



INSTRUCTIONS

This manual contains important
warnings and information.
READ AND KEEP FOR REFERENCE.

METERING PUMP

Adjust-A-Stroke

FOR MONARK AND PRESIDENT PUMPS

Meters Delivery by Varying Pump Stroke Length

Model 210-514, Series B

For use with Monark pumps.

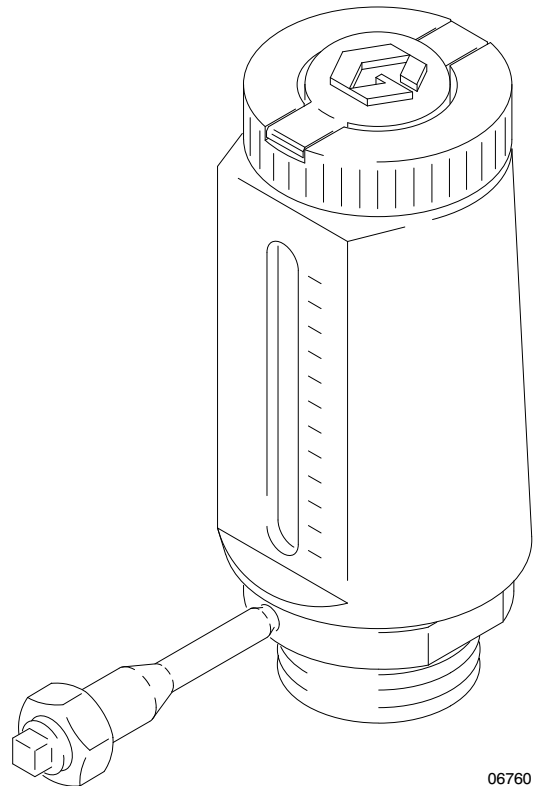
Model 210-515, Series B

For use with President pumps.

Model 210-516, Series B

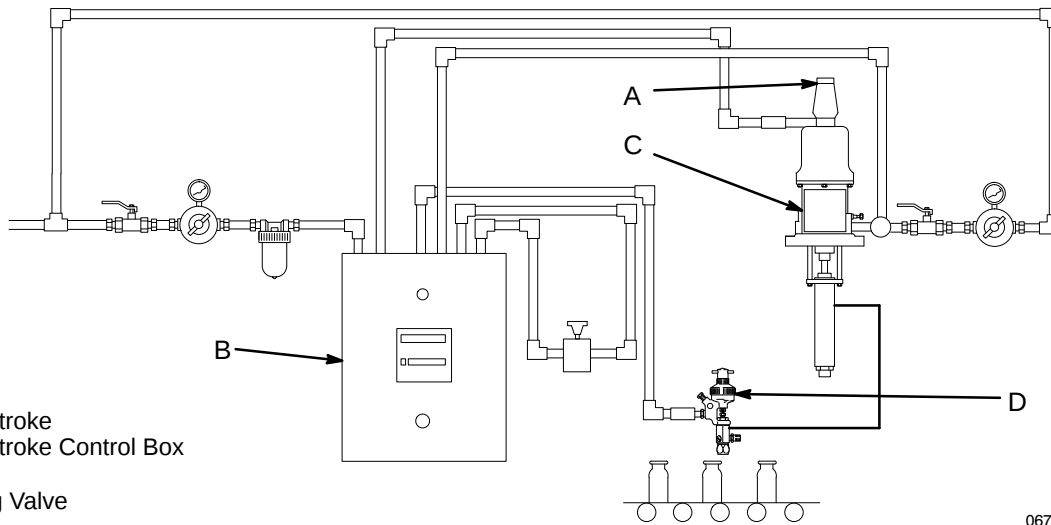
Chrome plated – For use with sanitary Monark
Pump

- Quick adjusting with flip-up crank
- Indicating scale calibrated in % of full stroke
- Infinite adjustments from 20% to 100% of full stroke
- Accurate metering of a variety of fluids



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Installation

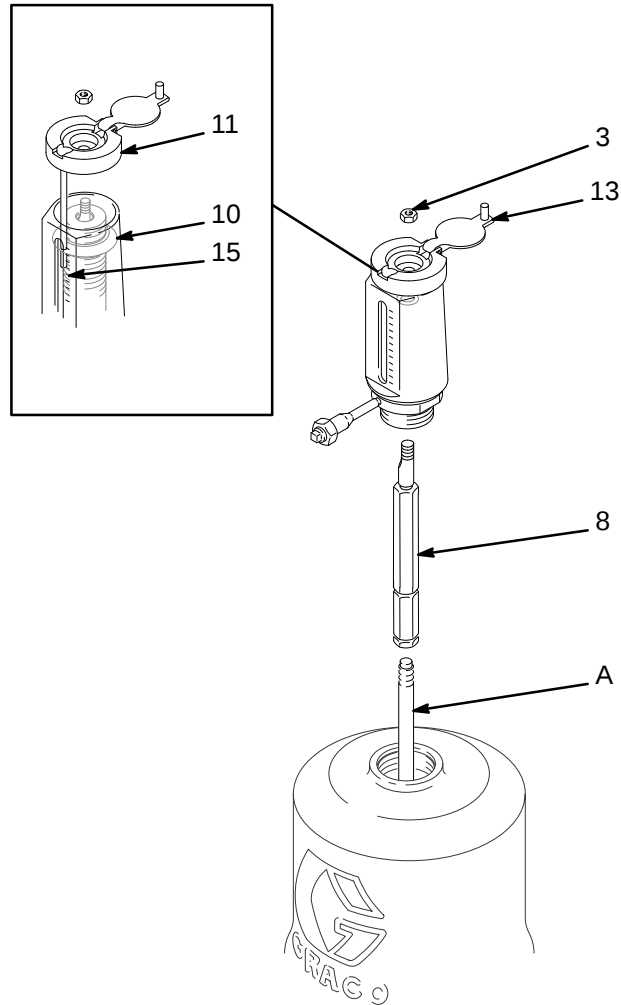


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1. Lift up the adjusting crank (13) and take the locknut (3) off the adjusting rod.
2. Push the adjusting rod (8) out of the bottom of the housing.

NOTE: Be careful not to damage the o-ring seal (6*) located at the top of the housing.

3. Unscrew the lift ring or cap nut from the top of the pump air motor cylinder.
4. Raise the trip rod as far as possible, grip with padded pliers (special tool No. 207-579) and remove the lift ring or cap nut from the trip rod. See Fig. 1.
5. Screw the "Adjust-A-Stroke" adjusting rod (8) onto the air motor trip and tighten.
6. Slip the "Adjust-A-Stroke" housing over the adjusting rod (8), put on the locknut (3), release the trip rod (A), and screw the housing into the air motor cylinder. See Fig. 1. Tighten the locknut snugly so that the adjusting cap drags slightly when rotated.
7. Zero the indicating ring (10) by rotating the adjusting crank (13) counterclockwise until the maximum limit is reached. Check the line on the indicating ring to see if it is lined up with the "100%" mark on the scale. If not, remove the locknut (3) and adjusting cap (11) and turn the ring the required direction to line up. Reassemble the adjusting cap and locknut.
8. If the indicating scale (15) does not face the desired direction, loosen the set-screw (14) with a .125" hex key wrench (not included) and rotate the housing to the desired position. Retighten the screw. See the Parts Drawing.



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Fig. 1

Operation/Service

Adjusting the Pump Stroke

Variations in dispensing requirements control the setting of the Adjust-A-Stroke. You will have to make calculations to determine the start setting for single or multiple shot dispensing.

Before adjusting the pump stroke, start the pump and measure its output per cycle at 100% Adjust-A-Stroke setting.

NOTE: The pump must be operating while adjusting its stroke to prevent stalling, which may require disassembly to restart it.

To set for calculated output, lift up the adjusting crank (13) and rotate and rotate the cap clockwise. See Fig. 1. The scale is accurate to 10% of indicated setting.

Measure the quantity per cycle metered. If not correct, increase or decrease the pump stroke until the proper amount is being metered.

Repeats of measured amounts will be correct within 1%.

Tighten the locknut (3) to secure the cap and prevent tampering.

CAUTION

Do not exceed recommended pump speed. The pump runs faster as the stroke is shortened with the same air pressure setting. The pump may be slowed down by reducing air pressure.

If the Adjust-A-Stroke Leaks Air

Replace the adjusting rod o-ring seal (6*). See the parts drawing for disassembly and identification.

Parts

Model 210-514, Series B

For Monark Pumps

Model 210-515, Series B

For President Pumps

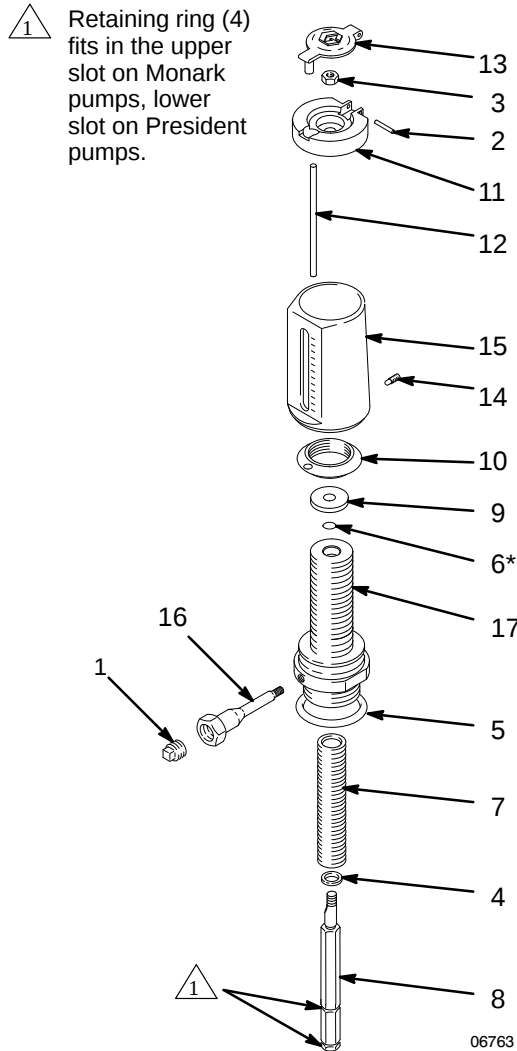
Model 210-516, Series B

For Monark Sanitary Pump

Ref No.	Part No.	Description	Qty.
1	100-403	PLUG, pipe; 1/8" npt	1
2†	101-386	PIN, drive-lok; type "C"; 0.09" (2.3 mm) dia; 0.68" (17.3 mm) long	1
3	102-393	NUT, lock; w/nylon insert; 5/16"-24	1
4	102-394	RING, retaining; 0.44" (11.2 mm) dia shaft size	1
5	156-698	O-RING; nitrile rubber	1
6*	159-589	O-RING; nitrile rubber	1
7†	167-085	SCREW, adjusting	1
8†	167-086	ROD, adjusting	1
9†	167-087	SPACER, shoulder	1
10†	167-088	RING, indicator	1
11†	171-613	CAP, adjusting	1
12†	167-091	PIN, str/ hdless; 0.056" (1.42 mm) dia; 3.56" (90.4 mm) long	1
13†	167-092	CRANK, adjusting	1
14†	167-178	SCREW, special set	1
15†	171-611	SLEEVE, indicator (Models 210-514 & 210-516)	1
15†	167-094	SLEEVE, indicator (Model 210-515)	1
16	172-931	COUPLER; 1/8" npt	1
17†	210-303	HOUSING, indicator	1

* Recommended Tool Box spare parts. Keep these spare parts on hand to reduce down time.

† These parts are available from Graco through special order only.



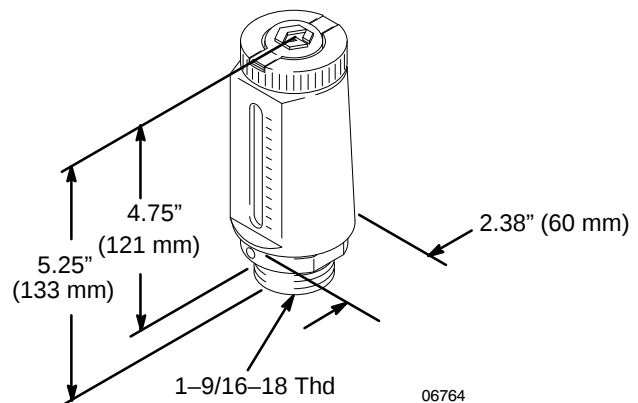
Manual Change Summary

The following changes were made to this manual.

- The entire manual was electronically updated for on-line use.
- Part No. 167-090 (Ref. No. 11 – CAP, adjusting) was replaced by Part No. 171-613.
- Part No. 171-612 (Ref. No. 13 – CRANK, adjusting) was replaced by Part No. 167-092.

All written and visual data contained in this document reflects the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Dimensions



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Foreign Offices: Belgium, Canada, England, Korea, Switzerland, France, Germany, Hong Kong, Japan

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