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Fabrication Instructions



655 **Motion Control Limiter**





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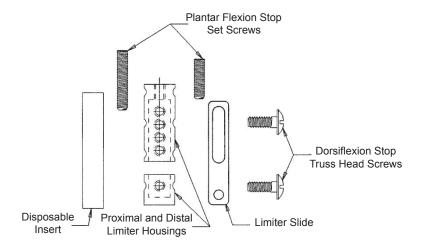
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| 655 MOTION CONTROL LIMITER KIT CONTENTS & DESCRIPTION | | QTY |
|---|-------------------------------------|-----|
| PROXIMAL HOUSING DISTAL HOUSING | | 1 |
| LIMITER SLIDE | | 1 |
| DISPOSABLE INSER | Т | 1 |
| EXTRA LARGE KIT ONLY | | |
| | DORSIFLEXION STOP TRUSS HEAD SCREWS | 2 |
| | DORSIFLEXION STOP TRUSS HEAD SCREWS | 2 |
| 8-32X5/8 | PLANTARFLEXION SET SCREW | 1 |
| 8-32X1 | PLANTARFLEXION SET SCREW | 1 |
| LARGE KIT ONLY | | |
| - | DORSIFLEXION STOP TRUSS HEAD SCREWS | 2 |
| 6-32X1/2 | DORSIFLEXION STOP TRUSS HEAD SCREWS | 2 |
| 8-32X5/8 | PLANTARFLEXION SET SCREW | 1 |
| 8-32X1 | PLANTARFLEXION SET SCREW | 1 |
| SMALL KIT ONLY | | |
| - | DORSIFLEXION STOP TRUSS HEAD SCREWS | 2 |
| , | DORSIFLEXION STOP TRUSS HEAD SCREWS | 2 |
| , | PLANTARFLEXION SET SCREW | 1 |
| 6-32X3/4 | PLANTARFLEXION SET SCREW | 1 |

NOTE: For optimal product life, the AFO should be trimmed in the area of the articulated ankle joints to minimize torsional and lateral flexibility. The 655-MCL should be aligned perpendicular to the approximate mechanical joint axis. Caution should be exercised in utilizing this product with anatomically alignable ankle joints and extreme anatomical offsets.

Fabrication Instructions

- 1. The 655-MCL has been assembled and packaged in a ready to drape thermoform condition. The PROXIMAL AND DISTAL LIMITER HOUSINGS are approximately spaced for equal plantar and dorsiflexion ranges of motion about the cast position. For more plantar or dorsiflexion change the housing spacing at this time.
- 2. Draw a line on the positive model through the mechanical joint axis across the Achilles tendon.
- 3. Place the LIMITER on the positive model over the Achilles tendon perpendicular to the mechanical joint axis with the proximal edge of the DISTAL HOUSING at the joint axis. Fig. 1



- 4. Verify that the proximal adjustable *PLANTAR STOP SET SCREW* will not interfere with the AFO shell. Clearance must be available for the PLANTAR STOP SET SCREW to travel approximately 1" out of the PROXIMAL HOUSING. If *PLANTAR STOP SET SCREW* interference is a potential problem, add additional foam shims or a small plaster build-up. Shims and build-up should have the same outside dimensions as the adhered polyolefin foam to allow for plastic wrap during thermoforming.
- 5. Glue the 655-MCL to the positive model.
- 6. Drape thermoform the AFO.
- 7. Trim through the center of the *DISPOSABLE INSERT*. Trim the balance of the AFO as usual.
- 8. Remove the remaining *DISPOSABLE INSERT* with a small tool inserted through the holes in the housing from the inside of the shell.

- 9. Trim with a hot knife or grind the plastic shell to expose the top of the *PLANTAR STOP SET SCREW*. Insert an allen wrench (5/64" for the Extra Large and Large models, 1/16" for the Small model) and remove the *SET SCREW* through the top of the *PROXIMAL HOUSING*.
- 10. Trim the AFO leaving at least 1/16" plastic wrap around the proximal edge of the DISTAL HOUSING and distal edge of the PROXIMAL HOUSING.
- 11. Remove adhesive backed foam and preserve for possible later use.
- 12. Drill through the shell (#29 [0.136 inch] drill for the Extra Large model, #36 [0.106 inch] drill for the Large and Small models) at the five housing hole locations from the inside of the shell.
- 13. Run a tap (8-32 for the Extra Large model, 6-32 for the Large and Small models) through the housing holes and plastic shell from the inside of the shell.
- 14. Insert the LIMITER SLIDE into the housings. Fix the LIMITER SLIDE into the DISTAL HOUSING with the provided 8-32 (Extra Large Model) or 6-32 (Large and Small models) DORSIFLEXION STOP TRUSS HEAD SCREW.

Verify that the screw does not extend through the AFO into the Achilles tendon.

- 15. Insert the other 8-32 (Extra Large model) or 6-32 (Large and Small models) DORSIFLEXION STOP TRUSS HEAD SCREW into the posterior aspect of the PROXIMAL HOUSING and through the LIMITER SLIDE for the desired range of motion.
- 16. Select the SET SCREW for the desired range of plantar flexion stop adjustment. Two lengths are provided to prevent having an excessive length of exposed SET SCREW above the PROXIMAL HOUSING.



