

DEUTSCH	3
ENGLISH	15
FRANÇAIS	27
ITALIANO	39

BETRIEBSANLEITUNG
OPERATING INSTRUCTIONS
MODE D'EMPLOI
ISTRUZIONI PER L'USO

CH 43

Ab Serie-Nr. 40'000

From serie no 40'000

A partir du no de série 40'000

A partire dal no di serie 40'000

Handapparat zum Umreifen mit Stahlband

Hand tool for steel strapping

Appareil pour le cerclage par feuillard d'acier

Apparechio per reggiare con reggetta d'acciaio



TABLE OF CONTENTS

	Page
1 Technical data	15
2 General information	16
2.1 Information on environmental protection	16
3 Safety instructions	17
4 Description	18
4.1 Design	18
4.2 Function	18
5 Operating instructions	19
5.1 Operating the tool	19
6 Preventive and corrective maintenance	21
6.1 Cleaning and lubricating	21
6.2 Setting the cutting depth	21
6.3 Setting clearance between tension wheel and toothed plate	22
6.4 Replacing tension wheel	22
6.5 Replacing toothed plate	23
6.6 Replacing die, die plate and knife	23
7 Parts list	24
Explosion drawing	26

1

TECHNICAL DATA

Weight	4.4 kg (9.7 lbs.)
Dimensions	L = 350 mm (14") W = 100 mm (4") H = 120 mm (5")
Tension force	up to approx. 5500 N
Sealing	Sealless notched seal with 3 notches

STEEL STRAP

Strap width	13, 16, 19 mm ($\frac{1}{2}$ " , $\frac{5}{8}$ " , $\frac{3}{4}$ ")
Normal quality:	
Strap thickness	0.40–0.63 mm (.016"–.023")
Tensile strength	up to approx. 850 N/mm ² (117'000 lbs/in ²)
High strength quality:	
Strap thickness	0.40–0.58 mm (.016"–.022")
Tensile strength	up to approx. 1100 N/mm ² (156'000 lbs/in ²)

2

GENERAL INFORMATION

These operating instructions are intended to simplify familiarisation with the strapping tool and the possibilities of application for the intended purpose. The operating instructions contain important information concerning the safe, proper and efficient use of the strapping tool. Observation of the information will help to avoid danger, reduce repairs and stoppages and increase the reliability and service life of the strapping tool.

The operating instructions must always be available at the place of operation of the strapping tool. They must be read and observed by all persons concerned with work on the strapping tool. This work specifically includes operation, refilling of operating material, fault elimination and maintenance.

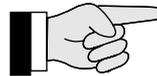
In addition to the operating instructions and the regulations for accident prevention effective in the country of use and place of application, the recognised technical regulations for safety and proper working must also be observed.

**CAUTION!**

Used where there is danger to life and health.

**WARNING!**

Used for danger which can cause material damage.

**NOTE!**

Used for general information and information which if not followed can cause faults in the operating sequence.

2.1 INFORMATION ON ENVIRONMENTAL PROTECTION

This tool is manufactured without any physical or chemical substances which could be dangerous to health. For disposal of all the parts, the governmental instructions must be observed.

3

SAFETY INSTRUCTIONS



Inform yourself!
Read the operating instructions carefully.

Use for the intended purpose

The tool is intended for strapping packages, pallet loads etc.

This tool was designed and manufactured for safe handling during the strapping operation.



Protect yourself!
When operating the tool, wear eye, face and hand protection (cut-proof gloves).

The tool processes steel straps only.

Possible misuse

The use of plastic straps is not possible.



Warning:
Strap will snap forward!
When cutting the strap, hold the upper portion and stand safely away from the strap.
Caution:
The lower strap will snap forward.



Warning:
Strap could break!
Do not stand in line with the strap while it is tensioned. The strap could break!



Caution:
Danger of squeezing!
Do not put your fingers into the tension wheel area.



Caution:
Only strap packed goods!
Do not put hands or other parts of the body between the strap and the package during the strapping process.



Original ORGAPACK spare parts must be used exclusively!
Not using original spare parts will dissolve the warranty and the liability.

4

DESCRIPTION

4.1 DESIGN

- 1 Sealing lever
- 2 Rocker lever
- 3 Tension wheel and toothed plate
- 4 Strap guide pawl
- 5 Die and die plate
- 6 Base plate
- 7 Adjusting screw (cutting depth)
- 8 Tension-/release pawl
- 9 Tensioning lever

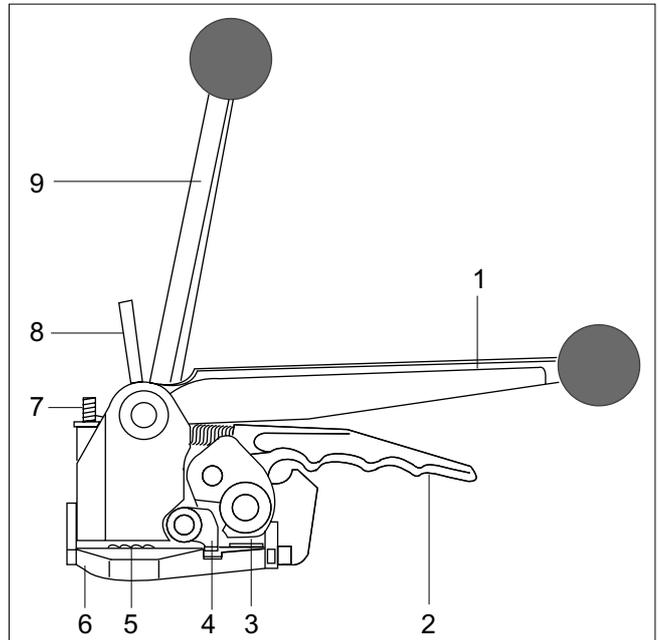


Fig. 1

4.2 FUNCTION

- Strap clamped by pressure on toothed plate (2/2).
- Tensioning by feed wheel principle (2/1).
- Sealing by punching strap (2/3).
- Strap cut with knife (2/4).

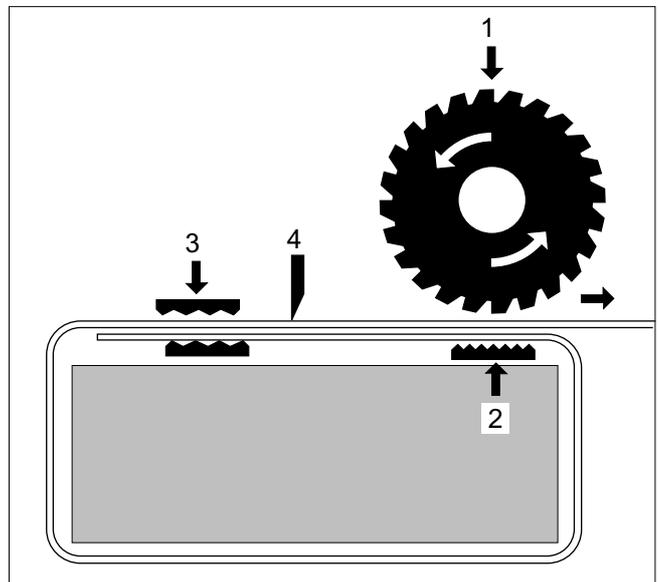


Fig. 2

5

OPERATING INSTRUCTIONS

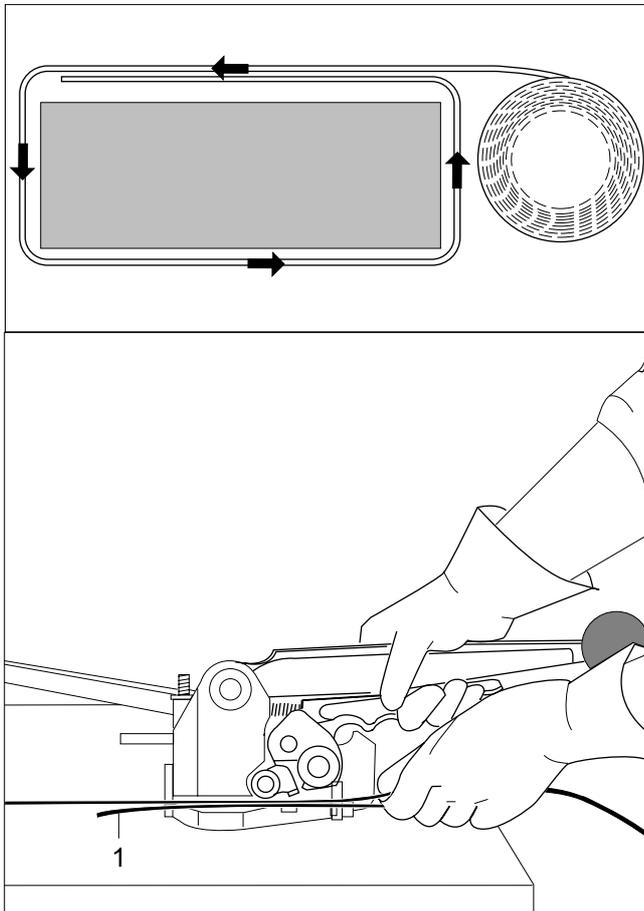


Fig. 3

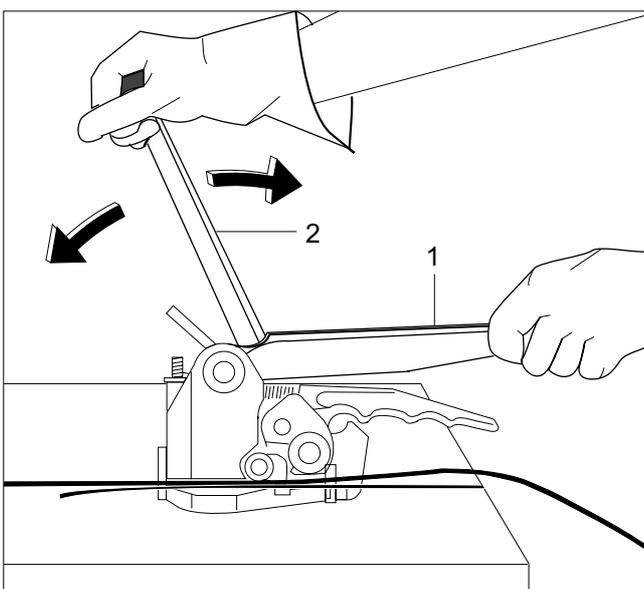


Fig. 4

5.1 OPERATING THE TOOL

- Wind strap tightly round packed goods, so that the straps lie above each other on top. Hold the strap in the left hand so that the lower strap start (3/1) is approx. 20 cm (8") from the hand.
- Hold the tool in right hand and raise rocker lever against sealing lever.
- Place the tool against the strap until this contacts the stop. The lower strap start projects approx. 5 cm (2") above the tool.
- Release rocker lever. The straps are clamped tightly and are fed from the tool.



If the straps are not inserted correctly in the tool, it is not possible to perform the tensioning operation.

- Hold the sealing lever (4/1) in the left hand and with the right hand move the tensioning lever (4/2) backwards and forwards until the required strap tension is obtained.

Releasing strap tension

In order to release the strap again during the tensioning process:

- Press black tension pawl (5/2) against tensioning lever (5/1).
- Draw back tensioning lever firmly to disengage the tension pawls and release the strap tension.

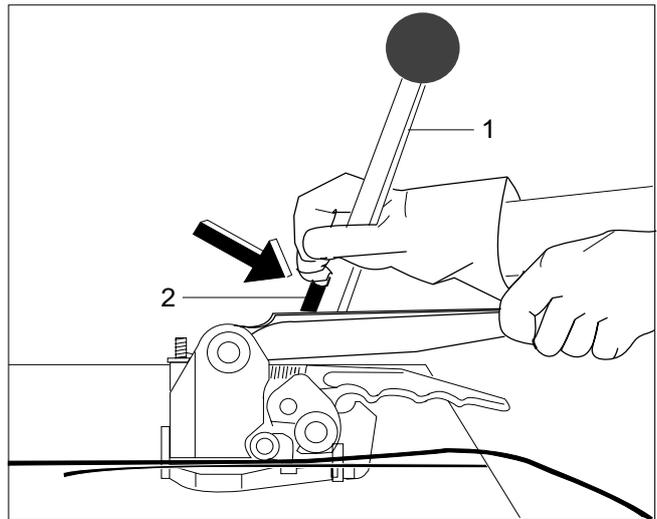


Fig. 5

- When the strap tension is reached, move sealing lever (6/1) to the stop. The right hand remains on the tensioning lever to resist the opposing force. The strap is sealed and cut.

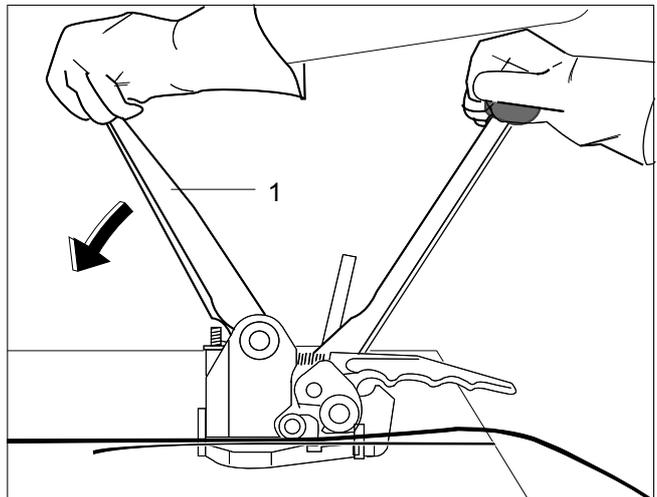


Fig. 6

- Return sealing lever to initial position.
- Raise the rocker lever against the sealing lever.
- Swivel the tool away from the strapping to the right at the rear.

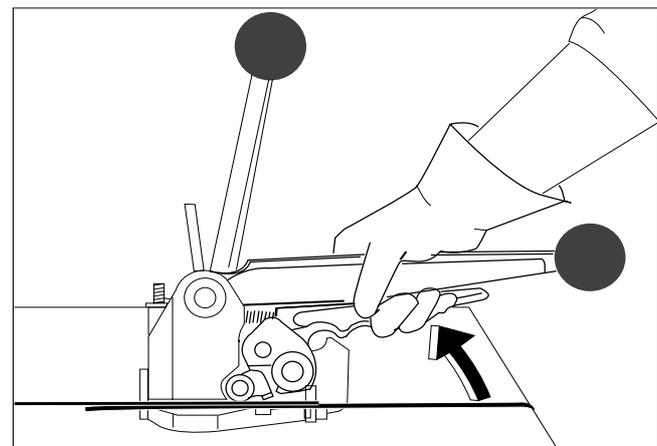


Fig. 7

Check of seal

To obtain the maximum seal efficiency, the notches (Fig. 8) have to be cut (interlock) properly into the straps (check regularly). If these notches are not correctly cut, replace die and die plate (see chapter 6.6).

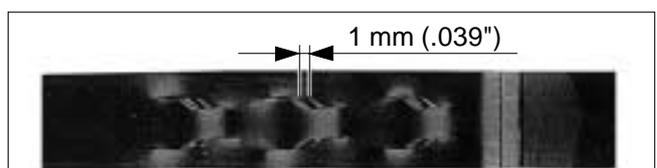


Fig. 8

6

PREVENTIVE AND CORRECTIVE MAINTENANCE

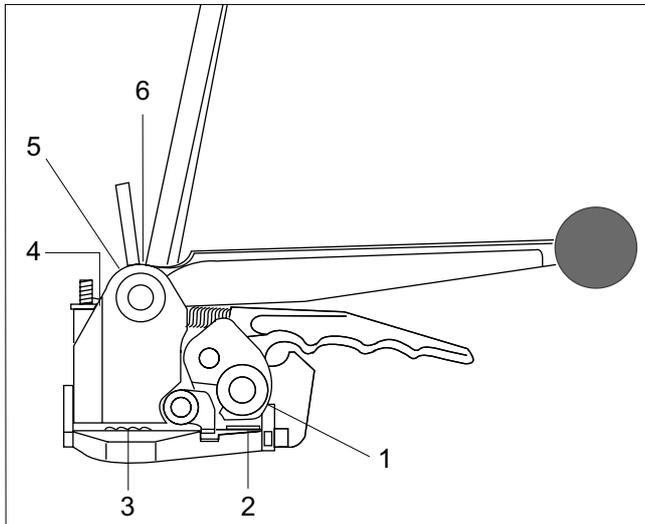


Fig. 9

6.1 CLEANING AND LUBRICATING

 In the event of severe soiling it is recommended to clean the tool regularly (daily). The following parts in particular should be kept clean:

- Punching tools (9/3)
- Tension wheel (9/1)
- Toothed plate (9/2)

This is best performed by blowing out with compressed air (wear goggles).

Apply a few drops of normal machine oil weekly to:

- Eccentric unit (9/6) on sealing lever
- Pressure roll (9/5)
- Bore (9/4) in housing

This will considerably prolong the service life of the tool and the force required for sealing is also substantially reduced.

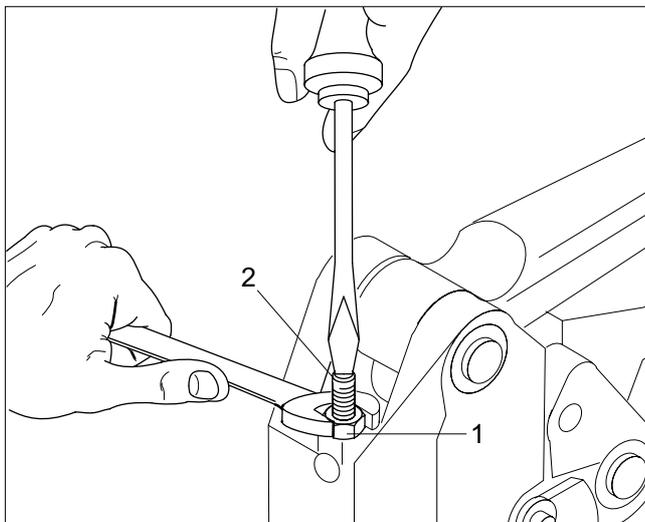


Fig. 10

6.2 SETTING THE CUTTING DEPTH

 The setting of the cutting depth must correspond to the thickness of the relevant strap. If set incorrectly, the sealing strength can be reduced.

- Release locknut (10/1).
- Set adjusting screw (10/2) with screwdriver. Turning adjusting screw clockwise increases cutting depth. Turning adjusting screw anticlockwise decreases cutting depth. Set cutting depth so that the lower strap is not touched during cutting.
- Tighten locknut.

6.3 SETTING CLEARANCE BETWEEN TENSION WHEEL AND TOOTHED PLATE

 The tension wheel and toothed plate must not touch (damage the teeth). If the spacing is too great, the strap slips through before the final tension is reached.

- Remove set screw (11/1) with socket-head spanner.
- Set the set screw underneath with a screwdriver so that the clearance between tension wheel and toothed plate is between 0.15 (.006") and 0.2 mm (.008"). Turning clockwise increases the clearance, turning counter clockwise reduces the clearance.
- Screw in and tighten set screw (11/1).
- Check clearance, reset if necessary.

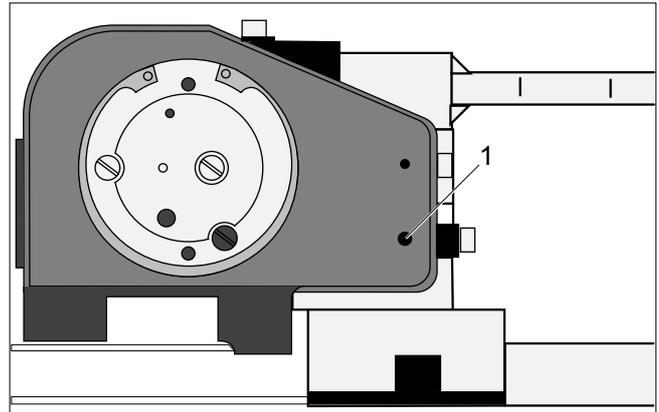


Fig. 11

6.4 REPLACING TENSION WHEEL

 If the tension wheel spins before the required strap tension is reached, the wheel must be replaced (precondition: clearance set correctly, see chapter 6.3).

Removal

- Release cylinder screw (12/14) and remove strap guide pawl (12/12) with hub (12/13).
- Release set screw (12/2) and remove shaft (12/1).
- Remove compression spring (12/10) and rocker (12/5).
- Remove retaining ring (12/9), disk (12/8) and link (12/11).
- Press pawls (12/4) and draw out tension lever shaft (12/3). Remove disk (12/7) and tension wheel (12/6) and replace tension wheel.

Installation

- Install the parts in reverse order.

 Before inserting the tension lever shaft (12/3) check that the compression springs of the pawls (12/4) are positioned correctly. Press pawls and insert tension lever shaft. Clamp pawls with tension lever shaft and insert tension wheel with disk. The 45° chamfer of the tension wheel must be outside.

- Secure all screws with Loctite 243.
- Set clearance between tension wheel and toothed plate (see chapter 6.3).

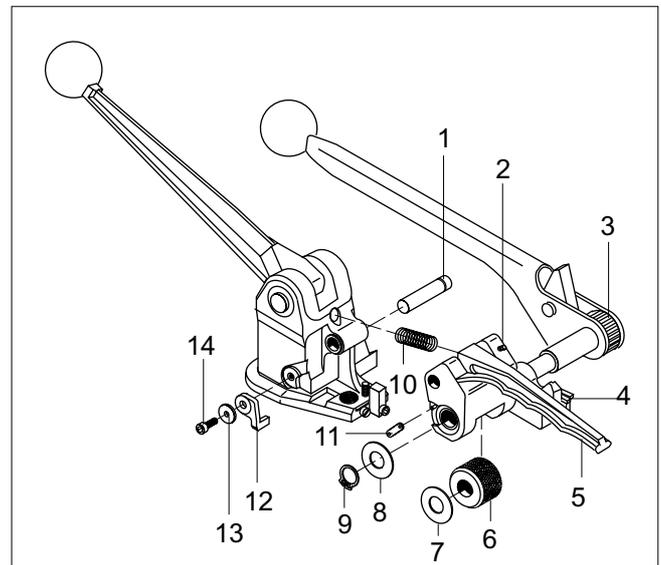


Fig. 12

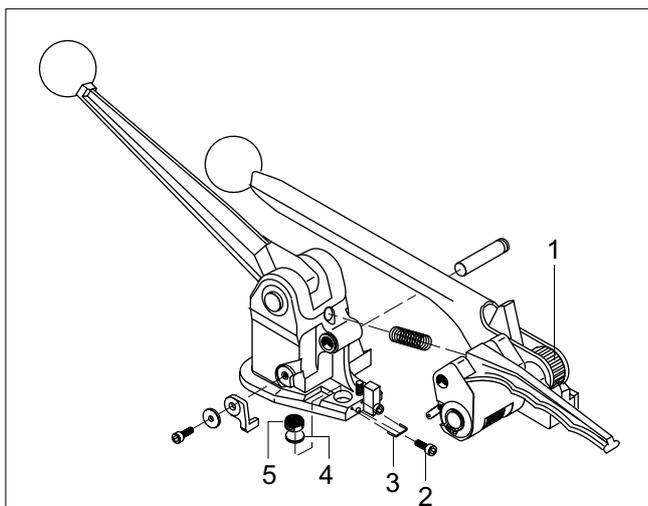


Fig. 13

6.5 REPLACING TOOTHED PLATE

 If the lower strap is no longer held during tensioning, the teeth of the toothed plate are worn. The toothed plate must be replaced.

Removal

- Remove rocker (13/1) (see chapter 6.4).
- Remove cylinder screw (13/2) and safety wire (13/3).
- Push out toothed plate (13/5) and shim (13/4) from below. Replace toothed plate.
- Clean bore in base-plate.

Installation

- Install the parts in reverse order.

 Insert shim (13/4) so that the rounded side is on top. Secure cylinder screw (13/2) with Loctite 243 and tighten slightly.

- Set clearance between tension wheel and toothed plate (see chapter 6.3).

6.6 REPLACING DIE, DIE PLATE AND KNIFE

 If the seal is no longer properly notched (seal does not grip, cut not clean), the die, the die plate and the knife must be checked and replaced if necessary.

Removal

- Remove cylinder screw (14/5).
- Set sealing lever to initial position and remove retaining ring (14/4).
- Draw die support (14/2) from housing.
- Remove countersunk screw (14/3) and press die (14/6) from die support. Clean die support.
- Tilt sealing lever to rear and draw sealing block (14/9) carefully from housing.
- Release two cylinder screws (14/7) and remove die plate (14/8).
- Remove knife (14/1). Clean and grease sealing block.
- Replace die, die plate and knife.

Installation

- Install the parts in reverse order.
- Secure all screws with Loctite 243.
- Set cutting depth after assembly (see chapter 6.2).
- Set clearance between tension wheel and toothed plate (see chapter 6.3).

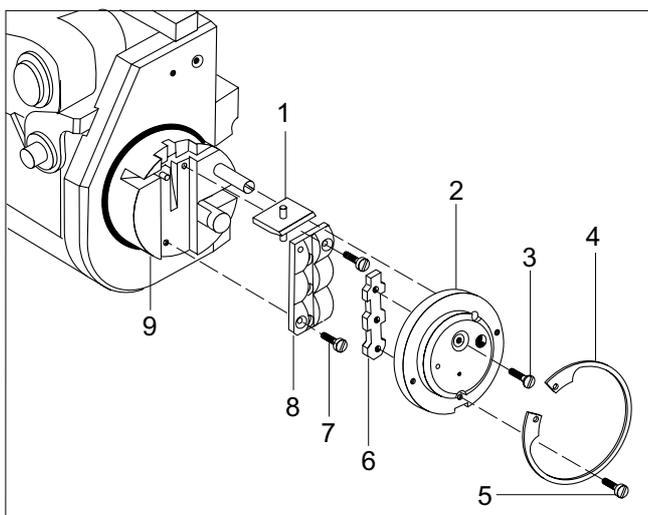


Fig. 14

7

PARTS LIST 1178.300.000/11

When ordering please indicate part number and quantity

Explosion drawing see page 26

* Recommended spare parts

Pos.	Part no	Part name	Quantity
1	1173.700.156	Housing, incl. pos. 2	1
* 2	1935.514.150	Radial-slide bearing, \varnothing 14/16 x 15	2
3			
4	1173.740.001	Strap stop front 13 mm ($1/2''$)	1
4	1173.750.001	Strap stop front 16, 19 mm ($5/8''$, $3/4''$)	1
5	1173.740.006	Strap stop rear 13 mm ($1/2''$)	1
5	1173.750.006	Strap stop rear 16 mm ($5/8''$)	1
5	1173.760.006	Strap stop rear 19 mm ($3/4''$)	1
6			
7	1911.905.122	Counter sunk screw, M 5 x 12	1
8	1911.005.168	Cylinder screw, M 5 x 16	1
9			
* 10	1820.040.080	Tooth plate	1
11	1820.020.181	Shim	1
12	1830.000.287	Safety wire	1
13			
14	1910.008.309	Set screw, M 8 x 30	1
15	1916.008.055	Nut, M 8/0.5 d	1
16	1910.805.058	Cylinder screw, M 5 x 5	1
17	1831.031.001	Rocker complete, incl. pos. 18, 19, 30, 53	1
18	1933.820.160	Needle bushing, \varnothing 20/26 x 16	1
19	1933.716.120	Needle bushing, \varnothing 16/22 x 12	1
20	1173.700.008	Tension shaft	1
* 21	1821.040.003	Tension wheel	1
22	1923.316.042	Key, \varnothing 16 x 4	1
23	1820.050.076	Pawl short	1
24	1820.050.077	Pawl long	1
25	1820.010.010	Compression spring	2
26	1820.030.322	Bolt	1
27	1173.700.011	Cover plate	1
28	1820.030.325	Shaft	1
29	1820.010.159	Compression spring	1
30	1921.404.181	Spiral pin, \varnothing 4 x 18	2
31	1910.505.102	Set screw, M 5 x 10	1
32			
33			
34	1820.080.015	Tension lever complete, incl. Pos. 37	1
35			
36			
37	1820.080.051	Knob, violet	2
38			
* 39	1820.050.078	Tension pawl	1
40	1820.010.061	Compression spring	1
41	1820.030.074	Bolt	1
42	1920.209.102	External retaining ring, \varnothing 9	2
43	1820.040.060	Blocking wheel	1
44	1830.000.062	Key	1
45	1917.401.165	Spacer, \varnothing 16/28 x 0.5	2

Pos.	Part no	Part name	Quantity
46	1920.216.102	External retaining ring, \varnothing 16	2
47			
48	1173.740.004	Strap guide pawl 13 mm ($1/2''$)	1
48	1173.750.004	Strap guide pawl 16 mm ($5/8''$)	1
48	1173.760.004	Strap guide pawl 19 mm ($3/4''$)	1
48	1831.042.001	Strap guide pawl 20 mm ($3/4''$)	1
49	1173.700.013	Link	1
50	1820.020.198	Hub	1
51			
52			
53	1921.603.161	Spiral pin, \varnothing 3 x 16	1
54			
55	1911.005.128	Cylinder screw, M 5 x 12	1
56	1173.700.005	Die cylinder	1
57	1173.700.007	Pressure roll, incl. pos. 58	1
* 58	1935.514.200	Radial-slide bearing, \varnothing 14/16 x 20	1
* 59	1173.700.012	Carrier	1
60	1820.030.324	Shaft	1
* 61	1173.700.151	Knife "D", incl. pos. 62	1
62	1921.403.121	Spiral pin, \varnothing 3 x 12	1
63	1820.030.348	Stud bolt	1
* 64	1821.202.002	Die plate 13 mm ($1/2''$)	1
* 64	1821.202.003	Die plate 16 mm, 19 mm ($5/8''$, $3/4''$)	1
65	1910.803.088	Cylinder screw, M 3 x 8	3
66			
67			
68	1821.081.002	Sealing lever complete, incl. Pos. 37	1
69			
70			
71			
72			
73	1820.030.431	Shaft	1
74			
75			
76			
77			
78			
79	1920.214.102	External retaining ring, \varnothing 14	2
80	1917.401.145	Spacer, \varnothing 14/26 x 0,5	2
81			
82	1910.406.052	Set screw, M 6 x 5	1
83			
84	1921.306.160	Cylindric pin, \varnothing 6 m6 x 16	1
85			
86	1173.740.007	Die support 13 mm ($1/2''$)	1
86	1173.760.003	Die support 16, 19 mm ($5/8''$, $3/4''$)	1
* 87	1173.700.147	Die 13 mm ($1/2''$)	1
* 87	1173.700.148	Die 16, 19 mm ($5/8''$, $3/4''$)	1
88	1173.700.153	Back up hook 13 mm ($1/2''$)	1
88	1173.700.154	Back up hook 16, 19 mm ($5/8''$, $3/4''$)	1

Pos.	Part no	Part name	Quantity
89	1911.005.108	Cylinder screw, M 5 x 10	1
90	1173.700.015	Cover plate	1
91	1925.210.042	Spring washer, \varnothing 8/4.2 x 0.4 (2 x 14)	2
92	1173.500.073	Ejector	2
* 93	1173.700.017	Cutting wire	1
94			
95	1912.503.087	Pan head screw, M 3 x 8	1
96	1911.703.127	Counter sunk screw, M 3 x 12	1
97	1920.352.202	Internal retaining ring, \varnothing 52	1
98	1821.027.003	Stop screw	1
99	1921.604.121	Spiral pin, \varnothing 4 x 12	3
100	1922.103.121	Ridged pin, \varnothing 3 x 12	1
101			
102	1820.090.066	Name plate	1

