



RT300 Supine Patient Setup Guide

This document provides setup instructions and troubleshooting strategies for the RT300 Supine



1. **Bike kit materials: Please have the following equipment before entering the patient's room.**

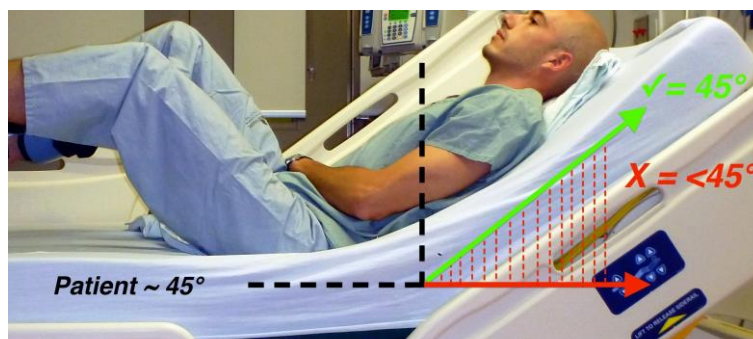
- 2 x pillowcase
- 1 x cotton bed sheet
- 1 x socks
- 1 x plastic bag



2. **Lower bed side panels and remove the panel at the foot of the bed.**



3. **Adjust the bed so the patient's torso is positioned at approximately a 45° incline ($\geq 30^\circ$ is appropriate). Also ensure the patient is centered on the bed in supine.**



4. **Drape the bed sheet across the patient for privacy and gently move the patient's legs so their feet are at the sides of the bed.**

5. Move wires/lines into a safe position for cycling.



6. Pivot the lower hanger (located between the pedals and leg rests) into the cycling position.



Storage/transport position



Cycling position

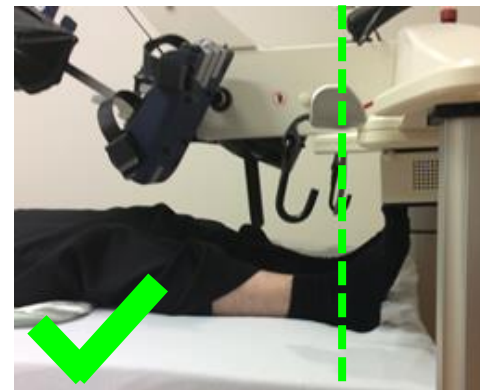
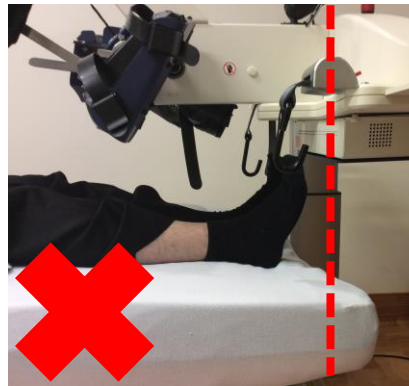
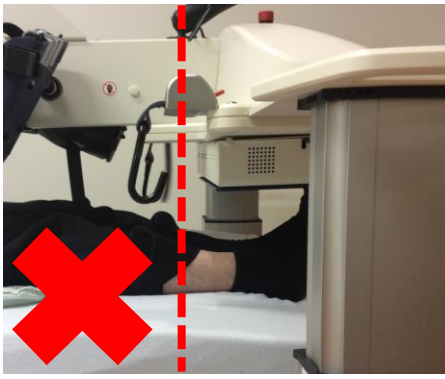
7. Before moving the bike over the foot of the bed:

- i. Connect the bike's power cable to the nearest power source and turn the power switch on.
- ii. Grab the handles with one person located on each side of the bike and pull/push to lengthen/narrow the base to allow enough space to move the bike over the foot of the bed, if needed.
- iii. Adjust the height of the bike using the up/down switch to create enough clearance to safely move the bike over the patient's feet.





8. Slide the bike over the foot of the bed until the patient's heels are positioned beneath the metal restraint devices.



9. Position the bike and patient for cycling.

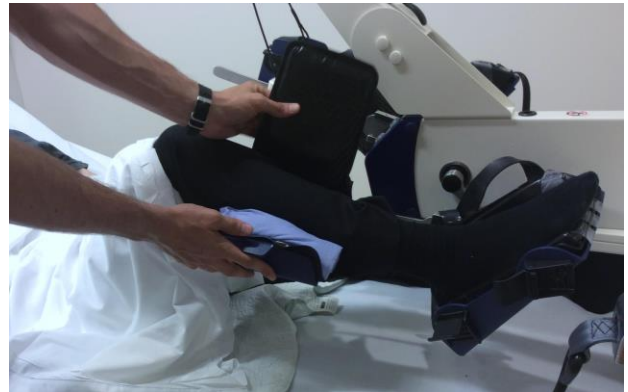
- i. The patient's hips and shoulders should lie flat in the bed. The patient's hips, shoulders and the base of the bike should run parallel with one another.
- ii. Imagine a straight line through the bike's lower leg hanger to the head of the bed. Align the bike through the centre-line of the patient with the body symmetrical on each side of the arm.



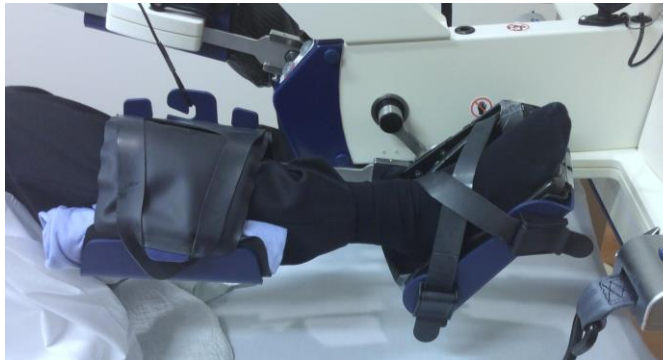
10. Lock the two wheels that are positioned farthest from your patient.



11. Place the patient's lower leg and foot onto the leg rest and pedal. Insert a rolled up pillowcase between the leg and leg rest.



12. Fasten the straps over the foot to form an X and secure the lower leg into the calf support, then rotate the pedals and repeat on the other side.

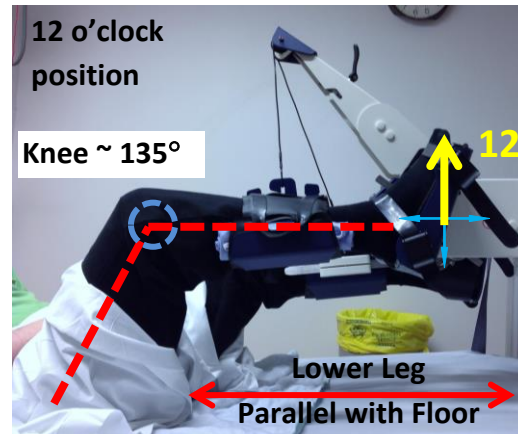
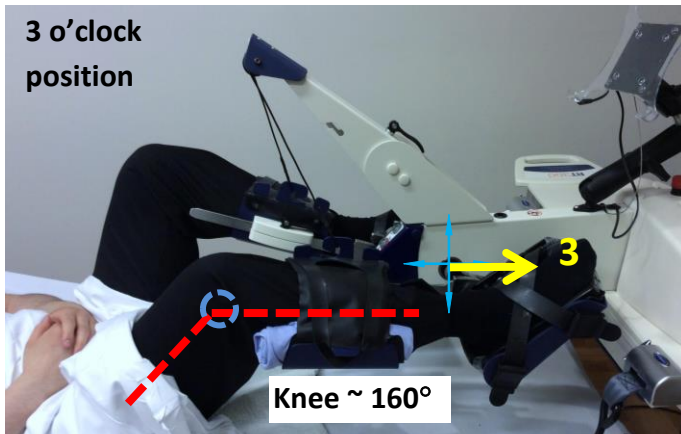


13. Assessing ROM and leg position:

Slowly guide the legs through the cycling movement and examine the following through the range of motion (ROM):

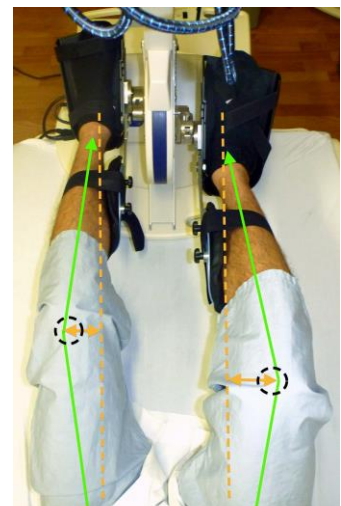
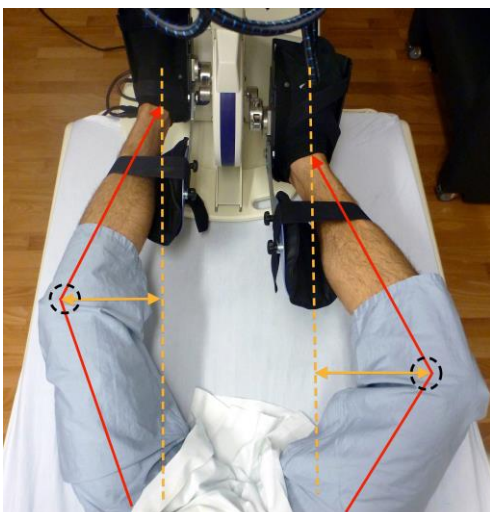
- i. No obvious discomfort
- ii. Heels remain on the pedals and legs remain secured to lower-leg rests
- iii. Lower-leg rests do not make contact with hamstrings
- iv. Knee angle ranges from 90° in flexion to 160° in extension
- v. Hip flexion is <90° throughout the movement

- vi. Legs should have a maximum knee angle of 160° to prevent hyperextension with heels remaining on pedal
- vii. Lower leg should be parallel with the floor when it is in the 12 o'clock position (adjust the height of the bike if necessary)



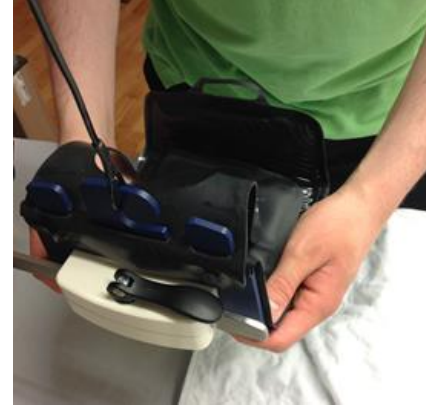
Guidelines for achieving proper patient positioning:

1. Excessive knee extension
 - Push the base of the bike towards the head of the bed/the patient
 - Tighten the Kevlar wires using the lock on the lower leg holder to straighten and secure the legs into the lower leg rests
2. Excessive hip/knee flexion
 - Pull the bike towards the foot of the bed
3. Excessive knee abduction
 - Lengthen the lower leg rests
 - Push the bike towards the head of the bed/the patient
 - Tighten the Kevlar wires to straighten and secure the legs into the lower leg rests
4. Tibia/lower leg is not parallel with the floor in the 12 o'clock position
 - Raise/lower the bike's elevation
5. The lower leg rests are contacting the hamstrings
 - Shorten the lower leg rests



14. Adjusting the length of the lower leg rests:

If knee extension, knee abduction and hip flexion are ideal but the lower leg rests continue to contact the patient's hamstrings throughout the ROM, adjust the position of the calf shells along the calf support metal bar.



15. Remove slack in the Kevlar wires.



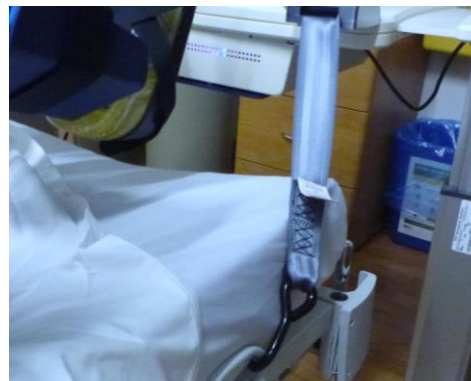
Slack



Slack taken up

16. Secure the bike to the bed.

- i. Lock all 4 wheels
- ii. Secure and tighten both metal safety-belt hooks to an immobile part of the bed and use the red lever and triangle dial on the metal restraints to fasten the hook tight to the bed

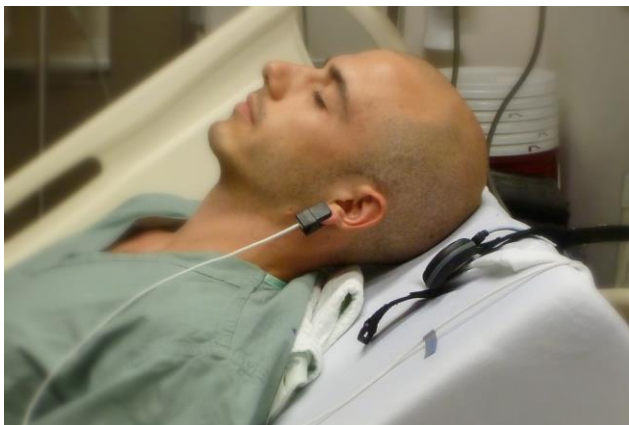


17. Final setup:



18. Attach the SpO₂ sensor to the patient's earlobe.

- i. Turn on the SAGE controller by pressing the small power button on the left side.
- ii. Check that the pulse oximeter is powered on and there is adequate battery to complete the session.
- iii. Observe HR and SPO₂ data on the bike's tablet before proceeding.
- iv. Upon session completion, ensure nothing is lodged between the sensor and the earlobe before storing and check that the device is powered off.



19. Initiate therapy:

- i. Log in: tap “Clinician” on the toolbar then select “Clinician Login” from the dropdown menu. Use code 1776 and tap OK.
- ii. Tap “Patient” on the toolbar then “Open Patient” on the dropdown menu. Enter the patient ID and PIN to login.
- iii. Ensure that SpO₂ and heart rate are registering on the screen.
- iv. Press GO and continue to assess the patient’s positioning and response as needed.

20. Recognize active cycling:

- i. The power is greater than 0 W.
- ii. The cogwheel below the image is grey as opposed to blue.
- iii. White numbers appear for percentage of left and right leg contribution in the bottom left and right hand corners of the image.

For help, please contact RTI: 800-609-9166 ext. 343