CareFlex

HydroTilt Accessories UI

These are the user instructions for the CareFlex HydroTilt Accessories.

Please read them carefully before setting up and using or adjusting the accessories and keep them in a safe place for future reference.

These instructions include details of the performance of the accessories. If they should start behaving outside of their intended performance, show signs of damage or excessive wear, or otherwise feel unsuitable, please take them out of service and contact CareFlex or your CareFlex Distributor immediately.

These instructions also include a guide to care and maintenance. Please refer to the CareFlex Cleaning and Fabric Guide for cleaning instructions for the chair and accessories.

Please refer to the HydroTilt Quick Set-Up Guide for details of adjusting the HydroTilt to suit a particular client.

The accessories covered by this guide are;

- Pelvic Strap
- Flip Up Footplate
- Legrest Extension
- Headrest and Neckrest
- Tray
- Groin Harness
- 4-point Chest Harness
- Lateral Blockers
- Motorised Actuation
- Autotilt

Instructions for the HydroTilt Adjustable Lateral System are available separately. Please contact CareFlex for details.

CE Class 1
Medical Device

1. Pelvic Strap

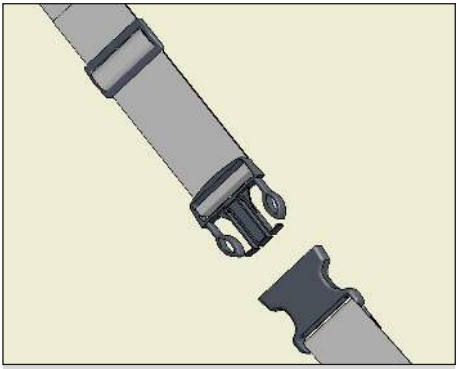
Please note, pelvic straps :

- Are an aid to maintaining a good posture and client safety.
- Must not be used as restraints.
- Must be adjusted to comfortably support the user and not restrict body function or cause discomfort.

The two parts of the buckle on the straps click together. To release the buckle, press the tabs on the sides of the buckle and pull the two halves apart.

A pelvic strap is attached to the side panels of the HydroTilt behind the seat cushion. The strap is fitted through the gap between seat and back cushions and across the client's hips at a 45 degree angle. This strap position is intended to keep the pelvis in an upright position by pulling the user as far back into the seat as possible.

It is essential that the strap is always correctly adjusted. Regularly check the tension of the strap so that the client is correctly supported and cannot wriggle beneath, or otherwise become trapped by, the strap.



Pelvic strap with (L>R) tri-glide, male part of the buckle and female part.

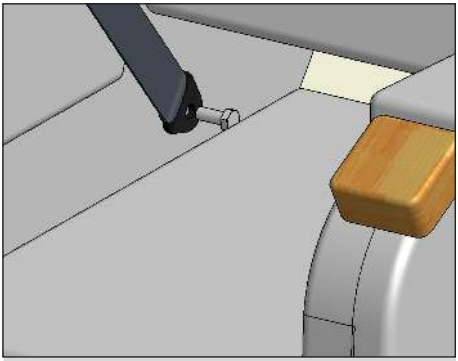
A client must be supervised by suitably trained personnel at all times if they are using the pelvic strap.

1a. Fitting a Pelvic Strap

To fit a pelvic strap, remove the seat cushion to reveal the fixing points on each side of the seat board.

Use a 17mm spanner to fasten the bolts (supplied) through the steel plates on the ends of the pelivc strap into the fixing points.

Ensure the bolts are firmly tightened and replace the seat cushion.



Bolting the pelvic strap to the rear anchor points.

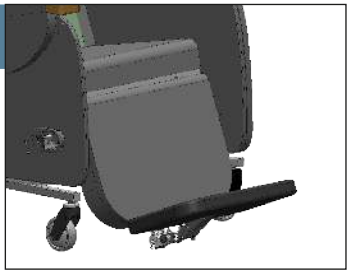
2. Legrest Extension & Flip-up Footplate
Patent pending GB 19 16 053.0

Careflex Footplate's are intended for clients with a longer lower leg length or those who require their feet to be supported. The Footplate is fixed into a bracket on the back of the legrest.

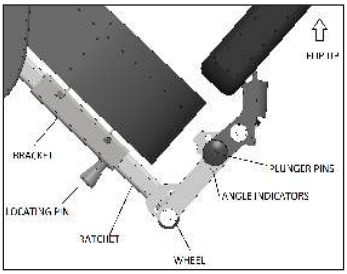
To insert & adjust the footplate height:

- Pull out the **locating pin** on the bracket, and insert the footplate.
- Slide the footplate up or down, to adjust to the desired height.
- Release the **locating pin**.
- The pin should 'click' into position when the footplate is properly located.
- Note the footplate stem has a **ratchet** and **wheel** safety feature. This ensures that should the footplate come into contact with the floor it will raise up out of the way, ensuring chair stability. The wheel offers some protection to the flooring.

Warning The **ratchet** feature is predominantly for safety, we advise that the Footplate height is reduced by hand every time the leg rest is lowered. *If your chair does not have a bracket on the legrest one can be easily retro-fitted.



The footplate fits into the bracket on the back of the legrest.

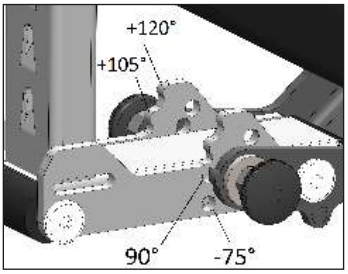


Parts of the footplate.

To adjust the angle:

- Ensure this operation is carried out by a competent person, and that no weight is being applied to the footplate.
- The position is set by the **plunger pins** as shown, each **indicator** offers 1 of 4 different positions. Pull out one of the **plungers** and twist so that it is locked off (see image).
- With one hand safely on the footplate, pull out the second plunger pin so that you can rotate the footplate to the desired setting.
- When this is achieved, **lock both plunger pins** into position, fully engaging with the corresponding holes on each side.
- The footplate will '**flip-up**' to vertical from any position and return to its original setting.

Warning! – Keep Fingers away from the mechanism when performing this task to avoid any potential finger traps.



Locating the plunger pin



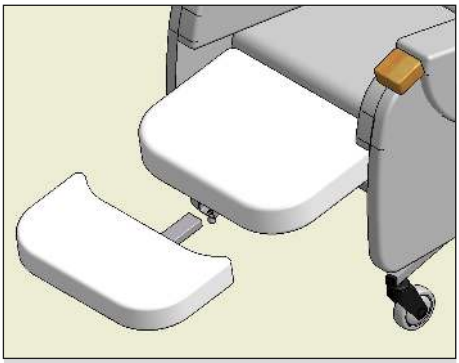
The footplate accommodates fixed angles of plantarflexion at the ankle, and provides a more restful ankle position whilst supporting the foot. The footplate can be adjusted and set to a choice of 5 positions; +90° (vertical), +15°, 0° (horizontal), -15° and -30°. This equates to a 120° range of adjustment. In all positions the footplate can be easily lifted up to vertical to move it out of the way.

2b. Legrest Extension

When the legrest is elevated a legrest extension can be fitted to support the client's heels. The legrest extension fits into the same bracket as the footrest and locates in the same way.

SAFETY WARNINGS FOR LEGRESTS AND FOOTRESTS

- When a legrest extension is fitted the legrest cannot be angled down into a vertical position.
- Legrest extensions and footrests MUST BE USED WITH GREAT CAUTION on motorised HydroTilts.
- HydroTilt footplates are not load bearing and clients cannot stand or walk off from them.
- Always remove footplates and legrest extensions before the legrest is angled down for standing transfer on and off a HydroTilt.



Fit the legrest extension into the bracket on the underside of the legrest.

3. Headrest Types

- Soft headrests are a simple pillow of soft material which will conform to the shape of the client's head but which will provide limited lateral control.
- Profiled soft headrests are soft pillows with a semi-circle cut out to allow the headrest to be positioned either around the client's head for lateral support or behind their shoulders to accommodate a kyphosis.
- The CareFlex neckrest has deep profiling to provide a lot of lateral control. However, the deep wings may affect sound and sight perception.
- CareFlex headrests come in three depths to fill the gap between the back of the head and the seat back cushion. If the user tends to lean forward due to the shape of their spine they will need the deeper headrest to provide support between the back of their head and the seat cushion.



Soft Pillow

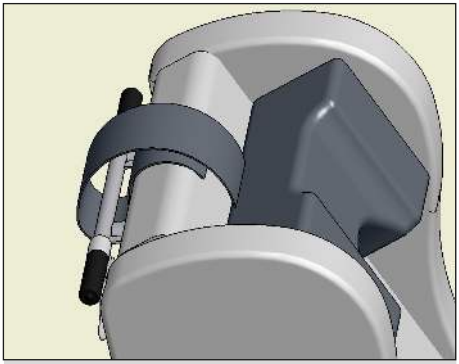


Soft Profiled Pillow

3a. Headrest Set-up

Headrests should be set up so that the bottom edge of the headrest is level with the top of the client's shoulder.

Height is controlled by a strap coming off the top edge of the headrest and looping around the push handle on the back of the chair. The length of the strap can be adjusted, thus lowering or raising the headrest. The strap is adjusted by means of Velcro strips.



Wrap the headrest strap around the push handle.

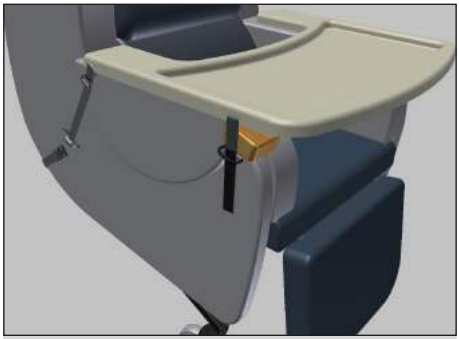
4. Fitting a Tray

The buckles on the straps on the back of the tray connect to small straps fitted to the bottom back corners of the chair sides. Once the buckles have been connected the lengths of the straps can be adjusted by re-positioning the tri-glide buckles. Straps should be adjusted so that they hold the tray close to the client but do not pull the tray into their stomach.

Fit the front straps through the D-rings on the sides of the handgrips. Fasten the straps by folding them over on themselves so the hook and loop on the straps sticks together.



Attach the rear straps from the tray to the buckles attached to the pelvic strap mounting points.



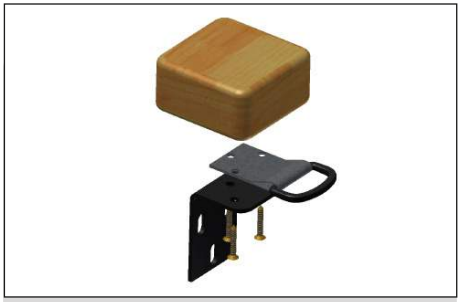
Fit the front straps through the D-rings and clip the rear straps into those fixed to the chair.

4a. Retro-fitting the Tray Positioning Straps

If a tray is being fitted to a HydroTilt, D-rings will need to be fitted to the handgrips and the short connector straps will need to be anchored to the chair sides at the back of the chair. You will need a 4mm allan key, posi-drive screwdriver and 17mm spanner (chairs made before 2011) or 10mm spanner (chairs made after 2011).

The anchor straps are fitted to the pelvic strap anchor points (see section 1). Fasten the plates on the end of the straps to the anchor points and position them so that the strap points down and will wrap around the bottom edge of the chair side. Use the small bolts for chairs made after 2011 and bigger bolts for chairs made before 2011. Bolt the straps in place and ensure the bolts are fully tightened before the chair is used.

To fit the D-rings to the handgrips, use a 4mm allan key to remove the handgrips. Sandwich the D-ring straps between the metal brackets and the grips. Use a posi-drive screwdriver to undo the screws holding the block to the bracket. Position the strap over the holes in the bracket and fasten the screws through the bracket and back into the handgrip. Ensure the screws are fully tightened and re-attach the brackets to the sides of the chair.



Assembling the D-ring straps into the handgrips.

Ensure the tray will not interfere with any devices implanted in the client's abdomen.

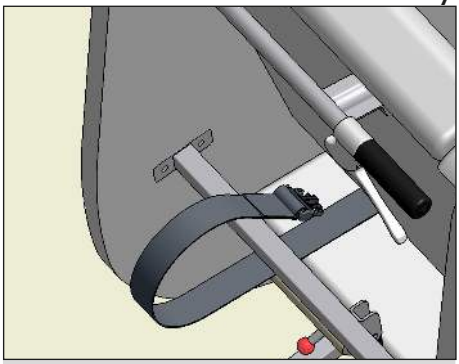
A tray can only be fitted to a chair which has either standard or soft handgrips.

5. Groin Harness

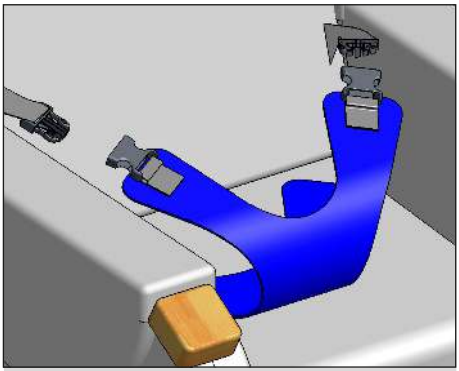
A groin harness helps to keep the user positioned correctly in the chair.

- Position the groin harness on the seat cushion with the long straps pointing to the back of the chair and the buckles on the harness facing down.
- Fit the webbing straps through the gap between the seat cushion and the chair back, loop them over the cross bar which the Tilt-in-Space gas action is fitted to and back through the gap between the seat cushion and chair back.
- Position the loose webbing straps over the arms of the chair and transfer the client onto the chair so that they are sitting on the groin harness.
- Position the ends of the groin harness with the buckles attached over the client's thighs and connect the buckles to the webbing straps.
- Adjust the length of the webbing straps through the buckles so that the groin harness helps control the client's position.

Do not over-tighten the straps as this may lead to discomfort. The groin harness should not be used as a restraint.



Loop the straps over the gas action bar and back through the gap between seat and back.

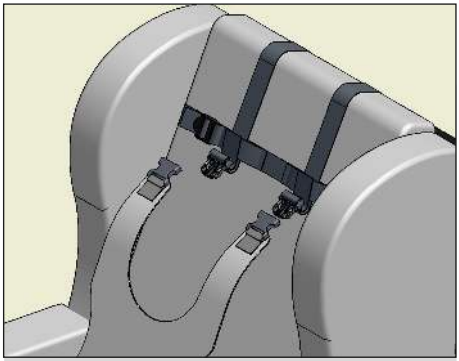


Positioning the groin harness for transfer.

6. 4-point Chest Harness

A four point chest harness keeps the user in an upright and 'midline' position and is very effective at controlling lateral movement. However, their use must be carefully considered, especially if the client has a stoma or feeding device implanted in their abdomen. A four point harness should never be used as a restraint.

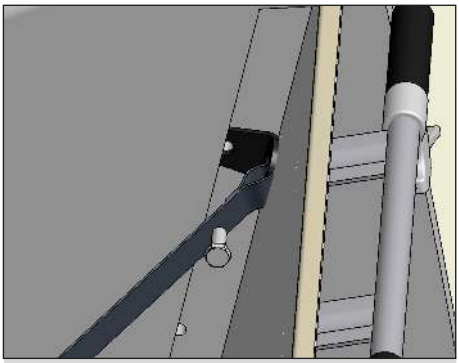
The harness consists of a padded bib shape held in position with a strap from each corner. Two straps attach to the chair at the client's waist and two over their shoulders. The straps are attached to the harness with side-lock buckles. The length of the webbing straps can be adjusted through the buckles.



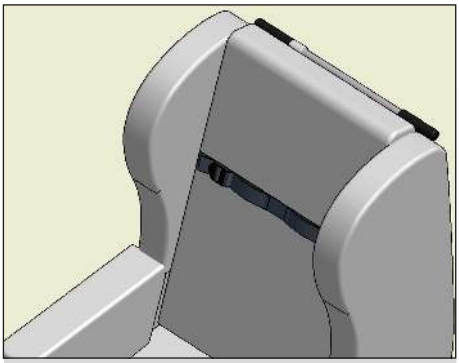
4-point harness.

6a. Fitting the 4-point Chest Harness

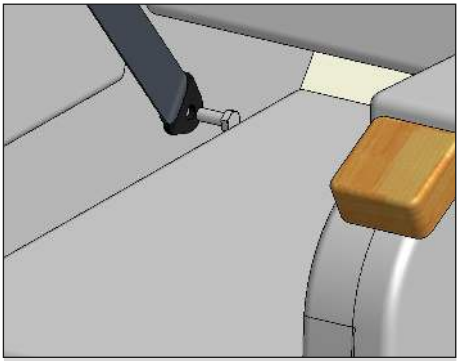
- A positioning strap needs to be fitted to the HydroTilt over the back cushion near the height of the client's shoulders.
- Pull the back cushion forward to give access to the inside of the side panels.
- Feel for two sets of indentations in the Velcro strip along the inside of the side panel on the underneath the wing.
- Position the steel brackets over the most appropriate indentations and use a 17mm spanner to fit them in place with the screws provided.
- Re-fit the seat cushion after carefully fitting it beneath the positioning strap.
- Pull the positioning strap tight over the cushion by adjusting the webbing through the buckles on the strap.
- The two longer legs of the harness point upwards. The webbing on these legs have loops sewn on the ends of them.
- Fit the webbing through the loops on the positioning strap and hook the ends over the push handles.
- Pass the bottom straps through the gap between the seat and back cushion and attach to the pelvic strap mounting positions.
- If a pelvic strap is already fitted, use a 17mm spanner to undo the bolts holding the pelvic strap in place.
- Position the plates on the 4-point harness straps where the pelvic strap plates were fitted.
- Ensure these bolts are properly tightened before the harness is used. The pelvic strap can be used in conjunction with the 4-point harness.



Bolting the anchor plates on each side of the strap into the threaded holes under the wing.



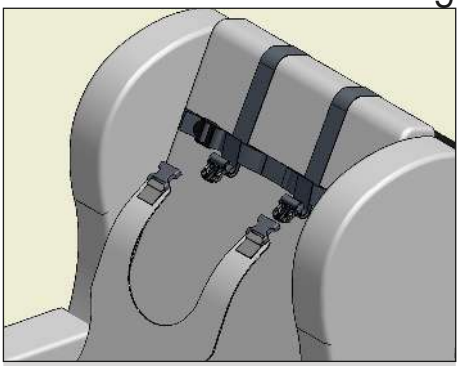
The positioning strap fitted over the back cushion.



Fitting the bottom straps to the pelvic strap anchor point.

6b. Using the 4-point Chest Harness

- Undo one of the lower buckles and both buckles which fit over the shoulders.
- Hang the bib section of the harness over the side of the chair and position all straps so that the client cannot sit on them when they are transferred into the chair.
- Transfer the client into the chair, position the bib section of the harness in front of them and fasten the buckles at the waist and shoulders.
- Ensure the belts are sufficiently tight to help support the client but are not tightened to the point where they restrict breathing or cause discomfort.



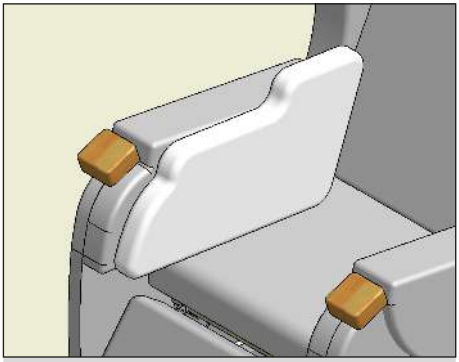
Attaching the top buckles to the shoulder straps once shoulder height has been set.

7. Lateral Blockers

The 'L' shaped Lateral Blockers come in different thicknesses and are fitted between the client and the arm/wing of the chair to help correct sideways leaning. Lateral blockers can be used singularly or in pairs and lateral blockers of different thicknesses can be used on opposing sides of the chair. However it is usually best to aim for the most symmetrical position as possible.

Select by measuring the seat width and adding the thickness of the lateral blockers to be used, e.g a 400mm seat width will become a 450mm seat width if two 25mm lateral blockers are to be used.

Once the client has been transferred into the chair, insert the lateral blockers between the client's hips and the arms of the chair.



Lateral blocker in position next to arm.

8. Motorised Chairs

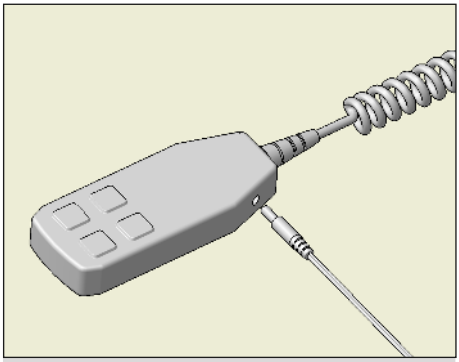
The HydroTilt is available with motorised actuation to control the Tilt-in-Space and legrest elevation. This utilizes a 24V DC battery system.

9. Battery Charging

When a motorised chair is first delivered and before it is used, charge the batteries for at least twenty four hours to ensure they are at full power. Similarly, if the motors have not been used for a prolonged period, charge the batteries for twenty four hours to bring them up to full power. Establish a regular regime for battery charging. Charging the chair regularly overnight is recommended. The battery unit will sound a warning signal when the battery is nearing its minimum recommended charge level. Charge as soon as is practicable once this signal is heard.

Only chargers supplied by CareFlex should be used to charge CareFlex chairs. Do not use a CareFlex charger to charge other products.

- Fit the jack plug connected to the charger into the socket on the hand control unit of the chair.
- Plug the charger into a 240V AC mains electric supply and switch on the power to the charger. See the notes above for charge times.
- At the end of the charging cycle, switch off the charger and disconnect all leads and plugs.



Fit the charging plug from the charger into the socket on the side of the handset.

DO NOT:

- **leave the charger connected to the chair with the mains power switched off.**
- **move the chair when it is connected to the mains.**
- **charge the batteries when there is a client in the chair.**

If, after charging, the motors do not work, take the chair out of service immediately and contact CareFlex or your local Distributor.

10. Using a HydroTilt with Motorised Actuation

A chair with motorised actuation has a hand controller on a coiled flex. To activate the actuators and tilt the chair or elevate the legrest, depress the appropriate up or down button for the facility required.

Always warn the client of what you are doing so that they do not become agitated or confused.



4-button handset for motorised chairs.

11. AutoTilt Facility

The AutoTilt facility has been developed to enhance the features of pressure management already found in the HydroTilt and to make more efficient use of the heathcare resources needed to achieve good pressure care.

AutoTilt reduces the amount of carer input by automatically adjusting the position of the chair at timed intervals. Every 20 seconds two microprocessors move the HydroTilt through 0.5 degrees of travel just enough to be perceptible to the occupant and to slightly re-focus the pressure points on the body. The AutoTilt cycle starts form a seating angle of 20 degrees with the occupant safely and securely positioned, AutoTilt then moves through 12 degrees in 8 minutes, gently tilting the HydroTilt back and then returning, over the same period of time, to its starting position.



HydroTilt AutoTilt Facility

11a. AutoTilt in Use

AutoTilt can be programmed to repeat this cycle for one or eight hours, ensuring optimal pressure care for those that need it most.
A chair fitted with the AutoTilt facility has six buttons on the handset, instead of the usual four. By depressing the bottom left button, the one hour AutoTilt cycle will begin. Pressing the bottom right button activates the eight hour AutoTilt cycle. If the chair is fully upright it will begin to tilt backwards at the intervals described above. Once it has reached its maximum backwards tilt it will begin to return to a more upright position. However, it will stop at a half-way point between the maximum upright and maximum reclined position and begin to tilt backwards again. This pattern will be repeated for either one or eight hours depending on the cycle selected.
Pressing any of the actuator control buttons (legrest elevation or TiS) will stop the AutoTilt cycle.



6 button AutoTilt handset. The bottom row of buttons activate the one or eight hour cycles.

Important Safety Information

- Please take the time to familiarise yourself with all the aspects of the chair and its functions before using the chair.
- Do not sit on the legrest, legrest extension or footplate, or subject them to excessive loads.
- Do not attempt to stand on the footplate.
- Regularly check the chair and its accessories for signs of damage or excessive wear.
- If there are any doubts as to the safe operation of the chair and its accessories, please contact CareFlex or your local CareFlex Distributor for advice and clarification.
- Always check the appropriateness of an accessory for a client. Do not assume that the same configuration can be used by different clients.
- Always try to avoid storing or using the accessories in areas where they may obstruct exits or passageways or where they will be subjected to excessive damp or humidity.
- Take care not to drop or knock accessories during transport and storage.
- For motorised chairs implement a regular charging procedure, preferable every night after the chair is used. Draining the batteries to below their effective operational level will drastically shorten their life span.
- Do not charge the chair's batteries when a client is sat in the chair.(Pro-Control and Motorised versions).
- Do not move the chair if the charging lead is connected between the chair and mains power supply.