



*All-Terrain Knee
Initial Fitting Primer*

Thank you for your purchase!



All-Terrain Knee

Primer

This brief presentation is designed to make you aware of the most vital aspects of the All-Terrain Knee.

It is extremely important that the QRC and IFU (included with the knee) are thoroughly reviewed before setting up the knee and prosthesis.

All-Terrain Knee: Models



All-Terrain
Knee



**Freshwater
proof**



All-Terrain Knee
with Stance Flexion



Weight Limit 275 lbs



All-Terrain Knee
Premium



**Corrosion
Resistant**



All-Terrain Knee
Premium with
Stance Flexion



Weight Limit 330 lbs

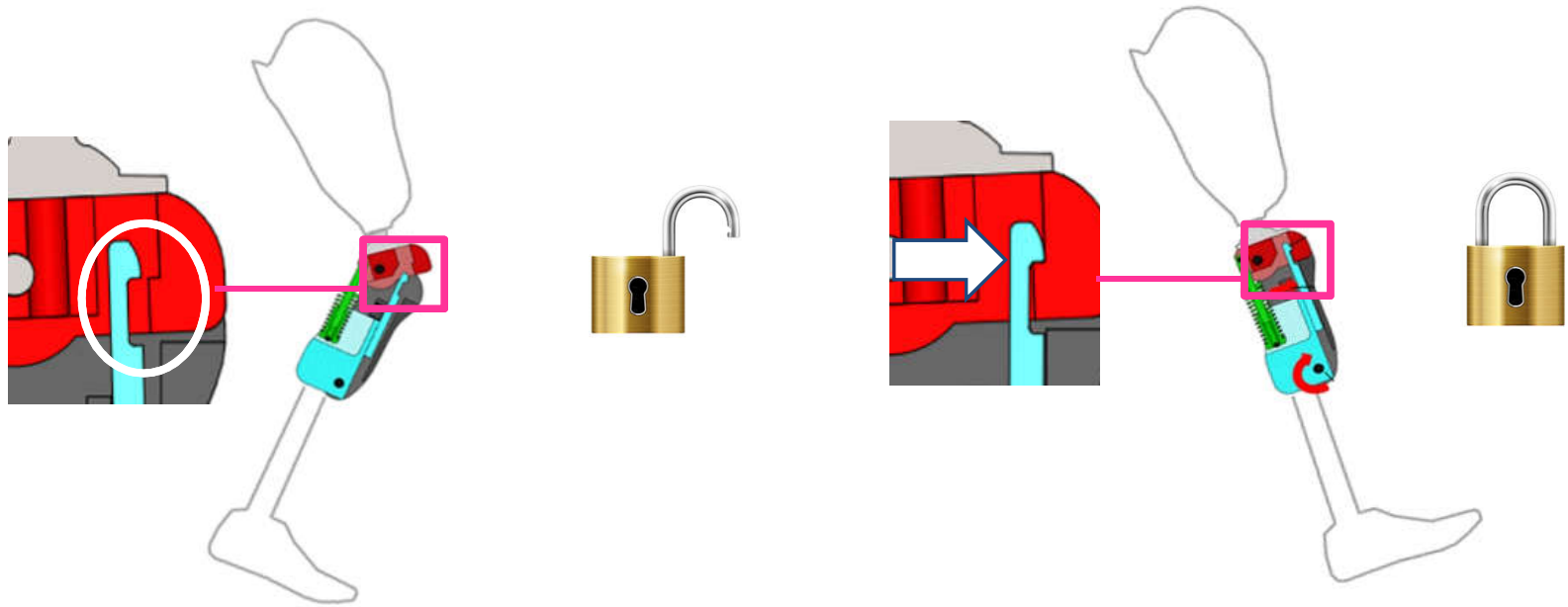


Autolock Technology
Variable Cadence Controller (w/o use of fluid resistance)
Activity Level: K1-K4

Key Features

AutoLock Mechanism

- Locking bar engages at swing phase extension
- Provides user with confidence that knee is completely stable before heel contacts ground



Locking bar retracted at
swing phase initiation

Locking bar engages at
swing phase extension

Sagittal Plane Alignment



Alignment Reference Line (descends from proximal socket bisection point)

Socket Flexion:
3-5° initial flexion

20mm Posterior Offset Line (extends vertically through first axis)

Foot (as per manufacturer's suggestion)



At least a 20mm offset is required to promote consistent release of the Autolock Mechanism in late stance phase!!!

Deviating to a more standard alignment is the most common mistake made in using the All-Terrain Knee, which increases patient difficulty in getting the AutoLock to release.

AutoLock Release Amputee Training

Two Conditions must be met to release Autolock:

- Requires *prosthetic side weight bearing* through late stance-phase (keeping weight over the toe)
- followed by *concurrent hip flexion* moment to initiate prosthetic knee flexion (must maintain loading of toe when flexing hip)
- FAILURE to execute in this manner (e.g., premature unweighting) will result in knee remaining extended and locked in swing phase

AutoLock Release /Amputee Training

First Amputee Exercise in Knee:

- position prosthetic leg behind and sound side forward as shown.
- Balance weight between the two sides so approximately $\frac{1}{2}$ of weight is over prosthetic toe
- Fire hip flexors / practice transitioning from toe-loading to heel-strike.



IMPORTANT: a clicking noise upon Autolock release will be evident if patient is not completely loading toe while flexing hip.

Serves as a feedback cue for patient to improve execution. Noise will cease once patient has mastered the gait pattern required to release the knee

Settings

Flexion Stop

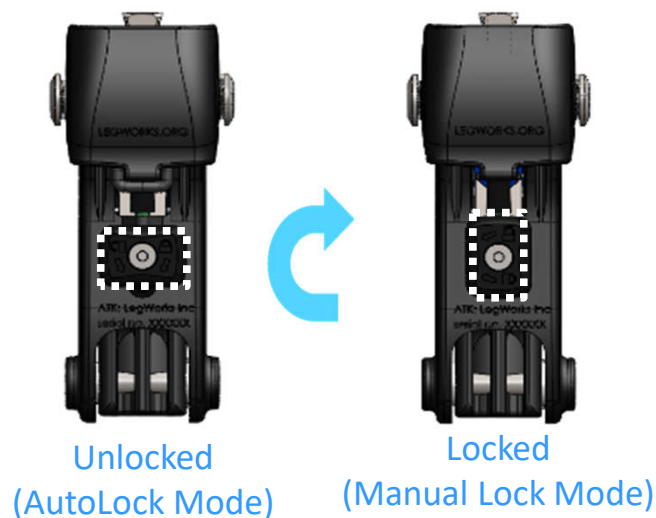
Socket must contact knee below extension assist assembly or damage may result

If needed, use crepe on socket to create properly positioned flexion stop



Manual Lock

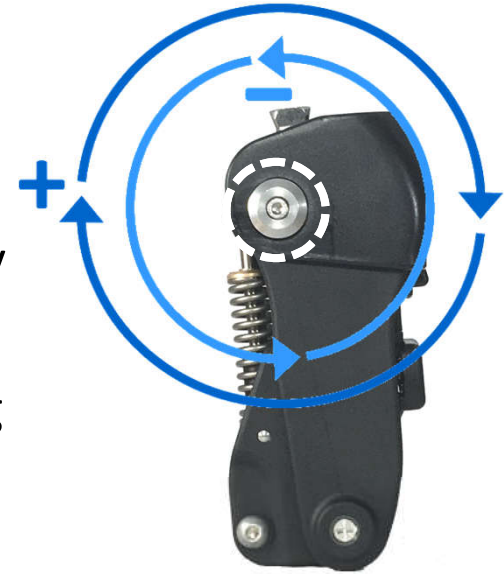
- Horizontal = unlocked
- Turn clockwise (anterior view) to engage
- Can be set to Manual Lock while seated; lock will engage when knee reaches full extension



Swing Phase Adjustments

Friction Mechanism

- Increase by turning 4mm screw clockwise in $\frac{1}{4}$ turn increments.
- Do not decrease intact mechanism from factory setting
- Friction can be reduced by completely removing the mechanism for a free swing response (e.g. low mobility patients) – see IFU pp 16-17



Extension Assist

- Medium Spring Pre-installed
- If delay in reaching swing phase extension, install the high stiffness spring
- Increase friction by turning friction screw clockwise



Leg Works offers free fitting support (e.g.,
Skype/Facetime/Phone).

email nick@LegWorks.com to
schedule your consult.

