



In Lieu Of CPM Machine: Range of Motion Exercises

1. Leg Extensions

Repetitions

3 sets of 10

Days per week

4 to 5

Main muscles worked: Quadriceps

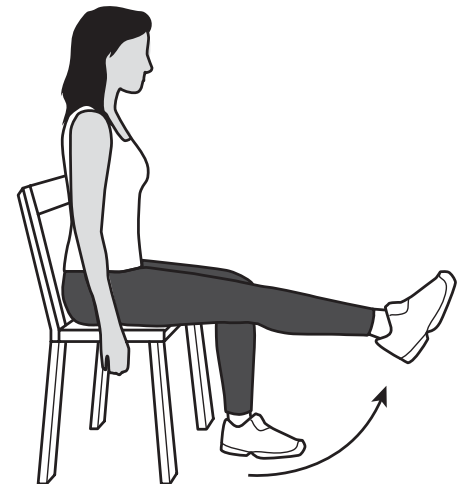
You should feel this exercise at the front of your thigh

Equipment needed: As the exercise becomes easier to perform, gradually increase the resistance by adding an ankle weight. Begin with a 5 lb. weight and gradually progress to a greater level of resistance, up to a 10 lb. weight. If you have access to a fitness center, this exercise can also be performed on a weight machine. A fitness assistant at your gym can instruct you on how to use the machines safely.

Step-by-step directions

- Sit up straight on a chair or bench.
- Tighten your thigh muscles and slowly straighten and raise your affected leg as high as possible.
- Squeeze your thigh muscles and hold this position for 5 seconds. Relax and bring your foot to the floor. Repeat.

Tip Do not swing your leg or use forceful momentum to lift it higher.





2) Heel Props:

- Place the heel on a rolled towel making sure the heel is propped high enough to lift the thigh off table.
- Allow the leg to relax into extension. Do this 3-4 times a day for 10 - 15 minutes at a time. See Figure 1



Figure 1: Heel prop using a rolled towel

3) Prone hang exercise:

Lie face down on a table with legs hanging off the edge of the table. Allow legs to sag into full extension.



Figure 2: Prone Hang. Note the knee is off the edge of the table

Bending (Flexion) is obtained by doing the following exercises:

- 1) Passive knee bend- Sit on the edge of a table and let the knee bend under the influence of gravity.
- 2) Wall slides (figure 3) are used to further increase bending - Lie on the back with the involved foot on the wall and allow the foot to slide down the wall by bending the knee. Use other leg to apply pressure downward.



Figure 3: Wall Slide: Allow the knee to gently slide down

3) Heel slides are used to gain final degrees of flexion.

- Pull the heel toward the buttocks, flexing the knee. Hold for 5 seconds.
- Straighten the leg by sliding the heel downward and hold for 5 seconds.

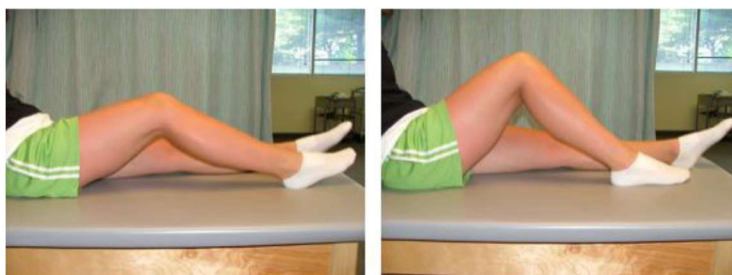


Figure 4: Heel slide - leg is pulled toward the buttocks



Repetitions

2 to 3

Days per week

4 to 5

Main muscles worked: Hamstrings

You should feel this stretch at the back of your thigh and behind your knee

Equipment needed: None

Step-by-step directions

- Lie on the floor with both legs bent.
- Lift one leg off of the floor and bring the knee toward your chest. Clasp your hands behind your thigh below your knee.
- Straighten your leg and then pull it gently toward your head, until you feel a stretch. (If you have difficulty clasping your hands behind your leg, loop a towel around your thigh. Grasp the ends of the towel and pull your leg toward you.)
- Hold this position for 30 to 60 seconds.
- Repeat with the opposite leg.



Tip Do not put your hands at your knee joint and pull.