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BendPak Technical Service Bulletin
Four-Post Lift Column Deformation Field Repair

BendPak TSB 200-042026 Rev. A

Overview

This Technical Service Bulletin describes the field repair of a minor column deformation along its inner and/or outer formed edge. Typically appearing at the level of the crosstube slide block, this deformation is caused by one corner of the lift's crosstube becoming restricted or locked while the other three corners descend normally. This causes the crosstube to depart its horizontal position in relation to the column. The crosstube slide block contacts and forces the column edge outward as three corners of the lift continue to descend. This is an operator-induced condition caused by improper (unlevel) lowering of the lift ramps under obstructed conditions, not a manufacturing defect.

⚠ DANGER This field repair should be attempted on ***minor*** column deformation only. If any of the following is observed in the deformation area, the Lift should be locked out and all use discontinued until the column is replaced:

- Deformation resulting in a sharp V-shape. The material has suffered irreversible damage to its internal structure.
- Deformation extends beyond the inner edge lip or outer edge into the column body
- Column shows signs of twisting, bowing, or misalignment
- Column material fractures, tearing, or splits of any dimension
- Weld separation or visible indicators of metal fatigue or corrosion
- Binding or obstruction of the crosstube travel through the column
- Paint cracking

Tools Required:

- Heavy duty C-clamp or equal
- 2 ea. plywood or equivalent ≈1 x 6 x 1/2 in. (≈25 x 152 x 13 mm)

Personal Protective Equipment (PPE)

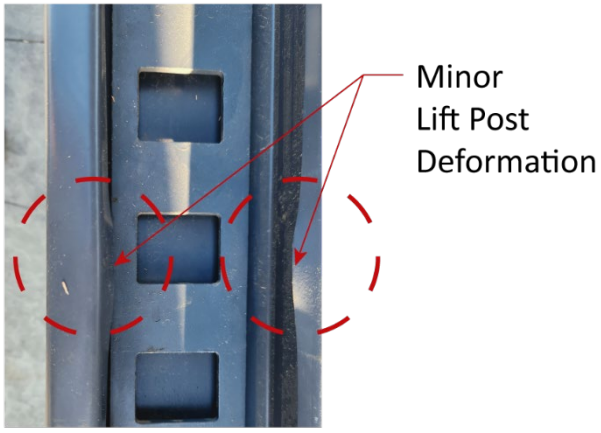
Always wear appropriate PPE when working on this Lift, including:

- Leather gloves
- Safety glasses
- Steel-toed boots

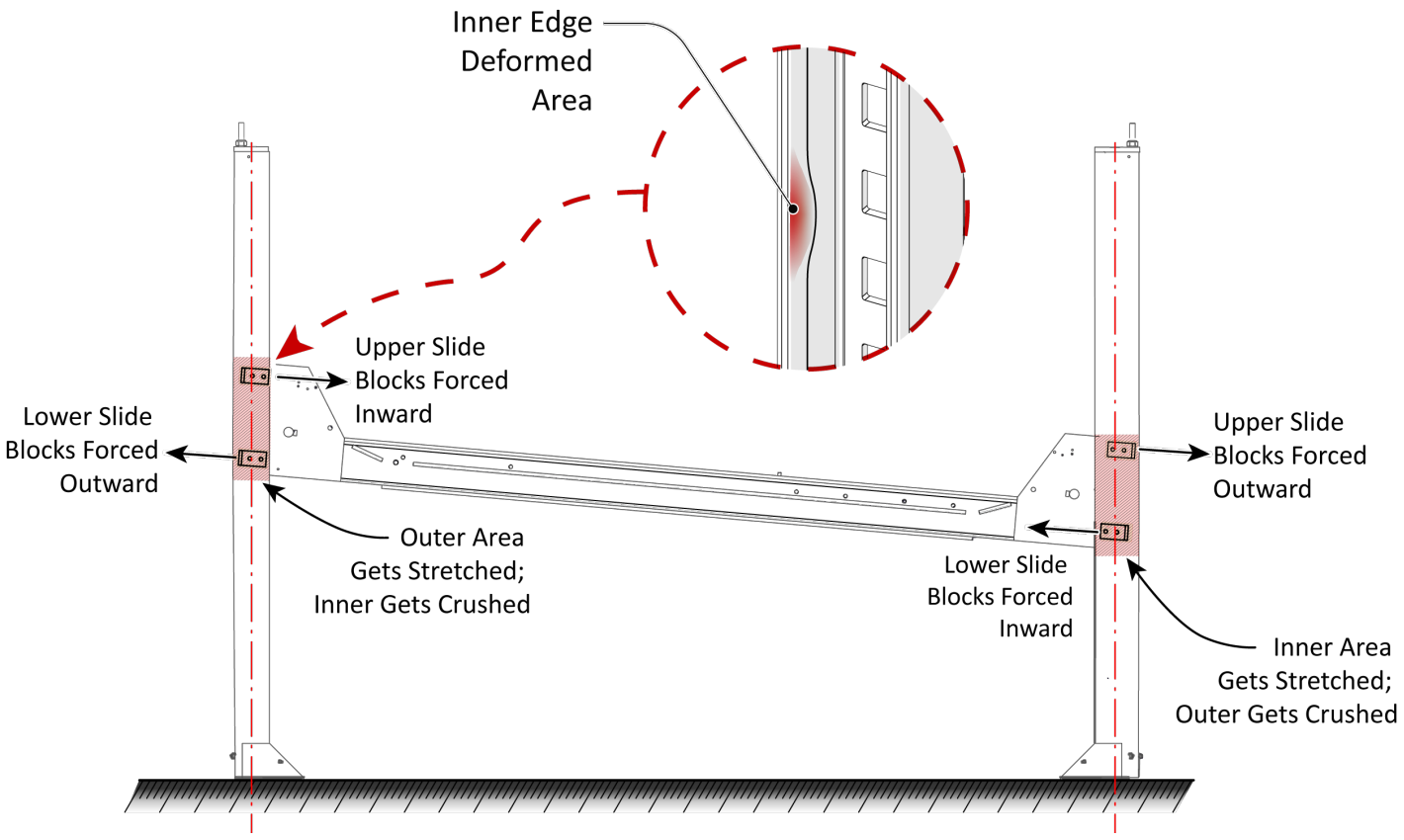
⚠ DANGER **Crushing hazard and pinch points**. Do not place any part of your body between the top ramps and any moving part of the Lift unless visual confirmation is made that the safety locks are fully engaged.

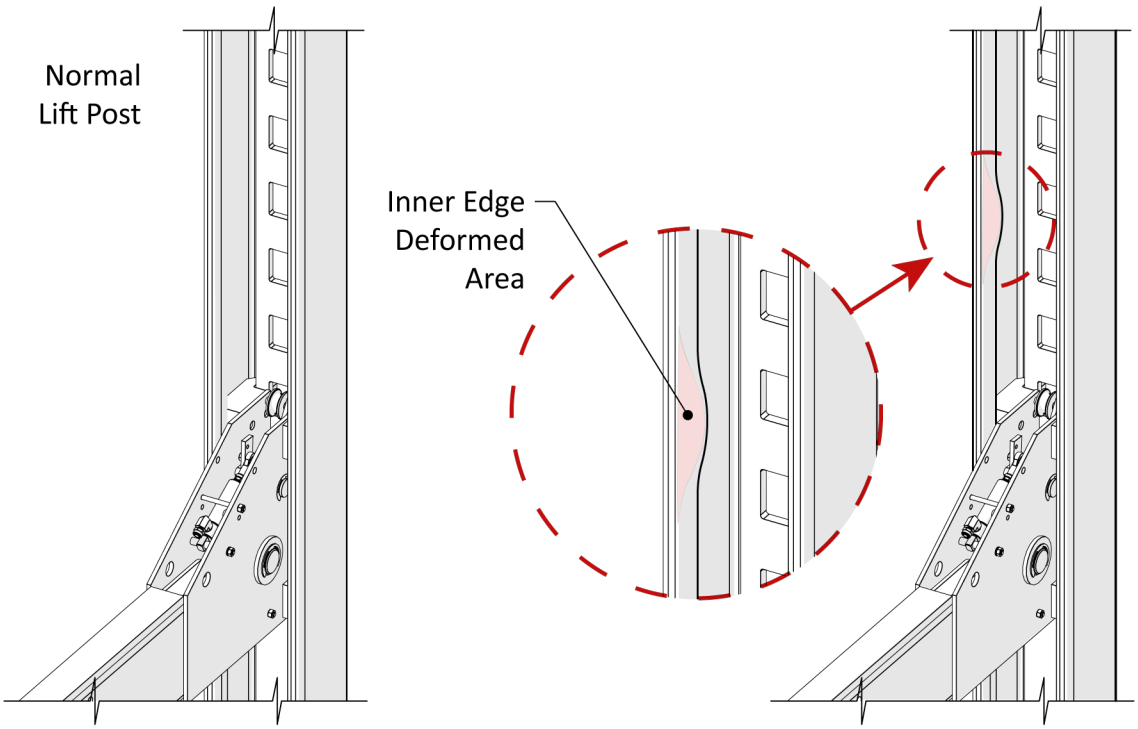
⚠ WARNING **California Proposition 65**. This product can expose you to chemicals including styrene and vinyl chloride which are on the list of over 900 chemicals identified by the State of California to cause cancer, birth defects, or reproductive harm. **ALWAYS** use this product in accordance with BendPak's instructions. For more information go to **www.P65Warnings.ca.gov**.

Inner Edge Lip Repair Procedure:



1. Read this entire procedure before beginning.
2. Gather all required tools and supplies.
3. Ensure the Lift is safe in all respects before beginning work.
    a) Both ramps are on the ground.
    b) Lockout/Tagout the Lift power and verify zero energy:
        - Turn the Lift OFF at the main disconnect/circuit breaker (or unplug if cord-connected).
        - Apply an approved lock and tag (identify technician, date/time, and reason). Keep the key in your possession.
        - Verify zero energy: attempt to operate the Lift controls (up/down). Confirm no movement occurs.
        - Do not re-energize until specifically instructed to apply power.
4. Inspect all four columns along the entire crosstube travel path.
5. Identify and mark for repair all column inner or outer edges that appear to be rolled/flared.
6. Identify any scraping or impact marks from the crosstube contact.



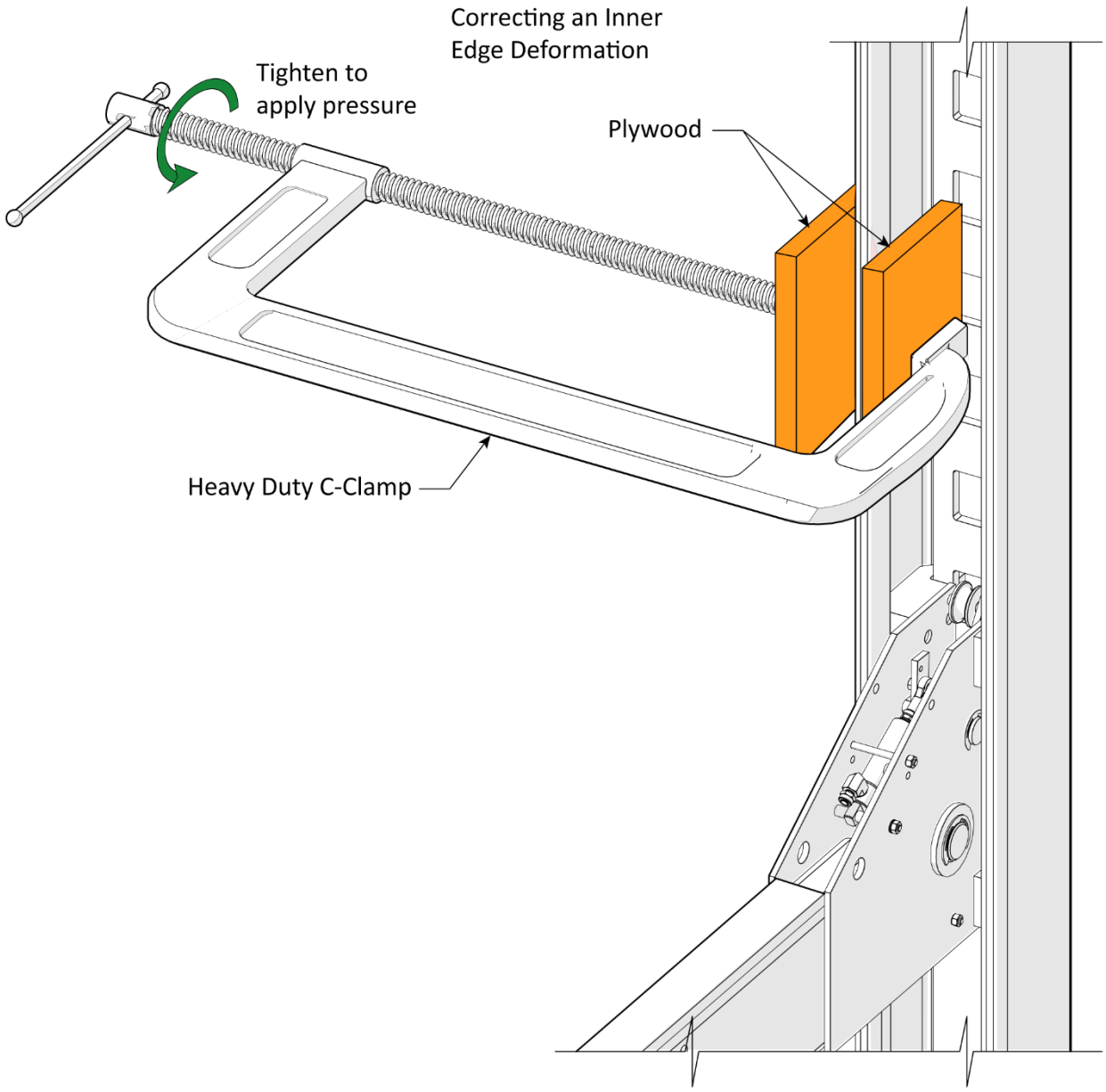


⚠ WARNING **Never:**

- Strike the column with hammers or impact tools
- Apply heat to the deformed area
- Attempt repair on structurally compromised areas

7. Position the plywood, one on each side of the damaged area at its point of maximum deformation. Refer to the illustration on the next page.
8. Place the C-clamp over the plywood and tighten to hold in place.
9. Slowly increase the pressure with the C-clamp. It will require significant force to compress the deflection.

⚠ **CAUTION** Keep hands clear of pinch points. Manual force only – no cheater bars.



10. Remove the C-clamp and plywood. The deformation is likely smaller, but still present.
11. Move the plywood and clamp up or down toward the outside of the deformation and apply pressure then release.
12. Move the plywood and clamp up or down toward the opposite side of the deformation and apply pressure then release.
13. Return the plywood and clamp to the center of the deformation and apply pressure then release.
14. Continue this process of compression, working outside to inside the deformation until it is eliminated or reduced enough to prevent interference with the crosstube motion.
15. Remove the tools from the area.

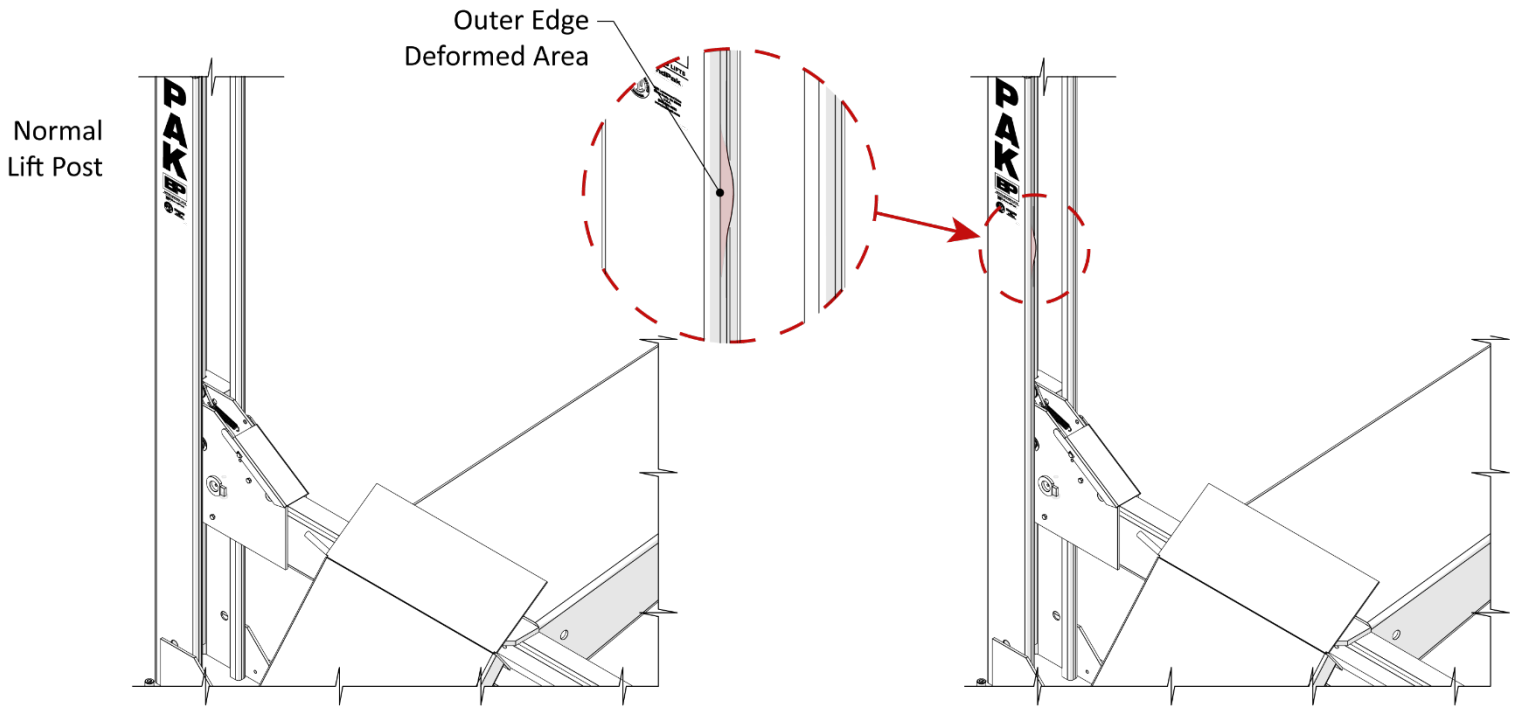
16. Apply power to the Lift.
17. Ensure that no one except the Lift operator is within 10-feet (3 m) of the Lift.
18. Press the **Up** button to raise the ramps past the repaired area.
19. Stop the Lift.

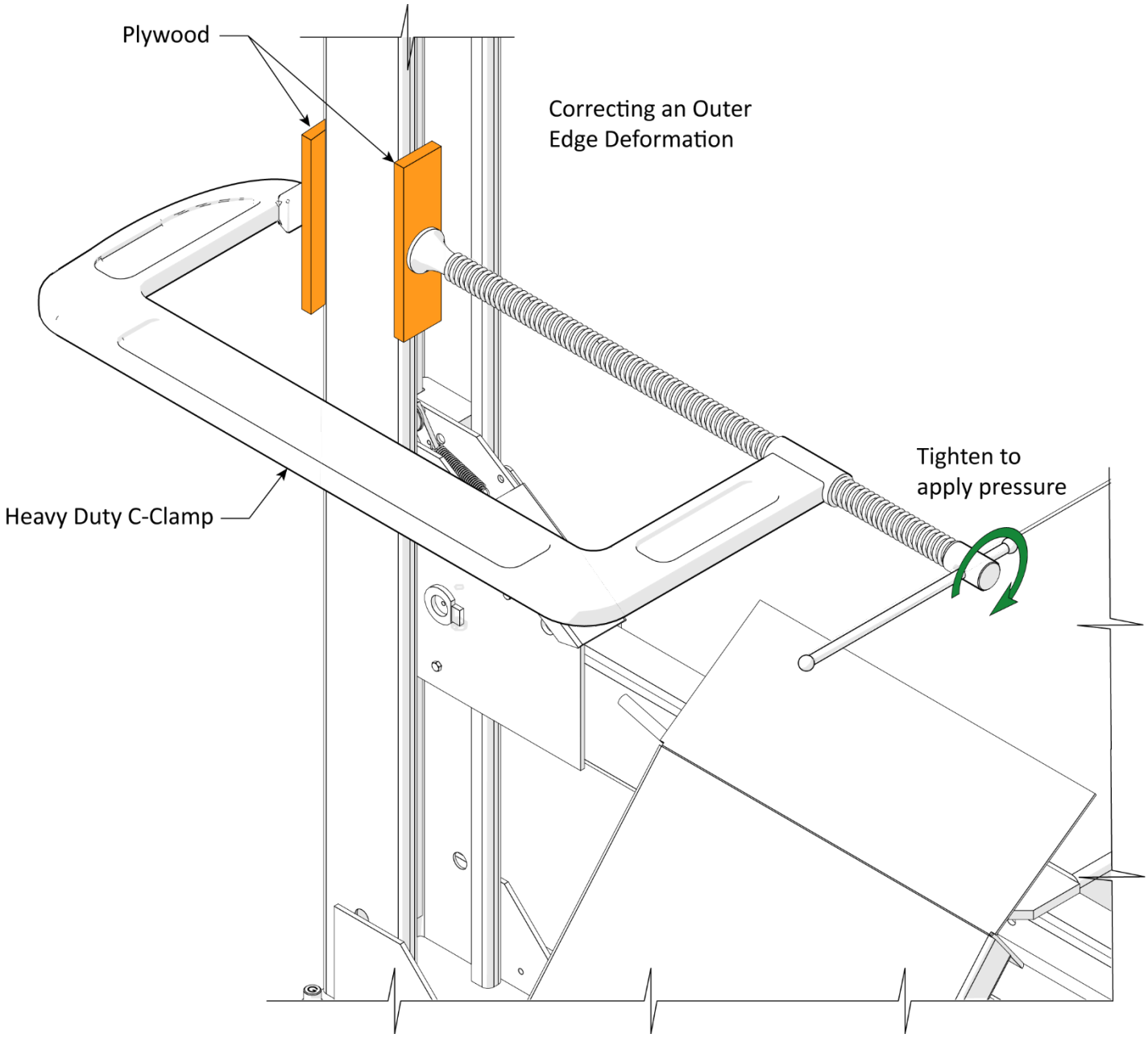
⚠ **DANGER** Pay close attention while lowering the Lift! Verify all four corners are descending evenly! If one corner remains on a safety lock while the other three corners descend, stop lowering immediately and raise the ramps to the safety lock where all four locks are engaged.

20. Press and hold the pushbutton air valve ***and*** the lowering handle *at the same time*.
21. If all four corners of the Lift are descending evenly, bring the ramps all the way to the ground then release the pushbutton air valve and the lowering handle.

Outer Edge Repair Procedure

The outer edge repair procedure is the same as the inner edge procedure with the clamp and plywood rotated 90 degrees. Refer to the following illustrations.





Repair Acceptance Criteria:

1. The crosstube must travel freely up and down the repaired column without interference.
2. The column profile must be restored sufficiently to maintain crosstube clearance and alignment.
3. There shall be no visible corrosion, cracking in the metal column / paint, or material failure present throughout the repaired column.
4. When properly repaired the Lift may be returned to normal operation, provided no cracks or structural damage are present.

Column Edge Condition – Frequently Asked Questions

Q: Is the column failing?

A: No. The column isn't failing—the edge was pushed outward by an off-level lowering event, and in minor cases it can be safely returned to its original shape.

Q: What caused the column edge to bend?

A: This is a result of lowering the lift ramps unevenly.
If one corner becomes stuck on its lock or an obstruction while the other corners continue to lower, the lift tilts slightly. That tilt puts sideload pressure inside the column, which can push the inner edge outward.

Q: Is this caused by overloading the lift?

A: No.
This condition is not related to weight or capacity. It is caused by side pressure from uneven movement, not by exceeding the lift's rated load.

Q: Can the bent edge be repaired?

A: Yes, in most cases.

If the damage is limited to the inner or outer edges (lip) only, it can typically be pressed back into shape using controlled force (such as a clamp or similar tool).

This works because:

- The edge was originally formed by bending the steel
- The repair simply returns it to its original shape

Q: Is this repair method different from how the column was originally made?

A: No—it is actually very similar.

The column edges were originally cold-formed, meaning the steel was shaped using controlled force without heat.
This repair uses that same basic principle by carefully applying controlled pressure to return the edge to its original shape.

Because the correction is limited to the non-structural edges (lip) and does not involve heat or material removal:

- It does not change the metallurgical properties of the steel
- It does not reduce the structural integrity of the column

In simple terms, this is not a structural repair, it is a controlled re-forming of the same feature using the same type of process used to create it.

Q: Does this repair affect safety or strength?

A: No—when properly done and when damage is limited to the inner or outer edges only.

The main structure of the column is unchanged, and restoring the edge does not reduce the column's lift capacity.

Q: Are the columns still safe?

A: Yes, provided there is no cracking or structural damage.

Lift columns are built with a very high safety margin:

- Industry standards require 3× capacity (300%)
- BendPak columns typically exceed 5× capacity (500%+)

That means they are designed to handle loads far beyond normal use without structural failure.

Q: When should I **NOT** attempt a repair?

A: Contact support and do not repair if the column shows any of the following:

- Cracks or tears in the metal
- Damage to welds
- A twisted or bowed column
- Deformation beyond the inner and outer edge areas

Prevention / Operator Guidance

To prevent recurrence of this damage:

- The operator is to observe the Lift and ensure all four corners lower evenly at all times.
- The operator is to stop the Lift operation immediately if:
  - The Lift ramps become unlevel
  - Any corner of the Lift hesitates or binds
- The operator is to keep columns and ramps clear of obstructions.
- The operator is to immediately stop lowering the Lift if abnormal movement is observed.
- Adjust the Lift cables whenever the safety locks engage the safety ladder unevenly. Perform the maintenance as outlined in the installation and operation manual.

BendPak Technical Support

If you experience difficulty with this repair, contact BendPak Technical Support:

- **Web: https://www.bendpak.com/support/warranty/**
- **Email: support@bendpak.com**
- **Phone: (800) 253-2363**
  Follow the prompts to reach Service. Online chat is also available