



Notes :

1 Stretching quadriceps



Reps: 3 Hold: 30

Lie on your side with your injured leg up and your bottom knee bent in front of you to protect your back.
Reach back and grasp your ankle of your injured leg and gently pull towards your buttocks. Move your knee back without arching your back until you feel a stretch in the front of your thigh.
Keep your knee as low to the floor as possible and maintain the position.
You can use a towel or belt around your ankle to pull it towards your buttocks.

2 Knee end range extension



Sets: 2 Reps: 10 Hold: 5

Lie on your back with a towel rolled under your ankle.
Push your knee down towards the bed so as to straighten it as much as possible.
Relax your knee and repeat.

3 Prone hamstring strengthening with band



Sets: 2 Reps: 10 Hold: 5

Attach an elastic to a secure object and to your ankle of the involved leg.
Lie on your stomach with your knee straight.
Bend your knee through the available range without lifting your hips.
Return to the starting position and repeat.

4 Stabilization hamstrings



Sets: 2 Reps: 10

Lie on your stomach and bend your knee to 90 degrees.
Contract the back of your thigh and slowly extend your leg with small up and down movements, keeping the knee under control at all times.
Return to 90 degrees of flexion and repeat.

5 Hamstring eccentric



Sets: 2 Reps: 10

Lie on your stomach and bend your knee to 90 degrees.
Rapidly let your foot go down, stopping it just before it touches the ground, keeping control of the knee at all times.
Bring your foot back up and repeat.



6 Isometric wall sit 90° (roller squeeze)



Sets: 2 Reps: 10 Hold: 5

Lean against a wall with your feet in front.
Place a small ball or a foam roller between the thighs and squeeze as you go down to a 90 degree angle at the knees.
In the bottom position, your knees should be aligned with the center of your foot (second toe) and over the feet.
Hold for the prescribed time.

7 Wall squat to 90° against ball



Sets: 2 Reps: 10 Hold: 5

Place a ball between your back and the wall with your feet apart the width of your hips and facing forward.
Slowly bend your knees to 90 degrees, keeping the knee caps in line with 2nd toe.
Slowly return to the standing position and repeat.
Don't let your knees go further than your ankles.

8 Stabilization step up



Sets: 2 Reps: 10

Stand up straight with a stool in front of you.
Place one foot on the stool facing straight forward.
Align your knee cap with your second toe and rise up slowly onto the stool while maintaining this alignment.
Return to your starting position by lowering your other foot slowly back down to the ground and repeat.
Prevent your knee from turning inward.

9 Stabilization step down



Sets: 2 Reps: 10

Stand up straight on the top of a stool with your supporting foot facing directly forward.
Lower the other foot in front of you and align the knee cap of the supporting leg with the second toe of that foot.
Step down while maintaining that alignment.
Return to your starting position by raising your foot back up onto the stool and repeat.
Control your supporting knee from going inward by squeezing your buttocks together.

10 Step down stabilization



Sets: 2 Reps: 10

Stand up straight on top of a stool with your supporting foot facing directly forward.
Put your hands on your hips and lower your body by bending at the affected hip and knee, keeping your back straight (slightly arched) and your knee cap aligned with the second toe.
Just before your foot touches the ground, raise yourself back to the standing position and repeat.



11 Scissors jump



Sets: 2 Reps: 10

Start in a lunge (split squat) position with your hips and knees bent 90°. Your front knee should be above your front foot and your back knee shouldn't be in contact with the floor. From this position, jump up and switch legs position quickly while in mid-air. Continue this way until all repetitions are completed.

12 Proprioception alphabet



Sets: 2 Reps: 25

Stand on one leg (injured leg) with your knee straight. Have the opposite leg move forwards and draws the letters of the alphabet in the air, trying to keep your balance on the stance leg. Increase the difficulty by slightly bending the stance leg.

13 Proprioception clock



Sets: 2 Reps: 25

Stand on one leg and reach as far as possible forward sideways and backward with the free foot. Bend your support knee slightly for balance.

14 Proprioception unipodal



Sets: 2 Reps: 25

Stand on one leg (injured leg) with your knee straight. Have the opposite leg move forwards and backwards trying to keep your balance on the stance leg. Increase the difficulty by slightly bending the stance leg.

15 Hip ext. rot., ball on wall



Sets: 2 Reps: 25

Place a ball on the floor against the wall in front of you. Put your hands on your hips and have the knee of your injured leg against the ball. Your knee of the uninjured leg is bent in front and not touching the ball. Keeping the knee of your uninjured leg bent and the knee of your injured leg and upper body stable, rotate around your hips towards the bent knee and slowly return to the initial position.



16 Depth jump



Reps: 25

Stand on a stable object or step approximately 12 inches high. Step forward to step off the step and drop to the floor to land on both feet and fall into a squat position to absorb the forces. Return to the top and repeat by alternating your feet when stepping forward.

17 Fast feet (front)



Sets: 2 Reps: 25

Stand in front of a step. Start with one foot on the step and the other on the floor. Alternate both feet as quickly as possible in a safe and controlled manner and keep a good alignment of your knee cap with the second toe.

18 Fast feet (side to side)



Sets: 2 Reps: 25

Stand on the side of a step with one foot on the step and the other on the floor. Switch feet by bringing your foot from the floor to the step while the other comes down on the opposite side. Repeat quickly in a safe and controlled manner with proper alignment of your knee cap with your second toe.

19 Crossover step up



Sets: 2 Reps: 25

Stand next to a step. Have the outside leg come across the body onto the step. Lift yourself up on the step, keeping good knee control and knee cap aligned with second toe the whole way through and step to the other side of the step. Hips stay leveled and facing straight throughout the whole movement.

20 4 points hops



Reps: 10

Place 4 markers on the floor so they create a zigzag. Hop to the first one and land on one foot. Absorb the forces by bending the knee and keeping it stable. Then hop to the next to land on the other leg and continue this way for all 4 points and turn around.



21 4 points hops



Reps: 10

Place 4 markers on the floor so they create a zigzag. Hop to the first one by crossing your legs and landing on the opposite foot. Absorb the forces by bending the knee and keeping it stable. Then hop to the next by crossing again to land on the other leg and continue this way for all 4 points and turn around.

22 Isometric hip abduction



Sets: 2 Reps: 10 Hold: 5

Stand on one leg beside a wall with the other leg bent and touching the wall. Have the support foot facing forward and your knee cap aligned with your second toe by activating your buttock muscle to externally rotate the supporting leg. Push your other knee against the wall without moving your body. Relax and repeat.

23 Isometric hip abduction, squat



Sets: 2 Reps: 10 Hold: 5

Stand on one leg beside a wall with the other leg bent and touching the wall. Have the support foot facing forward and your knee cap aligned with your second toe by activating your buttock muscle to externally rotate the supporting leg. Push your other knee against the wall while you slightly squat down on the supporting leg, keeping the knee cap aligned with your second toe at all times. Relax and repeat.

24 Hyperextension stabilization



Sets: 2 Reps: 10 Hold: 5

Stand and tie an elastic behind you at knee level. Tie the other end around your knee just below the knee cap. Transfer your weight on one foot and slightly bend your knee. Extend your leg slowly, making sure you don't go further than vertical (neutral position). Bend your knee and repeat.

25 Anterior stabilization



Sets: 2 Reps: 10 Hold: 5

Tie an elastic in front of you at knee level. Tie the other end of the elastic around your knee. Increase the tension in the elastic by moving backward and stand on the affected leg. Slowly bend your knee, keeping control of the movement by tightening the back of your thigh (hamstring) and keeping the knee cap aligned with the second toe. Return to the standing position and repeat.



26 Lateral knee stabilization



Sets: 2 Reps: 10 Hold: 5

Tie an elastic beside you (on the outside of the knee) at knee level.

Tie the other end of the elastic around your knee.

Increase the tension in the elastic by moving away and stand on the affected leg.

Slowly bend your knee without any lateral movement, keeping the knee cap aligned with the second toe.

Return to the standing position and repeat.

27 Medial knee stabilization



Sets: 2 Reps: 10 Hold: 5

Tie an elastic beside you (on the inside of the knee) at knee level.

Tie the other end of the elastic around your knee.

Increase the tension in the elastic by moving away and stand on the affected leg.

Slowly bend your knee without any medial movement, keeping the knee cap aligned with the second toe.

Return to the standing position and repeat.

28 Tibial external rotation



Sets: 2 Reps: 10 Hold: 5

Sit with the working leg slightly off the floor.

Tie the elastic to a stable object next to you at knee height, loop the band in front of your knee then hold it in your hand as shown.

Externally rotate your tibia by turning your foot outward as far as you can without moving your knee. The band should be opposing the rotation with the tension.

29 Tibial internal rotation



Sets: 2 Reps: 10 Hold: 5

Sit with the working leg slightly off the floor.

Tie the elastic to a stable object next to you at knee height, loop the band in front of your knee then hold it in your hand as shown.

Internally rotate your tibia by turning your foot inward as far as you can without moving your knee. The band should be opposing the rotation with the tension.

30 Internal rot. stabilization



Sets: 2 Reps: 10

If when you're walking one knee turns inward (internal rotation), contract your buttock muscle as you put weight on your foot to externally rotate your upper leg and keep your knee cap aligned with the second toe.

Repeat at each step.



31 Standing posture correction



Sets: 2 Reps: 10 Hold: 10

In a standing position, correct your flat feet (pronating foot) and/or your femoral internal rotation (knee cap looking inward) by squeezing your buttocks and externally rotating your femur.

Hold the position and relax.

Increase the difficulty by applying the same activation while walking.