Upstream Detergent Injector (50-0161) for High PSI Soap Application

- Two body styles: 3/4” GHT for quick attachment and 1/2” NPT for permanent installation.
- Two plunger styles designed for pump flow rates of 1.5-4.0 gpm and 4.0-7.0 gpm.
- On/Off feature helps prevent pump cavitation.
- Durable, 160°F max., 60 PSI max., for pressure higher than 60 PSI use inlet regulator Part #22-0099.
- Easy to install, use and maintain.

**WARNING:** DETERGENTS ARE INJECTED BEFORE THE PUMP. ENSURE DETERGENTS ARE HARMLESS TO THE PRESSURE WASHER PUMP.

READ ALL INSTRUCTIONS AND OPERATIONS MANUALS.

WEAR PROTECTIVE GOGGLES AND OTHER RECOMMENDED CLOTHING.

**CAUTION:** PROTECT FROM FREEZING - USE AND STORE INJECTOR IN AREAS ABOVE 32°F TO PREVENT DAMAGE.

TO PREVENT DAMAGE - DO NOT USE INJECTOR WITH HOT WATER ABOVE 160°F.

USE CLEAN WATER TO PREVENT DAMAGE OR PREMATURE WEAR TO INJECTOR COMPONENTS.

ALWAYS FLUSH INJECTOR AFTER USE.

**NOTE:** Improper adjustment of set screw will cause pump cavitation. The cavitation (lack of water to the pump inlet) will cause damage to the pump seals that will not be covered by the factory warranty.

**INSTALLATION AND OPERATION:**

**NOTE:** If you have the 1/2” NPT version, start with step #3. It will already be rigidly connected.

1. Connect the water supply hose to the female inlet of the injector.
2. Connect the male threads of the injector to the garden swivel fitting on the pressure washer.
3. With the plunger up in the “off” position, turn on the water supply and operate the pressure washer according to its operations manual.
4. Turn the plunger to line the notch up with the shoulder bolt. Press the plunger down and turn it clockwise to lock “on”.
5. With the pressure washer operating, the trigger gun open, and the detergent line submerged, use an 1/8” hex wrench to adjust the screw down until detergent is being siphoned.

**NOTE:** Only turn in 1/4 turn increments.

**CAUTION:** DO NOT OVER ADJUST THE SCREW TO A POINT OF PUMP CAVITATION. KEEP SIPHON HOSE SUBMERGED TO PREVENT AIR INTAKE.

6. When not using the detergent, turn the plunger to line the notch up with the shoulder bolt. Pull the plunger up to the “off” position. If desired, turn the plunger to lock off.

**NOTE:** Usually after the initial setting, the injector will not need additional adjustment; however; different elevations or inlet water pressures may require a different setting. Simply repeat step #5 as needed, adjusting the screw down or up for proper setting.

**WARNING:**

This product contains one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Wash your hands after handling this product.
### Upstream Detergent Injector (50-0161) for High PSI Soap Application

#### Item # | Description
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1 | Adjustment Screw
2 | Plunger
3 | Shoulder Bolt
4 | O-ring
5 | Washer
6 | Injector Body
7 | Spring
8 | Stainless Steel Ball
9 | O-ring
10 | Hose Barb
11 | Clear Hose
12 | Detergent Strainer

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
<th>Action</th>
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| No detergent being siphoned | - unit not running  
- plunger is not in "on" position.  
- detergent strainer is plugged.  
- adjusting screw not properly set. | - ensure the unit is on.  
- ensure the injector plunger is on.  
- inspect and clean strainer.  
- follow step #5 of installation and operations instructions. |
| Water pump cavitation | - adjusting screw set down too far, causing excess restriction.  
- detergent hose not submerged, causing air intake. | - adjust the set screws up until cavitation stops.  
- ensure siphon hose is submerged. |
| Water leaks around plunger. | - o-ring is worn.  
- inlet water pressure is too high. | - replace o-ring.  
- do not exceed 60 PSI. |
| Water leaks out of the detergent hose when plunger is in the "off" position. | - debris in valve  
- check if valve is worn. | - remove hose barb and inspect for debris.  
- replace bad parts or install repair kit. |