

viewport

The Viewport concept is simple: Provide a window that shows the ink level inside each Canon Pro1000 cartridge. While it sounds simple, the actual implementation took many months of experimentation with various components, materials and fabrication methods.

Finally the system came together in this dependable and proven kit that has been thoroughly tested for more than a year on a Canon Pro-1000 printer. The operational costs of the printer decreased dramatically with an 80% savings in consumable ink costs. [Find details at: StudioGroup.us/save](http://StudioGroup.us/save)

This toolkit contains all the tools you need to successfully install Viewports into your own Canon Pro-1000 printer.

Pre-Installation Preparation

Viewports are designed for an easy and leakproof installation. For the most recent advice on installation visit ViewportPro.com and review the step by step video guides.

Do not attempt a Viewport install into a cartridge if the chip has been identified as empty by the printer. You should install a Viewport into an active and currently “in use” cartridge. If you delay the installation until the cartridge is actually empty the printer’s software will write code to the chip located in the head of the cartridge. It will permanently mark the cartridge as empty and will not allow it to be used again.

Before an installation be sure to monitor your ink level by removing the cartridge periodically to verify that some ink still remains. You can also carefully drill a small refill hole into the top corner of an installed cartridge to replenish the ink until you are ready for an installation or to install into multiple cartridges at the same time. Please view the “Temporary Ink Replenishment” video at ViewportPro.com for more information.

When the cartridge ink is close to empty you can begin your Viewport installation. You should discard the small amount of ink that remains. Drilling the cartridge case while it is out of the printer (in an upright position) increases the chance that small particles will fall into the ink. It is safer not to refill the cartridge with this reclaimed ink.

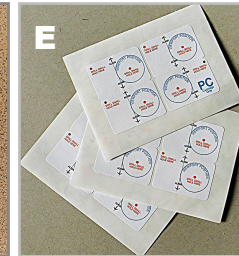
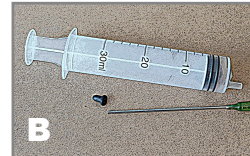
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Parts List

All the required parts and tools are included in the full installation kit.



- A. Specialty drill bits for the proper installation of the Viewport and the related ink fill plug.
- B. 30 ml blunt tip syringe for transferring ink.
- C. Viewports and ink refill silicone plugs.
- D. Permanent adhesive/sealant to provide a leakproof seal.
- E. Drilling templates to properly place the Viewport.
- F. Trimming and polishing tools

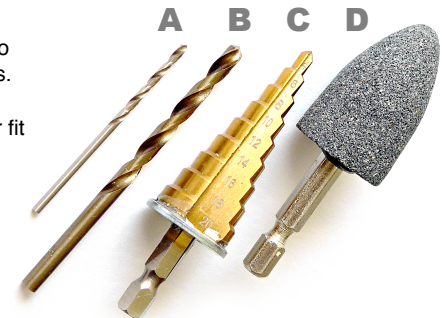


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Installation Drill Bits

The four drill bits included in your kit:

- A. The smallest drill bit (2mm) is used to set the two guide holes needed to accurately place the parts.
- B. The larger drill bit (4.35mm) is sized for a proper fit of the silicone ink plug.
- C. The “Step” drill bit is designed to allow a dependable enlargement of the 20mm Viewport hole. Follow the installation videos at ViewportPro.com for guidance to proper use.
- D. A conical grinding stone helps shape the Viewport opening for a leakproof bonding and for cleaning up any rough edges caused in the drilling process.

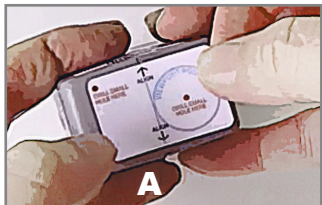


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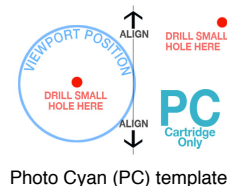
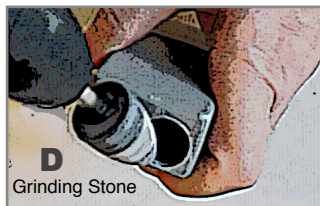
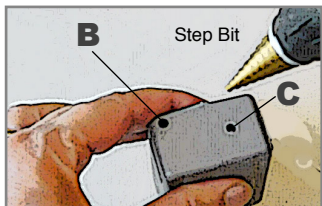
Hole Guides & Drilling

Use the provided guide hole templates to locate the proper positions for the ink refill hole and the Viewport. Pay special attention to the Photo Cyan template (marked PC) because the positions of the guide holes are reversed.

See the video "Why the Photo Cyan Viewport Is Reversed" at ViewportPro.com.



- Align the guide hole template with cartridge seam.
- The ink refill hole is located at the top corner of the tank.
- Use the Step drill bit to enlarge the Viewport opening.
- The grinding stone is used to shape and polish the surface of the tank around the Viewport.



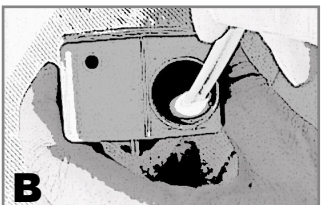
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Cleaning the Cartridge !

Take your time with this step. Repeat the rinsing process as many times as you like to be sure that all plastic particles inside the tank are removed.



- Wrap a paper towel around the ink tank's headpiece to protect the cartridge's electronic chip from water. Fill the cartridge to half capacity and vigorously agitate the tank while draining to dislodge plastic particles. Repeat this step several times until you are sure that all interior contaminants are removed.



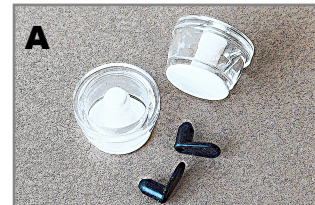
- Use the included sponge sticks to wipe the interior of the tank. Try to remove as much water as possible because this will speed up the drying time. Wait at least 1 hour for after wiping for the interior moisture to evaporate. After the interior is clean and dry you can proceed to the Viewport installation step.



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Inserting the Viewport

When the cartridge interior is clean and dry the Viewport window can be installed. Start by checking the fit of the window by positioning it in the opening.



- Viewport windows with ink fill silicone plugs. The full installation kit will include 12 Viewports.

BEFORE YOUR BEGIN PLEASE NOTE:

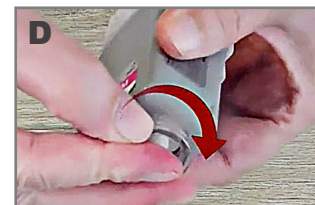
Cartridges marked as "empty" by the Canon printer will not function as Viewport refillable cartridges. To use these empty ink tanks you will need to replace the chip in the head of the cartridge. We suggest starting with a nearly empty and currently in use cartridge.



- Check the Viewport for its fit before applying sealant. It should feel snug and well seated when you insert it into the hole.



- If everything fits properly apply a small drop of sealant at 4 equal points around the viewport opening.



- Carefully insert the viewport while pushing firmly to seat the plastic edges against each other while slowly twisting the viewport into position. This step will lock the Viewport into its opening and evenly spread a thin layer of sealant along the mating surfaces. Check that the Viewport is level and true in the cartridge body.



- Allow the sealant/adhesive 5 minutes to set and firmly grip the Viewport. Then use the same sealant to run a thin and continuous bead around the entire perimeter of the Viewport where it comes into contact with the cartridge body. Be sure that there are no gaps.

The clear sealant shrinks as it cures and permanently bonds the plastic surfaces. This final perimeter bead of sealant will create the leakproof seal around the Viewport.

Allow at least 8 hours before adding ink to the new Viewport tank. Reinsert the "dry" cartridge into its proper ink port inside the Canon printer to keep the ink transfer nozzle from drying out. Do not use your printer until the cartridge is refilled after waiting 8 hours.



PLEASE NOTE:

When adding ink to your Viewport equipped cartridges you should not fill beyond approximately 3/4 full. Overfilling may allow ink to escape through the ink refill hole.