

## REPLACEMENT PARTS

Model	Description	Part No.
0010PC	1.0 mL Pipette Control Syringe	84001
0020PC	2.5 mL Pipette Control Syringe	84101
0030PC	5.0 mL Pipette Control Syringe	84201

### Replacement Parts

0010PC	1.0 mL LT Glass Barrel	10136
0010PC	Plunger Assembly	2145-01
0020PC	2.5 mL LT Glass Barrel	10137
0020PC	Plunger Assembly	2146-01
0030PC	5.0 mL LT Glass Barrel	10138
0030PC	Plunger Assembly	2146-02

# HAMILTON

THE MEASURE OF EXCELLENCE<sup>SM</sup>

## PIPETTE CONTROLLER

*Congratulations! You have purchased the finest quality precision fluid measuring device available today. We at Hamilton Company combine top quality materials with skilled workmanship, ensuring the highest possible performance level of every precision fluid device we manufacture. With proper care and handling, the pipette controller will provide unsurpassed performance in precision liquid handling year after year.*

Hamilton's pipette controller replaces bulb-type pipette fillers when using 1.0 mL, 2.5 mL, 5.0 mL, or smaller volume pipettes. Use the pipette controller with any graduated or volumetric pipette to accurately transfer fluids.

The pipette controller syringe is a Hamilton GASTIGHT<sup>®</sup> LT (Luer Tip) syringe modified with a special free-sliding, thumb-wheel plunger. The syringe is supplied with 41 mm (1 5/8") of clear vinyl tubing, 3 mm ID (.125") x 6 mm OD (.250"), to attach a pipette to the syringe's luer tip. The syringe draws liquids into the pipette (liquids do not enter the syringe barrel).


**NOTE: Since liquid does not enter the pipette controller syringe, the PTFE plunger tip may be lubricated lightly with Dow Corning<sup>®</sup> #4 compound or a comparable lubricant to maintain the suction effect of the syringe.**

### Trademarks:

Dow Corning - Dow Corning Corporation  
GASTIGHT - Hamilton Company.

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Hamilton Company manufactures products for precision fluid measuring: syringes, valves diluter/dispensers, and robotic sample processors, as well as polymeric HPLC columns and resins. For additional information any of these product lines, please contact Hamilton Company or your local Hamilton representative.

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**Syringes and needles manufactured by Hamilton Company are intended for scientific research and laboratory use only and are not intended for human in vivo use.**

## OPERATING THE PIPETTE CONTROLLER

(Numbers in parentheses refer to part numbers in Figure 1.)

1. Using the clear vinyl tubing, connect the luer tip of the pipette controller syringe barrel (1) and the pipette.
2. Fill the pipette by pulling the pipette controller plunger.
3. Stop filling when the liquid level is almost to the desired calibration line of the pipette. Complete the filling process by turning the plunger thumb-wheel (6) counterclockwise (to raise the liquid level) or clockwise (to lower the liquid level).
4. Push the plunger forward to expel the contents of the pipette.

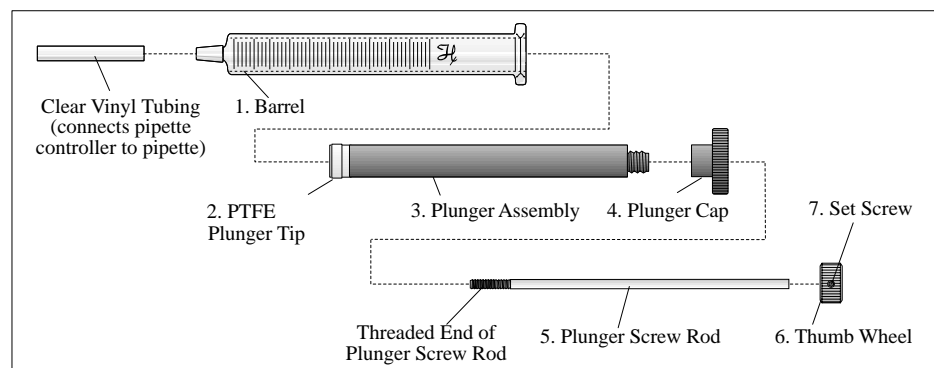


Figure 1

## DISASSEMBLING THE PLUNGER-SCREW ROD ASSEMBLY

1. Remove the thumb-wheel (6) by loosening the set screw (7) with the Allen wrench provided.
2. For Models 0020PC and 0030PC, unscrew the plunger cap (4) from the plunger assembly (3). Retain the plunger cap for reassembly to the new plunger assembly.
3. Turn the plunger screw rod (5) clockwise until the threads of the plunger screw rod are showing through the PTFE plunger tip (2). Then, holding the threaded tip of the plunger screw rod, turn counterclockwise until you can remove the plunger screw rod through the plunger tip.

## REASSEMBLING THE PLUNGER-SCREW ROD ASSEMBLY

1. Lubricate the threads of the plunger screw rod sparingly with Dow Corning #4 or similar lubricant.
2. Reinstall the plunger screw rod (5) by inserting the smooth end through the PTFE plunger tip, until the threads on the other end are engaged into the plunger tip. Turn the plunger screw rod clockwise.

3. Continue threading the plunger screw rod assembly until it extends 1/4" or more beyond the plunger cap (4)(for model 0010PC), or more than 1/2" beyond the plunger assembly (3)(for models 0020PC and 0030PC).
4. Attach the plunger cap (4) for models 0020PC and 0030PC.
5. Attach the thumb wheel (6) to the plunger screw rod, using the Allen wrench to tighten the set screw (7).
6. Retract the plunger screw rod until it no longer extends beyond the end of the PTFE plunger tip. Continue to retract the plunger screw rod about 1/4".

**NOTE: The threaded end of the plunger screw rod should not extend beyond the end of the plunger assembly since it may damage the glass syringe barrel during injection.**

7. Wet the PTFE plunger tip with water and insert it into the barrel (1).

## MAINTAINING THE PIPETTE CONTROLLER

The pipette controller requires minimal maintenance, limited to lubrication of the plunger screw rod, and replacement of the plunger assembly and glass barrel. Lubricate the threads of the plunger screw rod with Dow Corning #4 compound or a comparable lubricant any time you disassemble the plunger assembly for replacement, repair, or cleaning.

## WARRANTY STATEMENT

Hamilton Company unconditionally guarantees its products to be free of defects in materials and workmanship. Any product which fails due to such defects will be repaired or replaced at our discretion without cost, provided the device is returned with an explanation. It is the responsibility of the purchaser to determine the suitability of application and material compatibility of the products based on the published specifications of the products.

## RETURN OF GOODS

Hamilton Company's return and repair policy is written to protect its employees from potentially hazardous materials (e.g., serum, radioactive materials, carcinogenic chemicals, etc.) or any substance that may cause them partial or permanent disability during the inspection or repair process. In returning a product, the customer acknowledges that the product is free from any hazardous materials. Furthermore, the customer assumes responsibility should the returned product be determined to be hazardous.