



Proximity Drop Tube Switch

Part Numbers 53140 & 53141

Introduction

The Chore-Time proximity drop tube switch assembly is designed to provide reliable feed sensing in poultry and livestock applications. The proximity drop tube switch assembly is available with and without a safety timer. The safety timer option allows the operator to set the maximum auger run time. The maximum run time will help protect the system by stopping excessive operation if the feed bin runs out of feed.

The drop tube switch may be used with a wide variety of feed types, including high-moisture corn.

Installation



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

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

The proximity switch is to be installed through the hole in the side of the switch tube.

The proximity switch should be installed so that approximately 1" [25 mm] extends into the feed flow area, see **Figure 1**. Install the adjustable clamp to secure the proximity switch to the switch tube, see **Figure 1**.

The drop tube switch should be installed directly below the control unit funnel. A drop tube may be installed between the bottom of the funnel and the top of the stack tube or feed hopper.

When the stack tube or feed hopper is not directly below the control unit funnel a section of flexible tube can be used. Do not create an angle over 30 degrees when using flexible tubing to reach the stack tube or feed hopper.

Secure the junction box to the wall or ceiling near the drop tube switch assembly.

Wire the drop tube switch assembly according to the applicable wiring diagram.

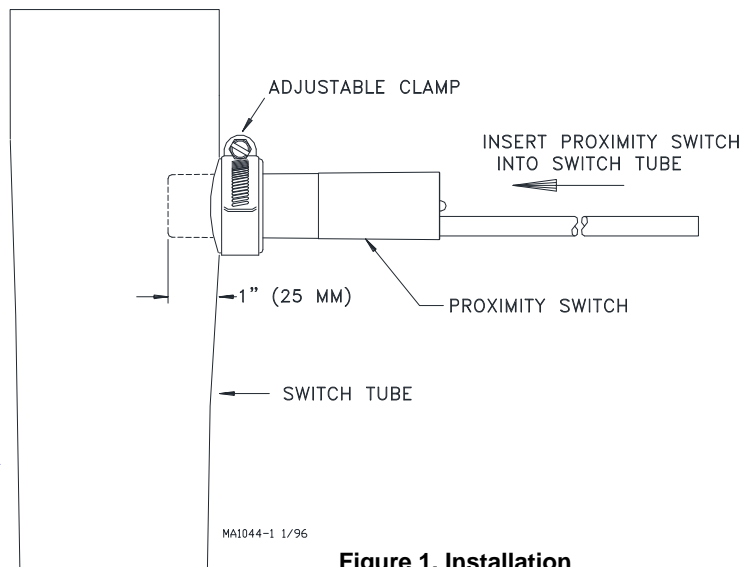


Figure 1. Installation

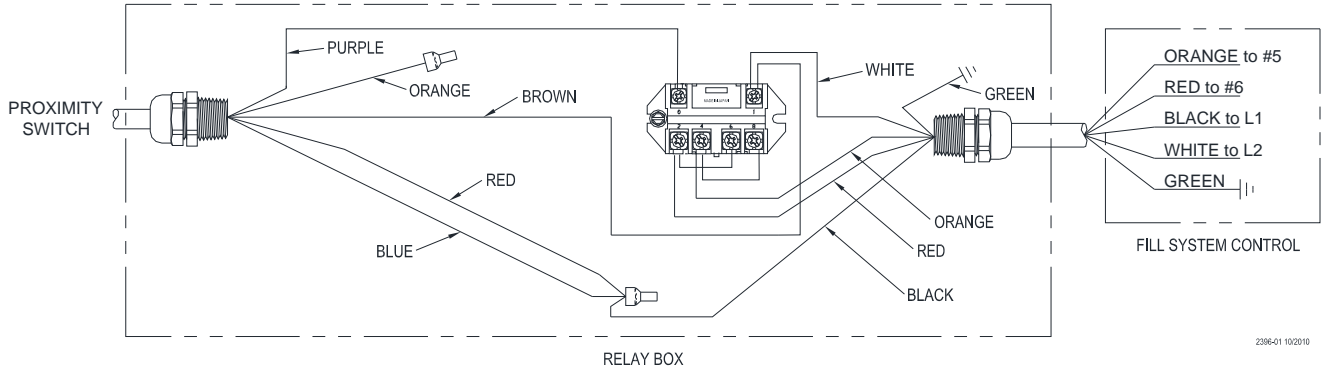
Wiring



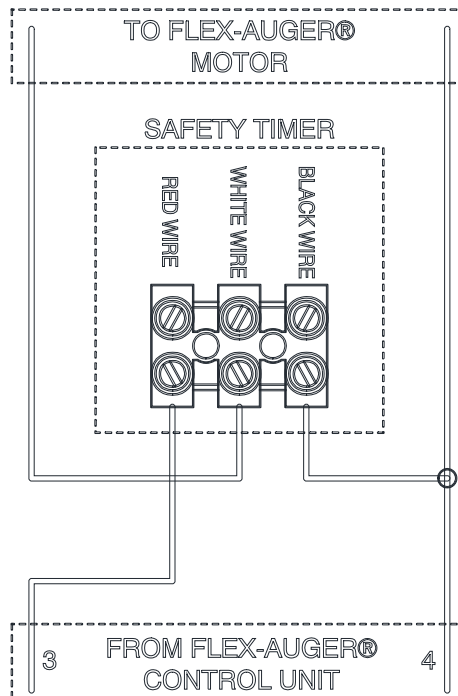
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Proximity Switch with Relay (P/N 53140)



Proximity Switch with Safety Timer (P/N 53141)



Proximity Switch Operation

The internal relay is activated when the proximity switch senses feed. When the switch senses feed the system is immediately stopped. Once feed is removed from the front of the proximity switch a delay is activated which will start the system after the set time (delay on).

Setting delay:

To set the seconds delay:

- Press and hold the black button.
- The first flash will zero the seconds delay time. Each additional flash will increase the delay by 10 seconds.

To set the minutes delay:

- Press and hold the red button.
- The first flash will zero the minutes delay time. Each additional flash will increase the delay by 1 minute.

Setting the timer mode:

The timer can be set to function on a dead end system (delay on) or on a MULTIFLO® system (delay off), factory setting is delay on.

- Press and release the black button (6) six times.
- The light will start to flash.
 - Green - Dead End System (delay on).
 - Red - Multiflo System (delay off).
- Press red button to change the function.
- Press black button to operate function.

Setting Calibration:

- Make sure no feed is on the sensor.
- Press red and black button at the same time.
- Wait until the light goes off and release buttons.

LED indicator (light) during operation:

- Green - Feed
- Red - No feed
- Red flash - Delay timer active

Safety Timer Adjustment

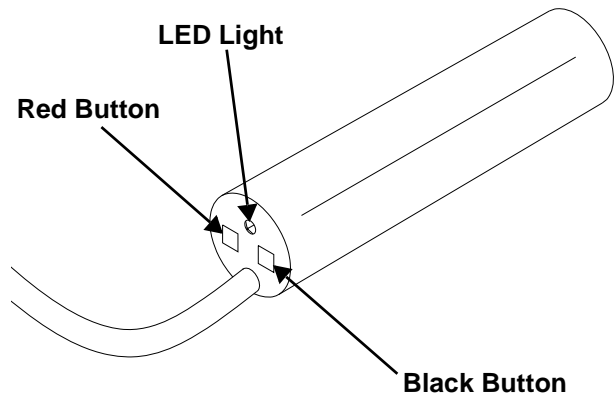
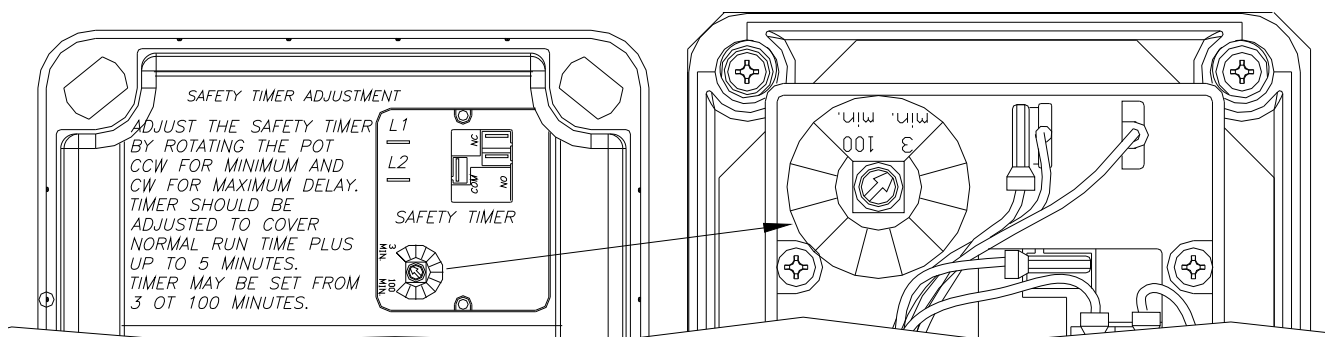
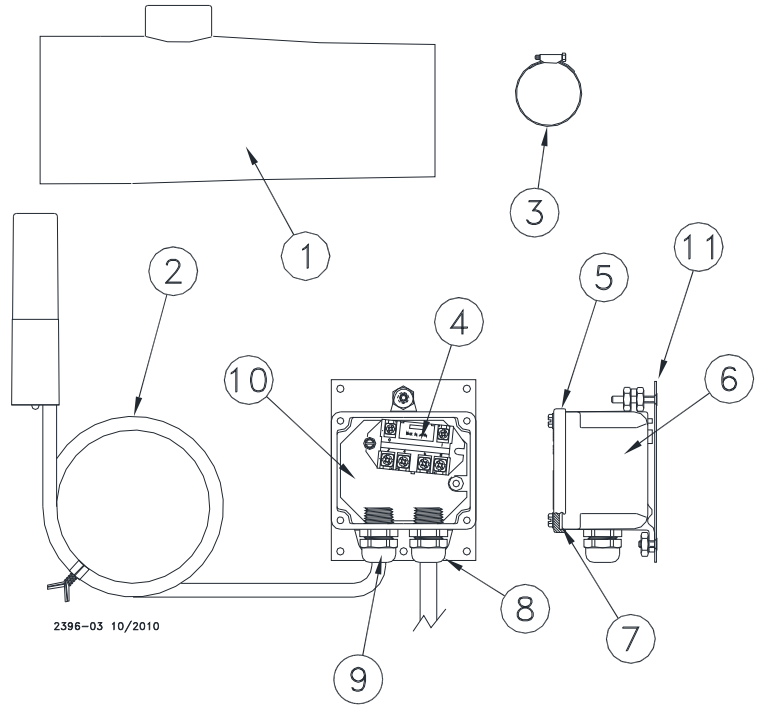


Figure 2. Setting the Proximity Switch

Parts List

Proximity Switch with Relay (P/N 53140)

Item	Description	Part No.
1	Switch Tube	35901
2	Proximity Switch Assy	52954
3	Adjustable Clamp	3527
4	240 VAC Relay	34654
5	Switch Box Cover	6776
6	Switch Box	24702
7	Gasket	6777
8	Liquid Tight Conn.	24685
9	Liquid Tight Conn.	23779
10	Relay Mounting Plate	24321
11	Mounting Plate	28701



Proximity Switch with Safety Timer (P/N 53141)

Item	Description	Part No
1	Proximity Switch Assy	52954
2	Liquid Tight Conn.	23779
3	Switch Box	42853
4	Pilot Light	46047
5	Mounting Plate	53262
6	Quick Connector	40579
7	Safety Timer	46732
8	Product Label	2529-1045
9	Switch Box Cover	42851
10	Switch Box Screw	42849
11	Switch Box Gasket	42854

