

Helix^{3D} Hip Joint System

Transfer, Lamination Technique, Cosmetic Cover

Academy



Quality for life

Helix^{3D} Hip Joint System

Lamination Technique

The transfer of the position of the lamination plate to the definitive socket is to be ensured.

A carefully laminated socket, in which flexible and stiff lamination resins have been used in accordance with the demand, will enable the patient to make use of the possibilities of the prosthesis system with less restrictions.

The cosmetic cover of the prosthesis shall comply with the patient's demand.

Helix^{3D} Hip Joint System



The screws are used to transfer the position of the adapter plate to the plaster positive.

For this purpose, mark the position before removing the hip joint.

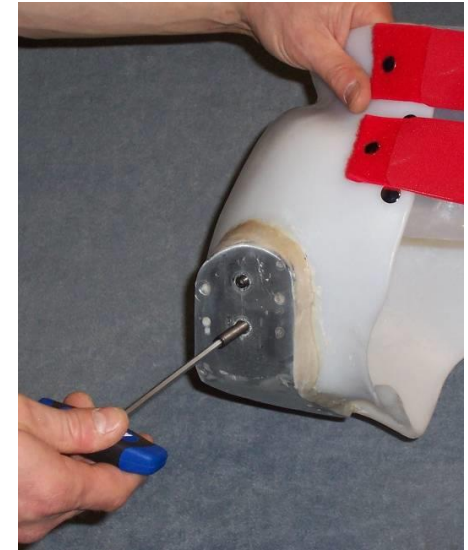
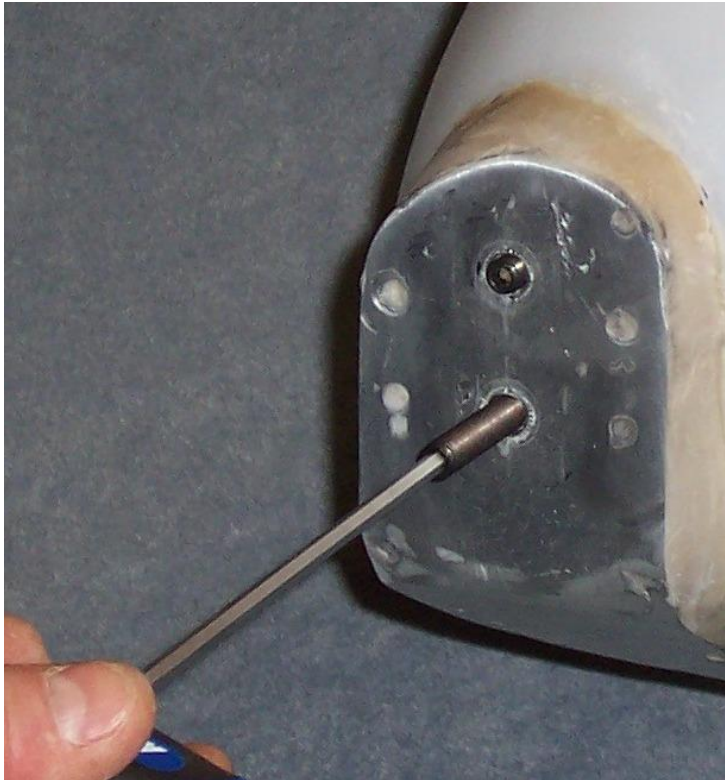
Helix^{3D} Hip Joint System



The screws are used to transfer the position of the adapter plate to the plaster positive.

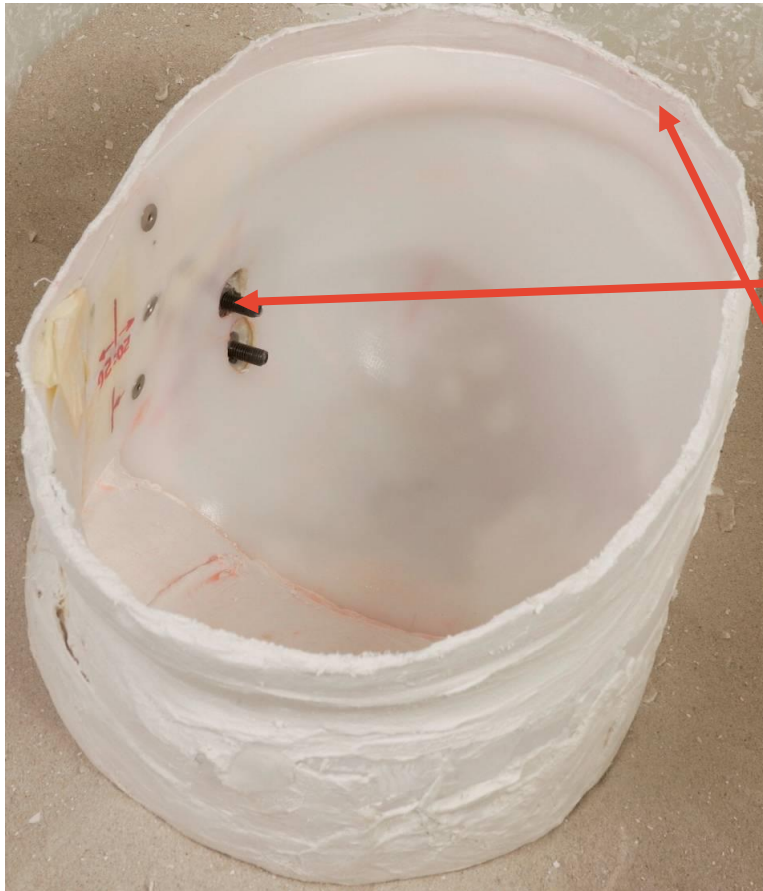
For this purpose, mark the position before removing the hip joint.

Helix^{3D} Hip Joint System



Grease 2 long screws and screw them into the lamination plate, but not completely, leaving a part of them protruding on the outside

Helix^{3D} Hip Joint System



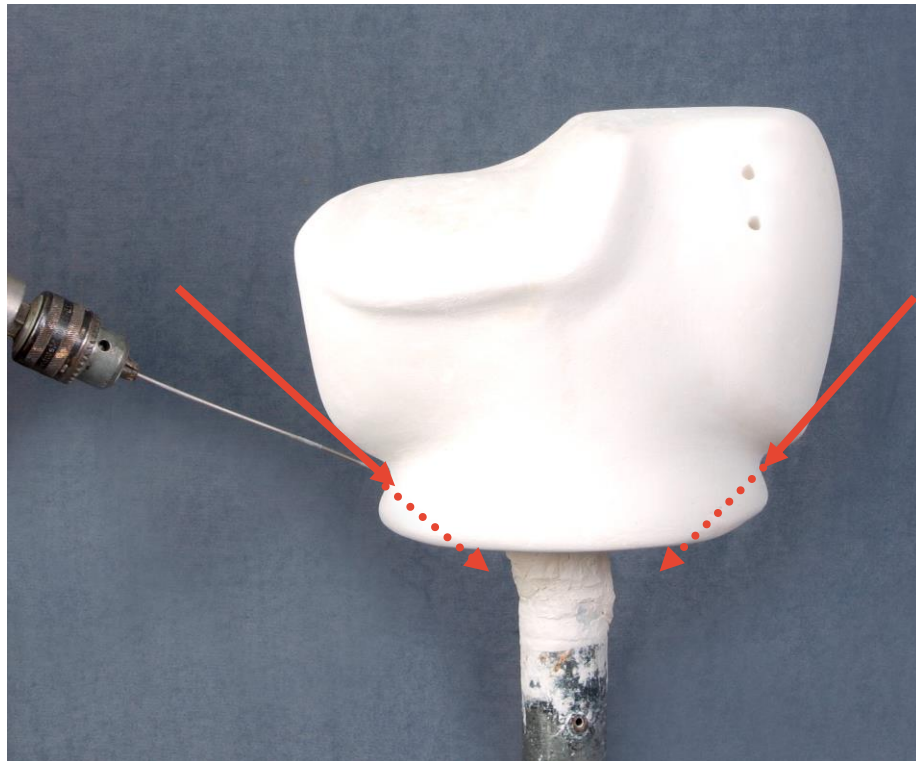
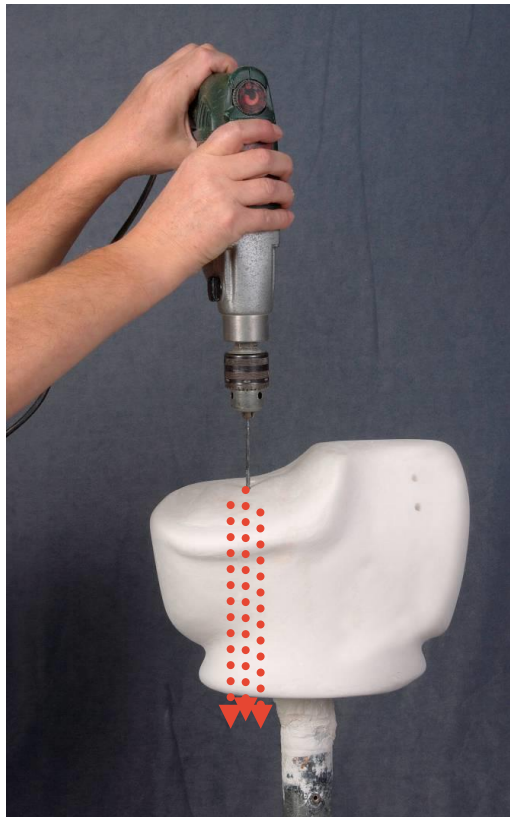
Insulate the screws with
Plastaband

Insulate the socket with
silicone parting agent

Extend the socket brim with
plaster bandages

Helix^{3D} Hip Joint System

Drill evacuation ducts



Helix^{3D} Hip Joint System

Cover with perlon and fix with linen adhesive tape



Helix^{3D} Hip Joint System

Tampon
evacuation ducts



Connect the ducts with perlon



Helix^{3D} Hip Joint System



Make an indentation using a rasp to provide space for the screw threads of the lamination plate

Helix^{3D} Hip Joint System

Pull over a PVA bag



Reinforce the areas where
you will pierce through

with Coroplast



Helix^{3D} Hip Joint System

Pierce the screw holes and press in a bit of Plastaband



Helix^{3D} Hip Joint System

Double layer of perlon stockinette
- tucked in the middle -



Carbon fiber cloth distally
in the lamination plate area
and at the lower flap up to
the middle posteriorly

Double layer of
perlon stockinette
- tucked in the
middle -



Helix^{3D} Hip Joint System

Fiberglass matting (Biegelow)
distally in the lamination plate area



Double layer of perlon stockinette
- tucked in the middle -

Helix^{3D} Hip Joint System

Position filler sleeves (ant. and post.)



Prepare Trolen flap

Helix^{3D} Hip Joint System



Position the lamination plate with the greased screws

Pull fiberglass roving through the bore holes of the lamination plate for reinforcement



Twisted double layer of perlon, slide the Trolen flap underneath

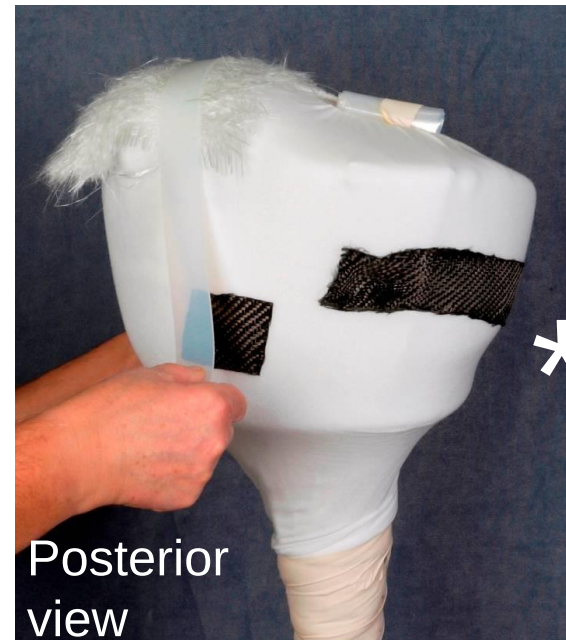


Helix^{3D} Hip Joint System

Position and fix the setting nuts for the connection cap



Carbon fiber cloth for upper flap up to the middle posteriorly *



Fiberglass matting (Biegelow) distally in the lamination plate area

Helix^{3D} Hip Joint System

Carbon fiber cloth distally in the lamination plate area and for upper flap up to the middle posteriorly *



Twisted double layer of perlon stockinette, perlon stockinette over filler sleeves

Helix^{3D} Hip Joint System

Cover screw heads with
Plastaband



Pull over a PVA bag



Helix^{3D} Hip Joint System



First bring flexible acrylic resin through the filler sleeves to the proximal section; then laminate the sitting surface and lamination plate area with 80:20 Orthocryl resin.

As soon as the vacuum decreases, pierce through above the evacuation ducts. Immediately close the punctures on the PVA bag with Coroplast.



Helix^{3D} Hip Joint System

Cut the screw heads free



Remove the screws

Helix^{3D} Hip Joint System



Pull over one layer of perlon stockinette



Place the lamination dummy



Pull over a PVA bag

Helix^{3D} Hip Joint System

One layer of
Dacron felt



One layer of perlon
stockinette



One layer of Dacron
felt and one layer of
perlon stockinette



Position Trolen strip and fix
with linen adhesive tape

Helix^{3D} Hip Joint System



Laminate only in the
connection cap area



Remove the
connection cap



Helix^{3D} Hip Joint System



Cut the socket
free

First carefully separate
the upper flap



Remove the Trolen flap

Helix^{3D} Hip Joint System

Then cut the lower flap free



Remove the socket from the plaster cast and grind the socket brim

Helix^{3D} Hip Joint System



Mark the area where the joint will pass through the connection cap

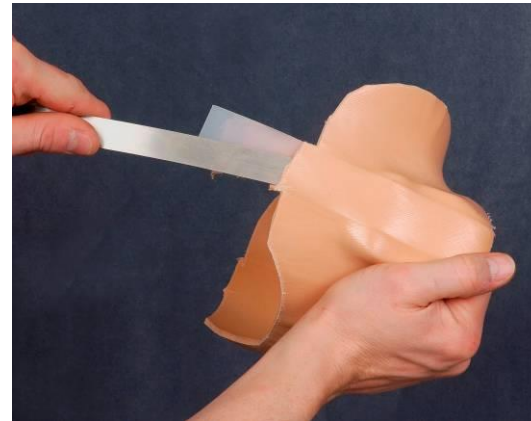
Cut free



Helix^{3D} Hip Joint System



Remove the Trolen strip



Then grind



Helix^{3D} Hip Joint System



Pull the elastic band through

Helix^{3D} Hip Joint System



Make a hole into the connection area between strap and elastic band and attach to the connection cap with a hollow rivet



Determine the length of the strap and sew it up

Helix^{3D} Hip Joint System

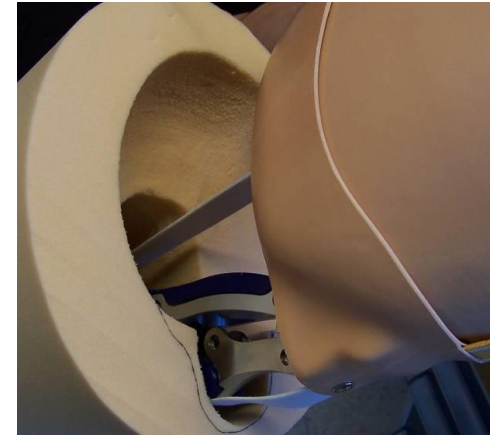
Shorten the cosmetic foam cover(knee rotation point up to proximal + 3 cm)



Position and mark the connection cap

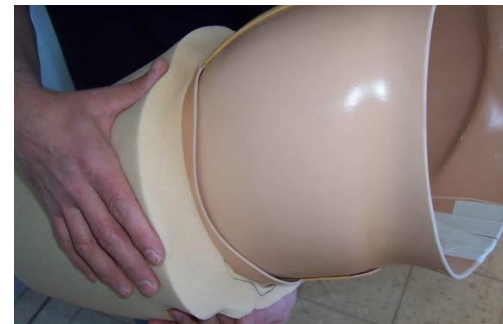
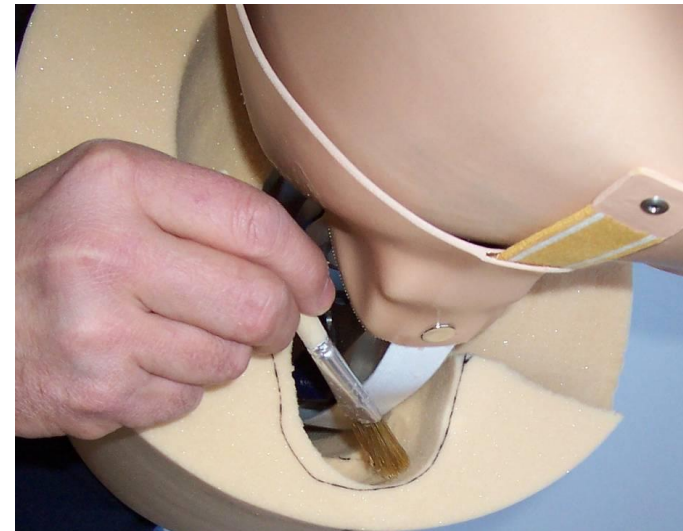
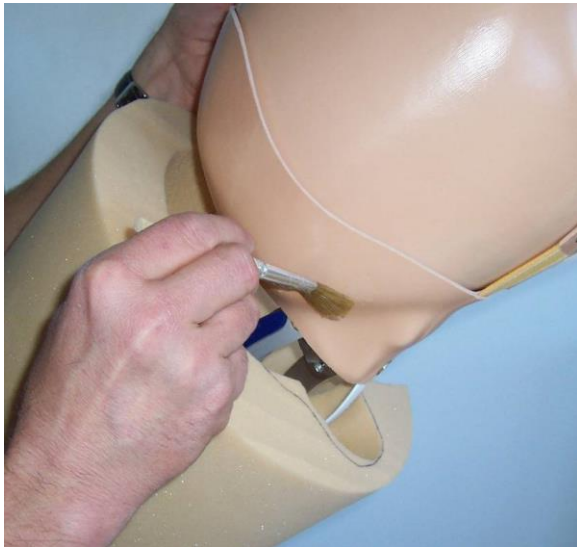


Insert the connection cap and hip joint into the cosmetic foam cover



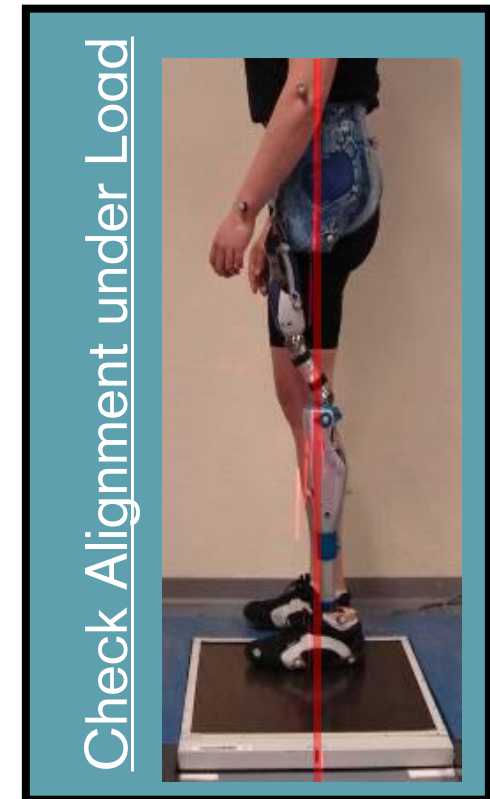
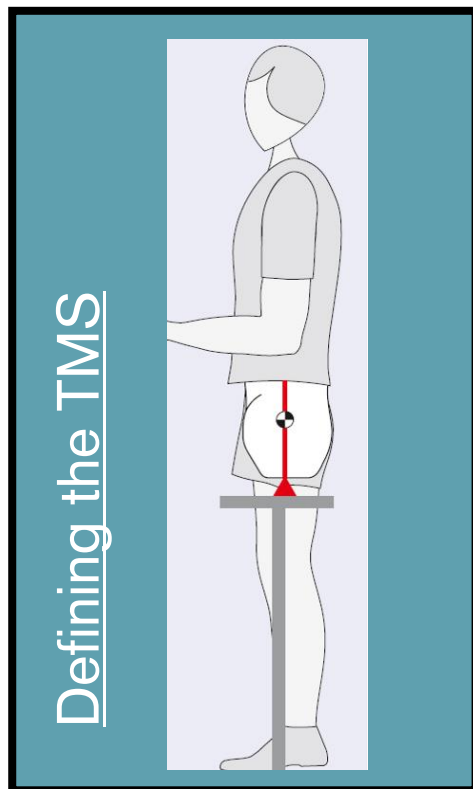
Helix^{3D} Hip Joint System

Glue in place the connection cap with adhesive for plastics



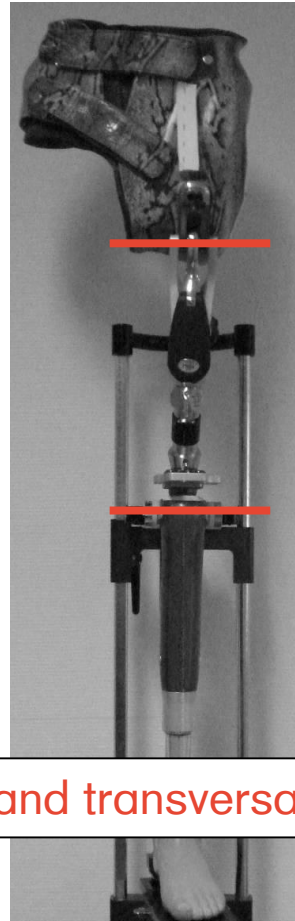
Helix^{3D} Hip Joint System

Define the TMS of the definite laminated Socket again and do the alignment according to the instructions



Helix^{3D} Hip Joint System

Upper rear hip axis parallel to the axis of knee



Frontal and transversal check!

Helix^{3D} Hip Joint System

Three important aspects must always be respected in the completion:

- Define the TMS of the definite laminated Socket again and do the alignment according to the instructions
- Upper rear hip axis parallel to the axis of knee
- Verify functionality of the prosthesis with cosmetic again

Helix^{3D} Hip Joint System

Verify functionality of the prosthesis with cosmetic again

- Go in the plane
- Go on a ramp and stairs
- Sit down



Check Adjustments of Helix and C- Leg!

Discover what moves us!

Referent

Contact details

www.ottobock.com



Quality for life