

#### Modification process for the Chestpad foam core

This document presents the process steps for customising the shape of the foam core of the Chestpad on a Kera sit2sit hygiene hoist.

This document only covers the removal of foam where no modification of the vinyl Chestpad cover is required. If further customisation is required, please contact HT Systems or a local representative to discuss further options.

The intended result is to improve comfort of the transfer by removing pressure from a specific point on a person's torso by removing foam from the Chestpad at the point of concern. An example would be a Suprapubic Catheter or PEG feeding tube.

HT Systems suggests considering the use of Thightstaps in addition to the foam customisation, to further reduce pressure and improve comfort.

Tool Requirements of the process:

- 4mm Hex Key
- 5mm Hex Key
- Felt permanent marker
- Long bladed knife
- Adhesive marker (or tape)

#### Optional:

- Contact adhesive



### **Process: Customising foam core of Chestpad**

1. Identify the position of the centre of pressure relief

Have the client engage with the Chestpad as if they were going to complete a transfer. Mark on the Chestpad where the centre of pressure to be released is i.e. position of the SPC or PEG, on the Chestpad using an adhesive marker.

For example, it is shown the marker is off centre and approximately mid height.

Take a photo or draw diagram with dimensions as reference for position of the marker. The cover will be remove and the marker needs to be translated to the foam.



The marker indicates where the foam will be removed from beneath this point. Image on the right from Step 11.



#### 2. Remove Chestpad from Kera

Remove the Rubber handle on the rear of the Chestpad Sliding Connector.

Remove the Cradle Cover from its brackets by lifting it upward.

Pull up the Indexing Pin and slide the Chestpad from the Hub, such that the Chestpad is separate from the Kera.



## 3. Remove the Sliding Connector and Cradle Brackets

Remove the 3 x M8 screws from the Sliding Connector plate and remove it from the Chestpad.

Take note of the Thighstrap hook on the top most M8 screw.

Remove the 3 x M6 screws from each of the Cradle Brackets and remove brackets from the Chestpad.

NB: The screws tighten into pronged Tnuts held in the wooden board of the Chestpad.

#### 4. Remove vinyl cover

Unzip the vinyl cover and remove it from the foam core of the Chestpad.

If possible, transfer the marker onto the foam during this process.









### 5. Add marker to the foam core from reference

Using the reference image or diagram, apply marker to the foam core.



#### 6. Draw cut profile for top surface

Mark points at 50mm to left, right and above the marker. Use these points to create a rectangle that is 100mm wide and extends to the bottom of the foam.

If desirable, the rectangle can be extended in either direction as long as it does not get within 25mm of the outer side edges. Dashed line shows optional larger size.

The reason the cut-out goes all the way to the bottom is to allow the vinyl to be looser over the cut-out. Also, if the person was to slide down the Chestpad a small amount during a transfer, the PEG or SPC will not reach a section where there is foam.





Consider that the foam is necessary to hold the weight of the person, and that removing too much will ultimately end up in the person's whole torso getting closer to the wooden board as the less foam there is the more it compresses.

# 7. Draw the cut profile on the bottom edge of foam

Draw a V-shaped profile from either side of the rectangle. The bottom of the V should be 20mm from the back surface of the foam.

The V-shape is desireable over a U-shape channel with vertical walls as it gives the foam support from being pushed out sideways.





#### 8. Cut out the V shaped wedge

Use the knife to cut along the face of the V shape cut-out.

Cut in as many passes required until the knife reaches the wooden board at the bottom of the V-shape.

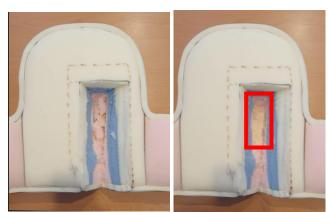
Cutting both sides of the v-shape allows the wedge to be lifted. Use the knife to cut the last face of the wedge with the knife in a vertical position.



#### 9. Remove any extra foam to suit

Where the marker was, remove all foam down to the wooden board, as shown inside the red rectangle.

Cut any extra foam as necessary.



#### 10. Test the Result with the client

Press the Foam pad to the client's torso to ensure that the cut-out is in the correct place. Determine if any additional foam should be removed.

If desired, the Chestpad foam core can be reconnected to the Sliding Connector and installed on the Kera so that a transfer be performed to ensure that the modification achieves a successful result.



#### 11. Replace the vinyl cover

Starting at the top of the foam pad, pull the cover over the foam core.

Close the zip at the bottom of the cover.

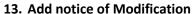


### 12. Remove the Sliding Connector and Cradle Brackets

Install the Sliding Connector via the 3 x M8 screws. Take note of the Thighstrap hook on the topmost M8 screw.

Install the Cradle Brackets via the 3 x M6 screws. Noting the Thighstrap hooks are on the outsides.

NB: The screws tighten into pronged Tnuts held in the wooden board of the Chestpad. Tighten firmly with hex key until spring washer are flattened. Do not use leverage bar or power tools.



With permanent marker write a notification to the Sliding Connector on the same side as the Serial Sticker on the Kera that notes that this Chestpad has been modified for a specific user and on the date it was performed.



# 14. Reverse steps in Step 2 to install the Chestpad on the Kera.

When sliding the Sliding Connector into the Hub, be careful not to dislodge the adhesive plastic strips on the inside surfaces of the Hub.

A small amount of water inside the rubber grip can make it easier to replace the grip.

