

45-Degree Leg Press

Bilateral inclined linear-sled basic form

Key positions



1. Whole view: support hips and back



2. Detail: keep feet planted and knees aligned

Muscles worked

Main muscles

- Quadriceps: the main knee extensors during the press.
- Gluteus maximus: contributes to hip extension during the press.

Supporting muscles

- Hamstrings assist movement and stability around the hips.
- Trunk and gripping muscles help maintain posture alongside the pad and handle support.

What makes it useful

A supported bilateral press moving a loaded footplate carriage along inclined rails. It uses the quadriceps and glutes. Maintain foot, back and pelvic support, and learn the model's carriage locks and safety stops.

Movement & technique

45-Degree Leg Press | Keep your back and hips supported, plant your feet, and press from a controlled depth.

Before you start

Secure the carriage before adjustments. Follow the model's guide for backrest, safety stops and light, balanced loading. Learn release, re-racking and emergency procedures.

1 Set your back and feet

Keep your back and buttocks on the pad and brace. Place feet symmetrically at a comfortable width, with heels and soles planted. Track knees toward toes.

2 Take the load before release

Support the carriage by pressing slightly upward, then release the stops as the model directs. Hold its stabilizing handles; never release unsupported load.

3 Lower without pelvic curl

Inhale and bend hips and knees slowly, retaining heel and pad contact. Stop before pelvic curl or low-back rounding; do not force thighs into the ribs.

4 Press and re-rack safely

Exhale and press without knee hyperextension. Finish by engaging the model's stops and gently settling the carriage onto them. Confirm support before removing feet and exiting.

Form reminders

- Keep the whole foot and heel supported without forcing the knees inward or outward.
- Maintain back and hip pad contact; avoid bouncing or rounding the back to gain depth.
- Choose a controlled range rather than a mandatory knee angle or deepest possible position.
- Follow the actual machine's release/re-rack instructions and settle the carriage securely onto its supports.

Finish safely

- Stop for shoulder, back, hip, knee or ankle pain or dizziness. Reduce load or range if support and control cannot be maintained.
- Never adjust the machine or change plates under suspended carriage load, and keep hands/feet clear of moving parts. Ask a qualified coach to demonstrate the actual machine when needed.

References

1. Cybex - Plate Loaded Leg Press5321 Manual (kb.cybexintl.com)
2. Precor - Discovery Angled Leg Press DPL0601 (static.precor.com)
3. ACE - Seated Leg Press (www.acefitness.org)
4. Jeff Nippard - Leg Press (movement reference) (www.youtube.com)