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## TILT SWITCHES

The tilt switches used on Skyjack aerial work platforms are safety devices that sense when the machine is out of level in any direction. The tilt switch is a normally closed switch that opens once it is tilted beyond a preset angle. Once the tilt switch opens, the tilt switch circuit will then sound an alarm and/or cut-out functions. The tilt switches are programmed for angle ranges that are specific to each aerial lift model. For this reason, when replacing a tilt switch, it is critical to replace it with the correct part number tilt switch for the model and serial number of the lift you are working on. Also, do not interchange tilt switch types; you must use the correct type that was originally installed on the machine.



Fig. 1



Fig. 2



Fig. 3

There are 3 types of tilt switches used on Skyjack aerial work platforms. **Figure 1** shows the older style tilt switch with the spring mounted switch body and bubble level on top. This type of switch is used on older model boom lifts and both electric powered scissor lifts and engine powered rough terrain scissor lifts. **Figure 2** shows the current style tilt switch – the ‘black box’ type which is now used instead of the type in Figure 1. **Figure 3** shows the auto level module which has the tilt switch built-in and is used on the rough terrain scissor lifts that are equipped with automatic levelling outriggers.

In order for the tilt switch to effectively do its job, it must be calibrated after it is installed. If the tilt switch is not calibrated correctly, the tilt switch circuit will not sound an alarm and/or cut out functions at the correct angle. To calibrate the tilt switch, first make sure the machine frame is level. Once the frame is level, you can set the tilt switch to match. For the type of tilt switch in Figure 1, adjust the nylon lock nuts on the tilt switch base to place the bubble in the center circle. The tilt switch types in Figure 2 and Figure 3 are set electronically using the procedure provided with the switch or in the correct service manual for the model and serial number of the lift you are working on.

Remember, all three types require the machine frame to be level before calibrating. The calibration process must be performed each time a tilt switch is installed on a machine. If the tilt switch mounting bracket is adjusted for any reason, the tilt switch must be recalibrated after the bracket adjustment.

To ensure that you are using the most up-to-date service and parts information available, the service and parts manuals are available online at [www.skyjack.com](http://www.skyjack.com). Please use the manual for the model and serial number of the unit you are servicing. If you have any questions regarding the tilt switches or any part of your Skyjack product, please contact Skyjack Product Support at 1-800-275-9522 or email [service@skyjack.com](mailto:service@skyjack.com)