

HPF KIT FOR 3 LOUVER AIRBLASTER

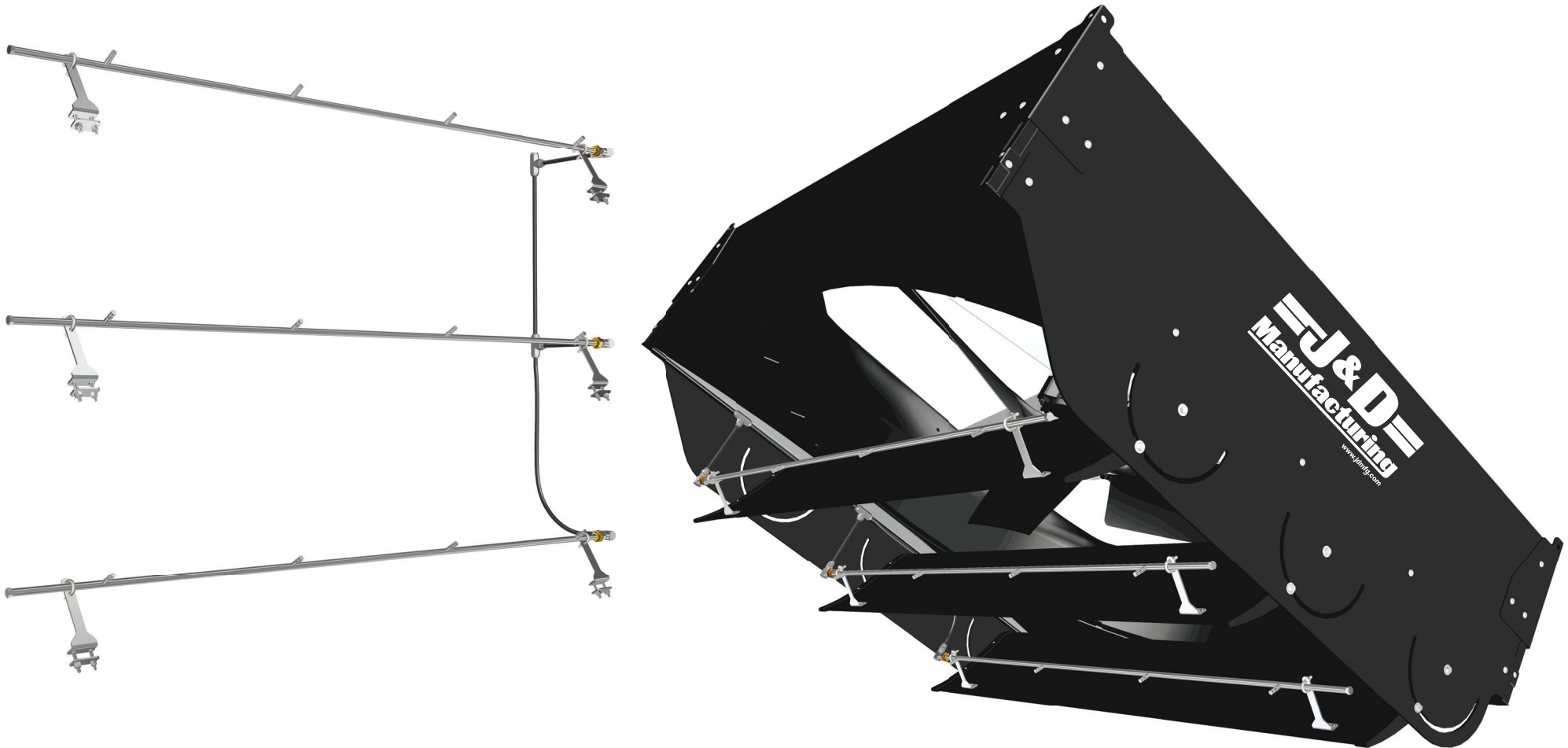


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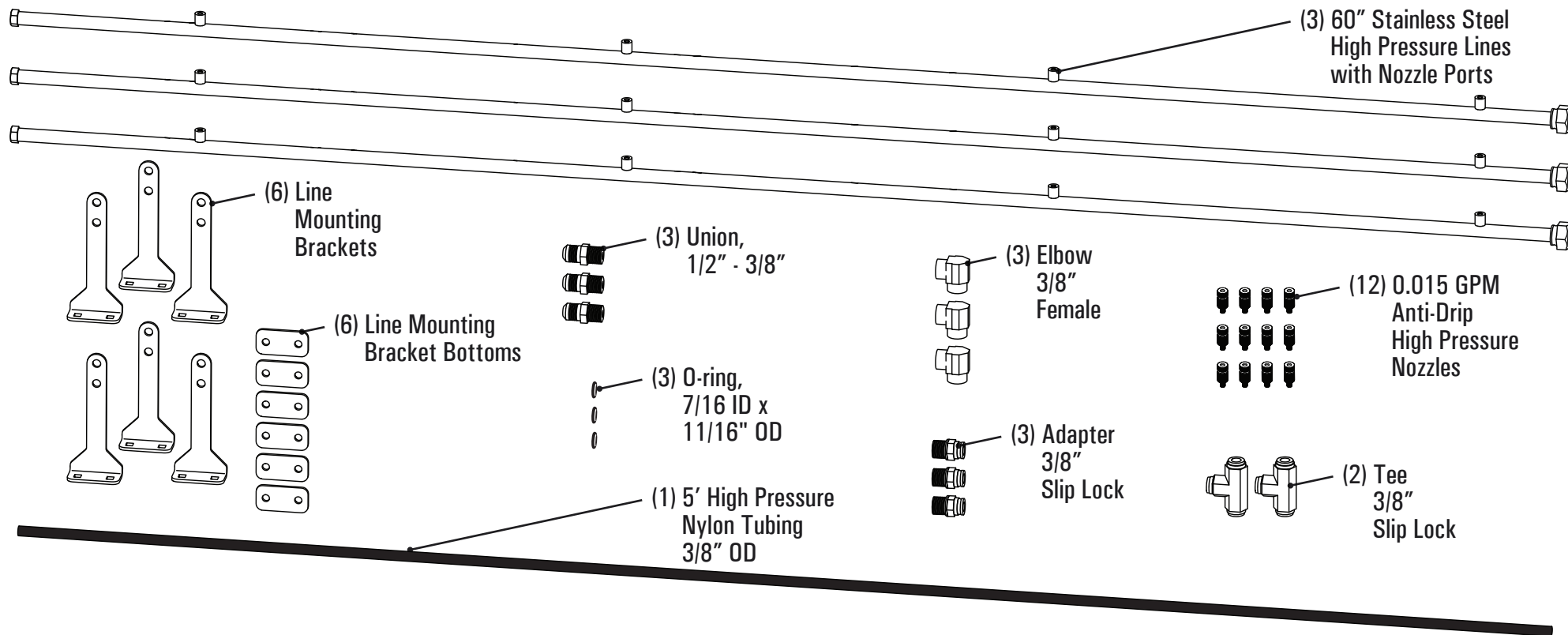
WARRANTY

J&D Mfg. warrants this products is free from defects in materials and workmanship under normal use for the period of one year from date of purchase. Our warranty does not cover ordinary wear and tear. J&D Mfg can repair or replace at our option, any product or part of the product that is found to be defective. Our warranty applies to materials only and does not include return freight, delivery, loss or damage to personal property, cost of removal or installation, any incidental or consequential damages or labor. This warranty does not apply to products which are misused, abused, altered, improperly installed or subject to negligence. All warranties must be approved through our warranty department. The original purchaser must present a copy of the invoice for the defective product.

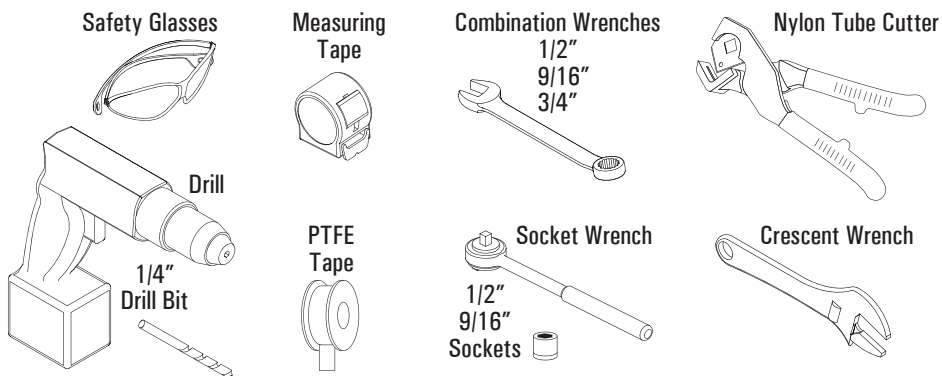
INSTALLATION

Please read over ALL instructions carefully before you begin.
If you have any questions please call your local dealer, or contact J&D Manufacturing at
1-800-998-2398.

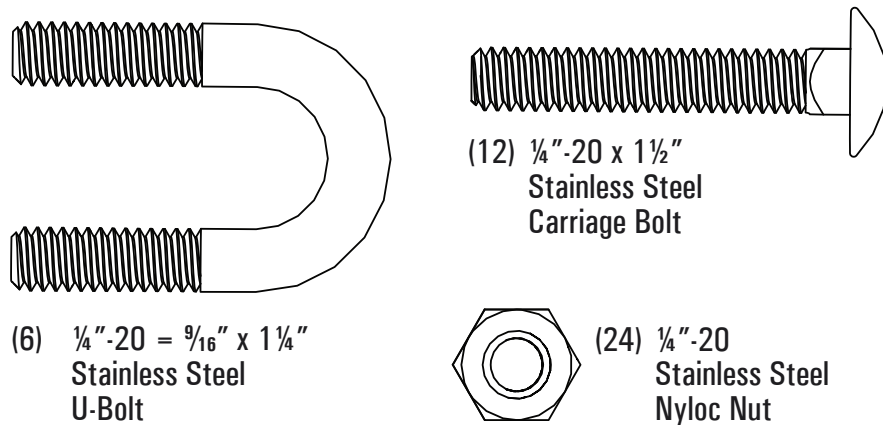
PARTS LEGEND



RECOMMENDED TOOLS & SUPPLIES FOR INSTALLATION AND ASSEMBLY (NOT PROVIDED)



INCLUDED HARDWARE

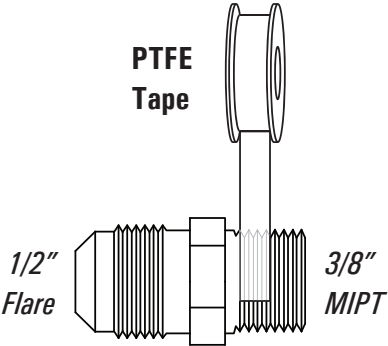
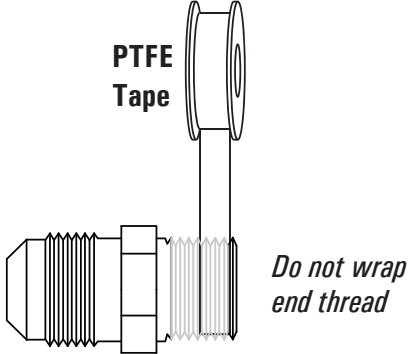
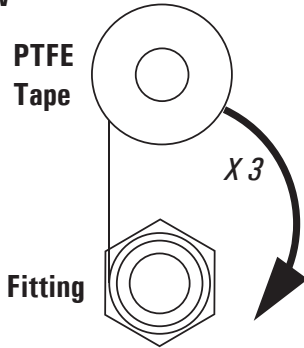


PTFE Tape & Tightening Guidelines

NOTE: Some fittings may come with a layer of dried white PTFE sealant that was previously applied to the threads by the manufacturer of the connector.
DO NOT add additional PTFE tape to these fittings; just assemble as is.

Hold the fitting and starting at the inner end of the threads, wrap PTFE tape tightly and evenly clockwise and upwards in a helical fashion until all but the end thread is covered. *Leaving the end thread bare makes it easier to get the thread started during assembling of joints.* Continue to wind the thread clockwise and downwards back to where you started then once more towards end of fitting. This method will provide industry standard of three layers of PTFE tape.

Screw the male thread into the female union by hand until tight, then using a wrench, rotate the fitting an additional 1-2 turns, **DO NOT OVER TIGHTEN.**

 <p>PTFE Tape</p> <p>1/2" Flare 3/8" MIPT</p>	 <p>PTFE Tape</p> <p><i>Do not wrap end thread</i></p>	<p>End View</p>  <p>PTFE Tape</p> <p><i>Wrap evenly & clockwise three layers of PTFE tape to meet industry standard</i></p> <p>X 3</p> <p>Fitting</p>
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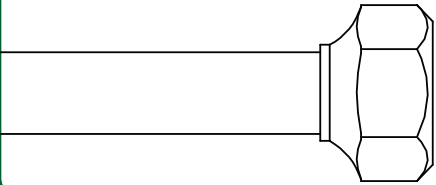

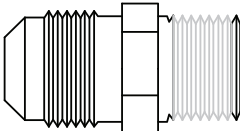
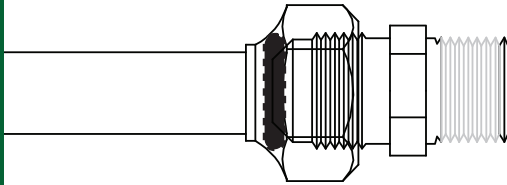
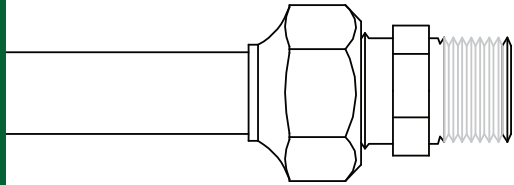
1/2" Flare Connector with Required O-Ring Guidelines

1/2" flare connector ends require an O-ring to complete the union.

Insert the O-ring into the High Pressure Fog flare nut and position it so it does not block the waterway.

With O-ring in place, screw the male thread into the female flare nut union by hand until tight; using a wrench rotate the fitting an additional 1/2 to 1 turn. **DO NOT OVER TIGHTEN.**

NOTE: Stainless steel line has a 1/2" flare nut on one end and includes the required O-rings needed for this connection.
 The purchase of additional O-rings (VHPR120) is only required for replacement if needed.

 <p>1/2" Female Flare</p>	 <p>VHPR120 O-Ring</p>	 <p>1/2" Male Flare</p>		
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Slip Lock Guidelines

Slip lock connectors requires the nylon tube be cut straight, cleanly, and without crimping or deforming the tube while cutting.

If the other end of the fitting is not a slip lock, connect that first.

Insert the end of the nylon tube into the slip lock until you meet some resistance, then push it in another 1/2" or so until it stops.

If you need to remove the nylon tube from the slip lock, the system must be depressurized. Then push the metal slip lock collar back into the fitting and pull the nylon tube out.

NOTE: Once the nylon tube has been fully inserted into a slip lock and is removed, even for a short time, 1" of nylon tube (the amount that was inserted into the slip lock) must be trimmed off or it will not seal properly. Keep this in mind if you intend to disassemble your system seasonally as you will want to provide additional tubing to those sections to allow for yearly trimming until you are required to replace your nylon tubing.



High Pressure Nylon Tube Guidelines

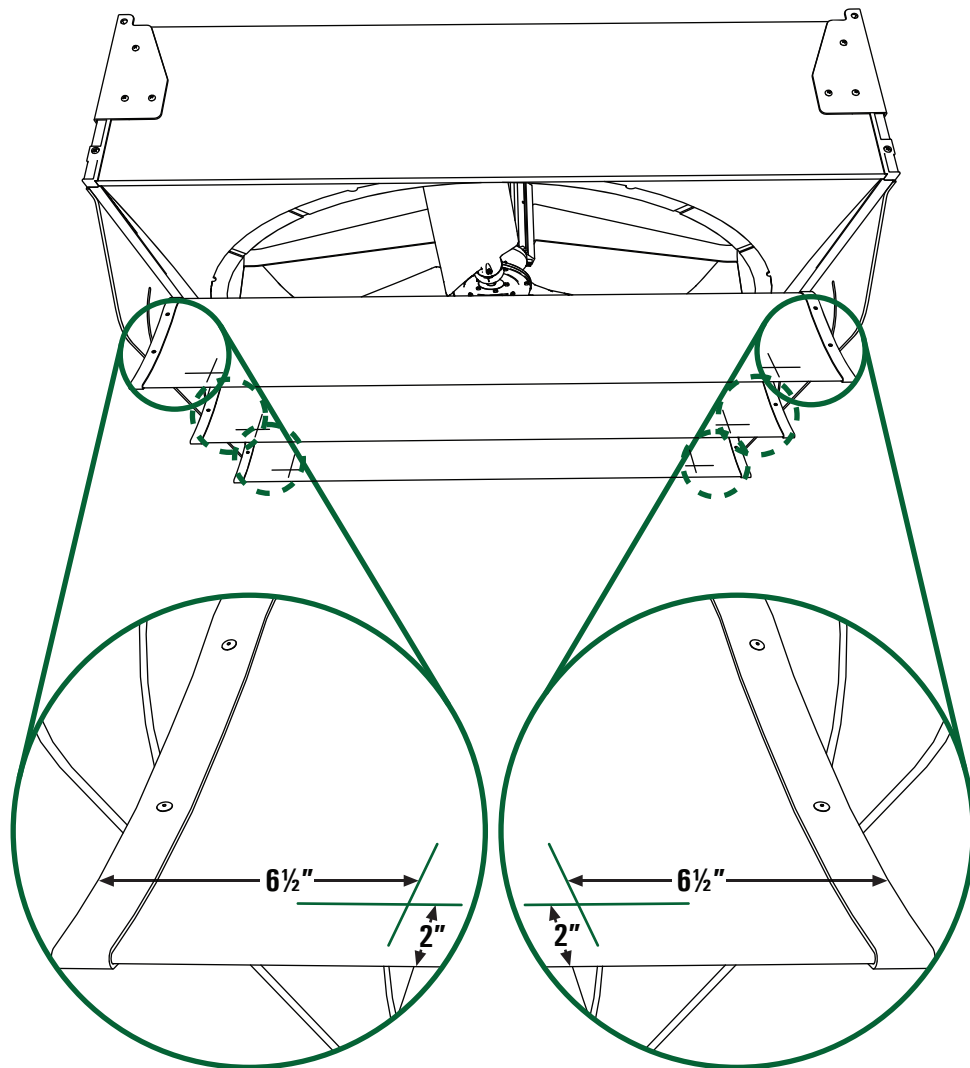
When system is running the high pressure nylon tube will vibrate and jump causing nearby sharp or abrasive surfaces to cut or wear a hole in the nylon tube. Rubber grommets, pieces of rubber mats, etc., should be used to protect the tube.

3/8" High Pressure Nylon Tube



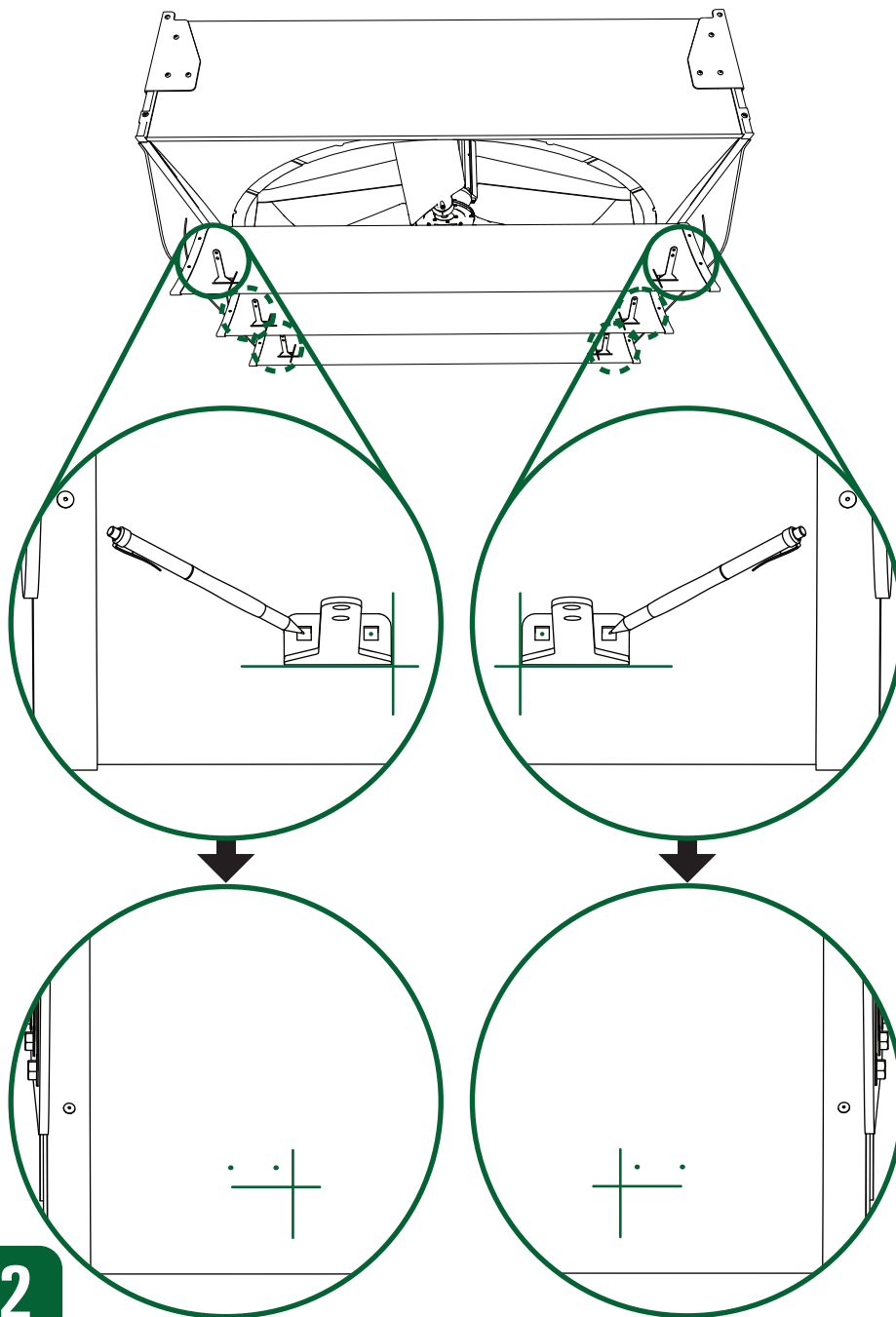
Line Bracket Placement & Installation

- Measure and mark $6\frac{1}{2}$ " from side each edge of louver and 2" from front edge of louver, as shown below.



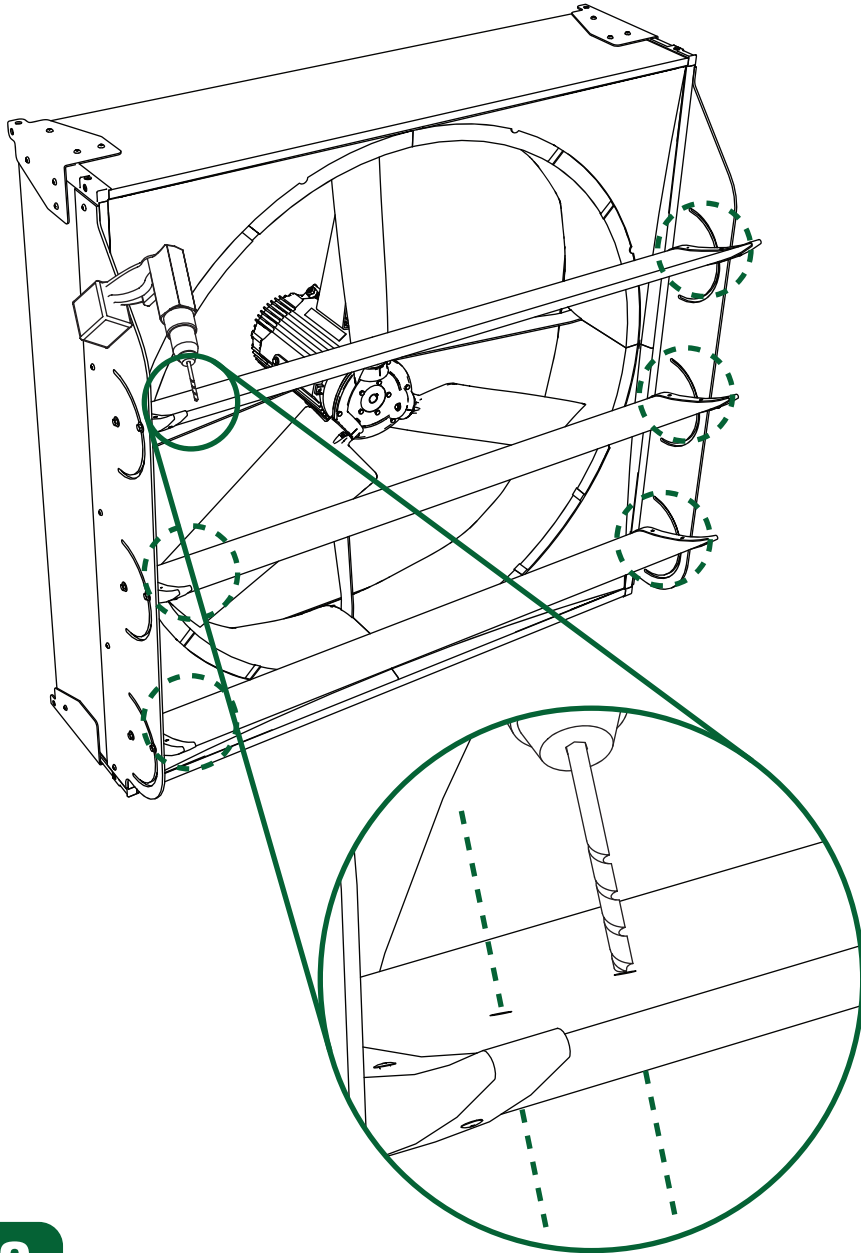
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- Using marks made in **Step 1**, align the edges of the Line Mounting Bracket, as shown below.
- Mark the center of both bolt holes.



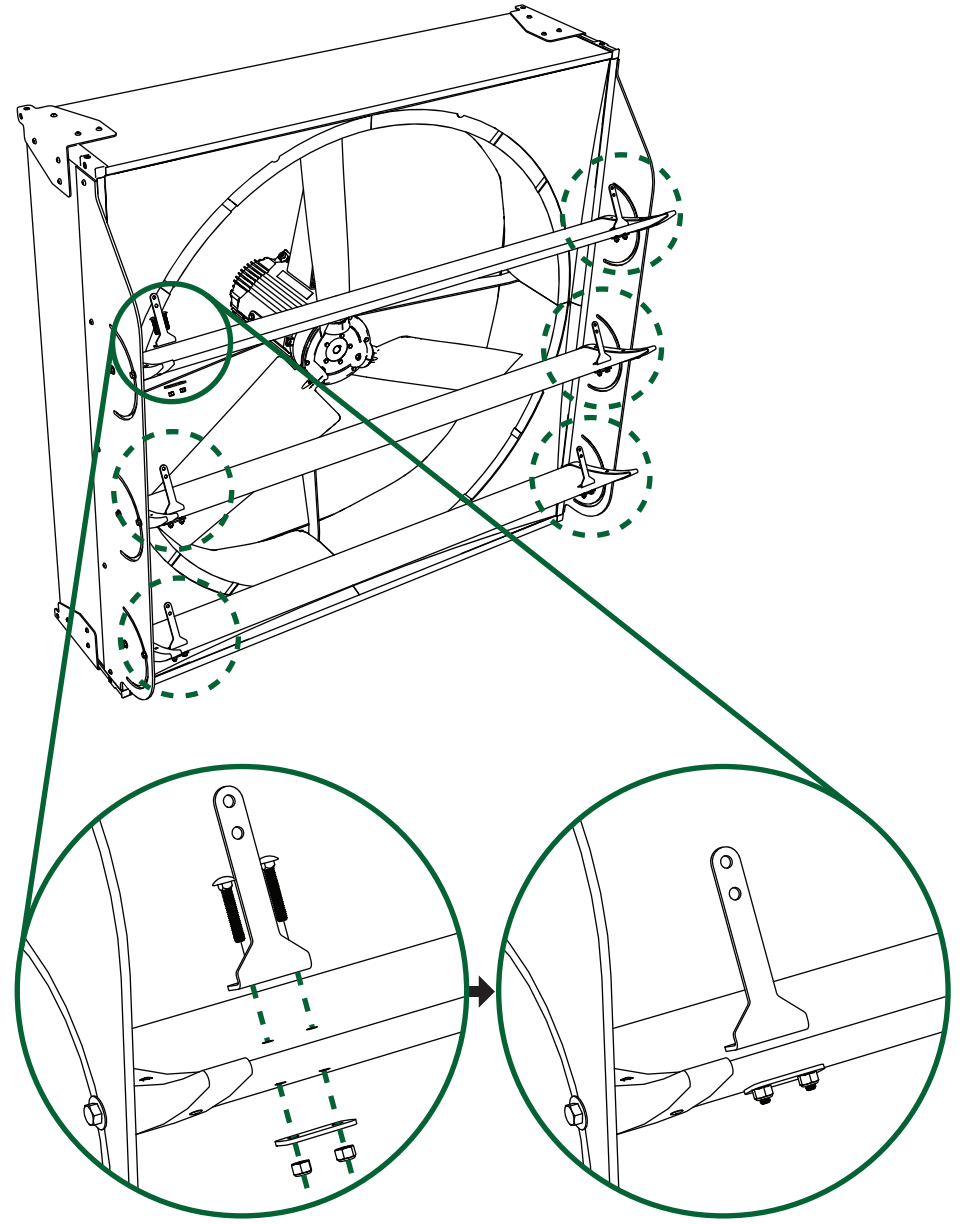
2

- Using a 1/4" Drill Bit and the bolt hole marks made in **Step 2**, drill holes through louver.
- NOTE:** When drilling holes make sure the drill and bit is at 90° to the face of the louver.



3

- Secure 2 line brackets to each louver using (2) 1/4"-20 x 1 1/2" Stainless Steel **Carriage Bolts**, (1) Line Mounting **Bracket Bottom**, and (2) 1/4"-20 Stainless Steel **Nyloc Nuts** per bracket, as shown below.

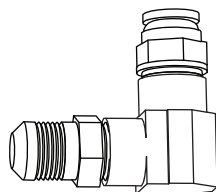
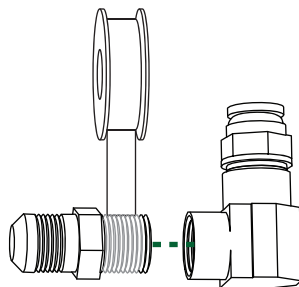
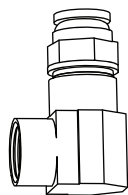
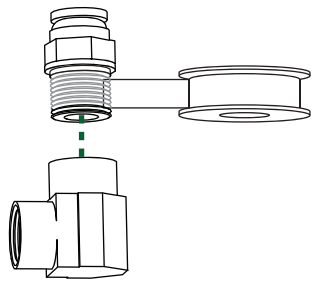


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Assembling High Pressure Fog Line Fittings

- Following the **PTFE Tape & Tightening Guidelines** on [Page 4](#)

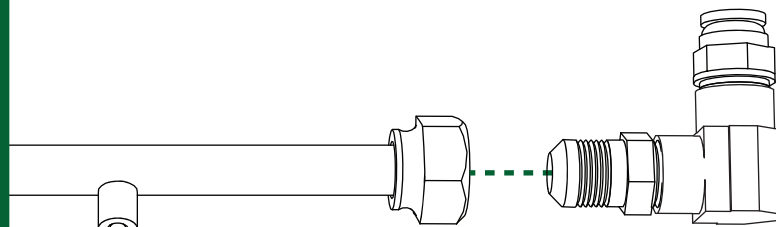
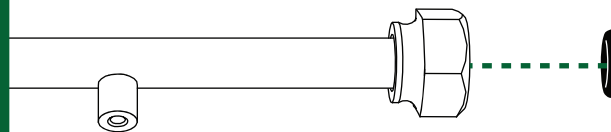
- Prep the 1/2" - 3/8" **Union** and 3/8" Slip Lock **Adapter** with **PTFE Tape**
- Assemble the 3/8" Slip Lock Adapter to the 3/8" Female **Elbow**
- Assemble the 1/2" - 3/8" **Union** to the other end of the 3/8" Female **Elbow**



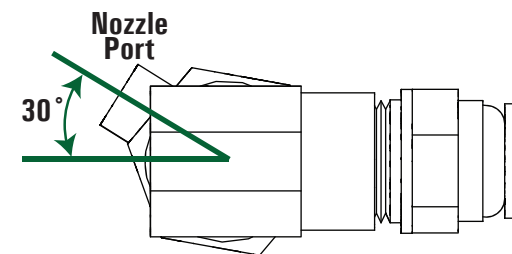
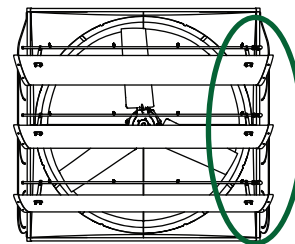
5

- Following the **1/2" Flare Connector with Required O-Ring Guidelines** on [Page 4](#)

- Insert the **O-ring** into the High Pressure Fog Flare Nut at end of line and position it so it does not block the waterway
- Assemble the High Pressure Fog Line Fittings from [Step 5](#) to the High Pressure Fog Flare Nut
- Using the mounting guides below, align the fitting assembly at 30° to the nozzle ports on the High Pressure Fog Line, as shown below

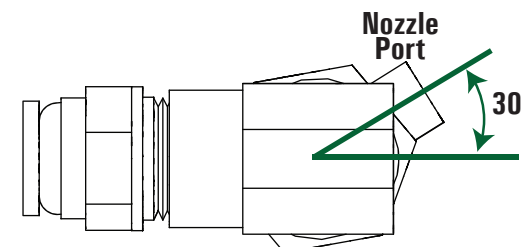
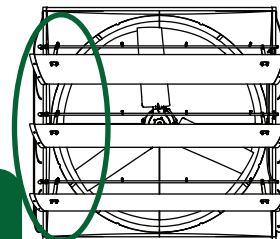


If mounting with fittings to the right



Fittings Assembly

If mounting with fittings to the left



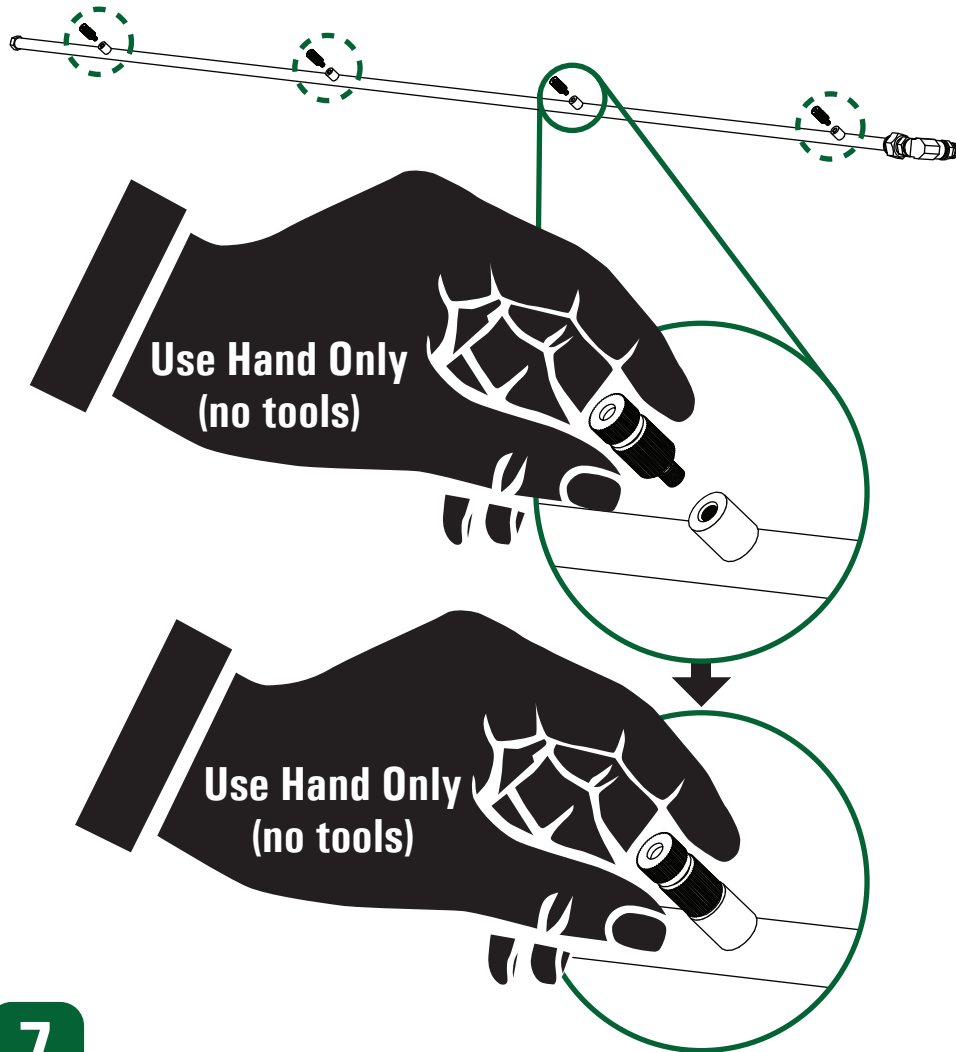
Fittings Assembly

6

Installing High Pressure Fog Nozzles

- Using your fingers, screw in and tighten the nozzle into the nozzle port.
 - **Hand tighten only.**
 - Tools are not recommended as they damage and over tighten the nozzles.
 - **DO NOT OVER TIGHTEN**

WARNING: Do not remove nozzles or plugs while system is running.

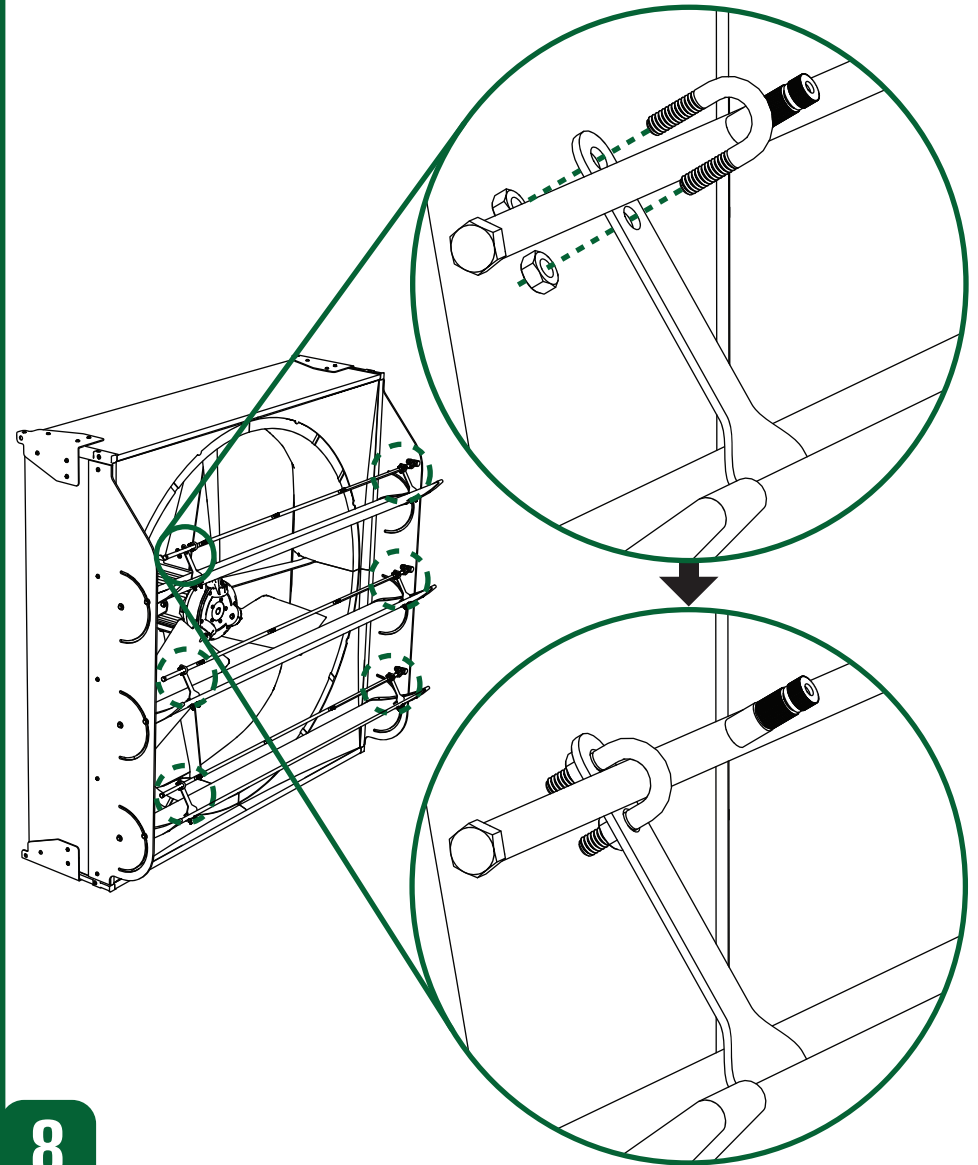


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Attaching High Pressure Lines to 3 Louver AirBlaster Fan

NOTE: High pressure lines can be mounted with all fittings to the left or all to the right, choose what works best for your installation.

- Center High Pressure Lines so that the ends are not touching the louver guides.
- Attach the end of each line to a bracket using (1) $\frac{1}{4}$ "-20 \times $\frac{9}{16}$ " \times $1\frac{1}{4}$ " Stainless Steel U-Bolt and (2) $\frac{1}{4}$ "-20 Stainless Steel Nyloc Nuts, as shown below.

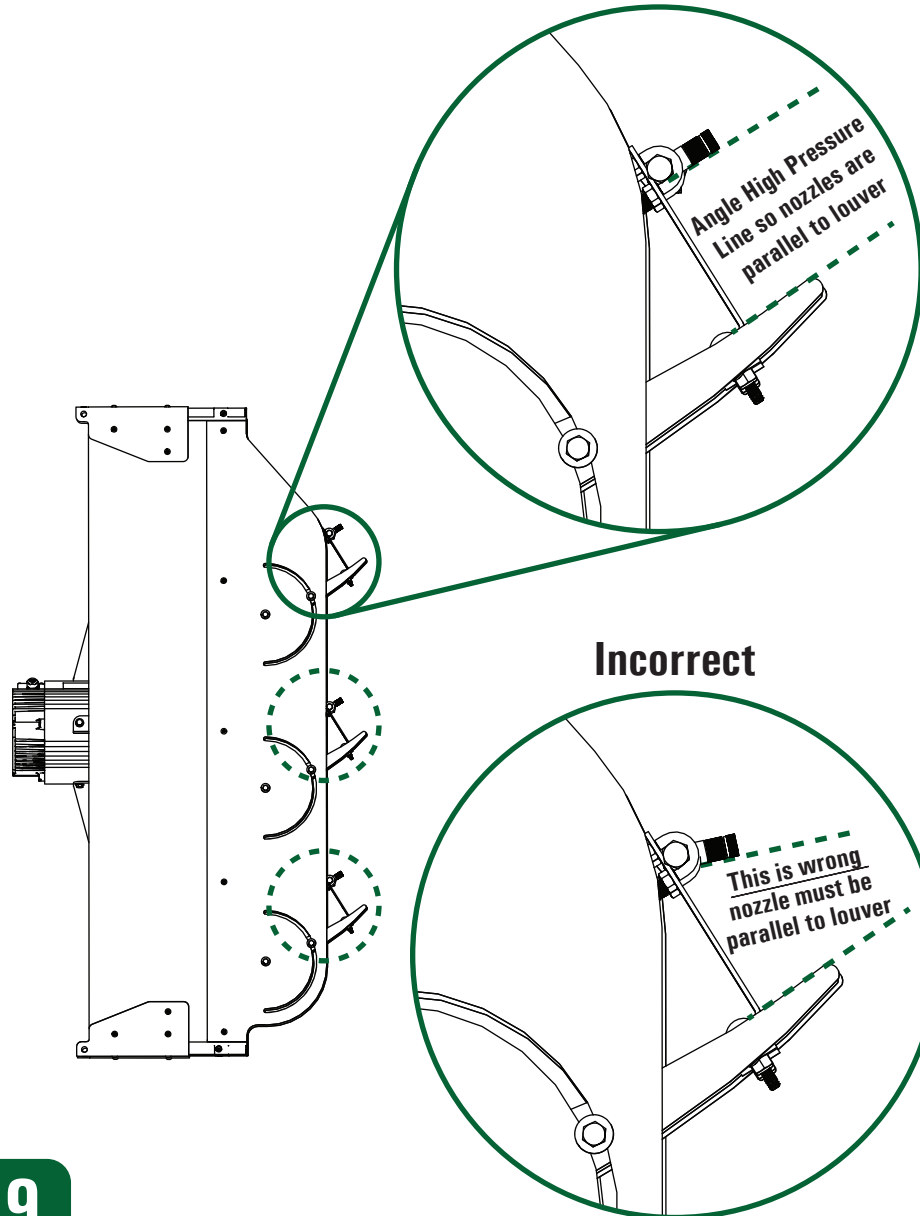


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Set Proper Nozzle Angle

- Rotate High Pressure Line so that nozzles are parallel to the louver, as shown below.
- Once line is at the correct angle, tighten the hardware used to attach the line to the brackets.

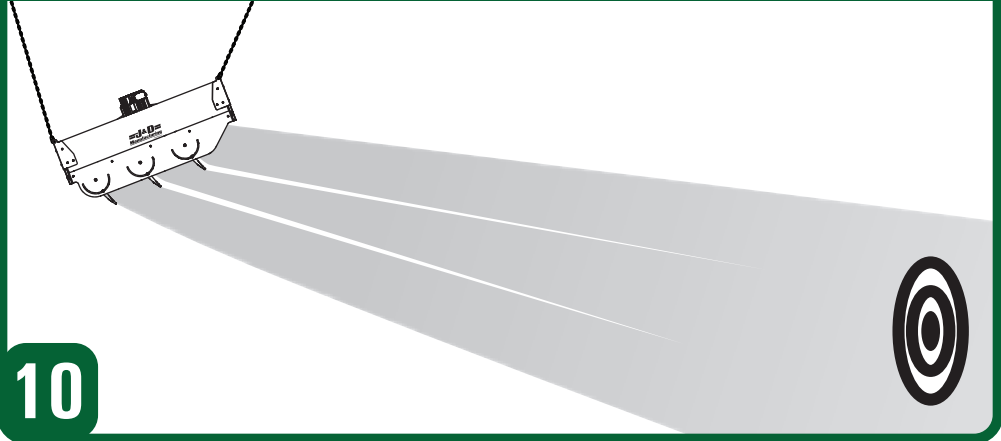
Correct



9

Install the AirBlaster & Set Louvers for Target Velocity

- Proceed to next step once the AirBlaster has been installed and louvers have been set to achieve the desired velocity at the target location.

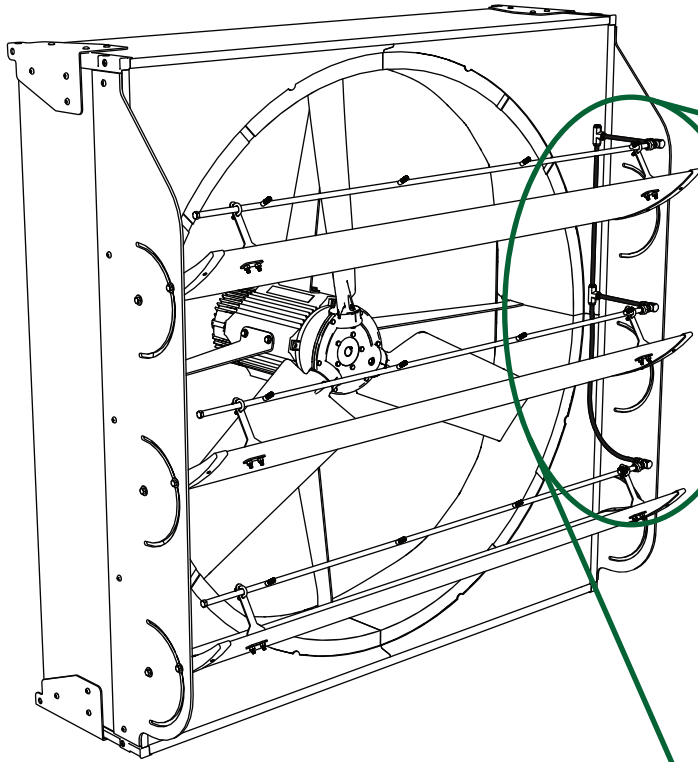


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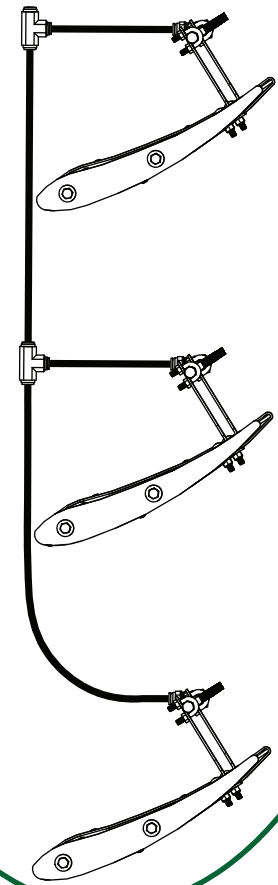
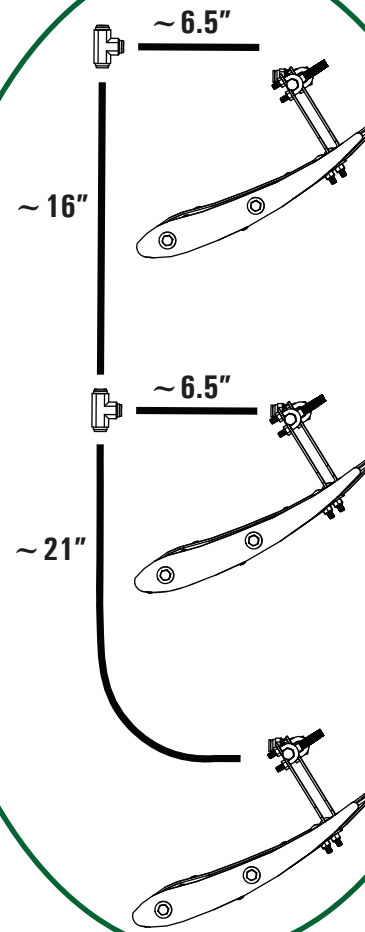
⚠ WARNING ⚠
DISCONNECT POWER BEFORE PRECEDING

Connecting Nozzle Lines:

- Review and follow **Slip Lock Guidelines** and **High Pressure Nylon Tube Guidelines** on [Page 5](#)
- The tubing length measurements given below will accommodate the average installation, however, they will not work for all installations, therefore, J&D recommends measuring the distances required for your specific installation and adjust the measurements as needed.



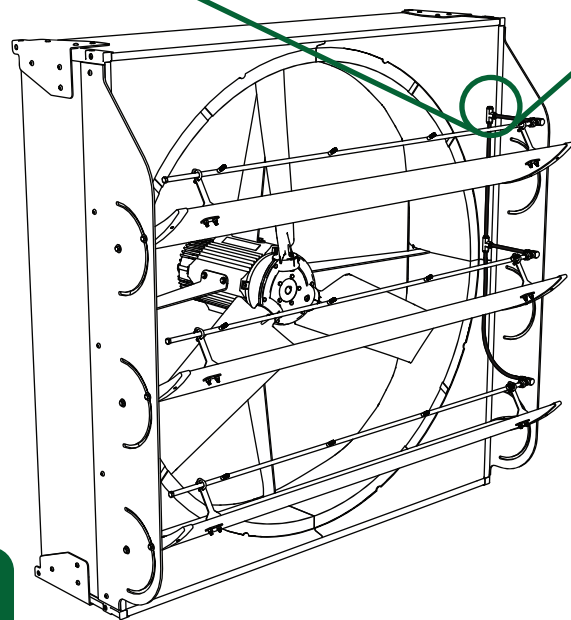
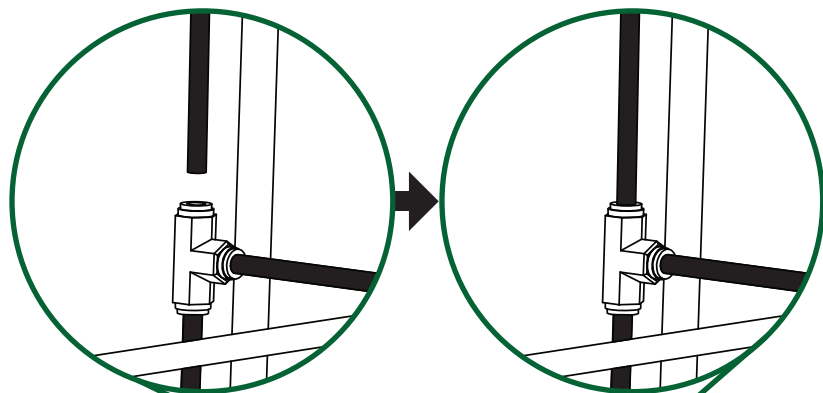
~ Tubing length measurements given below will accommodate the average installation, measure and adjust as needed



Connecting to Your HPF System:

- Following the **Slip Lock Guidelines** and **High Pressure Nylon Tube Guidelines** on [Page 5](#), connect the AirBlaster High Pressure Fog Kit

NOTE: If you need to remove the nylon tube from the slip lock, the system must be depressurized. Then push the metal slip lock collar back into the fitting and pull the nylon tube out. Once the nylon tube has been fully inserted into a slip lock and is removed, even for a short time, 1" of nylon tube (the amount that was inserted into the slip lock) must be trimmed off or it will not seal properly. Keep this in mind if you intend to disassemble your system seasonally as you will want to provide additional tubing to those sections to allow for yearly trimming until you are required to replace your nylon tubing.



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Maintenance Instructions:

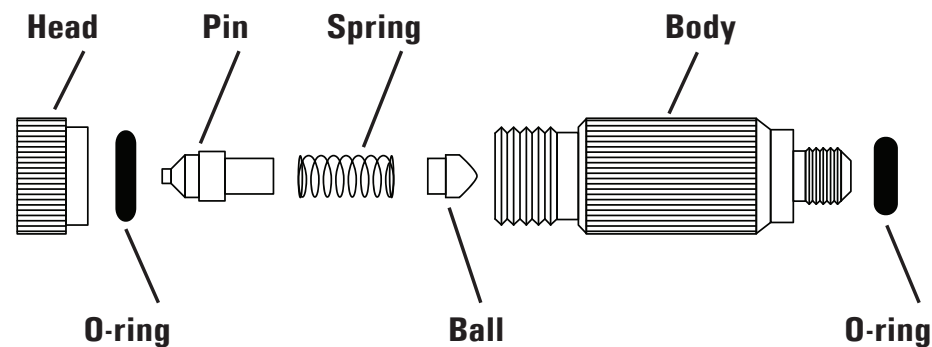
- Check for plugged nozzles.

WARNING: Do not remove nozzles or plugs while system is running.

- Disassemble the nozzle/s as shown below.
- Set aside the o-rings and the ball. If necessary the o-rings and ball can be washed with slightly soapy water.
- Soak the remaining metal parts in undiluted CLR[®] cleaner for a maximum of one hour.
- Once done soaking **rinse all parts thoroughly** and reassemble nozzles.

TIP: If cleaning more than one nozzle, separate nozzles by type and size as you remove them. Keep them separated during the cleaning process so reassembling and reinstalling after cleaning will be much easier.

Type: Anti Drip Nozzle



End of Season & Winterizing:

WARNING: Do not remove nozzles or plugs while system is running.

Nozzles End of Season Care

- Remove from lines
- Following Maintenance Instructions disassemble nozzles and clean them
- Reassemble nozzles
- Store nozzles in a container where they will not be exposed to freezing temperatures

Line and Tube End of Season Care

- Do not reinstall nozzles at this time.
- Disconnect system from pump
- Using pressurized air, blow all water out of rings and tubes

If your system is located where it can freeze you may want to provide additional protection. Refer to your HPF systems manual for instructions on winterizing in below freezing temperature.

Beginning of Season Setup:

WARNING: Do not remove nozzles or plugs while system is running.

Line and Tube

- Cut off 1" the end of any nylon tube that was disconnected for the season, the amount that was previously inserted into the slip lock (The pressure from the slip lock distorts the end of the tubing and it must be trimmed off or it will not seal properly)
- Connect water to filter and pump system
- Run pump for 10 minutes to flush all tubing and lines
- Turn off pump

Nozzles

- Follow directions from Step 7 on installing nozzles (**Hand tighten only**)

System

- Turn on pump and check system