



Stellar/160

Stand-aid lifter

User instruction

Important information

This user instruction must be read before the mobile lifter is used.

This user instruction is intended for technicians, installers, therapists and other personnel, in connection with the use, servicing and maintenance of the Stand-aid lifter.



Scan the QR-code for further information

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Contents

1. Aim and use

| | | |
|-----|----------------------------|---|
| 1.1 | Purpose | 4 |
| 1.2 | Safety instructions | 4 |
| 1.3 | Daily check | 5 |
| 1.4 | Terminology | 5 |
| 1.5 | Unpacking | 6 |
| 1.6 | Assembling instruction | 6 |
| 1.7 | Mounting of lifting slings | 8 |

2. Functions

| | | |
|-----|---|----|
| 2.1 | Pictograms and functions – control box | 9 |
| 2.2 | Pictograms and functions – hand control | 10 |
| 2.3 | Safety functions | 11 |
| 2.4 | Charging | 12 |
| 2.5 | Transport | 12 |

3. Use

| | | |
|-----|----------------------------|----|
| 3.1 | Adjusting the knee support | 13 |
| 3.2 | Using the lifting slings | 13 |
| 3.3 | Using the control box | 15 |

4. Maintenance

| | | |
|-----|----------------------|----|
| 4.1 | Cleaning | 16 |
| 4.2 | Storage | 16 |
| 4.3 | Special environments | 16 |

5. Check and trouble shooting

| | | |
|-----|------------------|----|
| 5.1 | Annual check | 16 |
| 5.2 | Trouble shooting | 17 |

6. Technical data and dimensions

| | | |
|-----|--------------------------|----|
| 6.1 | Technical specifications | 18 |
| 6.2 | Dimensions | 19 |

7. Environment and quality

| | | |
|-----|---------------------------|----|
| 7.1 | Disposal | 20 |
| 7.2 | Battery | 20 |
| 7.3 | Quality | 20 |
| 7.4 | Symbols and abbreviations | 21 |

| | | |
|----------------|--|----|
| 8. Accessories | | 22 |
|----------------|--|----|

1. Aim and use

1.1 Purpose

Stellar/160 is a mobile stand-aid lifter designed to transfer persons in institutions such as nursing homes, hospitals, care centres and in home care. Stellar can be used for transfer between bed and chair/wheelchair, from chair to another chair and from wheelchair to a toilet/commode.

Stellar is approved to transfer with a maximum load on 160 kg.

Before using the Stellar please follow these instructions:

- Personnel have received qualified instruction by Ergolet in using the stand-aid lifter.
- The stand-aid lifter has been assembled correctly and according to this user instruction.
- NEVER use the stand-aid lifter for other purposes than described in this user instruction.
- Ensure the user cannot be squeezed or restricted in the lifting situation.
- The stand-aid lifter has been developed for use with Ergolet lifting slings and other sling products authorized by Ergolet. See Ergolet's user instruction for slings for specific information about which models that can be used.
- The stand-aid lifter is intended for indoor use under normal temperatures (+2 – +40 C°) and relative humidity (40-90%).

1.2 Safety instructions



Important – Warning!

This user instruction must be read thoroughly before the stand-aid lifter is taken into use.

- All parts must be mounted correctly according to this user instruction.
- There must be no indication of wear and tear on the stand-aid lifter or the lifting sling.
- NEVER begin lifting if there is suspicion of any defect (abnormal sound, loose brackets etc.). In such cases it is important to find the cause and to take the stand-aid lifter out of service and your dealer or Ergolet contacted.
- The lifting capacity must never be exceeded. When using the stand-aid lifter in connection with other components e.g. slings it is always the component with the LOWEST weight capacity that decides the maximum lifting capacity.
- Ensure that neither carers/helpers nor patients/users can be hurt during the lifting.
- Using the lifter may not run on uneven surfaces or threshold.
- Never lift higher than necessary in the actual lifting situation.
- See section 5.1 (annual check) for further information.

1.3 Daily check

The carer/helper is responsible for ensuring that a daily check is carried out BEFORE the stand-aid lifter and accessories are used, including the following:

- 1) Check that the stand-aid lifter is complete and no parts are missing.
- 2) Check that there are no signs of rust, wear and tear or other defects. If there is any sign of a defect the stand-aid lifter must be taken out of service.
- 3) If any abnormal sound is heard from the stand-aid lifter, the lifter must not be used before personnel authorised by Ergolet have carried out a safety check on the unit.
- 4) Check the lifting slings for any damages especially as regards to the lifting straps for tears in the material. The slings must not be used if defects are detected.
- 5) If in any doubt concerning the use of stand-aid lifter or lifting slings, contact Ergolet for advice and guidance.

1.4 Terminology

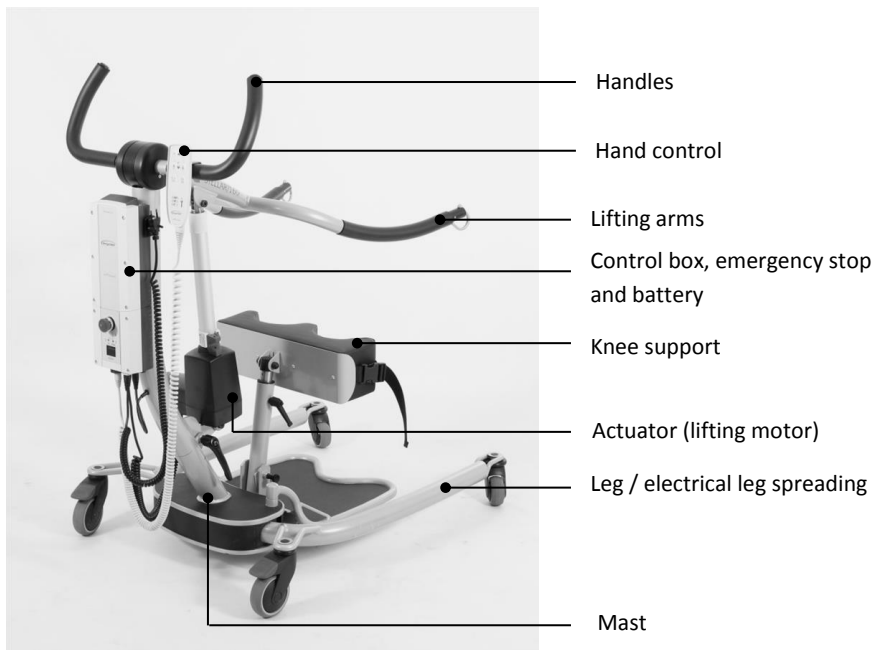


Fig. 1.4

1.5 Unpacking

Check that all the parts are present and undamaged. Any suspicion of damage or shortage should be reported to your dealer or Ergolet. We recommend that the box packaging is kept if the stand-aid lifter is to be used on other sites or for return shipment in case of repair or annual check.

Content of the box:

1. Leg with base for leg spreading
2. Mast and lifting arm
3. Actuator
4. Hand control with battery
5. Control box
6. Handles
7. Knee support
8. Tools (Allen key, spanner)
9. User instruction



1.6 Assembling instruction

Following step by step the assembly guidance:

1. Place the leg part on the floor and brake the wheels. Fig. 1.6A
2. Assembly the mast/lifting arm with the leg part and tighten the hand screw. (Fig 1.6B + 1.6C)



Fig. 1.6A



Fig. 1.6B



Fig. 1.6C

3. Mount the foot plate into the corresponding holes on the leg base.(Fig. 1.6D)

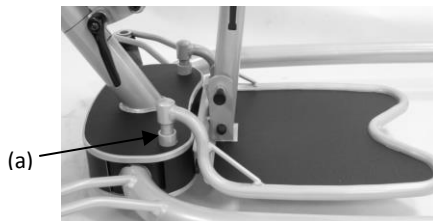


Fig. 1.6D

4. Fit the actuator piston rod to the lifting arm. Use the Allen key and the spanner to tighten the bolt/nut. (Fig. 1.6E). Put the cap on the nut.



Fig. 1.6E

5. Fit the handle on the mast with a screw and tighten with the Allen key. (Fig 1.6F)



Fig. 1.6F

6. The hand control, lifting arm and electrical leg spreader are connected to the control box. (Fig 1.6G)
(See section 2.1 – functions / connection).



Fig. 1.6G

1.7 Mounting of lifting slings

The stand-aid lifter is equipped with lifting arms where there in the end is a hook, which is designed for use with Ergolet lifting slings. Ergolet lifting slings have 4-6 lifting straps and are designed for lifting hooks larger than $\varnothing 8\text{mm}$.

If using non-authorized slings Ergolet will have no responsibility for faults and accidents.

Ergolet can assist in choosing slings and their correct use.

Fitting slings on the Ergolet lifting hook

Ergolet accepts no responsibility if slings are placed incorrectly, it is always the onus of the carer/helper to ensure that the sling is correct for the situation needs and is correctly fitted.

- (1) The sling strap is placed over the hook in its open position.

(Fig. 1.7A)

- (2) The strap is pulled downwards so that the hook closes.

(Fig. 1.7B)

The design of the lifting hook is such that the weight of the patient/user will help close the hook.

To release the strap after lifting simply pull upwards to open the hook.

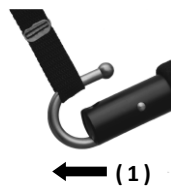


Fig. 1.7A

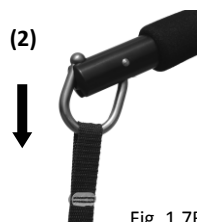
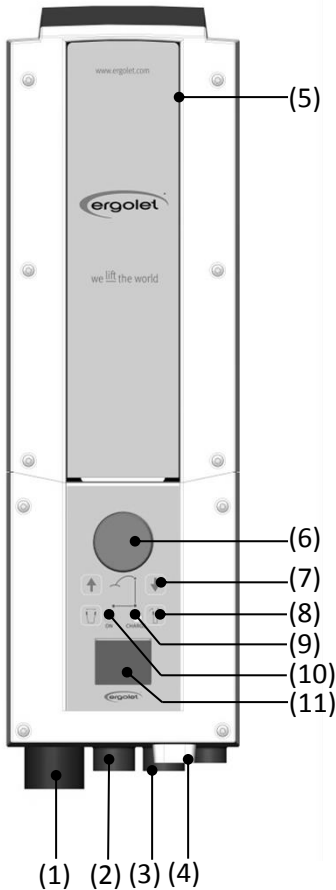


Fig. 1.7B

Note: Risk of finger entrapment - ensure that patients' fingers cannot get trapped.

2. Functions

2.1 Pictograms and functions – control-box



(1) Connecting plug - hand control

(2) Connecting plug - lifting actuator

(3) Connecting plug - electrical leg spreading

(4) Connecting plug - power supply

(5) Battery

(6) Emergency stop – See section 2.3

(7) Lift up/down – Press ↑ and the lifting arm is lifted up. Press ↓ and the lifting arm is lowered. Stop movement by releasing the button.

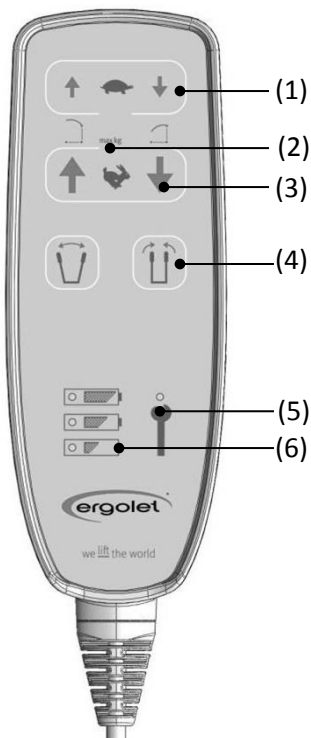
(8) Leg spreading in/out – Press → ← and the leg spreading move together. Press ↔ and the leg spreading will spread. Stop movement by releasing the button.

(9) Charge – indicates charging on the battery (see section 2.4).

(10) ON – indicates that main supply is on.

(11) Display – (See section 3.3)

2.2 Pictograms and functions – hand control



(1) Turtle – This function operates the lifting arm up/down in a low speed.

(2) Max Kg – indicates an overload (see section 3.3)

(3) Hare – This function operates the lifting arm up/down in a high speed.

(4) Leg spreading – Press → ← and the leg spreading move together. Press ↔ and the leg spreading will spread.

(5) Service – See section 3.3

(6) Battery – indicates the state of the battery (see section 2.4)

2.3 Safety functions

Emergency stop: This function is only to be used in an emergency e.g. if the stand-aid lifter does not react or does not stop after releasing the hand control operation. If the emergency button has been activated all functions immediately stops. The emergency stop can be released by turning the red button a $\frac{1}{4}$ turn to the right. (Fig 2.3A)



Fig. 2.3A

Emergency lowering: This function is only to be used in an emergency, where it is necessary to safely lower a patient. The emergency lowering is placed on the lifting actuator and is activated by pulling in the red handle and the lifting arm is lowered slowly. (Fig 2.3B)



Fig. 2.3B

For both functions; If the emergency button/lowering has been activated due to an emergency the stand-aid lifter must not be used again before a check has been made and any defect repaired.

In any doubt, please contact Ergolet.

2.4 Charging

The stand-aid lifter is equipped with a battery that requires regular charging. Ergolet recommends that the battery is charged when the stand-aid lifter is not in use or every night. The stand-aid lifter can be charged from the mains (wall outlet).

There are 3 batteries symbols on the hand control, which indicate the power level of the battery.

| | |
|---------------------|---|
| Low battery | The battery must IMMEDIATELY be put on charge. In this situation remain on charge for 24 hours. |
| Battery 25% | An audible battery alarm will alert when there is a 25% capacity remaining in the battery. |
| Battery 50% | Recommend charging to avoid low battery. |
| Full battery | The lifter is ready for use. |

Note: The stand-aid lifter cannot be overcharged.

Charge directly from the wall outlet

- 1) Remove the plug, placed on the side of the control box and plug into the mains.
- 2) The cable from the charger to the mains must be loose.
- 3) The “charge” diode lights yellow on the control box and the display shows a plug symbol during charging.



Fig. 2.4

2.5 Transport

The stand-aid lifter is most safely transported using the original packing.

Symbols are printed on the packaging to ensure the best information to carrier companies.

3. Use

Stellar/160 is ready for use if all assembly instructions have been followed and the emergency stop has been released.

3.1 Adjusting the knee support

Height adjustment:

The knee support is adjusted by loosening the hand screw (1).

- The knee support adjusted up or down. The upper edge of the knee support should be under the user's kneecap.
- Tighten the hand screw when settings fit.

Note: The knee support must never press on the knee-caps.

Angle adjustment:

The angle of the knee support can be adjusted in 5 positions.

- Pull the click lock (2) out and set the angle to the user when the user stands up.
- Release the click lock and ensure that the mechanism is locked.

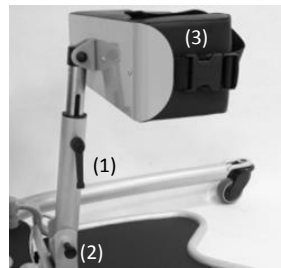


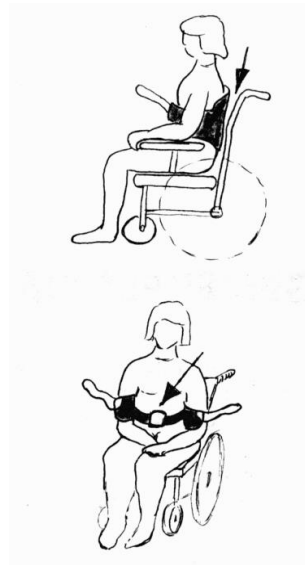
Fig. 3.1A

Note: As additional support, the calf belt (3) can be tightened around the knee support.

3.2 Using the slings

Lifting from sitting position:

- Place the sling behind the user by pushing the back support as low down on the users back as possible.
- Close the safety belt. Lock the clasps on the belt and pull the straps tight. Straps must be pulled tight.

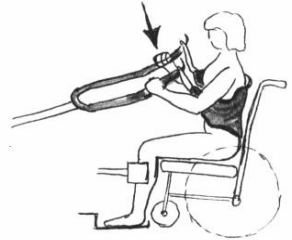


Note: Be aware that the clasps located under the user's ribs.

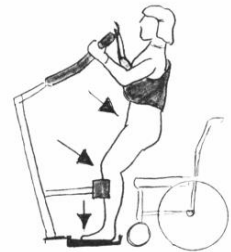
- Fit the side pieces under the user's arms and fasten the sling loops on the sling hooks on the lifting arm.
- The user may have their arms outside as illustrated or if the user is semi-paralyzed, it may be necessary to keep the arm inside the lifting arm/sling.



- Apply the brakes on the wheelchair. Move the stand-aid lifter to the user and place the user's feet on the foot plate.
- Start lifting until the sling sits tightly around the back. Re-tighten the sling belt around the waist once more if it is not tight enough.
- The user may hold the foam padded part of the handle and is asked to participate (co-operate) in the lifting action, as much as possible.
- Ensure that the patient feels no discomfort.



- Ask the user to press their feet down onto the plate and to stretch both knee-and hip-joints.
- The carer may help by placing a hand on to the knee and press the knee lightly downwards. Continue the lifting process according to the user's ability, until he stands as upright as possible. Never lift higher than is necessary.



From standing to sitting position:

- Move the lifter to the secured (braked) wheel chair. **Note:** Do not apply the brakes on the stand-aid lifter when lifting the user.
- The user is best lowered with his buttocks placed on the bottom half of the chair's back-rest. This will tilt the chair slightly backwards and the user will then slide down into the back of the chair when lowered. This movement demands the utmost care and attention from the carer.



3.3 Using the control box

Display information's:

To activate the display press up and down at the same time on the hand control



- Total cycles – lifting actuator
- Total work (Amp/sec)
- Number of overloads
- Day since last service/days between services



Service indicator:

When it is time for a service on the lifting actuator the diode lights on the hand control and the wrench symbol will be shown on the display. Service interval is 8000 cycles/12months by default, this interval can be adjusted.

Resetting of service is done by pressing up/down on the hand control at the same time for 5 sec. The counter will reset to zero and start counting a new service period.



Overload:

The safety working load (SWL) on 160kg has been exceeded!



Charge:

See description in section 2.4.



Battery:

See description in section 2.4

4. Maintenance

4.1 Cleaning

The stand-aid lifter may be cleaned using a slightly damp cloth with a standard household cleaning agent. Chemicals and other strong/abrasive agents must not be used.

The stand aid lifter cannot under any circumstance be autoclaved.

It is recommended that the stand-aid lifter be cleaned after each use to avoid infection. The stand-aid lifter can be disinfected with household alcohol.

4.2 Storage

The stand-aid lifter must be stored in a dry environment with relative humidity under 90%.

If the stand-aid lifter is not to be used over a longer period of time it is best to fully charge the unit and activate the emergency button to save battery before putting in storage.

4.3 Special environments

The stand-aid lifter is not intended for use in aggressive environments e.g. leisure centres or swimming pools. For these situations please contact your local dealer or Ergolet.

5. Check and trouble shooting

5.1 Annual check / inspection

The stand-aid lifter must always be maintained by qualified and authorised personnel who have been approved by Ergolet.

The manufacturer Ergolet stipulates that this lifter **MUST** be checked by a qualified and authorised person at least once a year. This annual check is also recommended in the Standard (EN/ISO 10535) for lifters.

It is the customer's / dealer's responsibility to ensure that the annual service inspection is carried out.

If it is necessary to replace any parts due to wear or damage these must be obtained/purchased from Ergolet or your local dealer.

5.2 Trouble shooting

Fault:

| | | |
|---|-----------------|---|
| The lifter does not react when the hand control buttons UP/DOWN are used. | Possible cause: | Emergency stop is activated. |
| | Solution: | Release the emergency stop (see section 2.3) |
| | Possible cause: | Defect hand control. |
| | Solution: | Try using another hand control. Alternative is to get a new hand control from the dealer. |
| | Possible cause: | Flat battery. |
| | Solution: | Charge battery (see section 2.4). |

Fault:

| | | |
|--|-----------------|---|
| The lifting arm can travel up or down not both. | Possible cause: | Fault in the control box. |
| | Solution: | Replace the control box. |
| The electrical leg spreading can only move in or out not both. | Possible cause: | Defect hand control. |
| | Solution: | Try using another hand control. Alternative is to get a new hand control from the dealer. |

Fault:

| | | |
|--|-----------------|--------------------------------|
| The lifting actuator is noisy or vibrates abnormally | Possible cause: | Lifting actuator is defective. |
| | Solution: | Replace the lifting actuator. |

Fault:

| | | |
|-----------------|-----------------|---|
| Does not charge | Possible cause: | Charger is not connected to the main supply. |
| | Solution: | Connect charger. |
| | Possible cause: | Defective control box. |
| | Solution: | Try another control box. Order a new control box from Ergolet or your dealer. |
| | Possible cause: | Defective battery. |
| | Solution: | Replace battery. |

6. Technical data and dimensions

6.1 Technical specifications

Lifting properties:

| | |
|------------------------------|------------------------------|
| Load capacity: | 160 kg |
| Number of lift movements: | 60-80 lift with 80kg / 0,5 m |
| Duty cycle: | 10%, max, 2 min/18 min |
| Manually emergency lowering: | Yes |
| Electronically lowering: | Yes |

Electrical details:

| | |
|-----------------------|----------------------------------|
| Power supply (Input): | 100-240 VAC 50/60 Hz, max 0,35 A |
| Output voltage: | 24V $\overline{=}$ |
| Control box (Output): | 250 VA |
| Battery capacity: | 2,9Ah |

IP-class: IPx4

Noise:

Lwa during lifting/lowering without load is 49dB(A)

Lwa during lifting/lowering at maximum load is 52dB(A)

Material:

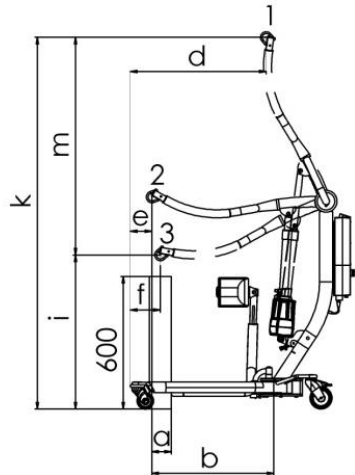
Powder coated steel

More test results may be available by contacting Ergolet.

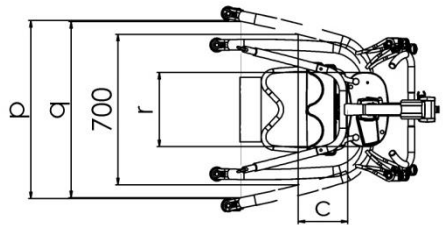
6.2 Dimensions

1. Highest point
2. Maximum reach point
3. Lowest position

| | |
|--|-------|
| a) Maxi. reach at 600 mm (reference height): | 89mm |
| b) Maxi. reach from base | 553mm |
| c) Reach from base with legs spreading to 700 mm | 232mm |
| d) Min. Dist. from wall to CSP* at maxi. height | 616mm |
| e) Min. Dist. from wall to CSP* at maxi. reach (legs spread) | 98mm |
| f) Min. Dist. from wall to CSP* at min. height (legs spread) | 136mm |



| | |
|-----------------------------------|--------|
| i) Min. Height of CSP* | 697mm |
| k) Maxi. height of CSP*: | 1683mm |
| m) Hoisting range | 986mm |
| p) Maxi. internal width | 828mm |
| q) Internal width at maxi. reach: | 893mm |
| r) Min. internal width | 535mm |



* CSP = Central suspensions point

Turning radius: 1060mm

Weight:

| | |
|---------------------|-----------------------|
| Weight in total: | 54 kg |
| Mast incl. battery: | 21 kg (battery 2,8kg) |
| Base/legs: | 23 kg |
| Foot plate: | 10 kg |

7. Environment and quality

Stellar/160 has an expected life time of minimum 10 years under the assumption that all recommended service checks have been carried out and that the normal maintenance and care instructions have been followed.

7.1 Disposal

Disposal of this stand-aid lifter can be made through Ergolet. After useful lifetime Ergolet will receive the stand-aid lifter back and dispose of the individual parts in an environmentally friendly way either through reuse or recycling.

Parts that contain aluminum, lead acid batteries, electrical component, ABS plastic, steel may damage the environment if not handled in an environmentally responsible way.

7.2 Battery

The stand-aid lifter is equipped with one battery which may be returned either to a local recycling station or to Ergolet at the end of their lifetime.

7.3 Quality

Ergolet is certified according to the quality standard ISO 9001 and ISO 13485.

These certifications mean that the products and the company comply with international standards for quality management and standards for traceability of medical products.

Stellar/160 is classified as a Medical device class 1 product.

7.4 Symbols and abbreviations



Direct current



Double insulated



The patient is not separated from the ground and the chassis



The product should be reused where possible



Refer to user instruction

SWL

Safe working load (user + sling)

8. Accessories

Stellar/160

| | |
|--------------|-------------|
| 011-01310EU | |
| 011-01310UK | Stellar/160 |
| 011-01310US | |
| 011-01310AUS | |
| 011-01615CN | |

Hand control

| | |
|-----------|-----------------------|
| 018-08021 | Standard hand control |
|-----------|-----------------------|

Foot plate

| | |
|-----------|----------------------|
| 722-11100 | Foot platform, 50mm |
| 722-11099 | Foot platform, 100mm |
| 017-00010 | Angle handle |

Battery

| | |
|-----------|----------------|
| 018-08014 | Battery module |
|-----------|----------------|

A complete list of spare parts is available. Please contact Ergolet for details.



Elite Healthcare Ltd
F1 Swords Enterprise Park Feltrim Road
Swords
County Dublin
Tel: 01 8903932
Fax: 01 8903937
e-mail: info@elitehealthcare.ie
www.elitehealthcare.ie

93/42/EØF CLASS I

EN ISO 10535



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