

Boom Truck Operator On-The-Job Checklist



	Level 1	Page 1/3
Red Seal Tasks	On-The-Job Duties	Completed
Performs safety-related functions	Clean windows & remove clutter from the operator's cabin	<input type="checkbox"/>
	Select & inspect PPE equipment such as fall protection	<input type="checkbox"/>
	Participate in completion of a hazard analysis & pre-trip inspection checklist	<input type="checkbox"/>
Uses communication & mentoring techniques	Communicate with rigging leader & signal person using a radio or hand signals	<input type="checkbox"/>
Determines load weights	Assist the Journeyperson with determining the weight of an object	<input type="checkbox"/>
	Calculate the weight of a simple lift including rigging & verify with supervisor	<input type="checkbox"/>
Calculates boom truck capacity	Refer to the boom truck's load charts to find the optimal boom length & angle for the measured radius	<input type="checkbox"/>
	Identify the correct load chart for the lift	<input type="checkbox"/>
Performs rigging calculations	Calculate rigging lifting capacity based on sling angle & confirm with Supervisor	<input type="checkbox"/>
	Perform WLL calculations & confirm with supervisor	<input type="checkbox"/>
Performs pre-operational checks & regular inspections	Check engine oil levels & top up as required	<input type="checkbox"/>
	Inspect air hoses for cracks or leaks	<input type="checkbox"/>
	Verify battery system is providing correct voltage	<input type="checkbox"/>
	Check & top-up hydraulic oil levels	<input type="checkbox"/>
	Inspect chassis for loose fasteners, missing pins & signs of metal fatigue	<input type="checkbox"/>
	Verify the outriggers/stabilizers extend fully	<input type="checkbox"/>
	Document results of a boom inspection in the maintenance log	<input type="checkbox"/>
	Perform a post-operational check on the support base & document any concerns	<input type="checkbox"/>
Loads & unloads components for transport	Assist the Journeyperson in load securement to learn proper load placement	<input type="checkbox"/>
	Assist unloading by laying out blocking for unloaded components	<input type="checkbox"/>

All work performed in this checklist is to be done under the supervision and guidance of a certified journeyperson

Boom Truck Operator On-The-Job Checklist



	Level 1	Page 2/3
Red Seal Tasks	On-The-Job Duties	Completed
Performs operational & continual checks	Completes function check of controls prior to beginning operation	<input type="checkbox"/>
	Verifies the operation of warning systems & automatic cutouts as per manufacturer instructions	<input type="checkbox"/>
	Maintain tension on hoist lines during operation to prevent wire rope damage	<input type="checkbox"/>
	Verify level sensor operation prior to use	<input type="checkbox"/>
	Monitor ground conditions during operation	<input type="checkbox"/>
Performs minor maintenance	Verify the service history of a machine during inspection	<input type="checkbox"/>
	Apply grease to outriggers to prevent corrosion as part of a regular maintenance schedule	<input type="checkbox"/>
	Lubricate the wire rope & sheaves as part of a regular maintenance schedule	<input type="checkbox"/>
	Assist in the replacement of damaged or leaking air lines	<input type="checkbox"/>
Inspects, maintains & stores slings & hardware	Inspect & lubricate wire rope slings prior to storage	<input type="checkbox"/>
	Remove outdated rigging from service until it can be inspected	<input type="checkbox"/>
	Ensure damaged rigging that fails inspection is removed from service & destroyed	<input type="checkbox"/>
	Rigging is organized & stored to prevent damage	<input type="checkbox"/>
Follows rigging procedures	Identify the rigging required for a basic shaped load with the assistance of their supervisor	<input type="checkbox"/>
	Rigs a load using a using standard rigging equipment	<input type="checkbox"/>
	Guide a load into position using a tagline	<input type="checkbox"/>
Performs pre-lift planning	Attend & participate in a pre-lift planning meeting	<input type="checkbox"/>
	Identify how changes in weather conditions impact operations	<input type="checkbox"/>
Sets up boom truck	Inspect the lifting area to spot hazards such as soft ground	<input type="checkbox"/>
	Identify setup location based upon the task assigned	<input type="checkbox"/>
	Prevent unauthorized access to the lifting area by installing barriers, flagging, or assigning personnel to control entry	<input type="checkbox"/>

All work performed in this checklist is to be done under the supervision and guidance of a certified journeyperson

Boom Truck Operator On-The-Job Checklist



	Level 1	Page 3/3
Red Seal Tasks	On-The-Job Duties	Completed
Drives boom truck on public roadways	Identify the requirements to transport a boom truck on public roadways	<input type="checkbox"/>
	Verify equipment is secured for highway transport including outriggers, boom & rigging components	<input type="checkbox"/>
	Transports boom truck to site according to SGI & transportation regulations	<input type="checkbox"/>
Performs common craning operations	Adjust LMI to match the configuration used during a lift	<input type="checkbox"/>
	Determine a pathway into the work area	<input type="checkbox"/>
Operates boom truck	Understand the use & limitations of a boom truck	<input type="checkbox"/>
Secures boom truck	Lower load to the ground when exiting the operator's cab	<input type="checkbox"/>
	Lubricate & store a boom truck according to manufacturer recommendations	<input type="checkbox"/>

All work performed in this checklist is to be done under the supervision and guidance of a certified journeyperson

Boom Truck Operator On-The-Job Checklist



	Level 2	Page 1/2
Red Seal Tasks	On-The-Job Duties	Completed
Determines load weights	Verify lift weight using manual calculations	<input type="checkbox"/>
	Calculate the weight of complex shaped load	<input type="checkbox"/>
Calculates capacity	Understand the limitations of lifting quadrants & positions boom truck to maximize lifting capacity & reach	<input type="checkbox"/>
	Identify the load chart used with optional components such as a jib extension & spreader bar	<input type="checkbox"/>
Performs rigging calculations	Perform WLL calculations for equal length slings	<input type="checkbox"/>
	Derate a sling's capacity based upon the rigging configuration	<input type="checkbox"/>
Performs pre-operational checks & regular inspections	Verify engine service intervals	<input type="checkbox"/>
	Verify the air compressor activates when required	<input type="checkbox"/>
	Inspect & verify electrical connections including connections to controls, trailing cables & safety devices	<input type="checkbox"/>
	Check for hydraulic leaks by using approved methods	<input type="checkbox"/>
	Verify that fasteners & pins are installed & secured prior to operation	<input type="checkbox"/>
	Compare hoist configuration to load charts to verify boom truck capacity is not exceeded by the lift	<input type="checkbox"/>
	Extend & retract the boom, testing the functionality of any attachments while listening for vibrations or unusual noises	<input type="checkbox"/>
Inspect the hoisting line for any signs of damage or stress	<input type="checkbox"/>	
Performs minor maintenance	Apply grease to the hoisting cable & sheeves	<input type="checkbox"/>
	Inspect press fitting for damage or corrosion	<input type="checkbox"/>
	Replace damaged or leaking air lines	<input type="checkbox"/>
Inspects, maintains & stores slings & hardware	Disassemble & lubricate a spreader bar then reassemble	<input type="checkbox"/>
	Remove a kinked or damaged steel sling from service	<input type="checkbox"/>
	Dispose a worn nylon sling by cutting it up	<input type="checkbox"/>
	Perform a post-use inspection of slings & hardware	<input type="checkbox"/>

All work performed in this checklist is to be done under the supervision and guidance of a certified journeyperson

Boom Truck Operator On-The-Job Checklist



	Level 2	Page 2/2
Red Seal Tasks	On-The-Job Duties	Completed
Performs operational & continual checks	Verify & document the function of cutouts, alarms & wind sensors	<input type="checkbox"/>
	Verify the operation of the LMI system by lifting a load off the ground at its maximum reach	<input type="checkbox"/>
	Ensure that the tag line does not get caught on structure while hoisting	<input type="checkbox"/>
	Monitor hydraulic pressure & load indicators during a lift	<input type="checkbox"/>
	Utilize sensors to track the distribution of weight during a lift & detect any movement in the support base	<input type="checkbox"/>
Follows rigging procedures	Calculate the rigging required for a complex shaped load	<input type="checkbox"/>
	Use rigging to stabilize a load with an offset center of gravity	<input type="checkbox"/>
	Lift load off the ground to test the rigging configuration	<input type="checkbox"/>
Performs pre-lift planning	Provides input during the pre-lift planning meeting	<input type="checkbox"/>
	Identifies the hazards of lifting an unbalanced load	<input type="checkbox"/>
Sets up boom truck	Inspect setup area for ground condition, worker access, boom reach, & position	<input type="checkbox"/>
	Determine boom truck position based upon assigned task & load	<input type="checkbox"/>
	Limit access to hoisting area to authorized personnel	<input type="checkbox"/>
Performs common craning operations	Set the load limit indicator	<input type="checkbox"/>
	Identify lift hazards & procedures to mitigate them	<input type="checkbox"/>
Operates boom truck	Position boom truck to avoid electrical hazards	<input type="checkbox"/>
	Operate a boom truck larger than 15.5 tons	<input type="checkbox"/>
Performs specialty craning operations	Complete a pick and carry operation	<input type="checkbox"/>
Secures boom truck	Secures boom truck from unauthorized use while unattended	<input type="checkbox"/>
	Apply grease to exposed areas to prevent corrosion	<input type="checkbox"/>

All work performed in this checklist is to be done under the supervision and guidance of a certified journeyperson

Boom Truck Operator On-The-Job Checklist



Information Regarding the Checklist

Saskatchewan Apprenticeship and Trade Certification Commission's (SATCCs) On-The-Job Checklist provides a complete list of trade-specific Red Seal tasks for apprentices to complete under the supervision of a journeyman. This work should be completed prior to attending the technical training level under which the duties are listed (e.g. Level 1 completed prior to attending Level 1 technical training).

Completing this checklist will ensure that apprentices are exposed to the full scope of a particular Red Seal trade throughout their apprenticeship program. It will also help prepare apprentices for each level of technical training by performing work on-the-job relating specifically to topics covered later on. The trade-specific tasks listed have been reviewed by certified journeymen in Saskatchewan for their accuracy and have been set to an appropriate skill level.

An apprentice spends approximately 85% of their apprenticeship term training on-the-job. It is the both the apprentice and the employer's or journeyman's responsibility to supervise an apprentice's practical skills development during their program.

To promote transparency and consistency, this document aligns with the 2021 Mobile Crane Operator Red Seal Occupational Standard (Employment and Social Development Canada).

A complete version of the Occupational Standard can be found at www.red-seal.ca

Saskatchewan Apprenticeship & Trade Certification Commission (Regina)

2140 Hamilton St Regina SK, S4P 2E3

Tel: (306) 787-2444

Toll Free: 1-877-363-0536

Website: www.saskapprenticeship.ca

Saskatchewan Apprenticeship & Trade Certification Commission (Saskatoon)

603 45th Street West Saskatoon, SK S7L 5W5

Tel: (306) 933-8476

Toll Free: 1-877-363-0536

Website: www.saskapprenticeship.ca

District Offices

Estevan (306) 637-4930

La Ronge (306) 425-4385

Moose Jaw (306) 694-3735

North Battleford (306) 446-7409

Prince Albert (306) 953-2632

Swift Current (306) 778-8945

Yorkton (306) 786-1394

All work performed in this checklist is to be done under the supervision and guidance of a certified journeyman

1-877-363-0536
apprenticeship@gov.sk.ca
saskapprenticeship.ca

