

Installation, Operating, & Maintenance Instructions



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Product Safety Information

- All personnel who may be expected to use this equipment must be thoroughly trained in its safe and proper use. Appropriate personal protective equipment, including eye protection, should be used while working with this equipment.
- Before flowing water from this device, check that all personnel (fire service and civilian) are out of the stream path. Also, check to make sure stream direction will not cause avoidable property damage.
- Become thoroughly familiar with the hydraulic characteristics of this equipment, and the pumping system used to supply it. To produce effective fire streams, operating personnel must be properly trained.
- Open water valves supplying this equipment slowly so that piping and hoses fill slowly, thus preventing possible water hammer occurrence.
- After each use, and on a scheduled basis, inspect equipment per instructions in the Maintenance section.



Important: Before installing and operating provided equipment, read this manual thoroughly. Proper installation and understanding of the intended use of the Chief XD EN Break-Apart is essential to safe operation.

System Information: Nozzle (Type, Gallonage, Serial Numbers, Colour, Date Received, Etc.):	

Overview

The Chief XD EN series of handline break-apart nozzles is of constant (fixed) liter per minute design and available in 4 and 6 BAR flow rate options. The constant flow feature maintains the same flow rate throughout the stream pattern selection from straight stream to wide fog. The break-apart feature allows the user to remove the nozzle tip to clear debris and/or flow with an optional integral smooth bore. The Chief XD EN series is rugged, simple and effective.

Features

Nozzle Shutoff

The shutoff portion of the nozzle features a double drive, double stop forged metal bale handle for years of dependability and service. The full round metal valve ball creates a smooth unobstructed waterway to help deliver efficient and accurate flow. The valve ball seals against two hydraulically balanced self-lubricating seats which make operation easy and dependable. The shutoff inlet features a full time (free) swivel that allows the nozzle to be rotated without breaking the hose connection and eliminating chance of injury by the operator. The shutoff body is constructed of forged metal for maximum strength. The metal pistol grip is designed for maximum grip with or without a gloved hand. The ergonomic inserts in both the pistol grip and bale handle can be color coded and provide additional grip while handling the nozzle. Laser etching for all markings on the shutoff provide years of identification.

Nozzle Tip

The tip has a metal extruded nozzle body for maximum strength. Stainless steel spinning teeth or urethane fixed teeth that will not break. If necessary, either teeth option can be easily removed and replaced. The ergonomic bumper with stream indicator lug, with 12 colour options, protects and allows for easy rotation of the tip from straight stream to flush (counterclockwise) and from flush to straight stream (clockwise). Pattern adjustments are guided by cam slots for extreme reliability. When rotated (counterclockwise) past wide fog, the flush feature opens up the waterway and allows debris to pass without ever shutting down. The tip is equipped with a low profile, easily operated, locking lever which allows the operator to remove the tip in less that a 1/4 turn. Once the nozzle tip is removed, the operator can flush large debris or flow with the optional integral smooth bore within the shutoff. Field changeable stem heads provide flexibility to the end user. Like the shutoff, all markings are laser etched for years of readability.

Technical Information

See www.elkhartbrass.com for information.



Installation Instructions

Prior to attaching the break-apart nozzle, ensure that there is a gasket behind the standard BSP female inlet threads. This will assure that the nozzle or tip will not leak at the connection. Install the nozzle by rotating the inlet clockwise onto hose coupling or other device threads. When the end of the male threads contact the gasket, tighten securely. Other inlet options may require other attachment methods. Also make sure that the tip is in the locked position to ensure that it will not come off when the hose line is charged.

Operation Instructions

These instructions are written from the nozzle operator's perspective when positioned behind the nozzle.



Shutoff Valve Operation

- TO CLOSE push the bale handle forward towards the nozzle discharge as far as possible.
 - Always charge the hose line with the shutoff valve closed.
 - Always close the shutoff valve slowly when the nozzle is flowing water.
- TO OPEN pull the bale handle back towards the nozzle inlet as far as possible.
 - Always be prepared to counteract the nozzle reaction before opening the shutoff valve when the nozzle is pressurized.

Changing Stream Patterns

- STRAIGHT STREAM grasp the hand grip (bumper) and turn the nozzle tip clockwise as far as possible.
- WIDE FOG grasp the hand grip (bumper) and turn the nozzle tip counter clockwise until resistance is felt.
 - The wide fog position can only be felt when the nozzle is flowing water. When not flowing water turning the nozzle tip counter clockwise until resistance is felt will put the nozzle in the FLUSH position.
- NARROW FOG the stream pattern can be adjusted by placing the nozzle tip anywhere in between the STRAIGHT STREAM and WIDE FOG positions described above. There is also a detent location that indicates a spray angle of at least 30° fog. This is a haptical device that is both audible and felt.

Flush Position

- To place the nozzle in FLUSH position when flowing water place the nozzle in the WIDE FOG position and increase the force needed to continue turning the nozzle tip in the counter clockwise direction. Continue turning counter clockwise as far as possible.
- To place the nozzle in FLUSH position when not flowing water turn the nozzle tip counter clockwise as far as possible.
- Always place the nozzle back in the STRAIGHT STREAM position after flushing the nozzle.

Tip Lock Operation

To Remove

- Close bale handle.
- Press the LOCKING LEVER and rotate tip clockwise unit it stops.
- Pull tip forward and remove.

To Install

- Align arrows located on tip and shutoff.
- Pull tip towards shutoff. Once stops, rotate counter clockwise until the LOCKING LEVER engages slot.
- Check to make sure tip swivel will not rotate.
- Place nozzle back in the STRAIGHT STREAM position.

Maintenance & Care Instructions

Care

The Chief XD EN series of break-apart nozzles are designed to provide years of trouble free service. The nozzle should be treated with care and not be used as battering ram, sledge hammer, or forcible entry tool.

Weekly visual inspections and monthly operational checks should ensure excellent reliability. All nozzles and tips should be flow tested before entering any hazardous environment to ensure equipment is operating properly.

Preventive Maintenance

The following maintenance procedure should be followed after each use of the Chief XD EN Break-Apart nozzle.

Chief XD EN Break-Apart Nozzle

- Remove from hoseline or other apparatus.
- Inspect the inside and outside of the nozzle for any debris or buildup. Remove any debris and flush inside with fresh clean water clean outside with mild soap & water using a soft cloth and/or soft bristle brush.
- Inspect the nozzle shutoff and remove any debris. OPEN/CLOSE the shutoff to ensure no debris is caught and flush with fresh clean water.
- Rotate tip through pattern positions to ensure it moves freely. If not working freely, remove tip, clean and re-grease cam slots. Reinstall.
- Rotate the swivel to ensure there is no binding in the joint. By design, the full time (free) swivel does not rotate without force, but check to make sure it will rotate. If binding, remove swivel and clean any debris from ball race. Reinstall.
- Check to make sure gasket inside swivel (if required) is not damaged. If so, replace.
- If nozzle or tip has spinning teeth, make sure they spin freely. If not, remove, clean and reinstall using mild soap and water with a soft cloth and/or soft bristle brush.

- Remove tip and inspect locking mechanism, cam slot, and cam bosses. Make sure there is no binding, mechanism works properly, and remove any debris. Re-grease cam slot and cam bosses if necessary (see below).
- Rinse complete nozzle or tip with "fresh" clean water and let dry prior to storing.
- See www.elkhartbrass.com for exploded parts drawings.



Warranty Information

The Chief XD EN series offers a limited lifetime warranty against defects in materials or workmanship.



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