



## STYLES 1522, 1523, 1525, 1526, 1527 & 1528 SABERJET™ NOZZLE OPERATING INSTRUCTIONS

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

### PRODUCT RATINGS

Maximum Pressure: 200 psi/14 bar

### PRODUCT WARNINGS

- ⚠ **WARNING:** Charge all lines slowly to facilitate a controlled water pressure build-up during start-up. Open and close slowly. Rapid opening will produce a sudden thrust. Rapid opening or closing can cause water hammer. Have enough firefighters on the line to safely control the reaction force created by the stream.
- ⚠ **WARNING:** At pressures below that indicated those on the label, 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:** This nozzle is not for use on electrical fires. May cause electrocution.
- ⚠ **WARNING:** Do not use the SaberJet nozzle in portable hose holders.
- ⚠ **WARNING:** Ensure the SaberJet is aimed in a direction that is safe, prior to opening.
- ⚠ **WARNING:** Do not use the SaberJet 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 hose connection.
- ⚠ **WARNING:** When operating at lower pressures the hose can kink more easily. A kink in the hose chokes off the flow, which may result in inadequate flow for the situation.
- ⚠ **WARNING:** Do not use a SaberJet as a shutoff when testing hose.

### PRODUCT CAUTIONS

- ⚠ **CAUTION:** This nozzle has 2 shutoffs. Both must be off for the nozzle to be completely off.
- ⚠ **CAUTION:** The fog stream can be opened when the shutoff handle is closed.
- ⚠ **CAUTION:** This nozzle requires specific training about using the two shutoffs. This is especially true if there is the possibility of mutual aid.
- ⚠ **CAUTION:** If any tags or bands on the nozzle are worn or damaged and cannot be easily read, they should be replaced.
- ⚠ **CAUTION:** Recommended for use with fresh water or standard fire fighting foams only. If used with foam or salt water, thoroughly flush with fresh water to minimize corrosion potential.
- ⚠ **CAUTION:** For fire fighting use only.
- ⚠ **CAUTION:** When using with an eductor, make sure the nozzle is properly matched to the eductor. If they are not, the nozzle flow, pressure, and reach may be reduced or the eductor may shut down. Do not throttle your SaberJet with an eductor in the line. This can cause the eductor to shut down.
- ⚠ **CAUTION:** Do not over tighten the nozzle onto the hose connection.
- ⚠ **CAUTION:** The nozzle is configured for optimum performance. Do not alter in any manner.
- ⚠ **CAUTION:** Do not expose the pistol grip or shutoff handle to Trichloretyhylene or Trichlorethane. These chemicals can weaken the parts and make the nozzle inoperable over time.
- ⚠ **CAUTION:** Opening the fog stream while flowing the solid bore will reduce the nozzle pressure and increase the flow of the nozzle.
- ⚠ **CAUTION:** Your nozzle should be inspected prior and after each use, to ensure it is in good operating condition. 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 it back in service.

## OPERATING INSTRUCTIONS

The SaberJet has two (2) separate waterways that operate independently (solid bore and fog stream). The streams can also be operated simultaneously. The fog stream is calibrated to flow 95 gpm (360 lpm) at 50 psi (3.45 bar) and 135 gpm (510 lpm) at 100 psi (7 bar). The solid bore at 50 psi pitot pressure flows approximately:

3/4"	117 gpm (443 lpm)
7/8"	158 gpm (598 lpm)
15/16"	183 gpm (693 lpm)
1"	208 gpm (787 lpm)
1 1/8"	260 gpm (984 lpm)

### SOLID BORE (Shutoff #1)

- To open: Pull the handle toward the inlet. Only opens smooth bore!
- To close: Push the handle toward the outlet. Only closes smooth bore!
- To change the tip:
  1. Remove the set screw found under the wide band on the nozzle body.
  2. Place an open face spanner wrench into the holes found on the discharge end of the tip.
  3. Rotate the tip counterclockwise until it comes loose and remove it from the nozzle.
  4. Carefully remove the O-Ring from the threaded end of the tip.
  5. Slide the baffle assembly off the tip being careful not to damage the O-Ring under the baffle assembly or lose any shims found between the tip end of the baffle assembly.
  6. Apply O-Ring lube to the O-Rings.
  7. Slide the shims, then the baffle head onto the new tip. Again being careful not to damage the O-Ring.
  8. Install the O-Ring onto the threaded end of the tip.
  9. Thread the tip assembly back into the nozzle until it is tight.
  10. Install the set screw into the side of the nozzle body.

### FOG STREAM (Shutoff # 2)

**⚠ CAUTION:** The nozzle opens into a straight stream. Be prepared to handle the reaction force created by the stream. Also the fog stream can be open when the shutoff handle is closed.

- To open: Rotate the bumper counterclockwise until the pattern indicator is aligned to the required stream i.e. straight stream, narrow fog, or wide fog. Only opens fog pattern!
- To close: Rotate the bumper clockwise until the stream is shut off and the off indicator is visible. Only closes fog pattern!
- To flush: Rotate the bumper counterclockwise until the pattern indicator is aligned with the word flush located past the wide fog indicator.

## **MAINTENANCE**

- 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.
- Flush with fresh water after each use with salt water or fire fighting foam.
- Over time the seals and turbine teeth may need to be replaced. This can be accomplished by purchasing the Akron Repair Kit Style 9182. Use qualified maintenance mechanics or return the nozzle to Akron Brass for repair.