
Forklift Mounted Safety Light And Alarm Check

1.0 Objective & Intent

The objective of this SOP is to establish a standardized procedure for the daily inspection and verification of forklift mounted safety lights and backup alarms. This procedure ensures that all visual and audible warning devices are fully operational before the forklift is placed into service, thereby reducing the risk of pedestrian injury and collision in the workplace. Compliance with WorkSafeBC regulations (OHS Regulation Part 16: Mobile Equipment) mandates that all industrial trucks be equipped with functioning safety devices to alert nearby personnel of movement and direction changes.

2.0 Operational Scope

This procedure applies to all forklift operators, maintenance personnel, and supervisors responsible for the operation and daily inspection of forklifts within the cabinet and millwork manufacturing facility. It covers all counterbalance, reach, and rough terrain forklifts equipped with factory or aftermarket mounted safety lights (headlights, strobe lights, blue safety lights) and backup alarms. The check must be performed at the start of every shift, after any maintenance or repair, and whenever the forklift is returned to service from storage.

3.0 Hazard Identification & Mandatory PPE

- Struck-by / Pedestrian Impact: Forklift moving without audible or visual warning increases risk of pedestrian collision.
- Crush / Pinch Points: Hands or fingers caught in light housing or wiring during inspection if forklift is not secured.
- Electrical Shock: Exposed wiring or damaged light fixtures may cause electric shock during inspection.
- Slip / Trip: Oil, debris, or loose cables on floor around forklift inspection area.
- CSA-Approved Steel Toed Boots
- High-Visibility Safety Vest (Class 2 or higher)
- Safety Glasses with side shields
- Cut-Resistant Gloves (ANSI A4 or higher) for handling wiring or sharp edges
- Hearing Protection (if noise levels exceed 85 dBA during alarm test)

4.0 Required Safety Equipment & Tools

- Forklift daily inspection checklist (paper or digital via SafeDesk)
- Flashlight (for inspecting lights and wiring in low light)
- Multimeter (for verifying electrical continuity if light or alarm fails)
- Replacement bulbs / LED modules (as per forklift manufacturer specifications)
- Insulated screwdrivers and pliers (for minor adjustments or bulb replacement)
- Lockout/Tagout (LOTO) kit with personal lock (if electrical repair is required)
- Warning cones or barriers to cordon off inspection area

5.0 Step-by-Step Safety Procedure

1. Park the forklift in a designated inspection area on level ground, with the forks fully lowered to the floor, the parking brake engaged, and the key removed from the ignition. Place warning cones around the forklift to alert other personnel that an inspection is in progress.
2. Don all required PPE as listed in Section 3.0. Ensure high-visibility vest is worn and safety glasses are secured before approaching the forklift.
3. Visually inspect the exterior of all mounted safety lights (headlights, strobe lights, blue safety lights) for physical damage, cracks, moisture ingress, or loose mounting brackets. Check wiring harnesses for fraying, cuts, or exposed conductors. Report any damage immediately to the supervisor.
4. Insert the key into the ignition and turn it to the 'On' position without starting the engine. Activate the headlight switch and observe each headlight for proper illumination. If equipped with a strobe or rotating beacon, activate the switch and verify the light is flashing at the correct intensity and pattern.
5. Engage the parking brake and shift the forklift into reverse gear (or activate the backup alarm manually if equipped with a test button). Listen for the backup alarm to emit a clear, intermittent audible tone. If the alarm is continuous, weak, or silent, tag the forklift as 'Out of Service' and report to maintenance.
6. If the forklift is equipped with a blue safety light (pedestrian warning light), position yourself at a safe distance (approximately 10 feet) behind the forklift. Have an assistant activate the light from the operator seat. Confirm the blue light projects a clearly visible spot on the floor indicating the forklift's path. Repeat for the front if applicable.
7. Turn the ignition to the 'Off' position and remove the key. Inspect the backup alarm and light housings for any loose connections or corrosion. Gently wiggle the wiring connectors to ensure they are secure. If any component is loose, tighten the mounting hardware with the appropriate tool.
8. Record the inspection results on the daily forklift checklist. Note the forklift ID, date, time, operator name, and the status of each light and alarm (Pass/Fail). If any item fails, complete a 'Defective Equipment Tag' and attach it to the steering wheel. Notify the supervisor and maintenance team immediately.
9. If a light or alarm requires replacement, perform a Lockout/Tagout on the forklift battery or fuel system before proceeding with electrical work. Use a multimeter to verify zero voltage at the light socket. Replace the bulb or module per manufacturer instructions, then re-test the component before removing the LOTO.
10. Remove warning cones and return the forklift to service only after all lights and alarms pass inspection. If the forklift was tagged out, do not remove the tag until a qualified technician has completed repairs and a second inspection confirms functionality. Sign off the checklist to close the inspection.

Regulatory Disclaimer: This document is a generic safety template provided for educational and informational purposes only. It does not constitute professional engineering, legal, or regulatory compliance advice. The end-user assumes all liability for validating all safety protocols against specific machinery manufacturer manuals and local occupational health and safety regulations (e.g., WorkSafeBC, CSA standards) before deployment.