



blue photon®

Technology & Workholding Systems

User & Operating Guide

## Barrel Loader

Barrel loader transfers BlueGrip™ workholding adhesive from cartridges to 30 cc syringes for easier handling in assembly operations. Barrel loader uses a 1L cartridge reservoir.

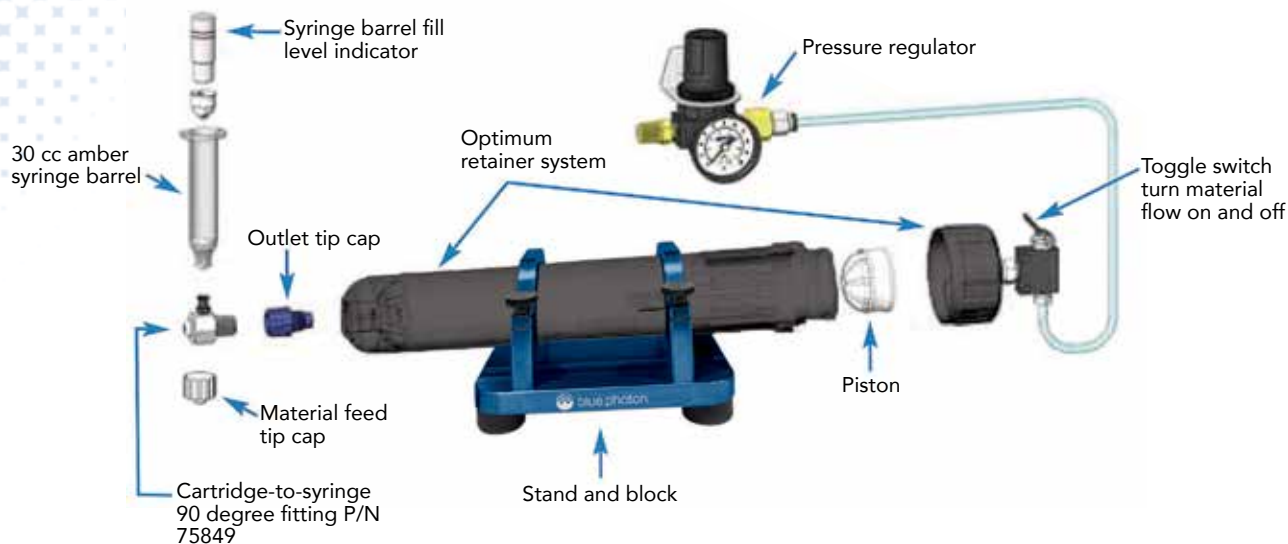
Barrel loader includes the stand with retainer block, optimum retainer system, empty cartridge reservoir and piston, material feed tip cap, cartridge-to-syringe fitting, 100 psi (6.9 bar) air pressure regulator with gauge and mounting bracket, manual toggle air valve with air hose assembly and syringe barrel fill level indicator plugs.

Part #: 46600

### Features

- Includes stand with retainer block.
- Use to fill 30 cc syringes from a 1 liter cartridge.
- 90 Degree Fitting (P/N 75849) available to fill 30 cc syringes.





## Setup

1. Install the 100 psi (6.9 bar) air pressure regulator assembly into a filtered air supply. Included with the regulator are fittings for plumbing the regulator into existing air lines.
2. Set the pressure to zero. Do not connect the air line from the barrel loader to the regulator until the cartridge reservoir has been filled and the retainer cap is installed.

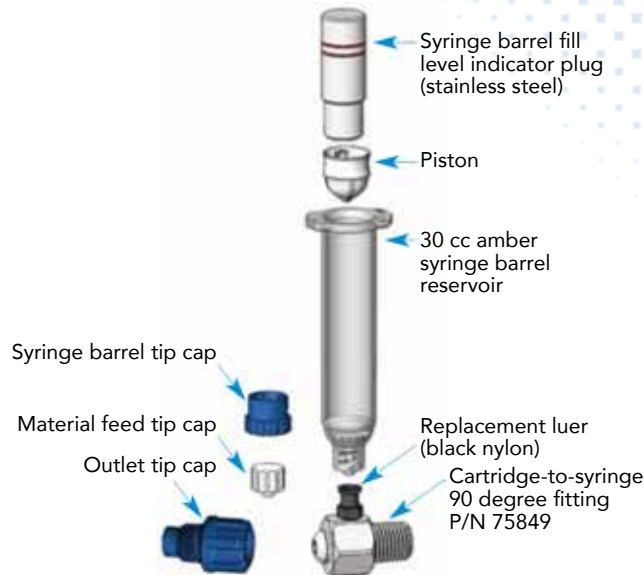


3. Remove the cartridge retainer from the cartridge stand.
4. Unscrew the retainer cap and remove the cartridge reservoir from the retainer.  
**Cap installation instructions:** Place the retainer cap on the retainer body. Twist the retainer cap clockwise until it locks in place.
5. Seal the threaded end of the cartridge with the outlet cap supplied.

6. Load the cartridge with your material.  
**1. Filling instructions:** When filling cartridges, leave a gap of at least .5 inches (12.7mm) between the top of the piston and the top of the cartridge so that the retainer cap can be installed.  
**2.** Once loaded, insert the piston while squeezing the cartridge slightly to allow air to pass by the piston during installation.



7. Place the filled cartridge reservoir into the retainer.
8. Reattach the retainer cap. Remove the cartridge outlet cap and install the cartridge-to-syringe 90 degree fitting into the threaded end of the cartridge reservoir (hand tighten only).
9. Place the cartridge reservoir assembly into the cartridge stand. Orient the cartridge-to-syringe 90 degree fitting to face upward. Tighten the retainer thumb screws.
10. Insure that the toggle air valve is positioned toward the cartridge retainer cap (OFF). Install the air line from the barrel loader to the air pressure regulator outlet.



## Operation

1. Prepare the 30 cc amber syringe barrel reservoirs for loading by first inserting a piston into the barrel. Use the syringe barrel fill level indicator plug to push the piston down to the bottom of the syringe barrel. Leave the fill level indicator plug in the syringe barrel.
2. Remove the material feed tip cap from the cartridge-to-syringe 90 degree fitting, then twist on the syringe. Only 1/2 turn is required.  
**Caution:** Do not over tighten or you may strip the 90 degree fitting.
3. Pull out the air pressure regulator knob until it clicks into the unlocked position. Turn clockwise to adjust the air pressure to 20 psi (1.4 bar). This is a starting point. More or less pressure may be required, depending on the viscosity of the material. Do not exceed 40 psi.
4. Place your hand over the syringe barrel fill level indicator plug to prevent it from popping out due to expanding air as filling operation begins.
5. Hold the switch in the ON position, away from the cap. Watch the fill rate carefully and adjust the pressure as necessary to regulate the fill rate. Let go of switch to stop the fill when the red line on the fill indicator is level with the top of the syringe.
6. Remove syringe barrel fill level indicator plug and cap the syringe if not being used immediately.
7. Remove the syringe and immediately install the next syringe. Place syringe barrel fill level indicator plug into new syringe barrel. Or, if filling has been completed, install the material feed tip cap.
8. Install syringe storage tip cap if syringe will not be used immediately.

## Equipment Misuse Hazard

**General safety:** Any use of the equipment and related accessories not consistent with that described in this manual, such as modifying or removing parts, over-pressurizing, using incompatible substances, or using worn, damaged or incompatible parts can cause them to rupture resulting in serious bodily harm, including substances splashed in the eyes or on the skin, or fire, explosion or other property damage. Never alter or modify any part of this equipment, as doing so may cause it to malfunction. Check all system components regularly and replace any worn or damaged parts with supplied or approved parts. Be sure that all dispensing equipment and accessories are rated to withstand the maximum operating pressure of the system.

## Personal Protection Equipment (PPE)

Wear all protective eyewear, gloves, clothing, and respirator as recommended by the manufacturer of the materials used.

## Material Compatibility

Be sure that all materials, including their vapors, contained in the system are compatible with all the materials. Read the material manufacturer's literature, including the MSDS (Material Safety Data Sheet) and observe all warnings before circulating materials through the system.

## User's Responsibility

It is the responsibility of the user to ensure the cartridge filling system is installed in a manner that complies with all local and national jurisdictional requirements.

## Important Safety Information

All disposable components, including syringe barrels, cartridges, pistons, tip caps, end caps, and dispense tips, are precision engineered for one-time use. Attempting to clean and re-use components will compromise dispensing accuracy and may increase the risk of personal injury.

## Always wear appropriate protective equipment and clothing suitable for your dispensing application.

- Do not exceed maximum operating pressure of 40 psi (7.0kg/cm<sup>2</sup>).
- Do not heat syringe barrels or cartridges to a temperature greater than 100°F (38°C).
- Dispose of components according to local regulations after one-time use.
- Do not clean components with strong solvents (e.g. MEK, Acetone, THF).
- Cartridge retainer systems and barrel loaders should be cleaned with mild detergents only.
- To prevent fluid waste, use pistons provided.

## Tipping and Dropping Hazard

Be sure that the barrel loader is placed on a hard, level surface and that all tubing lengths are sufficient to allow free motion of all movable components attached to the machine. Do not pull on tubing to move the machine. Tipping the machine or otherwise supporting it on its side can cause it to be unstable, resulting in possible damage.

If any system components are damaged or worn, they must be replaced with supplied or approved parts before returning to service.

## Tubing Safety

Pressurized tubing can be very dangerous. Tubing whose integrity is compromised due to wear, damage or misuse can develop a leak, spraying materials at high pressure. This spray can enter the eyes or cover the skin or cause other serious bodily injury, fire or property damage. Before pressurizing any system, examine all tubing for cuts, wear, bulges and leaks. If any of these conditions exist, replace the tubing immediately with supplied or approved tubing. Do not try to repair a damaged tube.

1. Be sure all tubing connections to the system are properly secured.
2. Be sure that the material to be dispensed is compatible with the system.



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