

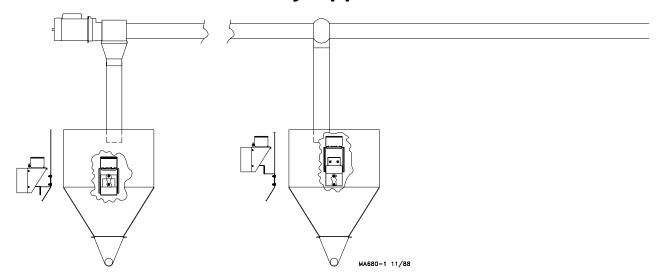
14550 Hopper Level Control

Parts List • Wiring • Installation

The 14550 hopper level control is designed for use with any conveying system that carries free-flowing feed. The control automatically starts and stops the fill system as feed level against the paddle changes.

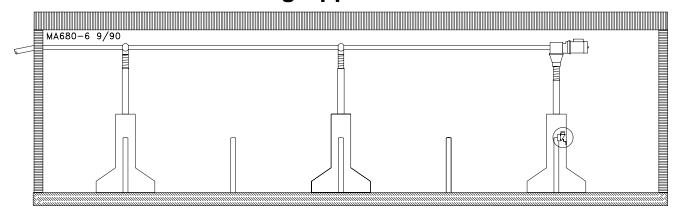
Switches may be placed in more than one hopper to assure that no hopper empties before the control unit hopper requires feed. All switches must be wired in parallel so that any one switch can start the system.

Poultry Application



Install the hopper level control in the last hopper located at the end of the delivery system. Mount it low.

Hog 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.

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

August 2010 MA680 I

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 paddle. 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**, to assure free movement of the switch paddle. 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.

Note: The mounting bracket can be relocated to the studs underneath the paddle shield to lower the hopper level control approximately 2" (50 mm) in the hopper.

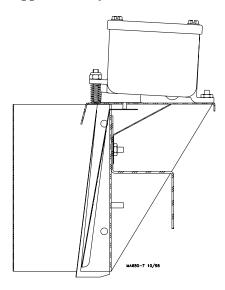


Figure 1. The Hopper Level Control Mounted Vertically

Switch & Paddle Adjustment

The control switch is factory adjusted for both switch sensitivity and paddle position. It is set for medium to light weight feed (less than 40 lb/ft³ or 64 kg/m³).

IMPORTANT: External adjustment nut is for paddle positioning only. Switch sensitivity can only be adjusted internally.

Paddle Positioning

- 1. Place switch in a vertical position with <u>NO FEED</u> in front of paddle.
- 2. Turn external nut CLOCKWISE until switch actuates (clicks).
- 3. Turn external nut back COUNTER-CLOCKWISE until switch de-activates (clicks).
- 4. Turn external nut an additional TWO full turns COUNTER-CLOCKWISE.

Switch Sensitivity Adjustment

- 1. Loosen the two #6 slotted, hex washer head screws holding the switch bracket in place.
- 2. Slide the switch and bracket assembly--
 - --RIGHT to make the switch LESS SENSITIVE, requiring more feed to actuate
 - --<u>LEFT</u> to make the switch <u>MORE SENSITIVE</u>, requiring less feed to actuate. See **Figure 2**.
- 3. Re-tighten the screws (do not over-tighten).
- 4. <u>IMPORTANT</u>: Re-adjust paddle position whenever switch sensitivity is adjusted.

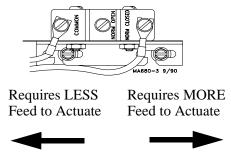


Figure 2. Adjusting the Switch

Wiring



DANGER: Always disconnect power to the system before inspecting, servicing, or maintaining the equipment. Failure to disconnect power may cause injury or death.

Ground all electrical equipment for safety. Ground all non-current carrying metal parts to guard against electrical shock. Electrical disconnects and over current protection are not supplied with the equipment.

PANGER

ELECTROCUTION
HAZARD!
Do not open this control box until electrical power is disconnected at circuit breakers.

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

The 14550 hopper level control is a single pole, double throw switch with wiring leads connected so that the circuit is complete (closed) when there is no feed against the paddle. The circuit is broken (open) when there is feed against he paddle.

The 14550 hopper level control is rated for up to a 1 H.P., 230 VAC motor. If a motor larger than 1 H.P., 230 VAC is used, a contactor must be installed to control the current to the switch.

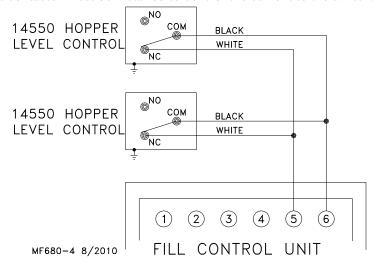
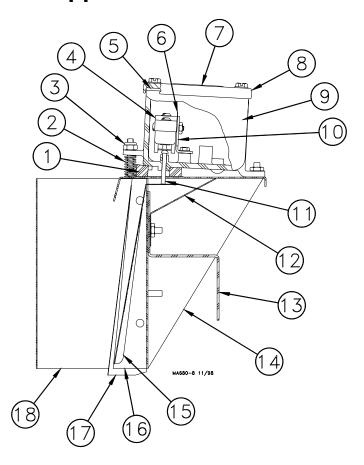


Figure 3. Wiring the Hopper Level Control

14550 Hopper Level Control Parts List



Item	Description	Part No.	Item	Description	Part No.
1	Gasket	6968-1	11	Pin	8757
2	Spring	6972	12	Paddle Shield	24059
3	10-32 Lock Nut	6963	13	Switch Brace Bracket	2703
4	SPDT Switch	46091	14	Switch Frame Assembly	14499
5	Gasket	6777	15	Paddle	14519
6	Switch Insulation	1907-5	16	Switch Frame Assembly	14498
7	Danger Decal	2527-35	17	Diaphragm	28157
8	Switch Box Cover	6776	18	High Differential Shield	7808
9	Switch Box	24678		1/2" Watertight Connector	23779
10	Switch Bracket	7068		Mounting Bracket Assembly	2911