

Kinn Assembly Instructions



U.S. Patent 12,178,725 PATENT NUMBER

Recommended L-codes:

L-5783 (Addition to lower extremity, user adjustable, mechanical, residual limb volume management system)

L-5988 (Addition to lower limb prosthesis, vertical shock reducing pylon feature)

Failure to follow the instructions may void the warranty.

Kinn is not a suspension system; please choose the appropriate suspension for your patient. Confirm proper alignment of the Kinn system; dial should rotate forwards.



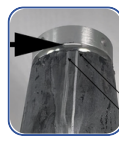
Scan to select the right Kinn for your patient.

Lamination Plate attachment:



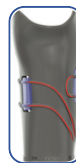
1 Lamination prep:
Roughen and clean the lamination. Align the plate with the tubing path (tubing pathway is opposite to the manual dial), apply fast-curing

adhesive, adhere the socket with proper alignment, and smooth all edges.



2 Tubing pathway layout:
The tubing begins and ends at the Cable Tubing Insertion Port. Orient the lamination plate using the port and the manual dial (opposite to the port).

Bisect the posterior socket, then mark the distal tubing start and end points ¼ inch apart on either side of the line.



3 Tubing Routing:
Draw horizontal guide lines across each panel. Start tubing at the cable port, route 0.5" from panel edges with ≥15 mm curves, then return along the same

path. Keep tubing parallel, evenly spaced, & adjust panel layout as needed.



4 Glue on Tubing:
Ensure the tubing is covered with a nylon sleeve. Insert one end through the lamination plate cable entry, leaving 1" inside.

Secure the tubing along the marked path with glue dots every 2 cm.



5 Tubing Trim:
Cut the tubing so that 1" can be placed through the Cable Tubing Insertion Port on the lamination plate.



6 Port Sealing:
Pack 1" of clay into both tube ends to prevent resin entry, then seal the Cable Tubing Insertion Port with fast-setting adhesive (Fabtec).



7 Insert Lamination Dummy:
a. Apply a thin coat of petroleum jelly to the large lamination dummy.

b. Place the large lamination dummy into the distal surface of the lamination plate and ensure the terminal ends of the tubing are inserted into the dummy.



8 Distal Sealing:
Apply stretch tape over the exposed distal surface, including the screw hole or putty.

Second Lamination:



9 Lamination & Bagging:
Pull lamination materials into the back groove and back over the socket. Pull the PVA bag and laminate as usual, taking care not to shift

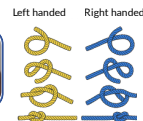
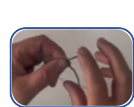
the tubing or Cable Tubing Insertion Port. Use extra resin and remove air bubbles around the tubing.



10 Excess Resin Removal:
Toward the end of lamination, tape can be applied over the lamination plate to squeeze out excess resin.



11 Panel Layout & Cutting:
Remove the socket, inner socket, and lamination dummy. Mark and cut panels, smooth edges, then scuff panel backs and glue ~5 mm convex foam pads with skived edges.



12 Cable Prep:
Clear all clay and debris from the tubing by pulling a paper towel through. Tie a single overhand knot in one end of the cable.



13 Cable Routing:
Use the cable tool to feed the cable through the socket and panels, starting and ending at the Cable Tubing Port. Ensure correct panel orientation.



14 Cable Stopper Knot:
Leave 10 cm (4") of cable on each end and tie the ends together to form a stopper knot. If too large, tie a knot in each end instead.

Technical Specifications

Build Height	1.98"/50.5 mm (Uncompressed)
Vertical Compression	Up to 0.16"/ 4 mm
Kinn Unit Weight (without lamination plate or 4-hole adapter)	1 lb/ 454 g
Platform Diameter	2.60"/ 66 mm
Lamination Plate Diameter	2.83"/ 72 mm
Tube Outer Diameter	0.16"/4 mm (tube for single cable)
Cable Tensile Strength	850 lb/385 kg
Patient Weight Limit	220 lb / 100 kg
Shock Absorber, Soft Rating	100 lbs to 200 lbs/ 45 kg to 91 kg
Shock Absorber, Medium Rating	200 lbs to 220 lbs/ 91 kg to 100 kg

Kinn System Assembly:



15 **Attach cable to spool:**
Slide the shock absorber onto the cable, then feed the cable through the spool side of the main Kinn assembly.



16 **Spool loosening:**
Loosen the screw on the spool.



17 **Cable routing:**
Feed the cable through the spool side of the Kinn assembly and place the cable and knots under the spool screw.



18 **Spool Orientation:**
Tighten the spool screw and ensure correct spool wrap direction: position the cable to the left of the spool for a left leg and to the right for a right leg.



19 **Cable Pre-Wrap:**
Twist manual dial to pre-wrap 2 rotations of cable onto the spool.



20 **Inner shell assembly:**
Attach the inner shell to the socket and align the shock absorber with the dial cutout.



21 **Inner shell alignment:**
Hold the shock absorber and outer shell, pull back the inner shell to expose the four female screws, then align the inner shell with the lamination plate.



22 **Fasten inner shell screws:**
Fasten the four M4x0.7 screws and tighten to 4.5 N-m.



23 **Function check:**
Rotate the dial to confirm function (it should only rotate forwards), then push the button to release.



Scan the QR code for detailed fabrication guidance.

© 2026 Vessl Prosthetics Inc. All rights reserved.

To confirm proper function or to tighten the socket panels, rotate the dial. Always rotate the dial forward. See the image below for a visual reference.

Right leg
medial dial



Left leg
lateral dial



Right leg
lateral dial



Left leg
medial dial



Distal Set Screw Adjustment:



24

Measuring Depth:
Measure the depth of the distal set screw and place the prosthesis on the patient.



25

Identifying Notch:
Identify the notch on the manual dial and note its starting position.



26

Initial Walk:
Have the patient walk 10 to 20 steps to pressurize the system.



27

Check Rotation:
Observe the position of the notch on the manual dial to determine if the dial is still rotating.



28

Evaluate Fit:
Have the patient walk an additional 5 steps. If the notch continues to move, repeat this step until the notch stops moving. Once the notch stops moving, the system is fully pressurized. Ask the patient how the socket pressure feels.



29

Evaluate Fit:
If the socket feels too loose, tighten the distal set screw and repeat steps 24 through 28.
If the socket feels too tight, loosen the distal set screw by pressing the release button and repeat steps 24 through 28.

4- Hole Adapter Instructions



Scan the QR code for detailed instructions on the 4- Hole Adapter.

Vessl Prosthetics Inc

1204-100 Collip Circle,

London, ON N6G 4X8, Canada

Support: support@vesslpro.com | www.vesslpro.com