

OXFORD | HOYER

Oxford[®]/Hoyer[®]

Advance Lift

**Professional Series
SERVICE MANUAL**



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INSPECTION CRITERIA

Sunrise Medical Ltd recommends a thorough inspection and test of the Oxford/Hoyer Advance and its lifting accessories, slings etc. is carried out every six months. The examination and test should be conducted according to the recommendations and procedures below. Sunrise Medical Ltd recommends, authorised service dealers should carry out maintenance, inspection and certified testing only.

Note: These recommendations are in compliance with the requirements of 1998 No2307 Health and Safety: The Lifting Operations and Lifting Equipment Regulations 1998. (LOLER) *This is a UK regulation. Outside the UK please check your local requirements.*

SPREADER BAR

Check the spreader bar for freedom of rotation and swing.
Check for wear on the central pivot. Lubricate as necessary.
Check for firm attachment to the boom.
Examine sling strap retainers. Check for effective function.
Check for adequate padding.
Inspect for excessive wear on the sling hooks and any side suspenders used in conjunction with the spreader bar.

BOOM

Check for adequate boom padding.
Check for secure attachment of the boom to the mast/boom pivot.
Make sure there is only minimal side movement of the mast/boom pivot and that it is free to rotate in the mast.
Check the security and for wear on the actuator unit and mounting bracket on the boom.
(Any excessive movement or play of the actuator must be investigated).

MAST

Check the operation and condition of the leg retaining cord.
Check the operation of the mast-locking device.
Make sure the mast fully engages onto the base socket.
Check for correct operation of the folding function on the hoist.
Check for wear on the bottom actuator unit and mounting bracket on the mast.
(Any excessive movement or play of the actuator must be investigated).

POWER PACK

Check for secure attachment of the power pack mounting plate to the mast.
Check the function of the Emergency Stop button.
Check the hand control for correct functioning in both directions
Check the fit of the hand control plug and socket.
Inspect the actuator plug for correct fitting.
Check the operation of the emergency raise and lowering function.

INSPECTION CRITERIA

LEG ADJUSTMENT

Operate the foot pedal and check the legs open and close correctly.
Check the legs are locked when the leg lock mechanism is engaged.

LEG PIVOTS

Check the leg pivots are secure and the legs pivot freely. Any stiffness must be investigated.
Make sure there is no excessive play in the leg pivots.

CASTORS

Check all castors for firm attachment to the legs.
Check for free rotation of the castor and the wheels.
Remove any build up of threads, hair or fluff.
Lubricate if necessary with a light mineral based grease.
Check correct operation of the brakes.

ACTUATOR

The actuator should require no maintenance.
Check for correct operation.
Check for correct operation of mechanical emergency lowering device.
Confirm anti-crush precautions are operational.
Listening for unusual noise.
Check for wear on the mounting boss top and bottom.
(Any excessive movement or play of the actuator must be investigated)

BATTERIES

The batteries are housed in the battery pack and should not require maintenance, other than regular charging as detailed in the charging instructions.

CHARGING UNIT

Confirm the charger unit is charging the battery pack.
Check mains plug is fitted with the correct rated fuse.
Check the safety of the input and output lead wiring.

CLEANING

Clean with ordinary soap and water and/or any hard surface disinfectant. Harsh chemical cleaners or abrasives should be avoided as these may damage the surface finish of the lift. Avoid wetting any of the electrical parts.

TESTING

LOAD TEST

The load test should be carried out in accordance with the manufacturers test procedures. It is strongly recommended that, an authorised service dealer carry out the test.

Oxford Electric hoists have been designed to the requirements of:

1 BS EN ISO 10535 1998 Hoists for the transfer of disabled persons

The hoists are designed to lift the Safe Working Load only. The load lifting capability is set electronically and must not be increased as this causes excessive loading when the actuator reaches the limits of travel. This will affect the actuator's useful life.

2 BS EN ISO 10535 Load Raising Test

This test is a straightforward lift of a load the equivalent to the Safe Working Load, from the lowest position to highest position of the hoist.

3 BS EN ISO 10535 Operator effort Test

This test is conducted with the Safe Working Load only.

Using a force gauge (0-500N is a suitable range) push the one of the foot pedals down and note the amount of force necessary to open or close the legs. Maximum permissible force is 300N (30 kgf / 67 lbf).

TEST LOADS – OXFORD/HOYER ADVANCE

155kgs/342lbs

The load test should be carried out in accordance with the manufacturers test procedures. It is strongly recommended that an authorised service dealer carries out, the test.

CERTIFICATION

An authorised service dealer will issue a test certificate after satisfactory completion of the thorough inspection and test.

This certificate will be valid for six months.

Thorough Examination Report

Lifting Operations and Lifting Equipment Regulations 1998 (LOLER UK ONLY)

LOLER requires certain information to be included on the report given to a customer after a thorough examination. The information can be found in Schedule 1 (page 56) in the LOLER L113 publication.

Sunrise Medical Ltd has prepared a Thorough Examination Report that includes all the required information and a copy can be found on page 20.

Please feel free to use this as the basis of your own report.

SERVICE & MAINTENANCE

TOOLS REQUIRED

- Circlip Pliers
- 21mm A/F Spanner (*for the front and rear castors*)
- 19mm A/F Spanner (*for the mast/boom pivot*)
- 5mm Hex Key (*for the leg opening assembly*)
- 4mm Hex Key (*for the screws on the base plate and all other fixings*)
- 2mm Hex Key (*for the leg opening knob*)
- Medium Strength Thread lock (BLUE) type

SPREADER BAR.

- 1** The spreader bar fulcrum pin is held in place with two M6 x 20mm counter sunk head screws. Remove one of the screws from the fulcrum pin and, leaving the other in place, withdraw the fulcrum pin.
- 2** Examine the fulcrum pin for signs of wear and for firm attachment of the remaining screw. The diameter of the fulcrum pin is 10mm. Reduction in diameter due to **wear must not exceed 1mm** before replacement.
- 3** Withdraw the outer sleeve bush from the boom end (hold the spreader bar while doing this as the spreader bar may fall) inspect the sleeve for wear as per the fulcrum pin.
- 4** Remove the plastic bush caps (2 off) from the boom end and retain.
- 5** Remove the black plastic shrouds (2 off) from the spreader bar pivot and examine for damage. The shrouds are an important guard against finger traps. Make sure it will perform this function. Discard and replace if necessary.
- 6** Remove the rubber moulding from the spreader bar. The moulding is split along the bottom edge and will pull off the spreader bar quite easily.
- 7** Take off and retain the "O" ring that holds the main pivot in the spreader bar central boss.
- 8** Examine the main pivot and the central boss for wear.
- 9** Main pivot: Check for wear on the cross-hole for the fulcrum pin. The hole is 10mm in diameter; **wear should not exceed 1mm on diameter or 2mm elongation** before replacement.
- 10** Check the condition of the white acetyl wear washer that sits on the pivot shoulder. The wear washer is there to stop metal to metal contact on the pivot shoulder and the central boss on the spreader bar assembly. If the washer shows any signs of deformation or wear it should be replaced.
- 11 Spreader bar sling hooks:** Check for wear, particularly if used in conjunction with side suspenders. The sling hooks are made from 9.5mm diameter material. Reduction in diameter by **wear should not be allowed to exceed 2mm before replacement.**

SERVICE & MAINTENANCE

12 IMPORTANT: Side suspenders are often used in conjunction with the lift spreader bar. These may be stored away from the lift. It is important side suspenders are checked for wear. Side suspenders are made from 9.5mm material. Reduction in diameter by **wear at the suspension point or the hooks should not be allowed to exceed 2mm before replacement.**

13 Examine the sling strap retainers. Check that the plastic discs are fitted and move smoothly on the central shafts. Check the screw through the central shafts for tightness.

NOTE If the retainers are missing they should be replaced.

RE-ASSEMBLY OF THE SPREADER BAR

After performing all the actions and checks in section 1 reassemble the spreader bar as follows:

- 1** Lubricate the main pivot, fulcrum pin and sleeve with any light mineral-based grease, or silicon spray paying particular attention to the pivot shoulder, wear washer, and the fulcrum pin cross-hole.
- 2** Fit the main pivot to the spreader bar central boss. Refit the retaining "O" ring. Check rotation of the pivot in the boss.
- 3** Replace the rubber moulding.
- 4** Fit the black plastic shrouds to the spreader bar pivot and insert into the boom end. Line up the holes in the boom, shrouds and pivot and insert the sleeve.
- 5** Replace the bush caps and insert the fulcrum pin. Secure with the M6 screw after freshly applying threadlock to the thread. **Tighten each screw to 5 Nm.**

NOTE 1: It is most important that the fulcrum pin and pivot assemblies are checked to ensure the wear washer is in place and the assembly is completely secure before leaving the hoist.

NOTE 2: Before applying Loctite to any screw or bolt check it can be screwed into the component without hindrance from old remaining Loctite. As this could affect the proper torque setting.

BOOM

- 1** Remove the grey plastic covers from the mast end of the boom and check the two M12 hexagon headed bolts that hold the boom extrusion to the boom pivot casting, are **fully tightened to 15 Nm.**
- 2** The covers are clipped into place and can be removed by gentle levering between the boom and the cover.
- 3** Replace the grey plastic covers to the boom.
- 4** Examine the actuator mounting point. Without taking the mounting apart check for signs of wear on the fulcrum pin. Check for excessive vertical and horizontal movement in the mounting. This will give a good indication of wear but if there is any doubt the assembly should be stripped down as follows:

SERVICE & MAINTENANCE

- 5** Remove one of the circlips that secures the actuator fulcrum pin to the bracket. Remove the washer and extract the fulcrum pin.
- 7** Examine the fulcrum pin for signs of wear and for firm attachment of the remaining circlip. The diameter of the fulcrum pin is 8mm. Reduction in diameter due to **wear must not exceed 1mm** before replacement.
- 8** Remove the outer sleeve bush from the boom bracket and actuator top while holding the actuator, carefully lower the actuator to the ground.
- 9** Examine the outer sleeve bush for wear **this should not exceed 1mm**.
- 10** Examine the actuator mounting on the boom for wear on the bore of the bracket **this should not exceed 2mm**.
- 11** Examine the actuator top for wear **this should not exceed 1mm**.
- 12** Replace the fulcrum pin and sleeve through the actuator and boom bracket.
- 13** Replace washer and circlip.

NOTE: Sunrise Medical recommends:

NEVER reuse circlips.

ALWAYS use circlip pliers for fitting.

ENSURE the circlip is properly located in the groove.

MAST/BOOM PIVOT

- 1** Check the pivot for lateral, vertical and horizontal play that would indicate excessive wear. Signs of excessive wear must be investigated and the pivot stripped down. Lateral play at the pivot point must not exceed 1mm before replacement.
- 2** Construction of the mast/boom pivot, comprises of 11 components, 2 off M6 x20mm counter sunk head screws, 2 off 22mm counter sunk steel caps, 2 off 20mm x 1mm plastic washers, 1 off 10mm inner fulcrum pin and 1 off 13mm outer sleeve, 2 off 52mm x 2mm plastic pivot bearing washers and 1 off pivot casting.

REMOVAL OF THE MAST/BOOM PIVOT

- 1** To remove the Mast/Boom Pivot it is advisable to first remove the two M12 bolts from the boom end. This will enable the pivot to be removed and replaced more easily.
- 2** The Mast/boom pivot fulcrum pin is held in place with two M6 x 20mm counter sunk head screws. Remove one of the screws from the fulcrum pin and, leaving the other in place, withdraw the fulcrum pin.
- 3** Examine the fulcrum pin for signs of wear and for firm attachment of the remaining screw. The diameter of the fulcrum pin is 10mm. Reduction in diameter due to **wear must not exceed 1mm** before replacement.

SERVICE & MAINTENANCE

4 Withdraw the outer sleeve bush from the boom end (hold the boom while doing this as it may fall forwards) inspect the sleeve for wear as per the fulcrum pin.

5 Remove the plastic bearing washers (2off) from the pivot and examine for any wear or damage. Lateral movement at the pivot is most likely to be caused by wear on these washers.

Examine the Mast/Pivot casting, the pivots internal bore and the holes in the mast in particular for wear or damage. The bore and holes are 13mm in diameter; **wear should not exceed 1mm on diameter or 2mm elongation** before replacement.

RE-ASSEMBLING THE MAST/BOOM PIVOT

After performing all the actions and checks in section 4 reassemble the Mast /Boom pivot as follows:

- 1** Lubricate the, fulcrum pin and sleeve with any light mineral-based grease, or silicon spray paying particular attention to the, bearing washers, and the mast/boom pivot internal bore.
- 2** Assemble one end of the fulcrum pin so that the sleeve will fit over the pin and rest on the end secured by the M6 screw after freshly applying threadlock to the thread.
- 3** Refit the Mast/Boom pivot and one bearing washer into the top of the mast.
- 4** Align the holes in the mast, bearing washer and Mast/Boom pivot.
- 5** Insert the sleeved fulcrum pin into the holes and ensure it passes into the boom hole on the opposite side.
- 6** Pull back the sleeved pin assembly until it is inside the pivot, insert the remaining bearing washer between the pivot and the inside of the mast. Line up the hole of the washer with the bore of the pivot and push the sleeved pin assembly through the washer and into the boom.

Replace the remaining cap and washer and M6 screw after freshly applying threadlock to the thread. **NOTE:** It is most important the fulcrum pin/sleeve assembly is carefully checked to ensure complete security. **Tighten each screw to 5 Nm.**

7 Refit the boom end of the Mast/Boom pivot into the boom and refit the 12mm bolts refit M12 Nyloc nuts. (See note below) **Tighten each bolt to 15 Nm.**

8 Replace plastic covers.

NOTE 1: Sunrise Medical recommends Nyloc nuts should always be replaced if undone.

NEVER fit a new pin or sleeve to a worn or damaged casting.

ALWAYS torque the fulcrum pin to the correct setting.

ALWAYS assemble the M6 screws with threadlock.

CHECK the assembled Mast /Boom pivot for unacceptable movement.

NOTE 2: Before applying threadlock to any screw or bolt check it can be screwed into the component without hindrance from old remaining threadlock as this could affect the proper torque setting.

SERVICE & MAINTENANCE

REPLACING THE LEG RETAINING CORD

- 1** To replace the cord you must first remove the mast/boom pivot from the mast (**see section 5, steps 1 & 2**).
- 2** Remove the mast from the cross member (see section 11, step 1).
- 3** Cut the cord and discard it.
- 4** Take the new cord and thread one end through the right hand hole in the mast.
- 5** Pass the cord through the reel and into the second hole in the mast.
- 6** Take both ends of the cord and wrap the cord around the outside of the mast tie a double knot in the cord tight to the mast.
- 7** Pull the cord over the top of the mast and inside of the mast.
- 8** Replace the mast/boom pivot, and boom assembly as per section **6 RE-ASSEMBLING THE MAST/BOOM PIVOT**.

NOTE: Sunrise Medical recommends Nyloc nuts should always be replaced if undone. **NEVER** fit a new pin or sleeve to a worn or damaged casting.

ALWAYS torque the fulcrum pin to the correct setting.

ALWAYS assemble the M6 screws with threadlock.

CHECK the assembled Mast /Boom pivot for unacceptable movement

NOTE 2: Before applying threadlock to any screw or bolt check it can be screwed into the component without hindrance from old remaining threadlock. As this could affect the proper torque setting.

MAST

- 1** Check the socket headed counter sunk screws (4), which hold the push handle to the mast. With a 5mm A/F Allen key confirm the screws are fully tightened to **5 Nm**.
- 2** Examine the actuator mounting point and the spreader bar cradle for damage or wear. Without taking the mounting apart check for signs of wear on the fulcrum pin. Check for excessive vertical and horizontal movement in the mounting. This will give a good indication of wear but if there is any doubt the assembly should be stripped down as follows:
- 3** Remove one of the circlips that secures the actuator fulcrum pin to the bracket. Remove the washer and spreader bar cradle and extract the fulcrum pin.
- 4** Examine the fulcrum pin for signs of wear and for firm attachment of the remaining circlip. The diameter of the fulcrum pin is 8mm. Reduction in diameter due to **wear must not exceed 1mm** before replacement.
- 5** Remove the outer sleeve bush from the mast bracket, and actuator-mounting boss while holding the actuator, carefully lower the actuator to the ground.
- 6** Examine the outer sleeve bush for wear **this should not exceed 1mm**.
- 7** Examine the actuator mounting bracket on the mast, for wear on the bore of the bracket **this should not exceed 2mm**.

SERVICE & MAINTENANCE

8 Examine the actuator bottom mounting boss for wear **this should not exceed 1mm**

9 Replace the fulcrum pin and sleeve through the actuator and mast bracket and the spreader bar cradle.

10 Replace washer and circlip.

NOTE 1: It is most important fulcrum pins are re-assembled carefully. Check to ensure complete security.

NOTE 2: Sunrise Medical recommends:

NEVER reuse circlips.

ALWAYS use circlip pliers for fitting.

ENSURE the circlip is properly located in the groove.

11 Confirm the presence and proper location of the mast engagement label.

12 Check the engagement of the mast-locking knobs. Confirm the mast will lift from the mast socket when the locking knobs are unscrewed.

BATTERY PACK & CONTROL UNIT

1 Confirm the mounting bracket is firmly attached to the mast. Three M6 cap head screws secure the mounting bracket. **Confirm the screws are fully tightened to 5 Nm.**

2 Check the engagement of the battery pack with the mounting. The battery pack should snap into place and be retained by a latch at the top of the pack. Make sure the latch is functioning correctly and holds the battery pack firmly in place.

3 Check that the actuator and hand control plugs are inserted fully into the appropriate socket on the base of the control unit. The plugs, particularly the hand control plug, are a tight fit in the sockets and must be pushed fully home. The hand control plug is indexed and can only be fitted in one position. The other plug is not indexed and can be fitted with a straight push.

4 Inspect the hand control and coiled lead for any obvious signs of damage. Damage to the hand control and particularly to the lead can cause intermittent faults. The hand control should be replaced if damage is evident. The mounting hook on the rear top of the hand control, can be replaced by unscrewing two screws and fitting a new hook.

5 Check the operation of the hand control. Press the up and down buttons and confirm the boom moves in the proper direction.

6 Check the operation of the Emergency stop switch. Push in the red button, this will latch and remain depressed and cut off all power to the lift. Confirm by looking at the LCD panel that should now state the word STOP and show the image of a plug by the side of it and by using the hand control. Return power to the lift by twisting the red button clockwise and releasing. The LCD panel should no longer be showing the word STOP or the image of a plug and battery power should now be displayed instead.

Check the operation of the Emergency raise and descent buttons. These are small flush buttons on the front of the control unit under the Emergency stop switch labelled EMERGENCY and an up and a down arrow. The button is operated by pushing with a ballpoint pen or similarly shaped object.

SERVICE & MAINTENANCE

CROSSMEMBER

To perform a service inspection of the cross member, removal of the mast and boom assembly is required. Remove one of the mast locking knobs, and withdraw the remaining knob complete with locking shaft attached, to do this. The mast and boom assembly can then be lifted out of the locating post on the cross member.

- 1** Inspect the mast locating post for damage or wear especially the slot that the mast locking shaft/knobs fit into.
- 2** The front plate is cosmetic and requires no maintenance.
- 3** Ensure the leg-locking knob is secure. The knob is secured to a M10 threaded steel shaft by means of a M4x5mm grub screw if it is loose it must be retightened.
- 4** Inspect the push pad grip and foot pedal grip pads for wear and replace as necessary.
- 5** Look for any excessive play or damage on the foot pedal mechanism. If any is found it must be inspected further to establish a cause and any subsequent replacement of parts. To do this the cross member assembly should be stripped down as follows:
 - 6** Remove the leg-locking knob.
 - 7** Find a suitable surface to enable the base assembly to be turned over without damaging the mast locating post. (packing may be needed to elevate the assembly).
 - 8** Remove all the screws that hold the bottom base plates 22 in all, comprising of 6 off M6x12mm Button head socket screws, 4 off M4x10mm Countersunk cross head screws on the central plate, and 12 off M6x20mm Countersunk head socket screws, 6 off each on the left hand and right hand plates that cover the leg link rod assemblies.
 - 9** Remove the pivoting tie rod ends from the legs.
 - 10** Remove the legs taking care not to loose the bronze bearing washers at each end of the leg pivot pins.
 - 11** Loosen the lock nuts to remove the link rods and or the pivoting tie rod ends attached to the foot pedal mechanism.
 - 12** Loosen the grub screw that locks a ball bearing onto the actuating shaft in the front aluminium, mounting block.
 - 13** Remove the 4 off M5x30mm hex cap head bolts from the front and back aluminium mounting blocks.
 - 14** Pull back the front block against the spring on the actuating shaft and push the exposed end of the mechanism as far as possible into the hole in the cross member. At the same time lift up the mechanism from the back and pull the mechanism back and out of the cross member.
 - 15** Remove the actuating shaft from the foot pedal assembly and inspect the two parts for wear and replace any required parts as necessary. Lubricate the mechanism with any light mineral-based grease, and re assemble to the cross member.

SERVICE & MAINTENANCE

RE-ASSEMBLY OF THE LEG OPENING MECHANISM TO THE CROSS MEMBER

- 1** Pull back the front block against the spring on the actuating shaft and push the exposed end of the mechanism as far as possible into the hole in the cross member. At the same time push down on the mechanism at the back until the aluminium mounting blocks are in line, and seated on to the threaded holes that will secure the blocks on the cross member.
- 2** Apply threadlock to the 4 off M5x30mm hex cap head bolts, screw them into the two mounting blocks and **tighten them to 5 Nm.**
- 3** Tighten the grub screw in the front block.
- 4** Screw in the pivoting tie rod ends into each threaded hole on the leg lever plate and tighten the lock nuts **tighten them to 5 Nm.** (ensure that the heads of the pins are upward and facing the front of the cross member).
- 5** Screw the link rods into the pivoting rod ends on the leg lever plate.
- 6** Screw into each leg the other two pivoting rod ends (viewed from behind the hoist in a upright state the pivot on the left leg will be fitted from underneath the leg and the pivot on the right hand leg will be fitted from above the leg) and tighten the lock nuts **tighten them to 5 Nm.**
- 7** Push the left hand foot pedal (viewed from behind the hoist in a upright state) down to open the legs as far as possible. The link rods can now be threaded on to the pivot rod ends on the legs.
- 8** Ensure that there is equal thread length at each end of the link rods and then tighten the lock nuts to **tighten them to 5 Nm.**
- 9** Replace the base plates, and after applying fresh locktite to all the screws **tighten them to 5 Nm.**

NOTE: Before applying Locktite to any screw or bolt check it can be screwed into the component without hindrance from old remaining threadlock. This could affect the proper torque setting.

LEGS / LEG PIVOT PINS

Check the leg pivots are secure and the legs pivot freely. Any stiffness must be investigated, and also check that there is no excessive play in the leg pivots. To inspect the leg pivot pins, the leg must be removed from the cross member. The legs can be removed as follows:

- 1** You will need to remove the mast and boom assembly from the cross member, Remove one of the mast locking knobs, and withdraw the remaining knob complete with locking shaft attached. The mast and boom assembly can then be lifted out of the locating post on the cross member.
- 2** Find a suitable surface to enable the base assembly to be turned over without damaging the mast locating post.

SERVICE & MAINTENANCE

- 3** Remove all the screws that hold the bottom base plates, 22 in all, comprising of 6 off M6x12mm Button head socket screws, 4 off M4x10mm Countersunk cross head screws on the central plate, and 12 off M6x20mm Countersunk head socket screws, 6 off each on the left hand and right hand plates that cover the leg link rod assemblies.
- 4** Remove the leg fixing end of the link rod from the legs by removing the M8x35mm button head screws with a 5mm hex key.
- 5** Remove the leg taking care not to loose the bronze bearing washers at each end of the leg pivot pin.
- 6** The leg pivot pin can now be withdrawn and inspected.
- 7** Clean the pin of any debris or replace the pin if worn.
- 8** Inspect the leg pivot bush in the leg.
- 9** Clean the bush in the leg of any debris or replace the leg if it is worn.
- 10** Lubricate the leg pivot pin with any light mineral-based grease, or silicon spray.

RE ASSEMBLY OF THE LEG PIVOT PINS

- 1** Place one of the bronze washers over the hole in the main base casting of the cross member.
- 2** Refit the pin into the leg with the deeper shoulder of the pin going into the main base casting of the cross member.
- 3** Place the remaining bronze washer over the leg pivot pin so that it rests on the surface of the leg bush.
- 4** Apply threadlock to the M8 screw on the link rod and tighten to **5 Nm** on the leg.
- 5** Ensure the leg operating mechanism opens and closes the legs correctly.
- 6** Replace the plates.
- 7** Apply threadlock to the screws and **tighten them to 5 Nm.**

NOTE: Before applying threadlock to any screw or bolt check it can be screwed into the component without hindrance from old remaining threadlock. This could affect the proper torque setting.

REAR CASTORS

- 1** Check the front and rear castors are firmly fixed to the legs. Remove any loose castors with a 21mm A/F Spanner, re-assemble with threadlock. **Tighten to 10 Nm.**
- 2** Make sure the castors swivel and the wheels rotate freely. Remove any build up of threads, hair or fibres that may clog the bearings and prevent free rotation. Lubricate if necessary with a light, mineral based grease or silicon spray.
- 3** Check the action of the brakes on the rear castor. A foot-operated pedal activates the brake. Check the brake pedal locks in place and that the castor does not move when the brakes are engaged.

SERVICE & MAINTENANCE

NOTE: Before applying threadlock to any screw or bolt check it can be screwed into the component without hindrance from old remaining threadlock. This could affect the proper torque setting.

FRONT CASTORS

- 1** Check the front castors are firmly fixed to the legs, and swivel freely.
- 2** To remove a loose or damaged castor, first remove the two M6 button head screws under the leg that secure the front leg insert.
- 3** Pull the insert out of the leg and push the rubber protective jacket (it may require a tap with a soft mallet from the back to loosen it) down the castor housing insert far enough to enable the castor nut to become accessible to a 21mm A/F Spanner and remove the castor.
- 4** Re-assemble with threadlock. **Tighten to 10 Nm.**

NOTE: Before applying threadlock to any screw or bolt check it can be screwed into the component without hindrance from old remaining threadlock. This could affect the proper torque setting.

FAULT FINDING

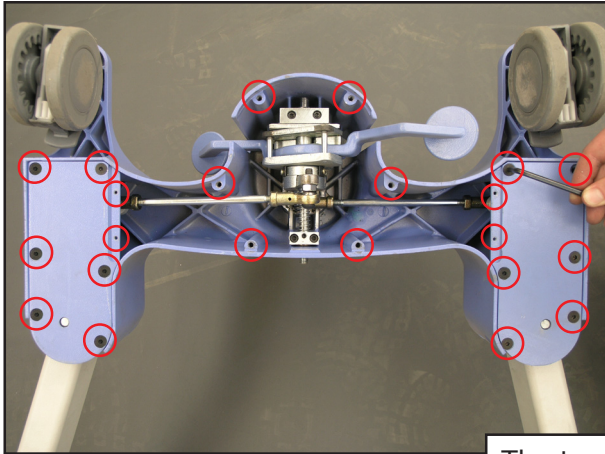
● Problem - Hoist not working

Possible Fault	Remedy
Emergency stop switch activated	Can be identified by a LCD panel that will have the word STOP and a picture of a plug in the panel. Turn red button clockwise or anticlockwise (try both) and release.
Flat batteries	Can be identified by a LCD panel that will have none of the four blocks illuminated (audible beep should have been heard prior to this)
Power supply disconnected (detachable battery packs)	Push battery into place until a CLICK can be heard
Completely flat batteries (discharged beyond recovery)	Replace batteries

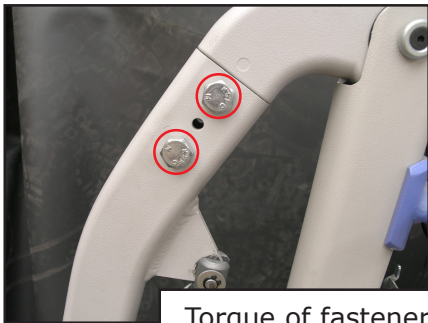
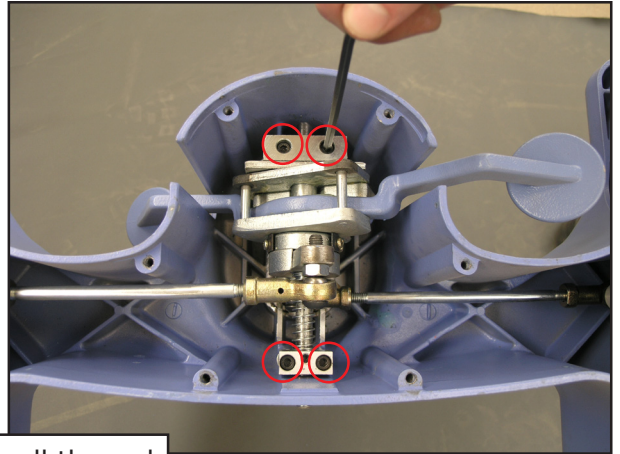
● Problem - Hoist won't go up or won't go down

Possible Fault	Remedy
Hand control plug not fully engaged	Push plug firmly into socket (in an emergency use of the Emergency raise and lower function on the control box will suffice)
Wiring in hand control plug detached	Replace hand control + As above
Hand control switches not working	Replace hand control + As above
Wires detached inside handset	Replace hand control + As above
Hand control socket damaged	Replace control box
Relay on control board inoperative	Replace control box
Defective actuator	Replace actuator
Anti-crush micro switch activated (Safety Device)	Check for correct function of micro switch, or remove any obstacle that may have come between the boom as it was lowering
Actuator jack plug disconnected	Checkout plug and re-connect
Actuator socket damaged	Replace control box

TORQUE SETTINGS

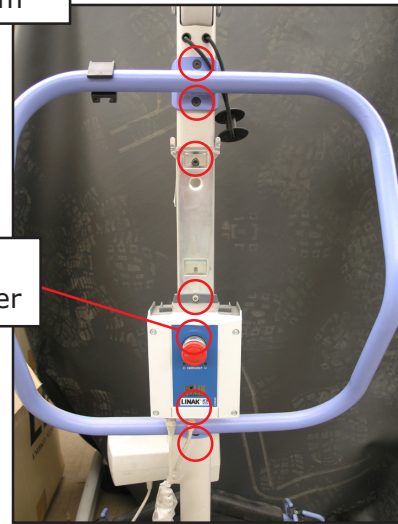


The torque value for all the red circled fasteners are 5 Nm



Torque of fasteners in picture are 15 Nm

There is 1 screw beneath the controller

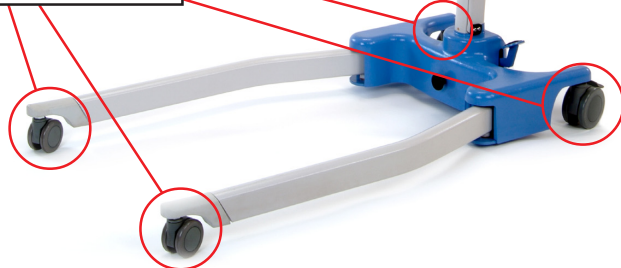


The torque here is 5 Nm



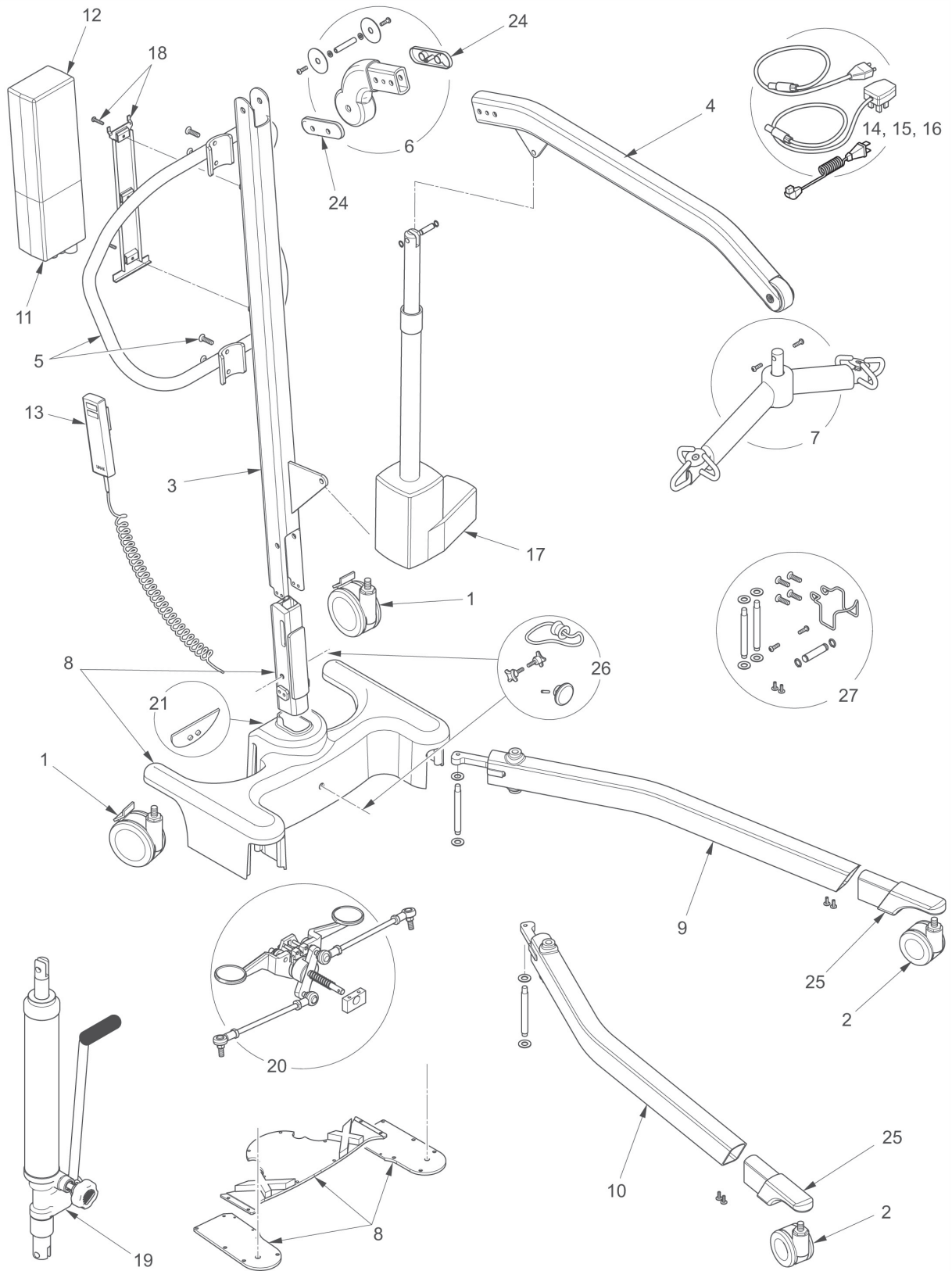
The torque here is 5 Nm

Torque for all the front and rear castors are 10 Nm



All these screws are threadlocked except the boom bolts as they have Nyloc nuts

EXPLODED VIEW



539A234

PARTS LIST

OXFORD / HOYER ADVANCE

N°	PART NUMBER	DESCRIPTION	QTY
1	0Y0066	100mm rear castor (braked)	2
2	0Y0109	75mm front castor (non-braked)	2
3	0Y0033	Mast extrusion including labels	1
4	0Y0034	Boom extrusion (inc. boom end caps and labels except for Oxford/Hoyer dome label)	1
5	0Y0035	Push handle assembly (including fixings)	1
6	0Y0036	Casted boom to mast pivot joint (including connection bolts/fixings/spacers)	1
7	0Y0037	Spreader bar assembly complete (6 point)	1
8	0Y0038	Base assembly (inc. base casting, bottom plate, welded post & labels, not internal parts)	1
9	0Y0039	Left leg extrusion (including fixings)	1
10	0Y0040	Right leg extrusion (including fixings)	1
11	0Y0110	Linak controller (UK/EU)	1
11	0Y0106	Linak controller (US)	1
12	0Y0067	Linak battery	1
13	0Y0111	Linak hand control (UK/EU)	1
13	0Y0107	Linak hand control (US)	1
14	0Y0071	Linak charge lead (UK)	1
15	0Y0068	Linak charge lead (US)	1
16	0Y0072	Linak charge lead (EU)	1
17	0Y0031	Linak actuator - 350mm stroke (inc. location pins, sleeves, washers, circlips and labels)	1
18	0Y0069	Linak battery and controller brackets/fixings	1
19	0Y0032	Hydraulic pump - 350mm stroke (US only) (including labels & serial number)	1
20	0Y0041	Foot pedal mechanism complete	1
21	0Y0042	Foot push pad assembly complete	2
22	0Y0043	Decal set (Oxford) not shown - no serial number labels	1
23	0Y0044	Decal set (Hoyer) not shown - no serial number labels	1
24	0Y0108	Boom to mast pivot plastic caps	2
25	0Y0045	Front castor leg inserts including fixings (plastic)	2
26	0Y0046	Knob kit (including mast tightening knob, elastic leg restraint and leg disengage handle)	1
27	0Y0047	Fixings kit (all bolts, screws and fixings)	1
28	0Y0070	Handset clip (not shown)	2
29	0Y0053	Linak charger and stand assembly (temporary requirement for Oxford)	1

LOLER: Thorough Examination Report

Lifting Operations and Lifting Equipment Regulations 1998 Schedule 1

Client Name & Address _____

_____ Tel _____

Address of Examination _____

Model _____ Serial No. _____ Date of Manu. _____

Date of last Examination _____ Safe Working Load _____

Commissioning Examination Yes No Safe to Operate Yes No N/A

Periodic Examination Yes No

Interval of Examination 6 Months 12 Months Examination Scheme Exceptional

Safe to Operate Yes No N/A

Defective Parts (Immediate Attention):

Part Number	Description	Defect	Action Taken

Defects requiring rectification at a later date:

Part Number	Description	Defect	Action Taken	Latest Date

Next examination due date _____

Load test conducted according to BS 5827 BS EN ISO 10535 Other (state) _____

Thorough examination carried out (Date) _____

Name of Examiner _____ Job Title _____

On behalf of (Company/Organisation) _____

Address _____

Signed _____

Signed on behalf _____

Date of Report _____

Name & address _____

NOTES



Sunrise Medical Limited

High Street • Wollaston • Stourbridge • West Midlands • DY8 4PS • England

Tel +44(0)1384 44 66 22 Fax +44(0)1384 44 66 44

www.sunrisemedical.com