

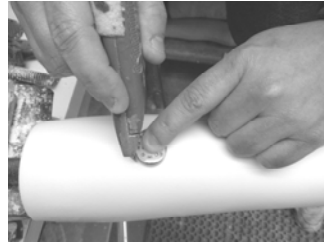
TL-100 Installation Instructions for Thermoplastic Orthoses

Patent Pending

The TL-100 can be applied to all types of orthoses including AFOs, KAFOs, TLSOs, Upper Extremity and even Cranial Bands. An AFO was used for fabrication sequence below. Some of the steps may not apply to other orthoses such as TLSO's and Cranial Bands.



1) Apply 1/8" foam interface to calf portion of positive mold. A firm interface works best.



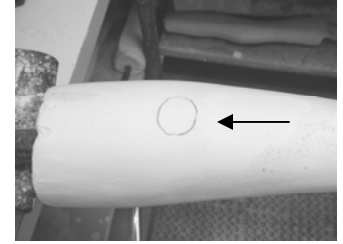
2) Using the TL-100 as a template cut out the 1/8" foam interface in the exact location where the paper transfer will be positioned in the future.



3) Carefully remove the cut out from the mold.



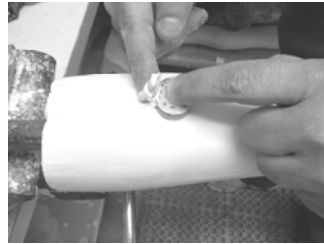
4) Trace around the foam cut out for future alignment of the TL-100.



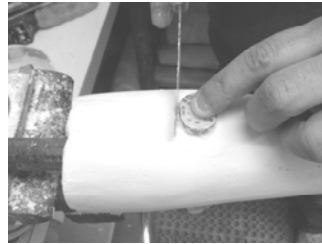
5) Now remove the entire 1/8" foam interface from positive cast. (See alignment mark).



6) Position the TL-100 inside the alignment mark on the cast. Make sure the LED lights are facing outwards and the label marked "Top" is positioned towards the top of the cast.



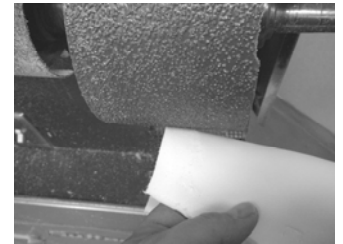
7) Apply a slurry of plaster around the sides of the TL-100 to fill in **all** voids beneath the light module.



8) Using a mixing knife remove all excess plaster around the sides of the TL-100 - keeping the blade at 90 degrees. Wipe away any excess plaster residue from the surface of light. Let dry.



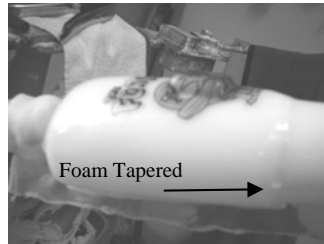
9) Place 2 nylons over the entire cast including the Transfer Light.



10) Trim the distal end of the foam interface to your desired length and grind a long smooth taper.



11) Re-apply the foam interface to the positive cast and then use a perforating tool to optimize vacuum.



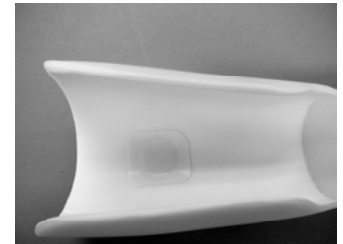
12) Apply your transfer image to the heated plastic as recommended. Now carefully align the transfer directly over the TL-100, seal the plastic and vacuum form as usual.



13) Once plastic is cooled remove orthoses from mold and strip away the nylon. Depending on the amount of vacuum pressure used- the light will sometimes easily dislodge from plastic.



14) If TL-100 does not dislodge from the plastic- simply trim away nylon around the light. It is not vital that the light be removed during the final stages of finishing the orthosis.



15) **Final step-** Clean the foam interface with solvent. Once dry carefully apply the self adhesive interface patch (included) directly over the TL-100, avoiding any wrinkles.

REMOVAL OF LIGHT: The TL-100 can be easily removed from the orthosis in the future by simply heating the outer shell of the orthoses and then using a small flat blade screw driver to pry out the light. When installing a new TL-100 you may need to taper on the sides of light using a smooth grinding cone. This will help insure an optimal fit of the new light inside the brace.