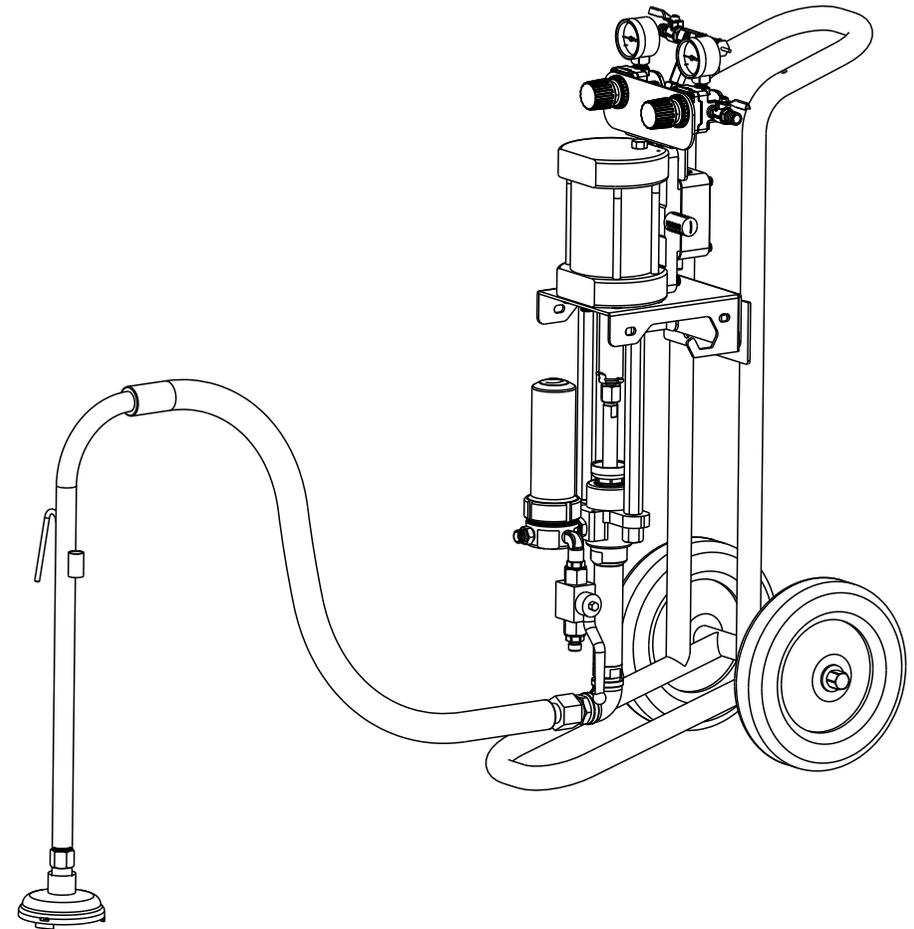


VS 20 MINI AIRLESS

AIR PRESSURE-TYPE PLUNGER PUMP

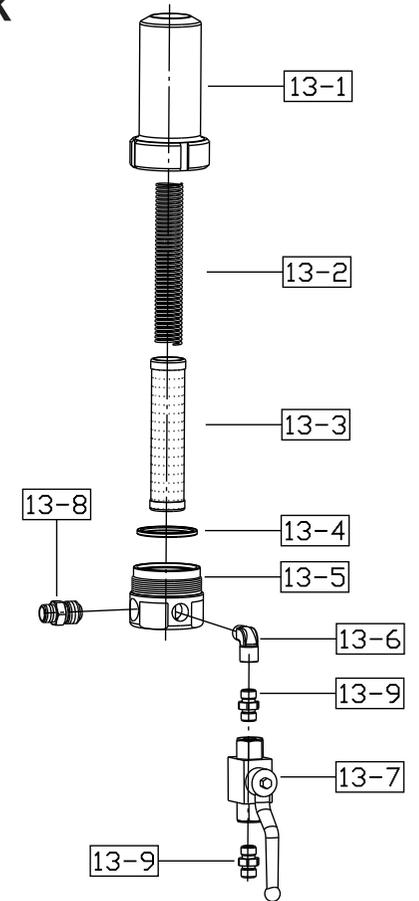
OPERATING INSTRUCTION



IMPORTANT: Before assembly and start-up, please read and clearly understand all the documents relating to this equipment (professional use only).

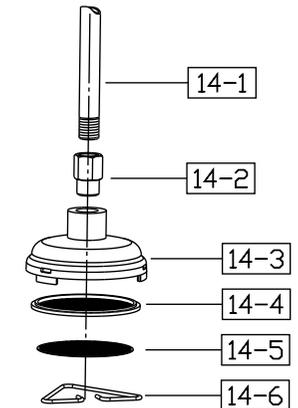
PRESSURE STORAGE TANK

No.	Description	Q' ty
13-1	Pressure storage tank cover	1
13-2	Spring	1
13-3	Filter	1
13-4	Seal gasket	1
13-5	Bottom cover	1
13-6	Elbow	1
13-7	Cock	1
13-8	Fluid coupler	1
13-9	Fluid coupler	2



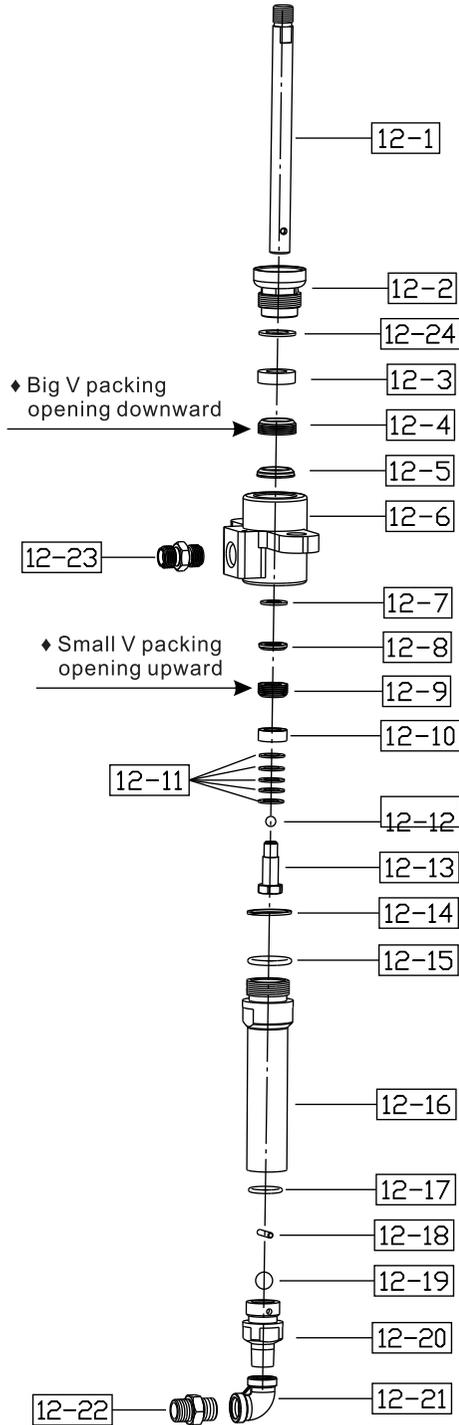
SUCTION TUBE SET

No.	Description	Q' ty
14-1	Suction tube	1
14-2	Connector	1
14-3	Suction tube cover	1
14-4	Filer 2	1
14-5	Filer 1	1
14-6	Spring clip	1



MATERIAL CYLINDER

No.	Description	Q' ty
12-1	Rod	1
12-2	Lubricant container	1
12-3	Big up packing retainer	1
12-4	Big V packing	5
12-5	Big down packing retainer	1
12-6	Cylinder housing	1
12-7	Retainer	1
12-8	Small down packing retainer	1
12-9	Small V packing	5
12-10	Small up packing retainer	1
12-11	Retainer	5
12-12	Ball	1
12-13	Check valve	1
12-14	Cylinder packing retainer	1
12-15	O ring	1
12-16	Piston cylinder	1
12-17	O ring	1
12-18	Pin	1
12-19	Valve ball	1
12-20	Foot valve	1
12-21	Connector	1
12-22	Connector	1
12-23	Connector	1
12-24	Cylinder shim	1



- GENERAL SET-UP PRECAUTIONS ----- 2
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GENERAL SET-UP PRECAUTIONS

1. This airless spray equipment uses compressed air for the fluid displacement pump.
2. Supply dry compressed air
3. Pressure drop occurs when a compressor is installed in a place far removed from the pump. The maximum compressed air pressure supplied to the pump is 0.5 Mpa. Determine the capacity of compressor taking the compressor-to-pump distance into account.
4. Securely ground the grounding wire
5. Never use hazardous materials, such as acidic or corrosive materials, or halogenated hydrocarbon solvents with this equipment.
6. This equipment is not explosion-proof.
7. Flushing the equipment before first use. Check the fluid passage for leak at the same time. If there is any leak, retighten to fix the leak.

EQUIPMENT FLUSHING PROCEDURE

1. Provide 3 liters of solvent (cleaning thinner). Fill an empty can (fluid container) with solvent (cleaning thinner). Put the suction pipe into the can and ensure that the suction filter is fully immersed in the solvent
2. Gradually open the air regulator (turn clockwise) and supply compressed air and then start operation. Set the compressed air at about 0.1 MPa.
3. Put the tip of spray gun into solvent and pull the trigger. Solvent circulates through the system, purging air inside (which comes out in the form of bubbles). This will clean the liquid passage through the system, hose and gun.
4. Once passage cleaning is done, pull the suction pipe off the fluid can and run the pump idly to completely remove residual solvent within the pump. And then close the air regulator (turn counter-clockwise).

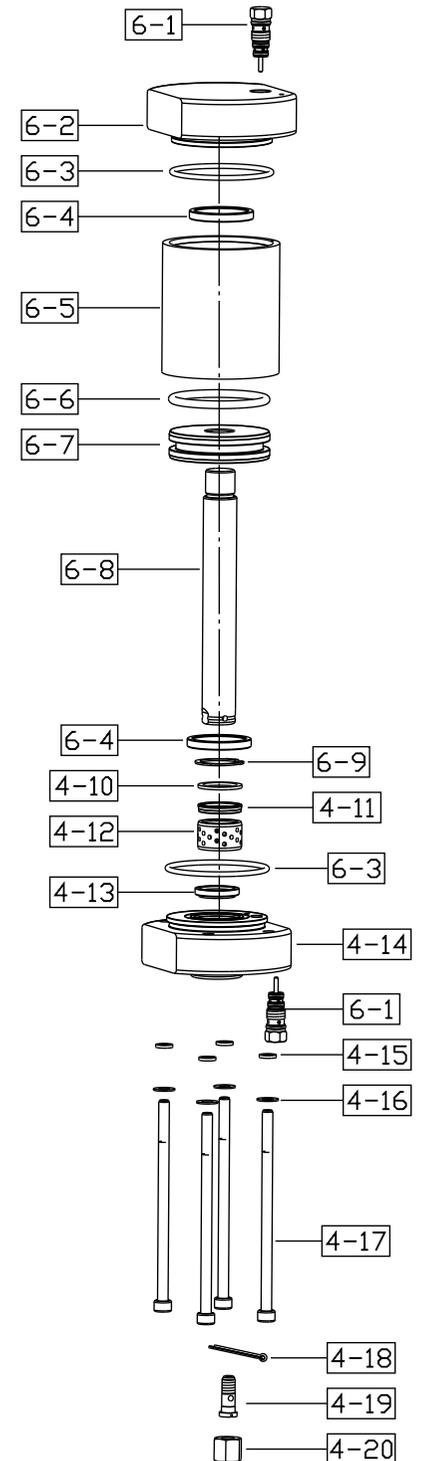
Now it's ready for operation

Starting and

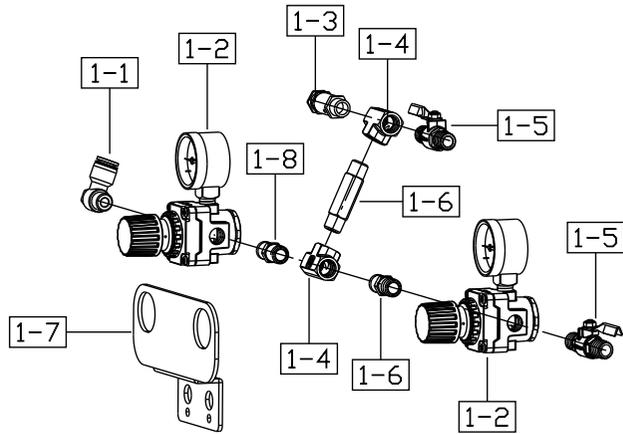
5. Provide a paint fluid can .
6. Repeat Step (1) through (3), with paint fluid.
7. Adjust the air regulator to keep compressed air pressure at 0.2 to 0.5MPa
8. Check to see that there is no leak from the painting equipment or the joint between the painting equipment and hose. If you find leak: Bring the pressure down, Drain the fluid, Then, locate the point of leakage, Retighten to fix the leak.
9. Add lubricant to the lubricant container.

AIR MOTOR

No.	Description	Q' ty
6-1	Needle set	2
6-2	Top cover	1
6-3	O ring	2
6-4	Packing retainer	2
6-5	Cylinder	1
6-6	O ring	1
6-7	Piston	1
6-8	Trip	1
6-9	Snap ring	1
6-10	Bolt ring	1
6-11	O ring	1
6-12	Bearing sleeve	1
6-13	O ring	1
6-14	Bottom cover	1
6-15	M8 plain washer	4
6-16	M8 spring washer	4
6-17	M8 screw	4
6-18	Split pin	1
6-19	Screw	1
6-20	Hex. nut	1

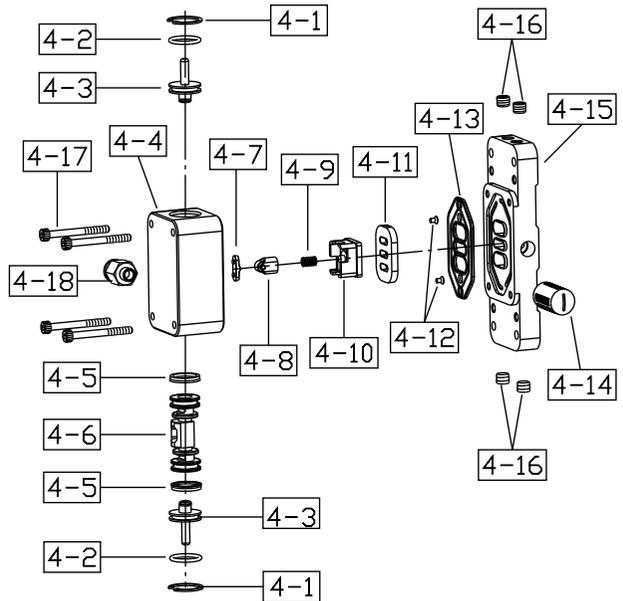


AIR SUPPLIER CONTROL SET



No.	Description	Q' ty
1-1	Quick coupler	1
1-2	Pressure gauge	2
1-3	Safe valve	1
1-4	Tee	2
1-5	Cock	2
1-6	Connector	1
1-7	Control panel	1
1-8	Two-way connector	2

AIR CHANGE VALVE SET



No.	Description	Q' ty
4-1	Snap ring	2
4-2	O ring	2
4-3	Valve cover	2
4-4	Valve body	1
4-5	O ring	2
4-6	Valve shaft	1
4-7	Centering block	1
4-8	Pulley	1
4-9	Pulley spring	1
4-10	Pulley block	5
4-11	Include ply	1
4-12	Screw	2
4-13	Valve packing retainer	1
4-14	Noise canceling unit	1
4-15	Valve base	1
4-16	Sealing screw	4
4-17	M5 screw	4
4-18	Connector	1

	4-3-1	No.	Description	Q' ty
	4-3-2	4-3-1	Forced valve	1
	4-3-3	4-3-2	O ring	1
		4-3-3	Valve cover	1

	4-8-1	No.	Description	Q' ty
	4-8-2	4-8-1	Pulley	1
	4-8-3	4-8-2	Pulley shaft	1
		4-8-3	Pulley seat	1

SHUTDOWN AND EQUIPMENT CARE

Check the equipment and hose for leak from joints.

Interruption or overnight shutdown with resumption due in 24 hours: Leave the equipment filled with fluid. In this case, because air will be purged from the fluid passage keeping the fluid in the way as if it were stored in a paint can, the fluid in the equipment will be kept free from solidification.

Long-term shutdown for a period beyond 24 hours: Completely remove fluid from the equipment and keep it empty. Any fluid paint left inside the equipment, how little it may be, will solidify. Flush thoroughly with solvent.

When you flush, keep the solvent pressure as low as possible (the minimum pressure enough for flushing).

EQUIPMENT MAINTENANCE GUIDELINES

1. According to the frequency of use, tighten the oil cup regularly to maintain sufficient sealing performance.
2. When the pump V packing is worn, replace.
3. When paint is solidified and accumulated in the pump, take it apart and clean.
4. Before you take parts apart, always drain all paint fluid in the system and completely relieve the pump operating pressure and wrap air pressure down to zero.

SPECIFICATIONS

Model	VS 20 MINI AIRLESS
Pressure ratio	1:23
Max. paint pressure	11.5 Mpa
Max. air pressure	0.5 Mpa
Normal of discharge	1.3 L/min
Max. rate of discharge	4 L/min
Air hatch	G1/4
Fluid outlet	G3/8
Compressor	0.75 kw (1 PS)
Size WxDxH	350x450x800 mm (13.8x17.7x31.5 in)
Weight	17kg (37.5 lbs)

EXPLODED DIAGRAM OF PUMP

No.	Description	Q' ty
1	Air supply control set	1
2	M6 screw	2
3	M6 screw	4
4	Air change valve set	1
5	Seal packing	2
6	Sir motor	1
7	Base plate	1
8	M8 screw	3
9	M8 screw	2
10	Stabilizer rod	2
11	M14 nut	2
12	Material	1
13	Pressure storage	1
14	Suction tube set	1
15	Cart frame	1
16	Plain washer	4
17	Spring washer	2
18	Hex. nut	2
19	Caster	2
20	Spring washer	2
21	Caster nut	2

