

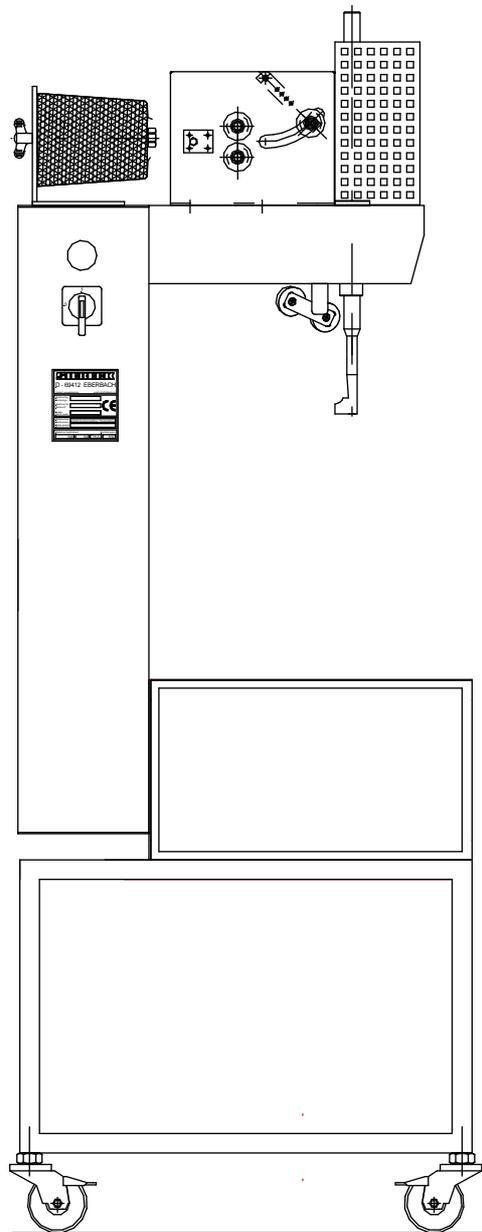
Translation of the original operating manual

No. jet_in_bed_0315

SIEBECK

Strapping machine JET 2000

Model JET IN



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Hazard warnings

Hazard warnings are found in the respective position in the text.



They are denoted by this warning triangle and an information text



Caution!

The technical manual must have been read and understood before using the machine for the first time. For personal safety it is important to follow all the instructions listed in it. The manual must be kept by the customer and must be handed over in case the machine is passed on to third parties or a new user.



Caution!

Installation and repair must only be performed by qualified persons who have the necessary experience and knowledge of occupational and industrial safety and risks of accidents. If the available staff do not have one or more of these qualifications, specialist staff must be contracted.



Caution!

If it is necessary to replace a component, you must make sure that only original spare parts are used. Improper repairs or the use of non-original spare parts can cause considerable damage and hazards for the user

In case of damage which has been caused by failure to observe this operating manual, the warranty will be rendered null and void. No liability will be assumed for consequential damages.

No liability will be assumed in case of material damages or personal injuries which are caused by improper use or failure to adhere to the safety instructions.

Introduction

This machine has been engineered in accordance with the recognised rules of technology and in adherence to the regulations for occupational safety and the prevention of accidents so that **proper use cannot not cause any hazards** for the life and limb of the user or third parties.

Information on **incorrect use and residual risks**, which are still in place or possible despite the integrated safety and technical protective equipment, are described and illustrated on pages 43-47. These risks are documented in a risk analysis and filed by the manufacturer.



Every person on the user's premises given the task of setting up, commissioning, operating, maintaining and repairing this machine must have read and understood this operating manual, and in particular the chapter "Safety".

The customer's own changes, restrictions or upgrades and the resultant safety-related consequences are at the expense and risk of the user.



If this machine is sold or set up at another location, this operating manual must be handed over to the new owner or the new user. Additional copies can be ordered from the address given below, quoting article number 0914FRT-A-MKIVbed.

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WARRANTY

All machines which have been manufactured at our production facilities are covered by a warranty of 12 months, starting from the date of commissioning, or 18 months from the date of delivery. This warranty covers material and manufacturing faults.

The warranty covers all parts, with the exception of expendable parts and parts which are replaced due to normal wear during maintenance. Under the terms and conditions of the warranty we are not liable for working hours and downtimes.

If machine damage is caused due to the use of unsuitable tying material or material not expressly recommended by us, the warranty will be rendered null and void.

All claims must be asserted in writing. An exact description of the cause of damage, the part number and machine number must be enclosed. Once we have accepted your warranty claim, the faulty part must be returned to us.



This warranty is only valid if

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original parts without any form of modification are used.

EC - Declaration of conformity

We hereby declare that the following specified machinery

Make : SIEBECK
Model : JET IN
Serial No. :

complies with the following provisions applying to it:

EC Machinery Directive **2006/42/EC** (valid from 29.12.2009)

Harmonised standards applied, in particular

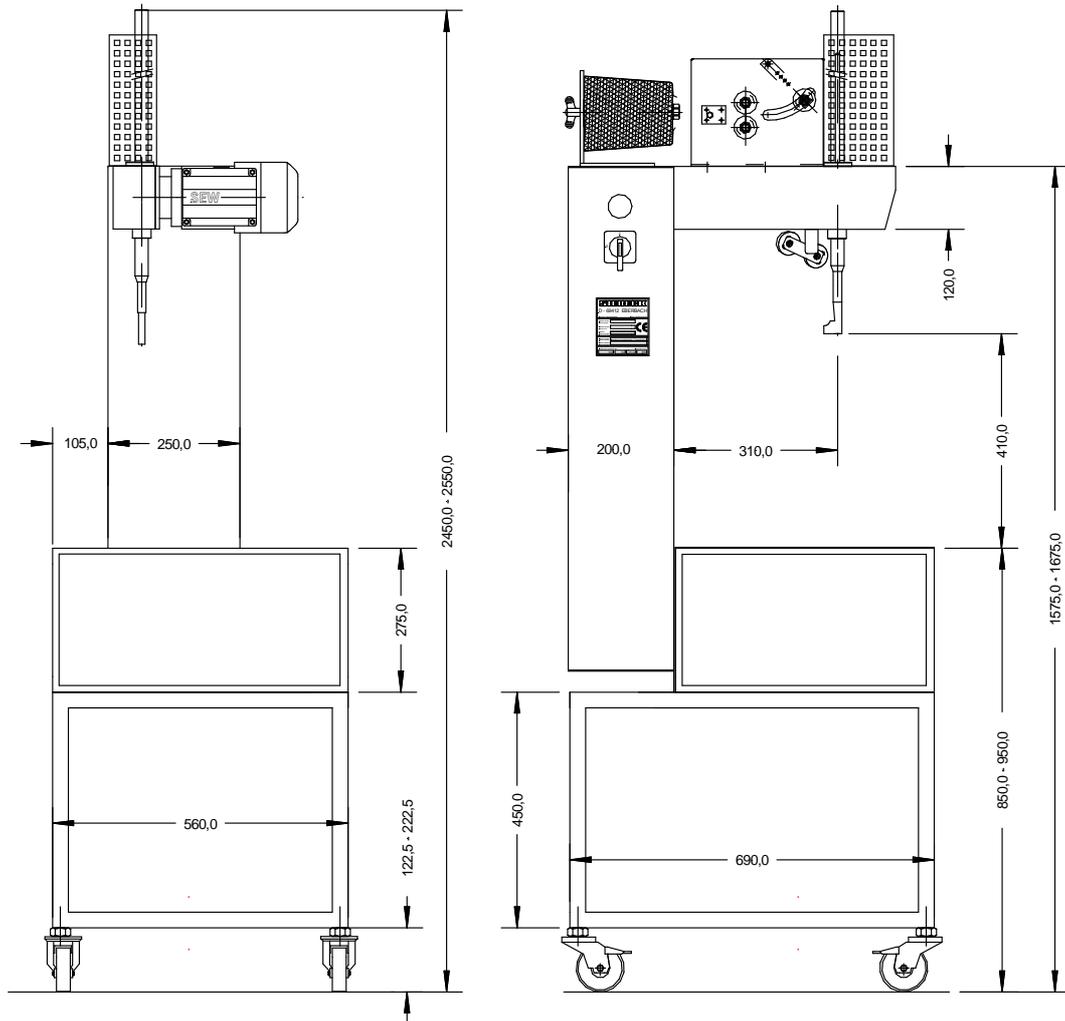
EN ISO 12100 Part 1 and 2 "Safety of machinery"
EN 60204-1 "Electrical equipment of machines"
89/336/EEC as amended 92/31/EEC "EMC Directive"

Eberbach, date 10.09.2014

Siebeck GmbH

Technical data

Machinery dimensions

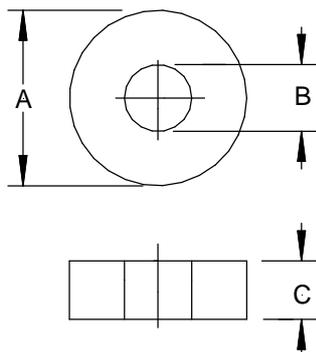


All dims. in mm, changes reserved

Electrical connection values: 400 Volt, 3 phase power supply, 1 kW, 50 Hz
Machine performance: up to 40 cycles p. min. (based on product size)
Machine weight: 130 kg
Noise pressure level: < 79 dB(A) as per EN 11204 (without product / without string)

Proper use:
 Solely commercial / strapping of preferably ring-shaped products

RING DIMENSIONS Ringabmessungen



	maximal	minimal
A	600 mm	80 mm
B	500 mm	70 mm
C	400 mm	5 mm

Safety!



The European standard EN 60204-1 requires the power supply connection to be established by a suitable plug device. The power supply cable must not be connected to a power distributor directly by way of a terminal connection, without a plug connector.



The safety limit switch below the table top prevents the machine from starting up during maintenance work. This safety device must be checked before putting the machine into operation each time to make sure it is fully functional.

Procedure:

First switch on the machine and remove table top. Do not reach into the machine (!), then press the foot pedal. The machine must not start up.

Attention! Risk of crushing! Checking protective device



The rack is secured electromechanically during the downward motion. If the needle shoe hits an object above the table top, the drive motor is reversed immediately and the rack runs upwards in the initial position.

To check this protection device, place a box on the table top opening and start the machine by pressing the foot switch. If the box is damaged during this process, the protective device must be checked. The manufacturer recommends carrying out this check on a daily basis.



Always pull the mains plug before all maintenance and cleaning work!!

When inserting a new string bobbin, and when threading the string, **always** pull the mains plug.



A minimum of 500 lux is required for local lighting.

Set-up and commissioning

Erect the machine in the designated location and press the roller wheel locks down so that the machine is stable.



To avoid collisions with other machines, as well as for adequate access for the operating and maintenance personnel, there must be a clearance of min. 1.5 metres around the machine.

If not otherwise stipulated, the machine is designed for 400 volt 3-phase alternating current and 50 Hz, when supplied from the factory. Measure the local mains voltage and compare the measurement with the value specified on the type plate.

Check that the machine is correctly grounded. Adhere to the local electrical engineering regulations. Maximum fuse protection 16 amperes.

Checking the motor direction of rotation

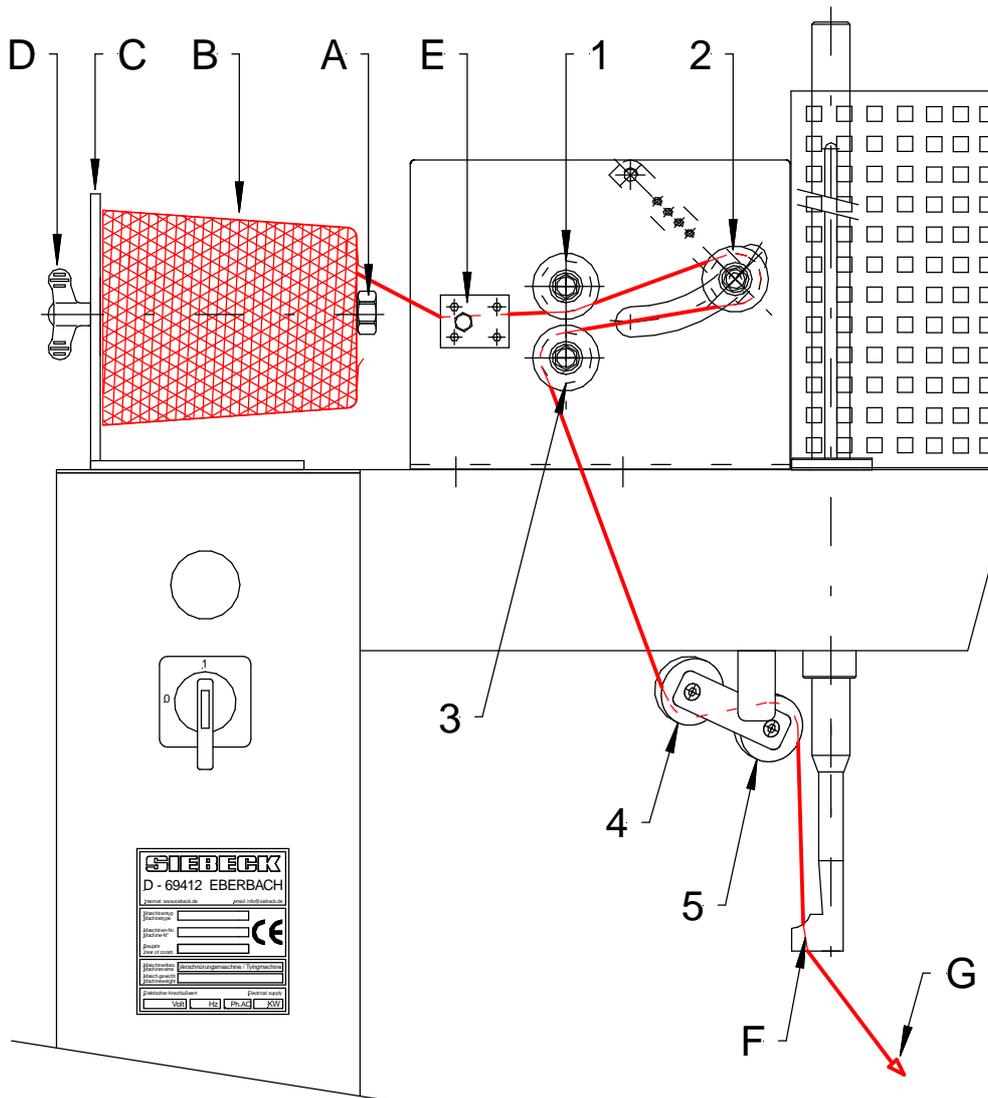
The machine comes with a rotation direction monitoring device (phase sequence relay).

Connect the machine via the mains plug to the mains. Turn on main switch. If the pilot light does not light up, then there is an incorrect phase sequence. The monitoring device locks the power supply. Two phase wires must be exchanged on the mains plug for the correct direction of rotation.

Strapping material

The knotting mechanism is designed for a maximum thickness of 900 linear metres per kilogram (ELA-900). We recommend obtaining the material from the machine manufacturer during the warranty period. This prevents the possible loss of the warranty claim, which could be caused by the incorrect use of the material.

Inserting the string



1. Insert bobbin holder (A) with string bobbin (B) into the pick-up (C) and tighten with wing nut (D).
2. Thread string through between the brake plates (E)
3. Thread into the five string rollers reels starting at 1, and in the sequence up to 5, and then through the hole (F) in the needle shoe from top to bottom thread
4. Pull end of string (G) with your right hand as far as the right, rear table top corner and hold there
5. Start the machine via the foot pedal. The string is then automatically inserted underneath the table top and cut off



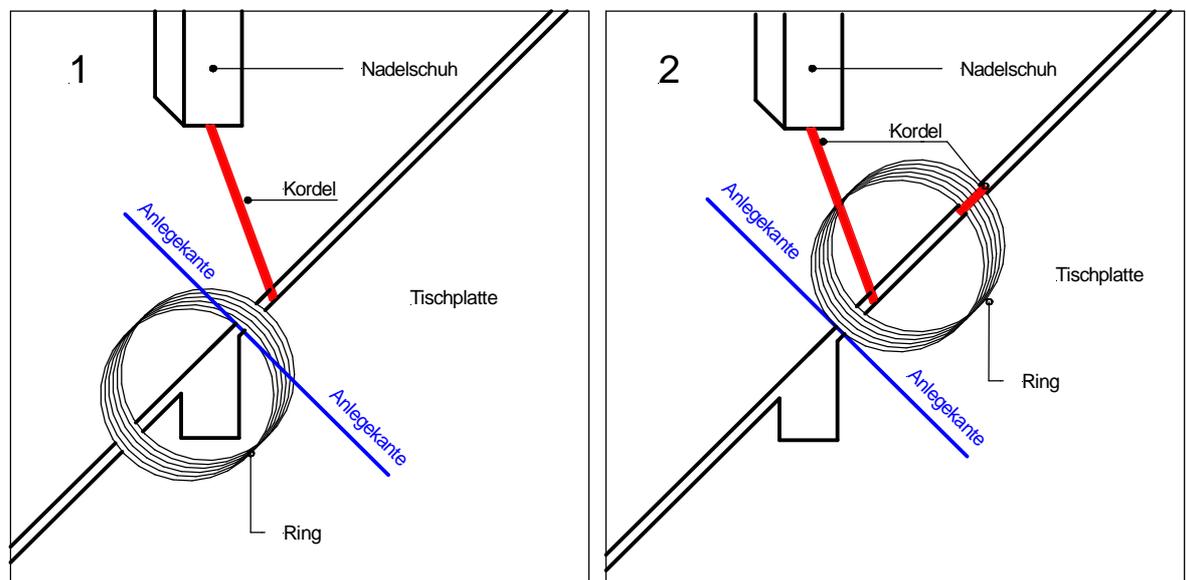
Attention Risk of crushing!

Make sure you keep the opening in the middle of the table top clear.

When inserting the needle here, there is a considerable risk of injury.

Correct positioning of the products to be strapped

1. The products to be wrapped (ring) should be run in each case for the first and any other binding up across the contact surface marked on the table top (see figure below).
2. After the first binding, the product is run further to the right and again to just over the contact surface.
If two strappings are not enough, the process must be repeated.
3. If the product is pushed beyond the contact surface, the wrapping becomes loose. If the product is run just in front of the contact surface, then there is a fault in the binding, or the string tears.



Service and maintenance of the machine



To prevent accidents when cleaning and servicing the machine, it is essential to make sure that the main switch is turned off, or the machine power supply is switched off. The manufacturer of the machine is released from any liability if this mandatory requirement is not observed.

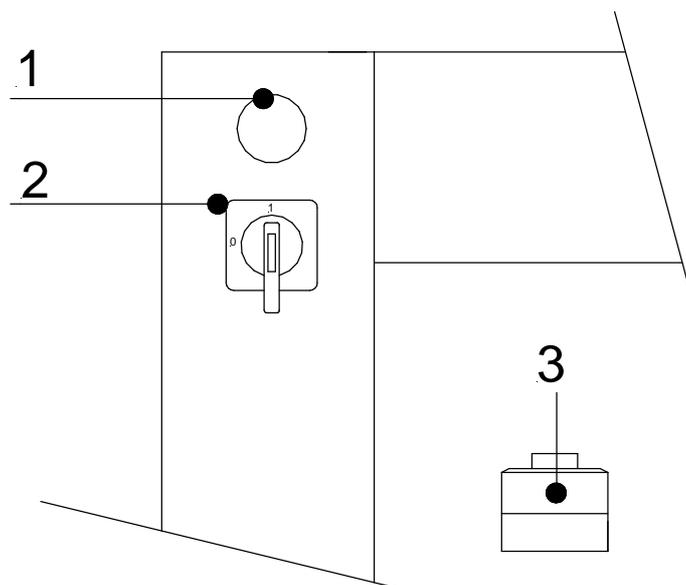
Cleaning the machine

After a running time of approximately 40 hours, the machine must be cleaned thoroughly. The table top must be removed so that the knotting aggregate is exposed and can be easily cleaned. Clean with a vacuum cleaner and do not use compressed air.

Lubrication schedule

After a running time of approximately 40 hours, all lubrication nipples must be lubricated (use only oil, no grease). All lubrication points marked in red must be lubricated with an oil can twice a week. All moving parts must be oiled once a week.

Operating controls



1 Control lamp

2 Main switch = O / off I / on

3 Pushbutton (under the table top)

- press intermittently = Move aggregate forward in stages

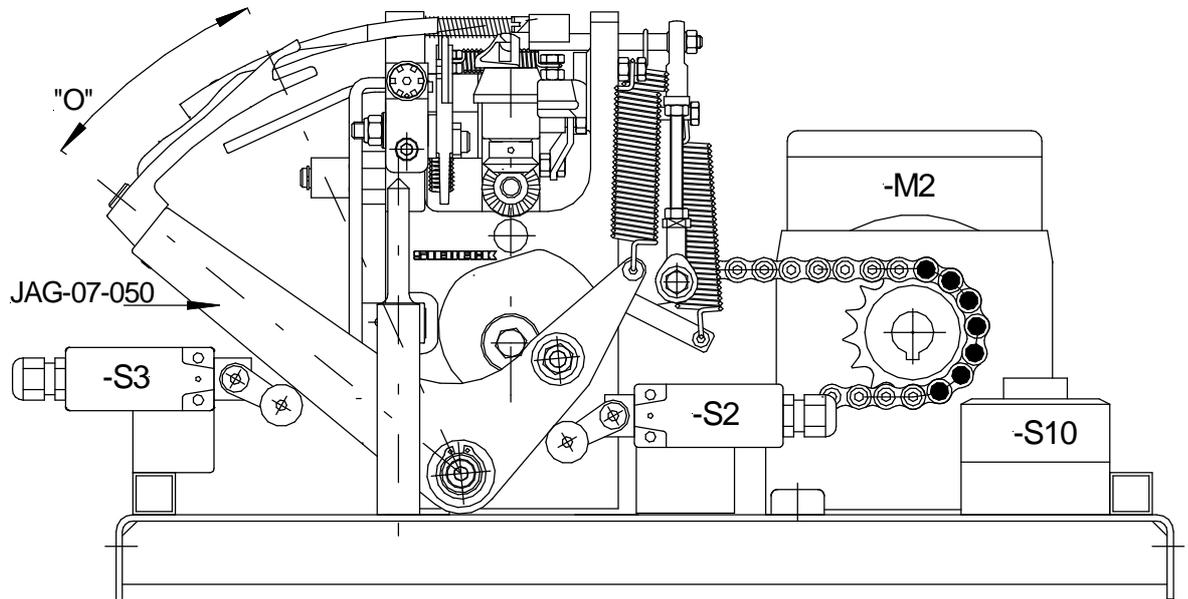
- press repeatedly = Aggregate runs to neutral position



Jog mode via pushbutton:

Only authorised and trained staff are allowed to perform this procedure!

Adjusting the zero position on the aggregate



The correct zero point ("O") is achieved if the inserting lever JAG-07-050 has reached its furthest left position.

The zero point is adjusted by sliding the end switch -S3.



Only authorised and trained staff are allowed to perform this setting!!

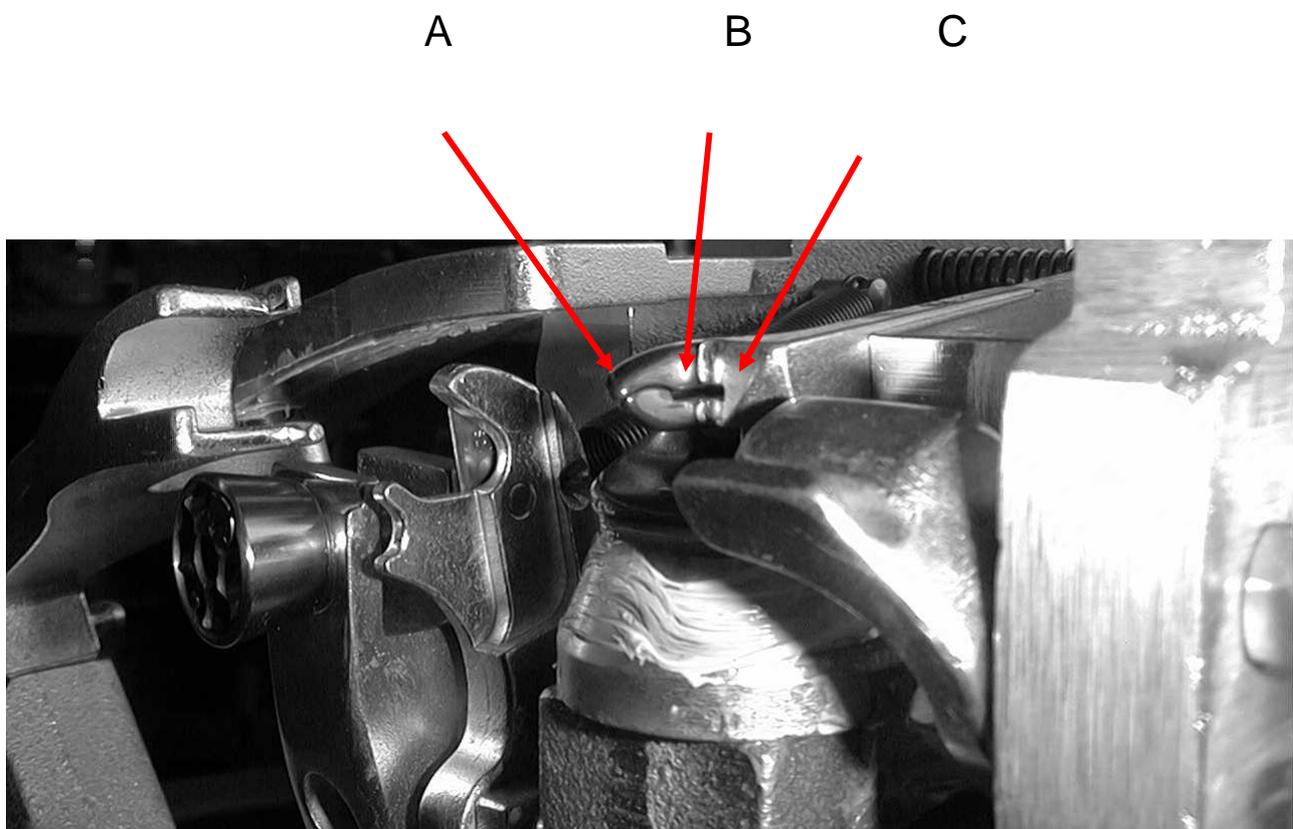
Stripper setting

The side setting for the stripper "C" is made using the threaded pin No. 9 (group M4).

When the knotter "A" moves back, the stripper "C" must rest on knotter "A" with pressure.

The height is set is using the rod end No. 2 (group M4).

The correct height of the stripper slot "B" to the knotter is shown in the figure below.



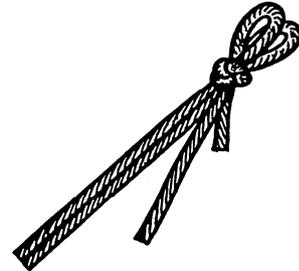
Only authorised and trained staff are allowed to perform this setting!

The story of knots

Incorrect knotting patterns and their causes

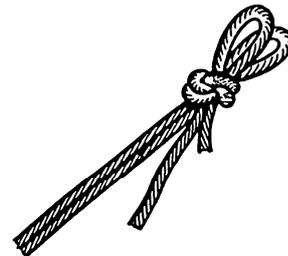
Short loops

The knotter opens too early. Shift the mount for the cam roller for opening the knotter backwards towards the chain wheel. The stripper does not rest on the knotter. The string is too thin.



Knots not strong enough

Stripper slot too large. The knotter opens too early. The string is too thin.



String not cut cleanly

The string knife is blunt. Flip or replace the knife.



String break before the knot

Sharp edges on the stripper, drawslide head, tip up lever or knife lever.



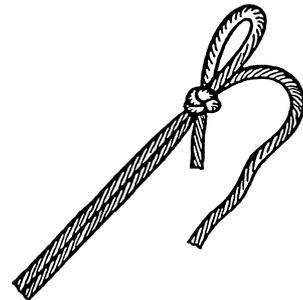
One normal length and one short loop

The knotter is not closing properly. Tension spring for the knotting lock is too weak. The stripper does not rest on the knotter.



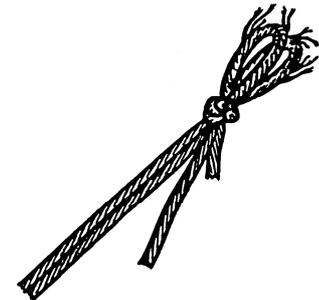
Single loop

The knot has only a single loop. The second loop is drawn through. Increase the spring pressure on the twine button. The lead end of the string which protrudes from the twine button must not move when the tying arm starts up.



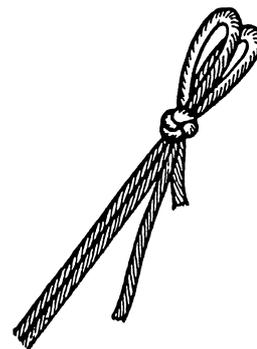
Loop ends torn

Upper or lower finger of knotter or stripper has sharp edges.



The perfect knot

A correct knot has two loops of equal length and one short and one long end of string. The knot is tight and hard.



Faults and their causes



Never rework the surface of the twine button housing! This surface has an exactly specified contour. The notch is intentional and has not been created by wear. Only ever make the necessary settings by adjusting the string brake and twine button spring.

1. Threading: Make sure that threading has been performed properly. The string taking the wrong course is the most common cause of string breaks (see "Threading diagram" on pages 22-24).

2. String: The machine is set to a certain string thickness. Always use the same quality and thickness of string in order to achieve the best results..

- a) String, which is too weak often breaks on the twine button instead of being pulled out without hindrance
- b) If the string is too thick, it will not be released by the knotter
- c) String, which is too thin causes a loose knot

3. Twine button: If you are using a good quality of string of the correct thickness and it still breaks and leaves behind residual fibres in the twine button, this is generally caused by excessive spring tension on the twine button.

Reduce the spring tension. Make sure that the setting wheel re-engages properly and the retainer screw is tightened.

4. String tension: You achieve the best results with an even, smooth string brake setting. Check the setting by pulling out a few metres of string from the tying arm tube. You can change the string tension by turning the knurled nut on the string brake



Every person on the user's premises given the task of setting up, commissioning, operating, maintaining and repairing this machine must have read and understood this operating manual, and in particular the chapter "Safety".

Residual risks and incorrect operation

Residual risks and incorrect operation, which exist despite measures for integrated safety and technical protective equipment, are described and illustrated in the following. These risks are documented in a risk analysis and filed by the manufacturer.

When the machine hood is open, the knotting aggregate can be driven using jog button at reduced step by step (jog mode). The individual movement sequences can thus be observed quite easily.



Jog mode:

Only authorised and trained staff are allowed to perform this procedure!



In the entire area of the knotting aggregate, in particular on its drive elements, chain wheel to roller chain, there is a **considerable risk of crushing**.



Attention Risk of crushing!

Make sure you keep the opening in the middle of the table top clear. When inserting the needle here, there is a considerable risk of injury.



Thermal hazard!

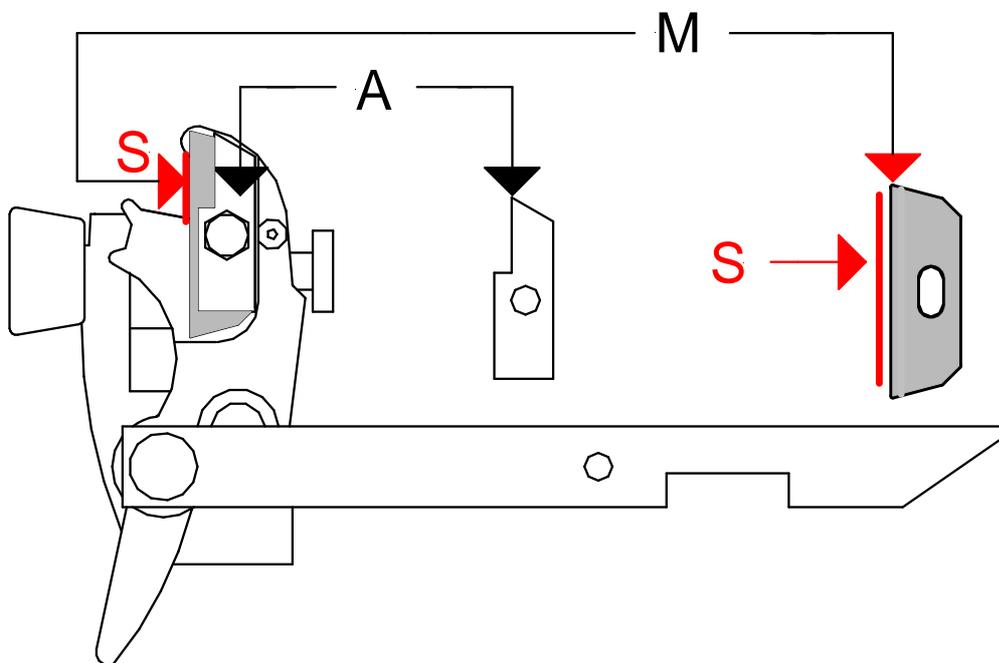
The drive motors can reach temperatures of up to 80° C. If the covers are removed, contact can cause injuries.

**Risk of cuts.**

When installing and removing the knife M.

When installing and removing the knife M, you must adhere to the following::

- Do not touch the knife blade S
Risk of injury!
- The cover plate A must be fitted as illustrated. If the cover plate is missing, the knife M will wear quickly.



Only authorised and trained staff are allowed to perform this procedure!



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