

Lotus Adapter



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1 FOR CHECK SOCKET ATTACHMENT

1.1 Check Socket Alignment



Establish alignment of the socket over the knee and shin. (Be sure to accommodate any contracture + 5 degrees, and any abduction contracture.)

⚠ Note: This is very important to get the alignment as close as possible as the lotus adapter has less alignment available than a typical pyramid system!

⚠ Alignment is changed by rotating the angled discs in opposite direction to obtain slight angular changes.



1.2 Preparing Lotus Adapter



The lotus adapter has open channels for the wire to run through the plate. These need to be covered for test socket fittings so that when laminating, the resin can thoroughly saturate. The wire needs to stay clean for lamination to obtain an optimum bond. Take care to completely cover over the wire cage and connectors.

When done with the test fitting, take care not to damage any of the wires or connectors and be sure wires are clean for lamination process.

⚠ The integrity of the socket will depend on the bond of the wires to the resin. The wires are to be placed over the 1st lamination and have the outer reinforcement placed over it and tied into the adapter for the 2nd outer lamination.



1.3 Check Socket Mounting



To remove the lotus adapter, the use of urethane adhesive would facilitate easier removal over the use of resin based bonding mix. Adhesive can also be easier to bond the wire in sections about the socket.

- 1) Bond the socket on the lotus plate with preferred alignment, and the wire basket can be bonded in sections in later stages (Photos Left).
- 2) If there is a valve, the wire basket can be manipulated around the opening and bonded down (Photos Right).
- 3) Continue in sections to bond the basket down until the entire basket is bonded down to the socket (Photos Below).



- 4) Invert the socket and continue to fill in areas to ensure that there are no voids between the socket and the wire basket (Photos Below).



Once the basket has been fully bonded to the socket and the adhesive has cured, the socket is ready to be reinforced with fiberglass wrap to ensure that there is no separation of socket from the adapter.

When test fitting is done, carefully undo the lotus adapter from the socket.

! Take extreme care not to damage the cabling as it will decrease the life expectancy of the system. Remove the masking tape covering and after 1st lamination, transfer Lotus adapter back onto the socket in the same method, but without the masking tape.



2 FOR DEFINITIVE LAMINATION

2.1 Transfer Socket Alignment



Fill Check socket in an alignment transfer apparatus.

Note: Check socket is shown in pictures, but the process is the same to transfer alignment.



2.2 Preparing Lotus Adapter



Carefully remove the bonded lotus from the check socket.

Urethane adhesive will require that the surface covering the Lotus adapter be sanded down, but take care not to nick the Lotus Adapter wiring.

The masking tape can act as an aid to gauge to stop sanding. It will also aid in removing the wire matrix from the socket and keep it clean for lamination.

! The integrity of the socket will depend on the bond of the wires to the resin. The wires are to be placed over the 1st lamination and have the outer reinforcement placed over it and tied into the adapter for the 2nd outer lamination. It is recommended to utilize a high strength reinforcement material, with a generous use of reinforcement unidirectional tape.

2.3 Socket Mounting



Be sure that the Adapter is clean. Clean of the surface and the wiring thoroughly.

Apply a very strong adhesive to bond the Lotus Adapter to the laminated socket taking care not to get adhesive on the wiring.

Be sure that there is a slight gap between the plate and the socket so that the initial reinforcement layer can be tied to the socket so it does not migrate during lamination.

It is recommended that the reinforcement material be interwoven with the wire matrix to enhance the ability of the lamination to hold the Lotus adapter under load.

! It is your responsibility to ensure that the lamination is adequate to provide enough strength to perform for you specific patient's needs.

We have found that the grade of resin will significantly impact the strength of the materials used. There should be enough reinforcement material under the Lotus Adapter wire matrix as well as on the outer portion of the wire matrix to provide enough strength to hold the adapter from pulling out under load. The best outcome would be provided by Carbon Fiber and an Epoxy resin. Urethane adhesive would help hold the adapter, as would a good application of an Acrylic Resin bonding agent with fiber filler added.

Take extreme care not to damage the cabling as it will decrease the life expectancy of the system. Also be sure that the matrix lies flush to the contour of the socket. There should not be any sharp contours allowing the wire matrix to bend excessively.

Liability

The manufacturer recommends using the device only under the specified conditions and for the intended purposes. The device must be maintained according to the instructions for use supplied with the device. The manufacturer is not liable for damage caused by the component combinations that were not authorized by the manufacturer.



CE Conformity

This product meets the requirements Council EU 2017/745 (EU) for medical products. This product has been classified as a class I product according to the classification criteria outlined in appendix IX of the guidelines. Please keep this manual in safe place for future use.

Disposal

The device and its packaging must be disposed of in accordance with respective national/local environmental regulations.

LA13 IFU REV. D (4-30-25)