



ProLine

Professional Sprayers

The All Stainless Steel Sprayer



ProLine

Professional Sprayers

Instruction Manual

1/2 gallon 501-502-080

1 gallon 501-504-210

1.5 gallon 501-50-210

Airofog USA ProLine PCO professional sprayer 0.5 gallon , 1 gallon and 1.5 gallon referred to in this document are designed for use by qualified and experienced personnel. Please read this instruction thoroughly before usage.

Safety Instruction

- Keep out of reach of children.
- Before usage, check condition and proper function of the sprayer.
- Only pumping up and using sprayer in upright or vertically hanging position.
- Do not leave sprayer filled with pesticide in the sun.
- Note the wind direction, do not spray against wind and prevent droplets from drifting onto areas which must not be treated.
- Never spray into electric outlets or cable boxes.
- Do not spray to person or pet.
- Do not operate the sprayer if there are visible symptoms of a problem.
- Wear personal protective equipment when handling dangerous substances.
- Application of insecticides should follow recommendations of manufacturers and be in compliance with local regulations controlling the application of pesticides. We are not liable for consequence of improper applications.
- When unscrewing, never point the lance at others or yourselves.
- Never blow through clogged nozzles or valves with the mouth.
- Before repair and maintenance, drain the sprayer and release all pressure.
- Always replace damaged or malfunctioning parts immediately.



Cautions:

It is the operator's responsibility to ensure the safe use of sprayer and he is fully compliant with national or local regulations governing compression sprayer and application of pesticide.

AIROFOG USA is not liable for damages or consequences occurred due to improper use/repair/maintenance, the use of non-OEM parts, and acceptance of damaged/broken sprayers by any reason.

Operation

A) Filling & mixing insecticides:

- always follow label instructions when mixing insecticides
- measure liquid quantity to meet actual requirements
- first fill half of the required water into tank
- add the insecticide according to correct proportion
- attach pump cap and tighten
- shake the mixture
- remove pump cap
- add the remaining amount of water and tighten pump cap

B) Pressurizing the sprayer:

- unlock the pump handle by turning $\frac{1}{4}$ turn
- pump plunger up and down until the required pressure is reached
- lock the pump handle

C) Application rates of multi-nozzle (measured with water, at 2.8 bar, 40 psi):

fine fan -----360ml/min. (6.0 oz/min.), 80
coarse fan ----- 760 ml/min. (12.9 oz/min.), 80
pin stream ----- 330ml/min. (5.6 oz/min.), 26 ft
crack & crevice extension straw-----50ml/min. (1.0 oz/min.)

Repair and Spare Part

- do not modify the sprayer, this may cause a risk of harm and may damage the sprayer
- if any part shows signs of damage or wear, replace it immediately
- always use original spare parts for repair or maintenance

Care and Maintenance

A) After using:

- empty the tank and drain the hose and lance after each use
- carefully inspect all gaskets and hoses as well as all other fittings of wear and tear, replace when necessary.

B) Cleaning the sprayer

- rinse the tank thoroughly with water
- add water and detergent into the tank
- attach pump cap and tighten it
- shake to clean the tank
- pressurize the tank
- flush the hose and nozzle
- empty the tank and refill with clean water
- flush the hose and trigger valve once more
- empty the remaining water
- the sprayer should be cleaned thoroughly at least once a week

C) Cleaning clogged nozzle and extension straw

- do not insert metal objects into the tip orifices
- clean with a soft bristle brush such as a tooth-brush to free clogs
- cleaning detergents or solvents can be used to soak the tip (do not use ammonia – it can corrode brass)
- do not insert metal object into the straw which will be greatly damaged to the point of not functioning at all
- run warm water over and into the extension straw
- soak the nozzle and extension straw in warm, soapy water
- blow compressed air through back of nozzle and extension straw

D) Maintenance of pump and trigger valve

- piston o-ring (1.7) or cup, trigger valve o-ring (9.13/1) should be **greased** from time to time when resistance is felt or every 3 months
- check valve at the bottom of the pump cylinder prevents liquid from entering the pump, if liquid leaks into the pump, the valve should be inspected or replaced, use a blunt tool to press the nipple of the check valve into pump cylinder
- if liquid leaks out of the trigger valve or any connection, the valve seal/gasket or the connection should be inspected or replaced

Specification

	0.5 Gallon	1 Gallon	1.5 Gallon
Working Capacity	0.5 Gal., 2L	1 Gal., 4L	1.5 Gal., 5L
Tank Volume	0.8 Gal., 3L	1.3 Gal., 5L	2.0 Gal., 7.5 L
Tank Material	AISI 304		
Max. Working Pressure	90 psi 6 bar		
Filling Mouth	Ø2.75 inch (Ø70mm)		
Pressure Relief Valve	Max at 60 psi 4 bar,		
Pressure Gauge	0-100 psi 7 bar		
Pump Handle	Brass, D-type		
Pump Cylinder	AISI 304 SS tubing with Viton™ check-valve		
Hose	48 in (120 cm)		
Trigger Valve	brass, drip-free (DFC) type with locking nut		
Wand	AISI 304, Stainless Steel core, Tig Welded and Argon Purge		
Nozzle	4-way multi-nozzle with crack & crevice extension straw		
Carrying Strap	Single shoulder strap optional;		
Service Kit	Pump & Valve extension/trigger service kit, Includes seal/gasket kit		
Tank Dimensions	Ø6.7 x H7.3 in (Ø17 x H18.5 cm)	Ø6.7 x H11.2 in (Ø17 x H28.5 cm)	Ø6.7 x H14.2 in (Ø17 H36 cm)
Total Height	10.6 in (27 cm)	14.6 in (37 cm)	17.5 in (44.5 cm)
Net Weight	5.72 pound (2.6 kg)	6.82 pound (3.1 kg)	8.14 pound (3.7 kg)

※ Specifications subject to change without notice or obligation. Trademarks appearing within are the property of Airofog USA, Ltd. Other trademarks are the property of their respective owners.

Model example -ProLine A4DFC9-

A: available for worldwide

4: 1 Gal. (4L) tank; 2: 0.5 Gal. (2L) tank; 5: 1.5 Gal. (5L)

tank DFC-VE: drip-free trigger valve with cable

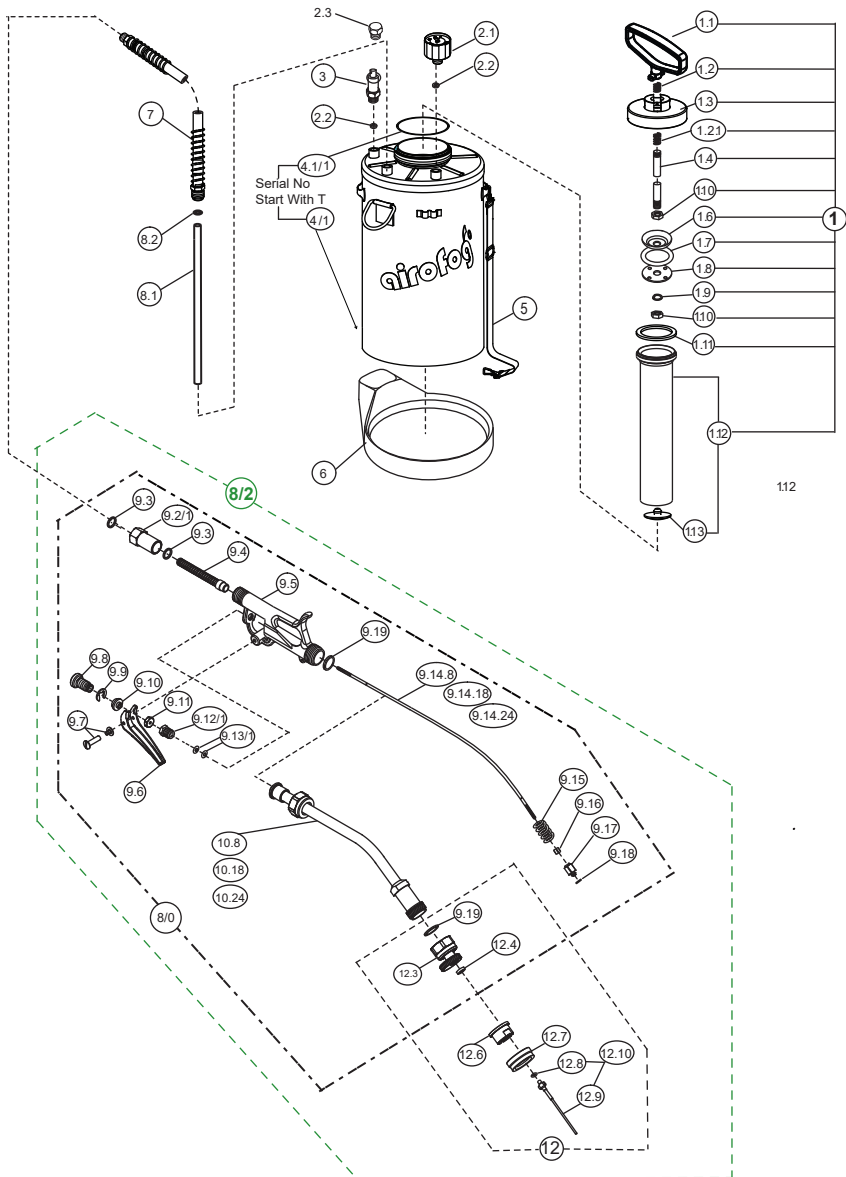
9: 7.5" wand ; 18:17.5" wand 24" 36"

M: multi-nozzle CC ; F: fan nozzle

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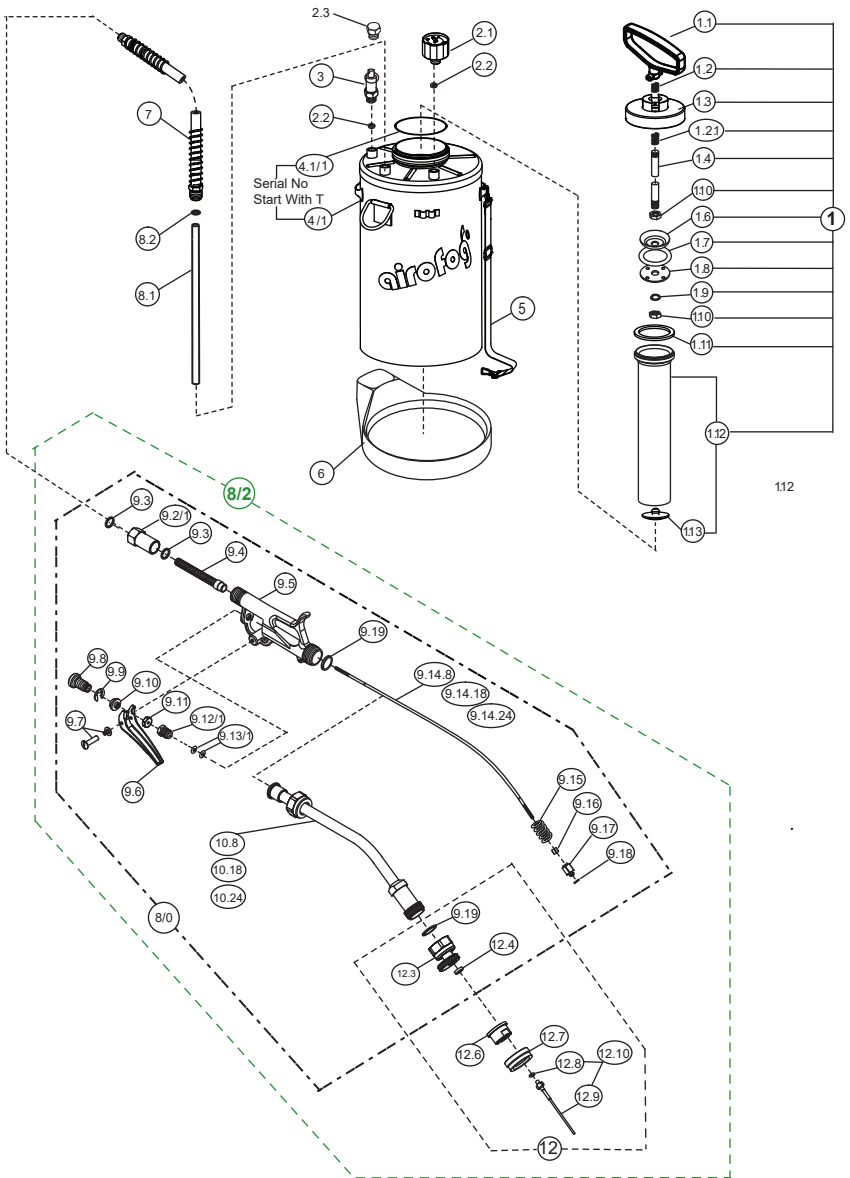
0.5 / 1 / 1.5 DFC VE-9/18/24/36

Parts not interchangeable with competitors



A2 / A4 / A5 DFC-9/18-M Spare Part List		
Pos. No.	Part No.	Descriptions
1	502-001-410	Pump Assembly,complete, 0.5 Gallon
1	504-001-410	Pump Assembly,complete, 1 Gallon
1	505-001-410	Pump Assembly,Complete, 1.5 Gallon
1.1	501-001-010	Handle, Pump
1.2	505-001-020	Spring, Plunger Lock
1.2.1	505-001-021	Spring, Buffer
1.3	501-001-030	Cap, Pump: incudes gasket
1.4	502-001-440	Rod, Plunger, , 0.5 Gallon
1.4	504-001-440	Rod, Plunger, 1 Gallon
1.4	505-001-440	Rod, Plunger, 1.5 Gallon
1.6	505-001-060	Plate, Spreader
1.7	505-001-070	Gasket, Pump Piston
1.8	505-001-080	Plate, Back SS
1.9	505-001-090	Washer, Lock SS
1.10	501-001-100	Nut, Plunger
1.11	501-001-110	Gasket, Cylinder Pump Cap
1.12	502-001-520	Pump Cylinder w/check valve 0.5 Gallon
1.12	504-001-520	Pump Cylinder w/Check valve 1 Gallon
1.12	505-001-520	Pump Cylinder, w/check valve 1.5 Gallon
1.13	502-001-130	Check Valve, Viton
2.1	501-002-000	Pressure Gauge, 0-60 psi
2.2	505-002-020	Washer, REplaces D-51P
2.3	501-002-030	Plug (Optional)
3	501-003-000	Pressure Relief Valve, W/ gasket
4	502-004-410	Tank, 0.5 Gallon, Old version
4	504-004-410	Tank,1 Gallon, Old version
4	505-004-410	Tank, 1.5 Gallon Old version
4/1	502-004-411	Tank, NV, 0.5 Gal. (serial no. start with T)
4/1	504-004-411	Tank NV1 Gal. (serial no. start with T)
4/1	505-004-411	Tank,NV1.5 Gal. (serial no. start with T)
4.1	604-016-010	Gasket, for tank top, old version black
4.1/1	604-016-110	O-Ring Brown NV (serial no. start with T)
5	505-005-000	Adjustable Carrying Strap
6	500-006-000	Tank Bottom (blue)
7	501-007-620	Hose, 4 Foot (blue)
8.1	502-008-010	Syphon Tube, 2L,0.5 Gallon, includes gasket
8.1	504-008-010	Syphon Tube, 4L, 1 Gallon, includes gasket
8.1	505-008-010	Syphon Tube, 5L, 1.5 Gallon, incudes gasket
8.2	505-008-020	Gasket, Syphon Tube
DFC-8/0	501-000-082	Valve Assembly, 9": w/CC Tip Assembly
	501-000-182	Valve Assembly,18"w/CC tip assembly
	501-000-242	Valve Assembly, 24"w/CC tip assembly

0.5/1/1.5 DFC-VE-9/18/24/36



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0.5/1/1.5 DFC-9/18-M Spare Part List

Pos. No.	Part No.	Descriptions
DF9.2/1	501-009-020	Housing, Strainer
DF9.3	500-009-030	Gasket, strainer housing
DF9.4	500-009-040	Strainer
DF9.5	500-009-050	Valve Body, Kit includes packing and nut
DF9.6	500-009-060	Trigger, Valve
DF9.7	500-009-070	Trigger, Screw: stainless steel use loctite
DF9.8	500-009-080	Safety lock Nut
DF9.9	500-009-090	Snap Ring
DF9.10	500-009-100	Screw, Adjust: kit, POS: 9.9, 9.10, 9.11
DF9.11	500-009-110	Nut, Lock
DF9.12/1	500-009-121	Nut, Packing
DF9.13/1	500-009-131	Packing, Valve: Viton O-ring 2 needed
DF9.14.8	500-009-141	Cable, Valve 9 "
DF9.14.18	500-009-143	Cable, Valve 18 inch
DF9.14.24	500-009-144	Cable, Valve 24 inch
DF9.15	500-009-150	Spring, Seat Stem
DF9.16	500-009-160	Nut, Seat Stem
DF9.17	500-009-170	Seat Stem, w/viton gasket
DF9.18	500-009-180	O-ring, seat stem
DF9.19	505-009-150	Gasket, Valve extension
DF10.8	501-010-080	Extension Wand, 9 inch: Kit includes cable / spring
DF10.18	501-010-180	Extension Wand, 18 inch:Kit includes cable / spring
DF10.24	501-010-240	Extension Wand, 24 inch: Kit includes cable / spring
DF12	500-012-000	Multi-Nozzle, Assembly incl: CC tip straw
DF9.19	505-009-150	Gasket for VE and Tip holder
DF12.3	500-012-030	Tip Holder, Multi-Nozzle , C&C Tip
DF12.4	500-012-040	Gasket, TIP
DF12.6	500-012-060	Tip, CC
DF12.7	500-012-070	Retainer, Tip
DF12.8	935-018-000	Gasket, for CC straw
DF12.9	500-012-090	Crack & Crevice (C&C) Straw
DF12.10	500-012-100	C&C Straw with O-Ring
DFC-8/0	501-000-083	Valve Assembly with 4/way tip, 9"
Drip Free W/Cable	501-000-183	Valve Assembly with 4/way tip, 18"
	501-000-242	Valve Assembly with 4/way, 24"
	501-015-100	Pump/Tank Service Kit: Proline (1.7, 1.11, 1.13, 2.2x2, 4.1, 8.2)
	501-015-110	Pump/Tank Service Kit (serial no. start with T) (1.11, 1.13, 1.7, 2.2x5, 4.1/1, 8.2)
	501-016-030	Valve Service Kit (9.13/1x2, 9.3x2, 9.18, 9.19x2, 12.4, 12.8)

Conversion Factor:

1 yard	= 3 feet	= 0.91 metre
1 metre	= 39.37 inches	= 1.09 yards
1 metre/sec	= 2.237 miles per hr	= 196.9 ft/min
1 US gal	= 0.83 Imp gal	= 3.78 litres
1 Imp gal	= 1.20 US gals	= 4.54 litres
1 litre	= 0.26 US gal	= 0.22 Imp gal
1 US pint	= 16 US fl ounces	= 0.47 litre
1 Imp pint	= 20 Imp fl ounces	= 0.57 litre
1 pound	= 16 ounces	= 0.45 kilogram
1 kilogram	= 2.20 pounds	= 35.3 ounces
1 ounce	= 28.35 grams	
1 pound/sq inch	= 0.068 atmosphere	= 0.067 bar
1 atmosphere	= 14.70 pounds/sq in	= 1.01 bar
1 bar	= 14.50 pounds/sq in	= 0.98 atmosphere
1 kilopascal	= 0.01 bar	= 0.145 pounds/sq in



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