

Custom Thoracic Lumbar Sacral Orthosis (TLSO)

A TLSO is typically a two-piece clamshell design. It may also be a single piece with an opening on the front. A TLSO extends from just below the collar bones down to the pelvis. It is used to stabilize the spine after surgery or in the event of a spinal fracture to promote healing and decrease pain.

How to Put on a TLSO Back Brace

1. Apply a snug-fitting cotton t-shirt or body sock. Loose shirts may cause wrinkles and skin irritation.
2. While laying down in bed, log roll to the side to allow the caregiver to assist in putting on TLSO.
3. The caregiver should place the back portion on the patient, matching the grooves in the waist of TLSO with the patient's waist (the soft area between the hips and ribs) (Figure B).
4. The patient should gently roll onto the back. The caregiver should confirm that TLSO has not moved and is still in the proper position. Adjust accordingly.
5. Place the front portion on the patient, with the sides overlapping the back portion.
6. Secure the TLSO by pushing the ratchet straps through the slots between the brace and the "buckle". Pull both bottom straps through to even lengths. Pull both top straps through to even lengths.
7. Lift both outer levers of the bottom buckle up at the same time (twice) (See Fig. D). Then lift both the outer levers and continue to alternate, bottom buckles and top until the brace is snug to ensure even tightening and prevent twisting of the brace. Straps should be snug to hold TLSO in place, however, allow normal breathing.



Fig. A **Log Rolling**



Fig. B

Releasing Ratchet Straps and TLSO Removal

1. Lift only the inner part of the buckle with one hand and pull the strap out through the slot. (Fig. C)
2. Pull the front part of the brace away from the body.
3. Log roll the patient to one side and pull out the back section of the brace.



Fig. C (lift to release)

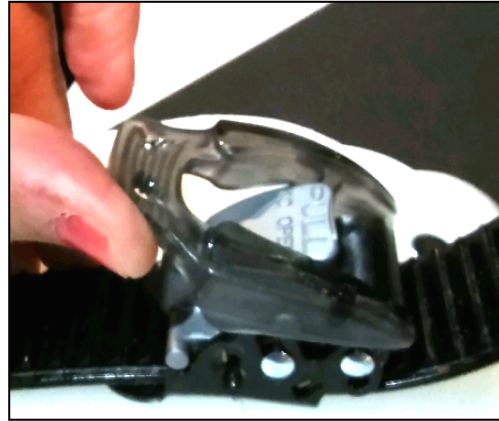


Fig. D (lift to tighten)

Wearing Schedule

Always check with prescribing doctor for a precise wearing schedule. Many times, the TLSO is worn only when out of bed while sitting or standing. Other times, the doctor requires the TLSO to be always worn.

Cleaning and Maintenance

Rubbing alcohol may be used to clean the inside and outside of the TLSO. Spray TLSO with alcohol and wipe gently with a cloth. Be sure that TLSO is completely dry prior to application to ensure no skin issues will occur. Always wear a clean, dry, snug-fitting shirt under the brace.

Tips and Problem Solving

- Avoid soft chairs and sit up straight. Leaning back into a chair will cause the brace to migrate upward and may place pressure underarms.
- Do not lean forward over a table while eating. Bring the food up to the mouth. This will reduce any pressure on the thighs and chest.
- If the TLSO starts to migrate upward under the throat/armpits, ensure that straps are snug. Straps that are loose will allow the brace to shift.

If you experience any problems, please contact your orthotist.