

OXFORD | HOYER

Oxford[®]/Hoyer[®]

Stature Lift

**Professional Series
SERVICE MANUAL**



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INSPECTION CRITERIA

Sunrise Medical Ltd recommends a thorough inspection and test of the Oxford/Hoyer Stature Vertical Lifter 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.*

4 POINT POSITIONING CRADLE

Check the cradle for freedom of rotation and swing.
Check for wear on the central pivot and wear washer.
Check for firm attachment to the carrier.
Check the security tab is visible on the fulcrum pin. See **Fig. 1, Appendix A** (page 22).
Examine sling strap retainers, check for effective function.
Check for adequate padding.
Check condition of the handgrip.
Inspect for excessive wear on the sling mounting points.
Inspect welded joints of the sling mounting points.
Maintenance: - Lubricate main suspension point, centre pivot, and cradle pivot points as necessary.

6 POINT SPREADER BAR

Check the spreader bar for freedom of rotation and swing.
Check for wear on the central pivot and wear washer.
Check for firm attachment to the carrier.
Check the security tab is visible on the fulcrum pin. See **Fig. 1, Appendix A** (page 22).
Examine sling strap retainers (if present). 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.
Maintenance: - Lubricate main suspension point and central pivot as necessary.

CARRIER

Check for secure attachment of the carrier to the carriage.
Check the carrier is in alignment with the centreline of the hoist.
Check the function of the anti crush mechanism.

MAST

Check for secure attachment of the push handle to the mast.
Check mast top cover is secure.
Check mast slot for damage or wear.
Check security of mast/cross member fixing bolts.
Check upper and lower micro switches in mast slot are fully operational.
Check tape for signs of wear or damage See **"Inspection and replacement of tape"** (pages 11 - 12).
Maintenance: - Replace the tape at least every 12 months.

INSPECTION CRITERIA

LIFTING STRAP (TAPE)

Check the strap as per the detailed instructions in the maintenance guide. See **"Inspection and replacement of tape"** (pages 11 - 12).

CROSS MEMBER

Check for secure attachment of the base plate to the cross member.
Check for excessive movement of the legs in the cross member.
Check the function of the mechanical lowering device. See **Fig. 2, Appendix A.**

POWER PACK

Check for secure attachment of the power pack mounting plate to the mast.
Check for secure attachment of the power pack to the mounting plate.

CONTROL BOX

Check the function of the Emergency Stop button.
Check the hand control for correct functioning in both directions, i.e. lift and lower.
Check the fit of the hand control plug and socket.
Inspect the actuator plug and socket for correct fitting.
Check the operation of the emergency raise and lowering function.

BATTERIES

The batteries in the power pack should not require maintenance, other than regular charging as detailed in the charging instructions.

ELECTRIC LEG ADJUSTMENT

Operate the leg opening buttons on the hand control and check the legs open and close smoothly and correctly.
Check the legs are locked when the hand control button is released.

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 silicon spray or a light mineral based grease.
Check correct operation of the brakes.

INSPECTION CRITERIA

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.

SLINGS AND ACCESSORIES

Confirm sling is an Oxford, or Hoyer Sling.
Check the load bearing straps and/or clips for wear or fraying.
Check the straps and/or clips are securely stitched.
Check the body of the sling for wear or cuts in the fabric.
Check any side suspenders for wear on the hooks or central suspension point.

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/Hoyer 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.

TEST LOADS – OXFORD/HOYER STATURE

227kgs/500lbs

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 21.

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

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.

SERVICE & MAINTENANCE

TOOLS REQUIRED

- Electrician's Screwdriver (*to remove security pin*)
- 21mm A/F Spanner (*for the rear castors*)
- 17mm A/F Spanner (*for the front castors and cradle*)
- 8mm Hex key (*for leg pivot bolts*)
- 4mm Hex Key (*for the screws on the base plate and all other fixings*)
- 5mm hex key ground down to a height of 12mm (*for access to the lift motor pulley block screws*)
- Long reach 5mm hex key (*for motor mounting screws*)
- 2.5mm hex key (*for Cam plate grub screws and micro switch screws*)
- Battery powered reversible drive drill and ¼ "drive and supplied 6mm socket (*for manual lowering*)
- Medium Strength Thread lock (BLUE) type

4 POINT POSITIONING CRADLE

- 1** The cradle fulcrum pin is held in place with a security pin that runs through a steel outer sleeve. Remove the security pin by depressing the security tab on the one end of the pin (an electrician's screwdriver or similar type of flat bladed tool can be used), and withdraw it from the other side.
- 2** Examine the pin for signs of wear and for any deformation of the security tab. The diameter of the 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 cradle while doing this as the cradle may fall) inspect the sleeve for wear as per the pin.
- 4** Remove the black plastic shroud (2 piece) from the spreader bar pivot and examine for damage. The shroud is an important guard against finger traps. Make sure it will perform this function. Discard and replace if necessary.
- 5** Take off and retain the "O" ring that holds the main pivot in the cradle's central boss.
- 6** Examine the main pivot and the central boss for wear.
- 7** 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.
- 8** 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 cradle assembly. If the washer shows any signs of deformation or wear it should be replaced.
- 9** Cradle sling mounting points: Check for wear. The sling mounting points are made from 7.5mm diameter material. Reduction in diameter by **wear should not be allowed to exceed 1mm before replacement.**
- 10** Remove the domed black plastic caps that cover the cradle pivot joints.
- 11** Check the 17mm A/F Nyloc nuts that hold the cradle to the central suspension assembly are tight.

SERVICE & MAINTENANCE

12 The cradle when tightened correctly should support a 5kg load or a force of 7N at the handle, and move smoothly on the central suspension assembly.

13 Lubricate the pivot joints with any light mineral-based grease, or silicon spray.

14 Replace the caps (ensure the cap snaps back into place).

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

RE-ASSEMBLY OF THE 4 POINT POSITIONING CRADLE.

After performing all the actions and checks listed under "**4 Point Positioning Cradle**" (pages 7 - 8), reassemble the cradle 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 Fit the black plastic shrouds to the cradle pivot and insert into the boom end. Line up the holes in the boom, shrouds and pivot and insert the sleeve.

4 Insert the security pin into the outer sleeve ensuring, that the security tab is visible when it passes through the outer sleeve. An audible "click" should be heard as the tab springs into position.

NOTE: It is most important that the cradle assembly is carefully checked to ensure the wear washer is on the pivot, and the cradle is completely secure before leaving the hoist.

6 POINT SPREADER BAR

1 The spreader bar fulcrum pin is held in place with a security pin that runs through a steel outer sleeve. Remove the security pin by depressing the security tab on the one end of the pin (an electricians screwdriver or similar type of flat bladed tool can be used), and withdraw it from the other side.

2 Examine the pin for signs of wear and for any deformation of the security tab. The diameter of the 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 pin.

4 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.

5 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.

6 Take off and retain the "O" ring that holds the main pivot in the spreader bar central boss.

7 Examine the main pivot and the central boss for wear.

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8 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.

9 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.

10 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.**

11 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.**

12 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.

13 If the screws are loose they should be **tightened (after reapplying loctite) to 5Nm.**

NOTE: If the retainers are missing they should be replaced.

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

RE-ASSEMBLY OF THE SPREADER BAR

After performing all the actions and checks listed under "**6 point spreader bar**" (pages 8 - 9), 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** Insert the security pin into the outer sleeve ensuring, that the security tab is visible when it passes through the outer sleeve. An audible "click" should be heard as the tab springs into position.

SERVICE & MAINTENANCE

NOTE: It is most important that the spreader bar assembly is carefully checked to ensure the wear washer is on the pivot and the spreader bar is completely secure before leaving the hoist.

CARRIER

1 Check for wear on the holes that support the spreader bar fulcrum pin at the end of the carrier. The holes are 16mm in diameter; **wear should not exceed 1mm on diameter** before replacement.

2 The carrier is secured to the carriage with 2 M6 CSK screws. Check that they are tightened to 5Nm.

3 Check the carrier for structural damage or weakness.

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

MAST

NOTE: It may be necessary to lean the hoist over or use a stepladder to gain access to the internal components of the mast.

1 Remove the black plastic cover from the top of the mast. The cover is secured to the mast by 2 x M5 x 20mm cap head bolts. Check that they are tightened to 4Nm.

2 Remove and inspect upper limit micro switch. The switch is secured in position by an M4 x 10mm cap head bolt.

3 Pull the tape slack, the top pulley will now be accessible.

4 Carefully displace the wiring of the pulley block from the centre of the mast to allow safe withdrawal of the assembly.

5 Slide the pulley and micro switch assembly out of the mast taking care to remove it with the wires attached. Inspect for wear or damage and put aside. Move any wiring aside when performing this task taking care not to pull on the wiring.

6 Pull out the carriage by way of the strap that is fastened to it.

7 The strap is fixed to the carriage by a M10 cap head bolt.

8 Remove the bolt to access the tape and inspect for wear or damage. See **"Inspection and replacment of tape"** (pages 11 - 12).

9 The mast is fixed to the Cross member by 2 off M12 x 40mm button head bolts.

10 Check that they are tightened to 10Nm.

11 There are also 4 off M6 x 20mm cap head bolts that can only be accessed by removing the lift motor assembly.

12 Check that they are tightened to 5Nm.

13 Once the motor has been withdrawn from the cross member the M6 bolts can be removed.

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14 Pull the mast away from the cross member boss. (It may be necessary to prise the mast from the boss by gentle levering using a flat bladed screwdriver or similar type of tool).

15 The bottom Micro switch can now be removed by 1 off M5 x 10mm cap head bolt (Identification on orientation of the wiring is advisable before removal).

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

CARRIAGE

1 Check the carriage for lateral, vertical and horizontal play that would indicate excessive wear. Signs of excessive wear must be investigated and the carriage stripped down.

2 The carriage has 4 twin wheeled roller assemblies. Each of these can be removed via a fine pitch M12 x 12mm O/D x 35mm long set pin Using a 6mm hex key remove the roller assemblies.

3 Inspect the assembly for wear or damage paying particular attention to the wheels.

4 The wheels can be removed via a fine pitch M12 x 12mm O/D x 22mm long set pin.

5 The pin is tightened to 8Nm.

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

INSPECTION AND REPLACEMENT OF TAPE

1 Using the handset cycle the carriage to the bottom of the mast.

2 Remove the carrier from the carriage by removing the securing plate via the 2 x M8 screws.

3 Place the hoist on its back on a suitable working surface and at a height that is adequate to perform the rest of this procedure task. **See Fig. 3, Appendix A** (page 22).

4 Remove the mast top cover via the 2 x M5 screws.

5 Remove the centre piece of the base plate assembly. **See Fig. 3, Appendix A** (page 22).

6 Slide the carriage up the mast to release the tension on the tape.

7 Grasp the loose tape through the slot in the mast.

8 Pull on the tape to depress the contact Micro switch, on the top pulley (this allows the motor to wind the tape down) press the down button on the handset to activate the tape motor.

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- 9** Continue to wind the tape down until the end of the tape can be seen around the bottom pulley. **See Fig. 3, Appendix A** (page 22).
- 10** Remove the 1 x M4 screw from the top limit switch assembly.
- 11** Slide the pulley and micro switch assembly out of the mast taking care to remove it with the wires attached. Inspect for wear or damage and put aside. Move any wiring aside when performing this task. Take care not to pull on the wiring as you could pull the wires off the bottom pulley switch.
- 12** The pulley wiring can be disconnected after noting the orientation of the wiring configuration.
- 13** Withdraw the carriage enough to remove the M10 bolt that retains the tape to the carriage.
- 14** Remove the carriage from the mast assembly.
- 15** Using a blunt/wide flat bladed screwdriver or similar implement, remove the bottom pulley strap retainer pin and store to one side.
- 16** The tape can now be removed from the base of the hoist.
- 17** Check the tape for indications of wear and or fraying. **See Fig. 3, 4, and 5, Appendix A** (page 22). Replace if necessary.
- 18** Refitting the tape is a reversal of the procedure. However these care points should be observed.
 - Some assistance in re routing the tape may be necessary by using a blunt/wide flat bladed screwdriver or similar implement.
 - Take care not to damage the tape when replacing it.
 - **Do not** use sharp implements to push the tape through the hoist.
 - Ensure that the tape is not twisted within the mast.
 - Ensure that the strap retaining pin is tightened to the correct torque setting of 8Nm.
 - Ensure no entrapment of the wiring when fitting the top pulley and limit switch to the mast top pulley and limit switch wiring when refitting it to the mast. **See Fig. 5, Appendix A** (page 22).
 - Prior to refitting the top cover take any slackness in the tape up by use of the handset up function.
 - After refitting the mast top cover, cycle the carriage up and down (this can be done by exerting a little pressure downward on the carriage to activate the top pulley limit switch).
 - Refit centre plate on the base of the hoist.
 - Return the hoist to an upright position.
 - Refit the carrier to the carriage.
 - Cycle the carrier up and down.
 - Test the hoist with 227kg of solid weight. See **"Testing of the Oxford Stature"** (page 6).

SERVICE & MAINTENANCE

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

BATTERY PACK & CONTROL UNIT

- 1** Confirm the mounting bracket is firmly attached to the mast. Three M5 cap head screws secure the mounting bracket. **Confirm the screws are fully tightened to 4Nm.**
- 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 the Motor plugs, 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 plugs are 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 carrier and carriage moves in the correct direction.
- 6** Press the leg open and close buttons and confirm the legs move in either direction.
- 7** 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.
- 8** Confirm this 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.
- 9** 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.
- 10** 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.

CROSS MEMBER LEGS / LEG PIVOTS

- 1** Check the leg pivots are secure and **tightened to 25Nm**, and the legs pivot freely. Any stiffness must be investigated.
- 2** Check that there is no excessive play in the leg pivots.

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- 3** Support the underside of the cross member so the front castors are off the floor and check the up and down movement of the leg. Movement in excess of 5mm is not acceptable; the pivot should be stripped down for closer inspection.
 - 4** Removal of the legs/leg pivots can be done as follows.
 - 5** Turn the lift on to its back and unscrew the 2 x 2 off M6 x 20 CSK head screws that secure each leg to the leg pivot castings.
 - 6** Remove the legs inspect for wear if needed and put aside.
 - 7** To enable the leg pivot pin and casting to be inspected, it will be necessary to remove the 2 off M12 x 110mm CSK cap head screws that holds the leg pivots in place on the cross member.
 - 8** Remove the remaining M6 x 20mm CSK cap head screws from the base plates.
 - 9** Remove the base plates and inspect the casting, the bearings, and bearing sleeve on each of the leg pivots for wear.
 - 10** Inspect the leg linkages for wear/damage.
 - 11** Remove the leg pivot and taking care not to lose the bronze bearing at each end of the leg pivot.
 - 12** Remove the steel sleeve to inspect it and the pivot for wear.
 - 13** Clean the sleeve of any debris or replace it if worn.
 - 14** Inspect the leg pivot bush in the leg pivot.
 - 15** Clean the bush in the leg pivot of any debris or replace the leg pivot if it is worn.
- NEVER** fit a new pin or sleeve to a worn or damaged casting/component.
- ALWAYS** torque fasteners up to the correct setting.

RE-ASSEMBLY OF THE LEG PIVOTS

- 1** Lubricate the leg pivot sleeve, and the leg pivot bush with any light mineral-based grease, or silicon spray.
- 2** Place the bronze bearings over the holes in the leg pivot casting.
- 3** Refit the sleeve into the leg pivot casting.
- 4** Align the leg pivot casting with the locating holes in the cross member and the base plate.
- 5** Replace the M12 cap head screw (**after applying loctite**) that secures the leg pivot casting to the cross member and **tighten to 25Nm**.
- 6** Apply loctite to the M6 CSK screws and fasten base plate **tighten them to 5Nm**.
- 7** Replace the legs.
- 8** Apply loctite to the 2 M6 CSK screws and fasten the legs to the leg pivot **tighten them to 5Nm**.

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NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

CROSS MEMBER LEG MOTOR

1 To remove the leg opening motor you will need to remove the base plate and left hand leg assemblies as per the procedure in "**Cross member legs / leg pivots**" (pages 13 - 14).

2 Remove the 2 off M8 x 25mm cap head bolts (torque tightened to 6Nm) to disconnect the leg linkage rods from the Cam plate.

3 Remove 4 off M6 x 20mm cap head bolts (torque tightened to 5Nm) from leg motor mounting plate.

NOTE: Do not remove 2 off M6 cap head bolts near the micro switches.

4 Disconnect the hand control wiring (Identification on orientation of the wiring is advisable before removal).

5 Remove the M4 x 12mm (torque tightened to 3Nm) button head screw from the cam plate and loosen the grub screw (2.5mm Hex key) (torque tightened to 3Nm) set within the cam plate.

6 The Cam plate can now be removed from the drive shaft of the leg motor.

7 Remove 3 off M6 x 20mm CSK head screws (torque tightened to 5Nm) that retain the motor to the mounting plate.

8 Remove the drive key and bronze bush from the drive shaft of the motor.

9 Disconnect wiring from the motor (Identification on orientation of the wiring is advisable before removal).

10 The **micro switches** can also be removed at this point if necessary via the M3 x 20mm cap head screw securing the micro switch to the mounting plate and remove any wires attached (Identification on orientation of the wiring is advisable).

11 The M6 cap head bolts near each micro switch will act as a GO/NOGO guides to the correct refitting of the micro switches.

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

CROSS MEMBER - LIFT MOTOR

1 To remove the lift motor assembly you will need to remove the base plate and right hand leg assemblies and leg motor assembly as per the procedure listed under "**Cross member leg motor**" (page 15).

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2 Remove 4 off M6 x 20mm cap head bolts (torque tightened to 5Nm) from the motor plate that secures the motor on to the cross member, (note one bolt is inside the tape drum housing) See **Fig. 6, Appendix B**.

3 The Lift motor and brake assembly can now be removed from the hoist.

4 Disconnect wiring from the motor (Identification on orientation of the wiring is advisable before removal).

5 Remove 4 off M6 x 20mm cap head bolts (torque tightened to 5Nm) from motor plate securing the tape-housing block. Use a short 5mm hex key ground down to 12mm (See Fig. 7 in Appendix B).

NOTE: it is advisable to mark the two parts with witness marks to make it easier to enable correct refitting of them.

6 Push carriage upwards to extend the tape for easier access to the tape drum.

7 Remove 6 off M6 x 20mm CSK head screws (torque tightened to 5Nm) from the motor mounting plate.

8 Pull away any tape that is still wound around the tape drum, to gain access to the 2 off M5 x 10mm grub screws (torque tightened to 4Nm).

9 Loosen the grub screws and remove the motor from the drum housing, using a suitable drift to tap out the motor from the drive shaft end.

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

CROSS MEMBER - TAPE DRUM

1 To remove the tape drum you must follow the procedures listed under "**Cross member legs / leg pivots**" (parts 4 to 8, pages 13 - 14) and "**Cross member - lift motor**" (pages 15 -16).

2 The drum assembly is comprised of two halves, held together by 2 off M5 x 20mm cap head bolts (torque tightened to 5Nm).

3 Remove the end of the tape from the drum. (It is advisable to mark the drum to indicate the direction that the tape i.e. anticlockwise).

4 Inspect the two halves for any signs of excessive wear or damage.

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct 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 Loctite or similar thread locking compound. **Tighten to 10Nm.**

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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.

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct setting.

FRONT 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 Loctite or similar thread locking compound. **Tighten to 10Nm.**

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.

NOTE: 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 correct torque setting.

ALWAYS torque fasteners up to the correct 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 |

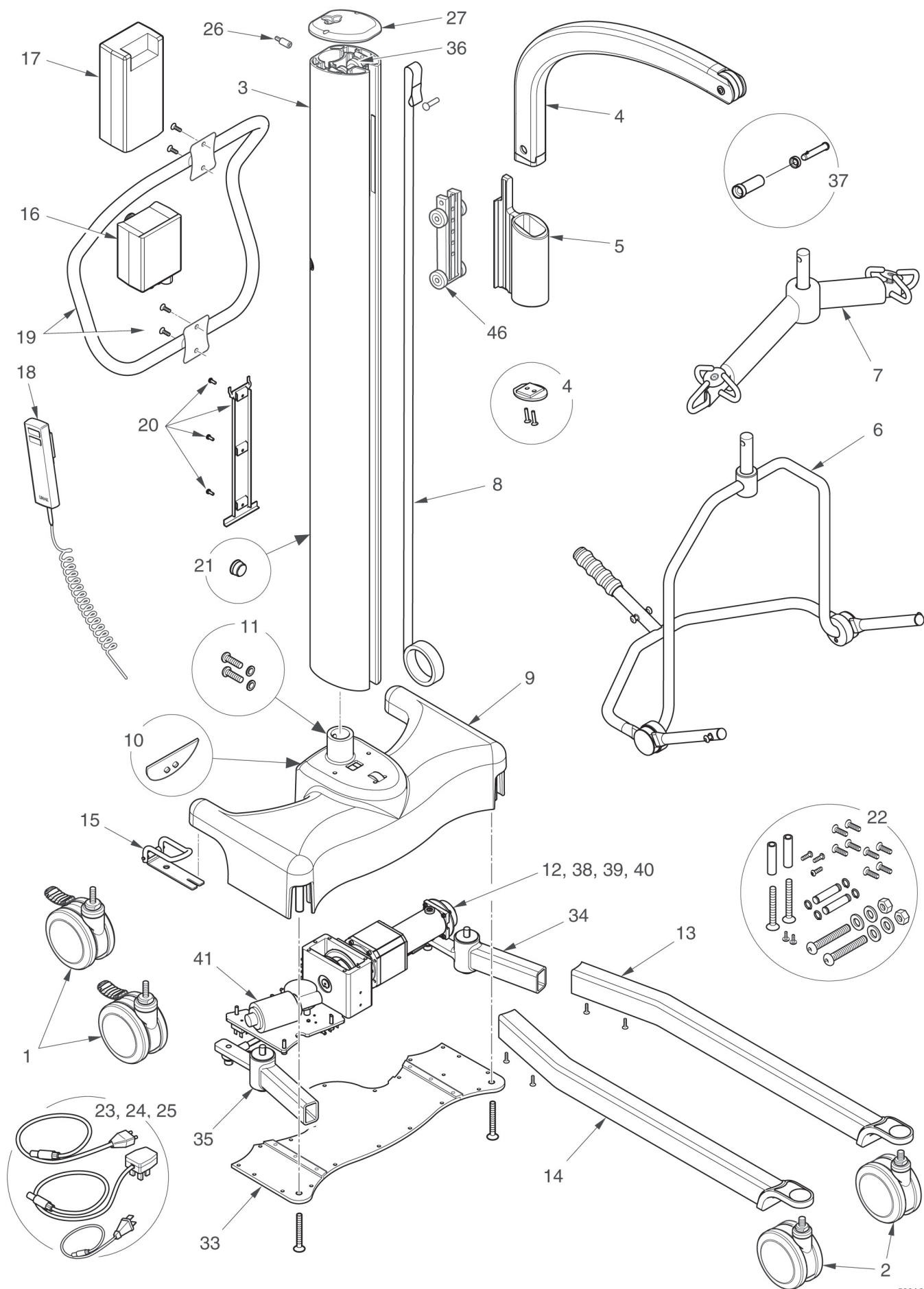
● Problem - Hoist won't go up or won't go down

| 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 motor | Replace motor |
| Anti-crush micro switch activated (Safety Device) | Check for correct function of micro switch, or remove any obstacle that may have come between the carrier as it was lowering |
| Motor power cables disconnected | Check connections and re-connect |
| Motor socket damaged | Replace control box |

● Problem - Electric Leg Operation not working (one or both legs not moving)

| Possible Fault | Remedy |
|--|-------------------------------------|
| Leg motor cables disconnected | Check connections and re-connect |
| Motor disconnected from leg or centre mounting | Re-assemble, replace mounting bolts |
| Motor defective | Replace motor |
| Not enough power in battery pack | Charge battery pack |

EXPLODED VIEW



539A288

PARTS LIST

OXFORD / HOYER STATURE

| N° | PART NUMBER | DESCRIPTION | QTY |
|----|-------------|---|-----|
| 1 | 0Y0066 | 100mm rear caster (braked) including fixings | 2 |
| 2 | 0Y0073 | 100mm front caster (non braked) including fixings | 2 |
| 3 | 0Y0185 | Mast extrusion | 1 |
| 4 | 0Y0186 | Boom extrusion and capping plate | 1 |
| 5 | 0Y0187 | Boom carrier | 1 |
| 6 | 0Y0188 | 4 point cradle assembly complete (standard with Stature) | 1 |
| 7 | 0Y0189 | 6 point spreader bar assembly complete (option with Stature) | 1 |
| 8 | 0Y0190 | Lift strap and pin | 1 |
| 9 | 0Y0191 | Base Assembly; includes base casting & welded post (not internal parts) | 1 |
| 10 | 0Y0192 | Foot push pad assembly complete | 2 |
| 11 | 0Y0193 | Mast to base fixing kit | 1 |
| 12 | 0Y0194 | Motor gear box and brake assembly complete | 1 |
| 13 | 0Y0195 | Left leg extrusion including fixings | 1 |
| 14 | 0Y0196 | Right leg extrusion including fixings | 1 |
| 15 | 0Y0197 | Straight-line steering device | 1 |
| 16 | 0Y0198 | Linak controller | 1 |
| 17 | 0Y0067 | Linak battery | 1 |
| 18 | 0Y0075 | Linak hand control | 1 |
| 19 | 0Y0199 | Push handle assembly and fixings | 1 |
| 20 | 0Y0069 | Linak battery and controller brackets/fixings | 1 |
| 21 | 0Y0200 | Mast grommet (cable feed) | 2 |
| 22 | 0Y0201 | Fixings Kit (all bolts, screws and fixings) | 1 |
| 23 | 0Y0071 | Linak charge lead UK | 1 |
| 24 | 0Y0114 | Linak charge lead USA | 1 |
| 25 | 0Y0072 | Linak charge lead EURO | 1 |
| 26 | 0Y0202 | Emergency descent socket and drive | 2 |
| 27 | 0Y0203 | Mast top cap | 1 |
| 28 | 0Y0204 | Decal set (Oxford) not shown (no serial number labels) | 1 |
| 29 | 0Y0205 | Decal set (Hoyer) not shown (no serial number labels) | 1 |
| 30 | 0Y0070 | Handset clip (not shown) | 1 |
| 31 | 0Y0128 | Caster tightening wrench (not shown) | 1 |
| 32 | 0Y0227 | Wiring kit complete (includes circuit diagram and descriptions) not shown | 1 |
| 33 | 0Y0218 | Base bottom plate | 1 |
| 34 | 0Y0219 | Leg pivot assembly and fixings (left hand) | 1 |
| 35 | 0Y0220 | Leg pivot assembly and fixings (right hand) | 1 |
| 36 | 0Y0221 | Top pulley assembly | 1 |
| 37 | 0Y0222 | Quick release pin kit | 1 |
| 38 | 0Y0223 | Brake assembly (separate) | 1 |
| 39 | 0Y0224 | Motor gearbox assembly (separate) | 1 |
| 40 | 0Y0225 | Bottom pulley kit | 1 |
| 41 | 0Y0226 | Leg motor | 1 |
| 42 | 0Y0228 | Limit switch kit (includes 4 proximity switches) not shown | 1 |
| 43 | 0Y0229 | Relay kit (X1) not shown | 1 |
| 44 | 0Y0230 | Diode kit (X4) not shown | 1 |
| 45 | 0Y0053 | Linak charger and stand assembly not shown | 1 |
| 46 | 0Y0231 | Carriage pulley assembly complete | 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 _____

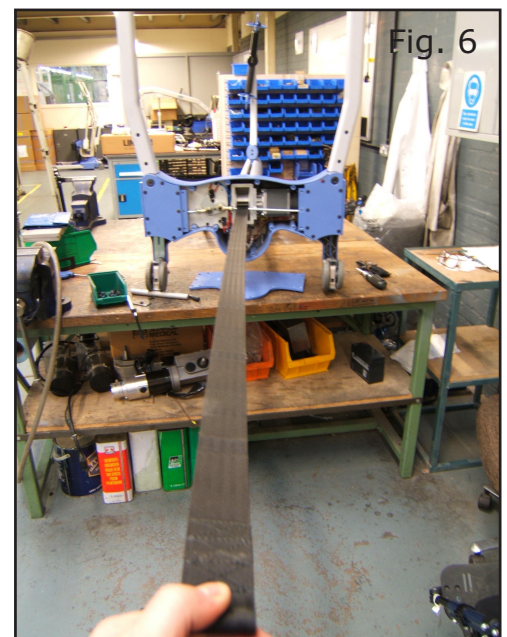
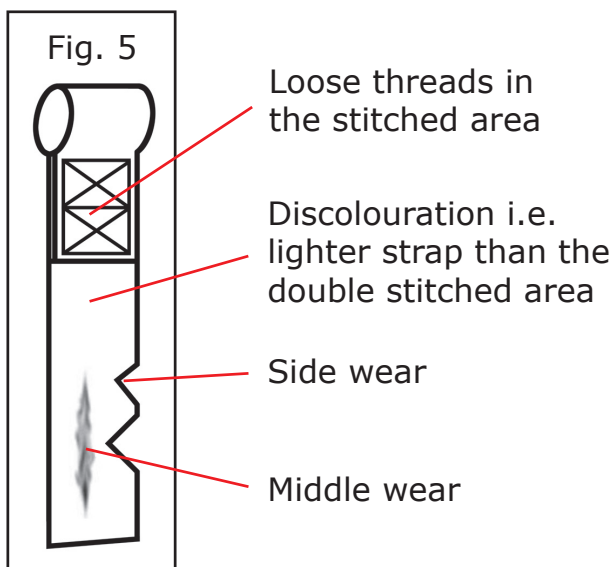
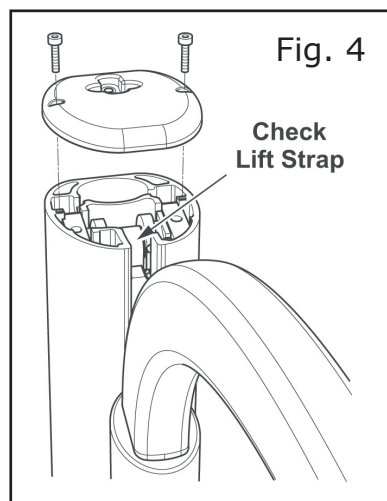
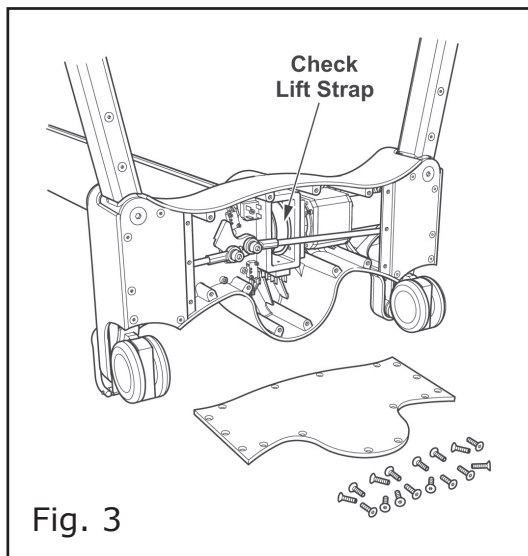
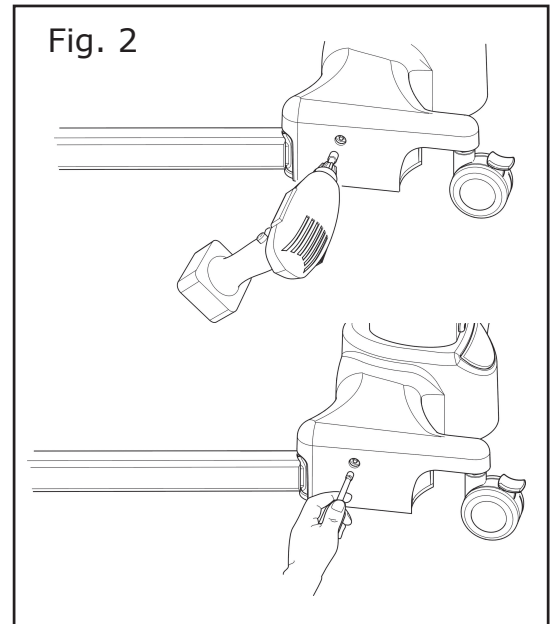
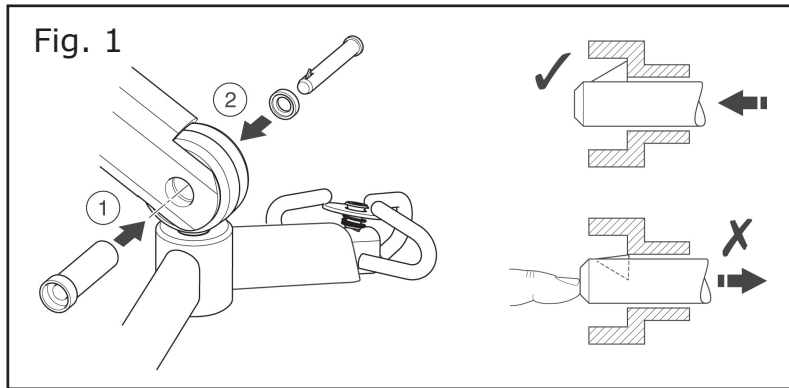
Signed _____

Signed on behalf _____

Date of Report _____

Name & address _____

APPENDIX A



APPENDIX B

Fig. 7

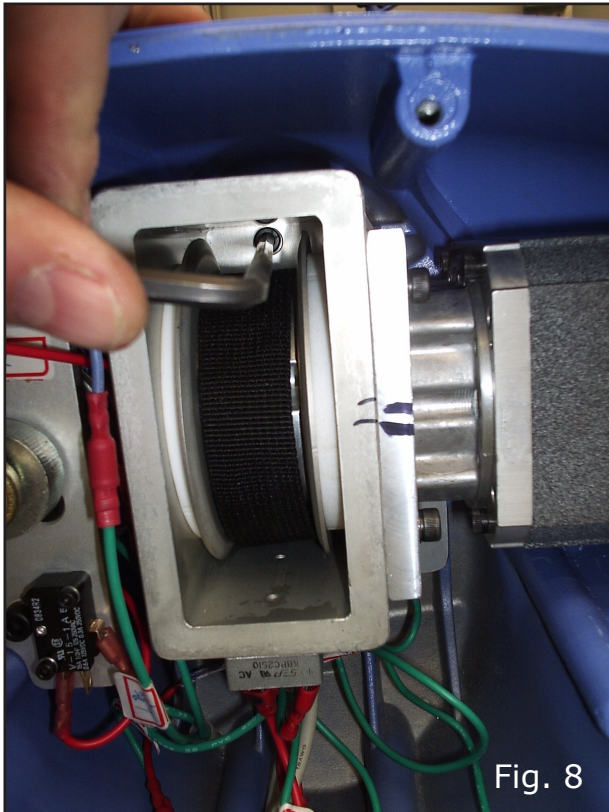
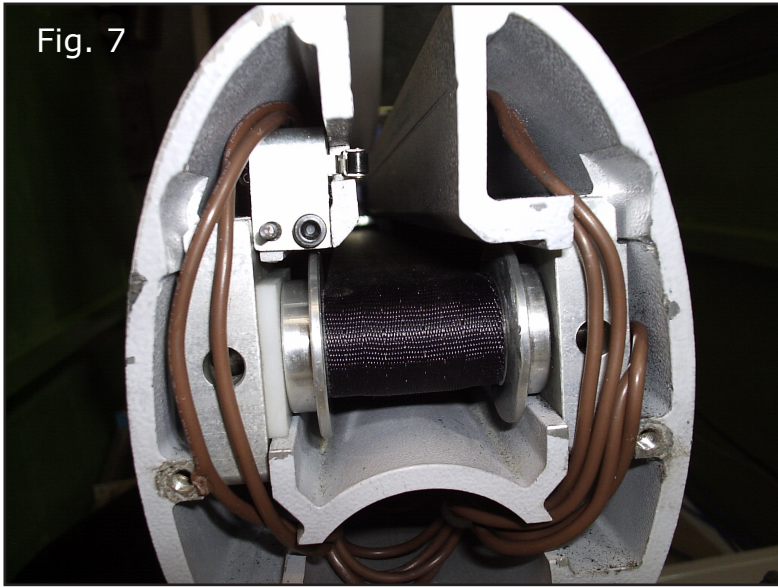


Fig. 8

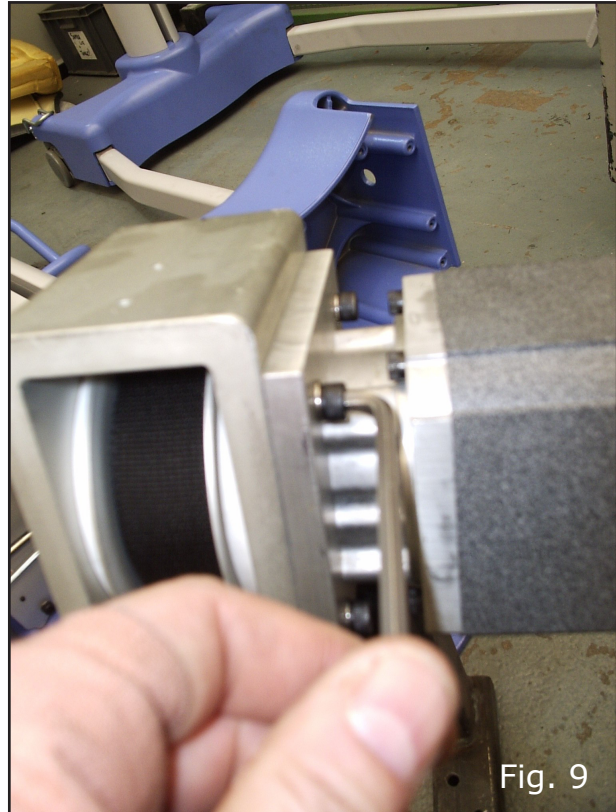


Fig. 9

NOTES



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