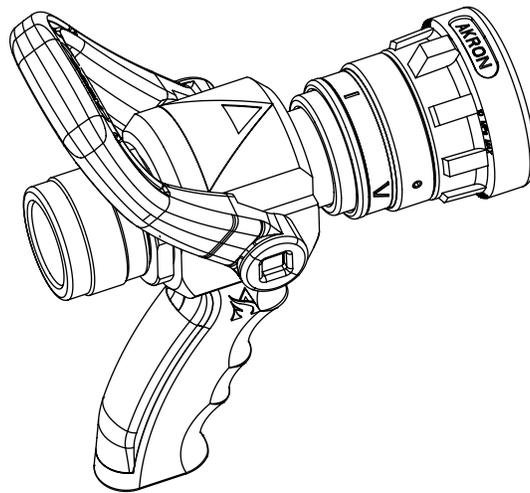




# AKRON<sup>®</sup>

## BRASS COMPANY

### Style 4808 UHP NOZZLE OPERATING AND MAINTENANCE INSTRUCTIONS



The following is intended to provide the basic instructions for operating an Ultra-High Pressure hand line nozzle. Read and understand these operating instructions before use.

#### PRODUCT RATINGS

Maximum Pressure: 1500 psi (103 bar)

Maximum Flow: 30 gpm (113 lpm)

Mass: 3.2 lbs (1.45 kg)

- ⚠ 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 on the label, the nozzle will have reduced flow and reach. Be sure you have enough flow and pressure for the situation.
- ⚠ WARNING:** Not for use on electrical fires. May cause electrocution.
- ⚠ WARNING:** Do not use the UHP hand line nozzle in portable hose holders.
- ⚠ WARNING:** Ensure the UHP hand line nozzle is aimed in a direction that is safe, prior to opening the shutoff bale.
- ⚠ WARNING:** Do not use the UHP hand line 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 hose connection.
- ⚠ WARNING:** Do not use as UHP hand line nozzle as a shut-off when testing hose.

- ⚠ 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:** In the flush position, the nozzle flow will increase. Depending on pump capacity and other devices being used, this may reduce pressure available to the other devices currently being used.
- ⚠ WARNING:** When leaving the FLUSH position, rotate the pattern sleeve/bumper slowly. Rapid opening or closing can cause water hammer.

## 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 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:** Your nozzle should be inspected prior to 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.

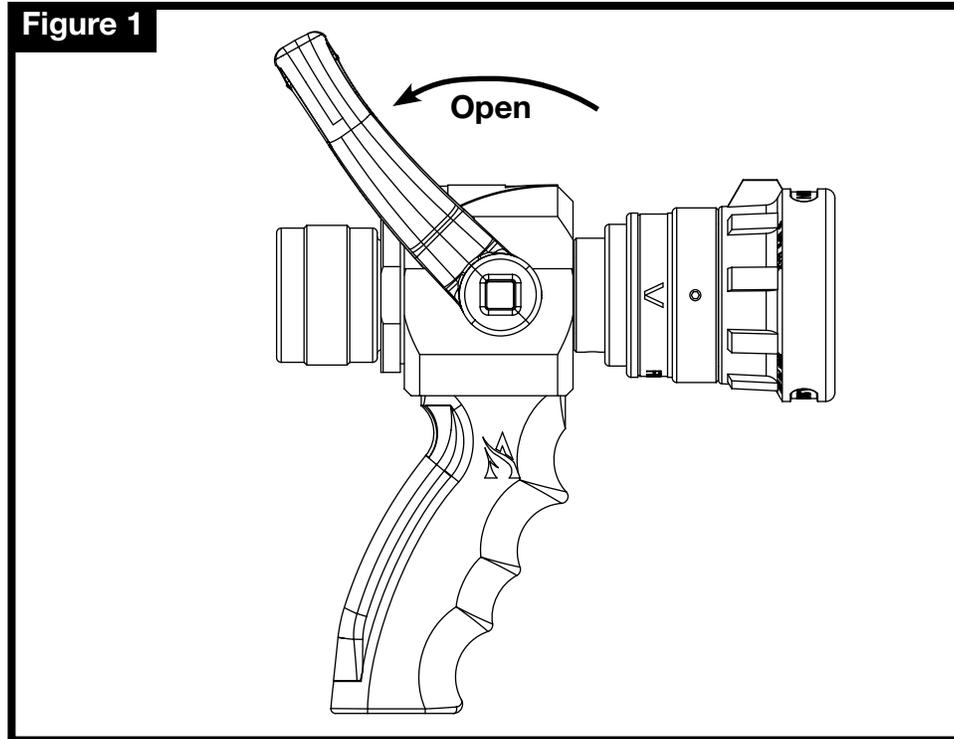
If any of the above situations are encountered, the nozzle should be taken out of service and repaired, plus tested by qualified nozzle technicians, prior to placing it back in service.

## OPERATING INSTRUCTIONS

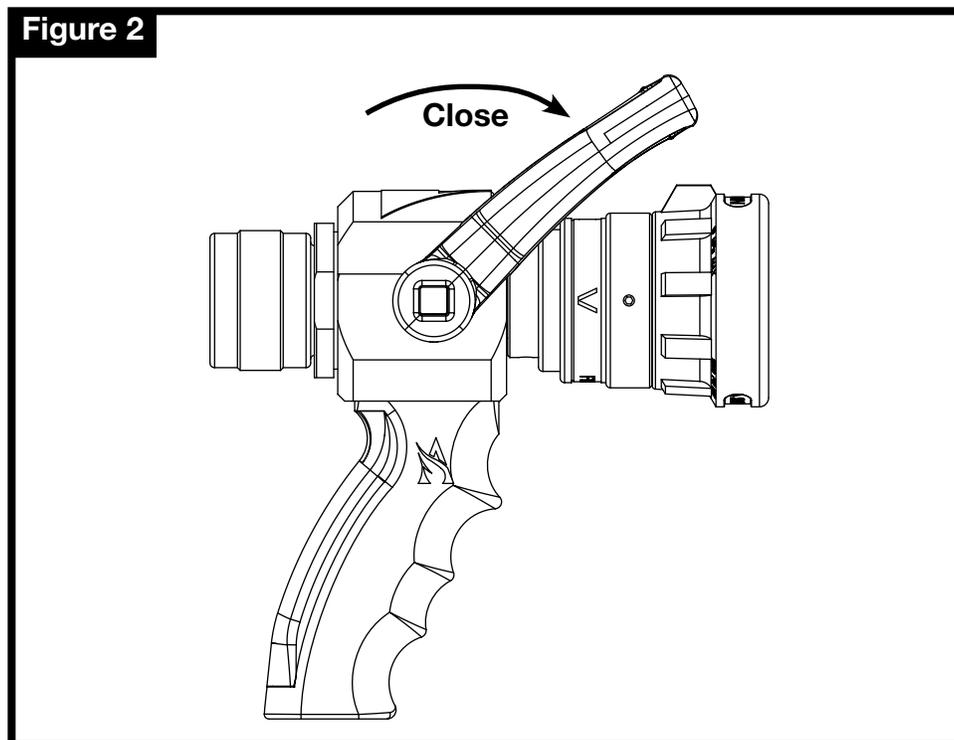
### SHUTOFF

**⚠ 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.

To Open: Pull the handle toward the inlet (Figure 1).



To Close: Push the handle toward the outlet (Figure 2).

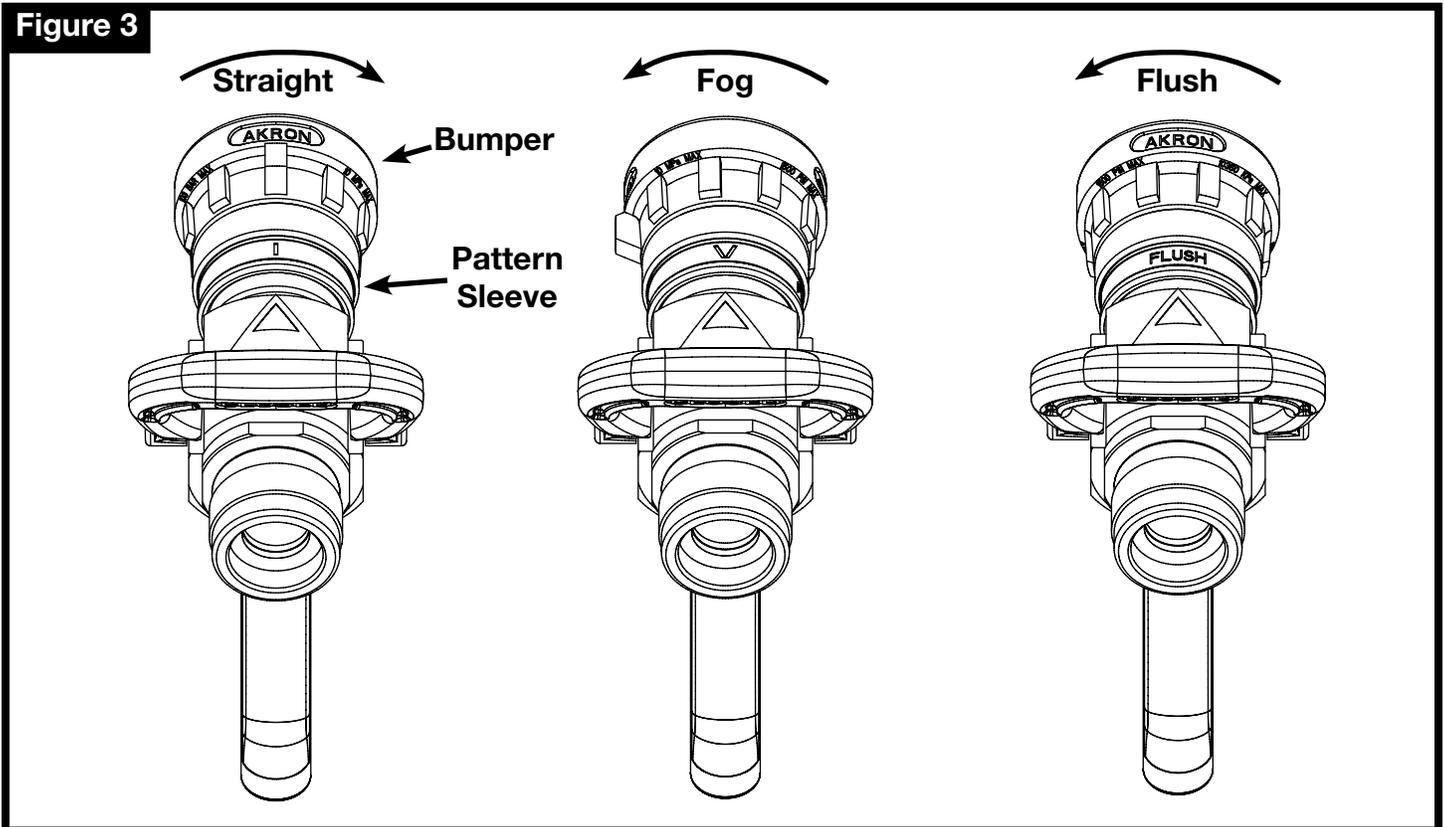


## NOZZLE OPERATION

- Straight stream: Rotate the pattern sleeve/bumper clockwise until it touches a hard stop (Figure 3).
- Wide Fog Pattern: Rotate the pattern sleeve/bumper counterclockwise until it touches a soft stop (Figure 3).  
If the stream shape becomes distorted due to particles lodged in the baffle, move the pattern sleeve/bumper to the flush position.
- Flush Position: Rotate the pattern sleeve/bumper counterclockwise until it touches a soft stop (Wide Fog). Continue to rotate the pattern sleeve/bumper counterclockwise until it touches a hard stop (Figure 3).

**⚠ WARNING:** In the flush position, the nozzle flow will increase. Depending on pump capacity and other devices being used, this may reduce pressure available to the other devices currently being used.

**⚠ WARNING:** When leaving the FLUSH position, rotate the pattern sleeve/bumper slowly. Rapid opening or closing can cause water hammer.



To determine the required engine pressures to achieve the flow setting, use the following formula: Engine pressure (EP) = Friction Loss (FL) + Nozzle Pressure (NP) + pressure loss or gain due to elevation (1/2 psi per foot of height difference).

## MAINTENANCE

- Inspect nozzle prior to and after each use, to ensure it is in good operating condition.
- Under normal conditions, periodically flushing the nozzle with clean water, cleaning grit and dirt from around exterior moving parts will allow the nozzle to operate as designed. We recommend low-temperature lubriplate as the lubricant.
- Over time the seals and turbine teeth may need to be replaced. This can be accomplished by purchasing the appropriate Akron repair kit. Use qualified maintenance mechanics or return the nozzle to Akron Brass for repair.
- Regularly check the baffle screw to be sure it is tight.
- Use Low-temp Lubriplate on metal parts and Parker O-Ring lubricant on O-Rings



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