

 THOMPSON RIVERS UNIVERSITY Risk & Safety Services Safe Work Procedure Forklift Truck Safety			
Program/Services Trades/ITTC, Facilities, Warehouse/Distribution		Document ID RSS 18.25.4	Department: Risk and Safety Services
Personal Protective Equipment or Devices Used Safety Glasses Work Gloves Hearing protection (where noise >85 dB) CSA-approved protective footwear Seat belt must always be worn whenever forklift is in motion	Training Requirements Classroom safety training Hands-on practical training Current forklift operator certification (CSA B335-15 compliant)	Applicable Documents Appendix A: RSS 18.25.4A Forklift Pre-Use Inspection Checklist	Creation Date: 23 Jan. 2014
			Effective Date: 21 Nov. 2025
			Next Review: November 2026
			Revision no.: 4
			Reviewer: Safety Technician

WORK AT HEIGHT	PINCH POINTS	HIGH SOUND LEVELS	FOOT INJURY	EXPOSURE
				
Maintain three-point contact when entering or exiting a forklift. Always wear your seatbelt while operating the forklift.	Apply lockout procedures before performing maintenance or working within 30 cm (12 inches) of exposed pinch points. Never place hands, feet, or any body part near moving gears or pinch points.	Hearing protection is mandatory in designated areas or when noise levels exceed 85 dB Confirm hearing protection is properly fitted before starting work.	Wear CSA-approved protective footwear whenever there is a risk of: - Slipping or uneven terrain - Abrasion or crushing hazards - Temperature extremes - Corrosive substances - Puncture hazards - Electrical shock - Any other recognizable hazard	Identify chemicals in your work area or those being transported by forklift. Consult the Safety Data Sheet (SDS) and wear appropriate PPE before handling or moving hazardous materials.

PURPOSE

To ensure safe operation of forklifts in compliance with WorkSafeBC OHSR Part 16 and CSA Standard B335-15. This procedure applies to all faculty, staff, and students operating or working near forklifts.

PRE-USE REQUIREMENTS

- Perform a documented pre-use inspection using Form RSS 18.25.4a or approved checklist.
- Do not operate if any defect is found. Remove key, tag “Out of Service,” and notify supervisor/instructor.
- Confirm seat belt is functional and worn during operation.
- Maintain three-point contact when mounting/dismounting.

OPERATIONAL RULES

General

- Only trained and certified operators may operate forklifts.
- Never allow passengers except during controlled training.

Traveling

- Keep arms, legs, and head inside the operator compartment.
- Drive with forks lowered (approx. 3 inches above ground).
- Use horn at blind spots and when approaching pedestrians.
- Reduce speed in congested areas; use cones/signage to restrict pedestrian access.
- Avoid operating on icy or uneven surfaces.

HANDLING PROCEDURES

Lifting A Palletized Load

- Stop with forks about 3 inches from the load..
- Level the mast so it's square to the pallet.
- Raise forks to 1 inch below pallet slots.
- Drive forward until forks are fully inserted.
- Lift forks about 4 inches.
- Tilt mast back slightly to secure load.
- If load blocks view, travel in reverse slowly.
- Honk and check behind you before moving.
- Lower load to 3 inches above ground for travel.

Picking Up Drums

- Place drums securely on a pallet.
- Strap drums together if there's any chance of shifting.
- Tilt mast forward and slide forks under the pallet.
- Raise forks and tilt back slightly to stabilize drums.
- Drive slowly—liquid-filled drums can shift during transport.

Unloading Pallets

- Raise load 5–10 inches above the unloading point (space permitting).
- Stop 3–4 inches in front of deposit point.
- Tilt mast forward so load is level.
- Drive forward until aligned with stack.
- Lower load gently and ensure stack is straight.
- Lower forks 1 inch to clear pallet, then back up slowly.
- Lower forks to 3 inches above ground for travel.

Unloading Round Objects

- Stack round objects tightly and secure with wedges.
- For nesting, place bottom tier tightly together and wedge each roll.
- Hold securely in place before lifting.
- Lower forks after unloading and back up carefully.

Grades & Ramps

- Never turn on a slope.
- Travel forward uphill with load, reverse downhill with load.

Parking

- Park on level ground, forks lowered flat.
- Apply parking brake; chock wheels if needed.
- Shut off propane or connect electric charger as applicable.
- Remove key when unattended.

HOUSEKEEPING

- Park forklift on level ground with forks lowered flat.
- Apply parking brake and remove key when unattended.
- Shut off propane or connect charger as applicable.
- Chock wheels if required.
- Leave the work area clean, organized, and free of hazards.

POTENTIAL HAZARDS

Hazard	Control Measure
Tip-Over	Never exceed rated capacity; keep load low and mast tilted back when traveling.
Collision	Operate at safe speeds; sound horn at intersections; maintain clear visibility.
Pedestrian Strikes	Keep pedestrians out of operating zone; use spotters when visibility is limited; never allow riders.
Falling Loads	Ensure loads are stable and secured; tilt mast back slightly during travel.
Pinch/Crush Points	Keep hands, feet, and body clear of mast and moving parts; maintain safe distance.
Poor Visibility	Travel in reverse if load blocks view; use mirrors and check blind spots.
Carbon Monoxide (Propane)	Operate in well-ventilated areas; monitor air quality indoors.
Slips/Trips	Keep operating area clean and free of debris; avoid oil or grease on floor.
Working alone	High-risk tasks (e.g., lifting heavy loads, operating on uneven surfaces) must not be performed alone without an approved safety plan and check-in procedure.

RECORDS/VERIFICATION OF UNDERSTANDING

- Retain inspection checklists digitally for minimum one year.
- Maintain operator training records including Verification of Understanding and make available upon request.
- A training master log will be maintained by leadership/instructors. Facilities, Warehouse, and Trades will maintain records of training of all qualified operators of forklift trucks. Copies made available to RSS when requested.

ANNUAL REVIEW

Risk and Safety Services (RSS) will complete a review of this Forklift Truck Safe Work Procedure annually to ensure it remains current and effective. The Joint Occupational Health and Safety Committee (JOHSC) may be consulted during this review.

A review will also occur if:

- Regulatory requirements change.
- The procedure is reported to be ineffective.
- An incident occurs involving forklift operation.

APPLICABLE OCCUPATIONAL HEALTH AND SAFETY REGULATION (OHSR)

SWP Section	Requirement Met	WorkSafeBC Regulation Reference
Pre-Operational Safety Checks	Equipment inspection, manufacturer instructions, rated capacity, area safety	OHSR 4.3, 4.5, 4.9, 12.78, 12.79
Operational Safety Checks	Vehicle positioning, single operator, area clearance, manual lock engagement	OHSR 14.34
Housekeeping	Vehicle chocking, equipment shutdown, lockout, clean work area	OHSR 10.3–10.8, 12.80.1
Potential Hazards	Identification of falling, trapping, crushing, and entanglement risks	OHSR 4.13
PPE and Clothing Requirements	Safety glasses, gloves, boots, hard hats, fitted clothing, no jewellery, hair secured	OHSR 8.10–8.11, 8.14–8.17
Training Requirements	Classroom and hands-on instruction, verification of understanding	OHSR 3.23–3.24
Records and Documentation	Instructor-maintained training records and master log	OHSR 3.24, 3.25

SUMMARY OF CHANGES

Rev#	Date	Change	Issued By
1	2014.01.23	NEW	OHS Officer
2	04/23/2019	Review, Revisions and New Format	Safety Officer
3	08/23/2024	RSS update	Safety Advisor
4	11/21/2025	Full rewrite for clarity and training use. Added WorkSafeBC OHSR Part 16 and CSA B335-15 references. Simplified hazard statements. Integrated detailed handling steps (pallets, drums, round objects). Added TRU SWP and OHSR tables. Updated PPE and record retention requirements.	Safety Technician

APPENDIX A: FORKLIFT PRE-USE INSPECTION

Inspection must follow Manufacturer Specifications & OHSR Part 16.3 Requirements

Operator:		Make & Model:	
Department:		Hour Meter Start:	Hour Meter Fin.:
Location:		Date:	Unit No.:
Check boxes accordingly: OK = No Issues NO = needs attention / repair N/A = not applicable			
POWER OFF CHECKS	Status OK NO N/A	POWER ON CHECKS	Status OK NO N/A
Check under for leaks and debris	☐ ☐ ☐	Seatbelt	☐ ☐ ☐
Overall condition	☐ ☐ ☐	Starts and runs (unusual noises? leaks?)	☐ ☐ ☐
Tires, Lug Nuts	☐ ☐ ☐	Instrument panel, gauges, controls	☐ ☐ ☐
Engine/Battery:		Fuel/Charge level	☐ ☐ ☐
a) Cover panel(s)	☐ ☐ ☐	Horn/Audible warning devices	☐ ☐ ☐
b) Debris	☐ ☐ ☐	Lights, turn signals, mirrors	☐ ☐ ☐
c) Belts/hoses	☐ ☐ ☐	Mast/boom up/down	☐ ☐ ☐
d) Air filter	☐ ☐ ☐	Attachments up/down - left/right - tilt	☐ ☐ ☐
e) Wires/cables/Terminals	☐ ☐ ☐	Hydraulic lines/hoses	☐ ☐ ☐
f) Battery – clean/dry/secure	☐ ☐ ☐	Parking brake (holds against slight acceleration)	☐ ☐ ☐
g) Electrolyte Level	☐ ☐ ☐	Drive – forward, back, back up alarm	☐ ☐ ☐
Fluids:		Steering – left, right	☐ ☐ ☐
a) Engine oil	☐ ☐ ☐	Brake – holds, stops	☐ ☐ ☐
b) Engine coolant	☐ ☐ ☐	Exhaust	☐ ☐ ☐
c) Hydraulic oil	☐ ☐ ☐	Windshield wipers	☐ ☐ ☐
d) Transmission oil	☐ ☐ ☐	Turn off and check for leaks under	☐ ☐ ☐
e) Fuel/Battery	☐ ☐ ☐		
Hydraulics		WORKSITE CONDITIONS	Status OK NO N/A
a) Cylinders/Rods	☐ ☐ ☐	Drop-offs or holes	☐ ☐ ☐
b) Hoses/Lines/Fittings	☐ ☐ ☐	Bumps & floor/ground obstacles	☐ ☐ ☐
Capacity plate/Load Charts	☐ ☐ ☐	Debris/Slippery floors	☐ ☐ ☐
Windows/Screens/Doors	☐ ☐ ☐	Overhead obstructions	☐ ☐ ☐
Guards (ROPS, cab)	☐ ☐ ☐	Electrical conductors	☐ ☐ ☐
Mast/Boom	☐ ☐ ☐	Hazardous locations	☐ ☐ ☐
Forks, Carriage Assembly, Attachments	☐ ☐ ☐	Slopes	☐ ☐ ☐
Counterweight & bolts	☐ ☐ ☐	Ground/Surface & Support conditions	☐ ☐ ☐
Operators Manual – present and legible	☐ ☐ ☐	Pedestrian/vehicle/worker traffic	☐ ☐ ☐
Safety Decals /Markings present & legible	☐ ☐ ☐	Weather Conditions	☐ ☐ ☐
Propane tank and connection	☐ ☐ ☐	Other possible hazards	☐ ☐ ☐
Fire extinguisher (Date tag? Charged?)	☐ ☐ ☐	Other:	☐ ☐ ☐
Cab condition	☐ ☐ ☐	Other:	☐ ☐ ☐

Comments / Concerns:	Operator Signature
Tag or Locked Out Procedure If any item is marked NO remove forklift from service, tag and report immediately. Notify Supervisor/Management. Do not operate the forklift until it has been serviced	
Date and Time :	
Comments :	