



Syringe and Cleaning Accessories

Hamilton manufactures a variety of syringe accessories to improve or modify the functionality of a standard syringe. We offer tools to prevent plunger bending, to increase reproducibility, and to clean the syringe for a prolonged lifetime.



Plunger Support Accessories

For applications requiring additional plunger support and reproducibility, Hamilton manufactures several syringe series with reinforced plungers as well as plunger support accessories that are mounted to standard syringe series.



Plunger Support Accessories

P. 68

Syringe and Needle Cleaning

Proper care and maintenance is critical for attaining maximum syringe life. Hamilton offers a variety of tools including needle cleaning wires, cleaning solutions, and storage racks.



Syringe and Needle Cleaning

P. 71

Syringe Termination Adapters

Adapt the end of a removable needle syringe to a Luer or Luer Lock connection or add a septum or sample lock valve to a Luer or Luer Lock Syringe.



Syringe Termination Adapters

P. 73

PB-600 Repeating Dispenser

This syringe accessory is used for precise aliquot dispensing from syringes between 10 μ L to 2.5 mL.



PB-600 Repeating Dispenser

P. 75

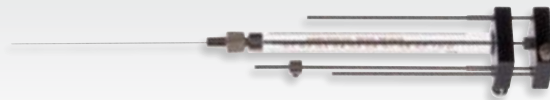




Plunger Support Accessories

Small plunger diameters and rapid dispense speeds occasionally lead to misalignment and bent plungers. Hamilton offers several syringe series and accessories to address plunger bending and improve syringe life.

Reproducibility (Chaney) Adapters



P. 69

Syringe Guides



P. 70

600 Series Syringes

Combines a thick plunger to resist bending during operation with a fine plunger wire for small volume accuracy (page 17).



800/1800 Series Syringes

A blue syringe holder is attached to the back of the syringe. The holder has a thick plunger and the smaller syringe plunger is protected during operation (page 18/page 23).

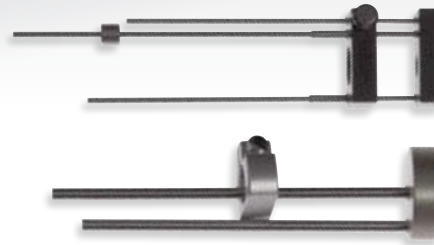


Reproducibility (Chaney) Adapters

The Hamilton Reproducibility (Chaney) Adapter assures repetitive and identical syringe plunger location. Once the stop rod is adjusted to the desired fill volume the plunger can be repeatedly positioned without continuously reading the graduations.



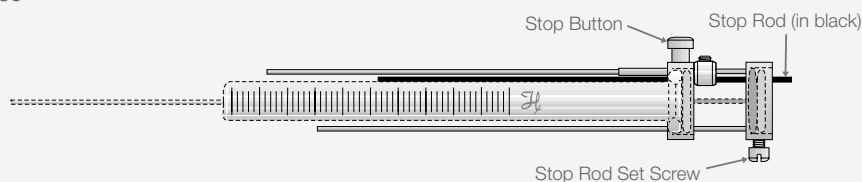
Reproducibility (Chaney) Adapters



P/N	Volume	Series
14700	5 – 10 μ L	700/1700
14725	25 – 500 μ L	700/1700
32146	5 – 250 μ L	800/1800

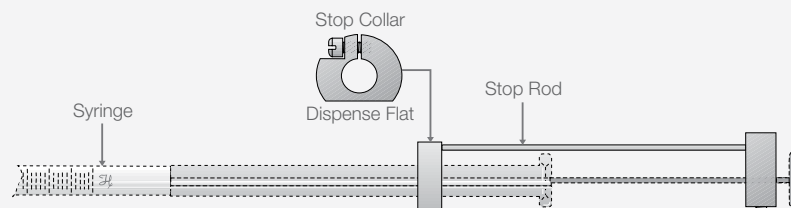
Syringes Figure 4. 700/1700/7000 Series

Loosen the set screw and adjust the Stop Rod until it hits the Stop Button at the desired volume. Press the Stop Button to engage the stop, then release to dispense.



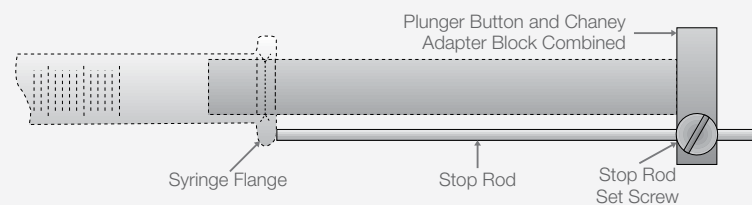
Syringes Figure 5. 800/1800 Series

Adjust the Stop Collar until the Stop Rod hits at the desired volume. To dispense, rotate the plunger so the Stop Rod travels past the Dispense Flat.



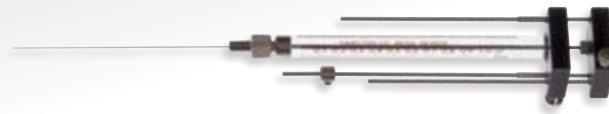
Syringes Figure 6. 1000 Series

Adjust the Stop Rod until it hits the Syringe Flange at the desired volume. To dispense, rotate the plunger so the Stop Rod travels past the dispense flat in the flange.



Reproducibility (Chaney) Adapters (Cont.)

7000 Series Built-in Chaney Adapters



P/N	Volume	Series	Length	Point
86252	0.5 µL	25 ga	70 mm	3
80104	1 µL	25 ga	70 mm	3
86204	1 µL	22 ga	70 mm	3
88404	2 µL	25 ga	70 mm	3
88504	2 µL	23 ga	70 mm	3
88004	5 µL	24 ga	70 mm	3

1000 Series Built-in Chaney Adapter



P/N	Volume	Series	Length	Point
81318	1 mL	22 ga	51 mm	2
81324	1 mL	Luer Lock (TTL)		
81418	2.5 mL	22 ga	51 mm	2
81403	2.5 mL	Luer Tip (LT)		
81424	2.5 mL	Luer Lock (TTL)		
81518	5 mL	22 ga	51 mm	2
81524	5 mL	Luer Lock (TTL)		
81618	10 mL	22 ga	51 mm	2
81624	10 mL	Luer Lock (TTL)		

Syringe Guides

The Syringe Guide is a cost effective way to prevent plunger damage during normal syringe operation. The guide is compatible with 700 and 1700 series syringes. It is also compatible with 7000 series syringes but requires the delicate removal and reinsertion of the plunger wire. For this reason the most popular 7000 series syringes can be ordered preassembled with the proper guide.

Syringe Guides

P/N	Volume	Series
14806	5 – 10 µL	700/1700
14906	25 – 500 µL	700/1700

7000 Series Built-in Syringe Guides



P/N	Volume	Gauge	Length	Point
86254	0.5 µL	25 ga	70 mm	3
80107	1 µL	25 ga	70 mm	3
86207	1 µL	22 ga	70 mm	3
88407	2 µL	25 ga	70 mm	3
88507	2 µL	23 ga	70 mm	3
88007	5 µL	24 ga	70 mm	3



Point Styles

Point 2

Point 3

Point 4

Point 5

Point AS



Syringe Storage and Cleaning

Syringe Rack

P. 71

Needle Cleaning

P. 72

Syringe Rack

The brushed stainless steel Syringe Rack stores up to five 700, 1700, or 7000 series syringes. The rack keeps your syringes from making contact with other syringes and minimizes the risk of sample contamination. Prevent breakage on the benchtop or save space by mounting to the wall.

Syringe Rack

P/N	Description
204880	5-Position Syringe Rack





Needle Cleaning

To clean syringes it is best to use a solvent known to be effective in solvating. Ideally the solvent would be non-alkaline, non-phosphate, and non-detergent based. Hamilton offers a biodegradable, non-phosphate, cleaning concentrate that is suitable for many common sample types.

For some needle obstructions, mechanical cleaning may be necessary. For this purpose Hamilton provides various sized tungsten cleaning wires that can be threaded through the needle to clear a blockage.



Needle Cleaning Kit

P/N	Volume
76620A	Kit includes 10 of each wire and 70 mL of concentrate

Cleaning Concentrate

P/N	Volume
18311	500 mL
18310	70 mL

Tungsten Cleaning Wires

P/N	For Gauges	Wire OD	Package
18304	22, 23 ga, and larger	0.306 mm	10 pk
18303	24 – 26 ga	0.207 mm	10 pk
18302	27 ga	0.167 mm	10 pk
18301	22s, 25s, and 28 – 30 ga	0.126 mm	10 pk
18300	26s and 31 – 33 ga	0.089 mm	10 pk
18306	23s ga	0.076 mm	10 pk

See “Syringe Care and Use” in the technical reference section for cleaning tips on page 77.





Syringe Termination Adapters

Removable Needle to Luer Adapters

250 μ L or Larger



P. 73

Inert Sampling Valve



P. 74

Septum Adapter



P. 74

Removable Needle to Luer Adapters

These adapters convert a Hamilton specific termination to an industry standard luer connection. They are compatible with SampleLock (SL) or Removable Needle (RN) syringes 250 μ L and larger. The internal diameter is 1 mm making it possible to spike samples with an internal standard using a 26 gauge needle or smaller.

RN to Luer Adapters

P/N	Description
35081	Female Luer Lock
35083	Male Luer Lock
35080	Male Luer





Inert Sampling Valve

The Inert Sampling Valve is a lever-actuated on/off valve used for storing and transporting samples. Connect to a Gastight syringe via the female luer lock, and use the male luer to attach to a needle, adapter, or tubing assembly. The valve is autoclavable with a 1 mm internal diameter and a pressure rating up to 0.7 MPa.

Inert Gas Sampling Valve

P/N	Description
86580	MTB Sampling Valve



Septum Adapter

The Septum Adapter turns any luer syringe into a sealed reaction container. Samples can be added or removed from the sealed container using another syringe to pierce the replaceable septum.

Luer Lock Septum Adapter

P/N	Description
31335	Adapter and 12 septa
75810	Replacement Septa 12 pk





PB-600 Repeating Dispenser

The PB-600 Repeating Dispenser is a low cost high accuracy accessory for repetitive dispensing. Each press of the button dispenses 1/50th of the syringe volume. The repeating dispenser is compatible with the cemented needle (N), removable needle (RN), luer tip (LT), or PTFE Luer Lock (TLL) syringes from 10 μ L to 2.5 mL. Syringes are sold separately.

PB-600 Repeating Dispenser

P/N	Dispense	Syringe	Series
83700	0.2 μ L	10 μ L	1700 Series
	0.5 μ L	25 μ L	700/1700 Series
	1 μ L	50 μ L	700/1700 Series
	2 μ L	100 μ L	700/1700 Series
	5 μ L	250 μ L	700/1700 Series
	10 μ L	500 μ L	700/1700 Series
	20 μ L	1 mL	1000 Series
	50 μ L	2.5 mL	1000 Series

