



TECHNICAL SERVICE BULLETIN

Technical Service Bulletin Number-TSB0005 – Shift-N-Step Ski Alignment

Date – 05/24/2019

Item, Unit or Assembly Affected – Shift-N-Step

Serial Number(s) Affected – All

Reason for Bulletin – Due to the curvature of the base of wheelchair lifts (especially Braun-brand), improper installation will result in misaligned skis in the Shift-N-Step tracks.





Action Required – Follow proper installation procedure according to training and provided manuals. Before the lift is installed, ensure Shift-N-Step skis are moving freely without noticeable obstruction. If they are not moving smoothly, first make adjustments to the middle column of Allen bolts (4th column from the left, 4th column from the right) on the base plate.

Once the skis are moving freely, secure the lift to the Shift-N-Step while inserting plastic shims to compensate for the curvature of the lift base. The shims should be applied such that they prevent the bolts from bending the skis to the curved shape of the lift base.

Figure 1 below shows the recommended shim pattern:

- Two (2) shims in Column 2, inboard and outboard
- Three (3) shims in Column 3, inboard and outboard
- Two (2) shims in Column 4, inboard and outboard
- A total of 14 shims

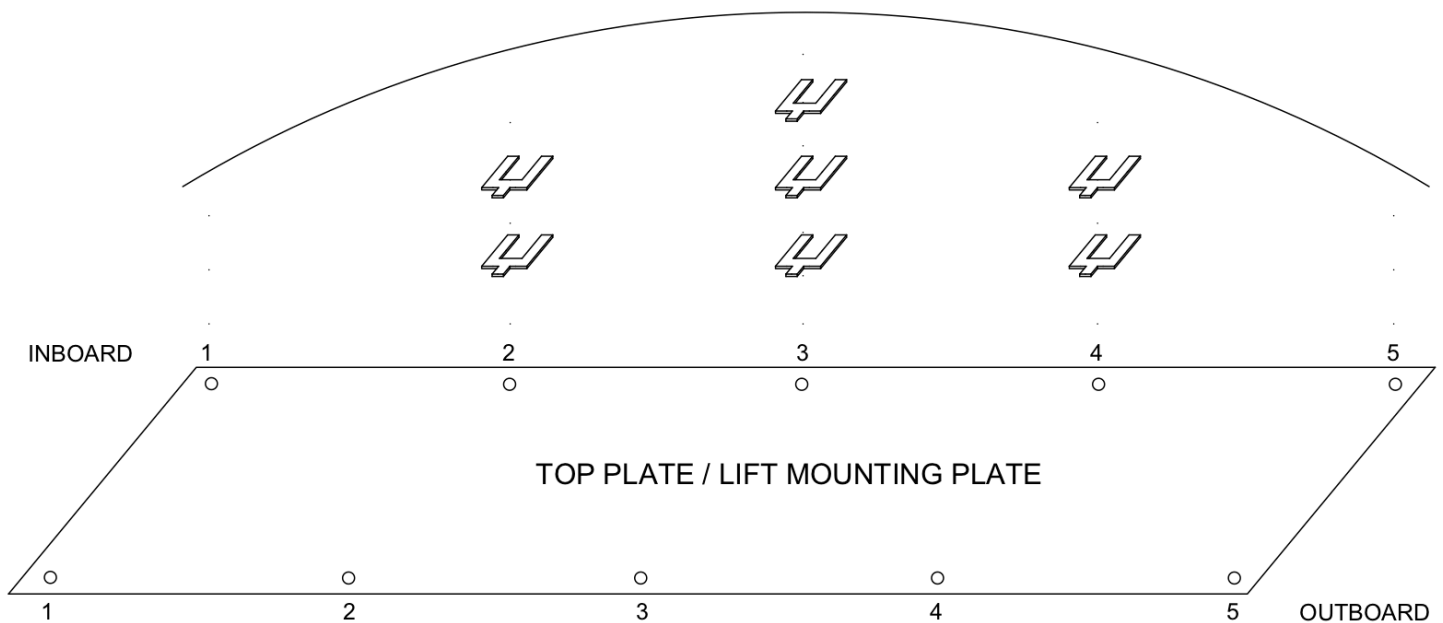


Figure 1 Shim Placement



After the lift is mounted to the ski stand-offs with the shims in place, ensure the skis are not under stress in the tracks. With the Shift-N-Step shifted full right, shine a flashlight down the tracks from the back of the vehicle to ensure the skis are parallel and true, resting flat in the tracks, according to *Figure 2*.



Figure 2 Proper ski position

If the skis are lifted off the floor of the track, as shown in *Figure 3*, first loosen the inboard and outboard bolts in Column 5, and then test shifting action. If there seems to be improvement, loosening the inboard and outboard bolts in Column 1 may help even more. If these adjustments do not improve movement, more shims may be required.



Figure 3 "Tight install" in the x-axis



Figure 4 "Tight install" in the z-axis

If the skis are “bowing”, as shown in *Figure 4*, remove the lift from the ski stand-offs, and then remove the ski stand-offs from the skis. Inspect the ski stand-off to determine the A-side (shallow mill) and the B-side (deeper mill). Rotate the ski stand-offs such that the B-sides are on the outside and re-install.

Safety Issue? - Potentially. If a “tight install” causes the Shift-N-Step to fail, the vehicle exit may be obstructed.

