

Jinzon

Manlifts, Scissor Lifts, and Aerial Work Platforms



Manlifts, Scissor Lifts, and Aerial Work Platforms are used to perform numerous personnel lifting tasks, both indoors and outdoors. They come in various sizes and configurations, in



both electric and fuel powered versions.

What they all have in common is that they use a *Tilt Sensor* or *Tilt Switch* (commonly referred to as a *level sensor* in this industry) as part of their safety system to prevent *tip-over*. This can occur when the equipment is not on level ground, and/or is supporting a heavy load.

Traditionally, this application has been served by companies who produce crude electro-mechanical switches. This technology utilizes a pendulum,



whose movement is damped by silicon fluid. This approach is antiquated, and only signals once an unsafe condition has been reached. In addition, they also incorporate a delay function to prevent false triggering. This has prompted the manufacturers to

place a sticker on the outside of the device to *avoid liability* in case of an accident.

This application can be readily satisfied by either of three superior *Spectron* products:

- *TAD II Threshold Angle Detector*
- *SPECTROTILT™ II Dual Axis Inclinometer*
- *SP Series Dual Axis Electrolytic Tilt Sensor.*

The *TAD II* provides switching (open collector) type outputs, and readily replaces the electro-mechanical pendulum devices commonly used. The *SPECTROTILT™ II Dual Axis Inclinometer*, which has variable DC outputs, has more distinct advantages. The DC output can be interpolated to not only alarm when required, but to also indicate approaching unsafe conditions. The *SP Series Dual Axis Electrolytic Tilt Sensor* can also serve this application well, and is the obvious choice for the OEM.