

Operating instructions

ErgoPack 700/700E/720E/730E

Less bending over- healthier back

Declaration of conformity

EU declaration of conformity for the purposes of the EU machine directive 98/37/EG, Annexe II A

Firma ErgoPack Deutschland GmbH Holzbrückleweg 9a 89420 Höchstädt

We hereby declare that the devices "ErgoPack 700, 700E, 720E, 730E", 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 (98/37/EG) EU Low voltage directive (2006/95/EG)	
	e v	
	EU Guideline on electromagnetic compatibility (2004/108/EG)	
Applied standards	EN12110-1 & 2, EN294, EN349	
	EN55014-1, EN55014-2: EN50366	

Höchstädt, 31 March 2008

Andreas Kimmerle CEO

,

Validity of the operating conditions

- The operation in these instructions is explained by using the ErgoPack 720E as an example.
- All the points in these instructions referring to the operation of the closing unit and also all points referring to the operation of the control unit with the drive unit, charger and rechargeable batteries are not applicable, as far as the "ErgoPack 700E" is concerned.
- All the points in these instructions referring to the operation of the closing unit are not applicable as far as the "ErgoPack 700E" is concerned. The ChaineLance for the 700E is operated mechanically via the crank handle where as this operation is powered via the joystick on the 720E models.

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 720E

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 2000N

ErgoPack 730E

Strapping unit with electrical drive, electronically controlled via a joystick with sealing unit for strap widths of 16-19mm and a maximum tension of 3300N

List of contents

1	Technical data	
	1.1 Strapping unit	5
	1.2 Sealing unit	6
	1.3 Charger unit	7
2	General	8
	2.1 Notes on environmental protection	9
3	Safety regulations	10
	3.1 Safety regulations for charger and battery	13
4	Description	14
	4.1 Construction	14
	4.2 Operating panel strapping unit	15
	4.3 Operating panel sealing unit	15
	4.4 Charger displays	16
5	Commissioning	17
	5.1 Battery charger	17
	5.2 Charging the battery	17
6	Operation	19
	6.1 Setting the strap width at the sealing unit	19
	6.2 Switching on the control unit	20
	6.3 Setting the strap tension range at the sealing unit	21
	6.4 Setting the tension at the sealing unit	21
	6.5 Threading in the strap	22
	6.6 Strapping	37
	6.7 Tensioning and sealing with pallets over 70cm in height	42
	6.8 Sealing control	46
	6.9 Setting the welding unit	47
	6.10 Tensioning and sealing with pallets under 70cm in	
	height	47
7	Servicing and repair	49
	7.1 Cleaning the ChainLance	49
	7.2 Replacing the ChainLance	50
	7.3 Replacing individual chain links	51
	7.4 Replacing the reversing sledge	52
	7.5 Replacing the length stop strap	54

8	Spare parts lists	62
	7.10 Replacing the cutter at the sealing unit	61
	7.9 Cleaning/replacing the gear wheel at the sealing unit	61
	7.8 Cleaning/replacing the tension wheel at the sealing unit	60
	7.7 Replacing the control with a drive unit	58
	7.6 Changing the sealing unit	56

1. Technical data

1.1 Strapping unit

Weight: ErgoPack 700 ErgoPack 700E (incl. battery) ErgoPack 720E/730E (incl. battery)	58.3 kg 76.7 kg 85.7 kg
Dimensions (all types)	Length 630 mm Width 770 mm Height 1200 mm
Maximum chain speeds	
Mode A, strapping	
Moving out horizontally: Moving out vertically: Moving in vertically: Moving in horizontally:	40 m/min 60 m/min 44 m/min 54 m/min
Mode B: setting up/inserting strap	
Moving out Moving in:	20 m/min 16 m/min
Max. chain thrust:	310 N

1.2 Sealing unit

Weight: (incl. spiral cable)	3.9 kg	
Dimensions	Length 33 Width 13 Height 13	5 mm
Tension		
720E	400-2000N	
730E	400-3300N	
Wrapping speed	260mm/S	
Sealing	Friction we	ld sealing
Measured A-assessed Noise emission level (EN ISO 11202) 720E 730E	L _{pa} L _{pa}	82 dB (A) 85 dB (A)
Hand arm vibrations		
(EN ISO 8662-1)	a _{h,w}	2.2 ms ⁻²
Plastic strap Strap quality	Polypropyle Polyester (F	

Strap width		
720E, adjustable to	12-13, 15-16m	m
730E, adjustable to	15-16mm (PET)
-	18-19mm (PET	, PP)
Strap thickness		
720E	Polypropylene	0.6-1,0mm
	Polyester	0.5-1,0mm
730E	Polypropylene Polyester	0.8-1,0mm 0.8-1,3mm
	Polyester	0.8-1,3mm

1.3 Charger

Charger	2 stage lead charger Prim.: 100-240 VAC 50/60Hz 1,2A Sec.: 24V DC/2A Total max. power 56W
Battery Weight:	24V lead battery 12.0 kg
Charging time:	approx. 6 hours
Temperature range:	5°C - 45°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 he place where the device is used. They should 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.



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!



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



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 used any water! Neither water nor steam can be used for cleaning the device.



Only use original ErgoPack spare parts! The use of other non-ErgoPack parts invalidates guarantees and liability.

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.

Warning:

If the ChainLance is extended too far it can fall back and hit the operator which may cause injuries if he/she is not careful.

You should always be careful, concentrated and should always catch the ChainLance when it falls across the pallet.

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).

Possible misuse

Strapping with a steel strap is not possible with this device.

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, only use original spare parts.
- Keep the connection plug to the battery away from non-related objects and dirt.
- Protect the charger from moisture; only operate it in dry rooms.
- 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





Control with drive unit Cutter Packaging strap brake





Sealing unit Sliding window with safety switch Tool-Lift Battery

4.2 Operating panel strapping unit



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

LED display

Permanent light green Permanent light yellow Permanent light red

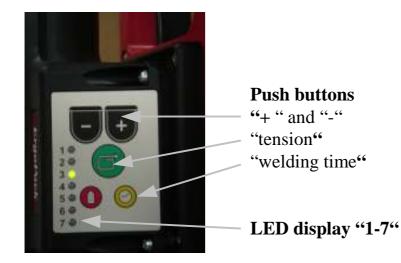
- = battery full
- Permanent light yellow = battery will soon be empty
 - battery empty, control unit switches off

Flashing light <u>all</u> LEDs = control unit in the learning mode Flashing light <u>green or yellow</u> LED = control unit in the set-

up mode

Quick flashing light red LED = sliding window open **Rotary switch strapping mode** "A"/ set-up mode "B" **Main switch** "power supply 1/0"

4.3 Operating panel sealing unit



4.4 Charger display





LED lights up green = charger ready for use <u>or</u> charging procedure finished / battery charged LED lights up orange = battery will be charged



Important !

The orange LED must always light up if the charger is plugged into the battery, even if the battery is already full. If the charger is plugged into a full battery, the LED changes from green to orange and jumps back to green again to show that the battery is full.

There is no charging procedure if the green LED does not change at least to orange for a few seconds!

The following reasons are possible:

- 1.) Charger faulty
- 2.) Battery fuse faulty
- **3.)** Charger cable interrupted (the cable has come out of the socket)
- 4.) The socket at the battery is faulty

5. Commissioning

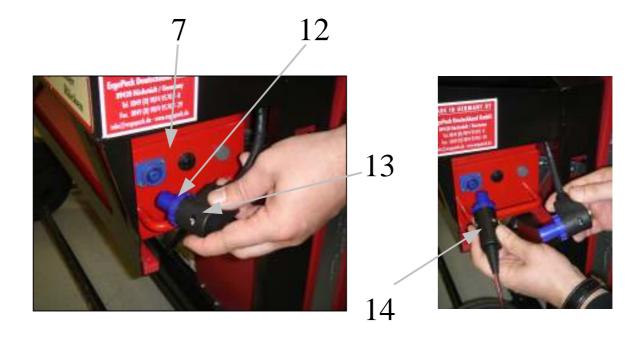
5.1 Battery charger

The mains voltage must comply with the details on the name 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 blue ring (12) of the plug (13) on the battery (7) to the left.
- 3.) Disconnect the plug (13) from the battery
- 4.) Insert the plug (14) of the charger into the battery (7).



The charging time is approximately 6 hours

The maximum charging current flows if the temperature of the battery is between 10 - 45°C. Avoid battery temperatures below 0°C when loading.

The intelligent charger loads the battery with the respective, optimum charging current. A maintenance charge flows when there is a full charge to prevent self-draining so that the battery has a longer life span.

Important!

You achieve the longest life span, if the battery is charged daily and is not being operated until the control unit is switched off (red LED lights up).



6. Operation

6.1 Setting the strap width at the sealing unit

The sealing unit can be used with two different strap widths: ErgoPack 720E: 12-13mm or 15-16mm

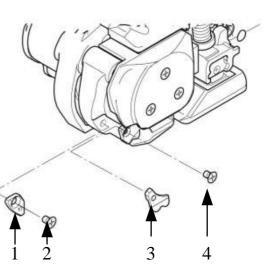
ErgoPack 730E: 15-16mm or 18-19mm

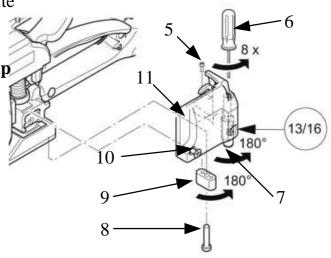
a) Conversion from narrow strap to wide strap

- Undo the countersunk screw (2) and remove strap stop 1.
- Pull the rocker lever against the handle, Undo the countersunk screw (4) and remove the strap guide (3).
- Remove the countersunk screw (10) and the cylindrical screw
- (8) and remove the cover (11).
- Undo the cylindrical screw 5 and turn the strap stop (9) 180° and assembly
- Use a screwdriver (6) to undo the threaded bolts by eight turns. Pull the strap guide downwards (7) and turn 180°.
- Use a screwdriver (6) to tighten up the threaded bolts and reinstall the cover (11). Secure the screws (8) and (10) with Loctite 222.

b) Conversion from wide to narrow strap

- Sequence as described under point a).
- Install the strap stop (1) secure
- countersunk screw (2) with Loctite 222)
- Install the strap guide (3) secure the (countersunk screw (4) with Loctite 222)
- Turn the strap stop (9) 180°.
- Turn the strap stop (7) 180°.

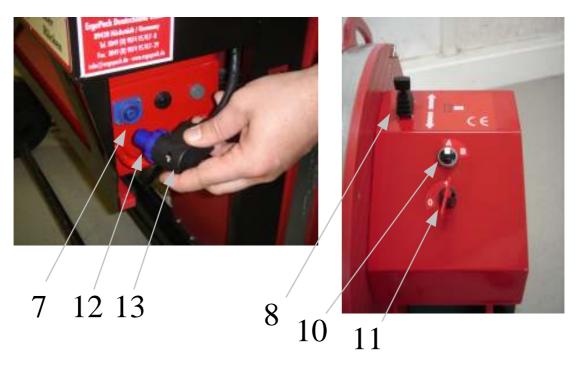




6.2 Switching on the control unit

<u>1. Step</u>

- 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 blue 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".



2. Step

All 3 LEDs (green, yellow, red) are now flashing. The control unit is in the learning mode.

Now move the joystick (8) completely in the "move out" or the "move in direction" and push it until then green LED lights up. The control unit is now ready for operational use. One of the seven green LEDs lights up on the display of the sealing unit after two seconds. The control unit is now ready for operational use.

6.3 Setting the strap tensioning range at the sealing unit

Two strap tensioning ranges can be set at the sealing unit

ErgoPack 720E	A = 400 - 2000 N (standard, PET straps)
	B = $400 - 1200$ N (recommended for polypropylene (PP) straps)

ErgoPack 730E A = 400-3300 N (standard, PET straps)B = 400-1400 N (recommended for polypropylene (PP) straps)

Call up strap tensioning range:

- Press the push button switch "-" and keep pressing, press the push button "tension force" for a few seconds as well.
- Tensioning range A is set if LED's 1-7 are flashing
- Tensioning range B is set if LED's 1-4 are flashing

Changing the strap tensioning range:

- Press the push button switch "-" and keep pressing, press the push button "tension force" for one second as well
- Press the push button switch "-" or "+" for a short while , the strap tensioning range changes (wait 2 sec. Until the value has been saved)

6.4 Setting the tension strength at the sealing unit

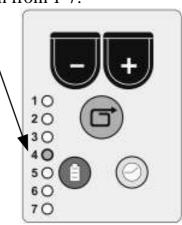
The green LED shows the presently set tension strength from 1-7.

1 = minimum tension strength

7 = maximum tension strength

(The minimum and maximum value depends on the tension range set under point 6.3)

- To set the tension strength, press the green push button "tension strength" for a short while until the green LED flashes.
- Press the push button "+" or "-" until the flashing LED display shows the desired tension strength. (wait 2 seconds until the value is saved)



6.5 Threading in the packaging strap

<u>1. Step</u>

Switch on the control unit key to number 2.

<u>2. Step</u>

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



<u>3. Step</u>

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.





<u>5. Step</u>

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





into the drilled hole with the cut out at the lower left

<u>7. Step</u>

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



<u>8. Step</u>

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





Important !

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

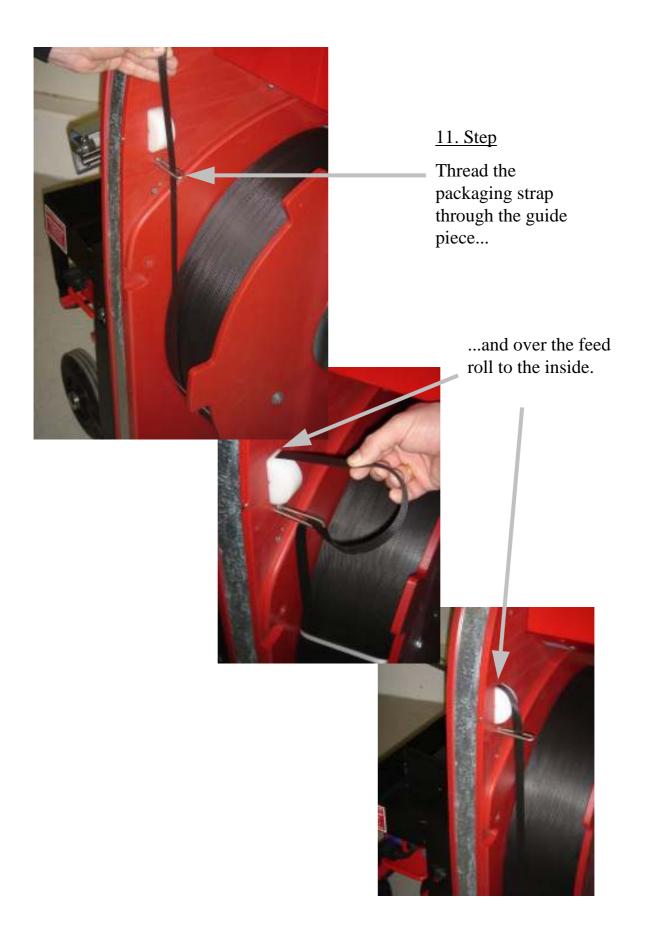
<u>9. Step</u>

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



<u>10. Step</u>

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





<u>12. Step</u>

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

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





Now close the sliding window (6) 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)





13. Step

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



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".



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



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

<u>14. Step</u>

Place your left foot behind the reversing slide in such a way that it cannot be pulled back into the device when turning back the ChainLance.



<u>15. Step</u>

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







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



<u>17. Step</u>

Turn the ChainLance further back now by pushing the joystick in the "move in" direction until approx. 30 cm sticks out from the reversing sledge.



<u>18. Step</u>

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



Push the strap from the back through the top of the ChainLance as shown. The packaging strap must be pushed under the eccentric latch.



<u>19. Step</u>

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





20. Step

Move the ChainLance completely backwards by pushing the joystick again in the "move back" 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.



<u>21. Step</u>

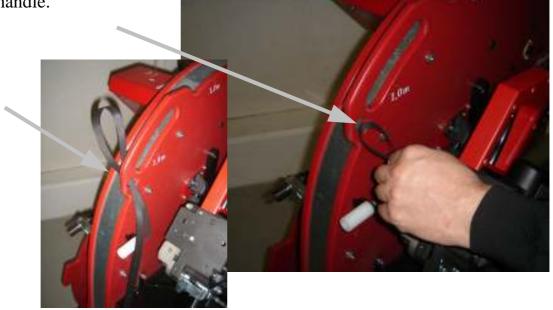
Set the operating mode switch (3) to position "A"

22. Step

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

3





23. Step

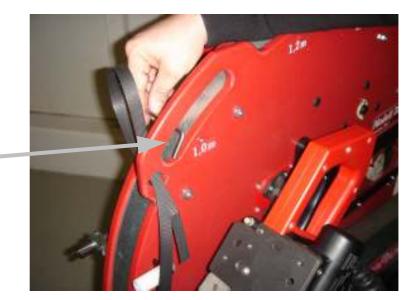
Remove the clamp for setting the package width from the position from the drilled hole on the lower left...



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

Example 1: Package width 0.80 m- insert adjusting piece at 1.0 m

Example 2: Package width 1.2 m- insert adjusting piece at 1.4 m



Your ErgoPack is now ready for strapping.

6.6 Strapping



1. Step

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



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.



...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 fall onto the package!

Let go of the joystick as soon as you have caught the ChainLance so that this moves back the the middle position and the ChainLance stops moving out further.



Hold the strap as shown with the left hand at the front, <u>directly at the chain</u> <u>lance</u>...



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





Important!

Proceed as follows when moving the ChainLance:

- 1.) First move the ChainLance back by approx. 5 cm.
- 2.) The unlock the eccentric latch with a short tug on the strap

3.) Then keep the strap slightly under tension and move the ChainLance completely backwards.

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.

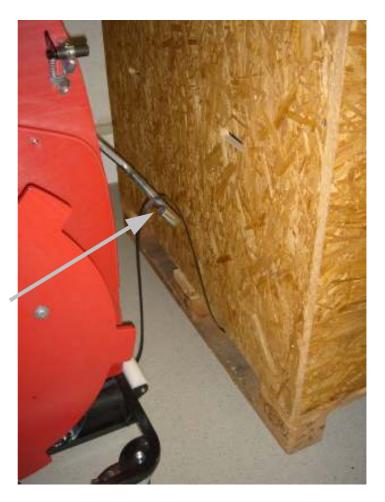
Step 4

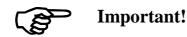
The strap lift arm rises automatically after the reversing sledge has moved back into the device.

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 <u>completely</u> <u>in the upper position</u>. 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)

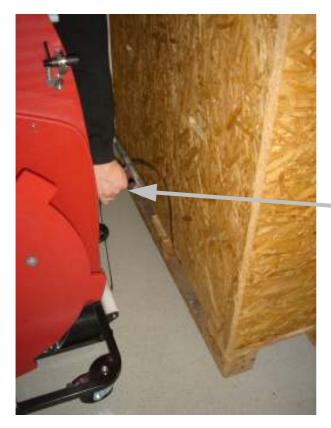




You have to hold the strap loosely in your hand when the strap lifter rises.

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 the strap lift arm directly!





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

6.7 Strapping and sealing with pallet heights <u>over 70cm</u>

1. Step

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



<u>2. Step</u>

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

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



<u>3. Step</u>

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

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

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

Now let go of the rocker lever



4. Step

Press the yellow tension button.

The sealing tool switches off automatically when the set tension force is been reached. (See here page 21, point 6.4)

Re-tensioning can be done at any time.



5. Step

Press the welding button <u>quickly</u> <u>and firmly until it is fully down</u>. The straps will be welded to each other and the lower strap will be cut off.

Ś

The green flashing light shows the cooling time of the locking. No button or lever has to be moved as long as the green LED flashes.



<u>6. Step</u>

The cooling time for sealing is finished as soon the green flashing LED switches over again to a steady green light and an acoustic signal is given.

Now pull the rocker lever against the handle. The welding button springs back automatically into the basic position.



There is an audiable/acoustic signal to indicate a completed cycle prior to tool release.

7. Step

Move the sealing unit to the left and push it downwards at the same time.

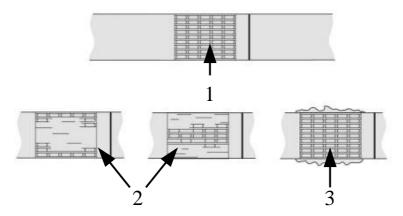


We recommend that the device is cleaned regularly (daily) when there is a heavy accumulation of dirt. Especially the tension wheel and the gear wheel which have to be checked for damage and kept clean. This is best achieved by blowing through with compressed air. (wear safety goggles).



6.8 Sealing efficiency

Visual guidelines of the weld duration: The welding time must be checked in accordance with point 6.9. and changed where necessary when the straps are badly welded.



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.



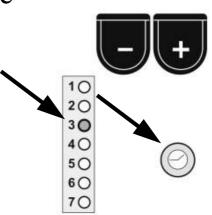
Strapping which has faulty welding cannot secure the load and can lead to injuries.

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

6.9 Setting the welding time

Press the pressure switch "welding time" (yellow clock symbol) for a short while until the red LED flashes.

The desired welding time can then be selected with "+" or "-". 1= minimum welding time 7= maximum welding time



If the necessary welding time is between 6 or 7 to produce a good weld in accordance with point 6.8, or you are unable to achieve a suitable weld using the adjustment methods described above 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.

6.10 Tensioning and wear for pallet heights **below** 70cm

1.Step

Pull out the black knob of the locking bolt, then remove the strapping tool from the Tool-Lift and place it on the packaged goods.





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











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.



<u>3. Step</u>

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.



7.3 Replacing individual chain links

The ChainLink 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 ChainLink in accordance with point 6.2 step 2 after each strapping operation.



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

<u>1. Step</u>

Disconnect the main power supply cable from the battery.

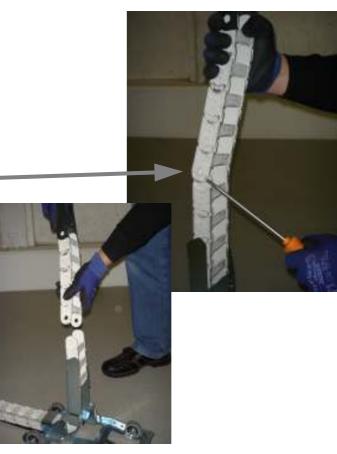
2. Step

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



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.



4. Step

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



<u>5. Step</u>

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



<u>6. Step</u>

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 key and 8mm open end or ring spanner on the other side...



...not the countersunk screws with a 5mm allen key 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.







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 unit



<u>1. Step</u>

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



2. Safety

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



<u>3. Step</u>

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



<u>4. Step</u>

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



7.7 Changing the control with the drive unit

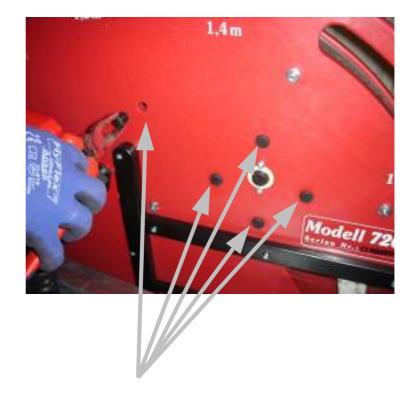
<u>1. Step</u>

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.



<u>2. Step</u>

Remove the 5 small caps in the storage plate.



3. Step

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

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



4. Step

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



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.



7.8 Cleaning/replacing the tensioning wheel at the sealing unit

Dismantling

- Unscrew the three countersunk screws (2) and remove the cover (3) together with the ball bearing.
- Lift up the rocker lever (4) and

carefully pull out the tensioning wheel (1)

- Clean the tensioning wheel with compressed air (wear safety goggles)
- -Use the wire brush which has been supplied to carefully clean the gears of the gear wheel if they are extremely dirty.
- Check the gear wheel for worn cogs . The gear wheel has to be replaced if several cogs are worn.

Installation

- -Installation takes place in the reverse sequence
- <u>MAKE SURE you observe the direction of rotation during</u> <u>installation!</u>
- Lightly grease the gears of the tension wheel with lubrication grease GBU Y
 - 131 Microlube).
- Lift up the rocker lever when installing the tension wheel.
- Secure the countersunk screws (2) with Loctite 222.

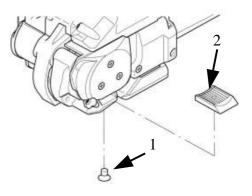


The tension wheel is extremely sensitive when it comes into contact with hard, especially metallic objects. A hard object, such as a screwdriver or similar must not be used under any circumstances whatsoever for cleaning. The tension wheel must not be cleaned in an installed state when it is rotating.

7.9 Cleaning/replacing the gear wheel at the sealing unit

Dismantling

- -Undo the countersunk screw (1) and remove the gear wheel.
- -Clean the gear wheel with compressed air (wear safety goggles)
- -When the gears are extremely dirty <u>carefully</u> clean them with the supplied wire brush or a marking tool.
- -Check the gear wheel for worn cogs replace if necessary.



Installation

- Installation takes place in the reverse sequence.
- Secure the countersunk screw (1) with Loctite 222.

7.10 Replacing the cutter at the sealing unit

Dismantling

- Unscrew the countersunk screw (2) and the cylindrical screw (1) and remove the cover (3).

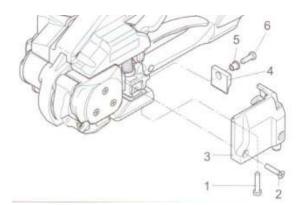
- Unscrew the cylindrical screw (6) remove and replace the cutter (4) with the collared socket (5).

Installation

- The installation takes place in the reverse sequence.
- Check whether the pressure spring has been placed

```
above the cutter before installing the cutter.
```

```
- Secure screws (1), (2) and (6) with Loctite 222.
```



8. Spare parts lists

Spare parts lists and explosion drawings can be found on our website **www.ergopack.de** under "downloads" as a PDF file.

Please make a note of the type <u>and</u> 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 item number of the part on the exploded drawing).