

DISCHARGE SAFETY SHUTOFF INSTRUCTIONS

(For Kits DSS-801 & DSS-821 and DSS-1001 & DSS-1021)

The Discharge Safety Shutoff Option is available in 8-inch and 10-inch tube diameter sizes to fit all current Farm Fans grain dryers. This option may be ordered either factory installed or as a field installed kit. The option includes the following special features:

- The special discharge option is equipped with an electrical safety shutoff switch and a grain release hatch. This assembly is designed to automatically shut down the dryer and relieve grain pressure, in the event the auxiliary grain unloading system stops or becomes plugged. After grain overflow is removed from the discharge tube and the grain release hatch falls to its normal position, the device will automatically reset and allow the dryer to be restarted.
- The Discharge Safety Shutoff option is provided with a Collect-A-Sample tube to allow a safe and easy method of obtaining a grain sample. To operate, simply rotate the tube; 180° rotation provides maximum discharge.

AUTOMATIC DISCHARGE SHUTOFF	
NUMBER	DESCRIPTION
DSS-801	8" Discharge Shutoff - Factory Installed
DSS-821	8" Discharge Shutoff - Field Installed Kit
DSS-1001	10" Discharge Shutoff - Factory Installed
DSS-1021	10" Discharge Shutoff - Field Installed Kit

FIELD INSTALLATION

Removal of existing grain discharge tube assembly is required. Also, auger shaft guard must be removed from the existing discharge assembly and attached to the new assembly (see fig. 1). The following sequence of steps is needed:

- Remove the auger shaft guard. Unscrew bolts joining auger bearing flange to discharge tube assembly. Remove the bolts anchoring the discharge assembly to the dryer. Carefully remove the discharge assembly, taking care to avoid damaging auger fighting.
- Mount the new discharge assembly into place by carefully sliding it past the auger fighting into position. Attach auger shaft guard that was saved from existing discharge assembly.
- Remove hold-down screw in discharge box cover, which is for shipping purposes only (see fig. 3).
- Mount the discharge shutoff switch as shown in fig. 3. Observe range of travel of discharge shutoff switch. If necessary, adjust so that when discharge box cover is fully closed, the switch is closed but not tightly jammed.

WIRING INSTRUCTIONS

NOTE: If dryer does not have a meter roll monitor switch, then additional conduit must be installed from the ASC to the new conduit junction box that is described in step 1 below.

1. Install the new conduit junction box as shown in figure 2. To mount the box, use the junction box as a template and drill 9/64" mounting holes.

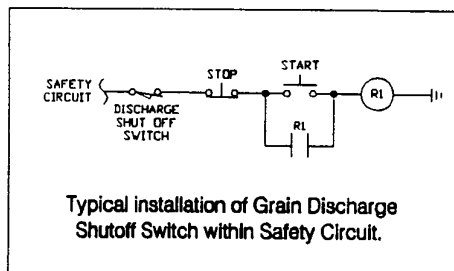
2. For dryers NOT EQUIPPED with *meter roll monitor switch* :

- Install additional Sealtite conduit between discharge shutoff switch and the new junction box. (CAUTION: Note that the discharge shutoff switch should be wired as normally open, and that a safe connection requires cutting the wires to proper lengths and that insulation not be over-stripped.)
- Install conduit containing two red 18 gage wires from the ASC box to the new junction box.
- Using provided wire nuts, make a connection within the new junction box between leads from the discharge shutoff switch and leads from the ASC box.

3. For dryers EQUIPPED with *meter roll monitor switch* :

- Disconnect existing Sealtite conduit from the meter roll monitor switch and connect to new junction box (see fig. 2). (CAUTION: Note that the discharge shutoff switch should be wired as normally open, and that a safe connection requires cutting the wires to proper lengths and that insulation not be over-stripped.)
- Pull two additional red 18 gage wires through the monitor switch conduit, running the length of the conduit from the ASC box to the new junction box.
- Make a connection within new junction box between new red 18 gage leads and leads from the discharge shutoff switch.
- Reconnect leads from monitor switch to their original supply wires, inside the new junction box.

4. For ALL dryers: ASC Box - The discharge shutoff switch must be placed in series within the dryer safety circuit (see wiring diagram below). To achieve this, disconnect the single lead¹ connected to the control circuit stop button (circuit input side) and connect to either of the red leads from the discharge shutoff switch. Connect the remaining discharge shutoff wire to the stop switch.

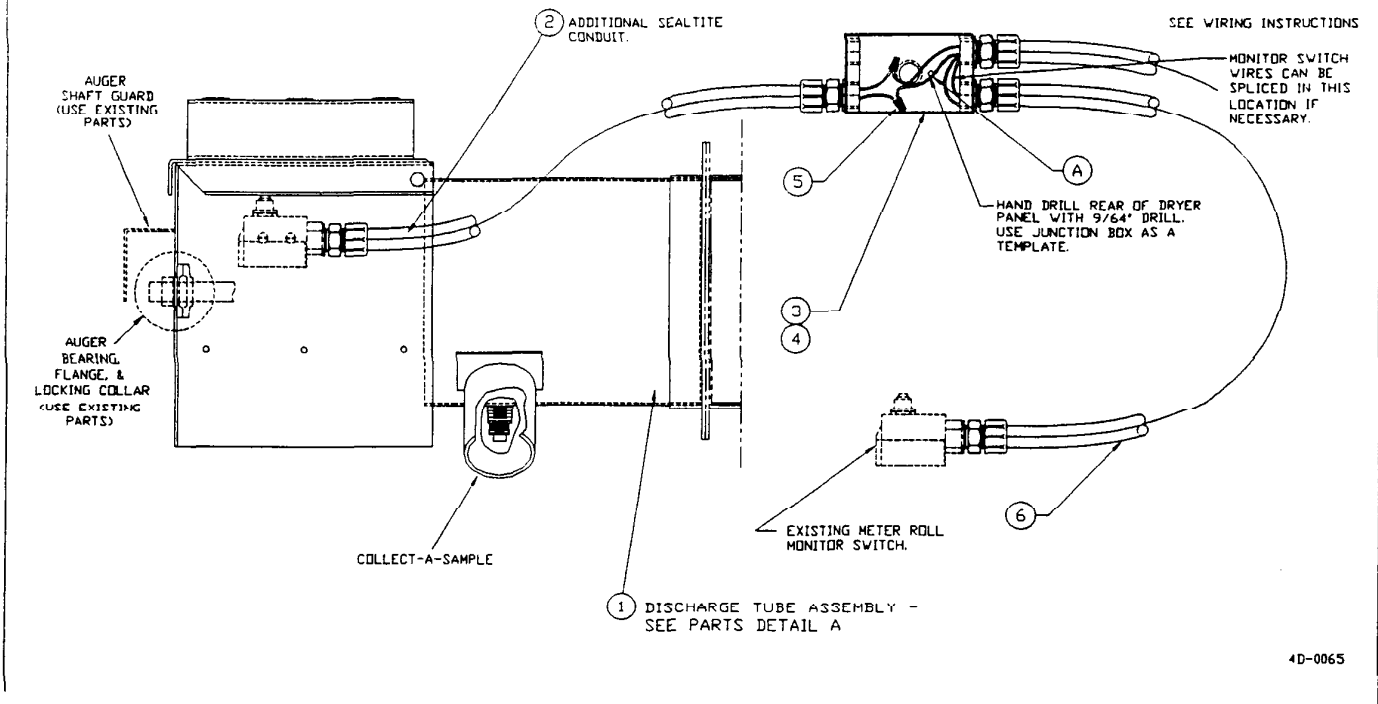


TESTING

With the Discharge Shutoff Option installed, test the operation by lifting the discharge box cover while discharge auger is rotating. If dryer shut-down does not occur, check that all parts and wiring have been properly installed.

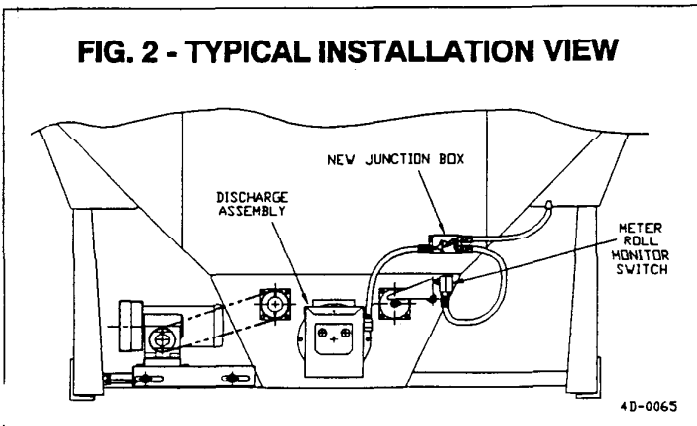
1. If neither of the stop button terminals has only one lead, disconnect the wires from the terminal that is not connected to the start button.

FIG. 1 - AUTOMATIC GRAIN DISCHARGE SHUTOFF OPTION



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FIG. 2 - TYPICAL INSTALLATION VIEW

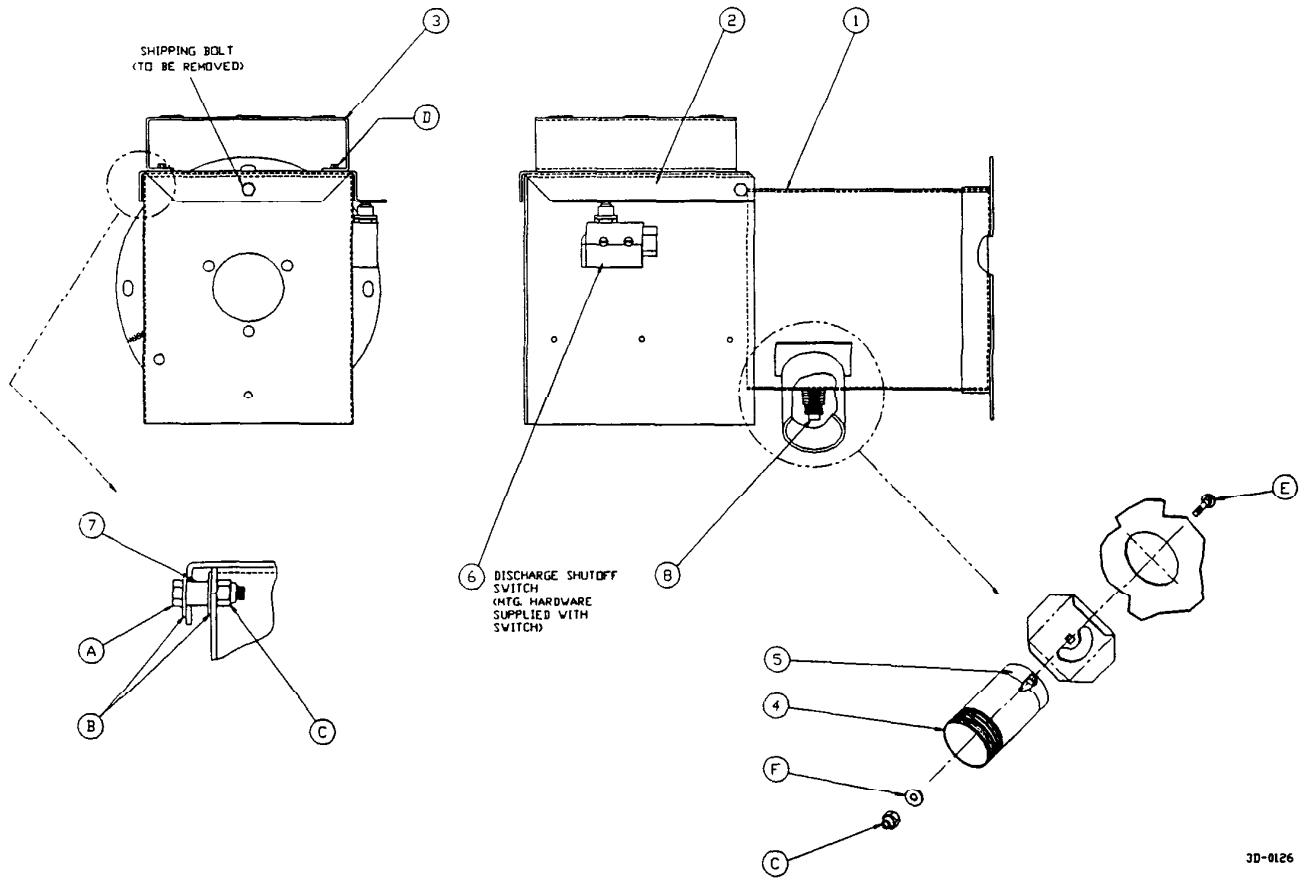


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**GRAIN DISCHARGE SHUTOFF
OPTION PARTS LIST**

ITEM	PART NO.	DESCRIPTION	QTY.	
	950-1105-2	8" Discharge Tube Option with Shutoff	X	
	950-1106-0	10" Discharge Tube Option with Shutoff		X
ITEM	PART NO.	DESCRIPTION	QTY.	
1	415-2716-9	Discharge Tube Assy. - 8" (see Parts Detail A)	1	-
1	415-2717-7	Discharge Tube Assy. - 10" (see Parts Detail A)	-	1
2	415-2809-2	Conduit Assy. 3/8" x 27"	1	1
3	410-1785-6	Junction Box (4 Outlet)	1	1
4	67-029	Cover/Gasket Package	1	1
5	53-002-2	Wire Nut - Yellow	1	1
6	415-2810-0	Conduit Assy. 3/8" x 22"	1	1
A	090-1158-6	Tapit #7-16 x 1/2 A	2	2

FIG. 3 - PARTS DETAIL A: DISCHARGE TUBE SUBASSEMBLY



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DETAIL A - DISCHARGE TUBE SUBASSEMBLY - PARTS LIST -				
	PART NO.	DESCRIPTION		
	415-2716-9	8" Discharge Tube Assembly with Shutoff	X	
	415-2717-7	10" Discharge Tube Assembly with Shutoff		X
ITEM	PART NO.	DESCRIPTION	QTY.	
1	410-1786-4	Tube Weldment - 8"	1	-
1	410-1787-2	Tube Weldment - 10"	-	1
2	401-3809-1	Cover, Discharge Box - 8"	1	-
2	401-3810-9	Cover, Discharge Box - 10"	-	1
3	401-3808-3	Step. Discharge w/ Shutoff	1	1
4	410-1289-9	Tube Weldment, Grain Sample	-	1
5	420-1171-8	Decal	1	1
6	26-025	Microswitch	1	1
7	017-1023-5	Bearing, Bronze 5/16 x 1/2	2	2
8	007-1229-9	Pipe Plug 1/2 NPT	1	1
A	090-1070-3	HHCS 5/16-18 x 1-1/4	2	2
B	092-1008-9	Flatwasher 5/16	4	4
C	091-1051-1	ESNA Nut 5/16-18	3	3
D	090-1198-2	HHST 1/4 x 1/2 B	1	1
E	090-1291-5	CBLT 5/16-18 x 3/4	1	1
F	090-1406-9	Belleville Washer	1	1