

## GrowerSELECT™ HS593 Feed Line Control Unit – 230V Single Phase

### 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: Control Unit 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 GrowerSELECT HS593 Control Unit is designed for use with a flexible auger feed system where control of an auger drive motor is required. Power to the auger drive motor is done through feed pressure being applied to a diaphragm coupled to an electrical switch internal to the control unit housing. This switch is used to control the auger drive motor by turning off the power when feed is present and turning on the power when feed has been removed from the control unit housing.

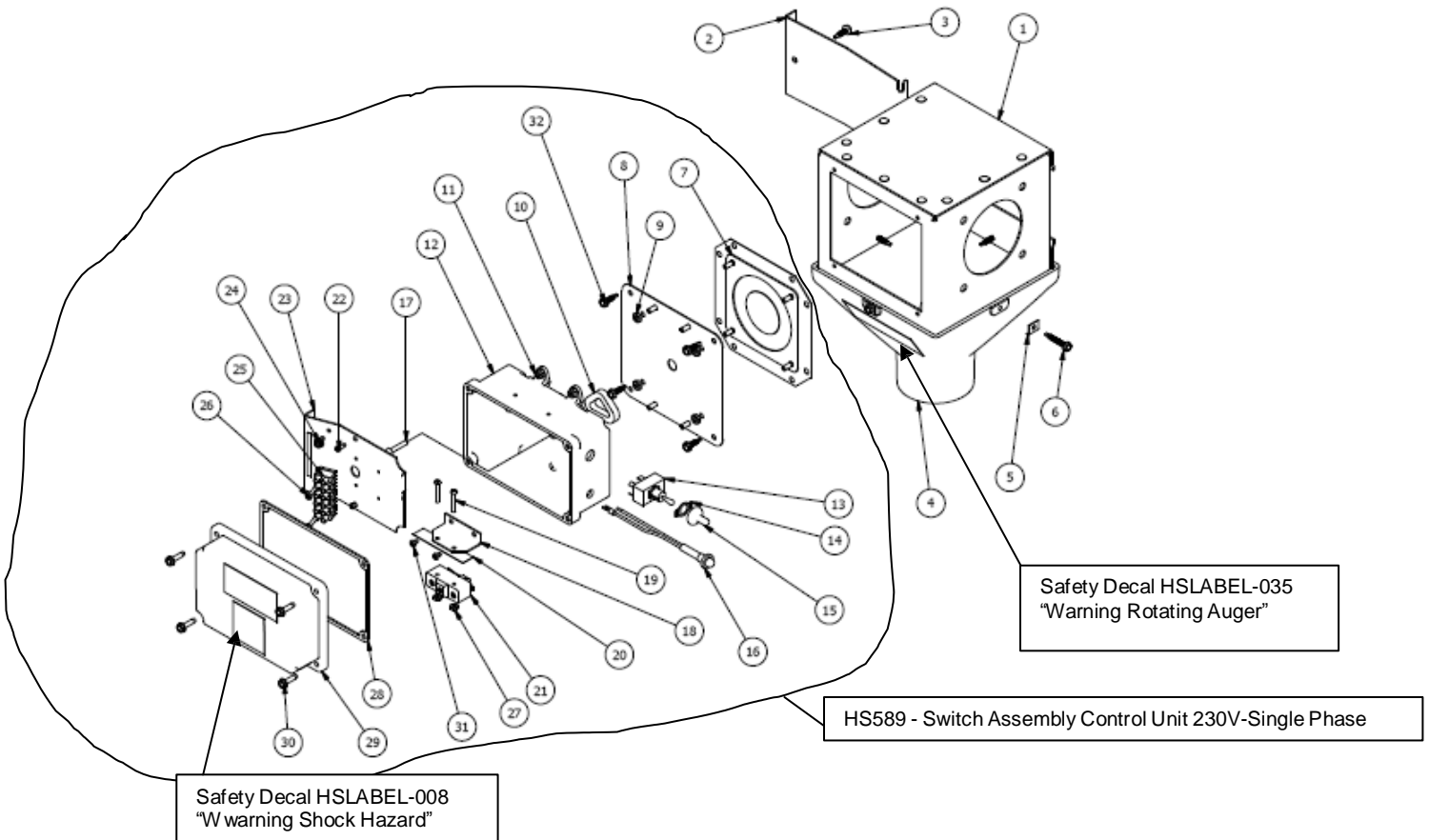
The sensitivity of the electrical switch is not adjustable.

**MAXIMUM LOAD RATING: 1 ½ HP @ 230VAC**

A red indicator light on the side of the switch housing will illuminate when the diaphragm has been pressed (MOTOR OFF) and the switch has been activated.

The ON/OFF switch is used to enable or disable the Control Unit. **DO NOT USE THIS SWITCH AS DISCONNECTING MEANS FOR SERVICING.**

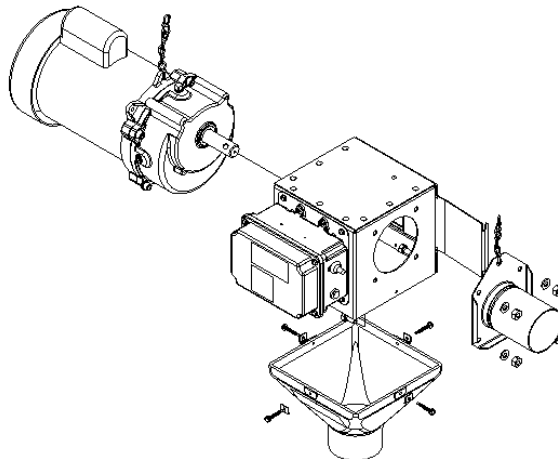
## HS593 Feed Line Control Unit



REF #	PART #	DESCRIPTION	REF #	PART #	DESCRIPTION
1	HS590-1	ASSEMBLY HOPPER	17		SWITCH ACTUATOR PIN
2	HS590-11	ACCESS GATE	18		SWITCH MOUNT BRACKET
3		#10-16 X 3/4" HEX SELF DRILLING SCREW	19		#6-32 X 1", PHILLIPS PAN HEAD MACHINE SCREW
4	HS591	DROP CONE - CLARIFIED PLASTIC	20		INSULATING FILM
5		CONTROL UNIT CLAMP	21	EL1052M	SNAP ACTION 20A @ 250V
6		#10-16 X 1" HEX WASHER SELF DRILLING SCREW	22		#6-20 X 3/8" TAPPING SCREW TYPE BT
7	HS582	DIAPHRAGMASSEMBLY	23		SWITCH ASSEMBLY COMPONENT MOUNT PLATE
8		SWITCH ASSEMBLY MOUNT PLATE	24		#10 X 3/8" THREAD FORMING - GROUNDING SCREW
9		#10-32 HEX MACHINE NUT	25	EL1072	6 POSITION 18-10 AWG TERMINAL STRIP
10	HS529-45	PLUNGER SEAL	26		#6-32 X 1" PHILLIPS PAN HEAD TAPPING SCREW
11		#10-32 NYLON LOCK NUT	27		#6-32 HEX MACHINE NUT
12		SWITCH ASSEMBLY ENCLOSURE	28	HS589-3	GASKET
13	EL1011	TOGGLE SWITCH, DPST, 20A @ 250V, 2HP	29		SWITCH HOUSING COVER
14		LEGEND PLATE, ON/OFF	30		SHOULDER SCREW #10-16 X1.375" HEX WASHER HEAD
15	EL1083	TOGGLE SWITCH BOOT COVER	31		#6-32 X 1/4" SCREW
16	EL1079	INDICATOR LAMP, RED, 250V	32		#10-16 X 3/4" HEX WASHER SELF DRILLING SCREW

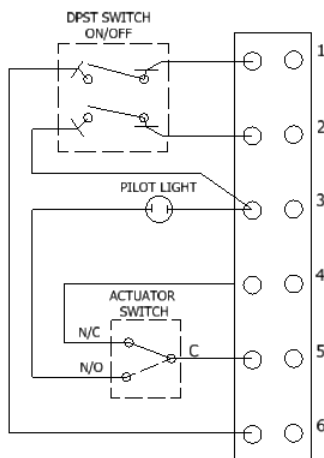
## Installation:

1. (Figure 1) illustrates a typical installation example of the HS593 control unit.
  - a. Mount tube anchor to one side using (4) 5/16" x 3/4" bolts with (4) flat washers.
  - b. Mount auger power drive unit gear box secured with (4) 5/16" x 3/4" bolts and (4) flat washers.



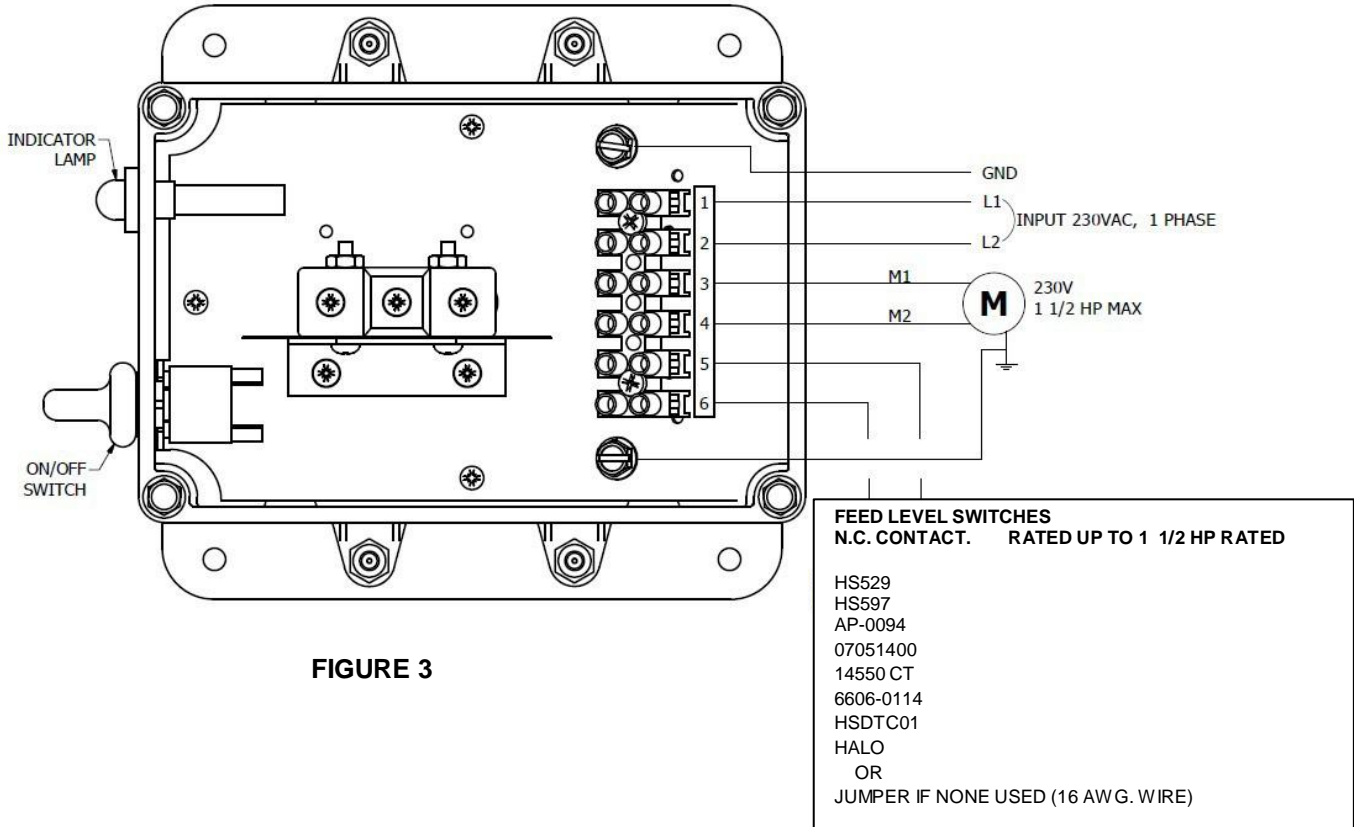
**FIGURE 1**

2. The HS593 Control Unit must be hardwired. See (Figure 2) for factory wiring diagram.
3. See below Figures 3 and 4 for external wiring for single phase and three phase operation.
4. When connecting wire from equipment to terminal strip, remove no more than 1/4" of insulation from end of wire. Be sure there are no stray wire strands before inserting wire into terminal strip. Insert wire into terminal 1/4" and tighten terminal strip set screw.
5. When using **Hopper Level Control Switch**, switch should be wired as "Normally Closed" contact.
6. If **No Hopper Level Control Switch** is to be used, Place jumper wire between terminals (5) and (6).
7. Use provided self-tapping screws to provide bonding to Control Unit Switch Assembly and other connected equipment.
8. Pilot indentions are provided and located to allow for sufficient clearance for 1/2" non-metallic liquid tight strain relief cord connectors. **DO NOT USE RIGID CONDUIT.**
9. Care should be taken when drilling pilot holes to prevent damage to wires or other components.

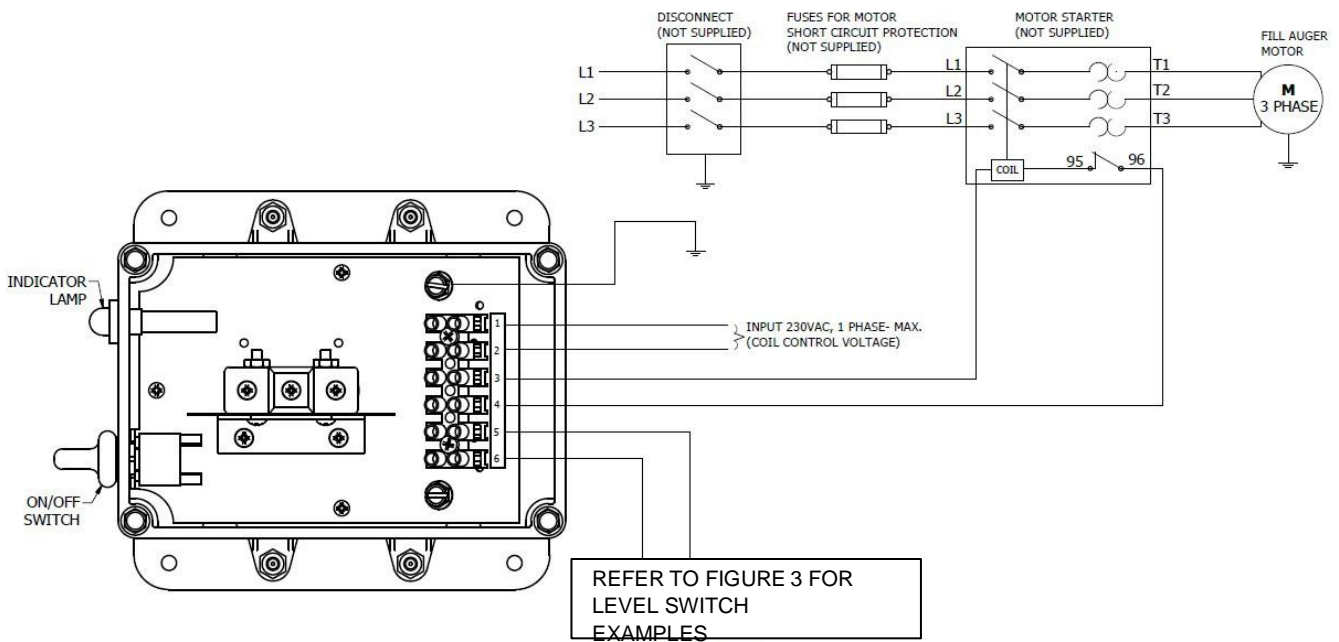


**FIGURE 2**

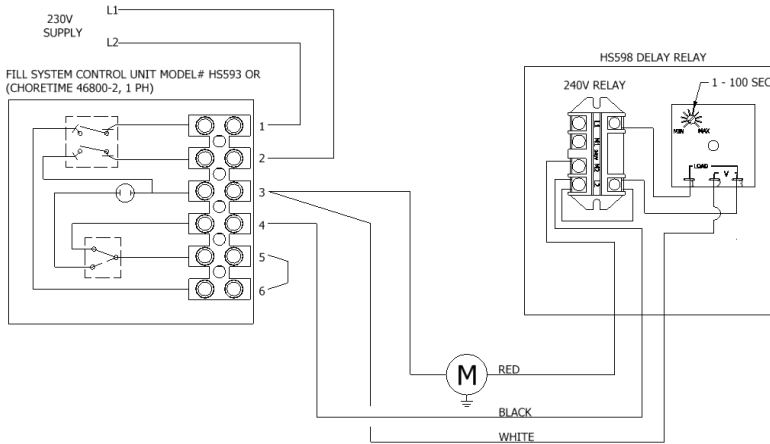
WIRING INSTRUCTIONS FOR SINGLE PHASE – 50/60Hz W/O MOTOR STARTER



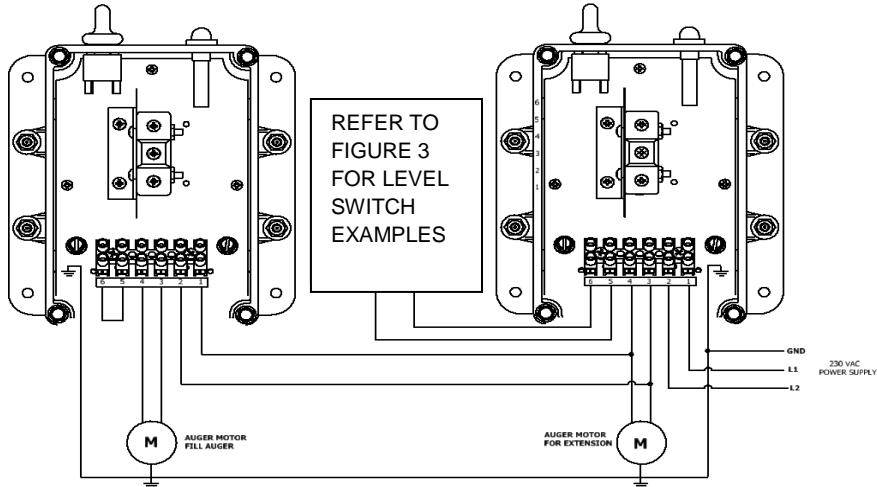
WIRING INSTRUCTIONS FOR THREE PHASE – 50/60Hz WITH MOTOR STARTER



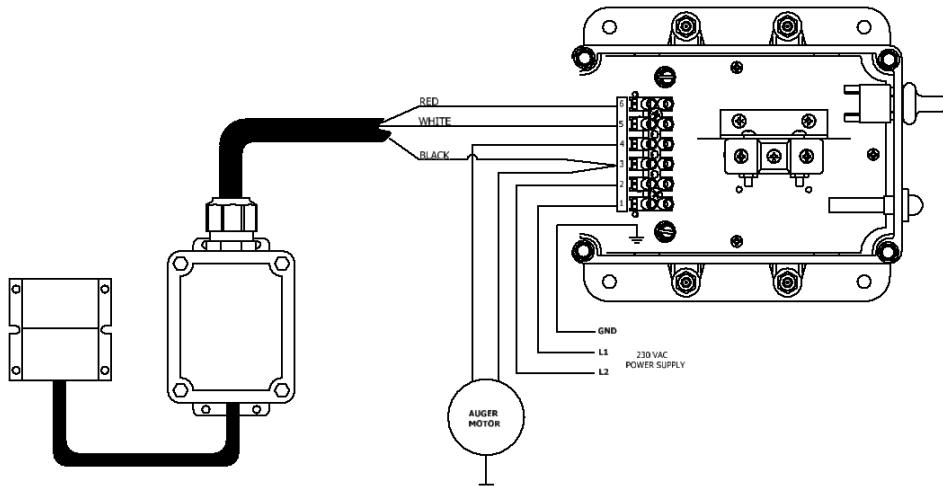
## WITH OPTIONAL TIME DELAY:



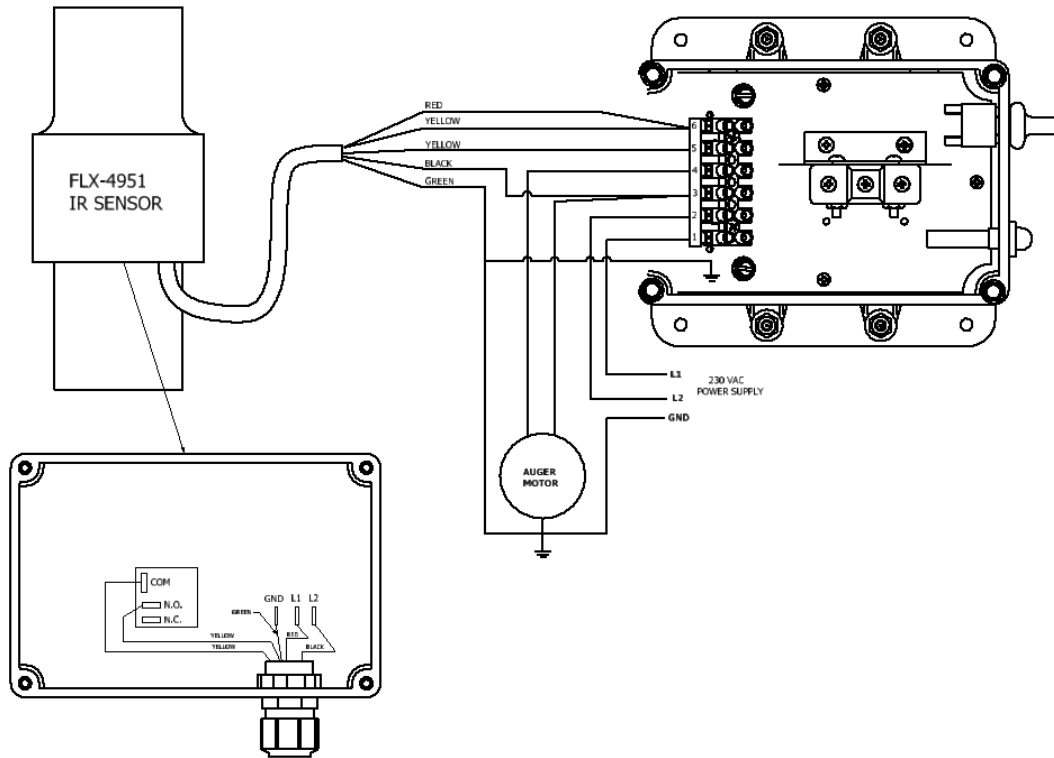
## WITH EXTENSION GROW-FLEX™ AUGER USING TWO HS593 CONTROL UNITS



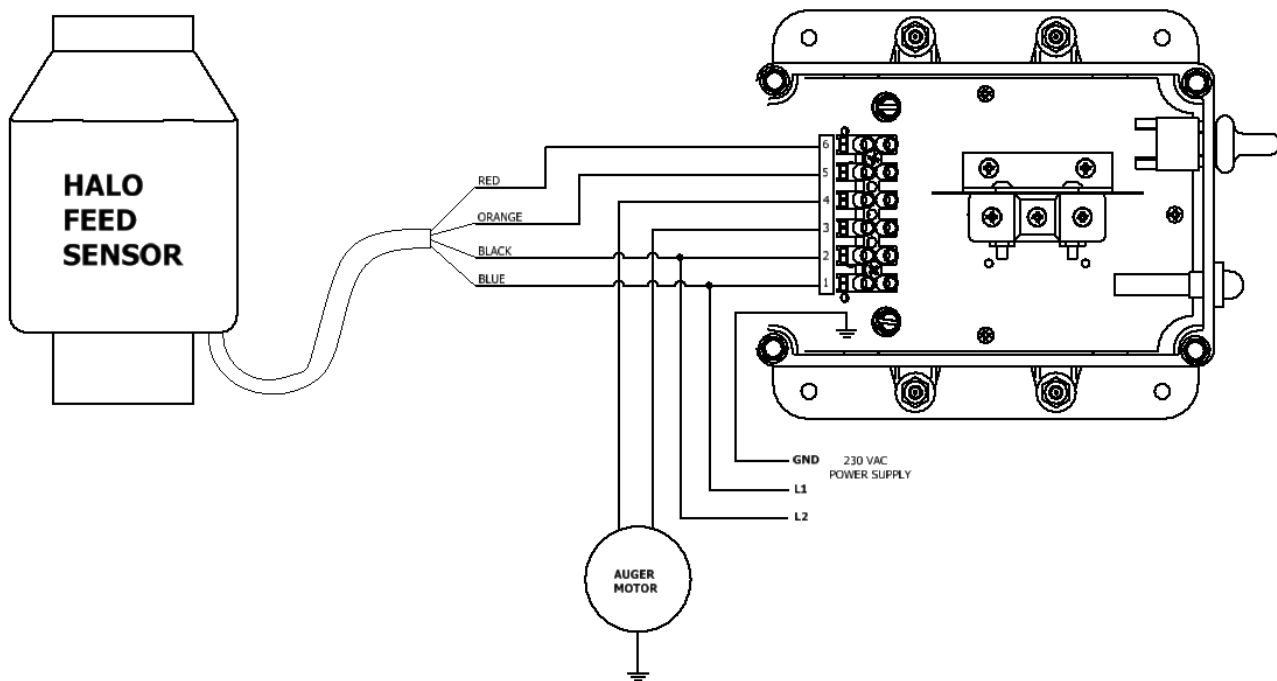
## CHORE-TIME 46316 DROP TUBE SWITCH



GSI SMART IR ® SENSOR



HALO JR MAX FEED SENSOR



# Hog Slat Limited Warranty

Hog Slat warrants products to be free from defects in material or workmanship for a period of twenty-four (24) months from the date of **original purchase**. Hog Slat will credit, repair, or replace, at its option any product deemed defective within this time period. Labor costs associated with the replacement or repair of the product are not covered by the Seller/Manufacturer.

## Conditions and Limitations

1. The product must be installed by and operated in accordance with the instructions published by the **Seller/Manufacturer or Warranty will be void**.
2. Warranty is void if **all components** are not original equipment supplied by the **Seller/Manufacturer**.
3. This product must be purchased from and installed by an authorized retailer/distributor or certified representative thereof or the Warranty will be void.
4. Malfunctions or failure resulting from misuse, abuse, negligence, alteration, accident, or lack of proper maintenance shall not be considered defects under the Warranty.
5. This Warranty applies only to components/systems for the care of poultry and livestock. Other applications in industry or commerce are not covered by this Warranty.
6. This Warranty applies only to the Original Purchaser of the product.

The **Seller/Manufacturer** shall not be liable for any **Consequential or Special Damage** which any purchaser may suffer or claim to suffer as a result of any defect in the product. "**Consequential**" or "**Special Damages**" as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.

THIS WARRANTY CONSTITUTES THE SELLER/MANUFACTURER'S ENTIRE AND SOLE WARRANTY AND THIS MANUFACTURER EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

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**This equipment must be installed in accordance with all State and Local Codes and applicable Regulations which should be followed in all cases. Authorities having jurisdiction should be consulted before installations are made.**



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Market: Hog & Poultry