



MANUAL: Foam Aspirators

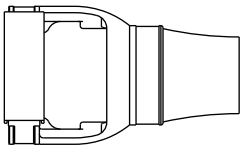
INSTRUCTIONS FOR SAFE OPERATION AND MAINTENANCE

⚠ WARNING

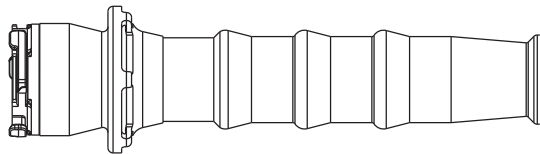
Understand manual before use. Operation of this device without understanding the manual and receiving proper training is a misuse of this equipment. Obtain safety information at tft.com/serial-number

This instruction manual is intended to familiarize firefighters and maintenance personnel with the operation, servicing, and safety procedures associated with this product.

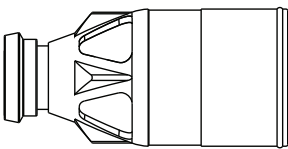
This manual should be kept available to all operating and maintenance personnel.



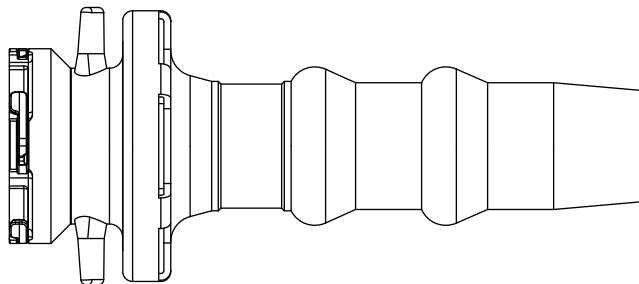
FoamJet



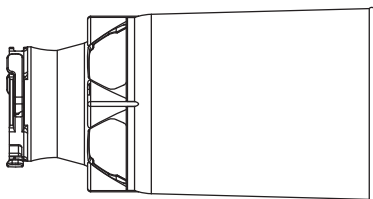
FoamJet-LX



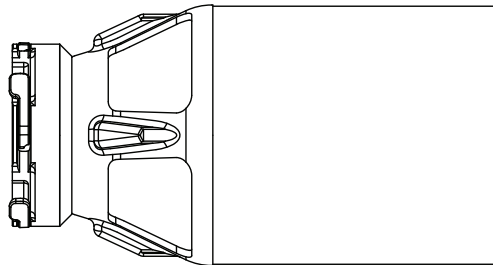
MX-FoamJet



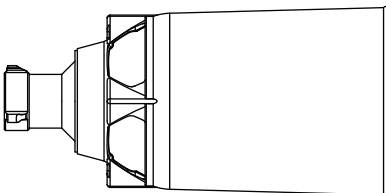
FJ-LX-M



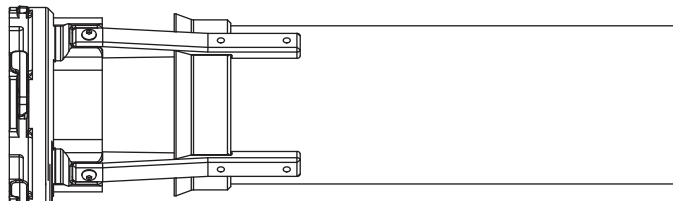
MX-FoamJet



MX-FoamJet




MX Foam Nozzle



FJ-LX-M2

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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.



Fire and Emergency Manufacturers and Service Association
P.O. Box 147, Lynnfield, MA 01940 • 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 standard Z535.6-2011, the definitions of the four signal words are as follows:

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

2.0 SAFETY

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. Assure that:

- Application rate is sufficient (see NFPA 11 of foam manufacturer's recommendations)
- Enough concentrate in on hand to complete task (see NFPA for minimum duration time requirements)
- Foam logistics have been carefully planned

Allow for such things as:

- Storage of foam in a location not exposed to the hazard it protects
- Personnel, equipment, and technique to deliver foam at a rapid enough rate
- Removal of empty foam containers
- Clear path to deliver foam, as hoses and other equipment and vehicles are deployed

WARNING

There are a wide variety of foam concentrates. Each user is responsible for verifying that any foam concentrate chosen to be used with this unit has been tested to assure that the foam obtained is suitable for the purpose intended.

WARNING

Improper use of foam can result in injury or damage to the environment. Follow foam concentrate manufacturer's instructions and fire service training to avoid:

- Using wrong type of foam on a fire, i.e. Class A foam on a Class B fire.
- Plunging foam into pools of burning liquid fuels.
- Causing environmental damage.
- Directing stream at personnel.

CAUTION

Any alterations to the FoamJet, MX-Foamjet or FoamJet-LX or their markings constitutes a misuse of these products and could diminish safety.

3.0 INTRODUCTION

In order to produce the best quality low and medium expansion foam for fire fighting, 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). See page 11 for a summary of typical uses for various foam types.

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. Refer to page 11 for basic guidelines. 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 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 FOAMJET, MX-FOAMJET AND FOAMJET-LX ATTACHMENTS

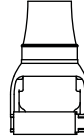
Refer to fire service training and foam concentrate manufacturer's recommendations for the proper use of foam.

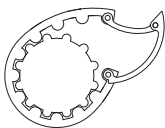
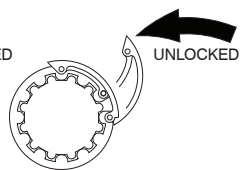

6.1 LX FOAMJET

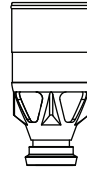
LX aspirators are intended to be used with the nozzle in the straight stream position only. Failure to do so will cause blow-back through the air intakes of the foam attachment.

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.

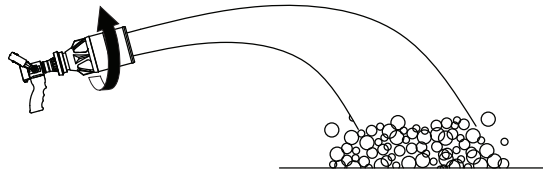


Series	FOAMJET				
Description	Low Expansion Aspirating Attachment				
Model	FJ-DQ	FJ-GD	FJ-U	FJ-HM	FJ-H
For Nozzle Series (flow range)	1 " QuadraFog 5-40 GPM 5-60 GPM	1" G-Force 10-100 GPM	Ultimatic 10-125 GPM Metro 0 20-100 GPM	MidMatic Mid-Force Metro 1 70-200 GPM	Handline 95-300 GPM Dual-Force 95-300 GPM Metro 2 95-325 GPM
CLASS A	GOOD				
AFFF	GOOD				
Alcohol Resistant AFFF	GOOD				
PROTEIN, FP, FFFP	GOOD				
Attachment Method	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>① Insert bumper into attachment engaging ribs.</p> </div> <div style="text-align: center;">  <p>② Move latch to locked position.</p> </div> </div>				
Foam Application	Use in Straight Stream Only				

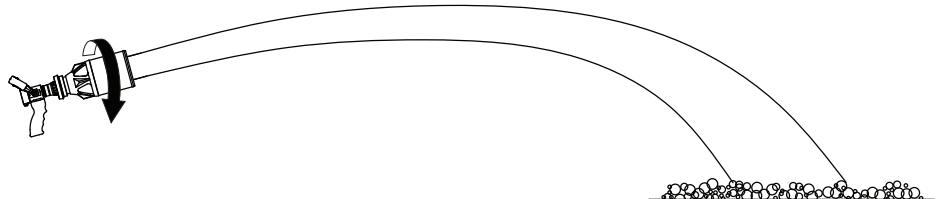


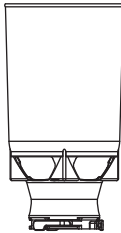
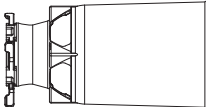

Series	MX-FOAMJET
Description	Multi-Expansion Foam Aspirating Attachment
Model	FJ-MX-D
For Nozzle Series (flow range)	Twister 1" 10-24 GPM 10-40 GPM
CLASS A	BEST
AFFF	BEST
Alcohol Resistant AFFF	BEST
PROTEIN, FP, FFFP	BETTER
Attachment Method	<p>① Insert bumper into attachment with ring unlocked.</p> <p>② LOCKED UNLOCKED → PUSH</p>
Foam Application	Use in Straight Stream through Fog Pattern

FOG: Shorter Reach
More Expansion

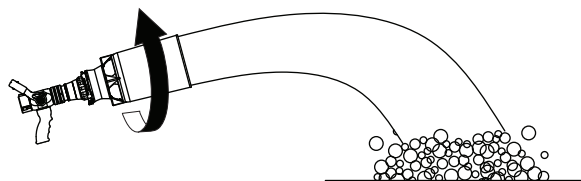


STRAIGHT STREAM:
Longer Reach, Less Expansion

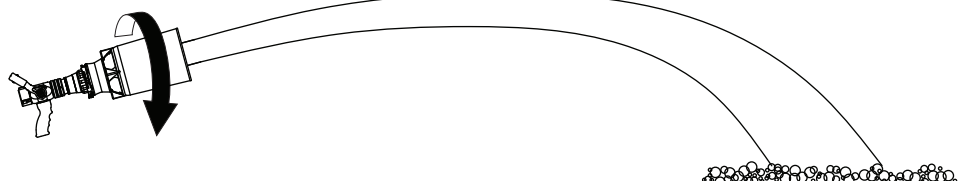


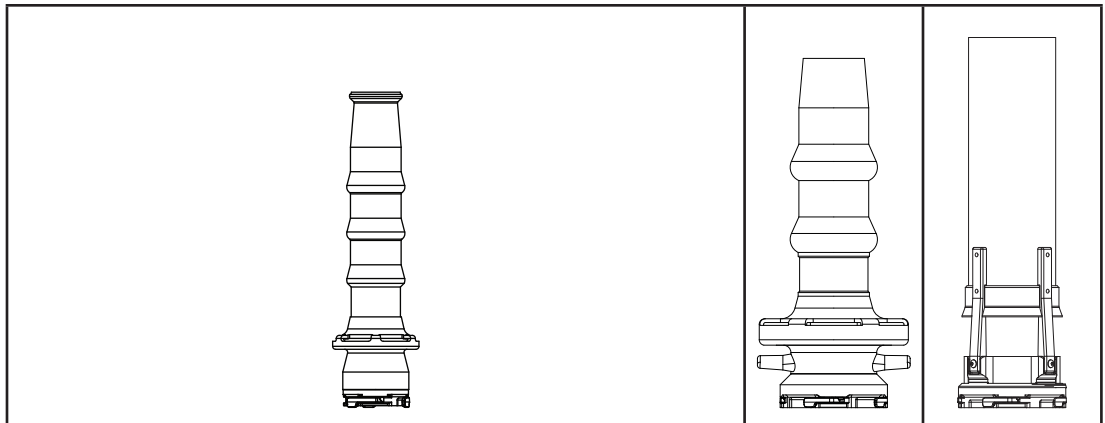
								
Series	MX-FOAMJET							
Description	Multi-Expansion Foam Aspirating Attachment							
Model	FJ-MX-F	FJ-MX-DQ	FJ-UMX FJ-UMX-G	FJ-MX-FQ	FJ-MX-FT	FJ-MX-HM	FJ-MX-G	FJ-HMX
For Nozzle Series (flow range)	1.5" Twister 20-60 GPM 20-95 GPM	1" QuadraFog 5-40 GPM 5-60 GPM Medium Expansion 24, 40 & 60 GPM Settings Only	Ultimatic 10-125 GPM 1" G-Force 10-100 GPM Metro 0 20-100 GPM	QuadraFog 1.5" 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
CLASS A	BEST							
AFFF	BEST							
Alcohol Resistant AFFF	BEST							
PROTEIN, FP, FFFP	BETTER							
Attachment Method	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>① Insert bumper with latch unlocked.</p> </div> <div style="text-align: center;"> <p>UNLOCKED LOCKED</p>  <p>② Push levers down to lock in place.</p> </div> </div>							
Foam Application	Use in Straight Stream through Fog Pattern							

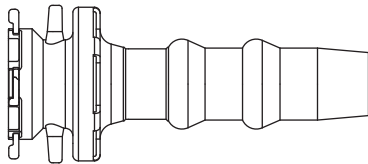
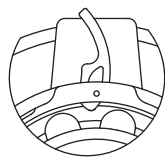



FOG: Shorter Reach
More Expansion

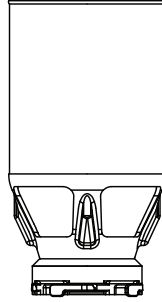


STRAIGHT STREAM:
Longer Reach, Less Expansion

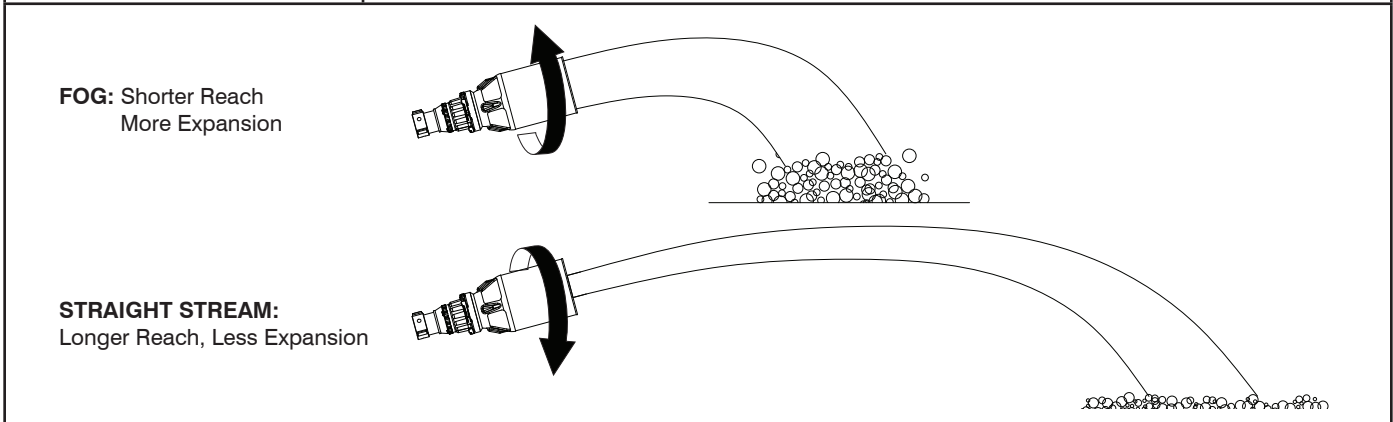


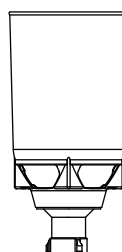


Series	FOAMJET-LX					
Description	Low Expansion Aspirating Attachment					
Model	FJ-LX-U FJ-LX-U-G	FJ-LX-G	FJ-LX-FQ	FJ-LX-HM	FJ-LX-M	FJ-LX-M2
For Nozzle Series (flow range)	Ultimatic 10-125 GPM 1" G-Force 10-100 GPM Metro 0 20-100 GPM	1.5" G-Force 30-150 GPM	1.5" QuadraFog 30-125 GPM	Mid-Matic Mid-Force Metro 1 70-200 GPM	Master Stream 1000, 1250S, and the Master Foam 250-750 gpm (946-2839 l/min) series nozzles	M-F* series of Master Stream nozzles
CLASS A	BETTER					
AFFF	BETTER					
Alcohol Resistant AFFF	GOOD					
PROTEIN, FP, FFFP	BEST					
Attachment Method	    <p>1 Insert bumper into attachment with latches unlocked 2 Align latches between bumper ribs 3 Lock all latches</p> <p style="text-align: right;"><i>Unlocked</i> <i>Locked</i></p>					
Foam Application	Use in Straight Stream Only					



Series	FOAMJET-MX
Description	Low-Expansion Aspirating Attachment
Model	FJ-MX-MD
For Nozzle Series (flow range)	MD Series: 100 - 500 GPM (Max-Force, Max-Matic, Max-Flow) ZN Series: 350, 500 & 750 GPM Industrial Nozzle
CLASS A	BETTER
AFFF	GOOD
Alcohol Resistant AFFF	GOOD
PROTEIN, FP, FFFP	BETTER
Attachment Method	<p>① Insert bumper with latch unlocked. ② Push levers down to lock in place.</p>
Foam Application	Use in Straight Stream through Fog Pattern





Series	MX FOAM NOZZLE		
Description	Medium Expansion Foam Nozzle		
Model	FJ-MX-060	FJ-MX-095	FL-MX-125
For Nozzle Series (flow & pressure rating)	60 GPM @ 60 PSI 225 LPM @ 4 bar	95 GPM @ 60 PSI 360 LPM @ 4 bar	125 GPM @ 60 PSI 475 LPM @ 4 bar
CLASS A	BEST		
AFFF	BEST		
Alcohol Resistant AFFF	BEST		
PROTEIN, FP, FFFP	BETTER		
Attachment Method			
Foam Application	Full Open Valve Straight Hose Line		

7.0 Basic Guide To Foam Selection and Use

Refer to instructions and guidelines from foam manufacturer and the fire service for specific uses and application techniques.

SOLID FUEL - CLASS A	
Solid fuel with wettable cellular fibers that leave ash behind when burned. Examples: wood, paper, straw, brush, etc.	
CLASS A	
Recommended using class A foam that meets USDA Forest Service "Interim Requirements for Foam for Wildland Fires, Aircraft or Ground Application" or NFPA 298 "Foam Chemicals for Wildland Fire Control."	
INVOLVED STRUCTURES	WILDLAND & EXPOSURE PROTECTION
Application rates in gpm/ft ² 0.33 for fully involved	Apply as needed for penetration, isolation, cooling, and smothering
<p>Apply using low expansion setting for:</p> <ul style="list-style-type: none"> - soaking and penetration of fuel - greater stream reach <p>Apply using medium expansion setting for:</p> <ul style="list-style-type: none"> - greater coverage - longer lasting - insulating 	

LIQUID FUEL - CLASS B			
HYDROCARBONS		POLAR SOLVENTS	
Fuels that are mostly refined from crude oil or vegetable matter. Will not mix with water.		A flammable liquid that mixes with water. Examples are alcohols, amines, ethers, esters, aldehydes, and ketones. In firefighting, any flammable liquid which destroys regular foam is generally referred to as a polar solvent.	
AFFF (Aqueous Film Forming Foam) FFFP (Film Forming FluoroProtein Foam) AR-AFFF (Alcohol Resistant AFFF Foam) PROTEIN FLUOROPROTEIN		AR-AFFF (Alcohol Resistant Foam)	
IGNITED	UNIGNITED	IGNITED	UNIGNITED
Application rates in gpm/ft ² : AFFF & FFFP: 0.10 Protein & Fluoroprotein: 0.16 Reapply as needed.	May apply at less than rates for ignited. Be capable of increasing to ignited rates if needed.	Application rates: Use foam manufacturer's recommendations for handheld nozzles.	
Apply using LOW EXPANSION setting for extinguishment	Apply using MEDIUM EXPANSION setting for vapor suppression	Apply using LOW EXPANSION setting for extinguishment	Apply using MEDIUM EXPANSION setting for vapor suppression

8.0 WARRANTY

Task Force Tips LLC, 3701 Innovation Way, Valparaiso, Indiana 46383-9327 USA (“TFT”) warrants to the original purchaser of its Foam Attachment (“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, it 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 THE 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 and long term performance in firefighting nozzles. If your department 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 field use of Break Free CLP (spray or liquid) lubricant will help to restore the smooth and free operation of the nozzle. However, these lubricants do not have the washout resistance and long-term performance of the silicone grease. Therefore, re-application of Break Free CLP will be needed on a regular basis. The nozzle can be returned to the factory at any time for a complete checkup and re-lubrication with silicone grease.



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 (2013), nozzles must be tested a minimum of annually. Nozzles failing any part of this test must be removed from service, repaired and retested upon completion of the repair.

9.2.1 RECORDS

A record of testing and repairs must be maintained from the time the nozzle is purchased until it is discarded. Each TFT nozzle is engraved with a unique serial number which, if so desired, can be used to identify nozzle for documentation purposes.

The following information, if applicable, must be included on the test record for each nozzle:

1. Assigned identification number
2. Manufacturer
3. Product or model designation
4. Vendor
5. Warranty
6. Hose connection size
7. Maximum operating pressure
8. Flow rate or range
9. Date received and date put in service
10. Date of each service test and service test results
11. Damage and repairs, including who made the repairs and the cost of repair parts
12. Reason removed from service

NFPA 1962: Standard for the care, use, inspection, service testing, and replacement of fire hose, couplings, nozzles and fire hose appliances. (2013 ed., Section 5.5.4). Quincy, MA: National Fire Protection Agency.

9.3 REPAIR

Factory service is available with repair time seldom exceeding one day in our facility. Factory serviced nozzles are repaired by experienced technicians, wet tested to original specifications, and promptly returned. Repair charges for non-warranty items are minimal. 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 for parts lists, exploded views, test procedures and troubleshooting guides. All replacement parts must be obtained from the manufacturer to assure proper operation of the product, and to maintain approval of the device.

Performance tests shall be conducted on the nozzle 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 nozzle. 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



Any alteration To the nozzle and its markings could diminish safety and constitutes a misuse of this product.

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 operation
- Clamp and mounted object 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 type connection.
- All locks and hold-down devices work properly.
- There is no damage to the appliance that could impair safe operation (e.g. dents, cracks, corrosion or other defects)
- All swiveling connections rotate freely.
- There are no missing parts or components.

11.0 ANSWERS TO YOUR QUESTIONS

We appreciate the opportunity of serving you and making your job easier. If you have any problems or questions, our toll-free "Hydraulics Hotline", 800-348-2686 or 1-219-462-6161 is normally available to you 24 hours a day, 7 days a week.

TASK FORCE TIPS LLC
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