



The Technology of Human Performance

# Treatment Guidelines – Ankle

These guidelines may be applicable to a variety of diagnosis, injuries and dysfunctions. Use your clinical judgment when proceeding on any course of treatment.

<b>Description</b>	The following represents suggested areas of assessment and uses of the PrimusRS for clients with ankle involvement. This assessment focuses on the ankle; however you are encouraged to evaluate the client as a whole.
<b>Contraindications</b>	Treatment needs of an ankle can vary greatly based on diagnosis and intervention goals. Utilize your clinical knowledge and skills in determining the appropriateness of any treatment plan prior to beginning a program with a client. Always consider client safety a priority.
<b>Early Intervention</b>	There may be ROM deficits that will need to be addressed. Utilize the CPM mode to increase ROM when appropriate for diagnosis and/or surgical procedure.
<b>Establish need</b>	<ol style="list-style-type: none"> <li>1. Strength – implement an isometric comparison test for the ankle motions to compare injured side to non-injured side.</li> <li>2. Endurance – to further establish need.</li> <li>3. Neuromuscular coordination – CPM with target force</li> <li>4. Effects of repetition, if indicated</li> <li>5. Work or other functional tolerance (press foot pedal, walking, etc...)</li> </ol>
<b>Develop Treatment</b>	<p>Isometric and dynamic strength (endurance) of isolated muscle groups can be measured by performing isolated joint motions and, of combined muscle groups, by performing specific tasks. This will help determine if there is a weak area to focus on.</p> <p>Initiate a treatment program that includes the ankle motions for which you have established a need. Set initial resistance at 30% of current strength level. Perform exercise to fatigue. Set new goal based on exercise result for next session.</p> <p>In addition, you may perform a task analysis to determine appropriate exercises based on return to work, ADL or other functional needs.</p>
<b>Primus Attachment Suggestions</b>	<p>#701 - ankle flexion and extension            #701 - Inversion/Eversion</p> <p>Special purchase attachments</p>

# Positioning Suggestions

## Ankle Plantar Flexion/Dorsi Flexion



Plantar-Flexion



Dorsi-Flexion

### Set-up:

**Exercise Head:** Number five position

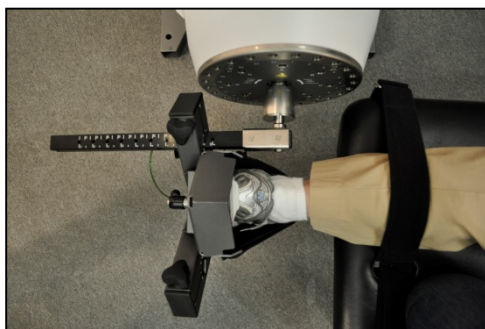
**Attachment:** 701

**Tool Setup:** Plantar-Flexion – Use pedal attachment in the A position. Dorsi-Flexion: Use padded block in the A position. Adjust tool length to place pressure point at the ball of the foot for plantar flexion. For dorsi-flexion, place the pad on the dorsal surface of the foot, so the center of the pad is above the ball of the foot.

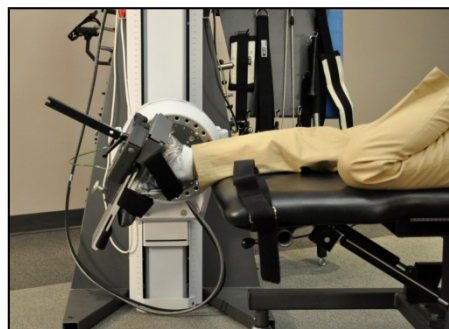


**Client Positioning Chair Setup:** The photos above show the chair positioned flat as a bench with the client sitting with her leg extended. A single strap is used to stabilize her leg.

**Alternate Set-Up:** If the optional ankle attachment is available, you may also set up the using the following images as a guideline.



Overhead view with optional ankle attachment



Side view with optional ankle attachment

## Ankle Inversion/Eversion

To effectively perform the ankle inversion and eversion setups, you must have the optional attachment that is part of the Pro-Package. This attachment can be set for the right or left foot. The images in these examples show the setup for the left foot. Setup for inversion and eversion is the same. The motion or muscle group exercised is determined by the direction of the resistance set in the software.



Side view



Overhead view showing settings for left and right foot. In this image, the tool is for the left foot.

**Exercise Head:** Number eight position

**Attachment:** 701 with optional inversion/eversion attachment. Extend the tool to its longest setting.

**Tool Setup:** Set the attachment to either the right (R) or left (L) foot settings. The heel of the involved foot should be back against the "V" shaped edge of the attachment. Use the straps to secure the foot into the attachment.

**Client Positioning Chair Setup:** Place the chair in front of the Primus at pictured above. Tilt the seat back to an angle that allows the clients foot to rest in the attachment in a neutral position (not flexed). Adjust the back of the chair so the client is in a comfortable position. Use the thigh strap to stabilize the upper leg.