



# TEAT-CARE “PRO”™

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## INSTALLATION INSTRUCTIONS FOR SINGLE AND TWIN PUMP TEAT SPRAY SYSTEMS

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# Genesis Industries Teat-Care “Pro”™ TEAT-SPRAY Installation Instructions

*This is a complete system for farm use only*

## **Carton contents:**

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- 1 Wall unit complete with Single or Twin Pump system, ready for use.
- 3 spray gun units complete with drop down coils and cable ties.
- 1.5 meters of 12mm diameter PU tubing complete with 40 micron filter.
- 30 Meters of 10mm dia NON Toxic PVC tubing with 12mm outlet and 12mm>10mm reducer.
- 1 instruction manual.

## **User Assurance**

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At Genesis Industries our aim is to develop the highest quality products which benefit the farmer.

Extensive on-farm trials and user feedback provide the basis for our class leading product development.

## **Safety**

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The *Genesis Teat-Care “Pro”™* TEAT- SPRAY System is designed for use exclusively in milking installations.

Any application outside the use described in this operating manual, will be taken to be not in accordance with the intended purpose.

The manufacture / supplier will not be held responsible for any losses arising, as a result of such use, the user will take full responsibility for use.

# ATTENTION

Whilst in operation, the installation is under an operating pressure of 3>4 bar (45>60lbs) psi.

If the spray accidentally comes in contact with a person's face rinse immediately with plenty of water and seek medical advice.

Always isolate from compressed air supply using valve (M) in Figure A and Figure A2.

Depressurise the spraying system by compressing trigger on one or more of the spray guns. Always depressurise before servicing the unit.

## Installation

Position the unit in a dust free environment which is adequately ventilated and close to a regulated supply line of compressed air.

Remove the template from the inside of the unit and mark the four hole positions. Position the unit no more than 1.8 meters (6 ft) above the base of the chosen chemical container. If fixing unit onto timber drill 3.5mm holes and use screws supplied, if fixing onto concrete drill 6 mm and place plastic rawl plug in each hole then use screws supplied.

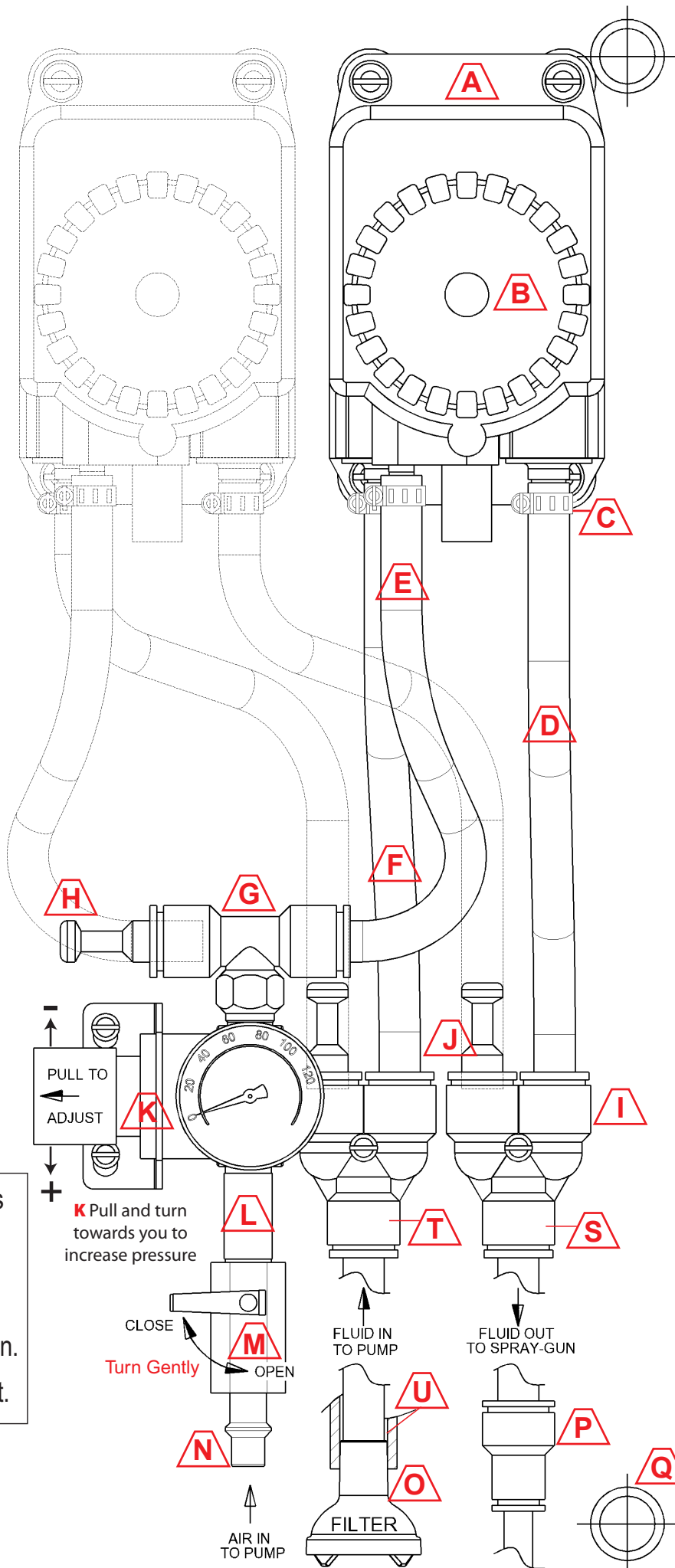
## Air Supply

The unit requires a supply of 'dry filtered' compressed air at 3>4 bar (40>60lbs) psi and capable of providing air flow rates of up to 20 litres/min, (precise air flow will depend on both operating pressure and spray demand / frequency – i.e. number of guns and usage frequency).

It is essential that the compressed air supply has a drier and / or water separating system in the air distribution system - failure of pumps due to water in the air chamber will not be covered under the warranty.

**WARNING** - *Before attempting to connect the compressed air supply ensure valve 'M' is in the off position.*

Figure A



Description / Part No.	Item
Fixing Screws 88110	A
Flow-Jet Pump 88120	B
Hose Clips 88130	C
PVC Hose Out 88140	D
Air Feed Hose 88150	E
PU Hose In 88160	F
Regulator Tee	G
Tee Plug 88180	H
“Y” Fitting IN/OUT 88190	I
“Y” Fitting Plug 88200	J
Adjustable Regulator 88210	K
Regulator Adapter 88220	L
Isolating Valve 88230	M
Air Fitting 88240	N
Inlet Filter 88250	O
Reducer 12/10 88260	P
Wall Fixing Screws 88270	Q
Template Plugs 88280	R
12mm Feed Tube 88290	S
Chemical Inlet 88300	T
Alignment Sleeves 88310	U

Removal of Tubing or Maintenance Plugs

Fig D

1. Push Tubing or Plug inwards.
2. Push down on Collar in the same direction.
3. Still holding the Collar down, pull tube out.

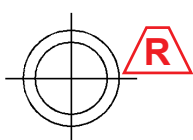


Figure A2

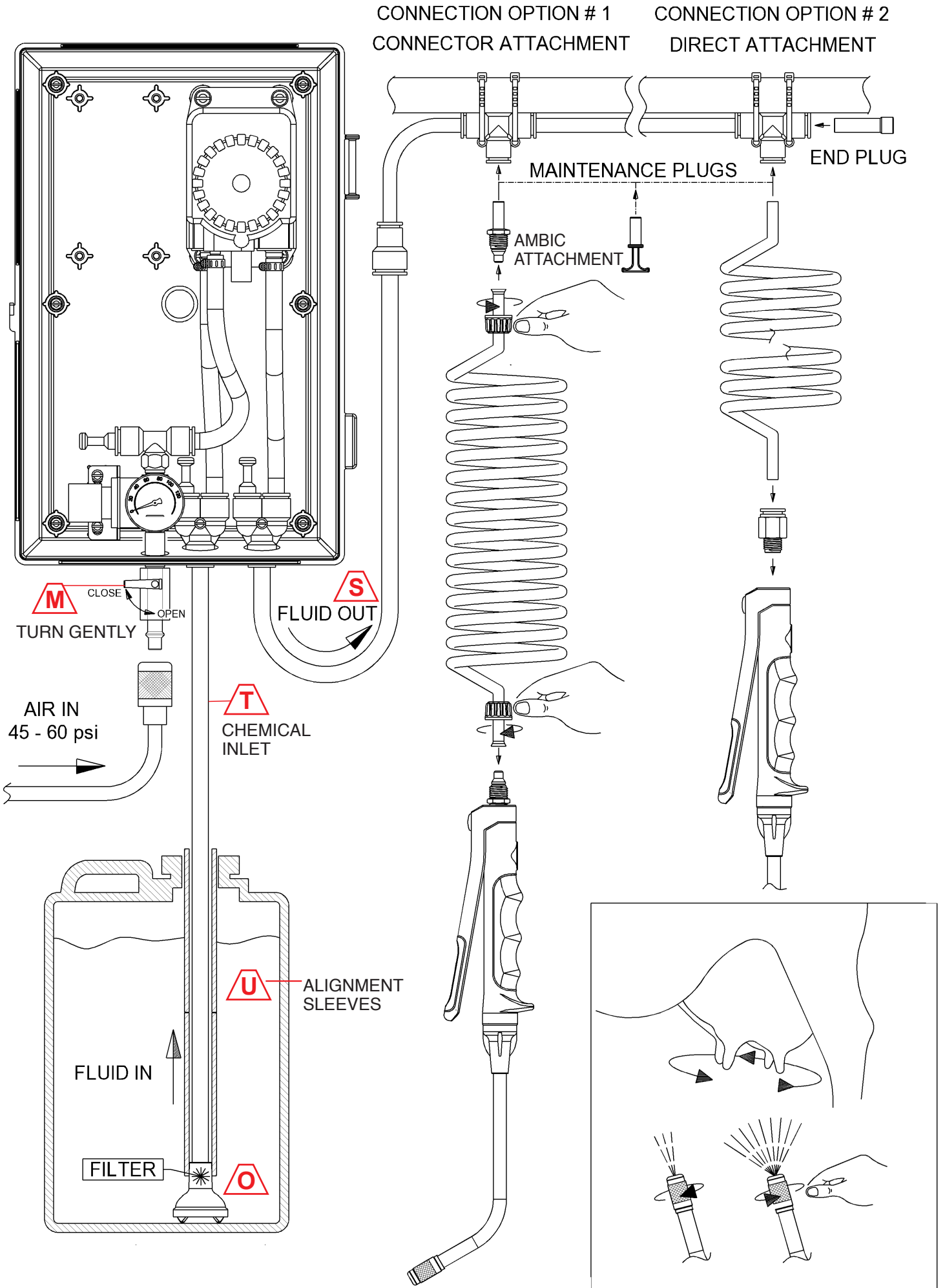


Figure B

## Line set-up

**Please Note:** Do not connect the air supply at this stage.

All reference will be made to “Figure A2 on Page 4, also on Wall template.

Remove feed tube ‘S’ and fix to the outlet ‘Y’ piece (refer to label on bottom of the unit, ‘RED’ arrow fluid, to spray guns) then fix to holding rail with plastic ties (ensure not to squeeze tube or restrict flow in any way).

Open spray gun package, using the tee connector, position along holding rail to preferred first position for drop coil, fix firmly with i.e. straps supplied (refer to Figure A2). Using PVC tube (2.7 meters) in package push into tee fitting, then attach to second Tee to determine next drop coil, complete all three guns.

Please ensure you place the end plug in last tee as per option 2 in Figure A2.

Attach each spray gun as per detail on Figure B In the event of the flare on the coil tube being damaged at any time, this can be cut off and refitted directly to the tee (remove item ‘V’).

Remove fluid input tube ‘T’ with black alignment sleeves ‘U’ and connect to pump unit (blue arrow on the label) place filter into chemical container. Agitate to disperse any crystal formation in the fluid.

## Initial Startup

Connect Air supply to wall unit, check filter is in place, ensure all guns are secure turn on valve ‘M’ the unit will start pumping rapidly then slowing to as stop once the full output pressure has been achieved, this has been preset at factory (45 PSI) adjust if required.

**Important** - Lift each individual gun above the delivery line to vent any air in the system, beginning with the gun farthest from the pump, this will ensure that the valve will shut off at the gun. For best results remove Stainless spray adjuster tip when venting the system. Minimise waste of Chemical by having an empty container available to vent into.

## Operation

The *Genesis Teat-Care "Pro"™* system is suitable for use with all main teat disinfectant sprays.

**Caution** - Do not use with sodium hypochlorite and peroxyacetic acid. When using concentrates ensure that the manufactures instructions are followed. Agitation may periodically be required.

**Important** - Replenish disinfectant supply before it runs out to prevent air entering the system.

The efficient operation of this system relies on having at least 2.4 bar (35lbs) at the spray guns. The output pressure at spray guns is practically identical to that of the internal regulator. This along with nozzle adjustment is preset to ensure a non-annulus spray pattern. It is recommended that the internal pressure regulator is set to give no less than 45psi on the gauge (this allows for pressure drop when more than one gun is in use at a time).

## **Air Pressure**

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Adjustment is by pulling the adjuster “K” on Figure A out and turning towards you to increase or away from you to decrease, once the desired pressure has been set push back in position to lock, this will prevent accidental movement of control.

**Caution** - Never set the regulator to exceed a pressure of 4.5 bar (70psi) - pressures in excess of 6.5 bar (100psi) will cause irreparable damage to the pump and may cause severe injury to humans and animals.

## **Spraying**

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For effective mastitis pathogen control, the teats must be completely covered with disinfectant. On adjustable nozzle guns rotate nozzle to achieve correct spray pattern (Figure B). The nozzle should ideally be positioned approximately 15 cm (6 inches) below the teats. Optimum and economical coverage is achieved by employing a circular movement. Application time will differ between cows; however, on average should be approximately 1 second per cow.

## **End of Milking**

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When milking is completed, isolate the unit from the main air supply by turning valve 'M' to the horizontal position in Figure A. This minimizes the loss of fluid in the event that a gun trigger valve is inadvertently left open.

## **Maintenance**

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**WARNING** - Before attempting to disconnect unit from the compressed air distribution line, isolate air supply from Compressor by using valve ‘M’ and ensure that both the compressed air distribution line and teat spray output line is de-pressurised.

## **Working on the Power Unit**

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Having disconnected the compressed air supply (N). chemical inlet (T) and outlet tubes (S), lift the Power Unit off the wall and remove it to a safe and convenient working surface.

## **Technical Data**

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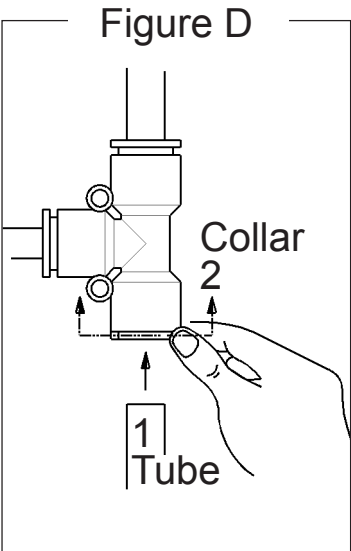
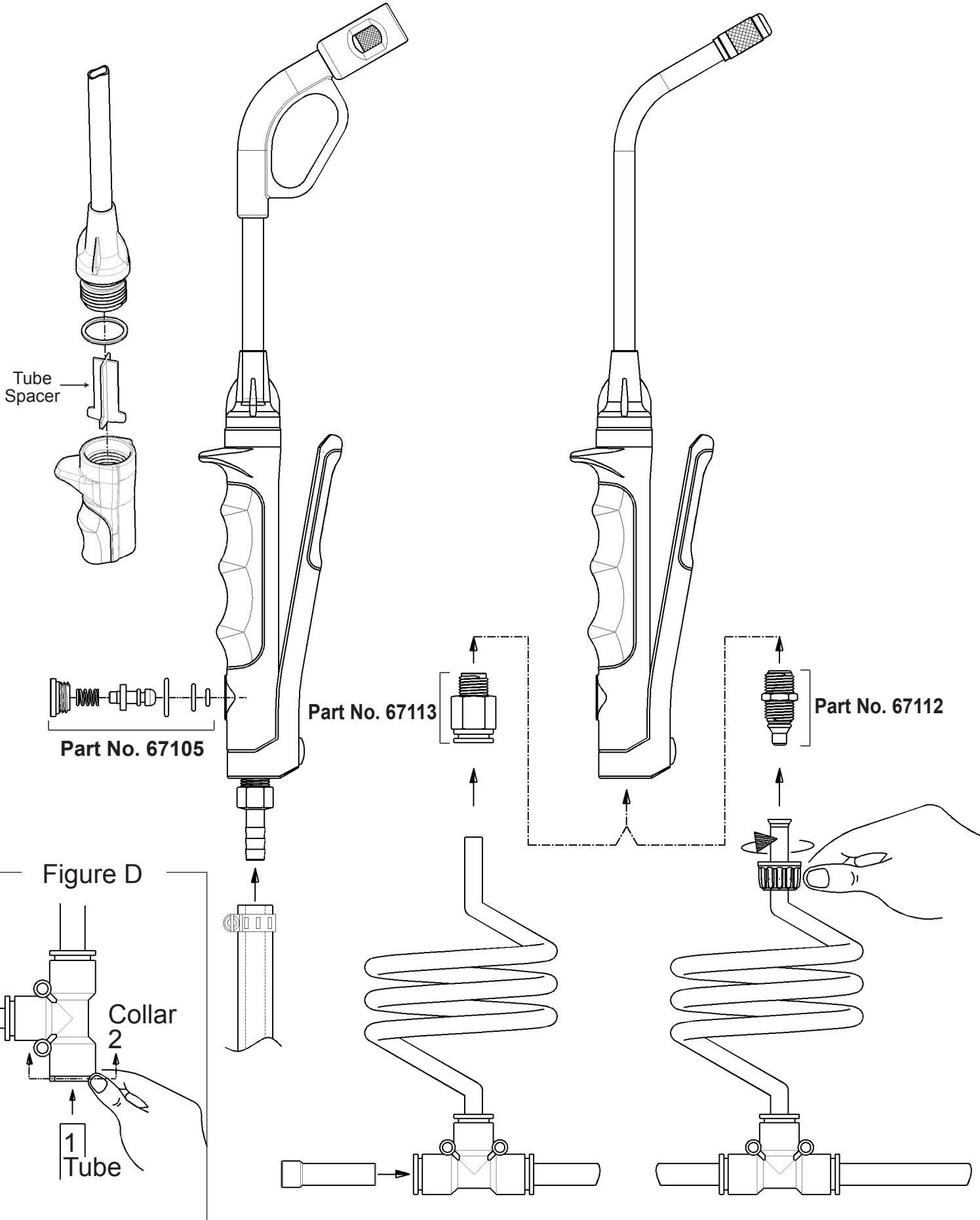
Power source	Compressed Air 3>5 bar (40>70)
Maximum number of guns operated simultaneously	14
Typical Chemical Consumption (per gun)	10-15ml/sec @ 3 bar (50psi)
Maximum no of guns per Power Unit	Single Pump 7 / Twin Pump 14
Air consumption – maximum	20 l/min
(actual consumption will depend on extend of demand from spray output line)	
Maximum length of Spray Output Line	50 m (160 ft)
Spray output pressure	3-4 Bar (40-60psi)
(dependent on air supply pressure at power unit)	

**12 months limited warranty on parts**

Figure C

**Specialise Dragline  
Part No. 67106**

**Spray Gun  
Part No. 67100**



- Fig D  
Removal of Tubing or Maintenance Plugs.
1. Push Tubing and Plug in the direction of the arrow.
  2. Push down on Collar in the same direction.
  3. Still holding the Collar down, pull tube out.



## Trouble Shooting

FAULT	CAUSE	REMEDY
1. Unit does no spray	<ul style="list-style-type: none"> <li>a Compressor, or air isolating valve not switched on.</li> <li>b Compressor line not airtight.</li> <li>c Constricted Compressed Air Supply Pipe (N).</li> <li>d Chemical Container is empty.</li> <li>e Intake Filter (O) or internal filter in button gun handle, blocked.</li> <li>f Spray Output Line (F) blocked.</li> <li>g Spray Nozzle 67104 blocked.</li> <li>h Unsuitable Chemical being used.</li> <li>i Pump faulty.</li> </ul>	<ul style="list-style-type: none"> <li>a Switch 'On" Compressor and/or isolating valve.</li> <li>b. Check that internal gauge on pumping unit is showing 40-60 psi. Check air tubing system for leaks.</li> <li>c Check for kinks and overtightened Cable Ties.</li> <li>d Fill Container.</li> <li>e Clean Filter.</li> <li>f Clear blockages, check for constrictions, kinks and tight Cable Ties.</li> <li>g Disassemble, clean Nozzle</li> <li>h Change to recognised Teat Disinfectant.</li> <li>i Return to service agent for repair or replacement. *</li> </ul>
2. Nozzle (C-1) does not shut off cleanly or leaks.	<ul style="list-style-type: none"> <li>a Air in Spray Output Line D S</li> <li>b Gun Control Valve 67105 dirty or damaged.</li> </ul>	<ul style="list-style-type: none"> <li>a Vent as described under "Initial start up".</li> <li>b Clean or replace Control Valve.</li> </ul>
3. Chemical running out of Power Unit.	<ul style="list-style-type: none"> <li>a Loose Connector Nut/tube.</li> <li>b Defective pump.</li> </ul>	<ul style="list-style-type: none"> <li>a Locate leak and rectify.</li> </ul>
4. Chemical leaks into Air line	Pump faulty.	Immediately de-pressure and disconnect air line. Refer 1-ii.

\* A service unit will be available for use during this time, pumps damaged by water in air supply are excluded from warranty.

# Spare Parts

## Description & Part Number

1



Spray Gun / Part No. 67100

2



Retractable Coil / Part No. 67101

3



Extension Kit / Part No. 67102

4



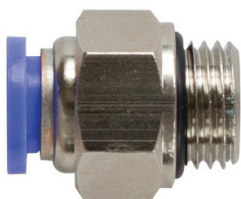
Stainless Steel Lance / Part No. 67103

5



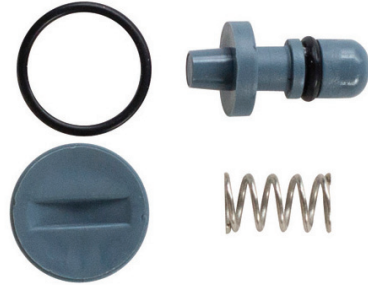
Adjustable Nozzle / Part No. 67104

6



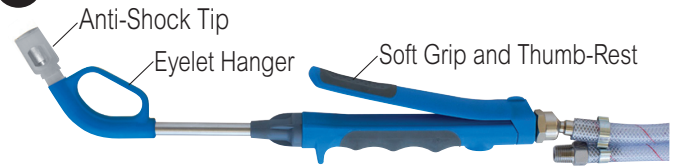
Handle Push-in Fitting / Part No. 67113

7



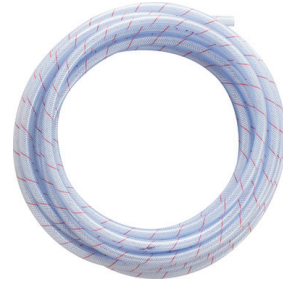
Control Valve / Part No. 67105

8



Specialised Dragline (Complete with 15m Hose) / Part No. 67106

9



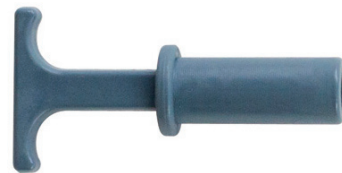
15m Drag Line Hose / Part No. 67106H

10



Tee connector with Push-in Coil Attachment / Part No. 67110

11



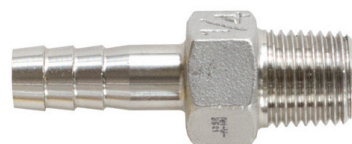
Push-in Plug / Part No. 67111

12



Handle Coil Fitting / Part No. 67112

13



Drag-line Hose Connector Stainless Steel / Part No. 67114