



## STYLE 1577 SABERMASTER™ NOZZLE INSTALLATION & OPERATING INSTRUCTIONS

The following is intended to provide the basic instructions for operating a SaberMaster nozzle. Read and understand these operating instructions before use.

### PRODUCT RATINGS

Standard Flow:	Fog 1250 gpm at 80 psi
	2" Smooth Bore - 40 gpm at 50 psi, 1188 gpm at 80 psi
Optional Flow:	Fog 1000 gpm at 80 psi
	1 15/16" Smooth Bore - 789 gpm at 50 psi, 998 gpm at 80 psi
Maximum Pressure:	200 psi/14 bar
Minimum Voltage at motor:	12 Volt Motor: 10 Volts at 15 amps
	24 Volt Motor: 20 Volts at 7.5 amps
Maximum Motor Current Draw:	10 amps
Normal Operating Current Draw:	5 amps

### PRODUCT WARNINGS

- WARNING: Akron Brass Monitors and Nozzles are matched to a custom engineered electrical control package. Caution must be observed if the SaberMaster is used on a non-Akron Brass style monitor. In order to prevent mechanical and electrical damage to the SaberMaster nozzle, the control package being used must have current sense protection that matches the load requirements for the SaberMaster. The monitor's electrical control package must set the current limit trip point for the nozzle to 10 amps.
- WARNING: The SaberMaster Style 1577 nozzle can produce large reaction forces. The supporting structure must be strong enough to safely withstand a reaction force of up to 600 lbs.
- WARNING: Charge slowly to facilitate a controlled water pressure build-up during start up. Rapid charging can cause water hammer.
- WARNING: At pressures below that indicated, the nozzle will have reduced flow and reach. Be sure you have enough flow and pressure for the situation (see IFSTA and NFPA manuals for guidelines).
- WARNING: Do not use on electrical fires. May result in electrocution.
- WARNING: Ensure the nozzle is aimed in a direction that is safe, prior to charging.
- WARNING: Do not use the nozzle as a forcible entry tool. Doing so may damage it or make it inoperable.
- WARNING: Ensure the thread on the nozzle swivel is matched to the thread on the monitor connection. Mismatched threads may allow the nozzle to suddenly come off under pressure possibly causing property damage and/or serious bodily injury.

### PRODUCT CAUTIONS

- CAUTION: If any tags or bands on the nozzle are worn or damaged and cannot be easily read, they should be replaced.
- CAUTION: For use with fresh water or standard fire fighting foams only. Not recommended for use with salt water. After use with foam or salt water, flush with fresh water.
- CAUTION: For fire fighting use only.
- CAUTION: Do not over tighten the nozzle onto the monitor connection.
- CAUTION: The nozzle is configured for optimum performance. Do not alter in any manner.

**CAUTION:** Your nozzle should be inspected prior and after each use, to ensure it is in good operating conditions. Periodically, an unanticipated incident may occur where the nozzle is used in a manner that is inconsistent with standard operating practices and those listed in IFSTA. A partial list of potential misuses follows:

- Operating above maximum rated pressure and flow.
- Not draining, and allowing water to freeze inside the nozzle.
- Dropping the nozzle from a height where damage is incurred.
- Prolonged exposure to temperatures above +130 degrees F, or below -25 degrees F.
- Operating in a corrosive environment.
- Other misuse that might be unique to your specific fire fighting environment.

There are many “tell tale” signs that indicate nozzle repair is in order, such as:

- Controls that are either inoperable or difficult to operate.
- Excessive wear.
- Poor discharge performance.
- Water leaks.

If any of the above situations are encountered, the nozzle should be taken out of service and repaired, plus tested by qualified nozzle technicians, prior to placing back in service.

## INSTALLATION

The Style 1577 with a 3-1/2” swivel must be locked in place as follows:

1. Thread the nozzle onto the monitor outlet.
2. Rotate the motor into required location.
3. Tighten the socket head set screw in the side of the swivel using a 3/16” hex wrench.
4. Plug in motor connector

**Warning:** The electrical control system must incorporate a current limiting circuitry set for a maximum of 10 amps for 12 volts (5 amps for 24 volts). Without circuitry set, motor may become inoperable if stalled during operation.

## OPERATING INSTRUCTIONS

### DETERMINING FLOW

The SaberMaster has two operating positions - Smooth Bore and Adjustable Fog.

1. Push the Pattern Control Switch towards Straight Stream position to operate in Smooth Bore.
2. Push the Pattern Control Switch towards Fog to operate in Fog. Once the Smooth Bore streams have completely shut off, the Fog stream is in a narrow pattern. By continuing to hold down the Control Switch, the pattern will widen to full wide fog. The stream can be stopped between narrow and wide by releasing the switch.
3. To go back to Smooth Bore, push the Pattern Control Switch towards Straight Stream until the Fog stream has completely shut off.
4. The SaberMaster has a manual override feature which allows the stream position to be manually operated. Place a 1/4” hex wrench into the hex socket at the discharge end of the motor assembly. From the discharge end, turn the hex wrench clockwise to go into Smooth Bore and counter-clockwise to go into Fog.

## MAINTENANCE

- Under normal conditions, periodically flushing the nozzle with clean water and cleaning grit and dirt from around exterior moving parts will allow the nozzle to operate as designed.
- Over time, the seals may need to be replaced. This can be accomplished by returning the nozzle to Akron Brass for repair.



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