



## Inspection and Technical Services

### Elevator Safety Bulletin

ITS 21-002

#### Inverted Hydraulic Cylinder Design Lift for Persons with Physical Disabilities

**Purpose:** For elevator installation and service companies, property owners and maintenance personnel: this directive is to advise of the correct installation procedure for inverted hydraulic cylinder design lifts for persons with physical disabilities.

- On April 28, 2011, an incident involving a hydraulic lift for persons with physical disabilities occurred at a school located in the City of Winnipeg which resulted in the injury of the two occupants.
- The lift involved was an inverted hydraulic cylinder design. The investigation into this incident has revealed that a contributing factor to this incident was the incorrect installation of the lifting collar at the time this device was installed.
- All personnel involved in the installation, servicing and inspecting of inverted hydraulic cylinder design lifts are required to ensure that the manufacturers' installation instructions are correctly followed.
- In particular, the set up and installation of the adjustable lifting collar on the hydraulic cylinder must be secured in its correct position with two strategically placed welds in accordance with the manufacturers' installation requirements. (See Figure 1)
- The three set screws provided with the collar are for positioning purposes only and are not meant as a means of ensuring a complete bond between the collar and the cylinder.

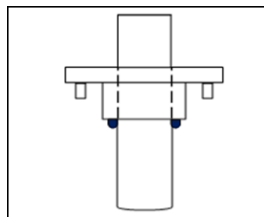


Figure 1

When finally in position, the collar **MUST** have two opposing 1/2" fillet welds on completion.

#### Required Action:

Inspection and Technical Services Manitoba (ITSM) requires that property owners operating hydraulic lifts for persons with physical disabilities contact their service company and make immediate arrangements for an inspection to confirm that the units have been installed in accordance with manufacturers' recommendations.

For service companies performing inspections, ITSM requires any lift that demonstrates signs of weld fatigue, wear, stress or that is not installed in accordance with manufacturers' requirements be immediately removed from service, and be reported to ITSM at the number below.