



The Technology of Human Performance

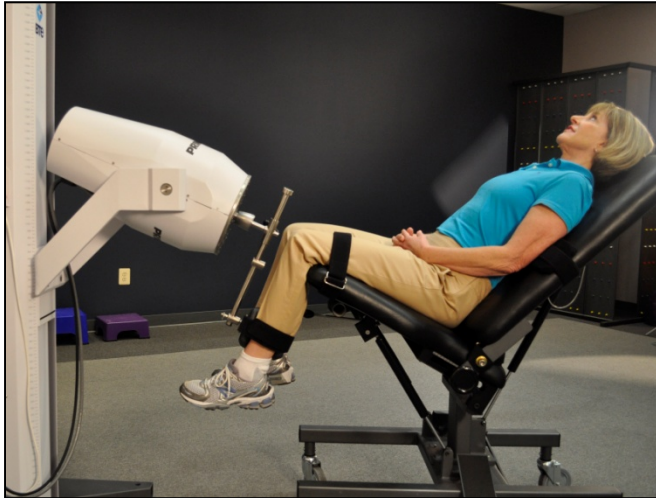
Treatment Guidelines – Hip

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

Description	The following represents suggested areas of assessment and uses of the PrimusRS for clients' with hip involvement. This assessment focuses on the hip; however, you are encouraged to evaluate the client as a whole.
Contraindications	Treatment needs of the hip 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.
Early Intervention	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.
Establish need	<ol style="list-style-type: none"> 1. Strength – implement an isometric comparison test for the hip motions to compare injured side to non-injured side. 2. Endurance – to further establish need. 3. ROM/neuromuscular coordination – CPM/CPM with target force 4. Effects of repetition, if indicated 5. Work or other functional tolerance (press foot pedal, walking, etc...)
Develop Treatment	<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 hip 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>
Primus Attachment Suggestions	<p>#701/802 -flexion and extension - abduction and adduction #701 - internal and external rotation</p> <p>#191 – step/gait training</p>

Positioning Suggestions

Hip Internal/External Rotation



Align the femur with the axis of rotation



Client is seated facing the PrimusRS

Set-up:

Exercise Head: Number six position

Attachment: 701 with padded block in the “B” position.

Tool Setup: Hip external rotation – Place the pad on the inside surface of the lower leg. Hip internal rotation – Place the pad on the outside surface of the lower leg.

Client Positioning Chair Setup: Position the chair so it is in front of and facing the Primus RS exercise head. The chair seat should be tilted so the femur aligns with the rotation of the shaft. Adjust the seat back so it is comfortable for the client. Use the thigh strap on the chair to provide additional stability.



Hip in internal rotation

Hip Flexion/Extension

Set-up:

Exercise Head: Number five position

Attachment: 701 with padded block in the “B” position. 802 May also be used.

Tool Setup:

Hip Flexion – Adjust lever length so pad is at approximately mid thigh. Client may rest hand on exercise head for stability.

Hip Extension - Place pad on the posterior surface of the upper leg.

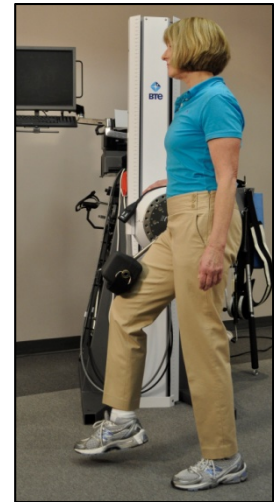
Client Positioning Chair Setup: The Positioning chair is not needed if performing this activity in a standing position. If performing hip flexion lying down, please see the “Alternate Set-Up” section below.

Alternate Set-Up Ideas: For a more isolated setup the does not require the opposite side participation for stabilization, the Positioning Chair may be utilized.

- Configure the Positioning Chair as a bench. Have the client lie in the supine position. The 701 or 802 tool may be used in this configuration.
- Align the axis of hip flexion with the axis of rotation of the shaft.



Hip Flexion - Standing



Place pad on thigh



Hip Flexion with 802



Hip Flexion in the supine position

Hip Abduction/Adduction

Set-up:

Exercise Head: Number five position

Attachment: 701 with padded block in the “B” position. 802 May also be used.

Tool Setup:

Hip Abduction – Adjust lever length so pad is at approximately midway between hip and knee joints. Client may rest hands on exercise head for stability.

Hip Adduction - Place pad on the interior surface of the leg. For hip adduction, the 802 tool may be more appropriate.

Client Positioning Chair Setup: The Positioning chair is not needed if performing this activity in a standing position. If performing hip flexion lying down, please see the “Alternate Set-Up” section below.

Alternate Set-Up Ideas: For a more isolated setup the does not require the opposite side participation for stabilization, the Positioning Chair may be utilized.

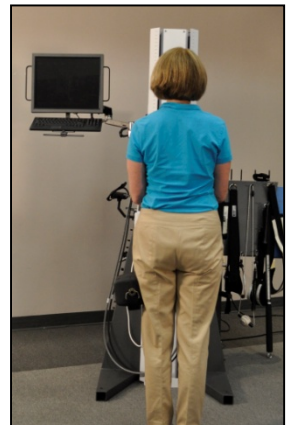
- Configure the Positioning Chair as a bench. Place the client in as side lying position. The 701 or 802 tool may be used in this configuration.
- Align the axis of hip adduction/abduction with the axis of rotation of the shaft.



Hip Abduction - Standing



Place pad on leg



Hip Abduction with 701



Hip Abduction in a side lying position using the 802 attachment.