

General Workplace Inspectorate

Promoting Safety and Health in the Workplace

ACCIDENT/INCIDENT ALERT

10 March 2003

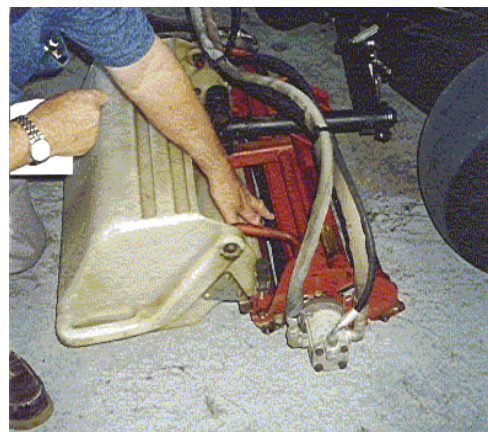
Serious Harm Accident Involving a Triplex Ride-On Mower

Incident

An experienced golf course superintendent was mowing his last green using a triplex ride-on mower. The early morning heavy dew was preventing cut grass from being thrown into the catcher; instead it was tending to clog on the reel carrier frame. The superintendent activated a foot pedal-operated safety reel switch (proximity switch), to deactivate the reel cutters. He dismounted and attempted to clear the grass from the right front cutter reel with his gloved left hand. This resulted in his glove and hand getting caught in the rotating reel, dragging it into the cutters.

Circumstances

Normally when the foot pedal is depressed the reels are lifted from the ground. The reel support bar duly activates a proximity switch (safety reel switch), which stops power supply to the rotating cutter reels. The superintendent could not hear that the cutter reels were still rotating due to the noise from the main diesel-powered engine and he could not see them due to the build-up of grass clippings. Because no intermittent fault had previously been displayed, he assumed the cutting reel would be stationary.



Photographs showing the ride-on mower and the area where the hand was trapped by the moving parts

Gloves were worn due to the messy nature of the job. The intention was to clear the grass from the front of the catcher and push it to the

back. It appears that the proximity switch was faulty and the cutter reels in this case were still operating. Therefore, when he reached into the danger area his hand became trapped by the rotating reel, dragging it into the cutting blades.

Emergency cellphone calls were made but were not successful. Due to the main engine noise the trapped superintendent could not be heard and therefore persons called terminated his calls.

Because of the early hour of the day and the isolation of the accident area, it was some twenty minutes before any attention of a person could be attracted to assist him. The frame carrier rod had to be cut by a hacksaw before he could be released.

Investigation

The investigation uncovered the following causation factors:

1. The primary interlock safety switch on the driver's seat had been deactivated so that when the superintendent dismounted, the main engine continued to operate.
2. The second reel switch or proximity switch appears to have developed an intermittent fault allowing the cutting reel to continue operating.

3. The superintendent's hand was used to clear the grass clippings that had accumulated.

Recommendations:

To prevent a recurrence of this accident, the following actions should occur:

1. Before using the mower, check that all safety switches are operating and are of a failsafe type.
2. Report all faults to the supervisor/manager so they can be attended to.
3. Mowers must be regularly maintained and checked for safe operation each time before use.
4. An appropriate broom/rake or other suitable implement for clearing grass or blockage should be available for use only when the machine is stationary.

The importers and distributors have agreed to publicise this event in the *Turf Journal*, a publication distributed to golf clubs and local bodies to raise the awareness when operating this type of machinery. In order to prevent a similar accident, SAFETY DEVICES fitted on such machinery must not be tampered with.

Never operate the machine unless the operator safety backup system is working.