10ML VARIABLE AUTOMATIC DRENCHER

IMPORTANT

The 10ml Automatic Drencher (referred to as applicator) has been designed for the administration of most solution and suspension drenches and injectable solutions to livestock. It should never be used for vaccination of small livestock at dose settings of 1ml or less. As components in this instrument may be affected by solvents in some 'pour-on' formulations no responsibility will be accepted by the manufacturer should the instrument be used with such products.

BEFORE DRENCHING

Always read the label.
Check the label on the pharmaceutical manufacturer's container for dose rates, precautions, and safety information prior to use.

Use only the recommended dose rate.
Use only the pharmaceutical manufacturer's recommended rates. Refer to the pharmaceutical manufacturer's dose rate chart or specification. The manufacturer will take no responsibility if the applicator is used for any other purpose than specified or used contrary to the pharmaceutical manufacturer's dose rate specifications.

Check the applicator.

IMPORTANT

Before each use, the nozzle should be inspected to ensure there are no sharp edges. Should this occur, remove with file or emery paper or replace nozzle.

INSTRUCTIONS FOR USE

Preparing the applicator.
Fit the appropriate nozzle assembly to the handpiece, taking care to ensure the delivery valve and spring (item 5) remain facing in direction shown in the handpiece diagram.

Priming the applicator.
To prime, set to maximum dose and actuate the instrument by depressing the lever quickly until material is drawn into the cylinder. Expel all air by holding the instrument in a **vertical position**, with the nozzle pointed upwards until both cylinder and nozzle are full.

WARNING

Care must be taken to ensure the liquid does not come into contact with any part of the operators body. Chemicals may cause injury to the operator.

To adjust the dose.
Loosen lock nut (item 22). Depress the lever to take pressure off dose adjustor (item 21). Adjust the dose adjustor in or out depending on the dose setting required. To set the correct dose, align the piston (item 13) with the cylinder marking. Once the piston is in the correct position, release pressure on the lever and re-tighten lock nut (item 22). (See calibration instructions.)

Calibration of the applicator.
As the graduation markings on the cylinder are for reference only, check the accuracy of the instrument with a calibrated measuring glass. To ensure repeatability, squirt 5 x 5ml doses into a calibrated glass. The level of fluid should be at the 25ml mark. If it is not, readjust the applicator following the steps above then perform the dose test again. If you have problems with dose accuracy contact the manufacturer or place of purchase.

Cylinder fill rate and delivery pressure.
This can be varied by adjusting return spring (item 27) tension. Turning spring tension nut (item 24) on the trunnion assembly clockwise, will increase fill rate and delivery pressure, turning anti-clockwise will reduce fill rate and delivery pressure. Minimum return spring tension should be used to achieve acceptable filling rate and delivery speed. If spitting occurs reduce tension on return spring.

WHEN DRENCHING

CAUTION

Always exercise care when dosing animals. Do not apply undue pressure and ensure the nozzle is not forced against or through delicate mouth and throat tissues.

Sterilisation.
A common method of sterilization is as follows:
1 Connect feed tube and spring to handpiece.
2 Wrap cloth around handpiece and place end of feed tube into container of clean hot water and draw hot water into cylinder by depressing lever.
3 Remove cloth and suspend complete instrument by fully immersing in a container of water and boil together with any needles for 10 to 20 minutes.
4 Remove instrument from container, wrap cloth around handle and pump dry, remove cloth and dry handpiece.

Attach connecting tube to both the hand piece and draw off system. Make sure the springs provided are screwed over the feed tube in an anti-clockwise direction. This will prevent the tube from kinking at these points.

CARE AND MAINTENANCE

To ensure continued high performance from this instrument, attention to cleanliness is essential. After each use, flush the instrument and feed tube thoroughly by pumping through a warm water detergent mix, followed by clean water. Remove the feed tube from the instrument and suck a small quantity of NJ Phillips Lubricant into the cylinder by immersing the inlet fitting in the lubricant and gently pumping the lever. If at any time the instrument becomes sluggish in operation, maintenance by cleaning and lubrication should overcome the problem.

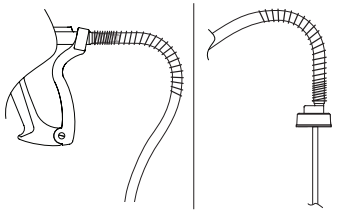
IMPORTANT

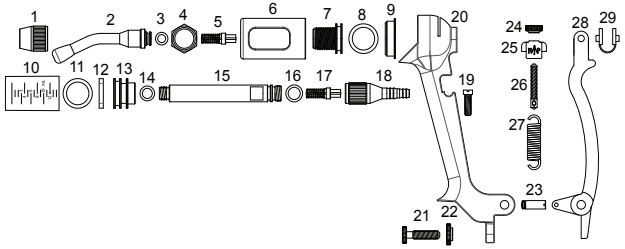
DO NOT store your applicator or feed tube full of product. Clean as per the "Care and Maintenance" instructions.

NOTE

Suspending the instrument not only makes it easier to remove, but also prevents damage should the container boil dry. Chemical sterilization with antiseptic solutions is sometimes practised and in such instances the recommendations of the chemical manufacturer should be followed. ***DO NOT attempt to sterilize by autoclaving.***

Ensure feed tube spring is located correctly on applicator and draw-off.





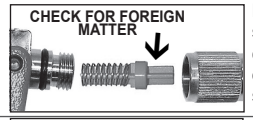
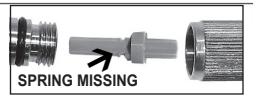
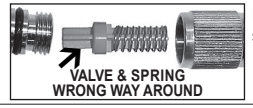
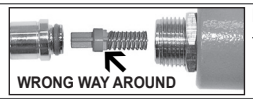
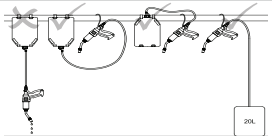
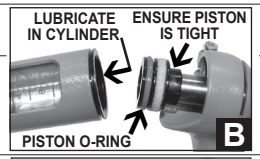
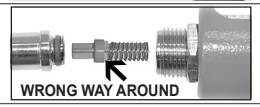
1. Nozzle Nut
2. Lamb Nozzle
3. Nozzle Seal Ring
4. Lock Nut
5. Delivery Valve & Spring
6. Cylinder Cover
7. Delivery Cage
8. Seal Ring
9. Cylinder Clamp Ring
10. Cylinder
11. Piston Seal Ring
12. Lubricating Washer
13. Piston
14. Seal Ring
15. Push Rod
16. Inlet Adaptor Seal Ring
17. Inlet Valve & Spring
18. Inlet Adaptor
19. Handle Clamp Screw
20. Handle
21. Dose Adjustor
22. Lock Nut
23. Lever Pin
24. Spring Tension Nut
25. Trunnion
26. Spindle
27. Return Spring
28. Lever
29. Lever Pad

Assembled at an ISO 9001:2015 accredited facility
Contact your local NJ Phillips product representative for service kit details
Email: ahdsinfo@datamars.com
Website: njphillips.com
Toll free number: 1800 247 175

njphillips™ DATAMARS

850 0000-614 | 355 0000-925

IMPORTANT: QUICK REFERENCE TROUBLESHOOTING GUIDE

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
1a. Product being returned to the container from the applicator. **1b. Unable to draw product from the container.**	Foreign matter lodged under the inlet valve. 	Remove inlet adaptor (18) and clean the internal seat by removing valve and spring (17), rinse with clean water then wipe with a soft cloth. Reassemble ensuring correct orientation of the valve and spring (17).
	Inlet valve spring is missing. 	Replace inlet valve and spring (17).
	The inlet valve and spring are incorrectly assembled. 	Reassemble the valve and spring (17) correctly (as shown in the top photo).
	Foreign matter lodged under delivery valve. 	Remove nozzle (2), valve and spring (5). Clean valve seat located in front of cylinder by rinsing and wiping with a soft cloth. Clean valve and spring (5) and reassemble ensuring valve and spring are oriented correctly.
2. Product leaking out of nozzle or air being drawn into the cylinder from the nozzle end.	Nozzle seal ring is damaged. 	Replace nozzle seal ring (3).
	Delivery valve and spring are incorrectly assembled.	Reassemble valve and spring (5) correctly (see parts illustration).
	Delivery valve sealing edge damaged.	**SEE PICTURE A.** Replace the delivery valve and spring (5).
	Delivery cage seal ring damaged.	Replace the delivery cage seal ring (8).
3. Fluid dripping/ running out of nozzle when not in use.	Applicator is hanging at end of feed tube when not in use. 	Hang applicator at same height or higher than off take point of feed tube on container of product. This ensures the delivery valve is free of load which can cause the product to leak past the valve assembly.
4. Air is being drawn into the cylinder from in and around the piston.	Foreign matter lodged on or around piston o-ring. 	Replace piston seal ring (11) and lubricate liberally.
	Piston not sealing against push rod.	Remove cylinder (10). Hold rear push rod (15), tighten piston (13) firmly using wide blade screwdriver in slot or replace push rod / piston seal ring (if applicable).
	Delivery valve and spring incorrectly assembled. 	Replace the inlet adaptor seal ring (16).
	Feed tube perforated /damaged.	Replace the feed tube.
	Feed tube connection at container or applicator is split or damaged.	Replace container fitting or inlet adaptor to ensure an air tight seal. Cut feed tube for clean ends.
5. Piston not returning fully on filling stroke.	Piston o-ring and lubricating washer are dry.	**SEE PICTURE B.** Remove cylinder (10), soak piston o-ring (11) and lubricating washer (12) in NJ Phillips Lubricant.
	Blockage in inlet line.	Check inlet valve and spring (17), inlet adaptor (18), feed tube and container draw off fitting for foreign matter.
	Kinking or restriction of feed tube.	Remove restriction or reposition feed tube.
	Binding of push rod within dose adjustor assembly caused by foreign matter lodged between sliding surfaces.	Dismantle push rod (15) from instrument and rinse it and dose adjustor assembly with clean water. Inspect for damage. If damaged, replace affected part.
	Material used too viscous for draw-off and feed tube.	Increase feed tube and draw off bore size.
	Chemical container not collapsing as instrument draws fluid.	Vent pack or use a Phillips Vented Draw-Off system.
6. Hard delivery stroke pressure	Foreign matter in delivery valve spring or blockage in nozzle.	**SEE PICTURE A.** Remove nozzle (2). Clean delivery valve &, spring and nozzle fluid hole. Reassemble.