AKRON® BRASS COMPANY

OPERATING INSTRUCTIONS
1" ASSAULT™ NOZZLES & TIPS

The following is intended to provide the basic instructions for operating an Assault nozzle.

PRODUCT RATINGS
Maximum operating pressure 580 psi/40 bar.

PRODUCT WARNINGS

⚠**WARNING:** Not for use on electrical fires.

⚠**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 (See ISFTA and NFPA manuals for guidelines).

⚠**WARNING:** Open and close shut-off slowly. Rapid opening will produce a sudden thrust. Rapid opening or closing can cause water hammer.

⚠**WARNING:** If any tags or bands on the nozzle are worn or damaged and cannot be easily read, they should be replaced.

⚠**WARNING:** Pulsing the shutoff can be accomplished with this nozzle. However, you must assure that all equipment used with the nozzles can withstand the resulting peak pressures and that the fire fighter is aware and can effectively support the sudden change in nozzle reaction when pulsing.

GENERAL INSTRUCTIONS
- Not recommended for use with salt water.
- After use with foam, flush with fresh water.
- Have enough firefighters on the line to safely control the reaction force created by the stream.
- Assault nozzles are labeled for the flow and pressure at which they are set.
- Charge all lines slowly to facilitate a controlled water pressure build-up during start-up.
- For firefighters use ONLY.
- For use with water or standard fire fighting foams ONLY.
- Ensure your Assault is properly matched to your eductor.
- Do not use your Assault to throttle flow with an eductor in the line. This can cause the eductor to shut down.
- Do not use Assault nozzles in portable hose holders.
- Ensure the Assault is aimed in a direction that is safe, prior to operating.
- Do not use the Assault as a forcible entry tool.
- Ensure that the thread on the nozzle swivel is matched to the thread on the hose connection.
- Do not overtighten the nozzle onto the hose connection.
- The nozzle is configured for optimum performance. Do not alter in any manner.
- Do not expose pistol grip or shutoff handle to Trichlorethylene or Trichlorethane.

OPERATING GUIDELINES
SHUTOFF
- Open and close the Shutoff slowly.
  To open: Pull the handle toward the inlet.
  To close: Push the handle toward the outlet.

NOZZLE

- To change the spray pattern rotate the pattern sleeve/bumper. Rotate it clockwise for straight stream (designated by a I) and counterclockwise for wide fog (designated by a V).
- The flow setting for an Assault can be changed by purchasing a flow kit.
- 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).
- To flush the nozzle, rotate the pattern sleeve/bumper counterclockwise to the FLUSH setting. Rotate slowly back to the required setting when obstruction is flushed.

MAINTENANCE

- 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 nozzle.
    - Dropping nozzle from a height where damage is incurred.
    - Prolonged exposures to temperatures above +130°F, or below -25°F.
    - Operating in a corrosive environment.
    - Other misuse that might be unique to your specific firefighting environment.

Also, there are many "tell tale" signs that indicate nozzle is not 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 into service.

- 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 and turbine teeth, if applicable, may need 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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