



ALL-TERRAIN KNEE COLLECTION

FREQUENTLY ASKED QUESTIONS

HOW CAN I PURCHASE A KNEE FROM THE ALL-TERRAIN KNEE COLLECTION?

Orders can be placed direct through LegWorks via www.legworks.com or by calling us at (408) 692-5633 or through one of our partners Cascade Orthopedic Supply or Empire Medical.

WHAT ARE THE SUGGESTED L-CODES?

L5611, L5850, L5925. L5845 is available on stance flexion models only.

WHO ARE CANDIDATES FOR THE ALL-TERRAIN KNEE COLLECTION?

The All-Terrain Knee Collection is appropriate for all activity levels and amputees weighing up to 330 lb (150 kg). These high functioning waterproof knees feature a simple to use manual lock, provide superior stability with their patented AutoLock Technology, and enable multiple walking speeds via its unique Variable Cadence Controller. See below for a product selection guide.

HOW DOES THE VARIABLE CADENCE CONTROLLER ENABLE MULTIPLE WALKING SPEEDS?

The Variable Cadence Controller (VCC) provides a smooth and quiet gait by reducing terminal impact and heel rise. This is achieved by a combination of a frictional resistance profile that changes depending upon the flexion angle and spring damping.

HOW DOES THE ALL-TERRAIN KNEE COMPARE TO OTHER POLYCENTRIC OR GEOMETRIC LOCKING KNEES?

The All-Terrain Knee Collection locks upon full swing-phase extension providing stability regardless of the ground reaction forces at heel-strike, whereas polycentric knees with geometric locks require weight-bearing to engage. Clinical testing with children against a leading polycentric knee joint saw a reduction in reported falls from once per day to once per month¹.

HOW DOES THE ALL-TERRAIN KNEE UNLOCK?

The All-Terrain Knee Collection unlocks by firmly loading the toe and then flexing the hip while keeping the toe load constant. It can also be unlocked by hand by pushing firmly on the cover of the knee and flexing the knee.

HOW DOES THE WEIGHT OF THE ALL-TERRAIN KNEE IMPACT THE AMPUTEE?

While the All-Terrain Knee is not ultralight, subjective reports from users are that the prosthesis feels lighter when walking. A clinical trial showed 40% energy efficiency savings for the All-Terrain Knee compared to a friction braking knee that was half the weight².

WHICH ALL-TERRAIN KNEE SHOULD I ORDER?	All-Terrain Knee	All-Terrain Knee w/Stance Flexion	All-Terrain Knee Premium	All-Terrain Knee Premium w/Stance Flexion
Freshwater Activities Only	✓	✓	✗	✗
Freshwater and Saltwater Activities	✗	✗	✓	✓
Patient Weight up to 330 lb	✗	✗	✓	✓
Patient Weight up to 275 lb	✓	✓	✗	✗
Long TF Residuuum or KD	✓	✗	✓	✗

¹<https://www.ncbi.nlm.nih.gov/pubmed/16425824> ²<https://www.ncbi.nlm.nih.gov/pubmed/27376843>

*L-Codes suggested by LegWorks are for reference-only, and are subject to change. The responsibility and liability for coding lies with the provider.

HOW DOES THE ALL-TERRAIN KNEE WORK?

The All-Terrain Knee utilizes a proprietary stance-phase control mechanism (AutoLock Technology) and swing-phase control mechanism (Variable Cadence Controller). The knee comprises of a 4-linkage kinematic chain.

AUTOLOCK TECHNOLOGY

LegWorks' patented AutoLock Technology consists of a locking mechanism that automatically engages at full swing-phase extension and remains securely locked until late stance-phase when it is disengaged for an effortless swing-phase initiation. This promotes a more natural stride through biofeedback, and deters gait deviations, such as hip-hiking and sound side-vaulting, resulting in more energy-efficient ambulation.

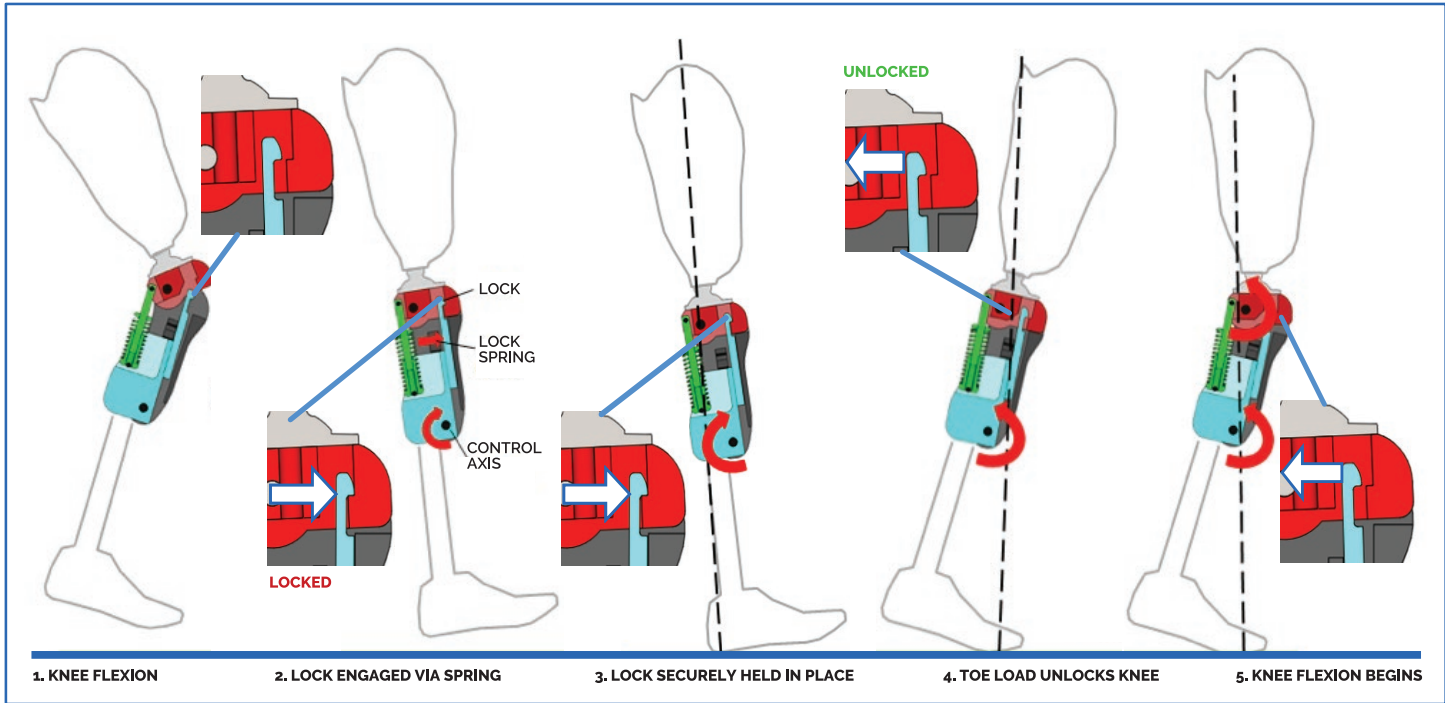


Figure 1: AutoLock Technology operation in a 4-bar knee design

VARIABLE CADENCE CONTROLLER

The Variable Cadence Controller (VCC) provides a smooth and quiet gait by reducing terminal impact and heel rise. VCC simultaneously facilitates multiple walking speeds through a combination of a variable frictional resistance profile and spring damping.

Visit legworks.com/clinical-education to see it in action.