



Model ATF™ End Control with Sensor Plus™

Part Number 42343

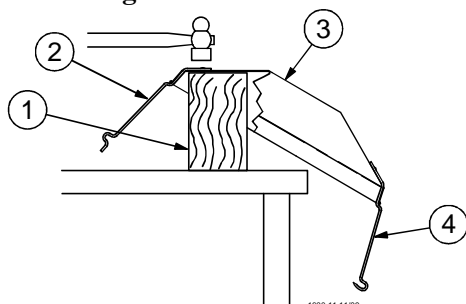
and

Model ATF End Control Update Kit

Part Number 43711

Model ATF End Control with Sensor Plus

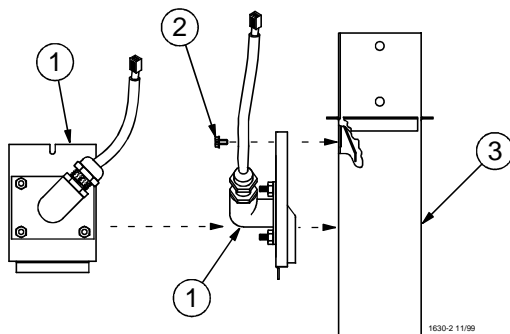
1. Attach one Swinging Pan Support (item 4) and three regular Pan Supports (item 2) to Pan Shield (item 3) using rivets supplied. Always attach the Swinging Pan Support (item 4) at the same location on all Pan Shields (item 3). It will be necessary to support the Pan Shield (item 3) while installing the rivets. Use a hammer to drive rivets as shown in **Figure 1**.



Item	Description
1	Wood Block
2	Pan Support
3	Pan Shield
4	Swinging Pan Support

Figure 1. Assembling the Pan Supports to the Pan Shield

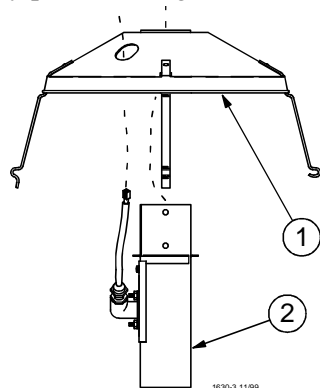
2. Install the Sensor Switch Assembly (item 1) to the Drop Tube (item 3) using the included #8 Hex Washer Head Screw (item 2).



Item	Description
1	Sensor Switch Assembly
2	#8 Hex Washer Head Screw
3	Drop Tube

Figure 2. Installing the Sensor Switch Assembly to the Drop Tube

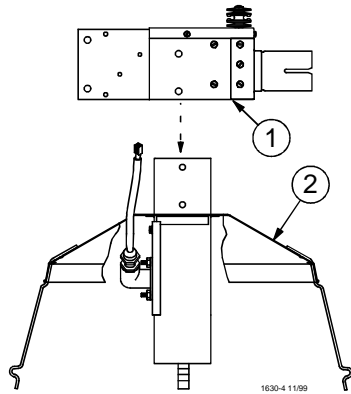
3. Install the Drop Tube Assembly (item 2) to the Pan Shield Assembly (item 1) by routing the Drop Tube Assembly (item 2) up through the center of Pan Shield Assembly (item 1). Make sure the cord from the Sensor Switch Assembly passes through the hole in the side of the Pan Shield Assembly (item 1).



Item	Description
1	Pan Shield Assembly
2	Drop Tube Assembly

Figure 3. Assembling the Drop Tube to the Pan Shield Assembly

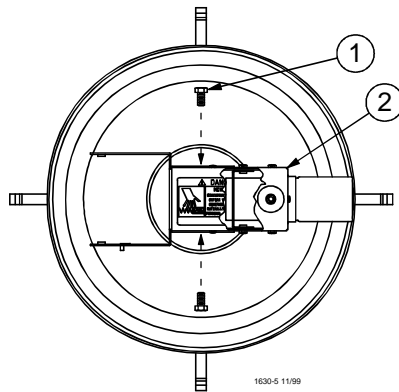
4. Assemble the ATF End Control Body (item 1) to the Drop Tube with Pan Shield (item 2) by sliding the ATF End Control Body (item 1) into the top of the Drop Tube with Pan Shield (item 2).



Item	Description
1	ATF End Control Body
2	Drop Tube with Pan Shield

Figure 4. Assembling the ATF End Control to the Drop Tube Assembly

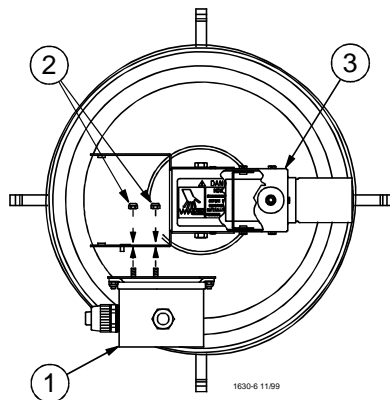
5. Secure the ATF End Control Body (item 2) to the Drop Tube Assembly using the included 1/4-20 Hex Head Bolts (item 1).



Item	Description
1	1/4-20 Hex Head Bolts
2	ATF End Control Body

Figure 5. Securing the ATF End Control Body

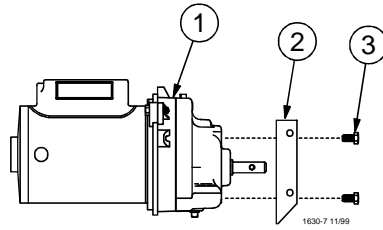
6. Route the Sensor Switch Assembly Cord up through the black Water Tight Connector on the bottom of the Relay Box (item 1). Tighten the Water Tight Connector around the Sensor Switch Assembly Cord making sure there is enough cord inside the Relay Box (item 1) to plug into the Socket on the Circuit Board. Mount the Relay Box to the side of the ATF End Control Body (item 3) and secure using the included #10-32 Hex Lock Nuts (item 2).



Item	Description
1	Relay Box
2	#10-32 Hex Lock Nuts
3	ATF End Control Body

Figure 6. Installing the Relay Box to the ATF End Control Body

7. Install the Anchor Plate (item 2) to the Drive Unit (item 1) using the included 1/4-20 Hex Head Bolts (item 3).



Item	Description
1	Drive Unit
2	Anchor Plate
3	1/4-20 Hex Head Bolts

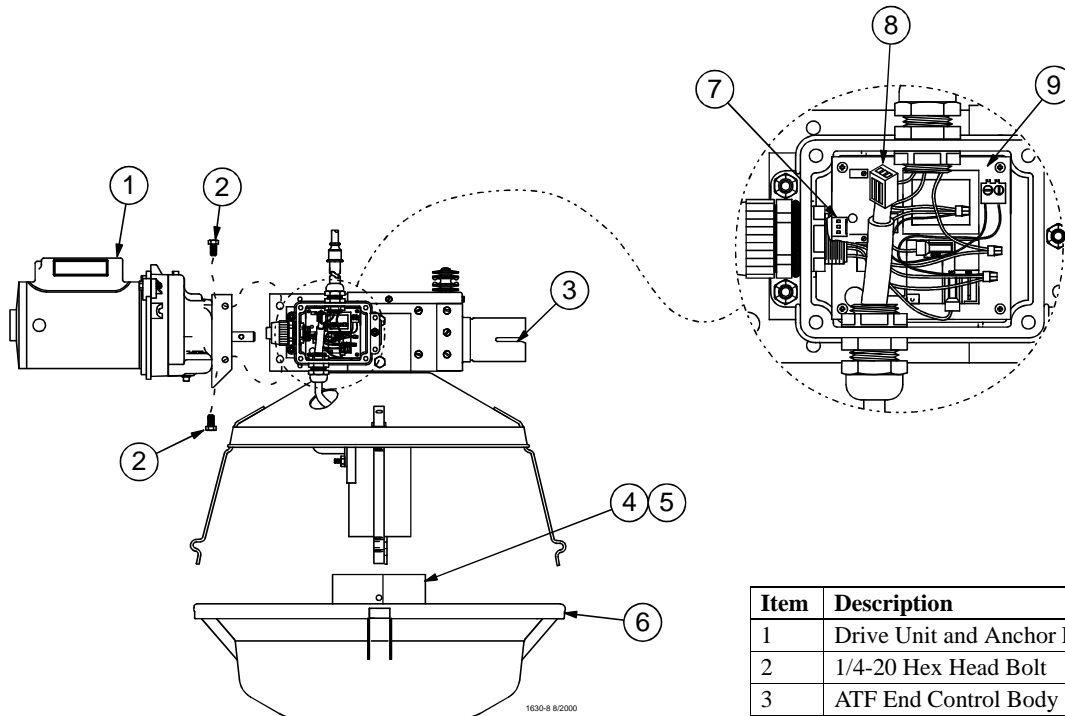
Figure 7. Installing the Anchor Plate to the Drive Unit

8. Connect the Plug (item 8) from the Sensor Switch Assembly into the Socket (item 7) on the Circuit Board (item 9). See **Figure 8**.

Install the Pan Shield Assembly onto the Feeder Pan (item 6) by hooking the Swing Down Pan Support through the hole in the Feeder Pan (item 6). Install the Feed Level Tube (item 4) and the Feed Level Ring (item 5) then swing the pan up and snap the remaining Pan Supports over the lip of the Feeder Pan (item 6). See **Figure 8**.

Important Do not bend the Pan Supports during assembly.

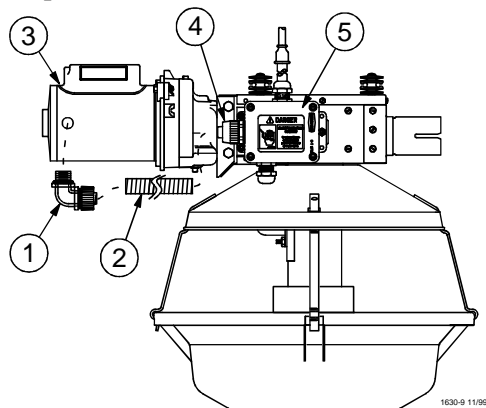
Install the Drive Unit and Anchor Plate (item 1) to the ATF End Control Body (item 3) using the included 1/4-20 Hex Head Bolts (item 2). See **Figure 8**.



Item	Description
1	Drive Unit and Anchor Plate
2	1/4-20 Hex Head Bolt
3	ATF End Control Body
4	Feed Level Tube
5	Feed Level Ring
6	Feeder Pan
7	Socket
8	Plug
9	Circuit Board with Heater

Figure 8. Assembling the components

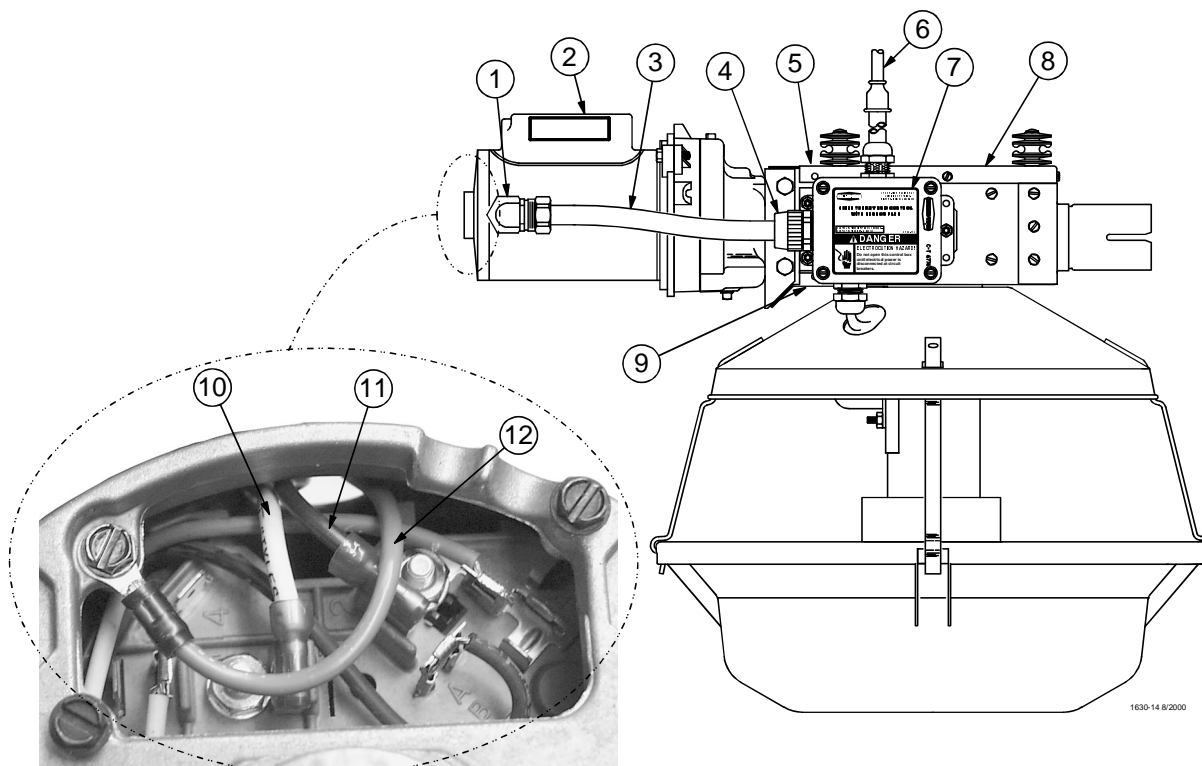
9. Install the 90° Metal Conduit Connector (item 1) to the Motor (item 3). Cut the Flex Conduit (item 2) to length and assemble with the 90° Metal Conduit Connector (item 1). Route the three wires through the Flex Conduit (item 2) into the Motor (item 3) and assemble the Flex Conduit (item 2) with the Conduit Connector (item 4) at the Relay Box (item 5). Wire the Motor (item 3) in accordance with the motor plate.



Item	Description
1	90° Metal Conduit Connector
2	Flex Conduit
3	Motor
4	Conduit Connector
5	Relay Box

Figure 9. Wiring the ATF End Control

10. Install the Metal Water Tight Connector (item 1) in the Feed Line Motor (item 2). Cut the Flex Conduit (item 3) to length. Slide the wires from the end control through the Flex Conduit (item 3). Install the Flex Conduit (item 3) in the connectors. Connect the wires to the Feed Line Motor (item 2).



Item	Description	Part No.
1	Metal Water Tight Connector	23810
2	Feed Line Motor	_____
3	Flexible Conduit	26982-1
4	Water Tight Connector	26980
5	Safety Cover Assembly	27941
6	Cord Assembly	4999-100

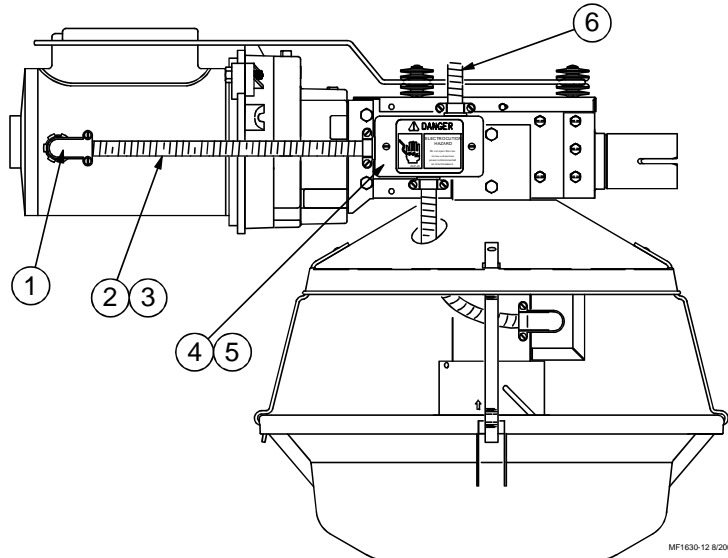
Item	Description	Part No.
7	Product Identification Decal	2529-734
8	Body Cover	27942
9	Bottom Plate	27893
10	White Wire	_____
11	Black Wire	_____
12	Green Wire	_____

Figure 4. Wiring the Motor

Model ATF End Control Update Kit

The Model ATF End Control Update Kit is designed to replace an existing mechanical switch with a Sensor Plus switch.

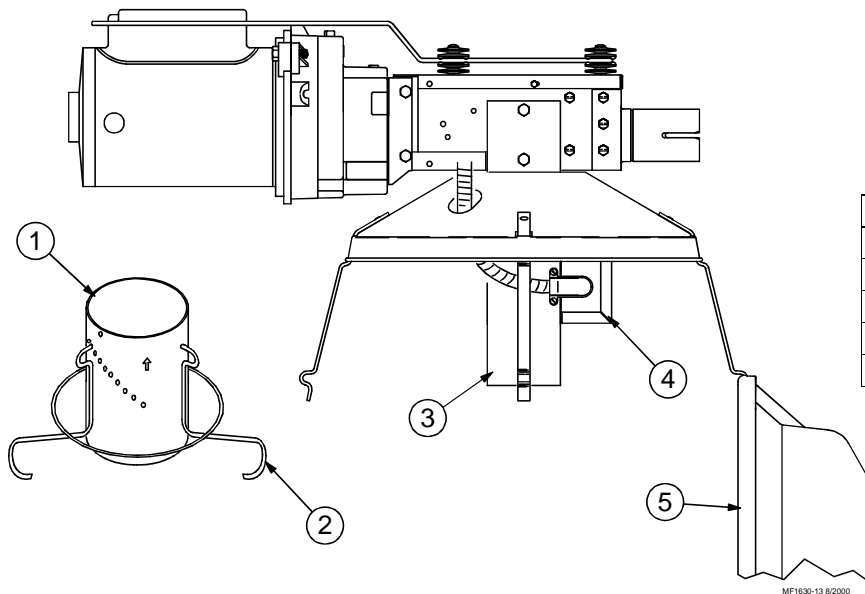
1. Disconnect the power at the circuit breaker. Remove and discard the Power Cord (item 6), 90° Romex Connector (item 1) on the Motor, Motor Wires (item 3), Flex Conduit (item 2), Switch Box (item 4), and Switch Box Mounting Plate (item 5).



Item	Description
1	90° Romex Connector
2	Flex Conduit
3	Motor Wires
4	Switch Box
5	Switch Box Mounting Plate
6	Power Cord

Figure ?. Removing parts that will be replaced

2. Swing the Feeder Pan (item 5) down out of the way and remove the Drop Tube Assembly (item 3), Feed Level Tube (item 1), and Feed Level Ring (item 2). Remove and discard the Switch Assembly (item 4).



Item	Description
1	Feed Level Tube
2	Feed Level Ring
3	Drop Tube Assembly
4	Switch Assembly
5	Feeder Pan

Figure ?. Removing the Switch Assembly

3. Reassemble following the instructions for the Model ATF End Control with Sensor Plus.

Switch Adjustment

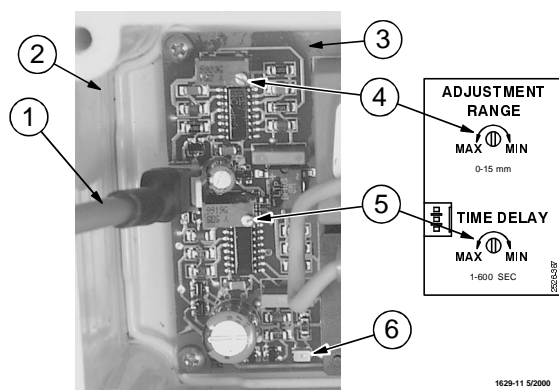
The SENSOR PLUS Pan Half Round Sensor Switch is adjusted at the factory to a sensitivity of .25" [6 mm] and a time delay of 15 seconds, but they may be changed for a specific installation. The sensitivity adjustment range is 0" to .80" [0 mm to 15 mm] and the time delay adjustment is 0 seconds to 600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

To adjust the Sensitivity:

- For less sensitivity — turn Sensitivity Adjusting Screw (item 4) clockwise
- For more sensitivity — turn Sensitivity Adjusting Screw (item 4) counter-clockwise

To adjust the Time Delay:

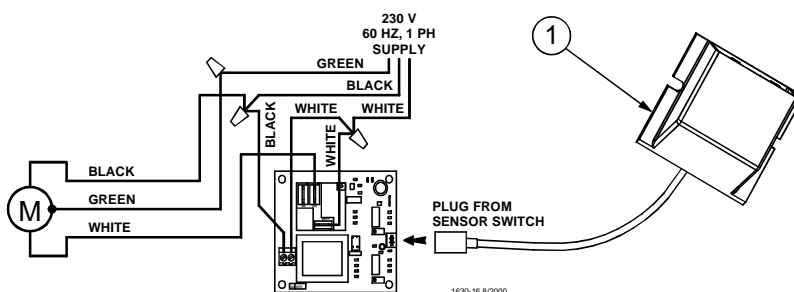
- For less time — turn Time Delay Adjusting Screw (item 5) clockwise (Light blinks fast)
- For more time — turn Time Delay Adjusting Screw (item 5) counter-clockwise (Light blinks slow)



Item	Description	Part No.
1	Proximity Switch Cord	_____
2	Switch Box	42627-3
3	Circuit Board with Heater	42604
4	Sensitivity Adjusting Screw	_____
5	Time Delay Adjusting Screw	_____
6	Light	_____
—	Proximity Sensor Switch and Circuit Board	44915
—	Rectangle Sensor with Heater	42593

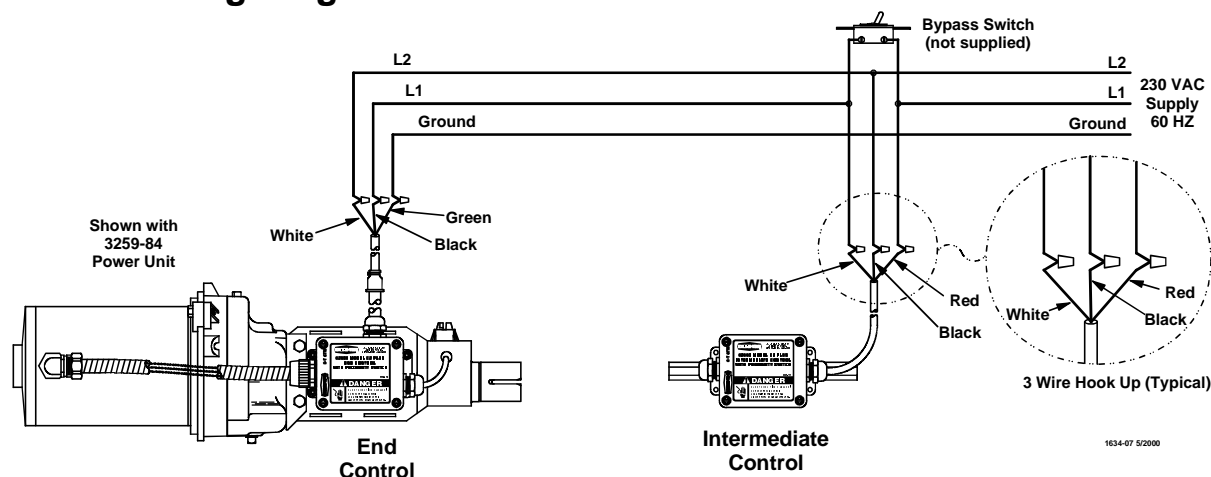
Figure 2. Adjusting the SENSOR PLUS Proximity Switch

Internal Wiring



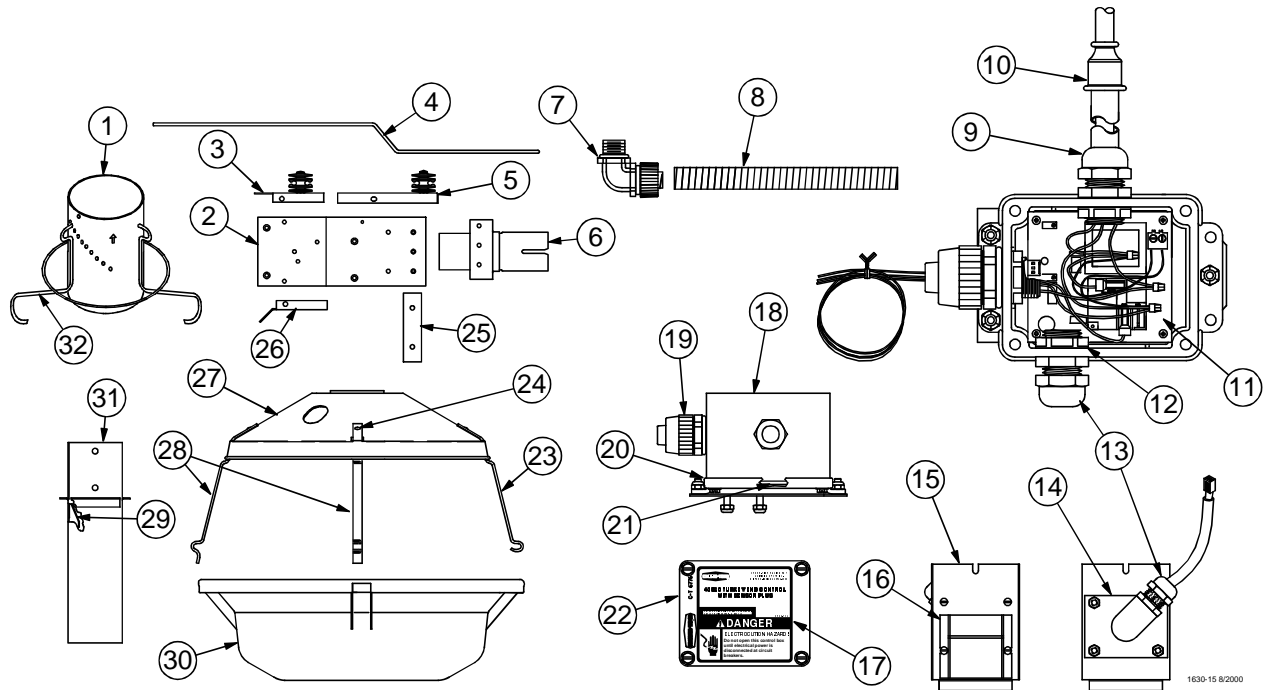
Item	Description	Part No.
1	Rectangle Sensor with Heater	42593

Control Wiring Diagram



Parts Listing

Model ATF End Control with Sensor Plus

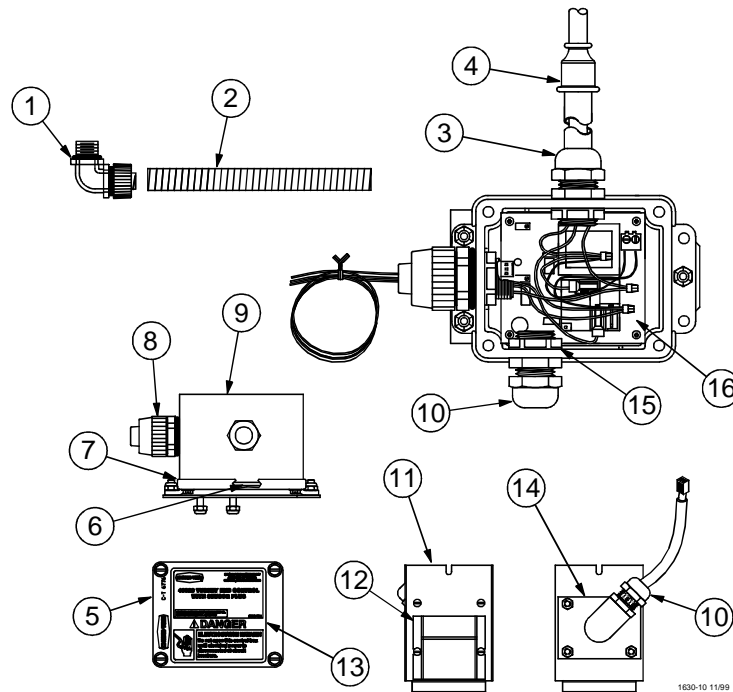


Item	Description	Part No.
1	Feed Level Tube	4341
2	Control Body	27889
3	Safety Cover Assembly	27941
4	Anti Roost Guard	2798
5	Body Cover	27942
6	Stub Tube Weldment	27900
7	90° Metal Conduit Connector	23810
8	1/2" Flexible Conduit	26982-1
9	1/2" Water Tight Connector	24685
10	Cord Assembly	4999-100
11*	Proximity Switch Circuit Board	42604
12	1/2" Conduit Lock Nut	43662
13	1/2" Water Tight Connector	23779
14	Plastic Adapter Plate	43819
15	Adapter Plate	43813
16*	Proximity Switch Sensor	42593

Item	Description	Part No.
17	Danger/Product Identification Decal	2529-734
18	Electrical Box	42627-4
19	1/2" Conduit Connector	26980
20	Mounting Cover	6956
21	Switch Box Gasket	6777
22	Switch Box Cover	6776
23	Swing Down Pan Support	24274
24	Drive Rivet	4200
25	Tube Support	24891
26	Bottom Plate	27893
27	Pan Shield	4191
28	Pan Support	4199
29	Guard Assembly	4892
30	ATF Plastic Feeder Pan	29000
31	Drop Tube Weldment	4180
32	Feed Level Ring	29320

*These items may be ordered as a Level Sensor Assembly, Part Number 44920.

Model ATF End Control Update Kit Part Number 43711



Item	Description	Part No.
1	90° Metal Conduit Connector	23810
2	1/2" Flexible Conduit	26982-1
3	1/2" Water Tight Connector	24685
4	Cord Assembly	4999-100
5	Box Cover	6776
6	Gasket	6777
7	Mounting Cover	6956
8	1/2" Conduit Connector	26980

Item	Description	Part No.
9	Electrical Box	42627-4
10	1/2" Water Tight Connector	23779
11	Adapter Plate	43813
12*	Rectangle Sensor with Heater	42593
13	Cover Decal	2529-734
14	Plastic Adapter Plate	43819
15	1/2" Conduit Lock Nut	43662
16*	Circuit Board with Heater	42604

*These items may be ordered as a Level Sensor Assembly, Part Number 44920.