

PSYONIC Short Wrist Information

The PSYONIC transcarpal/short wrist is designed to minimize the distance between the Ability Hand and the socket. This is specifically for patients who have sustained a more distal level of amputation. Because the wrist provides approximately 90 degrees of pronation/supination, the wrist should be carefully assembled to ensure that the hand can rotate throughout its full range of motion.

Socket fabrication for PSYONIC Short Wrist

- 1) Once an evaluation socket has been fitted to the patient and the optimal alignment & forearm length of the wrist/Ability Hand determined, the outer lamination can be completed. The fabrication kit, shown below, includes 3d-printed sacrificial dummies for the power switch and batteries, the socket side short-wrist piece, and lamination cap. The lamination dummies can be adhered to the prepared socket form to complete the outer lamination on a vertical fabrication fixture.



2) Lamination instructions

- a) Ensure the Psyonic logo on the socket side piece is facing in the volar direction.
***When installing the hand on the socket, the hand will first lock into the socket rotated in full pronation (dorsal side up). The hand will then need to be rotated into full supination (volar side up) which will orient the set screw in a volar direction. Once the setscrew is oriented in the volar direction, the set screw can be screwed completely to ensure the hand is locked onto the short wrist socket side and tightened to the patient's preference in rotating friction.
- b) Use epoxy to bond the socket-side short wrist piece to the plaster socket



- c) Glue the lamination cap onto the socket-side short wrist with hot glue or silicone glue applied to the inside flange of the lamination cap. This seal should prevent resin from seeping under the lamination cap during fabrication. Apply the release agent to the top of the lamination dummy.



- d) Laminate with the desired method. The tie-in point is directly above the knurled section of the socket-side short wrist



- e) Grind down the resin above the lamination cap. Do not grind through the cap. Pry off the cap with side cutters or pliers.