



## Operating Instructions

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain information for future reference.

### 3/4" Primus Nozzle™

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#### DESCRIPTION

USB SEC's Primus Nozzles™ were developed and precisely manufactured in Germany to meet the highest technical standards. Tempered stainless steel is the primary material of construction, allowing the nozzle to be operated by pressurized potable or recycled water. High performance ceramic clutch discs and angles of jet incidence in the cleaning head control the speed of rotation.

These nozzles require no lubrication or replacement of internal mechanical parts during the first year of operation, making this nozzle very user-friendly. Grease, mineral deposits and roots up to 3/16" diameter don't stand a chance against the Primus Nozzle™.

#### SPECIFICATIONS

| <b>Part No.</b> | <b>Cleans Pipe Diam.</b> | <b>No. of Inserts</b> | <b>Hose Connection</b> | <b>Dimensions L x W</b> | <b>Weight</b> |
|-----------------|--------------------------|-----------------------|------------------------|-------------------------|---------------|
| 1-0501-5030     | 6 - 12"                  | 12                    | 3/4" NPT               | 7-3/8 x 4-3/4"          | 7.0 lbs.      |

**Pump Output Required:** 50 GPM, 3,000 PSI, Max.

**Propulsion System:** Advanced, Optimized 3D Hydro Mechanics™.

#### GENERAL SAFETY INSTRUCTIONS

##### **WARNING!**

1. For your own safety, read all of the instructions and precautions before operating tool.
2. The service staff must be trained in the proper operation of the tool.
3. Wear proper apparel. Do not wear loose clothing, rings, bracelets, or other jewelry that may get caught in moving parts of the tool.
4. Wear safety shoes with non-slip soles.



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5. Wear safety glasses complying with United States ANSI Z87.1. Everyday glasses are **NOT** safety glasses.

## **GENERAL SAFETY INSTRUCTIONS (Continued)**

6. Be alert and think clearly. Never operate tools when tired, intoxicated or when taking medications that cause drowsiness.

## **OPERATION**

1. Connect the high pressure hose to the Primus Nozzles™ at the rear propulsion part. **Do Not connect the hose to the nozzle using the guide skid**, as this will cause improper operation of the nozzle.
2. **Do not** allow the nozzle to be slammed or dropped on its head when lowering it into the manhole.

## **MAINTENANCE**

1. Periodically check the nozzle giving special attention to the inserts and insert seats. **It is extremely important that all inserts are free of any debris** because the inserts cause the nozzle to spin and propel forward. Following this precaution will ensure that the Primus Nozzle™ operates with the highest performance.
3. Use an M6 socket wrench to back out the front inserts (counter-clockwise). Clean the inserts and insert seats. Replace the inserts and tighten, using **Loctite® Blue Thread Locker**.
4. Repeat Step 2. for the rear inserts.

## **CHANGING THE SKID**

1. The skid should be changed only if necessary: (a) replacing the skid; (b) centering the nozzle on a flexible skid; or (c) replacing with a larger size skid.
2. Locate the hole in the body of the Primus Nozzle™ that fits the punch (provided).
3. Place one guide skid of the Primus Nozzle™ into a vice with the hole in the body facing up.
4. Place the punch (provided) into the hole and a wrench on the rear propulsion unit. Turn the punch clockwise, the wrench counter-clockwise and unscrew the rear propulsion unit from the body.
5. Pull the body from the front of the skid.



6. Place the body into the new skid and repeat Step 4. **in reverse order**. When re-attaching, use **Locktite® Blue Thread Locker**.

## **LIMITED WARRANTY**

**USB SEC ONE-YEAR LIMITED WARRANTY.** USB SEC Primus Nozzles™, models covered in this manual, are warranted by USB Sewer Equipment Corporation (USB SEC) to the original user against defects in materials or workmanship under normal use for one year after date of purchase. Any part which is determined to be defective in material or workmanship and returned to an authorized service location, as USB SEC designates, shipping costs prepaid, will be, as an exclusive remedy, repaired or replaced, at USB SEC's option. For limited warranty claim procedures, see "PROMPT DISPOSITION" below. This limited warranty gives purchaser specific legal rights which vary from jurisdiction to jurisdiction.

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## **LIMITED WARRANTY (Continued)**

**PROMPT DISPOSITION.** USB SEC will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to USB SEC at address below, giving dealer's name, address, date and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to the buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.

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