

WALBRIDGE

SAFETY SUMMARY #09-10

Construction Incident

Date: April 1, 2009 @ 2:15 PM

Description of Incident: An Ironworker while installing a diagonal cross member of iron was thrown from his SkyJack scissor lift (Model #3226) when the lift he was working from was blown over by a strong gust of wind. The work location was 32' high with the lift height at approximately 25 high (full extension is 26'). The incident occurred just as the Ironworker was going to install his initial bolt connections at the work location. At that moment, according to all witnesses and the post incident investigation, a strong gust of wind came through knocking over the lift. The Ironworker was thrown over the lift's backside guardrail and fell along side the lift with both the Ironworker and lift striking a grouted masonry wall 15' below the work location.

Injuries: Broken Ribs (3), deflated lung, elbow lacerations, liver contusion - **(LOST TIME)**. The employee was released from the hospital on April 3, 2009.

Key Point Summary

- The subcontractor told the equipment rental company that it needed two scissor lifts to reach approximately 25 feet and that they needed to be used for outside steel erection on an elevated slab with load restrictions. The equipment rental company delivered two SkyJack scissor lifts (Model #3226) to the work area and trained the workers on use of the lift.
- SkyJack's Technical Support Department was contacted as part of the investigation. Their representative indicated that the SkyJack scissor lift (Model #3226) is a narrow based lift and built for indoor use only. The maximum wind load for this lift is zero.
- The Ironworker was using proper personal fall protection (harness and lanyard) and was secured to the manufacturer's attachment point in the lift. As a result, he was left hanging from his lanyard and harness on the outside of the wall never striking the ground. His co-workers cut him out of the harness.
- No apparent mechanical failures occurred with the scissor lift.
- According to Weather Underground at Metro Airport at the time of the incident, wind conditions were steady at 23 MPH with gusts to 37 MPH.
- The Walbridge required plans for this operation were in place for the work being performed; both operators were aerial lift trained; 100% fall protection was being used; Crane Action Plan was in place; and Pre-Task Analysis was completed.



Picture of the complete work area with lift blown over.

Key Learning Points

- The wrong scissor lift for the tasks being performed was provided by the equipment rental company.
- The maximum wind load information for aerial lifts is located on the serial number plate on the lift. This needs to be checked on all lifts before they are put into use on the project.
- Outdoor aerial lifts generally have a maximum wind speed rating of 28 MPH on the Serial Number Plate. **This information is not referenced in the Equipment's Owner manual.** The owner manual references "Do Not raise your platform in gusty or windy conditions."
- All Walbridge projects require the use of 100% tie off when operating any aerial lift. Based on the circumstances of this incident, the employee would have struck the ground if he wasn't tied off to the proper attachment point using a harness and shock absorbing lanyard. All devices were removed from service.
- It's important to have an Emergency Response and Crisis Management Plan in place to help assist in a smooth response. The EMS arrived at the project within 5 minutes of the 911 call. As Part of the Emergency Response Plan and Crisis Management Plan, the Corporate Safety Department must be notified ASAP.

Thank you Chris for this valuable information.

As some of you know or may not know, we had a Skyjack scissor lift get blown over on one of our projects in 2009. The lift that was brought out by the rental company was NOT rated for outdoor use and had a wind rating of 0 MPH. I have attached the Safety Summary that was completed for that incident.

In addition, even if a lift is rated for 28 MPH our subcontractors still must be aware of the weather conditions to ensure the elevated lift is not exposed to hazardous wind/weather conditions. All of the exact details are not yet known but an example of that occurring was at Notre Dame when a scissor lift was blown over during 50+ MPH winds during football practice.

Check your lifts and if you have any questions of their accuracy contact the manufacturer and/or rental company.

Thanks again Chris.

Mike Palazzola

From: Lyles, Christopher

Sent: Monday, November 15, 2010 2:49 PM

To: Palazzola, Mike; LaClair, Mark; Clabaugh, Steve; Dorsch, Mike; Alcorn, Kelvin; Anderson, Megan; Smedley, Andrew; Astorga, Hugo; Bond, Matt; Burnley Jr., David; Clabaugh, Steve; Coffey, Gary; Cornell, Brandon; Corrin, David; Crane, Robert; creynoso@walbridge.com; Cruz, Tony; Davis, Penny; Dawson, Michael; Fairbanks, Eric; Gray, Patrick; Hill, Phil; Houghteling, Linnea; Huddleston, Peter; Hunter, Matthew; McEntee, Jerry; Johnson, Charles; Johnson, Kathy; Joseph, Harry; Kelly, Richard; Kinney, Richard; Lauterbur, Haley; Lewis, Rolando; Lyles, Christopher; Lynch, Jon; Czarnecki, Melissa; Zavislak, Mike; Onderko, Carrie; Rinke, George; Schultz, Stephen; Shane Goodman; Sherman, Dennis; Spavale, Michael; Strayhorn, Deborah; Sullivan, John; Thureau, Jason; Winney, Robert

Cc: Christopher White; Armbruster, Michael

Subject: Scissor lift

Safety team,

When inspecting a scissor lift this afternoon I suspected that the machine was not designed for outdoor use. When looking for its wind load rating on the serial number placard and the operators manual I noticed a wind load sticker placed on the machine where another sticker once was located (see attached picture). I called Skyjack, the makers of the lift, and they confirmed that this wind load sticker had been placed on this machine by another party.

I just wanted to share this information with my fellow safety colleagues to be on the lookout for fraudulent safety information from our equipment providers.



Christopher Lyles

Site Safety and Health Officer

Dynamic Component Rebuild Facility

Naval Air Station Corpus Christi





SR-033 Rev 2 – October 28, 2010
Scissor Lift Wind Speed Ratings – ANSI/CSA Machines.

All Skyjack scissor lifts with a nominal platform width greater than 32 inches may be used in winds up to 12.5 m/s (28 mph).

Scissor lifts with nominal platform width of 32 inches or less manufactured prior to May 2010:

Unless otherwise labeled and designated on the machine's engineering certificate, Skyjack scissor lifts with a nominal platform width of 32 inches or less are designated as indoor machines and thus do not have an associated wind speed rating.

Scissor lifts with nominal platform width of 32 inches or less manufactured after May 2010:

Unless otherwise labeled and designated on the machine's engineering certificate, Skyjack scissor lifts with a nominal platform width of 32 inches or less may be used in winds up to 12.5 m/s (28 mph).

Best Regards,

Ian McGregor, P.Eng
Product Safety Engineer

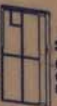




PLATFORM CAPACITIES
(EVENLY DISTRIBUTED)

MAXIMUM NUMBER OF PERSONS: 2 - NOT TO EXCEED 500 lb./226 kg
MAXIMUM WEIGHT OF PERSONS AND MATERIALS: 500 lb./226 kg
MAXIMUM SIDE FORCE: 90 lb./400 N

RETRACTED EXTENSION PLATFORM



500 lb.
226 kg

EXTENDED EXTENSION PLATFORM



250 lb.
113 kg

250 lb.
113 kg

WARNING! MAX. NUMBER OF PERSONS ON EXTENSION PLATFORM: 1
MAXIMUM WEIGHT OF 1 PERSON AND MATERIALS: 250 lb./113 kg
1.086745R




400 N (90 lb)

12.5 m/s (28 mph)
(45 km/h)

12-4465AE

