

# Renegade® LP Instructions for Use

Product Number: RS6

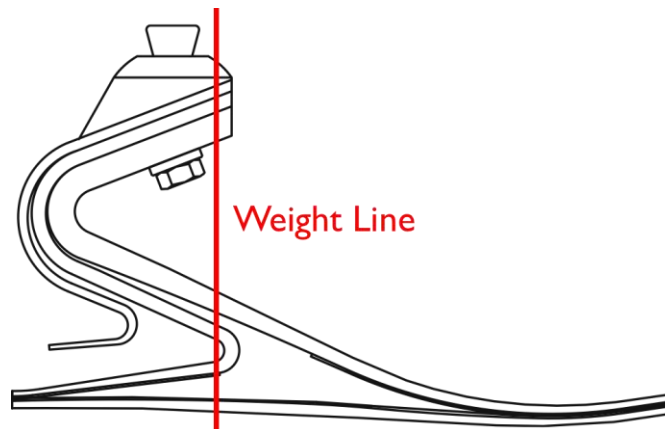
## Assembly

The Renegade® LP foot module is pre-assembled consisting of a graphite component (keel), sole plate, Spectra™ sock, and foot shell. Foam *stiffening bumpers* for increasing heel stiffness are provided. After dynamic alignment, torque pyramid adjustment screws to the manufacturer's specifications. Secure pyramid adjustment screws with a thread locking adhesive (i.e., Loctite 242).

## Bench Alignment

Prior to donning the prosthesis:

- Plantarflex/Dorsiflexion foot to match the shoe heel height.
- Adduct/Abduct socket to provide appropriate frontal plane angle.
- Flex/Extend socket to provide appropriate sagittal plane angle.
- Move the socket linearly to ensure the weight line falls along the anterior edge of the pylon (see illustration).



## Dynamic Alignment

During *loading response*, the sole plate and Z-Shock store energy and release it during *midstance*. This action provides momentum for the keel to store energy and release it during *terminal stance*. To optimize the heel to toe rollover motion, adjust the following variables:

- Anterior/posterior foot placement
- Dorsiflexion/plantarflexion
- Heel stiffness

## Troubleshooting

Heel too soft

### Symptoms

- Foot flat occurs too rapidly
- Toe feels excessively stiff
- Knee hyperextension

### Solutions

- Shift socket anteriorly in relation to the foot
- Attach foam *stiffening bumpers*

Heel too hard

### Symptoms

- Rapid knee flexion, instability
- Heel to toe progression too rapid
- Lack of energy return sensation

### Solutions

- Shift socket posteriorly in relation to the foot
- Verify appropriate foot module category

Foot module too stiff

### Symptoms

- Flat spot in rollover motion at slow cadences

### Solutions

- Consider a lower category foot module

Foot module too soft

*Symptoms*

- Clicking noise at *initial contact*
- Excessive toe deflection with high impact activity

*Solutions*

- Consider a higher category foot module

**Stiffening Bumpers**

Foam *stiffening bumpers* are included to adjust the heel stiffness during *loading response*. The bumpers may be temporarily attached with tape to the inferior aspect of the Z-Shock. If the bumpers provide excessive heel stiffness, exclude or trim as appropriate. For permanent placement, adhere bumpers using Barge or similar contact cement.

**Spectra™ Sock**

A Spectra™ sock is provided to protect the foot shell and minimize noise. Spectra™ socks must be replaced at intervals appropriate to the user's activity level. Failure to inspect and replace the Spectra™ socks may prematurely wear the foot module, and will void the warranty.

**Foot Shell**

When removing or installing the foot shell, use the Foot Shell Removal Tool (ACC-00-10200-00) to prevent damage to the foot module.

**Renegade LP® System**

Minimum clearance: 173mm-205mm  
 Maximum user weight: 166 kg (365 lbs)  
 Available sizes: 22cm-30cm  
 Heel height: 3/8"  
 Warranty: Graphite components/pyramid connector (36 months)  
 Foot shell (6 months)

**Maintenance**

The foot module requires periodic maintenance.

- Inspect the foot module every six months. If the user is more active, more frequent inspection may necessary. Service as necessary. Replace Spectra™ sock and/or foot shell if worn to prevent damage to the graphite components.
- The foot module may be cleaned and/or disinfected with soap and warm water. If the foot is exposed to water, remove the foot shell to clean and disinfect its interior.

**Warnings**

Failure to adhere to the guidelines of the *Instructions for Use* will void the warranty.

- Never use the foot module without a foot shell. Failure to comply may cause premature wear, loss of function, and/or product failure.
- Always use the foot module with a sock and shoe. Failure to comply may cause premature wear, loss of function, and/or product failure.
- Never allow aggregates such as sand to remain in the foot shell. Upon exposure to aggregates, immediately disassemble foot module and rinse with water. The abrasive properties of aggregates will quickly wear the graphite components of the foot module.
- Never insert the *sole plate* inside the Spectra™ sock of the Renegade® LP foot module. This will lead to premature failure of the foot module.
- Never use the Renegade® LP foot module without the *sole plate*. *Sole plate* removal will adversely affect the performance of the foot module. The *sole plate* fills the mid-foot void between the Z-Shock and toe lever, preventing potential user injury.
- Freedom Innovations foot modules are manufactured to fit industry standard pyramids and receivers. It is the prosthetist's responsibility to select and/or fabricate properly fitting attachment components.
- Never attempt to loosen the bolt affixing the pyramid connector.
- Discontinue use and consult your prosthetist if any part of the prosthesis starts to make noise.
- Inform your prosthetist if you lose or gain a significant amount of weight.
- Freedom Innovations foot products are manufactured and tested for a particular weight and activity impact level. Use by another user for whom it was not originally manufactured may cause injury and shall void any written or implied warranty.



3 Morgan  
Irvine, California 92618  
Toll Free (888) 818-6777  
FAX (949) 672-0084



Advena Ltd. Pure Offices, Plato  
Close, Warwick, CV34 6WE UK