Subject: Regulation of Parking Garage Lifts (PGL’s)

Sent to: All PGL Suppliers, Contractors, Installers, Consultants

1. INTRODUCTION

1.1. General

All elevating devices in Ontario are subject to the requirements of Ontario Regulation 209/01 (Elevating Devices) made under the Technical Standards and Safety Act, 2000, unless the type of elevating device is specifically excluded from the Regulation.

The elevating devices regulation (209/01) has been recently amended by O.Reg 252/08 (effective January 1, 2009) and now clearly references Parking Garage Lifts (PGL’s) as one of the many forms of regulated elevating devices.

Elevating devices used to elevate or lower vehicle(s) for the purpose of storing (parking) the vehicle are included in the Regulation.

A primary reason to reference and not exempt PGL’s is that they are not specifically regulated by any other Ontario Regulation designed to protect the public. Therefore any persons involved with the ownership, operation, installation, and maintenance of these types of elevating devices used in publicly accessible locations are expected to comply with the requirements set forth in the Act and Regulation. The Act and the Regulation specifies a person’s responsibilities.

The increase in PGL installations has prompted TSSA to work with the PGL industry to ensure the requirements of the elevating devices regulation are understood and the requirements followed for PGL installations and maintenance. As the regulatory requirements are new to many in this industry, TSSA is working to implement a phased approach to regulatory fulfillment. The purpose of this document is to inform responsible parties on the compliance requirements under the Regulations. Since compliance is expected to be achieved in stages, this document also specifies the minimum requirements and implementation timelines.

1.2. Subject of this Bulletin

This bulletin is intended to outline the requirements related to Parking Garage Lifts. The Regulation defines PGL as:

“Parking Garage Lift” means an elevating device that is used for lifting or lowering a vehicle in or about a parking facility.

This document is meant to address:

1. PGL Stackers - devices where vehicles are stored and are of the format:
   - PGL-Simple Stacker – A parking lift that has vertical motion only
   - PGL-Complex Stacker – A parking system which is not solely limited to vertical motion

   Note: No persons ever ride a stacker.
2. PGL-Transfer Area – An area from which vehicles are transferred to, or returned from, the working area of the PGL. The transfer area is intended to allow for at least the driver to enter or leave the vehicle. The transfer area has means to ensure the public does not have access to the working area of the PGL.  
  Note: No persons ever ride the transfer device.

3. PGL-Automatic – A parking system which includes a PGL-Transfer Area, and a vehicle storage area consisting of a PGL-Simple Stacker or PGL-Complex Stacker as defined above. 
  Note: No persons ever ride in an automatic PGL.

Note 1: At this time, only the requirements of the transfer area of a PGL-Automatic will be addressed. 
Note 2: A PGL with two or more loading and unloading landings is considered a PGL elevating device under section 1.3 below.

In this bulletin, PGL-Simple Stacker, PGL-Complex Stacker, PGL-Transfer Area and PGL-Automatic are referred to as “Parking Garage Lifts” (PGL’S).

1.3. Not the Subject of this Bulletin

1. Freight Elevators designed to carry motor vehicles; 
2. Freight Platform Lifts designed to carry motor vehicles; 
3. Material Lifts designed to carry motor vehicles. 
4. Elevating devices used to lift a vehicle for the purpose of performing service on the automobile. (O.Reg.209/01 s2.(3)(g)) 
5. Simple or Complex PGL’s which are inaccessible to the general public and are provided with Transfer Area(s) as the sole means of loading and unloading . Transfer Area’s however are subject to the Regulation.

Where elevating devices described in 1, 2, and 3 above are used to carry vehicles, the requirements of B44 Safety Code for Elevators will form the bases of the design of the elevating device. These devices will be classified as PGL Elevators.

2. INTERPRETATION & ENFORCEMENT

Ontario Regulation 209/01 as amended by O.Reg. 252/08 specifically recognizes Parking Garage Lifts, and becomes effective on January 1, 2009.

Prior to January 1, 2009, Parking Garage Lifts were classified as a “special elevating device”, requiring compliance with prior editions of the Act, regulation and applicable codes.

To facilitate industry compliance, the enforcement process has been divided into two phases.
  Phase 1
  The first phase will ensure compliance for new and altered installations, which are commissioned on or after January 1, 2009.
  Phase 2
  The second phase will address compliance issues for existing installations.
  • Identification of existing sites by June 1, 2009
  • Periodic inspection activities beginning on or after January 1, 2010.
The following guidelines will be used to ensure compliance with the O.Reg. 209/01:

2.1. **Scope of Work**

2.1.1. This Regulation applies to the design, construction, installation, erection, maintenance, alteration, use and service of Parking Garage Lifts as defined in this bulletin, except where otherwise indicated.

O.Reg.209/01, s.2

2.2. **Contractors and Contractor Registration**

2.2.1. All contractors must be registered. O.Reg.209/01, s.14

   a) For the first phase of the regulation compliance project, contractor registration requirements will be varied.
   b) Only companies authorized and trained by the manufacturers/manufacturer’s representative may be eligible for registration.

2.2.2. All work performed on a PGL after January 1, 2009 must be done by a registered contractor.

O.Reg.209/01, s.21

2.2.3. Applications for contractor registration shall include:

   a) A letter from the equipment manufacturer/manufacturer’s representative stating that the contractor is authorized to perform work on their equipment.
   b) Verifiable proof of experience shall be included with the application.
   c) Name of mechanic(s) registered by TSSA (see 2.3)

2.2.4. Applications for contractor registration can be obtained from:

   a) [http://www.tssa.org/regulated/elevating/elevatingForms.asp](http://www.tssa.org/regulated/elevating/elevatingForms.asp) or
   b) By email at customerservices@tssa.org or
   c) Calling Customer Services Advisors at 1-877-682-TSSA (8772) or 416-734-3300 for the Toronto area.

2.3. **Mechanic Requirements**

2.3.1. No work shall be undertaken on a Parking Garage Lift unless by a registered mechanic, or by a mechanic-in-training under the supervision of a mechanic. O.Reg.209/01, s.24

   a) A Parking Garage Lift mechanic must have documented training under the regulation.
   b) A certification program for Parking Garage Lift mechanics will not come into effect until a later phase.
   c) Until the mechanic certification program is in place, manufacturers and contractors shall provide information and documentation about their training programs.
   d) Until the mechanic certification program is in place, mechanics shall provide information and documentation about their training history. Ideally this will take the form of a training certificate and log from their employer.
   e) The Elevating Device Regulation 209/01 requires all mechanics to:
      1) have full knowledge of the Act, Regulations and any applicable code
      2) not undertake work beyond their scope of training

2.3.2. Application for a mechanic’s registration shall include:

   a) Relevant education history
   b) Related work experience
   c) PGL manufacturer training dates and training content
   d) A safety training workshop as per section 6(6) of O.Reg 222/01.
Note:
1) Mechanic registration is a prerequisite for contractor registration
2) Mechanic registration is an interim step toward mechanic certification.

2.4. Installation Locations and Maintenance Lists

2.4.1. Contractors shall provide a list of all Parking Garage Lifts which they have installed in the province of Ontario prior to January 1, 2009.

a) Installation lists shall be provided to TSSA by June 1, 2009.
b) Lists will not need to include installations at private dwellings houses, including the land upon which the private dwelling house is situated.
c) Installation lists should include:
   1) the device(s) address,
   2) owner of device(s) – if known
   3) owner’s phone number and address – if known
   4) number of devices (power units and load carriers per power unit)
   5) Total load and load carrier capacity ratings

2.4.2. Contractors shall provide a list of all Parking Garage Lifts under their maintenance. O.Reg.209/01, s.23

a) Maintenance lists shall be provided to TSSA by June 1, 2009
b) Lists will not need to include installations at private dwellings houses, including the land upon which the private dwelling house is situated.
c) Contractor licensing in subsequent years will require disclosure of all installations under their maintenance.
d) Maintenance lists should include:
   1) the device(s) address,
   2) owner of device(s)
   3) owner’s phone number and address
   4) number of devices (power units and load carriers per power unit)
   5) Total load and load carrier capacity ratings

Note: Condominiums are not included in the private dwelling house exemption as they have components / areas which are not exclusive to the owners of a single private dwelling, so they need to be included on the list.

2.5. Submission Requirements for New and Altered Installations

2.5.1. New and/or altered Parking Garage Lifts shall conform to the Technical Standards and Safety Act, 2000, Ontario Regulation 209/01 and the Elevating Devices Code Adoption Document. Engineering and inspection related documents (design submission documents) related to the installation shall be provided with the application for registration of a new installation. The engineering data will identify the applied codes and provide statements of hazard assessment and mitigation. O.Reg.209/01, s.5 (1), 5(2), 15, 16, 17

a) The first required design submissions will apply to any new or altered installation which will be commissioned / put into operation after January 1, 2009.
b) The design submission for registration of a new or altered installation shall include those items listed in O.Reg 209/01, s.15.(4), and shall also include:
   1) Proof of electrical equipment certification to CEC C22.1, CSA, cUL, or equivalent.
   2) Proof of manufacturer welding certification to CSA W47.1, or equivalent.
   3) Number of load carrying units driven by the power unit.
   4) Total Capacity of the device and the capacities of the individual carriers.
5) Operator Training Program
6) Assessment of Hazards and Mitigation - Identify how all minimum safety requirements are to be addressed (crush, shear, fall, shock hazards)
7) Testing procedures to demonstrate the effectiveness of safety devices and features.

2.5.2. All documents of a design submission shall be under the signature and seal of a professional engineer of Ontario. O.Reg.209/01, s.15. (6)
   a) Submitting engineers will be attesting compliance to any applicable regulations and codes and will ensure that matters effecting safety are addressed in a manner reflecting good engineering practice.

2.6. Inspection of New and Altered Installations

2.6.1. A contractor who installs or alters a Parking Garage Lift shall arrange for an initial inspection after ensuring the device complies with the registered design submission and the device is in a safe operating condition.

2.6.2. The initial inspection fee is the responsibility of the installing contractor. O.Reg.209/01, s.25, s. 44.

2.6.3. Contractors are reminded that new installations are not to be turned over for use until the device has passed an initial inspection.

2.6.4. Devices undergoing alterations minor in nature and which do not impact safety features can be returned to service but must be inspected within 60 days O.Reg.209/01, s.19

2.6.5. Full Load tests or loading with vehicles of representative weight will be required on all new devices (and where applicable on altered devices). Loads and/or other test equipment shall be provided by the contractor. O.Reg.209/01, s.44

2.6.6. At the initial inspection the following must be present:
   a) Operator Training Program
   b) A training log book – to record the names of trained persons
      Note: Operators shall be trained and their names recorded in the training log book prior to operation of the device.

2.6.7. Testing by the contractor will include a demonstration of test procedures included in the design submission.

2.7. Applied Codes and Standards

2.7.1. No code, standard or other technical rule has been authorized under section 36 of the Technical Standards and Safety Act, 2000 for the Parking Garage Lift. General engineering practice normally applied to elevating devices shall apply.
   a) If the lift was built to the European Standard EN 14010 Equipment for power-driven parking of motor vehicles, TSSA will deem that it meets an acceptable code except where the EN 14010 is in direct conflict with another North American standard applicable in Ontario. (example: Canadian Electrical Code or general requirements of the Code Adoption Document) O.Reg.209/01, s.5 (2)

2.8. Existing Installations / Devices

2.8.1. Existing Parking Garage Lifts shall comply with the Regulation.
   b) Existing Parking Garage Lifts are ones that have been commissioned / put into operation prior to January 1, 2009.
c) Owners will be responsible for the inspection fees and future safety inspections, at such intervals as determined by TSSA. O.Reg.209/01, s.4 (1), s.44.
d) Alterations of Existing Parking Garage Lifts shall conform to the Code Adoption Document.
   1) Alterations shall be performed by registered contractors.
e) Identification of general safety and regulatory violations during the first periodic inspection of existing Garage Parking Lifts may require modifications to bring the devices into compliance.
f) Safety requirements for existing lifts will be determined and refined over time by TSSA in conjunction with an Industry Working Group made up of manufacturer, contractor, and owner representatives.
g) Data-capture for existing devices will be conducted by TSSA field staff during the first periodic inspection.
h) After the first Periodic inspection is complete, TSSA will determine the frequency for the next Periodic inspection. (Frequency will be determined using a risk based model.)

2.9. Device License

2.9.1. Every Parking Garage Lift requires a license that must be posted at the device and is to be renewed on an annual basis by the owner. O.Reg.209/01, s.12, s.28, s.30.

   a) During the Initial inspection, an application for the device license will be supplied to the owner to fill in and return to the inspector along with payment based on the current license fee schedule.
   b) Owners of existing devices shall apply for a license prior to January 1, 2010.
   c) The initial application for the licensing of an existing device shall include:
      1) Owner name and address
      2) Device address
      3) Number of load carriers (per power unit)
      4) Total load and load carrier capacity ratings
      5) Description of controls used to prevent access to the device by the general public
   d) Each power unit will constitute an installation and will require a separate license.

2.10. Maintenance Requirements and Records (Logbook)

2.10.1. The owner shall ensure the device is maintained by a registered contractor. Maintenance and maintenance frequency shall be in accordance with the manufacturer’s recommendations, but in no case shall the time between maintenance visits be longer than one year. O.Reg.209/01, s.32

   a) For new or altered installations, maintenance requirements are effective January 1, 2009.
   b) Maintenance requirements of existing installations are effective June 1, 2009.
   c) Maintenance shall include inspection and testing of the safety device. O.Reg.209/01, s.33.

2.10.2. Every owner of a Parking Garage Lift and every contractor shall maintain a log book, in accordance with the manufacturer’s recommendations, for the device that they own or maintain. The log book shall be readily available at the location of the device. O.Reg.209/01, s.34

   a) A manufacturer supplied list of items requiring regular maintenance and the recommended maintenance frequency for each item shall be provided by the supplier of the equipment and should be included as part of the maintenance log book.
   b) Log books shall remain on site for 5 years as per O.Reg.209/01, s.34.(2)
   c) Maintenance requirements for PGL’s will be determined and refined over time by TSSA in conjunction with an Industry Working Group made up of manufacturer, contractor, and owner representatives.
2.11. **Operating Requirements (for Owners)**

2.11.1. Every owner of an elevating device shall ensure that the attendants and operators have knowledge of the device and complies with the *Technical Standards and Safety Act, 2000* and O.Reg.209/01. O.Reg.209/01, s.40, s. 13.

2.11.2. Owners shall have an operator training program and a log of trained persons.

2.11.3. Operation shall be restricted to only trained operators through the use of keys or equivalent systems.

2.11.4. Owners shall annually renew and post the device license at the power unit, controller or operating station.

2.11.5. Owners shall post:

   a) The installation number tag at the power unit and identify each load carrier unit.
   b) Shall post a capacity sign (in kilograms) at the operating station and each load carrier.
   c) Shall post safe operating procedure signage at each operating station.

      1) Signs may be shared between operating stations.
      2) The sign must be legible from the operating station otherwise individual signs shall be required.

2.11.6. Where an accident or incident occurs, the owner and/or contractor shall notify TSSA as per requirements of O.Reg.209/01, s.36.

2.11.7. Every owner of a Parking Garage Lift shall ensure safe and unobstructed access to all serviceable parts of the device for maintenance and service.

2.11.8. Keys for access to all locked parts of the device shall be readily available. O.Reg.209/01, s.37.

3. **Regulatory Requirement Summary**

   - *Technical Standards and Safety Act 2000, S.O. 2000, c.16*
   - Ontario Regulation 209/01 (Elevating Devices)
   - Ontario Regulation 222/01 (Certification and Training of Elevating Device Mechanics)


   - Elevating Devices Code Adoption Document
   - Enforcement Procedure Bulletin 194/08

Electronic copies of these documents can be found on the TSSA web site at: [http://www.tssa.org/regulated/elevating/elevatingSafety.asp?loc3=act](http://www.tssa.org/regulated/elevating/elevatingSafety.asp?loc3=act)

4. **Effective Date**

This enforcement procedure is effective immediately.

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Developed in consultation with the PGL Industry Task Group