

K2 Foot

Product Manual

Fillauer[®]

Instructions

The K2 is designed to be maintenance free. The foot is water resistant; however, if the foot is submerged in water, the foot and foot shell should be rinsed with fresh water and dried immediately. The K2 should be inspected every 3 – 4 months for signs of abnormal wear and that the attachment/alignment screws are secure.

Instructions to the Practitioner

- Please review the indications, contraindications, and FAQ sections of the manual before use of the foot. These instructions should be read prior to fitting and followed to ensure the proper integration of the AllPro foot into the patient's prosthetic system.
- The foot stiffness is based on weight and activity level. Please provide accurate patient information so that the appropriate foot may be selected.

Product Specifications

Indications

- Low to moderate activity level community ambulators
- BK or AK amputees
- Unilateral or bilateral patients
- Patients that would benefit from increased flexibility and smooth roll-over
- Patients weighing up to 365 lbs. (166 kg)
- Build height above 3.5 in. (9 cm) (includes foot shell)

Contraindications

- Build height below 3.5 in. (9 cm)
- Moderate to high activity users requiring maximum energy return
- Patients with weights over 365 lbs. (166 kg)

Product Specifications

- Patient weight: Up to 365 lbs. (166 kg)
- Foot sizes: 22 – 30 cm
- Heel height: 0.4 in. (10 mm)
- Foot height (in shell to base of pyramid): 3.5 in. (9 cm)

- Foot weight (26 cm): 14 oz. (395 g)
- Attachment: Modular pyramid

Warranty

- 24 months from date of patient fitting
- Foot Shell - 6 months from date of patient fitting

The K2 Foot System has been designed and manufactured for specific patient weights. Failure to follow the weight guidelines and/or overload conditions caused by the patient, such as heavy lifting, high impact sports, or abusive activities that would otherwise damage the natural limb, may void the warranty.

Satisfaction Guarantee

- 60 days from date of patient fitting

Installation

Deviating from the installation instructions or modifying the foot in any way will void any product warranty and could lead to product failure and injury to the patient.

1.0 Product Description

The K2 Foot is composed of three mating components that are designed for a low/moderate activity user. The K2 Foot's integrated pyramid is designed to be used with a pyramid receiver device such as a standard pylon, a tube clamp, or DuraShock torsion/shock absorbing pylon (Figure 1). The pyramid dome for the K2 Foot is permanently attached to the composite spring.

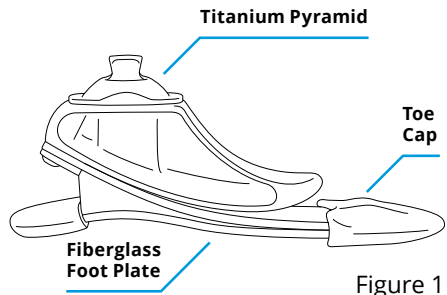


Figure 1

Warning: Do not remove the pyramid assembly or make any alterations to the structure. Doing so will void the product warranty.

2.0 Alignment

Proper alignment is the key to patient comfort and proper gait. Follow the recommended static and dynamic alignment guidelines for maximum performance.

2.1 Static (Bench) Alignment

Standard bench alignment techniques are used for initial alignment of the K2 Foot. The foot is designed with a 1 cm heel height. Place foot in shoe or use a 1 cm heel wedge to accommodate heel height. Align the center of the pyramid of the foot 10 mm anterior to the sagittal bisection of the proximal brim (Figure 2). Set the desired 5 – 7° flexion angle in the sagittal plane. In the coronal plane set the desired 3 – 5° adduction angle to accommodate for knee genu varum. The foot should also be set with 0 – 12 mm inset relative to the bisection of the proximal brim. Less inset is required for a shorter limb length. Rotate the foot with approximately 5° of external rotation relative to the line of progression.

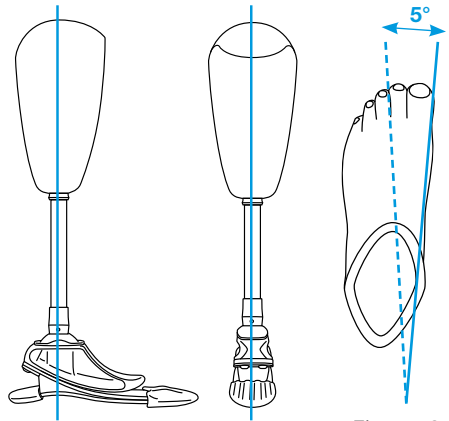


Figure 2

2.2 Dynamic Alignment

The K2 Foot is flexible and conforms well to the ground. This characteristic may make the foot appear to be properly aligned after the static alignment. Small adjustments in the alignment however will smooth the transition from heel to toe and optimize gait and efficiency. Patient feedback during this process is essential. In the dynamic alignment of the foot, the socket flexion angle and heel stiffness are altered to achieve optimal alignment and patient gait.

- Check for smoothness of gait and ground contact during stance phase.
- If the heel is too soft, there may be delayed heel rollover from heel strike to midstance. Dorsiflexing the foot may solve this issue.
- If the heel is too firm, heel rollover may be too rapid from heel strike to midstance. Also, the patient may complain of anterior distal pressure. Plantar flexing the foot may solve this issue.

- If the anterior keel rollover progresses too quickly from midstance to toe loading, the patient may say that they are “walking down a hill.” Plantar flex the foot to provide more anterior support.
- If the anterior keel rollover hesitates from midstance to toe loading, the patient may say they are “walking up a hill.” Dorsiflex the foot to increase the rate of rollover.

2.3 Changing the toe stiffness

The toe stiffness is predetermined by the foot category selected at the time of order. This stiffness can be dynamically adjusted by changing the A/P position of the foot under the socket and by changing the plantar/dorsiflexion of the foot. This adjustment increases or decreases the amount of anterior support during gait.

3.0 Securing the foot after alignment

The alignment of the K2 Foot is achieved by tightening and loosening of the four set screws in a pyramid receiver. After proper alignment is achieved and the patient is ready to leave the prosthetist’s office, all set screws should be properly secured. This is done according to the manufacturer’s recommendation but should include the use of a thread locking compound such as Loctite® applied to each of the mating component’s securing and aligning screws which should then be tightened to the manufacturer’s recommended torque specification. The attachment screws should be inspected every twelve months for signs of fatigue or corrosion and should also be re-tightened to the manufacturer’s recommended torque specification at that time.

4.0 Foot Shell Removal and Replacement

The K2 Foot features a foot cover that is flexible, durable, and cosmetically appealing. Using care in the installation and removal of the cover will allow it to maintain its appearance and durability.

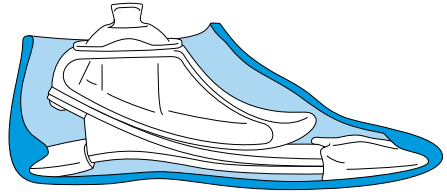
Removal

- Place the foot on the bench so that the heel is hanging over the edge of the bench.
- Apply downward force to the top of the cover at the heel. The heel of the lower foot plate should pop out of the lock allowing removal of the cover by hand.
- If the cover is too tight, a smooth edged shoe horn may be used to push the heel lock down over the heel of the lower foot plate.

Installation

- Coat the inside of the shell with talc before installing the K2 foot in it.
- Initially insert the forefoot into the cover as far as possible.
- Rotate the foot side to allow the cover to slide onto the heel.
- Push the cover up onto the heel, using a shoehorn if necessary, and allow heel to slide under the heel lock.
- Make sure that the lower foot plate of the K2 is tightly under the heel lock to fully secure the foot shell.

Heel Lock



Never use a sharp edged tool such as a screwdriver to install or remove the foot cover.

Frequently Asked Questions

What can the practitioner do if the heel or toe is too soft or too firm?

Alignment changes are recommended to alter the performance of the foot. Please see the section on alignment and setup.

Should the practitioner “go up one category” to accommodate more active patients or heavy lifting load?

The K2 is designed for the average patient that would be engaged in low to moderate activities. If your patient is much more active than average or is lifting heavy loads as part of their daily routine, going up one category or reevaluation of their functional level may be advised.

How long should the foot shell last?

The foot shell is designed to provide realistic appearance and maximum performance of the K2 Foot. The life of the shell will depend on the level of activity and degree to which it is protected from wear and damage with socks and shoes.

Can the pyramid be removed so that the foot can be bolted directly to the socket or other attachment?

No, the pyramid attachment should not be removed or altered in any way. Doing so will void the warranty and could put the patient at risk of injury.

What is the weight rating of the K2 Foot?

The maximum overall of the K2 Foot is rated for patient weighing up to 275 lbs. (125 kg). The foot has been tested to the ISO-22675 test standard for this weight rating. All K2 feet are selected and designed for a specified patient weight range. It is important to use the properly rated foot in order to ensure safety, durability, and maximum performance. The individual components of the K2 Foot are combined to accommodate a specific range of patient weight and foot size.

Daily Care and Maintenance

- The patient should clean the prosthetic foot and remove any debris inside the foot shell on a weekly basis if the cover is left open.
- If the foot performance changes or it starts making noise,, the wearer should contact his or her practitioner to have the foot inspected.
- As with all prosthetic devices, the foot should be inspected every six months by a certified practitioner.

Fillauer®

Fillauer LLC

2710 Amnicola Highway
Chattanooga, TN 37406
423.624.0946
Fax 423.629.7936