OPERATING INSTRUCTIONS Translation of original manual

BRUKSANVISNING Original bruksanvisning

BETRIEBSANLEITUNG Übersetzung der Originalbetriebsanleitung

MODE D'EMPLOI Traduction du mode d'emploi original

F53PN

From series no 1500504

Från serienummer 1500504

Ab Serie-Nr. 1500504

A partir du no de série 1500504

Pneumatic industrial stapler

Pneumatisk planhäftare

Pneumatische flachhefter

Agrafeuses

Before using the bottom stapler, read the operating instructions carefully.

Läs igenom bruksanvisningen noga innan du använder maskinen.

Vor dem Gebrauch der Bodenheftmaschine die Betriebsanleitung aufmerksam lesen.

Avant l'utilisation de l'appareil, consultez soigneusement le mode d'emploi.

CE

02.15

JOSEF KIHLBERG

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1 TECHNICAL DATA

Weight	42 kg (92,6 lbs)
Dimensions	Length 920 mm (36.2“) Width 750 mm (29.5“) Height 1350 mm (53.1“)
Magazine capacity	400 staples
Staple leg length	9–12 mm (3/8“ - 1/2“)
Throat depth Free anvil height	400 mm (15.7“) 1000 mm (39.4“)
Max. air pressure	7 bar (100 psi)
Recommended working air pressure	5 bar (72 psi)
Air consumption per driving operation at 6 bar operating pressure	2,0 litres
A-weighted single-event emission sound pressure level at work station	84 dB
A-weighted sound energy level	91 dB

FASTENERS

Staple JK53-09 (3/8“)	Art.No 400130
Staple JK53-12 (1/2“)	Art.No 400132

SE JOSEF KIHLBERG AB

Industrigatan 37
Box 126
SE-544 22 HJO

Telephone: +46 503 328 00
Fax: +46 503 328 01
E-mail: reception@kihlberg.se
Internet: www.kihlberg.com

DECLARATION OF CONFORMITY

We take sole responsibility for declaring that the industrial stapler F53PN, to which this declaration refers, is in full compliance with the current requirements of the guidelines laid down by the council on 17th May 2006 (2006/42/EG) “Machine Guidelines“.
Complies with norms: ISO 12100:2010

SE-544 50 HJO, 26.02.2015

Production Manager:

Anders Pettersson

Anders Pettersson
Agent for the publication of technical documentation:
Josef Kihlberg AB, Industrigatan 37B SE-544 50 HJO

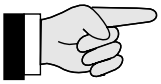
2 GENERAL INFORMATION

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 industrial stapler 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.

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

The operating instructions must always be available at the place of operation of the bottom stapler. They must be read and observed by all persons concerned with work on the bottom stapler. 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.

3 SAFETY INSTRUCTIONS

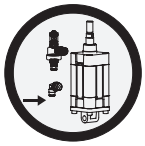
Inform yourself!
Read the operating instructions carefully.

Protect yourself!
When operating the bottom stapler, wear eye, and/or ear protection.

Warning: Danger of crushing!
Do not put your fingers underneath the protector. Do not remove protection covers.

Warning: Hazard!
Lay the compressed air hose so that there is no risk of tripping over it.

Do not exceed the air pressure!
Do not exceed the recommended air pressure.



Use safety coupling!
For connecting the air hose to the bottom stapler, use only a safety coupling.

Do not use a bottled air or gas source!
Do not operate this bottom stapler by using a bottled air or gas source.

Original JOSEF KIHLBERG staples must be used exclusively.

Original JOSEF KIHLBERG spare parts must be used exclusively!
Not using original spare parts will void the warranty and the liability.

Use for the intended purpose
The bottom stapler is intended for stapling corrugated cardboard.

This bottom stapler was designed and manufactured for safe handling during the stapling operation.

Possible misuse
The bottom stapler is designed to be used only with corrugated cardboard.

Servicing
The following maintenance work must be carried out at regular intervals, varying with working conditions and workload:
– daily check of compressed air pressure (4–6 bar).
– clean the bottom stapler regularly.
– check the condition of the bottom stapler at regular intervals for defects or worn parts. Never use a bottom stapler that has defective or worn parts (for sevice work refer also to chapters 7.1 and 7.2).

4 DESCRIPTION

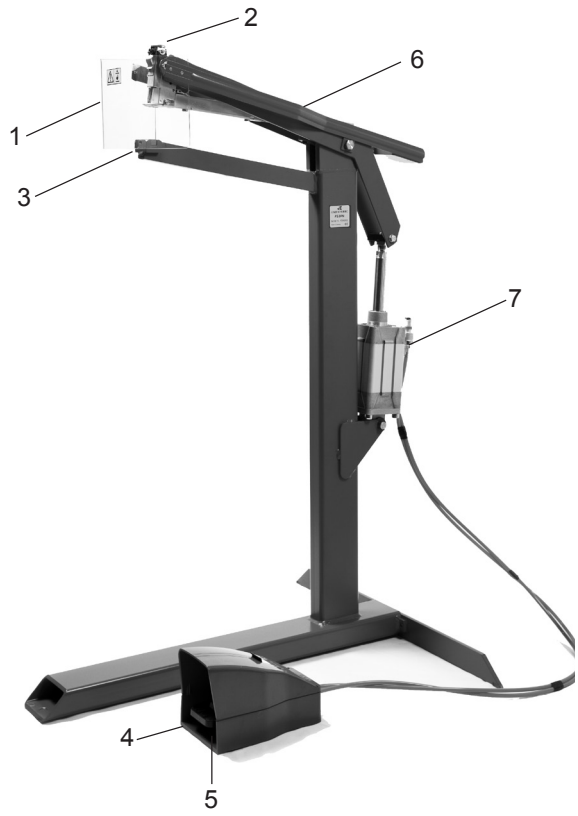


Fig. 1

4.1 DESIGN

1 Protector
2 Stapling head
3 Anvil
4 Safety latch
5 Foot valve
6 Pusher
7 Pneumatic cylinder

Fig. 2

4.2 FUNCTION

1. The pressure cylinder (Fig. 2/1) is activated by the foot valve (Fig. 2/2).
2. When you press the foot valve the cylinder presses the stapling head (Fig.2/3) against the manually positioned carton.
3. The stapling head automatically pushes a staple through the carton and the staple clinches against the anvil.
4. When you release the foot valve the stapling head is returned and the bottom stapler is ready for next stapling.

Warning: before stapling, ensure that no part of your body is underneath the protector.

5 INITIAL OPERATION

5.1 INSTALLATION

The bottom stapler is delivered with the rear foot disassambled. Assemble as following:

1. Remove the bottom stapler and the rear foot from the carton.

2. Assemble the rear foot according to Fig. 3. Tighten the two screws, (Fig. 3/1).

3. Place the bottom stapler on level, firm and clean-working ground.

Lay the compressed air hose so that there is no risk of tripping over it.

Fig. 3

5.2 COMPRESSED AIR CONNECTION

Properly prepared compressed air is essential for troublefree operation of the bottom stapler. This can only be ensured by a reliably functioning maintenance unit, consisting of water separator, pressure reducing valve with pressure gauge.

The internal diameter of the pipe should be at least 10 mm ($^3/_8$“).

The bottom stapler doesn´t need any lubrication. Connect and adjust the air pressure to the lowest possible, approx. 5,0 bars (72 psi), which clinch the staples correctly.

Never exceed the maximum permitted air pressure of 8 bar (110 psi). The maximum supply pressure is 8 Bar (110 psi).

Low air pressure will give low maintenance costs!

6 OPERATING INSTUCTIONS

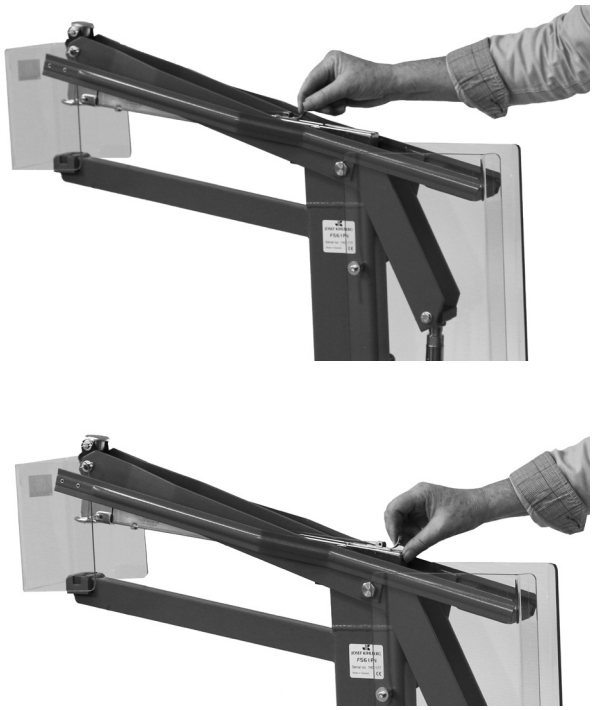


Fig. 4

6.1 LOADING THE BOTTOM STAPLER

– Always use Josef Kihlberg original staples JK53-09 or JK53-12.
The correct type of staple is marked on the left side of the magazine.

– Pull the pusher back and lift up the pusher into its rear holder.

Fig. 5

– Insert staple strips from the rear.
– Do not overload the magazine.

Fig. 6

– Release the pusher.

Do not release the pusher directly from the rear when the magazine is empty, carefully guide it forward.

6.2 OPERATING THE BOTTOM STAPLER

– Load the stapling head with staples, (refer to chapter 6.1). Ensure to use the right length of the staple (refer to chapter 6.3).
– Place the carton underneath the protector.

Warning: before stapling, ensure that no part of your body is underneath the protector.

Fig. 7

– Activate the foot valve.
– The stapling head presses the carton and automatically clinches the staple against the anvil.

Fig. 8

Fig. 9

– When you release the foot valve the stapling head will return.
– Move the carton to the next staple position and activate the foot valve again. Repeat until the correct amount of staples have been used.

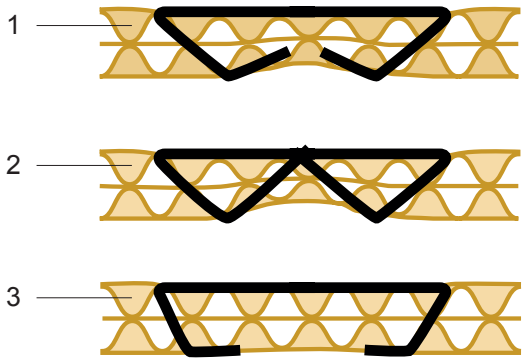


Fig. 10

6.3 CONTROL THE CLINCH

1 Good clinch.
2 Leg length of the staple too long.
3 Leg length of staple too short.

Always use Josef Kihlberg original staples: JK53-09 or JK53-12.

7 PREVENTIVE AND CORRECTIVE MAINTENANCE

Before carrying out any maintenance tasks on the bottom stapler always first disconnect it from the air supply.

7.1 LUBRICATION

The linkage bearings are greased at delivery.
At regular intervals (monthly) lubricate them with oil.
Also lubricate the moving parts in the stapling head with a few drops of oil.

7.2 CLEANING THE BOTTOM STAPLER

This bottom stapler does not require special servicing. It only needs regular cleaning with a non-aggressive (non-corrosive) cleaning agent. Do not remove any parts for cleaning purposes!

Check the proper functioning of all safety devices daily. Make especially sure that:

– the foot valve safety latch and the protector move freely without binding or sticking.

– all screws and nuts are securely tightened.

7.3 REMOVING JAMMED STAPLES

Before carrying out any maintenance tasks on the bottom stapler always first disconnect it from the air supply.

– Loosen the screw (Fig. 11/1). Squeeze the stapler head and remove the staple trip block(11/3).
– Driving down the lower part of stapling head until the defective staple exposed.
– Remove the defective staple.
– Replace the driver (16/5) if it is worn.
– Assemble in reverse order.

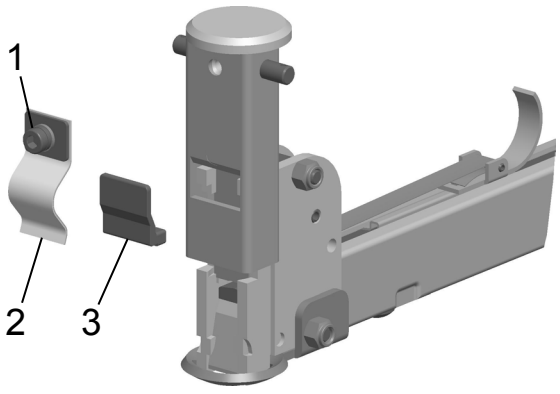


Fig. 11

7.4 ADJUSTMENT OF STAPLING HEAD BEARING

Upon delivery, the stapling head bearing is tight but easily movable. After being in use for a while, the bearing will have become worn and must be readjusted as follows:

– Loosen nut (Fig. 12/1) and screw (Fig. 12/2).
– Tighten screw (Fig. 12/2) to obtain just enough play.
– Lock with nut (Fig. 12/1).

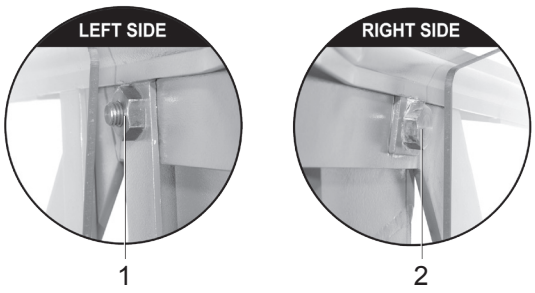


Fig. 12

7.5 ADJUST STAPLE CLINCH

Each bottom stapler is tested carefully before delivery. Following rough treatment during transport a screw may become loosened and the anvil may therefore have to be adjusted. Incorrect stapling may occur (Fig. 13/1).

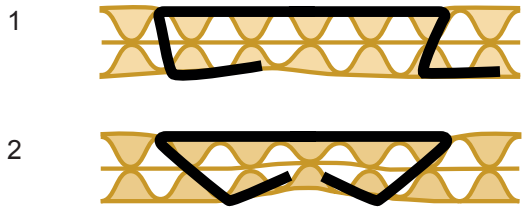


Fig. 13

– Press down a staple (Fig. 14/1) by hand until the staple legs are visible or insert a single staple into the canal.
– Move the staple head down towards the anvil (Fig. 14/2) and check that the staple legs hit the anvil symmetrically.
– If necessary, loosen the screw (Fig. 14/3) and centre the anvil to the staple. Remember to tighten the screw after adjustment.
– Make a test stapling in a piece of cardboard. If the anvil is correctly adjusted, the clinch should be as shown in (Fig. 13/2).

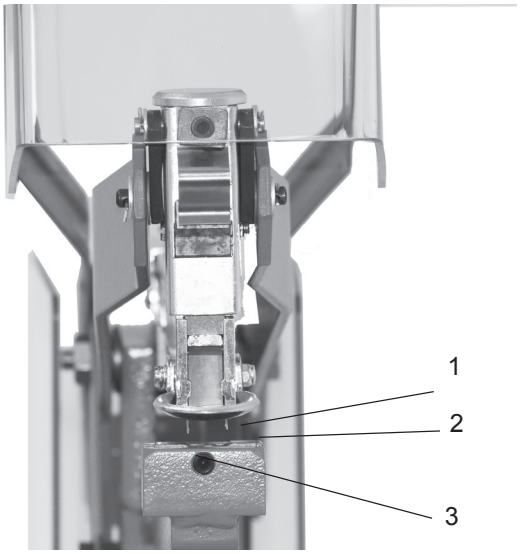


Fig. 14

7.6 REPLACE STAPLING HEAD

1. Loosen the links (15/1) and screws (15/2).
2. In order to loosen the rear screw (15/2) the stapling head must be lifted 90° .
3. Mount a new head and adjust as per (7/4).
4. Tighten the screws (15/2) and reassemble the links.
5. Adjust the stapling head to the anvil as described in chapter 7.5.

Fig. 15

7.7 REPLACE DRIVER BLADE / RETURN SPRINGS

1. Remove the stapling head according to chapter 7.6.
2. Remove any staples from the staple track and pusher to the front position.
3. Loosen the screw (Fig. 16/1). Squeeze the stapler head and remove the staple trip block (16/3).
4. Driving down the lower part of stapling head until the driver blade (16/5) are uncovered
5. Replace the driver and the return spring (16/6). We recommend change driver blade and return spring at the same time.
6. Assemble in reverse order. Please note that the bevel at the driver blade must be turned to the rear.
7. Assemble the stapling head to the machine as described in chapter 7.6.
8. Adjust the stapling head as described in chapter 7.5.

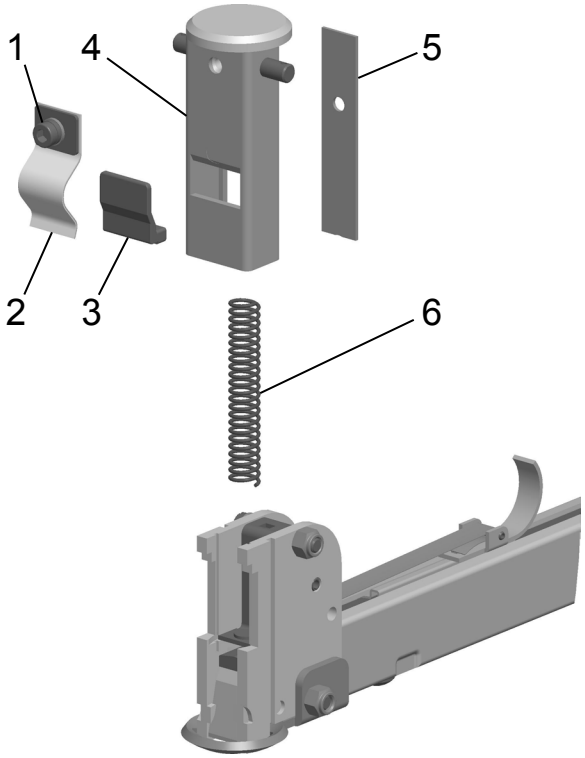


Fig. 16

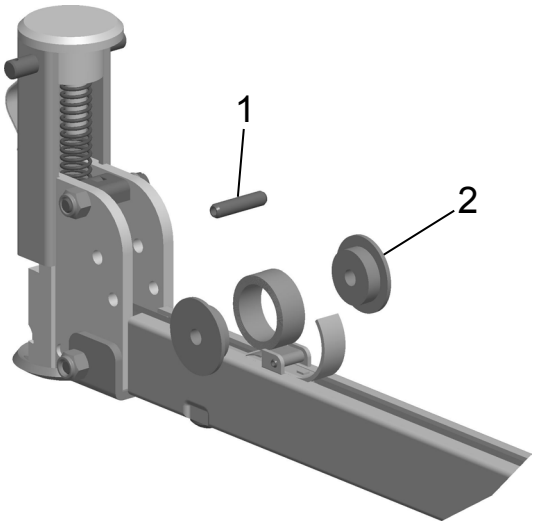


Fig. 17

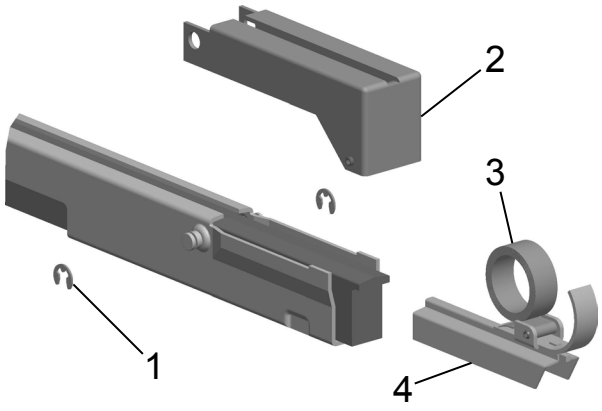


Fig. 18

7.8 REPLACE FEED SPRING OR PUSHER

1. Remove the stapling head according to chapter 7.6.
2. Remove the roll pin (Fig. 17/1) with a punch with size 4,9 mm.

3. Remove the circlips (18/1) and disassemble the breech complete (18/2).
4. Remove the pusher (18/4), feed spring (18/3) and rollers.
5. Replace defective feeders or spring.
6. Assemble in reverse order.
7. Assemble the stapling head to the machine as described in chapter 7.6.
8. Adjust the stapling head as described in chapter 7.5.

8 TROUBLE SHOOTING

Before carrying out trouble shooting on the bottom stapler always first disconnect it from the air supply.

FAULT	ELIMINATION
Staples are not fed properly	– Check if the right type of staples are used. **Always use Josef Kihlberg original staples.** – Check if the feeder spring is not defective. If necessary replace. – Check if the staple pusher is not defective. If necessary replace. – Clean the staple track. – Check return spring in the stapling head. If necessary replace.
Staples are deformed when inserted	– Check if stapling head bearing has no play (refer to chapter 7.4). – Check if anvil is properly centered. (refer to chapter 7.5). Check if driver is not damaged. If necessary replace. – Check if the staple channel is clean.
Noise level is too high	– Check if the air pressure is correct, (5 bar/70 psi). – Check if the stroke speed is not unnecessarly high.
The carton is damaged by the stapling head	– Check if the air pressure is correct, (5 bar/70 psi). – Check if the stroke speed is not unnecessarly high.
The carton is not pressed together properly	– Check if the length of piston rod is adjusted properly. If necessary adjust.
Removing a staple which has got stuck	– Refer to chapter 7.3.