

# Foam Aspirators

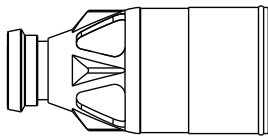
## INSTRUCTION FOR INSTALLATION, OPERATION, AND MAINTENANCE

### ⚠ WARNING

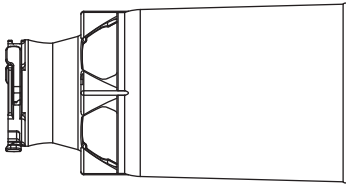
Understand manual before use. Operation of this device without understanding the manual and receiving proper training is a misuse of this equipment. Obtain safety information at [tft.com/serial-number](http://tft.com/serial-number).

This equipment is intended for use by trained and qualified emergency services personnel for firefighting. All personnel using this equipment shall have completed a course of education approved by the Authority Having Jurisdiction (AHJ).

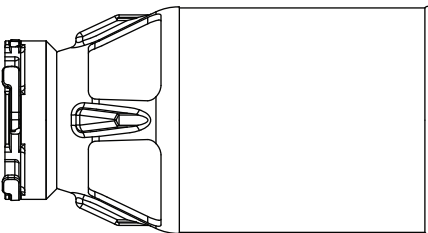
This instruction manual is intended to familiarize firefighters and maintenance personnel with the operation, servicing, and safety procedures associated with this product. This manual should be kept available to all operating and maintenance personnel.



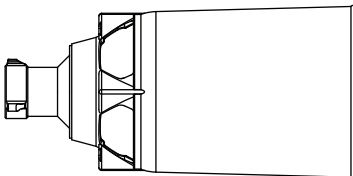
**MX-FoamJet**



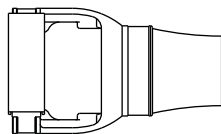
**MX-FoamJet**



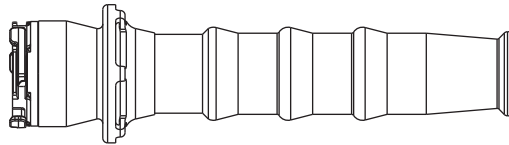
**MX-FoamJet**



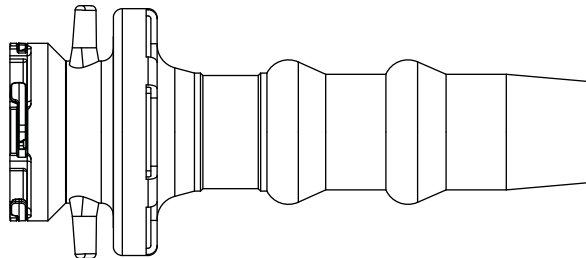
**MX Foam Nozzle**



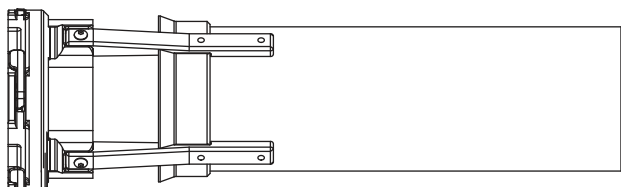
**FoamJet**



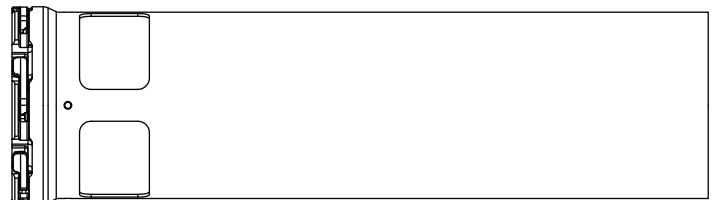
**FoamJet-LX**



**FJ-LX-M**




**FJ-LX-M2**



**FJ-LX-M3**

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**DANGER**

**PERSONAL RESPONSIBILITY CODE**

The member companies of FEMSA that provide emergency response equipment and services want responders to know and understand the following:

1. Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
2. It is your responsibility to read and understand any user's instructions, including purpose and limitations, provided with any piece of equipment you may be called upon to use.
3. It is your responsibility to know that you have been properly trained in Firefighting and /or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
4. It is your responsibility to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
5. It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
6. Failure to follow these guidelines may result in death, burns or other severe injury.







**FEMSA**




Fire and Emergency Manufacturers and Service Association  
P.O. Box 147, Lynnfield, MA 01940 • [www.FEMSA.org](http://www.FEMSA.org)

## 1.0 MEANING OF SAFETY SIGNAL WORDS

A safety related message is identified by a safety alert symbol and a signal word to indicate the level of risk involved with a particular hazard. Per ANSI Z535.6, the definitions of the four signal words are as follows:

	<b>DANGER</b> indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	<b>WARNING</b> indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	<b>CAUTION</b> indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
	<b>NOTICE</b> is used to address practices not related to physical injury.

## 2.0 SAFETY

	Lack of foam can place operator at risk of injury or death. Establish foam flow and adequate supply of concentrate for the task before advancing into hazardous situations.
	Improper use of agent could result in death or serious injury, including damage to the eyes. To reduce the risk of injury, avoid directing agent onto the faces of yourself and other personnel. Always wear PPE, including eye protection, as directed by the AHJ.
	Improper use of foam or using the wrong type of foam can result in illness, injury, or damage to the environment. Follow foam manufacturer's instructions and fire service training as directed by the AHJ.

## 3.0 GENERAL INFORMATION

In order to produce the best quality low and medium expansion foam for firefighting, the foam solution must be aerated by some means. The FoamJet, MX-FoamJet, and FoamJet-LX series of nozzle attachments and foam nozzles provide a simple and lightweight means to aerate the foam as it exits the nozzle. The foam attachments are quickly attached or removed from the nozzle as the situation demands. The attachments are available for a variety of TFT hand held & master stream nozzles. See the following pages for a listing of available models and compatible nozzles. The label on each attachment also lists compatible nozzles.

## 4.0 FOAM TYPE, CONCENTRATION, AND PROPORTIONING

The FoamJet, MX-Foamjet, Foamjet-LX, and Foam Nozzle can be used with most types of concentrate including protein, fluoroprotein, AFFF, and AR-AFFF (alcohol resistant foam).

The foam concentrate must be proportioned into the water before the nozzle by some means, such as batch mixing, eductors or direct injection systems.

The nature of the fire hazard will determine the type of foam used, the concentration, and the desired expansion ratio. Finished foam expansion and longevity (life) are largely dependent on the type and quality of foaming agents used in foam chemical formulations. Some foams will perform better than others when used with these devices.

## 5.0 ATTACHMENT TO THE NOZZLE

The FoamJet, MX-FoamJet, and FoamJet-LX Series are attached to the nozzle by three different methods. Each of the three methods is shown in the following pages. Each method clamps onto the bumper of the nozzle. Assure that bumper of nozzle is in good condition (no nicks or abrasions) to positively latch and seal to FoamJet attachment.

## 6.0 USE OF FOAM ATTACHMENTS

Refer to fire service training and foam concentrate manufacturer's recommendations for the proper use of foam.

### 6.1 LX FOAMJET

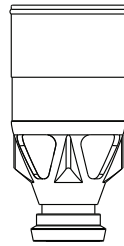
LX aspirators are intended to be used with the LX nozzle in the straight stream position only. Failure to do so will cause blow-back through the air intakes of the foam attachment.

### 6.2 MX FOAMJET

Foam expansion ratios from the MX Foamjet series may be adjusted by changing the bumper position of the nozzle. As the nozzle bumper is rotated back to the wide fog position, higher expansion ratios will be produced, but with reduced stream reach. Rotating the nozzle bumper into straight stream will produce lower expansion ratios, but with longer reach.

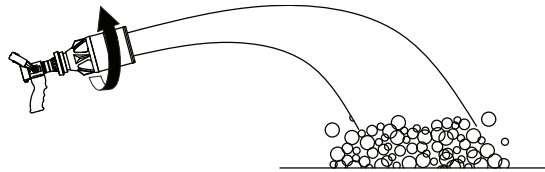


<b>Series</b>	<b>FOAMJET</b>				
<b>Description</b>	Low Expansion Aspirating Attachment				
<b>Model</b>	<b>FJ-DQ</b>	<b>FJ-GD</b>	<b>FJ-U</b>	<b>FJ-HM</b>	<b>FJ-H</b>
<b>For Nozzle Series (Flow Range)</b>	1" QuadraFog 5 - 40 GPM 5 - 60 GPM	1" G-Force 10 - 100 GPM	Ultimatic 10 - 125 GPM  Metro 0 20-100 GPM	Mid-Matic Mid-Force Metro 1 70 - 200 GPM	Handline 95 - 300 GPM Dual-Force 95 - 300 GPM Metro 2 95 - 325 GPM
<b>Attachment Method</b>	<p>① Insert bumper into attachment engaging ribs.</p> <p>② Move latch to locked position.</p>				
<b>Foam Application</b>	Use in Straight Stream Only				

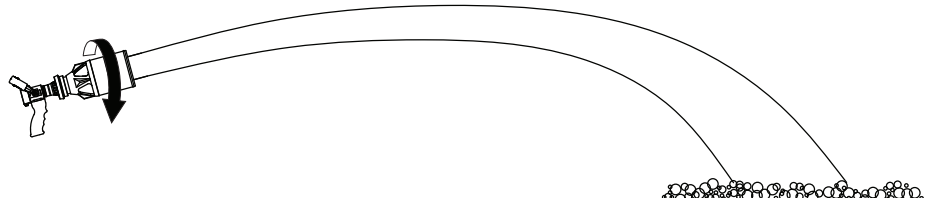


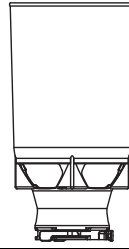
<b>Series</b>	<b>MX FOAMJET</b>
<b>Description</b>	Multi-Expansion Foam Aspirating Attachment
<b>Model</b>	<b>FJ-MX-D</b>
<b>For Nozzle Series (Flow Range)</b>	Twister 1" 10 - 24 GPM 10 - 40 GPM
<b>Attachment Method</b>	<p>① Insert bumper into attachment with ring unlocked.</p>
<b>Foam Application</b>	Use in Straight Stream through Fog Pattern

**FOG:** Shorter Reach  
More Expansion



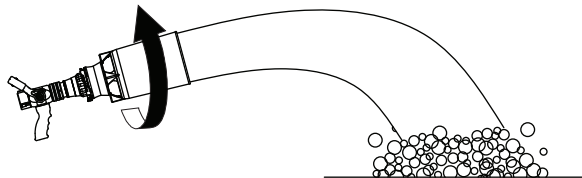
**STRAIGHT STREAM:**  
Longer Reach, Less Expansion



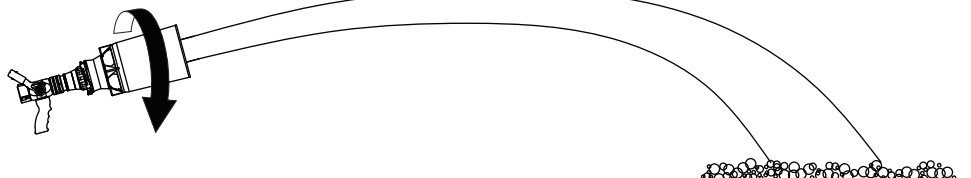


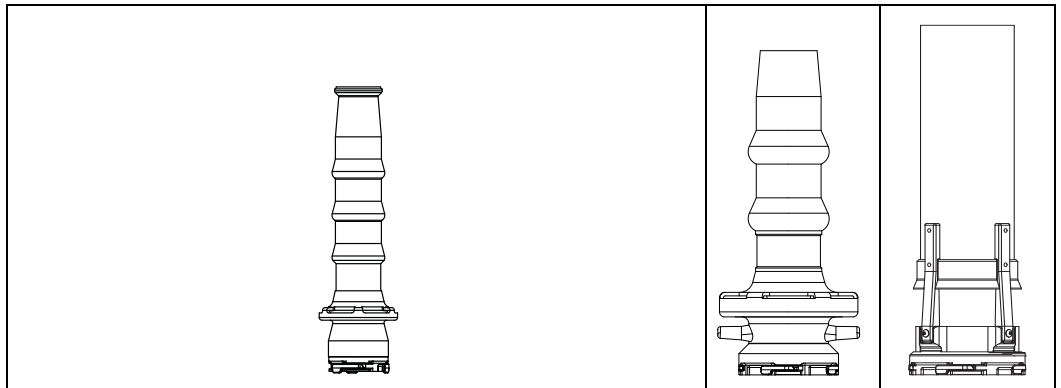
<b>Series</b>	<b>MX FOAMJET</b>							
<b>Description</b>	Multi-Expansion Foam Aspirating Attachment							
<b>Model</b>	<b>FJ-MX-F</b>	<b>FJ-MX-DQ</b>	<b>FJ-UMX</b>	<b>FJ-MX-FQ</b>	<b>FJ-MX-FT</b>	<b>FJ-MX-HM</b>	<b>FJ-MX-G</b>	<b>FJ-HMX</b>
<b>For Nozzle Series (Flow Range)</b>	1.5" Twister 20-60 GPM 20-95 GPM	1" Quadrafog 5-40 GPM 5-60 GPM Medium Expansion Suitable for 24,40&60 GPM Settings ONLY	Ultimatic 10-125 GPM  Metro 0 20-100 GPM  <b>FJ-UMX-G</b> 1" G-Force 10-100 GPM	1.5" Quadrafog 30-125 GPM	Thunderfog Series 30-200 GPM 95-250 GPM  QuadraFog 1000 110-1000 l/min	Mid-Matic Mid-Force Metro 1 70-200 GPM	1.5" G-Force 30-150 GPM	Handline 95-300 GPM  Dual-Force 95-300 GPM  Metro 2 95-325 GPM
<b>Attachment Method</b>	<p>① Insert bumper with latch unlocked.</p> <p>② Push levers down to lock in place.</p>							
<b>Foam Application</b>	Use in Straight Stream through Fog Pattern							

**FOG:** Shorter Reach  
More Expansion

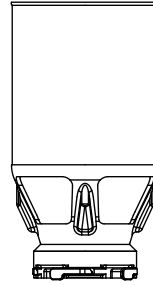


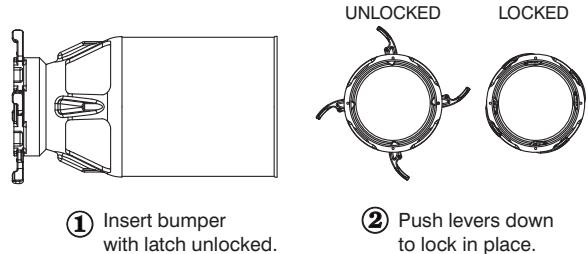
**STRAIGHT STREAM:**  
Longer Reach, Less Expansion



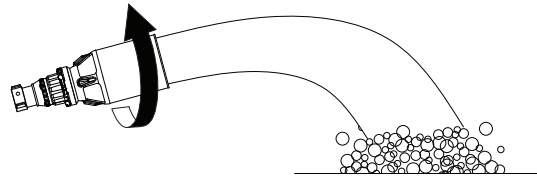


<b>Series</b>	<b>FOAMJET-LX</b>					
<b>Description</b>	Low Expansion Foam Aspirating Attachment					
<b>Model</b>	<b>FJ-LX-U</b>	<b>FJ-LX-G</b>	<b>FJ-LX-FQ</b>	<b>FJ-LX-HM</b>	<b>FJ-LX-M</b>	<b>FJ-LX-M2</b>
<b>For Nozzle Series (Flow Range)</b>	Ultimatic 10-125 GPM  Metro 0 20-100 GPM	1.5" G-Force 30-150 GPM	1.5" Quadrafog 30-125 GPM	Mid-Matic Mid-Force Metro 1 70-200 GPM	Master Stream 1000, 1250S and Master Foam 250-750 GPM (946-2839 l/min) series nozzles	M-F* series Master Stream nozzles
	<b>FJ-LX-U-G</b> 1" G-Force 10-100 GPM					<b>FJ-LX-M3</b> Master Stream 1250, 1500
<b>Attachment Method</b>	<p>① Insert bumper into attachment with latches unlocked</p> <p>② Align latches between bumper and ribs</p> <p>③ Lock all latches</p> <p><i>Unlocked</i>      <i>Locked</i></p>					
<b>Foam Application</b>	Use in Straight Stream Only					

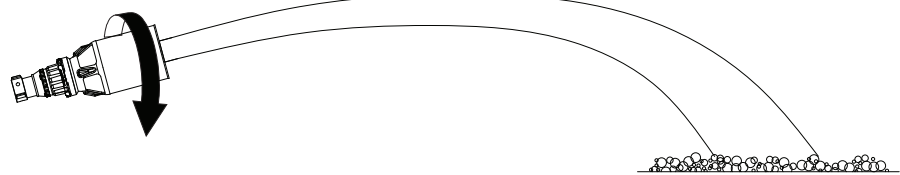


<b>Series</b>	<b>MX FOAMJET</b>
<b>Description</b>	Low Expansion Foam Aspirating Attachment
<b>Model</b>	<b>FJ-MX-MD</b>
<b>For Nozzle Series (Flow Range)</b>	MD Series: 100-500 GPM (Max-Force, Max-Matic, Max-Flow) ZN Series: 350, 500 & 750 GPM Industrial Nozzle
<b>Attachment Method</b>	
<b>Foam Application</b>	Use in Straight Stream through Fog Pattern

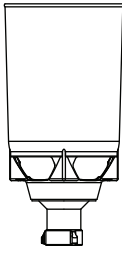
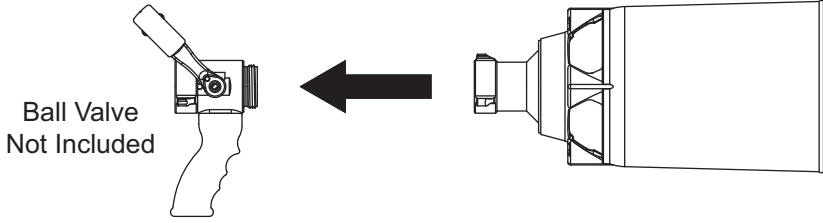
**FOG:** Shorter Reach  
More Expansion



**STRAIGHT STREAM:**  
Longer Reach, Less Expansion





			
<b>Series</b>	<b>MX FOAMJET NOZZLE</b>		
<b>Description</b>	Medium Expansion Foam Nozzle		
<b>Model</b>	<b>FJ-MX-060</b>	<b>FJ-MX-095</b>	<b>FJ-MX-125</b>
<b>For Nozzle Series (Flow Range)</b>	60 GPM @ 60 PSI 225 l/min @ 4 bar	95 GPM @ 60 PSI 360 l/min @ 4 bar	125 GPM @ 60 PSI 475 l/min @ 4 bar
<b>Attachment Method</b>			
<b>Foam Application</b>	Full Open Valve Straight Hose Line		

## 7.0 USING FOAM

It is recommended that the Class A foam used meets USDA Forest Service 5100-307A "Specification for Fire Suppressant Foam for Wildland Firefighting (Class A Foam)", or NFPA 1150 "Foam Chemicals for Fires in Class A Fuels".

**⚠ WARNING** Improper use of foam or using the wrong type of foam can result in illness, injury, or damage to the environment. Follow foam manufacturer's instructions and fire service training as directed by the AHJ.

**⚠ WARNING** For Class B fires, lack of foam or interruption in the foam stream can cause a break in the foam blanket and greatly increase the risk of injury or death. Follow procedures established by the AHJ for the specific fuel and conditions.

## 8.0 WARRANTY

Task Force Tips LLC, 3701 Innovation Way, Valparaiso, Indiana 46383-9327 USA ("TFT") warrants to the original purchaser of its products ("equipment"), and to anyone to whom it is transferred, that the equipment shall be free from defects in material and workmanship during the five (5) year period from the date of purchase. TFT's obligation under this warranty is specifically limited to replacing or repairing the equipment (or its parts) which are shown by TFT's examination to be in a defective condition attributable to TFT. To qualify for this limited warranty, the claimant must return the equipment to TFT, at 3701 Innovation Way, Valparaiso, Indiana 46383-9327 USA, within a reasonable time after discovery of the defect. TFT will examine the equipment. If TFT determines that there is a defect attributable to it, TFT will correct the problem within a reasonable time. If the equipment is covered by this limited warranty, TFT will assume the expenses of repair.

If any defect attributable to TFT under this limited warranty cannot be reasonably cured by repair or replacement, TFT may elect to refund the purchase price of the equipment, less reasonable depreciation, in complete discharge of its obligations under this limited warranty. If TFT makes this election, claimant shall return the equipment to TFT free and clear of any liens and encumbrances.

This is a limited warranty. The original purchaser of the equipment, any person to whom it is transferred, and any person who is an intended or unintended beneficiary of the equipment, shall not be entitled to recover from TFT any consequential or incidental damages for injury to person and/or property resulting from any defective equipment manufactured or assembled by TFT.

It is agreed and understood that the price stated for the equipment is in part consideration for limiting TFT's liability. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above may not apply to you.

TFT shall have no obligation under this limited warranty if the equipment is, or has been, misused or neglected (including failure to provide reasonable maintenance) or if there have been accidents to the equipment or if it has been repaired or altered by someone else.

**THIS IS A LIMITED EXPRESS WARRANTY ONLY. TFT EXPRESSLY DISCLAIMS WITH RESPECT TO THE EQUIPMENT ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. THERE IS NO WARRANTY OF ANY NATURE MADE BY TFT BEYOND THAT STATED IN THIS DOCUMENT.**

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## 9.0 MAINTENANCE

TFT products are designed and manufactured to be damage resistant and require minimal maintenance. However, as the primary firefighting tool upon which your life depends, it should be treated accordingly. To help prevent mechanical damage, do not drop or throw equipment.

### 9.1 FIELD LUBRICATION

All Task Force Tips nozzles are factory lubricated with high quality silicone grease. This lubricant has excellent wash out resistance, providing long term performance in firefighting nozzles. If your agency has unusually hard or sandy water, the moving parts of the nozzle may be affected. Foam agents and water additives contain soaps and chemicals that may break down the factory lubrication.

The moving parts of the nozzle should be checked on a regular basis for smooth and free operation, and for signs of damage. **IF THE NOZZLE IS OPERATING CORRECTLY, THEN NO ADDITIONAL LUBRICANT IS NEEDED.** Any nozzle that is not operating correctly should be immediately removed from service. The nozzle can be returned to the factory at any time for a complete checkup and re-lubrication with silicone grease.

The field use of Break Free CLP (spray or liquid) lubricant will help to temporarily restore the smooth and free operation of the nozzle. These lubricants do not have the washout resistance and long-term performance of the silicone grease. Once Break Free CLP is applied, re-application will be needed on a regular basis until the nozzle can be returned to the factory for a complete checkup and re-lubrication with silicone grease.

**CAUTION** Aerosol lubricants contain solvents that can swell O-Rings if applied in excess. The swelling can inhibit smooth operation of the moving parts. When used in moderation, as directed, the solvents quickly evaporate without adversely swelling the O-Rings.

### 9.2 SERVICE TESTING

In accordance with NFPA 1962, equipment must be tested a minimum of annually. Units failing any part of this test must be removed from service, repaired and retested upon completion of the repair.

### 9.3 REPAIR

Factory service is available with repair time seldom exceeding one day in our facility. Factory serviced equipment is repaired by experienced technicians, wet tested to original specifications, and promptly returned. Any returns should include a note as to the nature of the problem and whom to reach in case of questions.

Repair parts and service procedures are available for those wishing to perform their own repairs. Task Force Tips assumes no liability for damage to equipment or injury to personnel that is a result of user service. Contact the factory or visit the web site at [tft.com](http://tft.com) for parts lists, exploded views, test procedures and troubleshooting guides.

Performance tests shall be conducted on the equipment after a repair, or anytime a problem is reported to verify operation in accordance with TFT test procedures. Consult factory for the procedure that corresponds to the model and serial number of the equipment. Any equipment which fails the related test criteria should be removed from service immediately. Troubleshooting guides are available with each test procedure or equipment can be returned to the factory for service and testing.

**CAUTION** Any alterations to the product or its markings could diminish safety and constitutes a misuse of this product.

**NOTICE** All replacement parts must be obtained from the manufacturer to assure proper operation of the device.

## 10.0 OPERATION AND INSPECTION CHECKLIST

### BEFORE EACH USE, appliances must be inspected to this checklist:

- There is no obvious damage such as missing, broken or loose parts, dents cracks, corrosion, or other defects that could impair safe operation.
- Clamps and mounted objects are secure.
- Hose and nozzle are securely attached.
- All swiveling elements rotate freely.
- Foamjet is pointed in a safe direction.

### BEFORE BEING PLACED BACK IN SERVICE, appliances must be inspected to this list:

- The waterway is clear of obstructions.
- There is no damage to any connections.
- All locks and hold-down devices work properly.
- There is no obvious damage such as missing, broken or loose parts, dents cracks, corrosion, or other defects that could impair safe operation.
- All swiveling elements rotate freely.
- There are no missing parts or components.



**WARNING** Equipment failing any part of the checklist is unsafe for use and must have the problem corrected before use or being placed back into service. Operating equipment that has failed the checklist is a misuse of this equipment.