



User Manual Hardrock

Doc Ref 999-1-09 – en-gb -REV 3
12-09-24

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1.0 Introduction



This user manual should be kept safe for future reference.



Please read and understand this manual in its entirety before using your Hardrock Chair.

The information in this manual is important for the safety of anyone near the chair and must be read and understood to help prevent injuries. It is also crucial to the proper operation and maintenance of the Hardrock chair.

Should any questions arise from reviewing this manual, contact your local authorised representative.

Failure to comply with warnings in this manual may result in; injury to the operator and/or client and/or damage to the chair or related components.

If, during the use of this device or because of its use, a serious incident has occurred please report it to the manufacturer and to your national authority.

Store this manual with the documents included with the Hardrock chair. Contents of this manual are subject to change without prior written notice.



Do not attempt to use this equipment without first understanding the contents of this manual.



Unauthorised modifications on this product may affect its safety. The manufacturer will not be held responsible for any accident, incident or deficiencies of performance that occur because of any unauthorised modification to its products.

1.1 Manufacture

The chair is manufactured at the address below:



Smirthwaite
16 Wentworth Road Heathfield, Newton Abbot TQ12 6TL
Telephone number: 01626 835552

1.2 European Authorised Representative






















The address of the European Authorised Representative for this product:



European Healthcare & Device Solutions (Ireland) Ltd.
Stratton House, Bishopstown Road,
Cork, Ireland.
T12 Y9TC.
Telephone number: +353(86)2280846.

1.3 Symbols Used

The Table below includes all Symbols from BS EN ISO 15223-1:2021 that can be found in this Manual and on the Product and what they represent. Refer to this Table when you are unsure of what a symbol represents.

			
Place of Manufacture	Country of Manufacture	Serial number	Catalogue number
			SWL
Medical Device	CE Marking	European Authorised Representative	Safe Working Load
			
For internal use only	Packaging indicator – Keep dry	Do not use if package is damaged	Packaging indicator – This way up
			IP_{N₁}N₂
Fragile, handle with care	Please observe local laws on recycling	Non-sterile	Degree of protection provided by enclosure.
			
Temperature range	Humidity range	Atmospheric pressure limitation	Consult instructions for use
	UK CA		
Caution – see instructions for use	UK Conformity Assessment Marking	Type 'B' applied part	Type 'BF' applied part

1.4 Contraindications/Limitations

Contraindications of the chair include:

There are no known "contraindications" associated with the usage of the Hardrock chair and its accessories, provided they are used as per manufacturer's recommendations and guidelines.

It is recommended that a client specific assessment is completed by a trained and knowledgeable health care professional to determine the best method of transfer and use.



Smirthwaite Ltd. does not recommend a required number of operators for the use of our products. This information and recommendation can only be provided after a thorough personalised, case specific assessment, as there are many factors that can influence these decisions.

Limitations of the chair include:

- The chair should only be operated by competent and trained persons.
- The chair should only be used with patients weighing under the safe working load of the chair.
- Between the chair and other accessories, the lowest safe working load of the components should not be exceeded.
- The chair is only to be used within the environment it is installed into. The chair must only be relocated by an authorised person.
- The chair is only compatible with the allocated accessories found within this manual.
- The chair is designed for human transfer only. There is no other application to this product.
- The operator of the chair must always pay attention to the well-being of the patient.
- Users should not be left unsupervised during operation.
- The chair is not designed for self-adjustment. A carer must operate the chair during use.

1.5 Intended Purpose



For internal use only. The Hardrock chair is intended to enable users with moderate postural support needs to develop and maintain healthy posture and promote visual, hearing, communication, fine motor control and social engagement.

1.5.1 Indications

The Hardrock Postural support chair is indicated for use by children and adults from the age of 2 year to 18years old with difficulty maintaining postural control.

1.5.2 Intended User

The Hardrock has been designed specifically for children, teenagers and adults with postural support needs. Caregivers including carers, therapist, and teaching staff will be responsible for maintaining and cleaning the chair as per the recommended guidelines in section 'Cleaning'. Under their care, they will assist the users in and out of the chair and ensure their safety while seated in the Hardrock. This includes conducting safety checks, making necessary adjustments and recharging the batteries where applicable.

The Hardrock is designed to be checked and adjusted by a therapist to ensure the child is seated correctly.

The device is used under instruction, and the operation of the aid is undertaken by a trained carer. A risk assessment must be performed before using the chair to ensure safe use can be established.



You may need to seek specialist advice on how to assist some people with specific moving and handling needs. Sources of advice include, but are not limited to, professional bodies and organisations, occupational therapists, physiotherapists, manual handling advisers and ergonomists with experience in health and social care.

1.6 Safety Instructions and Warnings



Ensure to read and understand all the statements below, for the safety of the caregivers and users, along with warranty requirements.

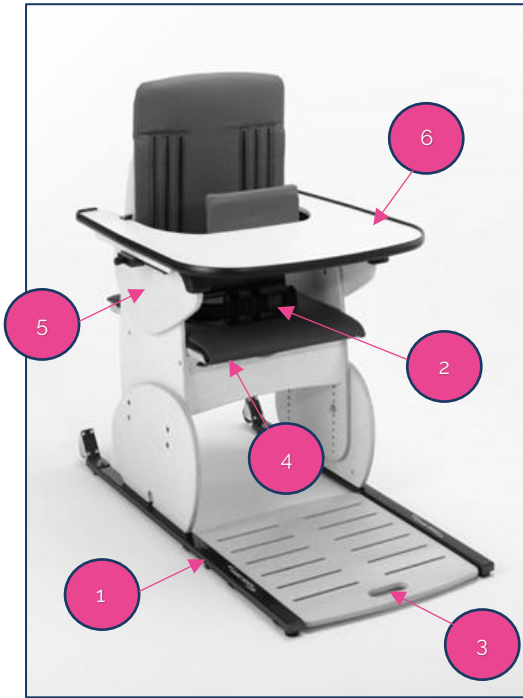
- The user should NOT be left unattended whilst in the chair. Always ensure a responsible therapist or carer is in attendance.
- For the initial setting up of the Hardrock and at subsequent/future review of the child, measurements of the child's seat depth and height is required.
- The therapist should be familiar with the methods of adjustment and have completed all adjustments appropriately to meet the needs of the child using the measurements taken before transferring the child into the chair.
- Before making any adjustments, tilt the chair slightly onto its side and ensure all castors on the mobile base are locked with the castors facing inwards.
- The therapist should be familiar with the methods of adjustment and have completed all adjustments appropriately to meet the needs of the user before transferring the user onto the chair.
- Adjusting the seat height of the Hardrock is easier and safer if carried out by two people.
- If you believe the chair or any fitted accessory to be faulty at any time, do not use – contact Smirthwaite Ltd. by telephone on +44 (0)1626 835552.
- The chair is only to be used indoors on a flat level surface.
- Do not exceed user maximum weight limits.
- Rear transporter wheels are installed on sizes 1, 2, and 3 to facilitate moving the chair. **DO NOT** move these chairs while the user is seated in the chair.
- Always fasten pelvic straps or any other straps provided with the chair.
- Always keep this product away from naked flames, cigarettes and sources of heat including open fireplaces, radiators, heaters.
- DO NOT fit parts or accessories of other manufacturers to this product unless authorised to do so in writing by Smirthwaite Ltd. Failure to follow these instructions will not only invalidate the guarantee but could make the chair dangerous to use.
- Smirthwaite Ltd will not accept liability for any injury or damage incurred through such malpractices. Any repairs required must be carried out by Smirthwaite Ltd authorised personnel.
- Lap straps must be appropriate and safe for the user and the users clothing. Lap straps and harnesses must be checked every time the chair is used to ensure they are fitted as prescribed by the clinician, take account of the users clothing, and are tightened so that the user cannot sustain injury. Checking the fit of lap straps and harnesses must be done with the user in the chair and should be undertaken as soon as the users sits in the chair.
- A risk assessment must be performed before using any manufactured chair, to ensure safe use can be established.
- The chair is intended to be installed on a flat and levelled surface prior to use.
- All chairs are less stable on sloping surfaces. A 5-degree slope is the maximum permitted.

- Take care during the transfer of the person; do not move the person at speed, as this increases the risk of an accident.
- All chairs are less stable when the load is moving.
- The chair must be installed only by persons authorized by Smirthwaite or who have the rights to install and commission the chair safe for use.
- Under no circumstance should the chair be put in control of a person who has not been properly trained in the use and care of this equipment. Failure to adhere to this warning may result in serious injury to the operator and/or the individual being transferred.
- The chair, and its accessories (including straps and harness) are not toys. Do not use it for unsafe practices. Do not allow children to play with the chair or any of its components. The chair should not be used for any practice except its intended use.
- In facilities where more than one operator will be responsible for using the chair, it is imperative that all such members be trained on the chair prior to use. A training program should be established by the facility to acquaint new operators with this equipment.
- To maintain optimum function, the chair should be inspected and maintained on a regular basis. See section 'Daily checks, Servicing and Cleaning' within this user manual.
- The chair and its accessories are intended only for seating of a person. Smirthwaite will not be responsible for any damage caused by the misuse, neglect, or purposeful destruction of the unit, and/or its associated components.
- Any accessories used with the chair including the harness, should be checked to ensure that they are in good working order. Check for signs of wear to each component prior to use. Report any unusual wear to your local authorized dealer.
- The chair and its associated parts are certified to a maximum load of 80kg (size 1 & 2)/120kg (size 3&4)/150kg (size 5). Do not exceed the maximum rated load of any of the components.
- Ensure that a clear space is maintained around the chair. Before use, check for and move all obstacles out of the way.
- Protecting the people present, visually monitor the harness (if applicable) to ensure the user is safe, always be vigilant of the user when there is no harness supporting them.
- To reduce the risk of unintended use, when the chair is not in use remove the harness from the product to prevent entrapment or strangulation should the device be tampered with.
- Between chair and any accessory used with it, the lowest maximum load shall always be used.

2.0 Components/Key Parts

When delivered, the chair will be supplied fully assembled except for the attachment of any special accessories ordered. Please see below to familiarise yourself with the components of the Hardrock chair. If you have not received all the components listed below, contact your local Smirthwaite dealer immediately – contact details are provided on the last page of this manual.

Hardrock Size 1, 2 and 3
Code 8201, 8202, 8203



Hardrock Size 4, and 5
Code 8204, 8205



SN: [] REF: [] Product: [] SWL: [] Built By: []

Smirthwaite Ltd
Heathfield, Newton Abbot
TQ12 6TL

European Healthcare & Device Solutions (Ireland) Ltd
Stratton House,
Bishopstow Road, Cork, Ireland

MADE IN BRITAIN

Temperature range: -15°C to +40°C (-5°F to +104°F)

Pressure: 20% - 80% (700hPa - 1060hPa)

MD UK CA CE

Manufactured in the UK - Removal of this label will invalidate the warranty

SN: [] REF: [] Product: [] SWL: [] Built By: []

Smirthwaite Ltd
Heathfield, Newton Abbot
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MD UK CA CE

Manufactured in the UK - Removal of this label will invalidate the warranty

CARELESSNESS CAUSES FIRES

Filling materials and covering fabric meet the requirements for resistance to cigarette and match ignition in the 1983 safety regulations

RESISTANT

Li-Ion Battery Operated 1 x 24 V, 2.85 Ah
Charger input: 100-240 V, 50/60 Hz, 200 VA
Charger Output: 30 VDC/4 A
Duty Cycle: 2 min "ON" - 18 min "OFF"

IPX6 MD UK CA CE

026143A

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Item	Description
1	Ski
2	Pelvic Strap
3	Footboard
4	Anti-thrust cushion
5	Armrest
6	Tray – Size 4&5 also come with tray as standard (not shown)
7	Mobile Base with lockable castors
8	Pelvic Strap
9	Footboard
10	Anti-thrust cushion
11	Armrest
12	Extended gables – come as standard on size 5 (not shown)
13	Stabiliser (optional)
14	Thoracic Supports (optional)
15	Information Label (located bottom of backrest)

3.0 Compatible Accessory List

The Hardrock chair comes with a variety of compatible accessories. These accessories and part codes are listed below.

Approved Accessories Chair	Size 1 Code 8201	Size 2 Code 8202	Size 3 Code 8203	Size 4 Code 8204	Size 5 Code 8205
Lower Leg Accessories					
Mobile Base with Push Handle	MB010	MB010	MB012	MB012	MB015
Heel Huggy Plate	FP016	FP017	FP018	FP019	---
Stabilisers*	SB001	SB001	SB002	SB002	SB002
Extended Side Gables*	EG001	EG001	EG002	EG002	---
Seat Accessories					
Pommel	PL020	PL020	PL021	PL021	PL022
4 Point Pelvic Strap*	HN073	HN074	HN075	HN076	HN097
Increased Height Backrest (Extra 100mm) *	BK154	BK155	BK156	BK157	BK159
Tray Accessories*					
Tray Handrail Full Width	GB009	GB010	GB011	GB012	GB015
Padded Tray Insert (Fitted Top)	TR034	TR035	TR036	TR037	TR045
Padded Tray Insert (Fitted Underneath)	TR030	TR031	TR032	TR033	TR046
Front Tray Retaining Strap	ST053	ST053	ST053	ST053	ST053
Rear Tray Retaining Strap	ST054	ST054	ST054	ST054	ST054
Side Tray Retaining Strap	ST055	ST055	ST055	ST055	ST055
Back & Head Accessories					
Moulded Pelvic Support	SP016	SP017	SP018	SP019	SP030
Trunk Supports with Straps	SP010	SP010	SP011	SP011	SP031
Samba Style Headrest Size 1	HT014	HT014	HT014	HT014	HT014
Samba Style Headrest Size 2	HT015	HT015	HT015	HT015	HT015
Cushions					
25mm Pelvic Cushions (Pair)	CS138	CS139	CS140	CS141	CS240
38mm Pelvic Cushions (Pair)	CS142	CS143	CS144	CS145	CS241
50mm Pelvic Cushions (Pair)	CS146	CS147	CS148	CS149	CS242
62mm Pelvic Cushions (Pair)	CS150	CS151	CS152	CS153	CS243
75mm Pelvic Cushions (Pair)	CS154	CS155	CS156	CS157	CS244
25+25mm Pelvic Cushions (Pair)	CS210	CS211	CS212	CS213	CS245
38+25mm Pelvic Cushions (Pair)	CS221	CS222	CS223	CS224	CS246
50+25mm Pelvic Cushions (Pair)	CS214	CS215	CS216	CS217	CS247
62+25mm Pelvic Cushions (Pair)	CS218	CS219	CS220	CS221	CS248

***NB Items marked with * must be factory fitted at the time product is ordered**

Sizes 2 & 3 come complete with adjustable armrests, anti-thrust cushion, tray, buckle pelvic strap with pad and transporter base (consists of skis with transporter wheels and integrated footboard).

Size 4 & 5 come complete with adjustable armrests, anti-thrust cushion, tray, buckle pelvic strap with pad and mobile base with push handle.

3.1 Attaching accessories

Table 3-1

The sections below will give detailed instructions on how to install and remove the accessories from your chair. These instructions must be adhered to for a successful and safe assembly of the chair. If you are unsure of any processes, always seek advice.

3.1.1 Tray

The Tray is installed and removed following the same process. Follow the instructions below to install or remove the tray.

To fit the Tray, following these steps:

1. Locate the two plunger pins (1) in Fig. 3.1.1-1 and adjust them to the open position by pulling and pushing it to one side (Fig 3.1.1-2).
2. Hold the tray with both hands on either side.
3. Slide the back of the tray into the tray retainer (2) shown in Fig. 3.1.1-1.
4. Adjust the tray to the desired position, ensuring the chest pad (3) shown in the Fig 3.1.1-1 is correctly positioned in front of the child for safety, providing appropriate support and minimizing undesired movement.
5. Release the plunger pins into the appropriate holes along the armrest (4) shown in Fig. 3.1.1-1 to secure the tray in place. Ensure the pin is in the closed position (Fig.3.1.1-2)

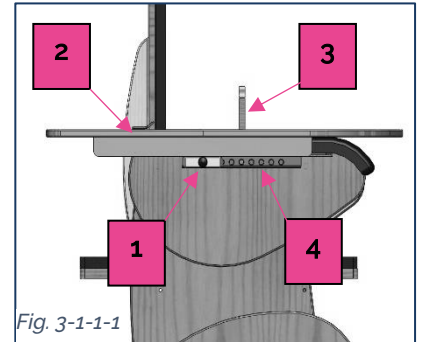


Fig. 3-1-1-1

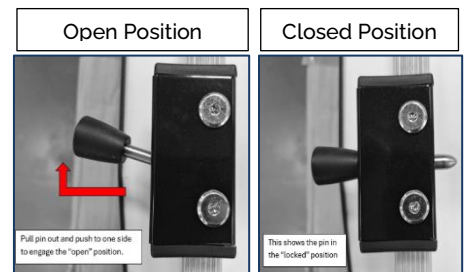


Fig. 3-1-1-2

3.1.2 Stabilisers

To retrofit the stabilizers, follow these steps:

1. Loosen the side panel fixing screws located under the chassis.
2. Insert the stabilizers through the 'mouse-hole' (1) of the side panel as shown in Fig 3.1.2-1.
3. Turn the stabilizer to the vertical position as shown in Fig 3.1.2.1
4. If necessary, drill an M8 clearance hole through the baseboard.
5. Secure the stabilizers with M8 cap screws, nuts, and washers.
6. Retighten the leg/side panel fixing screws under the chassis.

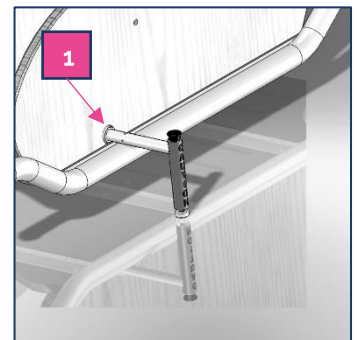


Fig. 3-1-2-1

For more information about accessories and fitting instructions, please get in touch with Smirthwaite directly. They will be able to provide all the details you need.

4.0 Operating/Adjustment Instructions



Appropriate training in postural seating procedures should be undergone by any person operating the chair, for their own and the client's safety and comfort. These instructions are designed to cover the methods of using the Hardrock.

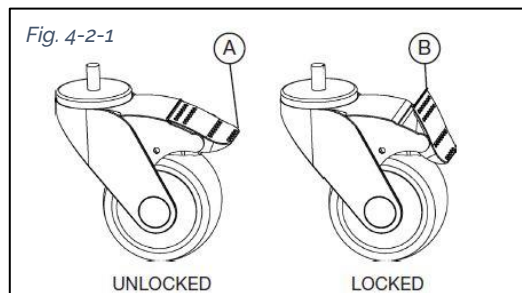
4.1 Manoeuvring the Chair

The Hardrock size 4 and 5 are designed with castors, allowing transfer and manoeuvrability of the chair, to manoeuvre correctly, follow the guidance below.

- A. To manoeuvre the chair, hold onto the handles and push forward, the designated handle is located behind the backrest and can be held at the comfiest location. Always use two hands to manoeuvre the chair.
- B. To manoeuvre the chair in the forward direction of travel, the handle must be used.
- C. To rotate the chair, ensure both hands are used on the handle to control the product. Alternatively, it is possible to rotate the chair by applying a single brake, which will allow the user to rotate the chair around the castor. This manoeuvring must be done with a smooth, slow action to avoid discomfort to the patient. See section 4.2 on how to activate the brakes.

4.2 Brakes

- A. The Smirthwaite Hardrock size 4 and 5 chairs have four braked castors.
- B. The castors should/can be applied when parking, to avoiding lateral movement, and using the chair and as an emergency stopping system.
- C. To apply the brake, simply press the lower end of the brake pedal down with your foot.
- D. To release the brake, simply press the top end of the brake pedal down with your foot.



4.3 Buckle and Strap Operation

Below is a step-by-step instruction guide on how to operate the Pelvic straps and Thoracic Support buckle.

- A. Press areas (U) to unlock the buckle and pull the two buckle parts apart.
- B. To fasten simply reconnect the two parts – the buckle will 'click' and lock.

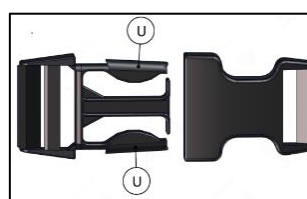
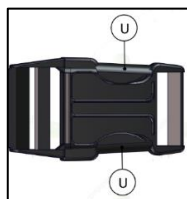


Fig. 4-3-1

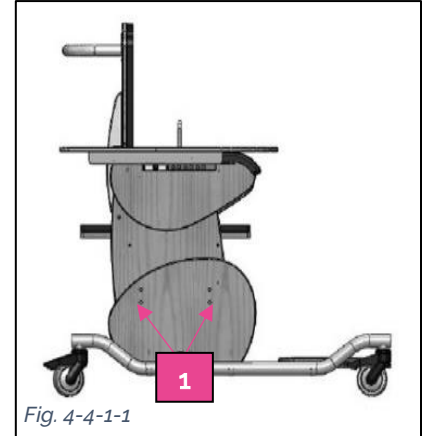
4.4 Adjustments

The Hardrock has components that are adjustable to your requirements. See the instructions below on how to adjust these components correctly. If you are unsure of any process, do not continue and seek advice.

4.4.1 Seat Height

To adjust the height, follow the steps set out below:

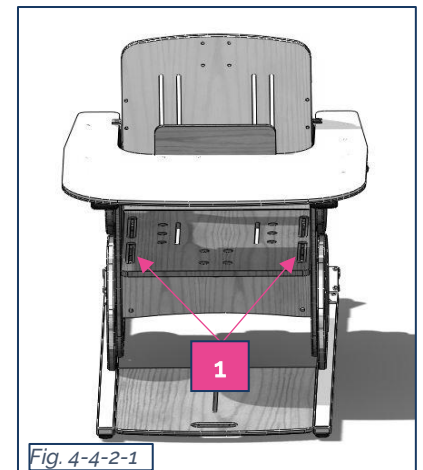
- Place the chair onto its side (requires 2 people).
- Unscrew the 4 hexagon head screws (1) shown in diagram 4.4.1-1
- With one person holding the top seat section, slide the seat to the desired height.
- Insert and replace all 8 screws, making sure they align with the height holes.
- Ensure all screws and tighten securely.
- Carefully return the chair to its upright position.



4.4.2 Seat Depth

To adjust the depth, follow the steps set out below:

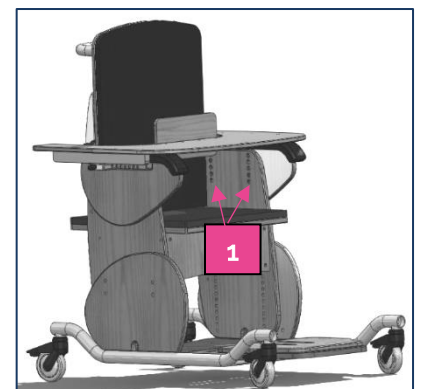
- Lift the front edge of the seat, which is secured by hook and loop underneath.
- Loosen the 4-hexagon screw (1) located in the slots along the seats edge, as shown in diagram 4.4.2-1. Turn the screws slightly – just a few turns.
- Slide the seat forward or backwards to adjust to the desired depth.
- Tighten the screws to lock the seat in place.



4.4.3 Armrests

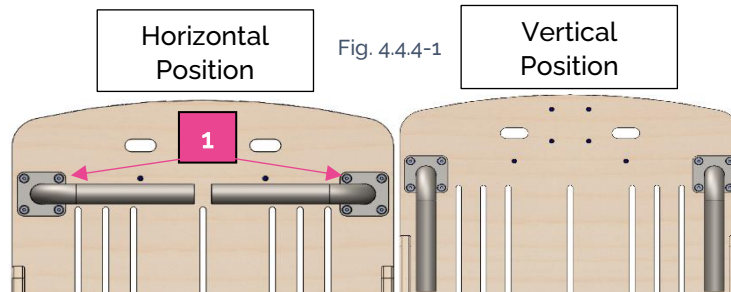
To adjust the armrest height, follow the steps set out below:

- Loosen the 2 hexagon screws (1) shown in diagram 4.4.3-1
- Adjust the armrests to the desired height using the available holes, ensuring both armrests are at the same height and are horizontal.
- Tighten the screws to lock in armrests in place



4.4.4 Push Handle Configuration (size 5 only)

The Size 5 model features two bullhorn-style push handles, unlike the continuous bar found on Sizes 1-4. The default installation position for these push handles is horizontal. However, they can also be installed in a downward-facing configuration. This adjustment allows shorter carers to push the patients comfortably, even when the chair is set up with the high back option.



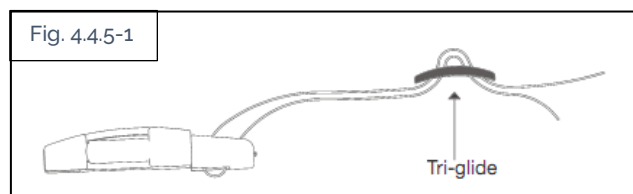
To alter the bullhorn style push handles position, follow the steps set out below:

- Remove the 4 hexagon head screws (1) as shown above in Fig. 4.4.4-1
- Rotate the handles to the preferred position, either horizontal or vertical.
- Reinsert the screws into their original holes and tighten to secure the handles in place.

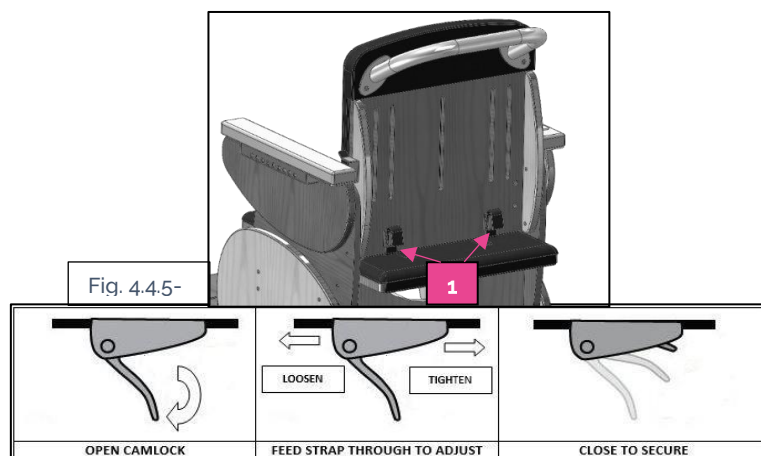
4.4.5 Pelvic Lap Straps.

To adjust the length or remove the pelvic strap, follow the steps set out below:

- Use the tri-glide to set the strap to your desired length as shown below in Fig. 4.4.5-1.



- If further adjustment is needed, feed more or less of the strap through the cam-lock fasteners (1) located at the back of the chair (see Fig. 4.4.5-2).

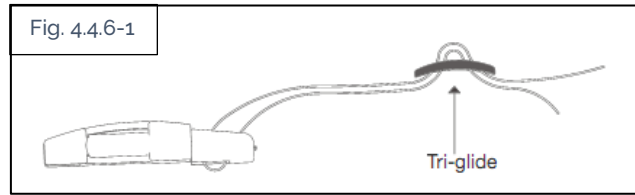


- To remove the strap completely open the cam-locks and retract the strap from the chair.

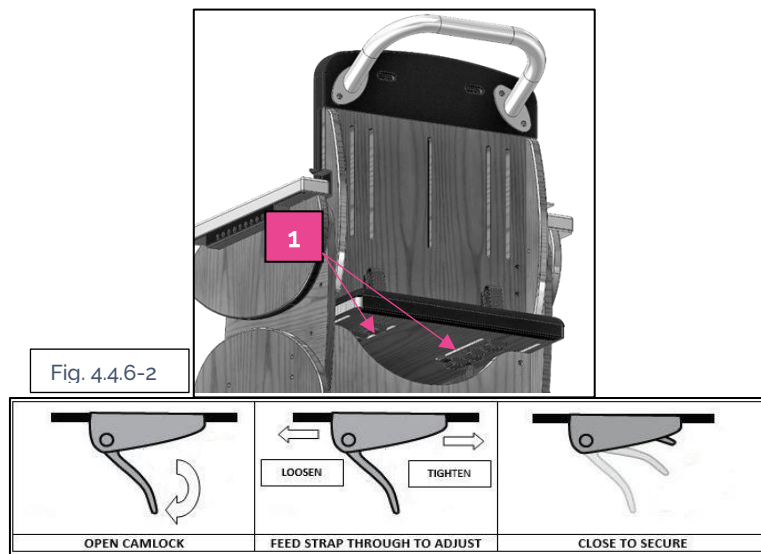
4.4.6 4- Point Pelvic Strap

To adjust the length or remove the 4-point pelvic strap, follow the steps set out below:

- Use the tri-glide to set the strap to your desired length (see Fig. 4.4.5-1).



- If further adjustment is needed, feed more or less of the strap through the cam-lock fasteners (1) located at on the underside of the seat (see Fig. 4.4.5-2).

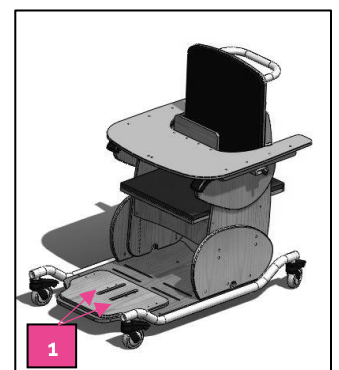


- To remove the strap completely open the cam-locks and retract the strap from the chair.

4.4.7 Heal Stop for Heal Huggy

To adjust the depth of the Heal Stop, follow the steps set out below:

- Loosen the screws (1) shown in diagram 4.4.7.1.
- Slide the heel stop forward or backwards to adjust to the desired depth.
- Once in the correct position tighten the screws to lock in place.



4.4.8 Thoracic Supports

4.4.8.1 Height

To adjust the height of the Thoracic Supports, follow these steps:

- Loosen the handwheels located on the rear of the backrest as shown in Fig. 4.4.7.1-1
- Slide the thoracic support up or down to the desired position.
- Once in position re-tighten the locking handwheels to secure in place.

Fig. 4.4.7.1-1

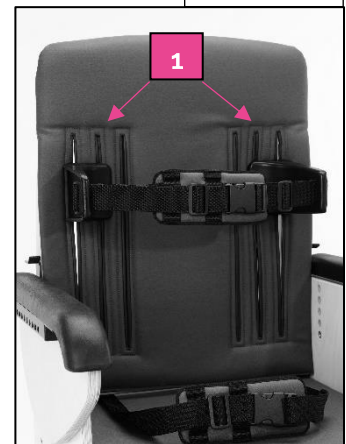


4.4.8.2 Width

To adjust the height of the Thoracic Supports, follow these steps:

- Loosen and remove the handwheels on the rear of the backrest as shown in Fig. 4.4.7.1-1.
- Remove the Thoracic Support from the vertical slot in the backrest.
- Re-insert the thoracic support in the appropriate vertical slot (1) for the desired position as shown in Fig. 4.4.7.1-2.
- Once in the correct position, re-attached the handwheels and tighten to secure in place.

Fig. 4.4.7.1-2



4.4.9 Pommel

To adjust the pommel, follow the steps set out below:

- Loosen the handwheel located on the underside of the seat shown in Fig. 4.4.9-1
- Slide the Pommel into the position appropriate for the user.
- Once in position re-tighten the locking handwheels to secure in place.

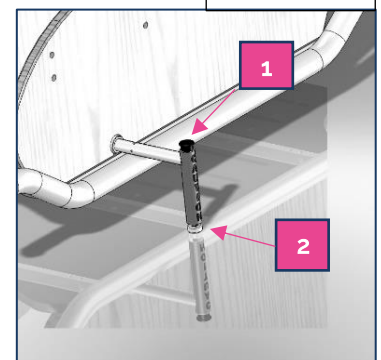
Fig. 4.4.9-1



4.4.10 Extend Stabiliser

- Depress button (1) shown in Fig. 4.4.10-1 to release the stander tube.
- Pull the stander tube to extend to the ground (2) shown in Fig. 4.4.10-1
- Once in the correct position turn the stander tube until you hear a click to indicate its lock into position.

Fig. 4.4.10-1



5.0 Technical Specifications

5.1 Hardrock Chair Dimensions



The diagram(s) above include the relevant dimensions of the chair, for further details on the chair specification, see the table below. All dimensions are in millimetres unless otherwise stated.

Table – 5-1-1

Code	Size	Seat Height (mm)	Width (mm)	Seat Depth (mm)	Back Height (mm)	Max User Weight (kg)	Product Weight
8201	1	220-315	290	230-305	300	50	35
8202	2	260-410	350	300-415	390	60	35
8203	3	290-440	430	370-485	370	70	40
8204	4	375-525	470	400-550	575	90	50
8205	5	425-550	550	450-600	650	150	60

5.2 Standards Applied

The standards that have been applied to the device are as follows:

- BS EN ISO 21856:2022 – Assistive Products – General requirements and test methods
- IEC 62366-11:2015 – Usability Engineering
- ISO 10993-1:2020 – Biological Evaluation of Medical Devices
- EN ISO 15223-1:2021 – Medical Device Symbols
- BS ISO 20417:2021 – Information Supplied by the manufacture.

6.0 Environmental Conditions

The chair is intended to be used in dry environments.

The chair is intended to be used within a professional healthcare facility or home healthcare environment. The chair is not suitable for any other environment.

The chair is not intended to be used in environments where there are rapid changes in the environmental temperature and humidity.

The operation of the chair is not adversely affected by lint, dust or light.

6.1 Normal operating conditions

+5°C to +40°C (41°F to 104°F) at a relative humidity between 15% to 90% RH, non-condensing but not requiring a water vapour pressure greater than 50hPa and atmospheric pressure between 700hPa to 1060hPa.

6.2 Shipping and storage conditions

-25°C to +5°C (-13°F to 41°F) with any humidity level

+5°C to +35°C (41°F to 95°F) at a relative humidity up to 90%,

+35°C to 70°C non-condensing at a water vapour pressure up to 50hPa

During all transportation it is recommended that the chair remains in its original packaging.

It is recommended that the chair is stored in a cool, dry place out of direct sunlight. If cleaning is required after storage, please see section on 'Cleaning' of the user manual for instructions.

Shipping and storage conditions are also contained on Hardrock Box Label:

7.0 Daily Checks



Inspection is to be completed prior to each use by the user of the Hardrock chair.

Should any of the components in the table below fail the inspection, DO NOT use the chair.

Contact your local authorised dealer for service – contact details are on the last page of this manual.

Ensure all component inspections in the Table below are completed prior to each use of the chair.

Check List before Use

Table 7-1

Component	Service/Inspection required.
Generic	<p>Visual inspection of the external of the chair. Significant damage that may affect the function of the chair along with a clear safety hazard is unacceptable.</p> <p>Check the labelling on the chair to ensure they are all still legible, this includes the Serial Number and other important markings. If labels are not legible, then contact your local authorised dealer immediately.</p> <p>Check all main nuts and bolts to see if they are loose and tighten as needed.</p> <p>Check all upholstery for signs of wear and tear, if you have concerns, then contact your local authorised dealer immediately.</p> <p>The product is not waterproof and is not intended to be exposed to water for elongated periods of time.</p> <p>Always ensure that the product is kept dry.</p>
Castors	<p>Examine the products castors for signs of damage or wear, ensure they run freely and are not cracked.</p> <p>Check to see all castors are flat on the floor and chair is stable.</p> <p>Ensure the product can rotate freely with ease.</p>
Brakes	<p>Ensure the brakes function when activated.</p> <p>Ensure the chair can move freely when the brakes are deactivated. (Ensure they aren't rubbing on the wheels).</p>
Frame	<p>Examine the full frame of the product for any cracks or fractures.</p> <p>Ensure the frame is solid and there are no loose attachments between the frame and the accessories or any other constructional part.</p> <p>Ensure that the product is used on a level surface.</p> <p><i>For a Hardrock on a ski base</i> - Ensure that the four corners of the frames underside are always in contact with the floor</p>
Footrest	<p>Inspect the footrests for damage including cuts and breaks.</p> <p>Ensure that the footboard is fixed in position and does not slide back and forth, if this does occur, tighten the star handles on the underside of the footboard.</p> <p>Ensure that all the nuts and bolts that secure the footrest are secure.</p> <p>Inspect the footrest for any deformation due to fatigue. A badly deformed footboard must be replaced.</p>
Seat Pad	<p>Inspect the seat pad for damage including cuts and breaks.</p> <p>Ensure that all the nuts and bolts that secure the seat pad are secure.</p> <p>Inspect the seat pad for any deformation due to fatigue. A badly deformed seat pad must be replaced.</p>

<p>Arm Rests</p>	<p>Inspect the arm rests for damage including cuts and breaks. Ensure that the arm rests are in a fixed in position and aren't loose. Tighten the star handles to avoid unwanted movement. Ensure that all the nuts and bolts that secure the arm rests are secure. Inspect the arm rests for any deformation due to fatigue. A badly deformed arm rest must be replaced.</p>
<p>Back Rest</p>	<p>Inspect the back rest for damage including cuts and breaks. Ensure that the back rest is not sloped, the fixings on either side of the frame must be level prior to use. A sloped back rest is the result of an incorrect adjustment. Ensure that the back rest is in a fixed in position and isn't loose. The back rest should be locked in place into one of the angle configurations. Inspect the back rest for any deformation due to fatigue. A badly deformed back rest must be replaced.</p>
<p>Tray (if supplied)</p>	<p>Inspect the tray for damage, including cuts or breaks. Ensure no parts are loose or damaged. Inspect the tray for any deformation due to fatigue. A badly deformed tray must be replaced.</p>
<p>Accessories</p>	<p>Ensure that all accessories used are in good condition. Ensure that there is no cuts and breaks, cracks or fractures to the accessory, any damage that may affect its function or safety. Ensure that all accessories are fixed onto the product correctly, ensure to follow the assembly instructions when assembling yourself. Ensure all fixings are secured and will not come undone during use of the product. Ensure that the accessory used is compatible with your product. Any straps used, ensure that they are not worn, no fraying is present and that the locking clips are functional.</p>

8.0 Cleaning

To reduce the risk of cross-contamination it is recommended to clean the chair and accessories before use by a different person.



Please follow the recommended cleaning guidelines below on cleaning and disinfecting the chair.

8.1 Frame Cleaning

For mild cleaning the frames can be cleaned using a damp cloth, soap and water, or an antibacterial spray.. Avoid the use industrial bleaches, abrasive cleaners, or organic solvents and refrain from immersing the chair in water. For more stubborn marks on the woodwork gently clean them with a soft brush.

All cleaning solutions must be thoroughly rinsed off the product at the end of the cleaning process and the product dried using a dry cloth/towel. Always ensure the product is dry before use.

8.2 Fabric Cleaning

All materials can be wiped down using a damp cloth to remove any mild dirt, dust, and minor spillages. When a spillage occurs, it is recommended that it be cleaned as quickly as possible to avoid any staining; it is good practice to dab the spillage and not to rub it as this could cause staining. For more persistent stains and dirt, hot water with an antibacterial spray can also be used.

All cleaning solutions must be thoroughly rinsed off the product at the end of the cleaning process and dried using a dry cloth/towel. Always ensure the product is dry before use.

8.3 Pelvic Strap Cleaning

If the pelvic become heavily soiled, it can be machine washed at a low temperature with a mild detergent but ensure it is drip-dried for optimal care.

8.4 Disinfecting (if necessary)

Should the chair require a more thorough cleaning, the use of the Actichlor™ disinfectant product (which is widely available in tablet form and used throughout the healthcare industry) is recommended.



Follow the manufacturer's safety instructions for the use of this cleaning product before use to ensure safe use for the operator and the user.

Ensure the cloth is damp before the cleaning process.

Application is through a clean damp cloth applied to wipe the product down. Use in the following dilutions to ensure an effective clean:

- Actichlor™ dissolvable chlorine tablets provide a concentration of 1000 ppm of available chlorine (0.1%) per 1 tablet.
- 1 tablet (1.7g formed tablet (x1)) will create a virucidal solution, diluted in 1 litre of water to provide effective means to clean a "dirty" product. This is also ideal for use after an outbreak of the Norovirus/winter vomiting and can be used as a precaution against C.Diff. It is effective against viruses, bacteria, spores, yeasts, and moulds.
- A minimum of 5 minutes contact time with the outer components is recommended to prevent virucidal infections, whilst maintaining the integrity of the product. The product can withstand a longer contact period, however a minimum of 5 minutes is required to provide an effective cleaning regime.
- Blood spills should be dealt with by an increased concentration of the solution – please refer to the instructions on the manufacturer's product labelling.

Dilution chart					
Product used as	Product condition	Concentration (ppm)	Dilution qty* (l)	Tablets per 1l (0.26gal)	Contact time (minutes)
Bactericidal	Clean	200	5 (1.32gal)	1	1
	Dirty	1000	1 (0.26gal)	1	5
Yeasticidal	Clean	200	5 (1.32gal)	1	1
	Dirty	1000	1 (0.26gal)	1	5
Fungicidal	Clean	2000	1 (0.26gal)	2	15
	Dirty	5000	1 (0.26gal)	5	15
Mycrobactericidal	Clean	1000	1 (0.26gal)	1	15
	Dirty	5000	1 (0.26gal)	5	15
Virucidal	Clean	500	2 (0.53gal)	1	5
	Dirty	1000	1 (0.26gal)	1	5
Sporcidal (C. Diff)	Clean	1000	1 (0.26gal)	1	10
	-	-	-	-	-
Sporcidal	Clean	5000	1 (0.26gal)	5	10
	-	-	-	-	-

- Dilution is made with water. DO NOT dilute within any other medium.
- When diluted in water, one tablet gives 1000ppm of available chlorine.
- The concentration of the solution depends upon whether the object being cleaned is noticeably dirty (indicated in the table by "Product condition").

Table 9.3-1

Handling and storage safety precautions when using this cleaning agent:		
Advice on Safe Handling	Hygiene Measures	Conditions for Safe Storage
<p>Avoid contact with skin and eyes.</p> <p>Do not breathe dust, fumes, gas, mist, vapours, spray.</p> <p>Use only with adequate ventilation.</p> <p>Wash hands thoroughly after handling.</p> <p>Mixing this product with acid or ammonia releases chlorine gas.</p>	<p>Handle in accordance with good industrial hygiene and safety practice.</p> <p>Remove and wash contaminated clothing before re-use.</p> <p>Wash face, hands, and any exposed skin thoroughly after handling.</p>	<p>Keep out of reach of children.</p> <p>Keep container tightly closed.</p> <p>Store in suitable labelled containers.</p> <p>Storage temperature: 0-25°C (32-77°F).</p>
Individual Protective Measures		Dissolve
Hand protection: Gloves		Dissolve in cold water – With no agitation, 1 tablet will take approximately 10 minutes to fully dissolve in the water used.
<p>The information above has been extracted from the Actichlor™ MSDS (Manufacturers Safety Data Sheet). For a full review of the data please follow the link below:</p> <p>http://www.nhsggc.org.uk/media/236215/msds-actichlor-plus.pdf</p>		

Table 9.3-2

9.0 Servicing



No service is to be carried out on the Hardrock chair while transferring a person to reduce the risk of injury.

Service must be completed by a Smirthwaite authorised service engineer.

Do not attempt to service the product yourself, or warranty is void.

To ensure the safety and continued good function of your chair, routine service must be performed. The Hardrock chair should be serviced every 12 months to ensure the product required standard is maintained. Servicing must only be undertaken by a Smirthwaite Ltd. service engineer, or by a Smirthwaite Ltd. trained representative. The service history of the product should be documented each service in the Service Log at the back of this User Manual.

9.1 Nominal Service

Your product has a nominal service life of 7 years, during which full post-sales support will be available regarding spares and servicing.

Product service life has been determined based upon the design complexity of product, and the anticipated exposure to normal use.

Good practice dictates all Smirthwaite Ltd. products have been designed and manufactured to high levels of safety and quality and will meet requirements of normal use when maintained in line with our servicing recommendations.



If the product has been out of use for an extended period (6 months or more) it should always be serviced prior to being reissued. If the product has been subjected to 'heavy' or 'constant' use, the service should be reduced to half the recommended period.

Constant and/or heavy use is:

- Daily use above 7 hours' duration.
- Weekly use above 5 days' duration.
- Monthly use above 10 months per year.
- Use by a client who is at 90% to 100% of the maximum weight limit of the product. The maximum weight limit must NEVER be exceeded.
- Use by a client who is extremely active, either voluntarily or involuntarily.

9.2 Extending Nominal Service Life

At Smirthwaite Ltd. we are proud to produce products that have a reputation for quality and durability. We believe our products have the potential to provide benefits to our clients beyond the nominal service life documented above.

We will continue to provide full support beyond the nominal service life provided the following conditions are met:

1. A full-service schedule has been maintained.
2. A full service and inspection are undertaken at the end of the nominal service life period.
3. The product is subsequently serviced annually (or biannually if under 'heavy/constant' use conditions).
4. Smirthwaite Ltd. reserve the right to limit support where parts/components are no longer available.

9.3 User Serviceable Parts

Please contact Smirthwaite Ltd. or your local dealer for information to assist service requirements on the Hardrock – e.g. to ascertain the necessary information for replacement parts and components. Contact details are shown on the last page of this manual.

Contact your local authorised Smirthwaite Ltd. dealer if you:

- Need more information.
- Have any questions about the use or service of your product.
- Notice any change in the performance.
- Want to report an unexpected occurrence.
- Want to arrange a service.
- Need to ascertain necessary information for replacement parts and components.

Contact details of your local Smirthwaite Ltd. dealer are shown on the last page of this manual.

9.4 Documentation/ Records

It is the responsibility of the current equipment owner to ensure the User Manual (As well as any further manuals for accessories fitted to the equipment) are handed over to the new owner at the time of exchange/sale.

It is the responsibility of the current equipment owner to ensure the service and inspection record form is kept up to date.

10.0 Troubleshooting

Should a problem arise with the use of the Hardrock chair, review the table below. Find the fault and complete the recommended solution.

If the fault is not found and/or the solution does not correct the problem, contact your local Smirthwaite authorised dealer immediately – contact details are provided on the last page of this manual.

Table 10-1

Fault	Action
Castors do not operate.	Ensure the brake has been fully disengaged, Check the castors are free running Check the castors are touching the ground.
Movement is compromised by excessive force required to move the chair	Check the castors are not fouled with debris that would restrict its movement (clean out, test, and return to service).
Adjustment features loose/sliding (arm rests, Tray, seat, thoracic supports	Ensure that the handwheels are fully tightened in your preferred location. If the handwheels are loose this allows the adjustments to move and adjust into unwanted locations. These features must always be set in position prior to use for the safety of the user.
Anything else that can be fault that could be sorted by the user	

11.0 Disposal

When the chair has completed its life cycle and can no longer perform to its intended use safely the chair must be decommissioned by an approved service engineer. The following specifies the importance of correct disposal procedure including local laws and being environmentally friendly.

Please observe the local laws on recycling and respect the current laws for disposal within the community the device is being used within. If there is any uncertainty of the below guidelines, contact your local authorities to determine the proper method of disposal of potentially biohazardous parts and accessories.

The relevant components utilised in the manufacture of the device that can be recycled at the end of the device life are:

Table 11-1

Fully recyclables:	Consideration when Recycling:
Wooden frame	Chair Padding
Metal Base & Castors	Add anything else that need to be considered
Initial packaging of the device (cardboard)	
Metallic fixing – screws etc.	
Leg Rests	
Arm Rests	
Quick Release Tray	
Metal Accessories	



The product may be contaminated and must be disinfected before recycling or disposal. See section on 'Cleaning' for details of how to do this.

12.0 Warranty

It is impossible for all the risks to be eliminated from use of this product, but to reduce risk and improve safety and proper use, the user should always read and understand the user manual before use. Product failure may occur due to lack of maintenance and care, misuse, unauthorised and improper servicing or alterations, improper storage, and environmental use, or through normal use wear and tear. These factors are all beyond the control from the manufacturer. These risks are taken on by the users.

The chair comes with a 2-year warranty covering all manufacture defects. Refer to your terms and conditions for more detailed information. The warranty is valid if the product has maintained its intended use and the user manual instructions have been followed. The warranty will not extend to the use of the product when used contrary to the user manual. This guarantee does not affect or in any way limit your statutory rights.

1. The liability of the manufacturer under the terms of this guarantee shall be limited to the replacement of the defective part(s) to the sales distributor, dealer, agent, person, or entity which purchased the equipment from the manufacturer. In no event shall the manufacturer incur liability for any consequential or unforeseeable losses.
2. This equipment guarantee shall be void if the equipment is not serviced by an authorised service engineer, in accordance with the manufacturer's recommendations, or if any unauthorised persons carry out work on the equipment.
3. This guarantee does not apply to failure attributable to normal wear and tear, damage by natural forces, user neglect or misuse or deliberate destruction.
4. Do not attempt to service the product yourself, or the warranty is void.

13.0 Service Record History

Complete this record after each service, repair inspection and/or maintenance.

* Photocopy additional pages as required *

13.1.1 Product Information

Model	
Size	
Date of Manufacture	
Serial Number	

13.1.2 Service & inspection record for

Date	Procedure	Service Personnel

Date	Procedure	Service Personnel
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Dealer/service contact details:

Manufacturer contact details:

Smirthwaite Ltd,
16 Wentworth Road
Heathfield
Newton Abbot
Devon
TQ12 6TL
Telephone Number: 01626 835552

Disclaimer

While every effort has been made to ensure the accuracy of information contained in this user manual, no liability can be accepted by Smirthwaite Ltd for any errors or omissions. Smirthwaite Ltd operates a policy of continuous improvement. Specifications and other data are subject to change without notice.

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