


STANDARD OPERATING PROCEDURE

Using (Jersey) Barrier Lifting Tool		Document Number: 962C-SOP-044
Original Approval Date: Apr 09, 2018	Revision Number: 2	Page 1 of 7
Latest Revision Date: Jun 22, 2022	Next Revision Date: Jun 22, 2025	Document Approval Level: 4

This document is not controlled if printed.

USING (JERSEY) BARRIER LIFTING TOOL

						
2	APP	Jun 22, 2022	Approved	L. Norris	L. Norris	T. Siver
1	APP	Apr 09, 2018	Approved	T. Siver	B. Carter	B. Palmer
Rev	Status	Rev. Date	Status Description	Prepared by	Reviewed by	Approved by

STANDARD OPERATING PROCEDURE

Using (Jersey) Barrier Lifting Tool

Document Number: 962C-SOP-044

Original Approval Date: Apr 09, 2018

Revision Number: 2

Page 2 of 7

Latest Revision Date: Jun 22, 2022

Next Revision Date: Jun 22, 2025

Document Approval Level: 4

This document is not controlled if printed.

The following is a step-by-step procedure on how to complete a specific task or meet a facility specific requirement. Standard Operating Procedures (SOPs) are written for all identified critical tasks. By virtue of the hazard or complexity associated with critical tasks it is paramount that the SOP be followed as written. SOPs contain a listing of high-level hazards associated with the task, for detailed hazard analysis reference the applicable Task Hazard Assessments. SOPs do not replace the requirements contained in the company Standards, Codes, and Processes nor does it replace the need to comply with required legislation. Section 8.0 references documentation that the worker shall understand before work commences.

1.0 PURPOSE

- To establish a Company Standard to safely and effectively carry out work as it applies to using a (Jersey) barrier lifting tool.

2.0 SCOPE AND APPLICATION

- This document applies to all Company Heavy Construction and Mining operations. Ensure all site-specific requirements are being met or exceeded before performing the task.

3.0 HAZARDS AND CONTROLS

- Inadequate or defective rigging; inadequate lifting equipment.
 - Inspect rigging prior to use and ensure in good working condition.
 - Match rigging size to the weight being lifted. Ensure rigging size is adequate for the combined weights of the lifting device and (Jersey) barrier or load.
 - If using an excavator, inspect lifting eye and ensure free from cracks or damages. Confirm lifting capacity is adequate. Follow 962C-SOP-027 Lifting with Excavators. Use competent personnel to operate excavator.
 - If using a crane, inspect before use and confirm lifting capacity is adequate. Follow 960C-SOP-404 Mobile Crane Operation.
 - Inspect lifting tool (barrier lift) prior to use. Follow inspection criteria in Appendix A.
 - Do not rig unprotected nylon slings or wire rope directly through lift bail.
- Pinch points when assembling rigging.
 - Use gloves when assembling and attaching rigging.
 - Do not place body parts in pinch points.
- Unsecure load – (Jersey) barrier or load slipping from lifting tool.
 - Ensure the surface of the load being lifted as well as the lifting tool pads are clean and free of debris, foreign material or contamination that could compromise the grip of the lifting tool.
 - Position lifting tool at or near centre of (Jersey) barrier (load).
 - Ensure no personnel are in area while lifting tool is being moved. Use tag lines to control movement and assist in centering on (Jersey) barrier (load).
 - Perform a test lift (raise a few inches off ground) to confirm securement of load in lifting tool prior to lifting and moving barrier to designated location.

STANDARD OPERATING PROCEDURE

Using (Jersey) Barrier Lifting Tool

Document Number: 962C-SOP-044

Original Approval Date: Apr 09, 2018

Revision Number: 2

Page 3 of 7

Latest Revision Date: Jun 22, 2022

Next Revision Date: Jun 22, 2025

Document Approval Level: 4

This document is not controlled if printed.

- Unstable load or uncontrolled movement of load.
 - Use tag lines to control movement of lifting tool or load being lifted.
 - Do not handle loads that are not centred in the lifting tool.
 - Personnel are not permitted under suspended load.
 - Use controlled movements to lift load. Do not jerk or jar the load. Do not shock load.
- Crush points when attaching lifting tool to load.
 - Personnel must be clear from area before lifting load.
 - Do not use body parts to move lifting tool into position.
- Suspended load.
 - No personnel are permitted under a suspended load.
- Improper use of lifting tool.
 - Do not drag loads. Only use the tool to lift loads.
 - Do not use lifting tool to pick multiple items in a single pick.
- Overhead hazards when lifting.
 - Inspect work area before lifting and confirm there are no overhead hazards.
 - Use spotters, designate primary spotter.
- Load contacting personnel, equipment or material in work area.
 - Control work area; only authorized personnel are permitted in area.
 - Use spotters, designate primary spotter.
 - Inspect work area prior to lift and confirm location of materials and equipment in the area.
 - Use tag lines.
- Working within close proximity to lifting equipment (within swing radius of excavator).
 - Follow 962C-SOP-041 Approaching Equipment.
 - Use spotters, designate primary spotter.
- Poor or inadequate communication.
 - Establish a communication plan prior to the task and ensure everyone understands signals. Follow 962C-SOP-008 Signaling Equipment.
- Uncontrolled work area.
 - Use flagging, barriers or an alternative effective method to identify work area and control access.
 - Only authorized personnel are permitted in work area.

STANDARD OPERATING PROCEDURE

Using (Jersey) Barrier Lifting Tool

Document Number: 962C-SOP-044

Original Approval Date: Apr 09, 2018

Revision Number: 2

Page 4 of 7

Latest Revision Date: Jun 22, 2022

Next Revision Date: Jun 22, 2025

Document Approval Level: 4

This document is not controlled if printed.

4.0 CHECKLIST

- Attend all preparatory meetings (IE: daily PSI; job scope; review of JSA's and SOP's for the job).
- Complete FLRA cards before starting the work.
- Ensure all personnel involved in the task are aware of the hazards and the controls to be used, as identified in the SOP's; JSA's; and FLRA's.
- Conduct a pre-job inspection of all equipment to be worked on and tools to be used.
- Standard of Training required for working on this job: On-the job training.**

5.0 DEFINITIONS

5.1 Company

Means North American Construction Group Ltd. (NACG) and all directly or indirectly owned subsidiary companies, including joint ventures.

5.2 Company Personnel

Includes the Company's employees, officers, directors, agents, associates, consultants/contractors, temporary employees, and third-party processors.

5.3 HSE

Refers to the Health, Safety & Environment department

5.4 Barrier Lift

Engineered lifting tool designed for hands free (Jersey) barrier placement.

6.0 PROCEDURE

1. Attach barrier lift (lifting tool) using shackles and sling. If using an excavator, ensure bucket is grounded and operator out of the cab while attaching rigging.
2. Lift barrier lift and place tension on rigging. This will open the clamp.
3. Centre barrier lift on the barrier (load to be lifted).
4. Slowly lower barrier lift onto load until there is slack in the rigging. This will close the clamp.
5. Once clamp is secure on the barrier, slowly raise load (do not jerk) and move to designated location. Use taglines to control movement and ensure personnel are not under suspended load.
6. Place barrier at designated location (do not slam the load). Continue to lower lifting equipment until there is slack in the rigging. This will release the clamp.

STANDARD OPERATING PROCEDURE

Using (Jersey) Barrier Lifting Tool

Document Number: 962C-SOP-044

Original Approval Date: Apr 09, 2018

Revision Number: 2

Page 5 of 7

Latest Revision Date: Jun 22, 2022

Next Revision Date: Jun 22, 2025

Document Approval Level: 4

This document is not controlled if printed.



1. Attach barrier lift using shackles and sling

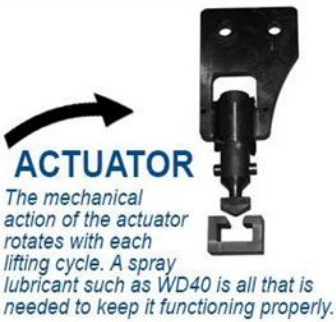
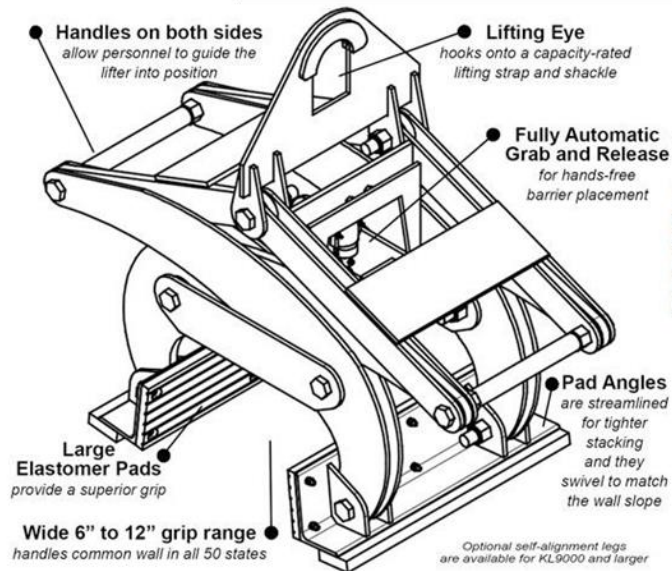
2. Center lift on the barrier

3. Lower lifting tool until there is slack in the sling, slow to minimize impact

4. Raise barrier and place, use a smooth motion, do not jerk.

5. Release by lowering the lifting tool until there is slack in the sling

Lubricate Actuator before use and after use before storing, using lubricant such as WD40



7.0 NOTES

If this task is to be done by a method different than described in this SOP, the work must **STOP** and the alternate method must be **DOCUMENTED** with an adequate hazard assessment tool such as a JSA. The document must be **APPROVED** by a supervisor before such procedures are implemented.

STANDARD OPERATING PROCEDURE

Using (Jersey) Barrier Lifting Tool

Document Number: 962C-SOP-044

Original Approval Date: Apr 09, 2018

Revision Number: 2

Page 6 of 7

Latest Revision Date: Jun 22, 2022

Next Revision Date: Jun 22, 2025

Document Approval Level: 4

This document is not controlled if printed.

8.0 REFERENCES

Alberta Occupational Health and Safety Act, Regulation and Code – {Part6 Cranes, Hoists and Lifting Devices}

- 960C-SOP-404 Mobile Crane Operation
- 962C-SOP-027 Lifting with Excavators
- 962C-SOP-008 Signaling Equipment
- 962C-SOP-042 Approaching Equipment
- 950C-C-008 Cranes Hoists and Rigging Code
- Kenco KL9000 Barrier Lift Operators Manual

9.0 APPENDICES

- Appendix A – Inspection Criteria for Kenco Kenlift Barrier Lift

Appendix A – Inspection Criteria for Kenco Kenlift Barrier Lift

STANDARD OPERATING PROCEDURE

Using (Jersey) Barrier Lifting Tool

Document Number: 962C-SOP-044

Original Approval Date: Apr 09, 2018

Revision Number: 2

Page 7 of 7

Latest Revision Date: Jun 22, 2022

Next Revision Date: Jun 22, 2025

Document Approval Level: 4

This document is not controlled if printed.



170 State Route 271
Ligonier, PA 15658
1-800-653-6069

Section VII. Inspection Criteria

THE KENLIFT® UNIT AND ALL OF ITS ASSOCIATED COMPONENTS SHALL BE REMOVED FROM SERVICE AND TAGGED APPROPRIATELY UNTIL RECERTIFICATION BY A QUALIFIED INDIVIDUAL IN ANY OF THE FOLLOWING CONDITIONS:

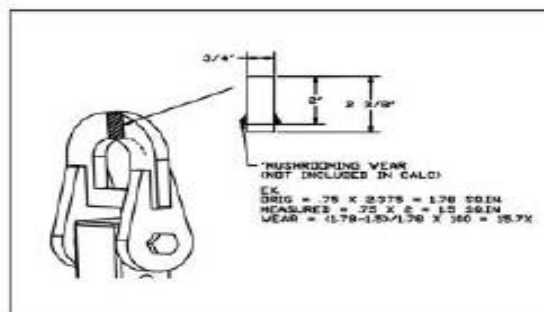
A. General

1. Cracking in any component or member.
2. Cracking in any weld.
3. Visible distortion in any member.
4. Visible distortion in any Bolt/Pin/Shaft.

B. Specific

1. Lift Bail

- a. The lift bail shall be replaced if a 20% loss in cross-sectional area from the original member(s) can be demonstrated. Note: cross section of welds, "mushroomed" wear faces, and burrs are not accounted for as cross-sectional area. (See ill.)



2. Holes

- a. Any members through which bolted or pinned connections pass shall be replaced if a 10% loss in cross-sectional area from the original member(s) can be demonstrated. Note: cross section of welds, "mushroomed" wear faces, and burrs are not accounted for as cross-sectional area.

3. Pins/Bolts

- a. Any visible deformation of a pin, shaft or bolt shall require replacement of that part.

4. Pads – Replace if:

- a. For units utilizing urethane gripping pads, if surface of any given mounting bolt is not at least 3/32" below the surface of the pad.
- b. Any de-lamination of the pad from the backing plate.
- c. Any scarring, chunking, or missing pad material constituting a total combined loss of surface area greater than 3 sq. in. per pad.
- d. Any single scar, chunk, or missing pad face that is greater than 1 sq. in per pad.