

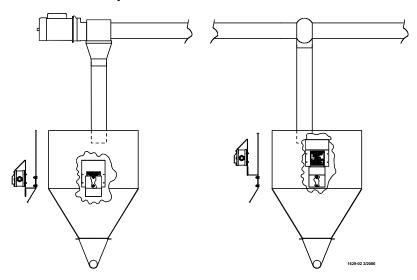
SENSOR PLUS™ Hopper Level Control Part Number 42613

The SENSOR PLUSTM Hopper Level Control is designed for use with any conveying system that carries freeflowing feed. The control automatically starts and stops the fill system as feed level against the sensor changes.

IMPORTANT Install the SENSOR PLUSTM Hopper Level Control in the last hopper located at the end of the Delivery System. Mount it low.

Poultry Application

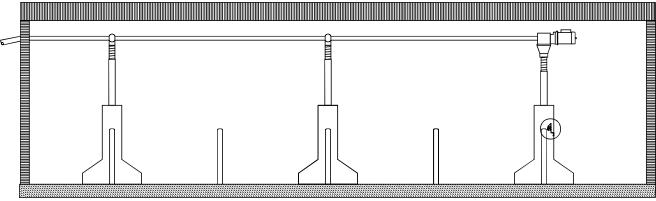
NOTE: In poultry applications, switches may be placed in more than one hopper to assure that no hopper empties before the control unit hopper requires feed. All switches must be wired in parallel so that any one switch can start the system.



Hog Application

December 2000

NOTE In most hog installations, the control is installed in the last hopper that is located at the end of the delivery system.



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Installation

Install the control in the last hopper which is located at the end of the delivery system. Mount it low so the feed level will be lower in that hopper than in the others. The lower feed level will cause the system to start frequently enough to maintain the feed level in every hopper and provide a reservoir for the feed in the fill system if another hopper calls for feed. Position the feed drop tube to deliver feed to the center and near the top of the hopper, in front of the sensor. Position the drop tubes and switches high in the other hoppers so that they fill but do not overflow.

Mount the Hopper Level Control vertically, as shown in **Figure 1**. Drill two 9/32" [7.2 mm] holes at the desired location. Use the bracket as a guide to determine the hole spacing. Fasten the bracket in place with the hardware supplied. Install the Control in the Mounting Bracket Assembly. The control may be removed for switch adjustment or for house clean-out.

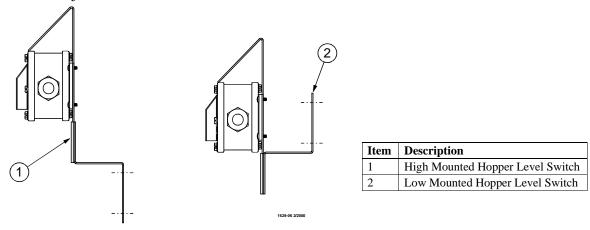


Figure 1. The Hopper Level Control Mounted Vertically

Switch Adjustment

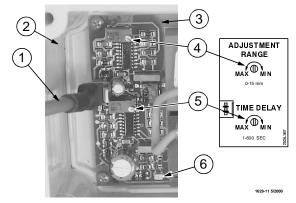
The SENSOR PLUS Hopper Level Switch is adjusted at the factory to a sensitivity of .25" [6 mm] and a time delay of 15 seconds, but they may be changed for a specific installation. The sensitivity adjustment range is 0" to .80" [0 mm to 15 mm] and the time delay adjustment is 0 seconds to 600 seconds.

To adjust the Sensitivity:

- For less sensitivity turn Sensitivity Adjusting Screw clockwise
- For more sensitivity turn Sensitivity Adjusting Screw counter-clockwise

To adjust the Time Delay:

- For less time turn Time Delay Adjusting Screw (item 5) clockwise (Light blinks fast)
- For more time turn Time Delay Adjusting Screw (item 5) counter-clockwise (Light blinks slow)



Item	Description	Part No.
1	Proximity Switch Cord	
2	Switch Box	42627-3
3	Circuit Board	42604
4	Sensitivity Adjusting Screw	
5	Time Delay Adjusting Screw	
6	Light	

Figure 2. Adjusting the SENSOR PLUS Proximity Switch

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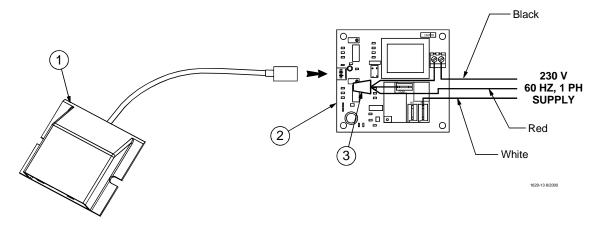
Internal Wiring

DANGER: Electrical Hazard

IMPORTANT Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

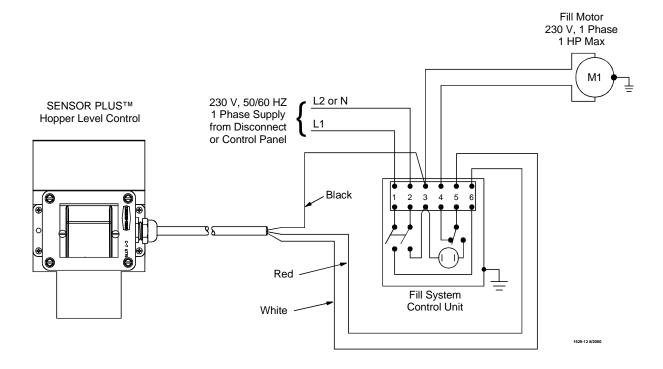
Ground all electrical equipment for safety.

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



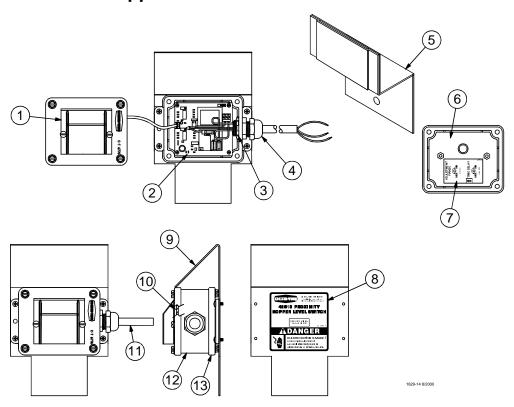
Item	Description	Part No.
1	Rectangle Sensor w/Heater	42593
2	Circuit Board w/Heater	42604
3	Crimp Wire Nut	5709-1

Wiring to the Fill System Control Unit



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SENSOR PLUS™ Hopper Level Control Parts List



Description	Part No.
Rectangle Sensor with Heater	42593
Circuit Board with Heater	42604
1/2" Nylon Conduit Lock Nut	43662
1/2" Liquid Tight Connector	24685
Mounting Bracket Assembly	2911
Machined Electrical Box Cover	42611
Switch Adjustment Decal	2526-387
Hopper Level Proximity Switch Decal	2529-714
Hopper Switch Support Bracket	42612
Switch Box Gasket	6777
Cord Assembly	4999-101
General Purpose Terminal Box (Machined)	42627-1
Terminal Box Mounting Cover	6956
	Rectangle Sensor with Heater Circuit Board with Heater 1/2" Nylon Conduit Lock Nut 1/2" Liquid Tight Connector Mounting Bracket Assembly Machined Electrical Box Cover Switch Adjustment Decal Hopper Level Proximity Switch Decal Hopper Switch Support Bracket Switch Box Gasket Cord Assembly General Purpose Terminal Box (Machined)

^{*}These items may be ordered as Sensor Plus Level Assembly, Part Number 44920.