



Stralus C 200 Service Manual

For use by Stralus
Service Professionals

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stralus 

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The following section outlines instruction for tests to assist in servicing the bed. These instructions should be read in conjunction with the User Manual. If the result of any test is unsatisfactory, investigate and take the appropriate remedial action.

The following tests should be performed before a serviced bed is returned to use or to review if the is functioning correctly.

1.1 Preliminary Checks

1.2 Electronic Functions Checks

1.3 Battery Back Up Function

1.4 Manual Functions - Side Rails, Manual CPR, Bed Extension, Castor Brakes & Steering, Knee Break & Calf Adjustment



WARNING
Keep clear of the moving bed when it is being operated. Severe injury can result from crushing by moving parts.



WARNING
If any electrical assembly/wiring has been replaced or repaired, appropriate safety checks must be made.

1.1 Preliminary Checks

- Verify that no furniture or other obstruction can impede the movements of the bed.
- Check that battery is charged by activating the hand control.
- Connect the bed to the mains power supply.
- Level the mattress platform (zero tilt).

1.2 Electronic Function Checks

- Using the handset, check the function of bed height, tilt, backrest angle and leg elevation.
- Verify satisfactory operation over the full range of bed movement.
- Verify that when using Trendelenburg feature (see section 3.4 of the User Manual), once the bed reaching the horizontal position, the bed pauses for two seconds then continues to move if the push button is still being pressed.
- Verify that the actuators are de-energised when the push button is released or the limit of travel is reached.
- Verify that the bed reverts to flat, horizontal & low height condition by positioning the bed at maximum height with both back rest and leg rest raised. Apply foot down tilt so that the bed is not level. Press and hold the EPP button on the handset.

1.3 Battery Backup Function

- Disconnect the bed from mains power.
- Check the functions of bed height, backrest angle, leg elevation and two-way tilt using the handset.
- Apply a load of approximately 80 kg to the mattress platform (the weight of one person).
- Raise and lower the platform from the minimum low height to the maximum height 3 times.
- Re-connect the bed to the mains power supply.
- Test the batteries as described in section 3.

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1.4 Manual Functions

Side Rails

– Check operation of side rails.

– Verify that the release button is effective and that the sides are firmly locked when raised.

– Refer to User Manual section 3.7 and 3.8 for detailed operating instructions.

Manual CPR

– Using push button handset, raise the back rest to approximately 60°

– Lift the CPR release handle and push the backrest down.

– Verify that the release mechanism is effective and the backrest reclines in a smooth, controlled manner with minimum force applied.

– Refer to User Manual section 3.9 for detailed operating instructions.

Bed Extension

– Check the operation of the bed extension.

– Verify that the latching mechanism is effective.

– Refer to User Manual section 3.12 for detailed operating instructions.

Castor Brakes & Steering

– Check the brakes for efficient operation by applying the brakes and pushing the bed. None of the four braking castors should rotate.

– Set the brake pedal in the steering position and verify that one head end castor is engaged so that it cannot swivel.

– Refer to User Manual section 3.10 for detailed operating instructions.

Knee Break and Calf Adjustment

– Use the handset to raise the knee break to maximum height.

– Lift the foot section to an intermediate position and check that it firmly locks in place.

– Lower the foot end again.

– Using the handset, lower the legs.

– Verify that the knee break angle returns to zero as the legs are lowered to horizontal.

– Verify that the foot end of the calf section can be raised and lowered over the full range of movement.

– Refer to User Manual section 3.12 for detailed operating instructions.

Servicing Procedure

2.1 General

The servicing procedures in this section include:

- Replacement of specific components and sub-assemblies
- Dismantling of the main structure
- Assembly of the main structure
- Restoration of paint finish

Procedures which are considered to be self evident have not been included. Do not disassemble more than is necessary to replace a defective item.

Note: All references to left or right of the bed are when viewed from the head end.



WARNING
Before starting any service or maintenance procedures, ensure that the equipment has been adequately decontaminated.



RISK OF CRUSHING
The bed and sub-assemblies are very heavy and could cause serious injury or death by crushing. When working beneath the bed, the equipment must be properly supported with suitable lifting devices, blocks or stands.

Before the bed is returned to use following service or repair, you should:

- Carry out a visual inspection for signs of damage
- Perform a serviceability test as given in Section 1
- Clean the equipment as specified in the User Manual

Using Loctite and Lubrication

Remove old Loctite and other adhesives from components before re-assembly. Apply Loctite 270 to screw threads on assembly of items as specified in Appendix A or in the text. Before applying Loctite, clean and degrease both internal and external screw threads using a suitable volatile solvent e.g. methylated spirits.

Apply grease to bushes and joints on assembly of items as specified.



WARNING
Avoid skin contact with lubricants. Wear rubber gloves and protective clothing during maintenance work.

Servicing Procedure

2.2 Product Assembly Structure

Each bed is comprised of a number of sub-assemblies.

The serial number of the bed is marked on a label which is visible on the Foot End Rail at the foot end of the bed. The date of manufacture is also printed on this label.

2.3 Tools and Equipment

In addition to normal workshop tools, the special tools and equipment listed below will be required for servicing.

- Lifting Hoist Minimum SWL 225 kg
- Sling strap x2

When using a hoist to lift any part of the bed, always ensure that the sling straps are applied to the main frame sections and do not bear upon components or minor fabrications.

Always ensure that the Hoist manufacturer's instructions/user guides are followed. It is essential that a Risk Assessment is conducted by an appropriately qualified and competent person to ascertain if the Hoist is appropriate to use as described in this manual. DO NOT use the hoist if it is deemed a possible risk.

When lifting the entire bed or the deck assembly, first remove all deck sheets and lift off the head end and the foot end. Pass both sling straps around the main longitudinal members of the deck frame.

2.4 Crank Cover- Access to Components

The moulded crank cover can be removed to provide limited access to components in the crank frame.

Removal

Raise the mattress platform to maximum height. Lift and remove the four plastic pins on the top and bottom of the cover, and then take the inner cover down. Be careful not to stretch the cables excessively.

Installation

Arrange the cables, and fit the cover back on the crank by reversing the removal procedure.

2.5 Crank Cover Replacement

Removal

Remove the existing cover as previously described.

To remove the cover on the Crank bracket, proceed as follows.

- Carefully lift hold the deck assembly and support the base frame in a suitable height with a hoist.
- Loose the bolt for the actuator
- Take the cover out from Crank actuator connector bracket.

Installation

Arrange the cables, and fit the cover back on the crank by reversing the removal procedure.

2.6 Brake Adjustment

– Use the hoist to raise the bed by approximately 20 cm from the ground. Support the undercarriage frame on suitable supports.

– Remove two hexagon head screws and washers on each castors.

– On the brake castors, turn the bearing housing clockwise. Rotate in 180° steps, until the brake is more effective.

– Alternatively, on the tracking castor, turn the bearing housing anti-clockwise. Rotate until the steering lock is more effective.

– Do not over-adjust by turning the housing too many times.

– Fit a new or serviceable shake proof pressing,

– Apply thread lock to two hexagon head screws and refit.

– Bend up the pressing to lock the screws.

– If satisfactory adjustment cannot be achieved, replace the castor.

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2.7 Castor Replacement

Foot End Castors

Removal

- Use the hoist to raise the bed by approximately 20cm from the ground. Support the undercarriage frame on suitable supports.
- Ensure that the brake pedals are in the free position. Remove screws and washers and pull off the brake pedals.
- Tap the hexagon shaft through the frame just far enough to clear the castor tube. Remove two hexagon head screws and washers.
- Withdraw the castor from the undercarriage.

Installation

- Insert the stem of the castor into the undercarriage and align the holes.
- Ensure that the braking castors are installed on this end and that they are in neutral mode.
- Install a new or serviceable shake proof washers and two hexagon headed screws including thread-lock but do not tighten yet.
- Align hexagon shaft with one hand and support whilst carefully tapping opposite end with a mallet through castor.
- Tighten the two hexagon headed screws.
- Install the brake pedals and attach with screws and washers.

Head End Castors

Removal

- Use the hoist to raise the bed by approximately 20 cm from the ground. Support undercarriage frame on suitable supports.
- Remove hexagon shaft retaining 12mm axle caps.
- Tap the hexagon shaft through the frame just far enough to clear the castor tube. Remove two hexagon head screws and washers.
- Withdraw the castor from the undercarriage.

Installation

- Insert the stem of the castor into undercarriage and align the holes.
- When inserting tracking castor, ensure that the castor is in neutral mode. Insert the stem of the castor into undercarriage and align the holes. **Note: the tracking castor should be fitted at the right side from the patient point of view.**
- Install a new or serviceable shake proof washers and two hexagon headed screws including thread-lock but do not tighten yet.
- Align hexagon shaft with one hand and support whilst carefully tapping opposite end with a mallet through castor.
- Tighten the two hexagon headed screws.
- Fit two new 12mm axle caps on hexagon shaft ends.

2.8 Mains Cable Assembly Replacement

Removal

– Disconnect the mains cable from the electrical power supply.

– Cut cable tie securing cable to crank frame in order to release the mains cable.

– Disconnect the mains cable assembly from the control box and remove the cable assembly from the bed.

Installation

– Connect the mains cable assembly to the control box. Position the cable around the end of the control box and then beneath the control box.

– Secure cable to crank frame using a new cable tie and cut excess length. Ensure that the cable is not strained and bend radius is not too short.

– Refit the crank cover.

2.9 Battery Replacement

Removal

– Disconnect bed from mains power supply.

– Remove the crank cover at the head end as described in section 3.4.

– Disconnect the batteries and remove them from the battery compartment.

Installation

– Position the new batteries on the crank frame near the control box, ensuring correct orientation. Attach with three screws.

– Reconnect the electrical wires.

– Refit the crank cover.



WARNING
Avoid short circuiting the battery, remove rings, washers or metal objects. Use tools with insulated handles.

Lead-acid batteries can be an environmental and health hazard. Store batteries in accordance with manufacturer's instructions. Dispose of unserviceable batteries safely in accordance with local authority regulations.

2.10 Control Box Replacement

Removal

– Raise bed to maximum height and disconnect mains cable from the electrical power supply.

– Remove the crank cover at the head end as described in section 3.4.

– Remove control box cable retaining cap over connection ports and disconnect all seven cables from the control box.

– Remove the M5 screw and nut securing control box and bracket to crank frame. Slide control box off the bracket.

Note: If main lift actuators are not functional and the bed is at low height: Lift off the head and foot panels. Remove the platform sheets. Disconnect the bed from the mains power supply. Use the hoist to support platform and tilt the bed on one side far enough to gain access to the control box.

Installation

– Install the control box on the control box bracket and attach with M5 screws and nuts through the crank frame.

– Lightly lubricate the o-rings on the actuator cable connectors with petroleum jelly

– Reconnect all cables to the control box and fit the retaining cap, preventing accidental disconnection of the plugs.

– Refit the crank cover.

– Calibrate system as described in section 4.

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2.11 Junction Box Cable Replacement

Removal

- Raise bed to maximum height and disconnect from mains power supply.
- Remove the crank cover at the head end as described in section 3.4.
- Remove cable retaining cap over control box connection ports and disconnect junction box cable from HB port on control box. Remove cable ties securing the cable to crank frame.
- Remove junction box cable retaining cap and unplug cable from port.
- Separate two piece conduit halves and remove the junction box cable from the conduit.

Note: If main lift actuators are not functional and the bed is at low height: Lift off the head and foot panels. Remove the platform sheets. Disconnect the bed from the mains power supply. Use the hoist to support platform and tilt the bed on one side far enough to gain access to the control box.

Installation

- Lubricate junction box cable plug O-ring and plug into junction box port and fit cable retaining cap.
- Install junction box cable into conduit and re-join two pieces of conduit.
- Secure conduit to backrest actuator using three cable ties.
- Lubricate junction box cable plug o-ring and plug into control box HB port and fit cable retaining cap. Fold surplus cable length and tidily secure to crank frame using cable ties.

2.12 Backrest/Knee Break Actuator Cable - Replacement

Removal

- Raise bed to maximum height and disconnect from mains power supply.
- Remove the crank cover at the head end as described in section 3.4.
- Remove cable retaining cap over control box connection ports.
- Disconnect **backrest actuator cable** from **No1** port and **knee break actuator cable** from **No3** port on control box. Remove cable ties securing cables to crank frame.
- Un-clip backrest/seat sheet top from platform frame. Remove cable retaining clip at actuator end and unplug cable.
- Separate the two piece conduit halves and remove actuator/s cable/s.

Note: If main lift actuators are not functional and the bed is at low height: Lift off the head and foot panels. Remove the platform sheets. Disconnect the bed from the mains power supply. Use the hoist to support platform and tilt the bed on one side far enough to gain access to the control box.

Installation

- Lubricate replacement actuator cable plug o-ring and plug into actuator housing port and fit cable retaining clip.
- Install actuator cable into conduit and re-join two pieces of conduit. Secure conduit to backrest actuator using three cable ties. Clip backrest/seat sheet top back in position over cross rails.
- Lubricate actuator cable/s, plug o-ring and plug into their corresponding control box ports. Fit cable retaining cap. Fold surplus cable/s length and tidily secure to control box tray using cable ties.
- Refit crank cover.

2.13 Height Actuator Cable -Replacement

Removal

- Raise bed to maximum height and disconnect from mains power supply.
- Remove the crank cover at the head end as described in section 3.4.
- Remove cable retaining cap over control box connection ports.
- Disconnect **head end crank main lift actuator cable** from **No4** port and/or **foot end crank main lift actuator cable** from **No2** port on control box.
- Use the hoist to support the platform. Remove main lift actuator rear mounting M10 bolt and nut and lower actuator onto floor allowing access to cable plug.
- Remove cable retaining clip and unplug cable from actuator housing port.

Note: If main lift actuators are not functional and the bed is at low height: Lift off the head and foot panels. Remove the platform sheets. Disconnect the bed from the mains power supply. Use the hoist to support platform and tilt the bed on one side far enough to gain access to the control box.

Installation

- Lubricate replacement actuator cable plug o ring and plug into actuator housing port and fit cable retaining clip.
- Align actuator rear mounting fixture holes to crank frame brackets and bolt in position using a new nyloc nut.
- Lubricate actuator cable plug o-ring and plug into corresponding control box ports and fit cable retaining cap. Fit cable tie and cut off excess length.
- Refit crank cover.
- Calibrate system as described in section 43.

2.14 Flexible Conduit - Replacement

Removal

- Raise bed to maximum height and disconnect from mains power supply.
- Disconnect the bed from the mains power supply.
- Remove the crank covers as described in section 3.4.
- Remove the sheet tops from platform frame.
- Separate the two piece conduit halves and remove all the cables.
- Unscrew the conduit connector and remove the conduit.

Installation

- Install cables inside conduit half and join two pieces of conduit together.
- Put the sheet tops back in position over platform cross rails.
- Secure other end of conduit to the crank cover with the connector.
- Refit crank cover.

2.15 Height Actuators- Replacement

Removal

– If the actuators are functional: Lift off the head and foot panels. Remove the platform sheet tops. Raise platform to maximum height and use the hoist to support it. Disconnect the bed from the mains power supply.

– If the actuators are not functional and the bed is at low height: Lift off the head and foot panels. Remove platform sheet tops. Disconnect the bed from the mains power supply. Use the hoist to support platform and tilt the bed on one side far enough to gain access to the actuators.

– Remove actuators mounting M10 bolt and nut to release the actuator ram from the crank arm.

– Set the bed back on its castors and use the hoist to raise the platform to maximum height.

– Remove the crank covers as described in section 3.4.

– Remove actuator rear and strut mounting bolts and nuts.

– Remove cable retaining clip and unplug cable from actuator.



WARNING
Take care to avoid trapping fingers in the above procedure.

Installation

– Apply grease to all pivot points prior to assembly.

– Lightly lubricate cable plug o-ring with petroleum jelly and insert plug into actuator port.

– Secure in place using cable retainer.

– Position the actuator, ensuring correct orientation and attach the body to crank actuator mount bracket using existing M10 bolt and new M10 nyloc nut. The bolt should be installed with the head toward the inside of the bed.

– Use the control handset to extend the actuator and align the hole in the ram with the hole in the crank arm.

– Attach the actuator ram to the crank arm with M10 bolt and new M10 nyloc nut. The bolt should be installed with the head toward the outside of the bed.

– Refit the crank cover.

– Calibrate the actuators as described in Section 3.



WARNING
Take care to avoid trapping fingers in the above procedure.

2.16 Knee Break Actuator-Replacement

Removal

- Raise bed to maximum height and lower knee break function to a flat position.
- Disconnect bed from mains power supply.
- Remove seat sheet top from bed frame in order to gain access to cable plug. Remove cable retaining clip and disconnect cable.
- Release actuator from bed frame by removing retaining pivot bolts and nuts.

Installation

- Apply grease to both pivot points prior to assembly.
- Position actuator, ensuring correct orientation and attach to bed frame using existing bolts and a new nyloc nuts. Be careful to not over tighten pivot bolts, allow actuator to freely pivot. The safety actuator spline feature allows for manual adjustment if required during this procedure.
- Lightly lubricate cable plug o-ring with petroleum jelly and install, securing in place with retaining clip.



WARNING
Take care to avoid trapping fingers in the above procedure.

2.17 Backrest Actuator- Replacement

Removal

- Raise bed to maximum height and lower backrest to flat position, disconnect from mains power supply.
- Remove seat sheet top from bed frame.
- Remove actuator cable retaining clip from actuator housing port and disconnect cable.
- Using a small flat screwdriver, slide open actuator CPR release cable cover and remove inner cable ball end, followed by cable outer housing.
- Remove actuator from bed frame by removing retaining pivot bolts and nuts.

Installation

- Apply grease to both pivot points.
- Position actuator, ensuring correct orientation.
- Attach to bed frame using existing bolts and new nyloc nuts. Be careful to not over tighten pivot bolts, allow actuator to freely pivot. The safety actuator spline feature allows for manual adjustment if required during this procedure.
- Lightly lubricate cable plug o-ring with petroleum jelly and install, securing in place with retaining clip.
- Insert CPR release cable outer into actuator cable recess. Insert inner cable ball end and slide cover in position.
- Install seat sheet top in position.



WARNING
Take care to avoid trapping fingers in the above procedure.

2.18 CPR Release Cable - Replace/Adjust

Removal

- Raise platform to maximum height, remove seat sheet top and raise backrest section.
- Remove retaining screws and nuts to release the cable inner from the CPR lever. Remove nut from the CPR cable outer and release it from the deck.
- Remove cable from backrest actuator as described in section 3.17.

Installation

- Insert CPR release cable outer into cable recess. Insert inner cable ball end, slide cover in position.
- Feed CPR release cable outer through cable guide lug located on deck fabrication and assemble to tension bracket with two nuts. Fit cable inner to CPR lever and secure in position with a new nyloc nut.
- Adjust the two nuts on the CPR release cable outer to ensure operation of the release mechanism.
- Refit seat sheet top.

2.19 Roller Buffer - Replacement

Removal

Reach under roller buffer and pull retaining pin ring down and pull pin out. Remove the roller buffer.

Installation

Fit roller buffer over buffer pin and insert retaining pin. Fold ring clip eliminating pin from falling out.

2.20 Dismantling the Bed

This sub-section gives procedures for dismantling the main structure of the bed. It must be read in conjunction with the preceding sub-sections which describe the removal of specific components and sub-assemblies.

Dismantling of the bed is not a routine procedure and should only be carried out to the extent necessary.

The information given is for guidance since procedures will be varied according to the purpose for which they are undertaken. For example, it is not necessary to take off the deck sections in order to remove the deck from the base. Minor procedures which may be deemed self-evident have not been included.

Safety Slides - Removal

– Remove the bolts and nuts fitting on foot end and head end of deck frame and remove the side rails.

Base Extension – Removal

- Remove base extension lever by removing pivot bolt and tension spring.
- Remove two tension springs on the slide bars of base extension.
- Slide base extension frame (including stripper) completely out of platform frame end tubes.

Backrest – Removal

- Remove four platform sheet tops.
- Remove bolt and nut to release the actuator and gas spring from backrest frame. Use a piece of wire or similar to support actuator strut end.
- Remove the bolts and nuts from backrest pivot points.
- Slide backrest off the platform frame from the slide bracket. Collect the two nylon slide blocks.

Calf Section - Removal

- Remove the bolts and nuts from the two Rastomats.

- Remove the bolts and nuts from pivot points within thigh section.

Thigh Section – Removal

- Remove bolt and nut to release actuator from thigh panel frame. Use a piece of wire or similar to support actuator strut end.

- Remove the bolts and nuts from the thigh panel pivot points.

Cranks – Removal

- Remove the self locking nuts, washers and screws and remove the stabilising links from the cranks. Do not allow the cranks to fall when released.

- Slide the cranks from the undercarriage aluminium slide channel. Collect the pivot bearings.

- Remove main lift actuators retaining nuts and bolts.

Platform Frame- Removal

- Remove head and foot panels. Remove sheet tops. Use the hoist to support the platform.

- If not already removed, disconnect the flexible conduit by cutting two cable ties securing conduit to backrest actuator. Remove the crank covers and disconnect cables from all the actuators and junction boxes.

- Remove the main lift actuator rear and strut mounting bolts and nuts.

- Remove the two self locking nuts, washers and crank axle rod to release the head end crank frame from the platform support bracket. Collect two pivot bushes.

- Remove the two self locking nuts, bushes and crank axle rod to release the foot end crank frame from the platform support bracket. Collect two pivot bushes.

- Remove the platform frame from assembly.

2.21 Assembling the Bed**Cranks - Installation**

- Place four pivot bearings on the bottom of cranks in position. Lubricate the bearing surfaces liberally with grease.

- Slide and position the cranks on the undercarriage aluminium slide channels, ensuring correct orientation i.e. with actuator short arms pointing toward outside of the bed. Note: the crank with the main control box is on the head end.

- Align the holes in the stabilising links with the holes in the crank frame.

- Apply grease to the holes and install hexagon bolts, washers with the head toward the outside of the bed.

- Secure with nyloc nuts.

- Fit the nut caps.

Platform Frame - Installation

- Use the hoist to position the deck assembly over the undercarriage assembly.

- Attach the crank axle rod to head end deck support bracket, 19mm washer, top cross tube on head end crank frame, 19mm washer and head end deck support bracket on another side in turn.

- Install the 12mm washers and nyloc nuts.

- Install nut caps on the two ends of the crank axle rod.

- Repeat steps to install foot end crank frame.

- Fit crank covers on crank frames.

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Thigh Section - Installation

– Install hexagon bolts, nyloc nuts with the head toward the outside of the bed to thigh panel frame pivot pins.

– Position actuator, ensuring correct orientation and attach to thigh panel frame using existing bolts and new nyloc nuts. Be careful to not over tighten pivot bolts, allow actuator to freely pivot. The safety actuator spline feature allows for manual adjustment if required during this procedure.

– Lightly lubricate cable plug o-ring with petroleum jelly and install, securing in place with retaining clip.

Calf Section - Installation

– Install hexagon bolts, 10mm nylon washers and to calf panel frame pivot pins. Position bolt heads on outside of bed.

– Install the rastomats to bracket using hexagon bolts, washers, nyloc nuts with the head toward the outside of the bed. Note: the Rastomats should be on the right side of the calf bracket when stand at the foot end.

– If rollers have been removed for any reason, it is important that they are fitted using two new star lock washers and lubricant applied.

Backrest - Installation

– Lightly lubricate two nylon slide blocks with petroleum jelly and install with backrest into slide bracket of deck frame.

– Install the bolts and nuts with the head toward the inside of the bed to backrest support bracket pivot points.

– Position actuator, ensuring correct orientation and attach to bed frame using existing bolts and new nyloc nuts. Be careful to not over tighten pivot bolts, allow actuator to freely pivot. The safety actuator spline feature allows for manual adjustment if required during this procedure.

– Install extension end of gas spring on the bolt of backrest actuator bracket using the nyloc nut.

– Lightly lubricate cable plug o-ring with petroleum jelly and install, securing in place with retaining clip.

Base Extension- Installation

– Install the bolt and nut to lever pivot point. Put spring over lever tab and pull the lever down to hold the spring.

– Insert base extension slide tubes into platform side rails open ends. Plug in the retaining pins on base extension slide tubes.

Safety Slides - Installation

– Using the bolts and nuts, fit the side rail on the head end of deck frame. Note: the lock must be on the foot end.

– Repeat on the other side.

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2.22 Restoration of Paintwork

Damage to the paint finish on the frame or other components can be repaired by brush application of cellulose based paint obtainable from specialist paint suppliers or local distributors.

To ensure colour match, contact Stralus and quote bed serial number.

Procedure

- Clean and degrease the damaged area by wiping with a lint free cloth moistened with a suitable volatile solvent e.g. methylated spirits.
- Make sure there are no loose chips of paint and use fine silicone carbide abrasive paper to abrade the area where paint is to be applied and blend to a smooth surface. Clean and degrease the area again.
- Use a soft bristle brush and apply the colour finish paint to the damaged area.
- Allow to dry.
- Use in accordance with the manufacturer's instructions.



WARNING
Always use painting materials as directed by the manufacturer and obey the safety instructions.

3.1 Overview

Long term use may result in lost position (non parallelism) of the main lift actuators. As a result, the bed may not return to a true horizontal position when required. This may be automatically corrected by driving the bed to its maximum height. If this is not effective, the condition can be rectified by the recalibration procedure in section 3.2.

If the main lift actuator or cable require replacement it is necessary to re-calibrated as described.

3.2 Calibration Procedure

- Ensure that the bed is connected to mains power.
- Adjust the bed to approximately the mid height position.
- Simultaneously press main-lift UP and DOWN keys on the handset until the system stops beeping. Please note that the two keys must be activated at exactly the same time This may take several attempts.
- Calibrate the main lifting actuators by pressing UP and running until both actuators are fully extended (bed is at its highest point).
- Hold the button for approximately 1 second after the actuators have stopped.

Note: Backrest and Knee break actuators do not employ any positional feedback so do not require calibrating.

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4.1 Spare parts

The following is a list of spare and replacement parts that are available for purchase. For more information please contact your Strlaus representative.

- Backrest Actuator
- Battery
- Cable (Nurse Panel)
- Castor
- Castor - directional
- Control Box (for Control Panel)
- Control Panel Right (excludes PCB and cable)
- Control Panel Left (excludes PCB and cable)
- Distribution Box
- Handset
- Hi-lo Actuator
- Leg Actuator
- Nurse Control Panel
- PCB
- Under Bed Light