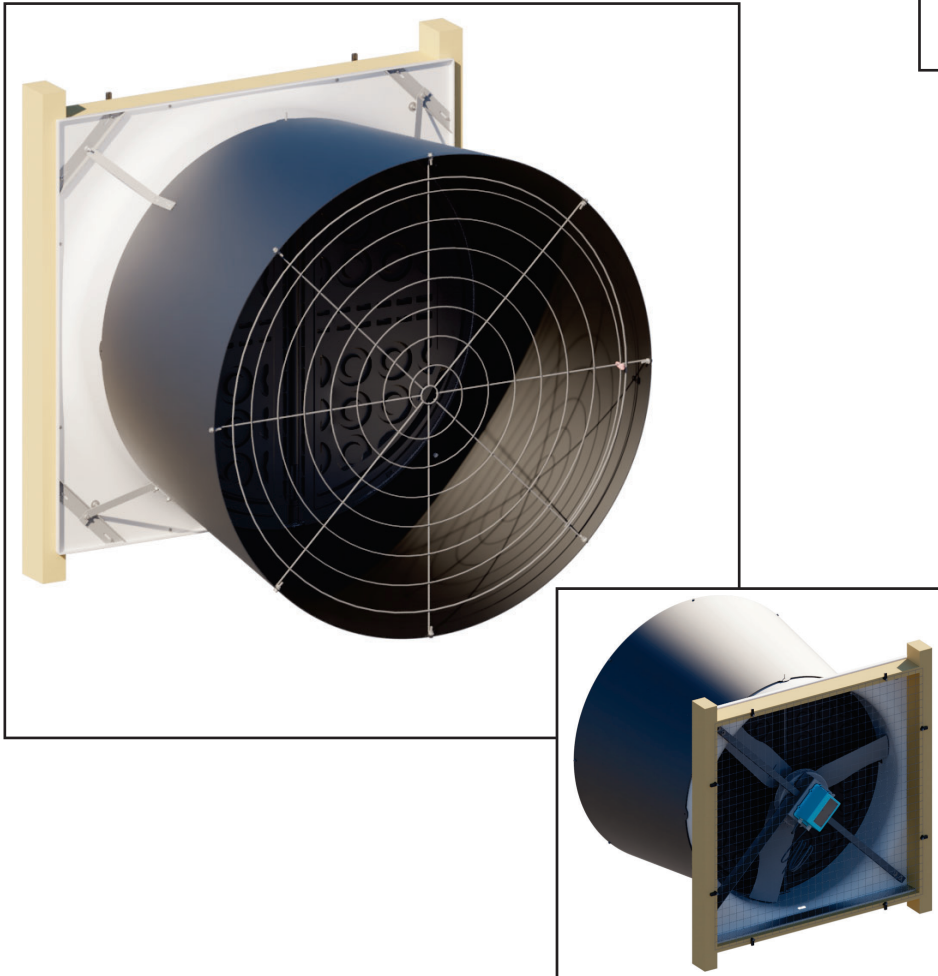


Instruction Manual

WM54DK Wall Mount Fan with Damper Door and Munters Drive* 1-Pack Quick Kit

*Patents Pending



WM54DK Fiberglass Wall Mount Fan with Damper Door and Munters Drive - 1-Pack Models: WM54DKxxCB-HO



WM54DK Fiberglass Wall Mount Fan with Damper and Munters Drive

Instructions for Use and Maintenance

Thank You:

Thank you for purchasing a Munters WM54DK Fiberglass with Damper. Munters equipment is designed to be the highest performing, highest quality equipment you can buy. With the proper installation and maintenance it will provide many years of service.

Please Note:

To achieve maximum performance and insure long life from your Munters product it is essential that it be installed and maintained properly. Please read all instructions carefully before beginning installation.

Warranty:

For Warranty claims information see the "Warranty Claims and Return Policy" form QM1021 available from the [Munters Corporation office at 1-800-227-2376 or by e-mail at aghort.info@munters.com](mailto:aghort.info@munters.com).

Conditions and Limitations:

- Products and Systems involved in a warranty claim under the "Warranty Claims and Return Policy" shall have been properly installed, maintained and operated under competent supervision, according to the instructions provided by Munters Corporation.
- Malfunction or failure resulting from misuse, abuse, negligence, alteration, accident or lack of proper installation or maintenance shall not be considered a defect under the Warranty.

Index

Chapters	Page
1. Unpacking the Equipment	4
1.1 Parts List	4
1.2 Fan Dimensions	6
1.3 Tools for Installation	6
2. Installation Instructions	7
2.1 Fan Installation	7
2.2 Cone Installation	12
3. Electrical Wiring	17
3.1 Recommended Wire Routing	18
3.2 Electrical Wiring	19
3.3 Recommended Wiring	20
4. Operation and Maintenance	26
4.1 Operation	26
4.2 Maintenance	26
5. Troubleshooting	27
6. Winterizing	28
6.1 Winterizing	28
6.2 Winter Weather Protection	28
7. Exploded View and Parts List	29-31

Unpacking the Equipment

1.

1.1 Parts List

Each Crate Includes

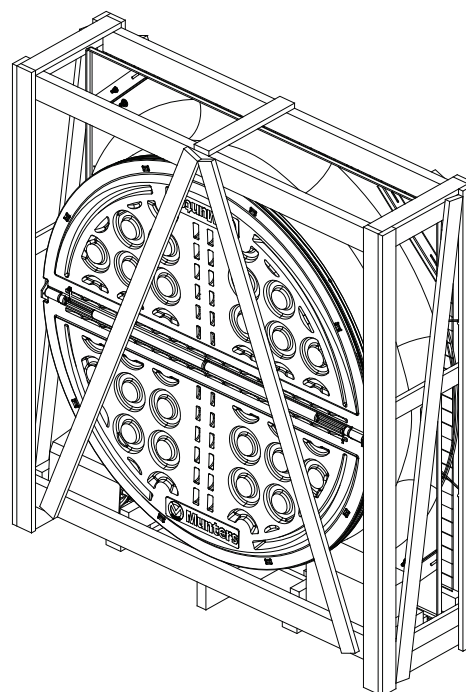
- 1 - 54" Orifice Panel, Fiberglass Fan, Sub-Assembly
- 4 - Cone/Strut Mounting Bracket, GZ
- 1 - Strut Brace, PWDCTD
- 1 - Drip Shield, AL
- 4 - Cone Sections, PL
- 1 - Cone Guard
- 1 - Inlet Guard
- 1 - Bulk Parts Package (BK1153)

BK1153 - Bulk Parts Package for WM54DK

- 1 - Coated Cable w/ferrule, 100" L.
- 1 - Hardware Package (HP1178)

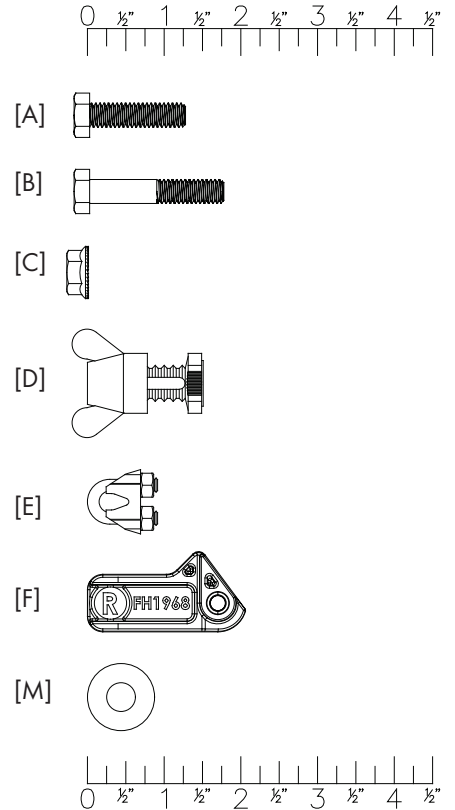
'MA' Munters Drive Controller Kit

- 1 - Munters Drive Controller
- 1 - Hardware Package (HP1325)



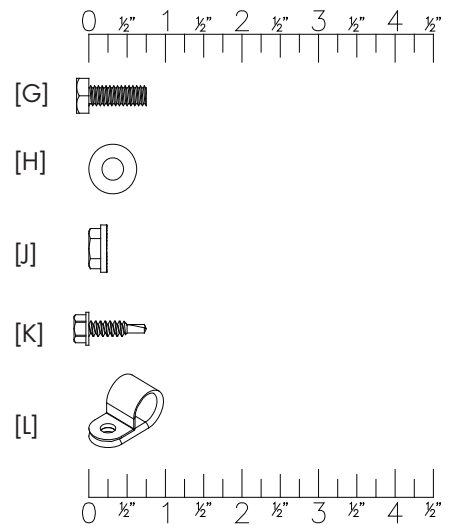
HP1178 - Hardware Package for 1 - WM54DK

ID	Qty.	Cat. No.	Description
[A]	18	KS1007	5/16"-18 x 1.25" Hex Head Bolt, SS
[B]	4	KS1029	5/16"-18 x 1.75" Hex Head Bolt, SS
[C]	22	KN0704	5/16" SRTD Flange Nuts, SS
[D]	1	AC0211 & AC0212	Azuma Bolt & Nut, Blue PL
[E]	2	AC1381	1/8" Dia. Cable Clamp, ZP
[F]	8	FH1968	1-Hole Pivoting Shutter Clip, BLK PL
[M]	2	KW4908	M8 x 32mm Flat Washer, ZP

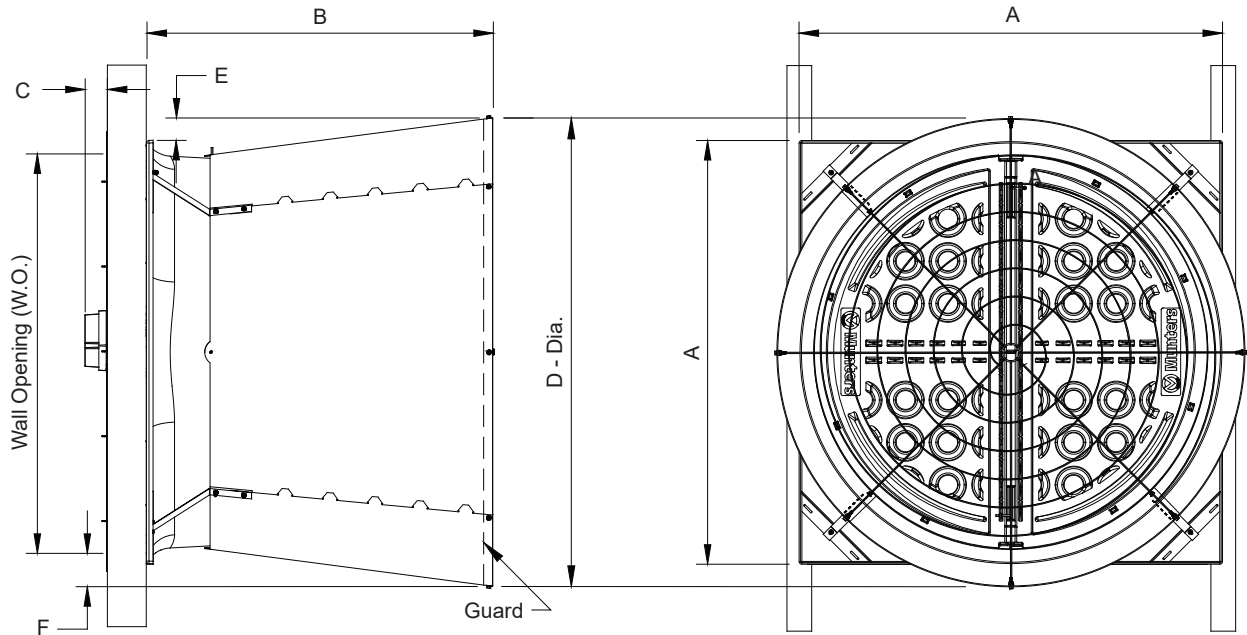


HP1325 - Hardware Package for 1 - WM54DK

ID	Qty.	Cat. No.	Description
[G]	4	KS1019	1/4"-20 x 1" Hex Bolt, SS
[H]	2	KW3002	1/4" Type-A Narrow Flat Washer, SS
[J]	2	KN0702	1/4"-20 Serrated Flange Hex Nut, SS
[K]	4	KS2258	#10-16 x 5/8" HXWSR TEK Screw, SS
[L]	4	KX1018	3/8" Dia. X 1/2"W. Wire Clamp, BLK NY



1.2 Fan Dimensions



Dimensions:

Size	A	B	C*	D - Dia.	E	F	Wall Openings
54"	60"W. x 60" H.	49"	3 ³ / ₈ "	66 ⁵ / ₁₆ "	3 ³ / ₁₆ "	4 ³ / ₄ "	56 ¹ / ₂ "W. x 56 ¹ / ₂ "H.

*Dimension varies depending on wall construction.

Fan Specifications: 60Hz shown (50Hz available)

Power: 230VAC or 230/460 VAC

Phase: 1 or 3

1.3 Tools Required For Installation

- 10mm [³/₈"] Socket
- 13mm [¹/₂"] Socket
- 17mm [¹/₁₆"] Socket or Wrench
- 27mm [¹-¹/₁₆"] Wrench
- ³/₈" Socket
- Phillips Screwdriver, #3 Size
- ⁵/₃₂" Hex Wrench
- Wire Cutting Pliers

Installation Instructions

2.

2.1 Fan Installation

Step 1

Construct framed opening to correct size according to Wall Opening listed in Chart A below. See Figure 1A and 1B. When installing exterior sheet metal before fan, leave 2" of the framing exposed on all sides so the orifice can mount flush to the frame.

Chart A

Fan Dia.	Wall Opening (W. x H.)	Minimum Spacing 'Z'	Center To Center Dimension
54"	56½" W. x 56½" H.	12" recommended; 3½" minimum	60" Minimum

Note:

Damper doors should be carefully set aside out of direct sunlight until needed.

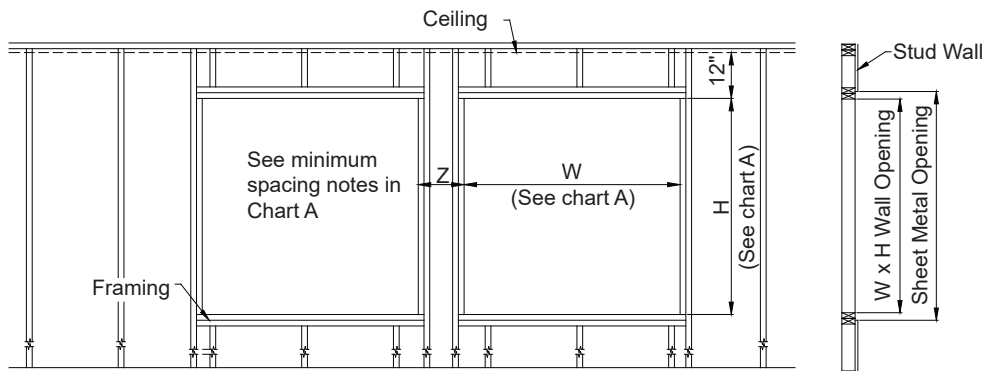


Figure 1A - Frame Construction

Top View

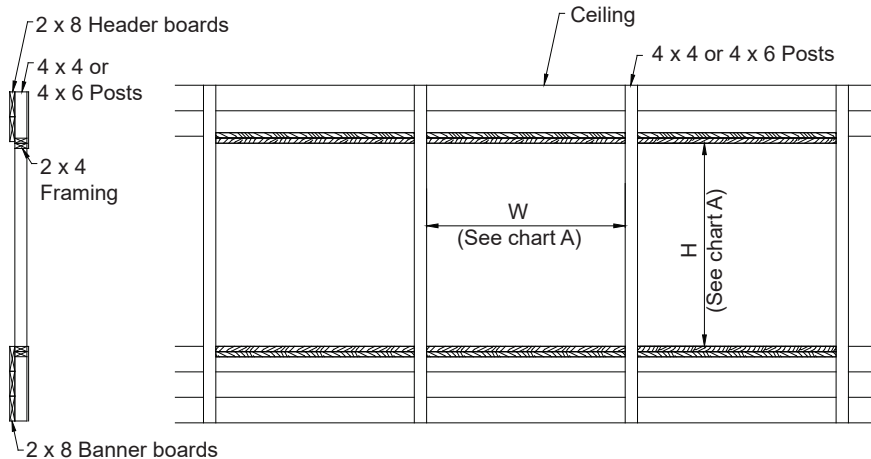
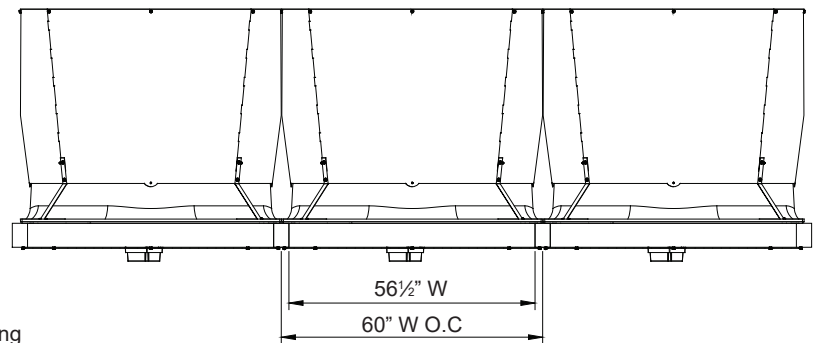


Figure 1B - 4 x 4 Post Construction - Elevation View

Step 2A

Remove the BK1153 and Munters Drive Controller Kit from the front of the crate. See Figure 2A.

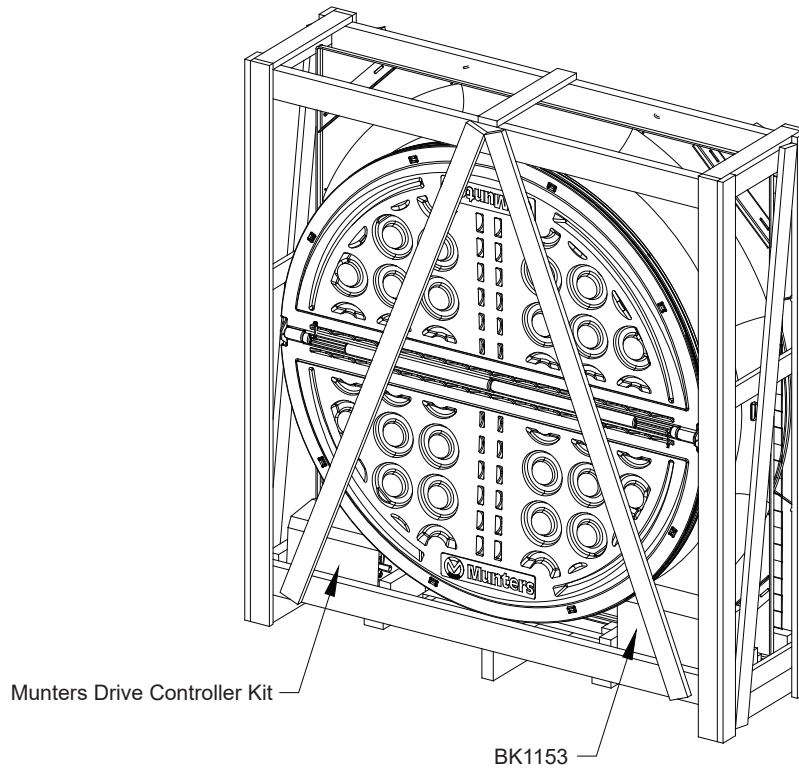


Figure 2A

Step 2B

Remove all the other loose parts from the back of the crate. See Figure 2B.

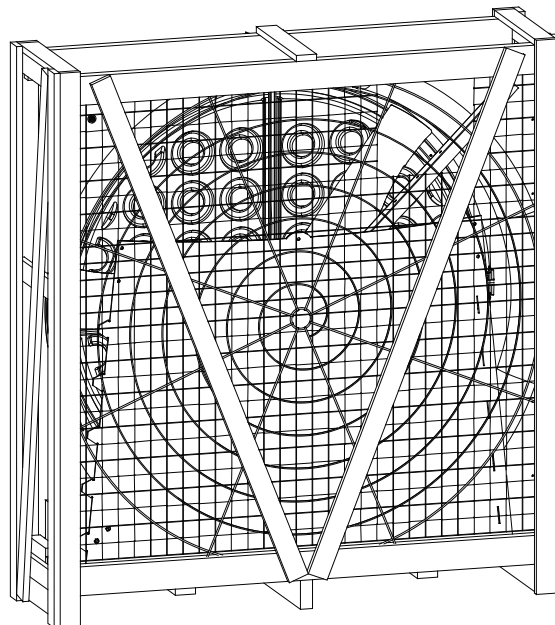


Figure 2B

The fan can either be installed on the wall before the drive system is installed or the drive system can be installed while the fan is in the crate.

Step 3

Carefully turn the crate onto its side, so that the drain hole in the orifice is at the bottom. See Figure 3.

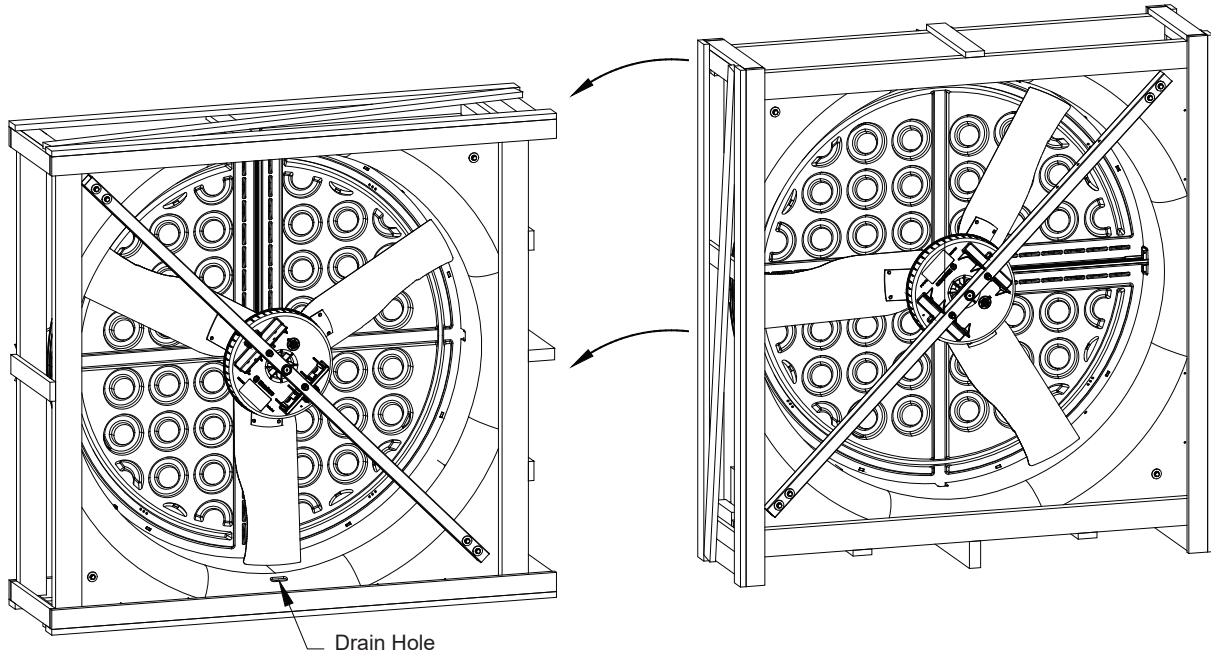


Figure 3

Step 4

Attach Drip Shield to bottom of framed opening using (3) Barn Screws (Not Provided). See Figure 4A and 4B. If a 4" wall is used a support board must be installed as shown in Figure 4B. Be sure not to deform Drip Shield when installing screws.

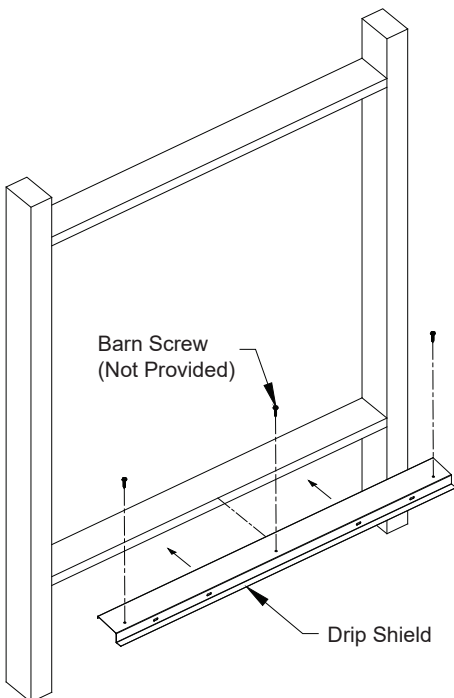


Figure 4A

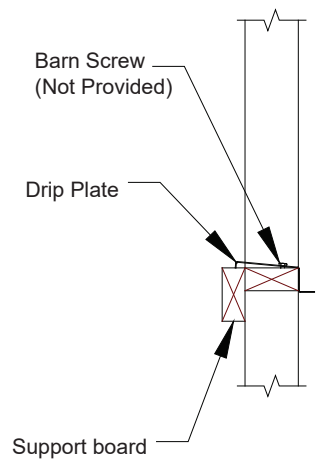
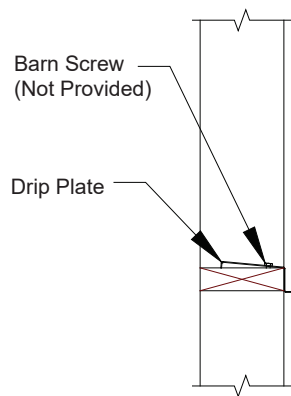


Figure 4B

Step 5

Locate the Drain hole in the Orifice Panel. This is the bottom of the Fan. Set the bottom edge of the fan on the Drip Shield ledge and center the panel on the opening. Then secure the Fan to the wall using (16) Barn Screws (Not Provided). [See Figure 5A and 5B.](#)

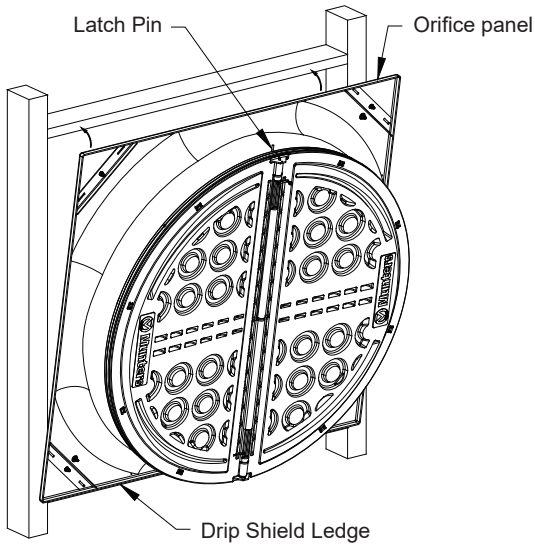


Figure 5A

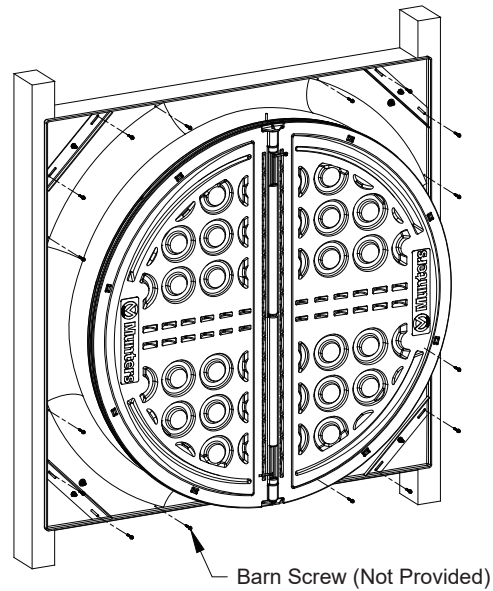


Figure 5B

Step 6A

Find Strut Brace in crate and remove the Controller from the foam packaging. Plug the Quick Connect Connector into the Motor and position Controller and Strut Brace over the Strut, with bottom of box toward bottom of the fan. Secure Controller and Strut Brace to Motor using (4) Bolts [G], Washers [H] and Nuts [J]. [See Figure 6A.](#)

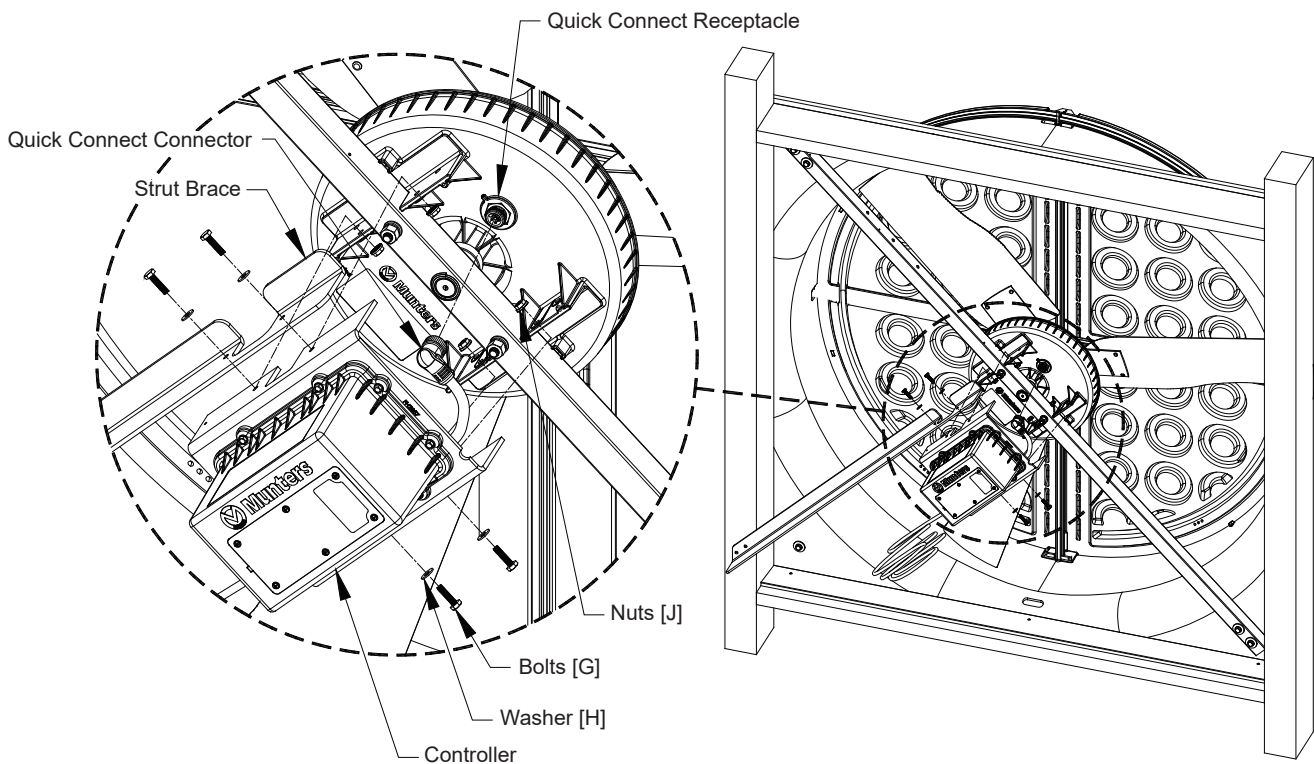


Figure 6A

Step 6B

Where the bottom of the Strut Brace meets the Orifice Panel, use the 2 holes in the Strut Brace as a guide and drill (2) $\frac{5}{16}$ " holes through the fiberglass Orifice Panel. Secure Strut Brace to Orifice Panel using (2) Bolts [A], Washers [M] and Nuts [C]. See Figure 6B.

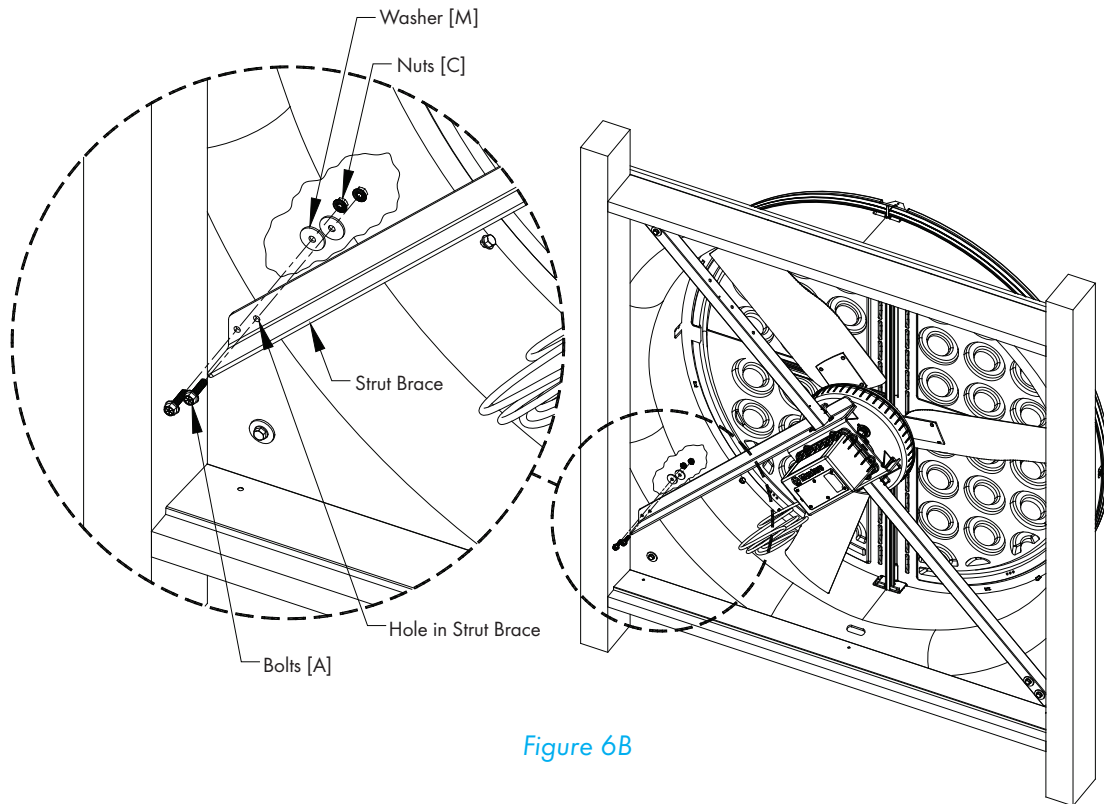


Figure 6B

Step 7

Find the Coated Cable and insert end opposite the ferrule into small hole in upper plate of the Main Frame and pull it through until ferrule stops at plate. See Figure 7.

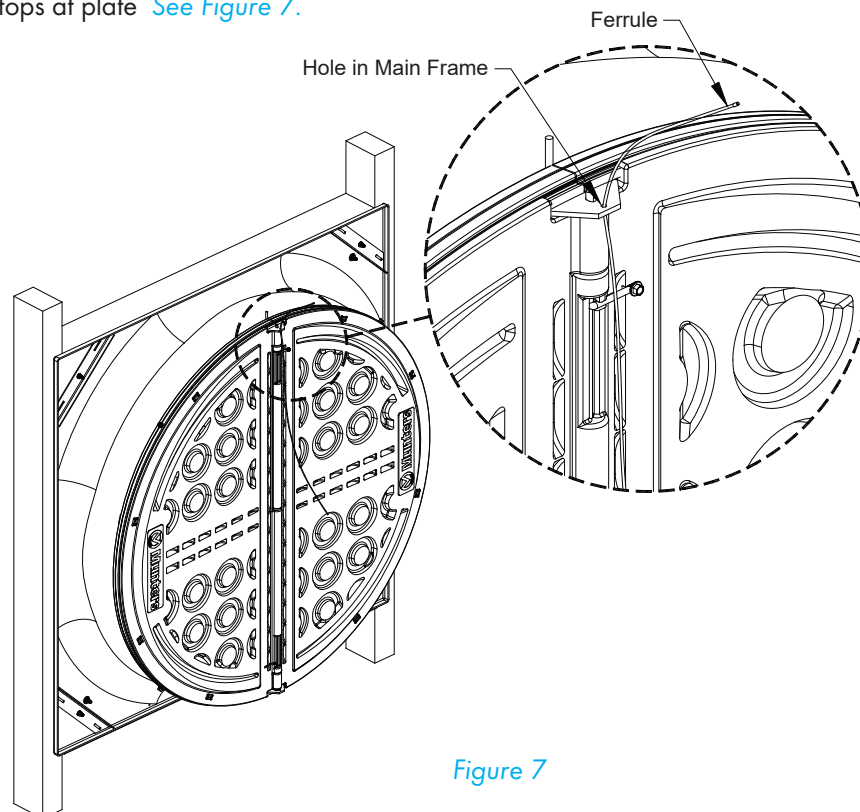


Figure 7

2.2 Cone Installation

Step 8

Place all 4 cone sections on a flat surface with the tabs from one facing the slots of the next. [See Figure 8A](#). Curl up the tab end of the first cone section and insert the tabs up into the slots in the next cone section, a mallet may be needed to seat the slots over the tabs completely. [See Figure 8B](#). Repeat this until all 4 cone sections are connected and laying flat.

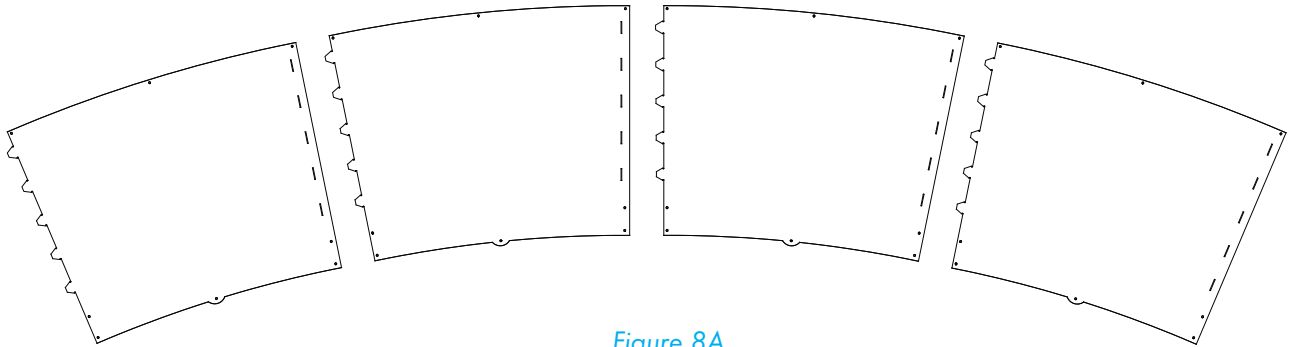


Figure 8A

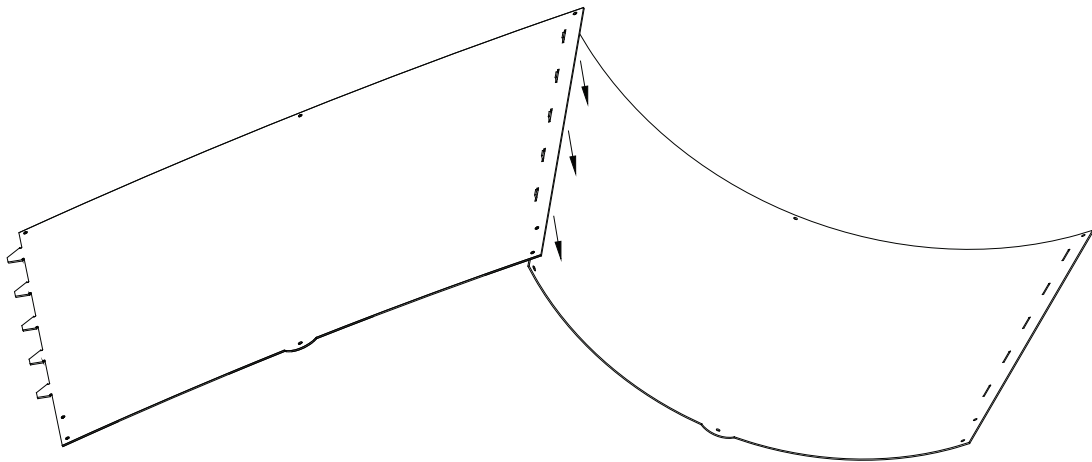


Figure 8B

Step 9A

Fasten each of the joints in the single outer hole using (1) Short Bolt [A] and Nut [C], with the nut on the side with the tabs. At the inner pair of holes of each joint attach (1) Cone Support Bracket to the inner hole using (1) Short Bolt [A] and Nut [C] with the bolt head on the side with the tabs. [See Figure 9A.](#)

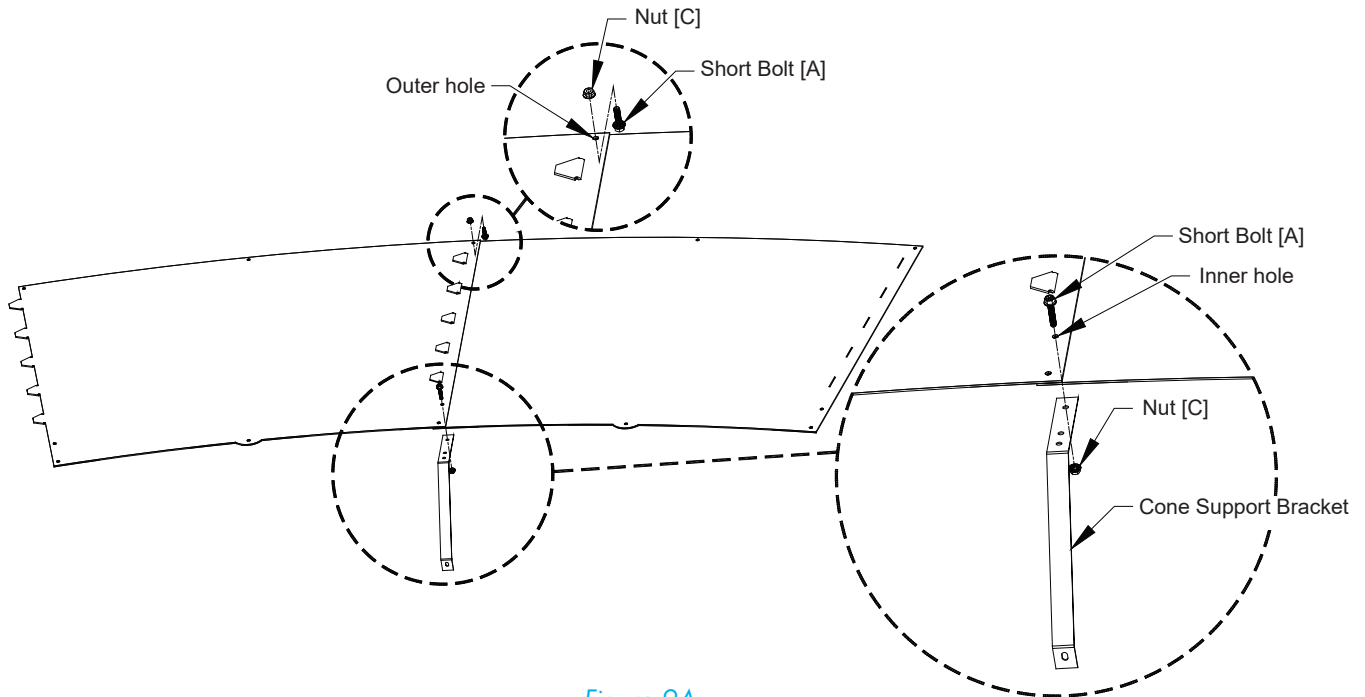


Figure 9A

Step 9B

Stand the cone sections on end and curl ends around to form cone with the Cone Support Bracket on the outside and the tabs on the inside. Then insert the remaining tabs into slots so the tabs are inside the cone and fasten final joint using (1) Short Bolt [A] and Nut [C], with the nut on the inside of the cone. At the inner pair of holes attach (1) Cone Bracket to the inner hole using (1) Short Bolt [A] and Nut [C] with the bolt head on the outside of the cone. [See Figure 9B.](#)

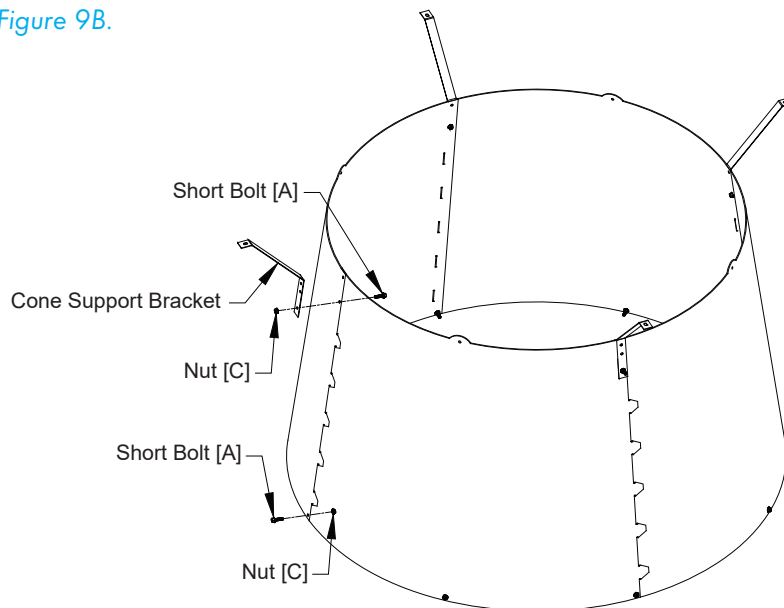


Figure 9B

Step 10A

Install cone onto fan by putting the top of the cone over the top of the fan. The hole in the tab of the upper cone section should slide down over the pin in the Main Frame assembly, then allow the rest of the cone to slide over the rest of the orifice panel making sure the cone brackets remain on the outside of the cone. [See Figure 10A.](#)

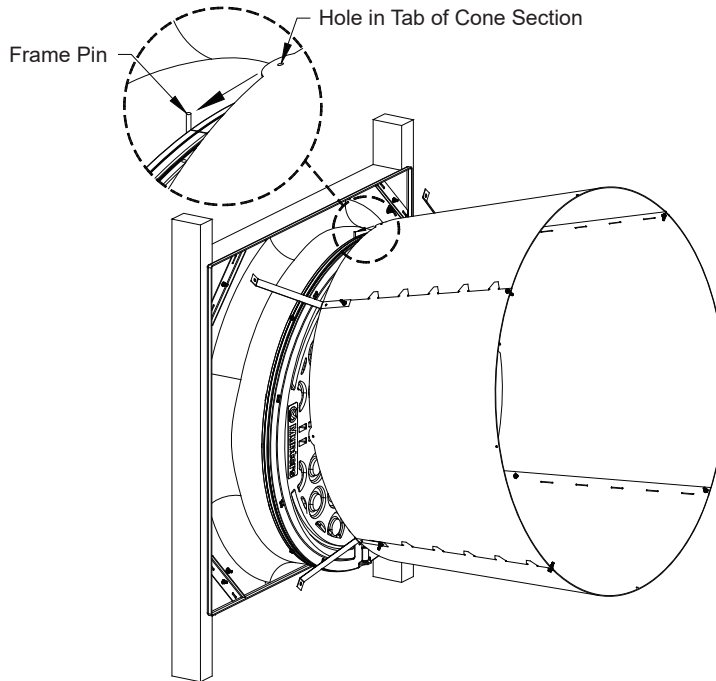


Figure 10A

Step 10B

Place the end of the Cone Brackets with the single hole over the bolt holding the Cone/Strut Mounting Bracket to the orifice and secure with Nut [C]. [See Figure 10B.](#) Secure the Cone to the Fan installing Long Bolt [B] through the remaining hole in the Cone Brackets and fastening with Nut [C]. A long screwdriver may be needed to help align the holes through the Cone Bracket, Cone, Damper Frame and Orifice. [See Figure 10B.](#)

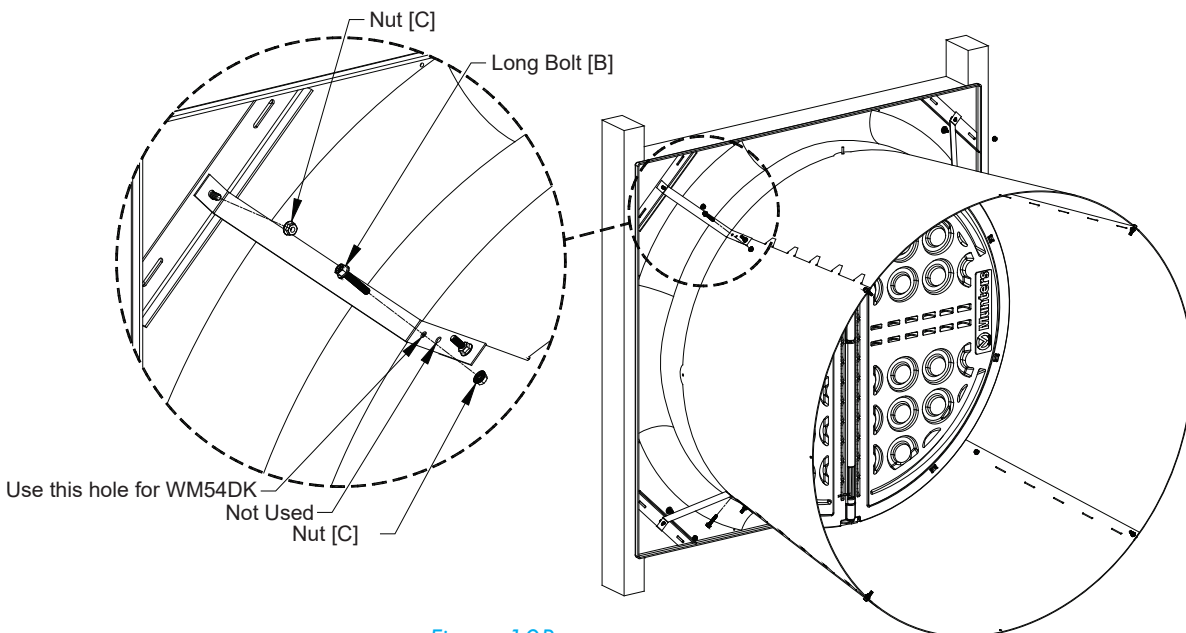


Figure 10B

Step 11

Insert guard into cone with the eyelets facing you. Install eyelets over bolts already installed in cone and fasten with Nut [C] and then secure remaining eyelets using Short Bolt [A] and Nut [C]. See Figure 11.

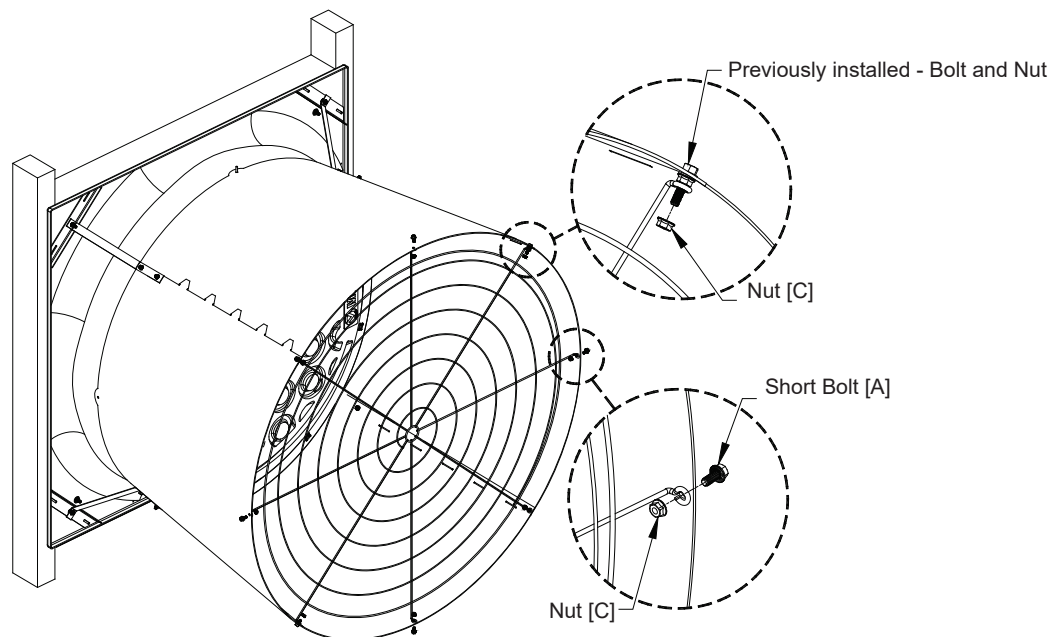


Figure 11

Step 12

Loop Coated Cable that was installed in a previous step, around the lower, middle joint in guard and fasten to itself with Azuma Bolt & Nut [D]. Make sure cable is pulled snug. See Figure 12.

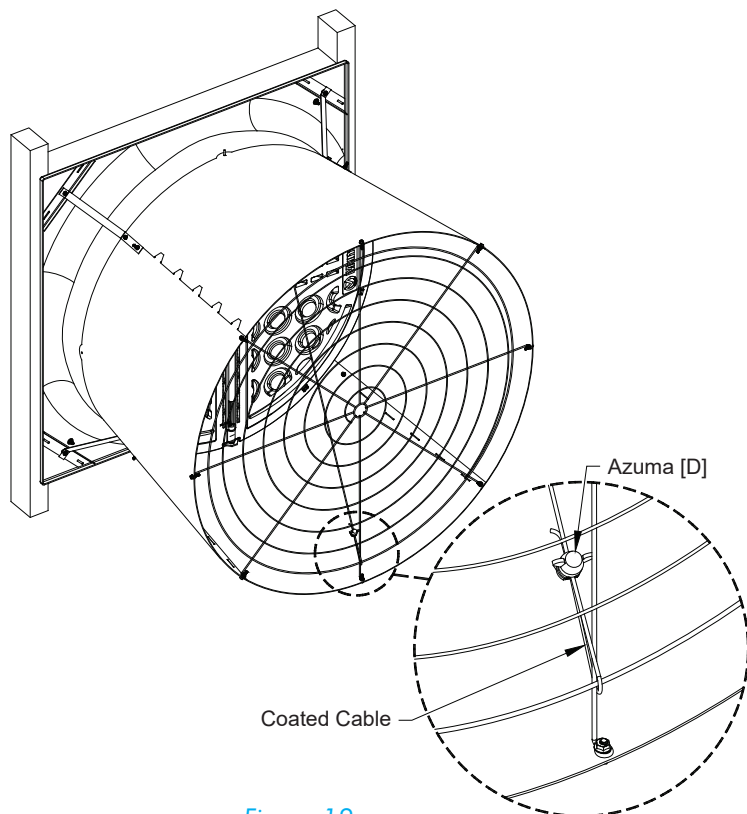


Figure 12

Step 13

If Fans are to be installed 60" O.C., cut the 3 o'clock and 9 o'clock guard wire in the position shown and push the side of the cone in as far as possible and fasten the cut guard wire to the attached guard wire using Clamp [E]. See Figure 13.

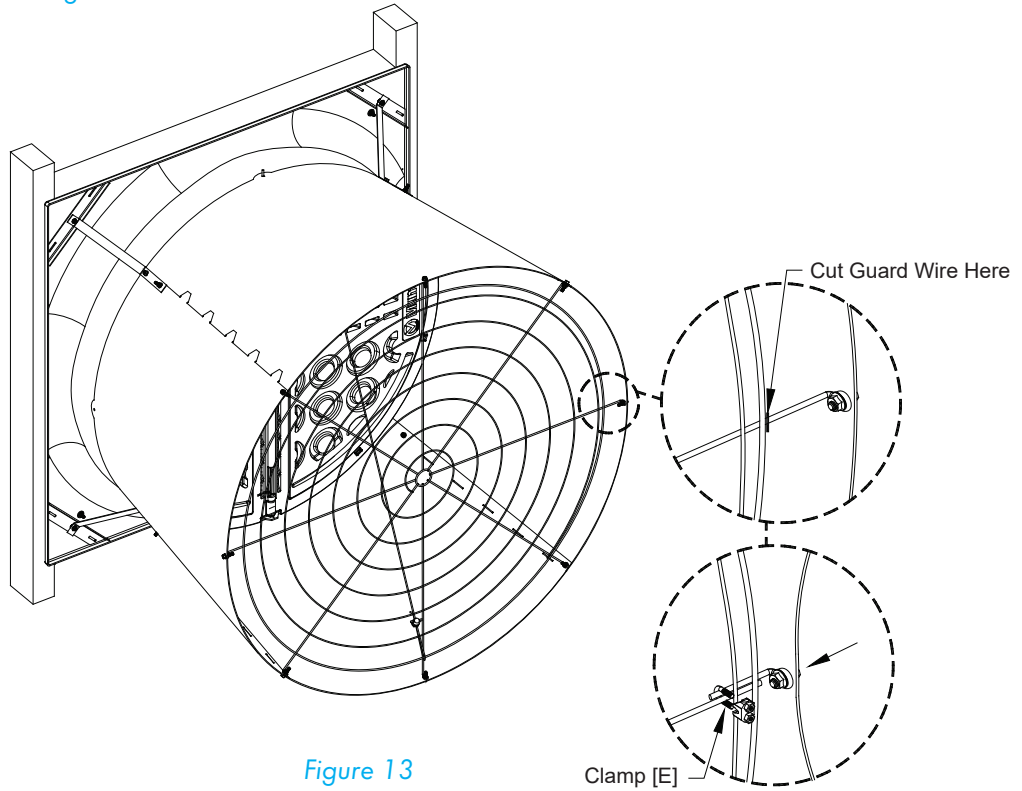
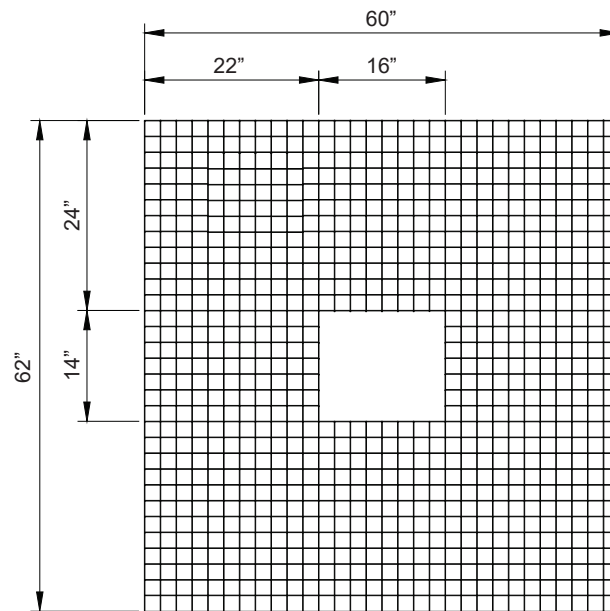


Figure 13

Step 14A

Cut a section of the inlet guard out to fit over the motor. When cutting the guard wires make sure to cut them as close to the other wires as possible. See Figure 14A.



WM54DK

Figure 14A

Step 14B

Place guard against framing and fasten guard in place using (8) Shutter Clips [F] and Barn Screws (not provided), 2 per side. See Figure 14B.

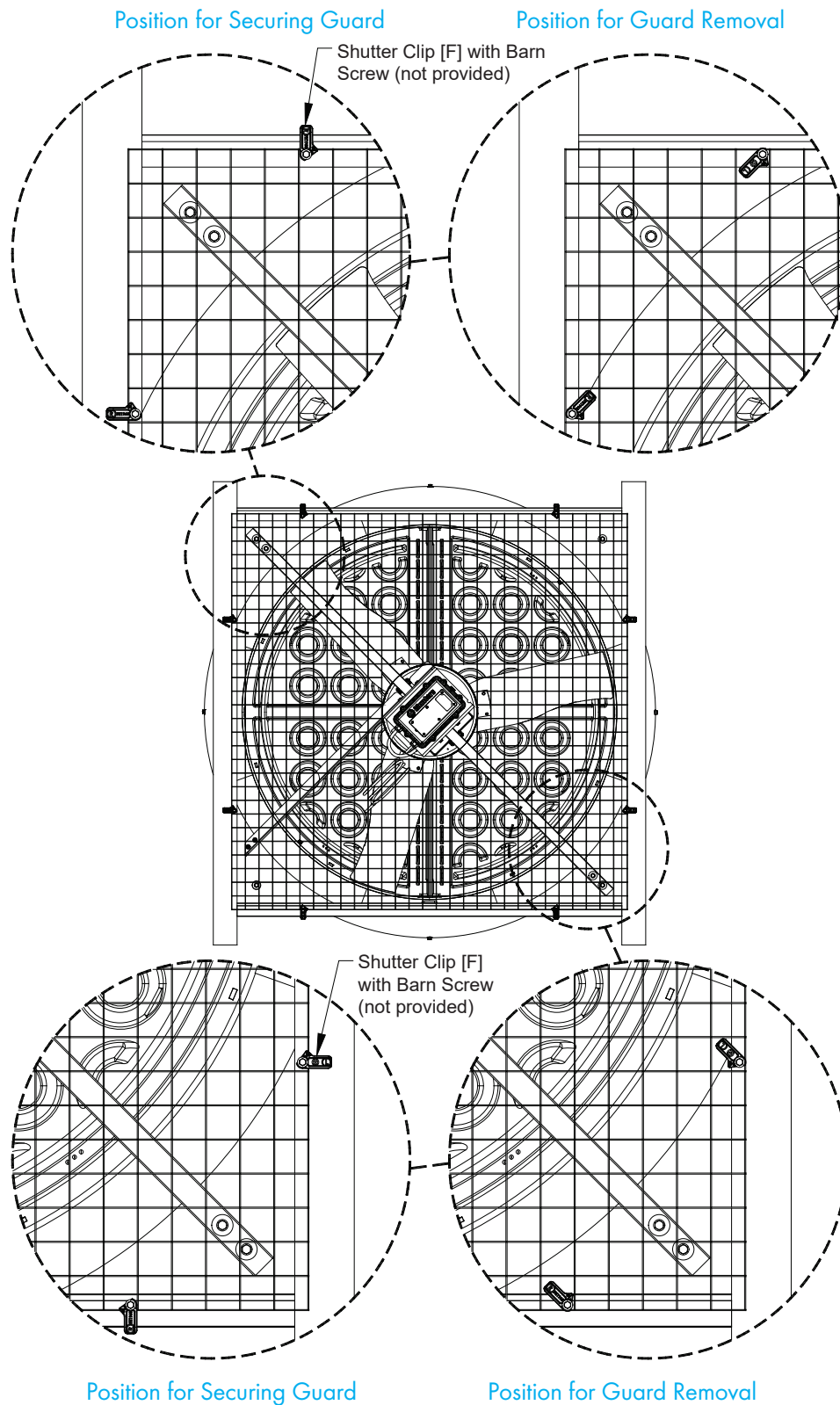


Figure 14B

3.1 Recommended Wire Routing:

The Munters Drive Fan comes with a coil of electrical cable that is pre-wired to motor. Find the end of the cable and route it outside the fan and connect it to the incoming power supply and/or the safety cut-off switch. (Safety cut-off switch by others). Create a drip loop in the bottom of the cable and then fasten it to the strut using (4) wire clamps [L] and TEK screws [K]. Attach the new cable to the existing power supply for the fan. See Figure 15A & 15B. Continue on next page.

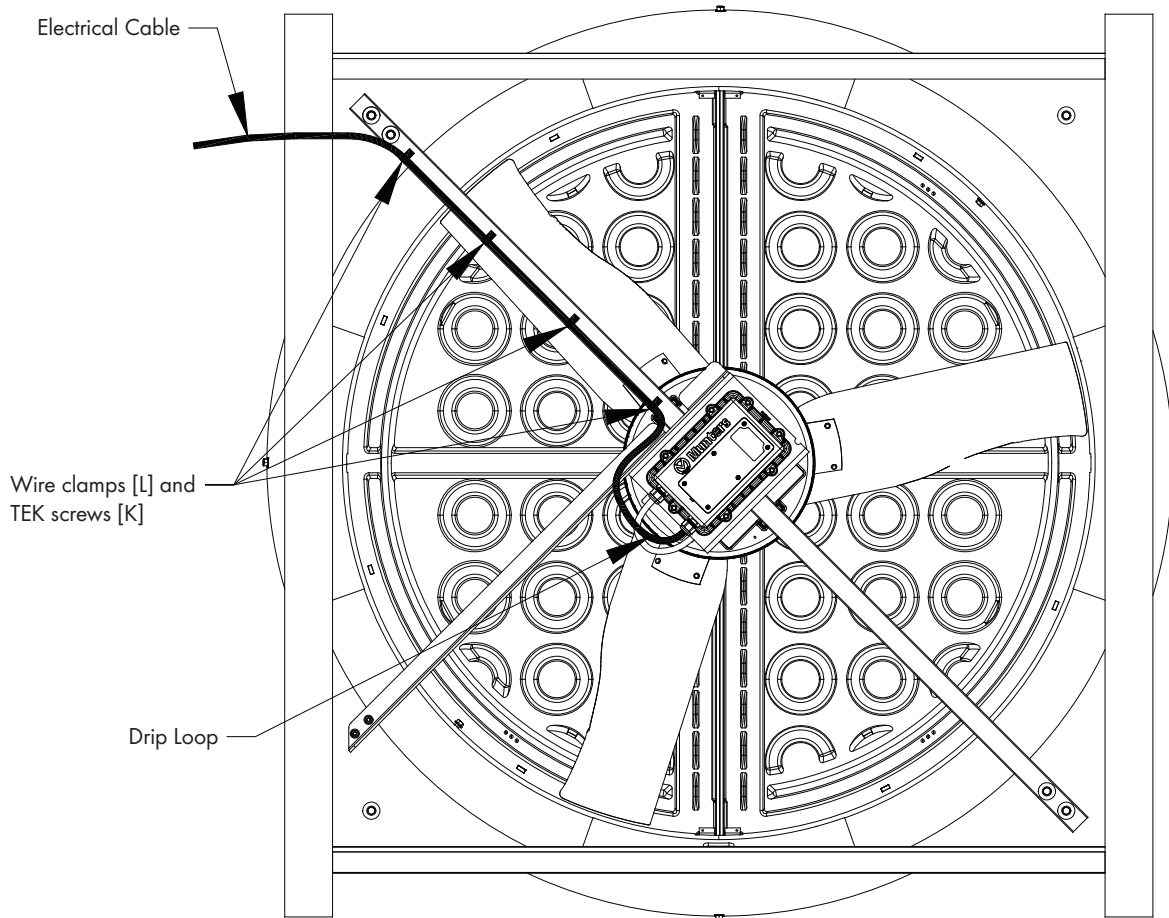


Figure 15A

WARNING: Fan is designed to be operated with shutter in place. Do not apply power to fan without shutter being installed.

3.2 Electrical Wiring



All wiring should be installed in accordance with National, State, and Local electrical codes. Fans used to ventilate livestock buildings or other rooms where continuous air movement is essential should be connected to individual electrical circuits, with a minimum of two circuits per room. For electrical connection requirements, refer to diagram on motor nameplate and to information enclosed with the environmental control to be used.

Single Phase and Three Phase Munters Drives: Power supply for fans to have Circuit Breaker or Fuse Protection. The installer must refer to NEC and local codes to ensure safety and compliance. See Figure 15B & 15C.

If recommended lightning protection was purchased, wire it to the fan power supply as shown and secure the lightning protection unit near the disconnect or the bus panel. See Figure 15B & 15C.

NOTE: A safety cut-off switch should be located adjacent to each fan.

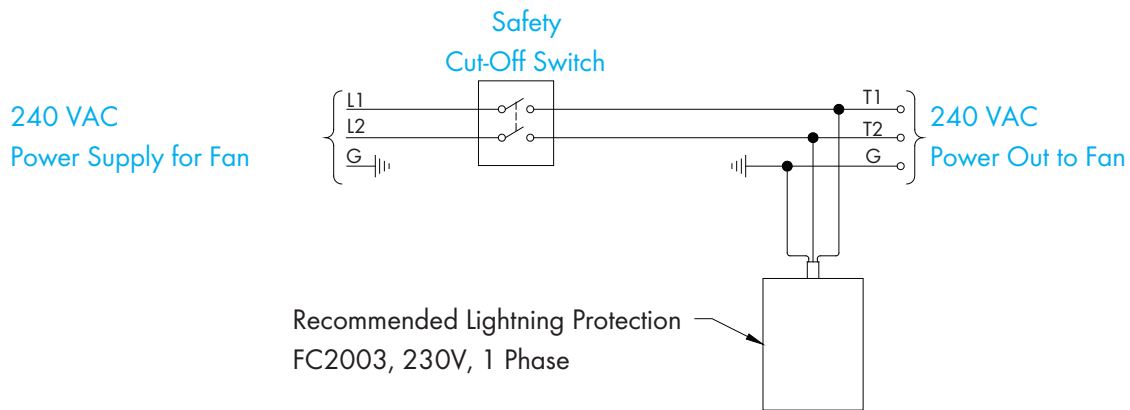
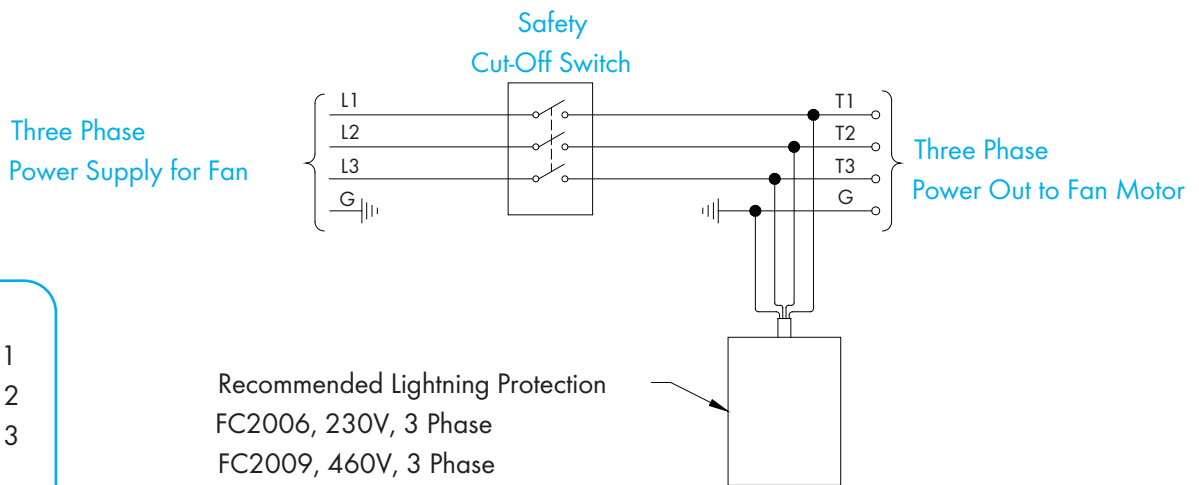


Figure 15B
Single Phase



KEY:
 L1=Line 1
 L2=Line 2
 L3=Line 3
 H=Hot
 N=Neutral
 G=Ground

Figure 15C
Three Phase

3.3 Recommended Wiring

The Munters Drive fan ships configured for simple ON/OFF operation. When electrical power is applied to the main cable and the 'RUN' Switch is in the 'ON' Position, the fan will start and run at full speed.

See Figure 16A.

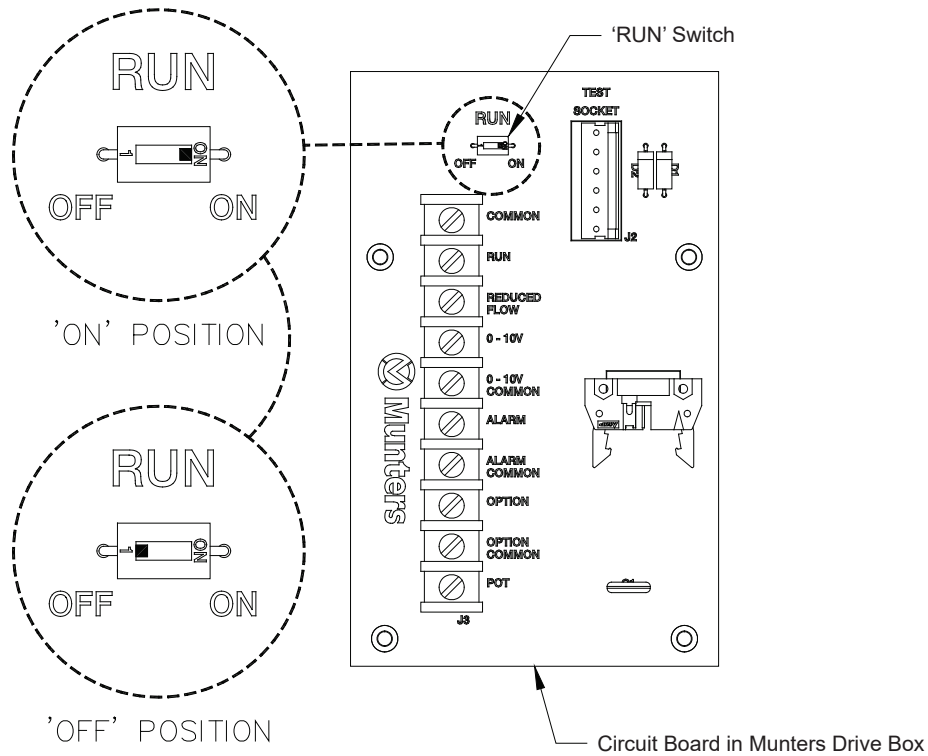


Figure 16A
Default Operation Full Speed

*****WARNING*****

The Blue Box electrical enclosure must not be removed from mounting bracket. Removing Blue Box from the mounting bracket will void the warranty. Any water or other damage to the controller will not be covered if the Blue Box is removed.

*****NOTE*****

All Low Voltage wire must be shielded cable. i.e. Belden 8770 or equivalent.

When making connections to Munters Drive Box, be sure to use the supplied watertight fittings with only 1 cable per fitting. If watertight fittings are not used or if 2 cables or more are in 1 watertight fitting, equipment failure from water damage will not be covered under warranty. If 2 or more cables are used in 1 watertight fitting, they must be sealed on both sides of Munters Drive Box wall to prevent water infiltration.

If you are going to run the Munters Drive with a signal from a control, carefully remove 6 screws and the cover and save to reinstall later. Carefully punch the knock-out from the bottom of the Munters Drive Box and install the Watertight connector as shown. See Figure 16B and 16C.

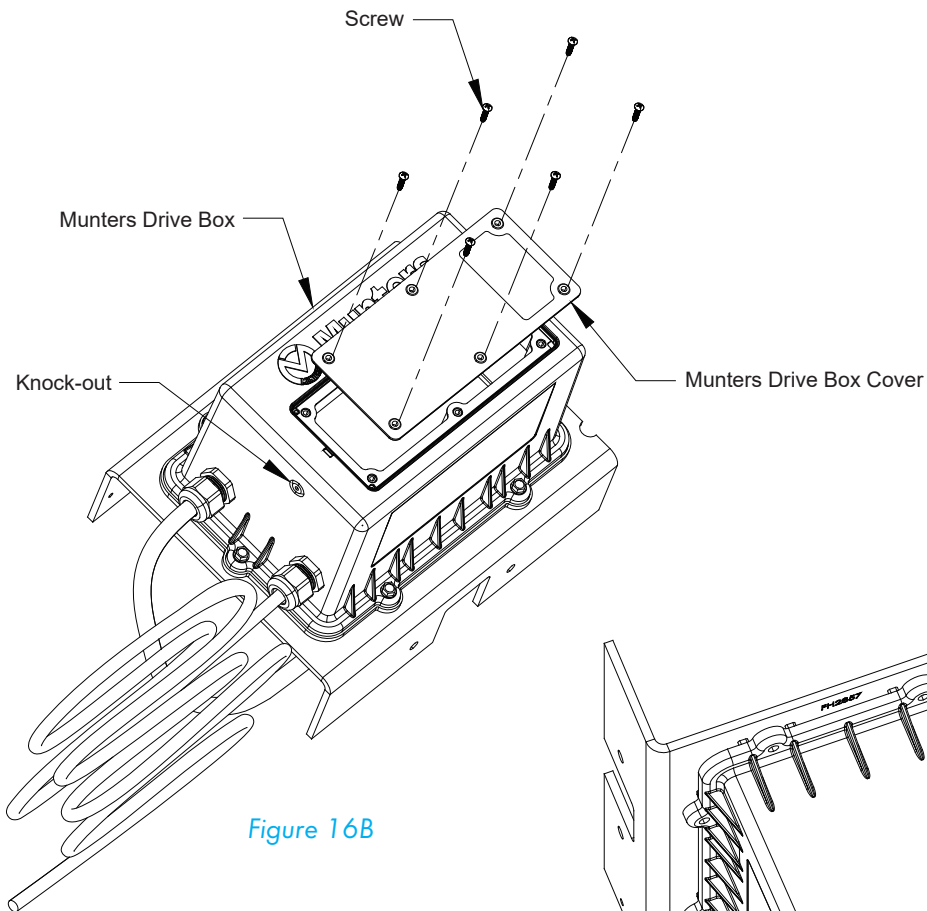


Figure 16B

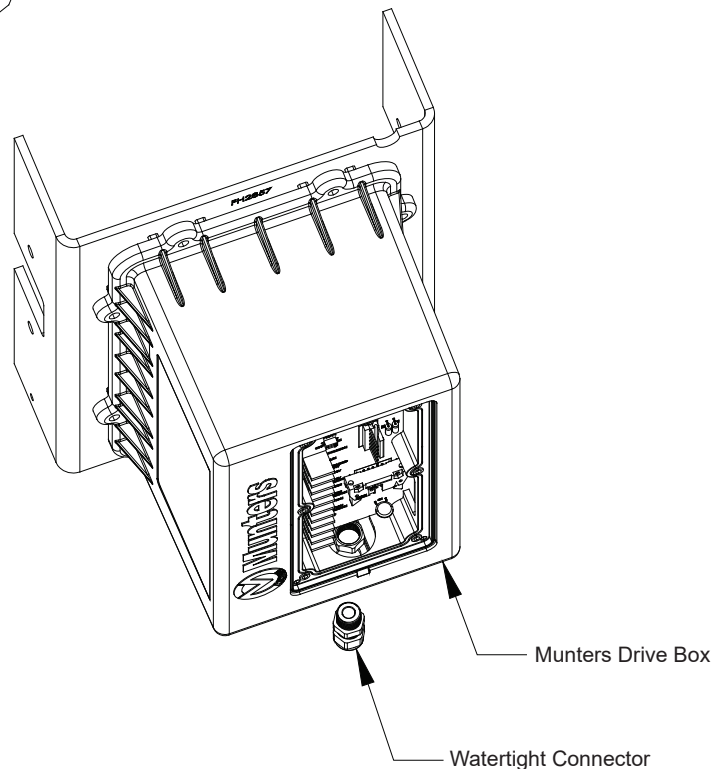


Figure 16C

To operate the Munters Drive On/Off with a control, Slide the 'RUN' switch, located on the circuit board in the Munters Drive Box, to the 'OFF' position. Now wire an 'ON' command from the 'COMMON' terminal to the input relay in the control and from the output of the control relay to the 'RUN' terminal in the Munters Drive Box. See Figure 16A & 16D.

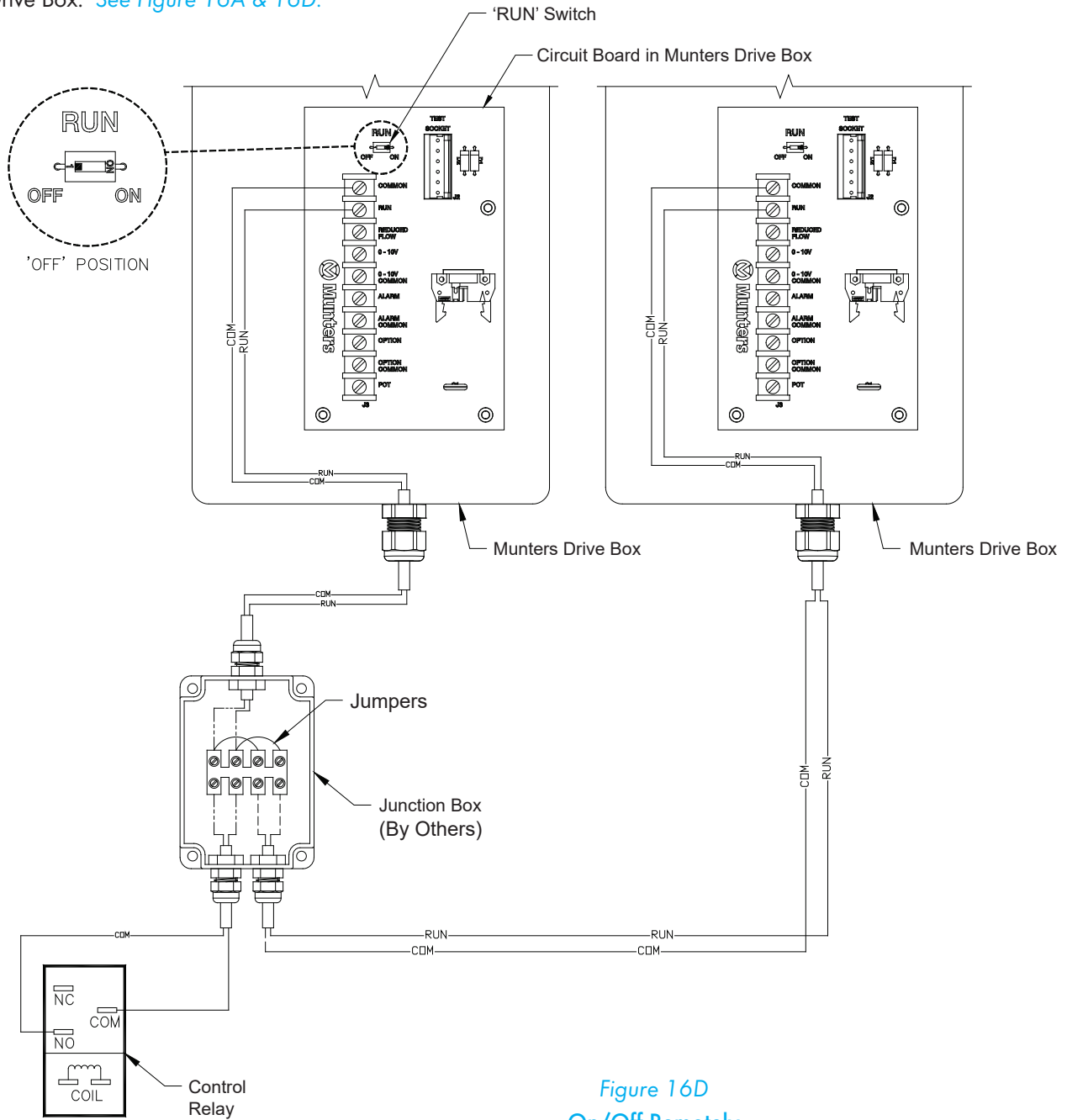


Figure 16D
On/Off Remotely

*****WARNING*****

The Blue Box electrical enclosure must not be removed from mounting bracket. Removing Blue Box from the mounting bracket will void the warranty. Any water or other damage to the controller will not be covered if the Blue Box is removed.

*****NOTE*****

All Low Voltage wire must be shielded cable. i.e. Belden 8770 or equivalent.

To operate the Munters Drive Off/Low/High with a control, slide the 'RUN' switch, located on the circuit board in the Munters Drive Box, to the 'OFF' position. Now wire an 'ON' command from the 'COMMON' terminal to the input relay in the control and from the output of the relay to the 'RUN' terminal in the Munters Drive Box. Then connect the output of the control relay for 'LOW' to the 'REDUCED FLOW' terminal in the Munters Drive Box. See Figure 16E.

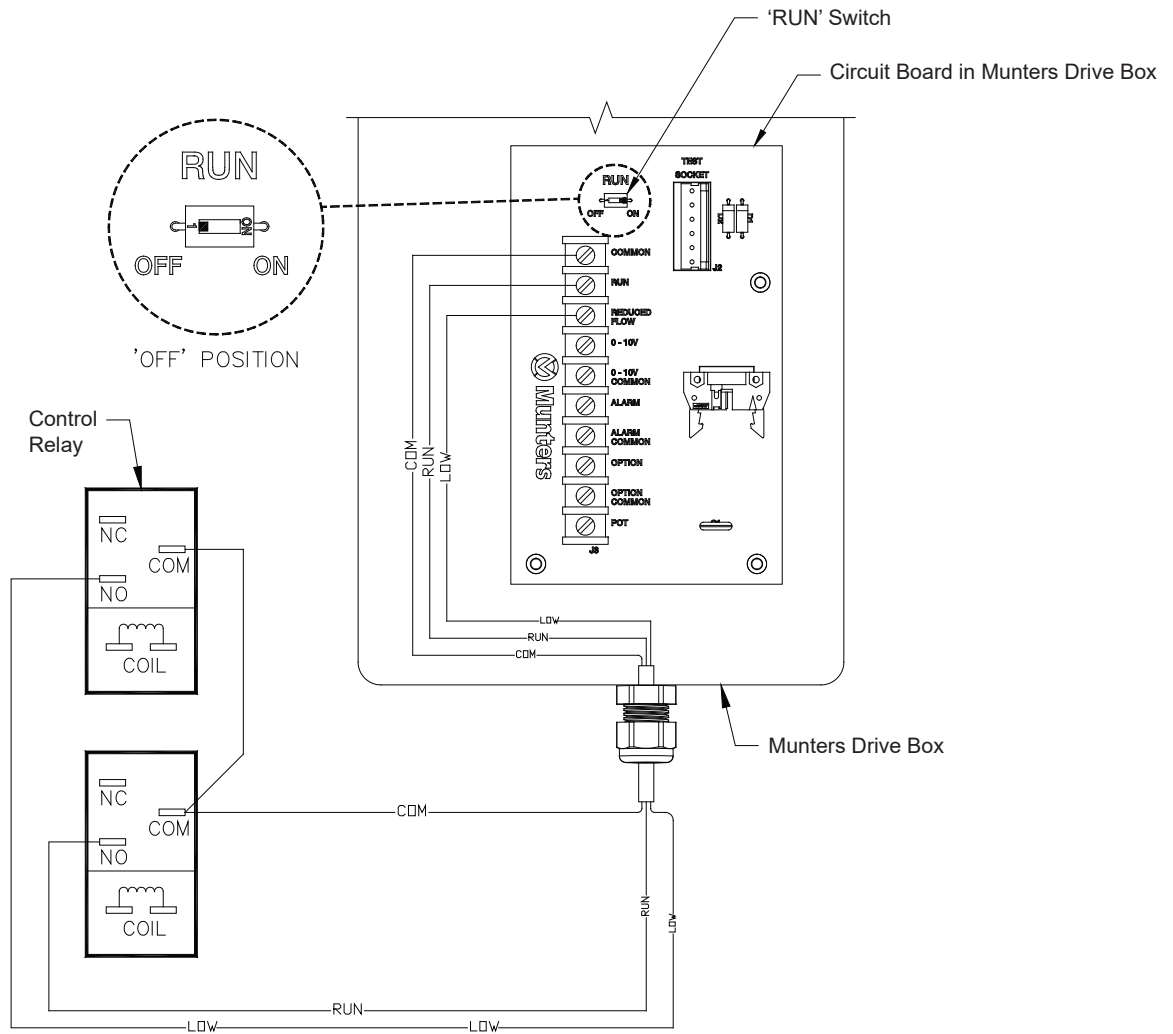


Figure 16E
Off/Low/High Remotely

*****WARNING*****

The Blue Box electrical enclosure must not be removed from mounting bracket. Removing Blue Box from the mounting bracket will void the warranty. Any water or other damage to the controller will not be covered if the Blue Box is removed.

*****NOTE*****

All Low Voltage wire must be shielded cable. i.e. Belden 8770 or equivalent.

To Operate the Munters Drive variable with a 10-0V Signal, slide the 'RUN' switch, located on the circuit board in the Munters Drive Box, to the 'ON' position. Connect wires from the '0-10V IN' and '0-10V COMMON' terminals in the Munters Drive Box to the 10-0V output in the control. See Figure 16F.

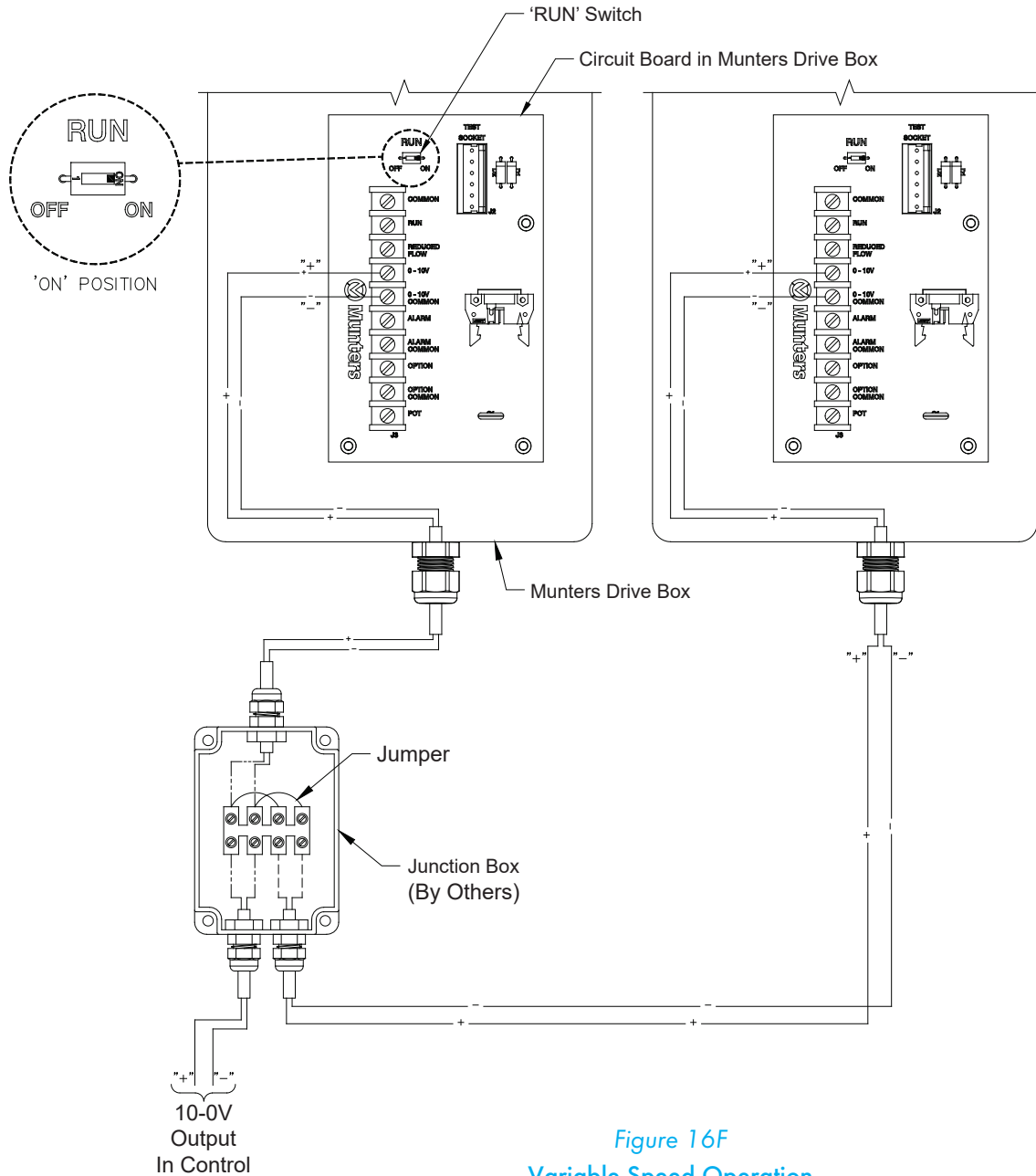


Figure 16F
Variable Speed Operation

*****WARNING*****

The Blue Box electrical enclosure must not be removed from mounting bracket. Removing Blue Box from the mounting bracket will void the warranty. Any water or other damage to the controller will not be covered if the Blue Box is removed.

*****NOTE*****

All Low Voltage wire must be shielded cable. i.e. Belden 8770 or equivalent.

To operate the Munters Drive Off/Variable with a 10-0V Signal, slide the 'RUN' switch, located on the circuit board in the Munters Drive Box, to the 'OFF' position. Now wire an 'ON' command from the 'COMMON' terminal to the input relay in the control and from the output of the control relay to the 'RUN' terminal in the Munters Drive Box. Also, connect wires from the '0-10V IN' and '0-10V COMMON' terminals in the Munters Drive Box to the 10-0V output in the control. See Figure 16G.

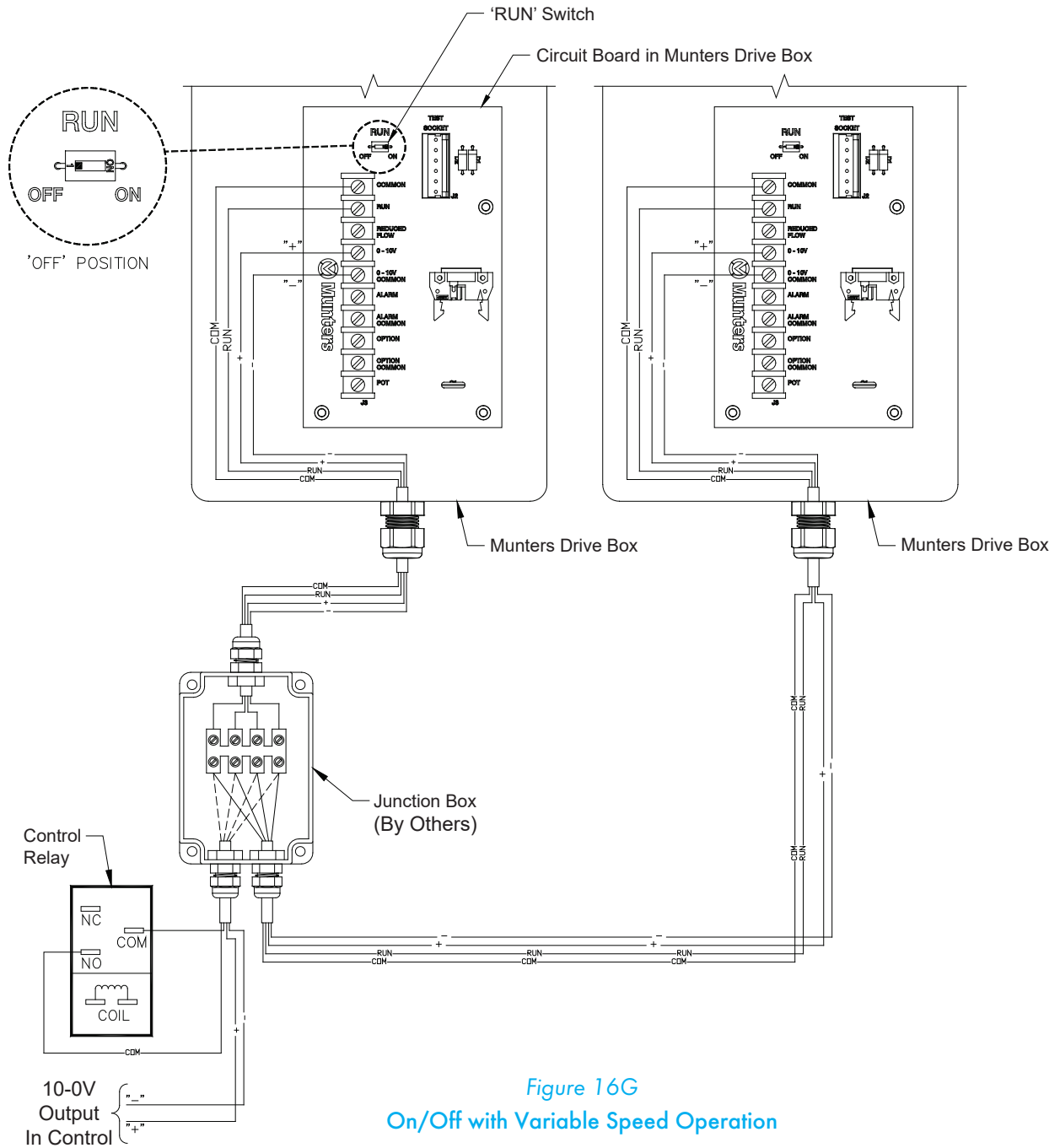


Figure 16G
On/Off with Variable Speed Operation

WARNING: Fan is designed to be operated with shutter in place. Do not apply power to fan without shutter being installed.

Operation and Maintenance

4.

4.1 Operation

- 1) **INITIAL START-UP:** With electrical power off, verify that the fan propeller turns freely and that all fasteners are secure. Turn on electrical power and confirm that the fan operates smoothly.
- 2) **ADJUSTMENTS:** Set the fan control to the temperature shown on your Aerotech ventilation system drawing, or to a value which will provide the desired environmental conditions.



4.2. Maintenance

The following inspection and cleaning procedures should be performed monthly:

Tools Needed for Maintenance:

wrenches: 10mm, 13mm, 16mm, 17mm, 27mm, 1/2", 6mm Hex



- 1) **INSPECT PROPELLER:** Check that propeller is secure on drive hub and that there are no signs of damage. The blades are of a self-cleaning design and should not require maintenance.



- 2) **CLEAN** regularly for best results:

- **FAN MOTOR:** Remove any dust accumulation from motor using a brush or cloth. (DO NOT use a pressure washer). A clean motor will run cooler and last longer. At the same time, verify that the motor is secure in its mount.
- **DAMPER:** Carefully clean dust from damper door and frame so that damper door opens and closes freely. A brush or cloth should be used.
- **GUARD:** Clean any dust or feathers from fan guards using a brush. Dirty guards can reduce airflow.



- 3) **CHECK FASTENERS:** For safety, all fasteners should be inspected. Tighten any loose connections.
- 4) **INSPECT FAN CONTROL:** With power disconnected, inspect all electrical connections. Wiring should be secure and in good condition. Remove any dust build-up from control case and sensor using a soft brush or cloth. **NEVER CLEAN ELECTRICAL EQUIPMENT WITH A PRESSURE WASHER!**

5.1 Troubleshooting



SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
<ul style="list-style-type: none"> Fan Not Operating 	<ul style="list-style-type: none"> Fan control set above room temperature Blown Fuse or open circuit breaker Propeller blade contacting fan housing Fan control defective (i.e. Farm Premium, etc.) 	<ul style="list-style-type: none"> Set to a lower temperature Replace fuse or reset breaker Realign motor in fan housing Repair or replace control
<ul style="list-style-type: none"> Fan Does Not Start Caution: There is a 10 second delay for the fan to start when an 'On' command is present. 	<ul style="list-style-type: none"> Munters Drive motor/controller issue 	<ol style="list-style-type: none"> Verify AC voltage is present at fan. Turn AC power off to fan for 1 minute Verify Prop turns freely <ol style="list-style-type: none"> If not contact Munters Product Support If it turns freely go to next step Turn AC power back on to fan <ol style="list-style-type: none"> If starts up and runs, fan OK <ul style="list-style-type: none"> Periodically observe fan to verify it is still running If it continues to run, fan is OK If fan stops, look through clear window in drive cover to check what drive display reads. Contact Munters Product Support If fan tries to start but stops, look through clear window in drive cover to check what drive display reads. Contact Munters Product Support If fan doesn't try to start, verify 'On' command signal is present at circuit board. Also, slide the switch on the circuit board to the 'On' position.
<ul style="list-style-type: none"> Fan Operating - Insufficient Airflow 	<ul style="list-style-type: none"> Shutter or Damper door jammed Guard dirty/clogged 10-0V signal set incorrectly 	<ul style="list-style-type: none"> Clean shutter or damper door Clean guard Check and adjust 10-0V signal
<ul style="list-style-type: none"> Excessive Noise 	<ul style="list-style-type: none"> Propeller blade contacting fan housing 	<ul style="list-style-type: none"> Sand fan housing to remove high spot
<ul style="list-style-type: none"> Excessive Vibration 	<ul style="list-style-type: none"> Motor loose on mount Propeller damaged 	<ul style="list-style-type: none"> Tighten fasteners Replace propeller

Winterizing

6.

6.1 Winterizing

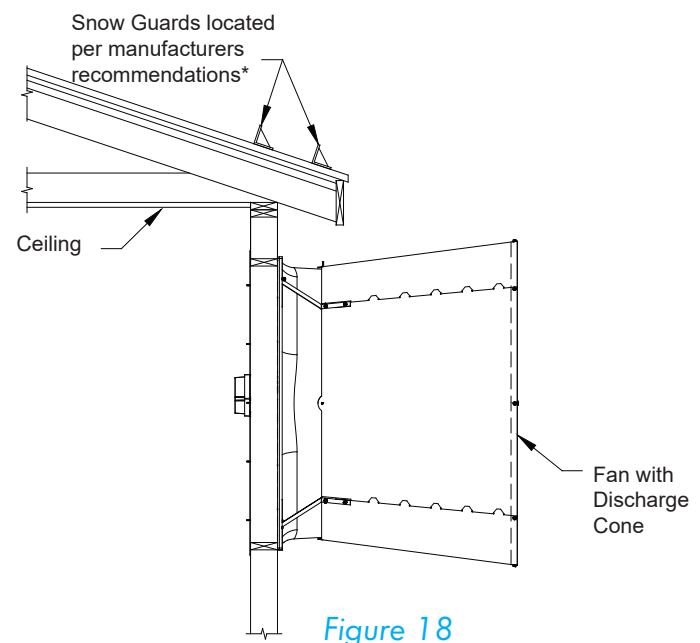
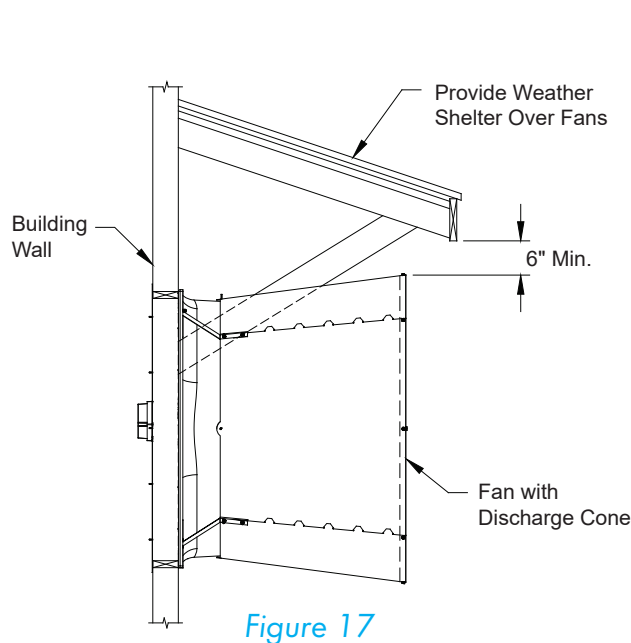
In most climates, it is probable that the ventilation system will never need to operate at a total capacity during the colder winter months. Consequently, it is advisable to “winterize” those fans which will not be used in cold weather to avoid unnecessary heat loss and condensation.

To winterize, turn fan control “off”. Install the insulated closure panel over the fan intake. If you don’t have an insulated closure panel, a piece of rigid insulation material can be used. Remember the insulation panel must be removed before warmer weather returns.

NOTE: At least one single speed fan should be left uncovered and with power available to provide air movement in the event of variable speed control difficulties.

6.2 Winter Weather Protection

To prevent cone or fan damage from snow or ice sliding off building roof, weather protection must be provided. A weather shelter may be constructed to cover the entire fan, *See Figure 17*, or snow guards may be placed on the roof, *See Figure 18*.



*Snow Guard Suppliers

Company Name	Phone No.	Fax No.	Web Site
Snojax, Inc.	800-766-5291	717-697-2452	www.snojax.com
Polar Blox	800-298-4328	814 629-9090	www.polarblox.com
LM Curbs	800-284-1412	903 759-3598	www.lmcurbs.com
Alpine Snow Guards	888-766-4273	888-766-9994	www.alpinesnowguards.com

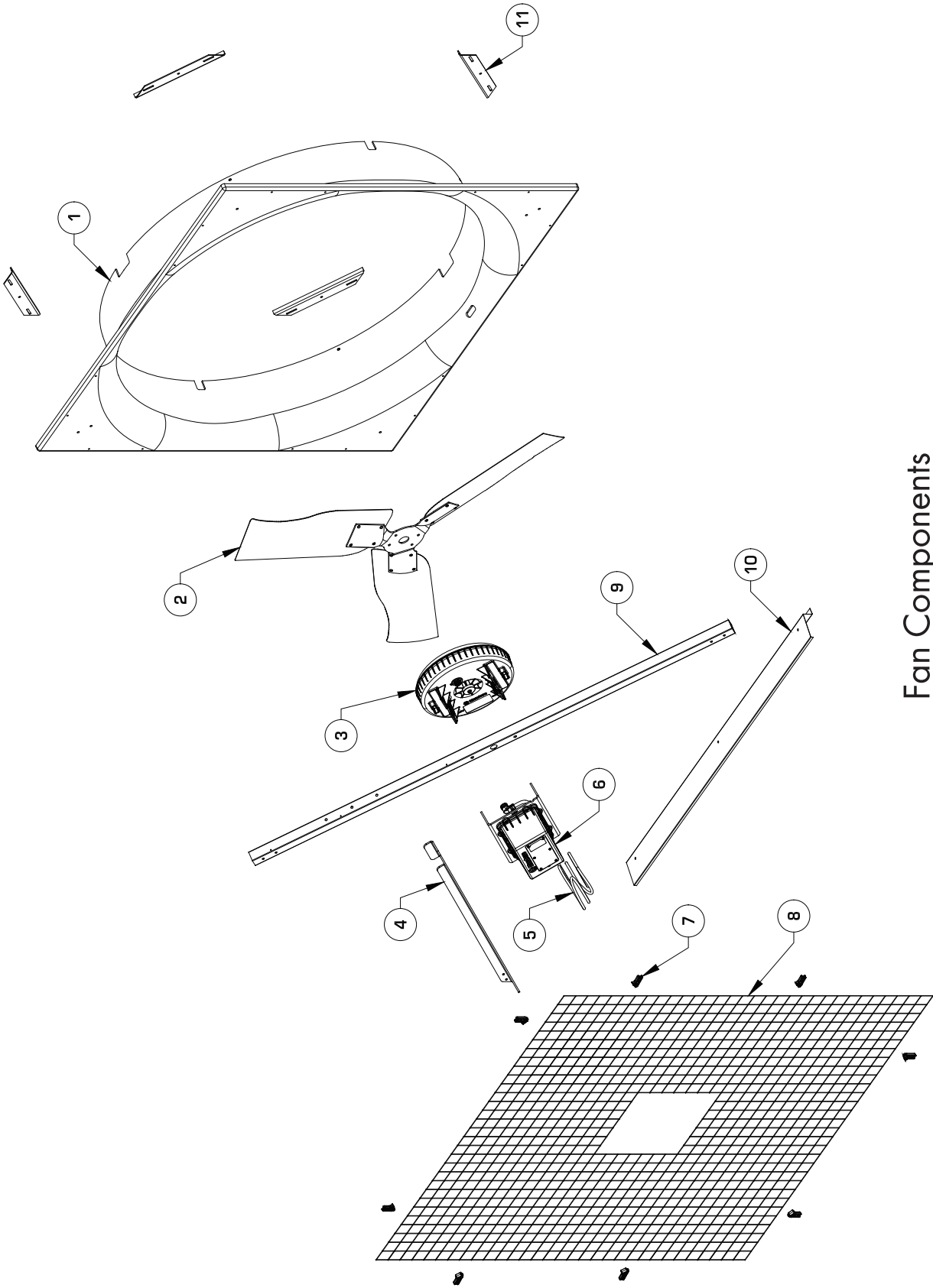
⚠ IMPORTANT

Munters Product and System Warranties do not cover cone or fan damage from external sources.

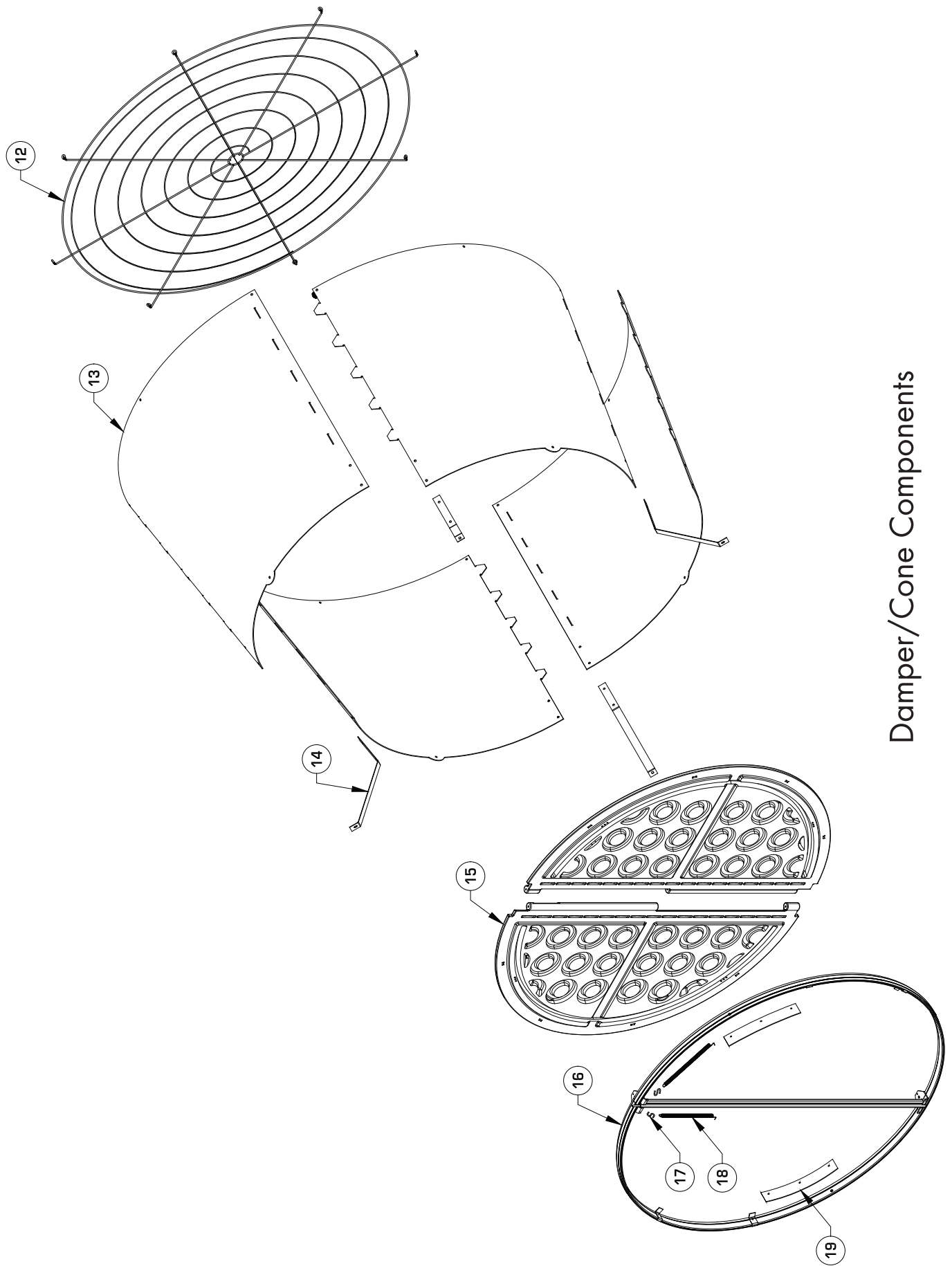
Note: Snow guards are designed to prevent sudden, dangerous snow and ice slides when attached to the building roof according to manufacturers recommendations. The supplier listing above is given as a reference only. Aerotech does not endorse any specific snow guard product and no performance warranty is implied.

Exploded View

7.



Fan Components



Damper/Cone Components

Catalog No.			
Item	WM54DK	Part Name/Description	Qty.
1	FH1654	Orifice Panel, FG	1
2	FP2454	Prop Assembly, 3-blade, GZ	1
3	Various*	Motor for Munters Drive, less controller	1
4	FH1990	Strut Brace, 39.19"L, PWDCTD	1
5	KE2535	Cable, Power, 1ph Munters Drive Controller, 16/3,144"L	1
	KE2536	Cable, Power, 3ph Munters Drive Controller, 16/4,144"L	1
6	Various*	Controller, WM Munters Drive	1
7	FH1968	1-Hole Pivoting Shutter Clip, BLK PL	8
8	FH1341	Inlet Guard, 2" x 2" mesh, GZ	1
9	FH1675	Tube Strut, Center, PWDCTD	1
10	FH1659	Drip Shield Plate, AL	1
11	FH1980	Cone/Strut Mounting Bracket, GZ	4
12	FH6454	Outlet Guard, Round, CTD BLK	1
13	FH4655	Discharge Cone with Tabs, PL	4
14	FH2431	Cone Support Bracket, GC type, GZ	4
15	FA2054	Door Assembly w/ Latch, PL	1
16	FA2854	Main Frame Assembly, AL	1
17	KX1059	1" S-Hook, 1/16" Wire, SS	2
18	KX1466	Tension Spring, 0.5"OD x 10.8"L, SS	2
19	FH1365	Wing Add-on Kit, 2 Wings w/ Hardware	1

*Contact office for replacement part numbers for your fan configuration.

WM Munters Drive Fans are developed and produced by Munters Corporation, Lansing, Michigan U.S.A. 1-800-227-2376



Munters Europe AB, Isafjordsgatan 1, P.O. Box 1150, SE-164 26 Kista, Sweden. Phone +46 08 626 63 00, Fax +46 8 754 56 66.

Munters Corporation 2691 Ena Drive Lansing, MI 48917 U.S.A. Phone +1 800-227-2376, Fax +1 517-676-7078

www.munters.us

Australia Munters Pty Limited, Phone +61 2 6025 6422, **Brazil** Munters Brasil Industria e Comercio Ltda, Phone +55 41 3317 5050, **Canada/US** Munters Corporation Lansing, MI Phone +1 517 676 7070, **China** Munters Air Treatment Equipment (Beijing) Co. Ltd, Phone +86 10 80 481 121, **Denmark** Munters A/S, Phone +45 9862 3311, **India** Munters India, Phone +91 20 3052 2520, **Indonesia** Munters, Phone +62 818 739 235, **Italy** Munters Italy S.p.A., Chiusavecchia, Phone +39 0183 52 11, **Japan** Munters K.K., Phone +81 3 5970 0021, **Korea** Munters Korea Co. Ltd., Phone +82 2 761 8701, **Mexico** Munters Mexico, Phone +52 818 262 54 00, **Russia** Munters AB, Phone +7 812 448 5740, **Singapore** Munters Pte Ltd., Phone +65 744 6828, **South Africa and Sub-Sahara Countries** Munters (Pty) Ltd., Phone +27 11 997 2000, **Spain** Munters Spain S.A., Phone +34 91 640 09 02, **Sweden** Munters AB, Phone +46 8 626 63 00, **Thailand** Munters Co. Ltd., Phone +66 2 642 2670, **Turkey** Munters Form Endüstri Sistemleri A.Ş, Phone +90 322 231 1338, **USA** Munters Corporation Lansing, MI Phone +1 517 676 7070, **Vietnam** Munters Vietnam, Phone +84 8 3825 6838, **Export & Other countries** Munters Italy S.p.A., Chiusavecchia Phone +39 0183 52 11