

KB3000-AHL

Adjustable Height Changing Station



Installation and User Guide



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Section 1

The KB3000 is a robust height adjustable changing station, delivering uncompromised user comfort and simple hygienic upkeep. Its patented stretcher is made from a highly cut-resistant material that is easy to clean and disinfect, yet offers a comfortable bed to lie on. It has been designed to be tamper proof with integrated controls and security fittings, and contains no removable parts. The guard gives versatility of use to suit your care task and situation, giving better access while maintaining safety.

Intended Use

No formal training is required to use the KB3000, but users must read and understand the user guide. To aid usage, a quick user guide should be clearly displayed on the wall at all installations.



CAUTION: The product must not be used for any purpose that is not specified within these operating instructions

The product is intended to be used by people trained or experienced in healthcare for a family member or client that:

- needs to be changed or cleaned in a lying position
- is older and/or larger than a child able to use a standard baby changing station

Other than the weight of the patient using the changing table, there are no known contraindications associated with this device.

The maximum working load for the KB3000 is 500 lbs (227 kg).
The recommended position for use of this equipment is shown in Fig 1.

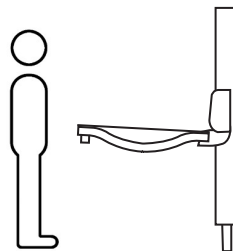


Fig 1

Operating Environment

The KB3000 is a product designed for use in public changing facilities. However, it could be used in any indoor facility at room temperature.

Section 2

See Section 5 for where the label is positioned on the product.

See Section 4 for a full explanation of symbols, cautions and warnings.

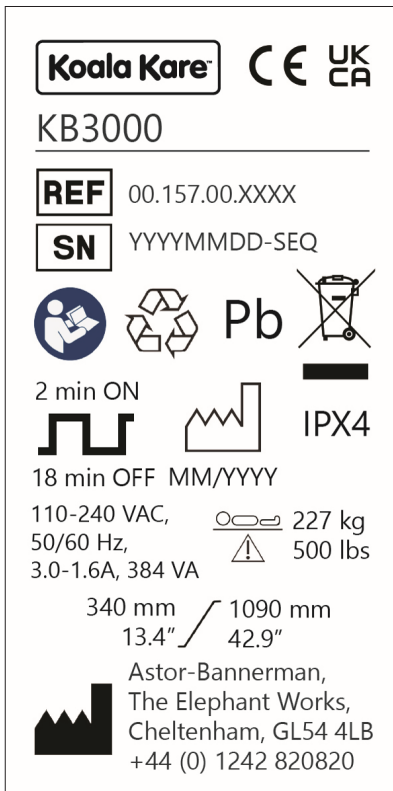


Fig 2a Product label



Fig 2b Pod label

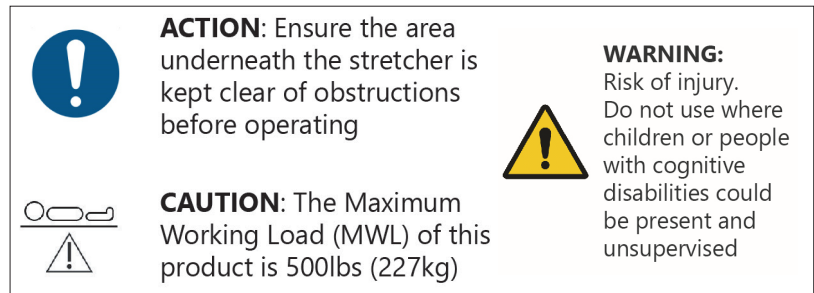


Fig 2c Front cover labels



Fig 2d UL Listing Label

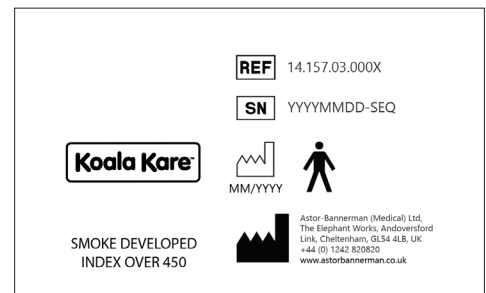


Fig 2e Stretcher label

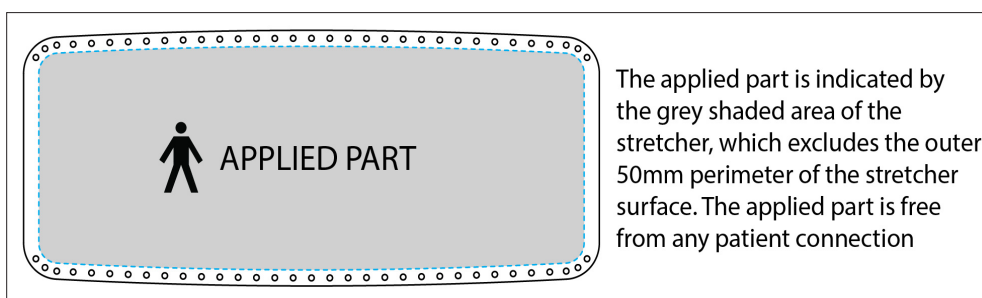


Fig 2f Stretcher Applied Part Label

Section 3

Once registered, this product has a **3 year warranty** against all defects in manufacture of the product. This does not affect your statutory rights.

To validate your warranty and for full terms and conditions, please register your product and your details immediately:

on-line at: koalabear.com

email our support team: customerservice@koalabear.com

or call us on Main: 303.539.8300 | **Toll Free:** 888.733.3456

This warranty is provided by Koala Kare to the registered customer.

Koala Kare Products, a Division of Bobrick Washroom, Inc. warrants that this product will be free from defects in material and workmanship under normal use and service, with proper maintenance, for a period of three (3) years.

This product has been designed using quality components and tested under standard usage conditions to give a 10 year service life based on regular servicing and average usage patterns and conditions. This does not alter the warranty offered.



Section 4.1 Standard symbols

Below are some common symbols used throughout this document and on the product labelling.



This product is UKCA Marked and is certified to BS EN 60601-1:2006+A12:2014 Medical electrical Equipment General Requirements for Basic Safety and Essential Performance, and to BS EN 60601-1-2:2015 for EMC. It also complies with Supply of Machinery (Safety) Regulations 2008, Electrical Equipment (Safety) Regulations 2016, BS EN 349:1993+A1:2008 Minimum gaps to avoid crushing parts of the human body, ISO 10535 Hoists for the transfer of disabled persons, ISO 17966 Assistive products for personal hygiene that support users and BS EN 62262. A declaration of conformity can be found on our website.



This product is CE-marked and is certified to BS EN 60601-1:2006+A12:2014 Medical electrical Equipment General Requirements for Basic Safety and Essential Performance, and to BS EN 60601-1-2:2015 for EMC. It also complies with Supply of Machinery (Safety) Regulations 2008, Electrical Equipment (Safety) Regulations 2016, BS EN 349:1993+A1:2008 Minimum gaps to avoid crushing parts of the human body, ISO 10535 Hoists for the transfer of disabled persons, ISO 17966 Assistive products for personal hygiene that support users and BS EN 62262. A declaration of conformity can be found on our website.



Koala Kare product reference number.



Koala Kare product serial number.



FOLLOW INSTRUCTIONS FOR USE: Before installing or using this equipment you must read and fully understand these instructions. Failure to comply with these instructions may result in accidents resulting in serious personal injury or the product being damaged.



CAUTION: To indicate that caution is necessary when operating the device or control close to where the symbol is placed, or to indicate that the current situation needs operator awareness or operator action in order to avoid undesirable consequences.



WARNING: This symbol indicates a hazardous situation which could result in serious injury or even death if not avoided.



WARNING: This symbol indicated a hazard relating to electricity/voltage.



Type B applied parts. Parts of this product in normal use necessarily comes into physical contact with the patient to perform its function. The product complies with requirements of IEC 60601-1 to provide protection against electric shock. The applied part for this equipment is the changing table stretcher plastic surface, excluding the outer 50mm perimeter. This area is free from patient connection.



Maximum 2 minutes movement of stretcher height in any 20 minute period



This product is for indoor use only.



ACTION: This sign is used to highlight a mandatory action that must be followed by the user.



Identify any terminal which is intended for connection to an external conductor for protection against electric shock in case of a fault, or the terminal of a protective earth (ground) electrode.



Used to identify that a component is suitable for direct current only.



To signify a prohibited action.



Parts of this product can be recycled.



Parts of this product must be separated when being disposed of.

Pb

The battery used in this product contains Lead.



Details of product manufacturer.



Symbol indicated the date of manufacture.

IPX4

This product has been tested for water ingress in accordance with IPX4.

IK10

This product has been tested for external mechanical impacts in accordance with IK10.



The maximum working load for this product is 500 lbs (227Kg).



The lifting range of this product is 12" (300 mm) to 41in" (1040mm).



WARNING: This symbol indicates a hazard associated with EMC (Electromagnetic Compatibility).



Power supply is equipped with safety isolation and short-circuit protection.



Astor Bannerman products are proudly made in Britain.



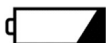
Control button to raise the stretcher.



Control button to lower the stretcher.



To indicate connection to the mains power supply.



To identify the battery condition indicator.



Information.



Consult Manual for Operating Instructions.



This way up.



Do not roll or tip.



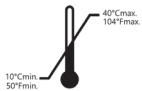
Stacking limit of 3.



Do not clamp as indicated



Keep away from rain.



Temperature Limits.



Humidity Limits.



Mass, Weight.



Class II equipment.

Note: This only applies to the internal power supply module and emergency stop. The equipment is Class I and must be connected to a protective earth.

Section 4.2 General safety information



WARNING: These instructions must be read and understood before installing or using this equipment. Failure to comply with these instructions may result in accidents resulting in serious personal injury or the product being damaged.

WARNING: No modification of this equipment is allowed without express authorization from Koala Kare. If you suspect that any individual parts may be damaged contact for Koala Kare dealer or service provider. Do not remove, attempt to repair or install parts yourself, unless directed to do so by Koala Kare or its agents.



CAUTION: The product must be installed professionally by a qualified trained individual. Koala Kare and Astor Bannerman cannot be held liable for injury to persons or damage to property caused by faulty installation.

CAUTION: The product is not to be used in oxygen-rich environments or where flammable agents, including anaesthetics, are in use.



WARNING: This electrical equipment conforms to IEC60601-1-2, and needs special precautions regarding electromagnetic compatibility (EMC) and needs to be installed and put into service in accordance with the EMC information. It is unlikely that the user will encounter problems with the product because of inadequate electromagnetic compatibility. However, portable and mobile RF communications equipment can affect medical electrical equipment. When the product is connected to the local mains power supply, we recommend the use of electromagnetic shielding and similar preventative measures to avoid conducted emissions. Prior to installation please ensure that there are no existing equipment in the environment that could be adversely affected by electromagnetic interference.

Use of the device should be discontinued if it is suspected that the equipment is being affected by electromagnetic interference.

WARNING: Risk of electric shock if equipment is not used correctly.

WARNING: Class I Medical Electrical Equipment. To avoid the risk of electric shock, this equipment must only be connected to a mains electrical supply with protective earth. The installer must verify that the protective earth terminal to the SBU is connected to the external protective earthing system.

WARNING: The product must be connected to the mains supply and a protective earth connection by a qualified electrician in accordance with IEC 60601-1, as well as any locally applicable standards.

WARNING: Internally Powered Medical Electrical Equipment. Internal voltages present when mains power is removed. Service Personnel are to apply the emergency stop when covers are removed.

WARNING: To ensure protection by electrical separation, the product must be supplied by a mains supply circuit that does not supply power to any other equipment, unless it incorporates a residual current protective device (RCD) with a rated residual operating current not exceeding 30 mA. The circuit must be grounded using a protective earth connection and able to be isolated from mains supply by means of a switch installed in a wall or cabinet. Ensure that location of the mains isolation switch or coupling is easy to access and use.

WARNING: The height adjustable changing table is powered by a 32VDC control system with battery backup. The battery enables the use of the changing table in the event of mains electrical supply failure. It is essential that mains electrical power is switched on at all times to maintain the charge of the backup batteries. Ensure that the device is connected to the internal battery at all times.



Section 4.3 EMC declaration

<p>The KB3000 changing station has been tested for compliance to EN 60601-1-2:2015 and is intended for use in the electromagnetic environments specified below. The responsible organisation should assure that it is used in such an environment.</p>			
<p>Guidance and Manufacturer's Declaration - RF Emissions</p>			
Test	Compliance Standard	Electromagnetic Environment - Guidance	
Radiated Emissions Conducted Emissions	CISPR 11:2015 +A1:2016 Group 1, Class A	<p>The KB3000 changing station is suitable for use in all public changing facilities. Its RF emissions are low and are not likely to cause any interference in nearby electronic equipment.</p>	
Mains Harmonics	EN 61000-3-2:2014 Class A		
Mains Voltage Flicker	EN 61000-3-3:2013		
<p>Guidance and Manufacturer's Declaration - Electromagnetic Immunity</p>			
Immunity Test	Compliance Standard	Compliance Level	Electromagnetic Environment - Guidance
Electrostatic Discharge	EN 61000-4-2:2009	<p>± 8kV contact</p> <p>±15kV air</p>	<p>Floors should be wood, concrete or ceramic tile. If floors are covered with non-conductive synthetic material the relative humidity should be at least 30%.</p>
Magnetic Field Immunity	EN61000-4-8:2010	30A/m	<p>Mains power quality should be that of a typical commercial environment.</p> <p>If problems are encountered then use of the equipment should be discontinued until the source of interference is identified and corrected.</p>
Radiated RF Immunity	EN61000-4-3:2006 +A1:2008 + A2:2010	3V/metre (28V/m spot frequencies)	
Conducted Immunity	EN 61000-4-6:2014	3V rms (6V in ISM Bands)	
Fast Transient Burst	EN 61000-4-4:2012	±2kV for power supply lines; ±1kV for input / output lines	
Surge Immunity	EN 61000-4-5:2014	±1kV differential mode; ±2kV common mode	
Voltage Dips and Interruptions	EN 61000-4-11:2011 +A1:2017	<p>-100% ½ cycle</p> <p>-100% full cycle</p> <p>-30% 500mS</p> <p>-100% 5000mS</p>	<p>The KB3000 changing station is equipped with a battery backup to permit continued use in the event of a power failure.</p>

Section 4.4 Regular checks

Please note that the cover must be removed to complete servicing tasks (this includes all annual tasks) which must only be done by a qualified person.



DO NOT: carry out these checks or service this changing station when a person is lying on the stretcher.

Tasks to be completed:	Start-up	Monthly	Every 6 months	Annually
Disinfect unit	✓			
Clean stretcher	✓			
Check stretcher is undamaged	✓			
Check stretcher is secure with no play (check it does not wobble side to side)	✓			
Check mains power & battery status indicator lights are both green	✓			
Rise and fall: full function test of the equipment; smooth; no unusual noise		✓		
Check front guard locks securely / unlock smoothly		✓		
Check front guard rotates freely once unlocked		✓		
Corrosion: inspect the unit for any signs of corrosion		✓		
Cables: Check that all cables from the power supply/control unit are securely fitted and show no sign of damage		✓		
Fixings: Inspect all visible nuts, bolts etc. to see that they are secure		✓		
Check the stretcher angle has not changed when the stretcher is deployed. Stretcher should not be leaning towards the floor. If so arrange a service.		✓		
LOLER test* (to be completed by service engineer)			✓	
Service** (to be completed by service engineer)				✓

*LOLER testing applicable to products used within the UK. Please follow all applicable local regulations.

**To maintain your warranty, and for your safety, this product should be fully serviced annually by a competent, trained technician.

Koala Kare will make available on request circuit diagrams, component part lists, descriptions, calibration instructions, or other information that will assist service personnel to repair those parts of the equipment that are designated by the manufacturer as repairable by service personnel.

If the equipment is likely to not be used for over 1 month then the battery should be disconnected. This can be done by following the reverse of section 12.2.

For further information on servicing offered by Koala Kare, contact: customerservice@koalabear.com

Section 5

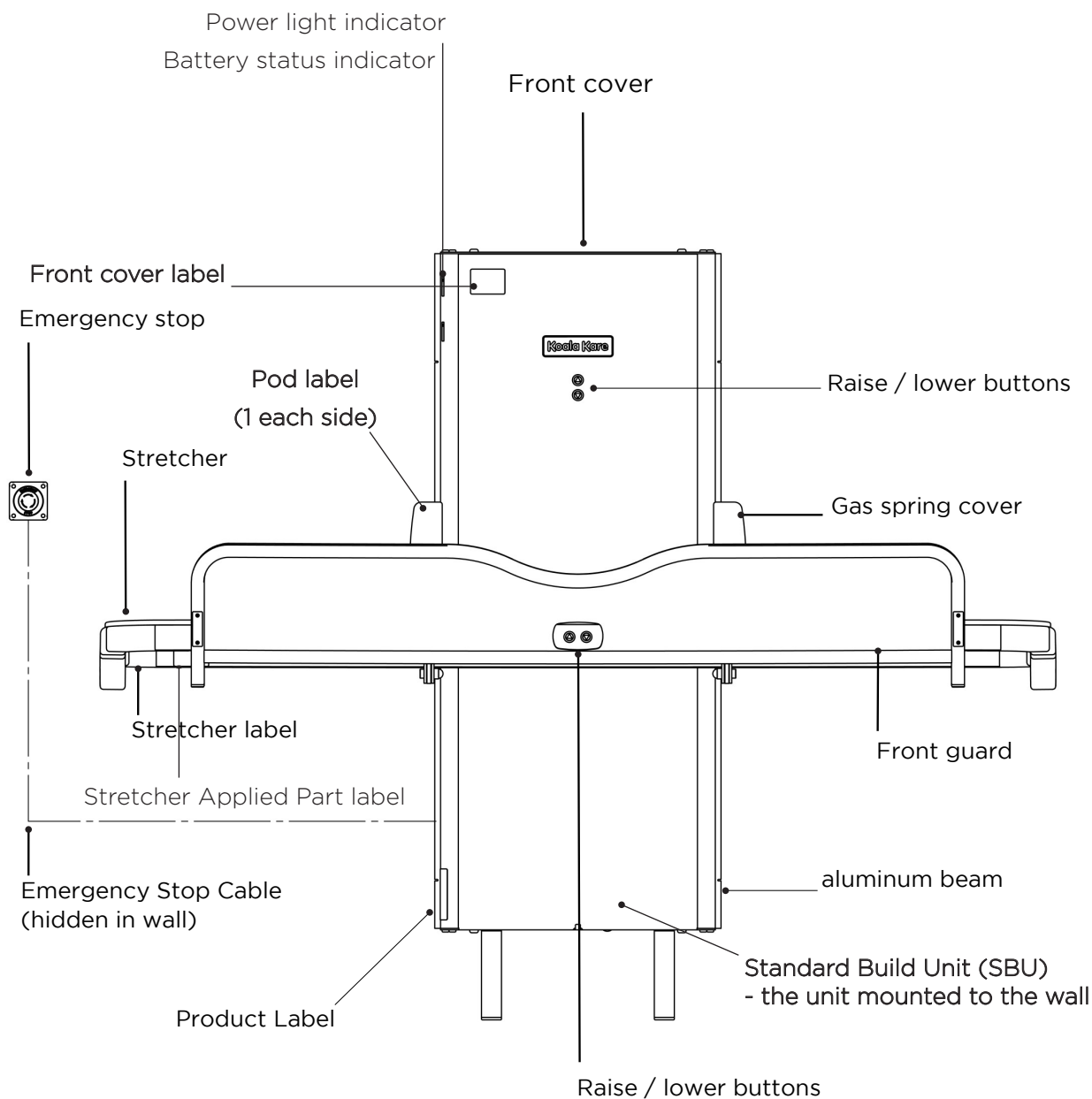


Fig 5

Section 6.1 Daily checks

Carry out the following checks daily before using the changing station:

- Check the weight of the user and ensure the equipment is rated for the weight to be lifted.
- Check the mains electrical supply is connected and turned on, see indicator light information Section 6.4. If mains supply is not turned on inform your facility manager.
- If the device is running on battery power ensure that there is sufficient battery charge, see indicator light Section 6.4.
- Check there are no obstructions or items that may be trapped when the changing station is operated.
- Check that the changing station will raise and lower using the buttons on the front cover or stretcher frame (see Section 6.5).
- In the event of an emergency where the mains power should need to be disconnected your device should have a mains isolation switch installed in a separate room or cabinet. (see Section 11 pre-install requirements)

Section 6.2 Preparing for use

The changing station is securely held in the stowed position by gas springs. There is no release mechanism to operate before deploying the stretcher. To move the bed from the stowed position:

- Place your hand on the top edge of the stretcher.
- Pull gently forward and the stretcher will begin to rotate down.
- During the rotation, the bed will gain a little momentum, so position your hand underneath to aid it lowering slowly down.

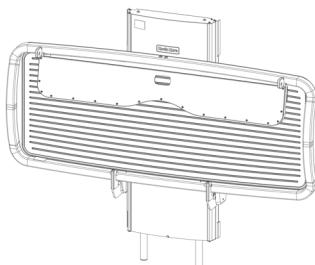


Fig 6.2a

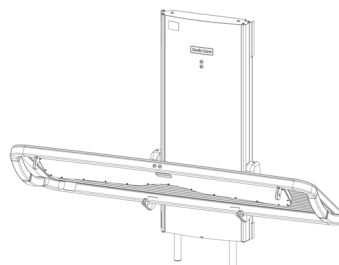


Fig 6.2b

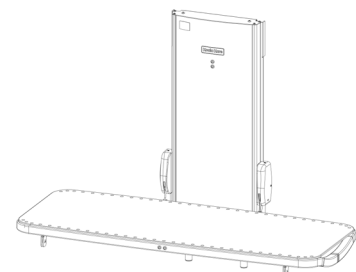


Fig 6.2c



ACTION: Ensure the area underneath the stretcher is kept clear of obstructions before operating to prevent risk of injury.



CAUTION: Keep clear of moving parts when stretcher is being raised or lowered.

Section 6.3 How to stow the stretcher

The changing station is securely held in the stowed position by gas springs. There is no release mechanism to operate before deploying the stretcher. To move the bed from the stowed position:

- Stow the guards as shown in Section 6.6.
- Place your hand on the underside of the stretcher.
- Pull gently upwards and the stretcher will begin to rotate up.
- During the rotation, the bed will gain a little momentum, so position your other hand on the end of the stretcher to control the movement safely.

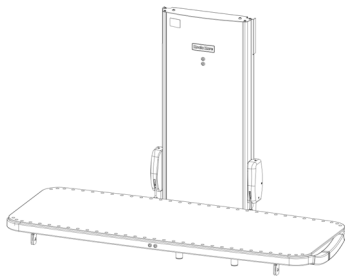


Fig 6.3a

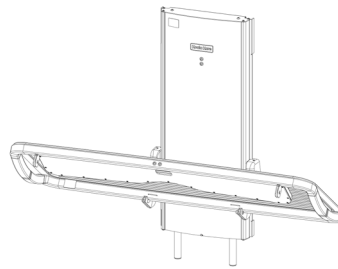


Fig 6.3b

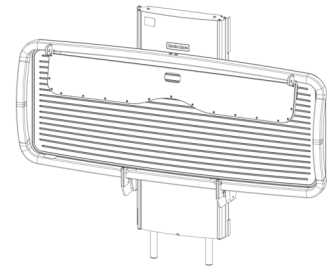


Fig 6.3c



ACTION: Ensure the area around the stretcher is kept clear of obstructions before operating to prevent risk of injury.



CAUTION: Keep clear of moving parts when stretcher is being raised or lowered.

Section 6.4 Check the status of the changing station

The changing station has two indicator lights at the side of the main unit. (Fig 6.4a)
The top indicator light will illuminate green when there is power to the device.
The light on the bottom will show the status of the battery. Use the equipment only if both lights are green.



DO NOT: use the equipment if the both power indicator lights are not green except in emergencies.

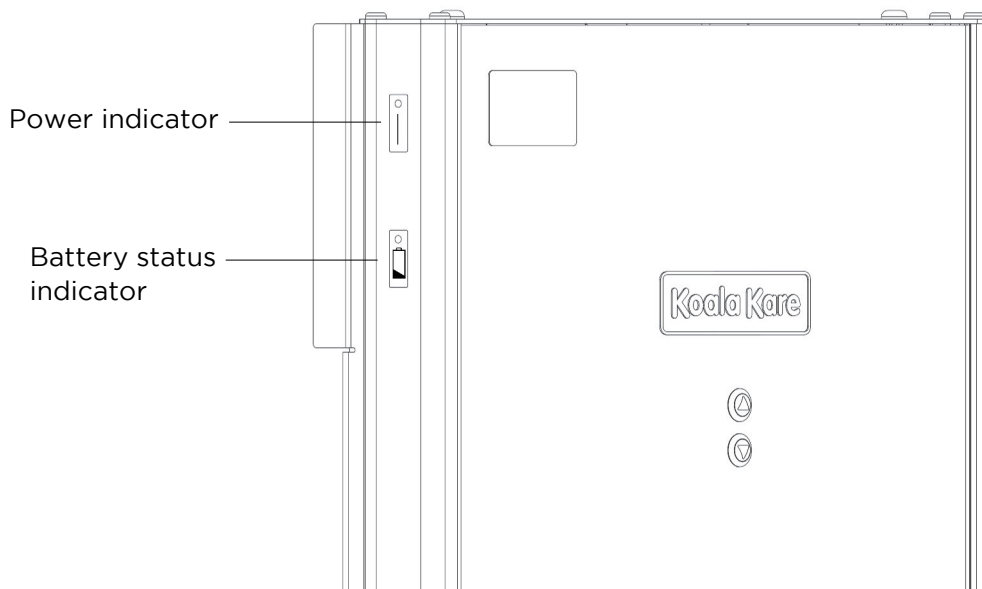


Fig 6.4a

Mains power indicator

- **Green** = Power on - Device in normal condition and the battery is charging.
Device is ready to use if battery status indicator light is also green.
- **Red** = Power on - Battery fault or Emergency stop activation detected, battery status indicator light is also red.
Power cycle when E-stop is reset to clear fault light. See troubleshooting section of this manual for details.
- **No light** = There is no mains electrical supply to the device. See troubleshooting section of this manual.

Battery status indicator

- **Green** = Battery level High. The device is safe to use if mains power indicator light is also green.
- **Orange** = Battery level Medium. Only use device for emergency release of the patient.
- **Red** = Battery level Low and is not in a ready to use state. Please see troubleshooting section.

Section 6.5 Adjusting the height of your changing station

- The changing station is operated using buttons on the front cover or moving stretcher frame.
- In each location, the buttons will either raise or lower the changing station to the desired height.
- Use the raise/lower buttons to position the station at the most convenient height to transfer the person being cared for.
- Once the person has been transferred, raise the front guard (see 6.6).
- The stretcher height can then be adjusted to suit a height most comfortable for the care-giver.
- If there is any unexpected movement of the stretcher use the emergency stop.

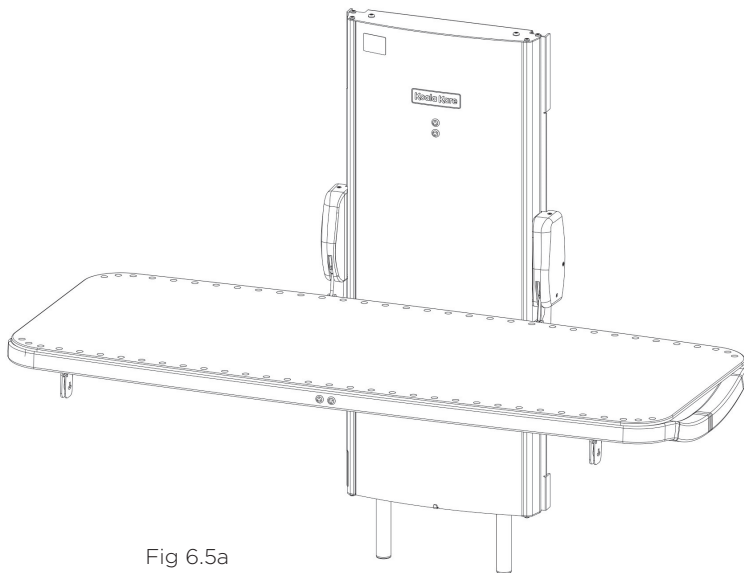


Fig 6.5a

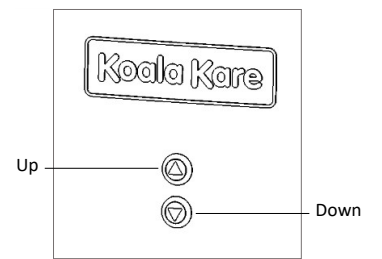


Fig 6.5b

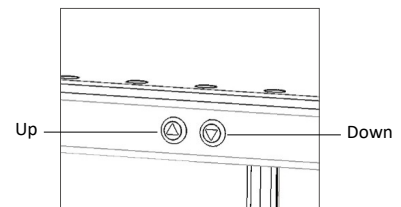


Fig 6.5c



WARNING: Risk of injury by crushing. Ensure the area underneath the stretcher is kept clear of obstructions before operating. Keep clear of the area above the stretcher when stowing.



CAUTION: Keep clear of moving parts when operating. Ensure there are no obstructions when moving the guards into position.



ACTION: Always deploy the guards before moving the changing table with a person on the stretcher.



ACTION: Ensure the area underneath the stretcher is clear of obstructions before operating.



ACTION: Keep fingers clear of moving parts before operating.

Section 6.6 Using the guard

The KB3000 changing station has a front guard which can be stowed under the stretcher.



ACTION: Always deploy the guard before moving the changing table with a person on the stretcher.



WARNING: Risk of falling. Stretcher occupant must never be left unattended.

To move the guard into place:

- Reach underneath the stretcher and take hold of the guard. The guard is stowed with magnets, see Fig 6.6a.
- Pull down on the front edge of the guard so it rotates down. Take care not to let go as it may swing around on its own, see Fig 6.6b.
- Rotate the guard forward and up into position.
- Once upright, the guard will be able to drop down into its location and lock into place, see Fig 6.6c.

To stow the guard:

- Lift the guard up until it can be rotated back towards you.
- Rotate the guard down and back underneath the stretcher.
- Push the guard up underneath the stretcher until the magnets hold it.



CAUTION: Ensure there are no obstructions while moving the guard into position.

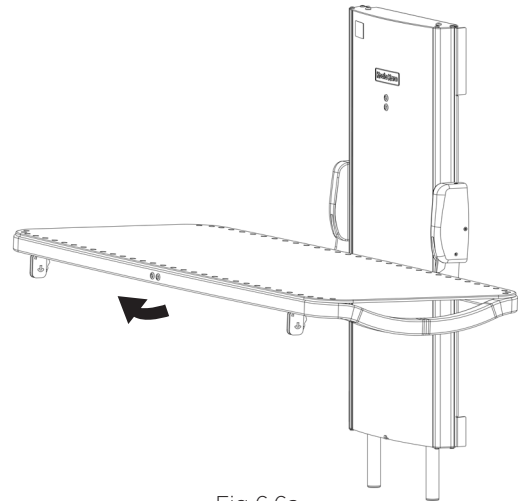


Fig 6.6a

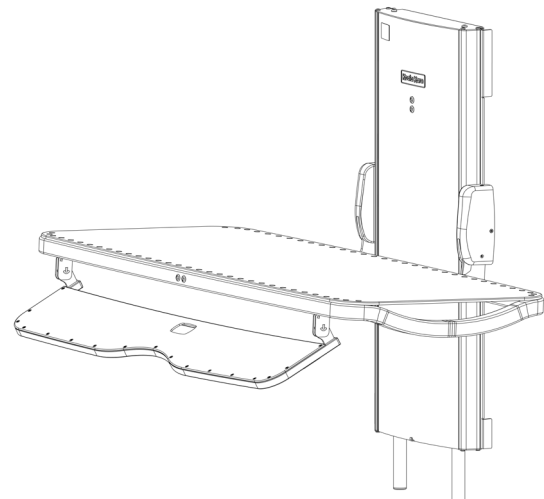


Fig 6.6b

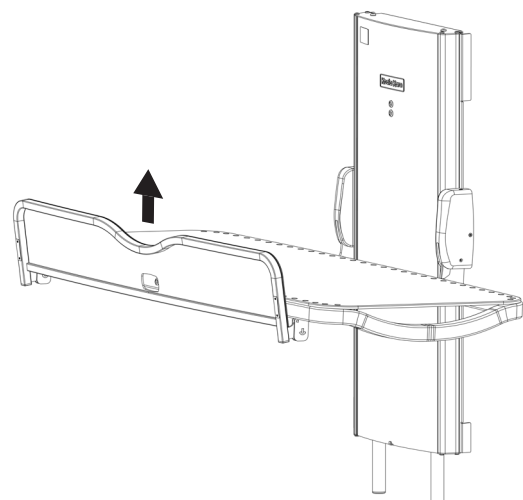


Fig 6.6c

Section 7

The KB3000 changing station should be regularly cleaned and must be cleaned between users to prevent the risk of cross contamination of infection.



CAUTION: The heavy use of oil based products may adversely affect the stretcher material. Oils and other petrochemical products should be avoided and any residue removed immediately. These products include, amongst others: baby oil and emollient creams.

Cleaning:

- Before cleaning, try a small test first in an inconspicuous area with the cleaning agent you are proposing to use.
- The changing station may be cleaned using mild cleaning agents, surface disinfectants or with a warm soapy water solution. The changing station should be rinsed off after cleaning and dried off with a soft cloth.
- A soft cloth or sponge is recommended for cleaning the equipment, abrasive pads should not be used.
- Chemical agents, abrasive compounds and solvents must not be used, i.e. drain cleaners, acetone, oven cleaners or acids.
- Attention should always be paid to instruction labels for the cleaning agent.
- Do not use an autoclave or other type of steam cleaner to clean any part of the product.
- The main unit of the device may be cleaned with the same solution used on the stretcher.



ACTION: Ensure any cleaning product spillages are cleaned up correctly.



CAUTION: Always follow the instructions and comply with the safe use of the cleaning/disinfecting agent. Do not mix cleaning products.



CAUTION: Do not use flammable cleaning agents.



CAUTION: Do not use abrasive cloths or cleaners.



CAUTION: A dampened, non-wet cloth should be used for cleaning.



CAUTION: Do not pour or spray cleaning liquids directly onto the equipment.

Section 8

Problem: The stretcher won't move up or down

Suggestion: Check if the emergency stop has been activated (both lights will be red if this is the case), to release turn the emergency stop button clockwise.

Check that the mains power supply is switched on. Check that you are using the correct button for the direction of your choice. Check battery status of the device. If the stretcher still won't move, use the other set of buttons.

If you discover one or both sets of buttons are not working correctly, please contact Koala Kare at customerservice@koalabear.com

Problem: I cannot release the front guard

Suggestion: The guard is held in place by magnets, so with a strong tug, it should easily release.

Problem: I cannot put the guard down to stow it

Suggestion: The guard is held in place by a auto-lock mechanism. To release this you need to lift the guard before you try to rotate it down.

Problem: My guard does not stow correctly

Suggestion: The guard is held in place with magnets fixed to the underside of the stretcher. Ensure you have rotated the guard to meet the underside of the stretcher so that the magnets can engage.

Problem: My power indicator light is not illuminated

Suggestion: If the mains power light is not on, check that your mains power supply is switched on and live. If the mains power is present and the indicator light is still not showing, power-cycle the unit to restore the indicator light.

Problem: My battery status indicator light has been red for over 24 hours.

Suggestion: If the mains power indicator light is green, power-cycle the unit to restore the correct indicator light. If the problem persists, there maybe an issue with your recharging circuit. Please contact Koala Kare.

Problem: Mains power indicator and battery status indicator light is red.

Suggestion: Ensure that the emergency stop is not activated and power cycle the unit. If the problem persists this indicates a disconnected battery or a potential battery fault. Please contact Koala Kare.

Problem: I have an idea for improving my product; some feedback, or there's something that doesn't work as expected

Suggestion: Koala Kare are committed to continuous improvement. Please contact our service department with suggestions, improvements, feedback or to let us know of any problems with your product at customerservice@koalabear.com

Section 9

AC input	110VAC-240VAC, 50/60Hz, 3.0-1.6A, 384VA
Power supply	Class I (Class II Power supply with supplementary earth connection to frame). Internally powered when mains power is not connected.
Applied part	Applied part class 'B' (Stretcher plastic surface excluding outer 50mm perimeter)
Battery specification	Lead acid battery / "non-spillable" Input 32V - Output 24V Supplier reference - TiMotion (TBB2-4307-002)
Battery model	TiMotion TBB2 1.2A
Fuses	Fuse type F5A fast-blow HRC (External to the device, part of the mains supply system)
Duty cycle	Maximum 2 minutes movement of stretcher height in any 20 minute period
Maximum working load	500 lbs (227 kg)
Sound emission	LAeq 56dB at maximum working load
Width	75 1/4" (1911 mm)
Height	61 1/4" (1556 mm)
Depth	40 3/4" (1026 mm) - Stretcher and guard deployed
Weight of product	227 lbs (103 kg)
Materials	Mild steel, Stainless Steel, Polyethylene
Operating ambient temperature range	50°F to 104°F (10°C to 40°C)
Operating relative humidity range	10 - 80% not condensed at 68°F (20°C)
Operating atmospheric pressure	50kPa to 106kPa
IP class	Product - IPX4, Emergency Stop - IP65
Transport & storage conditions	50°F to 104°F (10°C to 40°C), 10 - 80% not condensed at 68°F (20°C)



CAUTION: Battery module and mains cord are not routinely replaceable and are expected to last for the full service life of the product. If replacement is required, contact Koala Kare.

Section 10

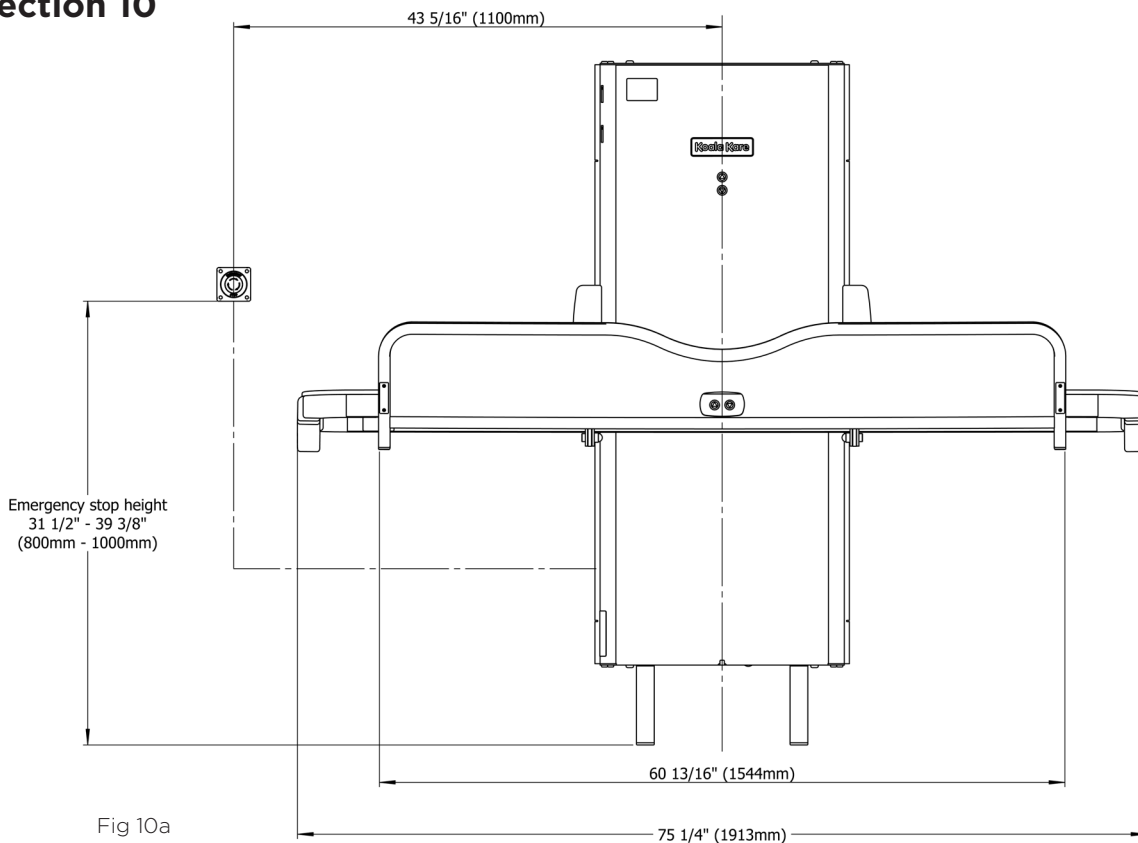


Fig 10a

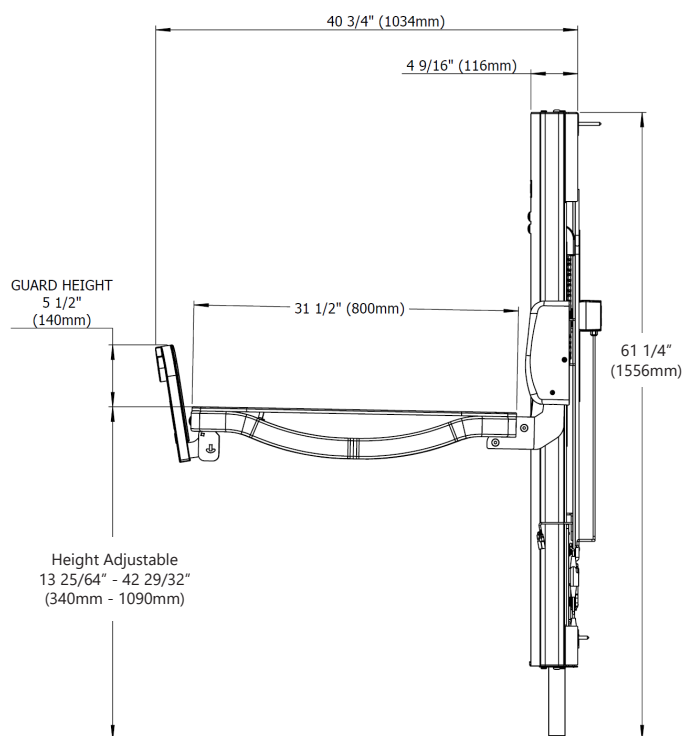


Fig 10b

* Height shown is with the stretcher unloaded. SWL will lower the front edge of the stretcher by about 1" (25mm), adjustment range remains at 29 1/2" (750mm).

Section 11

Before the changing station can be installed, the wall and mains electrical supply must have been prepared as set out below. Pre-Installation works should be carried out by a competent and qualified professional in compliance with local and national building code standards.



Fig 11 Pre-Install Video QR

- Electrical requirement: Ensure electrical hazards are fully understood before commencing pre-installation, See section 4.2 page 9 for detail. This device is powered by a Class II power supply. A mains supply to suit the technical specification is required through an isolatable flex outlet that is fitted in compliance with local and national building code standards. This outlet needs to be part of a GFCI protected circuit.
- There must be an easily accessible mains isolation switch fitted for this device. It is recommended to be located in a separate room or in a cabinet. To conform to IEC60601-1 clause 8.11 it must meet the following requirements:
 - Compliance to IEC61058-1 for mains transient voltages of 4kV and for the environment in which it is located
 - Isolation to be applied on both poles simultaneously
 - Markings to comply with IEC 60447
 - Fusing to be on the live conductor only - use 5A Fast Blow HRC fuses
 - Shall be capable of being locked in the off position if the switch is not visible when using the device
- The KB3000 is a wall-mounted, floor standing product.
- This product must be connected to a suitable mains earth



WARNING: Ensure the electrical mains supply is isolated from power while connecting the product to the mains supply.

Section 11.1 Preparing the wall



WARNING: Ensure supporting wall and fixings are suitable and correctly installed by a competent and qualified professional. Risk of collapse of equipment if the strength of the supporting wall structure is inadequate.

- A 108 5/16" (2751 mm) width area is recommended for fitting this product, to allow adequate clear space at both ends of the unit. If this is not available please defer to local/national building code for minimum clearance required around the unit.
- For solid masonry construction, it is expected that a wooden frame of 2" x 2" (50mm x 50mm) sections will be securely fixed to a solid load bearing concrete, brick or

equivalent construction wall which is flat and able to bear a load of 1250 lbs (566 kg).

- This construction or equivalent must be faced with minimum 23 5/8" (600 mm) wide, 1" (25 mm) thick marine plywood which continuously extends from floor to ceiling.
- The marine plywood must be from floor to ceiling and secured every 7 7/8" (200 mm) around the perimeter and to at least 2 supporting horizontal cross members as shown in Fig 11.1.
- Ensure the horizontal cross members are not located at the same height as the changing station's fittings as shown in Fig 11.3 in order to avoid a future installation problem.
- For wooded stud walls additional framing will not be required as long as framing behind the installed unit matches that shown in Fig 11.1.
- Koala Kare cannot be held responsible for the strength of the supporting wall structure.

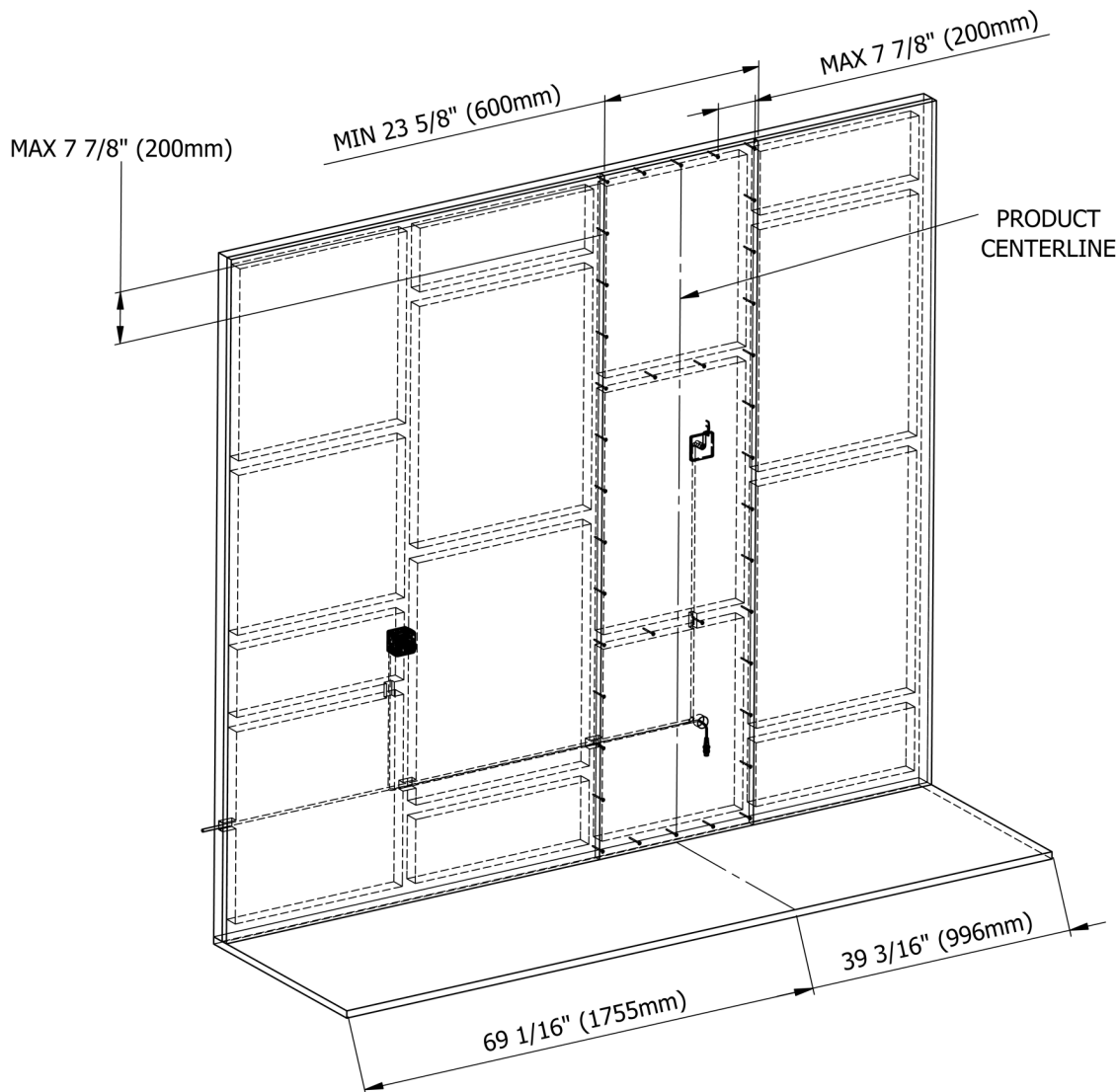


Fig 11.1 Preparing the wall

Section 11.2 Fitting the emergency stop & switched, waterproof, flex outlet

- The provided emergency stop must be fitted at the position shown in Fig 11.2.
- The emergency stop can be fitted either side of the product depending on your room layout. There must be at least 1 9/16" (40 mm) clearance at one end and 31 1/2" (800 mm) at the other end of the product for the emergency stop. This is to ensure it is 'easily accessible' in accordance with ISO 13850.
- Provision needs to be made to allow the cable to be traced in through the wooden frame and remain hidden behind the dry wall/plasterboard. At least 11 13/16" (300 mm) of cable should come through the marine plywood at the position shown in Fig 11.2. Alternatively a Mains Power Cable (H07RNF, 1 mm² CSA 50m, 450/750 Vac) may be laid into the wall and the Emergency Stop may be afixed to the end.
- Take care not to damage the connector at the end of the cable. This will be attached to the SBU later during installation.
- An IP65 rated junction box is integrated into the product, within which a hardwired connection to mains power should be made using the provided Wago connectors. The mains power cord can enter the junction box from below or behind, directly from the wall.
- If the cord enters the junction box from behind it is recommended to seal between the box and the wall using a flexible waterproof sealant.
- If the cord enters the junction box from below it is recommended to fit a suitable waterproof flex outlet cover/faceplate. This must be fitted sub-flush to the wall or within the clearance area shown in figure 11.2. The maximum dimensions for a surface mounted outlet are 3 5/8" (92mm) tall, 4 7/32" (107mm) wide and 2" (50mm) deep.

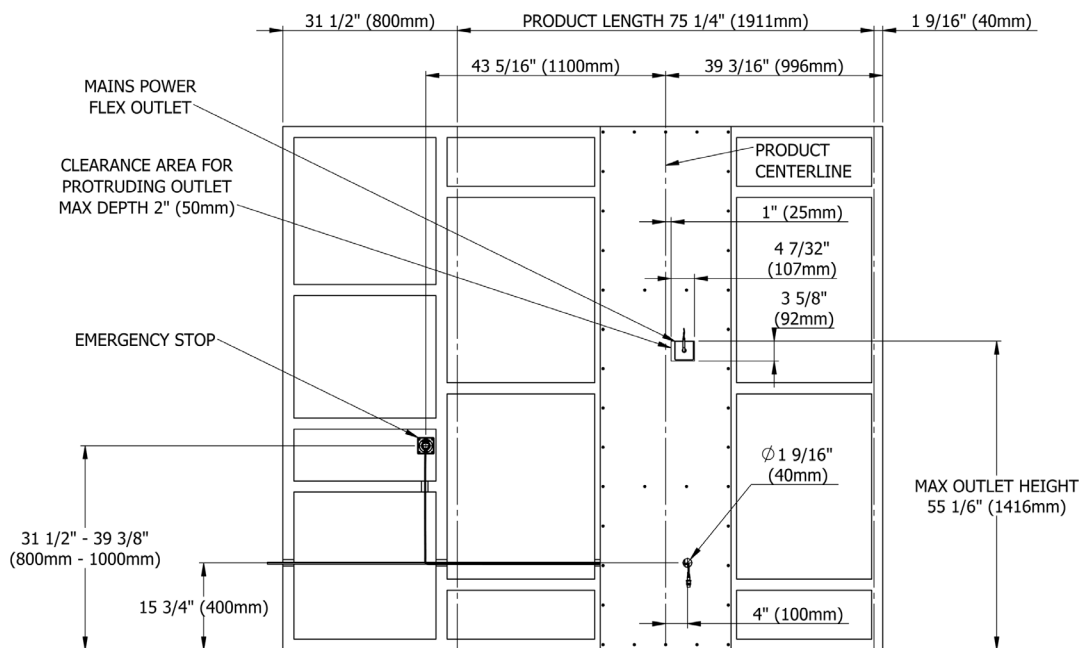


Fig 11.2 Emergency stop & switch, waterproof, flex outlet

Section 11.3 Finished pre-installation & checks

- The finished pre-installation should appear like Fig 11.3.
- Drywall/plasterboard is fitted to appear flush with the marine plywood. This wall can then be blended/painted so to appear as a finished wall.

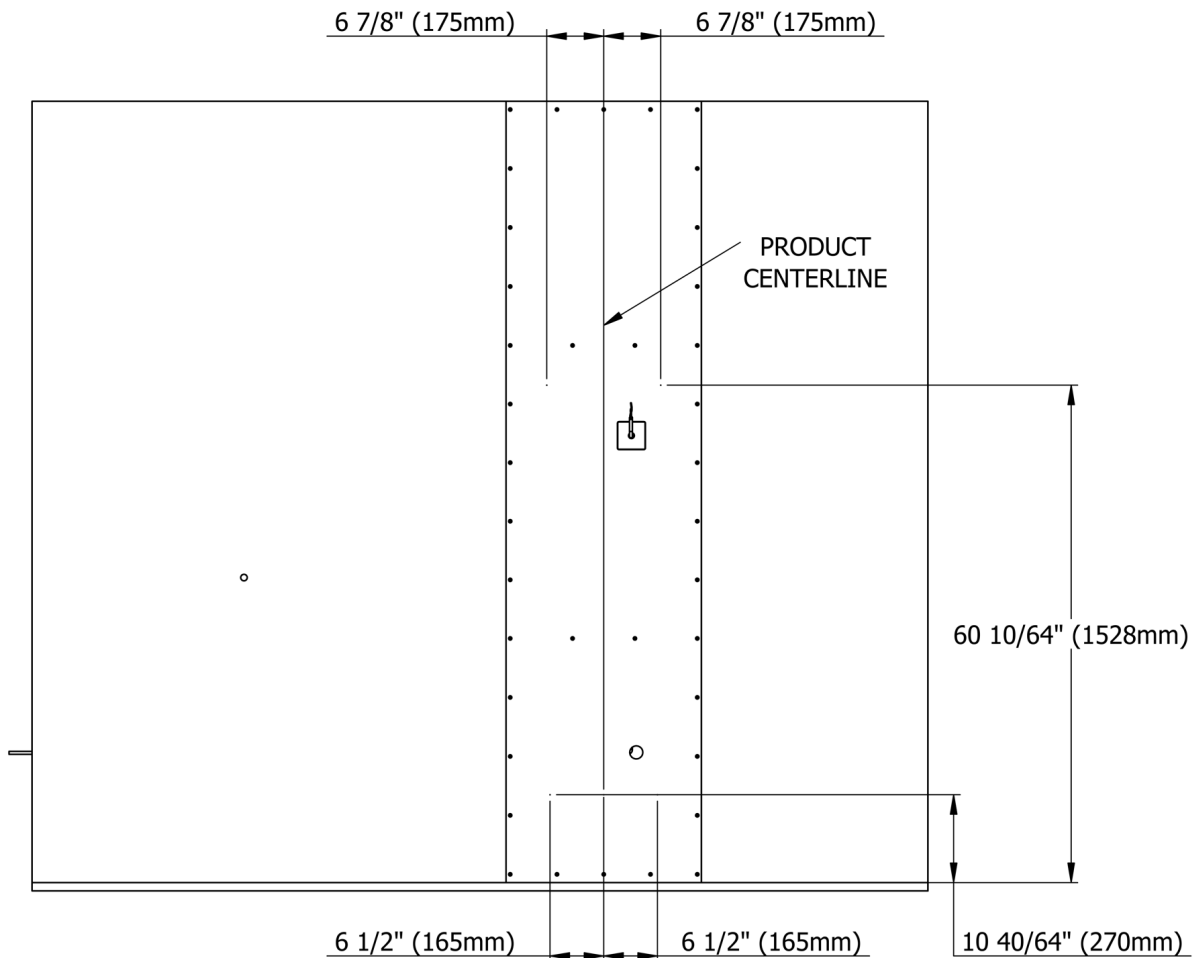


Fig 11.3 Fixing points of KB3000 SBU

Checks:

- A sheet of 1" (25 mm) marine plywood which is at least 23 5/8" (600 mm) wide has been securely fitted in accordance with section 11.1.
- The Emergency Stop has been fitted at the position shown in Fig 11.2. The cable has been hidden in the wall and at least 11 13/16" (300 mm) of cable is coming out of the wall.
- The switched, waterproof flex outlet has been fitted in the position shown in Fig 11.2, is no larger than the stated dimensions and flush or sub-flush with the wall.
- The entire wall has been painted and finished ready for product fitting.

Section 12

The KB3000 must be installed by a competent and qualified technician in compliance with local and national building code standards.

Ensure that all pre-installation works have been carried out & checked in accordance to Section 11.



Fig 12 Install Video QR

For servicing - The emergency stop should be pressed first if the front cover of the product is to be removed. This is to protect against unintended activation while undergoing maintenance.

Section 12.1 Preparing the standard build unit for installation (SBU)

The SBU will be provided with the front & gas spring covers already fitted. These will need to be removed before starting the installation.

Externally accessed security fixings require specific tools which are provided. Please keep them safe after completing installation for future servicing.

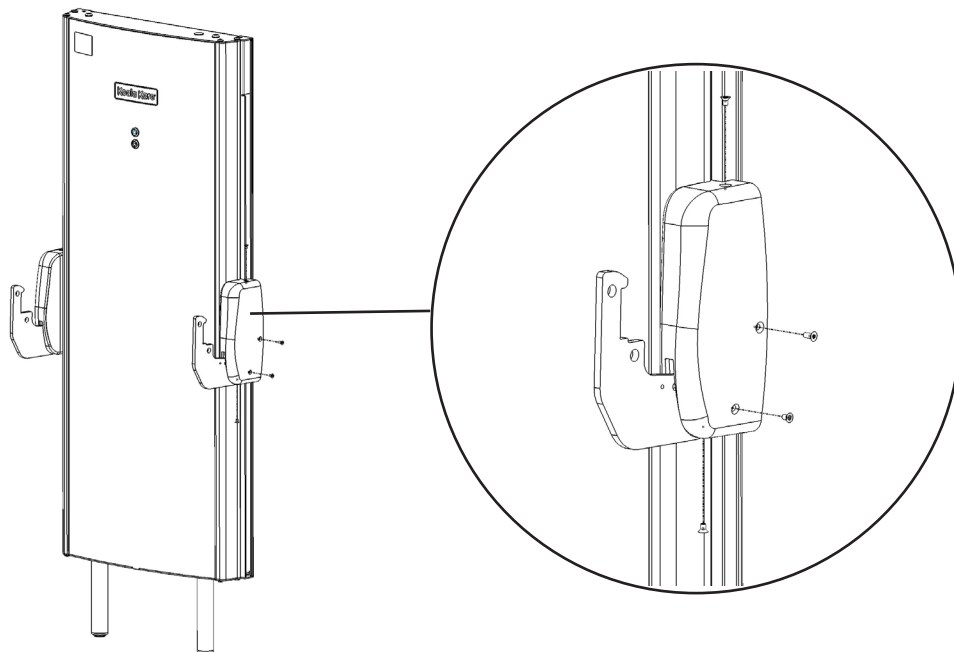
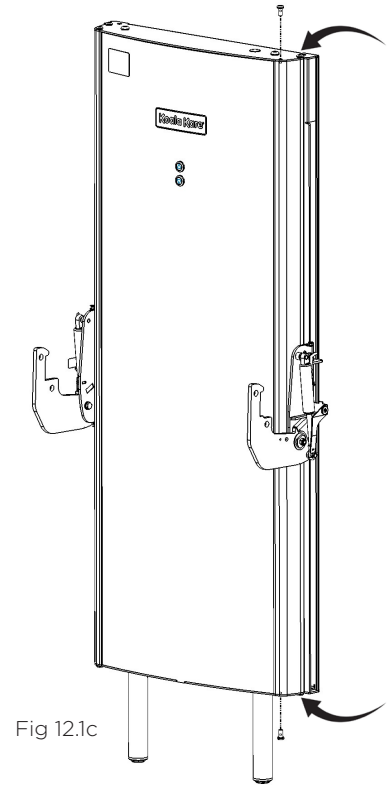
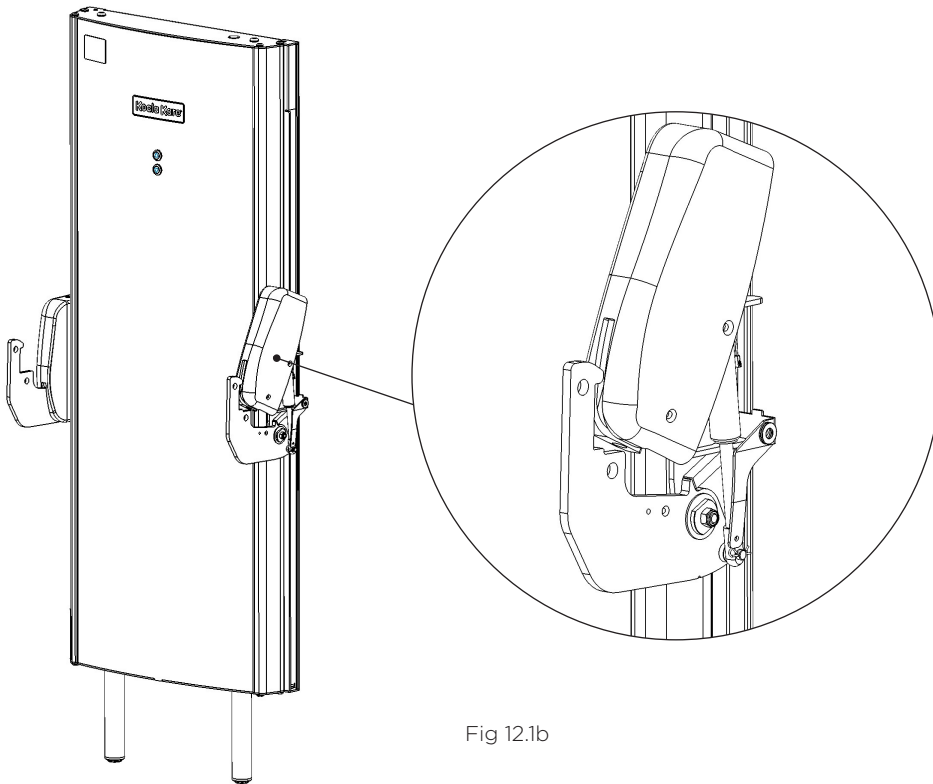


Fig 12.1a

- Remove the four security fixings from each of the gas spring covers, as shown in Fig 12.1a. Take note the upper most horizontal screw is a different size and has a hidden spacer inside the cover.

Section 12.1 Preparing the standard build unit for installation (SBU)

- Each gas spring cover can then be removed by rotating up and away, as shown in Fig 12.1b. Keep in safe place as they will be refitted at the end of the installation.



- The front cover can now be removed.
- Start by removing the two front screws which retain the aluminum beam, one top and bottom, and loosen the rear two screws, as shown in Fig 12.1c, on one side only. Two security screws on the top and two security screws on the bottom.

Section 12.1 Preparing the standard build unit for installation (SBU)

- Looking from the top (Fig 12.1d) the aluminum beam can now freely rotate in order to release the front cover.

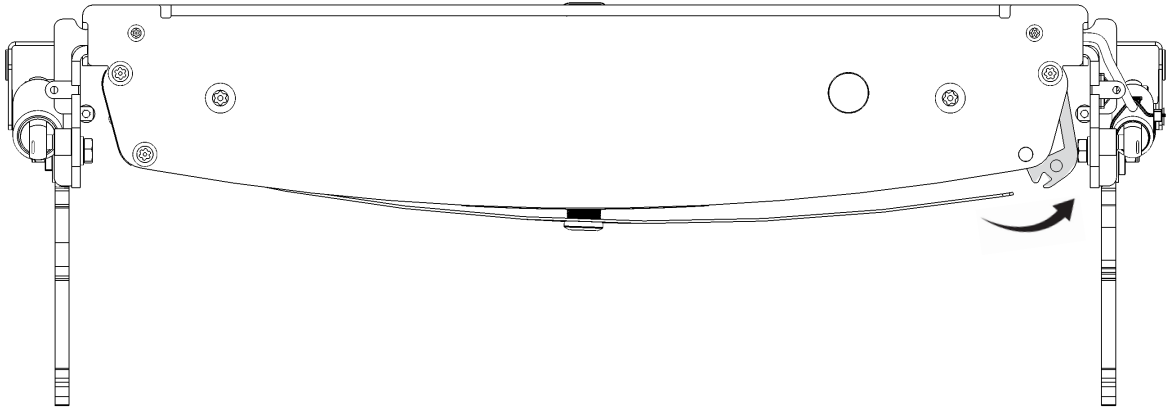


Fig 12.1d

- The front cover has two buttons which are connected to the wiring loom of the SBU.
- Open the connector clip and disconnect the male and female plug of the SBU and front cover.
- The front cover can now be lifted out vertically in the direction shown in Fig 12.1e, and retain. This will be refitted at the end of the installation.
- Take care not to scratch or damage the front cover or aluminum beam.
- Temporarily refit the screws into the aluminum beam to prevent any scratches during the next steps.

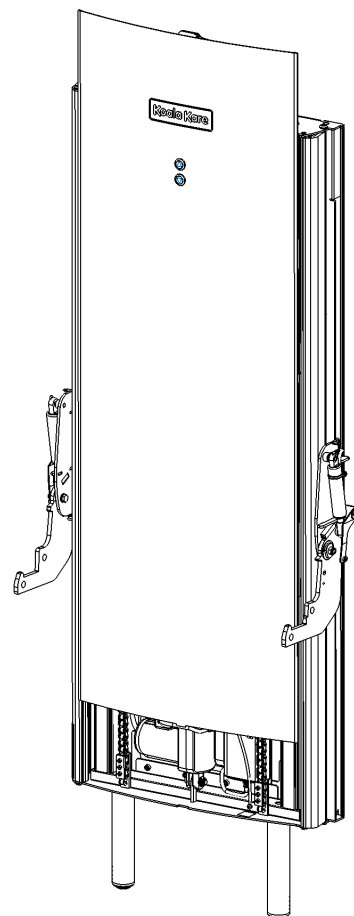


Fig 12.1e

Section 12.2 Connecting the emergency stop

Provision for the emergency stop should have been previously completed in accordance with Section 11. The cable should be hidden in the wall and at least 11 13/16" (300 mm) of cable is coming out of the wall.

- Looking at the rear of the product, locate the female connector.
- Locate the male connector of the emergency stop which should be coming from the wall.

- Make the connection by rotating the female connector clip cover and fully insert the male connector. The female clip cover should then easily rotate back over to secure the connection.

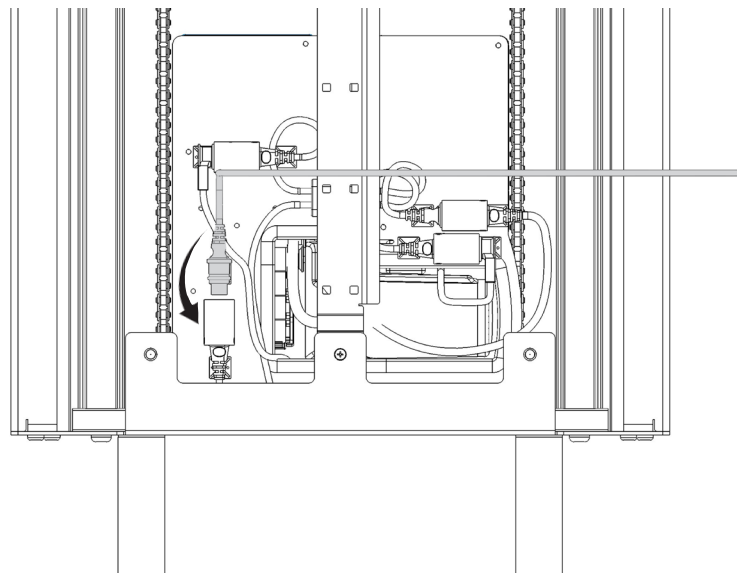


Fig 12.2a

- Secure the top of the connection by using one of the provided blue cable ties.
- This should be passed through the black plastic clip behind the connector, in the same way as the one below it, and any excess tie trimmed off.
- The emergency stop should now be pressed to prevent any unintended movement during install.

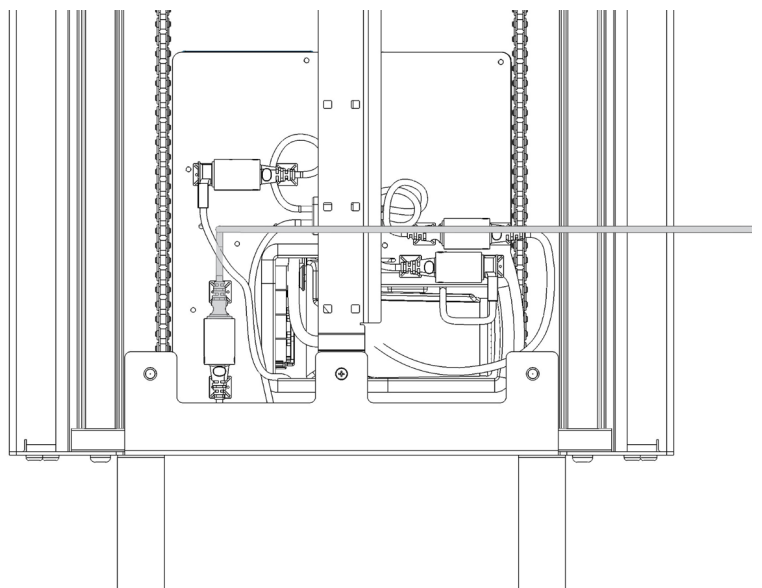


Fig 12.2b

Section 12.3 Connecting the battery

The product has been provided without the battery connected.

- Looking at the rear of the product, locate the female connector, as shown in Fig 12.3a.
- Locate the male connector of the battery which should be coming from the SBU.

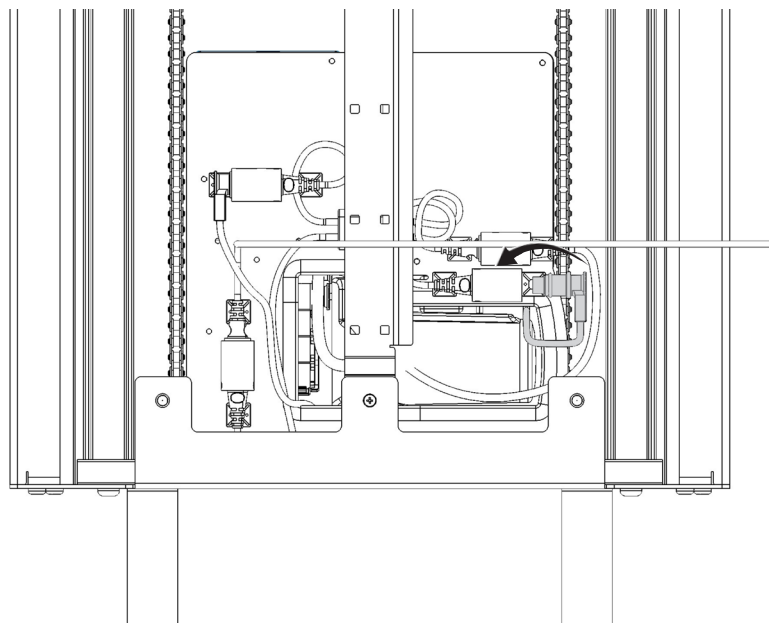


Fig 12.3a

- Make the connection by rotating the female connector clip cover and fully insert the male connector. The female clip cover should then easily rotate back over to secure the connection.

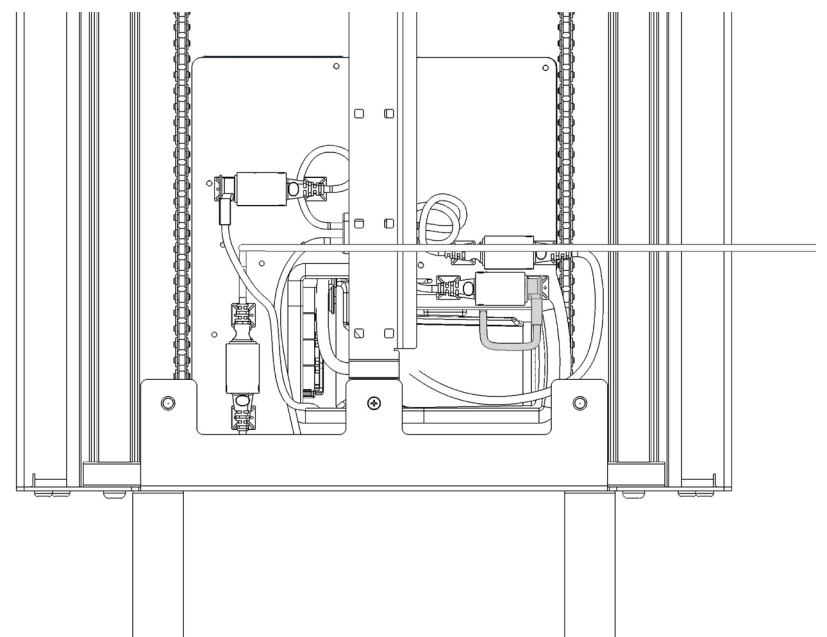


Fig 12.3b

- Tidy the cable behind the product so that it is not visible once the SBU is against the wall. Ensure it does not protrude further than any of the other cables.

Please note: The ON/OFF LED lights on the front of the battery are also control buttons.

Section 12.4 Connecting the power outlet



WARNING: Ensure the electrical mains supply is isolated from power while connecting the product to the mains supply.

In accordance with section 11, the mains power supply will be wired directly into the junction box from the wall behind or from a waterproof flex outlet below it.

- Position the SBU against the wall in the approximate mounting position which will allow the mains power cable to reach the junction box or puts the flex outlet within the defined clearance area (Figure 11.2).
- Remove the junction box cover to reveal three Wago connections on a single mount, this mount can be loosened from the box to facilitate making the connection to mains power.
- Connect each of the mains power wires to the corresponding Wago terminal, ensuring that the connection is secure before replacing the mount within the terminal box.
- Replace the lid of the junction box.
- If the connection has been made from a flex outlet, ensure that there is minimal loose cable between the outlet and the junction box. If necessary, secure the cable against the wall to keep it safe from any moving parts.
- If the mains power enters the junction box directly from the wall, apply a flexible waterproof sealant between the wall and the junction box.

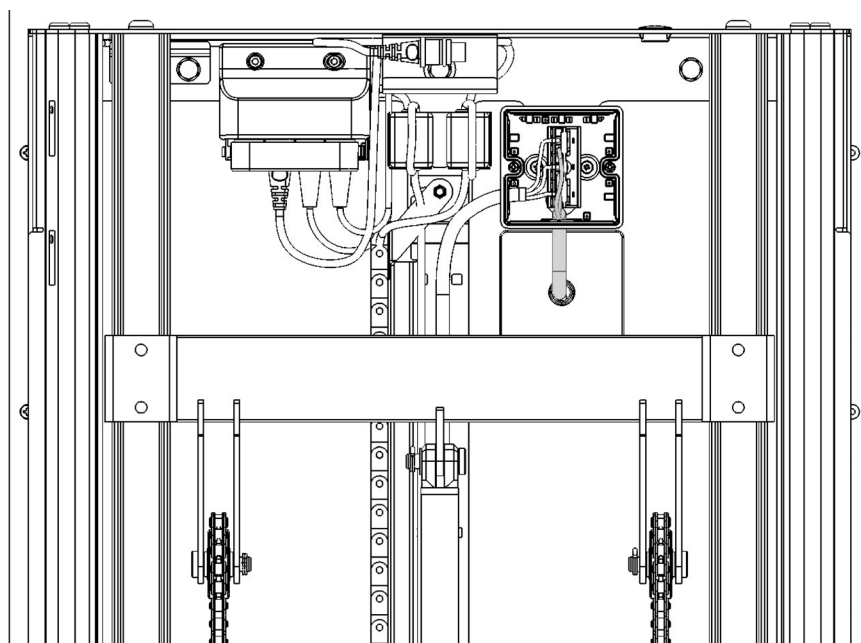


Fig 12.4

Section 12.5 Attaching the standard build unit to the wall

- The wall must have been suitably prepared and reinforced as explained in Section 11 during the pre-installation phase.
- Align the SBU to the wall about the centerline ensuring it is level. If the floor is uneven the feet can be manually adjusted.
- If the floor is uneven, the feet can be adjusted by rotating the black plastic screw head on the bottom of the foot up to 25/32" (20 mm).

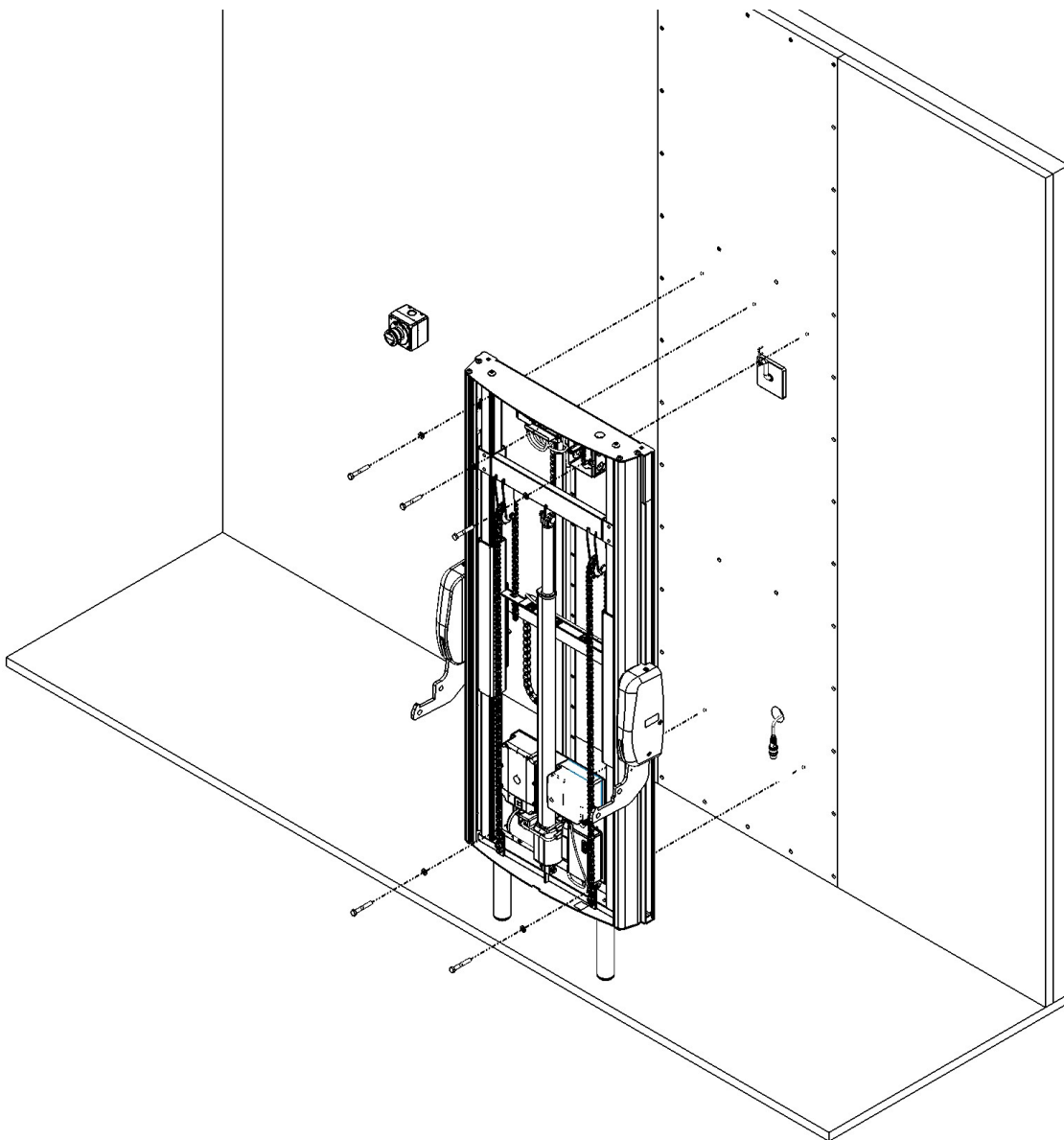


Fig 12.5a

Section 12.5 Attaching the standard build unit to the wall

- With the product in place, mark out the five fixing holes, set the SBU aside and then pilot drill with a 1/8" (3.5 mm) diameter bit.
- Using the screws provided No. 8 x 2 23/64" (60 mm) coach screws fit the top three first and then the lower two, as shown in Fig 12.5b.

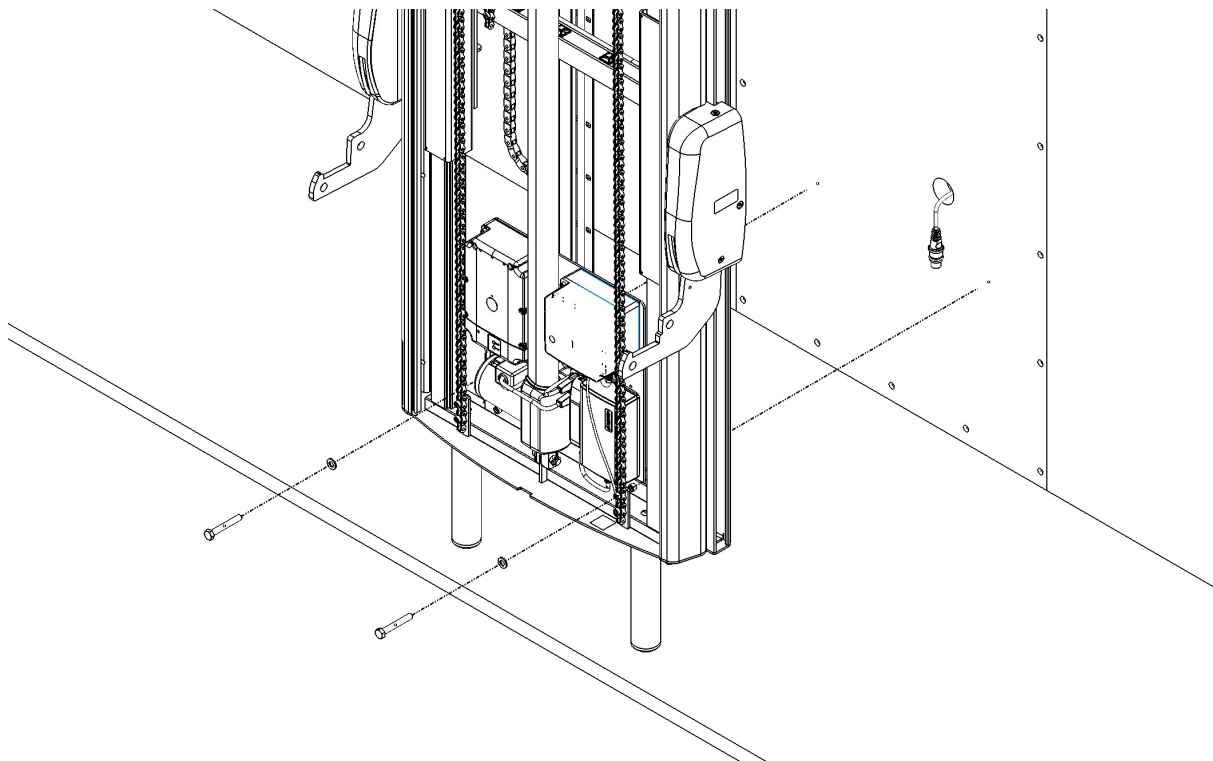


Fig 12.5b

- Tighten all five screws until they are flush.

Section 12.6 Connect the front cover

The front cover has two buttons which need to be connected to the wiring loom of the SBU.

- Locate the metal front cover which was previously removed from the SBU
- Connect the corresponding male and female plug of the SBU and front cover and ensure its securely closed.
- As the cover is located into the SBU, ensure that the fastened connector sits within the metal bracket at the top of the unit, shown in Fig. 12.6a.

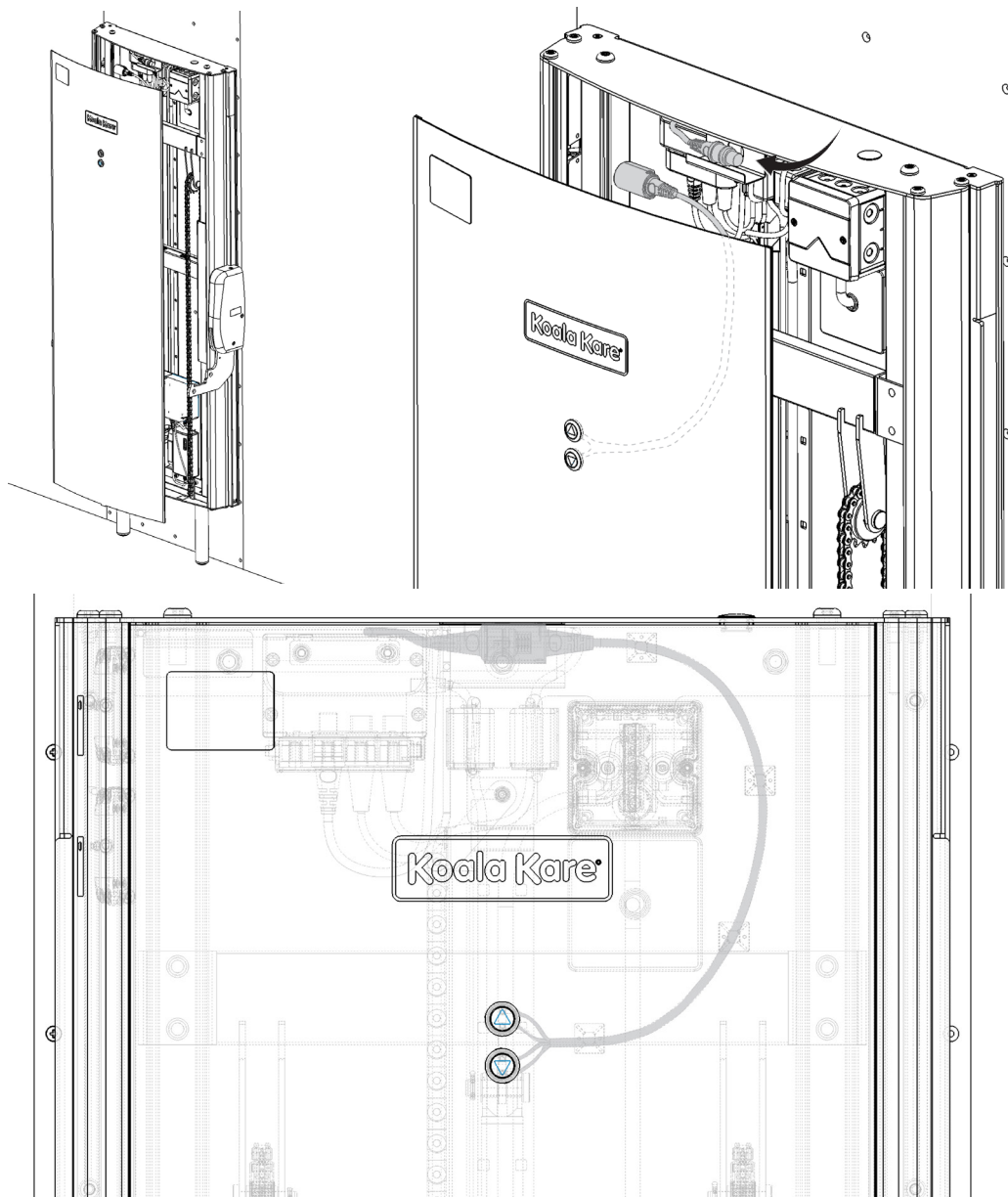


Fig 12.6a

Section 12.7 Refit the front cover

The front cover can now be refitted, fitting is the reverse of removal. Care should be taken not scratch the front cover or damage the cables.

- Remove the two front screws (top and bottom) which retain the aluminum beam, as shown, on one side only, and loosen the rear two.
- Looking from the top, the aluminum beam, as shown in Fig 12.7a, can now freely rotate in order to receive the front cover.
- Note that there is a tab on the bottom of the cover to align it centrally, ensure that this is sat in the groove in the lower steel plate.

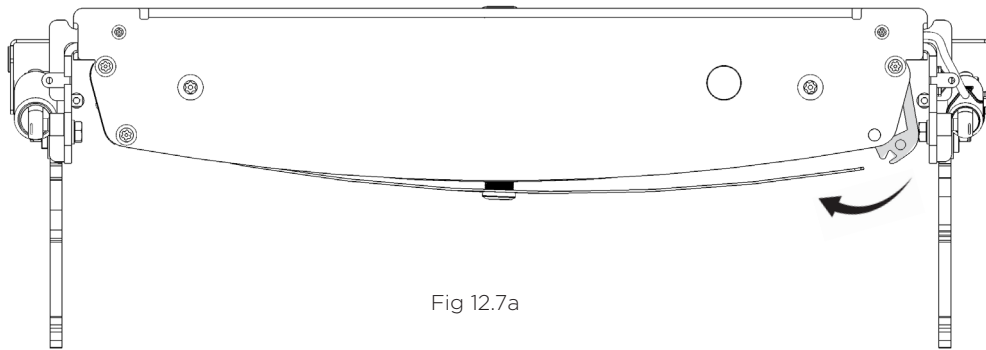


Fig 12.7a

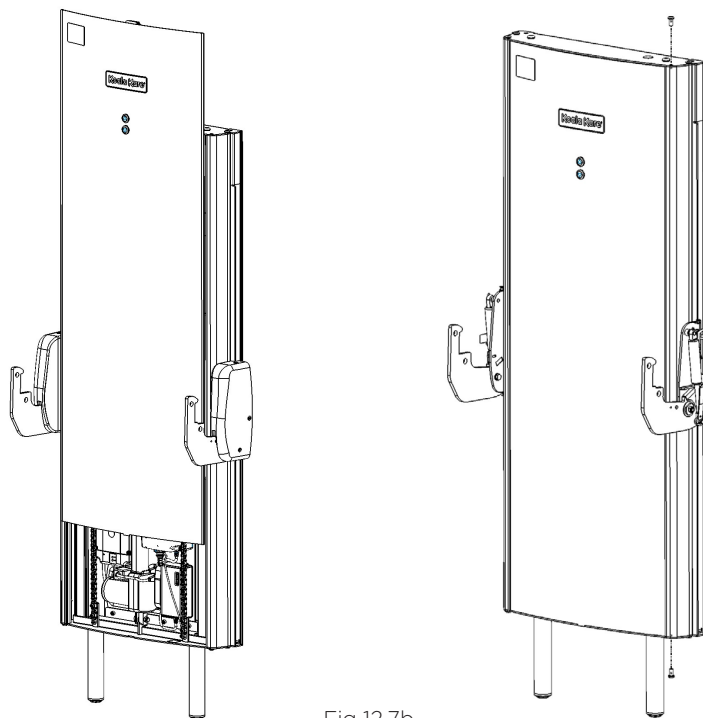


Fig 12.7b

- Refit the two security screws which retain the aluminum beam. Ensure all four retaining screws are fully tightened back up.

Section 12.8 Fit the stretcher.



CAUTION: Take care when fitting the stretcher to the product. This is a heavy item and we recommend two people install the stretcher.

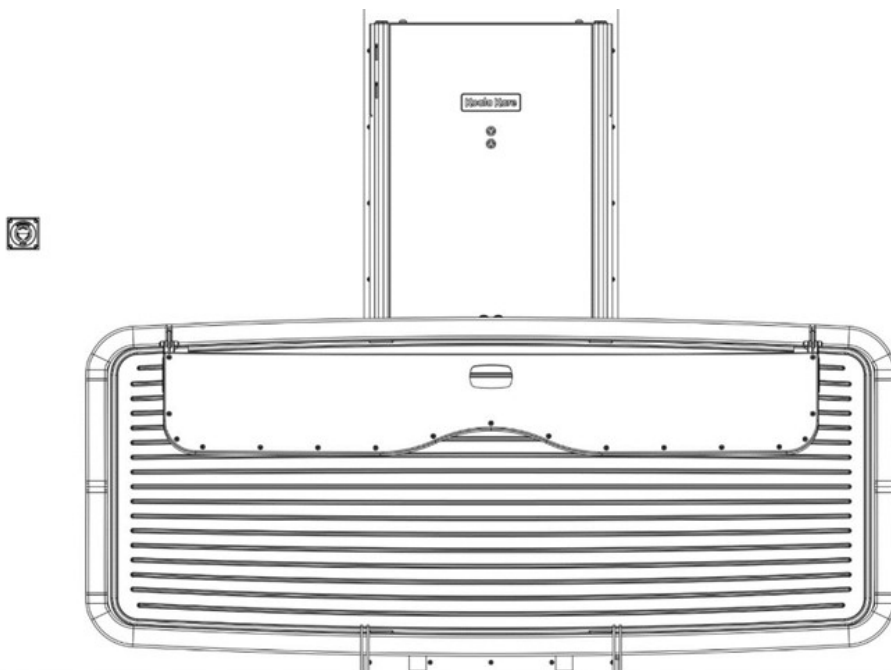


Fig 12.8a

- Bring the stretcher towards the product and rest as shown in Fig 12.8a.
- Take note of the cable coming out of the stretcher bracket and take care not to damage it during the next steps. It is taped to the stretcher with a disposable label.
- To protect the cable during the stretcher fitting, its recommended to fold the cable onto the stretcher and hold it there until the stretcher is fully secured, as shown in Fig. 12.8b.

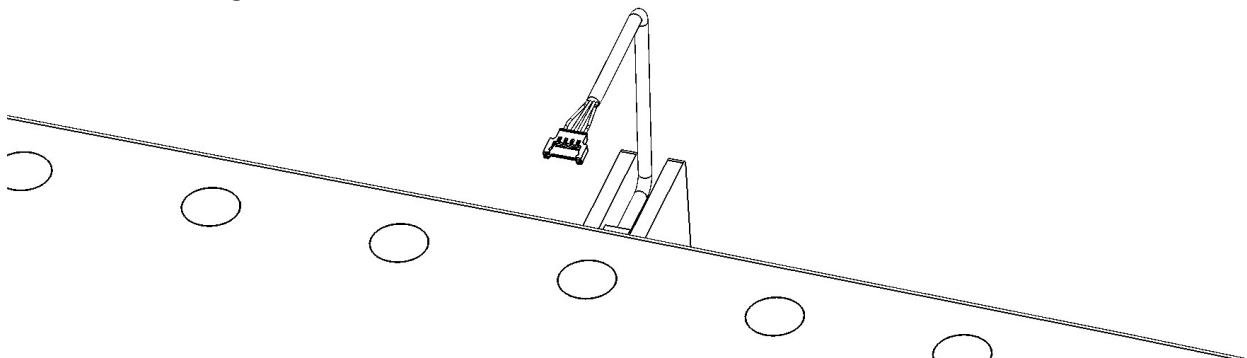


Fig 12.8b

Section 12.8 Fit the stretcher

- With two people, lift the stretcher and slot the SBU arms into the middle of each pair of stretcher brackets, see Fig 12.8c.

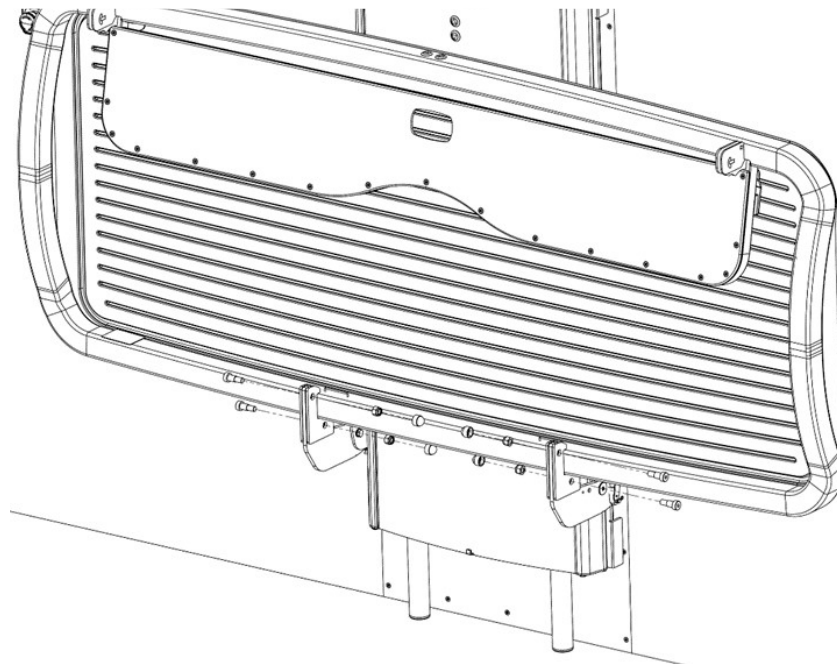


Fig 12.8c

- Once in position secure the M10 x 16 mm bolts and M10 nuts provided. Finish by covering the nut with the caps provided as shown in Fig 12.8d.
- Once all the fasteners are secured fold and stow to check the stretcher is moving freely and without restriction.

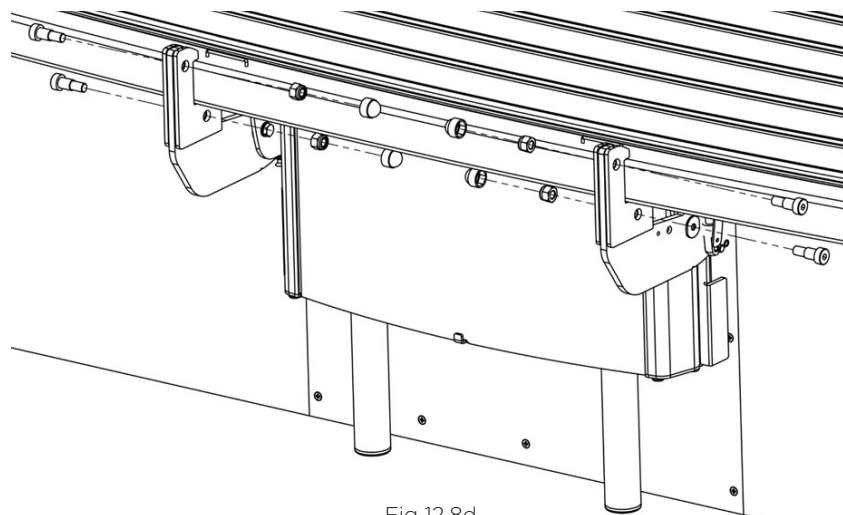


Fig 12.8d

Section 12.9 Connect the stretcher

The cable coming from the stretcher now needs to be connected to the SBU so that the stretcher buttons will function correctly.

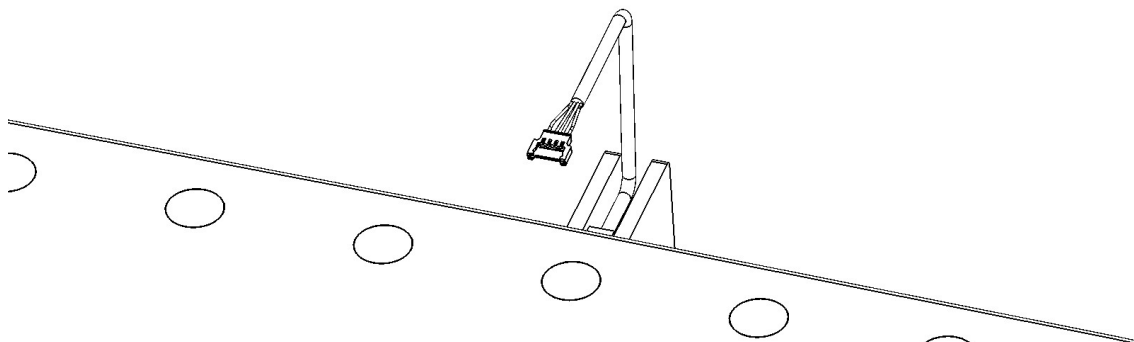


Fig 12.9a

- Deploy the stretcher and locate the cables coming from SBU and the stretcher, the former will be secured to the rear of the gas strut with a blue cable tie. Do NOT remove this.

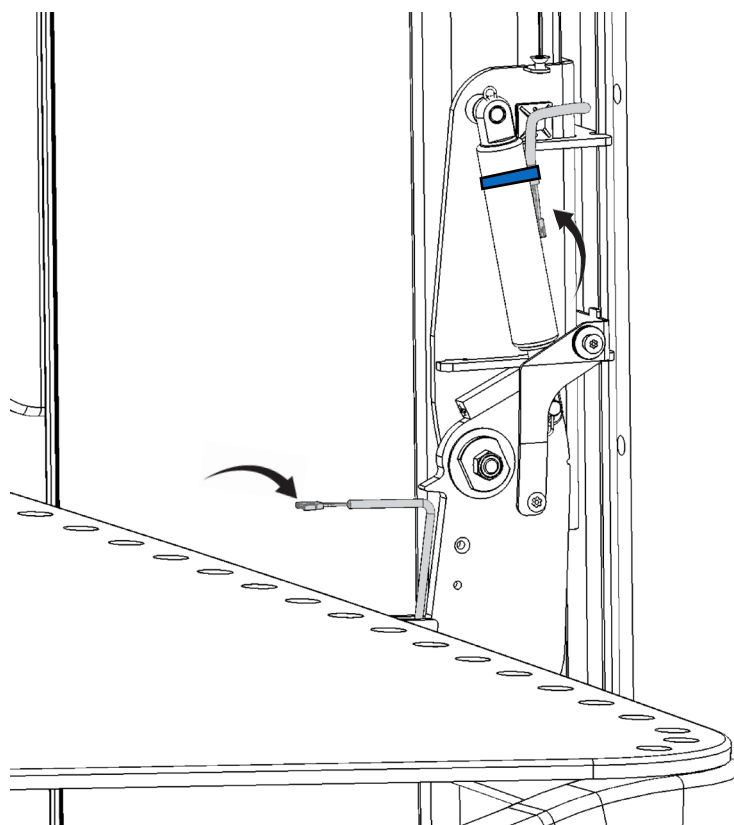


Fig 12.9b

Section 12.9 Connect the stretcher

- Connect the male and female connectors, taking note of the orientation and the locating tabs on the male connector.

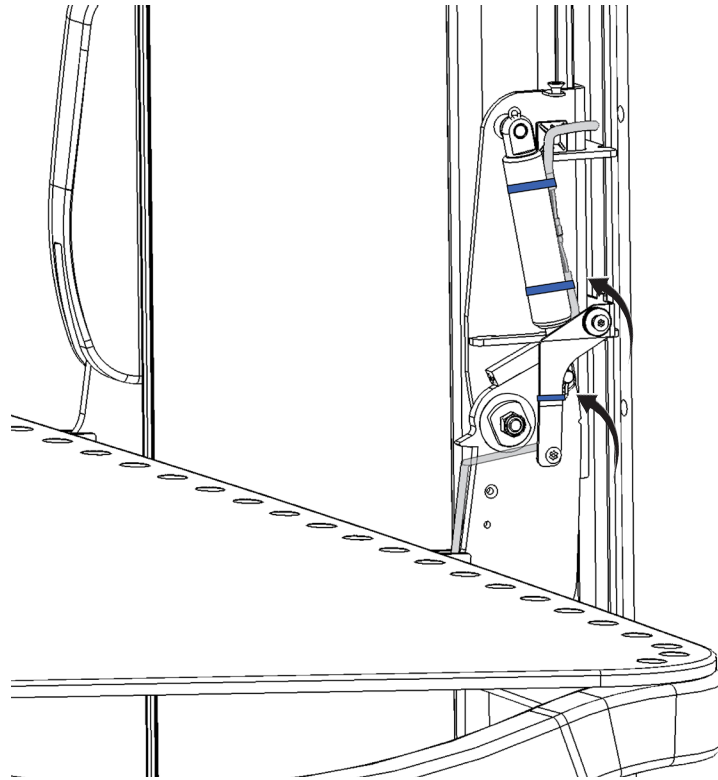


Fig 12.9c

- Secure the lower cable to the gas strut and pod mounting bracket using the supplied blue cable ties, in the same manner as the upper cable, as shown in Fig. 12.9c.
- The mains electrical supply can now be safely turned on.
- Check that the buttons at the front of the stretcher now raise and lower the product.

Section 12.10 Fit the cable cover

- To ensure the cable is not accessible a cable cover must now be installed to protect the connection.

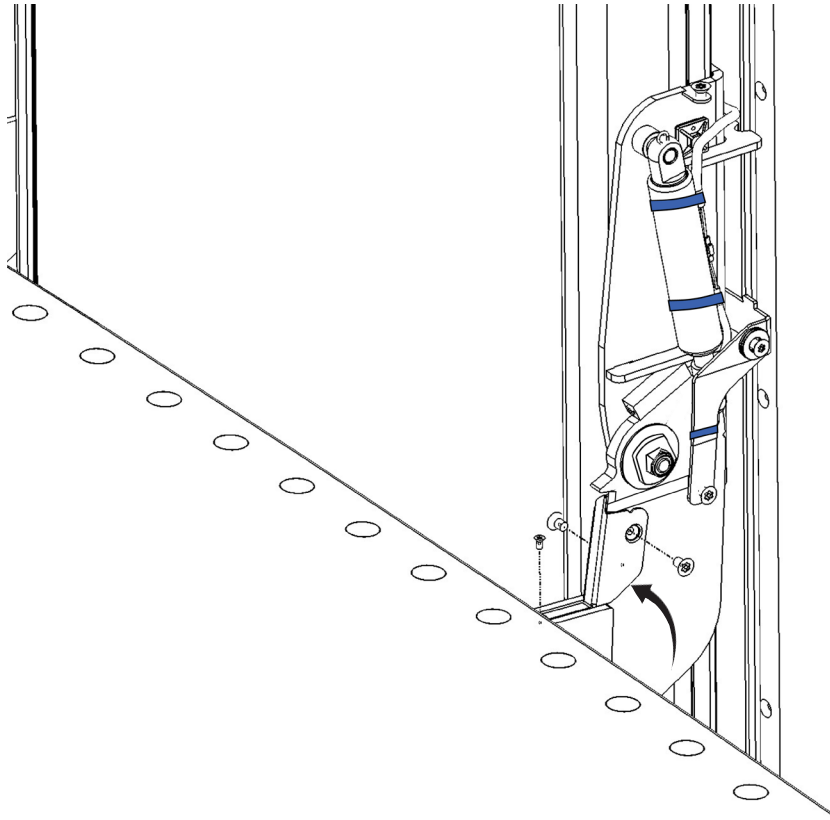


Fig 12.10

- Using the tools and security fasteners provided, install the cable cover. The two horizontal screws are M5 x 8 mm and one vertical is M3 x 6 mm as shown in Fig 12.10.

Section 12.11 Refit the gas spring covers

The gas spring covers can now be refitted, fitting is the reverse of removal

- Locate the gas spring covers and rotate into position, as shown in Fig 12.11a - 12.11b.

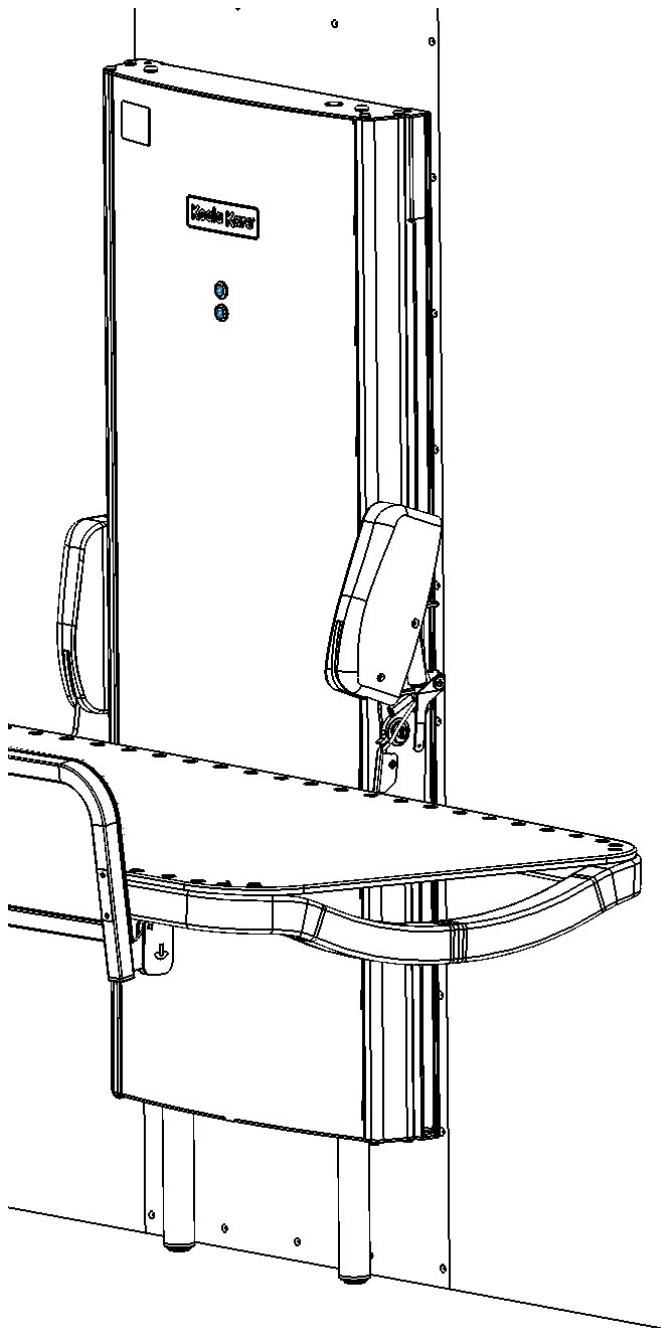


Fig 12.11a

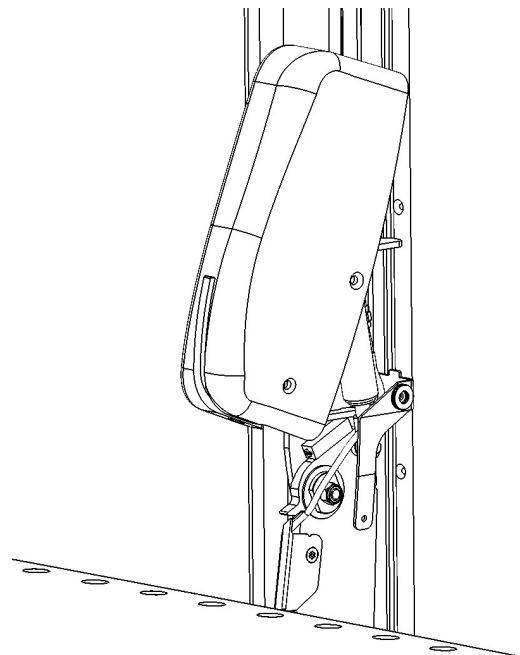


Fig 12.11b

Section 12.11 Refit the gas spring covers

- Align the four screw holes and refit with the previously removed screws, see Fig 12.11c.
- The uppermost horizontal screw is M5 x 12 mm with the remaining screws being M5 x 8 mm.

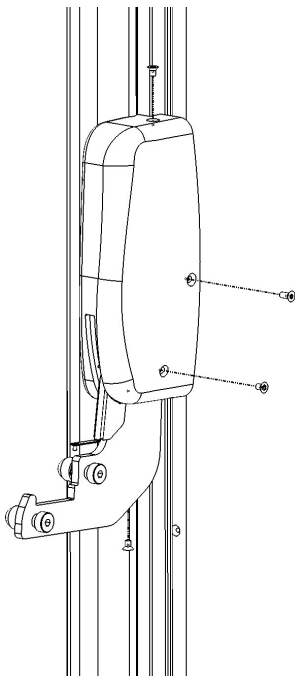


Fig 12.11c

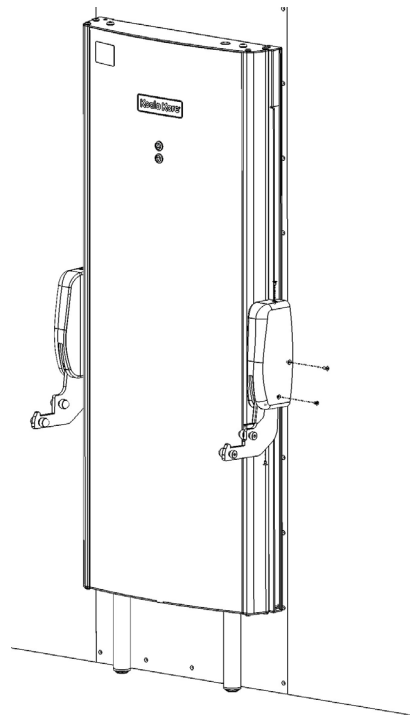


Fig 12.11d

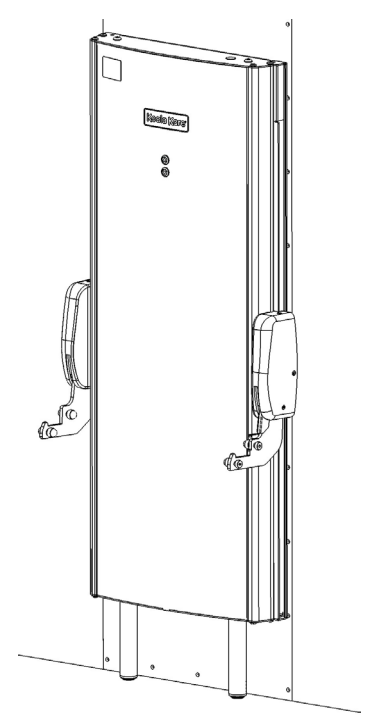


Fig 12.11e

Section 12.12 Testing

Once complete, a full function test of the product is required. Dis-engage the emergency stop before testing. Confirm the following:

- The stretcher stows vertically and deploys correctly.
- That the stretcher rises and falls with no obstructions through the full height range.
- Apply safe working load to stretcher and complete at least 3 cycles of the full height range checking for any excess noise or incorrect movement.
- Both sets of buttons move the stretcher up and down.
- The guard stows securely and is retained by the magnets.
- The guard locks into position when deployed.
- The emergency stop immediately stops the stretcher moving when pressed and re-starts after the emergency stop has been dis-engaged.

Note: After emergency stop activation, both status light will be red and the unit will need to be power cycled to clear this.

Section 12.13 Mounting the wall sign

The wall sign provided must be securely fixed to the wall in a clear and visible position near to the changing station.

- It is recommended that the wall sign be mounted next to and at a similar height as the emergency stop.
- If your changing table is in the corner of a room the wall sign can also be mounted on the perpendicular wall at a similar height.
- The wall sign must be clearly visible at all time. Ensure that the wall sign is not covered when the stretcher is stowed or by any other object in the room.
- Permanently fix the wall sign to your wall using appropriate fixings.

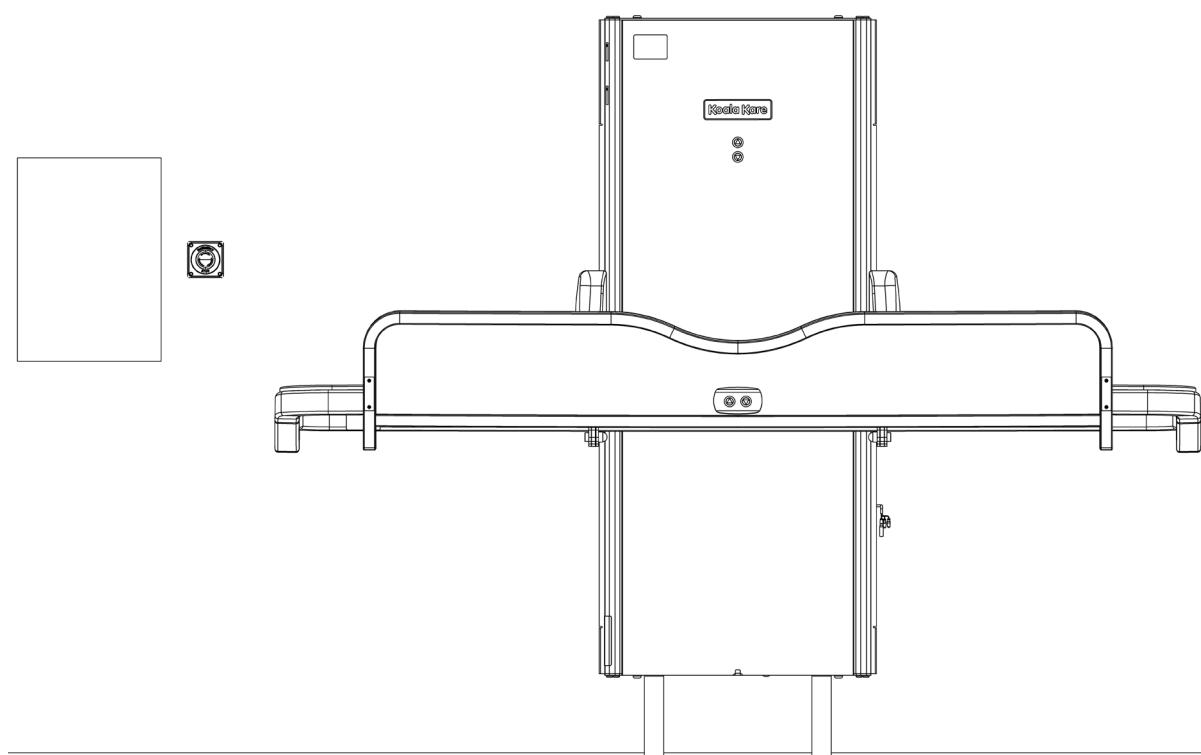


Fig 12.13

Section 13 Moving & transporting the equipment

- It is anticipated that once installed, the equipment will not be transported. If you need to transport this equipment after unpacking it, please contact Koala Kare customer services team for advice (see contact details at the end of this booklet).

Section 14 Product disposal

- The steel frame is widely recycled.
- Polyethylene material from the stretcher and guard can be recycled in some local authorities - please check and dispose of in accordance with state, federal and local regulations.
- The electronic components should be recycled in accordance with local WEEE regulations. For further advice, please contact Koala Kare:

email our support team: customerservice@koalabear.com
or call us on Main: 303.539.8300 | **Toll Free:** 888.733.3456



Section 15 Replaceable parts

The KB3000 is supplied for use with the following parts and accessories;

- SBU (main unit) - 14.157.05.0004
- Stretcher including front guard - 14.157.03.0001

There are no detachable items as part of this product.

In the event of any component failures or damage please contact us for advice;

email our support team: customerservice@koalabear.com
or call us on Main: 303.539.8300 | **Toll Free:** 888.733.3456



Koala Kare Products
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