



<b>Elevating and Amusement Devices Safety Program</b>	Ref. No.: 304 / 24
<b>ADVISORY</b>	Date: February 2, 2024

**Subject:** Hollister Whitney GT Series Machine Shaft Replacements  
**Distribution:** Posted on TSSA website

---

This advisory is intended to inform about the following:

**Issue Awareness & Reporting**

- i. Create awareness regarding an issue with Hollister Whitney GT11 and GT31 machines.
- ii. Create awareness of Hollister-Whitney’s plans to provide retrofit kits to all suspect GT Series machines.
- iii. Bring awareness to Owners/Contractors/Mechanics about such devices in their maintenance portfolios and plan for an upcoming need to retrofit all suspect/identified GT series machines.
- iv. Remind contractors/mechanics about the need and regulatory obligation to report all incidents of equipment failures.

**Entrapment/Evacuation**

- v. Advise of the current safety risks with GT series machines and current mitigations of those risks.
- vi. Notify Contractors/Mechanics to include a thorough assessment of potential rollaway scenarios in their emergency evacuation procedures of entrapped passengers, especially when the entrapment involves the activation of the emergency brake.

**Maintenance, Testing, and Records**

- vii. Remind contractors/mechanics to maintain accurate callback (trouble call) records which are especially pertinent for calls related to ACO/UCM activations on installations with GT series machines.
- viii. Remind contractors/mechanics of the importance of performing the required maintenance and category testing, and to ensure those tasks and tests are recorded in the maintenance Logbook.

**Retrofit Acknowledgement**

- ix. Advise contractors/mechanics to ensure that completion of the retrofit is recorded in the onsite documentation.

**1.0 Hollister Whitney GT11 and GT31 Machine Sheave Shaft Failure**

In July of 2023 Hollister Whitney notified contractors who purchased GT-Series machines of a potential shaft failure issue, and in October advised that the failures were attributable to stresses in the shaft caused by shaft misalignment relative to the outboard shaft support. Despite Hollister Whitney’s assessment that failure rates are extremely low (<0.25%), they are proceeding with the distribution of shaft retrofits kits.

Hollister Whitney advised of an enhanced shaft design that will be provided as a no cost retrofit kit for all identified machines, with inclusive coverage of reasonable labour costs for the installation by a contractor.

Hollister has developed a retrofit schedule for all GT series machines in Canada and USA, and for Ontario sites delivery of the final kits is anticipated to be May 2024.

In a November 6, 2023, communication, Hollister Whitney advised machines manufactured after these dates will not have shaft issues:

- GT11 Overhead Machines: July 31, 2023
- GT11 Basement Set and Overhead Deflector Machines: August 1, 2023
- GT31 Overhead Machines: July 18, 2023
- GT31 Basement Set and Overhead Deflector Machines: September 11, 2023

If an incident should occur, owners, contractors, and mechanics are reminded of the need to report all equipment failures as per Ontario Regulation 209/01 s.36 [Incidents / Reporting of Incidents].

## **2.0 Evacuation of Entrapped Passengers / Elevator Emergency Brake Engaged**

While there are a variety of events that could cause elevator entrapment, not all entrapment scenarios pose a similar risk when performing passenger evacuations.

In the event of an entrapment on an installation that has a GT-series machine, it would be prudent to ensure that the event was not the result of the machine sheave shaft failure that triggered an emergency brake to apply. While Hollister-Whitney believes the possibility of a shaft failure is very low (less than a quarter percent), contractors / mechanic due diligence is important when evaluating entrapment cause.

This assessment is important especially if a mechanic arrives to find that the emergency brake is actuated as it may be the only means preventing elevator unintended motion. Release of the emergency brake needs special evaluation before proceeding and contractors/mechanics should understand what triggered the emergency brake to set and the consequences that may occur if the brake is released.

## **3.0 Preventative Maintenance, Testing and Record Keeping**

While GT series machines are waiting for the delivery and installation of retrofits, it is crucial to recognize that the emergency brake, mandated in Ontario since 1990, serves as a final safeguard against elevator unintended motion. Understanding the significance of an activated emergency brake is paramount in mitigating the potential consequences that might otherwise lead to a catastrophic incident.

Emergency brakes under normal operating conditions are not normally activated, which means they are on standby in the event of an emergency. To ensure emergency brakes can perform their safety function it is critical that **maintenance** and **testing** validate that the emergency brake is;

- “Ready to deploy when needed” (via maintenance) and
- Can “perform the emergency braking function” (via passed specific annual and 5-year tests).


The maintenance and testing of specific elevating device components must be completed as per the regulations and documented in the elevating devices logbook (or on-site records).

In the event of a callback (trouble call), the requirements for contractors to maintain and make available the details of prior corrective actions to the on-call mechanic are extremely beneficial. This practice, if followed correctly empowers the onsite mechanic to make informed decisions and exercise the necessary diligence in addressing the situation.

While an activated emergency brake does not necessarily mean a failed shaft, the emergency brake on an un-retrofitted GT series machines remains the last line of defense against elevator unintended motion, so the resetting and re-evaluation of the emergency brake on a GT machine installation is an important undertaking.

#### 4.0 Retrofit and Retrofit Completion

The replacement of driving machine components is considered to be a maintenance, repair, replacement function and does not require a design submission, however TSSA would like to track the ongoing completion of retrofit upgrades and is requesting contractors to NOTIFY TSSA by means of an email containing the following information:

<p><b>To:</b> <a href="mailto:eddesignsubmittal@tssa.org">eddesignsubmittal@tssa.org</a> <b>Subject:</b> GT Machine Shaft Retrofit at &lt;address&gt;</p> <p><b>Body:</b></p> <p>The GT Machine(s) identified with installation numbers: &lt;insert installation numbers&gt; Located at: &lt;insert address&gt; have been retrofitted as per Hollister Whitney BULLETIN # 1197</p>	 New Email
--	---

Contractors are reminded that completing any required performance tests, and the safe return of the device to service is part of their responsibility.

Following a retrofit completion, Hollister Whitney has prepared a response form “**GT-Series Main Shaft Retrofit Completion Notice Final.pdf**”. Contractors should;

- Send a completion notice to Hollister for their records, and
- Record the completion and testing of work in the elevators logbook.