

## **Nova Scotia - Nouvelle-Écosse**

### **Lift Truck / Forklift**

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### **Occupational Health and Safety Act S.N.S. 1996, c. 7**

#### **Part 7 - Hoists and Mobile Equipment**

##### **General provisions**

55 An employer shall ensure that a hoist, industrial lift truck or powered mobile equipment is erected, installed, assembled, started, operated, used, handled, stored, stopped, inspected, serviced, tested, cleaned, adjusted, maintained, repaired, modified and dismantled in accordance with the manufacturer's specifications, or the specifications certified by an engineer.

Section 55 amended: O.I.C. 2000-130, N.S. Reg. 52/2000.

56 An employer shall ensure that a hoist, industrial lift truck or powered mobile equipment

- (a) is operated by a designated competent person;
- (b) has gears and moving parts securely guarded by adequate means where necessary to prevent a hazard to a person in the workplace; and
- (c) has any load on it adequately secured where necessary to prevent a hazard to a person in the workplace; and
- (d) is provided with safe means of access and exit from the operator's position and any passenger's position.

##### **Signaller**

57 (1) An employer shall designate one or more competent persons as a signaller to direct the safe movement of a load, hoist, industrial lift truck or powered mobile equipment where the operator of that hoist, industrial lift truck or powered mobile equipment

- (a) does not have an adequate view of the load;
- (b) does not have a clear view of the route the load is to take;
- (c) is not able to see clearly around the equipment when moving and has not taken measures sufficient to ensure that no person is exposed to a hazard as a result of the movement of equipment;
- (d) is not able to see clearly where the hoist or its load may encroach the minimum distance specified in Section 126 or a hoist is positioned closer than the length of its boom to an overhead energized power line or power line equipment; or

(e) is causing the equipment to move under its own power from one location to another and the situation creates a hazard in the workplace.

Subsection 57(1) amended: O.I.C. 2000-130, N.S. Reg. 52/2000.

(2) A signaller shall

(a) be readily identifiable to the operator;

(b) direct the movement of a load or equipment by a well understood distinctive code of hand signals or another effective communication system;

(c) warn the operator each time

(i) any part of the hoist or its load may encroach on the minimum distance specified in Section 126, or

(ii) the hoist is positioned closer than the length of its boom from an overhead energized power line or power line equipment; and

(d) obtain the assistance of another signaller if all or part of the view of the load or route is obstructed from both the signaller and the operator.

(3) An operator of a hoist, industrial lift truck or powered mobile equipment in a situation referred to in subsection (1) shall move a load only on a signal from a signaller.

### **Safety equipment and precautions**

58 An employer shall ensure that a mobile crane, industrial lift truck or powered mobile equipment is equipped with

(a) an audible back-up alarm that

(i) operates automatically when the vehicle is in reverse gear, and

(ii) is clearly audible above the background noise at the workplace, or that another means of protection or warning that provides an equivalent level of safety is used;

(b) a manually operated horn, unless such a horn was not installed at the time of manufacture;

(c) adequate front and rear lights when the equipment is used after dark or in dimly lit areas;

(d) an adequate braking system; and

(e) a screen, shield, grill, deflector, guard or other adequate protection for the operator, where the operator may be exposed to the hazard of flying or intruding objects.

Subsection 58(1) renumbered Section 58 and amended: O.I.C. 2000-130, N.S. Reg. 52/2000.

59 An employer shall ensure that a hoist or powered mobile equipment that is equipped with outriggers or stabilizers is operated with the outriggers or stabilizers engaged, unless the manufacturer's specifications permit otherwise.

Section 59 replaced: O.I.C. 2000-130, N.S. Reg. 52/2000.

60 An employer shall ensure that a hoist, industrial lift truck or powered mobile equipment is not altered in such a way as to render ineffective a safety device or control, except where the change has been certified in writing by the manufacturer or an engineer to afford protection equal to or greater than the protection afforded by the original safety device or control.

61 An employer shall take adequate precautions to ensure that a hoist, industrial lift truck or powered mobile equipment does not tip or roll over.

### **Overhead protection**

62 (1) Where an employee who is an operator of powered mobile equipment is exposed to a hazard from falling objects, an employer shall ensure that the powered mobile equipment is equipped with a protective structure adequate for the conditions in which the equipment is being used and that meets the requirements of the applicable SAE standard listed below or that is certified by an engineer or the manufacturer to provide equivalent or better protection:

(a) SAE J167 APR92, "Overhead Protection for Agricultural Tractors - Test Procedures and Performance Requirements";

(b) International Organization for Standardization (ISO) 3449:1992, "Earth-moving machinery – Falling-object protective structures – Laboratory tests and performance requirements";

Clause 62(1)(b) replaced: O.I.C. 2000-130, N.S. Reg. 52/2000.

(c) SAE J397 OCT95, "Deflection Limiting Volume - Protective Structures Laboratory Evaluation";

(d) SAE J1042 JUN93, "Operator Protection for General-Purpose Industrial Machines"; or

(e) SAE J1084 APR80, "Operator Protective Structure Performance Criteria for Certain Forestry Equipment".

Clause 62(1)(e) replaced: O.I.C. 2000-130, N.S. Reg. 52/2000.

Clause 62(1)(f) repealed: O.I.C. 2000-130, N.S. Reg. 52/2000.

Subsection 62(1) amended: O.I.C. 2000-130, N.S. Reg. 52/2000.

(2) An employer shall ensure that modifications, alterations or repairs made to a falling objects protective structure that affect the structural integrity of the structure meet the requirements of this Section and that the designing agency, the installing agency or an engineer certifies that modifications, alterations or repairs meet the requirements of this Section.

(3) An employer shall ensure that welding on a falling objects protective structure that affects the structural integrity of the structure is performed by a designated competent person.

### **Rollover protection**

63 (1) An employer shall ensure that, where reasonably practicable, powered mobile equipment and industrial lift trucks manufactured on or after January 1, 1974, are equipped with rollover protective structures that meet the minimum safety requirements of the following standards:

(a) CSA standard B352.0-95, "Rollover Protective Structures (ROPS) for Agricultural, Construction, Earthmoving, Forestry, Industrial and Mining Machines - Part 1: General Requirements", or is certified by an engineer or the manufacturer to provide equivalent or better protection;

(b) where applicable, CSA standard B352.1-95 (R1999), "Rollover Protective Structures (ROPS) for Agricultural, Construction, Earthmoving, Forestry, Industrial, and Mining Machines - Part 2: Testing Requirements for ROPS on

Agricultural Tractors", or is certified by an engineer or the manufacturer to provide equivalent or better protection; and

(c) where applicable, CSA standard B352.2-95 (R1999), "Rollover Protective Structures (ROPS) for Agricultural, Construction, Earthmoving, Forestry, Industrial, and Mining Machines - Part 3: Testing Requirements for ROPS on Construction, Earthmoving, Forestry, Industrial, and Mining Machines", or is certified by an engineer or the manufacturer to provide equivalent or better protection.

Subsection 63(1) replaced: O.I.C. 2000-130, N.S. Reg. 52/2000.

(2) Where reasonably practicable, an employer shall ensure that powered mobile equipment or industrial lift trucks manufactured before January 1, 1974 are equipped with rollover protective structures that meet the requirements of subsection (1) or

(a) a rollover protective structure and supporting attachments are designed, fabricated and installed in such a manner to support not less than twice the weight of the equipment, based on the ultimate strength of the material and integrated loading of the supporting members with the resultant load applied at the point of impact;

(b) there is a vertical clearance of 1320 mm between the deck and the rollover protective structure at the access openings; and

(c) the rollover protective structure and supporting attachments referred to in clause (a) are certified as meeting the requirements of clause (a) by the manufacturer of the rollover protective structure, the installing agency or an engineer.

Subsection 63(2) amended: O.I.C. 2000-130, N.S. Reg. 52/2000.

(3) An employer shall ensure that modifications, alterations or repairs made to a rollover protective structure that affect the structural integrity of the structure meet the requirements of this Section and that the designing agency, the installing agency or an engineer certifies that modifications, alterations or repairs meet the requirements of this Section.

[Note: Section 63 and amendments to it made by O.I.C. 2000-130, N.S. Reg. 52/2000 effective November 1, 2000.]

64 An employer shall ensure that welding on a rollover protective structure that affects the structural integrity of the structure is performed by a designated competent person.

[Note: Section 64 effective November 1, 2000.]

65 (1) An employer shall ensure that powered mobile equipment and industrial lift trucks that have been fitted with rollover protective structures have

(a) seat belts for the operator and passengers that comply with or exceed the applicable SAE standard listed below:

(i) SAE J386 NOV97, "Operator Restraint System for Off-Road Work Machines", Subclause 65(1)(a)(i) replaced: O.I.C. 2000-130, N.S. Reg. 52/2000.

(ii) SAE J800 JUN94, "Motor Vehicle Seat Belt Assembly Installation"; or

(b) where the wearing of seat belts is not reasonably practicable, restraining devices such as shoulder belts, bars, gates, screens or other similar devices

designed to prevent the operator and passengers from being thrown outside the rollover protective structure.

Subsection 65(1) amended: O.I.C. 2000-130, N.S. Reg. 52/2000.

(2) An operator of and passengers on powered mobile equipment or an industrial lift truck shall use the seat belts or restraining devices referred to in subsection (1) while the equipment is in motion.

Subsection 65(2) amended: O.I.C. 2000-130, N.S. Reg. 52/2000.

[Note: Section 65 and amendments to it made by O.I.C. 2000-130, N.S. Reg. 52/2000 effective November 1, 2000.]

### **Glass**

66 An employer shall ensure that glazing or rigid plastic materials used as part of an enclosure for a cab, canopy or rollover protective structure on a hoist, industrial lift truck or powered mobile equipment is adequate in the circumstances where it is used, and is immediately replaced if it presents a hazard, including permanent interference with visibility.

Precautionary arrangements

67 (1) Unless otherwise authorized by an enactment, no person shall operate an industrial lift truck or powered mobile equipment with passengers on the truck or equipment, unless the manufacturer's specifications for the truck or equipment state that the truck or equipment is designed to accommodate them safely. Subsection 67(1) amended: O.I.C. 2000-130, N.S. Reg. 52/2000.

(2) An employer shall ensure that powered mobile equipment and industrial lift trucks that have an internal combustion engine are provided with fire protection equipment adequate for the hazards of the equipment or vehicles.

Subsection 67(2) replaced: O.I.C. 2000-130, N.S. Reg. 52/2000.

(3) An employer shall

- (a) ensure that mirrors or other devices are installed and maintained at blind intersections where there may be a danger of a collision between an industrial lift truck or powered mobile equipment and another object or a person; or
- (b) adopt a written procedure that provides an equivalent level of safety.

### **Visibility**

68 Where work with a hoist, industrial lift truck or powered mobile equipment is carried out in an area where dust may create a hazard to a person in the workplace because of poor visibility, an employer shall take steps to reduce the amount of dust in the air so as to protect a person from the risk of injury.

Operating precautions

69 An operator of a mobile crane, where applicable, an industrial lift truck or powered mobile equipment shall

- (a) not set equipment in motion until all air and hydraulic pressures are fully built up at specified operating pressures;
- (b) when leaving the equipment unattended
  - (i) park it on level ground, if reasonably practicable,
  - (ii) set the parking brake,
  - (iii) lower the blades, bucket or other attachment or safely block the attachment,

- (iv) where applicable, disengage the master clutch, and
- (v) shut off the engine or take other precautions to ensure the equipment is not inadvertently set in motion;
- (c) not carry containers of gasoline, diesel oil or other flammable substances, classified as Class B substances under the Hazardous Products Act (Canada), in the part of the equipment where a person rides; and
- (d) ensure that there are no loose articles that may present a hazard in the part of the equipment where a person rides.

Section 69 amended: O.I.C. 2000-130, N.S. Reg. 52/2000.

70 (1) An employer shall ensure that a hoist, industrial lift truck or powered mobile equipment that has wire ropes, drums and sheaves is inspected

- (a) visually on a daily basis by the operator of the equipment; and
- (b) visually and manually by a designated competent person on a weekly basis.

(2) An employer shall ensure that, where a person works under a hoist, industrial lift truck, or powered mobile equipment that is raised from the ground, the equipment is provided with blocking or other adequate means of support in case the means of lifting the equipment fails.

71 Where repair or maintenance work is carried out at the point of articulation on an articulated truck, front end loader or other articulated equipment, an employer shall ensure that lock bars or an equivalent measure is used to prevent movement of either end of the truck, loader or equipment.

### **Industrial lift trucks**

81 An employer shall ensure that an industrial lift truck

- (a) is designed, installed, erected, examined, inspected, operated and maintained in accordance with the applicable ASME standard listed below, where applicable,
  - (i) ASME B56.1-1993, "Safety Standard for Low Lift and High Lift Trucks", or
  - (ii) ASME B56.6-1992, "Safety Standard for Rough Terrain Forklift Trucks";
- (b) in addition to any inspection required by clause (a), is inspected at the beginning of each shift in which it is used to ensure it is in a safe working condition.

82 (1) An employer shall ensure that an industrial lift truck is not operated

- (a) where propelled by an internal combustion engine, in a building or other enclosed structure where adequate ventilation, monitoring and record keeping practices are not carried out so as to eliminate the hazards from exhaust gases; and
- (b) near an area containing airborne dust or flammable vapour in a concentration that may cause an explosion; or
- (c) in a manner that may endanger a person.

(2) An employer shall ensure that where an industrial lift truck is operated

- (a) in a one-way aisle, the width of the aisle equals at least the width of the vehicle or load being carried, whichever is wider, plus 600 mm; and
- (b) in a two-way aisle, the width of the aisle equals at least twice the width of the vehicle or load being carried, whichever is wider, plus 900 mm.

(3) An employer shall ensure that an industrial lift truck that is propelled by propane

(a) has all engine and fuel components designed, assembled, examined, inspected, operated and maintained in accordance with Part 13 of the Canadian Gas Association standard CAN/CGA - B149.2 - M95, "Propane Installation Code"; and

(b) has the components that are propane appliances and equipment repaired and maintained by a designated competent person.

83 Where an industrial lift truck is used with a fork lift platform for lifting a person, the employer shall ensure that

(a) the industrial lift truck is inspected by an engineer at least once in the preceding 12 months to determine its adequacy for the purpose; and

(b) the engineer provides a written report certifying the results of the inspection.