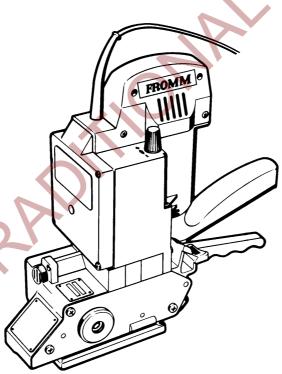
FROMM

OPERATION MANUAL

STRAPPING TOOL
MODEL P300



CE Declaration of conformity

We declare that the machine P300 is in conformity with the following standard or standardised documents:

98/37/EEC 73/23/EEC 89/336/EEC

FROMM Holding AG Hinterbergstrasse 26 CH - 6330 Cham 28.10 2002

R.Fromm Director

CE

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1 GENERAL SAFETY RULES

WARNING! Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/ or serious injury. The term "power tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

SAVE THESE INSTRUCTIONS.

1.1 Work area

- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

1.2 Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce the risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suit-able for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

1.3 Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.

1.4 Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the operation of the power tool. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

1.5 Service

a) Have your power tool repaired only by qualified personnel using original spare parts. This will ensure that the safety of the power tool is maintained.

2 SAFETY RULES FOR STRAPPING TOOLS

2.1 Joints

You are fully responsible to review the joints made by your tool. Become familiar with the seal control and seal adjustment described in this operation manual.

Misformed joints may not secure the load and could cause serious injury. Never handle or ship any load with improperly formed joints.

2.2 Dispensing strap

Only dispense strap from a dispenser specifically designed for strap. Tuck strap end back into dispenser when not in use.

2.3 Strap warnings

Never use strap as a means of pulling or lifting loads. Failure to follow these warnings can result in severe personal injury.

2.4 Strap breakage hazard

Improper operation of the tool, excessive tensioning, using strap not recommended for this tool or sharp corners on the load can result in a sudden loss of strap tension or in strap breakage during tensioning, which could result in the following:

A sudden loss of balance causing you to fall.

Both tool and strap flying violently towards your face.

Note as follows:

If the load corners are sharp, use edge protectors.

Place the strap correctly around a properly positioned load.

Positioning yourself in-line with the strap, during tensioning and sealing, can result in severe personal injury from flying strap or tool. When tensioning or sealing, position yourself to one side of the strap and keep all bystanders away.

Use the correct strap quality, strap width, strap gauge and strap tensile strength recommended in this manual for your tool. Using strap not recommended for this tool can result in strap breakage during tensioning.

2.5 Cutting tensioned strap

When cutting strapping, use the proper strapping cutter and keep other personnel and yourself at a safe distance from the strap. Always stand to side of the strap, away from the direction the loosened strap end will fly. Use only cutters designed for strap and never hammers, pliers, hacksaws, axes, etc.

3 WARRANTY CONDITIONS AND LIABILITY

FROMM Holding AG warrants all its strapping tools and machine heads during a period of 24 months from the date of installation at the end-user's sight by the distributor, however, not later than 30 months from the date of shipment to the distributor of FROMM Holding AG.

The warranty includes all deficiencies clearly resulting from poor manufacturing or faulty materials. Damage claims as a result of production shutdowns and claims for damage to persons and to property resulting from warranty deficiencies cannot be asserted by the customer.

The warranty excludes:

- wearing parts
- deficiencies resulting from improper installing, incorrect handling and maintaining the tool
- deficiencies resulting from using the tool without or with defective security- and safety devices
- disregard of directions in the operation manual
- arbitrary modifications of the tool
- deficient control of wearing parts
- deficient repair works of the tool
- Use of consumable products not recommended by FROMM Holding AG

We reserve the right to modify the product at any time in order to improve its quality.

APPROPRIATE USE

The tool model P300 has been designed to strap packages with plastic strapping exclusively.

A different or exceeded use is not appropriate.

For example the running idle use (without strap) is a not appropriate use.

FROMM HOLDING AG does not warrant any damages caused by non-appropriate use of the tool. Appropriate use also includes:

- Regarding of all directions in the operation manual.
- Regarding of control and maintenance instructions.

Attention!

Electromagnetic fields with high intensity may affect the proper function of the device. If this occurs, operate the machine at a different location, or contact our customer service.

5 TECHNICAL DATA

5.1 **Description of the tool**

The tool model P300 has been designed to strap packages with plastic strapping. The plastic strapping is fed around the package manually or in combination with a strap feeder. The straps are inserted in the tool, automatically tensioned, sealed by friction welding and separated.

5.2 **Sound information**

The A-weighted equivalent continuous sound level at the work place of the machine operator is typical 82 dB (A).

This value was determined according to DIN 45 635 T3 (11.85).

5.3 Vibration information

The weighted effective value of the acceleration typically amounts to less than 4,1 m/s². This value was determined according to DIN EN 28 662 T1 (01.93).

5.4 Strap tension

Tensioning force*: Max. 1600 N / 360 lbs Tensioning speed*: approx. 170 mm / s

approx. 75% of the tensile strength of the plastic strap Joint strength*:

PET (Polyester), see chart of types. Strap qualities:

PP (Polypropylen), see chart of types.

Strap dimensions: 10 - 16 x 0.4 - 0.8 mm, see chart of types.

Dimensions without suspension bracket

IOOI:	Package:
290 mm / 11.4"	360 mm / 14.2"
90 mm / 3.5"	400 mm / 15.8"
250 mm / 9.8"	110 mm / 4.3"
	90 mm / 3.5"

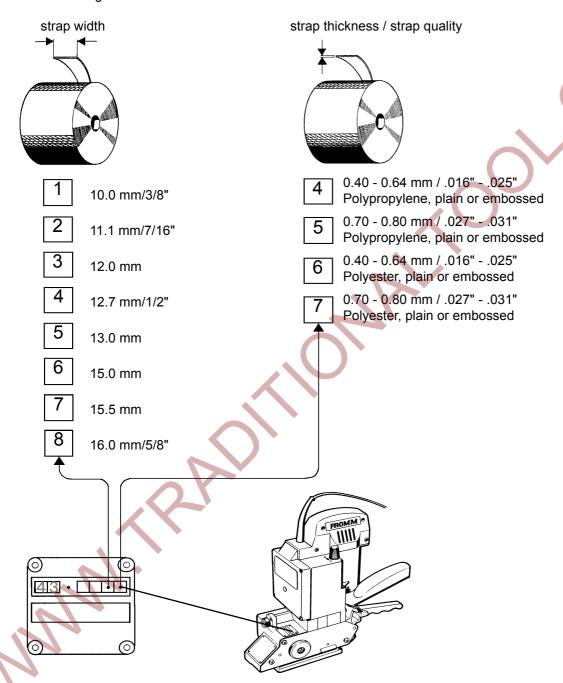
Weight: 3.9 kg / 8.6 lbs 0.8 kg / 1.8 lbs

^{*}These values are depending on the strap quality.

6 CHART OF TYPES

The item-No. is built up in form (nn.nnnn) and is marked on label (for instance 43.9944).

- The first two digits of the item-No. define the electrical data and specifications of the tool.
- The last two digits of the Item No. describe the strap width, the strap thickness and the strap quality as per the following chart.



7 INSTALLATION

Tool must be connected to the line using the original plug / cord only. Supply voltage and frequency must be identical with the indications on the label.

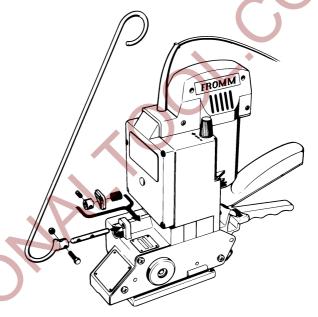
For the tools with item-No. 43.11.. / 43.18.. / 43.94.. / 43.95.. / 43.96..a helix cable with plug (item- No. N5. 2122) can be ordered.

Attention! The connecting cable may only be replaced by the manufacturer or by an authorized specialist.

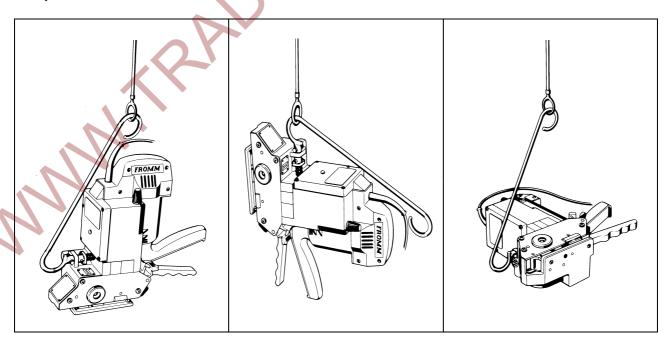
7.1 Suspension bracket

The tool can be equipped with a suspension bracket (item-no. P30.1407) and suspended on a balancer.

- Remove screw and nut from bracket. Slip bracket on bolt; be sure that holes in bracket adapter and in pin are aligned.
- · Secure bracket with screw and nut.



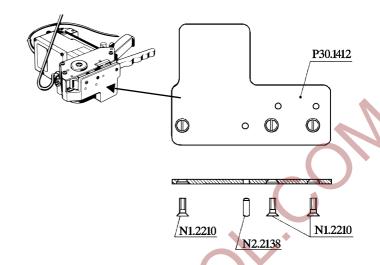
Suspension of tool



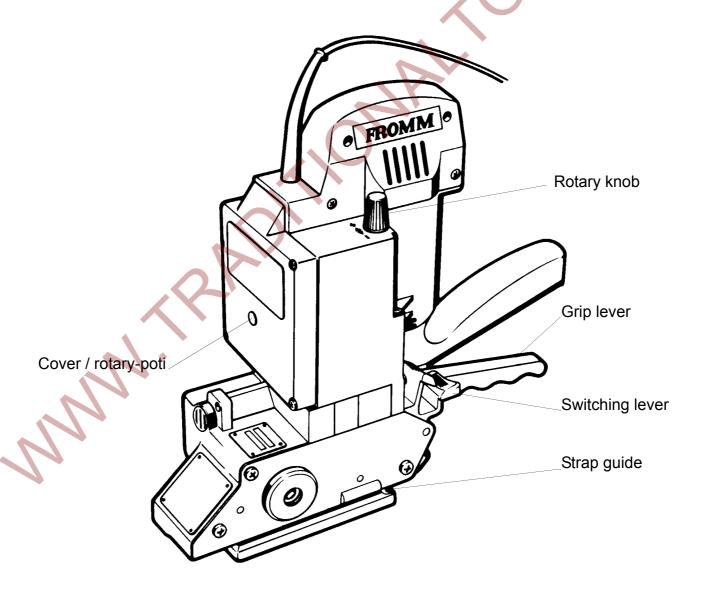
7.2 Wearing plate

As an option, tool can be equipped with a wearing plate complete (item-No. P30.1411) to protect base from excessive wear on abrasive package surfaces (like bricks, concrete blocks etc.).

Remove screw N1.1305 and pin N2.2110 from body and attach wearing plate with the 3 screws N1.2210 and the pin N2.2138.



8 OPERATING CONTROLS



9 OPERATION



Always wear safety glasses with side shields which conform to ANSI Standard Z87.1.

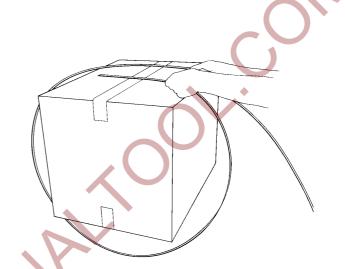
9.1 Feeding the strap around the package

The strapping is fed around the package in the direction as shown in the illustration.

Important!

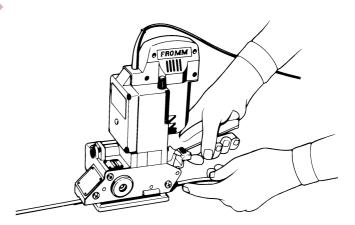
Use only plastic strap which is recommended by your local sales representative (name and address on the rear page of the operation manual).

Please only use sizes of strap which is intended for your tool (see chart of types).



9.2 Inserting the strap

Pull up the grip lever firmly with your right hand. Insert the two straps well aligned on each other into the strap guide using your left hand. Release the grip lever.



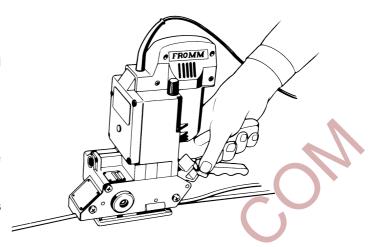
9.3 Tensioning

Press down the switching lever and then release it again after the desired strap tension has been reached. The tensioning operation can be interrupted and restarted at any time.

The desired tension of the strap can be preselected on the rotary knob. Turning it in a clockwise direction increases the tension (+) and in a counter-clockwise direction lowers it (-).

If a constant tension is desired apply tension until the motor stalls. It is recommended to set the tool at the maximum tension.

If maximum tension is not required tensioning cycle is stopped by releasing the switching lever before the motor stalls.



9.4 Sealing / welding

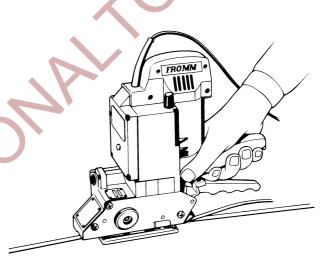
Press forward the switching lever firmly and release it again IMMEDIATELY.

The strap is welded automatically by friction and then

Depending on the size and quality of the strap, different WELDING TIMES are required.

The welding time can be set at the rotary potentiometer under the cover using a screw-driver with a small blade. Turning the rotary potentiometer in a clockwise direction increases the welding time and turning it in a counter-clockwise direction will reduce it.

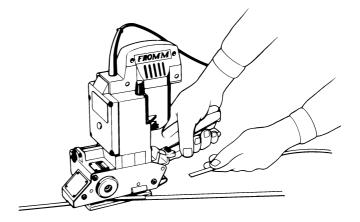
Attention! If adjusting the welding time disconnect the tool from the power supply.



9.5 Removing the tool

To prevent breaking of the seal, always let the seal cool down for approx. 2 seconds after welding.

Pull up the grip lever and push the tool to the right from the strapping.

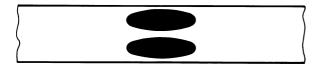


10 SEAL - CONTROL

Make a seal, peel it apart and examine as follows.



Welding time correct (seal correct)



Welding time too short (seal with insufficient tensile strength)



Welding time too long (possible strap breakage)

11 CLEANING

Clean tension parts from strap abrasion regularly by the use of compressed air (do not use any mechanical tool for cleaning).

ATTENTION!

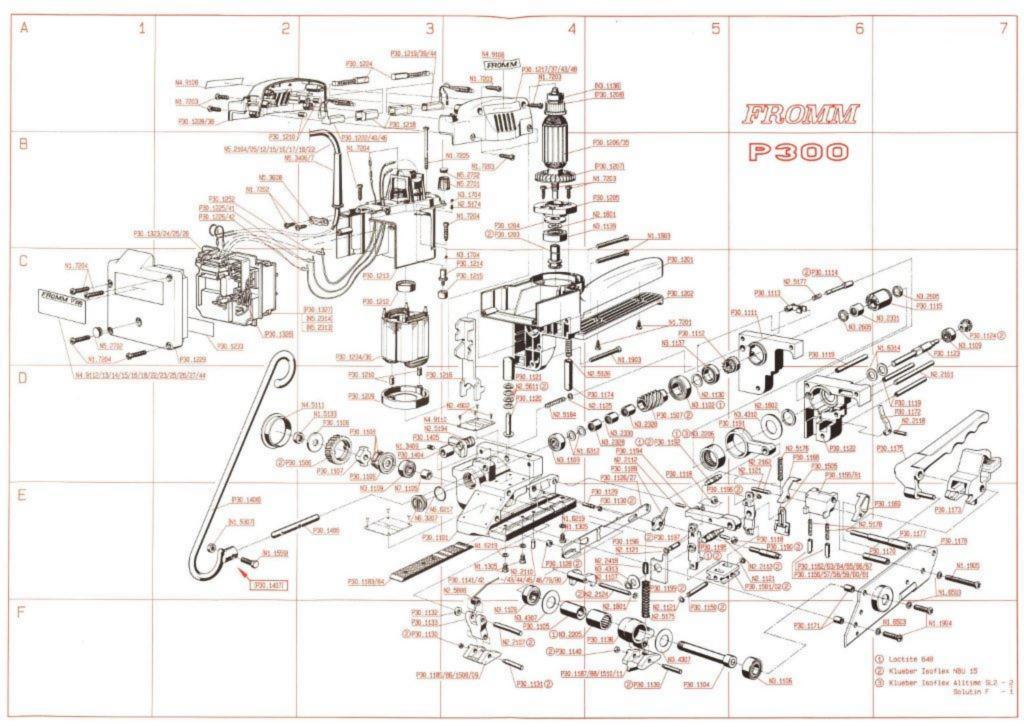
When cleaning the tool housing, do not use water or solvents.

12 SERVICE AND REPAIR

Servicing and repair work have to be carried out by authorized service centres only.

If the tool breaks down or does no longer operate do not disassemble it, send it fully assembled to the local service centre (see name and address on the rear page of this manual). Use original packing.

The electric plastic strapping tool P300 is a high performance tool. We strongly recommend you to have it serviced by an authorized service shop after 12 months at the latest if used one shift per day. If used two or more shifts per day the tool has to be serviced after a shorter period of time.



ITEM-NO.	in GR	GR	DESCRIPTION	43.991X	43.992X	43.993X	43.994X	43.995X	43.996X	43.997X	43.998X	43.99X4	43.99X5	43.99X6	43.99X7	FELD
N1.1305		-	SCREW M4 X 8	3	3	3	3	3	3	3	3	3	3	3	3	E4
N1.1903			SLOTTED CHEESE HD SCREW M5X60	3	3	3	3	3	3	3	3	3	3	3	3	B5+
N1.1904			SLOTTED CHEESE HD SCREW M5X20	2	2	2	2	2	2	2	2	2	2	2	2	F7
N1.1905			SLOTTED CHEESE HD SCREW M5X40	1	1	1	1	1	1	1	1	1	1	1	1	E7
N1.3409			SOCKET GRUB SCREW M4 X 8	1	1	1	1	1	1	1	1	1	1	1	1	D3
N1.5133			NUT M8 X 1	1	1	1	1	1	1	1	1	1	1	1	1	D3
N1.6219			SPRING LOCK WASHER M4	3	3	3	3	3	3	3	3	3	3	3	3	E4
N1.6312			SPACER 8 X 14 X 1,2	2	2	2	2	2	2	2	2	2	2	2	2	D5
N1.6314			SPACER 10 X 16 X 1,2	2	2	2	2	2	2	2	2	2	2	2	2	C7
N1.6503			SAFETY DISK M5	3	3	3	3	3	3	3	3	3	3	3	3	E7+
N1.7201	P30.0131		PT-SCREW 3,5 X 10	2	2	2	2	2	2	2	2	2	2	2	2	C5
N1.7202	P30.0131		PT-SCREW 4 X 10	2	2	2	2	2	2	2	2	2	2	2	2	B2
N1.7203	P30.0131		PT-SCREW 4 X 14	10	10	10	10	10	10	10	10	10	10	10	10	A2+
N1.7204	P30.0131		PT-SCREW 4 X 20	6	6	6	6	6	6	6	6	6	6	6	6	B3+
N1.7205	P30.0131		PT-SCREW 4 X 55	1	1	1	1	1	1	1	1	1	1	1	1	B4
N2.1107	P30.0101		CIRCLIP E8	1	1	0	0	0	0	0	0	1	1	1	1	E5
N2.1107	P30.0102		CIRCLIP E8	0	0	1	1	1	1	1	1	1	1	1	1	E5
N2.1121	P30.0101		CIRCLIP E5	4	4	0	0	0	0	0	0	4	4	4	4	E5+
N2.1121	P30.0102		CIRCLIP E5	0	0	4	4	4	4	4	4	4	4	4	4	E5+
N2.1125			CIRCLIP E3.2	1	1	1	1	1	1	1	1	1	1	1	1	D5
N2.1130			CIRCLIP ' V ' E15	1	1	1	1	1	1	1	1	1	1	1	1	D5
N2.1601	P30.0131		SPRING RING	1	1	1	1	1	1	1	1	1	1	1	1	B5
N2.1602	P30.0101		SPRING RING 20 MM	1	1	0	0	0	0	0	0	1	1	1	1	D6
N2.1602	P30.0102		SPRING RING 20 MM	0	0	1	1	1	1	1	1	1	1	1	1	D6
N2.1801			TENSION RING DIAM. 4 MM	1	1	1	1	1	1	1	1	1	1	1	1	F5
N2.2107			PARALLEL PIN 5 M6 X 40	1	1	1	1	1	1	1	1	1	1	1	1	F4
N2.2110			PARALLEL PIN 4 M6 X 10	1	1	1	1	1	1	1	1	1	1	1	1	E4
N2.2112			PARALLEL PIN 3 M6 X 12	1	1	1	1	1	1	1	1	1	1	1	1	E6
N2.2112	P30.0101		PARALLEL PIN 3 M6 X 12	1	1	0	0	0	0	0	0	1	1	1	1	D5
N2.2112	P30.0102		PARALLEL PIN 3 M6 X 12	0	0	1	1	1	1	1	1	1	1	1	1	D5
N2.2118			PARALLEL PIN 4 M6 X 14	1	1	1	1	1	1	1	1	1	1	1	1	D7
N2.2124			PARALLEL PIN 4 M6 X 40	1	1	1	1	1	1	1	1	1	1	1	1	E5
N2.2161			PARALLEL PIN 5 M6 X 50	1	1	1	1	1	1	1	1	1	1	1	1	D7
N2.2162			PARALLEL PIN 3 M6 X 24	1	1	1	1	1	1	1	1	1	1	1	1	D6
N2.2418			SLOTTED SPRING PIN 6 X 16 MM	1	1	1	1	1	1	1	1	1	1	1	1	E5
N2.4902			HAMMER HEAD BOLT 1,85 X 4,76	4	4	4	4	4	4	4	4	4	4	4	4	D4
N2.5126			PRESSURE SPRING 1 X 8 X 55	1	1	1	1	1	1	1	1	1	1	1	1	D5
N2.5174	P30.0131		PRESSURE SPRING 0.2 X 1.6 X 4	1	1	1	1	1	1	1	1	1	1	1	1	B4

ITEM-NO.	in GR	GR	DESCRIPTION	43.991X	43.992X	43.993X	43.994X	43.995X	43.996X	43.997X	43.998X	43.99X4	43.99X5	43.99X6	43.99X7	FELD
N2.5175			PRESSURE SPRING 1.6 X 10 X 45	1	1	1	1	1	1	1	1	1	1	1	1	F5
N2.5176			PRESSURE SPRING 0.6X5.5X31	1	1	1	1	1	1	1	1	1	1	1	1	D6
N2.5177			PRESSURE SPRING 0.55X5.55X15	1	1	1	1	1	1	1	1	1	1	1	1	C6
N2.5178			PRESSURE SPRING 0.32X2.82X20.5	2	2	2	2	2	2	2	2	2	2	2	2	E6
N2.5184			PRESSURE SPRING. 0.5X5.5.X25	1	1	1	1	1	1	1	1	1	1	1	1	D4
N2.5194			PRESS.SPRING 2X12.3X14/4 1/2	1	1	1	1	1	1	1	1	1	1	1	1	D3
N2.5611			DISK SPRING 12 X 6.2 X 0.5	42	42	42	42	42	42	42	42	42	42	42	42	D4
N2.5808			BENDING SPRING	1	1	1	1	1	1	1	1	1	1	1	1	E4
N3.1102			BALL BEARING	1	1	1	1	1	1	1	1	1	1	1	1	D5
N3.1106			GROOVED BALL BEARING	1	1	1	1	1	1	1	1	1	1	1	1	F6
N3.1109			BALL BEARING	4	4	4	4	4	4	4	4	4	4	4	4	C7+
N3.1137			GROOVED BALL BEARING	1	1	1	1	1	1	1	1	1	1	1	1	C5
N3.1138	P30.1235		GROOVED BALL BEARING	1	1	1	1	1	1	1	1	1	1	1	1	A5
N3.1139	P30.0131		GROOVED BALL BEARING	1	1	1	1	1	1	1	1	1	1	1	1	B5
N3.1704	P30.0131		BALL, 2 MM.	2	2	2	2	2	2	2	2	2	2	2	2	B4+
N3.2205			NEEDLE BEARING	1	1	1	1	1	1	1	1	1	1	1	1	F4
N3.2206	P30.0101		NEEDLE BEARING	1	1	0	0	0	0	0	0	1	1	1	1	D5
N3.2206	P30.0102		NEEDLE BEARING	0	0	1	1	1	1	1	1	1	1	1	1	D5
N3.2328			NEEDLE BUSH	2	2	2	2	2	2	2	2	2	2	2	2	D5
N3.2330			NEEDLE BUSH	1	1	1	1	1	1	1	1	1	1	1	1	D5
N3.2331	P30.0101		NEEDLE BUSH	1	1	0	0	0	0	0	0	1	1	1	1	C7
N3.2331	P30.0102		NEEDLE BUSH	0	0	1	1	1	1	1	1	1	1	1	1	C7
N3.2605	P30.0101		PACKING RING	2	2	0	0	0	0	0	0	2	2	2	2	C6+
N3.2605	P30.0102		PACKING RING	0	0	2	2	2	2	2	2	2	2	2	2	C6+
N3.4307			THRUST RACE	2	2	2	2	2	2	2	2	2	2	2	2	F4+
N3.4310	P30.0101		THRUST DISK	1	1	0	0	0	0	0	0	1	1	1	1	D6
N3.4310	P30.0102		THRUST DISK	0	0	1	1	1	1	1	1	1	1	1	1	D6
N3.4313	P30.0101		THRUST RACE	1	1	0	0	0	0	0	0	1	1	1	1	E5
N3.4313	P30.0102		THRUST RACE	0	0	1	1	1	1	1	1	1	1	1	1	E5
N4.5111			PROTECTION PLUG	1	1	1	1	1	1	1	1	1	1	1	1	D3
N4.9108	P30.0131		LABEL FROMM 54X12X0.1	2	2	2	2	2	2	2	2	2	2	2	2	A2+
N4.9110			LABEL FOR NO. P300	1	1	1	1	1	1	1	1	1	1	1	1	D3
N4.9116	P30.0131		LABEL (P300)	1	1	1	1	1	1	1	1	1	1	1	1	D1
N5.2116	P30.0131		PLUG WITH CABLE	1	1	1	1	1	1	1	1	1	1	1	1	B2
N5.2313	P30.1324		CONTROL SWITCH	1	1	1	1	1	1	1	1	1	1	1	1	C3
N5.2314	P30.1324		MAIN SWITCH	1	1	1	1	1	1	1	1	1	1	1	1	C3
N5.2701	P30.0131		SWITCH WITH MARK	1	1	1	1	1	1	1	1	1	1	1	1	В4
N5.2702	P30.0131		COVER	2	2	2	2	2	2	2	2	2	2	2	2	B4+

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ITEM-NO.	in GR	GR	DESCRIPTION	43.991X	43.992X	43.993X	43.994X	43.995X	43.996X	43.997X	43.998X	43.99X4	43.99X5	43.99X6	43.99X7	FELD
N5.3407	P30.0131		PROTECTION TUBE	1	1	1	1	1	1	1	1	1	1	1	1	B3
N5.3608	P30.0131		PIPE CLAMP	1	1	1	1	1	1	1	1	1	1	1	1	B2
N6.3207			PLUG	1	1	1	1	1	1	1	1	1	1	1	1	E3
N6.6217			O-RING 15 X 2	1	1	1	1	1	1	1	1	1	1	1	1	E3
N7.1105			SLEEVE	1	1	1	1	1	1	1	1	1	1	1	1	E3
P30.0101		GR	WELDING UNIT ASSY.	1	1	0	0	0	0	0	0	1	1	1	1	-
P30.0102		GR	WELDING UNIT ASSY.	0	0	1	1	1	1	1	1	1	1	1	1	-
P30.0131		GR	MOTOR ASSEMBLED	1	1	1	1	1	1	1	1	1	1	1	1	-
P30.1101		GR	BODY	1	1	1	1	1	1	1	1	1	1	1	1	E3
P30.1104			BEARING SCREW	1	1	1	1	1	1	1	1	1	1	1	1	F5
P30.1105			ECCENTRIC	1	1	1	1	1	1	1	1	1	1	1	1	F4
P30.1106			GUIDE WASHER	2	2	2	2	2	2	2	2	2	2	2	2	D3
P30.1107			DRIVER	1	1	1	1	1	1	1	1	1	1	1	1	D3
P30.1108			BUFFER	4	4	4	4	4	4	4	4	4	4	4	4	D3
P30.1111			SUPPORT BACK	1	1	1	1	1	1	1	1	1	1	1	1	C6
P30.1112			SLIDING COUPLER	1	1	1	1	1	1	1	1	1	1	1	1	C5
P30.1113			FORK	1	1	1	1	1	1	1	1	1	1	1	1	C6
P30.1114			ENGAGING ROD	1	1	1	1	1	1	1	1	1	1	1	1	C6
P30.1115	P30.0101		EXCENTRIC	1	1	0	0	0	0	0	0	1	1	1	1	C7
P30.1115	P30.0102		EXCENTRIC	0	0	1	1	1	1	1	1	1	1	1	1	C7
P30.1118			SUPPORTING ROLL	1	1	1	1	1	1	1	1	1	1	1	1	E6
P30.1118	P30.0101		SUPPORTING ROLL	1	1	0	0	0	0	0	0	1	1	1	1	D5
P30.1118	P30.0102		SUPPORTING ROLL	0	0	1	1	1	1	1	1	1	1	1	1	D5
P30.1119			CENTERING SLEEVE	3	3	3	3	3	3	3	3	3	3	3	3	C6+
P30.1120			SPRING BOLT	1	1	1	1	1	1	1	1	1	1	1	1	D4
P30.1121			SPRING SOCKET	1	1	1	1	1	1	1	1	1	1	1	1	D4
P30.1122			SUPPORT IN FRONT	1	1	1	1	1	1	1	1	1	1	1	1	D6
P30.1123			SHAFT	1	1	1	1	1	1	1	1	1	1	1	1	C7
P30.1124			BEVEL WHEEL	1	1	1	1	1	1	1	1	1	1	1	1	C7
P30.1126			BAR	1	1	1	1	1	1	1	1	1	0	1	0	D5
P30.1127			BAR	1	1	1	1	1	1	1	1	0	1	0	1	D5
P30.1128			SPACER	1	1	1	1	1	1	1	1	1	1	1	1	E4
P30.1129			SHAFT	1	1	1	1	1	1	1	1	1	1	1	1	E5
P30.1130			BUSHING	2	2	2	2	2	2	2	2	2	2	2	2	E5+
P30.1131			PIN	1	1	1	1	1	1	1	1	1	1	1	1	F4
P30.1132			LOCKING RING	1	1	1	1	1	1	1	1	1	1	1	1	F3
P30.1133			FORK	1	1	1	1	1	1	1	1	1	1	1	1	F3
P30.1136		GR	TENSIONING ROCKER	1	1	1	1	1	1	1	1	1	1	1	1	F5

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P30.1140	ITEM-NO.	in GR	GR	DESCRIPTION	43.991X	43.992X	43.993X	43.994X	43.995X	43.996X	43.997X	43.998X	43.99X4	43.99X5	43.99X6	43.99X7	FELD
P30.1141	P30.1139			BOLT	1	1	1	1	1	1	1	1	1	1	1	1	F5
P30.1142	P30.1140			ROLL	1	1	1	1	1	1	1	1	1	1	1	1	F4
P30.1143	P30.1141			STRAP GUIDE	0	0	1	0	0	0	0	0	1	1	1	1	E4
P30.1144	P30.1142			STRAP GUIDE	0	0	0	1	0	0	0	0	1	1	1	1	E4
P30.1146	P30.1143			STRAP GUIDE	0	0	0	0	1	0	0	0	1	1	1	1	E4
P30.1146	P30.1144			STRAP GUIDE	0	0	0	0	0	1	0	0	1	1	1	1	E4
P30.1150	P30.1145			STRAP GUIDE	0	0	0	0	0	0	1	0	1	1	1	1	E4
P30.1150 P30.0102 SHAFT BELOW O O O O O O O O O	P30.1146			STRAP GUIDE	0	0	0	0	0	0	0	1	1	1	1	1	E4
P30.1156 GUIDE BLOCK	P30.1150	P30.0101		SHAFT BELOW	1	1	0	0	0	0	0	0	1	1	1	1	F5
P30.1156 GUIDE PIN RIGHT	P30.1150	P30.0102		SHAFT BELOW	0	0	1	1	1	1	1	1	1	1	1	1	F5
P30.1157 GUIDE PIN RIGHT	P30.1155			GUIDE BLOCK	0	0	1	1	1	1	1	1	1	1	1	1	D6
P30.1158 GUIDE PIN RIGHT	P30.1156			GUIDE PIN RIGHT	1	0	1	0	0	0	0	0	1	1	1	1	E6
P30.1159 GUIDE PIN RIGHT	P30.1157			GUIDE PIN RIGHT	0	0	0	1	0	0	0	0	1	1	1	1	E6
P30.1160 GUIDE PIN RIGHT	P30.1158			GUIDE PIN RIGHT	0	1	0	0	1	0	0	0	1	1	1	1	E6
P30.1161 GUIDE PIN RIGHT O O O O O O O O O O O O O O O O O O	P30.1159			GUIDE PIN RIGHT	0	0	0	0	0	1	0	0	1	1	1	1	E6
P30.1162 GUIDE PIN LEFT	P30.1160			GUIDE PIN RIGHT	0	0	0	0	0	0	1	0	1	1	1	1	E6
P30.1163 GUIDE PIN LEFT O O O O O O O O O	P30.1161			GUIDE PIN RIGHT	0	0	0	0	0	0	0	1	1	1	1	1	E6
P30.1164 GUIDE PIN LEFT O	P30.1162			GUIDE PIN LEFT	1	0	1	0	0	0	0	0	1	1	1	1	E6
P30.1165 GUIDE PIN LEFT O O O O O O O O O O O O O O O O O O	P30.1163			GUIDE PIN LEFT	0	0	0	1	0	0	0	0	1	1	1	1	E6
P30.1166 GUIDE PIN LEFT 0 0 0 0 0 0 0 0 0 1 0 1 1 1 1 1 1 1 1	P30.1164			GUIDE PIN LEFT	0	1	0	0	1	0	0	0	1	1	1	1	E6
P30.1167 GUIDE PIN LEFT 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P30.1165			GUIDE PIN LEFT	0	0	0	0	0	1	0	0	1	1	1	1	E6
P30.1168 ROCKING BAR RIGHT	P30.1166			GUIDE PIN LEFT	0	0	0	0	0	0	1	0	1	1	1	1	E6
P30.1169 ROCKING BAR LEFT	P30.1167			GUIDE PIN LEFT	0	0	0	0	0	0	0	1	1	1	1	1	E6
P30.1170 CENTERING SLEEVE	P30.1168			ROCKING BAR RIGHT	1	1	1	1	1	1	1	1	1	1	1	1	D6
P30.1171 CENTERING SLEEVE 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	P30.1169			ROCKING BAR LEFT	1	1	1	1	1	1	1	1	1	1	1	1	E7
P30.1172 ENGANGING LEVER 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P30.1170			CENTERING SLEEVE	1	1	1	1	1	1	1	1	1	1	1	1	E7
P30.1173 SWITCHING ROCKER 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P30.1171			CENTERING SLEEVE	2	2	2	2	2	. 2	2	2	2	2	2	2	F6
P30.1174 SPRING SOCKET 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P30.1172			ENGANGING LEVER	1	1	1	1	1	1	1	1	1	1	1	1	D7
P30.1175 GR HANDLE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P30.1173			SWITCHING ROCKER	1	1	1	1	1	1	1	1	1	1	1	1	E7
P30.1177 SHAFT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <t< td=""><td>P30.1174</td><td></td><td></td><td>SPRING SOCKET</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>D5</td></t<>	P30.1174			SPRING SOCKET	1	1	1	1	1	1	1	1	1	1	1	1	D5
P30.1178 PLATE 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <t< td=""><td>P30.1175</td><td></td><td>GR</td><td>HANDLE</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>D7</td></t<>	P30.1175		GR	HANDLE	1	1	1	1	1	1	1	1	1	1	1	1	D7
P30.1179 STRAP GUIDE 1 0 0 0 0 0 0 1 1 1 1 E P30.1180 STRAP GUIDE 0 1 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P30.1177			SHAFT	1	1	1	1	1	1	1	1	1	1	1	1	E7
P30.1180 STRAP GUIDE 0 1 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P30.1178			PLATE	1	1	1	1	1	1	1	1	1	1	1	1	E7
P30.1181 GUIDE BLOCK 1 1 0 0 0 0 0 1 1 1 D P30.1183 GRIPPER 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 0 1 0 0 0 0 0 0 0 0 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <t< td=""><td>P30.1179</td><td></td><td></td><td>STRAP GUIDE</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td><td>E4</td></t<>	P30.1179			STRAP GUIDE	1	0	0	0	0	0	0	0	1	1	1	1	E4
P30.1183 GRIPPER 1 1 1 1 1 1 1 1 1 0 1 0 E	P30.1180			STRAP GUIDE	0	1	0	0	0	0	0	0	1	1	1	1	E4
	P30.1181			GUIDE BLOCK	1	1	0	0	0	0	0	0	1	1	1	1	D6
	P30.1183			GRIPPER	1	1	1	1	1	1	1	1	1	0	1	0	E3
ן און זון זון זון זון זון זון זון זון זון ז	P30.1184			GRIPPER	1	1	1	1	1	1	1	1	0	1	0	1	E3

ITEM-NO.	in GR	GR	DESCRIPTION	43.991X	43.992X	43.993X	43.994X	43.995X	43.996X	43.997X	43.998X	43.99X4	43.99X5	43.99X6	43.99X7	FELD
P30.1185			GRIPPING JAW	1	1	1	1	1	1	1	1	1	0	0	0	F3
P30.1186			GRIPPING JAW	1	1	1	1	1	1	1	1	0	1	0	0	F4
P30.1187			TENSIONING GRIPPER	1	1	1	1	1	1	1	1	1	0	0	0	F4
P30.1188			TENSIONING GRIPPER	1	1	1	1	1	1	1	1	0	1	0	0	F5
P30.1189			CAM	1	1	1	1	1	1	1	1	1	1	1	1	D5
P30.1190			BOLT	1	1	1	1	1	1	1	1	1	1	1	1	E6
P30.1191	P30.0101		ROCKER	1	1	0	0	0	0	0	0	1	1	1	1	D6
P30.1191	P30.0102		ROCKER	0	0	1	1	1	1	1	1	1	1	1	1	D6
P30.1192	P30.0101		SHAFT, UPPER	1	1	0	0	0	0	0	0	1	1	1	1	D5
P30.1192	P30.0102		SHAFT, UPPER	0	0	1	1	1	1	1	1	1	1	1	1	D5
P30.1194	P30.0101		HANDLE	1	1	0	0	0	0	0	0	1	1	1	1	D5
P30.1194	P30.0102		HANDLE	0	0	1	1	1	1	1	1	1	1	1	1	D5
P30.1195	P30.0101		MIDDLE SHAFT	1	1	0	0	0	0	0	0	1	1	1	1	E5
P30.1195	P30.0102		MIDDLE SHAFT	0	0	1	1	1	1	1	1	1	1	1	1	E5
P30.1196	P30.0101		PIVOTED LEVER, FRONT	1	1	0	0	0	0	0	0	1	1	1	1	E5
P30.1196	P30.0102		PIVOTED LEVER, FRONT	0	0	1	1	1	1	1	1	1	1	1	1	E5
P30.1197	P30.0101		PIVOTED LEVER, REAR	1	1	0	0	0	0	0	0	1	1	1	1	E5
P30.1197	P30.0102		PIVOTED LEVER, REAR	0	0	1	1	1	1	1	1	1	1	1	1	E5
P30.1198	P30.0101		CONNECTION BOLT	1	1	0	0	0	0	0	0	1	1	1	1	E5
P30.1198	P30.0102		CONNECTION BOLT	0	0	1	1	1	1	1	1	1	1	1	1	E5
P30.1199	P30.0101		SLIDE PLATE	1	1	0	0	0	0	0	0	1	1	1	1	E5
P30.1199	P30.0102		SLIDE PLATE	0	0	1	1	1	1	1	1	1	1	1	1	E5
P30.1201	P30.0131		HANDLE HOUSING	1	1	1	1	1	1	1	1	1	1	1	1	C5
P30.1202	P30.0131		HANDLE COVER	1	1	1	1	1	1	1	1	1	1	1	1	C5
P30.1203	P30.0131		PINION	1	1	1	1	1	1	1	1	1	1	1	1	B4
P30.1204	P30.0131		FELT WASHER	1	1	1	1	1	1	1	1	1	1	1	1	B4
P30.1205	P30.0131		BEARING SUPPORT	1	1	1	1	1	1	1	1	1	1	1	1	B5
P30.1207	P30.1235		FAN	1	1	1	1	1	1	1	1	1	1	1	1	B5
P30.1208	P30.1235		SPACER	1	1	1	1	1	1	1	1	1	1	1	1	A5
P30.1209	P30.0131		AERIAL CONDUCTOR	1	1	1	1	1	1	1	1	1	1	1	1	D3
P30.1210	P30.0131		SUPPORT	4	4	4	4	4	4	4	4	4	4	4	4	B2+
P30.1212	P30.0131		RUBBER BUSHING	1	1	1	1	1	1	1	1	1	1	1	1	C3
P30.1213	P30.0131		MOTOR HOUSING	1	1	1	1	1	1	1	1	1	1	1	1	C3
P30.1214	P30.0131		ADJUSTING SPINDLE	1	1	1	1	1	1	1	1	1	1	1	1	C4
P30.1215	P30.0131		ADJUSTING NUT	1	1	1	1	1	1	1	1	1	1	1	1	C4
P30.1216	P30.0131		BAR	1	1	1	1	1	1	1	1	1	1	1	1	D4
P30.1218	P30.0131		BRUSH HOLDER INSULATION	2	2	2	2	2	2	. 2	2	2	2	2	2	А3
P30.1224	P30.0131		CARBON BRUSH WITH SPRING	2	2	2	2	2	2	2	2	2	2	2	2	A3

ITEM-NO.	in GR	GR	DESCRIPTION	43.991X	43.992X	43.993X	43.994X	43.995X	43.996X	43.997X	43.998X	43.99X4	43.99X5	43.99X6	43.99X7	FELD
P30.1229	P30.0131		COVER	1	1	1	1	1	1	1	1	1	1	1	1	C2
P30.1233	P30.0131		LABEL	1	1	1	1	1	1	1	1	1	1	1	1	C2
P30.1235	P30.0131	GR	ROTOR 110 - 115 V	1	1	1	1	1	1	1	1	1	1	1	1	B5
P30.1236	P30.0131		FIELD 110 - 115 V	1	1	1	1	1	1	1	1	1	1	1	1	C3
P30.1237	P30.0131		COVER LEFT	1	1	1	1	1	1	1	1	1	1	1	1	A4
P30.1238	P30.0131		COVER RIGHT	1	1	1	1	1	1	1	1	1	1	1	1	A2
P30.1239	P30.0131	GR	BRUSH HOLDER ASSY. RED	1	1	1	1	1	1	1	1	1	1	1	1	A3
P30.1240	P30.0131	GR	BRUSH HOLDER ASSY. VIOLET	1	1	1	1	1	1	1	1	1	1	1	1	В3
P30.1241	P30.0131	GR	CONNECTING CABLE BLUE	1	1	1	1	1	1	1	1	1	1	1	1	B2
P30.1242	P30.0131	GR	CONNECTING CABLE YELLOW	1	1	1	1	1	1	1	1	1	1	1	1	B2
P30.1252	P30.0131	GR	Y-CONNECTION	1	1	1	1	1	1	1	1	1	1	1	1	B2
P30.1324	P30.0131	GR	ELEKTRONIC COMPL. 100/120V60HZ	1	1	1	1	1	1	1	1	1	1	1	1	B2
P30.1327	P30.1324	GR	SLIDING POTENTIOMETER	1	1	1	1	1	1	1	1	1	1	1	1	C3
P30.1328	P30.1324		BRIDGE	1	1	1	1	1	1	1	1	1	1	1	1	C2
P30.1404			BUSHING	1	1	1	1	1	1	1	1	1	1	1	1	D3
P30.1405			CATCH	1	1	1	1	1	1	1	1	1	1	1	1	D3
P30.1406			ARBOR	1	1	1	1	1	1	1	1	1	1	1	1	E3
P30.1501	P30.0101		WELDING GRIPPER	1	1	0	0	0	0	0	0	1	1	1	1	E6
P30.1502	P30.0102		WELDING GRIPPER	0	0	1	1	1	1	1	1	1	1	1	1	E6
P30.1505		GR	CUTTER ASSY.	1	1	1	1	1	1	1	1	1	1	1	1	D6
P30.1506			WORM WHEEL	1	1	1	1	1	1	1	1	1	1	1	1	D3
P30.1507			WORM	1	1	1	1	1	1	1	1	1	1	1	1	D5
P30.1508			GRIPPING JAW 0.4 - 0.64	1	1	1	1	1	1	1	1	0	0	1	0	F4
P30.1509			GRIPPING JAW 0.7 - 0.8	1	1	1	1	1	1	1	1	0	0	0	1	F4
P30.1510			TENSIONING GRIPPER 0.4 - 0.64	1	1	1	1	1	1	1	1	0	0	1	0	F5
P30.1511			TENSIONING GRIPPER 0.7 - 0.8	1	1	1	1	1	1	1	1	0	0	0	1	F5