



Elevating and Amusement Devices Safety Program	Ref. No.: 306 / 24 – r1
ADVISORY	Date: July 10, 2024

Subject: Federal Elevator LULA – Verification of correct shackle assembly
Distribution: Posted on TSSA website

This advisory is intended to inform about the possibility of a suspension failure at the shackle connection to the elevator on certain Federal Elevator LULAs.

TSSA became aware of an incident that occurred during a no-load CAT 5 safety test where the rope shackles detached from the hitch plates and safety plank assembly allowing the car to fall briefly during the test.

Upon investigation, it was determined that a washer was missing from the installed assembly (see item 3 in the adjacent representation). The affected shackle assembly is the EMCO 100 installed on Federal Elevator LULAs with serial numbers F-8200 and under.

Advisory and Retrofit:

All EMCO 100 shackle assemblies on Federal Elevator LULA elevators shall have a 1/2" washer at minimum (see no. 3 in the drawing). These washers are part of the original kit for these shackles. Contractors shall verify that the 1/2" washer is present and that the shackle is installed correctly per the Federal Elevator drawing. If the washer is missing or incorrectly installed, retrofit the shackle with a 1/2" washer as per Federal Elevator specifications (contact Federal Elevator for washers). Alternatively, use a 1/2" SAE Grade 5, ASTM F346 hardened steel washer.

For a step-by-step procedure for the proper EMCO 100 shackle assembly installation, refer to the Federal Elevator Safety Bulletin attached to this advisory.

The shackle and the spring (see item 6) should also be visually inspected for any signs of wear and should be replaced accordingly.

Verification of the shackle assemblies shall be completed per the Federal Elevator Safety Bulletin (Bulletin Date/Revision: June 21, 2024 Rev. 1) and by the Timeline provided in the bulletin (see bulletin page 2/2). Failure to comply will result in orders being issued by a TSSA Inspector with a 14-day compliance period.

Notification of Verification/Retrofit Completion:

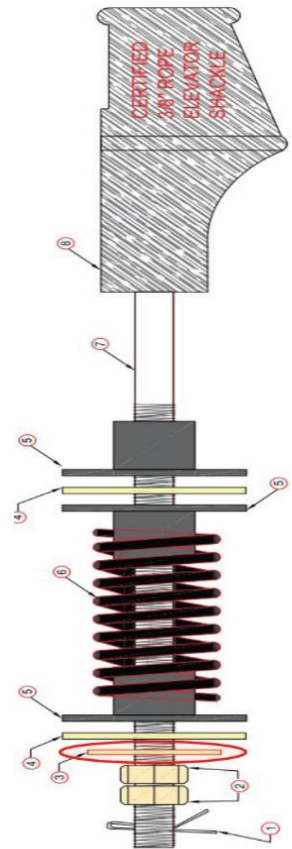
Once the shackle assembly is inspected per the Federal Elevator Safety Bulletin (Bulletin Date/Revision: June 21, 2024, Rev. 1) and TSSA Advisory 306/24-r1, the contractor shall send an email notification to TSSA per the instructions below:

Email To: eddesignsubmittal@tssa.org

Subject: Federal LULA at <address>

Body: The Federal LULA(s) identified with installation numbers: <insert installation numbers>

Located at: <insert address> have been inspected as per Federal Elevator Safety Bulletin (Bulletin Date/Revision: June 21, 2024, Rev. 1)



Federal Elevator Safety Bulletin

Bulletin Date/Revision: June.21, 2024/Rev. 1

Subject:

Confirmation of ½” washer in shackle assembly.

Sent to:

All Elevator Contractors maintaining and servicing Federal Elevator LULA Elevators

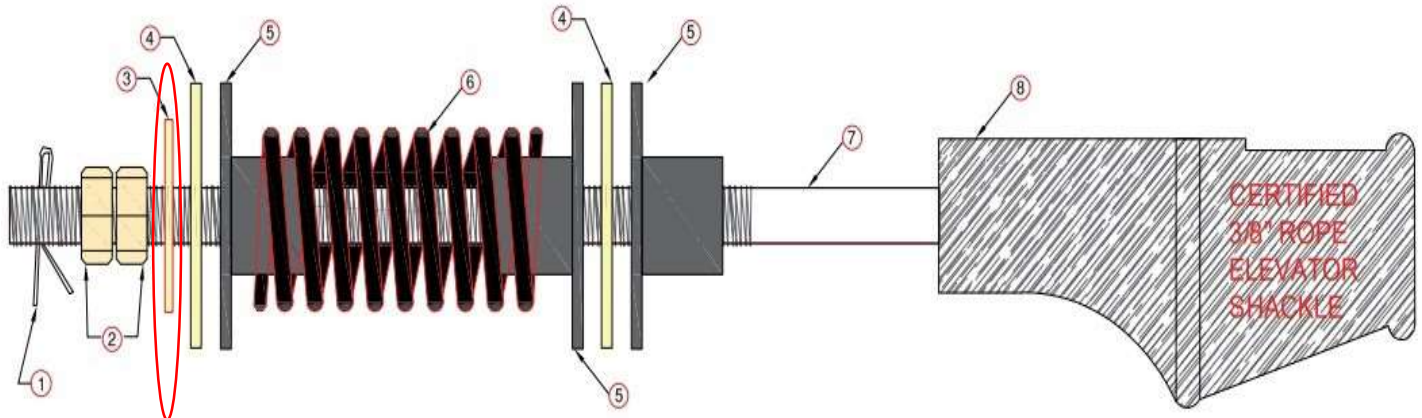
Issue found:

Some shackles may be incorrectly installed and could be missing a ½” washer. The correct shackle assembly is as per figure 1 – (see Item 3 for correct placement of the ½” washer)

Procedure:

1. Send the elevator to floor above the lowest landing.
2. Place elevator in temporary operation to allow use of temporary running buttons.
(Provided by maintenance company)
3. Open the bottom floor door using lunar key. (Provided by maintenance company)
4. Place pit switch to off position and lift pit prop to gain safe access to pit.
5. Once safe access is confirmed, install rail shoring blocks for added safety.
6. Secondary shoring blocks at height required for mechanic to work on bottom sling channel, provided by maintenance company, to be installed in pit.
7. Safely and slowly bring elevator down on shoring blocks set at height to work on shackle assembly.
8. Confirm if ½” washer is installed in the shackle assembly
 - a. If ½” washer is installed, move to step #18
 - b. If ½” washer is not installed, continue with step #9
9. Lower the cylinder to ensure there is no tension on the ropes.
10. Remove cotter pin holding hinge plate to bottom sling channel and remove ¼” hardware holding brake rod.
11. Once removed, shackle can be loosened and removed from bottom sling channel.
12. Shackle and spring to be visually checked.
 - a. Call Federal Elevator if a new shackle is required. Part No. LULA Shackle.
 - b. Call Federal Elevator if a new spring is required. Part No. LULA compression spring.
13. Additional ½” flat washer to be added between 5/8” washer and ½” nuts. See figure 1 below.
14. Re-install shackle onto bottom sling channel.
15. Reconnects brake rod and hinge plate.
16. Ensure shackle and bottom sling channel are working properly.
17. Raise elevator ensuring ropes do not get caught on anything.
18. Raise elevator to be between floors.
19. Remove all shoring blocks and exit pit safely.
20. Lower pit prop and ensure there are no obstructions left in the pit.
21. Place pit switch into the ON position
22. Close landing door.
23. Remove temporary buttons and place elevator back into automation operation.
24. Ensure elevator runs as normal.

Figure 1: Federal Elevator Shackle (Item #3 is the NEW washer to be added)



BILL OF MATERIALS		
NO.	NAME	PART NO.
1	COTTER PIN	LULA COTTER PIN
2	NUTS	LULA SHACKLE NUTS
3	1/2" WASHER	1/2" SHACKLE WASHER
4	5/8" WASHER	5/8" SHACKLE WASHER
5	ISOLATION BUSHING	SHACKLE ISOLATION BUSHING
6	SPRING	LULA COMPRESSION SPRING
7	ROD	LULA SHACKLE ROD
8	FEDERAL SHACKLE	LULA SHACKLE

Procurement:

To order parts, please send an email to techsupport@federalev.com with the address, F number for the job (ie. F-XXXX), and the parts number for the parts required

- 1/2" washer (if required) from Federal Elevator Systems Inc. using Part No. 1/2" Shackle washer
- New Shackle to be purchased (if required) from Federal Elevator Systems Inc. using Part No. LULA Shackle
- New spring to be purchased (if required) from Federal Elevator Systems Inc. using Part No. LULA compression spring

NOTE: If 1/2" washer is required, the washer will be provided free of charge and available for pick up at the address below.

Timeline to Comply:

The confirmation and possible addition must be done prior to next required Category 1 or Category 5 test (whichever comes first) from the date of this bulletin revision and must not exceed 1 year from this date.

MCP Procedures:

Category 1 test is a visual check and not a full load test as indicated in MCP

Category 5 test is a full load test as indicated in MCP