

Cartridge Killer™ Extrusion Gun Kit

Carlisle HVAC Products recently released our Cartridge Killer extrusion gun kit, a time-saving solution for applying fine beads of Spray-Seal™ sealant on boots, wyres and other fittings. This edition of Tech Tips will highlight the features and benefits of the Cartridge Killer kit and also provide instructions for assembly, usage and cleaning.

Features & Benefits

- Lightweight, hand-held gun with forward-facing, easy-to-pull trigger
- Rotating swivel enables application at any angle without causing kinks in the spray hose
- Custom, stainless-steel tip for pin-point application directly onto the joint or seam
- Precision control and consistent bead size and application
- Three tip sizes (0.012", 0.017" and 0.022") to meet job-specific requirements
- Stainless-steel wire mesh filter between gun and tip minimizes clogging
- 5-gallon capacity reduces change-over time as well as clean-up and storage requirements
- Stainless-steel and bronze materials ensure rust-free usage and storage in virtually any environment
- 8" extension enables you to seal inside longer ductwork sections
- Can be combined with our Mobile Sealant Delivery System, or an equivalent sprayer, for extended use without having to flush out the system on a daily basis (providing additional cost savings)



5-gallon capacity reduces change-over time as well as clean-up and storage requirements

Tip Sizes & Usage

The Cartridge Killer kit comes with three tip sizes to meet your job-specific requirements:

Orifice size (inches)	Flow rate (GPM) ¹	Time to empty pail (minutes) ²
0.012	0.15	33
0.017	0.31	16
0.022	0.52	10

¹Flow rate is based on water flowing through orifice at 2000 PSI. Actual flow rate will depend on pressure and viscosity of fluid.

²Time to empty pail is assuming the standard flow rate through the orifice and spray gun set to full open and allowed to run continuously. Actual time to empty pail will depend on size of components being sealed and time required to change between parts.

Assembling Your Cartridge Killer Kit

1. Remove contents from box.
2. Verify that all following components are in the kit:

Kit Contents		
Part #	Description	Kit Quantity
325323	Gun – lightweight – palm-held	1
325325	Rotating Swivel	1
325326	Stainless Steel Mesh Filter Screens	25
325812	8" Wand Extension	1
325320	0.012" orifice 304SS custom extrude tip	2
325321	0.017" orifice 304SS custom extrude tip	2
325322	0.022" orifice 304SS custom extrude tip	2

3. Install straight, rotating swivel onto the inlet side of the gun. Take care to not cross-thread when installing, as this can cause permanent damage to the seal and operation of the assembly.
4. Wrap Teflon tape (supplied) around threaded outlet of gun. Make sure to cover only the threaded section. If the Teflon tape covers the outlet, this can cause the kit to clog.
5. Verify fluid shut-off grommet is installed in the end of the gun. The white gasket goes toward the gun with the flat surface away from the gun. **If this is installed incorrectly, the gun will not achieve a positive-pressure shut-off when the gun trigger is released.** It may be necessary to depress the trigger slightly to get the shut-off grommet to set in the end of the gun.
6. Install the filter mesh within the female end of the 8" wand extension. If you are not using the extension, install the filter mesh within the female end of the extrusion cap. The wire mesh should fit tightly.
7. Install the preferred size of stainless-steel extrusion tip into the extrusion cap. It should fit tightly.
8. If using the 8" extension, thread the female end of the 8" extension over the threaded end of the gun. Use the appropriate tools to tighten the extension. If the extension is not tightened, leakage may occur.
9. Install the stainless-steel extrusion tip and extrusion cap over the threaded end of the gun (or the extension, if being used). Use the appropriate tools to tighten the extrusion cap. If the extrusion cap is not tightened, leakage may occur.



Connecting Your Cartridge Killer Kit to Sprayer Equipment

Follow these steps to connect your cartridge killer kit to your sprayer equipment.

1. Verify that your spray equipment is turned off and that any residual pressure is relieved.
2. Remove existing spray gun from your spray equipment.
3. Install the Cartridge Killer gun assembly onto the spray equipment hose, using the rotating swivel as the attachment connection. Use appropriate tools. If the rotating swivel is not tightened properly, the system could leak sealant from this location.

Note: The rotating swivel is designed to be installed without Teflon tape. If you use Teflon tape, make sure to cover only the threaded section. If Teflon tape covers the inlet of the rotating swivel, the system could clog.

Using Your Cartridge Killer Kit

WARNING: ALWAYS start your spray equipment with the pressure dial set to zero or the lowest setting. DO NOT EXCEED 500 PSI, as pressures above this can cause irreparable damage to the system and pose a danger to the operator.

1. Follow standard procedures to start up your spray equipment.
2. Starting with the pressure set to zero or to the lowest setting, trigger the Cartridge Killer gun into a waste pail. Slowly increase the pressure until you achieve the desired flow and bead size.
3. On your first trigger pull, with the spray equipment set to the desired pressure, you will see a slight initial increase in sealant being delivered. This is inherent to the design as the pressure comes to a steady state when the trigger is depressed. This initial increase will immediately dissipate, enabling you to apply a consistent bead of sealant.
4. As you begin using the Cartridge Killer system on joints and seams and achieve a consistent speed, adjust your pressure setting accordingly.
5. Take care to insert the tip as close as possible, or within, the joints and seams being sealed. This will allow the sealant to penetrate.

Cleaning Your Cartridge Killer Kit

WARNING: ALWAYS turn the pump off and relieve the pressure in the spray equipment before attempting any maintenance. Once this is complete, follow these steps to clean your system.

1. Follow the spray equipment manufacturer's directions for cleaning your pump equipment. If you do not have the manufacturer's directions, follow the steps outlined in the [Carlisle HVAC Mobile Sealant Delivery System User Manual](#) or watch [Carlisle HVAC's YouTube video](#) of this process.
2. During the pump cleaning process, you will utilize water or a solvent to flush the system. When flushing through the spray hose, flush directly through the Cartridge Killer system.
3. Once the pump equipment and Cartridge Killer system are flushed, remove the extrusion cap and extension wand (if used). Rinse and clean the cap, extension, wire mesh and stainless-steel tip.

