GUIDELINES FOR OPERATING LIKO ELECTRIC HOISTS
(GOLVO, UNO 102 & VIKING RANGE)

1. Introduction

THESE ARE GUIDELINES ONLY, AND ARE NOT INTENDED TO BE READ IN LIEU OF CORRECT TRAINING. PRIOR TO USE, TRAINING MUST BE PROVIDED BY A COMPETENT PERSON. REFER TO UHL CODE OF PRACTICE FOR USE OF HOISTS, P 3.

Before moving patients, staff directly involved in that patient’s care should be consulted. This is to ascertain any handling problems, conditions or patient specific problems they should be aware of. It is particularly important where the patient has attachments such as Intravenous infusions, Catheters, drains and feeding tubes.

All staff should take the appropriate steps to ensure a safer transfer without causing damage to any of the above attachments.

2. Guideline Standards and Procedures

2.1 Prior to use, the following checks should be made of any hoist:-

- Does the spreader bar move freely?
- Can the spreader bar be raised and lowered?
- Do the feet open and close easily?
- Do the wheels run smoothly?
- Is there any damage to any part of the hoist, including the hooks on the spreader bar?
- (Golvo model): is the lifting strap undamaged and properly aligned (i.e. not twisted)
- Is the Safe Working Load (SWL – recorded on the hoist) appropriate for the patient?
- Does the hoist operate in an abnormal manner i.e. spreader bar does not raise/lower smoothly; unusual noises heard when hoist operating? If so remove IMMEDIATELY from service and contact the Manual Handling Service.

2.2 If the Hoist does not operate, check:

- Is the battery discharged - audible warning when running low & on newer models, LCD indicator shows clear columns… (recharge, minimum 16 hours)
- Are there any loose/disconnected leads… (reinsert fully)
- Is the hoist plugged in and switched on at the mains… (unplug from the wall socket)
- Is the ‘Emergency Stop’ button depressed… (turn the button ¼ turn clockwise to release)
- If the hoist still fails to operate, contact the Manual Handling Service.
2.3 Prior to use the following checks should be made of all slings:

- Are there any holes or repairs to the sling, or any frayed edges or loops
- Is the SWL indicated on the sling and appropriate for the patient NB slings without clearly marked and legible SWL should be removed from use. Ensure the sling is laundered and refer to Manual Handling Service who may be able to have a printed label attached.
- Are the slings compatible with the hoist available. Except for disposable (i.e. single patient use) slings, always use the manufacturer’s specific slings. Disposable slings must always be used with the correct attachments for the hoist, i.e. loop fittings.

2.4 Applying the sling:

- Ensure the sling is the correct size for the patient. Measure from the bottom of the sacrum to the top of the head (High Back sling with curved top) or to the shoulders (Standard sling with straight top)
- Apply the sling with handles and/or label facing out
- If the patient is unable to assist by moving, either (a) place the sling by rolling the patient as described in the Procedures booklet (supine patient) or place a slide sheet between the patient and chair back or bed (sitting or semi-recumbent patient), then slide the sling behind the slide sheet.
- Ensure that the patient is positioned in the centre of the sling
- Ensure that the bottom of the sling is placed at the sacrum. It does not need to be any lower.
- Ensure the leg straps are placed underneath the thighs, and are not kinked or twisted, or placed high in the patient’s groin. If the patient is sitting in a chair, ensure the straps do not include the arms of the chair!
- Cross the legs straps over to preserve the dignity of the patient. With larger patients it may be more comfortable for them to not be crossed over.

2.5 Only now should the hoist be brought to the patient

- Assess the patient to ensure that the hoist is the most suitable option.
- Ensure the patient is fully aware of what is happening, and what equipment is to be used.
- Prepare the environment for the move.
- Always ensure not less than two people to use the hoist – one to operate the hoist and one to ensure patient safety.
- Approach the patient carefully, ensuring their feet are not trapped.
- Leave the brakes OFF.
- Attach the loops of the sling one at a time to the hoist.
- Do not let the patient hold any part of the hoist whilst it is being operated. The patient may operate the hand control if it is felt that they understand what to do, and the staff consider it safe to do so.
- Stand away from the hoist, so that the hoist can move freely to find its own centre of gravity.
- Raise/lower the patient in one smooth movement
• Once hoisted, reposition the patient as quickly as possible to avoid long periods in the sling. Move the hoist as little as possible, and avoid moving it long distances (e.g. bed to chair etc)
• Opening the feet of the hoist will make it easier to manoeuvre around beds, chairs etc.
• Once the patient is repositioned as required, disconnect the sling from the hoist and remove the hoist.
• Remove the sling from around the patient. If necessary, a slide sheet can be placed between the patient and the sling to aid the removal of the sling.

2.6 Other Advice

Amputees
If the patient has had one or both legs amputated, then an amputee sling is required (manufacturers’ guidance). DO NOT attempt to hoist an amputee with an ordinary sling.

Emergency lowering
The hoists should always be plugged in when not in use to charge the battery. Should the battery fail, use the emergency lower devices:

Golvo 7007
Pump the large red handle at the back of the hoist marked ‘Emergency Lower’. This will lower the belt. When the task is completed, return the belt to its original position. This is done by taking the weight off the spreader bar and pumping the red emergency lower handle whilst turning clockwise the cap on the same unit as the emergency lower. When the small red label on the belt is near the emergency handle, the belt has been returned to its usual position.

Uno 102
Twist clockwise the large red grip just below the main boom until the patient is lowered to the desired position.

Viking M/L/XL
Pull the small red handle above the top of the lifting motor upwards to lower the main boom. The boom will slowly lower, but gradually pick up speed. It will not lower if there is no weight on the spreader bar.

ALL THREE HOISTS ALSO HAVE A SMALL BUTTON ON THE BATTERY HOUSING MARKED ‘EMERGENCY’. USING THE TIP OF E.G. A BALLPOINT PEN, PUSH THIS BUTTON IN AND (EVEN WITH LITTLE POWER IN THE BATTERY) THE BOOM WILL LOWER.

Lowering into a chair
• To ensure the patient is as far back as possible in the chair, the person assisting the hoist operator (second operator) should stand behind the chair.
• As the hoist is pushed toward the chair it will tilt the chair backwards slightly. - The second operator should support the patient either side of the torso with their hands (but not pulling on the handles of the sling), whilst maintaining a stable balance by having one foot in front of the other.
• As the patient is lowered down into the chair, the second operator allows the patient to slide through their hands, guiding the patient down until all four of the chair legs are flat on the floor.
• If it is not possible to tilt the chair, gently push down on the patients’ knees to push them as far back in the chair as possible. This is also the preferred method when positioning the patient upright in the bed.
Raising from the floor

- Always ensure first that they have sustained no injuries
- Allow the patient’s head to rest on a pillow for their comfort, and to prevent injury when you are approaching with the hoist.
- Roll the patient onto one side as per safe Handling Guidelines.
- Place the correct sling in line with the spine, with the bottom edge of the sling at the sacrum.
- Roll the patient onto their back, so that they are half way on the sling.
- Roll the patient to the opposite side and straighten out the sling.
- Roll the patient onto their back, so that they are now in the centre of the sling. If necessary, reposition to centralize patient on the sling.
- Place the leg straps around the thighs (as described above).
- Approach the patient from the head. This allows the loops of the slings at the shoulders to be attached without too much effort. This also reduces the risk of injury caused by parts of the hoist, which is possible if the patient is approached from the feet.
- Connect the shoulder loops to the spreader bar, then bend the patients knees (or have the patient bend their knees) to connect the leg loops.
- Explain that the patient will rise up, coming into a sitting position, and may slide slightly in the sling.
- Raise the patient in a single smooth move.
- Reposition the patient as required in bed/chair etc.

Charging the hoists

Liko hoists have to be plugged in to the mains when not in use, to charge the battery. When taking the hoist to a patient, always unplug from the wall. DO NOT unplug from the machine. There is a quick release cable for the charger lead that should ALWAYS be in place, as this prevents damage to the charger cable.

Safety devices

There are two clips on the hooks where the slings are attached. These are to prevent the slings from coming off by accident. These clips should NEVER be removed. If they are, the hoist becomes inoperable as safety features will have been tampered with. The hoist should then be removed from use completely until the safety features have been replaced.

The battery housing will emit a warning tone when the battery charge is low and recharging is imperative.

Maintenance

The Trust has an on-going servicing and maintenance contract for Patient Lifting Equipment. However, please contact the Manual Handling Service in the first instance if the hoist needs attention or becomes defective.
3. Education and Training

None

4. Supporting References

NONE

5. Key Words

Hoist Liko
APPENDIX 1:
GUIDELINES FOR USE OF THE LIKO ‘FLEXOSTRETCH’ AND ‘LIFTSHEET’ FOR FLAT-LIFTING OF PATIENTS

Use of the Liko ‘FLEXOSTRETCH’ stretcher attachment and Liftsheet (sling)

The FLEXOSTRETCH is designed to lift patients in the supine position from a bed or from the floor, for example in the Intensive Care Unit setting or following successful Cardio-Pulmonary Resuscitation. It has a quick-release fitting to enable exchange with the standard spreader bar on each of the three Trust-owned Viking ‘XL’ hoists and some Viking ‘L’ hoists purchased by individual wards.

Due to the nature of the equipment and the manoeuvre described below it is recommended that a minimum of FOUR personnel should be involved with this procedure, with more staff required when larger patients are to be moved.

A member of the Manual Handling Service should be consulted where this procedure is being considered.

A full explanation of the procedure should be given to the patient where appropriate.

To lift a patient from a bed or trolley:

1) Remove the standard spreader bar from the hoist.

2) Attach the FLEXOSTRETCH to the hoist; this requires a minimum of TWO operators as it is large and heavy (14.5kg) and requires precise handling to engage with the quick-release fitting (Figs 1 & 2).
3) Identify the correct sling for the patient i.e. appropriate Safe Working Load (<200kg or <300kg). NB if you know – or strongly suspect - that the patient’s weight is greater than 286kg (Viking XL) or 236kg (Viking L) this equipment should not be used and a more suitable hoist should be made available.

4) Place the sling underneath the patient using turning/rolling techniques (see Manual Handling Procedures Book p20 or Safer handling of the Obese Patient p16). Ensure correct placement of the head end of the sling (Fig. 3).

5) Ensure the correct alignment of the FLEXOSTRETCH with the patient (Diagram on levelling adjuster, Fig. 4).

6) Position the hoist over the patient and lower the FLEXOSTRETCH until the loops can be easily placed on their corresponding hooks. For wider patients it may be necessary to extend the hook attachments on the FLEXOSTRETCH for best fit.

7) Raise the hoist until the slack is taken up, then adjust the levelling device (if required) using the control at either end of the adjuster (Fig. 4).

8) NB tall patients whose feet or lower legs overhang the end of the sling will need to have their feet supported.

9) Complete raising the patient clear of the bed; further levelling adjustment may be required for patient comfort. THEN either
   • Exchange the bed and trolley (or other surface) or
   • Transfer the patient from bed or trolley to the other surface.

10) Lower the patient onto the receiving surface

11) Detach and remove the hoist, then remove the sling using the techniques referred to earlier. Replace the standard spreader bar.
To lift a patient from the floor:

12. Ensure there is sufficient space for the manoeuvre.

13. Prepare and position the hoist, FLEXOSTRETCH and sling as in points 1 to 4 above.

14. Open the hoist base (legs) to the widest setting.

15. Approach the patient obliquely from the head (Fig. 5); have the patient raise the knee on the same side as the hoist to allow the hoist leg to pass underneath.

![Fig 5]

16. Lower the stretcher attachment and attach the sling loops to their corresponding hooks. For wider patients it may be necessary to extend the hook attachments on the FLEXOSTRETCH for best fit.

17. APPLY THE HOIST’S BRAKES – the patient must centre under the hoist in this scenario, rather than the usual vice versa during normal hoisting.

18. Take up the slack and adjust levelling if necessary.

19. Raise the patient in one smooth action, with at least one member of staff on hand controlling any tendency for the patient to swing; adjust levelling if necessary.

20. With taller patients whose feet or lower limbs overhang the end of the sling it may be necessary for them to be supported during the lift/transfer; consider your own posture and apply principles of safer handling.

21. RELEASE THE HOIST’S BRAKES.

22. Do not attempt to move the hoist and patient: position the bed or trolley under the patient and lower him/her onto it.

23. Detach and remove the hoist etc as above.