

C-Brace®: Diagnostic Test Orthosis Fitting and Alignment Checklist

CAUTION: Ensure the pins in the ankle joints are locked down before making any fitting adjustments and shipping. Vibration could cause the pins to back out and parts or alignment can be lost.

Highly Recommended: Perform DTO fitting and alignment using the L.A.S.A.R. Posture.

Requirement:

- The Diagnostic Test Orthosis (DTO) is for static alignment and fit only
- All fitting, trimming, padding, and modifying must be performed by the fitting Orthotist prior to shipping to Ottobock for the fabrication of the definitive C-Brace
- Print pages 2-3 to use as a reference during the DTO fitting then sign, date, and return with DTO when ready for definitive fabrication

Resources

1. Test orthosis fitting demonstration: <https://mylearning.ottobock.com/learn>

**Users will need to register and log into Ottobock's myLearning platform.*

From myDashboard, find "C-Brace Certification (Gen 1)" in the Course Catalogue, then go to "Section 1.4 Test Orthosis Fitting Video"

2. Review L.A.S.A.R. Posture videos:

To request a loaner L.A.S.A.R. Posture, please contact your Ottobock Sales Representative.

Experts OnDemand: How L.A.S.A.R. Posture 3D Can Help You Find Objectivity in Alignment:
https://www.youtube.com/watch?v=S7Dfc0sg-YU&feature=emb_title

L.A.S.A.R Posture Tutorial: <https://www.youtube.com/watch?app=desktop&v=U3k1yNnVCC4>

3. Order form: <https://professionals.ottobockus.com/Orthotics/Custom-Orthotics/KAFO-KO--Knee-Ankle-Foot-Orthosis-Knee-Orthosis/C-Brace/c/4036>

4. Video conference: FaceTime or Video Conference with an Ottobock Orthotist (broadband internet and scheduling required)

Equipment Needed

- | | |
|----------------------------------|-----------------------|
| - Diagnostic Test Orthosis (DTO) | - L.A.S.A.R. Posture |
| - Order form | - Heel lifts |
| - Plaster bandage | - Casting consumables |
| - Fitting tools / machine room | |

Ship to: Ottobock Great Lakes Building (ATTN: Fabrication)
3820 West Great Lakes Drive
Salt Lake City, UT 84120

Complete the checklist on the following page before shipping the Order Form and modified/aligned Test Orthosis to Ottobock.

C-Brace®: Diagnostic Test Orthosis Fitting and Alignment Checklist

General (upon arrival and before fitting):

- Were pins (not springs) in anterior and posterior channel of the ankle joint?
- Was ankle plantarflexed to angle equal to Effective Heel Height of shoe?
- When knee joint was fully flexed, does the posterior distal thigh opening overlap the proximal posterior calf opening? (Calf opening should be 6mm higher than thigh opening when flexed)
- If the patient will wear the C-Brace under their clothing, fit the DTO to their skin. However, if the patient will wear the C-Brace on top of their clothing, fit the DTO to their clothing.
- Use ML gauge or caliper to measure the width of the anterior opening of thigh and calf shells before and after donning the DTO to check for any discrepancy due to plastic flexing. Take measurements 5cm distal to proximal trimline and 5cm proximal to distal trimline.

Fit:

- Clearance at all bony prominences
- Clearance of knee and ankle joints are appropriate
- Knee joint can flex without pinching
- Orthotic knee and ankle joint match anatomic joint axes
- Was the footshell finished length marked during weightbearing and trimmed to finish length?
- Were foot, calf, and thigh shells trimlines established and trimmed out? All desired trimlines for the definitive orthosis should be accomplished at this DTO stage. Plastic should be trimmed, and edges flared or smoothed to patient's comfort before returning the DTO to SLC for final fabrication.

L.A.S.A.R. Posture:

- Get total body weight
- Check total body weight line for symmetry
- Find alignment with DTO in shoes if possible. If not, use heel lifts under shoeless sound limb and shoeless DTO equal to the amount of the Effective Heel Height of shoes to be worn.
- Ensure that ½ of patient's weight is going through the affected limb during alignment process and measurement
- Anatomic knee axis at least 15mm behind the ground reaction force line
- Body erect during the alignment process
- No weight-bearing by the arms during the alignment process (arms used only for minor balance assistance)
- Tighten ankle joint stops in desired alignment while the patient is on the L.A.S.A.R. Posture
- Recheck the ground reaction force line position after tightening the ankle joint channel screws

Anterior Casting:

- Have patient in a seated position with DTO on their leg
- Lock bails during casting process
- Ensure the DTO is tight against the posterior limb in the sagittal plane
- Cast the anterior thigh opening of the KAFO from the proximal end to proximal border of patella and anterior tibial opening from distal border of patella to ankle joints
- Work the plaster along the anterior trimline edges of the KAFO opening to lock in the anterior plaster shells to the posterior plastic thigh and calf shells

Shipping:

- Complete the Order Form and send with DTO to Ottobock Fabrication
- Tape the anterior plaster thigh and tibial shells in place over the DTO
- Confirm the ankle joint is stable and alignment won't be lost due to vibration during shipping
- Ensure that anterior plaster cast is set so that it will not deform during shipping

- C-Brace (2) Online Training must be completed before definitive device will ship:
<https://mylearning.ottobock.com/learn>



C-Brace®: Diagnostic Test Orthosis Agreement

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- I understand the C-Brace DTO process above helps ensure the best clinical outcomes for both the fitting orthotist and patient.
- I understand it is my responsibility to achieve the proper fit and alignment of the DTO before sending back to the Ottobock Fabrication Center in Salt Lake City.
- I understand Ottobock will not make fit or alignment modifications to the DTO after it is received in Salt Lake City.
- I understand the clinician is financially responsible for any orthosis remakes due to fit, alignment, or design changes.

Fitting Orthotist's Name

Date

Fitting Orthotist's Signature