

Dynaflex Adjustable Leg Dynamometer User Manual

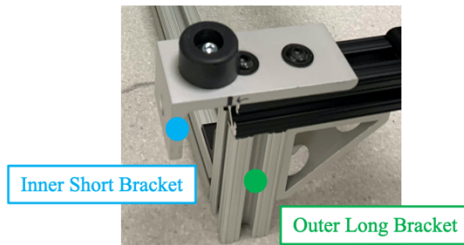
Welcome to Dynaflex!



1 – Velcro-Lined Table Rail



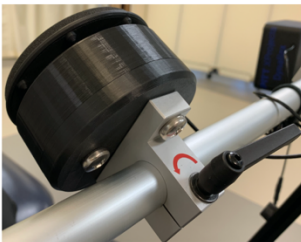
2 – Table Connection Bracket



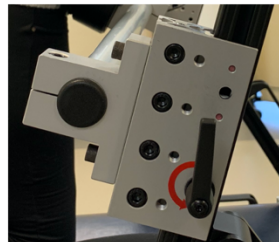
3 – Angle Adjustment Bearing



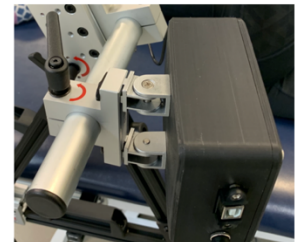
4 – Load Cell Adjustment Clamp



5 – Tibia Length Adjustment Bearing



6 – LCD Display Adjustment Clamp & Hinges



Using Your Dynaflex Adjustable Leg Dynamometer:

1. Instruct your patient to lie prone on the treatment table.
2. Raise the treatment table cushion up approximately 4 inches.
3. Place the product onto the rails of the treatment table using the table connection brackets:
 - (1) Line up the outer long brackets with the outside Velcro.
 - (2) Slide the device beneath the cushion and toward the patient until the leading table-connection brackets hit the Velcro stoppers.
 - (3) Push all brackets down until they rest even with the frame.
4. Lower the table cushion.
5. Plug the product into the nearest outlet using the cord that runs out of the electronics box located on the far side of the upper portion of the frame. Use the switch on this cord to turn the product on.
6. Adjust the frame's angle of incline by twisting the hand brakes on each angle adjustment bearing counterclockwise (as directed by the red arrows) and pushing/pulling the black handles located on each of the shorter upright arms of the frame. The red arrows on the angle adjustment bearings should point toward the desired measurement angle etched in the rail. Twist the handbrakes clockwise to tighten and secure this adjustment.
7. Adjust the load cell for the appropriate quadriceps/hamstring test and left/right leg by using the handbrake on the load cell adjustment clamp (see handbrake procedure details in step 6). This portion of the product has the ability to twist around the horizontal metal tube and translate from side to side along the tube. For the hamstring strength test, have the padded portion of the load cell facing the table, and for the quadriceps strength test, have the padded portion of the load cell facing away from the table. Be sure that the load cell is pointing perpendicular to the longer upright arms of the frame regardless of the test in order to maintain the proper test angle.
8. Instruct the patient to lift their foot in preparation for the hamstring or quadriceps strength test and reference their bent leg for all of the following adjustments. Throughout all adjustments, ensure that the patient's leg is parallel to the longer upright arms of the frame in order to maintain the proper test angle. If the patient's leg is not able to lie parallel to the frame arms, instruct them to move up/down the table.
9. Adjust the frame for the patient's tibia length by using the handbrakes on each tibia length adjustment bearing (see handbrake procedure details in step 6). This adjustment allows the horizontal tube to be moved up and down along the longer upright arms of the frame.
10. Adjust the LCD display for optimal visibility by holding the electronics box and swiveling it from side to side in the horizontal dimension. If necessary, the display may be rotated about the horizontal metal tube by following the same procedure detailed in step 7 for adjusting the load cell.
11. Instruct your patient to place their shin on the cushioned portion of the load cell and push against it. The force measurement may begin when the first beep sounds and will conclude 5 seconds later when the second beep sounds. Load cell sensitivity is limited to 8 kgf, so that the test will not begin until at least 8 kgf are applied.
12. Record the maximum force output displayed on the LCD screen. This value will display for 15 seconds after the conclusion of the force measurement test.
13. To remove the product, lift the cushion and slide it off the treatment table rails. For optimal storage, adjust the frame to the lowest angle to achieve maximum base stability.

For a Video Demonstration:

Please see the following YouTube tutorial https://youtu.be/hVNiL_EbwqA.

Have Questions or Complications?

Please contact the development team through email at rpm72@pitt.edu, ejm122@pitt.edu, oa29@pitt.edu, and fst4@pitt.edu.