

Electrode Fabrication Guide ELEC50/60



### Introduction

This fabrication guide describes how to manufacture both thermoplastic and laminated inner sockets containing ELEC50 and ELEC60 myoelectrodes. This method of fabrication allows for some height adjustment of the electrode within the socket through the travel of the legs.

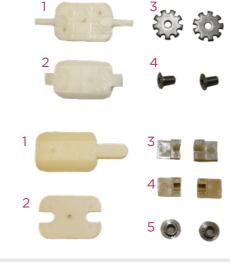
There are two sets of fabrication blanks included with each electrode purchased as detailed below.

## E25590 Lamination Kit

- 1. Inner socket lamination blank
- 2. Outer socket lamination blank
- 3. Washer x 2
- 4. Socket Screw with Allen head x 2

### E25591 Vacuum Kit

- 1. Inner socket vacuum blank
- 2. Outer socket vacuum blank
- 3. Electrode mounting bracket blank x 2
- 4. Electrode mounting bracket x 2
- 5. Setting nut x 2



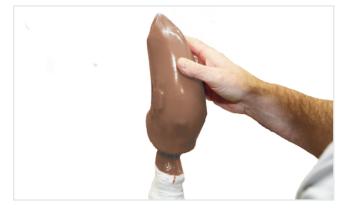
### Fabrication of Laminated Socket



1. Identify the position of the electrodes on the cast and check this area is completely flat to ensure a close fit of the inner socket lamination blank (from lamination kit E25590).



2. Apply a PVA sheet to the cast, with the gloss side in, ensuring there are no wrinkles within the socket area, and apply the vacuum. Attach the inner socket lamination blank using the attached double sided tape and feed 2 small pieces of dacron felt under the legs of the blank.



3. Fabricate the laminate socket in the usual manner.



4. Once the lamination procedure is complete, the outer surface over the blank is ground away to the level of the inner socket lamination blank.



5. Remove the inner socket lamination blank completely. Fit the outer socket lamination blank ensuring that the pip is situated proximally. Proceed to fabricate the forearm in the usual manner.

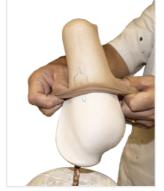


6. On completion of the forearm fabrication, remove all the blanks. It is recommended that electrodes are inserted from the outside of the inner socket to prevent stress on the flexible legs.

# Fabrication of a Vacuum Formed Thermoplastic Socket



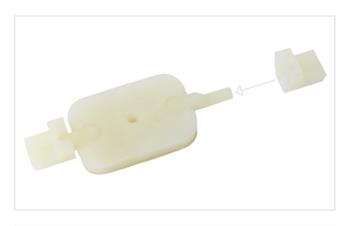
1. Ensure the electrode positions on the cast are identified and are suitably flat for a close fit with the blank. Place the cast into the drape station.





2. Apply nylon stockinette to the cast to act as a wick during the vacuum forming process.

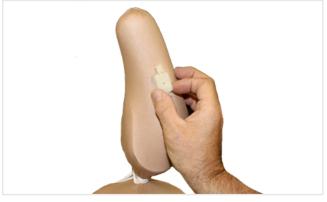
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3. Select the inner socket lamination blank (from lamination kit E25590) and attach two electrode mounting bracket blanks (from vacuum kit E25591).



8. Once the material has cooled, the outer surface over the blank is ground away to the level of the electrode mounting bracket blanks. Remove the inner socket vacuum blank.



4. Attach firmly to the stockinette using the attached double-sided tape.



9. Insert the outer socket vacuum blank (from vacuum kit E25591) with the tongue pointing towards the wrist and proceed to fabricate the forearm.



5. Attach the inner socket vacuum blank (from vacuum kit E25591) on top of the inner socket lamination blank and fix to the cast using round headed nails in opposite corners to prevent the blank rotating during the draping process.



10. On completion of the forearm fabrication, remove all the blanks and fit the electrode mounting brackets. The electrodes can now be inserted to the inner socket and the arm fully assembled.



6. Heat thermoplastic material in an oven as per manufacturer's guidelines and once ready drape the material over the cast taking care to ensure any wrinkles are pulled beyond the proximal trim. For more information on electrode fabrication please contact a Steeper product manager or our customer services team who will be happy to assist with your enquiry.



7. Apply full vacuum once the material has draped fully over the cast. It may be necessary to use a wooden spatula to press the material into the corners of the blank to achieve a good fit.

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