

Incident or Event

An Ontario automotive company has been fined \$45,000, plus a 25-per-cent victim fine surcharge after two workers were injured when a vehicle fell to the ground.

Outcomes

The vehicle was raised approximately six feet in the air and the workers were standing underneath the vehicle doing repairs. The vehicle suddenly fell off the hoist to the floor. Both workers suffered critical injuries.

Causal Factors

Negligent Maintenance

Examination of the arm restraints revealed that the gears that were supposed to lock the arms in place were not functioning properly. The teeth on the gears were worn, rusted and in poor condition and the metal bars that hold the restraints together were bent. Restraint devices had not functioned properly for an extended period of time. Pads on the swing arms were found to be worn and in poor condition.

No Inspections

The company had not provided the workers with any information or instruction on inspection requirements and had not trained or instructed the workers on how to inspect the hoists. As a result, there was no regular maintenance routine in place for the hoists.

Inspectors Not Qualified

An external company had previously been hired to inspect all hoists at the workplace. The inspections were primarily visual and lasted approximately 15 minutes per hoist. The company indicated that there were no defects in the hoists and that they were fit to use. The company nor its owner was considered a qualified inspector as per the ALI (Automotive Lift Institute) standards.



Shared Learning

Maintenance – Planned maintenance will be completed as per the recommendations of the hoist manufacturer as to the frequency whether it be daily, weekly, monthly, semi-annually, annually or on some other basis. Maintenance must only be performed by a qualified maintenance personal who have the training and knowledge.



Daily Inspections – The hoist operator shall inspect the hoist daily and document it. Some considerations when performing a daily inspection are:

- Deformation or excessive wear of components such as hoses, electrical wires, drive chains, wire rope or screws.
- Damage or excessive wear on any of the lift contact points which engage the vehicle during lifting.
- Evidence of hydraulic or pneumatic leaks.
- Unusual noises, sudden movements, or erratic operation.
- Cracked or loose concrete around the floor anchor bolts.

Qualified Inspector – Ensure the inspector hired to annually (at a min) inspect the hoists is qualified to do so. Some important qualifications are:

- Familiarity with industry terminology including the terms defined and used in ANSI/ALI ACLCTV.
- Knowledge of personal safety practices necessary to perform routine and periodic inspections of existing equipment.
- Ability to read and understand equipment manuals, drawings, and parts lists.
- Working knowledge in electrical and electronic control circuit, mechanical, hydraulic and pneumatic principles.
- Knowledge of the many and varied types and styles of automotive lifts, their uses and any limitations or restricted applications.

Discussion

Leaders should review the above at a meeting and use the following questions to engage their teams to identify similar hazards. Leaders should note answers, follow up, implement corrective actions, and positively reinforce worker responsiveness.

1. Where do we have similar hazards (Hoists)?

2. Where do we or have we performed similar tasks or processes?

3. Which of the causes associated with the incident are common in our facility?

4. Where else can we apply the shared learning?

5. For any similar hazards in our workplace, what is the level of risk?



Probability	3 Likely	Medium Risk 3	High Risk 6	Extreme Risk 9
	2 Unlikely	Low Risk 2	Medium Risk 4	High Risk 6
	1 Highly Unlikely	Minimal Risk 1	Low Risk 2	Medium Risk 3
Risk Matrix		1 Slightly Harmful	2 Harmful	3 Extremely Harmful
		Severity		

Probability: The likelihood of incident		Severity: The degree of consequence if an incident occurs	
1	Highly Unlikely - Could happen, but probably never will	Slightly Harmful -	Minor injuries or discomfort. May require first aid treatment.
2	Unlikely - May occur at some time	Harmful -	Injuries or illness requiring medical aid.
3	Likely - Expected to occur at some time	Extremely Harmful -	Injury or illness resulting in permanent impairment or death.

Assessment	
Risk Rating	Risk
9	Extreme - Urgent action required to eliminate or minimize risk
6	High - Immediate action required to eliminate or minimize risk
3-4	Medium - Short-term action required to eliminate or minimize risk
2	Low - Long-term action required to eliminate or minimize risk
1	Minimal - No action required if risk is eliminated or minimized

