

EG - KONFORMITÄTSERKLÄRUNG

Maschine: **Winkelwolf**
 Typ: **WW 130 G**
 Maschinen-Nr.: **J 6748**
 Baujahr: **1997**



Folgende Sicherheitsbestimmungen wurden bei der Konstruktion und dem Bau oben genannter Maschine berücksichtigt:

EG-Maschinenrichtlinie	89/392/EWG geändert durch die Richtlinien des Rates 91/368/EWG 93/44/EWG 93/68/EWG
EN 60204-1	Elektrische Ausrüstung von Industriemaschinen Ausgabe: Okt.1992 Option 3
EN 12331	Nahrungsmittelmaschinen Wölfe Sicherheits- und Hygieneanforderungen Ausgabe 1.Mai 1996
EN 1672-2	Nahrungsmittelmaschinen Sicherheits und Hygienevorschriften Allgemeine Gestaltungsleitsätze Teil 2:Hygieneanforderungen Ausgabe: Februar 1995
Unfallverhütungsvorschrift	Fleischereimaschinen VBG 19 vom 1. April 1990

EG-Baumusterprüfung

Bescheinigungs-Nr.: 96053 vom 13.12.1996
 der Prüfstelle: Fachausschuß Fleischwirtschaft
 Prüf- und Zertifizierungsstelle im BG-PRÜFZERT
 Lortzingstraße
 D-55062 Mainz

Traun, 24.11.1997


 Technische Leitung

.....
 Konstruktionsleitung

This operating manual contains everything you should know for ensuring that operation disturbance is kept to a minimum and that long machine life is guaranteed.

To avoid staff accidents and material damage caused by improper use of the machine, it is essential that before initial start up and before each subsequent operation of the machine this manual, and in particular all danger warnings, are carefully studied. You should also ensure that all staff designated to use this machine are trained according to this operating manual.

Furthermore, you must take the necessary steps to ensure that the machine is not used for purposes other than intended and is not operated by untrained staff or outsiders.

The removal or defacement of instruction plates attached to the machine should be guarded against. Whenever the machine changes hands this operating manual should be packed with it in order to avoid the danger of improper use/operation of the machine.

Correct operation, regular check-ups and necessary servicing are absolutely essential for perfect functioning of the machine and for fulfilment of any guarantee claims.

It must be clearly pointed out that if other than original LASKA cutting tools or spare parts are used, all guarantee claims expire.

In this operating manual, along side the standard machine versions, possible special versions and extra equipment are listed and described. These may well not correspond to your machine as version and fittings are according to individual order. Should your machine be equipped with extras which are not contained in this manual, your nearest LASKA agent will gladly inform you about operation, safety measures, servicing, etc.

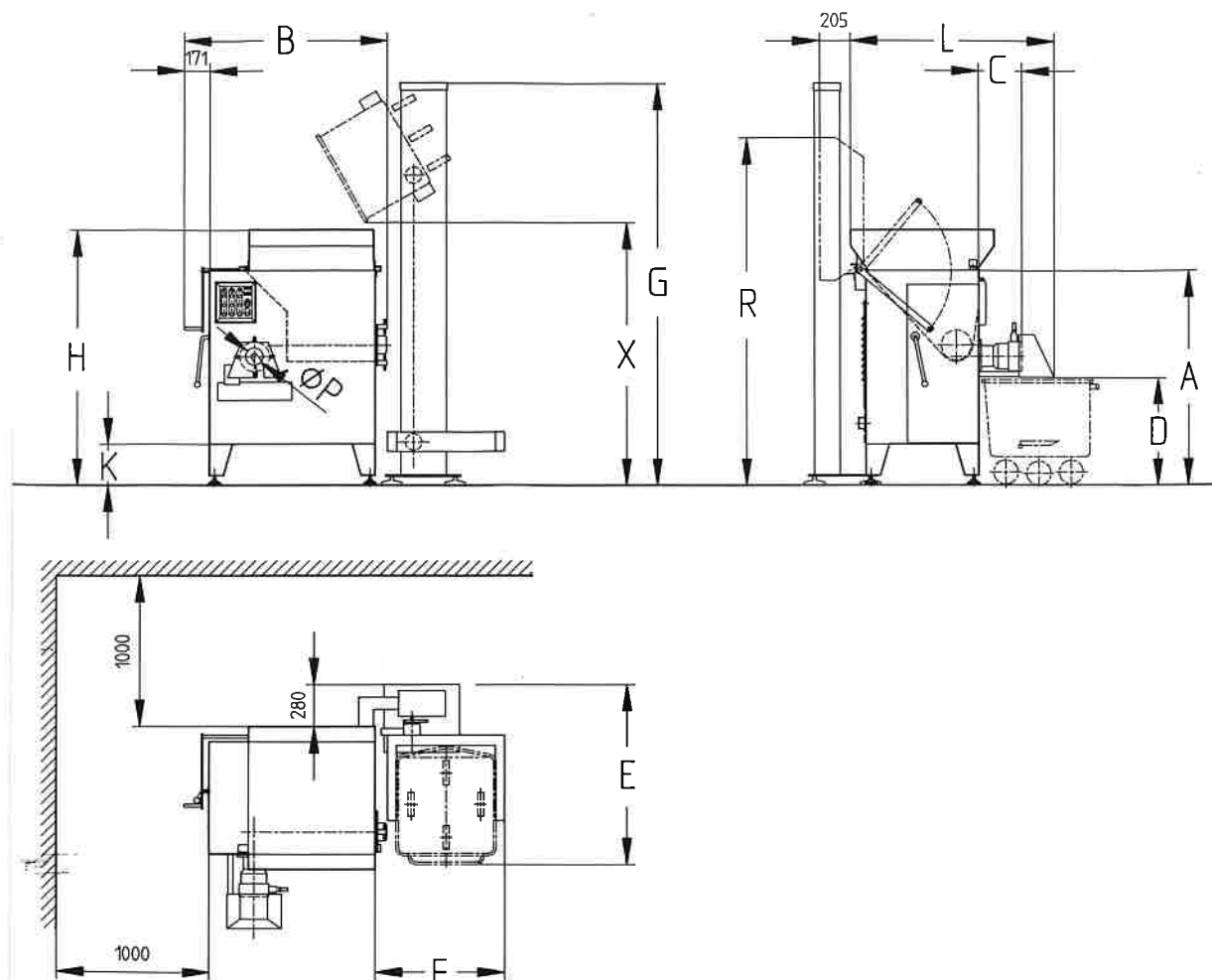
All data are based on the versions possible at the time of printing this manual. However, alterations due to further developments of the machine may arise.

Do make a mental note of all instructions so that staff accidents and material damage can be avoided and that neither you yourself nor we are held liable.

We should like to thank you for deciding in favour of a LASKA machine.

Maschinenfabrik LASKA
Gesellschaft m.b.H.
A-4050 TRAUN - AUSTRIA

All information and drawings contained in this operating manual are copyright and, without our express consent, may not be reproduced, given to third parties or misused!



TYPE		WW 130	BA 24						
TIPO									
Maße	L mm	1345							
Dimensions	B mm	1350							
Dimensions	H mm	1695							
Medidas	A mm	1400							
	C mm	282							
	D mm	725							
	E mm		1200						
	F mm		900						
	G mm		2670						
	K mm	275							
	P mm	130							
Gewicht ca.	R mm	2310							
Weight approx.	X mm	1745							
Poids env.									
Peso apr.	kg	800	300						

Angaben und Maße unverbindlich - Änderungen vorbehalten!

We reserve the right to make design improvements without prior notice!

Données et dimensions sans engagement de notre part, sous réserve de modifications!

Datos y medidas sin compromiso - nos reservamos el derecho de introducir modificaciones!

*** Performance data:**

Total Power:	
Rated voltage	3x400 V / 50Hz
Rated power	17 KW
Rated amperage	33 A
Fuse	50 A
Supply pipe cross sec	10 mm ²
Degree of protection	IP 55

Working worm:	Feed worm
Rated voltage 3x400 V / 50Hz	Rated voltage 3x400 V / 50Hz
Rated power 15 KW	Rated power 1,8 KW
Rated amperage 28,5 A	Rated amperage 4,5 A

*** Speed data:**

Working worm		Feed worm
rpm		rpm
Speed 1	270	13

*** Noise data:**

Emission noise pressure level L_{pA} 68 dB

Deviation K_A = 2,5 dB

ELECTRICAL DATA
DONNEES ELECTRIQUES
DATOS ELECTRICOS
DATI ELETTRICI

ACHTUNG: Aufgrund verschiedener Maschinenausführungen ist es notwendig, die tatsächliche Motorleistung am Leistungsschild der Maschine abzulesen! Die entsprechenden elektrischen Daten sind dann untenstehender Tabelle zu entnehmen. Bei nicht in der Tabelle angeführten Daten ist bei der nächsten LASKA-Vertretung nachzufragen.

ATTENTION: Due to a large variety of machine models it is absolutely necessary to read the actual motor-rating from the rating-plate. The exact electrical data are listed below. For further non-mentioned details please contact your nearest LASKA-agent.

ATTENTION: Etant donné la grande diversité de types de nos machines, il est nécessaire de relever la puissance réelle du moteur sur la plaque de puissances. Veuillez trouver les données électriques appropriées sur le tableau ci-dessous ou bien consulter le représentant-LASKA le plus proche pour toutes informations détaillées.

ATENCION: Debido a que existen diferentes configuraciones de las máquinas, es indispensable comprobar la potencia del motor en el letrero de datos técnicos de la máquina. Los respectivos datos eléctricos deberán ser leídos de la tabla mencionada o deberán ser preguntados a la más próxima representación de LASKA.

ATTENZIONE: A causa della grande varietà d' esecuzioni di ogni macchina è necessario rilevare la potenza reale del motore sulla targhetta delle potenze. Per i dati elettrici consultare le tabelle che seguono. Se i dati non dovessero figurare in queste tabelle, vogliate contattare il prossimo rappresentante LASKA.

MOTORLEISTUNG	Nennstrom	Sicherung -träge	Zuleitung Querschn.	Nennstrom	Sicherung -träge	Zuleitung Querschn.	Nennstrom	Sicherung -träge	Zuleitung Querschn.
MOTOR POWER	Current nominal	Fuse -delayed	Supply pipe cross sec.	Current nominal	Fuse -delayed	Supply pipe cross sec.	Current nominal	Fuse -delayed	Supply pipe cross sec.
PUISSANCE DU MOTEUR	Courant nominal	Fusible à action retardée	Conducteurs section	Courant nominal	Fusible à action retardée	Conducteurs section	Courant nominal	Fusible à action retardée	Conducteurs section
POTENCIA DEL MOTOR	Corriente nominal	Fusible -retardado	Conductores seccion	Corriente nominal	Fusible -retardado	Conductores seccion	Corriente nominal	Fusible -retardado	Conductores seccion
POTENZA DEL MOTORE	Corrente nominale	Fusibile ad azione ritardata	Sezione transvers. d. condotto	Corrente nominale	Fusibile ad azione ritardata	Sezione transvers. d. condotto	Corrente nominale	Fusibile ad azione ritardata	Sezione transvers. d. condotto
max. KW	A	A	Cu - mm2	A	A	Cu - mm2	A	A	Cu - mm2
	50 Hertz 200-230V			50 Hertz 400V			50 Hertz 420-440V		
(1) 15 (2) 1,8 (3) 1,5	51 7,7 6,4	80	25	29 4,5 3,7	50	10	27,5 4,3 3,5	50	10
	60 Hertz 200-230V			60 Hertz 400V			60 Hertz 420-440V		
(1) 15 (2) 1,8 (3) 1,5	48,5 7,3 6,1	80	25	27,5 4,3 3,5	50	10	26,1 4,1 3,3	50	10

(1) Hauptantrieb
(2) Zubringerantrieb
(3) Beschickung (el.)

Main drive
Feeder drive
Loader

Entraînement principal
Entraînement charge
Chargeur

Azionamento principale
Azionamento del elevatore
Caricatore

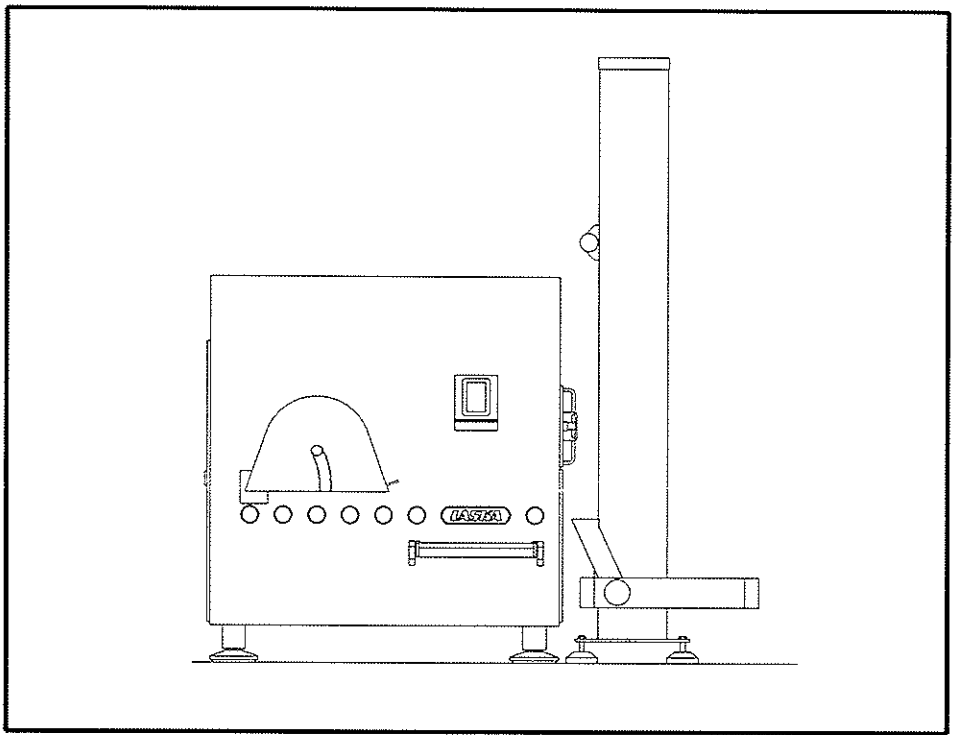
Accionamiento principal
Accionamiento de carga
Cargador

27. 11. 97

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Winkelwolf

Type	WW-130G
Ser. Nr.	J-6748
Gesamtleistung	18 KW
Netzspannung	3*400 VAC
Steuerspannung	230 VAC
Toleranz	± 5/
SPS-Spannung	24 VDC
Frequenz	50 HZ



=====

ELEKTRISCHER SCHALTPLAN

ELECTRICAL CIRCUIT DIAGRAM

PLAN DE MONTAGE ELECTRIQUE

ESQUEMA DE CONEXION ELECTRICA

=====

08.00/

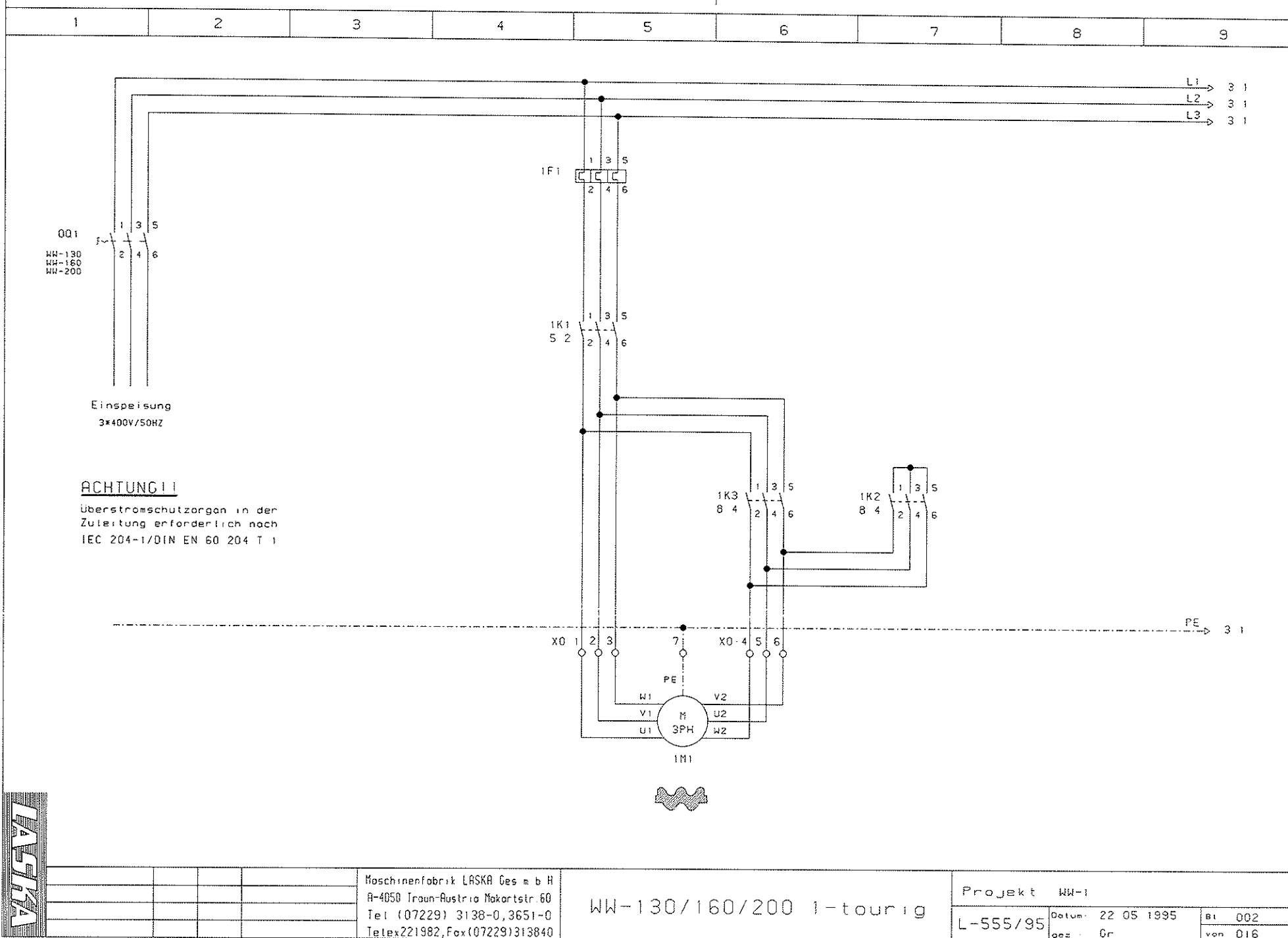
L-555/95

LASKA

				Maschinenfabrik LASKA Ges m b H A-4050 Traun-Austria Makortstr.60 Tel (07229) 3138-0,3651-0 Telex221982,Fax(07229)313840	Deckblatt	Projekt WW-1			
						L-555/95	Datum: 22.05.1995 gez. Gr	Bl. 001	von 016

ELEKTRISCHER SCHALTPLAN
ELECTRICAL CIRCUIT DIAGRAM
PLAN DE MONTAGE ELECTRIQUE
ESQUEMA DE CONEXION ELECTRICA

08.00/
L-555/95



Maschinenfabrik LASKA Ges m b H
A-4050 Traun-Austria Markartsir 60
Tel (07229) 3138-0,3651-0
Telex 221982, Fax (07229) 313840

WW-130/160/200 1-tourig

Projekt WW-1

L-555/95

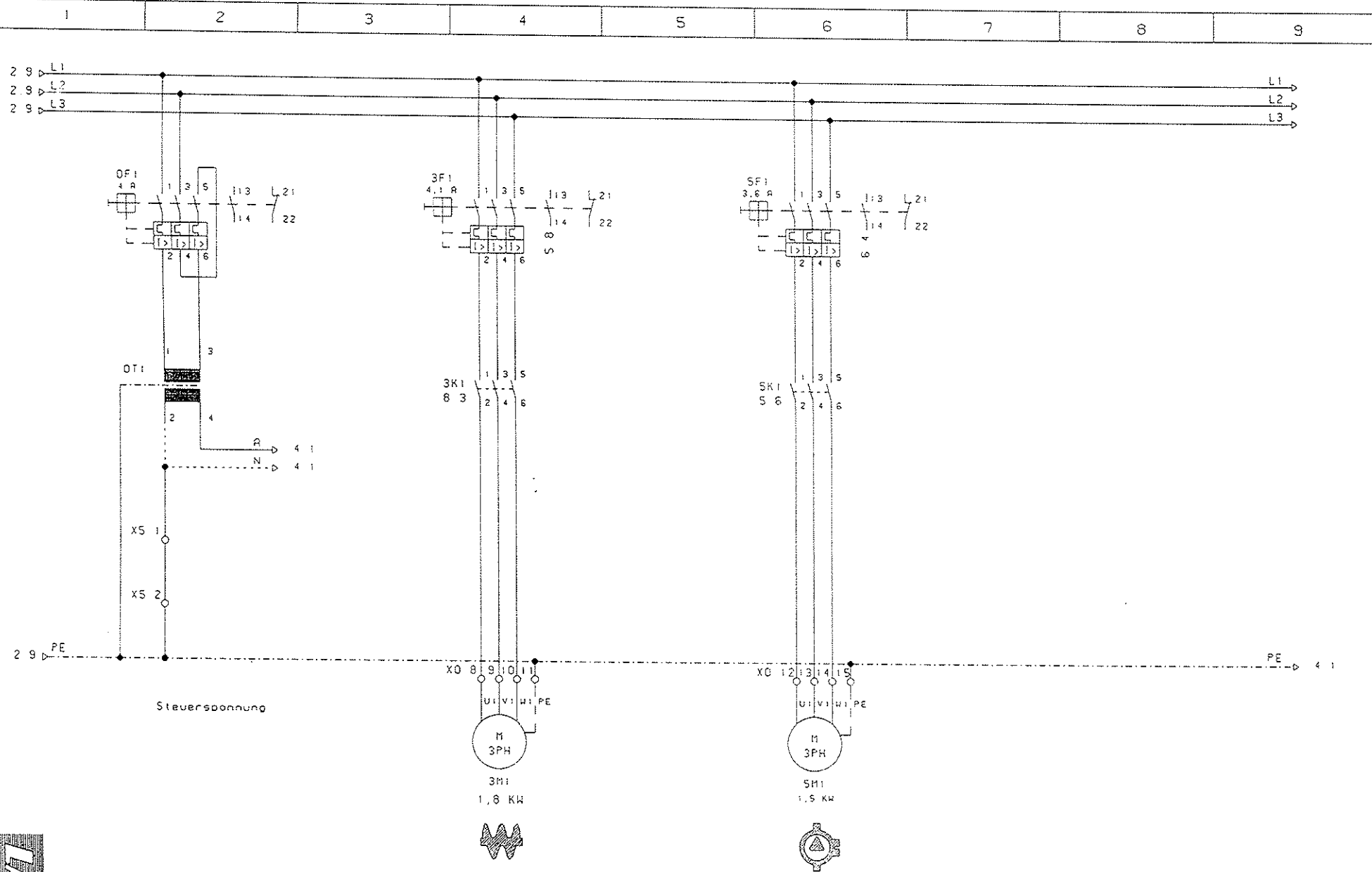
Datum 22 05 1995
Gr

Bl 002
von 016

LASKA

ELEKTRISSCHER SCHALTPLAN
ELECTRICAL CIRCUIT DIAGRAM
PLAN DE MONTAGE ELECTRIQUE
ESQUEMA DE CONEXION ELECTRICA

03 00/
L-555/95



LASKA

Maschinenfabrik LASKA Ges m b H
A-4050 Traun-Austria Mokartstr. 60
Tel (07229) 3138-0, 3651-0
Telex 221982, Fax (07229) 313840

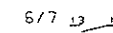
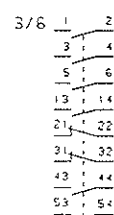
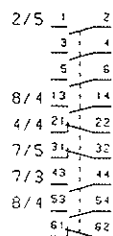
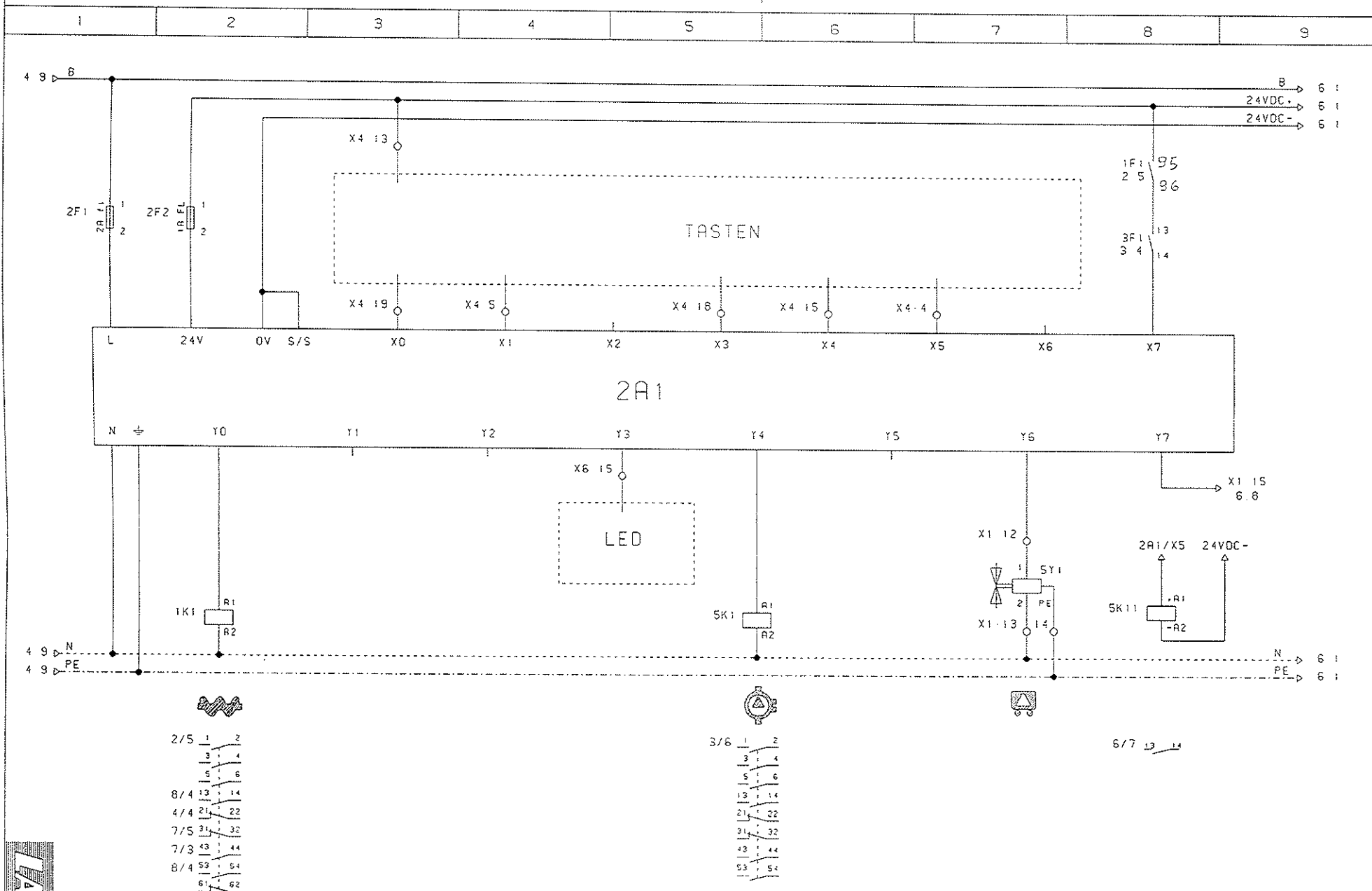
WW 130/160/200 1-tourig

Projekt WW-1

L-555/95

Datum 22 05 1995
gez Gr

Bl 003
von 016



Maschinenfabrik LASKA Ges m b H
A-4050 Froun-Austria Makortstr. 60
Tel (07229) 3138-0, 3651-0
Telex 221382, Fax (07229) 313840

WW 130/160/200 1-tourig

Projekt WW-1

L-555/95

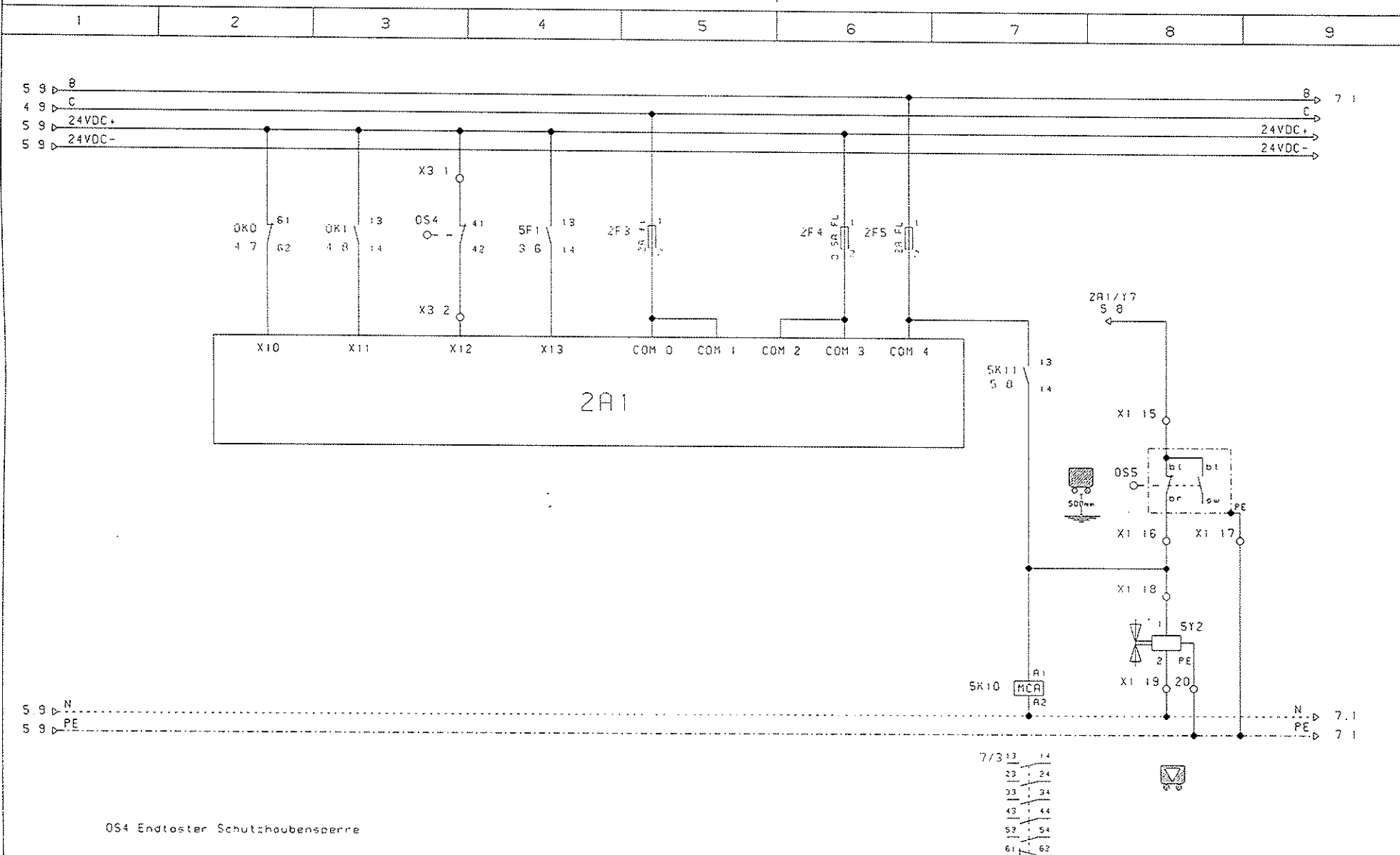
Datum 22 05 1995
Gez Gr

Bl 005
von 016

ELEKTRISCHER SCHALTPLAN
ELECTRICAL CIRCUIT DIAGRAM
PLAN DE MONTAGE ELECTRIQUE
ESQUEMA DE CONEXION ELECTRICA

08 00/

L-555/95



OS4 Endtaster Schutzhobensperre

Maschinenfabrik LASKA Ges m b H
A-4050 Braun-Austria Makartstr. 60
Tel (07229) 3138-0, 3651-0
Telex 221982, Fax (07229) 313840

WW 130/160/200 1-tourig

Projekt NW-1

L-555/95

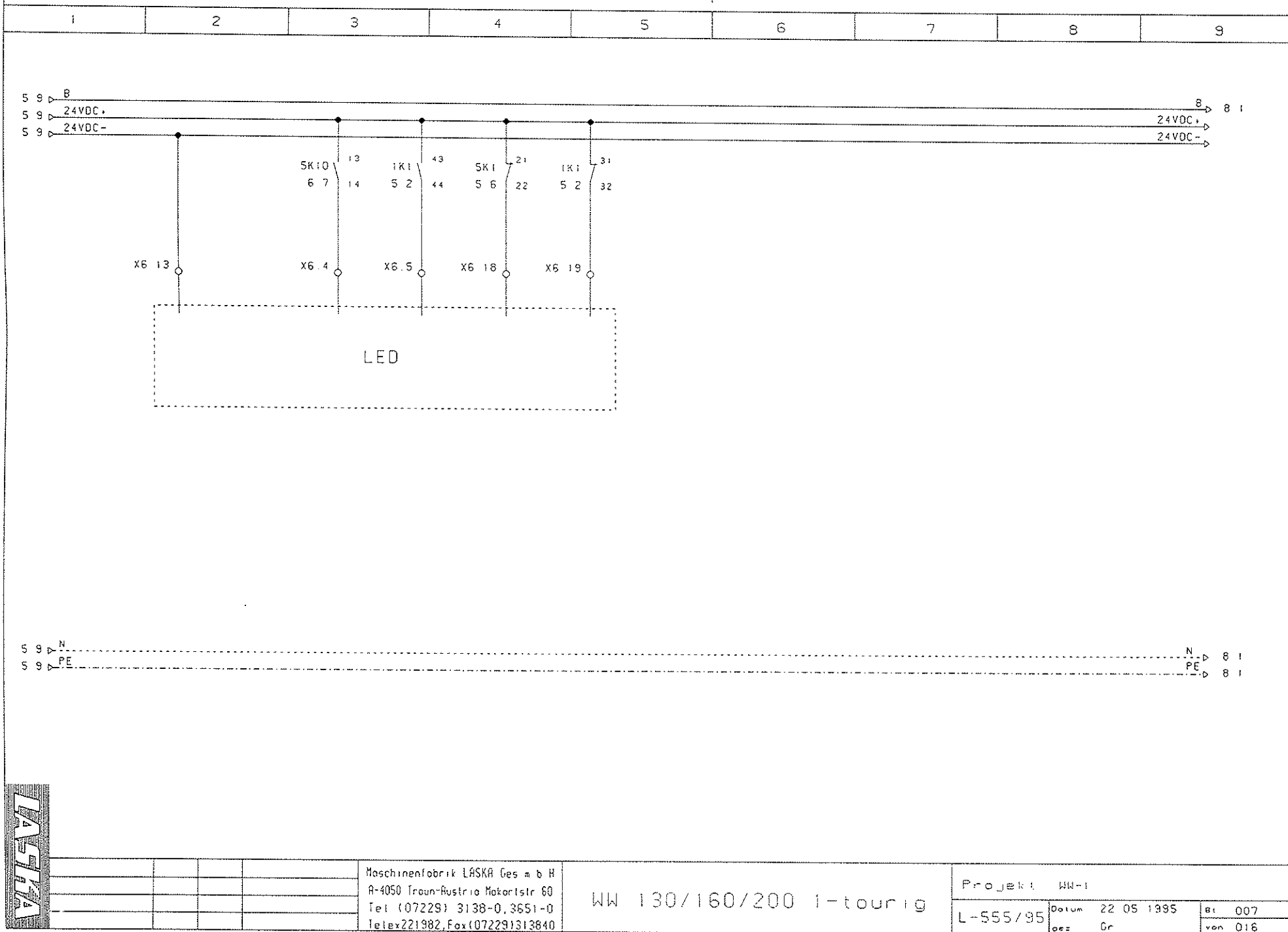
Datum: 22.05.1995
gez: Gr

Bl: 006
von 016

LASKA

ELEKTRISCHER SCHALTPLAN
 ELECTRICAL CIRCUIT DIAGRAM
 PLAN DE MONTAGE ELECTRIQUE
 ESQUEMA DE CONEXION ELECTRICA

08 00/
 L-555/95



LASKA

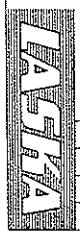
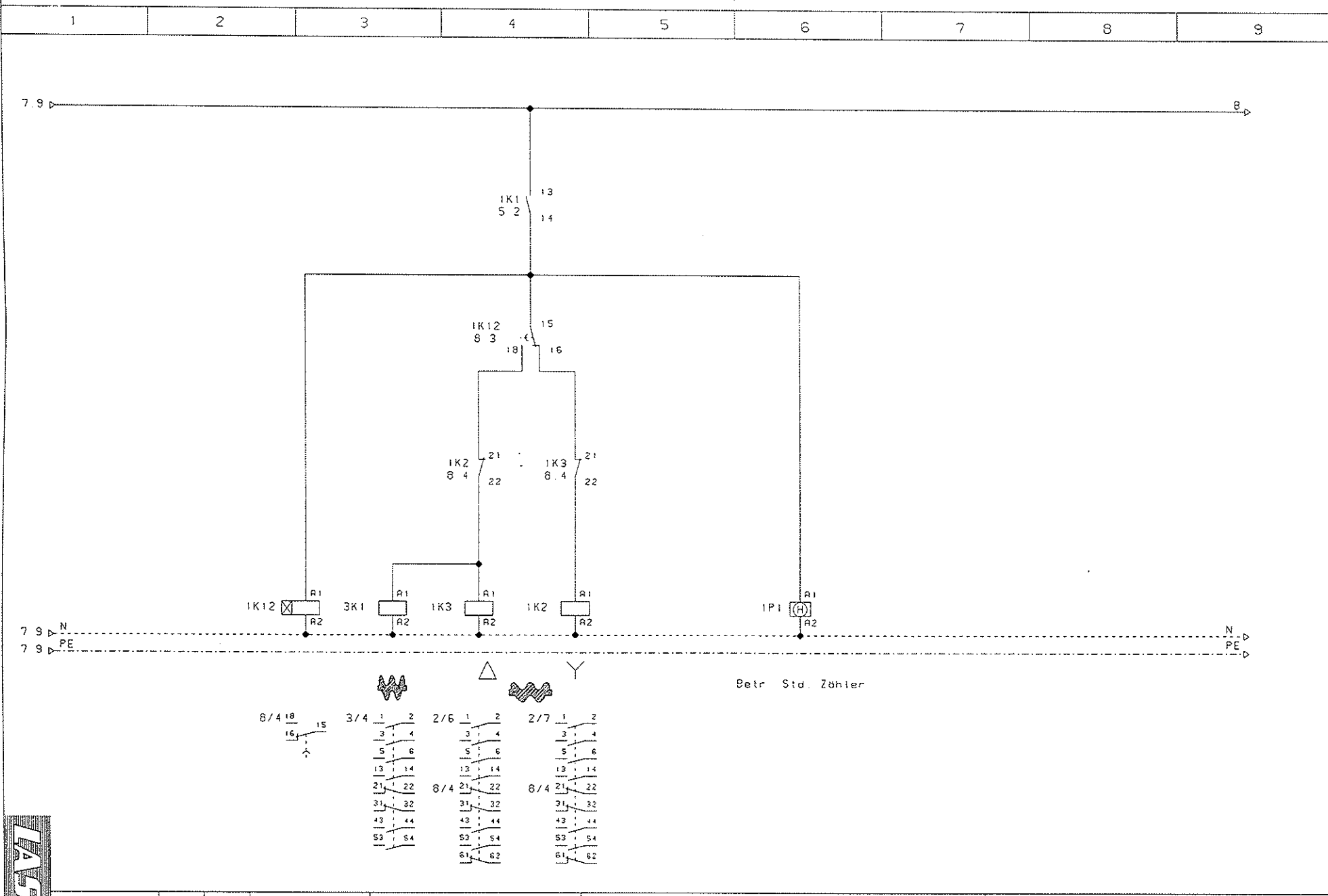
Maschinenfabrik LASKA Ges.m.b.H.
 A-4050 Traun-Austria Motorstr. 60
 Tel (07229) 3138-0, 3651-0
 Telex 221982, Fax (07229) 313840

WW 130/160/200 1-tourig

Projekt WW-1		
L-555/95	Datum 22.05.1995 gez Gr	Bl 007 von 016

ELEKTRISCHER SCHALTPLAN
 ELECTRICAL CIRCUIT DIAGRAM
 PLAN DE MONTAGE ELECTRIQUE
 ESQUEMA DE CONEXION ELECTRICA

08 00 /
 L-555/95



Maschinenfabrik LASKA Ges.m.b.H
 A-4050 Traun-Austria Makortstr. 60
 Tel (07229) 3138-0, 3651-0
 Telex 221982, Fax (07229) 313840

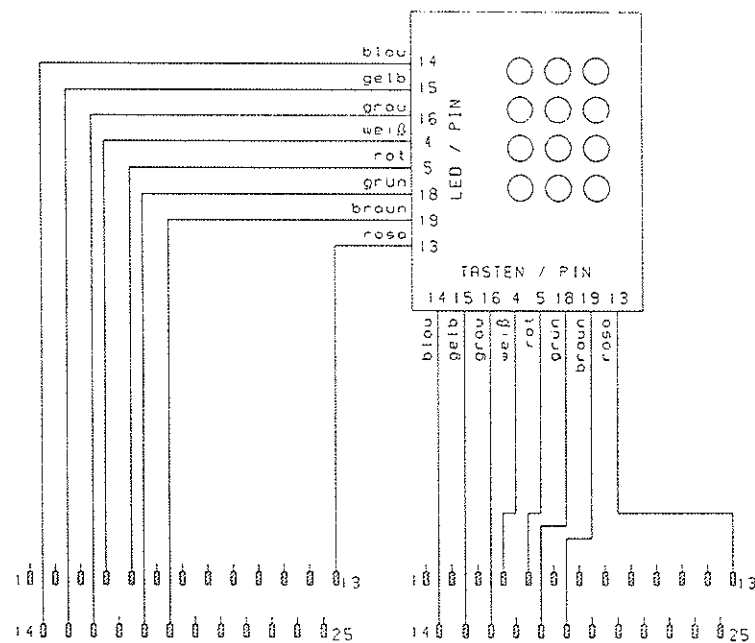
WW 130/160/200 1-tourig

Projekt WW-1			
L-555/95	Datum 22.05.1995	Bl. 008	
	Gez. Gr.	von 016	

ELEKTRISCHER SCHALTPLAN
ELECTRICAL CIRCUIT DIAGRAM
PLAN DE MONTAGE ELECTRIQUE
ESQUEMA DE CONEXION ELECTRICA

L-555/95

08.00/



Maschinenfabrik LASKA Ges m b H
A-4050 Traun-Austria Mokartstr.60
Tel (07229) 3138-0,3651-0
Telex221982,Fax(07229)313840

WW 130/160/200 1-tourig

Projekt WW-1

L-555/95

Datum 22.05.1995
gez. Gr

Bl 009
von 016

LASKA

The machine must only be started up by authorized persons who are familiar with the safety and operation stipulations.

The machine must never be used for purposes other than originally intended!

Before starting the machine, all safety devices should be checked. It is important to stress that protective devices and regulations can prevent possible damage and accidents and therefore must never be evaded. Should a protective device cease to function, this must be put right by a specialist before further machine operation!

In all cases, the accident prevention regulations or work safety laws valid in the subject country of installation are to be strictly adhered to.

- **Before start up ensure that no foreign bodies are present in the machine and that all necessary additional equipment, tools, etc. are correctly mounted on the machine and not just loosely fixed or not attached at all.**
- **During operation, moving or rotating parts must on no account be touched with clothing, tools, etc., nor brought into their proximity**

If the machine is equipped with a loading device, the safety function of the trolley stop must always be checked before start of operation and during operation no one should stand near or under the moving loading trolleys.

The machine must be regularly serviced, checked for any defects or damage and worn parts must be promptly renewed.

Before and during each servicing of the machine, as well as for installation and repair work, the machine must, due to safety reason, be completely switched off at the main switch from current, the machine tested for no volts and secured against the current being switched on again.

Please note that only original LASKA spare parts can guarantee perfect functioning of safety devices.

* Safety standards applied:

EC Machinery Directive	89/392/EEC as amended by Council Directive 91/368EEC 93/44/EEC 93/68EEC
EN 60204-1	Electrical Equipment of Industrial Machinery
EN 12331	Edition: October 1992 Food Processing Machinery-Mincer Safety and Hygiene Regulations
EN 1672-2	Edition: Mai 1996 Food Processing Machinery: Safety and Hygiene Regulations - General Design Guidelines Part 2: Hygiene requirements, February 1995

Accident prevention regulations for meat processing machinery
VGB (German Industry Assoc.) 19, 1.4.1990

* Cutting devices - Protection hood (mincer neck):

Do not reach into the cutting device while the machine is running.
!RISK OF INJURY!

Attention: You must not use holeplates with more than 8 mm hole-diameter!

* Cover:

Direct access to the feeder worm is prevented by a cover.

There is a fail-safe control to prevent
- the machine being started up when the cover is open.

* Hopper (raised machine housing):

Do NOT reach into the hopper while the machine is running.
!Risk of injury!

Direct access to the feeder worm is prevented by a top-mounted hopper.

On model WW, the top-mounted hopper is slewable.

On model WWR, the top-mounted hopper is rigid.

There is a fail-safe control to prevent

- the machine being started up when the top-mounted hopper is open (slewable top-mounted hopper).
- the machine being started up when the step is in the horizontal position (rigid top-mounted hopper).

* Thrust-pad bearing flange (feeder worm):

There is a fail-safe control to prevent:

- the machine being started up when the thrust-pad bearing flange is dismantled.

* Loader (where installed):

Do not go/stay under the loader.

Do not stand on the loader fork!

Check the trolley stop:

Push the trolley into the holder until it is stopped.

It should not be possible to pull out the trolley until the pedal is pressed.

* EMERGENCY STOP button:

Only press this button in an emergency.

After the EMERGENCY STOP button has been pressed, the machine is electrically dead.

"Caution:" Control cabinet is still electrically live!

* Remaining hazards:

- 1) Do not reach into the hopper while the machine is running.

!Risk of injury!

- 2) Do not reach in to the cutting device while the machine is running. **!Risk of injury!**

There must always be a transport carriage under the protection hood.

Immediately upon arrival/after unpacking the machine, check it for any transport damage and, if necessary, claim this from the transport company.

If the machine is screwed to the base of the crate, the side panels of the machine should be removed so that the base fixing screws are easily accessible from inside the machine and can be removed.

The machine can be rolled away sideways by means of rollers and transported with fork lift truck, taking care that the machine does not slide off (danger of accident and damage).

It should be noted that the machine is only to be supported/lifted at solid bearing frame points to avoid damage!

The machine does not require a special base. It must, however, be set up on a firm floor and **exactly adjusted horizontally by means of the height-adjustable, shock-absorbing machine feet.**

The electric connection must only be made by a competent electrician and should be carried out as follows:

- circuit diagram must be consulted!
- check whether mains voltage corresponds to operation voltage written on rating plate.
- the machine; i.e. the electric switchbox, should be connected with the necessary cable cross section and main fuses (see technical data), whereby the locally valid regulations in the respective country are to be observed.

The electric switchbox is best mounted in an easily accessible place on the wall (lower edge at least 1000 mm from the floor) as near as possible to the machine. It should be noted that the connection cables between machine and switchbox have a normal length of 3500 mm. These connection cables should be laid in the supplied protective hose, which is to be fixed to the machine and the switchbox, and clamped to the corresponding terminals in the switchbox (use tension relief in switchbox).

The switchbox is to be kept closed at all times and the correct state of the seals should be controlled.

Furthermore, all electric clamping points are to be controlled whether the numeration of the leads corresponds to that of the terminals.

WARNING: Before starting the machine care should be taken that all safety regulations are adhered to, that no foreign bodies are present in the machine, that all necessary pieces of equipment, tools, etc. are correctly mounted on the machine and not just loosely fixed or not attached at all. It should further be checked that the direction of rotation of the motors is correct (clockwise).

*** ATTENTION:**

The cutting set must be removed before checking the direction of rotation of the motor.

! ZERSTÖRUNGSGEFAHR !

For removal of the cutting set see section 33.1./01.

In the case of version with loading, the switchbox is mounted on the loading tower.

- * The angle mincer is a meat mincer for mincing fresh meat, frozen meat and animal fats using a range of different hole-plate sizes. The feeder worm takes hold of the material to be minced and feeds it through the conical section of the worm housing, first to the working worm and then to the cutting set.

Note: When processing frozen meat always make sure that the machine is completely empty before activating the stop button. If this procedure is not followed, severe damage will result.

* Designs:

- WW-2 : with 2 speeds for increased hourly capacity.
- WW-G : Reinforced version for processing frozen meat, with special working worm, knife studs and cutting set.
3-part and - on request - 5-part cutting sets may be used.
- WWR : With Z-shaped stirring arm and extra-high hopper.
Specially designed for mixing and salting meat.
- WW : Raised version with slewable hopper.
May only be used in conjunction with a loader.

* N.B.: Dismounting the feeder worm:

The feeder worm may only be mounted and dismounted by 2 men, as it weighs approx. 21 kg.

=====

* Types of cutting sets:

Fresh meat cutting set:
3- or 5-part

Frozen-meat cutting set:
3-part, onto end hole-plates with hole diams. of 8 mm or larger.
5-part, onto end hole-plates with hole diams. of less than 8 mm.

Desinewing cutting set:
5-part for automatic separation of sinews, gristle, rind and bone chips.
The soft meat is pressed through the fine holeplate bores, whilst hard particles are led off via the large holeplate bores and the support spider with transport device into the waste discharge pipe.
With the "L" de-sinewing set, the feed rate is adjusted by means of a ball valve.
With the "J" de-sinewing set, the feed rate is adjusted by means of a regulator bushing.

See section 60.40/.. for correct insertion of the cutting set.

* Unloading:

- The product is unloaded through the mincer neck into a transport carriage.

Warning: The transport carriage must not be overfilled.
!This may DESTROY the limit switch on the mincer protection hood!

*** Loader:**

Loading is carried out using a 200 litre transport carriage.
Do not stand on the loader fork!

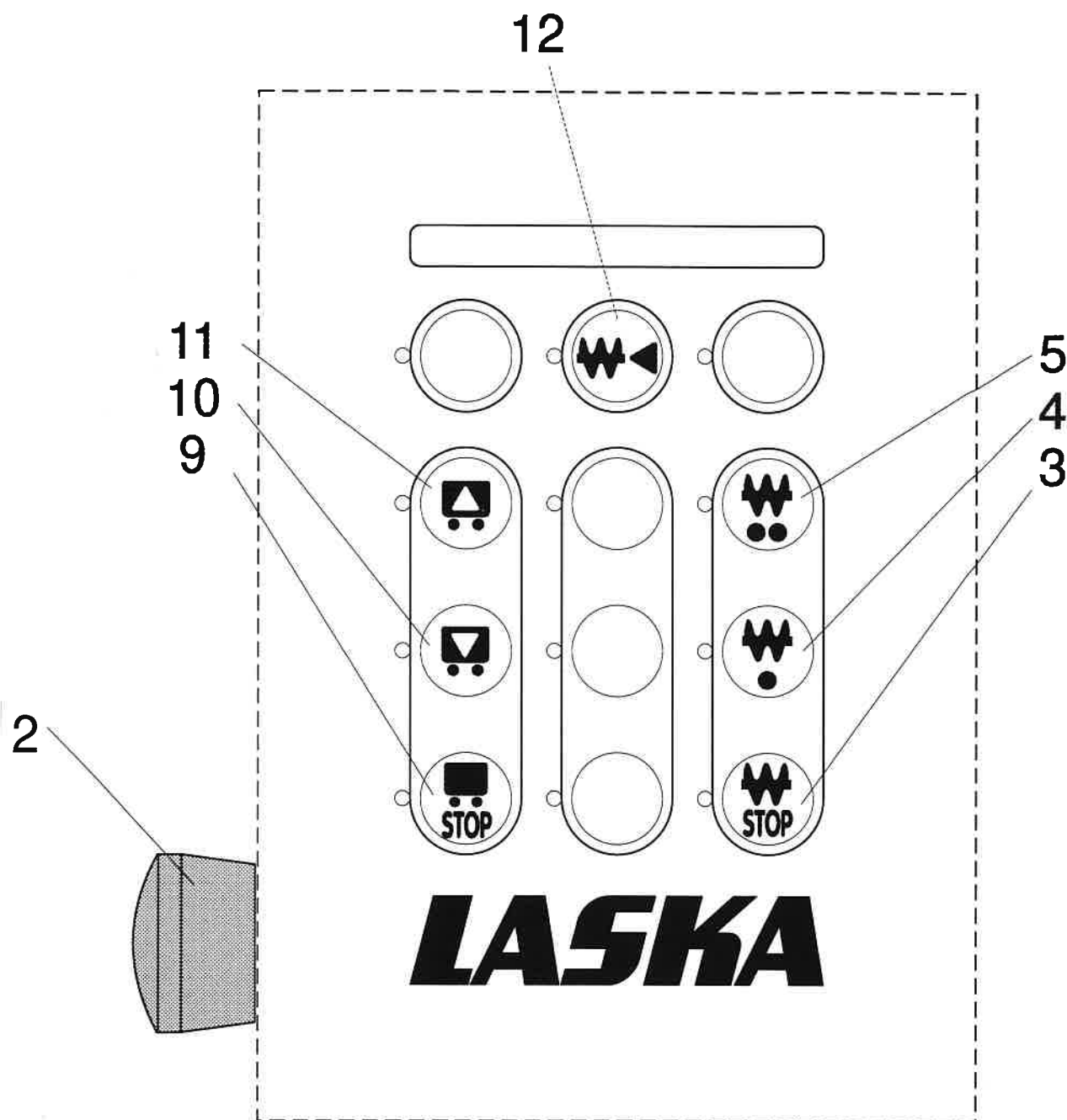
Loading only functions when hopper is closed.

When key „5S1“ (**Raise loader**) is pressed, the loader is automatically raised into its final (i.e. top) position.

When key „5S2“ (**Lower loader**) is pressed, the loader is automatically lowered to a position 500 mm above the floor.

For the final 500 mm, key no. „5S2“ must be pressed and hold down.

When key no. „5S2“ is pressed once again the loader stops in any position.



- 1 - Main switch (at switchbox)
- 2 - Emergency STOP (pushed-all functions are locked)
(unlock-turn switch to right side and pull)
- 3 - Cutting set - STOP
- 4 - First cutting set speed
- 5 - Second cutting set speed
- 9 - Loading device - STOP
- 10 - Loading device - DOWN
- 11 - Loading device - UP
- 12 - Ejector

Once you are familiar with all version and equipment details, control the direction of rotation of the motors (clockwise) and, when necessary, reverse this by changing over 2 phases of the current supply lead.

Control the oil level according to the lubrication maintenance instructions and grease the machine.

Test the hydraulic system (if applicable):

The electric motor of the hydraulic pump must be connected up in the correct direction of rotation so that the necessary oil pressure (already correctly adjusted in our factory) can be built up. This is then the case when a button is pressed for a hydraulic function and this functions perfectly or when the manometer of the hydraulic aggregate indicates the correct pressure as adjusted by our factory. (For procedure see section "Maintenance, Service"). The originally set pressure must not be altered!

Test the pneumatic system (if applicable)

Any protective coatings or foil should be removed and the machine, in particular all parts coming into contact with the product, is to be thoroughly cleaned with hot water to which a grease-dissolving but non-abrasive detergent has been added.

Before start up, attention should be paid that all safety measures are adhered to, that no foreign bodies are present in the machine and that all necessary additional equipment, tools, etc. are correctly mounted on the machine and not just loosely fixed or not attached at all.

The individual functions of the machine should be checked.

* Before starting the machine for the first time, remove the cutting set and ensure that no object or foreign bodies are in the bowl or on the machine itself.

* Safety cover and hopper (WW 130):

After operating the "EMERGENCY OFF" button or switching off the machine with the red main switch, the safety cover or hopper must be checked (that is, open the safety cover or hopper approx. 10 cm and close again).

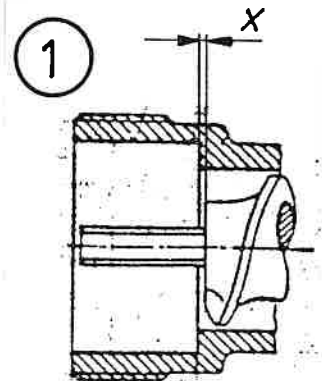
* Removal of cutting set:

Unscrew the closing nut by turning anticlockwise. Activate the ejector by pressing button "5S3". If the mincer is equipped with a mechanical ejector, the worm with the cutting set can be slid out of the housing by lifting up the ejector lever. Remove the cutting set and return the ejector lever to its original position.

Check the working worm's direction of rotation. The working worm turn in an anticlockwise direction as seen from the cutting set side.

Before the cutting set is inserted, check that the working worm has been slid in completely. This is the case when the worm is propped up against the support surface of the holeplates. (see fig.1)

Now the cutting set parts can be slid in in turn. (for correct insertion of cutting set see section 60.50/..)



=====

* Multicut version:

With the Multicut version the knife stud (mincer knife) is driven independently of the working worm.

When starting the machine switch on knife stud first.

If the working worm is not started within 5 seconds, the knife stud switches off again automatically.

The working worm can only be started when the knife stud is switched on.

N.B.: Only ORIGINAL LASKA cutting set can be used with version with shortened worm housing!

Never operate cutting set without material feed as otherwise unnecessary warming and wear of cutting set will result.
Never operate the feed worm without the working worm.

When processing frozen meat always make sure that the machine is completely empty before activating the "stop button".

If this procedure is not followed, severe damage will result.

After switching on the main switch, releasing the "EMERGENCY OFF" switch, the machine should not start automatically.
This should only happen after operating the individual function keys.

* Check (WW 130):

Machine should not start when:

- the lid or hopper is open.
- the lid or hopper is not quit.
- the counter bearing flange (feed worm) is not correctly positioned.

* Check: (WWR 130):

Machine should not start when:

- the safety step is in a horizontal position.
- the counter bearing flange (feed worm) is not correctly positioned.

* Loading device (if fitted):

- will not be working if hopper is open. (Type WW)
- When the step is in the horizontal position, it must not be possible to switch on the loader (Type WWR).

Before operating, the machine should be prepared and cleaned according to the section "start up".

Caution: For cleaning only the special purpose electrically locked cleaning pedestal (if fitted) may be used. It is forbidden to step on parts of the machine and use these for cleaning.

The machine, all easily removable parts and tools should be thoroughly **cleaned at least once a day at the end of operation and adhering to all safety regulations (see section "Safety") with hot water and a non-abrasive, grease-dissolving detergent.**

- **Switch off the electricity to the machine**
- **On no account should abrasive detergents or additives be used!**
- **On no account should high-pressure or steam jet cleaners be directed at sensitive parts** such as pushbutton panel, electric switches and equipment, switchbox, bearing, seals, etc., **nor at openings into the inside of the machine housing.**
- All electric parts should be cleaned as dry as possible and on no account should a water jet be directed against these.
- Pay attention with cutting parts – danger of accident!

After cleaning the machine, machine parts and tools should be dried, smeared with edible oil or fat and spread out separately.

W A R N I N G: CLEANING OF THE PUSH BOTTON PLATE, ELECTRICAL ELEMENTS AND SWITCH BOX
WITH HIGH-PRESSURE OR STEAM JET CLEANING DEVICES WILL LEAD TO A
BREAKDOWN OF THE MACHINE.

CLEANING SCHEDULE

	Cleaning agent	Method	Equipment	Remarks
ROUGH CLEANING	manual, mechanical	Removing remnants of product (Dismounting smaller components where nec.)	Spatula Scraper	Begin as soon as production operations have finished
PRE-RINSE	Potable water	Low pressure < 30 bar (< 3 MPa) Temp. 60°C (dep. on softening point of fat)	Low-pressure unit Water hose	Incl. small components
ALKALINE CLEANING or	2 - 5 % Henkel Hygiene P3-TOPAX 19 or P3-TOPAX 66 Goldschmied SOMPLEX fat solvent	Foam or manual cleaning. Action time approx. 15 min.	Low-pressure foam unit Hand-held spray unit Brush, tub	Every day Incl. small components!!!
ACID CLEANING (as needed, instead of alkaline cleaning)	3 - 6 % Henkel Hygiene P3-TOPAX 56 Fa. Goldschmied SOMPLEX acidic foam	Foam-cleaning Action time approx. 15 min. Manual, mechanical	Low-pressure foam unit Hand-held spray unit Brush for removing scale	As needed, instead of alkaline cleaning
RINSING	Potable water	Low pressure < 30 bar (< 3 MPa) Temperature 50 - 60°C	Low-pressure unit Water hose	Entire machine and all small components T H O R O U G H L Y
SIGHT CHECK for outward cleanliness		Sight check		Follow manufacturer's instructions - check critical points and problem areas!
DISINFECTION	As per product data sheet, 0.5 - 2 % Henkel Hygiene P3-TOPAX 99 or P3-TOPAX 91 Goldschmied TEGO 2000 TEGO IMC	Spraying, foam cleaning. Action time as per product data sheet	Low-pressure unit Spray gun	Entire machine and all small components. After all cleaning work in the room has been finished !
RINSING	Potable water	Low pressure < 30 bar (< 3 MPa)	Low-pressure unit Water hose	Rinsing procedure as per FLHV, Anl.2 11 Nr. 4
DRYING				
MACHINE CARE	e.g. edible oils	Spraying	Spray gun	

This Cleaning Schedule only applies to machines made largely of stainless steel.
For machinery made of other materials, please consult the manufacturer of the cleaning agent in question.

(The information given above assumes single-shift operation!)

1. Rough cleaning:

- * Press the EMERGENCY STOP button to disconnect the machine from the electricity supply.
- * Remove the cutting set (see chapter entitled "Start-up").
- * Pull out the working worm.
- * Feeding worm can be disassembled:
As the feeding worm weighs approx. 21 kg 2 persons are needed for this job.
Dismountle flange and pull feeding worm out.
- * Depending on execution: open hood or hopper.
- * Please use safety platform on the WWR-execution.
- * Clean the pushbutton plate with a damp cloth - NOT with a high-pressure cleaner.
- * At least once a day, flush cleaning openings (1) and (2) with hot potable water. (Fig. 1)

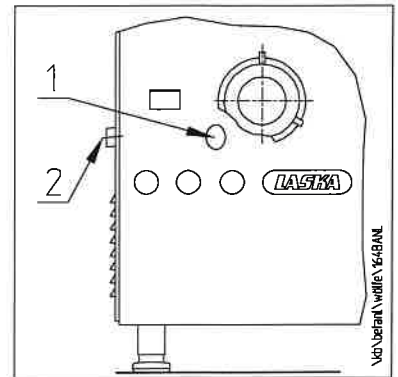


Fig.1

2. Pre-rinse:

- * Rinse the whole machine, and all dismounted parts, with hot potable water.

3. Alkaline or acid cleaning:

- * Foam-clean the whole machine from top to bottom, as well as all dismounted parts.

See Cleaning Schedule for details of which cleaning agents to use.

4. Rinse:

- * After the cleaning agents have had time to act, rinse down the whole machine, and all dismounted parts, with hot potable water.

Regular controls and necessary maintenance and servicing work are essential for perfect functioning of the machine. Maintenance, servicing and any repairs may only be carried out **once a year** or after **1000 operating hours** of the **LASKA service department**.

Attention: Welding jobs may only be carried out after permission of the **LASKA service department**, as this may cause severe damage to electronic components!

HYDRAULICS (when present)

The hydraulic system is made up of hydraulic aggregate, solenoid valves, hydraulic cylinders and hydraulic pipes. Control the oil level in the aggregate every week and check pipes and components for possible leakage spots.

The oil pressure can be tested with the built-on manometer by opening the shut-off valve in front of the manometer. The button for a hydraulic function should also be pressed and the pressure on the manometer can be read off once the end position of the cylinder has been reached. Utmost attention must be paid that, after testing, the shut-off valve is always reclosed as otherwise the manometer could be damaged.

PNEUMATICS (when present)

Regularly control pipes, valves, cylinders, maintenance unit etc.

LUBRICATION

Lubricate the machine regularly according to the lubrication plan, control the oil level and carry out oil change. In case of emergence of the lubricant, determine the cause immediately and if necessary repair any damage.

BELTS / CHAINS

Belts and chains should be tested weekly for correct sit, tension and wear and if necessary retightened (see assembly diagram).

Belt tightening: Utmost attention must be paid that, after tightening, the axes of the pulleys are exactly parallel to each other and the pulley grooves exactly aligned (Do not tighten tensioning elements on one side only).

Belt exchange: Loosen the tightening elements of the belts so far that belts can be easily removed and later easily replaced. Pulley grooves must be smooth, clean and free of oil and grease. Only ever insert belts of the same length. Belts should be mounted on the pulley carefully and never with force to avoid damage. Tension the belts as above and control after approx. 15-30 hours of operation whether retightening is necessary.

ELECTRICS

Electrical devices are to be checked at 6 monthly intervals.

The clamping points of all electrical connections should be checked 1 month after installation to make sure that they are properly secured. Seals in the switch box and electrical parts of the machine should be regularly checked for leakage.

Especially care should be taken that sensitive parts such as the switch box, push button plate, switches, etc. are not directly sprayed with water or high-pressure cleaners.

*** Attention:**

Service and maintenance work may only be carried out by **skilled personnel!**
Always disconnect the machine from the mains before carrying out maintenance jobs!

*** Relubrication:**

Each time after cleaning, grease knife stud, complete cutting set and worm stud of the disassembled
Working worm with animal fat.
A heavily worn knife stud can cause breakage of the knives and holeplates, and should therefore be replaced.

*** Ejector:**

In the case of the version with the mechanical ejector, each time after cleaning the machine, thoroughly clean
the protruding ejector bolt in the worm housing as well and grease with animal fat.

*** Feeder mounting gear / Agitator blade gear motor (Type WWR):****Oil level check:**

- change the oil when the machine is switched off.
Unscrew the control screw.
If oil emerges from the control bore, the oil level is correct.

Changing the oil:

- when the motor has been run warm.
Unscrew the drain plug and drain the oil into a drip pan.
Screw the drain plug back in, and refill with oil.
See Sections 65.0./.. and 67.0./.. for details of lubricants, filling quantities etc.

*** Dismounting the feeder worm:**

Procedure:
Unscrew both clamping bolts.
Detach the counter-bearing flange.
Pull out the feeder worm.

Warning: The feeder worm may only be mounted and dismounted by 2 men, as it weighs approx. 21 kg.

*** Hydraulic unit:**

Change the filter once a year.

Oil level check:

The oil level must be at least in the middle of the glass.

The machine must be switched off when this check is performed.

Changing the oil:

Disconnect the machine from the mains.

Change the oil when the motor has been run warm.

Unscrew the drain plug and drain the oil into a drip pan.

Screw the drain plug back in, and refill with oil.

See Sections 65.0/.. and 67.0/.. for details of lubricants, filling quantities etc.

*** Assembly of the cutting sets:**

Clean all parts thoroughly – also see section 50.../..
Grease holeplates with animal grease.

Attention: All cutting set parts must be assembled and inserted as shown in enclosed drawings!
Cutting set parts which are marked with the word, „**VORN**“ bzw. „**VORNE**“ must be inserted with the writing face upwards !
Special attention should be paid to the position of the kidney plates and knives!
Using kidney plates with bushing, you must not add a spider support with bearing !

Incorrect insertion can lead to destruction of machine !

See section 60.60/.. for grinding of the cutting set parts.

Frischfleisch-Schneidsatz 3- oder 5-teilig:

1. 3-stegiger Sichelvorschneider mit Lagerbuchse
2. 4-flügeliges Profil-Klingenmesser
3. Schräglochscheibe 13mm
4. 4-flügeliges Profil-Klingenmesser
5. Schräglochscheiben 3/5/8mm
6. Vorsteckring 28/55mm

Fresh meat cutting set 3- or 5-parts:

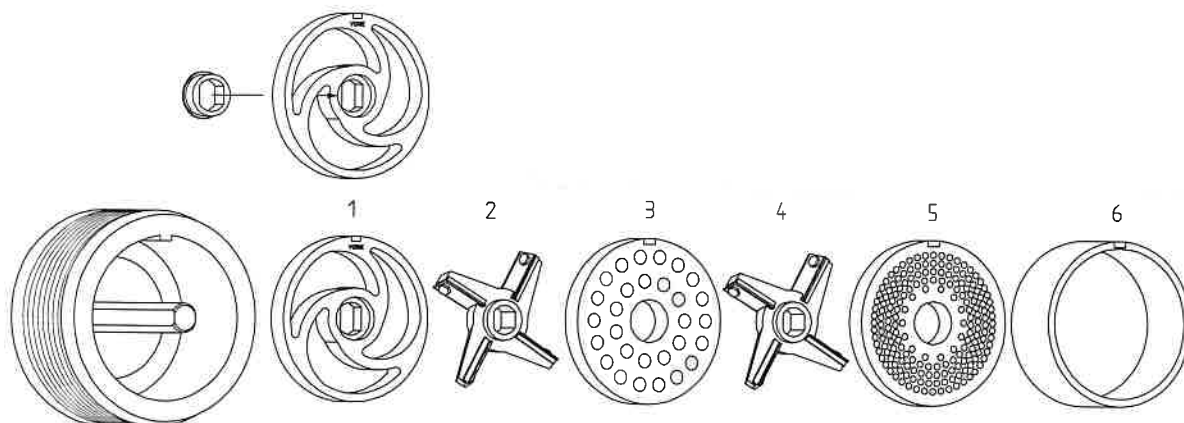
1. 3-web curved kidney plate with bushing
2. 4-wing profile blade knife
3. Inclined holeplate 13mm
4. 4-wing profile blade knife
5. Inclined holeplates 3/5/8mm
6. Support ring 28/55mm

Jeu de coupe pour viande fraîche à 3 ou 5 éléments:

1. Plaque de précoupe type faucille à 3 branches avec coussinet
2. Couteau profilé à lame à 4 ailes
3. Plaque à forages en biais 13mm
4. Couteau profilé à lame à 4 ailes
5. Plaque à forages en biais 3/5/8mm
6. Anneau de support 28/55mm

Juego de corte para carne fresca de 3 ó 5 elementos:

1. Placa de precorte falciforme de 3 alas con cojinete
2. Cuchilla perfilada de hoja à 4 paletas
3. Placa a taladros oblicuos 13mm
4. Cuchilla perfilada de hoja à 4 paletas
5. Placa a taladros oblicuos 3/5/8mm
6. Anillo de inserción 28/55mm



W 130/WW 130

INSTANDHALTUNG - WARTUNG

60.41/06

=====

MAINTENANCE - SERVICING

MANIPULATION - ENTRETIEN

MANTENIMIENTO - CUIDADO

=====

Gefrierfleisch-Schneidsatz 5-teilig:

1. 3-stegiger Sichelvorschneider mit Lagerbuchse
2. 4-flügeliges Distanzringmesser
3. Schräglochscheiben 13/20mm
4. 4-flügeliges Distanzringmesser
5. Schräglochscheibe 8mm
6. Vorsteckring W 130..55mm
WW 130..28/55mm

Achtung: Endlochscheibe mit Bohrungsdurchmesser größer als 8mm darf ohne Schutzabdeckung nicht verwendet werden!

Frozen meat cutting set (5-parts):

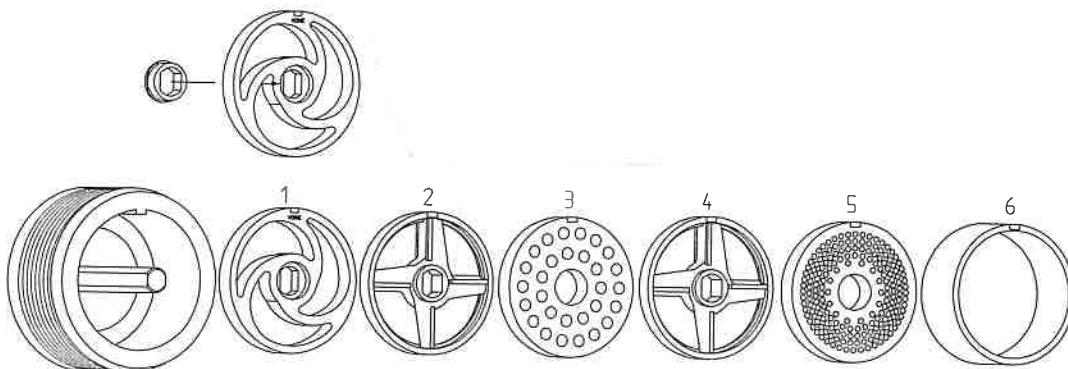
1. 3-web curved kidney plate with bushing
2. 4-wing spacer ring knife
3. Inclined holeplates 13/20mm
4. 4-wing spacer ring knife
5. Inclined holeplate 8mm
6. Support ring W 130..55mm
WW 130..28/55mm

Jeu de coupe à viande congelée à 5 éléments:

1. Plaque de précoupe type faucille à 3 branches avec coussinet
2. Couteau à bague de distance à 4 ailes
3. Plaque perforée 13/20mm
4. Couteau à bague de distance à 4 ailes
5. Plaque perforée 8mm
6. Anneau de support W 130..55mm
WW 130..28/55mm

Juego de corte para carne congelada de 5 elementos:

1. Placa de precorte falciforme de 3 alas con cojinete
2. Cuchilla con anillo distanciador con 4 alas
3. Placa perforada 13/20mm
4. Cuchilla con anillo distanciador con 4 alas
5. Placa perforada 8mm
6. Anillo de inserción W 130..55mm
WW 130..28/55mm



Tightening the cutting set:

Grease the closing nut with animal fat or parafin oil, screw onto housing and tighten. After tightening, turn closing nut back approx. 1/8 of a turn.

Start the machine and before the material reaches the cutting set retighten the closing nut.

The cutting set is now correctly tightened.

Grinding the cutting set parts:

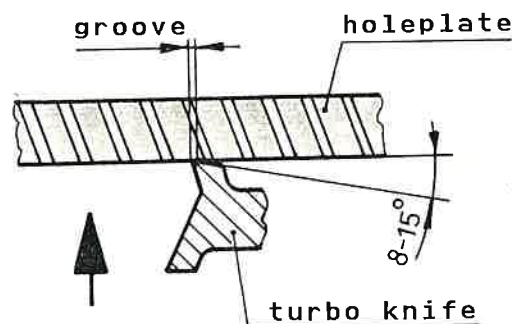
Regrinding the cutting set in good time is strongly recommended. As soon as the cutting performance lessens, all parts of the cutting set should be ground.

With blade knives the worn blades should be exchanged before the knife arms run against the plates. The screws on the knives will loosen slightly with time so these should be retightened periodically.

Turbo ring knives should be plane ground. The front of the blades - the side running against the holeplate - is ground with grooves.

Up to size 130 groove width 0.2 - 0.3 mm
160 upwards groove width 0.3 - 0.5 mm

The reverse side of the turbo knife is not grooved but remains plane. See sketch.

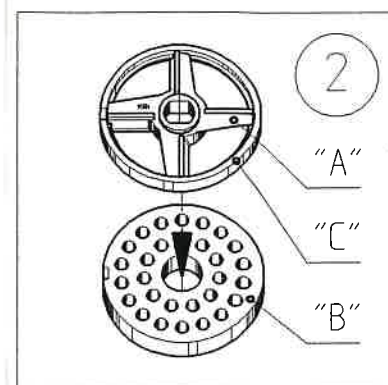
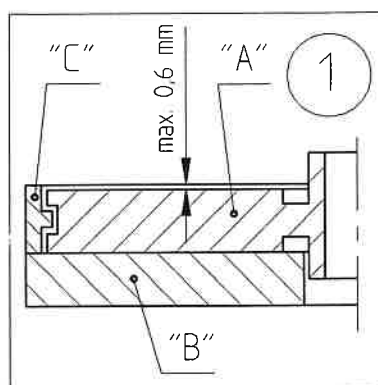


Grind coarse cut knives plane. If regrinding of the cutting edges is necessary, the original cutting angle must be retained.
NB: when you forward us coarse cut knives for grinding, make sure and also send the hub.

Grinding of cutting set parts:Spacer ring knife:

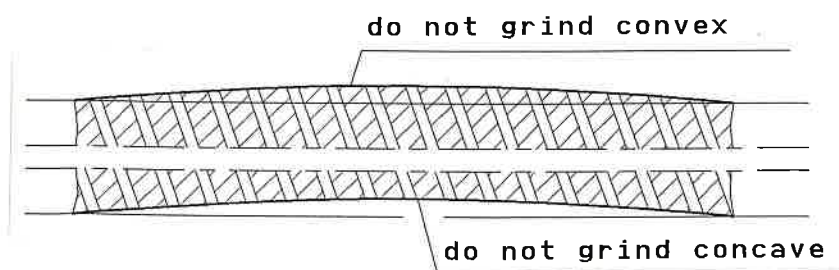
Caution: Regrind spacer ring knife at the latest when width difference between knife "A" and spacer ring "C" is 0,6 mm (fig.1).
Exceeding of max. tolerance of 0,6 mm can cause breakage of the cutting tools.

Knife "A" and spacer ring "C" must be placed on plane surface for grinding.
Place knife "A" on grinding rest "B" (holeplate, see drawing).
Now grind knife "A" and spacer ring "C" plane.
Thereafter place the knife on its ground side and grind the second side.

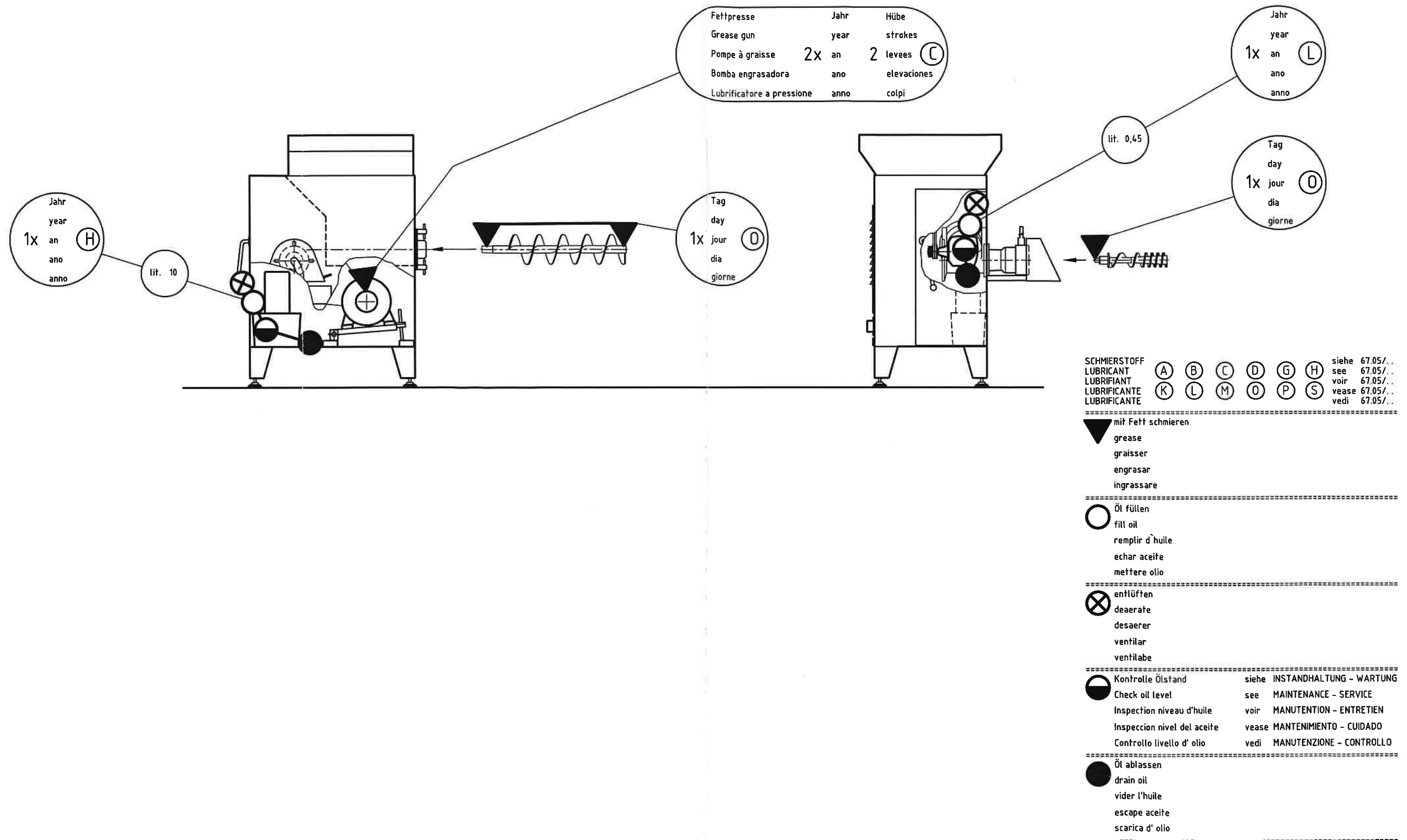
Bush system version:

With 5-part cutting set, i.e. with 2 knives, one should check that both bushes are not hitting against each other in the holeplate.
If necessary, the holeplate must be changed.

Grind the kidney plate and holeplates plane parallel, i.e. neither concave nor convex. See sketch!



Holeplates which are too thin curve forwards so care should be taken that such plates are renewed in time.



XXX

SCHMIERSTOFFE - ÜBERSICHT (H1)

67.03/01

=====

RECOMMENDED LUBRICANTS (H1)

=====

LUBRIFIANTS CONSEILLES - VUE GENERALE (H1)

LUBRIFICANTES RECOMENDADOS - VISTA GENERAL (H1)

LUBRIFICANTI RACCOMANDATI - VISTA GENERALE (H1)

TYPE	Temperatur Einsatzbereich	Viskosität	Flammpunkt	Stockpunkt	EMPFOHLENE SCHMIERSTOFFE	TYPE
TYPE	Temperature range of use	Viscosity	Flash point	Setting point	RECOMMENDED LUBRICANTS	TYPE
TYPE	Temperature zone d'action	Viscosite	Point d'in- flammation	Point de figeage	LUBRIFIANTS CONSEILLES	TYPE
TIPO	Temperatura de trabajo	Viscosidad	Punto de inflamación	Punto de so- lidificación	LUBRIFICANTES RECOMENDADOS	TIPO
TIPO	Temperatura di lavoro	Viscosità	Punto d'inf- iammabilità	Punto di so- lidificazione	LUBRIFICANTI RACCOMANDATI	TIPO
(A)						(A)
(B)						(B)
(C)	-50°C <-> +120°C		+220°C		Klübersynth UH1 14-31	(C)
(D)	-50°C <-> +120°C		+200°C		Klübersynth UH1 14-1600	(D)
(G)	-10°C <-> +60°C				Paraliq P 40 Spray	(G)
(H)		46 cSt/40°C	+200°C	-35°C	Klüberoil GEM 1-46	(H)
(K)						(K)
(L)		220 cSt/40°C	+200°C	<-35°C	Klüberoil 4 UH1-220	(L)

XXX

SCHMIERSTOFFE - ÜBERSICHT (H1)

67.03/02

RECOMMENDED LUBRICANTS (H1)

LUBRIFIANTS CONSEILLES - VUE GENERALE (H1)

LUBRIFICANTES RECOMENDADOS - VISTA GENERAL (H1)

LUBRIFICANTI RACCOMANDATI - VISTA GENERALE (H1)

TYPE	Temperatur Einsatzbereich	Viskosität	Flammpunkt	Stockpunkt	EMPFOHLENE SCHMIERSTOFFE	TYPE
TYPE	Temperature range of use	Viscosity	Flash point	Setting point	RECOMMENDED LUBRICANTS	TYPE
TYPE	Temperature zone d'action	Viscosité	Point d'in- flammation	Point de figeage	LUBRIFIANTS CONSEILLES	TYPE
TIPO	Temperatura de trabajo	Viscosidad	Punto de inflamación	Punto de so- lidificación	LUBRIFICANTES RECOMENDADOS	TIPO
TIPO	Temperatura di lavoro	Viscosità	Punto d'inf- iammabilità	Punto di sol- idificazione	LUBRIFICANTI RACCOMANDATI	TIPO
(M)		93 cSt/40°C	+260°C	<-12°C	BP Energol RC 100 Shell Talpa G 100 Mobil Vakuumpumpenöl Heavy Texaco Ursa Oil P 100	(M)
(O)	-20°C <-> +110°C	Kettenspray Chain spray Spray pour chaînes Spray para cadenas			Klübersynth 4 UH1-1500 Spray	(O)
(P)						(P)
(S)		150 cSt/40°C	+200°C	-35°C	Klüberoil 4 UH1-150	(S)
(T)		15 cSt/40°C	+105°C	-50°C	Shell Aerro Fluid 4	(T)

* **Machine does not start:**

Frequency and mains voltage **must** conform to the voltage given on the rating plate

Control whether the **power supply** has been interrupted

Machine **must** be switched on at red master switch

„**EMERGENCY STOP**“ switch **must** have been re-set (i.e. pulled out).

Cover or hopper **must** be closed

Protective hood for mincer neck **must** be closed

The counter-bearing flange **must** be mounted.

Safety step (if fitted) must be in a vertical position

Check, and if necessary exchange, the electric safety switch for the cover, hopper, protective hood, counter bearing flange or safety step.

Check the functioning of the buttons on the keyboard

Check contactors, motor protection switch or thermorelay:

In the switchbox operate the push button on the motor protection switch or on the thermorelay.

When the protection switch is often released the motor must be checked.

* **The loading, or ejector do not function**

Let the hydraulic cylinder run into the end position and control the required oil pressure according to the hydraulic plan by means of the manometer fixed to the hydraulic aggregate. (Open the shut-off valve in front of the manometer but make sure and close again immediately after pressure check

Check the power supply to the solenoid valve and its function.

Check the electrical limit switches for function and correct position.

In this spare parts index, all important parts are illustrated and named in ASSEMBLY DRAWINGS and listed in the following SPARE PARTS LIST.

GENERAL ASSEMBLY DRAWING: (BGUS) illustrates and names the individual assembly groups into which the machine is classified.

ASSEMBLY DRAWING: (AA-ZZ) illustrates all parts of an individual assembly group with their part number. So far as these data only apply to individual types or versions, this is indicated on the drawing.

(*) - Symbol in front of a part number indicates parts which are to be replaced together / which are only delivered together.

The (*) symbols of these parts which are to be ordered / delivered together are joined with a line.

The quantity of parts can be seen on this assembly drawing, e.g. (2X) or (6X)

SPARE PARTS LIST (appendix) : indicates the parts shown in the assembly drawings with their part numbers, their order Numbers and their name.
(Part numbers are arranged in ascending order whereby letters are arranged before figures in each part of the number.)

e.g. A 107
before AB 107
before A1 107
before 1K 107
before 2000.0.053

For every spare part order the following should be started:

EXAMPLE:

1. Machine type and size	WW 160
2. Serial number of the machine (see name plate)	Z – 5555
3. Part number – see assembly drawing / spare part list	2000.0.223
4. Order number – see spare part list	9268
5. Name of part required	Bearing cover
6. Quantity of part required	1 piece

It is expressly pointed out that if other than original LASKA cutting tools or spare parts are used, all guarantee claims are invalid.

All information and illustrations in this operating manual are copyright and may not, without our express consent, be copied nor given to third parties, nor misused !

Maschinenfabrik LASKA
Gesellschaft m.b.H.
A-4050 TRAUN - Austria

134.BZ

134.C

134.H

134.AN

134.AU

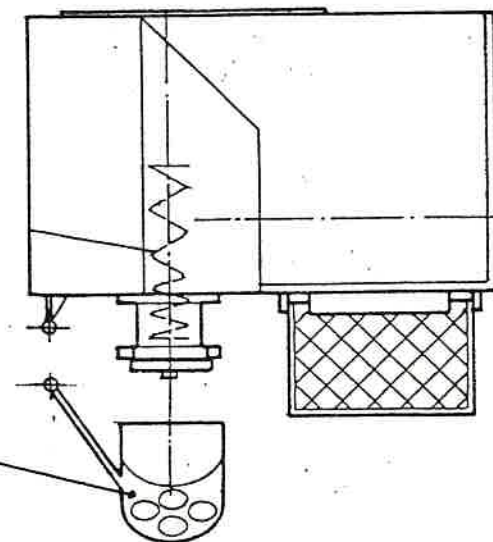
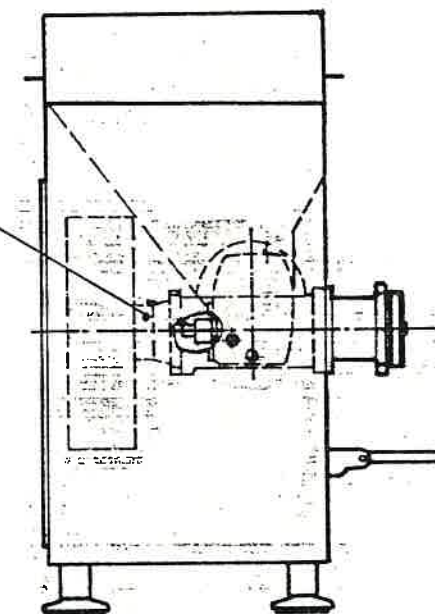
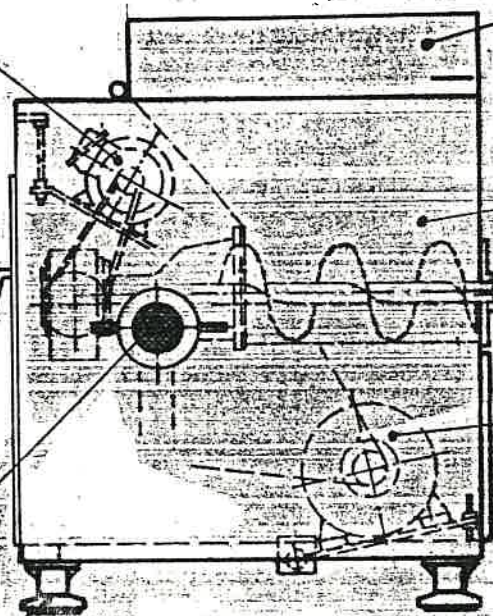
134.AM

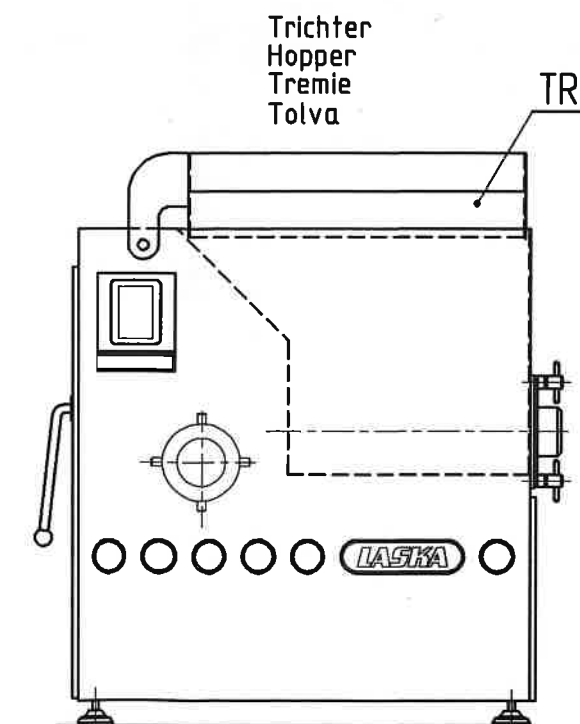
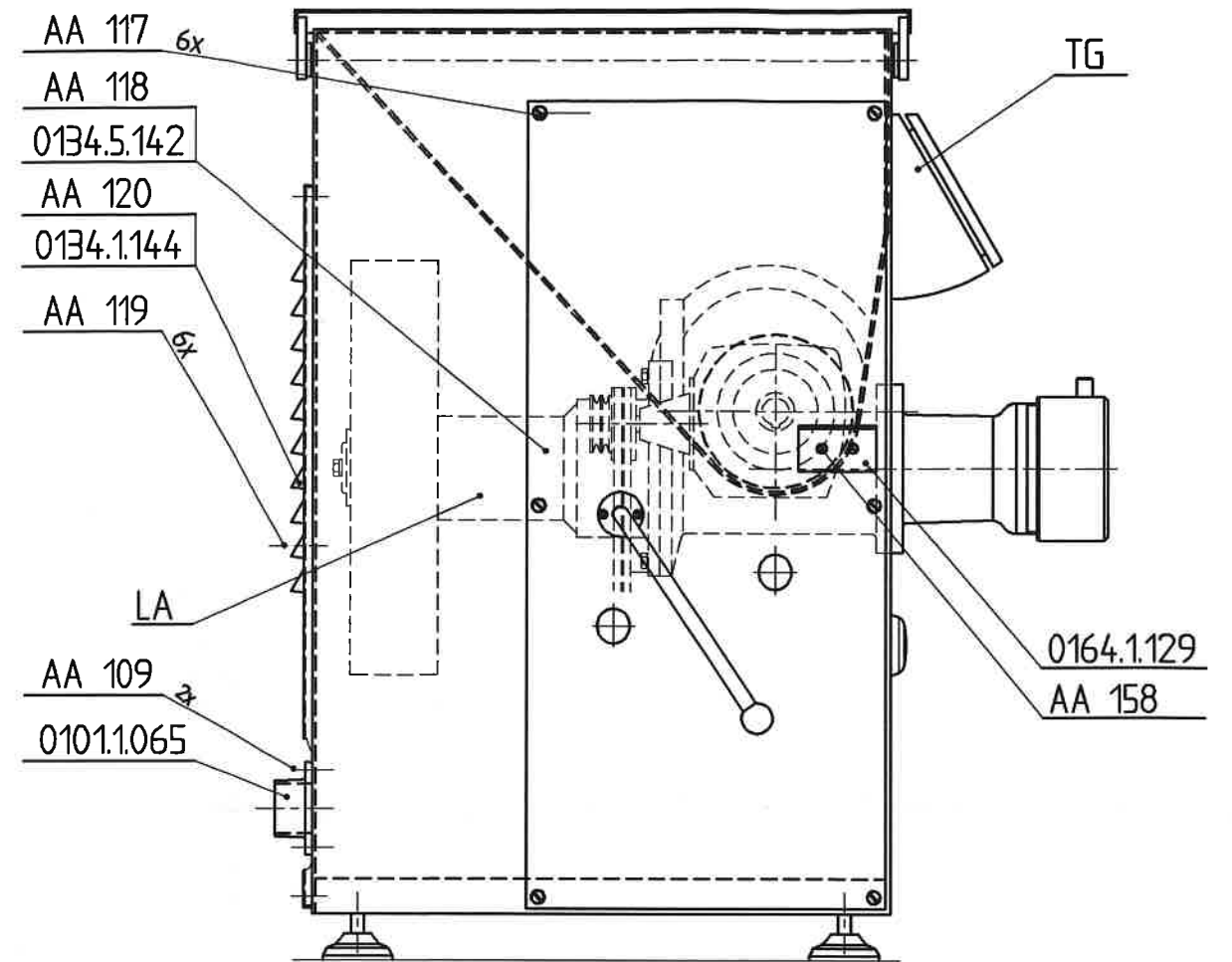
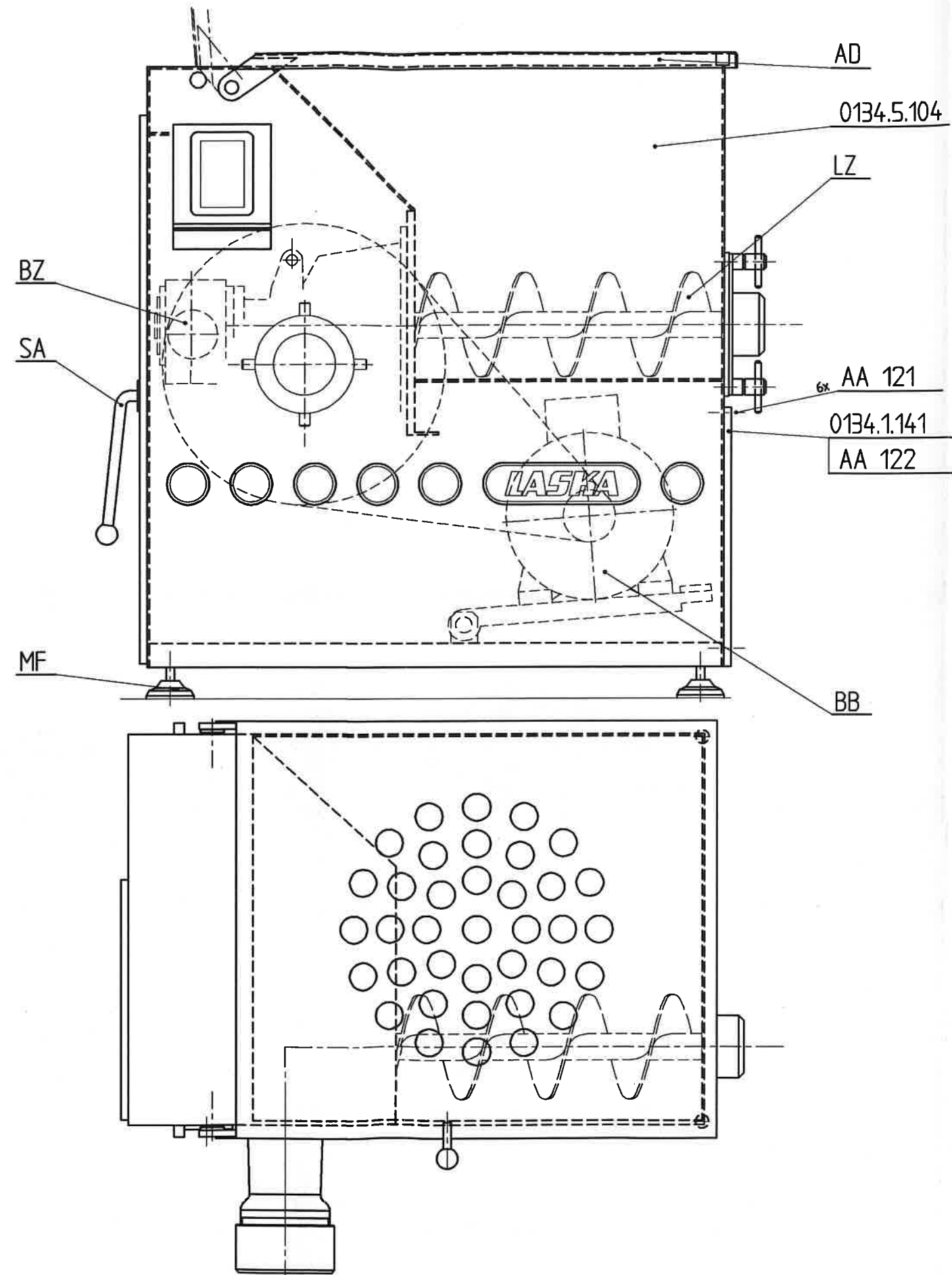
134.LA

134.AA

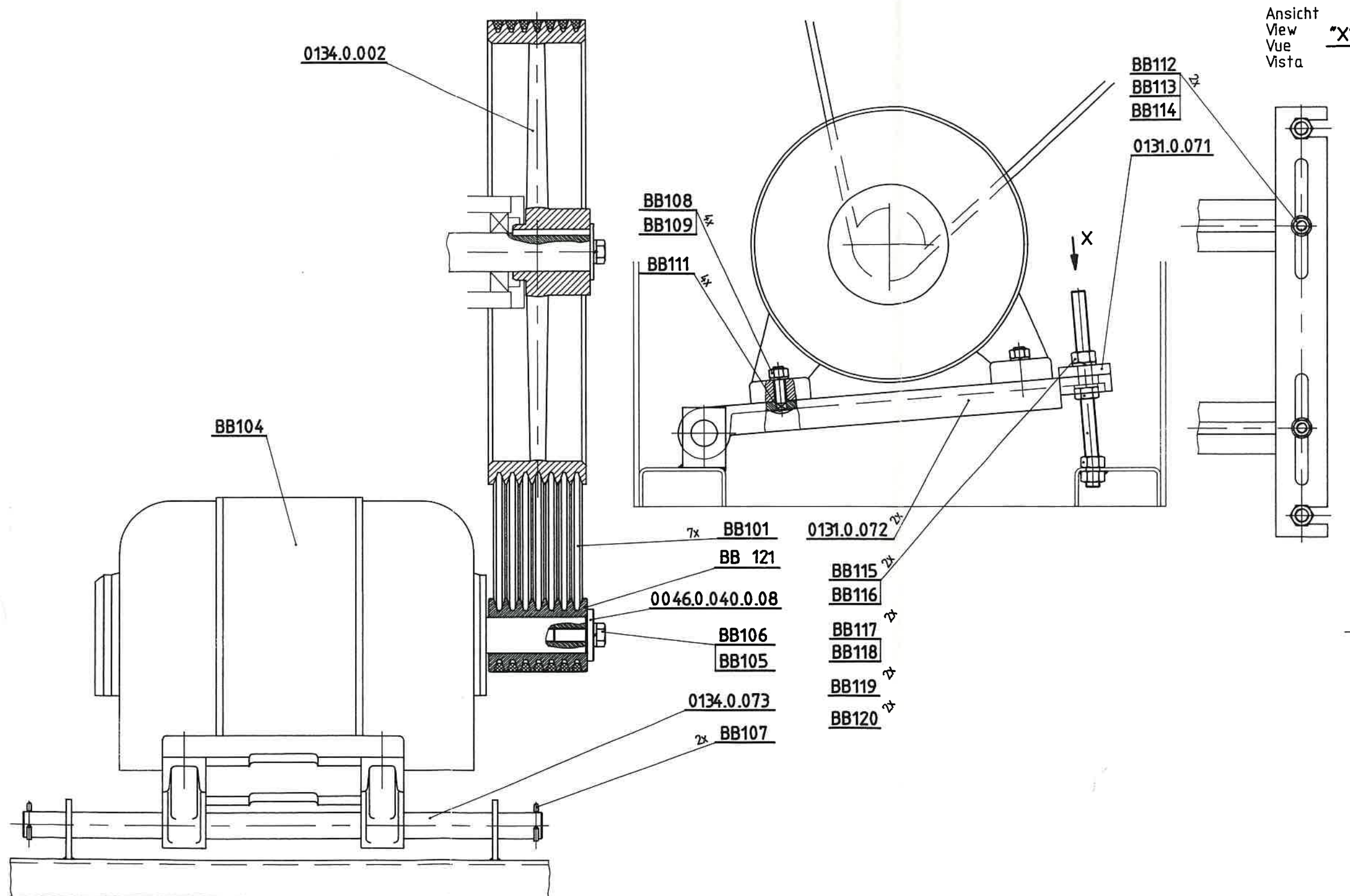
0134.LZ

134.BB

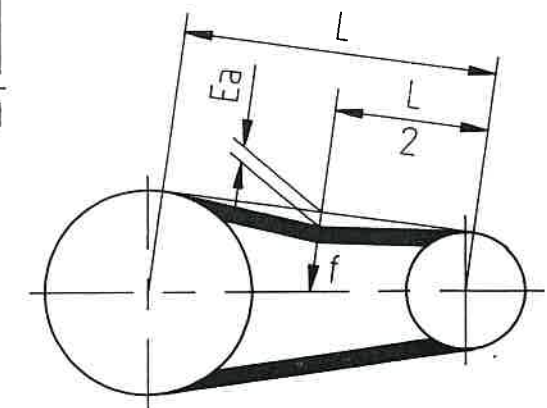




ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.AA11	48925	MASCHINENGEHÄUSE	MACHINE HOUSING	CORPS DE MACHINE	CARROCERIA
3018108	37614	FETT	GREASE	GRAISSE	GRASA
0101.1.065	04522	KABELFLANSCH	CABLE FLANGE	BRIDE À CÂBLE	BRIDA DE CABLE
0134.5.104.2	48922	STÄNDER	HOUSING	BÂTI	SOPORTE
0164.1.129	38190	HALTERUNG	FIXTURE	FIXATION	CONTENCIÓN
0134.1.141.2	39644	ABDECKUNG	COVER	COUVERCLE	TAPA
0134.5.142.2	46430	ABDECKUNG	COVER	COUVERCLE	TAPA
0134.1.144.1	27051	LÜFTUNGSDECKEL	VENTING COVER	COUVERCLE D'AÉRATION	TAPA DE VENTILACION
AA109	12238	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HEXAGONALE	TORNILLO HEXAGONAL
AA117	39274	LINSENSENKSCRAUBE	COUNTERSUNK SCREW	VIS TÊTE FRAIS.BOMB.	TORNILLO LENTEJA HUN
AA118	46232	DICHTMITTEL	SEALING AGENT	PRODUIT À JOINT	MATERIA EMPAQUETA
AA119	39274	LINSENSENKSCRAUBE	COUNTERSUNK SCREW	VIS TÊTE FRAIS.BOMB.	TORNILLO LENTEJA HUN
AA120	46232	DICHTMITTEL	SEALING AGENT	PRODUIT À JOINT	MATERIA EMPAQUETA
AA121	39274	LINSENSENKSCRAUBE	COUNTERSUNK SCREW	VIS TÊTE FRAIS.BOMB.	TORNILLO LENTEJA HUN
AA122	46232	DICHTMITTEL	SEALING AGENT	PRODUIT À JOINT	MATERIA EMPAQUETA
AA158	12199	LINSENSENKSCRAUBE	COUNTERSUNK SCREW	VIS TÊTE FRAIS.BOMB.	TORNILLO LENTEJA HUN


 Ansicht
 View
 Vue
 Vista

"X"

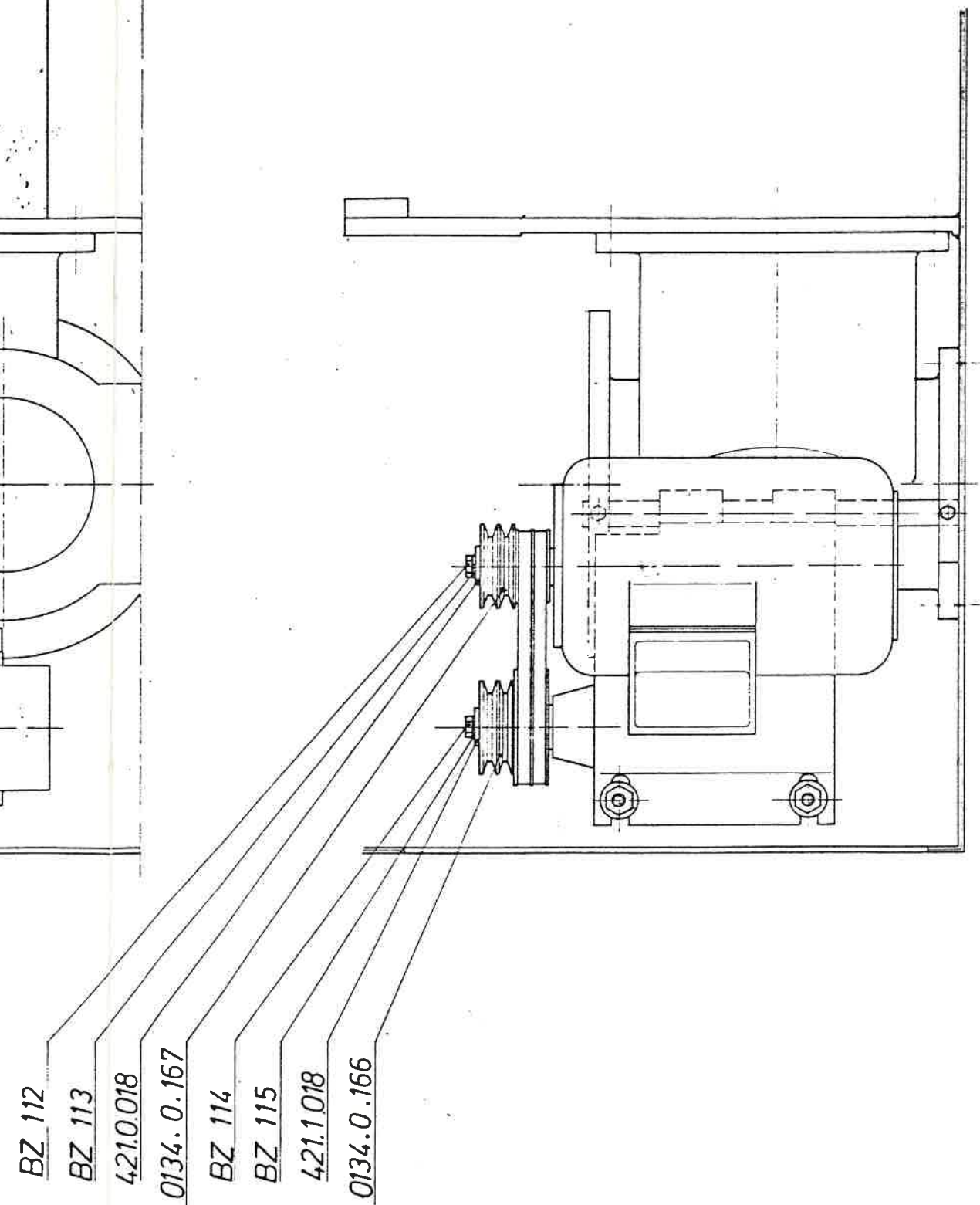
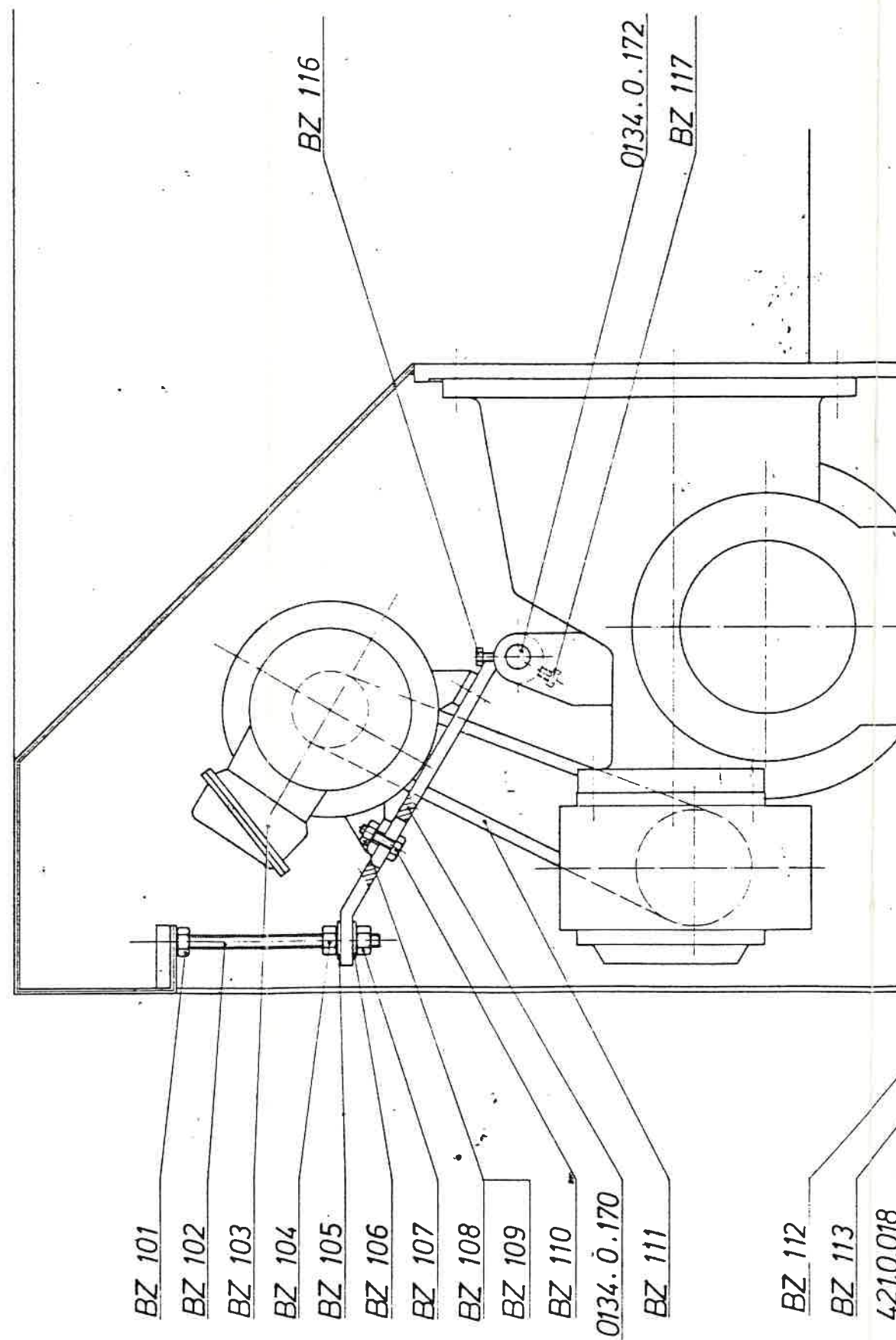
 Keilriemen-Vorspannung
 pre-tightening v-belts
 pretension des courroies
 extension de las correas


L = Trumlänge	= 530mm
L = length of taut side of belt	= 530mm
L = longueur du brin tendu de la courroie	= 530mm
L = largo de la correa tensada entre ejes	= 530mm

Ea = Eindrücktiefe des Trums	= 12,4mm
Ea = indentation depth of slack side of belt	= 12,4mm
Ea = profondeur d'empreinte de la veine	= 12,4mm
Ea = profundidad de impresion	= 12,4mm

f = Prüfkraft je Keilriemen	= 50 Newton
f = testing strength of each v-belt	= 50 newton
f = force d'essai par courrois	= 50 newton
f = fuerza de prueba de cada correa	= 50 newton

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.BB01.2	22001	HAUPTANTRIEB	MAIN DRIVE	COMMANDE PRINCIPAL	MANDO PRINCIPAL
0134.0.002.2	04714	RIEMENSCHLEIBE	V-BELT PULLEY	POULIE	RUEDA DE CORREA
0046.0.040.0.08	03807	ABDECKUNG	COVER	COUVERCLE	TAPA
0131.0.071	04665	SPANNSCHEINE	CLAMPING RAIL	RAIL DE SERRAGE	RIEL DE TENSION
0131.0.072	04666	MOTORWIPPE	MOTOR ROCKER	BASCULE DE MOTEUR	BASCULA DEL MOTOR
0134.0.073.1	04729	WIPPENWELLE	ROCKER SHAFT	ARBRE DE BASCULE	EJE DE BASCULA
BB101	14410	KEILRIEMEN	V-BELT	COURROIE CONIQUE	CORREA CUNEIFORME
BB105	12769	FEDERRING	SPRING RING	BAGUE DE RESSORT	ANILLO DE RESORTE
BB106	12331	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
BB107	13047	SPLINT	PEG	GOUPILLE FENDUE	CLAVIJA
BB108	13073	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
BB109	13132	SCHEIBE	DISC	DISQUE	DISCO
BB111	27673	TORBANDSCHR.	HINGE PLATE BOLT	VIS FICHE DE PORTE	TORNILLO FIJADOR
BB112	13073	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
BB113	12743	TORBANDSCHR.	HINGE PLATE BOLT	VIS FICHE DE PORTE	TORNILLO FIJADOR
BB114	13132	SCHEIBE	DISC	DISQUE	DISCO
BB115	13081	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
BB116	13137	SCHEIBE	DISC	DISQUE	DISCO
BB117	13137	SCHEIBE	DISC	DISQUE	DISCO
BB118	13031	SPLINT	PEG	GOUPILLE FENDUE	CLAVIJA
BB119	13180	GEWINDESTANGE	THREADED SHAFT	BARRE FILETÉE	BARRA CON ROSCA
BB120	13081	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
BB121	04663	RIEMENSCHLEIBE	V-BELT PULLEY	POULIE	RUEDA DE CORREA
BB121	04774	RIEMENSCHLEIBE	V-BELT PULLEY	POULIE	RUEDA DE CORREA



8811

WW 130

ZUBRINGER-SCHNECKEN-ANTRIEB

BZ

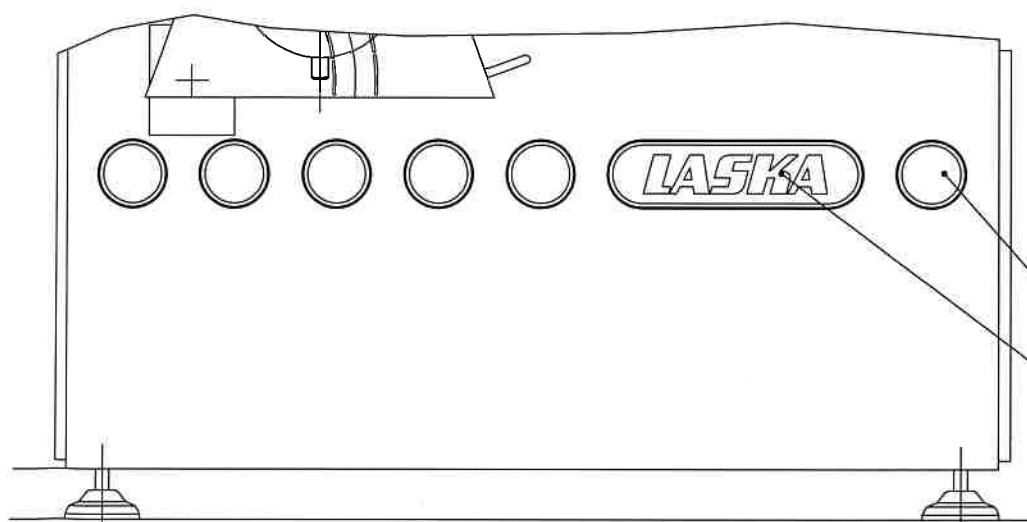
FEEDING-SCREW DRIVE

ACTJONNEMENT VIS D'ALIMENTATION

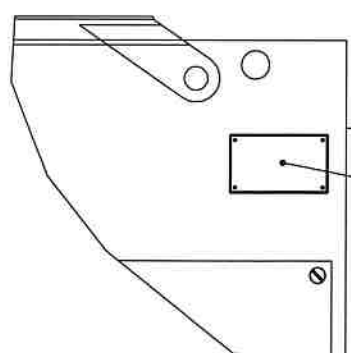
ACCIONAMIENTO DEL TORNILLO DE ALIMENTACION

0134.BZ01

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.BZ01	22003	SCHNECKE	WORM	VIS SANS FIN	CARACOL
0421.0.018	06938	SICHERUNGSSCHEIBE	SAFETY DISC	DISQUE DE SÉCURITÉ	DISCO DE SEGURIDAD
0134.0.167.2	04764	RIEMENSCHLEIBE	V-BELT PULLEY	POULIE	RUEDA DE CORREA
0134.0.170	04765	MOTORWIPPE	MOTOR ROCKER	BASCULE DE MOTEUR	BASCULA DEL MOTOR
0134.0.172	04766	WIPPENWELLE	ROCKER SHAFT	ARBRE DE BASCULE	EJE DE BASCULA
BZ101	13073	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
BZ102	13175	GEWINDESTANGE	THREADED SHAFT	BARRE FILETÉE	BARRA CON ROSCA
BZ104	13073	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
BZ105	13132	SCHEIBE	DISC	DISQUE	DISCO
BZ106	13132	SCHEIBE	DISC	DISQUE	DISCO
BZ107	13073	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
BZ108	13064	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
BZ109	13125	SCHEIBE	DISC	DISQUE	DISCO
BZ110	12243	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
BZ111	14330	KEILRIEMEN	V-BELT	COURROIE CONIQUE	CORREA CUNEIFORME
BZ112	12243	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
BZ113	12762	FEDERRING	SPRING RING	BAGUE DE RESSORT	ANILLO DE RESORTE
BZ116	12239	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
BZ117	12239	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL

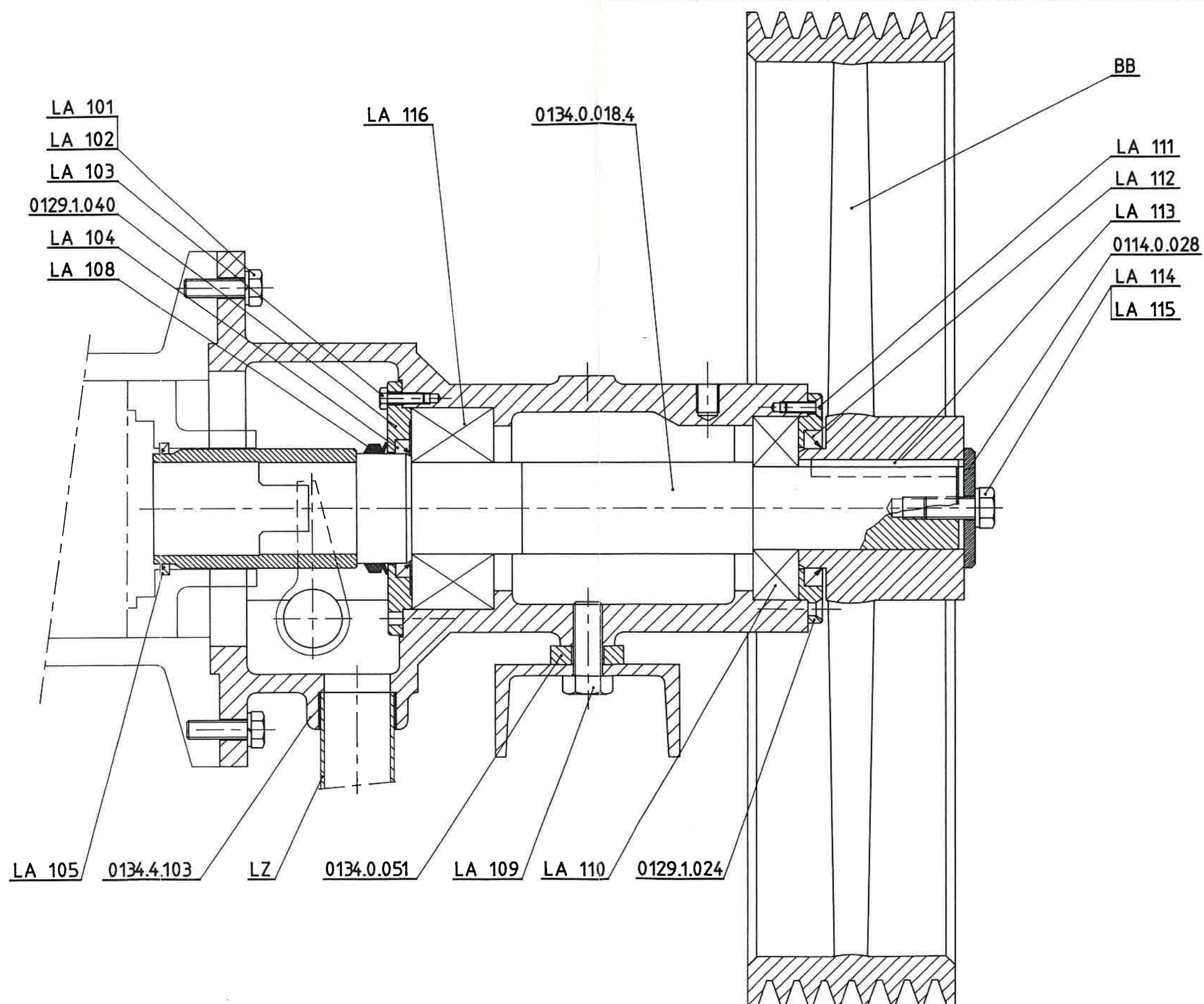


DT 104 9x
0999.3.505 6x
0999.2.505



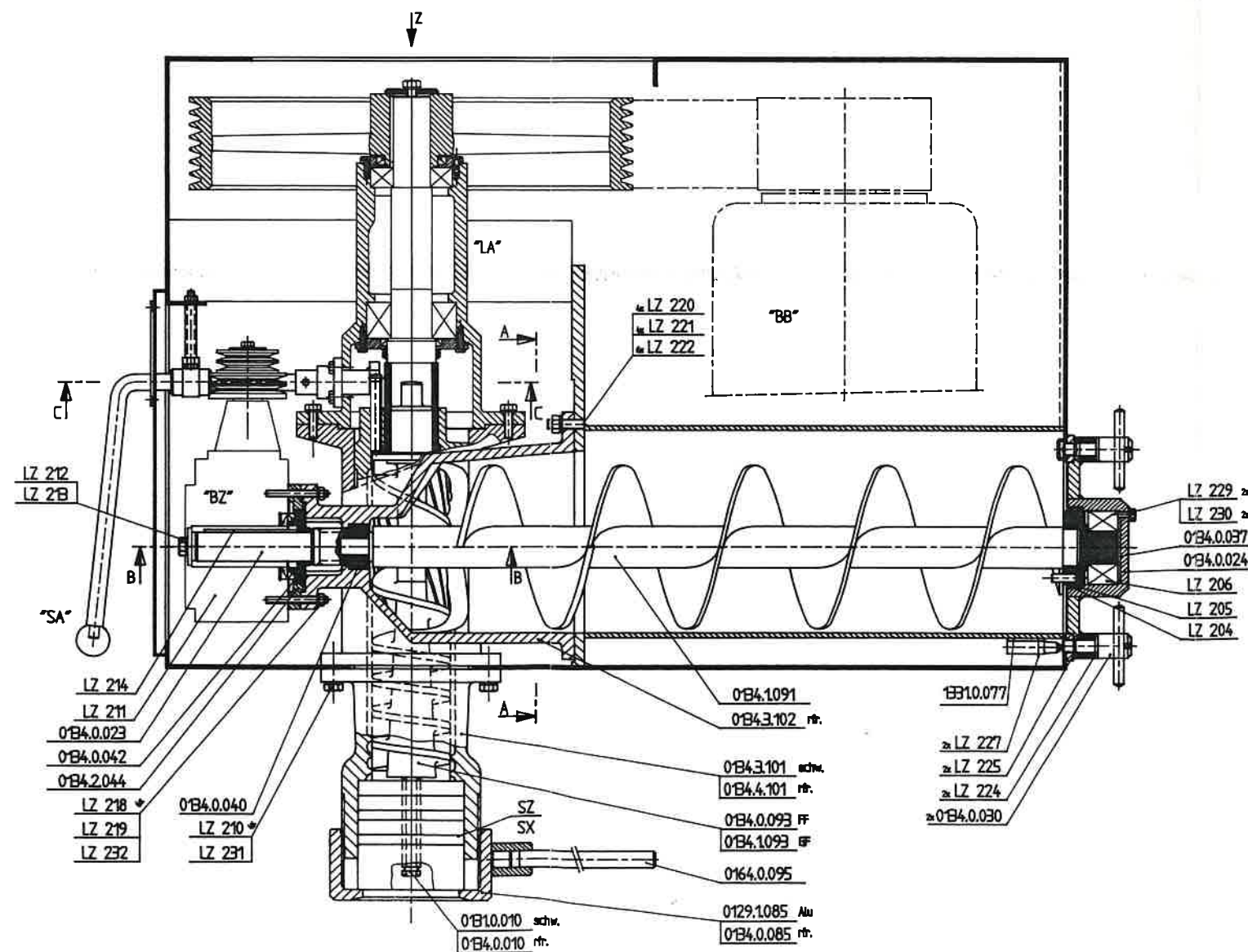
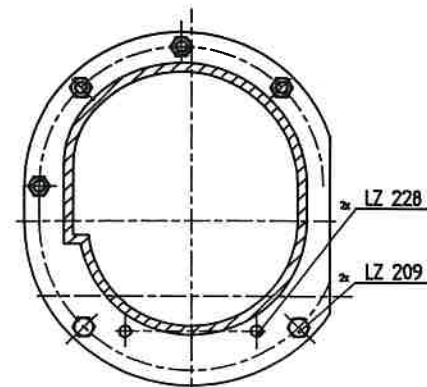
DT 101

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.DT01.1	43433	DIVERSE-TEILE	VARIOUS PARTS	PIECES DIVERS	VARIOS ELEMENTOS
0999.2.505	50260	RAMMSCHUTZ	IMPACT PROTECTION	PARECHOC	PARACHOQUES
0999.3.505	50261	RAMMSCHUTZ	IMPACT PROTECTION	PARECHOC	PARACHOQUES
DT101	41309	LEISTUNGSSCHILD	RATING PLATE	PLAQUE DE PUISSANCE	PLACA DE POTENCIAS
DT103	13293	SCHLÜSSEL	WRENCH	CLÉ	LLAVE
DT104	12217	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL

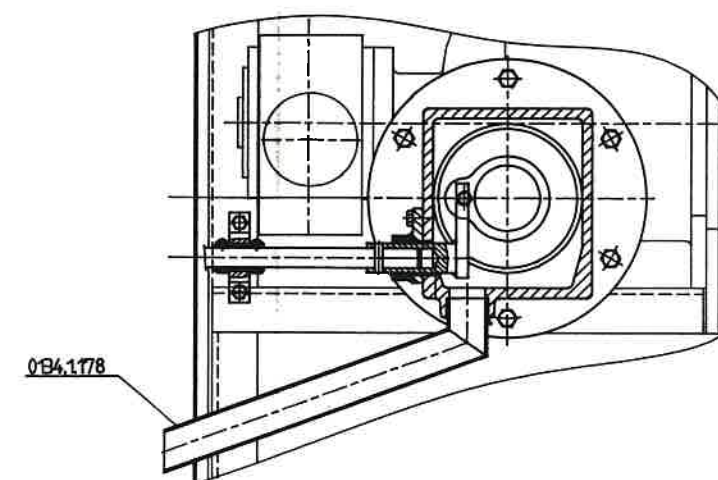


ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.LA03	46437	SCHNECKENLAGERUNG	WORM BEARING	LOGEMENT VIS	RODAMIENTO CARACOL
0114.0.028	04558	PLATTE	PLATE	PLAQUE	CHAPA
0134.4.103	46436	LAGERFLANSCH	BEARING FLANGE	BRIDE DE PALIER	BRIDA DE COJINETE
LA101	12764	FEDERRING	SPRING RING	BAGUE DE RESSORT	ANILLO DE RESORTE
LA102	12263	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
LA109	12325	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
LA114	13132	SCHEIBE	DISC	DISQUE	DISCO
LA115	12288	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL

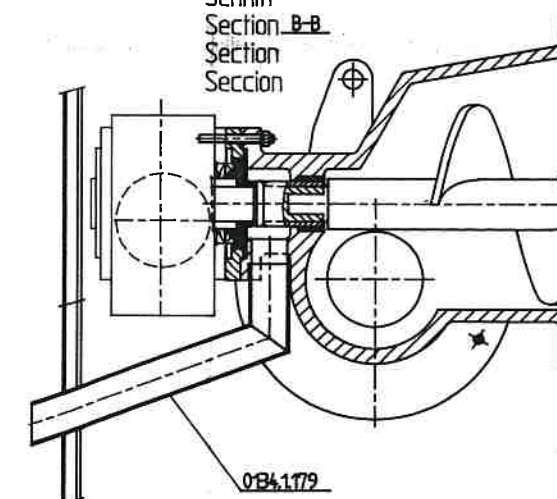
Schnitt
 Section
 Section
 Section
 A-A



Schnitt
 Section
 Section
 Section
 C-C

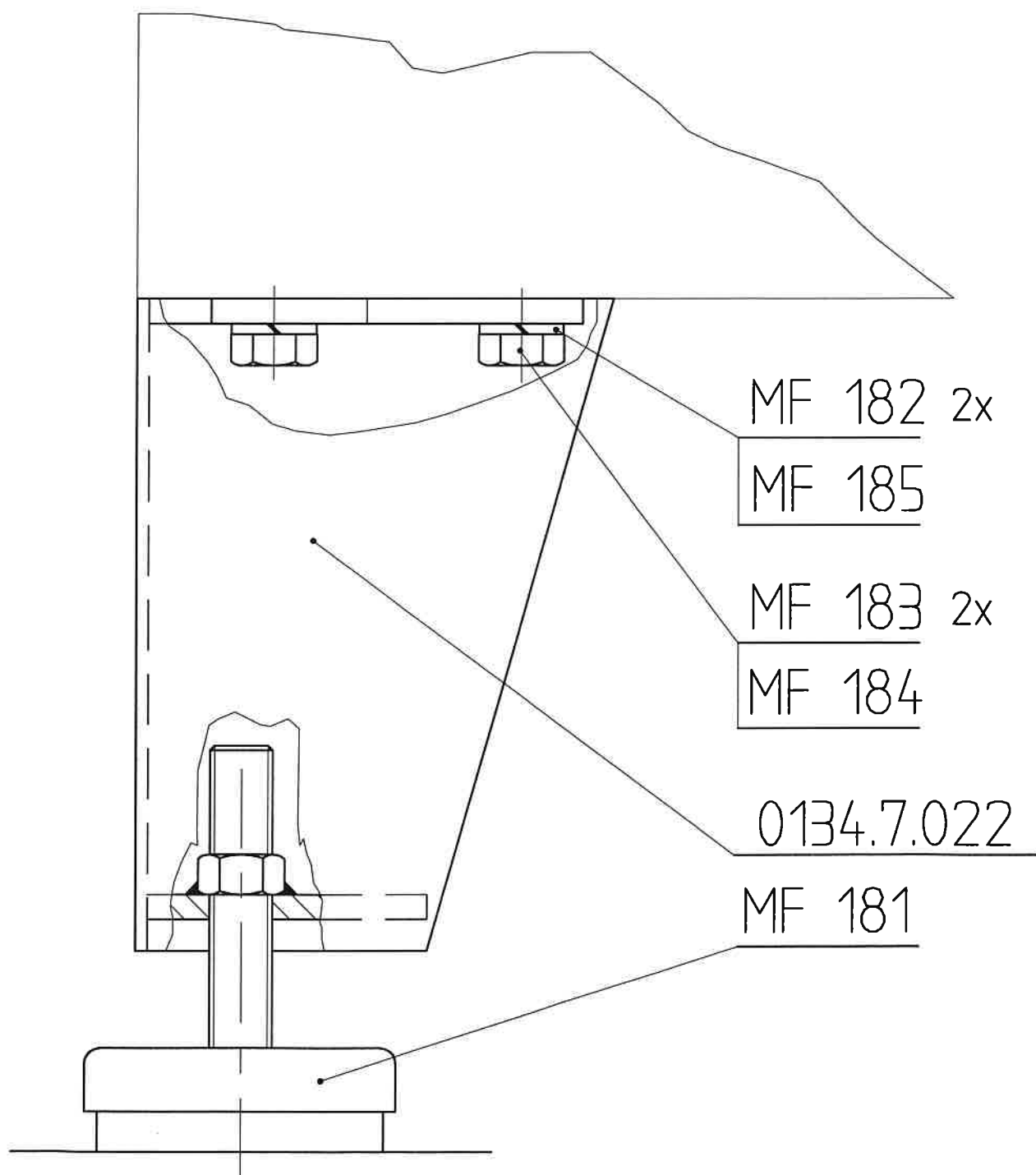


Schnitt
 Section
 Section
 Section
 B-B



"Teile ohne Pos.-Nr. - Angabe siehe Schaltplan"
 "Parts without ref. no. - for info. see circuit diagram"
 "Pièces sans No. de Réf. - Données: voir schéma de connexions"
 "Piezas sin No. de Ref. - Datos: véase esquema de distribución"

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.LZ08	46492	SCHNECKENLAGERUNG	WORM BEARING	LOGEMENT VIS	RODAMIENTO CARACOL
0131.0.010.6	04647	MESSERZAPFEN	KNIFE STUD	PIVOT DE COUTEAU	PERNO DE CUCHILLA
0131.0.010.6	04647	MESSERZAPFEN	KNIFE STUD	PIVOT DE COUTEAU	PERNO DE CUCHILLA
0134.0.024.1	24764	LAGERFLANSCH	BEARING FLANGE	BRIDE DE PALIER	BRIDA DE COJINETE
0134.0.040.2	21851	BÜCHSE	BUSHING	DOUILLE	CASQUILLO
0134.0.053	37220	DECKSCHEIBE	COVERING DISC	DISQUE RECOUVREMENT	DISCO DE LA TAPA
1331.0.077	35410	PLATTE	PLATE	PLAQUE	CHAPA
0134.1.085	46974	VERSCHLUBMUTTER	CLOSING NUT	ÉCROU DE FERMETURE	TUERCA DE CIERRE
0129.1.085.1	04618	VERSCHLUBMUTTER	CLOSING NUT	ÉCROU DE FERMETURE	TUERCA DE CIERRE
0134.1.091.2	26939	SCHNECKE	WORM	VIS SANS FIN	CARACOL
0134.0.093.5	04733	SCHNECKE	WORM	VIS SANS FIN	CARACOL
0134.1.093.5	04775	SCHNECKE	WORM	VIS SANS FIN	CARACOL
0164.1.095.1	46979	BOLZEN	PIN	BOULON	PERNO
0134.3.101	36474	SCHNECKENGEHÄUSE	WORM HOUSING	CORPS DE VIS	CUERPO DE CARACOL
0134.4.101	36475	SCHNECKENGEHÄUSE	WORM HOUSING	CORPS DE VIS	CUERPO DE CARACOL
0134.3.102.2	46433	EINLAUFGEHÄUSE	INTAKE CASING	CORPS D'ENTRÉE	CUERPO DE ENTRADA
0134.4.102.2	47597	EINLAUFGEHÄUSE	INTAKE CASING	CORPS D'ENTRÉE	CUERPO DE ENTRADA
0134.0.166	46488	GETRIEBE	GEAR	ENGRENAGE	ENGRANAJE
0134.1.178	46431	ABFLUß	DISCHARGE	DÉCHARGEoir	DESAGÜE
0134.1.179	46432	ABFLUß	DISCHARGE	DÉCHARGEoir	DESAGÜE
LZ209	12288	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HEXAGONALE	TORNILLO HEXAGONAL
LZ210	12300	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HEXAGONALE	TORNILLO HEXAGONAL
LZ220	12534	STIFTSCHRAUBE	STUD SCREW	GOUPILLE	TACHUELA-TORNILLO
LZ221	13073	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
LZ222	12766	FEDERRING	SPRING RING	BAGUE DE RESSORT	ANILLO DE RESORTE
LZ227	12572	ZYL.SCHRAUBE	CYLINDER BOLT	VIS CYLINDRIQUE	TORNILLO CILINDRICO
LZ228	12827	KERBSTIFT	TAPER PIN	GOUPILLE CANNELÉE	VARILLA ENTALLADA
LZ231	13134	SCHETBE	DISC	DISQUE	DISCO



ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.MF10	37225	MASCHINENFUB	MACHINE FOOT	PIED DE MACHINE	PATA DE LA MAQUINA
0134.7.022	37219	MASCHINENFUB	MACHINE FOOT	PIED DE MACHINE	PATA DE LA MAQUINA
MF181	34886	MASCHINENFUB	MACHINE FOOT	PIED DE MACHINE	PATA DE LA MAQUINA
MF182	12770	FEDERRING	SPRING RING	BAGUE DE RESSORT	ANILLO DE RESORTE
MF183	12323	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
MF184	12360	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
MF185	12772	FEDERRING	SPRING RING	BAGUE DE RESSORT	ANILLO DE RESORTE

Hydraulik - Aggregat

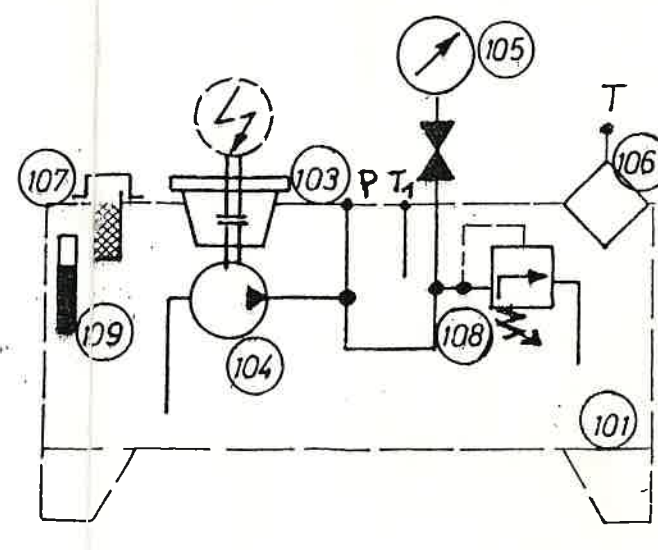
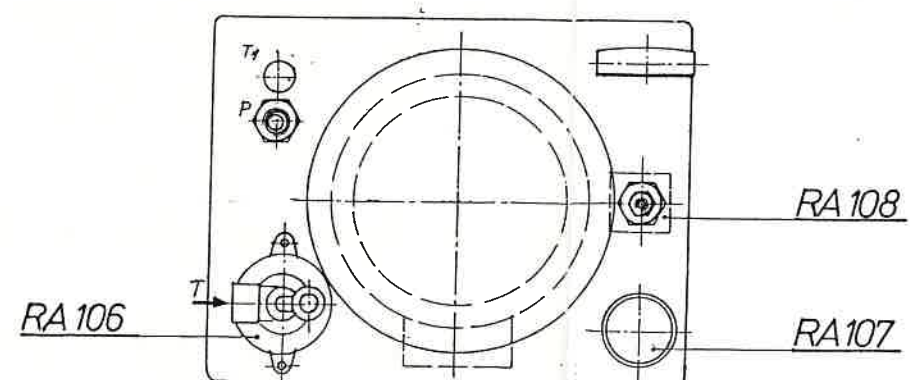
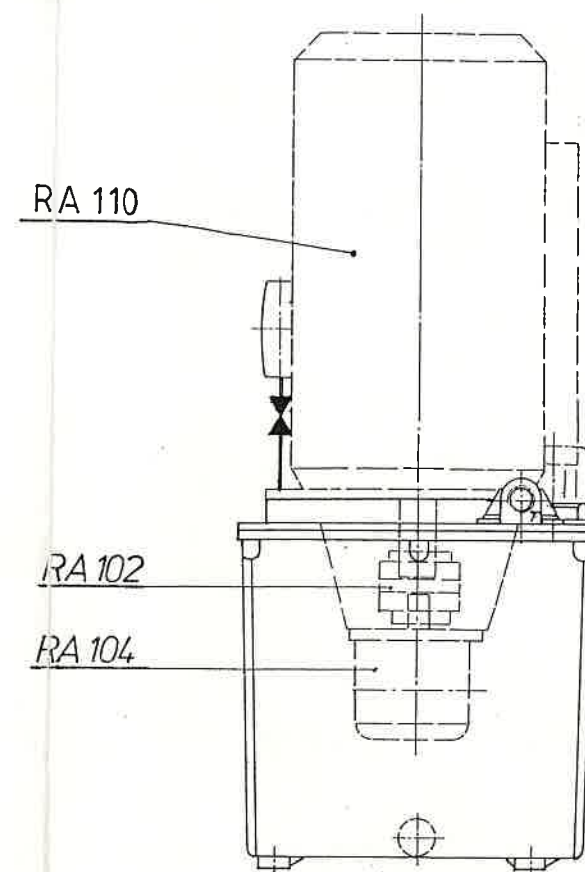
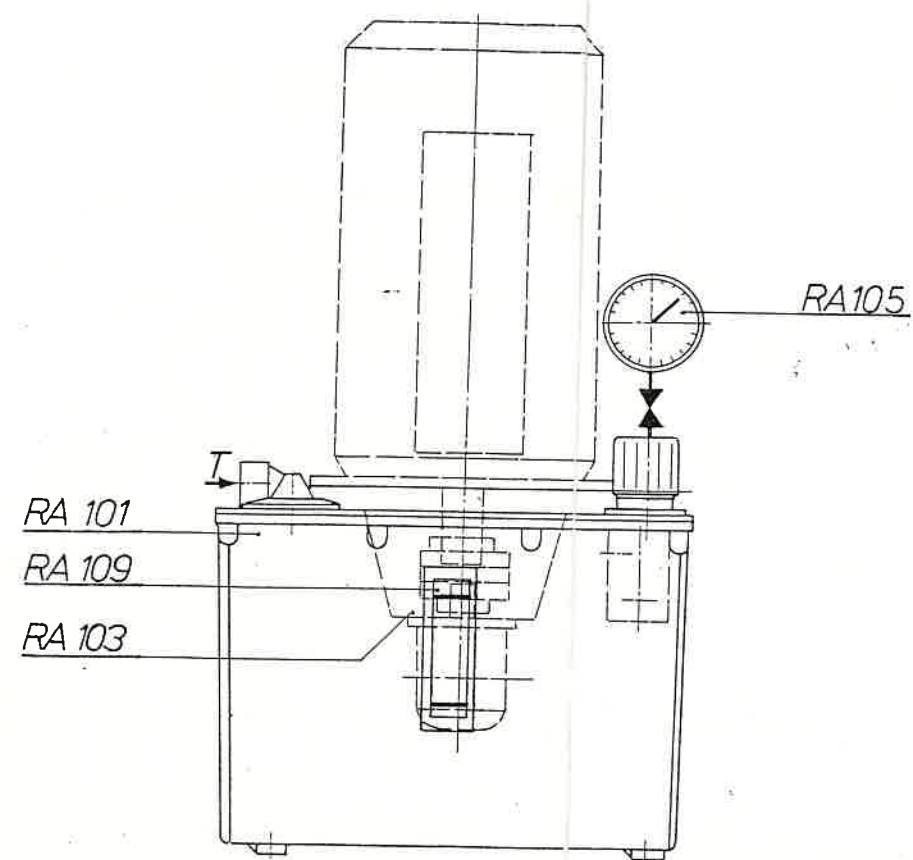
Hydraulic aggregat

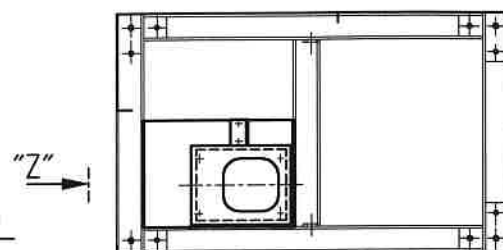
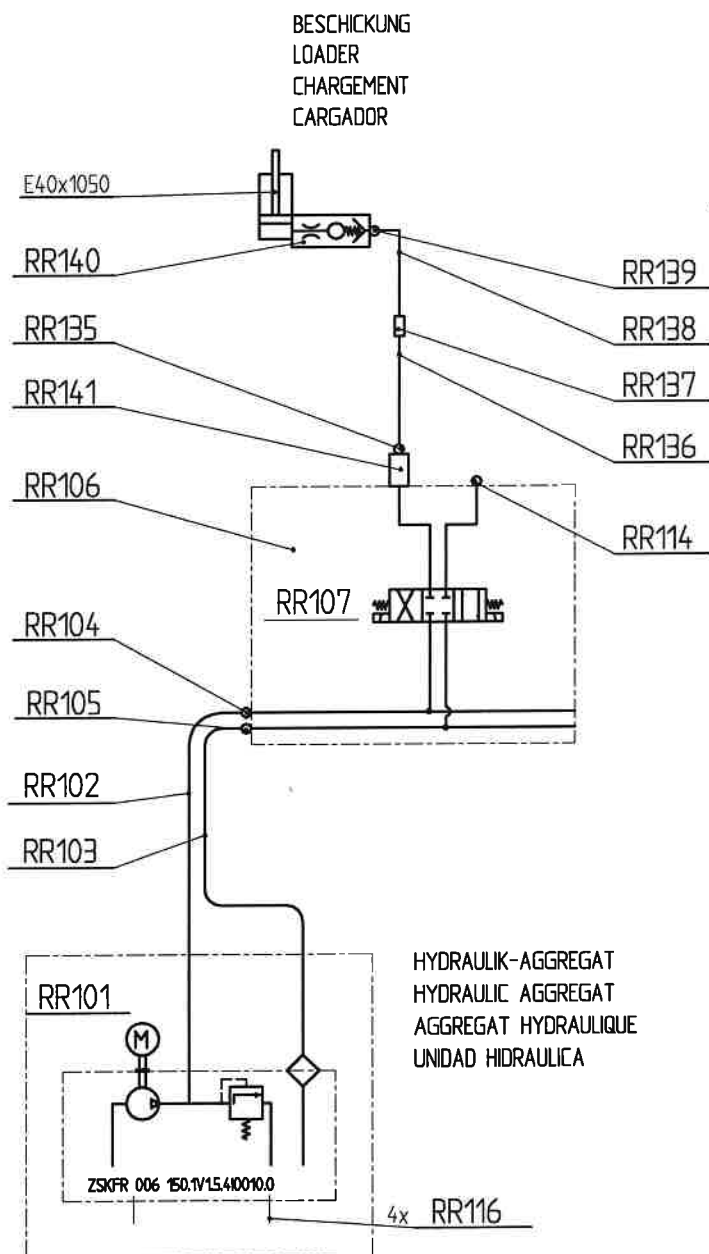
Aggregat hydraulique

Unidad hidráulica

RA

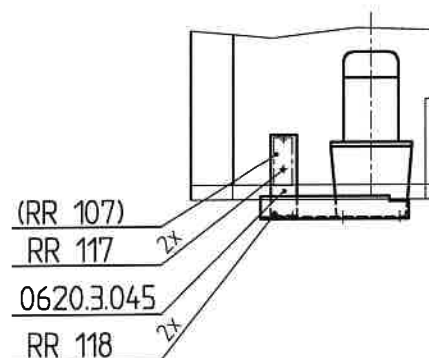
0164 . RA 011





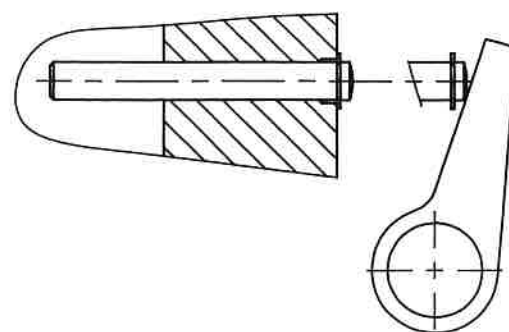
Ansicht
View
Vue
Vista

"Z"



"Teile ohne Pos.-Nr. - Angabe siehe Baugruppenzeichnung"
 "Parts without ref. no. - for info. see diagram of componentry"
 "Pièces sans No. de Réf. - Données: voir croquis groupe de construction"
 "Piezas sin No. de Ref. - Datos: véase dibujo grupo de construcción"

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.RR02.1	37527	HYDRAULIK	HYDRAULIC SYSTEM	SYSTÈME HYDRAULIQUE	SISTEMA HIDRAULICO
3023055	37440	ÖL	OIL	HUILE	ACEITE
0620.3.045.2	25276	VENTILKONSOLE	VALVE BRACKET	CONSOLE DE SOUPE	CONSOLA DE VALVULA
0134.0.062.1	35368	Halierung			
RR101	14794	HYD.AGGREGAT	HYDRAULIC AGGREGATE	AGRÉGAT HYDRAULIQUE	AGREGADO HIDRAULICO
RR101	29880	HYD.AGGREGAT	HYDRAULIC AGGREGATE	AGRÉGAT HYDRAULIQUE	AGREGADO HIDRAULICO
RR102	15161	HYD.SCHLAUCH	HYDRAULIC HOSE	TUYAU FLEXIBLE	MANGUERA HIDRAULICA
RR103	26220	HYD.SCHLAUCH	HYDRAULIC HOSE	TUYAU FLEXIBLE	MANGUERA HIDRAULICA
RR104	15213	VERSCHRAUBUNG	COUPLING	JOINT	ENTORNILLADO
RR105	15219	VERSCHRAUBUNG	COUPLING	JOINT	ENTORNILLADO
RR106	25778	MAGNETVENTILBATTERIE	SOLENOID BATTERY	BATTERIE ÉLEC.VANNE	BATERIA VALV.MAGNET.
RR114	36948	VERSCHLUBSCHRAUBE	CLOSING BOLT	VIS DE FERMETURE	TORNILLO FIJADOR
RR116	12237	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
RR117	12621	ZYL.SCHRAUBE ISK	HEX.CYL.SCREW	VIS À SIX PANS CREUX	TORN.CABEZA HUND.HEX
RR118	12237	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
RR135	35787	VERSCHRAUBUNG	COUPLING	JOINT	ENTORNILLADO
RR136	31623	HYD.SCHLAUCH	HYDRAULIC HOSE	TUYAU FLEXIBLE	MANGUERA HIDRAULICA
RR137	35519	VERSCHRAUBUNG	COUPLING	JOINT	ENTORNILLADO
RR138	35785	HYD.SCHLAUCH	HYDRAULIC HOSE	TUYAU FLEXIBLE	MANGUERA HIDRAULICA
RR139	35784	VERSCHRAUBUNG	COUPLING	JOINT	ENTORNILLADO
RR140	43379	VENTIL	VALVE	SOUPE	VALVULA
RR141	38233	VENTIL	VALVE	SOUPE	VALVULA

View
Vue
Vista

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.SA03.1	45394	AUSSTOßER	EJECTOR	ÉJECTEUR	EYECTOR
0130.0.014	04633	BOLZEN	PIN	BOULON	PERNO
0134.0.052	04728	ABDECKUNG	COVER	COUVERCLE	TAPA
0134.0.113.2	04746	LAGERUNG	BEARING SYSTEM	LOGEMENT DE PALIERS	COJINETE
0134.2.114	45356	AUSSTOßERHEBEL	EJECTOR LEVER	LEVIER ÉJECTEUR	PALANCA EXPULSORA
0134.0.175	45358	HEBEL	LEVER	LEVIER	PALANCA
0134.0.176	45359	ROHR	PIPE	TUYAU	TUBO
0134.0.177.1	45361	LAGERFLANSCH	BEARING FLANGE	BRIDE DE PALIER	BRIDA DE COJINETE
SA106	13064	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
SA107	16221	GRIFF	HANDLE	MANCHE	MANGO
SA111	12413	SENKSCHRAUBE	COUNTERSUNK SCREW	VIS À TÊTE FRAISÉE	TORNILLO CAB.HUNDIDA
SA191	13291	STELLRING	ADJUSTING RING	ANNEAU DE'AJUSTAGE	ANILLO AJUSTABLE
SA192	12253	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
SA193	12240	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HÉXAGONALE	TORNILLO HEXAGONAL
SA194	13865	GLEITLAGER	SLIDING BEARING	PALIER À GLISSEMENT	RODAMIENTO DESLIZANT
SA195	13853	GLEITLAGER	SLIDING BEARING	PALIER À GLISSEMENT	RODAMIENTO DESLIZANT
SA196	13020	SCHWERSPANNSTIFT	SPRING COTTER	GOUPILLE À RESSORT	VARILLA DE RESORTE

9011

ME 250-400

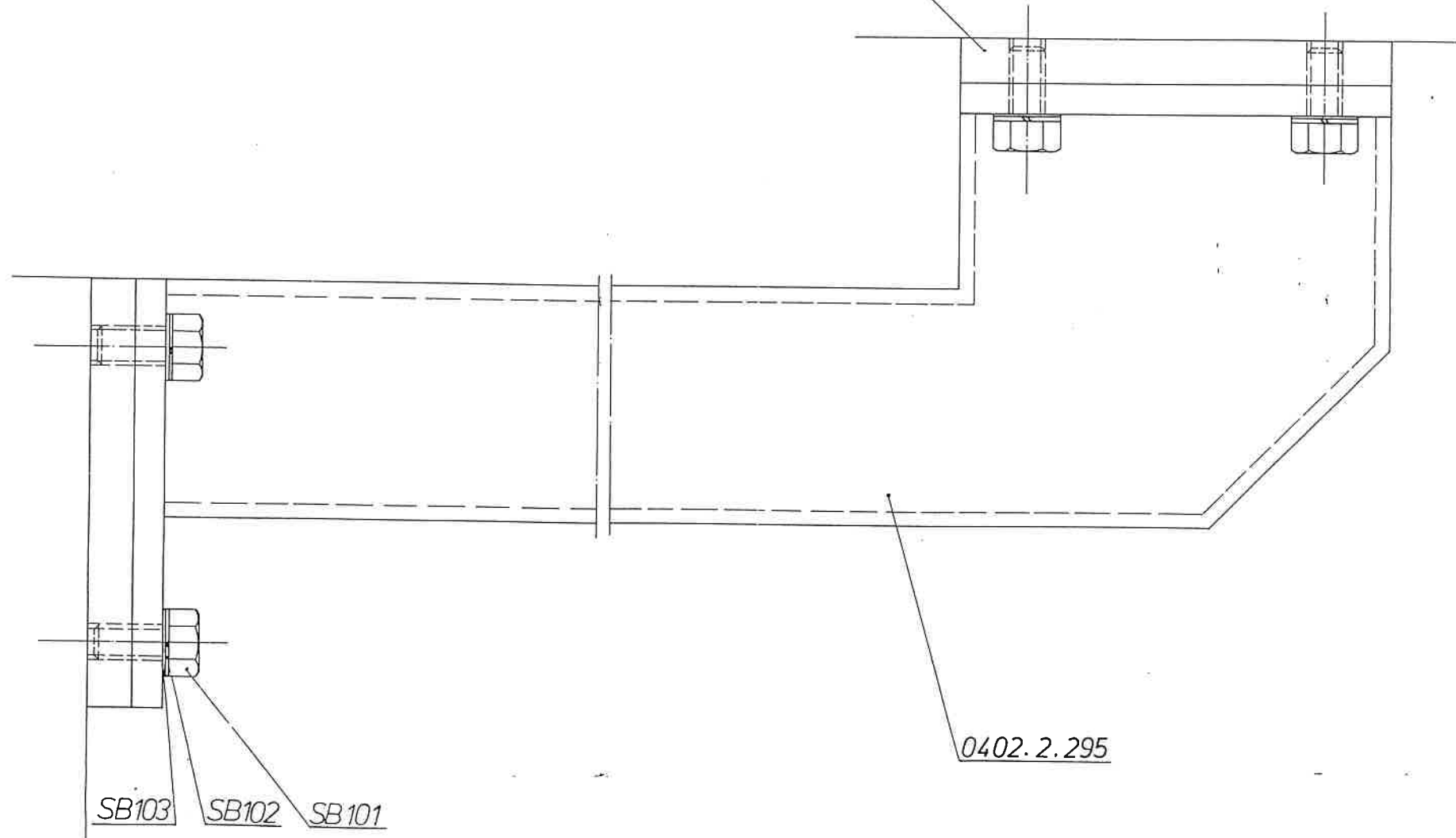
WW130-200

STÜTZWINKEL FÜR BESCHICKUNG
LOADING DEVICE SUPPORTING ANGLE
ANGLE DE SUPPORT POUR CHARGEMENT
ANGULO DE APOYO PARA ALIMENTADOR

SB

0402.SB05.2

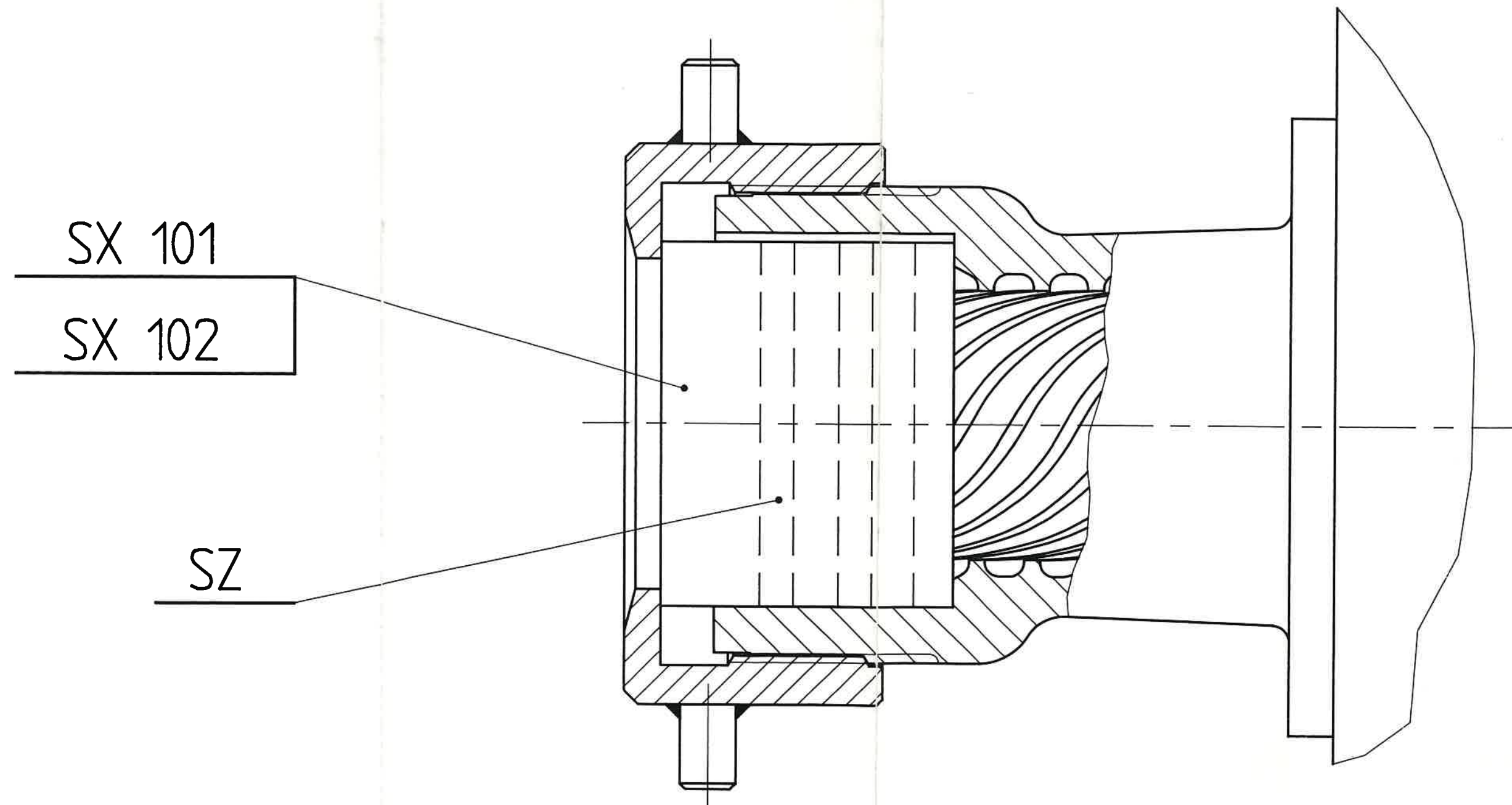
0402.0.298



0402.2.295

SB103 SB102 SB101

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0402.SB05.2	27142	STÜTZWINKEL	SUPPORTING ANGLE	ANGLE DE SUPPORT	ANGULO DE APOYO
0402.2.295.3	06889	STÜTZWINKEL	SUPPORTING ANGLE	ANGLE DE SUPPORT	ANGULO DE APOYO
SB101	12286	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HEXAGONALE	TORNILLO HEXAGONAL
SB102	12767	FEDERRING	SPRING RING	BAGUE DE RESSORT	ANILLO DE RESORTE
SB103	13134	SCHEIBE	DISC	DISQUE	DISCO



04.05.99 14:49:19

50367 W 15 Modell 127)

ITE 14

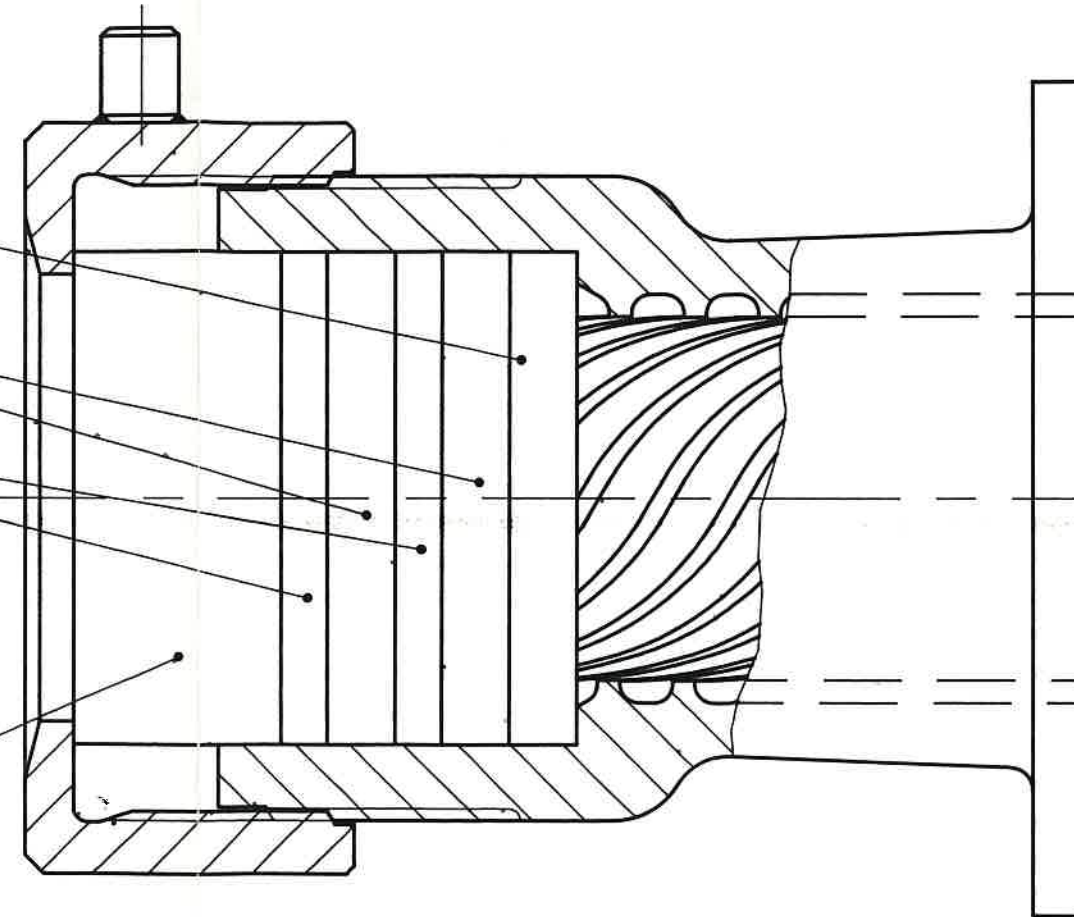
ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.SX01	35751	GESAMT-SCHNEIDSATZ	COMPLETE CUTTING SET	JEU DE COUPE COMPLET	JUEGO DE CORTE COMPLETO
SX101	30673	EINLEGERING	INSERT RING	ANNEAU D'INSERTION	ANILLO DE BALANCEO
SX102	30672	EINLEGERING	INSERT RING	ANNEAU D'INSERTION	ANILLO DE BALANCEO

SZ 341

SZ 235

SZ 233

(SX)



ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
-----	-----	-------------	------------	--------------------	-------------------

0134.SZ23 40945 Frischfleisch-Schneidsatz

SZ233	15644	LOCHSCHEIBE	HOLEPLATE	PLAQUE PERFORÉE	PLACA PERFORADA
SZ233	15647	LOCHSCHEIBE	HOLEPLATE	PLAQUE PERFORÉE	PLACA PERFORADA
SZ233	15649	LOCHSCHEIBE	HOLEPLATE	PLAQUE PERFORÉE	PLACA PERFORADA
SZ233	15653	LOCHSCHEIBE	HOLEPLATE	PLAQUE PERFORÉE	PLACA PERFORADA
SZ234	31517	KLINGEN	BLADES	LAMES	HOJAS
SZ235	35753	KLINGENMESSER	BLADE KNIFE	COUTEAU À LAMES	CUCHILLO DE HOJAS
SZ341	40610	VORSCHNEIDSCHNEIBE	PRECUTTING PLATE	PLAQUE DE PRÉCOUPE	PLACA DE PRECORTE

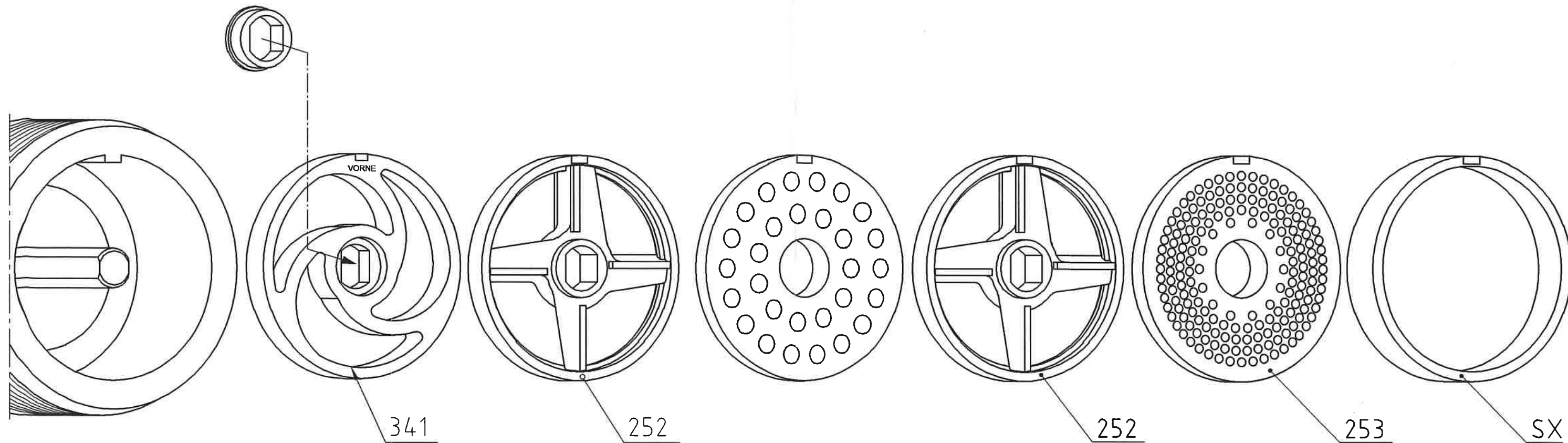
200204

WW 130

SCHNEIDSATZ
CUTTING SET
JEU DE COUPE
JUEGO DE CUCHILLAS

SZ

0134.SZ28



18.05.99 13:22:42

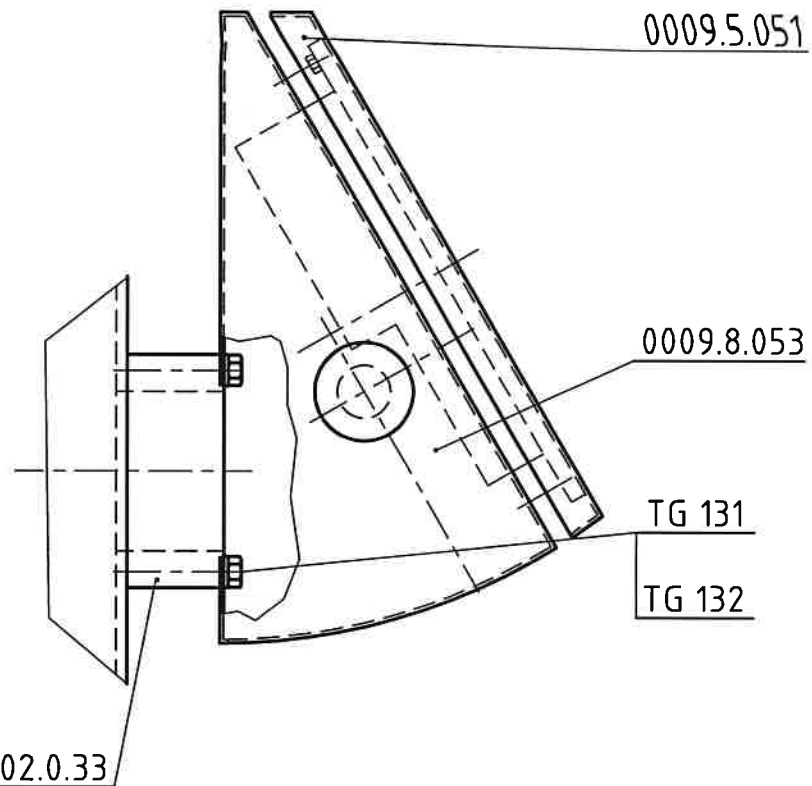
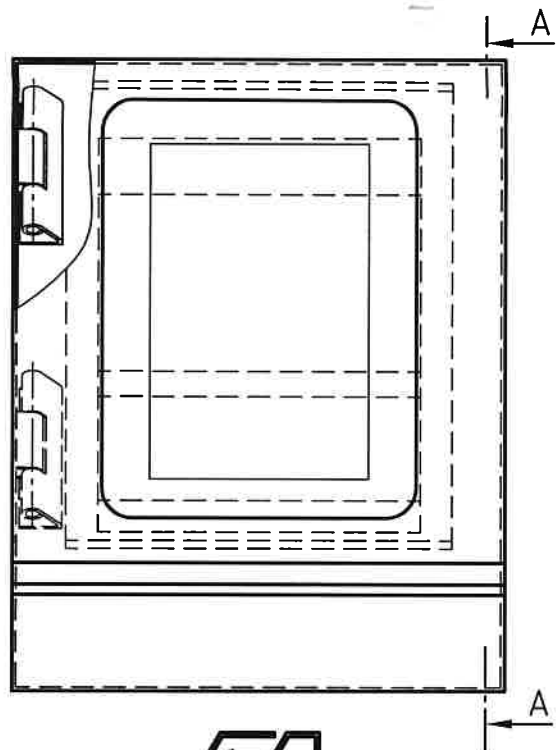
51513 WZ 30 (Modell 138)

EITE 23

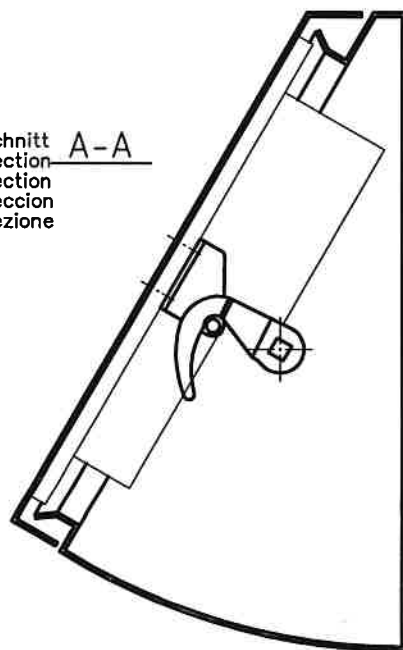
ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
-----	-----	-------------	------------	--------------------	-------------------

0134.SZ28 50246 Schneidsatz

SZ252	32260	MESSER	KNIFE	COUTEAU	CUCHILLA
SZ253	15649	LOCHSCHEIBE	HOLEPLATE	PLAQUE PERFORÉE	PLACA PERFORADA
SZ253	15653	LOCHSCHEIBE	HOLEPLATE	PLAQUE PERFORÉE	PLACA PERFORADA
SZ253	15656	LOCHSCHEIBE	HOLEPLATE	PLAQUE PERFORÉE	PLACA PERFORADA
SZ341	40610	VORSCHNEIDSCHLEIBE	PRECUTTING PLATE	PLAQUE DE PRÉCOUPE	PLACA DE PRECORTE



Schnitt A-A
Section
Section
Seccion
Sezione



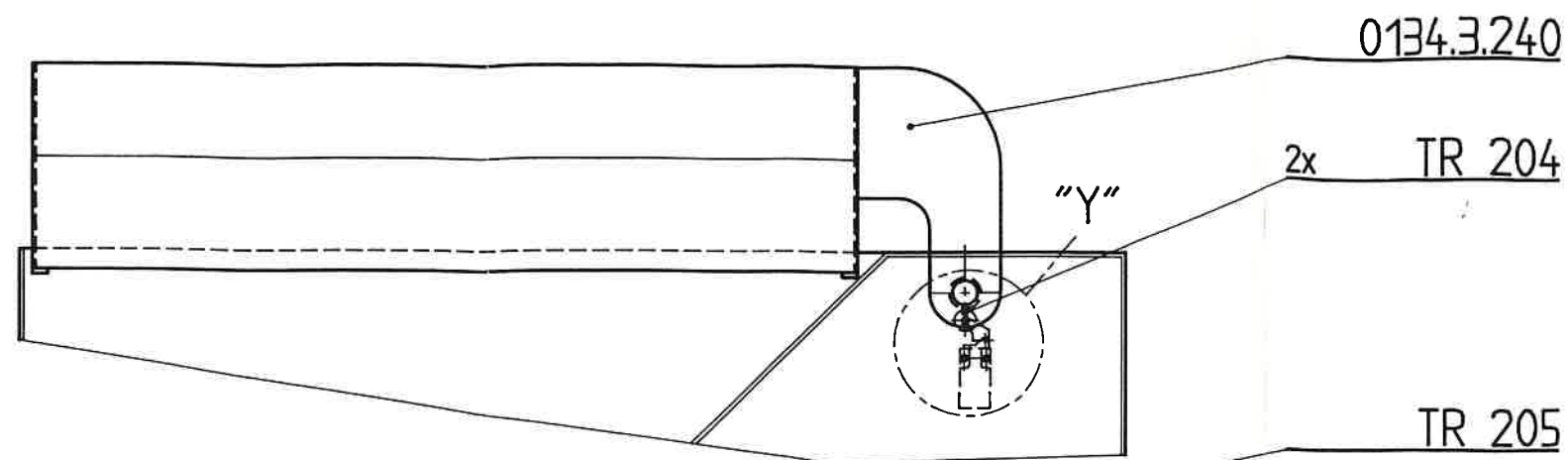
XXX

0009.TG03.3

TASTERGEHÄUSE
PUSH BUTTON HOUSING
BOITE BOUTONS-POUSOIRS
CAJA DE PULSADORES
STRUTTURA MANIPOLATORE

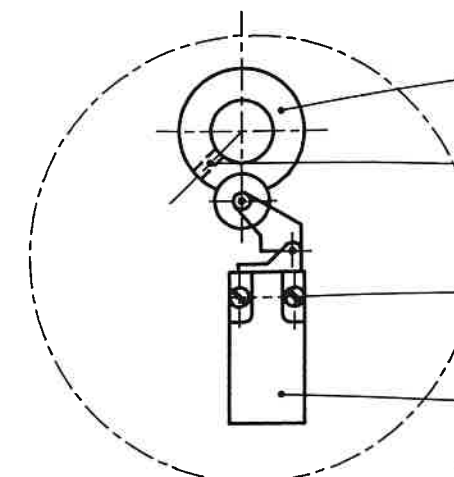
TG

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0009.TG03.3	39661	Tastergehäuse	Push button housing	Boîte boutons-poussoirs	Caja de pulsadores
0009.8.053	39421	Tastergehäuse	Push button housing	Boîte boutons-poussoirs	Caja de pulsadores
0129.3.202.0.33	49633	Distanz	Spacer	Ecartement	Distancia
TG131	12230	Sechskantschraube	Hexagonal screw	Vis hexagonale	Tornillo hexagonal
TG132	13124	Scheibe	Disc	Disque	Disco



Detail
Detail
Detail
Detalle

"Y"

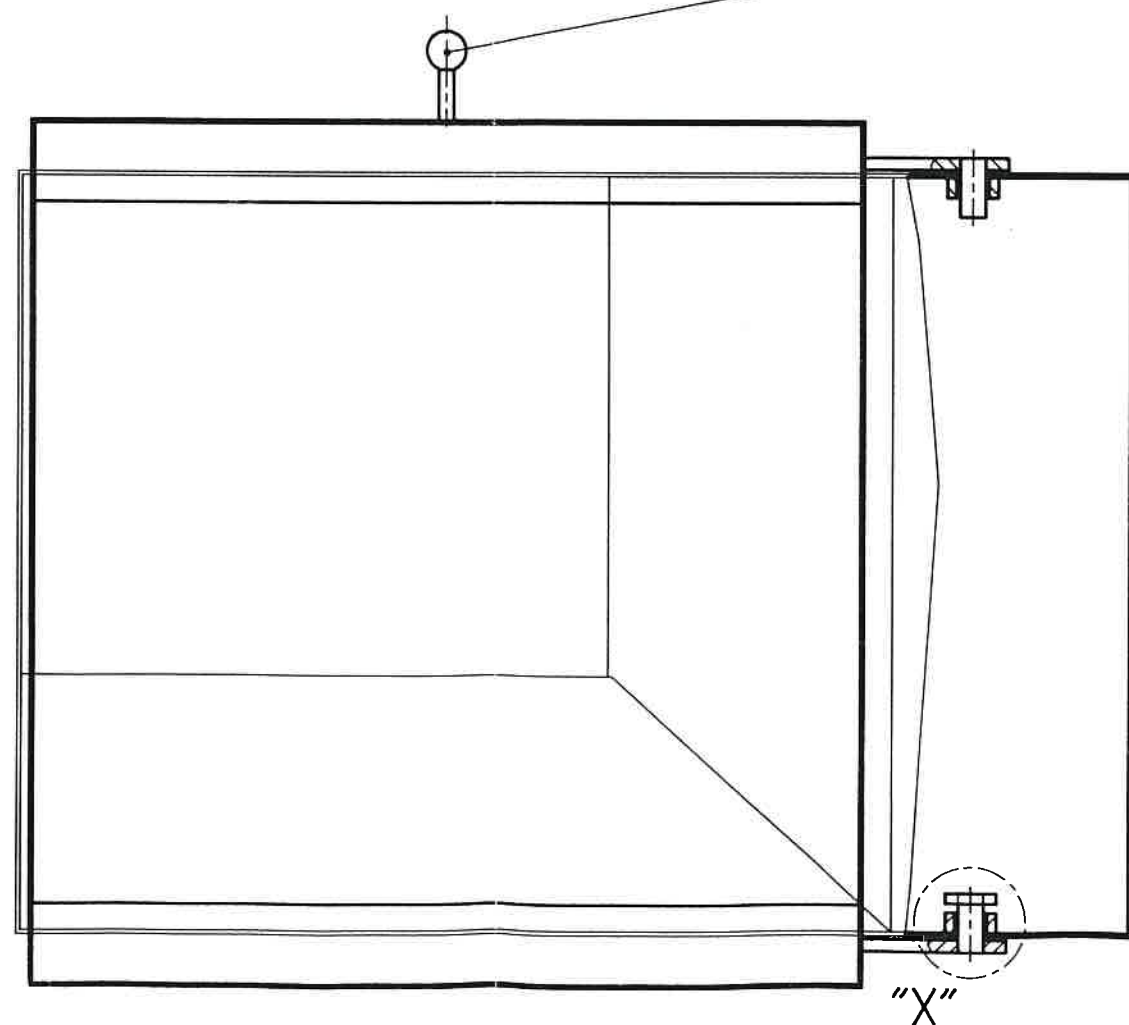


0134.0.253

TR 201

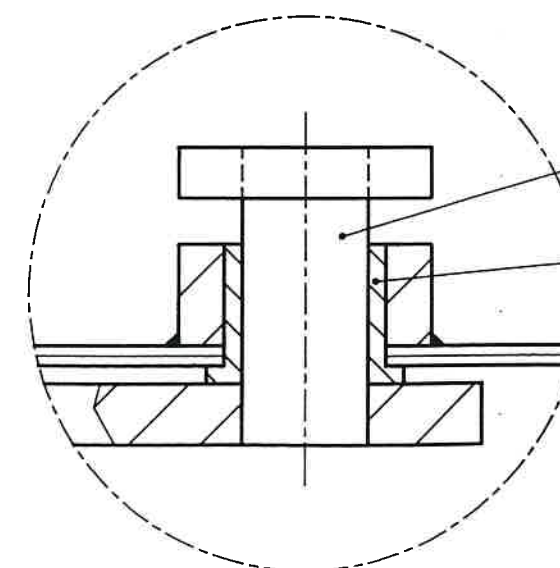
2x TR 202

AT 11-S-i



Detail
Detail
Detail
Detalle

"X"



2x 0644.0.219

2x TR 203

"Teile ohne Pos.-Nr. - Angabe siehe Schaltplan"
"Parts without ref. no. - for info. see circuit diagram"
"Pièces sans No. de Réf. - Données: voir schéma de connexions"
"Piezas sin No. de Ref. - Datos: véase esquema de distribución"

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.TR05.1	41377	EINLAUF - TRICHTER	INTAKE HOPPER	TRÉMIE D'ENTRÉE	TOLVA ALIMENTADORA
0129.1.102.1.23	20979	FLACHSTAHL	FLAT STEEL	ACIER PLAT	ACERO PLANO
0644.0.219	25042	BOLZEN	PIN	BOULON	PERNO
0134.3.240.1	41362	TRICHTER	HOPPER	TRÉMIE	TOLVA
0134.0.253.1	26947	SCHALTNOCKE	SWITCH CAM	CAME DE COMMANDE	LEVA INTERRUPTORA
TR201	13204	GEWINDESTIFT	THREADED PIN	BOULON FILETE	VARILLA ROSCADA
TR202	12564	ZYL.SCHRAUBE	CYLINDER BOLT	VIS CYLINDRIQUE	TORNILLO CILINDRICO
TR203	13897	BUNDLAGER	COLLAR END BEARING	PALIER À BRIDE	COJINETE DE CONEXION
TR204	13204	GEWINDESTIFT	THREADED PIN	BOULON FILETE	VARILLA ROSCADA
TR205	16221	GRIFF	HANDLE	MANCHE	MANGO

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.EG12	19427	BAUGRUPPE	SERIE	SERIE	GRUPO DE ELEMENTOS
1M1	18069	MOTOR	MOTOR	MOTEUR	MOTOR
1M1	20282	MOTOR	MOTOR	MOTEUR	MOTOR
1M1	27016	MOTOR	MOTOR	MOTEUR	MOTOR
3M1	18010	MOTOR	MOTOR	MOTEUR	MOTOR
3M1	18007	MOTOR	MOTOR	MOTEUR	MOTOR
3M1	18008	MOTOR	MOTOR	MOTEUR	MOTOR
OS2	16618	TASTER	PUSH BUTTON	BOUTONS-POUSOIRS	MANIPULADOR
OS3-4	37018	SCHALTER	SWITCH	INTERRUPTEUR	INTERRUPTOR
OS5	37810	TASTER	PUSH BUTTON	BOUTONS-POUSOIRS	MANIPULADOR
OS6	16621	ENDSCHALTER	PUSH BUTTON	BOUTONS-POUSOIRS	MANIPULADOR
OS6	16629	ANFAHRROLLE	STARTING PULLEY	POULIE DE DÉMARRAGE	RUEDA DE ACCIONAMIENT
7314205	36657	VENTILSTECKER	PLUG	?	?

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.EK14	46782	VERBINDUNGSKABEL	CONNECTING CABLES	CÂBLES DE CONNEXION	CABLES DE CONEXION
2014010	11701	SCHUTZSCHLAUCH	PROTECTION HOSE	TUBE DE PROTECTION	MANGUERA PROTECTORA
61583515	27308	SCHLAUCHBINDER	HOSE CLAMP	COLLIER DE SERRAGE	COLLAR DE AJUSTE
7011003	16415	KABEL	CABLE	CÂBLE	CABLE
7011003	16415	KABEL	CABLE	CÂBLE	CABLE
7011003	16415	KABEL	CABLE	CÂBLE	CABLE
7011004	16418	KABEL	CABLE	CÂBLE	CABLE
7011004	16418	KABEL	CABLE	CÂBLE	CABLE
7011203	16434	KABEL	CABLE	CÂBLE	CABLE
7011204	16436	KABEL	CABLE	CÂBLE	CABLE
7011005	44561	KABEL	CABLE	CÂBLE	CABLE
7010154	31195	DRAHT	WIRE	FIL	ALAMBRE
7011412	41751	KABEL	CABLE	CÂBLE	CABLE

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.ES16	48206	STEUERUNG	CONTROL	COMMANDE	MANDO
7403368	17388	GEHÄUSE	HOUSING	BÂTI	CUBIERTA EXTERIOR
7053051	36561	*	*	*	*
7404551	17410	Schaltp.antasche			
6803011	16236	FIRMENSCHILD	COMPANY PLATE	ENSEIGNE COMMERCIALE	ESCUDO DE COMPANIA
7404451	17409	BEFESTIGUNG	FIXTURE	FIXATION	FIJACIÓN
0101.1.065	04522	KABELFLANSCH	CABLE FLANGE	BRIDE À CÂBLE	BRIDA DE CABLE
5016035	12240	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HEXAGONALE	TORNILLO HEXAGONAL
5031011	12763	FEDERRING	SPRING RING	BAGUE DE RESSORT	ANILLO DE RESORTE
5044022	13066	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
0164.0.131.2	25004	BLECH	PLATE	TÔLE	LAMINA METALICA
5016031	12236	SK-SCHRAUBE	HEXAGONAL SCREW	VIS HEXAGONALE	TORNILLO HEXAGONAL
5031011	12763	FEDERRING	SPRING RING	BAGUE DE RESSORT	ANILLO DE RESORTE
5044022	13066	SK-MUTTER	HEXAGONAL NUT	ÉCROU HEXAGONAL	TUERCA HEXAGONAL
0A1	22062	NOTAUSGERÄT	SWITCH	INTERRUPTEUR	INTERRUPTOR
2A1	39451	PROGRAMMSTEUERUNG	PROGRAMME CONTROL	PROGRAMMATEUR	PROGRAMADOR
3A1	25917	FREQUENZUMFORMER	SEMICONDUCTOR	SEMI-CONDUCTEUR	SEMI-CONDUCTOR
3A2	35223	HALBLEITER	SEMICONDUCTOR	SEMI-CONDUCTEUR	SEMI-CONDUCTOR
0F1	24752	LEISTUNGSSCHALTER	MAIN SWITCH	INTERRUPT.PRINCIPAL	INTERRUPT.PRINCIPAL
1F1	24757	LEISTUNGSSCHALTER	MAIN SWITCH	INTERRUPT.PRINCIPAL	INTERRUPT.PRINCIPAL
1F1	47679	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPTOR
1F1	48027	THERMORELAIS	THERMAL RELAY	RELAIS THERMIQUE	RELÉ TÉRMICO
3F1	24753	LEISTUNGSSCHALTER	MAIN SWITCH	INTERRUPT.PRINCIPAL	INTERRUPT.PRINCIPAL
3F1	24754	LEISTUNGSSCHALTER	MAIN SWITCH	INTERRUPT.PRINCIPAL	INTERRUPT.PRINCIPAL
3F1	47679	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPTOR
5F1	24752	LEISTUNGSSCHALTER	MAIN SWITCH	INTERRUPT.PRINCIPAL	INTERRUPT.PRINCIPAL
5F1	24754	LEISTUNGSSCHALTER	MAIN SWITCH	INTERRUPT.PRINCIPAL	INTERRUPT.PRINCIPAL
5F1	47679	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPTOR
0K0	27955	HILFSSCHÜTZ	AUXILIARY CONTACTOR	CONTACTEUR AUXILI.	CONTACTOR AUXILIAR
0K0	27957	SCHALTER	SWITCH	INTERRUPTEUR	INTERRUPTOR
0K1	27955	HILFSSCHÜTZ	AUXILIARY CONTACTOR	CONTACTEUR AUXILI.	CONTACTOR AUXILIAR
1K1	47718	NETZSCHÜTZ	POWER CONTACTOR	CONTACTEUR RÉSEAU	CONTACTOR CORRIENTE
1K1	47719	NETZSCHÜTZ	POWER CONTACTOR	CONTACTEUR RÉSEAU	CONTACTOR CORRIENTE
1K2	47718	NETZSCHÜTZ	POWER CONTACTOR	CONTACTEUR RÉSEAU	CONTACTOR CORRIENTE
1K2	47719	NETZSCHÜTZ	POWER CONTACTOR	CONTACTEUR RÉSEAU	CONTACTOR CORRIENTE
1K3	47718	NETZSCHÜTZ	POWER CONTACTOR	CONTACTEUR RÉSEAU	CONTACTOR CORRIENTE
1K3	47719	NETZSCHÜTZ	POWER CONTACTOR	CONTACTEUR RÉSEAU	CONTACTOR CORRIENTE
1K12	51810	ZEITRELAIS	TIME RELAY	RELAIS TEMPORISE	RELE DE TIEMPO
1K13	51810	ZEITRELAIS	TIME RELAY	RELAIS TEMPORISE	RELE DE TIEMPO
3K1	47708	NETZSCHÜTZ	POWER CONTACTOR	CONTACTEUR RÉSEAU	CONTACTOR CORRIENTE
5K1	47708	NETZSCHÜTZ	POWER CONTACTOR	CONTACTEUR RÉSEAU	CONTACTOR CORRIENTE
5K10	27955	HILFSSCHÜTZ	AUXILIARY CONTACTOR	CONTACTEUR AUXILI.	CONTACTOR AUXILIAR
5K11	38023	RELAIS	RELAY	RELAIS	RELÉ
1P1	51350	BETR.STUNDENZÄHLER	OPERATION COUNTER	*	*
0Q1	16749	HAUPTSCHALTER	MAIN SWITCH	INTERRUPT.PRINCIPAL	INTERRUPT.PRINCIPAL
0Q1	16750	HAUPTSCHALTER	MAIN SWITCH	INTERRUPT.PRINCIPAL	INTERRUPT.PRINCIPAL
0T1	25033	TRANSFORMATOR	TRANSFORMER	TRANSFORMATEUR	TRANSFORMADOR
X4	41419	STECKER	PLUG	FICHE	ENCHUFE
X6	41419	STECKER	PLUG	FICHE	ENCHUFE
7379140	27683	HEIZGERÄT	HEATER	APPAREIL CHAUFFAGE	APARATO CALEFACTOR
7314229	26913	POTENTIOMETER	POTENTIOMETER	POTENTIOMÈTRE	POTENTIOMETRO
7070062	16630	DREHANTRIEB	ROTATING DRIVE	ACTIONNEMENT ROTAT.	ACCIONAMIENTO GIRAT.
7261211	47678	KLEMME	TERMINAL	BORNE	BORNE
7191001	47733	HILFSSCHALTERBLOCK	AUXILIARY CONTACTOR	CONTACTEUR AUXILI.	CONTACTOR AUXILIAR

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
7191001	47734	HILFSSCHÜTZ	AUXILIARY CONTACTOR	CONTACTEUR AUXILI.	CONTACTOR AUXILIAR
7261209	47683	SCHIENE	RAIL	RAIL	RIEL
7261209	47682	SCHIENE	RAIL	RAIL	RIEL
7051035	36497	KLEMME	TERMINAL	BORNE	BORNE
7051037	36498	KLEMME	TERMINAL	BORNE	BORNE
7051004	16574	KLEMME	TERMINAL	BORNE	BORNE
7051405	37717	KLEMME	TERMINAL	BORNE	BORNE
7051504	16581	KLEMME	TERMINAL	BORNE	BORNE
7051504	16581	KLEMME	TERMINAL	BORNE	BORNE
7051401	37716	KLEMME	TERMINAL	BORNE	BORNE
7010141	16392	DRAHT	WIRE	FIL	ALAMBRE
7056123	29980	ANKERSCHIENE	ANCHOR RAIL	RAIL D'ANCRAGE	RIEL DE ANCLAJE
7055901	38110	BRÜCKE	BRIDGE	PONT	PUENTE
7055910	38118	BRÜCKE	BRIDGE	PONT	PUENTE
7051555	29982	SHELLE	CLIP/CLAMP	BRIDE	COLLAR
7055640	26299	BÜGEL	CLAMP	ETRIER	ASA
7198005	36512	SCHIENE	RAIL	RAIL	RIEL
7055970	38232	*	*	*	*
20191025	25487	SCHLAUCH	HOSE	TUYAU	MANGUERA
7034105	20749	Klebeplatte			
7055651	36500	BRÜCKE	BRIDGE	PONT	PUENTE
7055609	36503	PLATTE	LATE	PLAQUE	CHAPA
7198002	36083	SCHIENE	RAIL	RAIL	RIEL
2021991	11794	KABELKANAL	CABLE CONDUIT	CONDUITE DE CÂBLES	CANAL DE CABLES
7051700	18628	BEFESTIGUNG	FIXTURE	FIXATION	FIJACIÓN
7051101	37711	KLEMME	TERMINAL	BORNE	BORNE
7051102	37712	KLEMME	TERMINAL	BORNE	BORNE

ZNR	ANR	ERSATZTEILE	SPAREPARTS	PIECES DE RECHANGE	PIEZA DE RECAMBIO
0134.ET11	19263	TASTERPLATTE	PUSH BUTTON PLATE	PLAQUE BOUTONS-POUSS	PLACA PULSADORES
0164.1.212	23489	TASTERPLATTE	PUSH BUTTON PLATE	PLAQUE BOUT.POUSS.	PLACA PULSADORES
1S0	37421	TASTER	PUSH BUTTON	BOUTON-POUSOIRS	MANIPULADOR
1S0	37423	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPT.
1S0	37422	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPT.
1S1	19286	TASTER	PUSH BUTTON	BOUTON-POUSOIRS	MANIPULADOR
1S1	16684	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPT.
1S3	19285	TASTER	PUSH BUTTON	BOUTON-POUSOIRS	MANIPULADOR
1S3	16684	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPT.
5S0	19285	TASTER	PUSH BUTTON	BOUTON-POUSOIRS	MANIPULADOR
5S0	16684	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPT.
5S1	16691	TASTER	PUSH BUTTON	BOUTON-POUSOIRS	MANIPULADOR
5S1	16684	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPT.
5S2	16691	TASTER	PUSH BUTTON	BOUTON-POUSOIRS	MANIPULADOR
5S2	16684	SCHALTELEMENT	CONTROL ELEMENT	ÉLÉMENT DE CIRCUIT	ELEMENTO INTERRUPT.