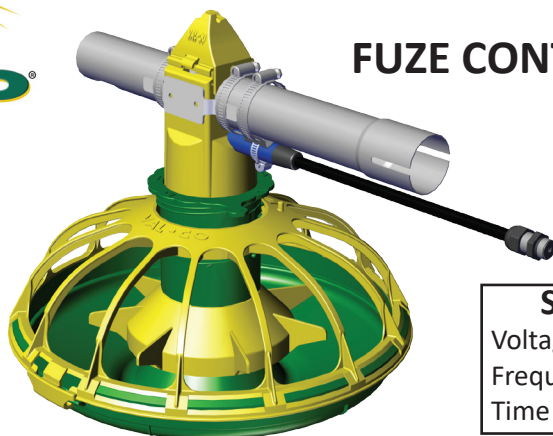# Quick Sheet Instructions

FUZE CONTROL PAN W/PROXIMITY SENSOR
455919, 455920, 455921,
455922, 455923, 455924

Sensor Specifications
Voltage: 20-280VAC/VDC
Frequency: 47-63 Hz
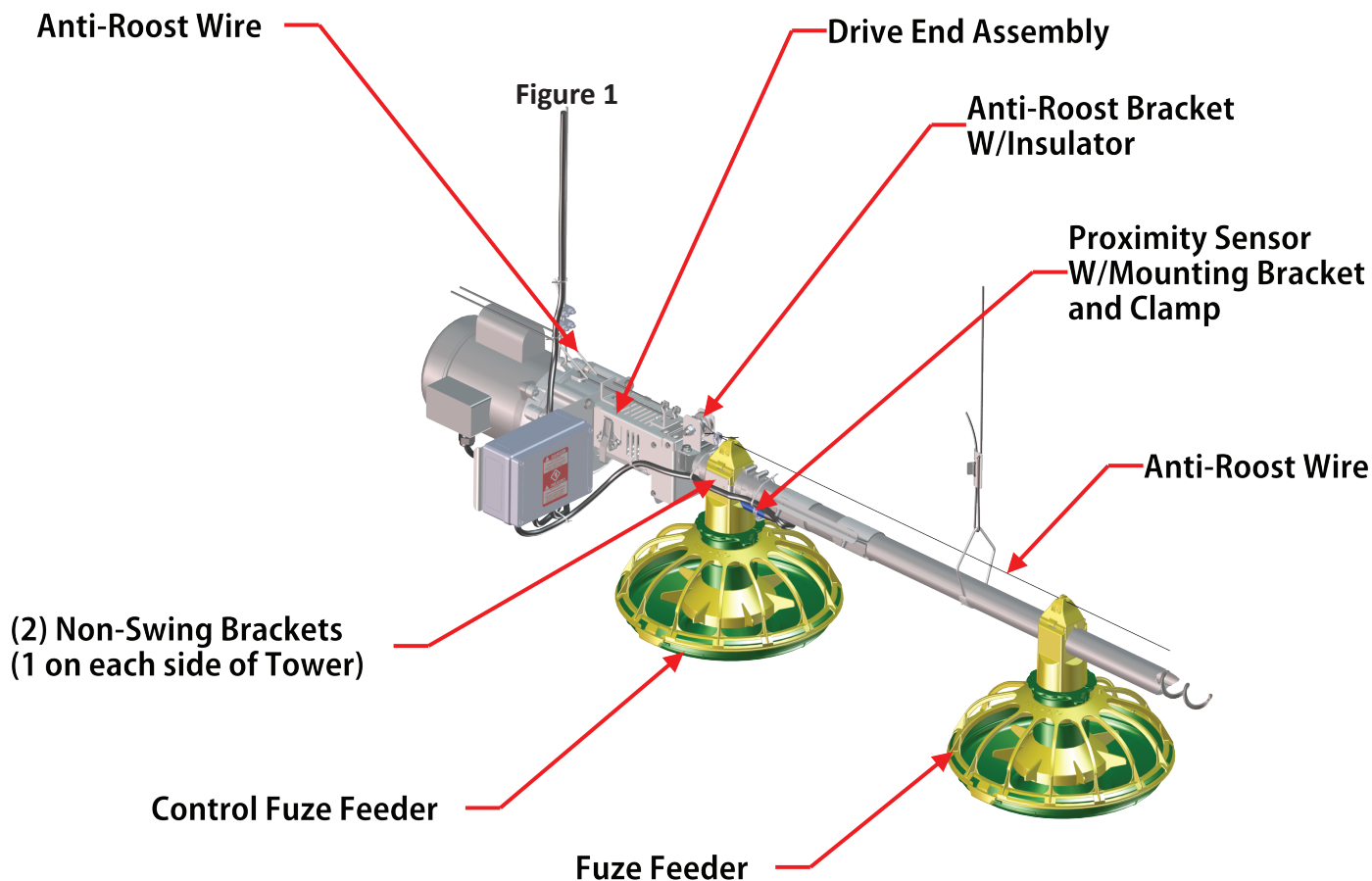Time delay (adjustable): 0.1-60 sec.

OVERVIEW

The control pan is typically used at the END-OF-LINE feeder tube applications, as shown in Figure 1. It may also be used in MID-LINE installations.
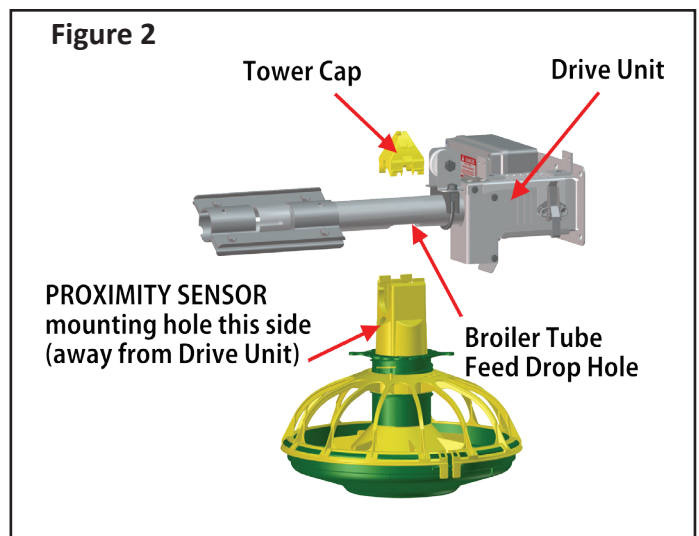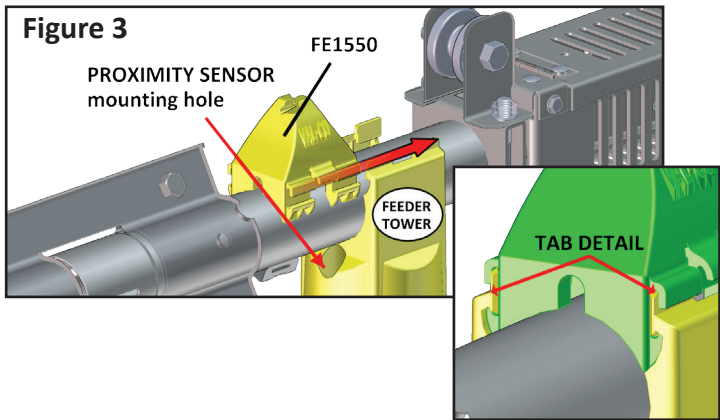
WARNING!
DISCONNECT POWER BEFORE INSTALLING OR SERVICING THIS EQUIPMENT!

Anti-Roost Wire

Drive End Assembly

Figure 1

Anti-Roost Bracket W/Insulator

Proximity Sensor W/Mounting Bracket and Clamp

Anti-Roost Wire

(2) Non-Swing Brackets
(1 on each side of Tower)

Control Fuze Feeder

Fuze Feeder

Do not route wires from motor and control switch that are attached to ceiling under sheet metal plate. They can get tangled and cut during winching.

Installation Instructions

1. Remove the FE1550 Feeder Tower Cap from assembly by sliding it off *(if pre-assembled)* the Control Pan.
2. Lift the Control Pan onto the bottom of the Port Tube centered under the Feed Drop Hole. Orient the Proximity Switch mounting hole of Feeder Tower as shown in Figure 2, on the opposite side of drive unit.
3. Slide the FE1550 Feeder Tower Cap onto the Feeder Tower tabs as shown in Figure 3.

Figure 2

Tower Cap   Drive Unit

PROXIMITY SENSOR mounting hole this side (away from Drive Unit)

Broiler Tube Feed Drop Hole

Figure 3

FE1550

PROXIMITY SENSOR mounting hole

FEEDER TOWER

TAB DETAIL

4. Fasten the (2) 451008 Tube Clamps onto the Port Tube, one on each side of the Control Pan, around the two (2) ends of each 820158 Non-Swing Brackets as shown in Figure 4 and 5.

Figure 5

Figure 4

820158, NON-SWING BRACKETS (1 on each side of Tower)

451008, 1-3/4" SS TUBE CLAMP
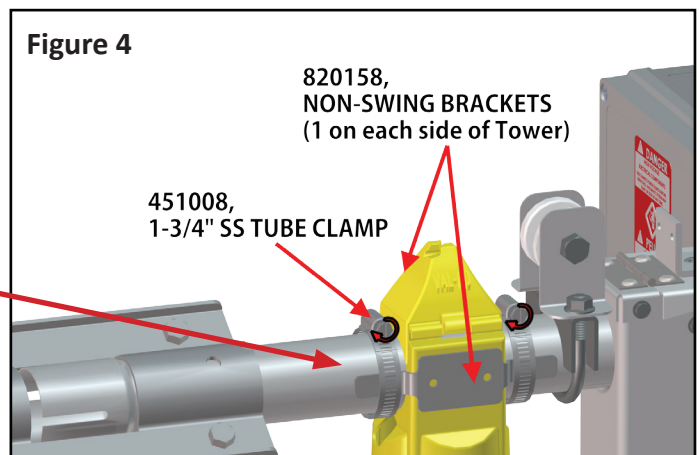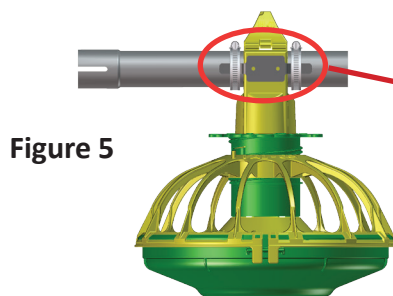
i TIGHTEN THE 451008 TUBE CLAMPS OVER THE 820158 NON-SWING BRACKET TABS AND AS CLOSE TO THE CONTROL PAN AS POSSIBLE.

Figure 6

820177   0.50 "

1.06 "

750437

5. Attach the 750437 Proximity Sensor to the 820177 Mounting Bracket using the 455928 Hose Clamp, *leaving 1.06 (1-1/6" or 2.69 cm) of the wiring end of the sensor beyond the bracket* as shown in Figure 6.

6. Mark the location of the insertion point with a magic marker. Draw a line .50" (1/2" or 12.7mm) from the other end of the sensor as shown in Figure 6. This will be used to position the sensor into the Feeder Tower.

455928

Magic marker drawn witness line (used to position sensor)

2
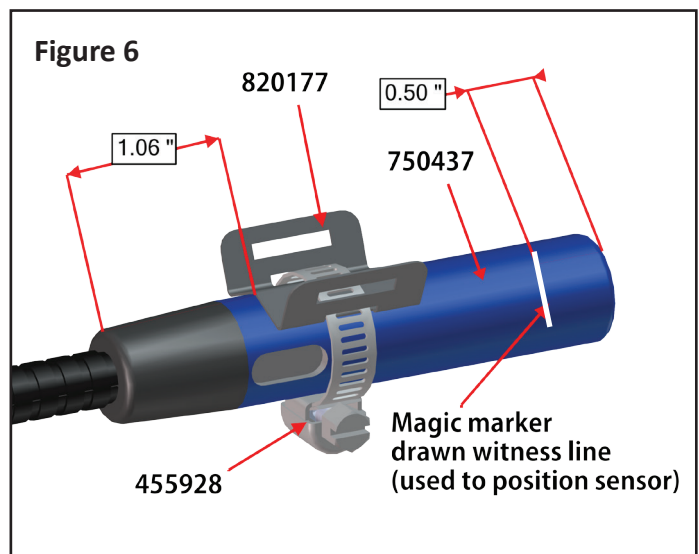
Installation Instructions-continued

7. Insert the Proximity Sensor into the Feed Tower .50" (1/2" or 12.7mm) up to the marked witness line drawn in Figure 6 on previous page and as shown in Figure 7 to the right. Attach the Sensor Bracket to the Feed Supply Tube with the 451008 Hose Clamp. Then connect the Sensor Wire to power source as indicated in the wiring diagrams on the page 4.

Figure 7

.50"

451008

TO POWER SOURCE

1.06"

> Depending on feed and conditions, feed can sometimes buildup on the proximity sensor and cause early shutoff. To remedy the situation, spray with static guard (available at most stores in the laundry section) before you install the sensor or as necessary. Once dry, reinstall the sensor into the Fuze Tower. Depending on your conditions, you may want to make this a routine maintenance check.
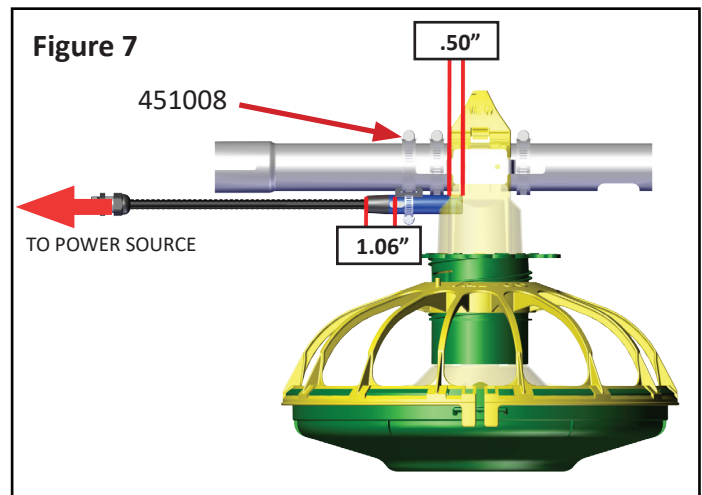
Proximity Sensor Adjustment

8. Use the small screwdriver, included with shipping, to adjust the SENSITIVITY on the sensor CCW until it can no longer be rotated. This will set the proximity to the least sensitive setting. Adjust the DELAY screw CW. This will set the sensor to the longest time delay as shown in Figure 8.

9. When the feed in running line fills Control Pan Tower and begins to bypass the Control Tower, quickly adjust SENSITIVITY screw CW until feed line motor stops, then turn a fraction more.

10. Vibrate the Control Pan to settle feed, adjust DELAY screw CCW to desired time of delay.

11. Repeat and adjust as necessary until desired setting is achieved. NOTE: Off time delay is adjustable from 1-60 seconds. Val-Co® recommends 60 second delay to prevent excessive feed line cycling.

Turn (once) 240 degrees trimmers-e.g. sensitivity and delay - see product label for details.

Figure 8

Delay   Sensitivity
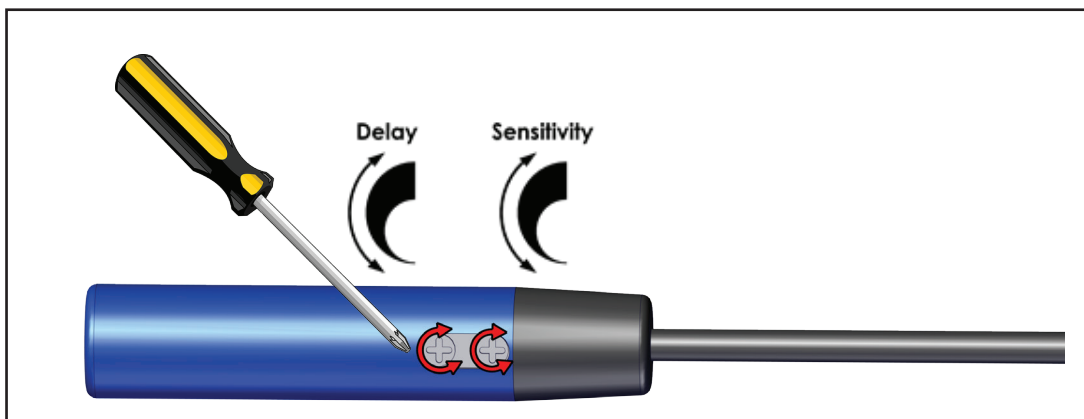
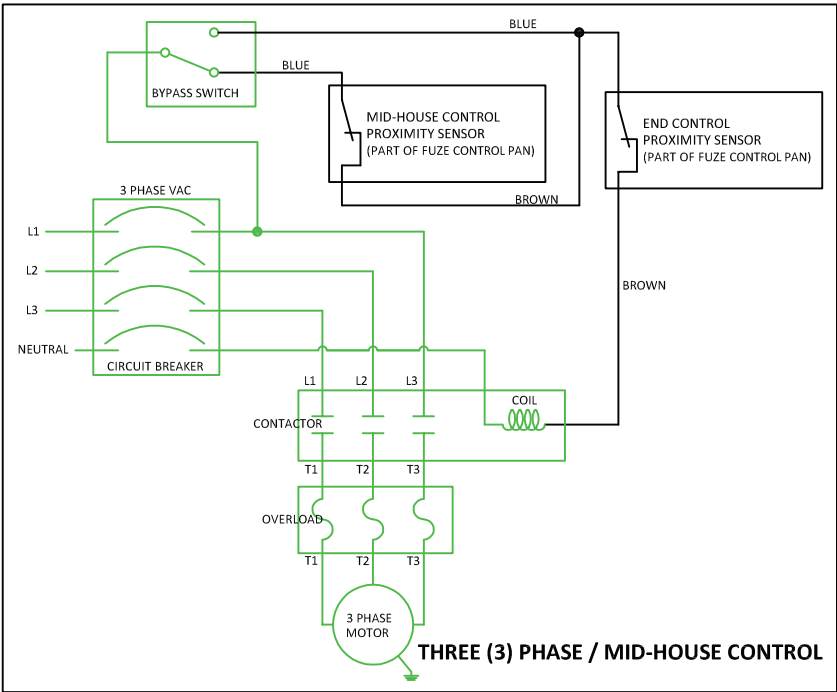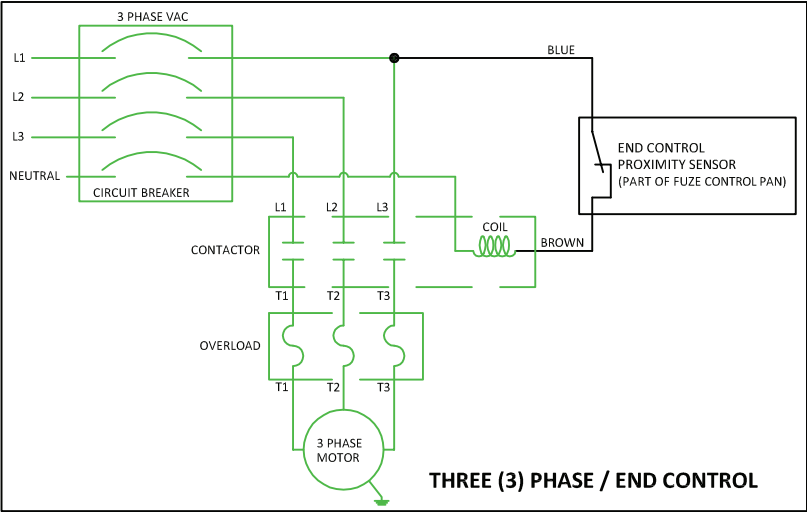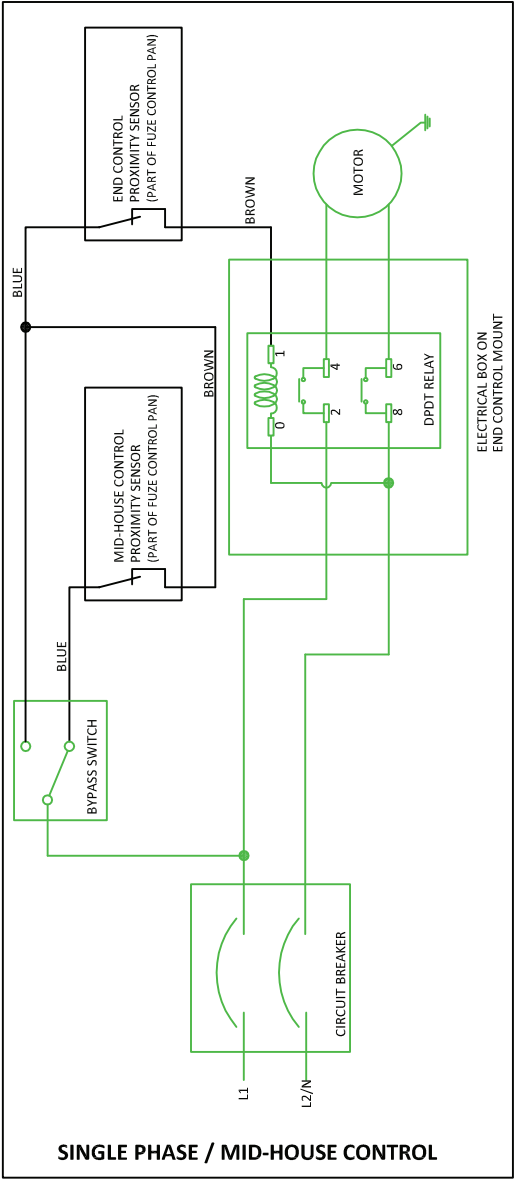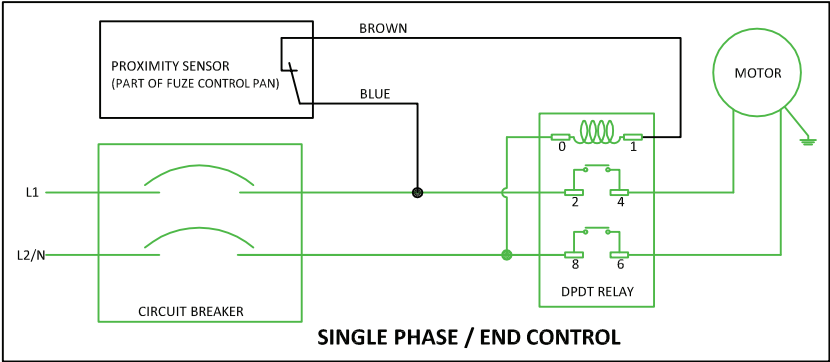| LED Indicaton	Sensor	Status	Feed Line
RED ON	Sensor output is ON	closed	No feed detected, motor ON
RED OFF	Sensor output is OFF	open	Feed detected, motor OFF
RED slow flashing	Sensor delay is active	still open	No feed detected, motor still OFF

Wiring Diagrams

SINGLE PHASE / END CONTROL

PROXIMITY SENSOR (PART OF FUZE CONTROL PAN)
BROWN
BLUE
MOTOR
L1
L2/N
CIRCUIT BREAKER
DPDT RELAY
0 1 2 4 8 6

SINGLE PHASE / MID-HOUSE CONTROL

END CONTROL PROXIMITY SENSOR (PART OF FUZE CONTROL PAN)
MID-HOUSE CONTROL PROXIMITY SENSOR (PART OF FUZE CONTROL PAN)
BLUE
BROWN
BROWN
MOTOR
DPDT RELAY
ELECTRICAL BOX ON END CONTROL MOUNT
BYPASS SWITCH
BLUE
CIRCUIT BREAKER
L1
L2/N

THREE (3) PHASE / END CONTROL

3 PHASE VAC
L1
L2
L3
NEUTRAL
CIRCUIT BREAKER
BLUE
END CONTROL PROXIMITY SENSOR (PART OF FUZE CONTROL PAN)
CONTACTOR
COIL
BROWN
L1 L2 L3
T1 T2 T3
OVERLOAD
T1 T2 T3
3 PHASE MOTOR

THREE (3) PHASE / MID-HOUSE CONTROL

BYPASS SWITCH
BLUE
BLUE
MID-HOUSE CONTROL PROXIMITY SENSOR (PART OF FUZE CONTROL PAN)
END CONTROL PROXIMITY SENSOR (PART OF FUZE CONTROL PAN)
BROWN
BROWN
3 PHASE VAC
L1
L2
L3
NEUTRAL
CIRCUIT BREAKER
CONTACTOR
COIL
L1 L2 L3
T1 T2 T3
OVERLOAD
T1 T2 T3
3 PHASE MOTOR

Control Exploded View and Parts List
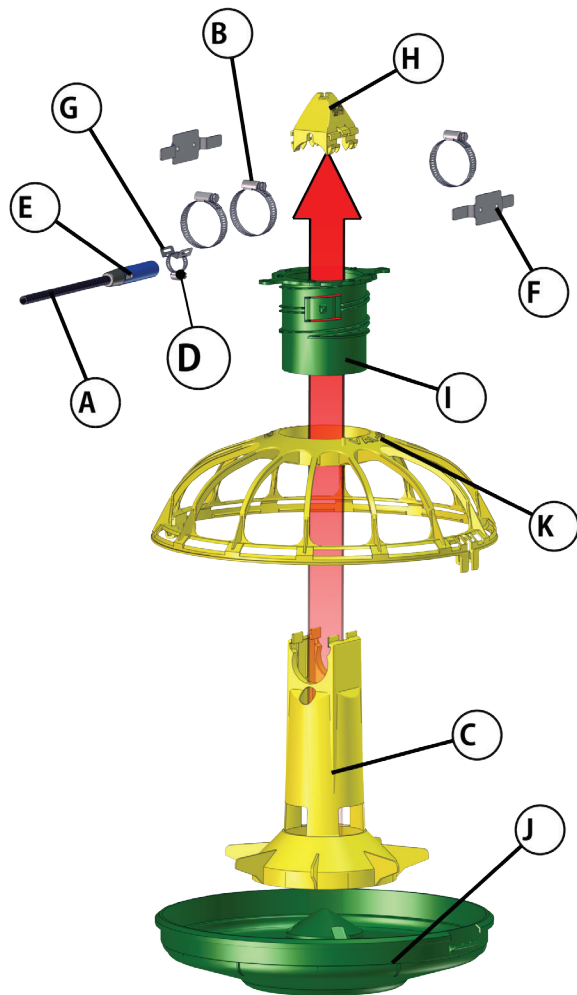
Standard Pan , Fuze Adj Collar for Standard Pan and 13 Spoke with Hinge & Lock shown

Key	Part #	Description	Qty
		Interchangeable Parts	
A	450965	3/8" CABLE COVER	2
B	451008	1-3/4" SS TUBE CLAMP	3
C	455926	FUZE PROX CONTROL TOWER	1
D	455928	7/8" HOSE CLAMP	1
E	750437	SENSOR, PROXIMITY, DOL26	1
F	820158	FUZE NON-SWING BRACKET	2
G	820177	BRACKET, PROX SENSOR MTG	1
H	FE1550	FUZE FEEDER TOWER CAP	1
		(parts specific to) **455919**	
I	FE1540	FUZE ADJ COLLAR - STANDARD PAN	1
J	FE1610S	14" FUZE SLOTTED STANDARD PAN W/ HINGE & LOCK	1
K	FE1620R	14" FUZE PRO GRILL - 14 SPOKE W/ HINGE & LOCK	1
		(parts specific to) **455920**	
I	FE1540	FUZE ADJ COLLAR - STANDARD PAN	1
J	FE1510S	13" FUZE SLOTTED STANDARD PAN W/ HINGE & LOCK	1
K	FE1520R	13" FUZE PRO GRILL - 13 SPOKE W/ HINGE & LOCK	1
		(parts specific to) **455921**	
I	FE1540S	FUZE ADJ COLLAR - SHALLOW PAN	1
J	FE1510LS	13" FUZE SLOTTED SHALLOW PAN W/HINGE & LOCK	1
K	FE1520R	13" FUZE PRO GRILL - 13 SPOKE W/ HINGE & LOCK	1
		(parts specific to) **455922**	
I	FE1540S	FUZE ADJ COLLAR - SHALLOW PAN	1
J	FE1610LS	14" FUZE SLOTTED SHALLOW PAN W/ HINGE & LOCK	1
K	FE1620R	14" FUZE PRO GRILL - 14 SPOKE W/ HINGE & LOCK	1
		(parts specific to) **455923**	
I	FE1540	FUZE ADJ COLLAR - STANDARD PAN	1
J	FE1610S	14" FUZE SLOTTED STANDARD PAN W/ HINGE & LOCK	1
K	FE1820R	14" FUZE PRO GRILL - 5 SPOKE W/ HINGE & LOCK	1
		(parts specific to) **455924**	
I	FE1540S	FUZE ADJ COLLAR - SHALLOW PAN	1
J	FE1610LS	14" FUZE SLOTTED SHALLOW PAN W/ HINGE & LOCK	1
K	FE1820R	14" FUZE PRO GRILL - 5 SPOKE W/ HINGE & LOCK	1