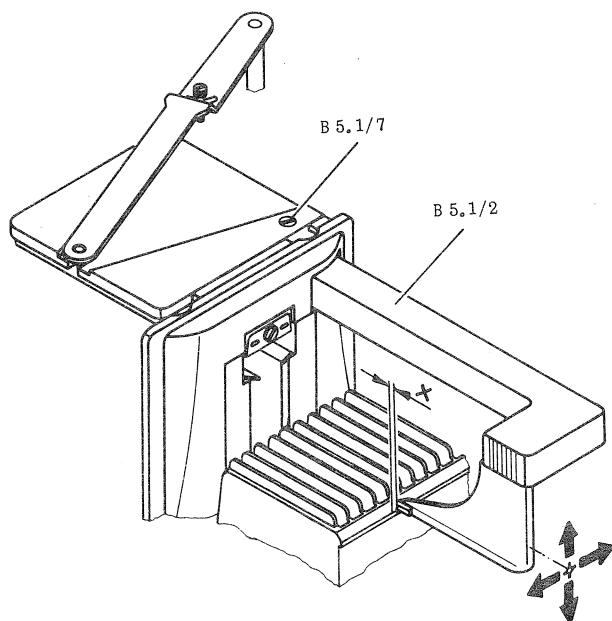
If the reflected image is offset release the fixing screw on the side of the motor and one of the two fixing screws on the gate for transverse adjustment and turn the slide changing device appropriately.

For vertical adjustment the screw B 6.1/31 must be released so that the spring B 6.1/7 can be adjusted. If the reflected image is strongly vertically offset, it may be necessary to insert a spacer under the slide mount on one side.

This testing is to be made with all 8 positions of the roller. If the positions of the compartments are not matching the mean value of the differences is to be adjusted.

Again check the position of the slide entry slot of the gate with the test gauge 031-049.001-000 W21.

If an adjustment has been carried out on the spring the pressure must again be checked with the contactor.



Adjusting the slide fork

The fork B 5.1/2 must be checked for

Alignment:

The fork must be in the centre of the magazine compartment.

Release screw B 5.1/17 and align the fork.

On entry, the fork must not be obstructed by the magazine.

Release outer screw B 5.1/17 and correct the vertical position of the fork with a spacer.

Length of travel:

At the moment of the magazine transport the transport face of the drive must be above the outer edge of the numbered bar of the magazine, see fig. (X).

After entry of the slide in the optical path the drive must move away from the slide through about 3mm.

After release of screw B 5.1/16 the path of the drive can be adjusted.

Centring the projection lamp

Check the tungsten halogen lamp.

In the projectors PRADOVIT C 1500 and CA 1500 only a 24V/150W tungsten halogen lamp must be used. Fixing the lamp mount: upper position, see fig. 4.

In projectors PRADOVIT C 2500 and CA 2500 only a 24V/250W tungsten halogen lamp must be used. Fixing the lamp mount: lower position, see fig. 4.

Insert pinhole slide 031-049.275-000 in the optical path. The lamp filaments and the mirror image produced by the reflector become visible through the lens cap when on the lens or on a sheet of paper held in front of the lens.

The two images of the filament must match in an upright position with very narrow separation.

Readjustment: Turn screw (A): horizontal adjustment of the lamp filaments, see fig. 2.

Turn screw (B): vertical adjustment of the lamp filaments, see fig. 3.

The reflector image can be adjusted by bending the reflector mount. If it is impossible to make the images of the filaments match as shown below, the halogen lamp must be pulled out, turned 180° and installed.

Repeat the centering operation.

The illustration alongside shows the mutual position of the two images of the lamp filament when the lamp is correctly centred.



Fig. 1

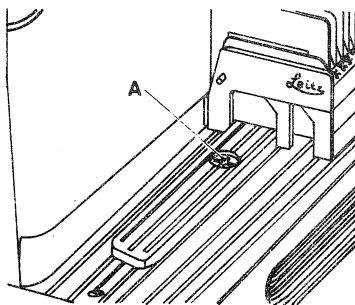


Fig. 2

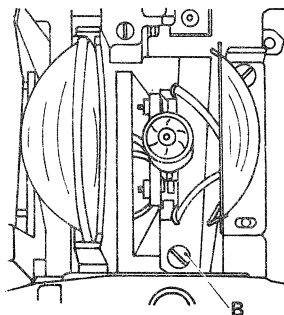


Fig. 3

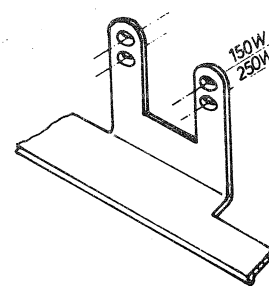


Fig. 4

Adjustment of the Autofocusing device

Tools required:

adjustment mirror	031-049.001-000 A10
adjustment plate	031-049.001-000 A11
LEITZ test slide, glassmounted	150-000.100-105
LEITZ test slide, glassless	150-000.100-173

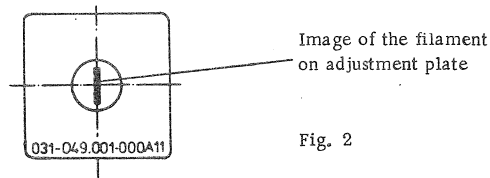


Fig. 2

Sequence of operations

1.0 Preparation

1.1 Switch on instrument

1.2 Insert remote control unit in St 2B

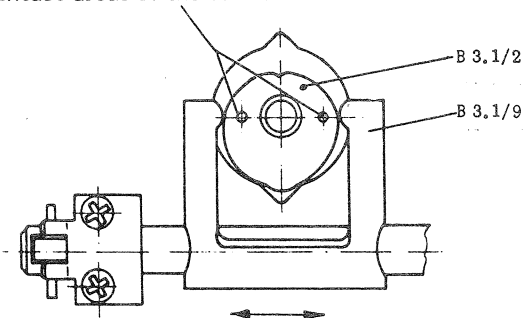
1.3 Set switch S 24 of remote control at .

1.4 Check the central position of the cam disc B 3.1/2:

1.4.1 With instruments up to state 1:

Check whether the focusing motor switches off in the central position of the cam disc B 3.1/2, see fig. 1

The indicator dots of the cam disc must be aligned with the contact areas of the fork of the lens carrier.



Central position of the cam disc B 3.1/2

Fig. 1

1.4.2 With instrument from state 2 onwards.

Move the cam disc B 3.1/2 into central position by operation S 23, see fig. 2.

1.5 Insert the test magazine in the projector and load it as follows:

1. adjustment plate	031-049.001-000 A11
2. adjustment mirror	031-049.001-000 A10
3. LEITZ test slide, glassmounted	150-000.100-105
4. LEITZ test slide, glassless	150-000.100-173

2.0 Adjustment procedure

2.1 Insert adjustment plate 031-049.001-000 A11 in the optical path (white surface in the direction of the projection). Release screw B 4.1/15 and rotate the Autofocus projective B 4.1/3 until the light filament of lamp B 4.1/13 forms an image in the centre of the adjustment plate. When the filament image is in an oblique position, erect it by rotating the lamp, see fig. 2.

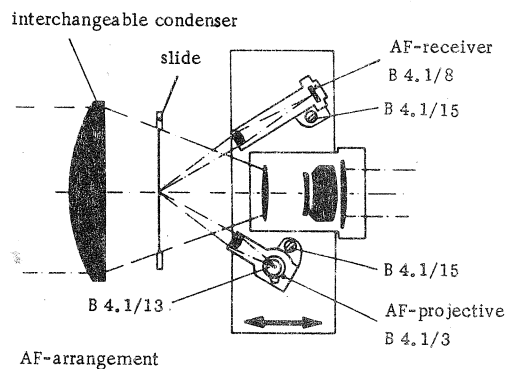
The found position of the lamp must be fixed to the upper contact spring.

After completion of the adjustment procedure retighten screw B 4.1/5.

2.2 Actuate slide change forward and move the adjustment mirror 031-049.001-000 A10 into the optical path (mirror surface in the direction of the projection). Turn switch from  to **A**.

Release screw B 4.1/15 and swivel the Autofocus receiver B 4.1/8 in the direction of the light filament image on the adjustment plate until the cam disc B 3.1/2 again stops in the central position of the fork B 3.1/9, see fig..

Tighten screw B 4.1/15.



2.3 Turn switch from **A** to .

Actuate focusing until lens bracket reaches end position.

Turn switch from  to **A**.

2.3.1 With instruments up to state 1:

After the completion of the automatic refocusing the cam disc B 3.1/2 must remain stationary. If the Autofocus mechanism oscillates repeatedly, R 4 must be replaced by a potentiometer 5k, see F 5.1, for further adjustment see 2.3.2.

2.3.2 With instruments from state 2 onwards:

Amplification must be set with the potentiometer R 4 so that the autofocus mechanism no longer oscillates. Check: oscillation is achieved by slightly tapping the lens carrier. The setting of R 4 is at its best when after being tapped the focusing motor runs up to 2-3 times.

2.4 Electronic adjustment for glassmounted slides

2.4.1 Actuate slide change forward and insert the glass-mounted LEITZ test slide in the optical path. Focus by turning the lens in the lens mount.

2.4.2 Actuate slide change forward and insert the glassless LEITZ test slide in the optical path. Readjust potentiometer R 3 until the best possible (not optimum) sharpness is obtained.

2.4.3 Now reintroduce the glass-mounted slide in the optical path. Check sharpness and if necessary readjust with the lens. Now repeat sharpness correction with the glassless slide by repeated readjustment of R 3.

Carry out these balancing procedures alternately until optimum sharpness is obtained.

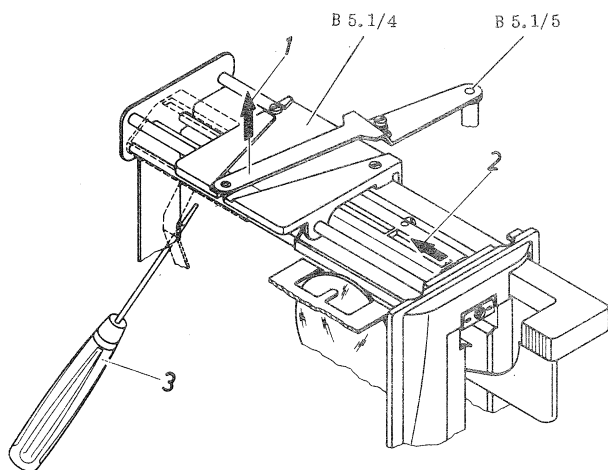
2.4.4 If the adjustment possibility of potentiometer R 3 is not sufficient,

- a 22k can be soldered instead of R 1 (only for instrument up to state 3)
 - the connections 1 and 3 of this adjustment instructions must be rechecked and eventually repeated.
- The adjustments from 2.2 of this adjustment instructions must be rechecked and eventually repeated.

2.5 Fixing of the found potentiometer positions by means of lacque or adhesive is not permitted.



Diatransportstörung	malfunction of slide changing	F 1
Autofocuseinrichtung	Autofocusing device	F 5
Fehlersuche und Reparatur	trouble shooting and repair	F 7
Fehlersuche Überblendung	trouble shooting dissolve equipment	F 14



Malfunction:

Malfunction of slide changing

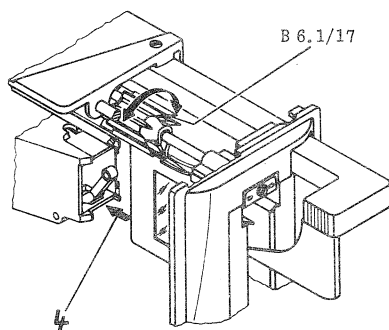
Cause

Slide is jammed in the slide changing device.

Executing repair

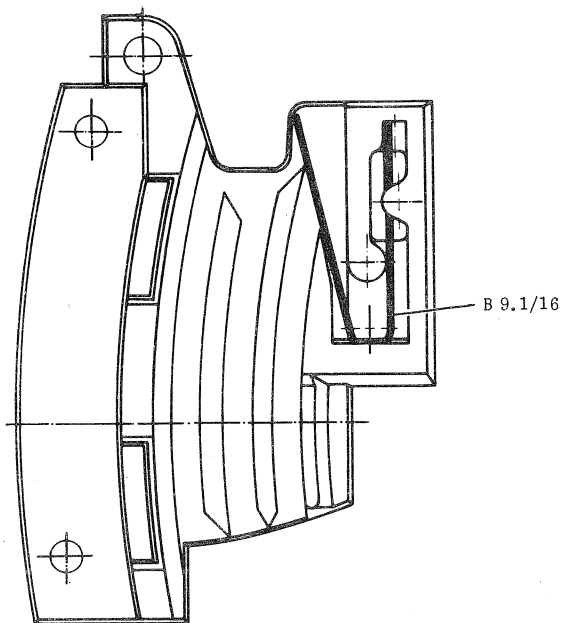
Remove upper part B 1.1/5.

Lift lever B 5.1/5 out of its guide B 5.1/4, see fig. (1), push slider B 5.1/6 into its rear end position, see fig. (2) and immobilize it there with a tool, see fig. (3)



Grip the slide with forceps from the top past the spring and push it against the stop, see fig. (4), do not bent spring. Move the slide into the empty slider channel by rotating the upper roller B 6.1/17.

Release slider block, tool (3), permit the slide to be slowly pushed out, hook lever B 5.1/5 into its guide B 5.1/4.

Malfunction:

Magazine fails to be transported when slide change forward or backward is actuated (malfunction of transport or failure to engage).

Cause

The spring B 9.1/16 031-049.051-009 is broken off.

Executing repair

Unscrew the 4 screws on the base plate. Unhook the spring B 9.1/12 from the guide B 9.1/15. Unscrew the two screws B 9.1/20 on the guide B 9.1/15, remove the bracket B 9.1/4, take out the switch to the slide and turn it round. With instruments that are equipped with the bracket B 9.2/20, this must be removed first.

If the defective spring is still there, dislodge it from the guide with a screwdriver and insert the new spring, see fig. Replace the guide and together with the holding bracket and screw it in position. Where applicable, insert bracket B 9.2/20 and screw it in position (broken spring parts should be removed from the projector). Hook spring B 9.1/12 in position, place the base plate in position and screw it home. Check functions of instrument.

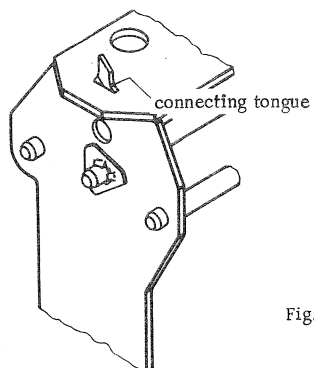


Fig. 1

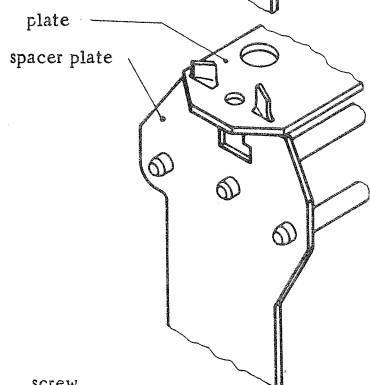


Fig. 2

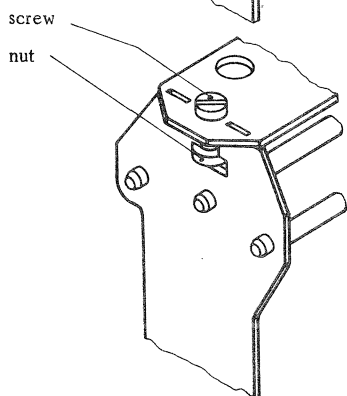


Fig. 3

Malfunction:

Malfunction of slide changing - slide changing device wobbles.

Cause:

Connecting tongue(s) broken off.

New parts:

1 distance plate

031-049.065-019

1 plate

031-049.066-000

1. Possibility of repair:

For slide changing devices with screw connection according to fig. 1

The spacer plate and plate must be exchanged for parts with two connecting tongues and slots respectively, see fig. 2

New parts:

1 screw M 3x8 DIN 84

700-713.163-000

1 nut M 3 DIN 546

702-464.163-000

2. Possibility of repair:

For slide changing devices with two connection according to fig. 2.

The spacer plate and the plate can be connected with a screw, see fig. 3.

Malfunction:

Malfunction of slide changing

Cause:

Lever B 8.1/15 has become unhooked from the guide of the slider B 5.1/9.

New parts:

1 bracket

031-049.843-005

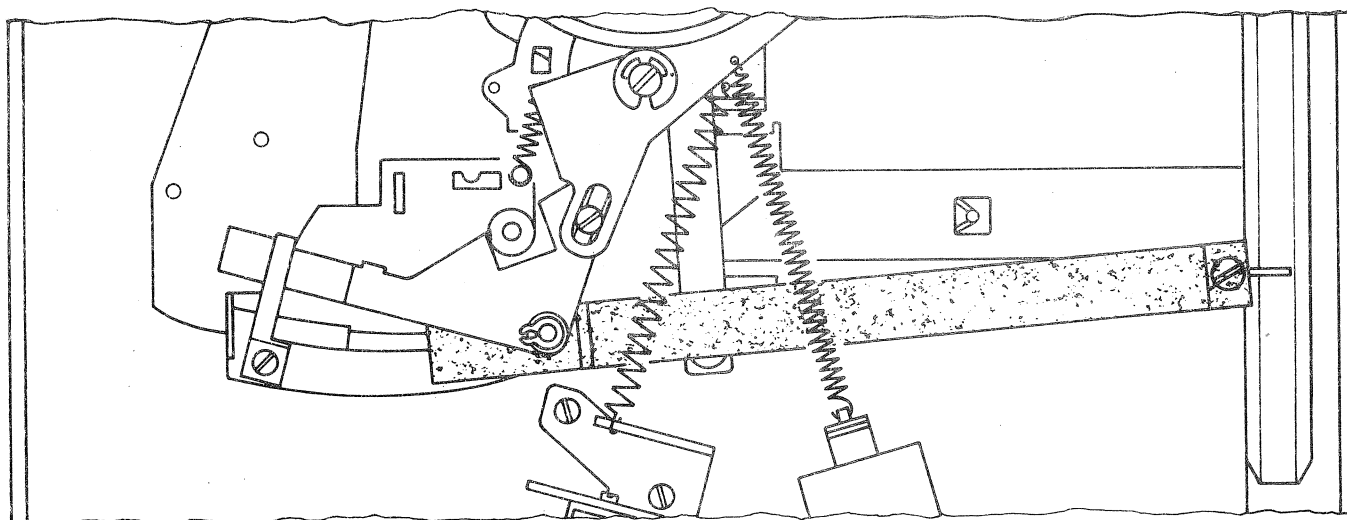
1 screw M 3x8 DIN 84

700-717.163-000

Executing repair:

Remove base plate. If the instrument has a voltage selector, screw out the fixing screw of the voltage selector. The milled side of the bracket must be hooked into the guide B 9.1/15. Push the bracket with the bore underneath the voltage selector and screw it together with the voltage selector, see fig.. With instruments without voltage selector the bracket is screwed onto the fixing column with the above-mentioned screw. Place the base plate in position and screw it on to the instrument.

Reinstall and screw on base plate.



Malfunction:

The autofocus device repeatedly (continuously) moves beyond the ideal focusing position.

Cause:

Amplification too high causing the autofocus device to read too sensitively.

Elimination:

Only true for instruments whose amplifier boards are equipped with resistor R 4 as shown in fig. 1.

Exchange resistors R 1 and R 4.

New parts:

1 resistor	830-494.000-000
22k-5-0207 DIN 44052	
1 potentiometer	847-698.000-000
P5k 1b HSF DIN 44149	

Parts become useless:

1 resistor R 1 47k
1 resistor R 4 1k or 330E

Executing repair:

Unsolder resistor R 1 and R 4 of the amplifier plate 031-049.074-000.

Solder in resistor 830-494.000-000 in the position of R 1.

Cut off one of the outer terminals of the potentiometer 847-698.000-000 and bend the outer terminal perpendicularly, see fig. 2.

Insert the remaining outer terminal of the potentiometer into the bore hole at R 4 on the amplifier board and solder it on. The rectangular terminal of the potentiometer is soldered on resistor R 2, see fig. 3.

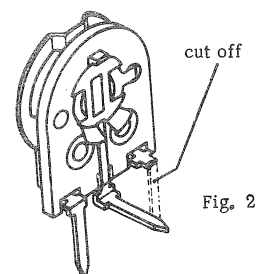
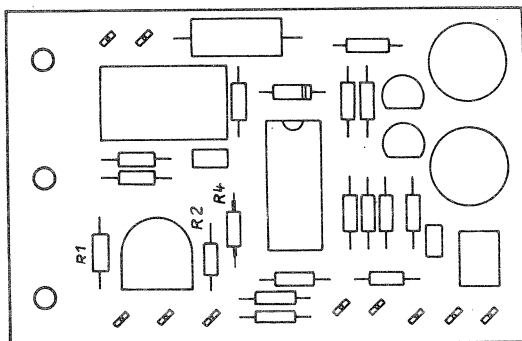
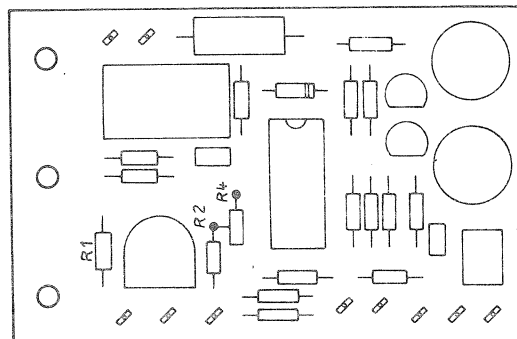


Fig. 2



031-049.074-000

Fig. 1



031-049.074-000

Fig. 3



Defect	Cause	Check and repair
Projector is switched on no function	Temperature switch B 3.1/14 is switched off	Check if: Louvres covered? Drive belt jumped off, defective? Ventilator blocked? Belt disc loose? Drive motor blocked, defective? Excess voltage in the current supply? The temperature switch must not be switched on again before the above mentioned positions have been checked. With excess voltage in the current supply the voltage selector B 10.1/12 should be set at the next higher voltage. Instruments without voltage selector should be set at economy switch with the selector B 10.1/14.
Slide change impossible	Current supply interrupted Fuse B 2.1/29 defective	See Description of function C 1.1 point 1.0 and 1.1. Renew fuse, check rectifier.
	Slider B 5.1/6-10 and/or fork B 5.1/2 are not in their starting position	Check slide changing device and gear.
	Magnet B 10.1/15 or spring B 9.1/11 defective	Renew defective part.
	Micro switch S 7 or S 8 defective	Check function of the switches. Switch reliability: min. 0,5mm, max. 1,0mm.
	C-clip B 7.1/17 jumped out, dog gear B 7.1/11 broken	Unscrew plate B7.1/14, replace defective or missing parts



Defect	Cause	Check and repair
Slide change impossible	Coupling B 7.1/13 defective	Check function of the coupling lever. It should easily catch in the gear rim B 7.1/8.
Self-acting slide change forward	Lever 3-arm B 9.1/9 blocked	Check function of levers B 9.1/2 and B 9.1/9.
Self-acting slide change reverse	Micro switch defective	Check function of the switches S 9, S 13 and S 22.
When slide changing button of instrument is operated slides are only changed reverse (remote control is connected)	Last switch function with remote control was: slide change reverse	Carry out a forward slide change with remote control.
Malfuction of slide changing	Entering slide fouls the transverse ribs of the guide plate B 6.1/20 spacer plate B 5.1/15 loose (lower joint lug broken off)	Check suspension of the guide plate. secure or renew spacer, see malfunction F 3.1
Slide is not ejected		<u>Taking the slide out of the slide changing device:</u> Remove upper part B 1.1/5. Lift lever B 5.1/5 out off guide B 5.1/14. Push slider B 5.1/6 into the rear end position and hold it there with an aid. Grip the slide with forceps from above past the spring B 6.1/7 and push it against the stop (do not bend spring). Rotate upper roller B 6.1/17 and thereby move the slide into the empty slider panel. Release slider lock B 5.1/6 (aid), permit the slide to be slowly pushed out. Hock lever B 5.1/5 back into guide B 5.1/14.

Defect	Cause	Check and repair
Slide is not ejected	Slide guides of upper and Lower rollers B 6.1/17 and B 6.1/18 are not properly aligned	Remove slide changing device, take off distance plate B 5.1/15 and move badly aligned roller into correct pos. Check axial play of rollers: max. 0,5mm. If axial play of roller B 6.1/17 exceeds this an additional c-clip 704-785.000-000, 4 DIN 6799 must be inserted between slide changing device B 6.1/11 and c-clip B 6.1/29. If roller B 6.1/18 has excessive axial play a c-clip 704-785.000-000, 4 DIN 6799 must be inserted between gate and roller B 6.1/18. At the same time the position of the trip cam B 6.1/3 must be checked. A cam of the trip cam B 6.1/3 must be in the centre of the switch lever B 6.1/23.
	Spring B 6.1/5 unhooked on one side	Hook in spring.
	Ledge B 6.1/4 inserted side-reversed, as a result too little switch movement	Insert ledge in the correct position.
	Spring B 6.1/7 deformed	Remove and replace spring B 6.1/7 with guide sheets B 6.1/8 Check slide position and evenness of image sharpness.
Projected slide is not ejected on the side of its empty compartment	Magazine transport and roller rotation move in opposite directions	Check function of transport lever B 9.1/14. Lever must move freely (if necessary bent and deburr it).
During ejection slide pushes against interch. condenser	Interchangeable condenser inserted reversed	Correctly insert interchangeable condenser: Plane surface or ground surface must point in direction of the projection screen.



Defect	Cause	Check and repair
During projection slide slowly drifts away sideways	Pressure of spring B 6.1/7 is too weak	Insert a plastic-mounted LEITZ test slide in the beam and check lift-off force of spring B 6.1/7 with contactor. Rated value 0,5-0,6N (50-60g). Bend the spring. The position of the spring must remain parallel to the guide axis. Check slide position and evenness of image sharpness.
Slide tilts shortly after the diaphragm opens	Lift of fork is too short	At the switching moment of magazine transport the transport face of the fork B 5.1/2 must be above the outer edge of the numbered ledge of the magazine. After screw B 5.1/16 has been released the travel of the fork can be adjusted.
Slide is not pushed into magazine compartment far enough	Sliders B 5.1/6,8,9,10 are too far back	Bend lever B 8.1/15 The lever must contact the slider B 5.1/9 without pretension. Check central position of slider plates between the recess of the guide plates B 6.1/8 and the gate B 6.1/15.
Fork B 5.1/2 sticks to the magazine during entry	Fork B 5.1/2 is too low	Release outer fork fastening B 5.1/17 (note nut B 5.1/19) and correct vertical position of fork with spacers.
Fork B 5.1/2 pushes against sheets B 6.1/8 during entry.	Fork B 5.12/2 out of adjustment	Fork must be in the centre of the magazine compartment. Release inner screw B 5.1/17 and align the fork.
	Gate B 6.1/15 disadjusted	Check position of gate relative to magazine with test magazine 031-049.001-000 W33 and test gauge 031-049.001-000 W21 according to Maintenance instructions E 1.1 "Adjustment of slide changing device"
	Guide sheets B 6.1/8 separate unevenly during entry of slide	Check spring for even pressure and bend it. Check movement of guide sheets.



Defect	Cause	Check and repair
Diaphragm does not close in Autofocus-instruments	Right-hand diaphr. B 8.1/3 was bent by holder 4.1/3	Adjust diaphragm, file contact surface of holder and check autofocus adjustment according to Maintenance instructions E 5.1.
Jerkily movement of magazine during transport	Drive axis B 9.1/17 has too much play	Play of axis bearing has to be reduced at side of transport wheel by addition of angle 031-049.021-997.
With strong vertical oblique projection the magazine is not retained in end position	Spring of lever B 8.1/5 too weak	Install new lever with 3 springs.
Magazine jams during pushing through magazine guide	Magazine tub B 1.1/3 disadjusted	Check and adjust magazine tub with adjustment ledge 031-049.001-000 W26 according to Maintenance instructions E 1.1 "Adjusting the magazine tub"
	Upper part B 1.1/5 bent	Bend rear edge on gate recess of upper part towards the inside.
During pushing magazine through the magazine guide slides stick in the area of the gate	Sliders B 5.1/6,8,9,10 protrude too far	Bend lever B 8.1/15. Lever must contact the slider B 5.1/9 without pretension. Check central position of slider plates between the recess of guide sheets B 6.1/8 and gate B 5.1/11.
Ventilator too excessive	Calotte bearing 3.1/1 loose	Give springs B 3.1/8 more pretension by bending them.
Rough, grinding running noise	Drive worm of motor B 10.1/4 has too little play and is not lubricated	Increase play between motor worm and gear B 7.1/12 and lubricate with lubricant 410.



Defect	Cause	Check and repair
Excessive noise during slide change	Drive axis B 9.1/17 has too much play	The play of shaft bearing has to be reduced on the side of transport wheel by addition of angle 031-049.021-997.
Excessive noise during slide change	Spring B 8.1/11 scratches at base B 1.1/4	Lubricate spring with lubricant 410 at point of contact.
	Sliding without lubricant	All spring suspensions (except on magnet B 10.1/15, diaphragm lever B 8.1/8 and on guide B 9.1/15) must be sufficiently lubricated. The elongated holes in lever B 8.1/16 and in lever B 9.1/9 must be filled with lubricant.
Remote focusing is not possible	Electrical control and transmission parts defective	Switch S 24 to  position. Check the focusing motor B 10.1/5, S 10, S 23 and S 24 including electrical connections.
	Mechanical transmission parts defective	Check gears of focusing motor B 10.1/5, cam disc B 3.1/2, fork of lens carrier B 3.1/9 or B 4.1/1 and replace defective parts.
Remote focusing moves too slowly	Gear wheels and/or cam discs B 3.1/2 are meshed too closely	Ensure sufficient backlash of gear wheels. The drive gear should have an axial play of 0,3mm. Possibility of adjustment is provided by adjustment of the securing ring.
	Cam disc B 3.1/2 moves too strong	Remachine shaft of cam disc
	Lens carrier B 3.1/9 or B 4.1/1 moves too strong	Check bearings of guide rod. Deburr base on bearing and sliding surfaces and lubricate it with lubricant 410. Check play between cam disc B 3.1/2 and fork of lens carrier B 3.1/9 or B 4.1/1, if necessary remachine fork.

Defect	Cause	Check and repair
Remote focusing operates only after delay	Excessive play between cam disc B 3.1/2 and fork of lens carrier B 3.1/9 or B 4.1/1	Renew cam disc B 3.1/2.
Autofocus does not work	AF-circuit not closed	Switch S 24 on the remote control unit to position A . If the remote control unit is not connected the short circuit plug B 2.1/8 (St 2 A2) must be inserted in the socket for the remote control unit.
	Mechanical transmission parts defective	Check gears of focusing motor B 10.1/5, cam disc B 3.1/2, fork of lens carrier B 3.1/9 or B 4.1/1, and renew defective parts.
Focusing motor runs continously	Bulb B 4.1/13 defective or filament in bulb is bent	Replace and adjust bulb, see Maintenance instructions E 4.1 and E 5.1.
	AF mechanism disadjusted	See Maintenance instructions E 5.1
Focusing motor runs continously without a magazine inserted in the instrument	Poor soldering connections of light receiver B 4.1/12 on the AF amplifier B 4.1/2	Re-solder soldering points 1, 2 and 3 of AF amplifier.
	Switch S 10 is bridged	Check functions of lever B 9.1/3 and switch S 10.
Focusing motor runs continously with stronly arched slides	AF adjustment is not adjusted for centration	See Maintenance instructions E 5.1.
Faulty switching	Spring B 9.1/11 occasionally jams in the core	Unhook spring B 9.1/11 and pull the core out of the magnet. Slightly widen the bore in the magnet core, or slightly file the point of the magnet core off, so that eye of the tension spring can no longer jam. Lightly lubricate the hooking-in point of the spring on the magnet core.



Malfunction	Cause	Repair procedure
Phase lamp on D.U. 24 illuminates	Phase unbalance	Turn power switch of a projector 180°
Projection lamp of one projector flickers		Insert both connection leads of the projectors in a multiple socket
		Exchange strand ws br sw with strand ws bl at points 5 and 6 on printed circuit board of 10-pin jack
During dissolving (dim) projection lamp briefly flashes completely	Triac defective	Replace triac in projector
	Rectifier in projector too weak	Replace rectifier in projector
	Hand control on D.U. 24 A defective	Replace IC 1 (Mc 14016) in hand control D.U. 24 A
		Replace potentiometer 10k R11 in hand control D.U. 24 A



Mikroschalter S 14	micro switch S 14	G 1
Umbausatz Kodak	conversion set Kodak	G 3
Umbausatz D.U.-24	conversion set D.U.-24	G 5

Supplementary installation of micro switch S 14

From state 6 onwards all PRADOVIT C/CA projectors are equipped with the micro switch S 14, which after the magazine has been removed triggers an additional switch step for the ejection of a slide that has remained in the slide changing device. All instruments up to and including state 5 can be modified to include function.

New parts:

1 micro switch	302-023.045-008
2 washers 015-121.038-425	706-121.163-000
1 spring ring 3 DIN7980	704-910.163-000
1 screw M 3x16 DIN 7985	707-956.163-000
1 pin 3x8 DIN 7343	705-223.163-000
1 strand AWG 24, 450mm	
1 strand AWG 24, 150mm	

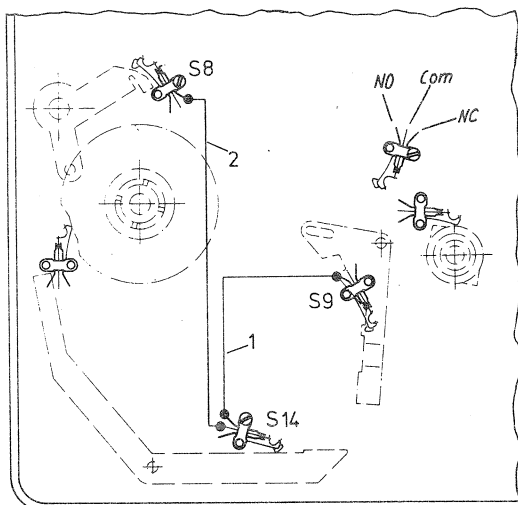


Fig. 1

Work procedure

Remove base plate and take out the screw on micro switch S 10. Place the micro switch S 14 302-023.045-008 above the micro switch S 10 and screw it in position with the screw M 3x16. The spring ring is placed under the screw head, followed by two washers, see fig. 2.

The two micro switches are additionally connected with the pin 3x8 DIN 7343.

Solder strand No. 2 to the free soldering point of the micro switch S 8 and take it to the micro switch S 14 with the cable form. There the strand is soldered to the central soldering point, see fig. 1.

The strand No. 1 is soldered to the outer soldering point of the micro switch S 9 to the cable already there. Take the strand No. 1 to the micro switch S 14 on the cable form and solder it to the outer soldering point (next to the screw), see fig. 1. Replace the base plate and screw it in position. Check function of instrument.

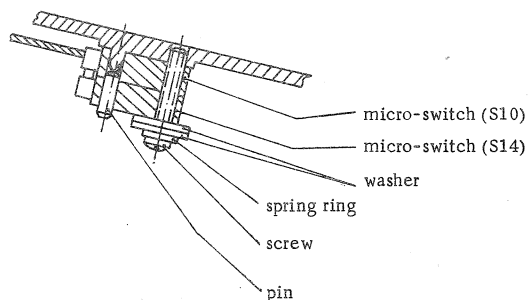
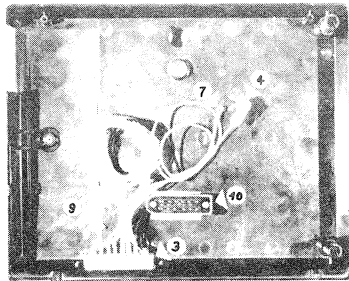
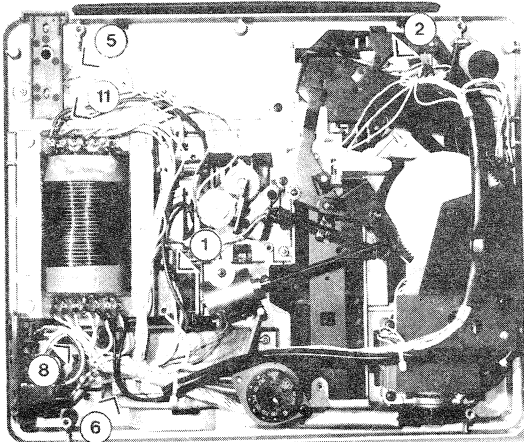


Fig. 2



conversion set 031-049.210-000



New part:

1 conversion set, compl. 37 958

031-049.210-000

part becomes useless

1 base plate

031-049.030-011

Work procedure

Remove base plate 031-049.030-011.

Remove connection between transformer point 13/14 (PRADOVIT C/CA 2500, S/SAF, A) Pkt 13 (PRADOVIT C/CA 1500 220V), Pkt 12 (PRADOVIT C/CA 1500 110-240V) and R 8.

Cut off strand ws br sw at terminal (1) (single terminal) of series resistor R 8 and unsolder it from point 13/14-13-12 at the transformer.

Pull off single terminal from R 8.

Interrupt connections (2) to S 14.

Unsolder both strands from micro switch S 14 (on instruments up to state 5 the micro switch S 14 must be installed according to Modifications G 1.1. However the wiring with S 8 and S 9 becomes needless). Cut and insulate them at the next branch of the cable conduit.

Installation of the plug connection St 5B (3)

Strand of St 5 B:

cont. colour

- | | | |
|-----|----------|---|
| a 3 | ws br sw | slip double terminal (4) on vacant plug connection of R 8 (1) (insulating sleeve towards magnet) and slip single terminal pulled off under 2.1, on vacant part of plug. |
| a 4 | ws gn | to be soldered to transformer point 13-14. |
| b 4 | ws rt gn | to be soldered to COM of S 13 (5). |
| b 1 | ws br ge | to be soldered to NO of S 13 (5). |
| b 3 | ws rt sw | to be soldered to COM of S 4 (11). |
| b 5 | ws bl | to be soldered to COM of S 14 (2). |
| b 6 | ws br | to be soldered to NO of S 14 (2). |
| a 6 | gn ge | loosen ground screw (6) and screw on terminal of ground wire (7). |
| a 1 | ws br bl | to be pulled through base plate near cable form (8). |
| a 5 | ws ge | to be pulled through base plate near cable form (8). |

Fasten all strands installed so far with the enclosed cable clips (9) to the cable form. Install base plate, invert instrument and take off upper part.

Solder strand ws ge pulled through from lever lower part to point 6 of supply unit 031-049.033-000 and solder strand ws br bl to point 12 of supply unit.

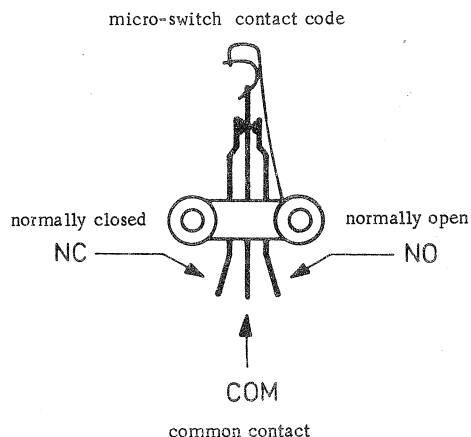
Put on upper part again.

Check functions of instrument.

Plug short circuit plug St 5 A (10) into St 5 B (3) and check all functions of the instrument.

Take the name plate with the same type number to be found on the base plate from the name plate set. Remove the protective paper from the name plate, activate the adhesive surface with acetone and stick it to the base plate with the 12-polar connector.

If the projector is to be used without control unit, the short circuit plug St 5 A must be plugged into St 5 B.



New part:

1 Conversion set

031-049.207-000

Work procedure:

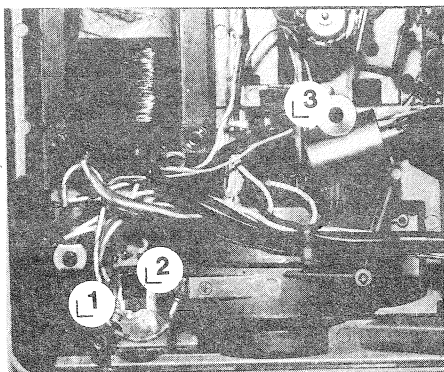
Remove upper part, unscrew terminal ledge, screw terminal ledge onto 10-pin socket. (In case of projectors manufactured in the first series, threaded holes must be bored). Solder MKH capacitor onto both fuses (next to rectifier).

Solder strand ws rt sw from St 5 B/2 onto supply unit point 2.

Solder strand ws rt gn from St 5 B/3 onto supply unit point 3.

Solder strand ws bl br from St 5 B/5 onto supply unit point 12.

Solder strand ws gn from St 5 B/6 onto supply unit point 9.



1 Choke

2 Triac

3 Cable shoe

4 10-pin socket

5 MKH capacitor

Remove screw of cover (near supply unit).

Turn over projector, unscrew base plate and plug carrier.

Press choke between threaded bolts (make sure that cable of choke is not under plug, otherwise plug will be lifted).

Screw-on plug carrier.

Apply heat absorbing paste to attachment part of triac and screw on.

Cut-off strand ws br sw of transformer from resistor R 8 (terminal), insulate it and solder onto soldering ledge (triac A 1).

Remove terminal with strand from R 8.

Place terminal with strand onto intermediate piece of flat plug than place flat plug onto R 8.

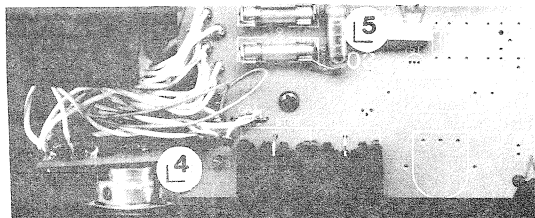
Place strand ws rt bl (ws bl) and strand ws ge sw (ws rt) through base.

Screw on base plate, turn over projector, fix cover with nut M 3.

Solder strand ws rt bl (sw bl) from R 8 onto St 5 B (printed circuit board point A 2).

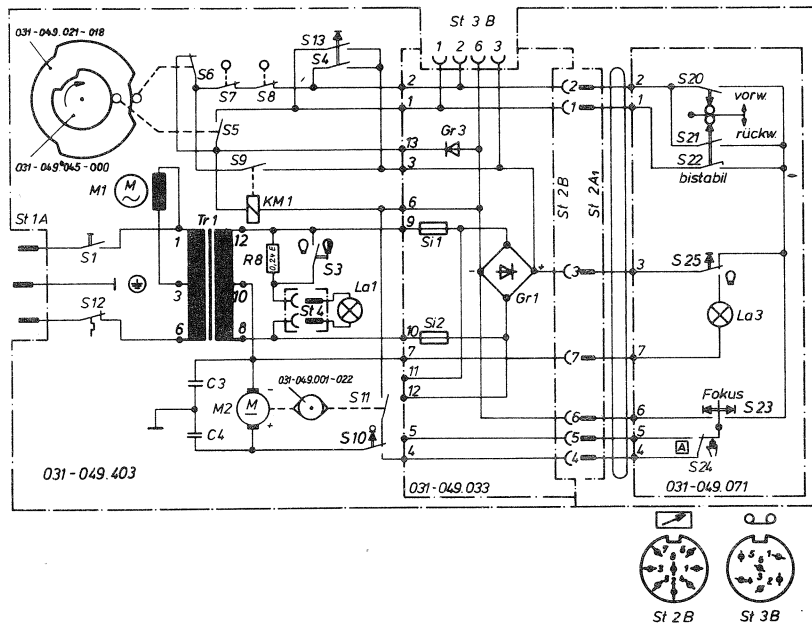
Solder strand ws ge sw (ws rt) from gate of triac onto St 5 B/4.

Screw-on upper part, Apply D.U.-24 label, Check functions.





C 1500	220V/50Hz		H 1
C 1500	110-240V/50-60Hz		H 2
CA 1500	220V/50Hz		H 3
CA 1500	110-240V/50-60Hz		H 4
C 2500	220V/50Hz		H 5
CA 2500	110-240V/50-60Hz		H 6
AF-Verstärker AF-amplifier		AF-amplificateur AF-amplificador	H 7
C 1500/2500 für Kodak C 1500/2500 for Kodak		C 1500/2500 pour Kodak C 1500/2500 para Kodak	H 8
CA 1500/2500 für Kodak CA 1500-2500 for Kodak		CA 1500/2500 pour Kodak CA 1500-2500 para Kodak	H 9
CA 2500 für D.U.-24 (10 polig) CA 2500 for D.U.-24 (10-pin)		CA 2500 pour D.U.-24 (à 10 poles) CA 2500 para D.U.-24 (de 10 polos)	H 10
PRADOVIT A			H 11



Projektor:

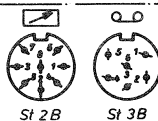
- S 1 Netzschalter
- S 3 Sparschaltung
- S 4 Diawechsel, vorwärts
- S 5 Diawechsel, rückwärts
- S 6 Impulssperre 1
- S 7 Impulssperre 2
- S 8 Impulssperre 3
- S 9 Selbsthaltung
- S 10 Focussierung
- S 11 Mittelstellung
- S 12 Wärmeschutzschalter
- S 13 Diawechsel, rückwärts
- Fernbedienung:
- S 20 Diawechsel, vorwärts
- S 21 Diawechsel, rückwärts
- S 22 Diawechsel, rückwärts
- S 23 Fernfocussierung
- S 24 Umschaltung: Autofocus-Fernfocussierung
- S 25 Lichtzeiger
- La 1 Projektionslampe
- La 3 Lichtzeigerlampe
- St 1A Netzstecker
- St 2A₁ Stecker für Fernbedienung
- St 2B Buchse für Fernbedienung
- St 3B Buchse für Tonbandanschluß

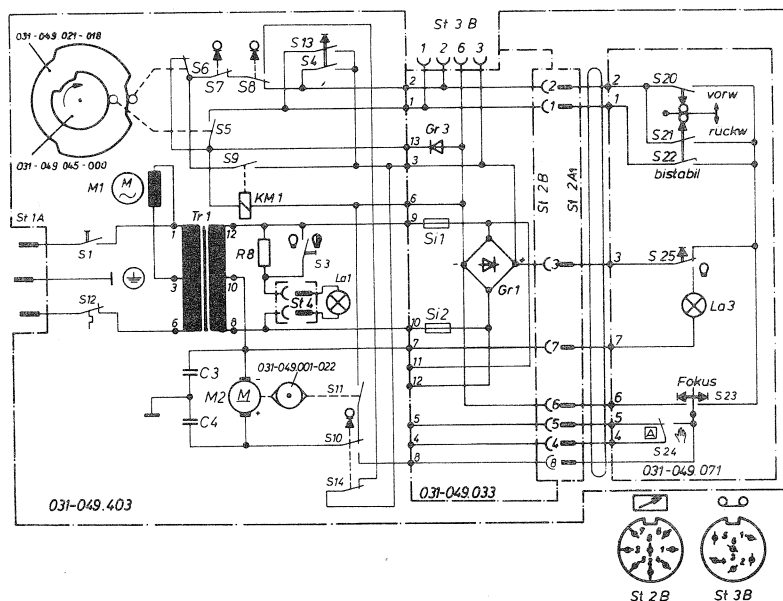
projector:

- power switch
- economy switch
- slide changing forward
- slide changing reverse
- impuls stop 1
- impuls stop 2
- impuls stop 3
- self holding contact
- focusing
- middle setting
- thermo switch
- slide changing reverse
- remote control:
- slide changing, forward
- slide changing, reverse
- slide changing, reverse
- remote focusing
- autofocus-remote focusing
- light pointer
- projection lamp
- lamp for light pointer
- power-supply plug
- plug for remote control
- socket for remote control
- socket for tape recorder

S 22 zu S 21 vorausseilend
Rückstellung durch S 20

S 22 before S 21
reverse by S 20





Projektor:

- S 1 Netzschalter
- S 2 Spannungswahlschalter
- S 3 Sparschaltung
- S 4 Diawechsel, vorwärts
- S 5 Diawechsel, rückwärts
- S 6 Impulssperre 1
- S 7 Impulssperre 2
- S 8 Impulssperre 3-automat. Diaausstoß
- S 9 Selbsthaltung
- S 10 Fokussierung
- S 11 Mittelstellung
- S 12 Wärmeschutzschalter
- S 13 Diawechsel, rückwärts
- S 14 automatischer Diaausstoß

- S 20 Fernbedienung
- S 21 Diawechsel, vorwärts
- S 22 Diawechsel, rückwärts
- S 23 Fernfokussierung
- S 24 Umschaltung:
- S 25 Autofocus-Fernfokussierung
- S 25 Lichtzeiger

- La 1 Projektionslampe
- La 2 Autofocuslampe
- La 3 Lichtzeigerlampe

- St 1 A Netzstecker
- St 2 A1 Stecker für Fernbedienung
- St 2 B Buchse für Fernbedienung
- St 2 A2 Kurzschlußstecker
- St 3 B Buchse für Tonbandanschluß

S 22 zu S 21 vorausellend
Rückstellung durch S 20

projector:

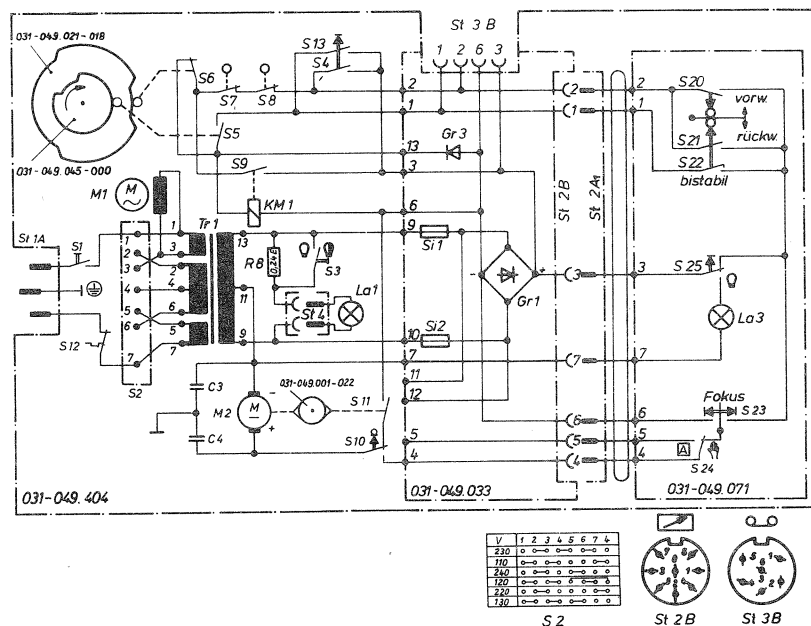
- S 1 power switch
- S 2 voltage selector
- S 3 economy switch
- S 4 slide changing forward
- S 5 slide changing reverse
- S 6 impuls stop 1
- S 7 impuls stop 2
- S 8 impuls stop 3-automatic slide ejection
- S 9 holding contact
- S 10 focusing
- S 11 middle setting
- S 12 thermo switch
- S 13 slide changing reverse
- S 14 automatic slide ejection

- S 20 remote control
- S 21 slide changing forward
- S 22 slide changing reverse
- S 23 remote focusing
- S 24 change-over switch:
- S 25 autofocus-remote focusing
- S 25 light pointer

- projection lamp
- lamp for autofocus
- lamp for light pointer

- power-supply plug
- plug for remote control
- socket for remote control
- short-circuit plug
- socket for tape recorder

S 22 before S 21
reverse by S 20



Projektor:

- S 1 Netzschalter
- S 2 Spannungswahlhalter
- S 3 Sparschaltung
- S 4 Diawechsel, vorwärts
- S 5 Diawechsel, rückwärts
- S 6 Impulssperre 1
- S 7 Impulssperre 2
- S 8 Impulssperre 3
- S 9 Selbsthaltung
- S 10 Focussierung
- S 11 Mittelstellung
- S 12 Wärmeschutzschalter
- S 13 Diawechsel, rückwärts

Fernbedienung:

- S 20 Diawechsel, vorwärts
- S 21 Diawechsel, rückwärts
- S 22 Diawechsel, rückwärts
- S 23 Fernfocussierung
- S 24 Umschaltung: Autofocus-Fernfocussierung
- S 25 Lichtzeiger

- La 1 Projektionslampe
- La 3 Lichtzeigerlampe
- St 1 A Netzstecker
- St 2 A₁ Stecker für Fernbedienung
- St 2 B Buchse für Fernbedienung
- St 3 B Buchse für Tonbandanschluß

projector:

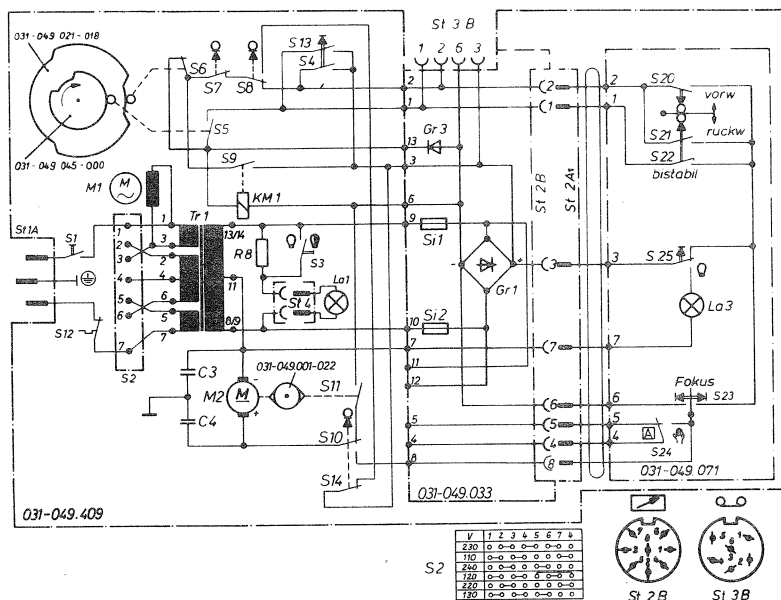
- power switch
- voltage selector
- economy switch
- slide changing, forward
- slide changing, reverse
- impuls stop 1
- impuls stop 2
- impuls stop 3
- self holding contact
- focusing
- middle setting
- thermo switch
- slide changing reverse

remote control:

- slide changing forward
- slide changing reverse
- slide changing reverse
- remote focusing
- change over switch: autofocus-remote focusing
- light pointer
- projection lamp
- lamp for light pointer
- power supply plug
- socket for remote control
- socket for tape recorder

S 22 zu S 21 vorausseilend
Rückstellung durch S 20

S 22 before S 21
reverse by S 20



Projektor:

- S 1 Netzschalter
- S 3 Sparschaltung
- S 4 Diawechsel, vorwärts
- S 5 Diawechsel, rückwärts
- S 6 Impulssperre 1
- S 7 Impulssperre 2
- S 8 Impulssperre 3-automat. Diaausstoß
- S 9 Selbsthaltung
- S 10 Focussierung
- S 11 Mittelstellung
- S 12 Wärmeschutzschalter
- S 13 Diawechsel, rückwärts
- S 14 automatischer Diaausstoß

Fernbedienung:

- S 20 Diawechsel, vorwärts
- S 21 Diawechsel, rückwärts
- S 22 Diawechsel, rückwärts
- S 23 Fernfocussierung
- S 24 Umschaltung:
- S 25 Autofocus-Fernfocussierung
- La 1 Projektionslampe
- La 2 Autofocuslampe
- La 3 Lichtzeigerlampe
- St 1 A Netzstecker
- St 2 A1 Stecker für Fernbedienung
- St 2 B Buchse für Fernbedienung
- St 2 A2 Kurzschlußstecker
- St 3 B Buchse für Tonbandanschluß

S 22 zu S 21 voraussendend
Rückstellung durch S 20

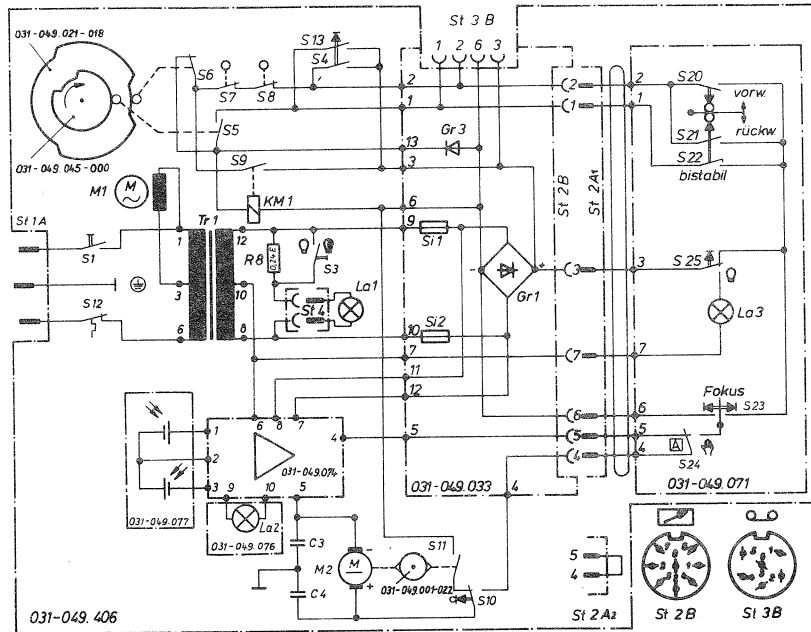
projector:

- power switch
- economy switch
- slide changing, forward
- slide changing, reverse
- impuls stop 1
- impuls stop 2
- impuls stop 3-automatic slide ejection
- holding contact
- focusing
- middle setting
- thermo switch
- slide changing, reverse
- automatic slide ejection

remote control:

- slide changing, forward
- slide changing, reverse
- slide changing, reverse
- remote focusing
- change over switch P:
- autofocus-remote focusing
- light pointer
- projection lamp
- lamp for autofocus
- lamp for light pointer
- power-supply plug
- plug for remote control
- socket for remote
- short-circuit plug
- socket for tape recorder

S 22 before S 21
reverse by S 20



Projektor:

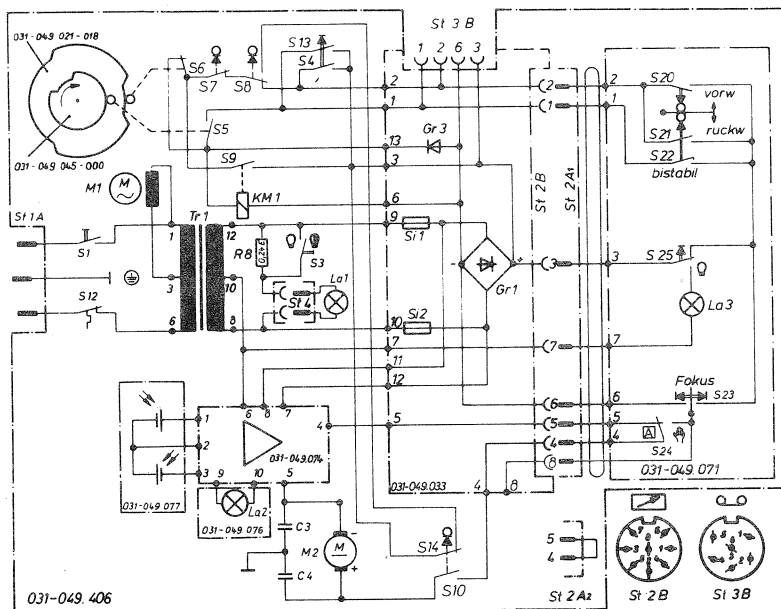
- S 1 Netzschalter
- S 3 Sparschaltung
- S 4 Diawechsel, vorwärts
- S 5 Diawechsel, rückwärts
- S 6 Impulsperre 1
- S 7 Impulsperre 2
- S 8 Impulsperre 3
- S 9 Selbsthaltung
- S 10 Focussierung
- S 11 Mittelstellung
- S 12 Wärmeschutzschalter
- S 13 Diawechsel, rückwärts
- Fernbedienung:
- S 20 Diawechsel, vorwärts
- S 21 Diawechsel, rückwärts
- S 22 Diawechsel, rückwärts
- S 23 Fernfocussierung
- S 24 Umschaltung:
- S 25 Autofocus-Fernfocussierung
- La 1 Projektionslampe
- La 2 Autofocuslampe
- La 3 Lichtzeigerlampe
- St 1 A Netzstecker
- St 2 A1 Stecker für Fernbedienung
- St 2 B Buchse für Fernbedienung
- St 2 A2 Kurzschlußstecker
- St 3 B Buchse für Tonbandanschluß

S 22 zu S 21 vorausellend
Rückstellung durch S 20

projector:

- power switch
- economy switch
- slide changing, forward
- slide changing, reverse
- impuls stop 1
- impuls stop 2
- impuls stop 3
- self holding contact
- focusing
- middle setting
- thermo switch
- slide changing reverse
- remote control:
- slide changing, forward
- slide changing, reverse
- slide changing, reverse
- remote focusing
- change over switch:
- autofocus-remote focusing
- light pointer
- projection lamp
- lamp for autofocus
- lamp for light pointer
- power-supply plug
- plug for remote control
- socket for remote
- short-circuit plug
- socket for tape recorder

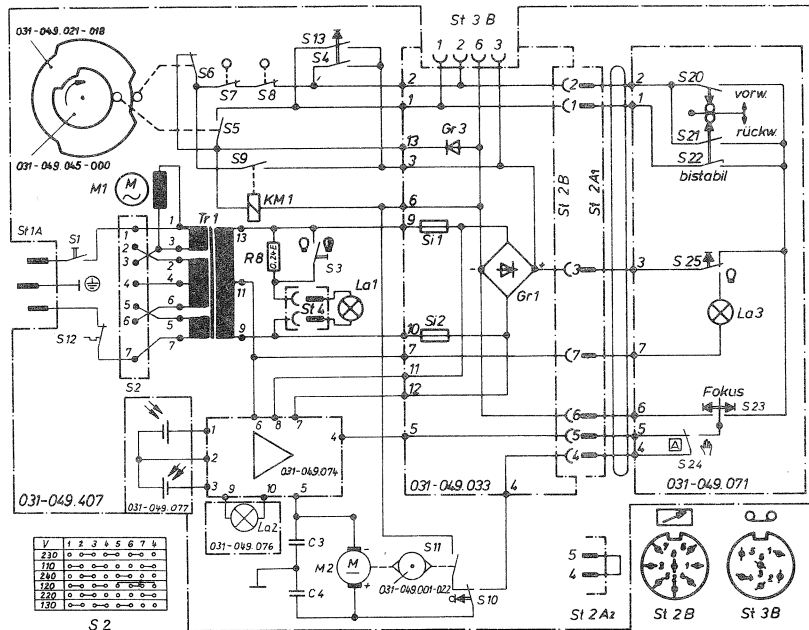
S 22 before S 21
reverse by S 20



Projektor:	projector:
S 1	Netzschalter
S 3	Sparschaltung
S 4	Diawechsel, vorwärts
S 5	Diawechsel, rückwärts
S 6	Impulslampe 1
S 7	Impulslampe 2
S 8	Impulslampe 3 - automat. Diaausstoß
S 9	Selbhaltung
S 10	Fokussierung
S 11	Mittelstellung
S 12	Wärmeschutzschalter
S 13	Diawechsel, rückwärts
S 14	Diawechsel, rückwärts
S 20	Diawechsel, vorwärts
S 21	Diawechsel, rückwärts
S 22	Diawechsel, rückwärts
S 23	Fernfokussierung
S 24	Umschaltung:
S 25	Autofokus-Fernfokussierung
La 1	Projektionslampe
La 2	Autofokuslampe
La 3	Lichtzeigerlampe
St 1 A	Netzstecker
St 2 A1	Stecker für Fernbedienung
St 2 B	Buchse für Fernbedienung
St 2 A2	Kurzschlußstecker
St 3 B	Buchse für Tonbandanschluß

S 22 zu S 21 voraussetzend
Rückstellung durch S 20

S 22 before S 21
reverse by S 20



Projektor:

- S 1 Netzschalter
- S 2 Spannungswahlschalter
- S 3 Sparschaltung
- S 4 Diawechsel, vorwärts
- S 5 Diawechsel, rückwärts
- S 6 Impulssperre 1
- S 7 Impulssperre 2
- S 8 Impulssperre 3
- S 9 Selbsthaltung
- S 10 Fokussierung
- S 11 Mittelstellung
- S 12 Wärmeschutzschalter
- S 13 Diawechsel, rückwärts

Fernbedienung:

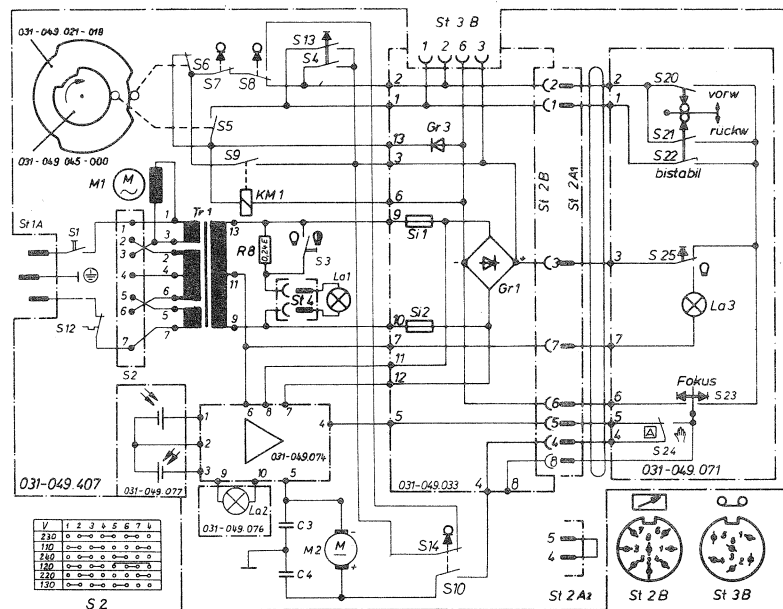
- S 20 Diawechsel, vorwärts
- S 21 Diawechsel, rückwärts
- S 22 Diawechsel, rückwärts
- S 23 Fernfokussierung
- S 24 Umschaltung: Autofocus-Fernfokussierung
- S 25 Lichtzeiger
- La 1 Projektionslampe
- La 2 Autofocuslampe
- La 3 Lichtzeigerlampe
- St 1 A Netzstecker
- St 2 A1 Stecker für Fernbedienung
- St 2 B Buchse für Fernbedienung
- St 2 A2 Kurzschlußstecker
- St 3 B Buchse für Tonbandanschluß

projector:

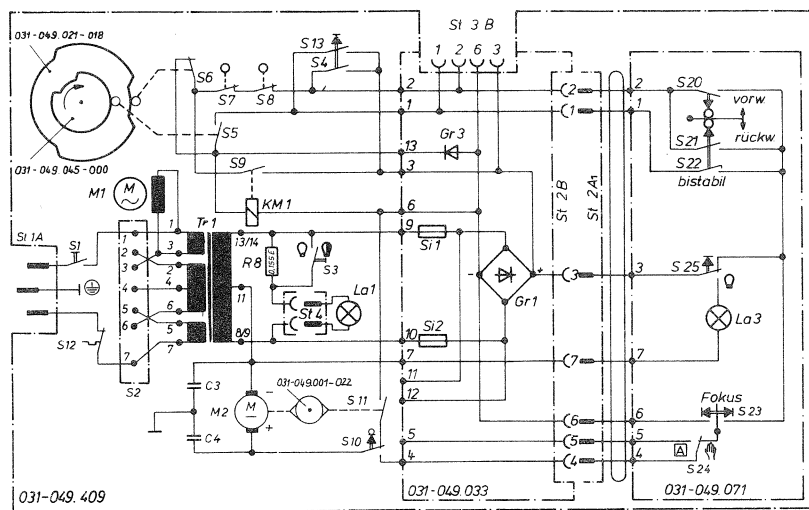
- power switch
- voltage selector
- economy switch
- slide changing forward
- slide changing reverse
- impuls stop 1
- impuls stop 2
- impuls stop 3
- self holding contact
- focusing
- middle setting
- thermo switch
- slide changing reverse
- remote control:
- slide changing forward
- slide changing reverse
- slide changing reverse
- remote focusing
- change-over switch:
- autofocus-remote focusing
- light pointer
- projection lamp
- lamp for autofocus
- lamp for light pointer
- power-supply plug
- plug for remote control
- socket for remote control
- short-circuit plug
- socket for tape recorder

S 22 zu S 21 vorausstellend
Rückstellung durch S 20

S 22 before S 21
reverse by S 20

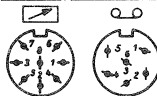


- | Projektor: | projector: |
|---|--|
| S 1 Netzschalter | power switch |
| S 2 Spannungswahlschalter | voltage selector |
| S 3 Sparschaltung | economy switch |
| S 4 Diawechsel, vorwärts | slide changing forward |
| S 5 Diawechsel, rückwärts | slide changing reverse |
| S 6 Impulsperne 1 | impuls stop 1 |
| S 7 Impulsperne 2 | impuls stop 2 |
| S 8 Impulsperne 3 - automat. Diaausstoß | impuls stop 3 - automatic slide ejection |
| S 9 Selbsthaltung | holding contact |
| S 10 Fokussierung | focusing |
| S 11 Mittelstellung | middle setting |
| S 12 Wärmeschutzschalter | thermo switch |
| S 13 Diawechsel, rückwärts | slide changing reverse |
| S 14 automatische Diaausstoß | automatic slide ejection |
| Fernbedienung: | remote control: |
| S 20 Diawechsel, vorwärts | slide changing forward |
| S 21 Diawechsel, rückwärts | slide changing reverse |
| S 22 Diawechsel, rückwärts | slide changing reverse |
| S 23 Fernfokussierung | remote focusing |
| S 24 Umschaltung: | change-over switch: |
| Autofokus-Fernfokussierung | autofocus-remote focusing |
| S 25 Lichtzeiger | light pointer |
| La 1 Projektionslampe | projection lamp |
| La 2 Autofokuslampe | lamp for autofocus |
| La 3 Lichtzeigerlampe | lamp for light pointer |
| St 1 A Netzstecker | power-supply plug |
| St 2 A1 Stecker für Fernbedienung | plug for remote control |
| St 2 B Buchse für Fernbedienung | socket for remote control |
| St 2 A2 Kurzschlußstecker | short-circuit plug |
| St 3 B Buchse für Tonbandanschluß | socket for tape recorder |
- S 22 zu S 21 vorausstellend
Rückstellung durch S 20
- S 22 before S 21
reverse by S 20



V	1	2	3	4	5	6	7	8
230	o	o	o	o	o	o	o	o
110	o	o	o	o	o	o	o	o
240	o	o	o	o	o	o	o	o
120	o	o	o	o	o	o	o	o
220	o	o	o	o	o	o	o	o
130	o	o	o	o	o	o	o	o

S 2



St 2 B

St 3 B

Projektor:

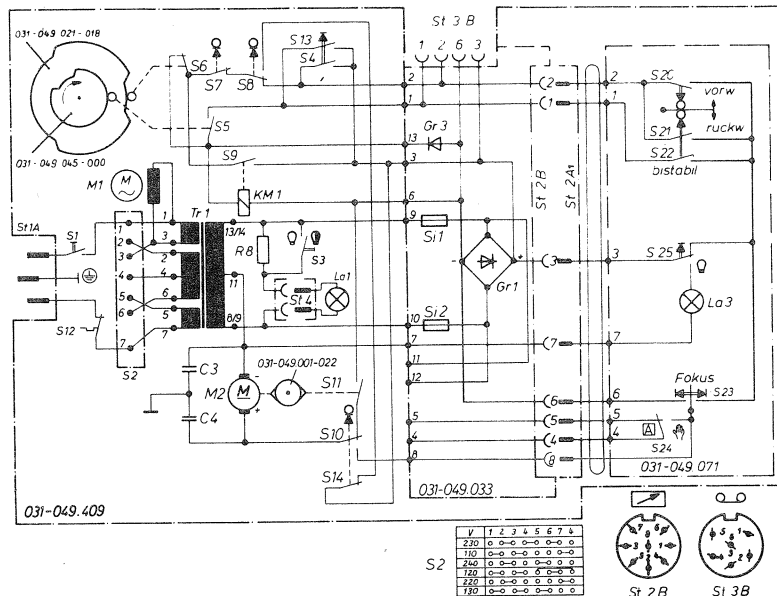
- S 1 Netzschalter
- S 2 Spannungswahlschalter
- S 3 Sparschaltung
- S 4 Diawechsel, vorwärts
- S 5 Diawechsel, rückwärts
- S 6 Impulsperre 1
- S 7 Impulsperre 2
- S 8 Impulsperre 3
- S 9 Selbsthaltung
- S 10 Focussierung
- S 11 Mitteleinstellung
- S 12 Wärmeschutzschalter
- S 13 Diawechsel, rückwärts
- S 20 Fernbedienung
- S 21 Diawechsel, vorwärts
- S 22 Diawechsel, rückwärts
- S 23 Diawechsel, rückwärts
- S 24 Fernfocussierung
- S 25 Umschaltung: Autofocus-Fernfocussierung
- La 1 Lichtzeiger
- La 3 Projektionslampe
- St 1 A Netzstecker
- St 2 A₁ Stecker für Fernbedienung
- St 2 B Buchse für Fernbedienung
- St 3 B Buchse für Tonbandanschluss

projector:

- power switch
- voltage selector
- economy switch
- slide changing forward
- slide changing reverse
- impuls stop 1
- impuls stop 2
- impuls stop 3
- self holding contact
- focusing
- middle setting
- thermo switch
- slide changing reverse
- remote control
- slide changing forward
- slide changing reverse
- slide changing reverse
- remote focusing
- change over switch: autofocus-remote focusing
- light pointer
- projection lamp
- lamp for light pointer
- power-supply plug
- plug for remote control
- socket for remote control
- socket for tape recorder

S 22 zu S 21 voraussellend
Rückstellung durch S 20

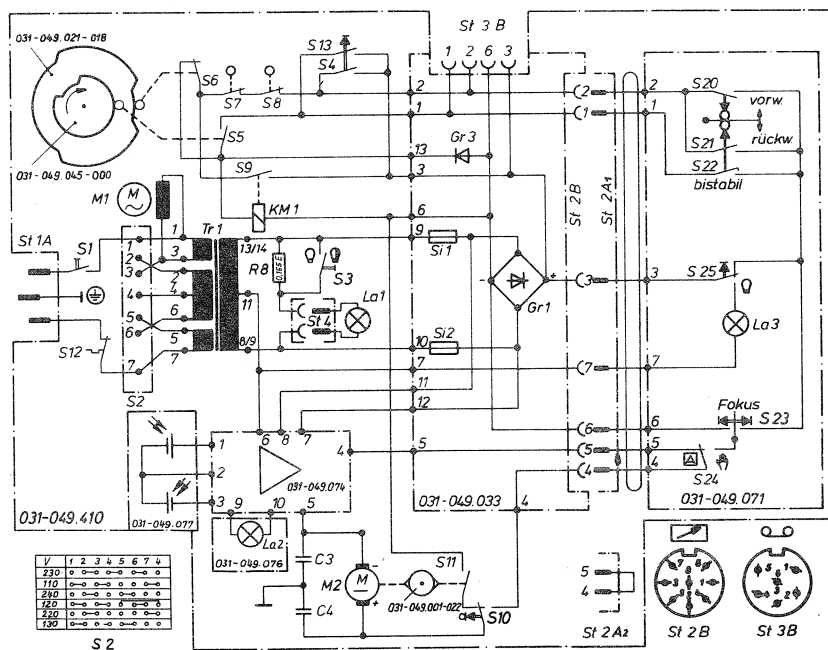
S 22 before S 21
reverse by S 20



- Projektor:**
- S 1 Netzschalter
 - S 3 Sparschaltung
 - S 4 Diawechsel, vorwärts
 - S 5 Diawechsel, rückwärts
 - S 6 Impulssperre 1
 - S 7 Impulssperre 2
 - S 8 Impulssperre 3-automat. Diaausstoß
 - S 9 Selbsterhaltung
 - S 10 Freischiebung
 - S 11 Mittelstellung
 - S 12 Wärmeschutzschalter
 - S 13 Diawechsel, rückwärts
 - S 14 automatischer Diaausstoß
- Fernbedienung:**
- S 20 Diawechsel, vorwärts
 - S 21 Diawechsel, rückwärts
 - S 22 Diawechsel, rückwärts
 - S 23 Fernfokussierung
 - S 24 Umschaltung: Autofocus-Fernfokussierung
 - S 25 Lichtzeiger
- La 1 Projektionslampe**
- La 2 Autofocuslampe**
- La 3 Lichtzeigerlampe**
- St 1 A Netzstecker**
- St 2 A1 Stecker für Fernbedienung**
- St 2 B Buchse für Fernbedienung**
- St 2 A2 Kurzschlußstecker**
- St 3 B Buchse für Tonbandanschluß**
- projector:**
- power switch
 - economy switch
 - slide changing, forward
 - slide changing, reverse
 - inputs stop 1
 - inputs stop 2
 - inputs stop 3-automatic slide ejection
 - holding contact
 - focusing
 - middle setting
 - thermo switch
 - slide changing, reverse
 - automatic slide ejection
- remote control:**
- slide changing, forward
 - slide changing, reverse
 - slide changing, reverse
 - remote focusing
 - change over switch P: autofocus-remote focusing
 - light pointer
- projection lamp**
- lamp for autofocus**
- lamp for light pointer**
- power-supply plug**
- plug for remote control**
- socket for remote**
- socket for tape recorder**

S 22 zu S 21 vorausseilend
Rückstellung durch S 20

S 22 before S 21
reverse by S 20



Projektor:

- | | |
|------|-----------------------|
| S 1 | Netzschalter |
| S 2 | Spannungswahlschalter |
| S 3 | Sparschaltung |
| S 4 | Diawechsel, vorwärts |
| S 5 | Diawechsel, rückwärts |
| S 6 | Impulssperre 1 |
| S 7 | Impulssperre 2 |
| S 8 | Impulssperre 3 |
| S 9 | Selbsthaltung |
| S 10 | Focussierung |
| S 11 | Mittelstellung |
| S 12 | Wärmeschutzschalter |
| S 13 | Diawechsel, rückwärts |

- | | |
|------|--|
| | <u>Fernbedienung:</u> |
| S 20 | Diawechsel vorwärts |
| S 21 | Diawechsel rückwärts |
| S 22 | Diawechsel rückwärts |
| S 23 | Fernfocussierung |
| S 24 | Umschaltung:
Autofocus-Fernfocussierung |
| S 25 | Lichtzeiger |

- | | |
|------|------------------|
| La 1 | Projektionslampe |
| La 2 | Autofocuslampe |
| La 3 | Lichtzeigerlampe |

- | | |
|--------------------|----------------------------|
| St 1A | Netzstecker |
| St 2A ₁ | Stecker für Fernbedienung |
| St 2B | Buchse für Fernbedienung |
| St 2A ₂ | Kurzschlußstecker |
| St 3B | Buchse für Tonbandanschluß |

- S 22 zu S 21 voraussetzend
Rückstellung durch S 20

projector:

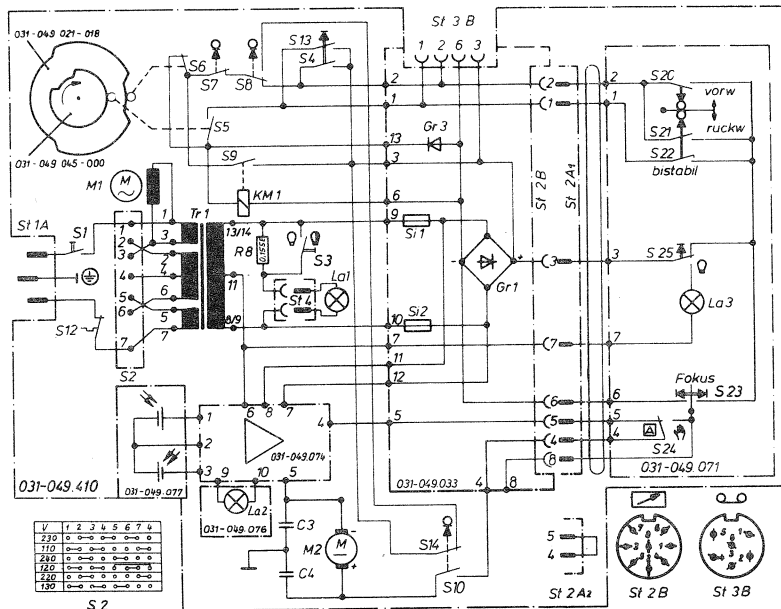
- power switch
voltage selector
economy switch
slide changing forward
slide changing reverse
impuls stop 1
impuls stop 2
impuls stop 3
self holding contact
focusing
middle setting
thermo switch
slide changing reverse

- remote control:
slide changing forward
slide changing reverse
slide changing reverse
remote focusing
change over switch:
autofocus-remote focusing
light pointer

- projection lamp
lamp for autofocus
lamp for light pointer

- power-supply plug
plug for remote control
socket for remote control
short-circuit plug
socket for tape recorder

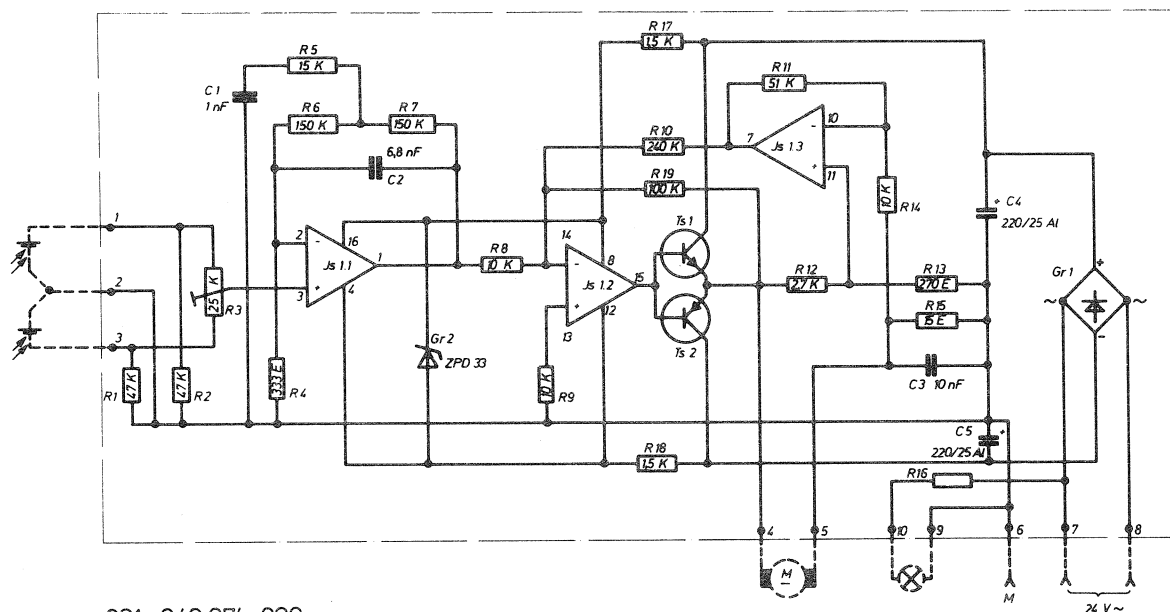
- S 22 before S 21
reverse by S 20



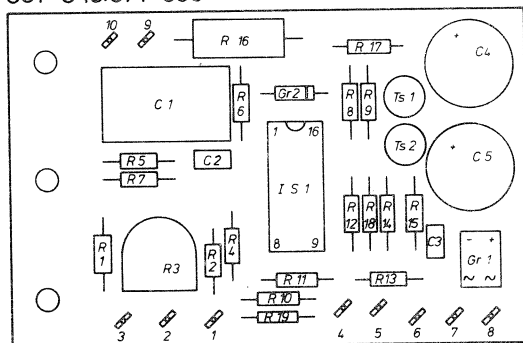
Projektor:	projector:
S 1 Netzschalter	power switch
S 2 Spannungswahlschalter	voltage selector
S 3 Sparschaltung	economy switch
S 4 Diawechsel, vorwärts	slide changing forward
S 5 Diawechsel, rückwärts	slide changing reverse
S 6 Impulsperre 1	impuls stop 1
S 7 Impulsperre 2	impuls stop 2
S 8 Impulsperre 3 - automat. Diaausstoß	impuls stop 3 - automatic slide ejection
S 9 Selbsthaltung	holding contact
S 10 Fokussierung	focusing
S 11 Mittelstellung	middle setting
S 12 Wärmeschutzschalter	thermo switch
S 13 Diawechsel, rückwärts	slide changing reverse
S 14 automatischer Diaausstoß Fernbedienung	automatic slide ejection remote control
S 20 Diawechsel vorwärts	slide changing forward
S 21 Diawechsel rückwärts	slide changing reverse
S 22 Diawechsel rückwärts	slide changing reverse
S 23 Fernfokussierung	remote focusing
S 24 Umschaltung: Autofocus-Fernfokussierung	change over switch: autofocus-remote focusing
S 25 Lichtzeiger	light pointer
La 1 Projektionslampe	projection lamp
La 2 Autofocuslampe	lamp for autofocus
La 3 Lichtzeigerlampe	lamp for light pointer
St 1 A Netzstecker	power-supply plug
St 2 A1 Stecker für Fernbedienung	plug for remote control
St 2 B Buchse für Fernbedienung	socket for remote control
St 2 A2 Kurzschlußstecker	short-circuit plug
St 3 B Buchse für Tonbandanschluß	socket for tape recorder

S 22 zu S 21 voraussendend
Rückstellung durch S 20

S 22 before S 21
reverse by S 20

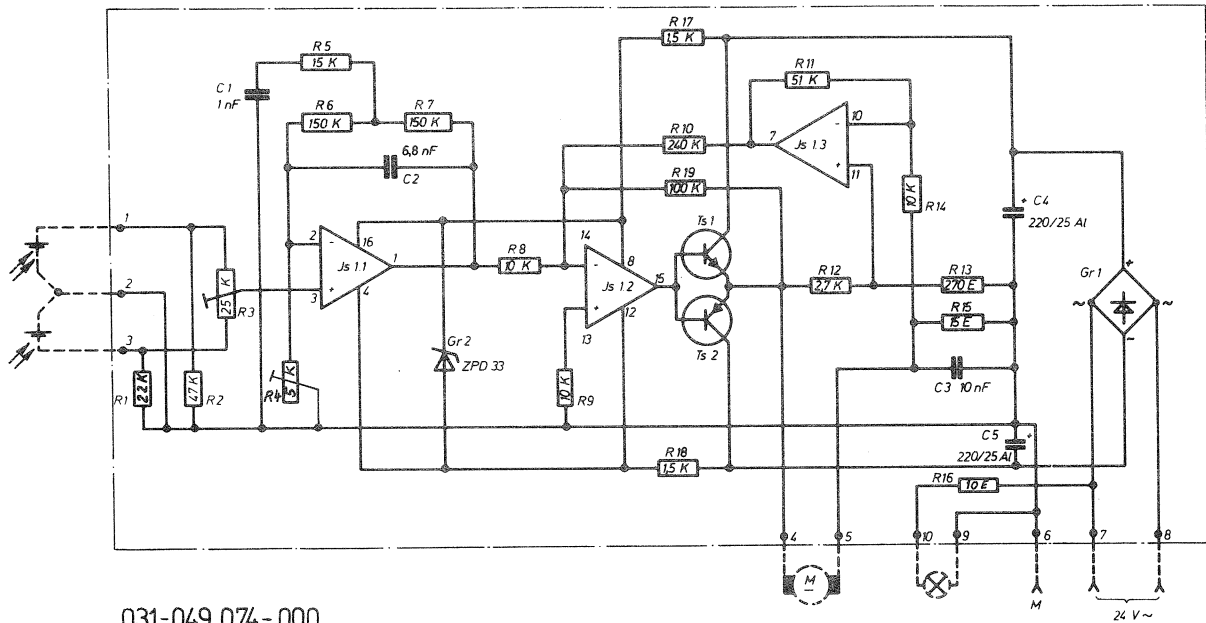


031-049.074-000

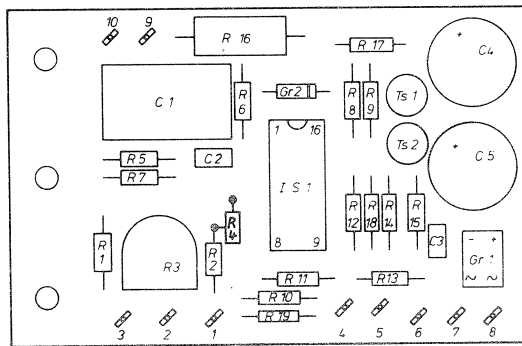


M = Mittelabgriff Tr 1-sekundär
centre tap Tr 1-secondary

28.02.1984 d e

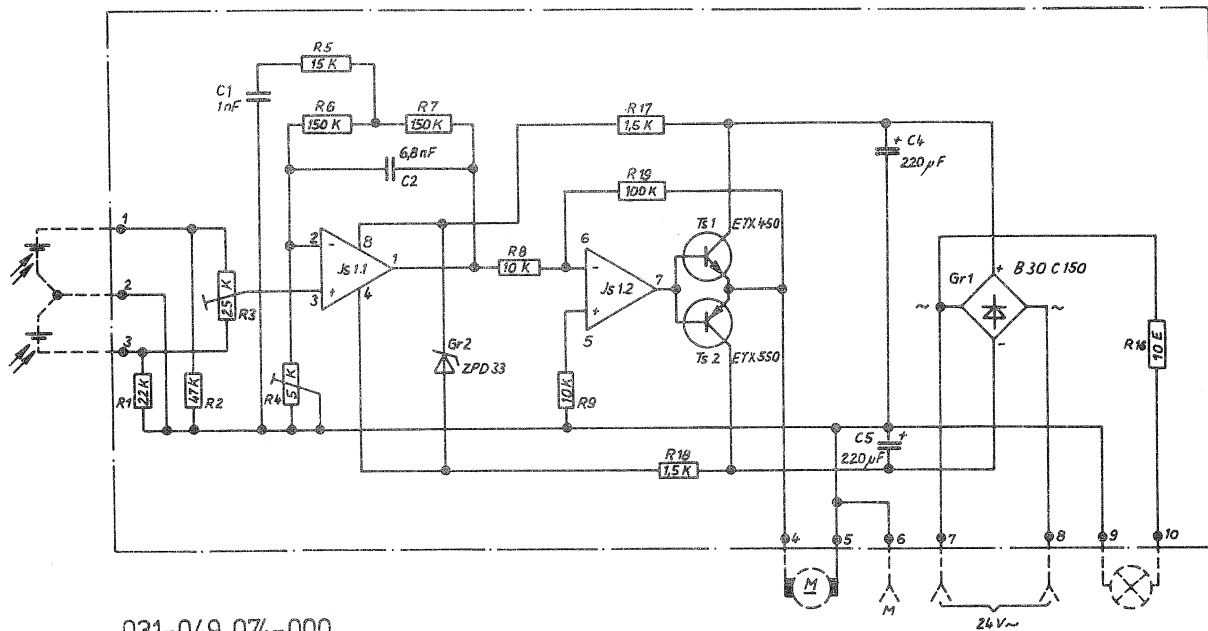


031-049.074-000

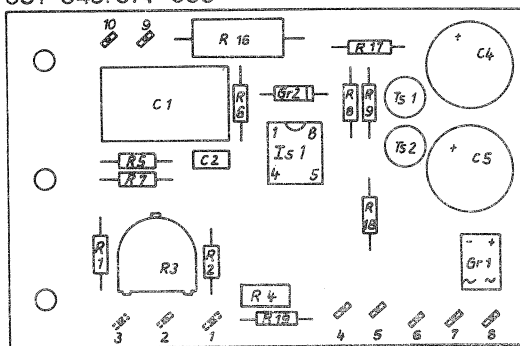


Mittelabgriff Tr 1-sekundär
M = centre tap Tr 1-secondary

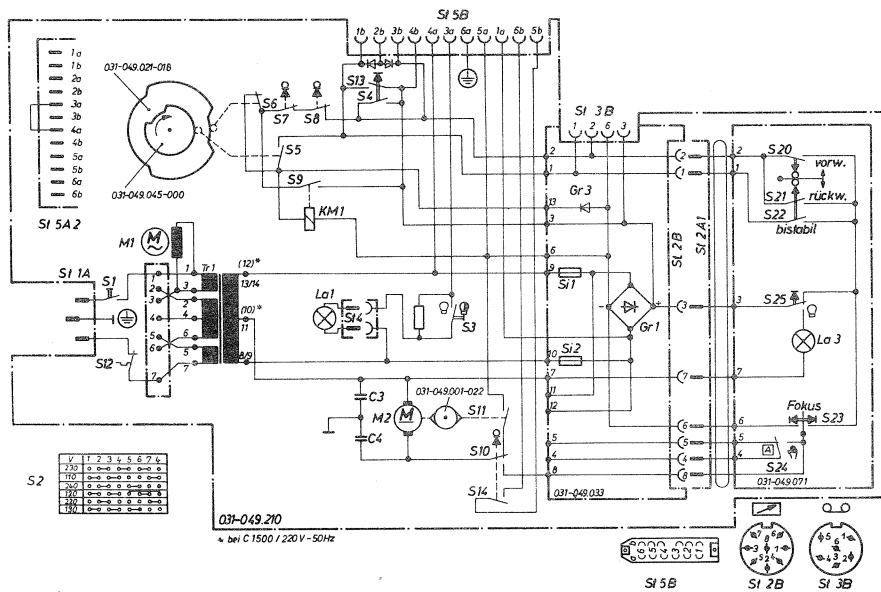
28.02.1984 d e



031-049.074-000



M = Mittelabgriff Tr 1-sekundär
centre tap Tr 1-secondary

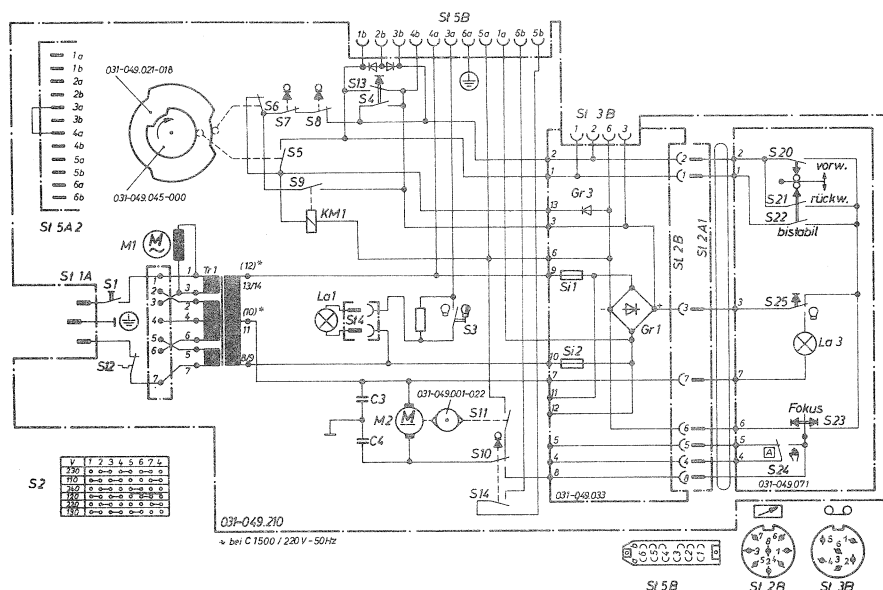


Projektor:

S1	Netzschalter	power switch
S3	Sparschaltung	economy switch
S4	Diawechsel, vorwärts	slide changing, forward
S5	Diawechsel, rückwärts	slide changing, reverse
S6	Impulsperre 1	impuls stop 1
S7	Impulsperre 2	impuls stop 2
S8	Impulsperre 3-automat. Diaaustoss	impuls stop 3-automatic slide ejection
S9	Selbthaltschaltung	holding contact
S10	Fokussierung	focusing
S11	Mittelstellung	middle setting
S12	Wärmeschutzschalter	thermo switch
S13	Diawechsel, rückwärts	slide changing, reverse
S14	automatischer Diaaustoss	automatic slide ejection
Fernbedienung:		remote control:
S20	Diawechsel, vorwärts	slide changing, forward
S21	Diawechsel, rückwärts	slide changing, reverse
S22	Diawechsel, rückwärts	slide changing, reverse
S23	Fernfokussierung	remote focusing
S24	Umschaltung:	change over switch:
	Autofocus-Fernfokussierung	autofocus-remote focusing
S25	Lichtzeiger	light pointer
La1	Projektionslampe	projection lamp
La2	Autofocuslampe	lamp for autofocus
La3	Lichtzeigerlampe	lamp for light pointer
SI1A	Netzstecker	power-supply plug
SI2A	Stecker für Fernbedienung	plug for remote control
SI2B	Buchse für Fernbedienung	socket for remote control
SI2A	Kurzschlußstecker	short-circuit plug
SI3B	Buchse für Tonbandanschluß	socket for tape recorder
SI5B	Buchse für Steuergerätsanschluß	socket for control unit

S22 zu S21 voraussend
Rückstellung durch S20

S22 before S21
reverse by S20



Projektor:

- | | |
|-----|------------------------------------|
| S1 | Netzschalter |
| S3 | Sparschaltung |
| S4 | Diawechsel, vorwärts |
| S5 | Diawechsel, rückwärts |
| S6 | Impulssperre 1 |
| S7 | Impulssperre 2 |
| S8 | Impulssperre 3-automat. Diaausstoß |
| S9 | Selbsthaltung |
| S10 | Focussierung |
| S11 | Mittelstellung |
| S12 | Wärmeschutzschalter |
| S13 | Diawechsel, rückwärts |
| S14 | automatischer Diaausstoß |

projector:

- power switch
economy switch
slide changing, forward
slide changing, reverse
impuls stop 1
impuls stop 2
impuls stop 3-automatic slide ejection
holding contact
focusing
middle setting
thermo switch
slide changing, reverse
automatic slide ejection

Fernbedienung:

- | | |
|-------------------|---|
| S20 | Diawechsel, vorwärts |
| S21 | Diawechsel, rückwärts |
| S22 | Diawechsel, rückwärts |
| S23 | Fernfocussierung |
| S24 | Umschaltung
Autofocus-Fernfocussierung |
| S25 | Lichtzeiger |
| La1 | Projektionslampe |
| La2 | Autofocuslampe |
| La3 | Lichtzeigerlampe |
| St1A | Netzstecker |
| St2A ₁ | Stecker für Fernbedienung |
| St2B | Buchse für Fernbedienung |
| St2A ₂ | Kurzschlußstecker |
| St3B | Buchse für Tonbandanschluß |
| St5B | Buchse für Steuergeräteanschluß |

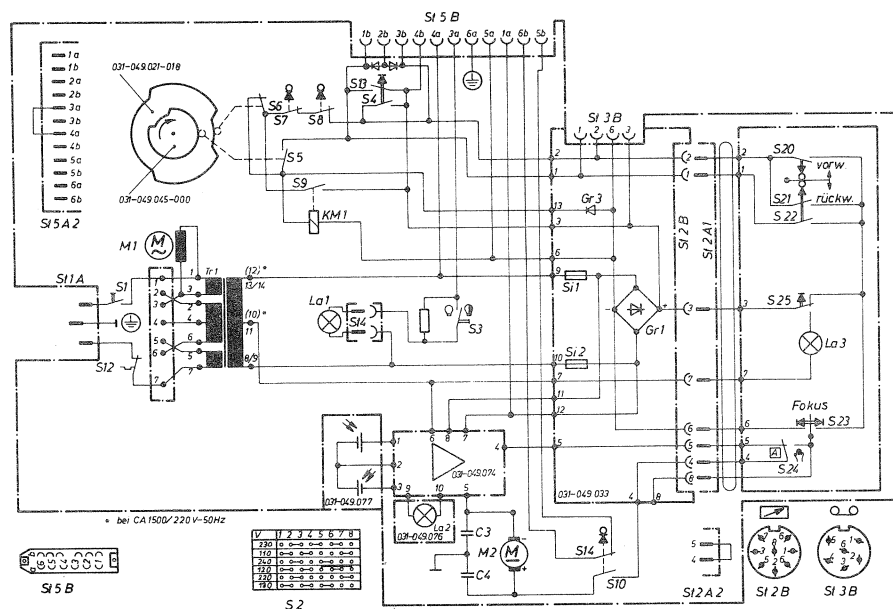
remote control;

- slide changing, forward
- slide changing, reverse
- slide changing, reverse
- remote focusing
- change over switch
- autofocus-remote focusing
- light pointer
- projection lamp
- lamp for autofocus
- lamp for light pointer
- power-supply plug
- plug for remote control
- socket for remote
- short - circuit plug
- socket for tape recorder
- socket for control unit

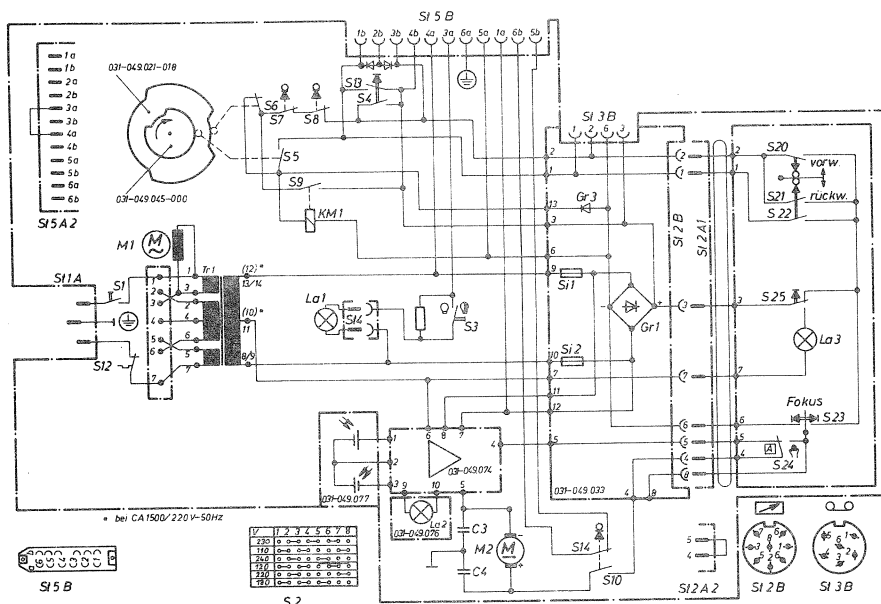
S22 zu S21 vorausseilend
Rückstellung durch S20

S22 before S21
- reverse by S20

28.02.1984 de



Projektor :		projector :	
S1	Netzschalter		power switch
S2	Spannungswahlschalter		voltage selector
S3	Sparschaltung		economy switch
S4	Diawechsel, vorwärts		slide changing forward
S5	Diawechsel, rückwärts		slide changing reverse
S6	Impulsperr 1		impulse stop 1
S7	Impulsperr 2		impulse stop 2
S8	Impulsperr 3 - automat. Diaaustöß		impulse stop 3 - automatic slide ejection
S9	Selbsthaltung		holding contact
S10	Fokussierung		focusing
S12	Wärmeschutzschalter		thermo switch
S13	Diawechsel, rückwärts		slide changing reverse
S14	automatischer Diaaustöß		automatic slide ejection
Fernbedienung :		remote control :	
S20	Diawechsel, vorwärts		slide changing forward
S21	Diawechsel, rückwärts		slide changing reverse
S22	Diawechsel, rückwärts		slide changing reverse
S23	Fernfokussierung		remote focusing
S24	Umschaltung :		change over switch :
	Autofokus-Fernfokussierung		autofocus-remote focusing
	Lichtseiger		light pointer
La1	Projektionslampe		projection lamp
La2	Autofocuslampe		lamp for autofocus
La3	Lichtseigerlampe		lamp for light pointer
S11 A	Netzstecker		power-supply plug
S12 A	Stecker für Fernbedienung		plug for remote control
S12 B	Buchse für Fernbedienung		socket for remote control
S12 A	Kurzschlußstecker		short-circuit plug
S13 B	Buchse für Tonbandanschluß		socket for tape recorder
S15 B	Buchse für Steuergerätsanschluß		socket for control unit
S22 zu S21 voraussetzend		S22 before S21	
Rückstellung durch S20		reverse by S20	



Projektor:

- S1 Netzschalter
- S3 Sparschaltung
- S4 Diawechsel, vorwärts
- S5 Diawechsel, rückwärts
- S6 Impulssperre 1
- S7 Impulssperre 2
- S8 Impulssperre 3-automat. Diaausstoß
- S9 Selbsthaltung
- S10 Focussierung
- S11 Mittelstellung
- S12 Wärmeschutzschalter
- S13 Diawechsel, rückwärts
- S14 automatischer Diaausstoß

projector:

- power switch
- economy switch
- slide changing, forward
- slide changing, reverse
- impuls stop 1
- impuls stop 2
- impuls stop 3-automatic slide ejection
- holding contact
- focusing
- middle setting
- thermo switch
- slide changing, reverse
- automatic slide ejection

Fernbedienung:

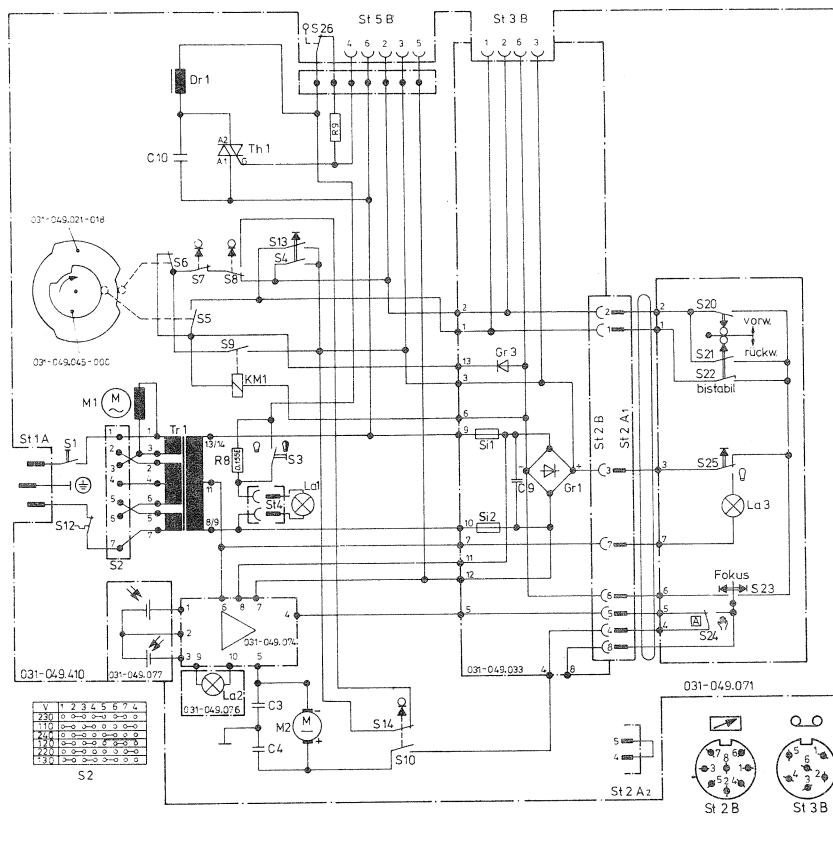
- S20 Diawechsel, vorwärts
- S21 Diawechsel, rückwärts
- S22 Diawechsel, rückwärts
- S23 Fernfocussierung
- S24 Umschaltung
- S25 Lichtzeiger
- La1 Projektionslampe
- La2 Autofocuslampe
- La3 Lichtzeigerlampe
- St1A Netzstecker
- St2A¹ Stecker für Fernbedienung
- St2B¹ Buchse für Fernbedienung
- St2A² Kurzschlußstecker
- St3B² Buchse für Tonbandanschluß
- St5B Buchse für Steuergeräteanschluß

S22 zu S21 vorausseilend
Rückstellung durch S20

remote control:

- slide changing, forward
- slide changing, reverse
- slide changing, reverse
- remote focusing
- change over switch
- autofocus-remote focusing
- light pointer
- projection lamp
- lamp for autofocus
- lamp for light pointer
- power-supply plug
- plug for remote control
- socket for remote
- short-circuit plug
- socket for tape recorder
- socket for control unit

S22 before S21
reverse by S20



Projektor:

- S1 Netzschalter
- S2 Spannungswahlschalter
- S3 Sparschaltung
- S4 Diawechsel, vorwärts
- S5 Diawechsel, rückwärts
- S6 Impulssperre 1
- S7 Impulssperre 2
- S8 Impulssperre 3 - automat. Diaausstoß
- S9 Selbsthaltung
- S10 Focussierung
- S11 Mittelstellung
- S12 Wärmeschutzschalter
- S13 Diawechsel, rückwärts
- S14 automatischer Diaausstoß

Fernbedienung:

- S20 Diawechsel, vorwärts
- S21 Diawechsel, rückwärts
- S22 Diawechsel, rückwärts
- S23 Fernfocussierung
- S24 Umschaltung: Autofocus-Fernfocussierung
- S25 Lichtzeiger
- S26 Lampe-Triac
- La 1 Projektionslampe
- La 2 Autofocuslampe
- La 3 Lichtzeigerlampe
- St 1 A Netzstecker
- St 2 A1 Stecker für Fernbedienung
- St 2 B Buchse für Fernbedienung
- St 2 A2 Kurzschlußstecker
- St 3 B Buchse für Tonbandanschluß
- St 4 Lampenfassung-Lampe
- St 5 B Buchse für Überblendung

S22 zu S21 vorausleitend
Rückstellung durch S20

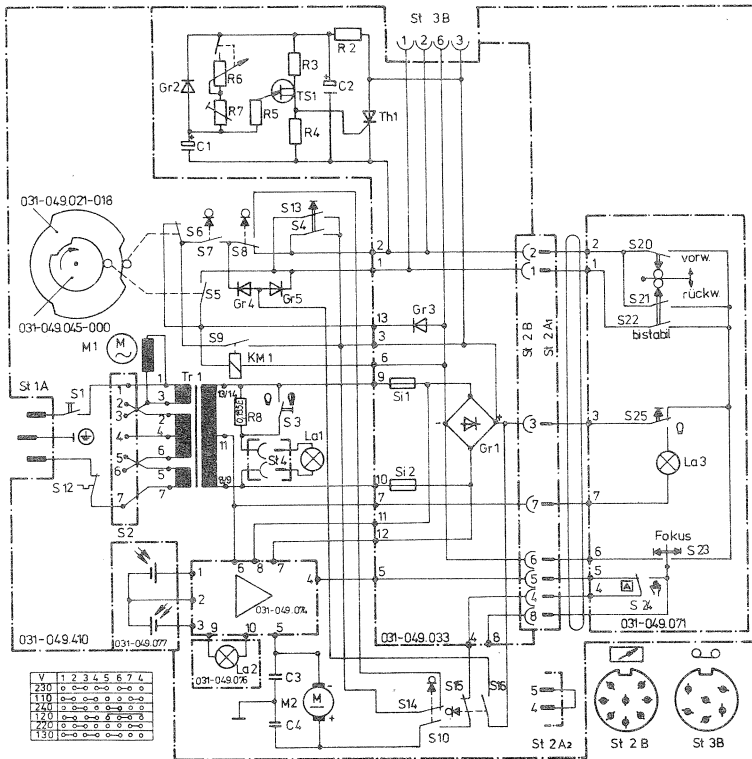
projector:

- power switch
- voltage selector
- economy switch
- slide changing forward
- slide changing, reverse
- pulse stop 1
- pulse stop 2
- pulse stop 3 - automat. slide ejection
- holding contact
- focusing
- middle setting
- thermo switch
- slide changing, reverse
- automatic slide ejection

remote control:

- slide changing, forward
- slide changing, reverse
- slide changing, reverse
- remote focusing
- changeover switch: autofocus remote focusing
- light pointer
- Triac lamp
- projection lamp
- lamp for autofocus
- lamp for light pointer
- power-supply plug
- plug for remote control
- socket for remote control
- short circuit plug
- socket for tape recorder
- Lamp socket - lamp
- socket for dissolve projection

S22 before S21
reverse by S20



Projektor:

- S1 Netzschalter
- S2 Spannungswahlschalter
- S3 Sparschaltung
- S4 Diawechsel, vorwärts
- S5 Diawechsel, rückwärts
- S6 Impulssperre 1
- S7 Impulssperre 2
- S8 Impulssperre 3 - automat.Diaausstoß
- S9 Selbsthaltung
- S10 Focussierung
- S12 Wärmeschutzschalter
- S13 Diawechsel, rückwärts
- S14 automatischer Diaausstoß
- S15 AF -Abschaltung
- S16 Rücktransport

Fernbedienung:

- S20 Diawechsel, vorwärts
- S21 Diawechsel, rückwärts
- S22 Diawechsel, rückwärts
- S23 Fernfocussierung
- S24 Umschaltung:
Autofocus-Fernfocussierung
- S25 Lichtzeiger

- La 1 Projektionslampe
- La 2 Autofocuslampe
- La 3 Lichtzeigerlampe
- St1A Netzstecker
- St2A,Stecker für Fernbedienung
- St2B Buchse für Fernbedienung
- St2A,Kurzschlußstecker
- St3B Buchse für Tonbandanschluß

S22 zu S21 vorausseilend
Rückstellung durch S20

projector:

- power switch
- voltage selector
- economy switch
- slide changing forward
- slide changing, reverse
- pulse stop 1
- pulse stop 2
- pulse stop 3 - automat.slide ejection
- holding contact
- focusing
- thermo switch
- slide changing, reverse
- automatic slide ejection
- AF off-switch
- return transport

remote control:

- slide changing, forward
- slide changing, reverse
- slide changing, reverse
- remote focusing
- changeover switch:
- autofocus remote focusing
- light pointer

- projection lamp
- lamp for autofocus
- lamp for light pointer
- power-supply plug
- plug for remote control
- socket for remote control
- short circuit plug
- socket for tape recorder

S22 before S21
reverse by S20



Nr.	Bestell-Nr.	Stück	Benennung		Bemerkung
1	150-000.000-249	1	Montagerahmen assembly frame	031-049.001-000 W1	Aufnahme d. Gerätes adaptation of instrument
2	150-000.000-250	1	Justierleiste adjustment ledge	031-049.001-000 W9	Justierung Magazinwanne adjustment magazine tub
3	150-000.000-251	1	Einstellspiegel adjustment mirror	031-049.001-000 A10	Justierung Diawechs lung u. Autofocus adjustment slide change and Autofocus
4	150-000.000-252	1	Prüflehre test gauge	031-049.001-000 W21	Justierung Diawechs lung adjustment slide change
5	150-000.000-253	1	Einstellplatte adjustment plate	031-049.001-000 A11	Justierung Autofocus adjustment Autofocus
6	150-000.000-255	1	Prüfmagazin gelb test magazine yellow	031-049.001-000 W33	Aufnahme Prüflehre W21 adaptation test gauge W21
7	150-000.000-256	1	Halterung holder	031-049.001-000 W34	Befestigung AKF adaptation AKF
8	150-000.000-257	1	Aufdrück-Vorrichtung push-on tool	031-049.001-000 W38	Montage Diawechs lung assembly slide change
9	150-000.000-258	1	Abziehvorrichtung pull-off device	031-049.001-000 W63	Abziehen Hebel B5.2/5 pulling off lever B5.2/5
10	150-000.000-612	1	Kupplung coupling	042-582.001-000 W18	Justierung Diawechs lung adjustment slide change
11	150-000.001-048	1	AKF autocoll.align.telescope	107-059.000-000	Justierung Diawechs lung adjustment slide change
12	150-000.100-105	1	LEITZ-Testdia,geglast LEITZ test slide,with glas		Justierung Autofocus adjustment Autofocus
13	150-000.100-173	1	LEITZ-Testdia,glaslos LEITZ test slide glassless		Justierung Autofocus adjustment Autofocus