

Gas / Air Pressure  
CATTLE  
Pour-On 45-50psi Oral  
Drench 50-55psi

Gas / Air Pressure  
SHEEP  
Thin Pour-On 45-50psi  
Oral Drench 45-50psi  
Thick Pour-On 50-55psi



# The POWER DOSER<sup>TM</sup>

"Pioneering Medicant Delivery Technology"

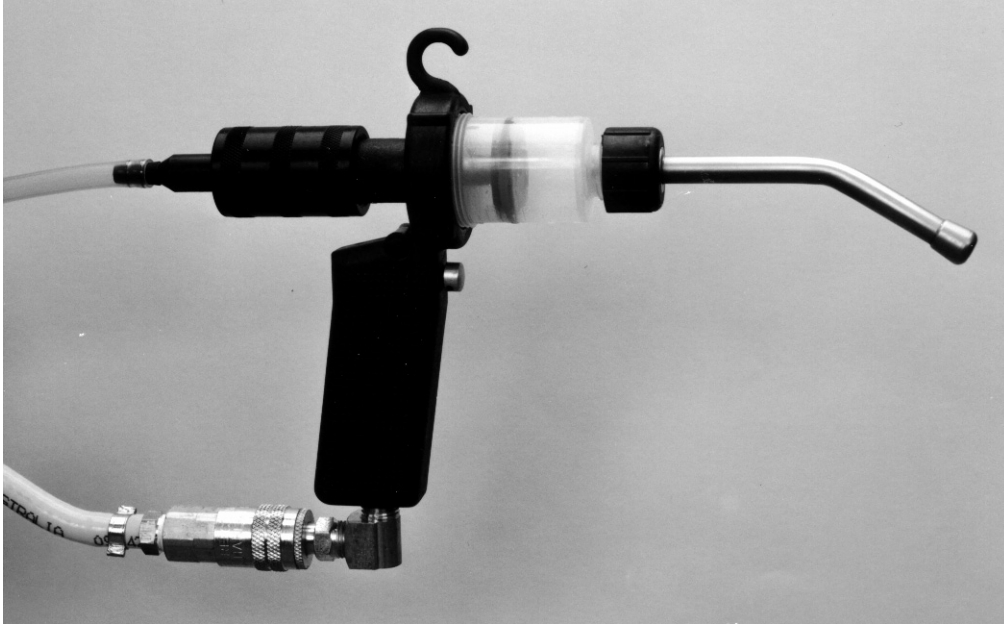
**DO NOT LEAVE MEDICANT**  
**IN APPLICATOR OR**  
**SUCTION HOSE.**

5-7 Burrundulla Road  
PO Box 27  
MUDGEE NSW 2850

Phone: (02) 6372 7203  
Fax: (02) 6372 7204

Email: [enquiries@genesisindustries.com.au](mailto:enquiries@genesisindustries.com.au)  
Website: [www.genesisindustries.com.au](http://www.genesisindustries.com.au)

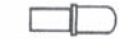
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# Power Doser Optional Accessories

## Nozzles



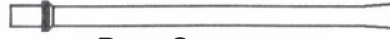
Spray



Vaccinator



T-Bar



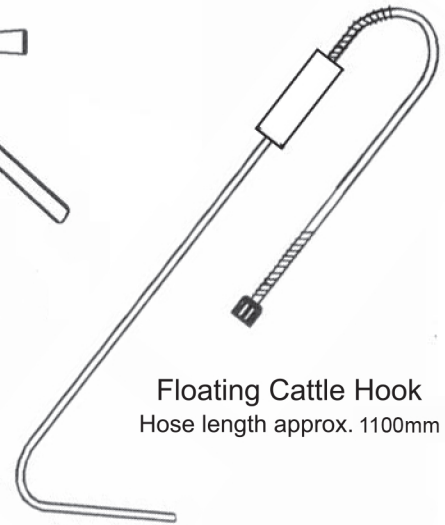
Pour-On



Cattle Drench



Sheep Drench



Floating Cattle Hook  
Hose length approx. 1100mm

## Adjustment Nuts



2ml

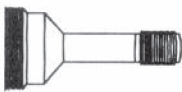


10ml/30ml

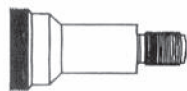


60ml

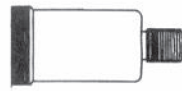
## Barrels



2ml



10ml

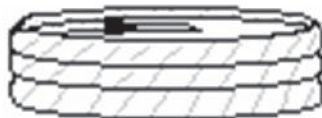


30ml

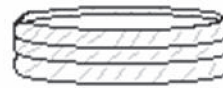


60ml

## Suction Hoses

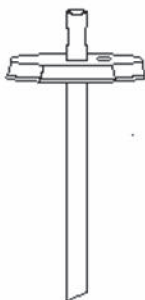


10m x 10mm ID EVA  
(with joiner)



10m x 6mm ID EVA

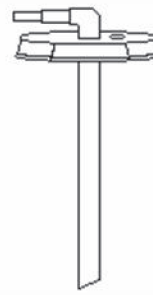
## Draw Off Systems



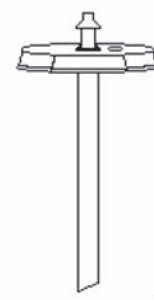
10mm ID Straight



10mm ID Elbow



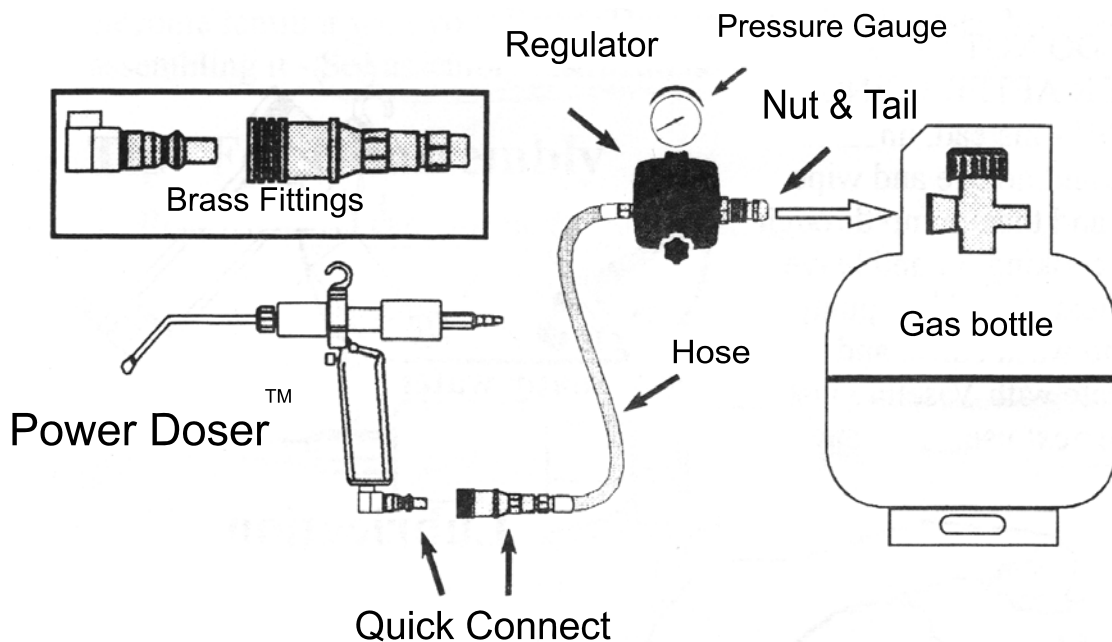
10mm ID reducing to  
6mm ID Elbow



10mm ID reducing to  
6mm ID Straight

# Power Doser Gas System

The diagram below illustrates the parts needed for efficient use with LPG.



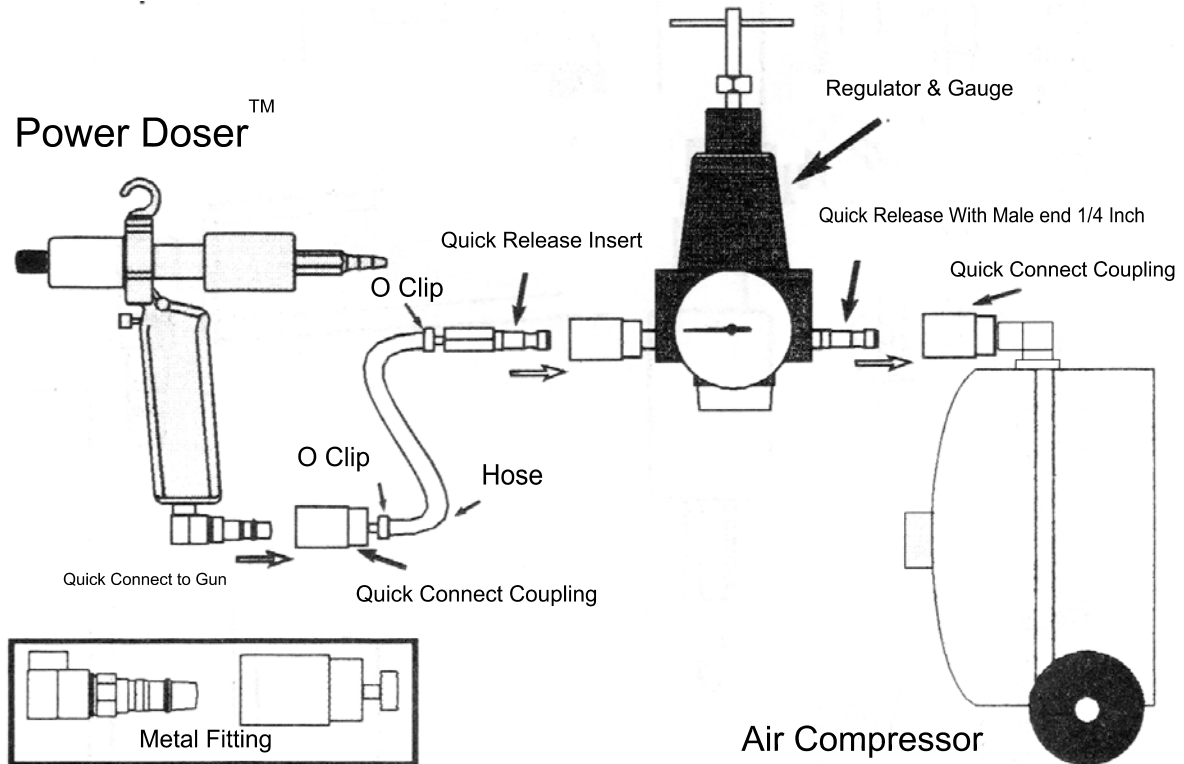
NOTE: Air compressor parts are not compatible with LPG, however you can use the gas kit as an air connection kit.

**LPG accessories must be approved for use with LPG (ie: AGA, ASA or UL approved)**

- NSW Workcover makes no objection to use of LPG as a safe portable power source provided that LPG approved accessories are used.
- All other Australian states and territories and New Zealand have accepted the NSW Workcover position.
- A 5 kilogram gas barbeque bottle will provide a minimum of 6000 shots of a 15 ml dose.
- LPG is not compatible with standard air hoses and fittings. LPG will corrode them.
- Normal pressure range 40-80 psi.
- Care should always be taken working with LPG. Keep LPG bottles upright, avoid leaks, avoid working in enclosed areas or near naked flames. Avoid smoking.

# Power Doser Air System

The diagram below illustrates the parts needed for efficient use with compressed air.

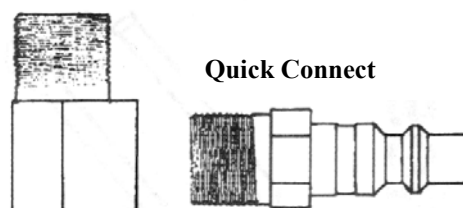


NOTE: If you have a Gas Kit (see Page 2) it can be used as an air kit to connect to your compressor.

## Air Hose Connection

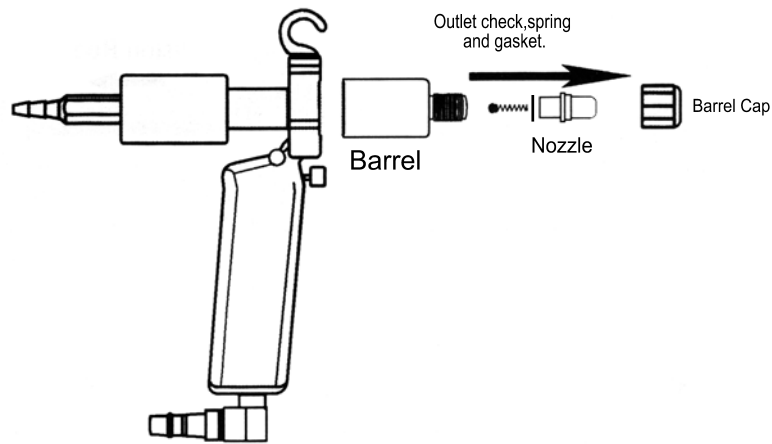
The connection of the air supply is accomplished by using a Quick Connect attached to the bottom of the handle. The standard connection is a 90° brass elbow connected to a Quick Connect system.

90° Brass Elbow

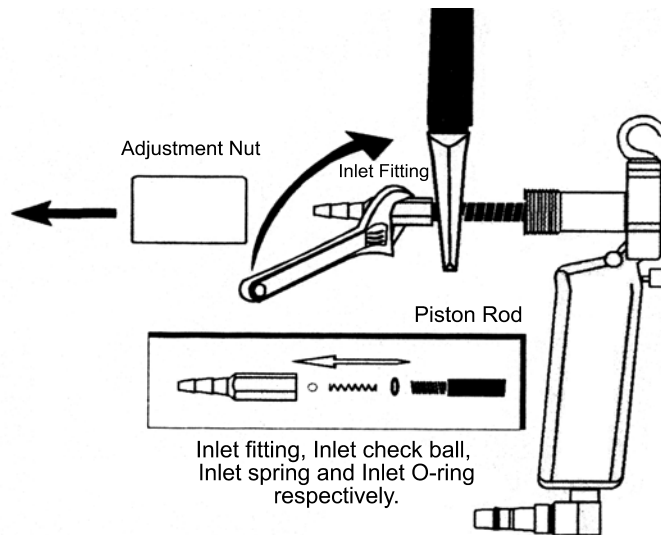


# Disassembling Your Power Doser

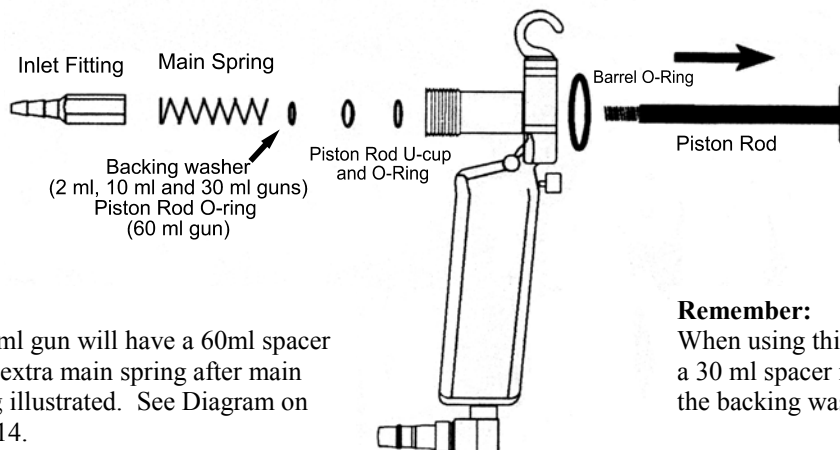
**Step 1** Remove Barrel cap, nozzle, outlet check, outlet spring, outlet gasket and barrel.



**Step 2** Screw off dose adjustment nut and remove inlet fitting as illustrated.



**Step 3** Pull out piston rod and barrel O-ring. Push piston rod back through to dislodge Backing washer, Piston Rod U-cup and Piston Rod O-ring.

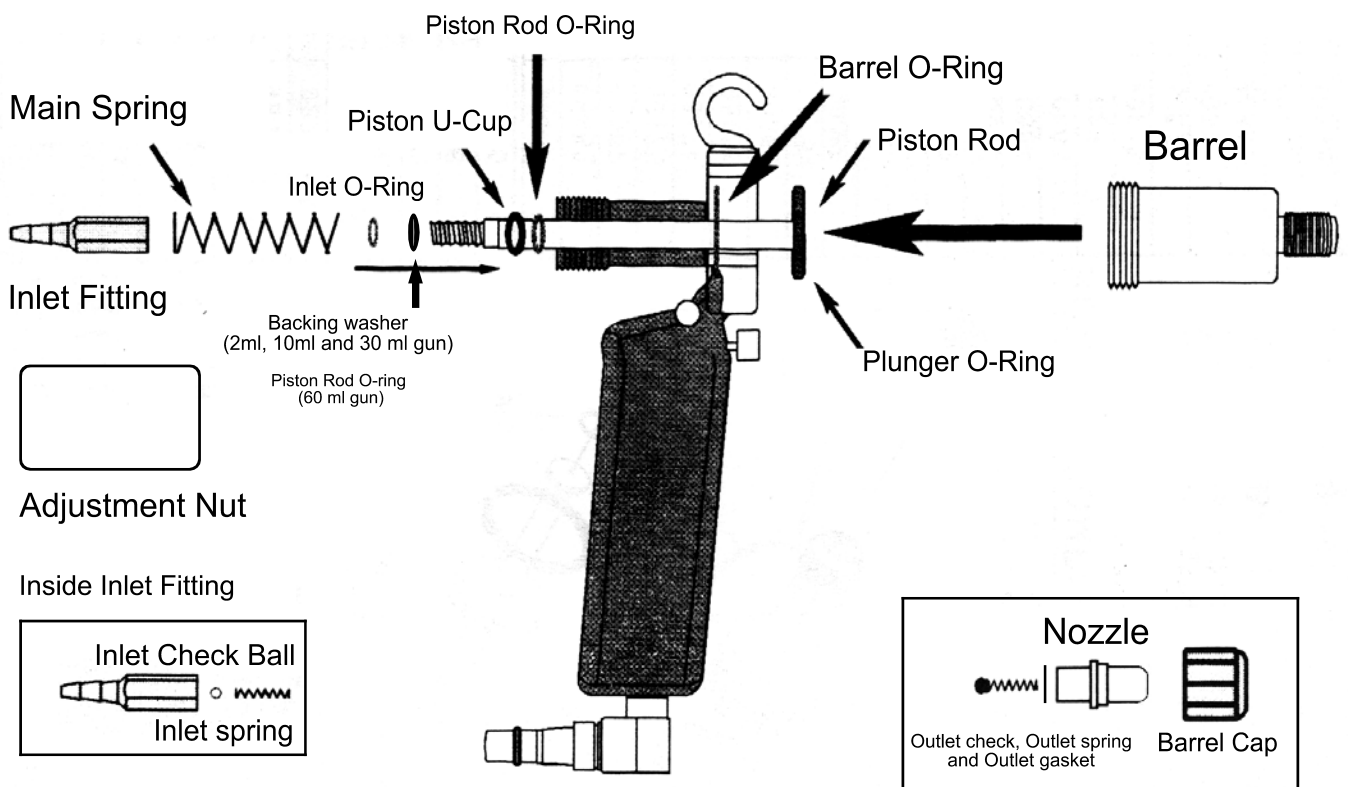


**Note:**  
A 60 ml gun will have a 60ml spacer and an extra main spring after the main spring illustrated. See Diagram on Page 14.

**Remember:**  
When using thicker products a 30 ml spacer may replace the backing washer.

# Re-assembling Your Power Doser

- Step 1** Make sure trigger is in correctly. (Refer to page 6 for replacement instructions.)
- Step 2** Place piston rod through handle and reseal piston rod O-ring and U-cup making sure the U-cup face is towards the barrel end. Then reseal backing washer (for the 2 ml, 10 ml and 30 ml gun) or another piston rod O-ring (for 60 ml gun).
- Step 3** Seat inlet O-ring on piston rod and place main spring on.
- Step 4** Place inlet ball and inlet spring into inlet fitting and quickly tip and screw onto end of piston rod, do not over tighten. Screw adjustment nut on.
- Step 5** Reseat barrel O-ring, lubricate barrel and plunger O-ring. Screw barrel into handle.
- Step 6** Place outlet rubber gasket onto back of nozzle, place nozzle through barrel cap.
- Step 7** Seat outlet check onto outlet spring and place in front end of barrel.
- Step 8** Screw on barrel cap.



**Note:**

Do not over tighten inlet nozzle onto piston rod.

**Remember:**

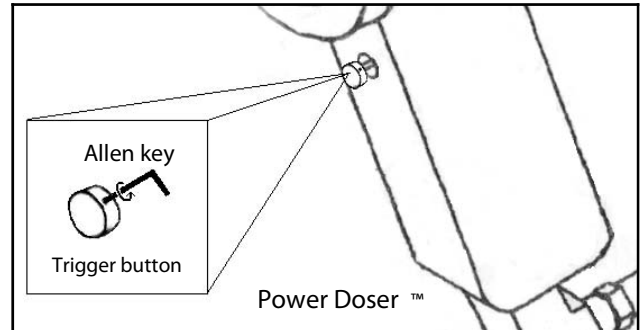
Lubricate Plunger O-ring, Barrel and Piston Rod with Genesis Power Lube (or Vaseline).

# Replacing The Trigger

If your trigger needs replacing or cleaning, follow the instructions below.

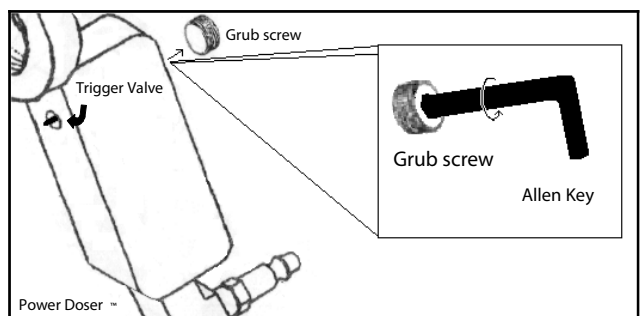
## Step 1

Remove trigger button using allen key in spare parts kit to loosen small grub screw in the trigger button. (Please refer to diagrams.)



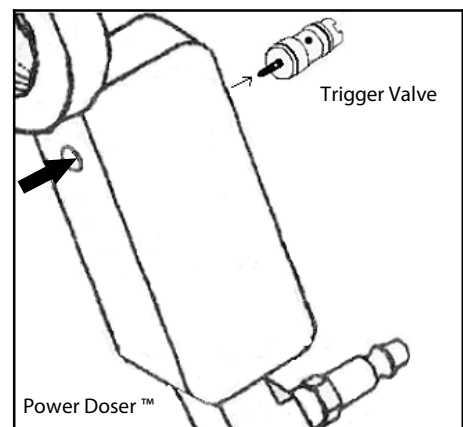
## Step 2

Remove larger grub screw at back of gun using an allen key.



## Step 3

Push trigger valve out from front to back (the trigger valve simply sits in the trigger cavity).

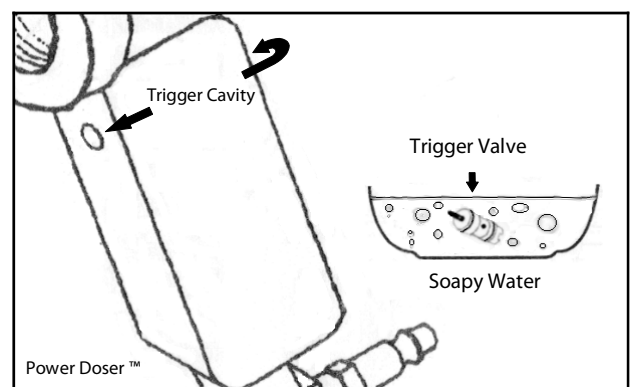


## Step 4

Clean the trigger cavity. Clean trigger valve in soapy water and dry thoroughly.

## Step 5

Reverse procedure above with cleaned trigger or use replacement trigger in spare parts kit.





## **Cleaning Your Power Doser**

After using Zapp, Avenge, Virbac IGR Pour On or Clipguard in your applicator use the following steps.

**Step 1** Pump out product at the end of each day after use.

**Step 2** Pump through good quality cooking oil, then pump out.

**Step 3** Undo barrel & wipe out with a clean rag.

**Step 4** Lubricate Plunger “O” ring with Power Lube (or Vaseline).

**Your applicator is ready for the next job.**

## **Maintenance**

Cleaning your Power Doser regularly will prevent it from getting ‘clogged up’ and failing whilst in the middle of a task.

\*Only clean your Power Doser with warm soapy water when disassembling the applicator for maintenance.

## **Lubricating Your Power Doser**

Lubricating your Power Doser regularly with Genesis Power Lube (or Vaseline) will help prevent wear and tear and will assist refill.

Firstly unscrew the barrel and liberally apply Genesis Power Lube (or Vaseline) to the Plunger “O”ring and inside the barrel.

It is best to lubricate you gun everyday or when the return of the piston rod begins to slow.

**DO NOT LUBRICATE WITH OIL!**

# Troubleshooting

## A Problems and Solutions for the Power Doser.

<b>Problem</b>	<b>Solution</b>
i) Trigger leaks air/gas.	<p>a) Trigger may be dirty, therefore remove trigger and clean trigger and chamber (see instructions).</p> <p>b) Trigger has failed, replace with spare in spare parts kit.</p> <p>c) The trigger cavity (chamber) is too small in the handle therefore return gun to factory to burr out. A very tight fit indicates this problem.</p>
ii) Air/Gas leaks at barrel.	<p>a) Usually barrel has been over tightened and is now cross-threaded, temporary solution is plumbing tape around thread of barrel.</p> <p>b) Check if the barrel O-ring isn't missing or has skewed.</p>
iii) Air/Gas leaks out back of gun.	The U-cup may be inverted. Take gun apart following disassembly instructions and rebuild (may replace with U-cup from spare parts kit).
iv) Barrel blows off and dispensing action too fast.	Usually indicates operator is not using a regulator. Barrel thread will probably be ruined. Obtain regulator and new barrel.
v) Gun is stuck and will not refill fully.	The gun may have been lubricated with oil (any oil). The oil breaks down and gums up the whole mechanism. Take apart following disassembling instructions, wash in soapy water removing all oil sediment. Rebuild Power Doser following re-assembling instructions and lubricate with Genesis Power Lube or Vaseline. "Oiling" guns is commonly accepted as good practice therefore, this can be a problem for the Genesis "Power Doser". Often when a gun will not work disassembling it, washing it, lubricating it and then rebuilding it will fix the problem.
vi) Leaks fluid at back and will not refill.	Broken piston rod, replace.
vii) When converted to a 10 ml Power Doser, the plunger will not travel all the way to the end.	Increase pressure, as the 10 ml Power Doser requires more pressure to operate.

## B Usage Problems

The vast majority of problems relate to usage with a particular product and not the Power Doser itself. Is the product “thick” or “thin”, “oily” or “watery”, “harsh” or “kind”. Quite often the solution will relate to the suction hose.

<b>Problem</b>	<b>Solution</b>
i) The piston rod will not return fully or quickly enough.	<ul style="list-style-type: none"> <li>a) Has the gun been lubricated with oil? Re-lubricate plunger O-ring with Genesis Power Lube or Vaseline. See v) in section A.</li> <li>b) Is it the correct suction hose for that chemical? See section C.</li> <li>c) Elevate drum for gravity assistance, eg, place on 44 gallon drum.</li> <li>d) Possibly main spring worn, stretch one centimetre and/or insert a spacer.</li> <li>e) Suction hose may have restriction eg, small diameter draw off system to large hose or a sieve was inserted that is restrictive.</li> <li>f) Piston rod O-ring and U-cup may be twisted impeding the piston rod. Pull gun apart following instructions and re-assemble.</li> <li>g) Is there an air/gas leak impeding return of piston rod? If it is stop leak by cleaning trigger, or replace it.</li> <li>h) Has the piston rod head swollen from a particular chemical and jammed in the barrel? Take plunger O-ring off to test. If jamming, obtain replacement piston rod.</li> </ul>
ii) The piston rod returns but air is in the barrel.	<ul style="list-style-type: none"> <li>a) Front valve not seating properly. Screw off nozzle and clear any obstructions. Check if outlet check is worn or shrunken from chemical, replace from spare parts kit if necessary.</li> <li>b) Check where suction hose fits on inlet nozzle, may be worn and lets air in. Cut off one centimetre of hose and refit (avoid using a clamp or wire because of the shape of the nozzle).</li> <li>c) Check suction hose to chemical, ensure no air is getting in.</li> </ul>
iii) The guns “spits”.	<p>The refill is too quick. Often the operator sees this when testing with water and the problem disappears when a chemical is used. For thin chemicals do one of the following:</p> <ul style="list-style-type: none"> <li>a) Check if outlet check and spring are worn. Replace if necessary.</li> <li>b) Insert an inlet nozzle reducer to slow the refill.</li> <li>c) Double up front valve spring with spare from spare parts kit.</li> <li>d) Use thin suction hose or tie suction hose to slow the flow.</li> <li>e) Put chemical drum in a hole.</li> </ul>

iv) The gun leaks out the nozzle	<ul style="list-style-type: none"> <li>a) Check front valve, both the spring and outlet check.. The check may not seat, replace with spare. The spring may be too weak therefore stretch or replace.</li> <li>b) Chemical drum elevated so high that gravitational pressure is excessive and keeps valves open.</li> <li>c) Sometimes the leak is because of the nozzle, ie, it runs out of the nozzle outlet between it and the valve, just keep nozzle horizontal to ground whilst operating.</li> </ul>
v) No 'Draw-off system'.	The gun is used for many purposes and a universal 'draw off system' hasn't been devised. Genesis Draw off systems are available for several products, please phone toll free 1800 068 512 for more information. In the meantime cut a hole in a spare drum cap and push hose to the bottom.
vi) The gun will not 'Suck up'.	<ul style="list-style-type: none"> <li>a) Test front valve – it may be a seating problem. To test – remove nozzle and valve, depress trigger and when plunger is to front hold finger over barrel outlet hole then release trigger – if it fills then that is the problem. Check for obstruction and if necessary replace outlet check and/or spring.</li> <li>b) Check suction hose to inlet nozzle connection – cut off one centimetre hose and refit.</li> <li>c) Check inlet valve – if necessary replace or clear obstruction.</li> </ul>

## C Suction Hoses

A good number of "Power Dosers" have been sold for a single purpose, either pursuant to a company promotion or purchased by a customer for a single job. The "Power Doser" will therefore work adequately for that job but then fails when used for something else. The solution to the failure is then related to specific product knowledge. As a general rule, the Power Doser works with "everything" but changes may be required to suction hoses and to the gun by tweaking it, eg, with a spacer for a thick product or inserting a weaker main spring such as for rum.

Some general principles are:

- a) Thick products require a large suction hose and maybe a spacer.
- b) A thick and harsh product may require a large EVA suction hose and spacer.
- c) Thin products may work best with the 6 mm suction hose and/or inlet nozzle reducer.

# 2 ML POWER DOSER™

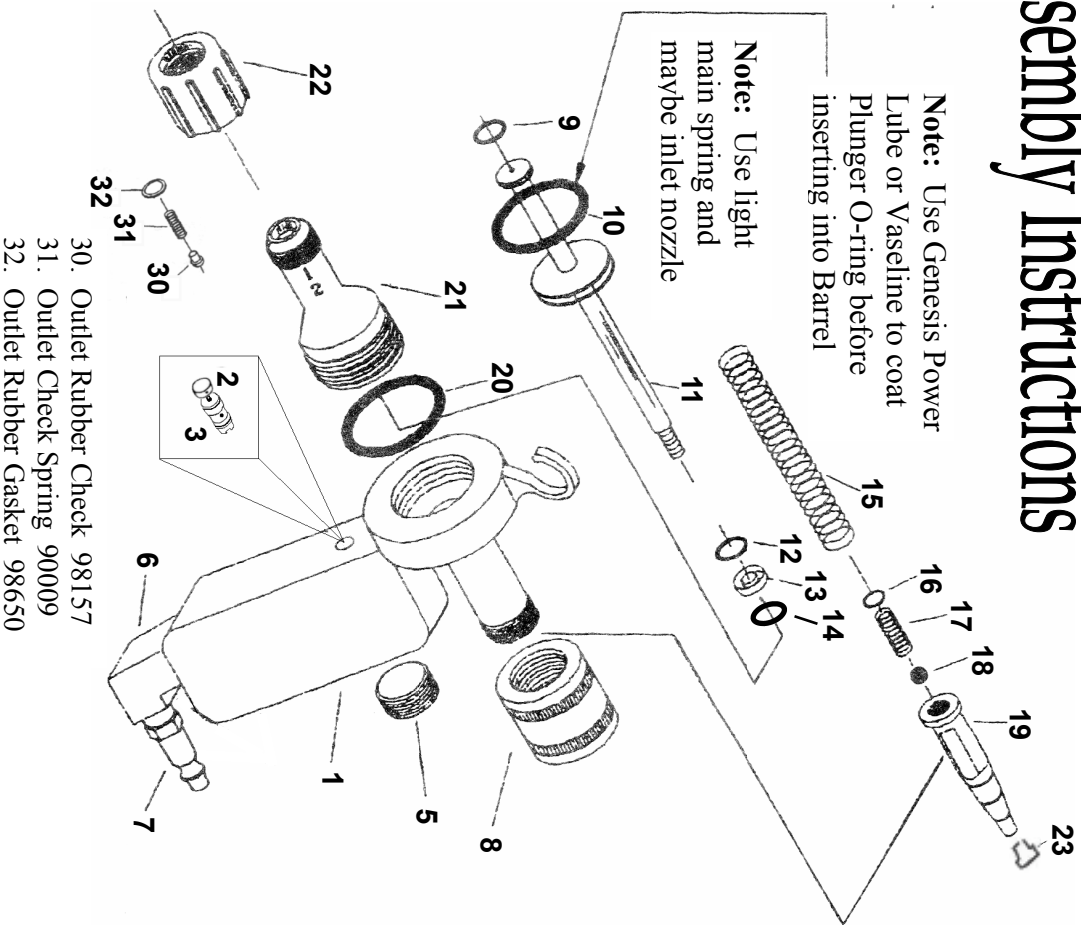
™

DESCRIPTION	PART #
1. Handle	98213
2. Trigger Button	98140
3. Trigger valve	98141
5. Grub Screw (large)	98098
6. Male elbow (brass)	98059
7. Quick Connect male (Air)	98300
7. Quick Connect male (Gas)	98312
8. Adjustment nut	98214-T
9. Plunger O-Ring 2 ml	98160-02
10. Plunger O-Ring 30 ml	98160-30
11. Piston Rod 2 ml	98177
12. Piston Rod O-Ring	98608
13. U-cup – Piston	98470
14. Backing washer	98608-1
15. Main spring - 2 ml	90015-02
16. Inlet O-Ring	98652
17. Inlet Check spring	90007
18. Inlet Check ball	98175
19. Inlet fitting	98174
20. Barrel O-Ring	98609
21. 2 ml barrel	40660
22. Barrel Cap	98164
23. Inlet Nozzle Reducer	40696

## Assembly Instructions

**Note:** Use Genesis Power Lube or Vaseline to coat Plunger O-ring before inserting into Barrel

**Note:** Use light main spring and maybe inlet nozzle

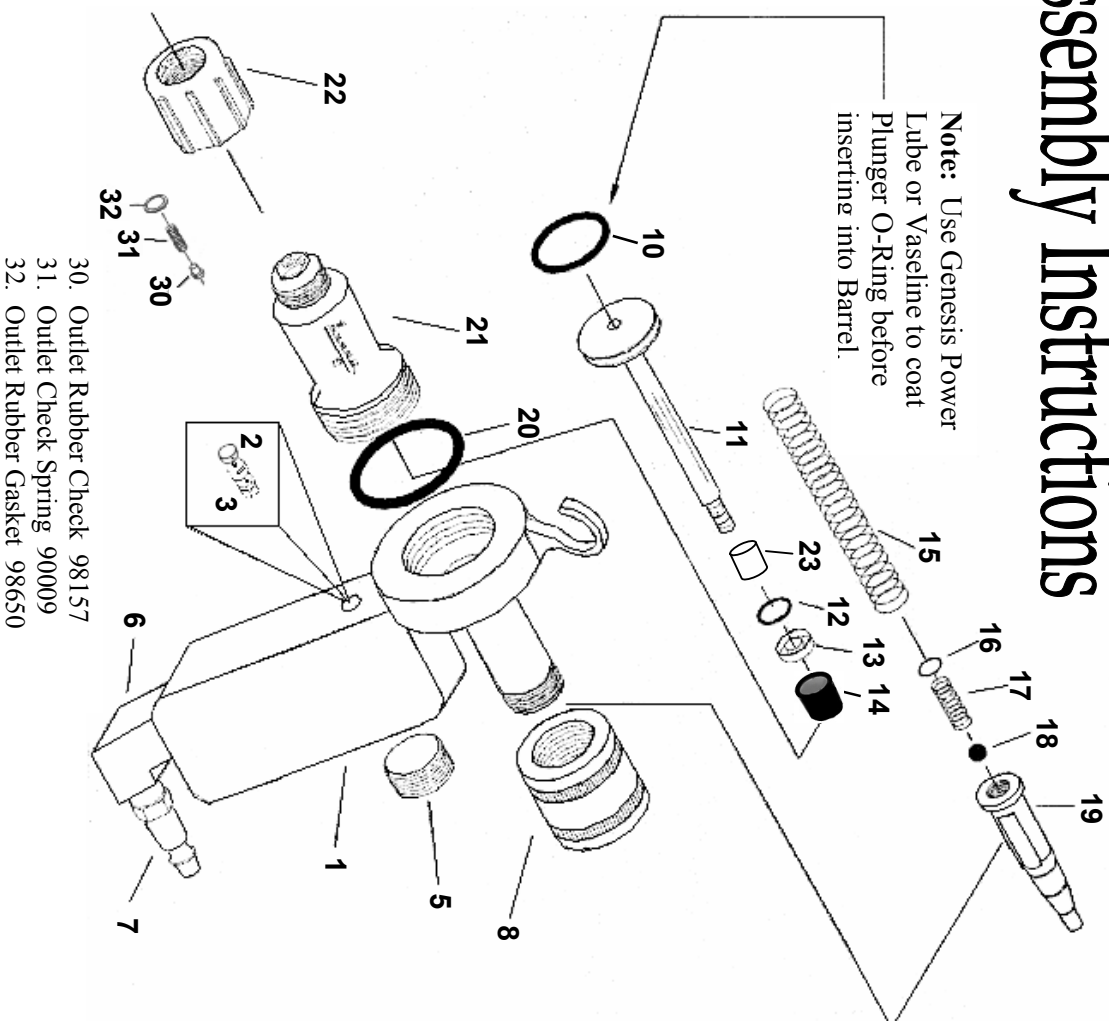


# 10 ML POWER DOSER™

## Assembly Instructions

DESCRIPTION	PART #
1. Handle	98213
2. Trigger Button	98140
3. Trigger valve	98141
5. Grub Screw (large)	98098
6. Male elbow (brass)	98059
7. Quick Connect male (Air)	98300
7. Quick Connect male (Gas)	98312
8. Adjustment nut 10/30 ml	98214-S
10. Plunger O-Ring 10 ml	98160-10
11. Piston Rod 10 ml	98172
12. Piston Rod O-Ring	98608
13. U-cup – Piston	98470
14. Spacer	98060-30
15. Main spring	90015-02
16. Inlet O-Ring	98652
17. Inlet Check spring	90007
18. Inlet Check ball	98175
19. Inlet fitting	98174
20. Barrel O-Ring	98609
21. 10 ml barrel	40662
22. Barrel Cap	98164
23. 10 ml Spacer	98167

**Note:** Use Genesis Power Lube or Vaseline to coat Plunger O-Ring before insertine into Barrel.



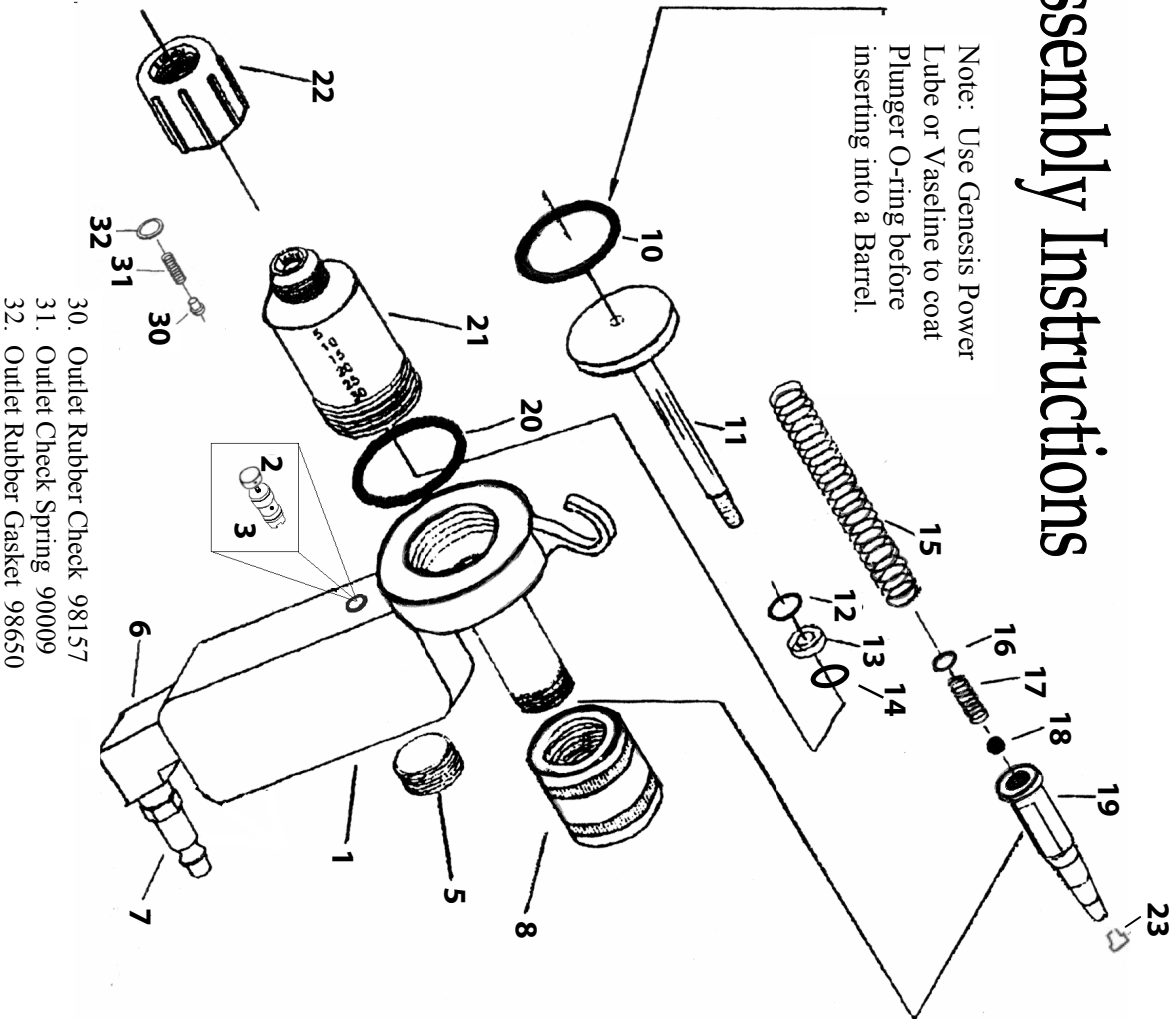
Note: Part 23 (10ml Spacer) is placed behind Piston Rod head before its pushed through handle.

# 30 ML POWER DOSER™

DESCRIPTION	PART #
1. Handle	98213
2. Trigger Button	98140
3. Trigger valve	98141
5. Grub Screw (large)	98098
6. Male elbow (brass)	98059
7. Quick Connect male (Air)	98300
7. Quick Connect male (Gas)	98312
8. Adjustment nut 10/30 ml	98214-S
10. Plunger O-Ring 30 ml	98160-30
11. Piston Rod 30 ml	98171
12. Piston Rod O-Ring	98608
13. U-cup – piston	98470
14. Backing Washer	98608-1
15. Main spring	90015
16. Inlet O-Ring	98652
17. Inlet Check spring	90007
18. Inlet Check ball	98175
19. Inlet fitting	98174
20. Barrel O-Ring	98609
21. 30 ml barrel	40664
22. Barrel Cap	98164
23. Inlet Reducer	40696

## Assembly Instructions

Note: Use Genesis Power Lube or Vaseline to coat Plunger O-ring before inserting into a Barrel.



# 60 ML POWER DOSER™

DESCRIPTION	PART #
1. Handle	98213
2. Trigger Button	98140
3. Trigger valve	98141
5. Grub Screw (large)	98098
6. Male elbow (brass)	98059
7. Quick Connect male (Air)	98300
7. Quick Connect male (Gas)	98312
8. Adjustment nut	98214-L
9. Adjustment nut-2 <sup>nd</sup>	98214-2
10. Plunger O-Ring 30 ml	98160-30
11. Piston Rod 60 ml	98178
12. Piston Rod O-Ring	98608
13. U-cup – Piston	98470
14. Backing Washer	98608-1
15. Main spring	90015
16. Inlet O-Ring	98652
17. Inlet Check spring	90007
18. Inlet Check ball	98175
19. Inlet fitting	98174
20. Barrel O-Ring	98609
21. 60 ml barrel	40666
22. Barrel Cap	98164
23. Spacer 60ml	98060-60

## Assembly Instructions

Note: Use Genesis Power Lube or Vaseline to coat Plunger O-ring before inserting into Barrel.

