



BASELINE RISK ASSESSMENT

Task: Replacement of Telescopic Boom Inner Section (Part #332/F4206 - Boom Inner, Machined 36ft)

Equipment: JCB 510-56 / 506.36 Telehandler | Lifting method: SECOND TELEHANDLER w/ JIB HOOK ATTACHMENT (no overhead crane in shop)

SUB-TASK	HAZARD/WHAT IF SCENARIO	POSSIBLE CAUSES	CURRENT CONTROLS	RESOURCES / PROCEDURES	FATAL RISK CRITICAL CONTROLS	LIKELIHOOD	SEVERITY	RISK RANKING	RECOMMENDED ADDITIONAL CONTROLS	LIKELIHOOD	SEVERITY	RISK RANKING
1. Job Planning, Management of Change & Permit	Work proceeds without proper planning / scope creep; modification not authorized	No management-of-change (MOC); engineering drawings/specs not reviewed; non-OEM parts	Job planned with supervisor and OEM JCB service & parts manuals (510-56 / 506.36); correct OEM part confirmed (332/F4206 Boom Inner Machined 36ft); JHSC/HSR notified	JCB Service Manual 9813/5050; OEM Parts Manual (506.36 / B510); Company MOC procedure	Written, authorized management-of-change completed before work starts (O. Reg. 854 s.55.1-5.3). Where drawings/specs involve professional engineering, they are prepared/checked, signed, dated & sealed by an engineer	Possible	Major	MEDIUM RISK	Formal MOC sign-off; pre-job risk assessment reviewed with all workers; confirm part authenticity and revision; engineer sign-off where required	Not Likely	Moderate	MEDIUM RISK
	Worker not competent / untrained for major structural boom teardown	Task assigned to worker lacking telehandler boom experience; no manufacturer procedure followed	Only competent, trained personnel assigned; mining Common Core / specialty modules current; OEM procedure available on site	O. Reg. 854 s.11; Common Core training records; OEM Service Manual	Employer provides information, instruction and supervision (OHSA s.25(2)(a)); only competent persons perform the work	Possible	Major	MEDIUM RISK	Verify training records before start; pair less-experienced worker with competent lead; toolbox talk on full sequence	Not Likely	Moderate	MEDIUM RISK
	Inadequate or incorrect tooling / lifting gear selected	Slings, chains, jacks or stands not rated for boom mass; gear not inspected	Rated lifting devices, slings and stands selected per load; pre-use inspection of all rigging	O. Reg. 854 (lifting devices); CSA B335 / B167; OEM lifting points	Lifting device constructed of adequate strength, examined by a competent person, marked with rated load (O. Reg. 854 / Reg. 851 s.51); rigging inspected before use	Possible	Major	MEDIUM RISK	Calculate/obtain boom section mass from OEM; tag-out defective gear; keep current inspection records on site	Rare	Moderate	LOW RISK
	Poor housekeeping / congested work area in bay	Long boom sections, removed covers and tooling create trip & struck-by hazards	Designated lay-down area; floor kept clear of obstructions and oil; barricade work zone	Reg. 851 s.11 (floors/obstructions); company housekeeping standard	Take every precaution reasonable in the circumstances (OHSA s.25(2)(h))	Has Happened	Minor	MEDIUM RISK	Pre-stage lay-down stands; spill kit on hand; cordon area and post signage	Not Likely	Insignificant	LOW RISK
2. Move Machine to Bay & Isolate / Lock-Out (De-energize)	Machine moves / rolls during work (struck-by, crushing)	Park brake not applied; not chocked; on a grade; another worker moves machine	Machine parked on firm level ground, park brake applied, transmission neutral, wheels chocked, key removed	OEM operator manual; Reg. 854 s.108; company LOTO procedure	Wheels chocked and machine immobilized before any work; key under control of worker performing maintenance	Possible	Major	MEDIUM RISK	Apply chocks both directions; 'Do Not Operate' tag at controls; confirm level ground	Not Likely	Moderate	MEDIUM RISK
	Unexpected start-up / inadvertent boom or ram movement	Engine/electrical not isolated; hydraulics still pressurized; controls bumped	Engine off, battery isolator off, starter key removed and controlled; controls cycled to relieve pilot pressure	O. Reg. 854 s.108; Reg. 851 s.75/76; CSA Z460 (control of hazardous energy)	Energy sources isolated and locked/tagged before maintenance; control switches locked out so starting cannot endanger a worker (Reg. 851 s.76)	Possible	Catastrophic	HIGH RISK	Apply personal lock & tag; verify zero energy state (try-start / cycle controls); written LOTO procedure for this machine	Rare	Major	MEDIUM RISK
	Hydraulic stored energy / accumulator discharge	Pressure trapped in extension ram, hoses or accumulator after shutdown	Hydraulics de-pressurized; controls operated with engine off to bleed pilot/residual pressure; lower boom fully before isolation	JCB Hydraulic Service Manual; CSA Z460; OEM ram dismantling cautions	All hazardous energy (hydraulic, mechanical, gravitational) released, blocked or locked before work (control of hazardous energy)	Possible	Major	MEDIUM RISK	Bleed/relieve hydraulic pressure & confirm zero pressure at gauge; crack fittings slowly; PPE for fluid injection	Not Likely	Moderate	MEDIUM RISK
	Electrical hazard during isolation	Live battery/electrical circuits; short or arc while disconnecting	Battery isolator opened; negative terminal removed first; insulated tools	OEM electrical manual; Reg. 854; CSA Z462 awareness	Electrical energy isolated and locked out before work (control of hazardous energy)	Not Likely	Moderate	MEDIUM RISK	Lock battery isolator; verify dead; cover exposed terminals	Rare	Minor	LOW RISK