

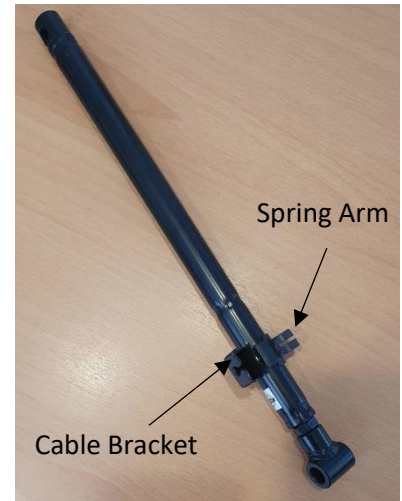
KERA SIT2SIT- REPLACEMENT PROCESS - LOCKING STRUT

Operation check and replacement process for Locking Strut

Principle of Operation:

The function of the Locking Strut is to lock the position of the main operating mechanism of the Kera sit2sit in order to restrict the Caregiver Handle from moving when the Kera sit2sit is not being used and to lock the system in the transfer position when a patient is being transferred.

The locking of the Strut is performed by an uncompressed coil spring clamping on to its sliding shaft. The Lock Lever on the Caregiver Handle connects to the coil spring Spring Arm via a cable. When the Lock Lever is pulled the coil spring in the Strut is compressed, releasing its grip on the sliding shaft, allowing the Strut to extend and the Caregiver Handle to move freely.



Kera sit2sit Locking Strut

Operation Check

- When the Lock Lever is pulled the Caregiver Handle should move freely through its full range of motion, hitting its stops at either end.
- When the Lock Lever is released the Caregiver Handle should lock in position. The Handle should not move less than 150mm when locked.

Loading Position

<150mm
Handle play

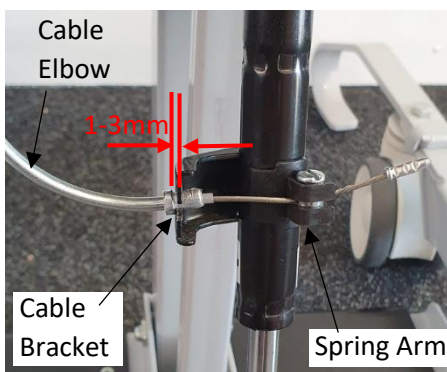


Transfer Position

<150mm
Handle play

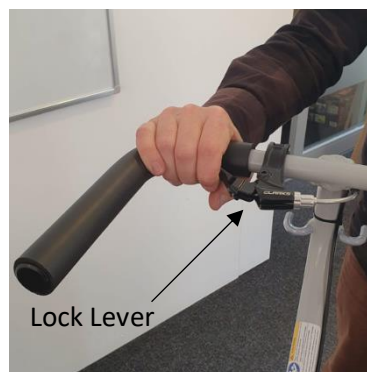


Normal operation of the Spring Arm on the Locking Strut



When Lock Lever not pulled

1-3mm of play between Cable Elbow shoulder and Cable Bracket.



Lock Lever being pulled

Adjustment of play can be made to the Adjustment Barrel on the Lock Lever. See Step 15.



Lock Lever pulled

Cable Stop pulls the Spring Arm. Cable is tight and Strut is free to travel.

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Tool Requirements of process:

- Two of 4mm Hex Keys
- 8mm, 10mm, 16mm and 17mm Spanners
- Pliers
- Felt permanent marker



Process: Replacing the Locking Strut

1. Remove the Knee Support Cover

Release the Velcro straps on back side of the Knee Support Cover and pull the cover off from the front.

Noting the pockets for the side walls of the Knee Supports.

Noting the orientation of the Knee Support Cover with the 'cut-out' at the top.

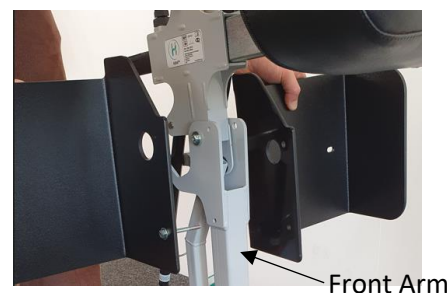
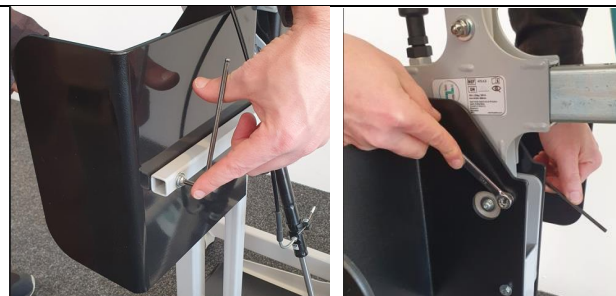


2. Remove the Knee Supports

Remove Barrel Nuts and M6 Screws from Knee Supports using two 4mm hex keys.

Remove the two sets of M6 Bolt, Washer and Barrel Nut assemblies from Front Arm using a 4mm hex key and 10mm spanner.

Remove Knee Supports from the Kera, noting they are left and right-handed.



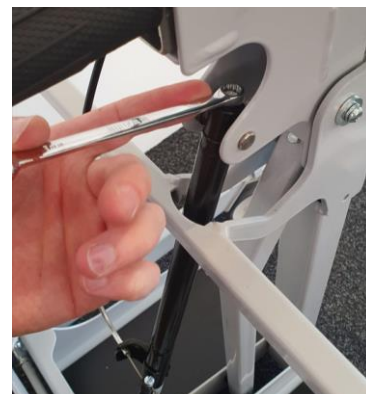
KERA SIT2SIT- REPLACEMENT PROCESS - LOCKING STRUT

3. Remove top screw from Locking Strut.

Have the Caregiver Handle in the position as shown.



With permanent marker, mark the axis of the M6 screw on the end of the 10mm top pin.



Using the 8mm spanner remove the M5 screw from the top pin of the Locking Strut.

4. Put Kera in safe position by supporting Handle

Rest the Handle on a chair back and put the brakes on with red foot pedal.

This will be a secure position of the Kera and Handle in which the Locking Strut can be removed without the operating mechanisms or Caregiver handle moving.

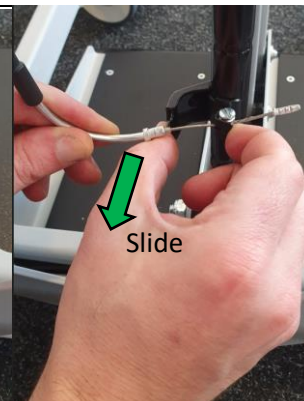


!! Ensure the Handle is secure and will not move when this operation is performed!!

5. Unhook the Lock Cable from the Locking Strut

Squeeze the Spring Arm of the Locking Strut toward the Cable Bracket, this will allow the cable elbow to slide free of Cable Bracket.

The Cable Stop barrel will then easily pull away of the Spring Arm.



6. Remove the bottom bolt of the Locking Strut

Using a 16mm and 17mm Ring Spanner, undo and remove the bottom M10 bolt of the Locking Strut from the Kera Base Frame. Noting the position of spacers.

Note: To aid in this process squeeze the Spring Lever (as in Step 5) to allow the end of the Locking strut to freely rotate and align with bolt axis.

!! Do not rotate the end of Locking Strut without squeezing the Spring Lever.



7. Remove top Locking Strut pin and remove the Locking Strut.

The top Locking Strut pin will pull out from the side.

Keep the two plastic spacers either side of the Locking Strut that will become loose once the pin is released.

The Locking Strut can now be removed from the Kera.



KERA SIT2SIT- REPLACEMENT PROCESS - LOCKING STRUT

8. Position replacement Locking Strut and insert top pin

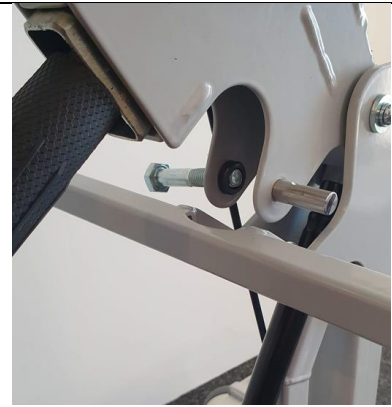
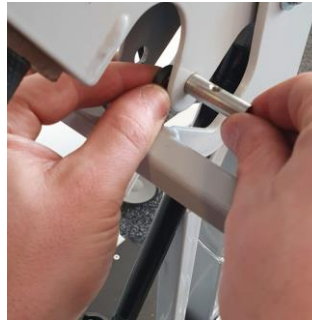
Begin by checking that the 10mm pin fits through the 10mm hole in the top of the Locking Strut. If not, use a file or 10mm drill bit to take off any snag in the Locking Strut hole.

Take one of the plastic spacers, insert the pin through the 10mm Hub hole and through the plastic spacer to hold it in place.

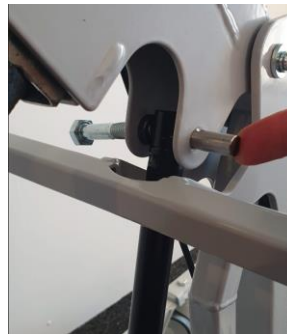
Similarly, use the M10 bolt to locate the plastic spacer with the other Hub hole from the opposite side

Position the replacement Locking Strut, ensuring correct orientation such that the Spring Arm and Cable Bracket are at the bottom of the strut and facing out toward the brake pedal.

Push the top pin through all parts until it is in both Hub holes and the M10 bolt drops out.



Top pin detail



Plastic Spacers

9. Install the bottom bolt of the Locking Strut

!! Do not rotate end of Locking Strut without squeezing the Spring Lever!!

Insert the bottom bolt from one side and add one plastic spacer.

Squeeze the Spring Arm to free up the Locking Strut end, and extend the strut to position it in line with the bolt.

Push the bolt through the Locking Strut end, add the second spacer, and push the bolt all way through frame.

Add Nyloc nut. Using an 16mm and 17mm Ring Spanner, tighten only until nyloc is engaged.



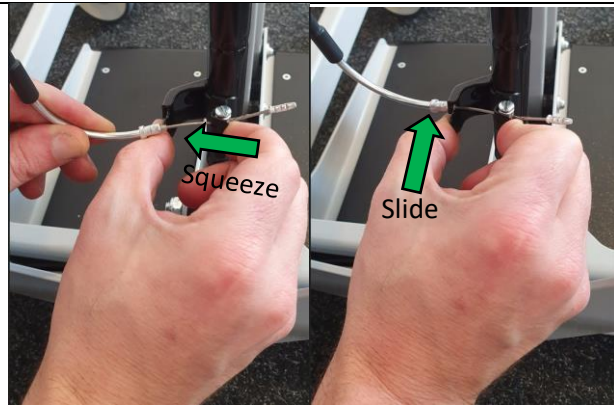
Do not overtighten and clamp end of Locking Strut, there will still be some side-to-side movement of the spacers.

!! Ensure the Handle is secure and will not move when this operation is performed!!

10. Connect the Lock Cable to the Locking Strut

Hook the Cable Stop barrel onto the Spring Arm first.

Use fingers to squeeze the Spring Arm to the Cable Bracket and slide the Cable Elbow end into position. Release the Spring Arm and check for normal operation of Lock Lever to move the Spring Arm.



11. Install and tighten top screw of Locking Strut.

Position the Caregiver Handle as shown in Step 3, to allow access to the top of the Locking Strut.

The M5 screw screws into the central thread of the pin. Tighten firmly with an 8mm spanner.

You may need to use pliers to rotate the pin to the position where the screw can engage the thread in the pin, as noted by the marker from Step 3.

!!Check the pin assembly is as shown with a spacer either side of the Locking Strut. There should be <1mm lateral movement of pin, restricting either end of the pin from being able to move out of its hole!!



Top pin detail



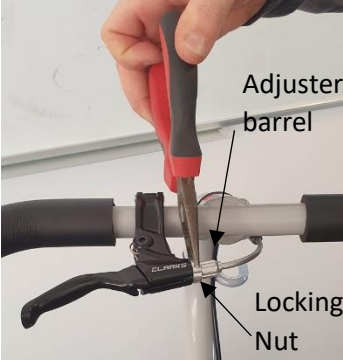
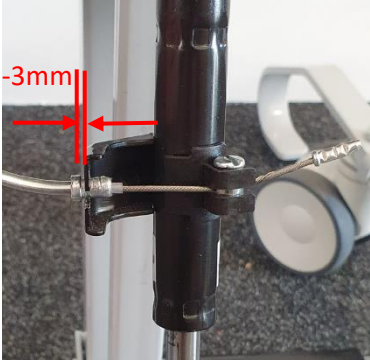
Plastic Spacers

12. Install the Knee Supports

As reverse of removal in Step 2.

All screws and bolts should be tightened up firmly.



<p>13. Position Knee Support Cover As reverse of removal Step 1.</p>	<p>Noting the pockets for the side walls of the Knee Supports and the orientation with cut-out up.</p>	
<p>14. Check operation Check operation of the Kera as described at beginning of this document.</p>		
<p>15. If needed: Adjustment of the Lock Lever</p> <ul style="list-style-type: none"> - Use pliers to loosen off locking nut. - Twist the adjustment barrel outward until desired gap is achieved at the Cable Elbow. Ensure 3 threads of barrel are still in the Locking Lever body. - Tighten locking nut until not able to be undone with fingers. - Recheck operation. <p>If sufficient adjustment cannot be achieved, contact HT Systems or a trusted suppliers for further information about replacement parts.</p>	 <p>1-3mm of play between Cable Elbow shoulder and Cable Bracket.</p>	 <p>1-3mm of play between Cable Elbow shoulder and Cable Bracket.</p>