

AMAFJ500

Installation Instructions

Fan Jammer Kit for Centrifugal Grain Bin Fans



270 West Park Avenue

Huron, SD 57350

866-526-5682

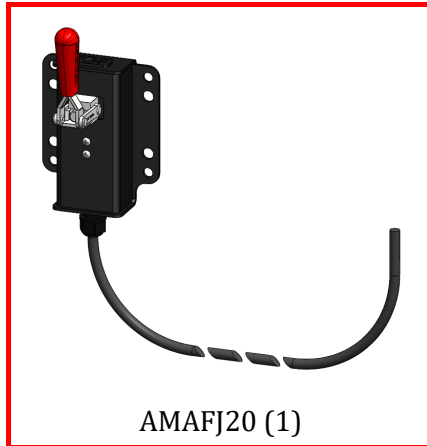
Numerical Parts List

Part Numbers	Description	Qty
AMAFJ20	Fan Jammer Assembly	1
AMAFJ-TEMP	Fan Jammer Drill Template	1
AMAFJ500BH	Fan Jammer Kit Bag of Hardware	1
	Fan Jammer Backing Plate (AMAFJ02)	2
	5/16"-18 x 3/4", Gr. 5 Hex Head Bolt	4
	5/16" Lock Washer	4
	5/16"-18 x 2.25" Full Thread, Gr. 2 Hex Head Bolt	1
	5/16"-18 x 2.75" Full Thread, Gr. 2 Hex Head Bolt	1
	#8-32 x 1/2" Thread Cutting Screw	6
	Cord Grip	1
	Wire Nut	2

Preparation

1. Turn off and flag the breaker that controls the bin fan

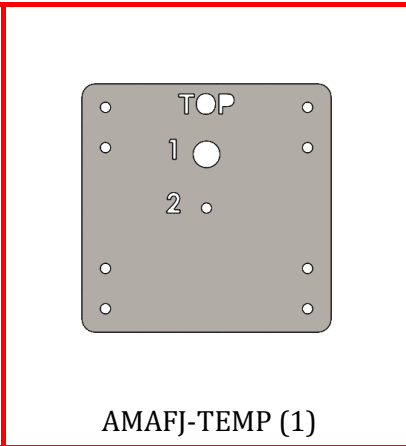
Pictorial Parts List



AMAFJ20 (1)



AMAFJ02* (2)
*In AMAFJ500BH



AMAFJ-TEMP (1)



AMAFJ500BH (1)

Kit Installation

Refer to Figures 1A & 1B

1. Remove the protective guard from the fan inlet area.

Figure 1A



Figure 1B



Kit Installation

Refer to Figures 2 & 3

2. Measure the distance from the center of the fan to the inside of the fan blades. The one in Figure 3 measures 10-5/8". Remember this dimension as it will be used to place the fan jammer on the other side of the fan housing. **NOTE: Dimensions may vary significantly by fan model and size!**
3. Re-install the protective screen on the inlet side of the fan

Figure 2



Figure 3



Kit Installation

Refer to Figures 4 & 5

4. Measure the radius of the fan motor. The one in Figure 4 measures around 5". Subtract this number from the dimension taken on the other side of the fan.
5. The resulting dimension is 5-5/8". Measure this distance from the outside of the motor and make a mark for the center of the Fan Jammer plunger.

Figure 5



Figure 4

Kit Installation

Refer to Figures 6 & 7

6. Center hole #1 from the drill jig over the mark you made and make sure the jig is level. Make sure this location does not interfere with anything on the outside of the fan housing.
7. Using a marker, mark the 8 holes on the outside of the jig as well as hole #2 in the center of the jig.

NOTE: The mark at hole #1 on the jig WILL NOT be drilled!! The mark made at hole #2 will be the center of the hole saw cutout.



Figure 6

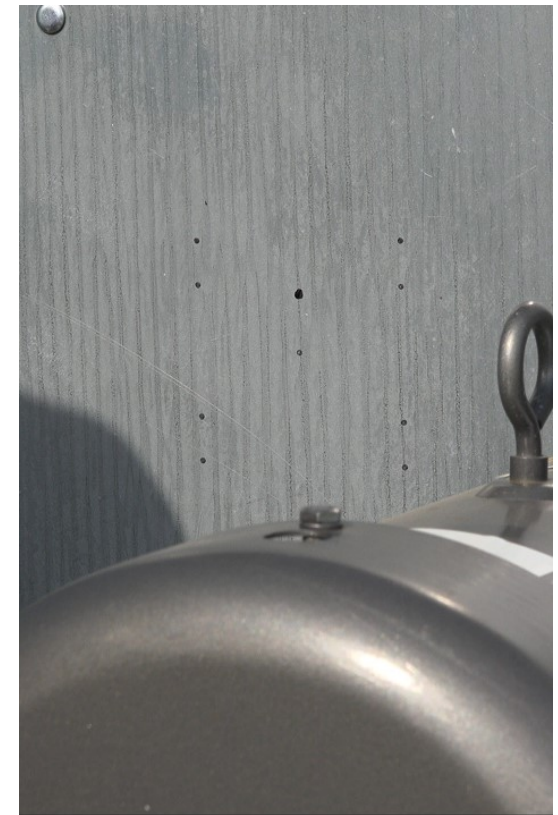


Figure 7

Kit Installation

Refer to Figures 8 & 9

8. Drill a small hole, the same size as the bit in your hole saw, where the mark was made at the hole #2 location on the jig.

IMPORTANT: Do this step with a separate drill bit from the one in the center of your hole saw, this will greatly reduce the possibility of breaking a pilot bit.

9. Using a 3-1/2" hole saw, make a cutout with the center at this 1/4" pilot hole.

NOTE: An installation kit including a hole saw and step bit can be purchased from Lankota. This kit will provide you with all the bits you need to drill holes to properly install this kit

Figure 8



Figure 9



Kit Installation

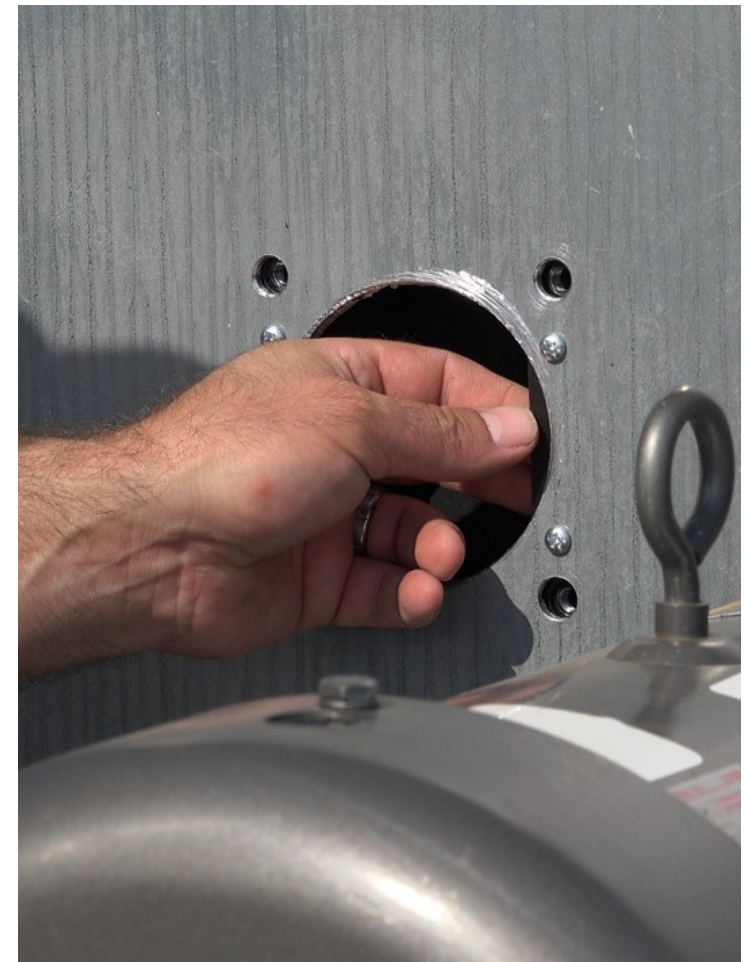
Refer to Figures 10 & 11

10. Drill the four outside holes of the pattern to 3/8" diameter and the inner holes to 3/16" diameter.
11. Using 4 of the provided #8-32 x 1/2" thread cutting screws, fasten the Backing Plates (AMAFJ02) flush to the inside of the fan housing. Leave slightly loose for the time being.

Figure 10



Figure 11



Kit Installation

Refer to Figures 12 & 13

12. Measure the distance from the outside of the fan housing to the face of the fan.
13. With the plunger out on the Fan Jammer Assembly, adjust the bolt to match this measurement. Two alternative bolts are provided if more adjustment is needed (One that is $5/16''$ -18 x 2.25'' and one that is $5/16''$ -18 x 2.75''). Make sure to tighten the jam nut when the proper adjustment is reached. The jam nut/washer/jam nut assembly should be tight against the Fan Jammer clamp shaft to ensure the electrical switch works properly.

Figure 12



Figure 13



Kit Installation

Refer to Figures 14 & 15

- Using the provided 5/16"-18 x 3/4" hex bolts and 5/16" lock washers, attach the Fan Jammer Assembly to the fan housing. Make sure when the handle is raised that the Fan Jammer will keep the fan from rotating freely in the wind. If it does not, go back to step 13 and make an adjustment.
- With the plunger set correctly, tighten all of the 5/16" bolts and the #8-32 thread cutting screws.

NOTE: DOWN should be the OFF position for the Fan Jammer, while UP should be the ON position for the Fan Jammer.

Figure 14



Figure 15



Kit Installation

Refer to Figures 16A & 16B

16. Remove the cover from the electrical box.

Figure 16A



Figure 16B



Kit Installation

Refer to Figure 17

17. Drill a 3/4" hole in the bottom of the electrical box. Be sure to steer clear of any wires inside the box.

Figure 17



Kit Installation

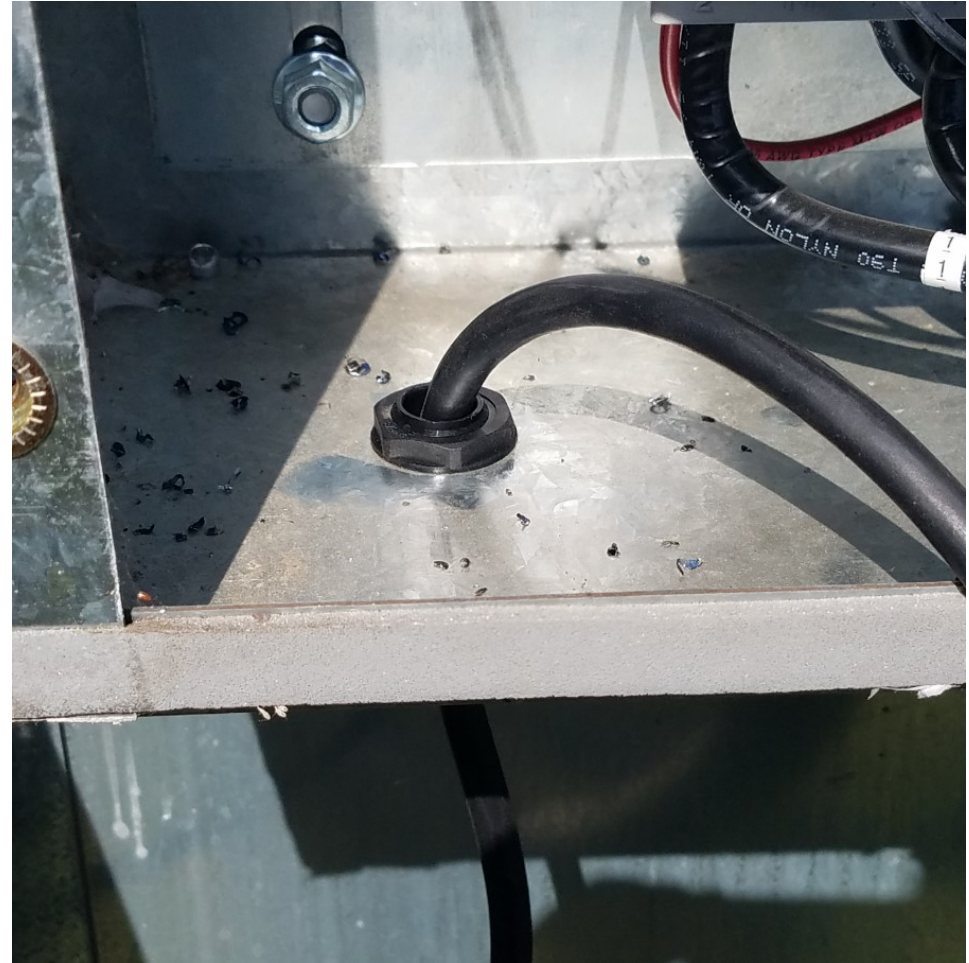
Refer to Figures 18 & 19

18. Pass the Fan Jammer cord under the motor over to the electrical box.
19. Pass it through the provided cord grip and install the cord grip into the hole that was drilled in the bottom of the electrical box.

Figure 18



Figure 19



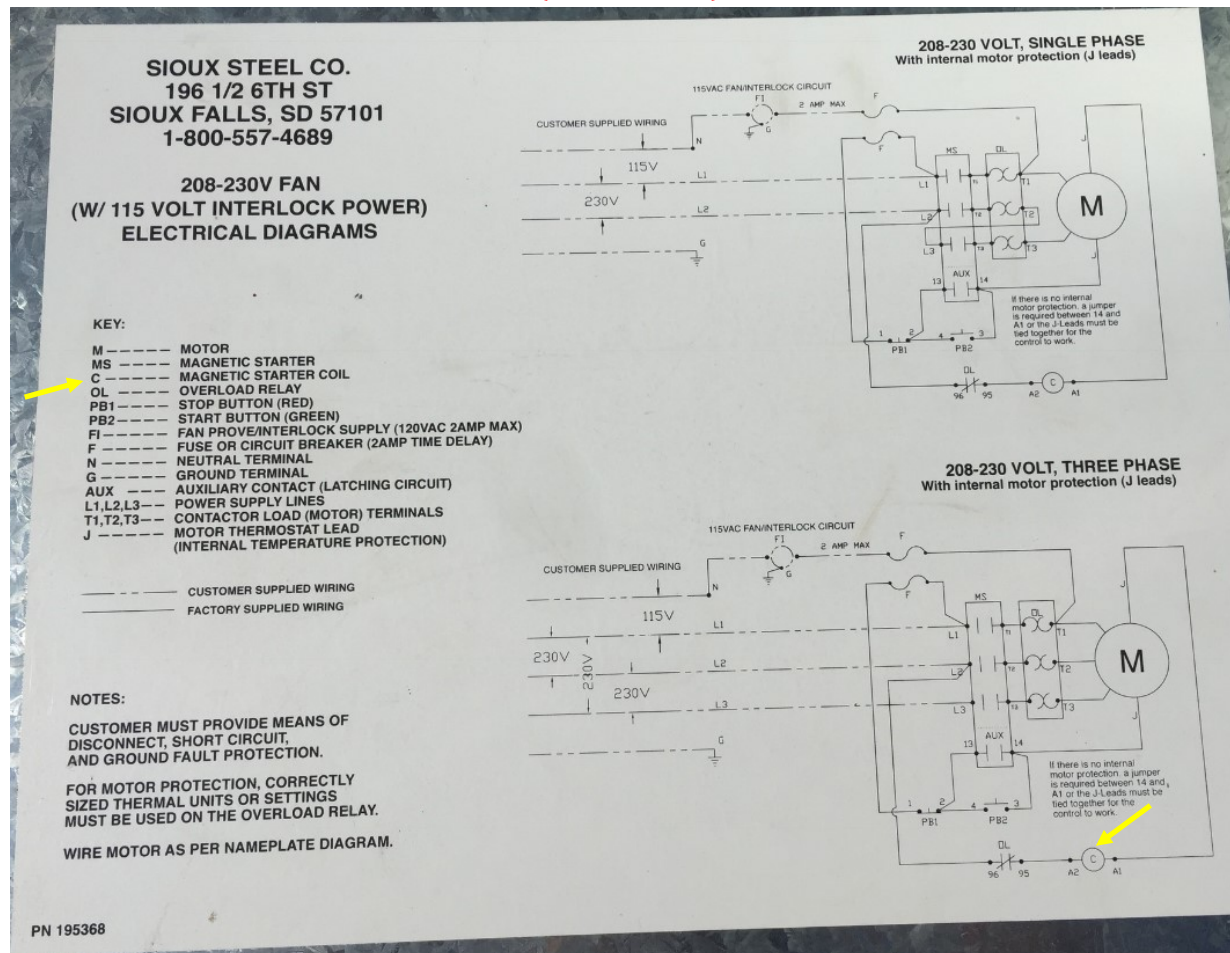
Kit Installation

Refer to Figure 20

NOTE: If you are not confident doing the wiring procedure, call a qualified electrician or 866-526-5682 for assistance!

20. On the electrical diagram, find the Motor and the Magnetic Starter Coil (indicated below). **NOTE: Schematic may vary by fan model and size. Make sure to use the schematic with the correct motor phase.** You will want to interrupt one of the wires going to the Magnetic Starter Coil. Based on the diagram below, the wire going to terminal A1 will be cut and the Fan Jammer will be wired in series with the Magnetic Starter Coil.

Figure 20



Kit Installation

Refer to Figure 21A & 21B

21. In this example, wire A1 coming out of the Magnetic Starter Coil will be spliced.

Figure 21A

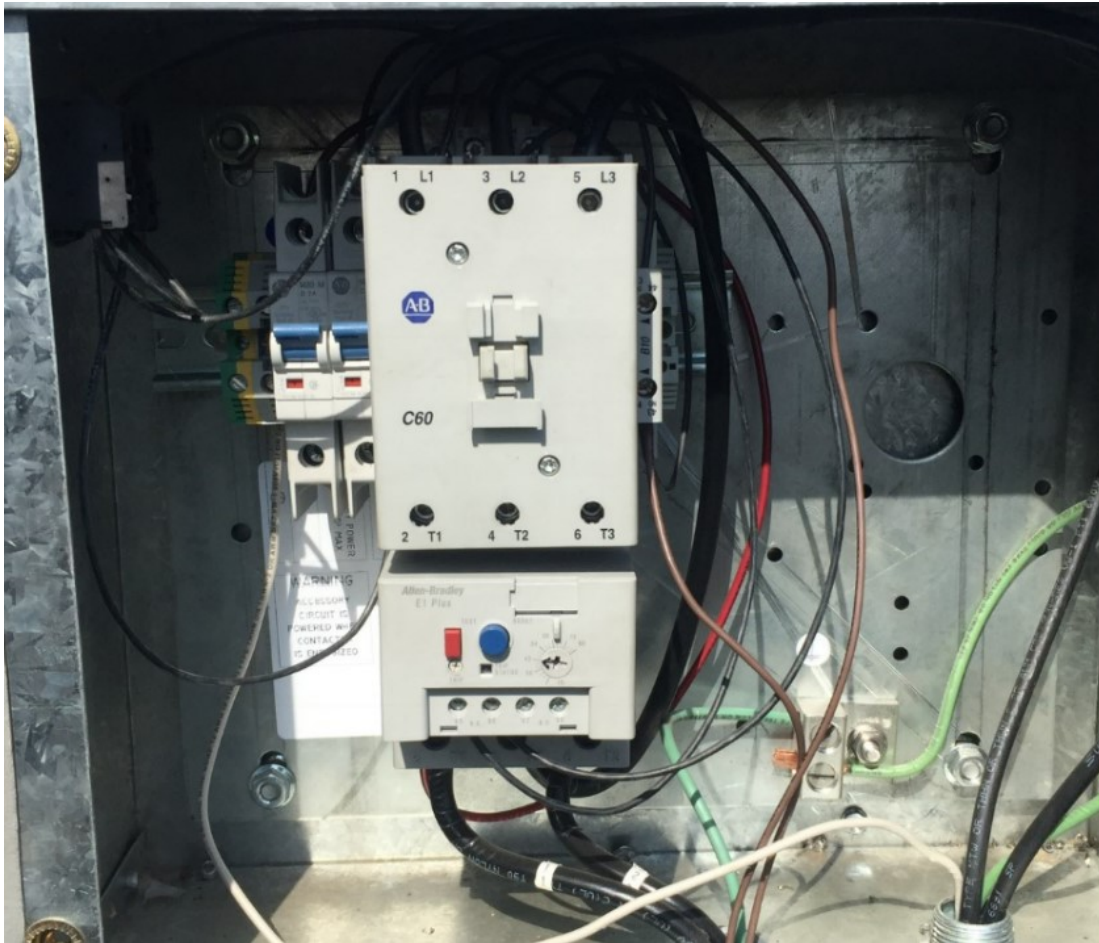
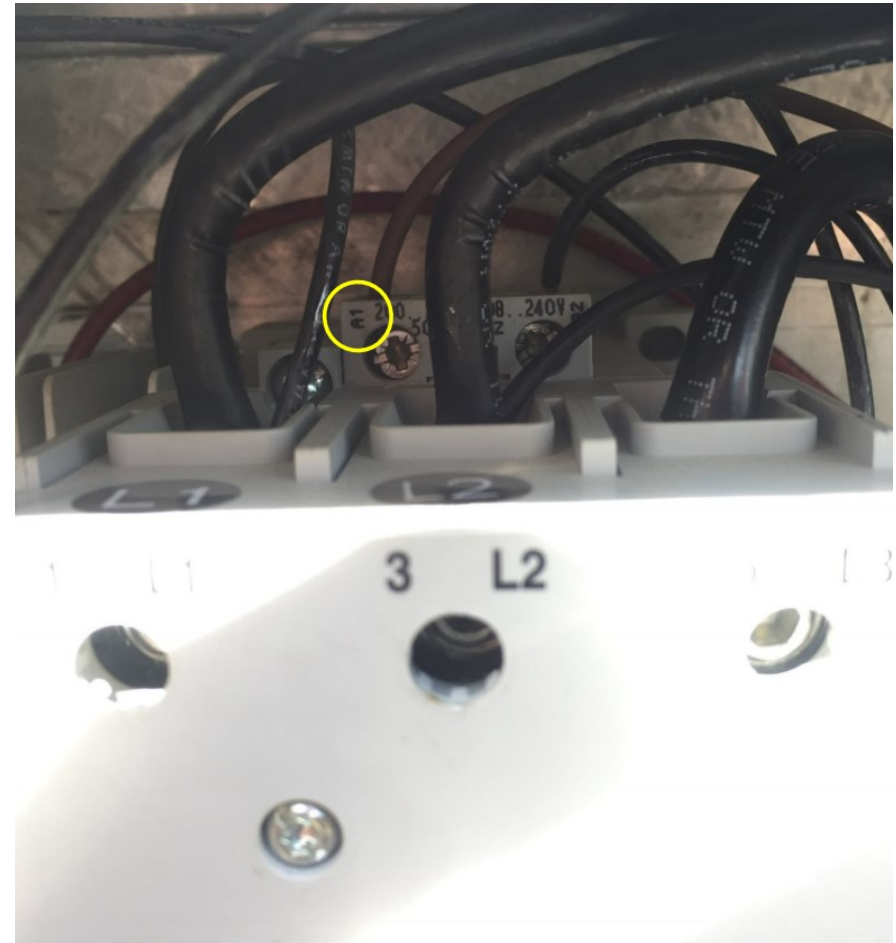


Figure 21B



Kit Installation

Refer to Figures 22 & 23

22. Cut the wire at a convenient spot and splice it with the wires from the Fan Jammer cord. Use the provided wire nuts to connect the wires.
23. Re-install the electrical panel cover.

Figure 22



Figure 23



Installation Checks

VERY IMPORTANT: NEVER try to engage (ie: raise the handle) of the Fan Jammer when a bin fan is powered on and/or spinning!!

24. With the Fan Jammer handle DOWN - in the OFF position, turn the breaker for the bin fan back on.
25. ***MAKE SURE THE FAN IS OFF AND NOT SPINNING***, then raise the handle for the Fan Jammer Assembly. This should keep the fan from free wheeling in the wind AND cut the power to the bin fan.
26. To test the electrical installation, put the Fan Jammer handle ***HALFWAY BETWEEN ON AND OFF - The handle should be horizontal to the ground.*** Tap the start button to the bin fan, if it does not turn over, installation is complete. If it tries to start, lower the Fan Jammer handle to back off the breaking mechanism and call 866-526-5682 for assistance. The fan should only be able to start with the Fan Jammer handle all the way DOWN - in the OFF position.

FOR FURTHER ASSISTANCE, CALL 866-526-5682