



Retrofit Instructions for Tower Dryer Moisture Sampler Blower Kit

Installation Manual

PNEG-1982

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GSI GROUP



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Safety Guidelines

This manual contains information that is important for you, the owner/operator, to know and understand. This information relates to protecting **personal safety** and **preventing equipment problems**. It is the responsibility of the owner/operator to inform anyone operating or working in the area of this equipment of these safety guidelines. To help you recognize this information, we use the symbols that are defined below. Please read the manual and pay attention to these sections. Failure to read this manual and its safety instructions is a misuse of the equipment and may lead to serious injury or death.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



This symbol indicates an imminently hazardous situation which, if not avoided, **will result in serious injury or death**.



This symbol indicates a potentially hazardous situation which, if not avoided, **may result in serious injury or death**.



This symbol indicates a potentially hazardous situation which, if not avoided, **may result in minor or moderate injury**.



This symbol indicates a potentially hazardous situation which, if not avoided, **may result in property damage**.



WARNING! BE ALERT!

Personnel operating or working around electric fans should read this manual. This manual must be delivered with the equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

Safety Instructions

Our foremost concern is your safety and the safety of others associated with this equipment. We want to keep you as a customer. This manual is to help you understand safe operating procedures and some problems that may be encountered by the operator and other personnel.

As owner and/or operator, it is your responsibility to know what requirements, hazards, and precautions exist, and to inform all personnel associated with the equipment or in the area. Safety precautions may be required from the personnel. Avoid any alterations to the equipment. Such alterations may produce a very dangerous situation where **SERIOUS INJURY** or **DEATH** may occur.

This equipment shall be installed in accordance with the current installation codes and applicable regulations, which should be carefully followed in all cases. Authorities having jurisdiction should be consulted before installations are made.

2. Installing a Moisture Sampler Blower on a Tower Dryer

These instructions cover the Moisture Sampler Blower Retrofit Kits for 220V, 440V and 575V Tower Dryers.

1. Remove the access door (F) to the moisture sensor housing assembly.
2. Remove the old inner moisture sampler box from the moisture sensor housing assembly and discard.
3. Install inner plate (D) inside the moisture sensor housing assembly at the same time as the blower moisture tube weldment (GT4-1532) is installed on the outside of the moisture sensor housing.
4. Assemble the cover plate (A) into the new inner box (E) and install the assembly into the inside of the moisture sensor housing. (See Figures 2A and 2B.)

NOTE: Make sure the cover plate (A) is resting against the top edge of the inner box (E) before tightening the bolts (B) and nuts (C).

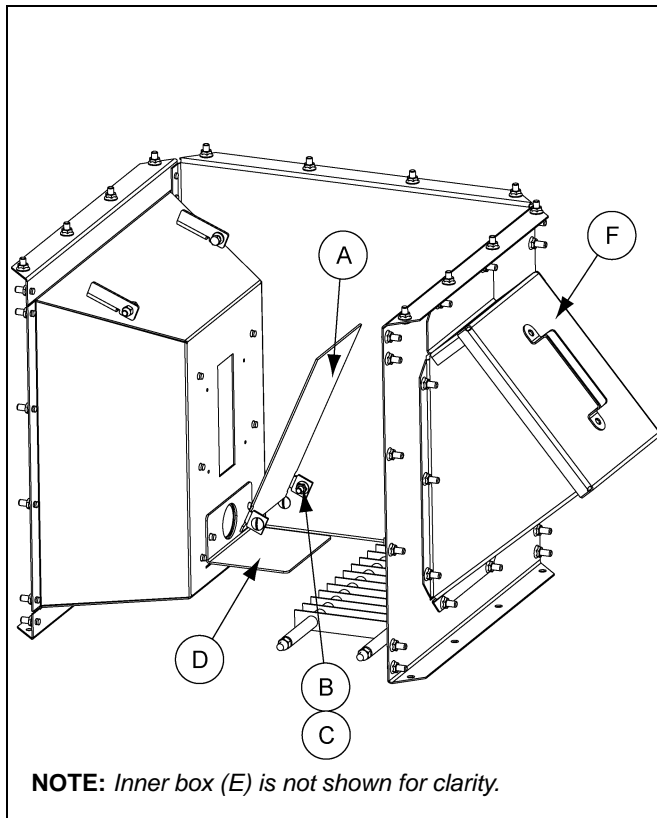


Figure 2A

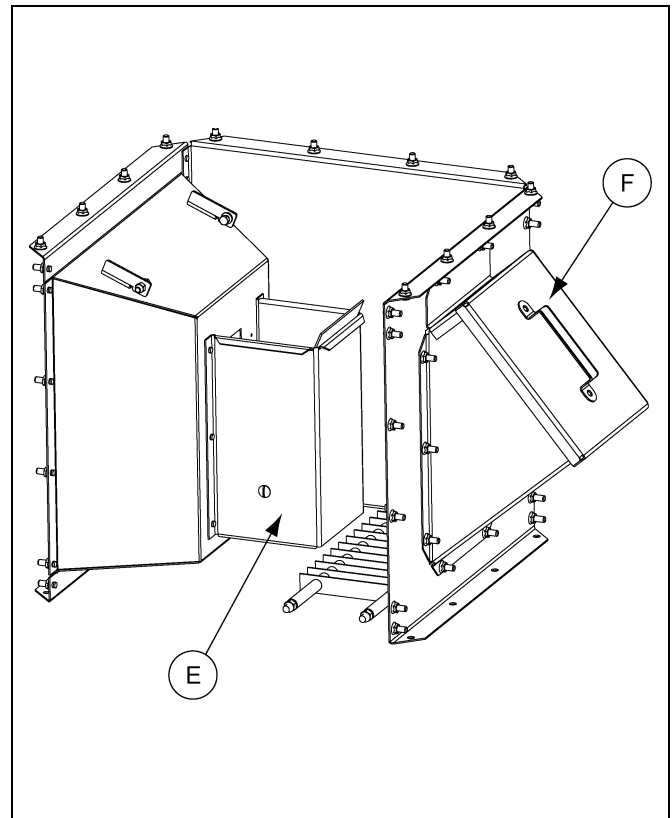


Figure 2B

Ref #	Part #	Description
A	GT1-2362	Cover Plate
B	S-6620	Screw, MS 5/16"-18 x 3/4" THS ZN Clear Grade 5
C	S-3611	Flange Nut 5/16"-18 YDP Grade 2
D	GT1-2361	Formed Plate
E	GT1-2364	Inner Box
F		Access Door

2. Installing a Moisture Sampler Blower on a Tower Dryer

5. Install the blower (G) to the outside of the moisture sensor housing assembly. Use the holes in the brackets as a template for drilling the holes in the side of the housing. Fasten with bolts and tighten all bolts on the blower brackets. (See [Figures 2C and 2D.](#))



Figure 2C

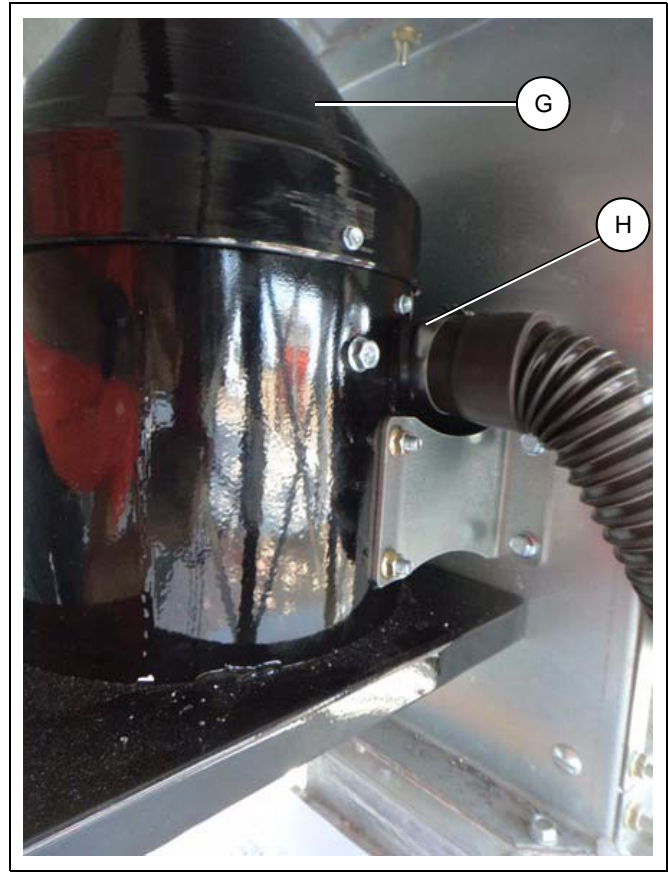


Figure 2D

Ref #	Part #	Description
G	D04-1016	Blower Cover Assembly
H	AP-0583	Hose Clamp

6. Install the flexible elbow pipe (K) to the blower moisture tube weldment (L) using a hose clamp (H).
7. Install coupler hose (I) to the flexible hose (J).
8. Install one side of the flexible hose (J) with couplers to the blower as shown in [Figure 2D](#) and the other side to solid tube (M) as shown in [Figure 2F on Page 8](#).
9. Install electrical components and wire according to attached electrical schematic on [Pages 14-16](#).

2. Installing a Moisture Sampler Blower on a Tower Dryer

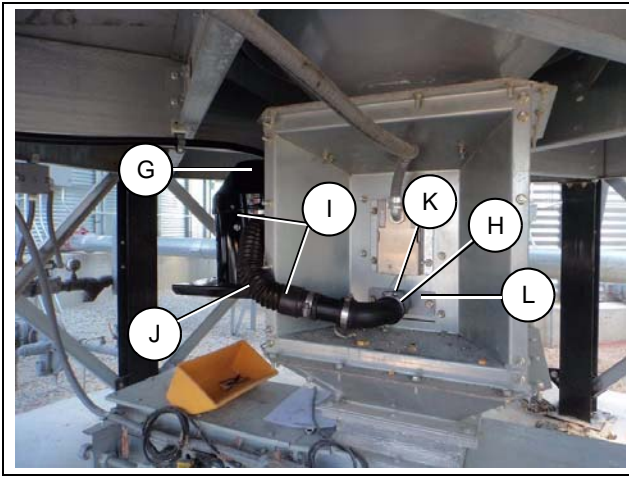


Figure 2E

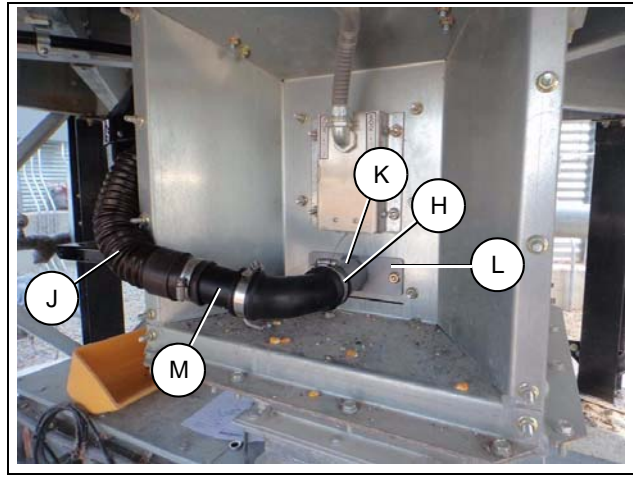


Figure 2F

Ref #	Part #	Description
G	D04-1016	Blower Cover Assembly
H	AP-0583	Hose Clamp
I	D03-1192	Coupler Hose
J	D01-2973	Flexible Hose
K	D03-1203	Pipe Elbow
L	GT4-1532	Tube Weldment
M	D01-2972	Pipe

10. If using 440V, install the transformer on the tower leg. (See Figure 2G.)



Figure 2G

1. Locate dipswitch on display I/O board. (See Figure 3A.)

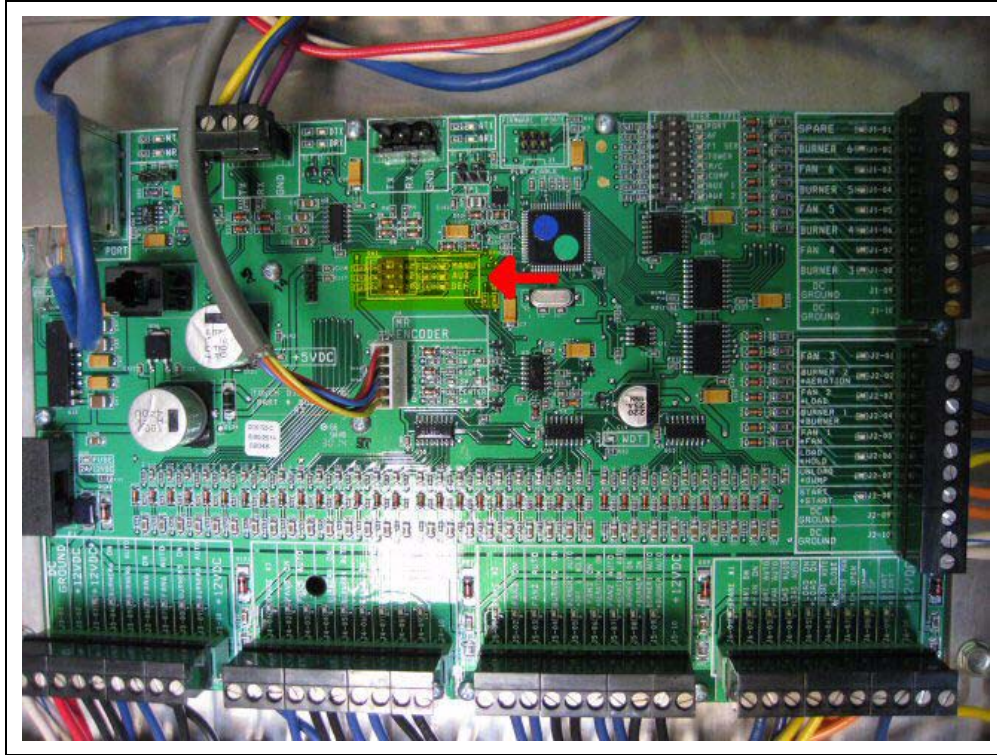


Figure 3A

2. Set AUX dipswitch closeup. (See Figure 3B.)

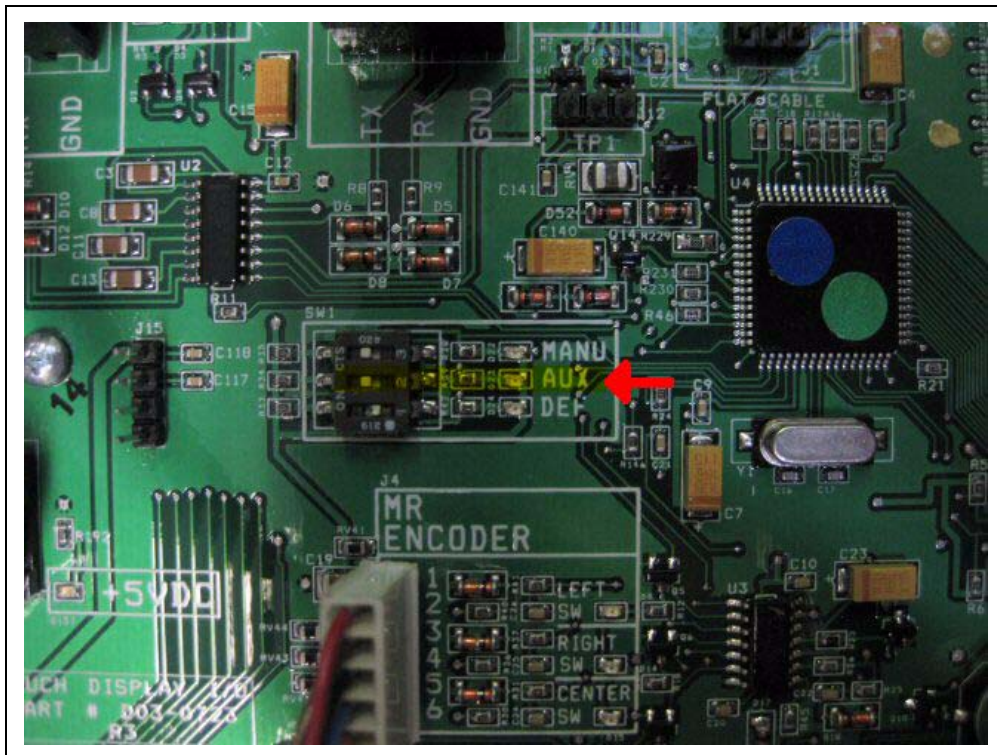


Figure 3B

3. Control Panel Modifications

3. Select Setup on main screen. (See Figure 3C.)

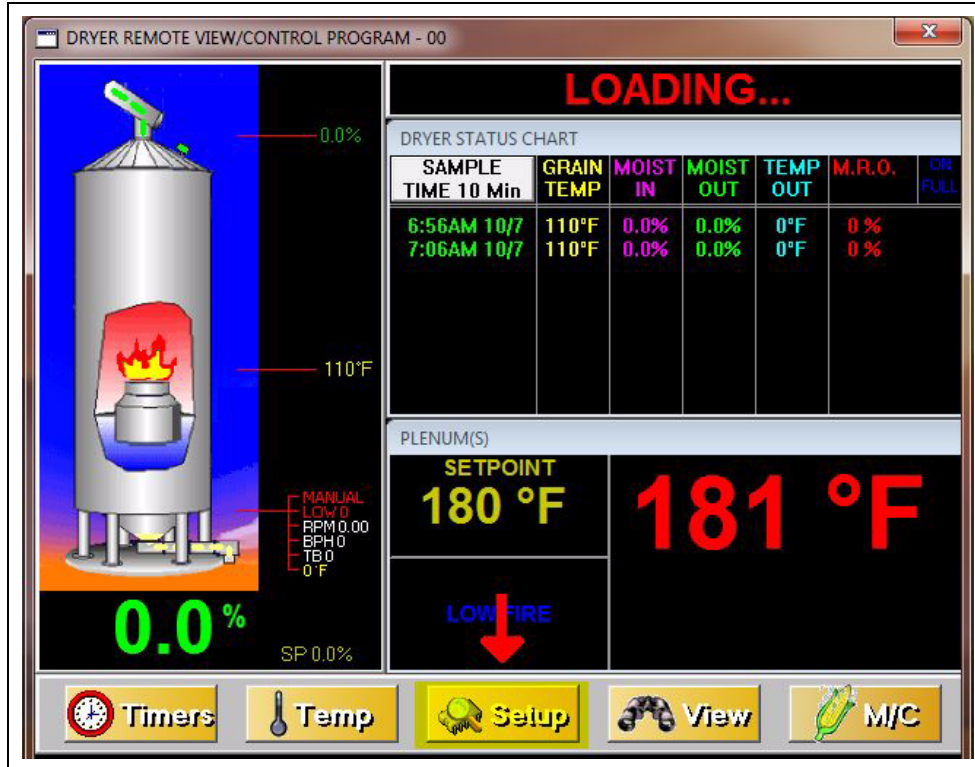


Figure 3C

4. Select Extended Setup on setup screen. (See Figure 3D.)

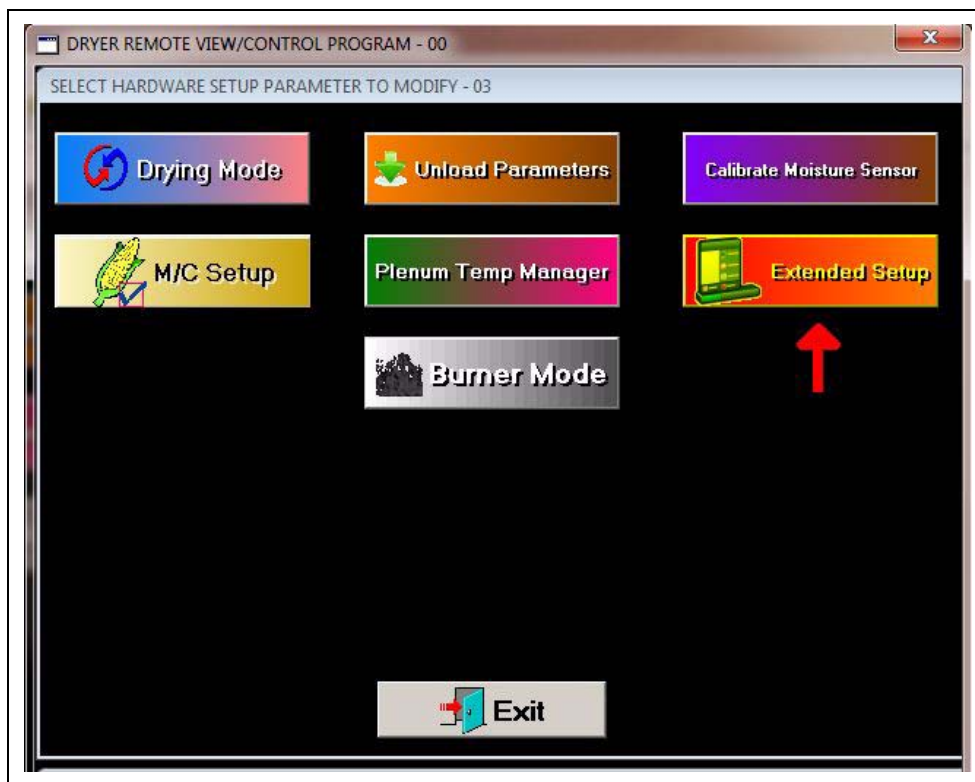


Figure 3D

5. Select Dryer Model on extended setup screen. (See Figure 3E.)

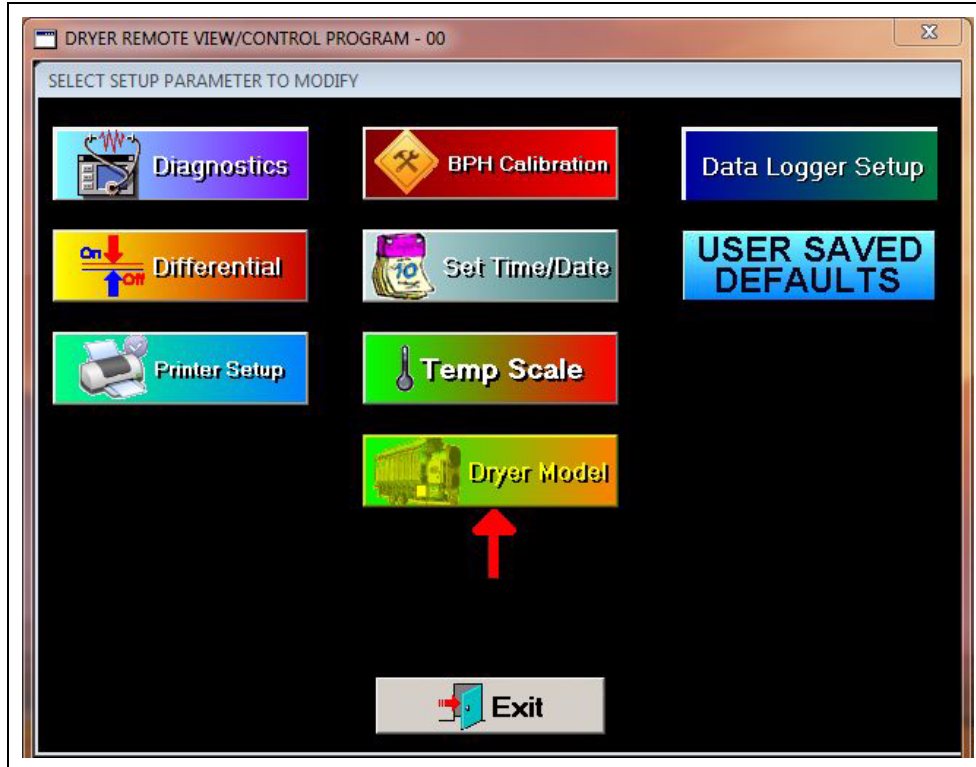


Figure 3E

6. Select enable moisture sampler cycled mode in dryer model setup. (See Figure 3F.)

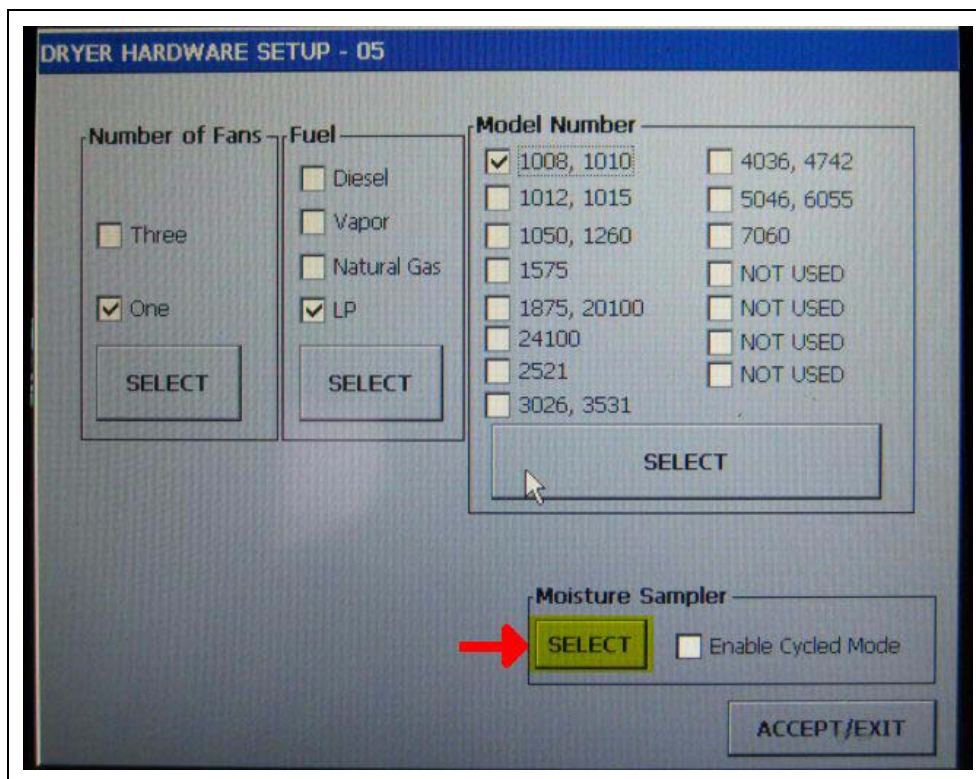
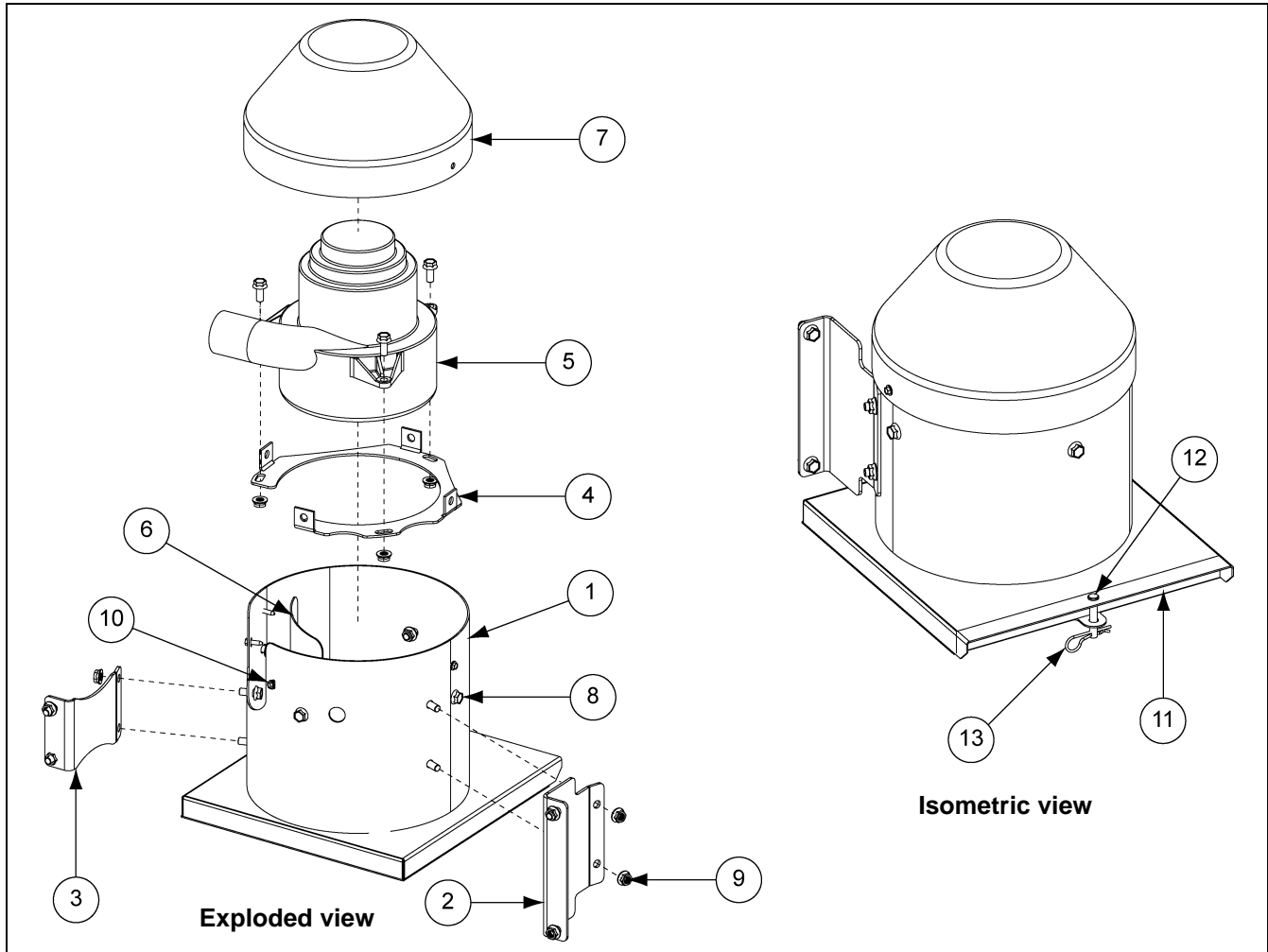


Figure 3F

4. Parts List

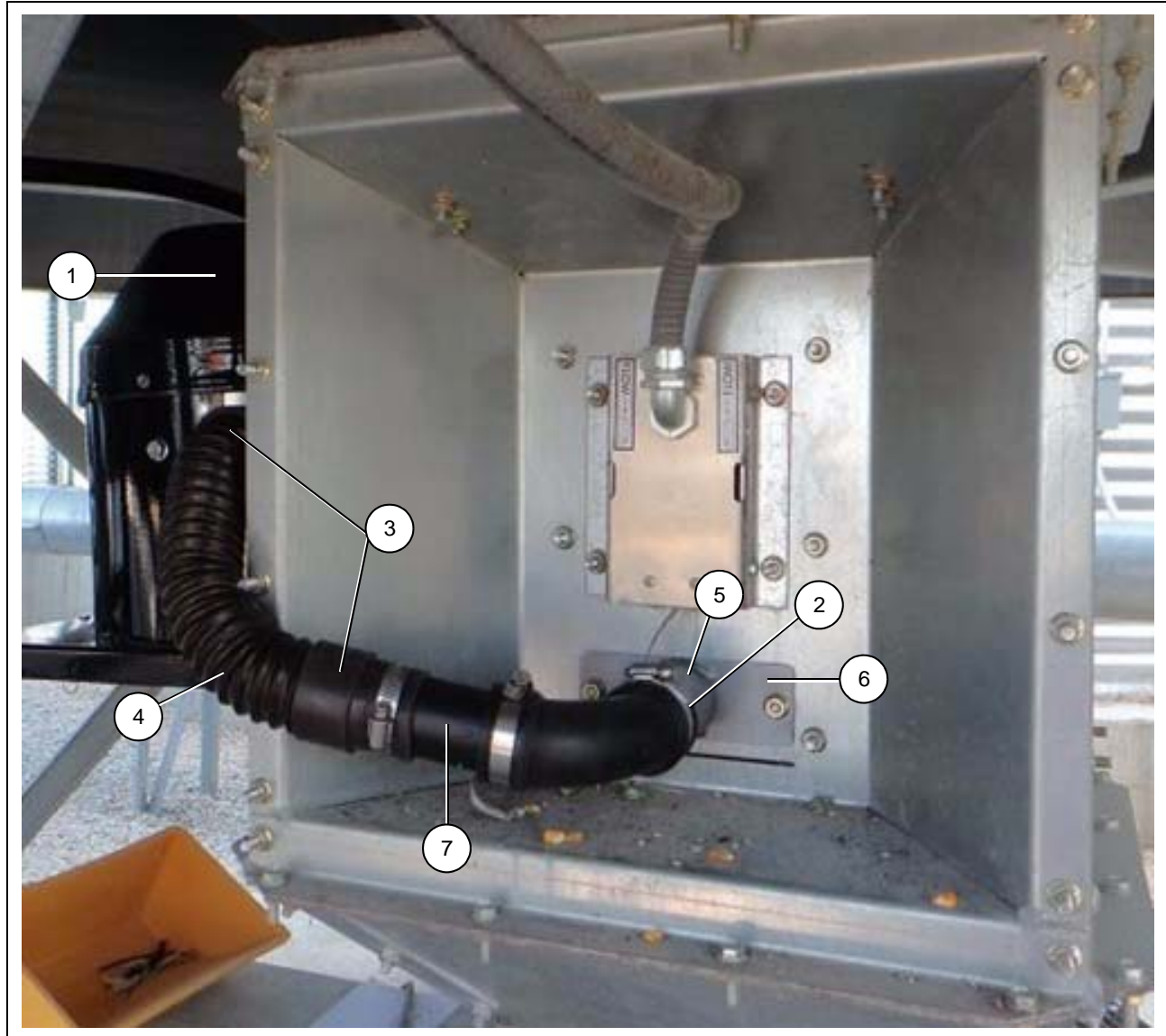
Blower Cover Assembly (D04-1016)



Blower Cover Assembly (D04-1016) Parts List

Ref #	Part #	Description	Qty
1	D04-1017-BK	Blower Cover Weldment	1
2	D01-2952	Moisture Sampler Blower Housing Bracket	1
3	D01-2959	Blower Mount Short Bracket	1
4	D01-2953	Blower Mount Bracket	1
5	D03-1181	Blower 120V VAC, 50/60 Hz	1
6	D01-2954	Seal Plate, Blower Housing	1
7	D04-1021-BK	10" Vertical Cap Black	1
8	S-6606	Flange Bolt 5/16"-18 x 3/4" ZN Grade 5	15
9	S-3611	Flange Nut 5/16"-18 YDP Grade 2	15
10	S-280	Screw, SDS #10-16 x 5/8" HWH ZN	4
11	D03-1189	Filter, Reusable Rigid Polyester Air, 12" x 12" x 1"	1
12	D02-0028	Clevis Pin 5/16" x 1-3/4" Long Zinc	1
13	S-7375	Cotter Pin, Hairpin 0.93" Wire Diameter	1

Moisture Sampler Hose Assembly



Moisture Sampler Hose Assembly Parts List

Ref #	Part #	Description
1	D04-1016	Cover Assembly
2	AP-0583	Hose Clamp
3	D03-1192	Coupler Hose
4	D01-2973	Flexible Hose
5	D03-1203	Pipe Elbow
6	GT4-1532	Tube Weldment
7	D01-2972	Pipe

220V Moisture Sampler Blower Wiring

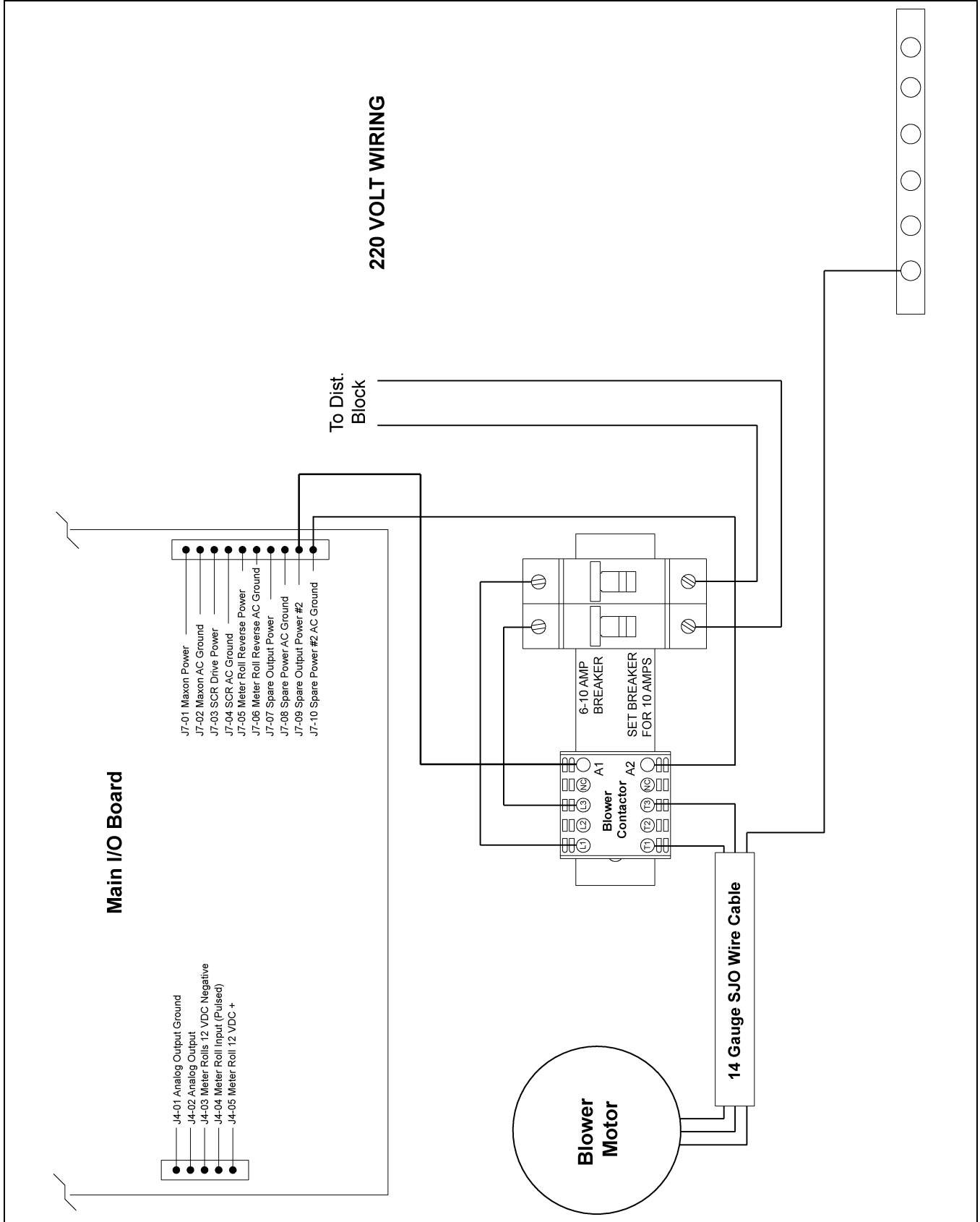


Figure 5A 220V Blower Motor Wiring

440V Moisture Sampler Blower Wiring

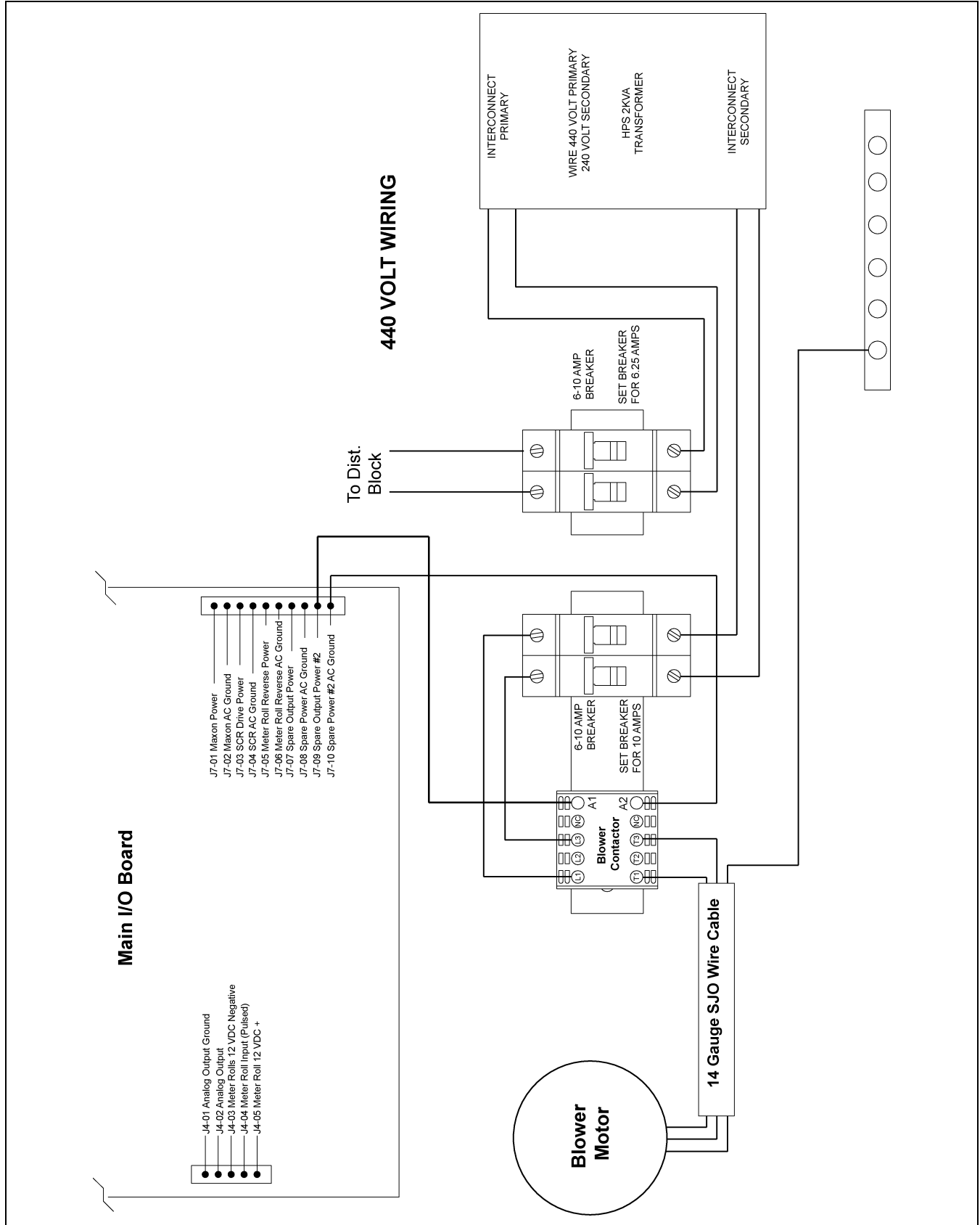


Figure 5B 440V Blower Motor Wiring

575V Moisture Sampler Blower Wiring

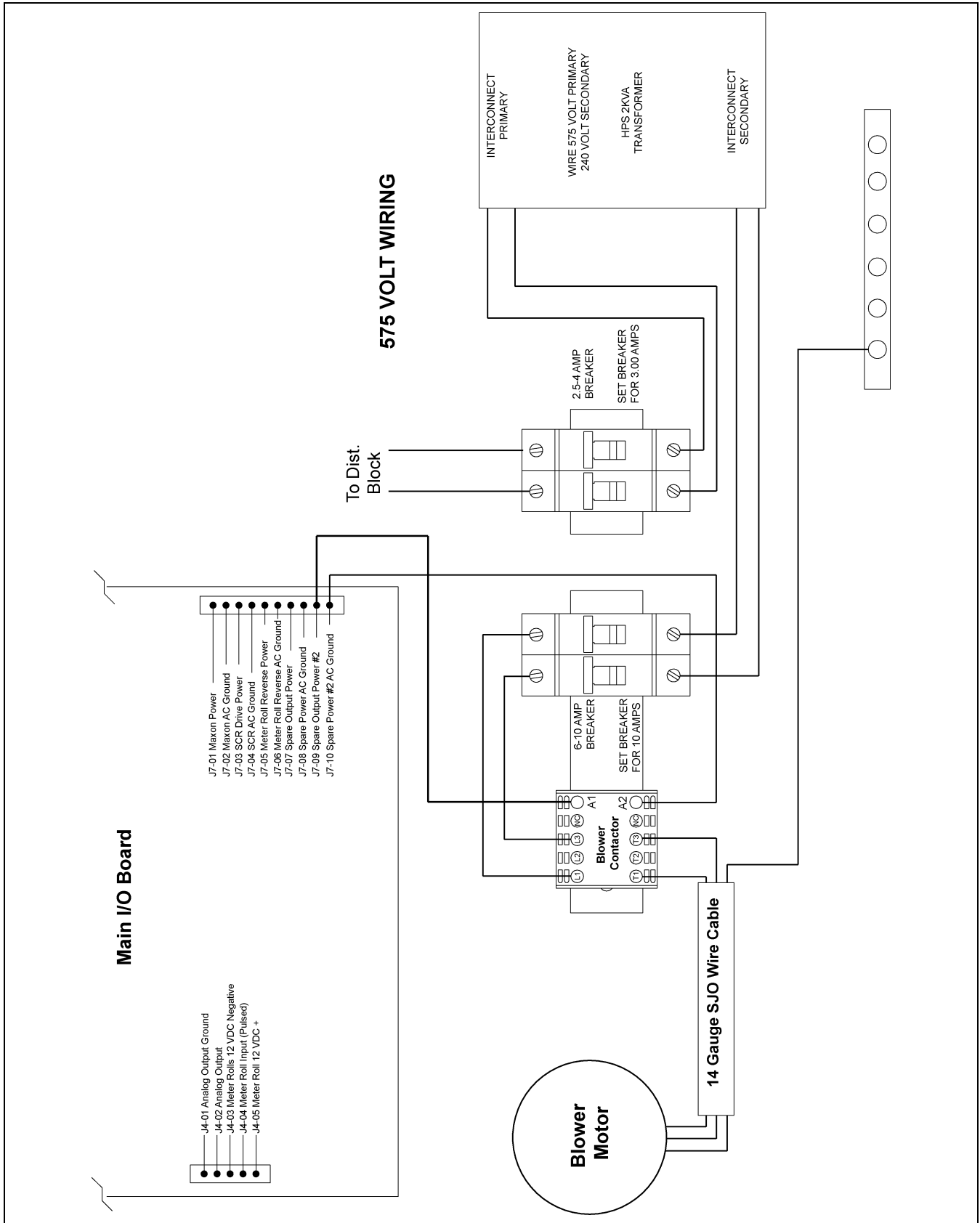


Figure 5C 575V Blower Motor Wiring

GSI Group, LLC Limited Warranty

The GSI Group, LLC ("GSI") warrants products which it manufactures to be free of defects in materials and workmanship under normal usage and conditions for a period of 12 months after sale to the original end-user or if a foreign sale, 14 months from arrival at port of discharge, whichever is earlier. The end-user's sole remedy (and GSI's only obligation) is to repair or replace, at GSI's option and expense, products that in GSI's judgment, contain a material defect in materials or workmanship. Expenses incurred by or on behalf of the end-user without prior written authorization from the GSI Warranty Group shall be the sole responsibility of the end-user.

Warranty Extensions:

The Limited Warranty period is extended for the following products:

	Product	Warranty Period	
AP Fans and Flooring	Performer Series Direct Drive Fan Motor	3 Years	* Warranty prorated from list price: 0 to 3 years - no cost to end-user 3 to 5 years - end-user pays 25% 5 to 7 years - end-user pays 50% 7 to 10 years - end-user pays 75%
	All Fiberglass Housings	Lifetime	
	All Fiberglass Propellers	Lifetime	
AP and Cumberland	Flex-Flo/Pan Feeding System Motors	2 Years	
Cumberland Feeding/Watering Systems	Feeder System Pan Assemblies	5 Years **	** Warranty prorated from list price: 0 to 3 years - no cost to end-user 3 to 5 years - end-user pays 50%
	Feed Tubes (1-3/4" and 2.00")	10 Years *	
	Centerless Augers	10 Years *	
	Watering Nipples	10 Years *	
Grain Systems	Grain Bin Structural Design	5 Years	
Grain Systems Farm Fans Zimmerman	Portable and Tower Dryers	2 Years	† Motors, burner components and moving parts not included. Portable dryer screens included. Tower dryer screens not included.
	Portable and Tower Dryer Frames and Internal Infrastructure †	5 Years	

GSI further warrants that the portable and tower dryer frame and basket, excluding all auger and auger drive components, shall be free from defects in materials for a period of time beginning on the twelfth (12th) month from the date of purchase and continuing until the sixtieth (60th) month from the date of purchase (extended warranty period). During the extended warranty period, GSI will replace the frame or basket components that prove to be defective under normal conditions of use without charge, excluding the labor, transportation, and/or shipping costs incurred in the performance of this extended warranty.

Conditions and Limitations:

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE LIMITED WARRANTY DESCRIPTION SET FORTH ABOVE. SPECIFICALLY, GSI MAKES NO FURTHER WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE IN CONNECTION WITH: (I) PRODUCT MANUFACTURED OR SOLD BY GSI OR (II) ANY ADVICE, INSTRUCTION, RECOMMENDATION OR SUGGESTION PROVIDED BY AN AGENT, REPRESENTATIVE OR EMPLOYEE OF GSI REGARDING OR RELATED TO THE CONFIGURATION, INSTALLATION, LAYOUT, SUITABILITY FOR A PARTICULAR PURPOSE, OR DESIGN OF SUCH PRODUCTS.

GSI shall not be liable for any direct, indirect, incidental or consequential damages, including, without limitation, loss of anticipated profits or benefits. The sole and exclusive remedy is set forth in the Limited Warranty, which shall not exceed the amount paid for the product purchased. This warranty is not transferable and applies only to the original end-user. GSI shall have no obligation or responsibility for any representations or warranties made by or on behalf of any dealer, agent or distributor.

GSI assumes no responsibility for claims resulting from construction defects or unauthorized modifications to products which it manufactured. Modifications to products not specifically delineated in the manual accompanying the equipment at initial sale will void the Limited Warranty.

This Limited Warranty shall not extend to products or parts which have been damaged by negligent use, misuse, alteration, accident or which have been improperly/inadequately maintained. This Limited Warranty extends solely to products manufactured by GSI.

Prior to installation, the end-user has the responsibility to comply with federal, state and local codes which apply to the location and installation of products manufactured or sold by GSI.

This equipment shall be installed in accordance with the current installation codes and applicable regulations, which should be carefully followed in all cases. Authorities having jurisdiction should be consulted before installations are made.

G S I G R O U P



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