STANDARD OPERATING PROCEDURE		
Lifting and Securing an OTR Machine Using Its Hydraulic Implements		Document Number: 960C-SOP-804
Original Approval Date: Feb 04, 2010	Revision Number: 4	Page 1 of 5
Latest Revision Date: Mar 30, 2022	Next Revision Date: Mar 30, 2025	Document Approval Level: 4

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LIFTING AND SECURING AN OTR MACHINE USING ITS HYDRAULIC IMPLEMENTS

						Thomas
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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 raising and lowering an Off the Road (OTR) machine using its hydraulic implements.

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

- Uncontrolled movement of equipment.
 - Isolate all forms of hazardous energy as per 950C-C-028 Hazardous Energy Isolation Code.
 Ensure Park brake is applied.
 - Use wheel chocks where applicable and ground all implements.
 - Follow 960C-SOP-111 Live Work; establish communication plan and designate spotters prior to using hydraulics to lift equipment.
 - Operator will stand outside cab when stands/blocking are being placed and removed; engage hydraulic lock out (if available) prior to leaving the cab.
 - Only competent operators are permitted to operate the equipment.
 - Do not rely on unit hydraulics for support. Use properly rated stands or blocks.
- Equipment falling off stands.
 - Use stands rated for the weight of the equipment and install under manufacturer designated lifting points.
 - Ensure equipment and stands are on firm level ground. Use steel plates if unit is in an area without a concrete pad.
 - To prevent load from slipping, metal to metal contact between stand and load is not permitted. Ensure a barrier (i.e., piece of rubber, softener, etc.) is placed between the stand and the contact surface of the load.
- Uncontrolled work area.
 - Keep work area clear of unnecessary tools, equipment, and personnel, erect barriers as required.



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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

6.0 PROCEDURE

NOTE: This is a LIVE WORK task. Follow 960C-SOP-111 Live Work: Working on Equipment While it is Running.

6.1 Raising

- (a) Conduct FLRA & Live Work Checklist prior to beginning task. Review FLRA with all parties involved (operator and maintenance personnel) to ensure a safe work plan has been communicated and primary spotter has been designated.
- (b) Park unit on level, solid ground.
- (c) Operator will set brakes, lower implements.
- (d) Primary spotter will direct operator from a safe location using hand signals to raise the unit using the equipment's hydraulic attachments.
- (e) Once the unit is at the proper height, the equipment operator will engage the hydraulic lock out (if equipped) and exit the cab <u>BEFORE</u> maintenance personnel place safety stands and/or blocks under designated blocking points. No personnel shall go under the raised equipment at any time.
- (f) Once stands are placed and maintenance personnel have cleared the area, the operator will enter the cab.



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- (g) From a safe location, the primary spotter will direct the operator using hand signals to lower the unit until its weight is resting on the stands and/or blocks.
- (h) Once the unit is resting safely and securely on the stands and/or blocks, the unit will be locked out in accordance with 950C-C-028 Hazardous Energy Isolation Code PRIOR to any maintenance activities being performed.

6.2 Lowering

- (a) Perform a walk around prior to lowering the vehicle and remove any tools or obstructions.
- (b) Conduct FLRA & Live Work Checklist prior to beginning task. Review FLRA with all parties involved (operator and maintenance personnel) to ensure a safe work plan has been communicated and primary spotter has been designated.
- (c) Remove lock out to facilitate unit operation.
- (d) Primary spotter will direct operator from a safe location using hand signals to raise the unit using the equipment's hydraulic attachments. Unit will be raised enough to facilitate removal of stands and/or blocks.
- (e) Once the unit is at the proper height, the equipment operator will engage the hydraulic lockout (if equipped) and exit the cab <u>BEFORE</u> maintenance personnel remove the safety stands and/or blocks. No personnel shall go under the raised equipment at any time.
- (f) Remove stands and place safely out of the way.
- (g) Once stands are removed and personnel are cleared from the area, the operator will enter the cab.
- (h) From a safe location, the primary spotter will direct the operator using hand signals to lower the unit until it is resting on ground.
- (i) The operator will set the unit's brakes, lower any implements to the ground, shut down the equipment and exit the cab.

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.

8.0 REFERENCES

- Jack manufacturer's operation manual
- Equipment manufacturer's manual for appropriate lifting / jacking points



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- Alberta Occupational Health and Safety Act, Regulation and Code
- 960C-SOP-111 Live Work: Working on Equipment While it is Running
- 960C-SOP-504 Hand Tools; Use of
- 950C-C-028 Hazardous Energy Isolation Code

9.0 APPENDICES

No appendices.

