Pediatric Posterior Mounting Bracket



Product

Instructions

The Pediatric Posterior Mounting Bracket is designed for use with posteriorly mounted feet. It is the recommended attachment system for use with the Pediatric Formula and Pediatric Running Blade.

These instructions should be read prior to fabricating and fitting and should be followed to ensure the proper integration of the plate into the prosthetic system.

Product Specifications

Plate Thickness: 0.3 in. (8.5 mm) Rated for patients up to 125 lbs. (57 kg) Weight: 3.4 oz. (95 g) Moderate to high activity levels

Product Name Quantity Number Lamination Bracket 180-30-3100 1 Lamination Dummy Cover 180-30-3150 1 0 **Pressure Plate** 180-30-3260 1 0 Sanding Screen 180-30-2250 1 M8-1.25 × 18 mm HHCS 180-30-2378 2 Threadlocker TL42 1

Warranty

12 months from date of patient fitting

The Posterior Mounting Plate 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.

Installation

Attention: 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.

Alignment

Using the following method to approximate the location of the pylon mount on the posterior of the socket.

- Trace the current prosthesis in the sagittal plane noting 1. foot position and height of MPT to bottom of foot. (If this is the patient's first prosthesis, it is recommended that a static alignment is done with an endoskeletal system and foot that can be replaced during dynamic alignment.)
- 2. Place the new DurrPlex (PETG) or laminated socket in the same position on the tracing.
- Place the posterior mount foot in the same position 3. as the current foot, noting that the posterior mount foot may have greater deflection upon static loading (standing).
- Trace position of new socket and posterior mount foot 4. on paper using a different color.
- Observe the rotation of the foot, pylon M/L angle (lean) 5. and pylon M/L position (inset) on the current prosthesis and approximate this

position on the new socket by drawing a vertical line on the posterior of the new socket (Figure 1).

6. Remove the bolts from the mounting plate and use the bolt holes as "sights" to line up the mounting bracket. When choosing height for the mounting plate, place it as proximal as possible that does not eliminate room for growth, but be sure to leave

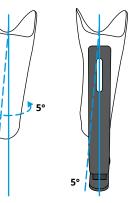


Figure 1

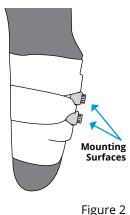
enough room below the posterior socket brim to allow a suspension sleeve to seal if using vacuum or suction suspension plus ½ in. (1.3 cm) to accommodate height adjustment if needed (Figure 1).

5°

- 7. Temporarily attach the mounting bracket by wrapping around socket with vinyl stretch tape and trace the edges onto the socket.
- If you are using a pylon without a slot, use the drilling 8. template to select the location to drill 7/16 in. holes in the pylon of the posterior mount foot. Holes must be drilled with the hole center no closer than 1 in. (2.5 cm) from the proximal edge of the cut pylon or the distal split in the pylon. Holes must be centered on the pylon.

As many holes as desired may be drilled between those two points to allow from growth.

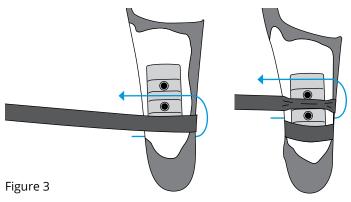
- 9. Drill the holes with a new drill bit and supporting material placed on the exit side of the intended holes. Carbon is an abrasive material and therefore carbide drills are recommended. Do not force the drill bit through the carbon, doing so can generate heat in excess of 250 °F leading to possible damage of the foot.
- **10.** Temporarily mount the foot to the posterior mount bracket.
- **11.** Visually compare the new prosthesis to the current prosthesis and make adjustments to the mounting bracket position as required and note any angulation that will be needed when mounting the foot. Lines may be drawn around the border of the bracket to help note the proper position.
- **12.** Abrade the socket and anterior side of the mounting plate to allow good adhesion.
- **13.** Clamp the foot to a level workbench to make visualization of socket angles simpler.
- **14.** Add Fabtech PlusSeries epoxy to the bracket (with foot attached and masked to protect from dripping adhesive)
- **15.** Place the socket on the bracket, aligned to match the angles noted above.
- **16.** To perform a test fitting, wrap rigid, fiberglass casting tape through the grooves of the mounting plate being sure not to cover the two mounting surfaces (Figure 2).
- **17.** When finished with alignment, transfer it to the vertical fabrication jig for test sockets or prepare for finish lamination by filling all gaps between the



socket and bracket with your choice of structural filler.

Lamination

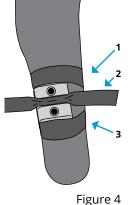
Begin with an initial lamination comprised of 1 1. layer of 6K braid, 2 layers Nyglass, and possible felt reinforcement around the knee.



- **2.** Sand and prepare for second lamination and bracket attachment.
- **3.** Transfer bracket or follow the steps above to align the bracket on the first lamination.
- To permanently attach the bracket: Start by wrapping one strip of 1 in. (2.5 cm) carbon tape in a spiral fashion to capture all three grooves in the plate (Figure 3).

opposite direction.

5.



 Cover with three strips of 1 in. (2.5 cm) carbon tape wrapped circumferentially in such a manner that the strips cover the grooves and the spirals (Figure 4).

Wrap a second spiraling in the

- **7.** Add 2 layer of wicking material (Nyglass, Dacron felt, etc.) leaving the two flat mounting surfaces clear of material.
- **8.** Add layers of 6K braid as needed for strength.
- **9.** Expose the T-nuts through the carbon braid.
- Add a thin layer of the stick wax to the exterior of the T-nuts. This step reduces the amount of resin build-up on the exterior of the T-nuts (Figure 5).

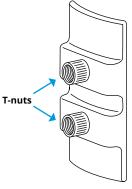


Figure 5

11. Apply the plastic dummy as described below.

Dummy Installation

- **1.** Apply silicone putty or equal to the center hole of the dummy making sure that it does not protrude from either side (Figure 6).
- 2. Press the dummy over the two exposed T-nuts.
- **3.** Apply stick wax to the threads of the bolts provided and tighten into the T-nuts to hold the plate in place.
- **4.** Laminate socket while preventing air bubble buildup under the lamination dummy and keeping the least laminate possible on the surface of the dummy.

Removal of the Dummy

- Using a knife, score the laminate around the edges of the dummy and expose the center hole filled with putty (Figure 6).
- 2. Remove both bolts going through the dummy.
- **3.** Remove enough putty to start a bolt in the center tapped hole.
- Screw one of the provided bolts into the center hole until the dummy breaks free. The remaining putty in the hole protects the lamination from the jacking screw (Figure 7).
- 5. Grind away excess lamination for a clean and level mounting surface.
- **6.** Remove any lamination from the outside of the exposed T-nuts.

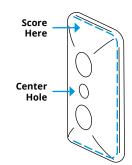
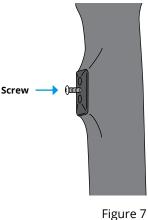


Figure 6



Figure

Foot Installation

- 1. Use the provided bolts and pressure plate to attach the foot to the bracket. Tighten the bolts to $18 20 \text{ N} \cdot \text{m}$. Thread-locker (one capsule provided) should be applied to both bolts connecting the foot to the plate (Figure 8). Be sure to check the torque of the bolts regularly throughout the life of the foot (a minimum of 3 6 months).
- **2.** Include the provided piece of sand screen between the foot and socket.

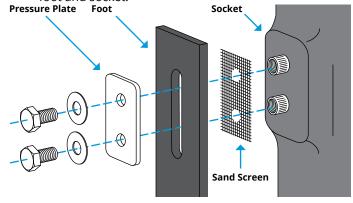


Figure 8



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