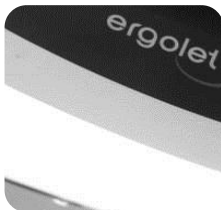


Stella

- technical User Guide



This manual is intended for technicians, installers, therapists and other personnel, in connection with the use, servicing and maintenance of the Ergolet Stella lifter.

Date 16.8.2012 version 10



Important - warning
This manual must be read before Stella is used

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93/42/EØF CLASS I
 EN ISO 10535
 EN 60601-1-2

1.1 PURPOSE

Stella is a mobile stand-aid lifter designed to transfer clients in institutions such as nursing homes, hospitals, handicap centres and in home care. Transfer situations include short transfers from a bed to a chair/wheelchair, from a wheelchair to a toilet/commode, from a wheelchair to another chair and for clients up to 150kg. Never use the Stella lifter for other purposes than originally intended.

Before using the Stella please read and abide by the following:

- Personnel have received qualified instruction in using the Stella lifter.
- The lifter has been assembled correctly and according to these instructions.
- Use of Stella does not endanger any person by trapping/squeezing during the lifting situation.
- The Stella lifter has been developed for use with Ergolet lifting slings and other sling products authorised by Ergolet. See Ergolet's sling leaflet for specific information about authorised models.

1.2 SAFETY INSTRUCTIONS

This User Guide must be read thoroughly before Stella is taken into service.

- All parts must be mounted correctly according to this guide.
- There must be no indication of wear on the Stella stand-aid lifter or lifting sling.
- NEVER begin lifting if there is a suspicion of any defect (abnormal sound, loose brackets etc.) In such cases the lift must be taken out of service immediately and your dealer or Ergolet contacted.
- Lifting capacity of Stella is 150kg, and must never be exceeded. When using Stella in connection with other components eg. slings it is always the component with the LOWEST capacity that decides the maximum lifting capacity.
- Ensure that neither carers/helpers nor clients/users can be hurt during the lifting.
- Never lift higher than necessary in the actual lifting situation.
- See section 5.2 (annual check) for further information.

1.3 DAILY CHECK

The carer/helper is responsible in ensuring that a visual check is carried out BEFORE Stella and accessories are used, including the following:

- 1) Lifting slings are checked for damage especially as regards lifting straps and tears in the material. The slings must not be used if defects are detected.
- 2) Check that no parts of the lifter are missing.
- 3) If any abnormal sound is heard from Faun the lifter must not be used before personnel authorised by Ergolet have carried out a safety check on the unit.
- 4) Check for any signs of rust, surface damage or breakage to the lifter.
- 5) If in any doubt concerning the Luna or lifting slings contact Ergolet for advice and guidance.

1.4 TERMINOLOGY

Stella

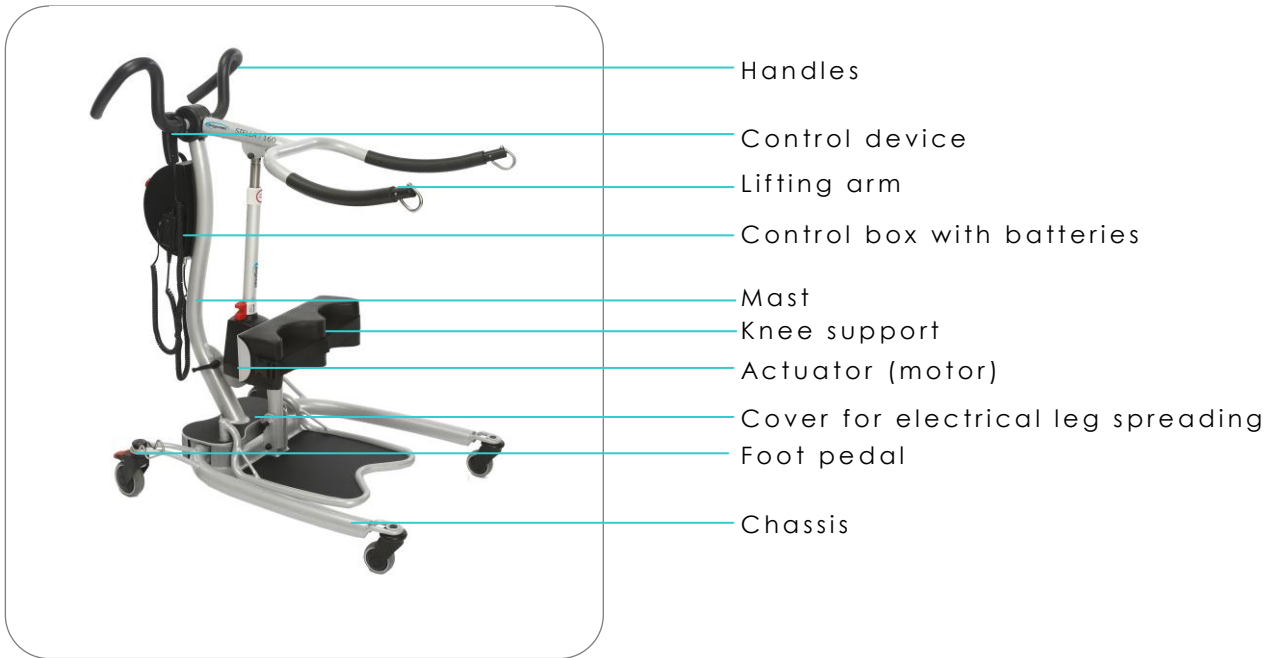


Fig. 1.4A

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 be kept if Stella is to be used on other sites or for return shipment in case of repair or annual check.

Ensure that no accessories remain in the box (see illustration).

Contents of the box

- a. Chassis
- b. Mast and arm
- c. Foot plate
- d. Actuator
- e. Control box
- f. Control device
- g. User Guide
- h. Charger
- i. Check list
- j. Pushing handles
- k. Lifting arm with handles



Fig. 1.5A

1.6 ASSEMBLING STELLA

Follow the step by step instructions below to ensure trouble free assembly modes:

- ① Place the chassis on the floor and brake the wheels. Fig 1.6A
- ② Place the mast section above the corresponding bracket on the chassis. Fig 1.6B
- ③ Connect the motor cables using the push connectors. Ensure that red is connected to red and blue is connected to blue. Fig 1.6C
- ④ Push the cables up into the mast section before allowing the mast to slide into the chassis bracket.



Fig. 1.6A

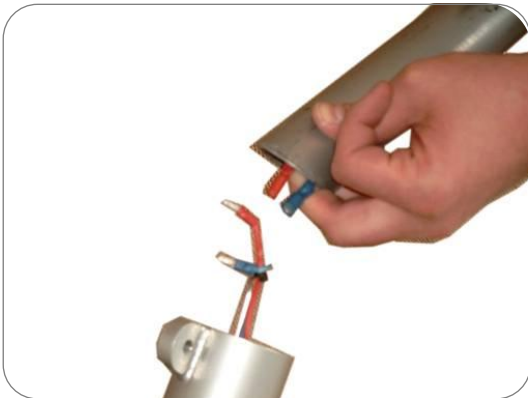


Fig. 1.6B



Fig. 1.6C

- ⑤ Position the hand held tightening bolt (a) in the corresponding hole and tighten. Note that hand held bolt cannot be placed in the hole unless the mast is fully and correctly placed onto the chassis. Fig. 1.6D



Fig 1.6D

a

⑥ Fit the foot plate into the corresponding holes on the chassis. Ensure that the foot plate is secure and that the holding pins (a) are fully in place. Fig. 1.6E



Fig.1.6E

⑦ Adjust the knee support

1. Pull the klik lock (a), adjust to the required angle, release the klik lock to lock.
2. To adjust the height release the hand screw (b) adjust the height and retighten the screw.



Fig. 1.6F

⑧ Plug the control device into the corresponding socket on the electrical control box. Hand tighten the nut on the plug.



Fig. 1.6 G

⑨ To mount the pushing arms use the Allen key included in the box see Fig. 1.6I
On the right side red against red and on the left side green against green. See Fig. 1.6H

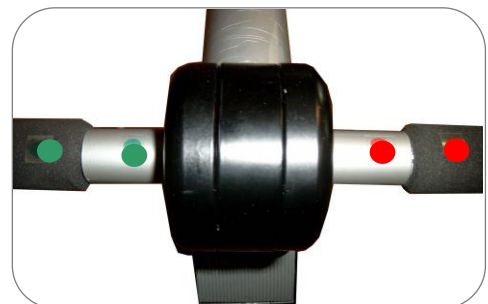


Fig. 1.6H



Fig. 1.6I

⑩ To mount the lifting arms use the Allen key included in the box see Fig. 1.6K
On the right side yellow against yellow and on the left side Blue against blue. See Fig. 1.6J

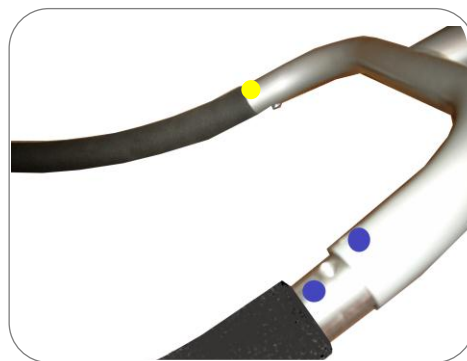


Fig. 1.6J

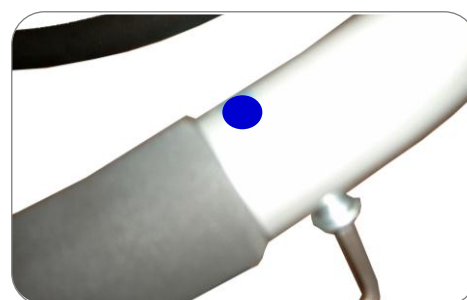


Fig. 1.6K

1.7 LIFTING SLINGS

Stella is equipped with a spreader bar (pat. pending) designed for use with Ergolet lifting slings. Ergolet lifting slings have 2-4 lifting straps for use with the stand-aid and are designed for lifting hooks larger than $\varnothing 8\text{mm}$. Use of non authorised slings will rend Ergolet's responsibility for faults and accidents null and void.

Ergolet can assist in choosing slings and also offer training sessions in transfer techniques and the correct use of slings.

Hangng slings on the Ergolet spreader bar

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 mounted.

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 client/user will help close the hook.

To release the strap after lifting simply pull upwards to open the hook.
Note: Risk of entrapment – ensure that clients fingers cannot get trapped

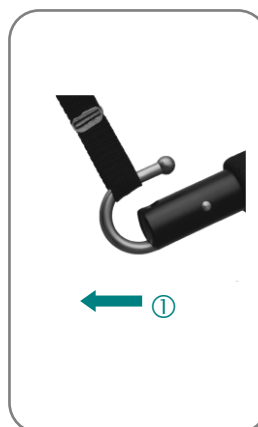


Fig. 1.7A



Fig. 1.7B

2.1 PICTOGRAMS AND FUNCTIONS – CONTROL BOX

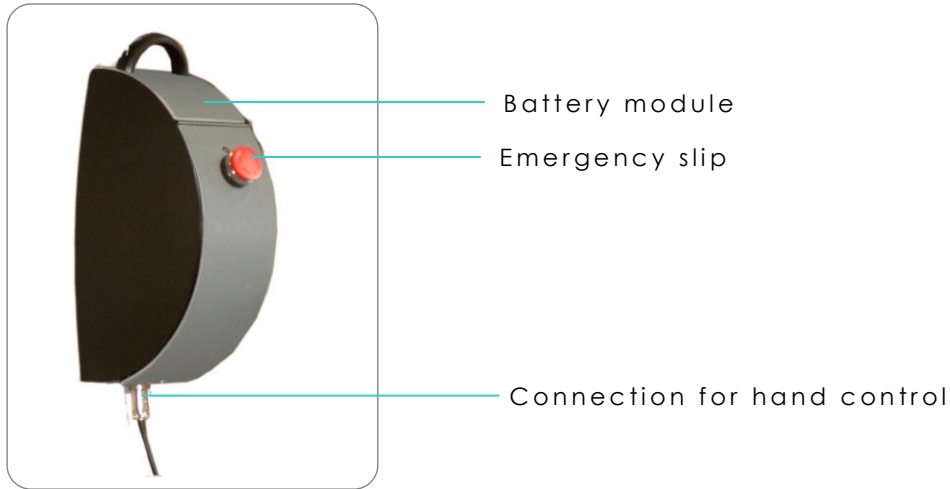


Fig. 2.1A

2.2 PICTOGRAMS AND FUNCTIONS – HAND CONTROL



Fig. 2.1B

1. Hand control basic Fig. 2.1B

The hand control has functions for up/down and leg spreading:
In addition there is electronic emergency lowering.

2.3 OPERATION AND TECHNICAL

Place the hand control in the socket (see section 1.6) on Stella which is now ready for use.

Note: Ensure that the emergency stop button is in the "out" position.

The Stella lifting arm will move faster when not loaded in order to reach the client without too much waiting time. When the client is lifted the speed will automatically reduce to increase comfort and security for the client.

Stella is intended for indoor use under normal temperatures (+2 to +40degrees C) and relative humidity (40 -90%). The unit should be protected against sudden changes in temperature/humidity since these can damage the lift functions.

2.4 SAFETY FUNCTIONS

Emergency stop: This function is only to be used in an emergency e.g. if the lifter does not react or does not stop after releasing the control operation. This button stops all functions immediately.

If this function has been activated due to an emergency Stella must not be used again before a check has been made and any defect repaired. If in any doubt contact an authorised dealer or Ergolet

Emergency lowering handle: This is also only to be used in an emergency where it is necessary to safely lower a client. If this function has been activated due to an emergency Stella must not be used again before a check has been made and any defect repaired. If in any doubt contact an authorised dealer or Ergolet. Pulling this handle in an upward direction will cause the lifting arm to slowly lower itself if a client is in the process of being raised. It is a hold to run device.



Fig.2.4A



Fig.2.4B

2.5 CHARGING

Stella has the following two possibilities:

1) Wall/table charger

Move Stella to the charging station, place the hand control onto the charger after which charging starts automatically.

2) This charging method is an option and must be ordered in advance. Remove the battery module from the electrical box, place this in the external charging station after which charging will start automatically. The extra battery is used on Stella whilst the charging is underway.

Stella is fitted with batteries that require regular charging. Ergolet recommends that Stella is charged every night or when the unit is not in use. Stella is fitted with a diode (marked batt.) which gives the following information concerning battery condition during use:

Stella cannot be overcharged

- Indicates that there is a power connection at the electrical box contact.
- When the batteries are fully charged the diode shines green.
- When the batteries are approx. 50% the diode shines yellow – at this point it is recommended that Stella is put on charge.
- If the batteries reach a critical point the diode will shine red and at the same time an acoustic ("beep, beep" signal) will be heard. Luna must IMMEDIATELY be put on charge in this situation.

2.6 TRANSPORT

Ergolet Stella stand-aid lifter is most safely transported using the original packaging.

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

3.1 USING STELLA

Stella is ready for use if all the assembly instructions have been followed.

3.2 TIPS FOR USING SLINGS



Lifting from sitting position:

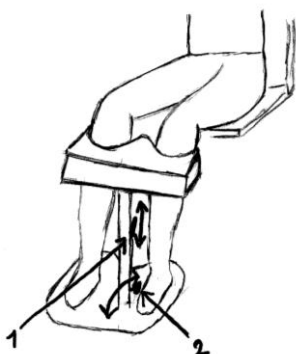
Place the sling behind the patient by pushing the back support all the way down to the small of the the back.



Close the safety belt – over the waist, approx. at the navel and tighten it. The safety belt should sit tightly above the waist.



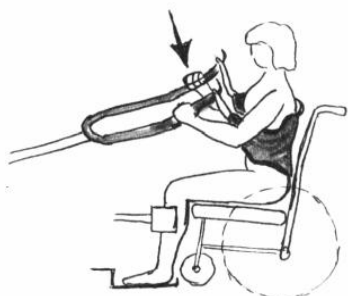
Brake the wheel chair and move the hoist/lift to the user. Lift the user's feet onto the foot plate, bring the hoist/lift forwards until the knee support is very close to the users' knees.



The height of the knee support can be adjusted with the hand screw (1). The upper edge of the knee support should be under the knee-cap. The knee support must never press on the knee-caps. The knee support's angle can be adjusted in 3 positions using the click lock (2). The angel of the knee support is individual – depending on how much the user can stretch his knees while standing. If required the calf belt (3) can be used.



Fasten the chest sling onto the hooks on the Standard-aid arm.
The user may keep his arms inside or outside the sling.
If the user is semi-paralysed, it may be necessary to keep the paralysed arm inside the sling.



Start lifting until the sling sits tightly around the back.
Then tighten the sling belt tighter around the waist.
Ensure that the client feels no discomfort.
The user may hold the foam padded part of the arm and is asked to take part (help) the lifting action. The user should then try to hold himself as upright as possible and look forwards.



Ask the user to press 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 users' ability, until he stands as upright as possible.



From standing to sitting position:

Take Stella to the secured (braked) wheel chair, so the hollow of the knee rests against the front edge of the seat-cushion.

Do not brake the stand-aid:



The user is lowered so that his bottom is placed on the bottom half of the chair's back-rest. That way the chair may tilt backwards and the user glides into the back of the chair.
This movement demands utmost care and attention from the carer.

4.1 CLEANING

The actuator (motor), electrical box and battery module may be cleaned using a slightly damp cloth with a small quantity standard household cleaning agent. Chemicals and other strong/abrasive agents must not be used.

Stella cannot under any circumstance be autoclaved.

4.2 STORAGE

Stella must be stored in a dry environment with relative humidity between 40 -90%

Stella will automatically enter the standby mode after short time when not in use.

If Stella is not to be used over a longer period of time it is best to fully charge the unit before putting in storage.

4.3 SPECIAL ENVIRONMENTS

Stella is not intended for use in aggressive environments eg. leisure center swimming pools etc. For these situations please contact your local dealer.

5.1 ANNUAL CHECK

Stella must always be maintained by qualified and authorised personnel who have been approved by Ergolet for replacing batteries, chargers, checking lifting straps and other components

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 relevant European Standard (EN ISO 10535) for patient lifters/hoists.

It is the onus of the buyer to ensure that this annual check is carried out and that the check is written in the logbook (section 5.2 Logbook). The logbook is held by the buyer

Ergolet's or other authorised service personnel will fill out the logbook after each annual check. If it is necessary to replace any parts due to wear or damage these must be obtained/purchased from Ergolet.

The logbook can be found in part 5.2.

5.2 LOGBOOK

Product name: Ergolet Stella
Serial number:
Date of purchase:
Guarantee period:

Supplier:
Packed and checked by (full name)
Pack date:

Check list

- Stella may only be serviced by Ergolet certified technicians
- The logbook may only be filled out by Ergolet certified technicians
- All repairs must be written in the log book after service or inspection
- The logbook must be signed

Must be filled put after each service check or inspection

Service type Before delivery Periodical Smaller Larger

Report :

Replaced:

Date: Inspected by (full name): Company:

Must be filled put after each service check or inspection

Service type Before delivery Periodical Smaller Larger

Report :

Replaced:

Date: Inspected by (full name): Company:

Must be filled put after each service check or inspection

Service type Before delivery Periodical Smaller Larger

Report :

Replaced:

Date: Inspected by (full name): Company:

Must be filled put after each service check or inspection

Service type Before delivery Periodical Smaller Larger

Report :

Replaced:

Date: Inspected by (full name): Company:

If the logbook is full, additional pages can be obtained from Ergolet or your dealer

5.3 FAULT FINDING

Fault:

Stella does not react when the hand control buttons UP/DOWN are used,

The diode does not light up

Possible cause: Stella is not on
Emergency stop is activated
Solution: Deactivate emergency stop (see section (2.4))

Possible cause: Defect hand control
Faultfinding: Check if the lift reacts using another hand device
Solution: Requires a new hand control from the dealer

Fault:

The lifting arm can travel up or down not both.
The electrical leg spreading can only move in or out not both

Possible cause: Fault in the electrical control box
Faultfinding: Defect control device or control box
Solution: Replace control device or control box

Possible cause: Loose connection in the hand control
Solution: New hand control

Fault:

Actuator is noisy or vibrates abnormally

Possible cause: Defect actuator or faulty assembly
Faultfinding: Actuator cannot move freely in the mountings
Defect actuator
Solution: Remount the actuator and ensure that it can move freely

Fault:

The lifting or leg movement is slow.

Possible cause: Power shortage.
Batteries are low or defect.
Charger or charging connections are defect
Solution: Charge for min. 24 hrs. or replace batteries.
Replace charger

Possible cause: Defect charger
Faultfinding: If another charger is available try this
Solution: Request new charger

Possible cause: Connection from hand control to charger defect
Faultfinding: If another charger is available try this
Solution: Request new hand control

6. 1 TECHNICAL DATA AND SKETCHES

Lifting

Load capacity 160 kg
 Lifting interval 72-173 cm
 Number of lift movements with 150 kg
 approx. 40-50
 (refer to Ergolet for definition)

Chassis

Width of chassis (external) 67 - 107 cm
 Width of chassis (internal) 52-92 cm
 Height of chassis (Back/Front) 15/12 cm
 Length of chassis 82 cm
 Diameter of wheels 100/75mm
 Turning radius 107 cm

Weight

Weight in total 46,5 kg
 Heaviest component approx. 24 kg

Material

Powder coated steel

Standard RAL-colours

see leaflets

Electrical details

Power supply on lift 36V
 Maximum current 10A
 IP20

Noise

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

Lwa during lifting/lowering at maximum
 load is 47dB(A)

More test results may be available by
 contacting Ergolet



7.1 ENVIRONMENTAL CONDITIONS

Stella has an expected lifetime 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.

Disposal of this mobile stand-aid lifter can be made through Ergolet. After Stella's useful lifetime Ergolet will receive the unit back and split the individual fractions in an environmentally friendly way either through reuse or recycling. Fractions that contain halogens, aluminium, lead acid batteries, ABS plastic or steel may damage the environment if not handled in an environmentally responsible way.

7.2 BATTERIES AND THE ENVIRONMENT

Stella is equipped with 3 x 12Volt batteries which, at the end of their useful lifetime may be returned to the local recycling station or to Ergolet.

7.3 ENVIRONMENTAL AND QUALITY CERTIFICATION

Ergolet, the manufacturer, is certified according to the Quality standard 9001-2000, the Medical Device standard ISO 13485 and the environmental standard ISO 14001.

The lifter is classified as a Medical device Class 1 product.

8.1 ACCESSORIES AND SPARE PARTS

PRODUCTS:**Item number**

011-01601

Description

Stella

ACCESSORIES:**Item number**

017-00500

250-02101

017-00121

017-00126

Description

Discrete charger for battery module

Battery module with handle 36V

Weight scale including spreader bar

Weight scale complete w/o spreader bar

SPARE PARTS:**Item number**

019-00405

019-00866

019-00613

250-02101

018-04706

018-04803

019-00701

710-60260

710-60261

018-03213

018-03214

018-00608

018-00507

018-00431

018-00432

018-00415

Description

Electrical box

Circuit board

Hand control

Battery module with handle 36V

Lifting actuator LA34310F-3L365141

Leg spreading actuator Re. GC (A 99.08.056)

Plug in (switchmode) charger + charging box

Plug in (switchmode) charger

Charging box

Brake wheel Manner ø100mm-1pc. red brake

MK-J-S-100PTE/K-10

Front wheel Manner ø75mm-1pc.

MK-S-75PTE/K-1080SH

Foam for lifting arm

Foam for handles

Knee support w/o back plate

Knee support with back plate

Strap for knee support with click lock



Stella manuals

- Stella (sales catalogue/leaflet)
- Stella User Guide
- Sling overview

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Dealer: