INTRODUCTION

This kit replaces the mercury tilt switch (E-5078), used in Low Grain Shut Offs (LGSO) (590A-002A) and Grain Level Indicators (GLI)(261A-001A), with a lever actuated microswitch. The LGSO has 2 wires coming into the box and which are connected to the mercury switch. The GLI has additional wires, a switch, a relay, and a light.

If the old GLI has the relay mounted in the bottom of the box, the relay will need to be moved to the left vertical side of the box, to make room for the lever actuated switch bracket.

The grain bin will need to empty (at least below the level of LGSO or GLI) to properly mount and adjust the new switch.

INSTALLATION

![DANGER]

ELECTROCUTION HAZARD
Make sure all power is disconnected and locked off.

1. Remove the cover from the LGSO or GLI.

2. Carefully remove the old mercury switch, being sure not to break the glass capsule containing the mercury. For GLI, take note where the mercury switch wires connect, as the new switch wires will need to connect to the same place. Please dispose of the old mercury switch in an environmentally safe manner.

3. Mount the switch and bracket (590-009A) as shown using the hardware from the 590-008A sack. Do not completely tighten the mounting screws until the switch is adjusted. The bracket should be able to slide in and out.

![Diagram]

- F-1035-07 (2): Plain Nut, #8-32
- F-1408 (2): Lockwasher, #8 Int. Star
- F-1144 (2): Flat Washer, #8
- 590-009A: Switch, LGSO & Bracket Assembly
- F-1630 (2): Screw, #8-32 X 3/8
4. Loosen the switch mounting screws so the switch can slide up and down.

5. Slide the switch up and down and move the bracket in and out until alignment of the switch is as shown in the following diagrams. Then tighten the switch and bracket hardware.

Microswitch lever should be centered under counterweight. Bend mounting bracket if necessary.

Adjust bracket in and out so counterweight securely contacts the microswitch lever.
When the counterweight is all the way down (as shown on previous page), there should be very little extra downward movement possible in the microswitch lever.

Hold the microswitch lever all the way down with a finger then while holding the counterweight all the way down, slide the switch up until it contacts the counterweight as shown on previous page. Tighten the switch mounting screws in this location.

Tighten the bracket mounting screws:

6. Recheck adjustment of switch. Hold the counterweight up and the microswitch lever should be up. Release the counterweight and the microswitch lever should be pressed down. Pressing the microswitch lever down with your finger should result in very little additional travel. You should be able to hear the switch click before the counterweight is all the way down. Having the switch adjusted this way will allow it to actuate even if some grain gets trapped between the arm and the hood inside the bin. If the counterweight won't actuate the switch, move the counterweight further back on the arm or add more weight to it.

7a. For LGSO, use the supplied yellow wire nuts to attach to the 2 incoming wires to the switch wires. The 2 point terminal strip on the side of the box will be difficult to access, but can be used if desired.

7b. For GLI, attach the new switch wires to the same location where the old mercury switch wires were connected. Crimp on spade terminals are provided.

8. Make sure everyone is clear of all drying equipment, then apply power and carefully test the installation by moving the counterweight up and down to simulate grain and no grain conditions.

9. Disconnect and lock off all power and re-install the LGSO or GLI cover.