

Amparo Confidence Socket








Step-By-Step Guide CPO



Quality for life

Introduction

Please read the entire instruction manual before you start.

	Tip
	Important
	Consult Product Instructions
	Use of Heat-Resistant Gloves Required
	Hot Surface
	Warning
	Flammable Materials

For better understanding of the process, watch also the step-by-step video tutorial!



Watch now


 www.youtube.com/watch?v=72Wl2vbimml&feature=youtu.be

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Tips for safe usage

Familiarize yourself with and be aware of potential dangers:

- Do not fit the socket before the end of the advised cooling time. Premature fitting may result in burning of skin.
- Be aware that ambient temperature can have an effect on the cooling process.
- The Mobile Oven must be used on a stable surface.
- Leave a space of at least 30 cm around the oven to minimize fire hazard risk.
- Make sure everything is correctly positioned, before switching the heat gun on.
- Switch off & safely store the heat gun, before removing the mobile oven cover.
- Ensure mobile oven cover is upright when removing, as not to touch the socket.
- Take care: All surfaces of the oven and socket will likely be very hot after heating.
- Wear heat-resistant gloves when working with the mobile oven and socket.
- Do not block the small ventilation hole in the top of the oven cover.
- Do not look into or put hand over ventilation hole when heating
- Be aware of your heat gun's power cord whilst heating as it may be a tripping hazard.

1 | Required Equipment

Amparo Confidence Socket



Vacuum or Pin-Lock System

Distal Circumference:
23 – 34 cm – Size S
30 – 45 cm – Size L

Amparo Tool-Set



Amparo Mobile Oven
for heating sockets



Vacuum Pump Adapter
connects socket & pump

Consumable Materials



Amparo Stretch Foil
for volume reduction



Spacer Pads
for sensitive areas



Amparo Molding Textile
for vacuum forming



Amparo Stretch Foil
for volume reduction



Heat Resistant Gloves
For Handling Hot Materials



Amparo Molding Textile
for vacuum forming



Heat Resistant Gloves
for Handling Hot Materials

NOTE: Portable vacuum pump or vacuum source needed for socket fabrication.
(755E14=110V Portable Pump 110v or similar)

2 | Residual limb preparation

Choose liner and socket bearing shape according to patient indication.

2.1 Positioning spacer pads

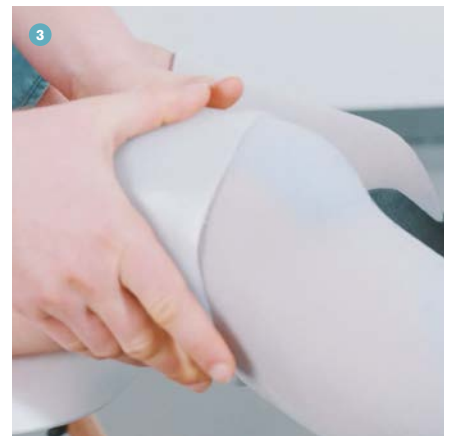
- 1 Check and palpate residual limb for sensitive areas.
- 2 If necessary, position Amparo spacer pads over sensitive areas, accordingly.
- 3 Pull over liner and fold back proximal end.



- If necessary, two spacer pads can be used for very sensitive areas.
- If the liner has been cut already and therefore is too short, a knee sleeve turned inside out can be used to extend the liner and cover the skin.



- To guarantee a vacuum tight seal, the folded proximal liner end should be approximately hand width.
- The folded over liner end needs to be 1 – 2 cm proximally above the intended socket edge, so that the liner edge won't be visible in the molded socket.



2.2 Volume reduction

- 1 Compress residual limb using Amparo Stretch Foil from the end of the residual limb up to the top of the liner (just like compression with an elastic bandage).
- 2 Be sure to reach the desired volume reduction.
- 3 If Pin Lock System is used, cut small hole into stretch foil and attach pin.
- 4 From here until 4.3. the residual limb should not move or bend. Otherwise the foil might slip off or the movement might result in folds and creases.



- Avoid large creases for optimal surface finish quality.
- It is advised to check volume reduction with a tape measure.
- Watch our video on Volume Reduction with Stretch Foil:



Watch now

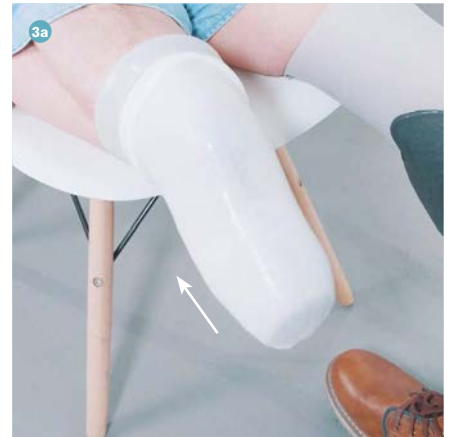
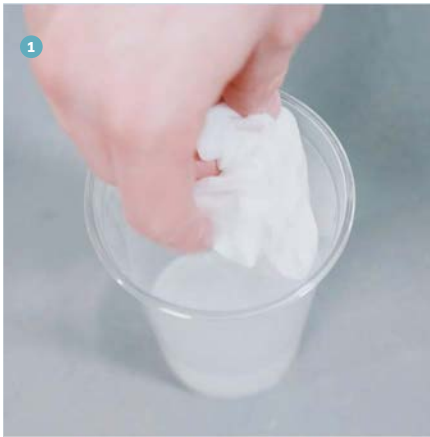
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2.3 Applying molding textile

- 1 To simplify removing the socket later, place the molding textile in water and wring it out. The textile need only be moist, and not wet.
- 2 Pull the first layer of molding textile over the residual limb.
- 3 a) For Passive Vacuum System: Twist textile and pull it back over the stump again
b) For Pin Lock System: Twist textile around the base of the pin and pull back over.

i Textile should reach the proximal end of the inverted liner.



💡 To ensure a smooth process and outcome, it is advised to only use the provided molding textile.



3 | Socket Preparation

3.1 Socket positioning



The mounting plate is offset by 1 cm from the center. Depending on prosthesis alignment requirements, the mounting plate can be oriented differently (e.g. lateral, medial, posterior or anterior).

Determine the individual's orientation requirement. Note: The offset is towards the side of the higher flank.



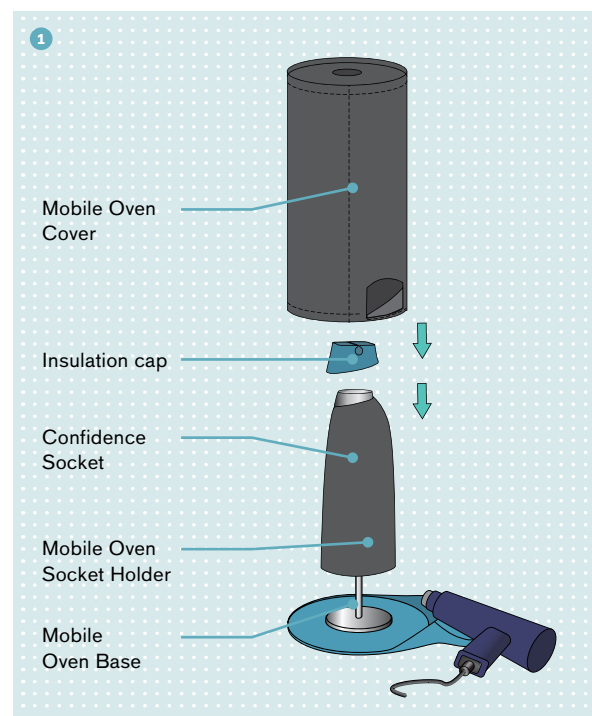
3.2 Heating the socket



Please consult the mobile oven instruction manual.




Construction of oven for heating socket.



- ② Be sure that the heat gun nozzle follows the direction of the textile spiral, inside the mobile oven cover. This creates a hot air vortex, for optimal socket heating (see illustration).
- ③ Set stopwatch to 10 minutes (see timeline) and turn the heat gun on.



 The optimal power setting is 2000-Watt, 500 L/min. If the wattage is too high, the outer surface of the socket can burn and turn brown. Before reuse, all parts of the mobile oven must return to room temperature.



3.3 Stretching socket

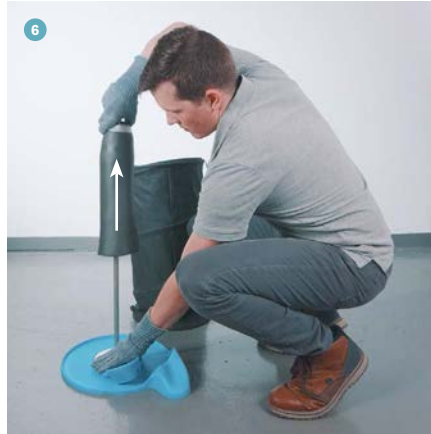
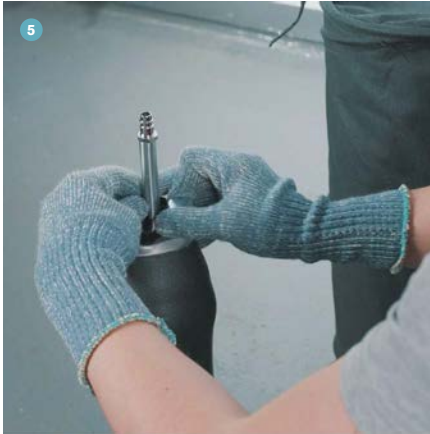
- ① Put on heat-resistant gloves.
- ② Remove mobile oven cover.
- ③ Check approximately 1 cm below mounting plate if the thermoplastic is pliable.
- ④ **Not yet pliable:**
Heat for a further 1 minute and check again. Repeat if needed.
Pliable:
Remove insulation cap and allow to cool.





After heating allow socket to cool for 6 MINUTES on its holder. Not adhering to the cooling time will result in the socket being too hot to use on a patient and the molding textile sticking to the inside of the socket.

- 5 Screw on vacuum adapter.
- 6 Remove socket and adapter vertically from holder.
- 7 Insert both hands inside the socket and slowly widen its circumference for 3 minutes, so that the material easily fits over the residual limb and the inside of the socket can cool.



- 8 If necessary, cut socket to length.



- Hold the socket with the opening facing down; else it will collapse, and the material will stick together. Try to have 1 hand in socket at all times.
- When measuring the length of the socket, be sure not to measure from distal end of mounting plate but from distal pad. Feel inside for pad and push finger in material to make a visible mark outside.
- If needed, cut a v-shape in the socket proximally above the patella, to aid removal.

Screw In Adapter

Stretch

3 Min

Mold to Residual limb

<5 Min

Socket No Longer Pliant

Cool

4 | Fitting the socket

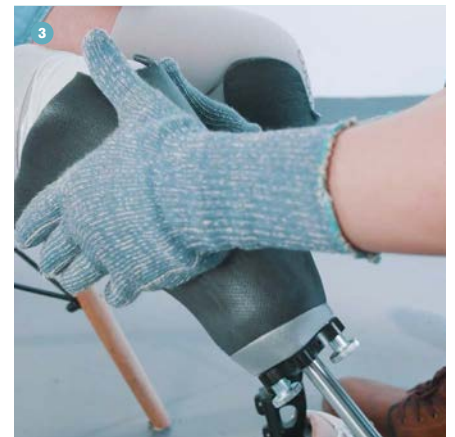
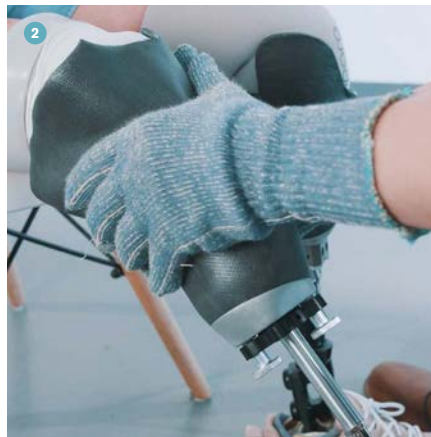


4.1 Fitting the socket

- 1 Ensure correct orientation of socket (medial/lateral/anterior/posterior).
- 2 Fit the socket over the liner and molding textile.
- 3 Be sure the top edge of the liner is at least 1cm higher than the desired socket height.
- 4 Massage the socket material upwards, towards the proximal end, around residual limb.
- 5 Be sure the residual limb end is in constant contact with the distal end of the socket.



Socket should never protrude past the proximal end of the liner.



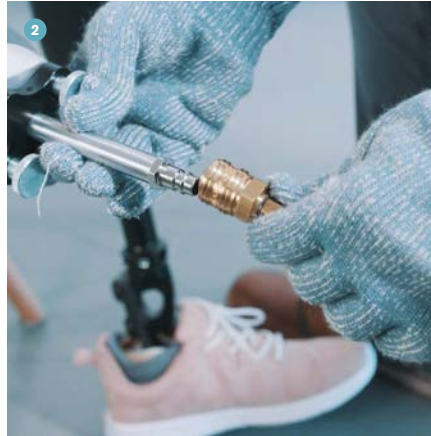
If needed, the socket can be additionally stretched to approximately 15% of its length, over the leg.



4.2 Applying vacuum

- 1 Wrap Amparo stretch foil around the proximal end of the socket and the inverted liner.
- 2 Connect the vacuum adapter to the vacuum pump via the hose and start the vacuum.

i Stretch foil must not protrude past liner or otherwise make contact with skin.



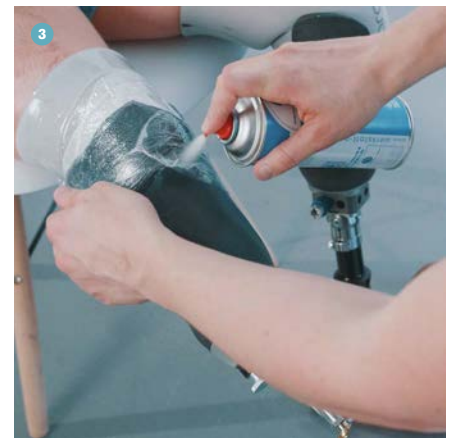
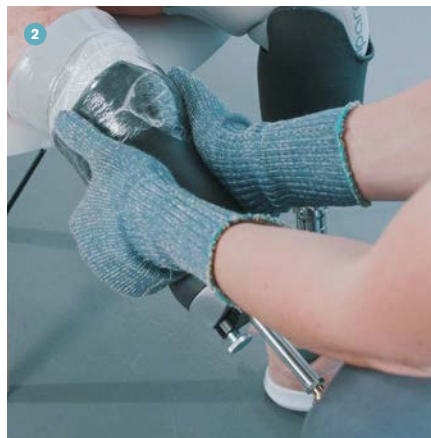
- Be sure that there is an air tight seal between the stretch foil and liner.
- If the liner is too short, it can be extended with an old, inverted section of liner or silicone sleeve.
- Always check the distal residual limb end is in contact with the socket.
- Before applying the stretch foil, the molding textile can be folded back over the trim line of the socket, for a nicer finish.



4.3 Molding & aligning socket

Shape the socket from distal up to proximal end:

- 1 Align mounting plate correctly and fix into position with ice spray or damp towel.
- 2 Create the functional form of the socket according to indication and cool with ice spray or damp towel.
- 3 Form the ears of socket and fix in position with ice spray or a damp towel.



- Passive Vacuum System:
The mounting plate can be adjusted for tilt, rotation and lateral offset
- Pin Lock System:
The mounting plate can only rotate around its own axis.



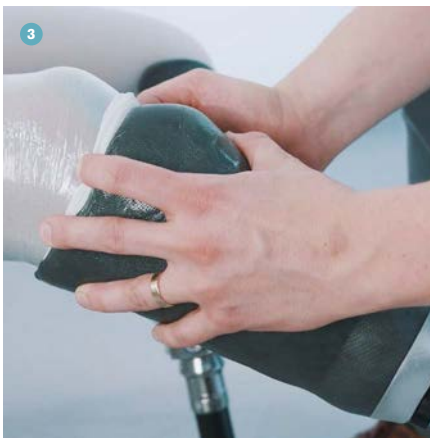
Heed the product specific instructions and warnings when using ice spray.

5 | Finishing the socket

5.1 Removing socket

i Be sure the socket material is no longer easily pliable before removing it from the residual limb.

- 1 Turn off vacuum pump.
- 2 Remove vacuum adapter.
- 3 Remove the socket as soon as rigid.
- 4 Remove molding textile from inside socket.
- 5 Remove stretch foil, liner and spacer pads (if using).



5.2 Marking socket trim line

Mark the shape of the socket trim line, according to patient indication, directly onto the material. Use a water soluble pencil.



5.3 Cutting socket trim line

Cut trim line with heavy duty shears

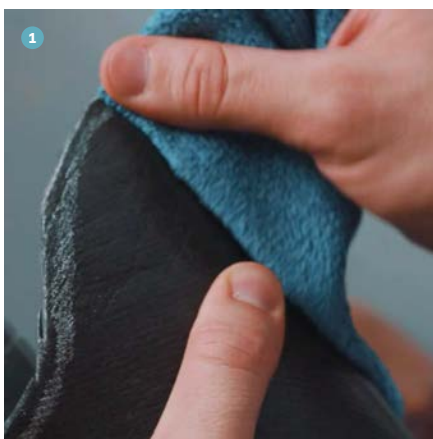


- Alternatively, an oscillating saw (universal blade with small teeth) or a jigsaw can be used.
- Avoid excessive force until socket is fully hardened.



5.4 Finishing socket trim line

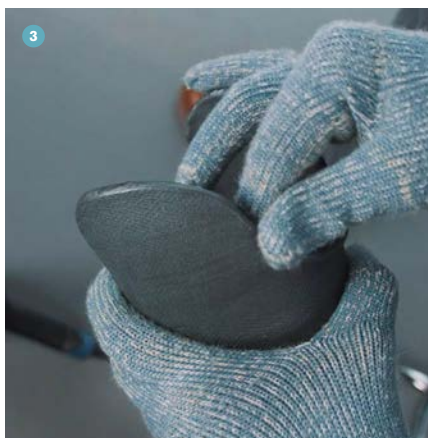
- 1 Remove all marks with rubbing alcohol or a damp cloth, before heating (as the marks will burn onto the socket surface).



- 2 Heat a small section of the trim line for no more than 10 seconds.
- 3 Wearing heat-resistant gloves, smooth over the heated area with your fingers or a spare piece of liner.
- 4 Repeat this process until the socket trim line is entirely smooth-edged.



- Use a heat gun adapter nozzle for focused heat.
- When heating socket trim line, hold the heat gun so that the heat is directed away from the socket body (see image 2.).
- Never focus heat on an area for more than a few seconds at a time, as this can compromise the form of the socket.
- Alternatively, a socket router can be used (slowest speed, sanding drum & brush or with a pine cone cutter).



6 | Prosthesis assembly

- 1 a) If using suction suspension: insert Amparo expulsion valve into hole of silicone pad inside distal socket.
b) If using pin-lock suspension: Screw Amparo clutch-lock with appropriate pyramid adapter onto distal end of mounting plate.
- 2 Assemble prosthesis according to prosthetic guidelines.

i The Confidence Socket has been designed to work in compatibility with the available Amparo suspension systems. Do not attempt to attach other suspension systems to the mounting plate.

