



***Mini-Spray  
Instruction Manual***

***model: MSP  
MSA***

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Airofog 16oz. Mini Sprayer model MSA and MSP 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.
- When using the metal extension close to electric outlets, pay attention to avoid the shock hazard.
- Do not spray on a 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:**

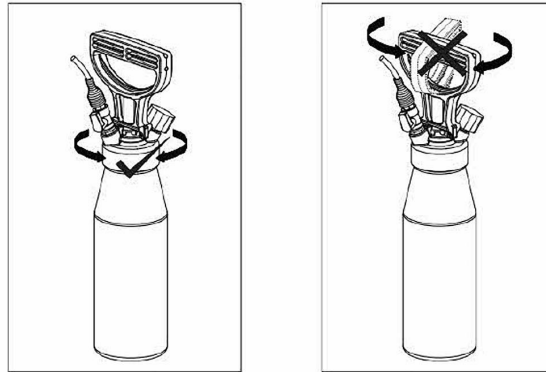
It is the operator's responsibility to ensure the safe use of sprayer and he/she is fully compliant with national or local regulations governing compression sprayer and application of pesticide.

AIROFOG USA is not liable for damages that has occurred due to improper use/repair/maintenance, the use of non-recommended/unoriginal parts, and acceptance of damaged/broken sprayers for any reason.

## Operation

### A) Opening/Closing bottle and filling insecticides:

- To open the bottle, holding the bottle cap then turning it counter clockwise.
- Follow insecticide's label instruction and fill the well mixed water or oil based insecticide into bottle. Avoid powder or any particle in the insecticide to prevent nozzle clogged.
- To close the bottle, holding and turning the bottle cap clockwise till tightening. **Never open or close the bottle by turning the handle as this may damage the handle seriously.**



### B) Pressurizing the sprayer:

- pressing down then ¼ turning the pump handle to unlock the pump handle
- 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 -----	1.2oz, /min., 80°
coarse fan -----	2.6oz, /min., 80°
pin stream-----	1.1 oz, /min., 25 FEET
crack & crevice extension straw-----	1.7oz, /min.

### Application rates of aerosol nozzle (measured with water, at 4 bar, 60 psi):

fine, white-----	2 oz, /min. 15-30 MICRONS
medium, blue-----	3 oz, /min. 30-50 MICRONS
coarse, red-----	4.4oz, /min. 50-70 MICRONS
crack & crevice tip -----	3.8oz, /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

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## Care and Maintenance

### A) After using:

- empty the bottle 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 bottle thoroughly with water
- add water and detergent into the bottle
- attach pump cap and tighten it
- shake to clean the bottle
- pressurize the bottle
- flush the hose and nozzle
- empty the bottle 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 crack & crevice tip

- 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 tip which will be greatly damaged to the point of not functioning at all
- run warm water over and into the crack & crevice tip
- soak the nozzle and extension straw in warm, soapy water
- blow compressed air through back of nozzle and crack & crevice tip

### D) Maintenance of pump and trigger valve

- piston o-ring (8) should be **GREASED** from time to time
- 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
- if liquid leaks out of the trigger valve or any connection, the valve seal/gasket or the connection should be inspected or replaced

## Specification

	<i>Mini-Spray Aerosol (MSA)</i>	<i>Mini-Spray Plus (MSP)</i>
Bottle	stainless steel AISI 304, 1/5 Gal.	
Working Capacity	1/8 Gal./ 16oz.	
Max. Working Pressure	116 PSI / 8 bar	
Pump Cylinder	stainless steel AISI 304, with Viton™ check-valve	
Spray Hose	heavy duty coiled	
Pressure Gauge	0-10 bar, 0-150 psi	
Pressure Release Valve	supplied as standard	
Discharge Valve	brass, wand-like trigger with Flexi-pro aerosol delivery system (FADS)	brass, drip-free trigger valve with multi-nozzle and C&C straw
Carry Pouch	supplied as standard	
Total Height (bottle with handle)	13.3in, 34 cm	
Net Weight	0.9 kg/ 2lb	1.2 kg/ 2.6lb

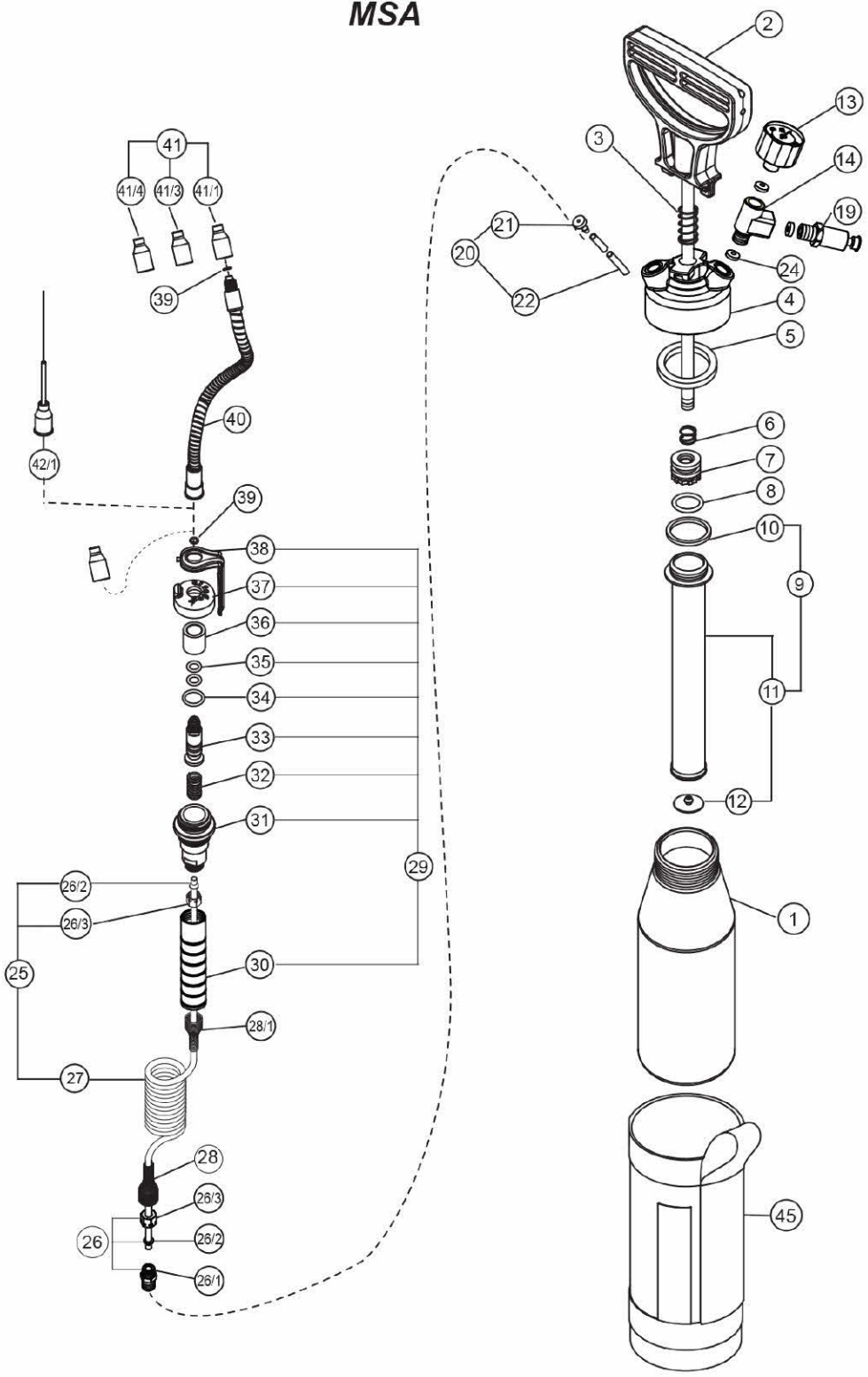
※ Specifications are subject to change without notice or obligation.

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### Included with Every Mini Sprayer

- C&C Tip- Screw in for MSP- SS Aerosol for MSA
- Carry Pouch with Belt Loop Strap
- Pump Cylinder Repair Kit
- Valve Repair Kit (MSP), Actuator Repair Kit (MSA)
- 6" Flexi Valve Ext (MSA)

# MSA

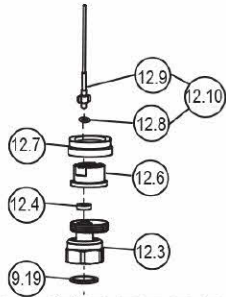


**MSA Spare Part List**

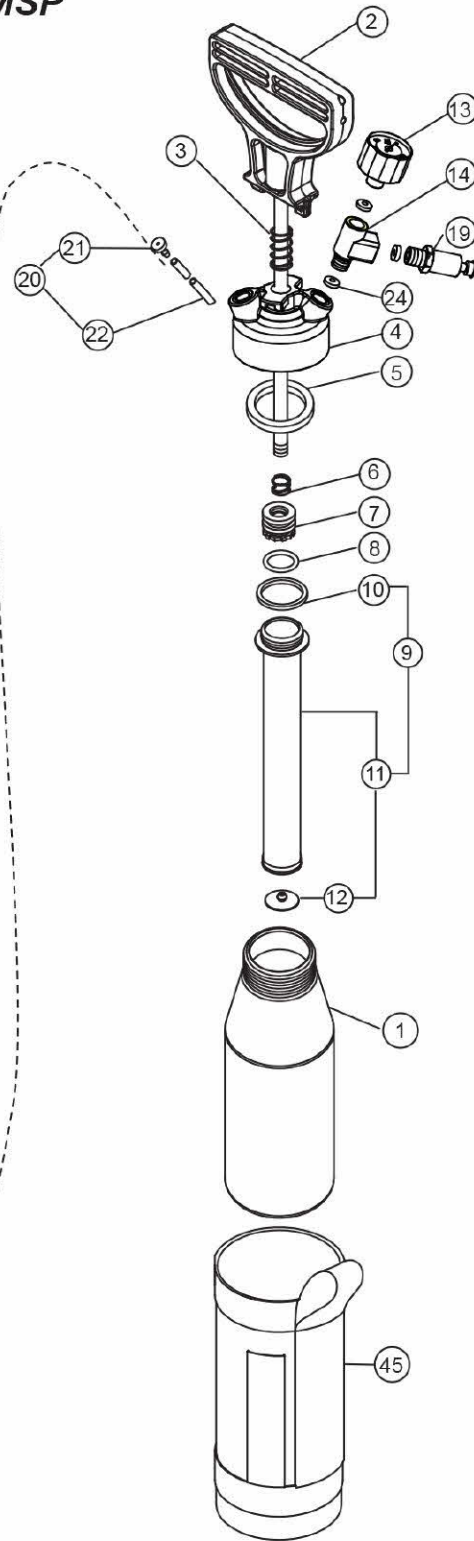
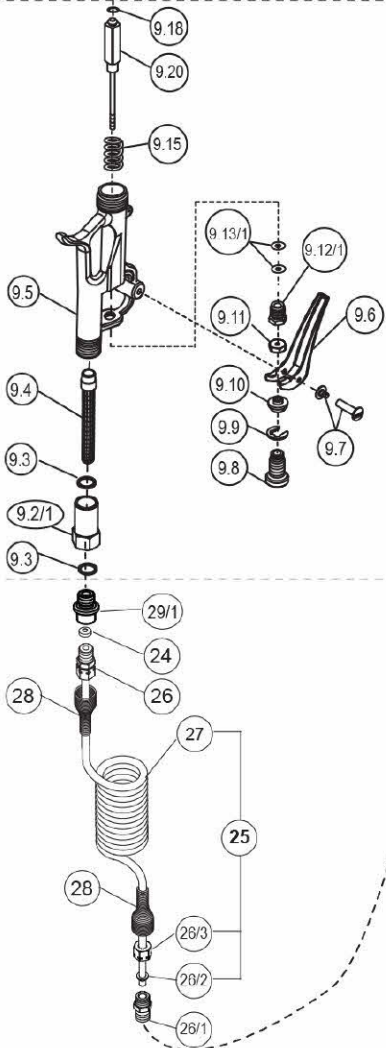
<b>Pos.</b>	<b>Part No.</b>	<b>Description</b>	<b>Pos.</b>	<b>Part No.</b>	<b>Description</b>
1	603-001-000	Bottle	26/2	601-004-012	Compression Ring
2	605-002-000	Piston Rod	26/3	601-004-013	Retaining Nut
3	604-003-000	Spring	27	601-004-1 30	Coiled Hose, Blue " KIT ONLY
4	605-004-000	Bottle Cap	28	601-004-040	Hose Protective Spring
5	605-005-000	Gasket, Viton	28/1	603-004-040	Hose Protective Spring
6	505-001-020	Spring	29	601-007-000	Flexi-Valve Assembly
7	605-007-000	Piston	30	601-007-010	Valve Handle
8	605-008-000	O-Ring	31	601-007-020	Valve Body
9	605-009-000	Pump Cylinder Assembly	32	505-003-014	Spring
10	605-010-000	Gasket	33	601-007-040	Seat
11	605-011-000	Cylinder Tube	34	601-007-060	AEROSOL VLV ASSM GASKET
12	604-012-000	Check Valve	35	935-041-000	O-Ring, Viton
13	604-013-000	Pressure Gauge	36	601-007-070	Seat Sleeve
14	510-003-030	T-Connector	37	601-007-080	Valve Cup
19	604-019-000	Pressure Release Valve	38	601-007-090	Trigger
20	603-020-000	Supply Tube Assembly	39	601-007-100	O-Ring, Viton
21	604-021-000	Tube Adapter	40	601-008-010	Extension ,Spiral Wand
22	603-022-000	Supply Tube	41	601-009-000	Aerosol Nozzle Set
24	505-002-020	Gasket	41/1	601-009-030	Nozzle fine, White (optional)
	605-035-000 Cap/Pump Service Kit consisting 5,8, 10, 12,20,24x3		41/3	601-009-050	Nozzle medium, Blue
			41/4	601-009-070	Nozzle coarse, Red (optional)
25	604-025-100 COIL Hose Replacement Kit consisting 26/2x2,26/3x2,27		42/1	604-01 0-012	Extension, 12cm
26		601-004-010 Hose Adapter Assembly		601-023-200	Valve Service Kit consisting 34,35x2,39x3
26/1	601-004-011	COIL HOSE Adapter	45	605-020-010	Carrying Pouch, Airofog

# MSP

## DF12



## DFV





<b>MSP Spare Part List</b>					
<b>Pos.</b>	<b>Part No.</b>	<b>Description</b>	<b>Pos.</b>	<b>Part No.</b>	<b>Description</b>
1	603-001-000	Bottle	DFV	500-009-000	DF Valve Assembly
2	605-002-000	Piston Rod	DF9.2/1	501-009-020	Housing strainer
3	604-003-000	Spring	DF9.3	500-009-030	Gasket
4	605-004-000	Bottle Cap	DF9.4	500-009-040	Strainer
5	605-005-000	Gasket, Viton	DF9.5	500-009-050	Valve Body
6	505-001-020	Spring	DF9.6	500-009-060	Trigger
7	605-007-000	Piston	DF9.7	500-009-070	Trigger Screw
8	605-008-000	O-Ring	DF9.8	500-009-080	Safety Lock Nut
9	605-009-000	Pump Cylinder Assembly	DF9.9	500-009-090	Snap Ring
10	605-010-000	Gasket	DF9.10	500-009-100	Adjusting Screw
11	605-011-000	Cylinder Tube	DF9.11	500-009-110	Lock Nut
12	604-012-000	Check Valve	DF9.12/1	500-009-121	Sealing Nut
13	604-013-000	Pressure Gauge	DF9.13/1	500-009-131	O-Ring, Viton
14	510-003-030	T-Connector	DF9.15	500-009-150	Seat Spring
19	604-019-000	Pressure Release Valve	DF9.18	500-009-180	O-Ring, Viton
20	603-020-000	Supply Tube Assembly	DF9.20	500-009-200	Long Seat Stem
21	604-021-000	Tube Adapter	DF12	500-012-000	Multi-Nozzle Assembly
22	603-022-000	Supply Tube	DF9.19	505-009-150	Gasket
24	505-002-020	Gasket	DF12.3	500-012-030	Multi-Nozzle Holder
	605-035-000	Cap/Pump Service Kit consisting 5,8,10,12,20,24x3	DF12.4	500-012-040	Gasket
			DF12.6	500-012-060	Multi-Nozzle
			DF12.7	500-012-070	Retainer
25	604-025-100	Hose Replacement Kit consisting 26/2x2,26/3x2,27	DF12.8	935-018-000	O-Ring, Viton
26	601-004-010	Hose Adapter Assembly	DF12.9	505-012-090	Crack & Crevice Straw
26/1	601-004-011	Adapter	DF12.10	505-012-100	Straw with O-Ring
26/2	601-004-012	Cutting Ring		604-036-000	DF Service Kit (consisting 24,DF9.3, 9.13/1 9.18, 9.19x2, 12.4, 12.8)
26/3	601-004-013	Retaining Nut			
27	601-004-130	Coiled Hose			
28	601-004-040	Hose Protective Spring	45	605-020-010	Carrying Pouch, Airofog
29	604-029-010	Female Adapter			

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