



Operating instructions

For ErgoPack 700/700E/725E/740E

Serial No. _____

Declaration of conformity

EU declaration of conformity for the purposes of the EU machine directive 2006/42/EG

,
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We hereby declare that the devices "ErgoPack 700, 700E, 725E, 740E",
to which this declaration refers complies with all the relevant and basic health and safety
requirements because of their concept, type of construction and the model we have brought
on to the market.

This declaration loses its validity if a change is made to the machine without our permission.

Respective

EU directives: EU Machine directive (2006/42/EG)
EU Low voltage directive (2006/95/EG)
EU Guideline on electromagnetic compatibility
(2004/108/EG)

Applied standards

EN12100-1: 2003 + A1: 2009
EN12100-2: 2003 + A1: 2009
EN415-8: 2008
EN55014-1: 2006 + A1: 2009
EN55014-2: 1997 + A1: 2001 + A2: 2008
EN62233: 2008
EN14121-1: 2007

Lauingen, 15th September, 2010



Andreas Kimmerle
CEO

Validity of the operating conditions

- **The operation in these instructions is explained by using the ErgoPack 725E as an example.**
- **As to ErgoPack 700, all the points in these instructions referring to the operation of the sealing unit and also all points referring to the operation of the control unit with the drive unit, charger and rechargeable batteries are not applicable. Also at all points in which is described the movement of the ChainLance by using the joystick, at ErgoPack 700 you have to use the crank handle for mechanic movement.**
- **All the points in these instructions referring to the operation of the sealing unit are not applicable as far as the “ErgoPack 700E“ is concerned.**

These operating instructions are valid for the following models:

ErgoPack 700

Strapping unit with manual drive via a hand crank, without sealing unit

ErgoPack 700E

Strapping unit with electrical drive, electronically controlled via a joystick, without a sealing unit

ErgoPack 725E

Strapping unit with electrical drive, electronically controlled via a joystick, with a sealing unit for strap widths of 12-16mm and a maximum tension of 2500N

ErgoPack 740E

Strapping unit with electrical drive, electronically controlled via a joystick with sealing unit for strap widths of 16-19mm and a maximum tension of 4000N

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1. Technical data

1.1 Strapping unit

Weight:

ErgoPack 700	59,7 kg
ErgoPack 700E (incl. battery)	78,7 kg
ErgoPack 725E/740E (incl. battery)	87,7 kg

Dimensions (all types)

Length	630 mm
Width	770 mm
Height	1200 mm

Maximum chain speeds

Mode A, strapping

Moving out horizontally:	40 m/min
Moving out vertically:	60 m/min
Moving in vertically:	44 m/min
Moving in horizontally:	54 m/min

Mode B: setting up/inserting strap

Moving out	20 m/min
Moving in:	16 m/min

Max. chain thrust: 310 N

Measured A-assessed

Noise emission level (EN ISO 11202)	L _{pa}	86 dB (A)
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1.2 Sealing head

Weight: (incl. spiral cable)	3,9 – 4,2 kg
Dimensions	Length 300 mm Width 140 mm Height 130 mm
Tension 725E 740E	400-2500N 400-4000N
Wrapping speed	220mm/S (725E) 175mm/S (740E)
Sealing	Friction weld sealing
Measured A-assessed Noise emission level (EN ISO 11202) 725E 740E	L_{pa} 86 dB (A) L_{pa} 86 dB (A)
Hand arm vibrations (EN ISO 8662-1)	$a_{h,w}$ 2.2 ms ⁻²
Plastic strap Strap quality	Polypropylene (PP) Polyester (PET)

Strap width	
725E, adjustable to	12-13mm 15-16mm 9-11mm (optionally)
740E, adjustable to	15-16mm 18-19mm
Strap thickness	
725E	0,5-1,0mm
740E	0,8-1,3mm

1.3 Charger

Charger	3 stage lead charger Prim.: 100-240 VAC 50/60Hz max. 1,2A Sec.: 2x 12V DC/2A Total max. power 60W
Battery	24V lead battery
Weight:	12.3 kg
Charging time:	approx. 6 hours
Temperature range:	5°C - 40°C
Number of strappings:	150 to 400 per charge depending on size of pallet, tension and maintenance of unit
Life span:	approx. 500 charges (Each complete discharge of the battery to the switch over point is indicated via the red LED on the control box)

2. General

These operating instructions will help you to understand the device and how to use it according to regulations. The operating instructions contain important notes on how to use the device safely, properly and economically.

Adhering to the notes helps you to avoid dangers, repairs and down times and also increases the reliability and life span of the device

The operating instructions must be available at the place where the device is used. It has to be read, understood and used by everybody who works with the device.

In addition to the operating instructions and the rules in the country and place of use for the prevention of accidents, the recognised specialist rules for working safely and according to proper and professional standards shall also be observed.



Be careful!

This sign indicates when there is danger to life and health



Watch out!

This sign indicates when dangers can cause damage to property.



Note!

This sign indicates general notes where there can be breakdowns in operations when they are not observed.

2.1 Notes on environmental protection

Physical or chemical materials injurious to health have not been used for manufacturing the device.

The valid, legal regulations have to be taken into consideration during disposal. The electrical components have to be dismantled, so that the mechanical, electromechanical and electronic components can be disposed of separately.

The specialist dealer offers disposal according to proper environmental protection.

- Do not open the battery
- Do not throw the used battery into the domestic waste bin, into the fire or into the water.

3. Safety regulations



Inform yourself !

The operating instructions have to be read carefully and understood before using the device. The device may only be serviced and maintained by trained personnel.



Wear protective helmet!

Wear protective helmet when strapping pallets exceeding a height of 1,20m



Protect yourself!

Wear eye and hand protection (cut proof gloves) and also safety boots when working.



Energy source!

Before servicing and maintenance work:
Set the red main switch to “0“ and
Remove the plug of the battery cable from the battery.



Be careful: Only strap packaging materials!

Be aware of hands or other parts of the body that may get caught between the strap and the packaging materials.



Be careful : Danger of crushing

Do not put your fingers into the area of the tension wheel of the sealing unit.
Increased danger of crushing exists especially in the area of the Reversing sledge!



Be careful: The strap can tear!

The strap can tear when is being tensioned! Do not stand in the path of the strap.



Do not use any water!

Neither water nor steam can be used for cleaning the Device.



Caution when cutting applied straps!

Hold the upper part firmly when cutting through the strap and put it to one side.

Watch out: Be aware the strap is under tension



Only use original ErgoPack spare parts!

The use of other non-ErgoPack parts invalidates guarantees and liability.



Attention : Risk of stumbling!

When the machine gets parked, the ChainLance must be completely retracted. The reversing sledge may not stick out of the machine.

Furthermore it must be assured that any potential strap culls or strap pieces are removed immediately from the floor.



Attention Risk of crush!

Risk of crush exists particularly in the whole area of the reversing sledge as well as under the storage box in the area where the ChainLance moves in and out.



Wear ear protection

Make sure before each strapping operation that no persons are in the area of operations or can enter it (especially where ChainLance operates).

This applies especially to the area on the opposite side of the pallet where the operator has a restricted and bad view.

When the ChainLance on the opposite side of the pallet moves upwards, its own weight causes it to fall across the pallet in the direction towards the operator.

In case of inattention the ChainLance might fall on the operator's head and cause injuries. Wear protecting helmet when strapping pallets with a height exceeding 1,20m. You should always be careful, concentrated and should always catch the ChainLance when it falls across the pallet.

If the strapping process cannot be stopped in another way, it can be interrupted at any time by pulling the rocker lever at the tension unit or by turning the main switch to the left in pos. „0“.

Strapping of pallets should take place, whenever possible, only on plane and horizontal surfaces. When strapping on inclined surfaces, the brakes of the two guide rolls on the strap-side of the machine have to be interlocked immediately after the positioning of the machine.

When changing the strap, the strap roll must be transported and placed by two persons if the weight of the roll exceeds 20 kg.

If the sliding window is opened for mounting the strap or for any other reason, the main switch has to be turned to the left in pos. „0“.

Before using the machine for the first time, visual inspection must be done to check if there are any exterior damages.

The machine is not designed to be used in explosion proof areas (ex-areas).

Use in accordance with the regulations

This device is to be used for strapping pallets. The device has been developed and constructed for safe operation when strapping.

The device is only to be used for strapping with plastic straps (polypropylene and polyester). Strapping with a steel strap is not possible with this device.

The machine is not designed to strap aliments which are not packaged.

The set up tension force must correspond to the packaged goods to be strapped. Constructing the machine there was not considered any risk due to damaging of dangerous products or their package.

3.1 Safety regulations for charger and battery



- Check the plug and the cable before each use and have them replaced by a specialist if they are damaged
- Do not use any batteries from other manufacturers, use original spare parts only.
- Keep the connection plug to the battery away from non-related objects and dirt.
- Protect the charger from moisture; operate it in dry rooms only.
- Do not open the battery and protect it from shock, heat and fire.
Danger of explosion!
- Store batteries in a dry frost-proof place. The ambient temperature must not exceed 50°C and must not fall below -5°C.
- Damaged batteries may not be reused.

4. Description

4.1 Construction



Fig. 1



Fig. 3

- Control unit with drive
- Cutter
- Packaging strap brake



Fig. 2



Fig. 4

- Sealing head
- Sliding window with safety switch
- Tool-Lift
- Battery

4.2 Operating panel strapping unit



Fig. 5

Joystick to move “ChainLance“ in and out with precision speed control.

LED display

Permanent light green = battery full

Permanent light

green + yellow = battery will soon be empty

Permanent light yellow = battery empty, control unit switches off

(Control unit switches off when battery voltage $\leq 23,7V$)

Flashing green + yellow = teaching mode

Flashing light green or yellow = setup mode

Quick flashing red = sliding window open

Rotary switch strapping mode “A“/ set-up mode “B“

Main switch “power supply 1/0“

4.3 Operating panel sealing head



Fig. 6

1 LED indicator „Power on“

2 Button „Tension“

3 Button „Function“

4 Button „Mode of operation“

5 Button „Welding time“

6 LED indicator „Soft tension“

7 LED indicator „Manual strapping“

(continuous green light)

8 LED indicator „Automatic strapping“

(continuous green light)

9 Digital display for:

- tension (1-9)

- welding time (1-7)

- cooling time (count down 3,2,1)

- fault indication

4.4 Indications of the Dual- Charger

Inside the red battery housing there are two 12V batteries installed. The dual charger charges each of the two batteries separately.

The dual charger has one LED- indication for each of the two 12V batteries. (Output I and Output II), indicating the charging status of each battery.

LED shining orange = quick charging

LED shining yellow = Battery is charged by 80%, charging current will be reduced until the battery is fully charged.

LED shining green = Battery fully charged, charger switches into preserving mode.

Note: The battery pack only is fully charged, **if both** LED indication lights are green!

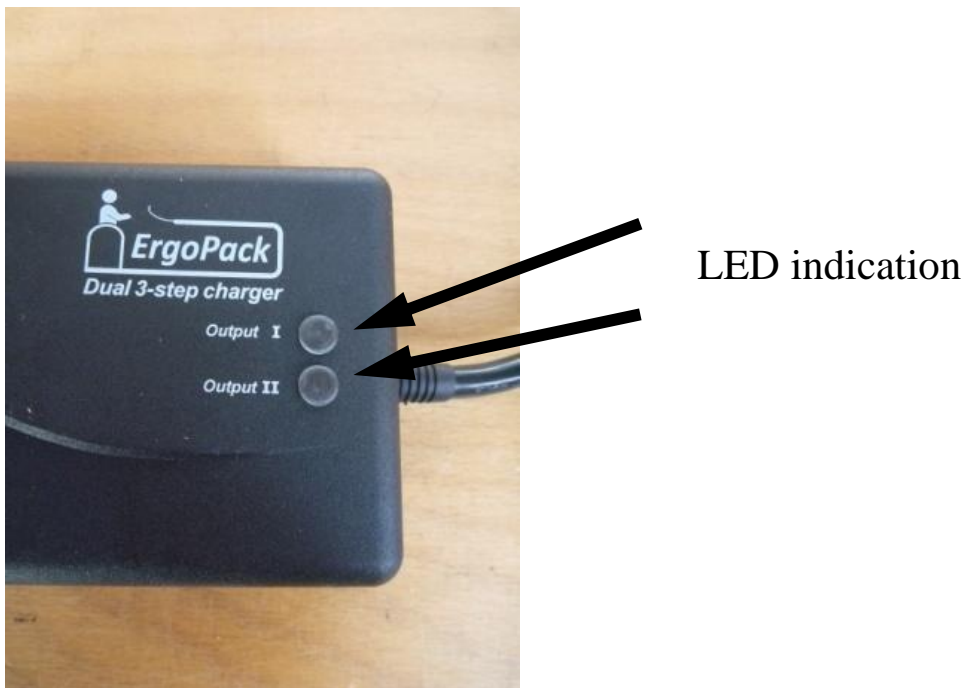


Fig. 7

5. Commissioning

5.1 Battery charger

The main voltage must comply with the details on the type plate.
The charger is only suitable for charging the delivered 24V lead battery.

5.2 Charging the battery

- 1.) Connect the charger to the main voltage
- 2.) Turn the red ring (12) of the plug (13) on the battery (7) to the left.
- 3.) Disconnect the plug (13) from the battery and put it into the hole of the storage box (Fig 9)
- 4.) Continue with page 18



Note !

Before using the machine for the first time, a visual inspection for exterior damages has to be done.



Attention!
Charge the battery only with the ErgoPack Dual 3-step charger through the blue socket.

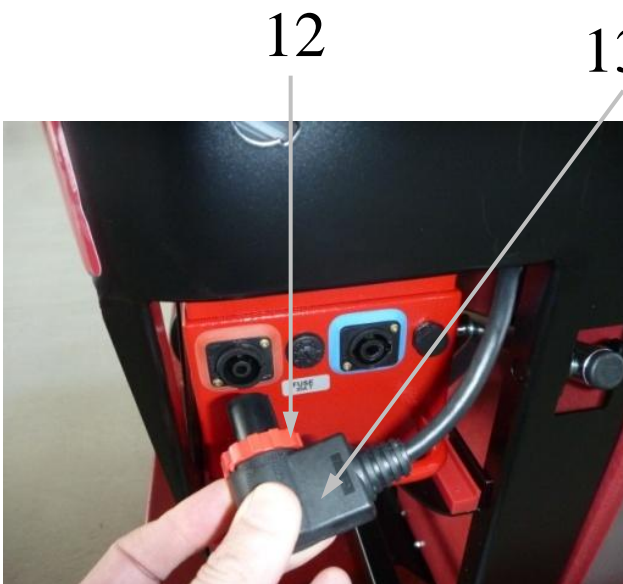


Fig. 8



Fig. 9

4.) Put the plug (14) of the charger into the blue charging socket of the battery pack as shown in Fig 9a by slanting to the lower left corner. Thereafter turn the plug by 45° to the right as shown in Fig 9b until you can hear it snapping in.



Fig. 9a



Fig. 9b

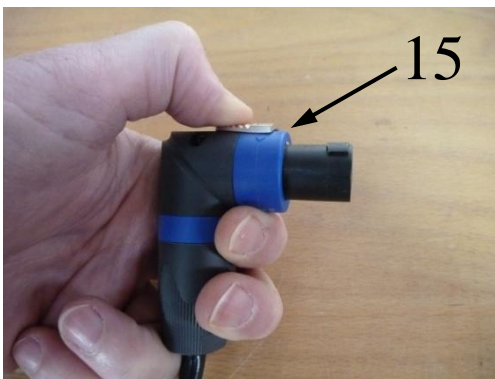


Fig. 9c

5.) To remove the blue charging plug after charging is completed please proceed as follows:
a) pull the silver locking bar (15) backwards
b) turn the plug to the left by 45°
c) remove the plug



Important!

The charging time is approximately 6 hours. The battery is fully charged not before **both** LED indication lights on the charger are shining green!

The maximum charging current flows if the temperature of the battery is between 5 - 40°C. Avoid battery temperatures below 0°C when loading.

You achieve the longest life span, if the battery is charged daily and is not being operated until the control unit switches off. (only the yellow LED light is shining on the control box).

6. Operation

6.1 Setting the strap width at the sealing head

The sealing head can be used with different strap widths:

ErgoPack 725E: 12-13mm
 15-16mm
 9-11mm (optional)

ErgoPack 740E: 15-16mm or 18-19mm

a) Change strap width from 12-13mm to 15-16mm

- Switch off main switch
- Release sunk screw (10/2) and remove strap stop 13mm (10/1)
- Lift the rocker lever towards the handle, release sunk screw (10/4) and remove strap guide (10/3).
- Remove three cylindrical screws (11/2)
- Lift the rocker lever towards the handle, remove cylinder screw (11/4) and strap stop block 13mm (11/3)
- Remove cover (11/1).
- Remove oval-head screw (11/7) and remove strap guide rear 13mm (11/6) from lever
- install cover (11/1)
- mount strap stop block 16 mm (11/5)

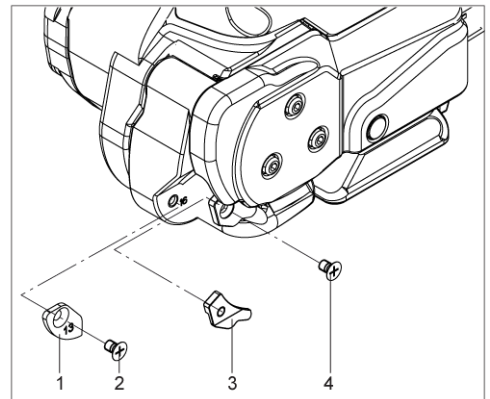


Fig. 10

b) Change strap width from 15-16mm to 12-13 mm

- Mount 13mm strap stop (10/1) and secure sunk screw (10/2) with Loctite 222
- mount 13mm strap guide (10/3) and secure sunk screw (10/4) with Loctite 222
- remove strap stop block 16 mm (11/5)
- remove three cylinder screws (11/2) and remove cover (11/1)
- mount strap guide block 13mm (11/6)
- install cover (11/1)
- mount strap stop rear 13mm (11/3)

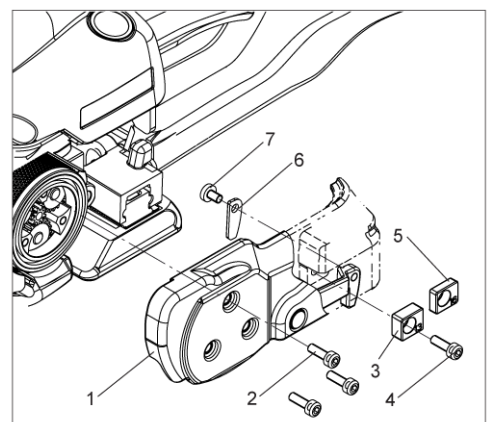


Fig. 11

6.2 Switching on the control unit

1. Step

- Charge the battery as described in 5.2.
- Insert the plug (13) of the power cable into the battery (7) and lock it by turning the red ring (12) to the right.
- Turn the main switch (11) to the right to operating mode “1”
- Set the operating mode switch (10) to operating mode “A”.



Fig. 12

7 12 13



Fig. 13

8 11 10

2. Step

2 LEDs (green and yellow) are now flashing. The control unit is in the teaching mode.

Now move the joystick (8) completely in the “move out” or the “move in direction” and keep it pushed until the green LED lights up. The control unit is now ready for operational use. The 7 segment indicator lights up on the display of the sealing head after two seconds. Also the sealing head is now ready for operational use.

6.3 Setting the strap tensioning range at the sealing head

Two strap tensioning ranges can be set at the sealing head:

A = 900–2500 N (725E) / 1200-4000N (740E) standard, PET straps

B = 400–1500 N (725E) / 400-1600N (740E) soft tension*, PP straps

•Soft tension: slow starting of the tension wheel. This avoids excessive contamination with PP strap

Setting soft tension:

- Press function button (14/1) briefly
- Press button „mode of operation“ (14/2) several times until the green SOFT LED indicator (14/3) lights up together with the desired mode of operation

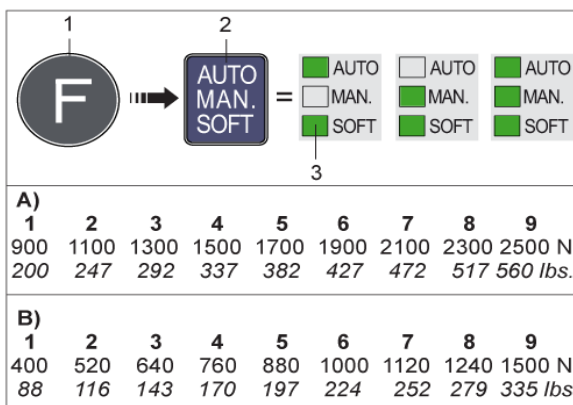


Fig. 14a (ErgoPack 725E)

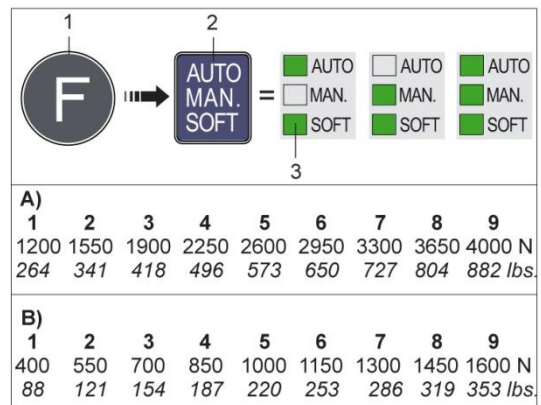


Fig. 14b (ErgoPack 740E)



The adjusted tension force must correspond to the packaged goods to be strapped. Constructing the machine there was not considered any risk due to damaging of dangerous products or their package.

6.4 Setting strap tension at the sealing head

- Press the „Function“ button (15/1) briefly
- Press the „Strap tension“ button (15/2) several times until the flashing digital display (15/3) shows the required strap tension
- (wait for 2 seconds until the new setting is saved)

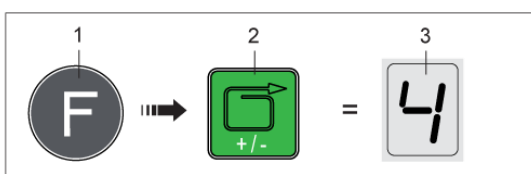


Fig. 15

1 = min. strap tension approx. 400/900 N (725E) / 400/1200N (740E) (PP)
 9 = max. strap tension approx. 1500/2500 N (725E) / 1600/4000N (740E) (PET)

6.5 Setting mode of operation

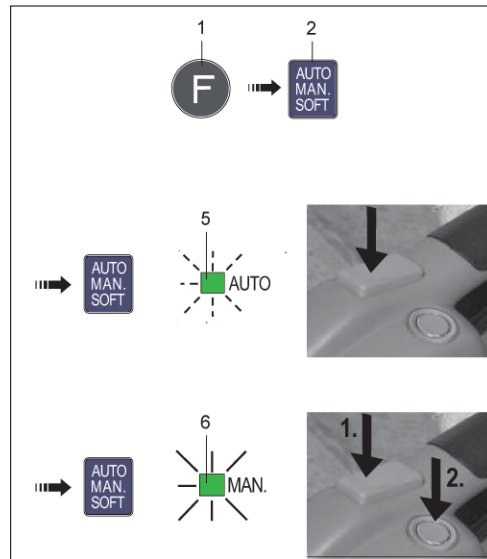


Fig. 15a

- Press „Function“ button (15a/1) briefly one time.
The digital display will show „F“ (Function) .
The present mode of operation is shown.
- Then press the „Mode of operation“ button (15a/2) briefly until the desired mode of operation is shown..

Auto strapping:

Strapping is performed by pressing the tension button. When the strap tension is reached, welding and cutting is performed automatically.

-When the „Auto“ LED indicator light continuously is green, „Automatic“ mode of operation is selected.

Manual strapping:

Strapping is performed by first pressing the tension button. When the adjusted tension is reached, press the welding button.

- When the „Man“ LED indicator “ (15a/6) lights continuous green, „Manual“ mode of operation is selected.

6.6 Threading in the packaging strap

1. Step

Switch on the control unit key as described under point 6.2

2. Step

Set the operating mode switch (3) to position "B" (green LED flashes)



Fig. 16

3

3. Step

You can use the joystick (8) to position the ChainLance so that the red chain link is in the middle of the sliding window (6).

The sliding windows must be closed during this operation!

4. Step

Open the sliding window (6). (red LED flashes quickly).

The control unit automatically switches off for safety reasons when the sliding window is open. Additionally, the main switch has to be turned to the left into pos. „0“.



6

Fig. 17

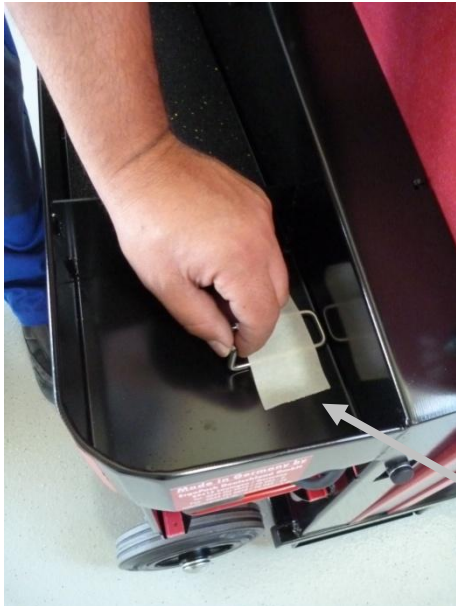


Fig. 18

5. Step

Remove the clamp
for setting the
package width
from the storage
compartment

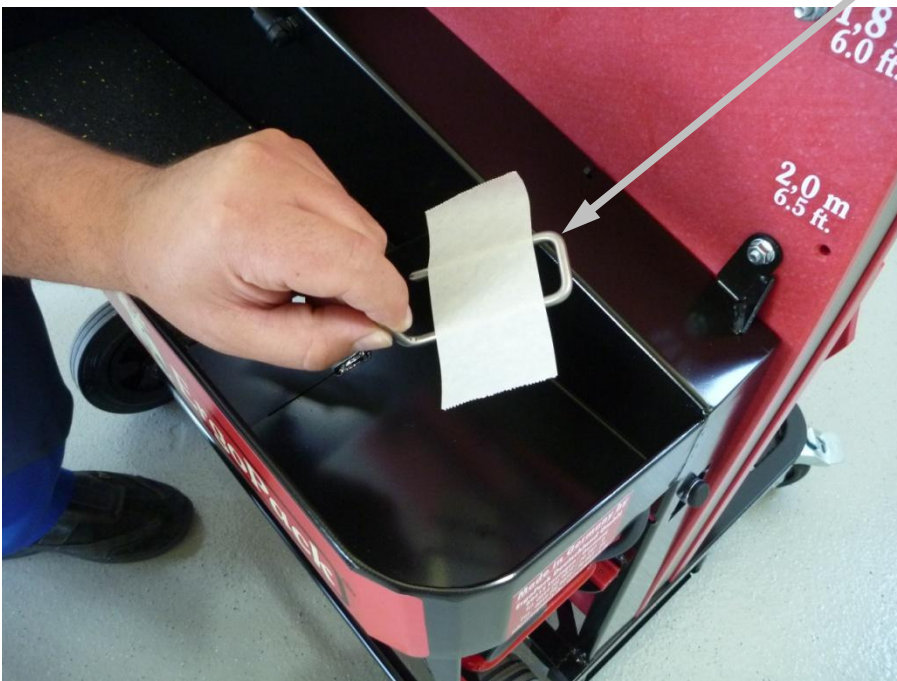


Fig. 19

6. Step

Insert the clamp as shown into the drilled hole with the cut out at the lower left



Fig. 22



Fig. 21

7. Step

Fold the lever arm with the red disc downwards into the horizontal position.



Fig. 23

8. Step

Place a new roll of strapping tape onto the red disc so that the strap unwinds in the **anti-clockwise direction** when looking down on to the roll.



Fig. 24



Important !

Do not remove the tapes or the adhesive strips yet which secure the strap on the roll!

9. Step

Fold the lever arm with the strap roll as shown upwards into the vertical position.

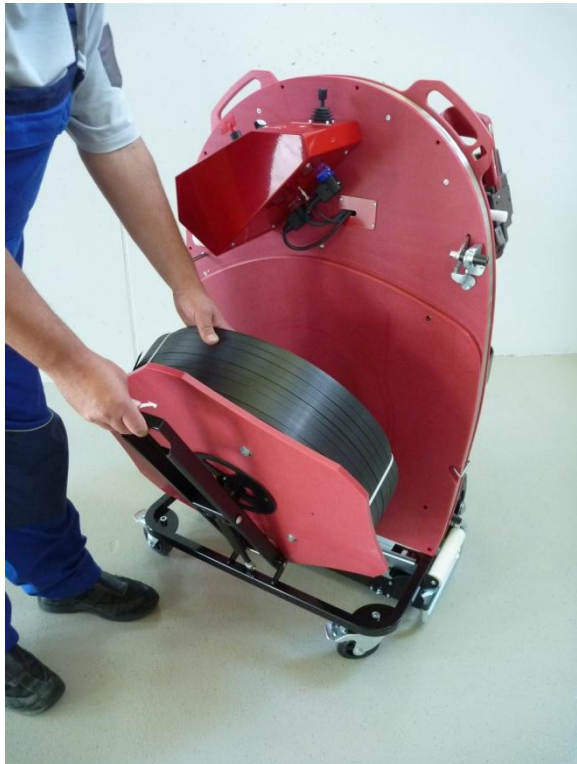


Fig. 25

10. Step

You can remove the tapes or adhesive strips now which secure the strap on the roll.



Fig. 26



Fig. 27

11. Step

Thread the strap through the U-bolt...



Fig. 28

...and over the white roll to the inside.



Fig. 29



Fig. 30

12. Step

Press from the left hand side on the clamp lock located in the red chain link.

...and then slide the strap from the right to the left through the slot in the clamp lock.



Fig. 31

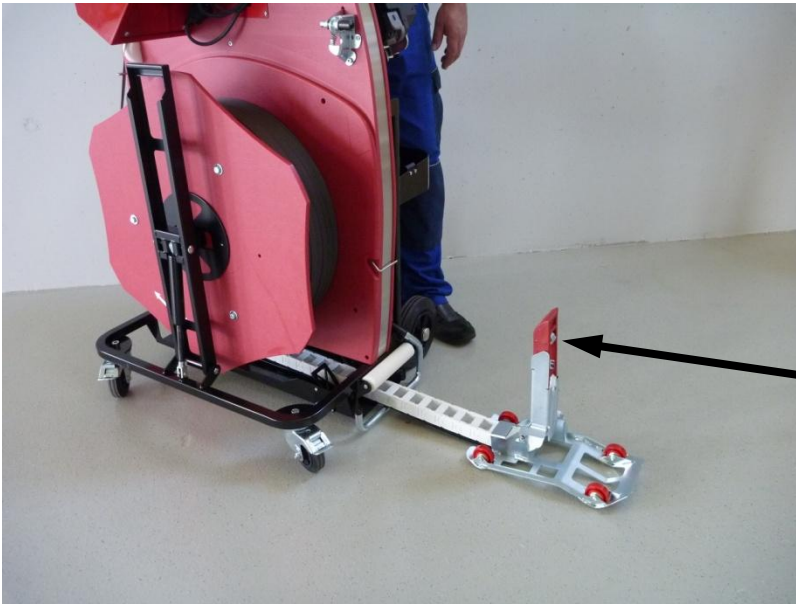


Fig. 32

Now close the sliding window (6) and turn the main switch back to the right in position „1“.
Make sure that the window is closed up to the stop.
The safety switch for the control unit will only unlock again when the window is completely closed.
(red flashing LED turns off, green LED lights up)



Fig. 33



13. Step

Press the joystick in the “move out “ direction until the reversing sledge tilts upwards.

Fig. 34



Be careful, danger of injury !

Never put your fingers between the links of the chain.



Hold the end of the ChainLance with the left hand while you still continue to push the joystick in the “move out direction“.

Fig. 35

Move the ChainLance out until you are able to place it on the device as shown...



Fig. 36



...and approx. 50 cm of the strap can be seen.

Fig. 37



14. Step

Move the ChainLance back now by approx 5-10 cm by briefly pushing the joystick in the “move in“ direction until the packaging strap is loose.

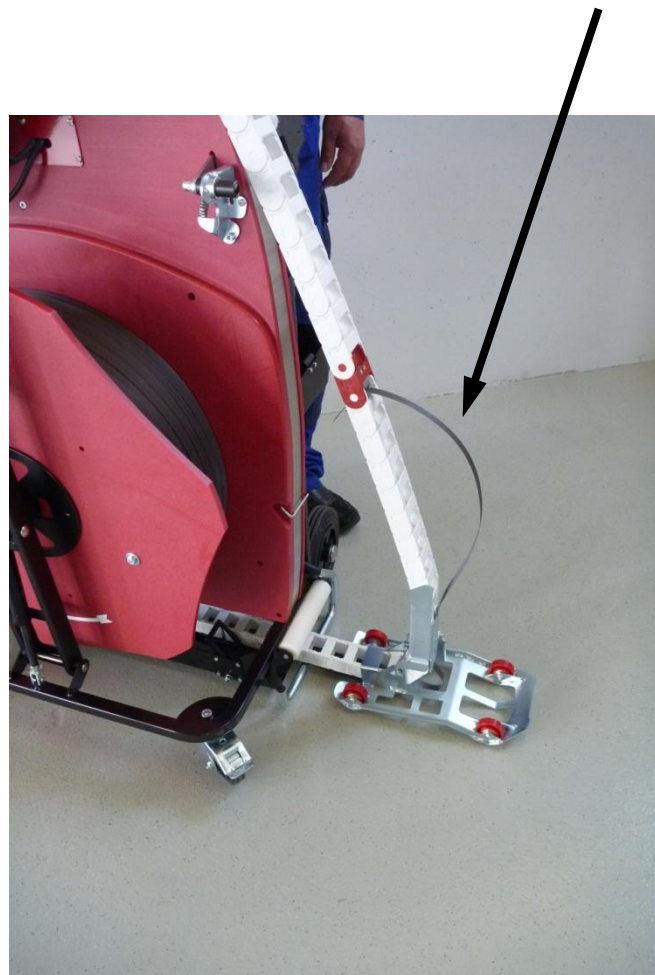
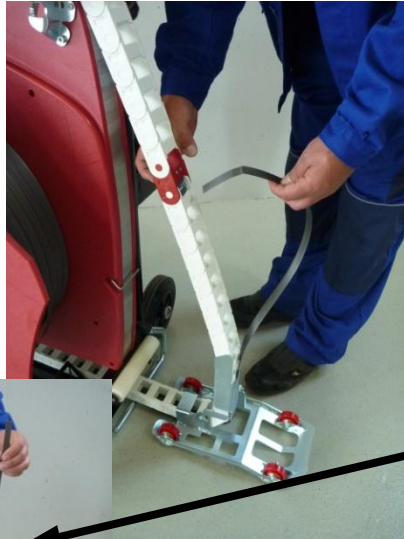


Fig. 38



15. Step

Remove the strap from the slots in the red chain link and hold it straight up as shown.

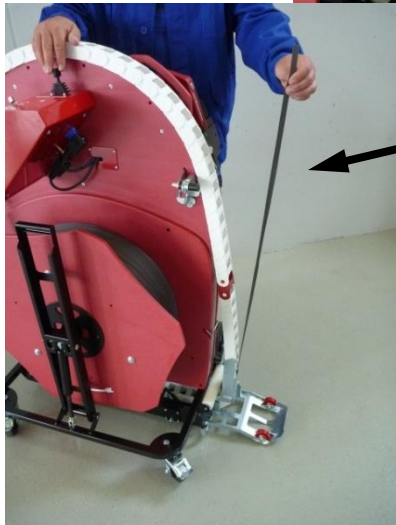
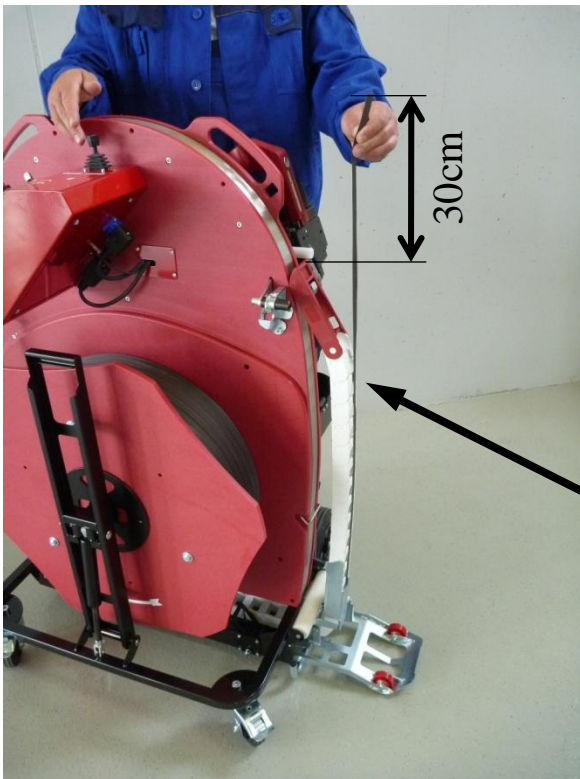


Fig. 39a

Fig. 39



16. Step

Move the ChainLance back now by pushing the joystick in the „move in“ direction until the ChainLance is approx. 30cm lower than the strap you are holding in your hand.

Fig. 40

17. Step

Open the eccentric latch by pushing it inwards with the finger as shown.



Fig. 41

Push the strap from the back through the top of the ChainLance as shown. The strap must be passed between the two aluminum eccentrics.



Fig. 42



18. Step

Now hold the strap vertically so that the strap and the ChainLance are straight..



Fig. 43

19. Step

Move the ChainLance completely backwards by pushing the joystick again in the “move in“ direction.



Important !

Make sure that the strap remains continuously tensioned while the ChainLance moves back, to avoid the strap being pushed back into the device.



Fig. 44

20. Step

Set the operating mode switch (3) to position “A“

3



Fig. 45

21. Step

Place the overlapping strap as shown with a loop through the small slot underneath the left handle.



Fig. 46b

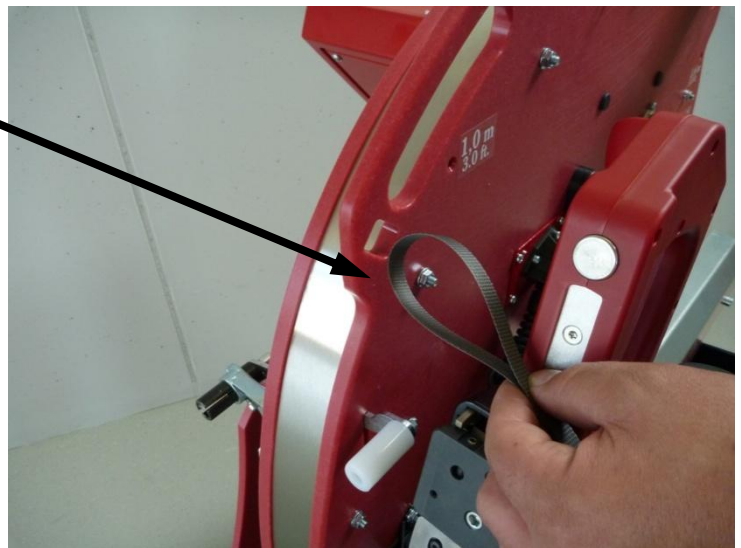


Fig. 46a

22. Step

Remove the clamp for setting the package width from the position from the drilled hole on the lower left...

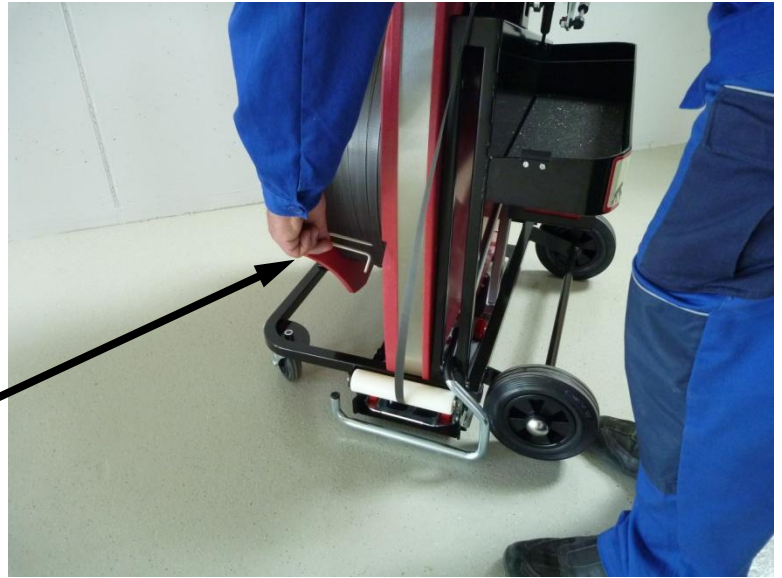


Fig. 47

...and set the package width as shown. Plug the clamp into the next highest dimension of your package width.

Example 1:

Package width 0.80m
- insert the clamp at 1.0 m

Example 2:

Package width 1.2 m-
insert the clamp at 1.4 m



Fig. 48

Your ErgoPack is now ready for strapping.

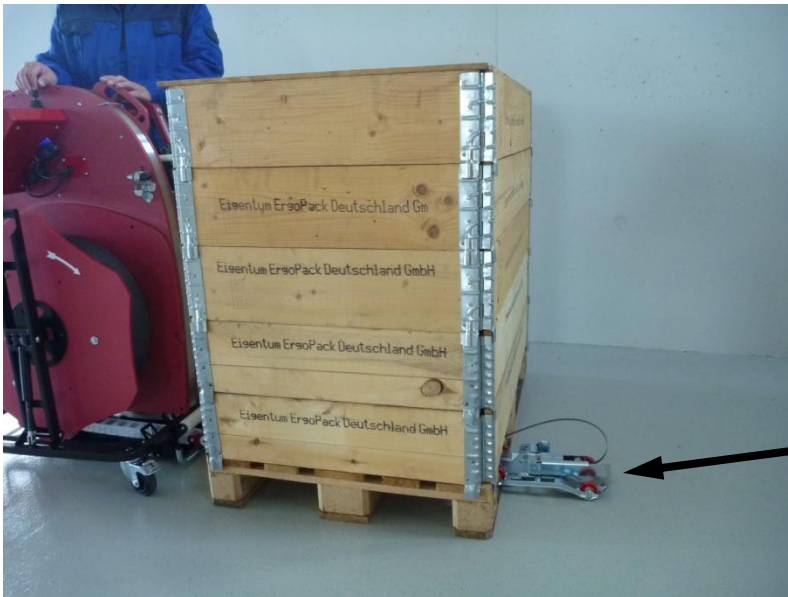
6.7 Strapping



1. Step

Place the ErgoPack at a distance of approx. 30 cm in front of the pallet to be strapped.

Fig. 49



2. Step

Move the ChainLance by pushing the joystick in the “move out“ direction.

The reversing sledge leads the strap through and underneath the pallet.

Fig. 50

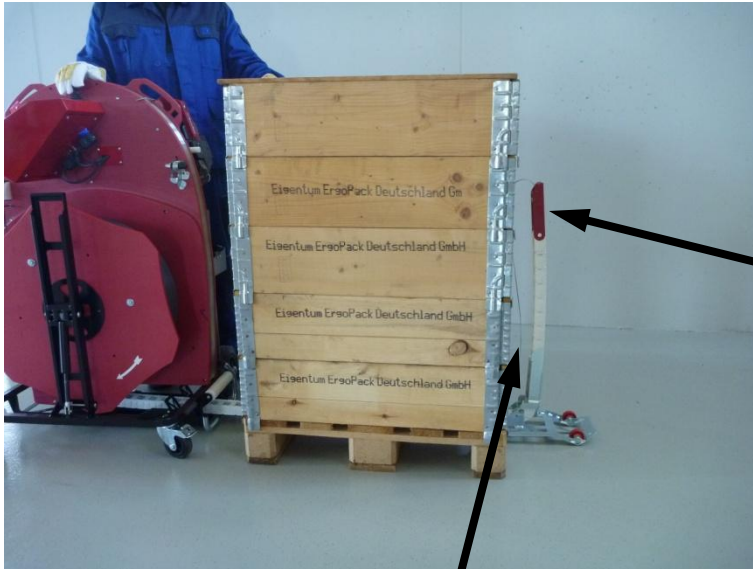


Fig. 51

...and back up again on the opposite side.

The device should be positioned in such a way that the distance between the rising ChainLance and the pallet is approx. 10-15 cm.



Important!

To guarantee that the ChainLance remains straight it is important that you push the joystick until the ChainLance appears on the other side.

Catch the ChainLance as shown at the front edge. Do not let the ChainLance drop onto the package!

As soon as you have caught the ChainLance, let the joystick move back to the neutral position so that the ChainLance stops moving out further.



Fig. 52

3. Step

Hold the strap as shown with the left hand at the front, directly at the chain lance...



Fig. 53

.... move the Chain Lance completely backwards by pushing the joystick in the “move in“ direction.



Fig. 54



Important!

Always keep the strap slightly under tension when moving the ChainLance backwards so that no loops can be formed or pushed into the device as this can lead to faults.

Step 4

The strap lift arm rises automatically after the reversing sledge has moved back into the device.

You now have to let the strap slide through your left hand; the strap lifter will not be able to rise otherwise.

The strap lift arm will give you the strap up to the working height so that you can take it into your hand without having to bend over.

Keep pushing the joystick until the strap lift arm is completely in the upper position.

The strap lift arm automatically moves down again after 2 seconds. (The strap lift arm will not go down automatically after 2 seconds if the upper position has not been reached successfully)

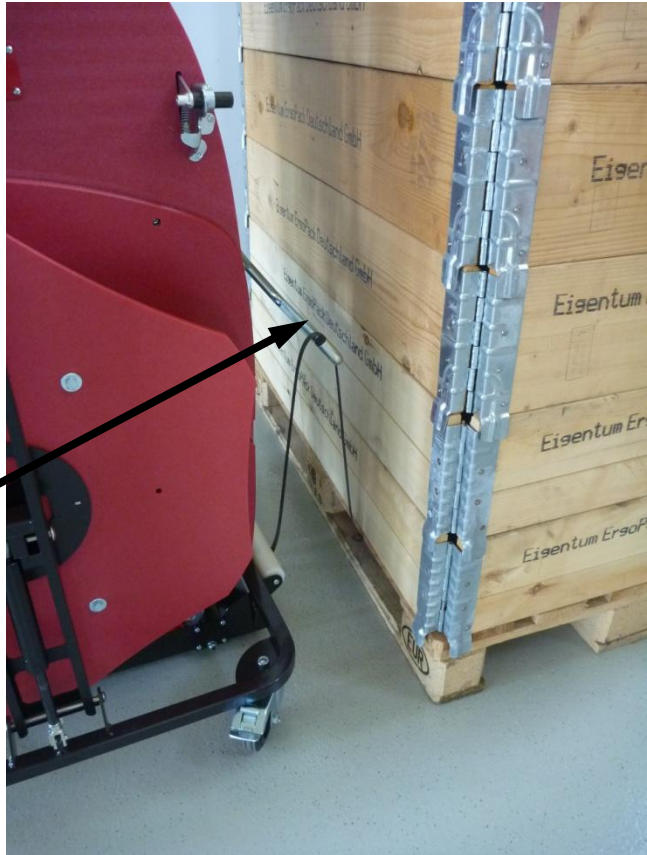


Fig. 55



Important!

You have to hold the strap loosely in your hand when the strap lifter rises.

The device automatically switches off to prevent damage, if you do not let go of the strap as the strap lifter rises. The strap lift arm can be raised up again by repeatedly pushing the joystick in the “move in direction“.

Strap can be easily drawn from the coil manually as required.

Do not pull at the strap lift arm directly!



Fig. 56



Fig. 57

...but about 10 cm below the strap lifter. Hold the strap with the whole hand and pull it out of the unit. You also have to let the end of the strap slide through your other hand at the same time!

6.8 Strapping and sealing with pallet heights over 70cm

1. Step

Overlap the straps so that the end of the strap lies underneath.



Fig. 58

2. Step

Then hold both straps as shown with the **right hand**.

The start of the strap should lie in your hand and not project beyond it!



Fig. 59

3. Step

Push the sealing tool towards the pallet with the left hand and tilt it forward at the same time so that the sealing head is parallel to the package.

Pull the rocker lever to open the clamp of the sealing head.

With your right hand you can now feed the strap from the top to the bottom through the slot in the sealing head.

Now let go of the rocker lever



Fig. 60



Fig. 61



Fig. 62

4. Step

The tensioning and sealing of the strap is different according to the set mode (manual or automatic mode)

See to this „Setting mode of operation“ page 22

4.1 Manual tensioning and sealing

The sealing unit switches off automatically as soon as the set tension force is reached. (see page 21, chapter 6.4) or if the tension button is released.

After this you press the round welding button (right button).

4.2 Automatically tensioning and welding

If the unit is on automatic mode, the welding process is activated automatically as soon as the preset tension force has been reached. Re-tensioning is not possible any more.

After the welding process is finished, a Countdown 3-2-1 with a audible signal at the end starts on the digital display. Only at the end of the countdown and the sound of the signal the welding is chilled enough so that the lever can be activated.



Fig. 63



Fig. 64

5. Step

As soon as the countdown is finished and the signal has sounded you have to pull the rocker lever towards the handle.



If the acoustic signal sounds and the straps are not welded that means that the tension button has not been pressed.

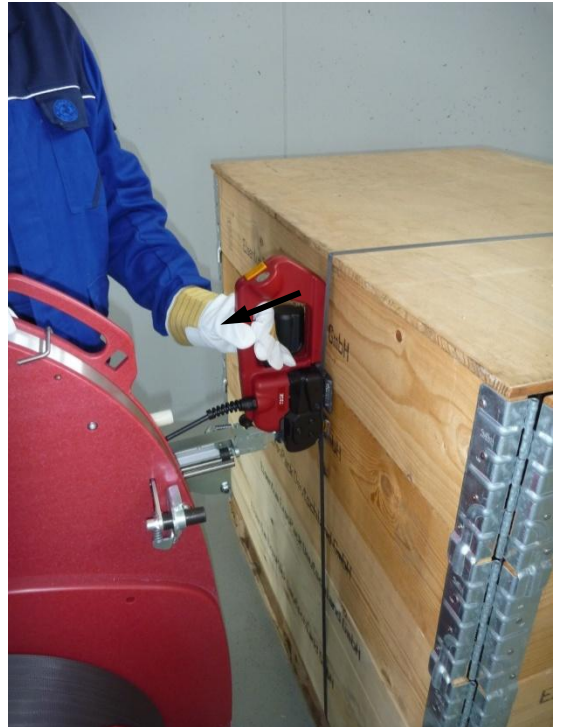


Fig. 65

6. Step

Keep the rocker lever lifted and move the sealing unit to the left and at the same time slightly down .



With a heavy contamination we recommend to clean the device regularly (daily), specially the tension wheel and the tooth plate which have to be checked for damage and kept clean. This is best achieved by blowing through with compressed air (wear safety goggles).

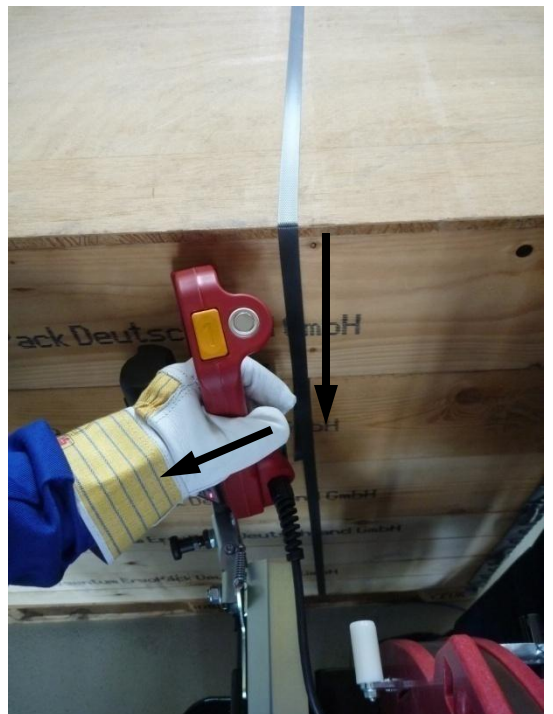


Fig. 66

6.9 Sealing efficiency

Visual guidelines of the weld duration: The welding time must be checked in accordance with point 6.10. and changed where necessary when the straps are badly welded.

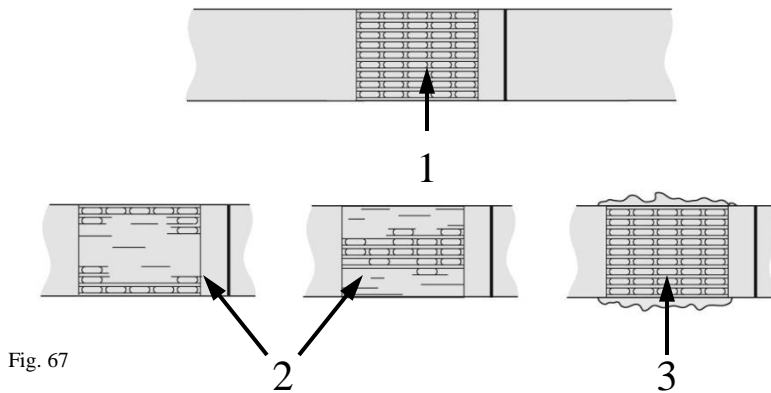


Fig. 67

1 Good welding: the whole sealed surface has been cleanly welded without any extra material being squeezed out to the side.

2 Short welding: the surface has been unevenly welded, the selected welding time is too short.

3 Over welding: superfluous material is squeezed out to the side, the selected welding time is too long.



Strapping which has faulty welding cannot secure the load and can lead to injuries.

Never transport or move the packaged goods with a friction weld sealing which has not been properly achieved.

6.10 Setting the welding time

- Press button „Function“ (1) shortly one time
- Press button „Welding time“ (2) several times until the flashing digital display (3) indicates the desired welding time (wait for 2 seconds until the value is saved).

1 = minimum welding time

7 = maximum welding time

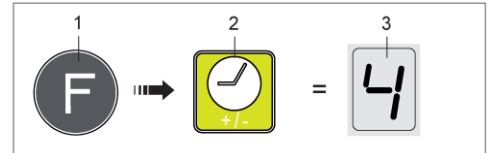


Fig. 68



If the necessary welding time is between 8 or 9 to produce a good weld in accordance with point 6.9, there maybe a fault with the tool or worn component in the welding mechanism. Usually both toothed plates of the welding mechanism have to be replaced.

6.11 Tensioning and welding for pallet heights below 70cm

1.Step

Pull out the black knob of the locking bolt, then remove the sealing head from the Tool-Lift and place it on the package to be strapped.



Fig. 69



Fig. 70

Step 1-7 proceeds exactly as described in point 6.7, except that the locking tool is now in the horizontal position.



Fig. 72



Fig. 74



Fig. 71



Fig. 73



Fig. 75

7. Servicing and repair

Your ErgoPack is made out of galvanized steel or KTL coated steel and ultra wear-resistant plastic materials and is basically maintenance free.

Clean the outside of the ErgoPack with a damp cloth if it is extremely dirty.



The main power cable must be disconnected from the battery and the main switch must be set to the “0” position for all servicing and repair work.

7.1 Cleaning the ChainLance

Clean the ChainLance with acetone or petroleum if it has become dirty with oil.



Do not place the ChainLance in the cleaner.

Then spray the ChainLance with commercially obtainable silicone spray.



Never use other lubricants such as fat or oil, etc

7.2 Replacing the ChainLance

1. Step

Disconnect the main power cable from the battery

2. Step

Pull out the reversing sledge by about 1m, pull out the ChainLance of the device as shown and roll it up.



Fig. 76

3. Step

Push the new ChainLance in again in the reverse direction.

4. Step

Reconnect the main cable to the battery again, set the main switch to position "1" and put the device into operation in accordance with point 6.2, step 2.



Fig. 77

7.3 Replacing individual chain links

The ChainLance can be opened as described in point 7.4 to replace broken chain links.

A defective chain link can also be removed without having to fit a new chain link. The control unit adjusts automatically to the current length of the ChainLance in accordance with point 6.2 step 2 after each strapping operation.



Important !

You have to make sure that no chain links are fitted the wrong way round if individual chain links have to be exchanged.

Each chain link has the lettering “ErgoPack“ on one side.

Make sure that this lettering appears on the same side of the chain links to be installed as the others.

The device can no longer be used if only one individual chain link has been fitted the wrong way round.

7.4 Replacing the reversing sledge

1. Step

Disconnect the main power supply cable from the battery.

2. Step

Pull the reversing sledge by about 1m out of the device, fold up the hinge at the reversing sledge and pull out approx 60cm of the chain upwards as illustrated



Fig. 78

3. Step

Use a screwdriver to push between the sides of the chain links and carefully turn the Screwdriver to twist the sides apart until both chain links can be completely separated from each other.



Fig. 79

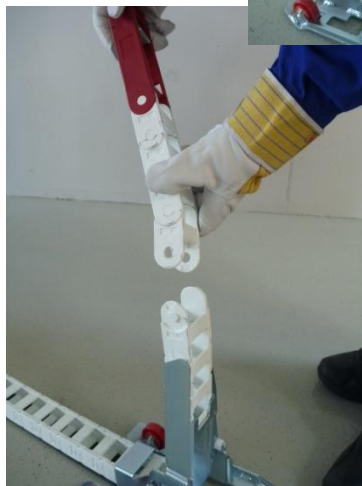


Fig. 80

4. Step

Push the ChainLance back into the device until it has completely moved out of the reversing sledge.



Fig. 81

5. Step

Place the reversing sledge on its top, as illustrated and use a screwdriver to unscrew both screws of the length stop strap.



Fig. 82

6. Step

Fitting is done in the reverse sequence for dismantling



Important !

Both screws of the length stop strap must be protected with screw retaining varnish!

7.5 Replacing the length stop strap

1. Step (dismantling)

Perform steps 1 to 5 listed in point 7.4 and proceed to step 2.

2. Step (dismantling)

Remove these 3 screws. (4mm allen wrench and 8mm open end or ring spanner on the other side...

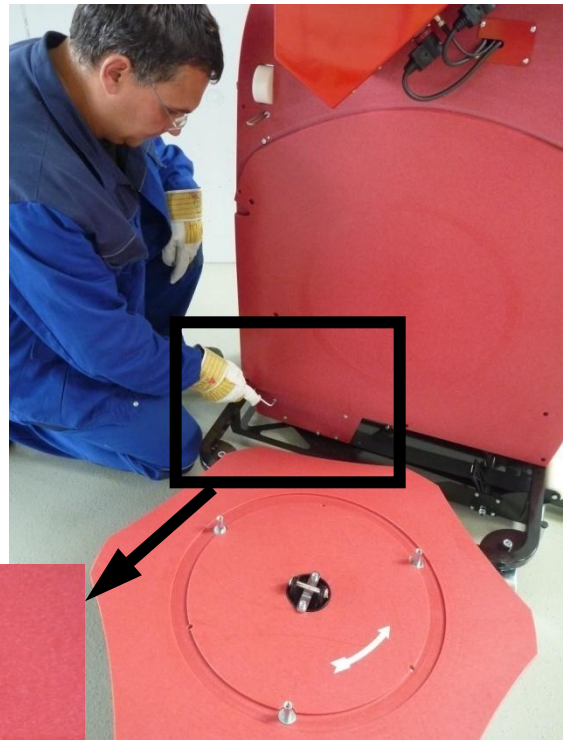


Fig. 83

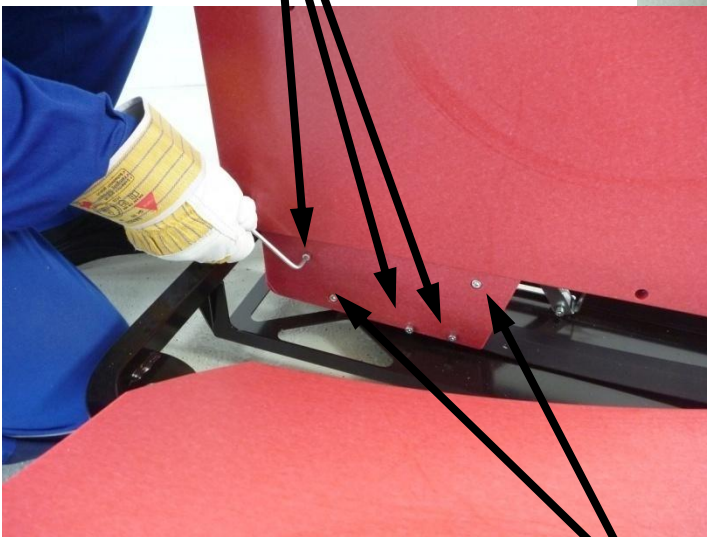


Fig. 84

...not the countersunk screws with a 5mm allen wrench and a 10mm open end or ring spanner on the other side!)

3. Step (dismantling)

Remove the stop clamp for setting the pallet width and pull out the length stop strap.

4. Step (installation)

Push the ChainLance all the way back into the device so that you can see the guide slot of the length stop strap.

5. Step (installation)

Push the new length stop strap into the small slot below the slot for the ChainLance.

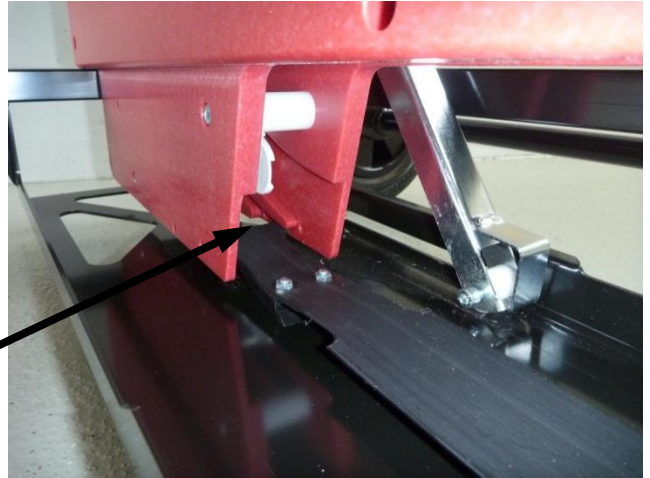


Fig. 85

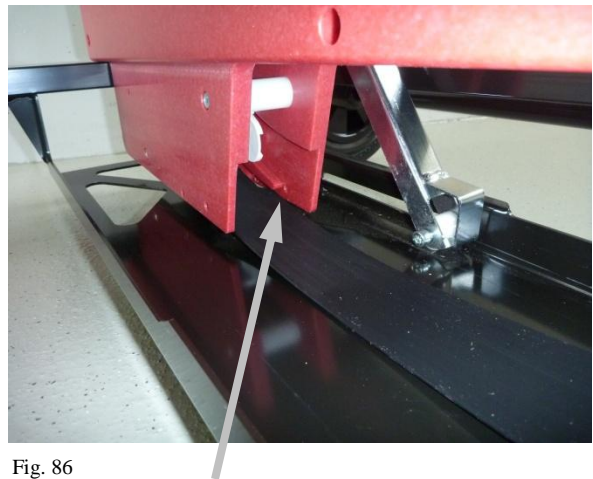


Fig. 86



Important !

Make sure that the length stop strap is inserted into the cut out in the lower slot and that it does not slide into the slot track for the ChainLance on the other side (Reverse this sequence for dismantling).

The screws may only be tightened until the stop nut engages. DO NOT OVER TIGHTEN!

If the screws have been tightened up too much, the storage plates will be pressed together, the ChainLance and the length stop strap could become jammed!

7.6 Changing the sealing head

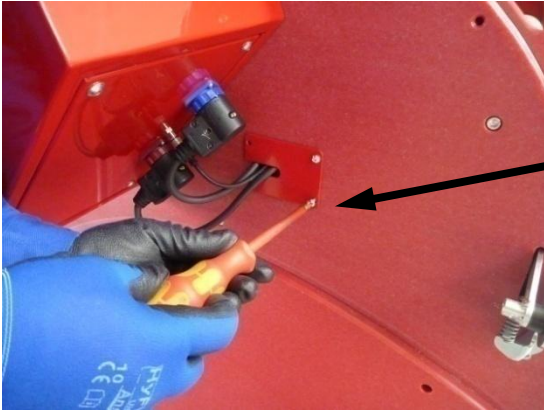


Fig. 87

1. Step

Remove each of the 4 screws from both of the red covers on both sides of the device.



Fig. 88

2. Safety

Turn the safety ring at the red plug to the left and take off the red plug.



Fig. 89

3. Step

Pull the cable with the plug through the opening in the storage plates.



Fig. 90

4. Step

Pull out the locking bolts for unlocking the sealing unit and remove the sealing unit.

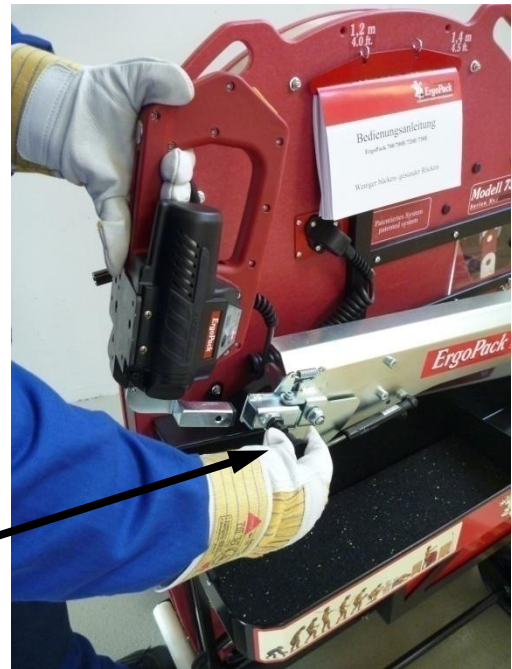


Fig. 91

7.7 Changing the control box with the drive unit

1. Step

Remove all three plugs on the lower side of the control unit.

All three plugs are secured with a safety ring which is unlocked by turning to the left.



Fig. 92

2. Step

Remove the 5 small caps in the storage plate.

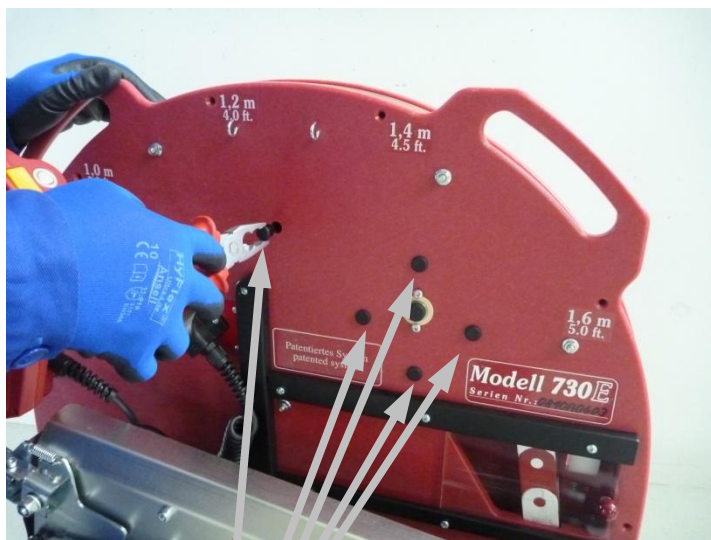


Fig. 93

3. Step

Use a 4mm allen wrench first of all to remove the four screws around the drive shaft

For that you have to move the ChainLance to turn the gear wheel until you can see and open the individual screws.



Fig. 94

4. Step

Remove the fifth screw now. Hold the control unit when you do this.



Fig. 95

5. Step

Pull off the control unit. Make sure that the small fitting spring on the drive shaft is not lost.

6. Step

The installation of the control unit is done in the reverse sequence.



Fig. 96

7.8 Cleaning/replacing the tensioning wheel at the sealing head

Removal

- Unplug the battery
- Remove four cylindric screws (4) and remove strap stop rear (5) and cover (3)
- Remove tension wheel (1) carefully. Remove ball bearing (2) from tension wheel.
- Clean the tension wheel with compressed air (wear goggles).
- If the tension wheel teeth are covered with heavy dirt, they must be carefully cleaned with the wire brush supplied.
- Check tension wheel for worn teeth. If a few teeth are broken, replace tension wheel (observe direction , see arrow).

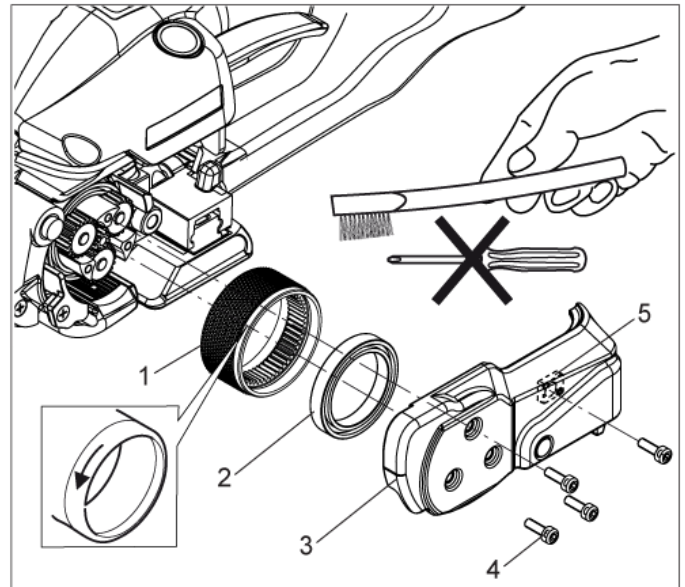


Fig. 97

The tension wheel must not be cleaned while it is rotating. There is a risk of breaking teeth!

Installation

- Install the parts in reverse order
- Grease interior gear teeth of tension wheel lightly with Klüber grease GBU Y 131 (Microlube)



Important !

The tension wheel is extremely sensitive when it comes into contact with hard, especially metallic objects. A hard object, such as a screwdriver or similar, must not be used under any circumstances whatsoever for cleaning. The tension wheel must not be cleaned in an installed state when it is rotating.

7.9 Cleaning/replacing the tooth plate at the sealing head

Removal

- Unplug battery
- remove pan head screw (1). Lift the rocker lever towards the handle and remove tooth plate (2)
- Clean tooth plate with compressed air (wear goggles)
- If the tooth plate teeth are covered with heavy dirt, they must be carefully cleaned with the wire brush supplied or a scribe.
- Check tooth plate for worn teeth, if necessary, replace tooth plate.

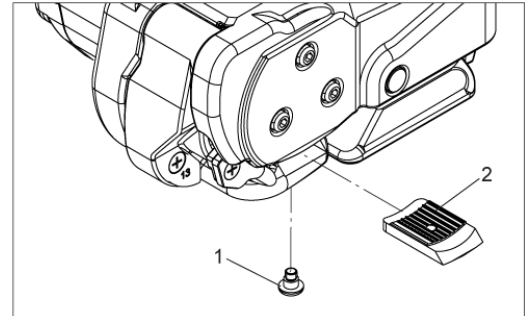


Fig. 98

Installation

- Install the parts in reverse order
- Secure pan head screw (1) with Loctite 222
- The tooth plate (2) must be seated so that it can move freely in the rocker

7.10 Replacing the cutter at the sealing head

Removal

- Unplug battery
- Remove four cylindric screws (2) and remove strap stop rear (3) and cover (1)
- Release pan head screw (4) and remove knife (6) with flanged bushing (5). Replace knife.

Installation

- Install the parts in reverse order
- Before installing knife, check that the compressing spring on top of knife is still mounted
- Secure pan head screw (4) with Loctite 222.

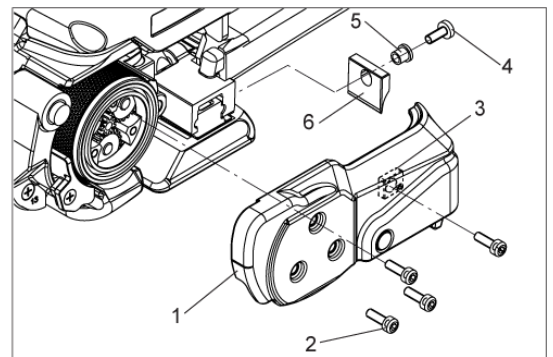


Fig. 99

8. Secure Movement and Parking

Moving the machine

The machine can be pushed in an upright position with the two hand grips at the head of the red frame plate. For pushing it you must release the brakes of the two guide rolls on the strap side.

Parking the machine

After having parked the machine you have to lock up the brakes of the two guide rolls on the strap side of the machine to avoid that the machine is rolling away accidental. Furthermore, you have to make sure that the ChainLance is completely drawn in and that the key of the main switch is removed and kept safely from the access of unauthorized persons.

9. Spare parts lists

Spare parts lists and explosion drawings as well as the wiring plan can be found on our website www.ergopack.de under “downloads“ as a PDF file.

Please make a note of the type and serial number of your device for the selection of your proper spare parts list

Please always state the name of the article when ordering spare parts. (not the position number of the part on the exploded drawing).