

## HS597 HOPPER LEVEL CONTROL

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### General Installation Notes:

Make sure that power is disconnected from system prior to servicing.

Installation of this equipment and related OEM equipment should be in accordance with these instructions, OEM's installation instructions and local codes (if applicable). Failure to follow specified instructions may cause damage to equipment and/or personal injury or death.

Take special note of any Warnings or Safety Decals on the equipment and in manuals.

Always wear protective clothing and any applicable Personal Protective Equipment (Safety Glasses and/or Ear Plugs) when working with the equipment.

Discarded materials, equipment and boxes should be recycled in accordance with local and national codes.

Unless otherwise specified, all Feed Delivery Systems (Diameters) are installed similarly.

**Note: Switch Assembly is to be wired in accordance with all applicable local and national electrical wiring codes. All wiring sizes and fuse capacities are to be sized according to applicable electrical code specifications or other regulations.**

### Safety Instructions:

Read all safety messages in this manual and on equipment safety decals. Follow recommended precautions and safe operating practices.

Ground all electrical equipment for safety.

Ground all non-current carrying metal parts to guard against electrical shock.

Always keep safety decals in good condition and replace missing or damaged decals.

### Overview:

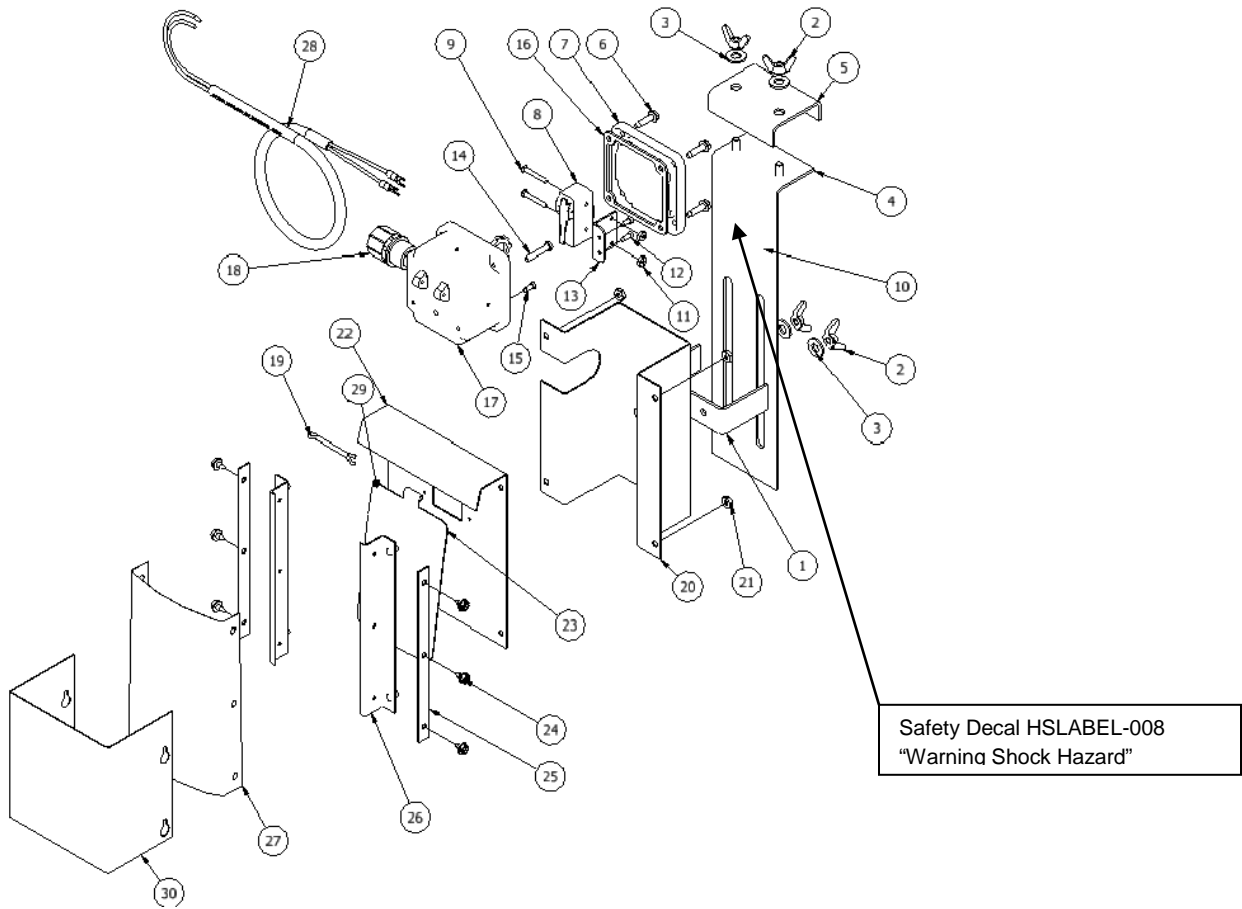
The HS597 Hopper Level Control is a universal control intended to be used with any conveying system that carries free-flowing feed. The control will automatically start or stop the fill system as the feed level pressure against the paddle assembly changes.

Controls may be used in more than one hopper to ensure that no hopper runs out of feed before the control unit hopper requires feed. In applications where more than one Hopper Level Control are used, the Hopper Level Controls must be wired in **Parallel** so that any unit can start the system.

The HS597 is designed for use in Poultry Feed Hopper applications. The HS597 installation requires no tools and height is adjustable.

**Do not connect rigid conduit to the enclosure.**

**HS597 HOPPER LEVEL CONTROL SWITCH ASSEMBLY**



REF #	PART #	DESCRIPTION	REF #	PART #	DESCRIPTION
1		ADJUSTMENT BRACKET STANDOFF	17		BOX ENCLOSURE
2		WING NUT 1/4"	18	61646	LIQUID TIGHT CONNECTOR 1/2"
3		FLAT WASHER 5/16"	19		COTTER PIN 1/8" X 1 1/2"
4		ADJUSTMENT BRACKET SLIDE	20		COVER, SWITCH HOUSING
5		TOP MOUNTING BRACKET	21		10-32 HEX NUT
6		SHOULDER SCREW, 10-16 X 1.375", SS - Type B	22		SWITCH COVER PLATE
7		CONTROL BOX COVER	23		SWITCH PADDLE
8	EL1052M	SWITCH - MICRO SNAP ACTION , 20 AMP	24		10-16 X 1/4 SCREW -TYPE AB
9		6 - 32 X 1", MACHINE SCREW	25		CLOTH PROTECTOR HOLD DOWN BRACKET
10	HSLABEL-008	LABEL,WARNING-SHOCK HAZARD (ENGLISH)	26		MOUNT RAIL,, CLOTH PROTECTOR
11		6 - 32, HEX MACHINE NUT	27	HS597-4	CLOTH, SWITCH PADDLE PROTECTOR
12		6-20 X 3/8" TAPPING SCREW Type BT	28		PIGTAIL- SJ 14/2 X 36"
13		SWITCH BRACKET	29		LABEL, HOPPER LEVEL CONTROL, HS597
14		SWITCH PIN	30		FEED SHIELD
15		6-20 X 3/8" TAPPING SCREW Type BF			
16	HSBTC01-10	GASKET			

## Installation:

The HS597 Hopper Level Control should be installed in the last hopper or feeder which is located at the end of the delivery or fill system. The unit should be mounted low in the hopper or feeder so the fill level in the control hopper will be lower than the others. This will cause the fill system to cycle more frequently insuring a proper feed level in every hopper or feeder. It will also provide a reservoir of feed in the system if another control hopper calls for feed. The feed drop tube should be positioned so that feed is delivered to the center and near the top of the control in front of paddle. Drop tubes and other control units should be positioned high in other hoppers or feeders so that they will fill but not overflow.

1. (Figure 1) Illustrates a typical installation example of the HS597 into a feed hopper.
2. Hopper Level Control is held in place by clamping assembly to top lip of feed hopper.
3. Remove the two wing nuts, washers and TOP MOUNTNG BRACKET (Item #5) from top of assembly.
4. Slide switch assembly underneath top lip of feed hopper as shown below (figure 1).
5. Replace TOP MOUNTING BRACKET (item #5), washers, wing nuts and tighten in place.
6. **The HS597 must be mounted vertically to ensure the proper movement of the switch and paddle.**

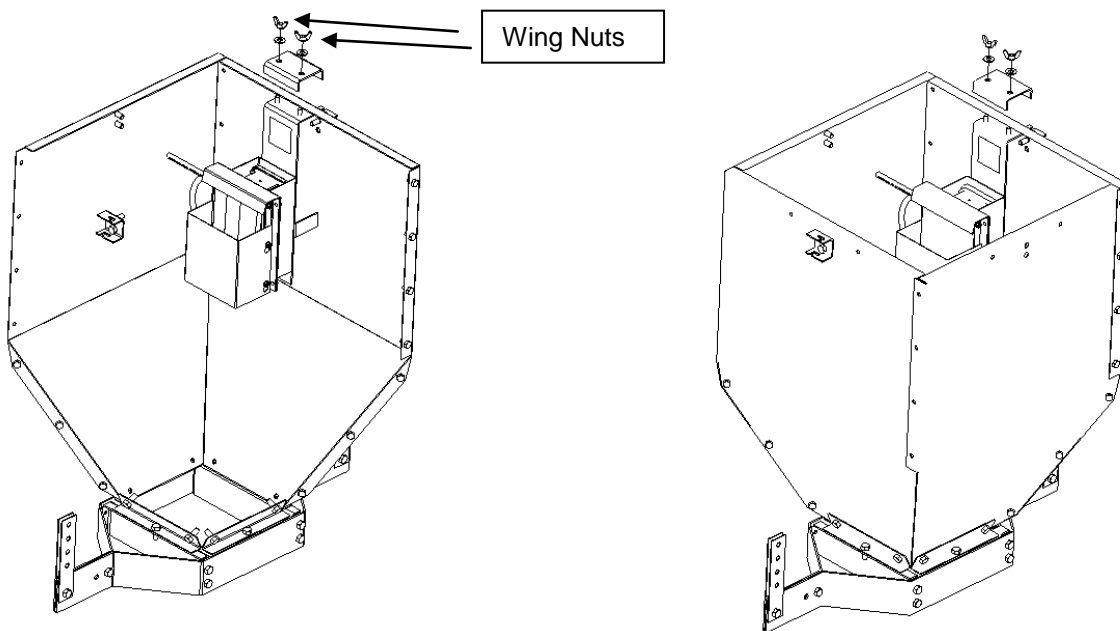
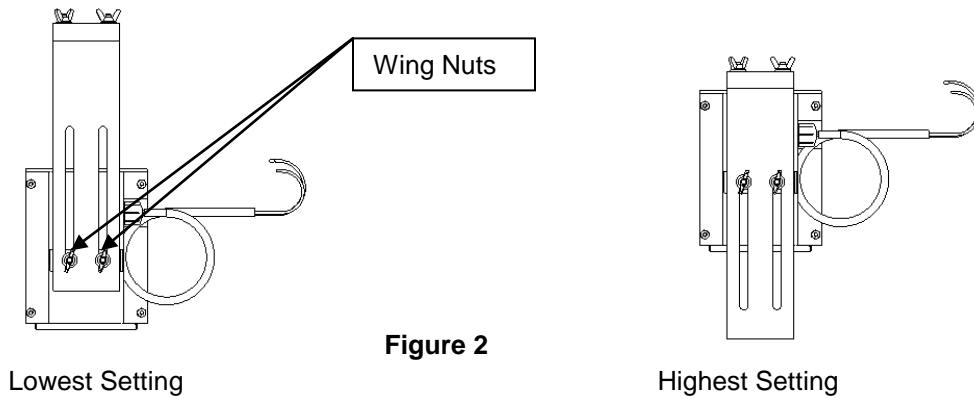
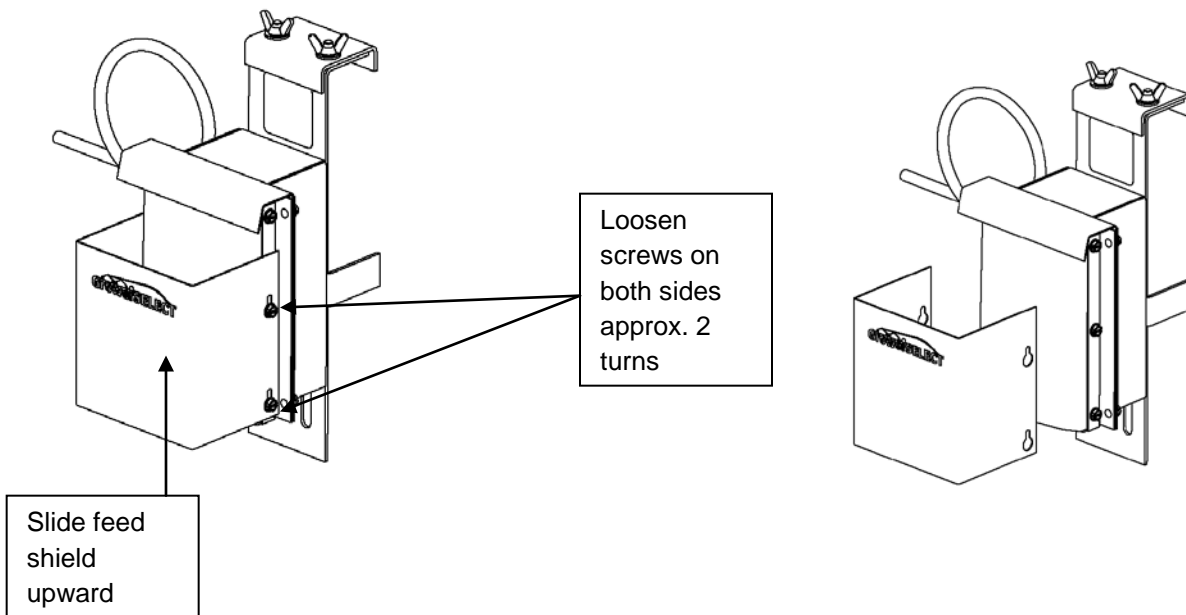


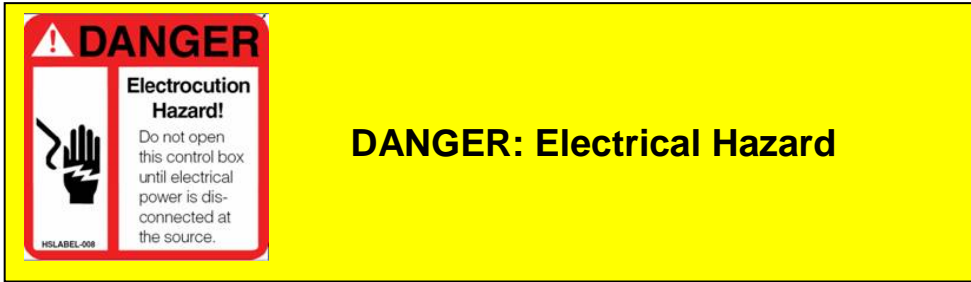
FIGURE 1

7. Feed height can be adjusted by loosening two wing nuts and sliding switch assembly up or down the adjustment bracket for desired feed level. Refer to Figure 2.



8. The front feed shield cover can be removed depending upon application requirements. Simply loosen the four screws approximately 2 turns and slide feed shield up so that screw heads align with large opening in key slots. Pull field shield over screw heads and remove. Replacement of feed shield is performed in reverse order.





**IMPORTANT** Disconnect all electrical power before attempting installation of this (or any equipment), inspecting or servicing.

**Ground all electrical equipment in accordance with applicable codes. Do not assume equipment will automatically be grounded due to incidental metal-to-metal contact.**

**ALL electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.**

**Wiring:**

The HS597 Hopper Level Control is a single pole, double throw switch connected so that the circuit is normally closed (Motor Runs) when there is no feed present against the paddle. The circuit is open (Motor Stops) when there is feed against the paddle.

The HS597 internal switch is rated for 20 amps @ 125V/250VAC. It can be directly connected in series to control a motor up to the following ratings.

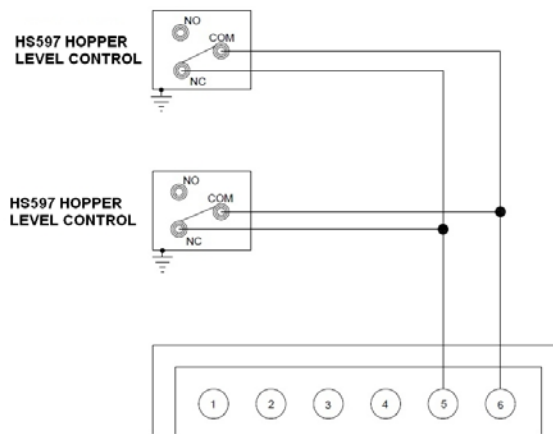
**Maximum Ratings:**

**1 ½ HP @ 230VAC**

**¾ HP @ 115VAC**

**Resistive load = 20 amps.**

If larger motor size is used or resistive load greater than 20 amps, the Hopper Level Control must be connected to a relay/contacter.



**Wiring for use with GrowerSELECT HS593 Control unit or CTB 6500 Control Unit**