

Gasoline-Powered hydraulic Airless Sprayer

HSS23000

Instruction manual

—For industry spray application of architecture paints and coatings



Important Safety Instructions:

Read all warnings and instructions in this manual. Save these instructions.

WARNING

Must be grounded when use this pump; Read Grounding instructions;
Use only grounded electrical outlets or ground equipment and conductive objects in work area.
Have heart problem or with heart pacemaker people, strictly prohibit to use this pump.



2023

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, Please contact to where you buy this product.

IMPORTANT SAFETY INSTRUCTIONS	2-3
Technical Data	3
Safety Instructions	4-6
Description	7
Operating Instructions	8-19
Storage	20
Maintenance	21
Troubleshooting	22
Explosive view and parts list	23-25

※ IMPORTANT SAFETY INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

WARNING – When using tools, basic precautions should always be followed, including the following:

- a) **SAVE THESE INSTRUCTIONS**-To reduce the risks of fire or explosion, electrical shock and injury to persons, read and understand all instructions included in this manual. Be familiar with the controls and the proper usage of the equipment.
- b) **WARNING-To reduce the risk of fire of explosion:**
 - 1) Do not spray flammable or combustible materials near an open flame or sources of ignition such as cigarettes, motors, and electrical equipment.
 - 2) For units intended for use with only water-based materials-Do not spray or clean with flammable liquids. For use with water-based liquids only.
 - 3) For units intended for use with only water-based or mineral spirit-type materials with a minimum flash point of 21C°(69.8 F°) Do not spray on clean with liquids having a flash point less than 21C°(69.8 F°)
 - 4) Paint or solvent flowing through the equipment is able to result in static electricity. Static electricity creates a risk of fire or explosion in the presence of paint or solvent fumes. All parts of the spray system, including the pump, hose assemble, spray gun, and objects in and around the spray area shall be properly grounded to protect against static discharge and sparks. Use only conductive or grounded high-pressure airless paint sprayer hoses specified by the manufacturer.
 - 5) Verify that all containers and collection systems are **grounded** to prevent static discharge.
 - 6) **Connect to a grounded outlet and use grounded extension cords. Do not use a 3 to 2 adapter.**
 - 7) Do not use paint or solvent containing halogenated hydrocarbons. See operating instructions for examples of these types of materials.
 - 8) Keep spray area well ventilated. Keeps good supply of fresh air moving through the area. Keep pump assembly in a well ventilated area. Do not spray pump assembly.
 - 9) Do not smoke in the spray area.
 - 10) Do not operate light switches, engines, or similar spark producing products in the spray area.
 - 11) Keep area clean and free of paint or solvent containers, rags, and other flammable materials.
 - 12) Know the contents of the paints and solvents being sprayed. Read all Material safety Data Sheets (MSDS) and container labels provided with the paints and solvents. Follow the paint and solvent manufacturer’s safety instructions.
 - 13) Fire extinguisher equipment shall be present and working.
- c) **WARNING- To reduce the risk of skin injection.**
 - 1) Do not aim the gun at, or spray any person or animal.
 - 2) Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
 - 3) Always use the nozzle tip guard. Do not spray without nozzle tip guard in place.
 - 4) Only use a nozzle tip specified by the manufacturer.
 - 5) Use caution when cleaning and changing nozzle tips. In the case where the nozzle tip clogs while spraying, follow the manufacturer’s instructions for turning off the unit and relieving the pressure before removing the nozzle tip to clean.

- 6) Do not leave the unit energized or under pressure while unattended. When the unit is not in use, turn off the unit and relieve the pressure in accordance with the manufacturer's instructions.
 - 7) High-pressure spray is able to inject toxins into the body and cause serious bodily injury. In the event that injection occurs, seek medical attention immediately.
 - 8) Check hose and parts for signs of damage. Replace and damaged hoses of parts.
 - 9) This system is capable of producing 27.5Mpa. Only use replacement parts or accessories that are specified by the manufacturer and that are rated a minimum of 27.5Mpa.
 - 10) Always engage the trigger lock when not spraying. Verify the trigger lock is functioning properly.
 - 11) Verify that all connections are secure before operating the unit.
 - 12) Know how to stop the unit and bleed pressure quickly. Be thoroughly familiar with the controls.
- d) WARNING-To reduce the risk of injury.**
- 1) Always wear appropriate gloves, eye protection, and a respirator or mask when painting.
 - 2) Do not operate or spray near children. Keep children away from equipment at all times.
 - 3) Don not overreach or stand on an unstable support. Keep effective footing and balance at all times.
 - 4) Stay alert and watch what you are doing.
 - 5) Do not operate the unit when fatigued or under the influence of drugs or alcohol.
 - 6) Do not kink or over-bend the hose.
 - 7) Do not expose the hose to temperatures or to pressures in excess of those specified by the manufacturer.
 - 8) Do not use the hose as a strength member to pull or lift the equipment.
 - 9) The Max. pressure of the air hose is 27.5Mpa, the normal pressure is 27.5Mpa
 - 10) The paint can be compatible: phenol aldehyde paint series, nitril paint series, alkyd paint series, epoxy resin paint series, oxidized rubber paint series, latex paint series, water soluble paint series. The paint should be put in shade and dry place.
 - 11) Be aware of any hazards presented by the material being sprayed and consult the markings on the container or information supplied by the manufacturer of the material to be sprayed, including requirements for the use of personal protective equipment.
 - 12) Do not spray any material there the hazard is not known.

※Technical Data

Model:	522 (Gasoline engine model)
Max. Motor Size	17HP
Flow Rate:	20L/Min ± 5%
Max. Working Pressure:	4000Psi
Standard Nozzle Size:	651#, 655#"
Max. Nozzle Size:	0.071"
Working environment temperature requirement:	5°C~40°C
Length of High Paint hose:	15m
Paint outlet connector:	1/2-14-NPSM
Dimensions Weight	149kg

※ Safety Instructions



Warning

The following warnings are for the setup, use, grounding, maintenance and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risks. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.

	<p>FIRE AND EXPLOSION HAZARD</p> <p>Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none">• Use equipment only in well ventilated area.• Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).• Sprayer generates sparks. When flammable liquid is used in or near the sprayer or for flushing or cleaning, keep sprayer at least 20 feet (6 m) away from explosive vapors.• Keep work area free of debris, including solvent, rags and gasoline.• Do not plug or unplug power cords or turn lights on or off when flammable fumes are present.• Ground equipment and conductive objects in work area. Read Grounding instructions.• If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem.• Keep a working fire extinguisher in the work area.
	<p>ELECTRIC SHOCK HAZARD</p> <p>Improper grounding, setup, or usage of the system can cause electric shock.</p> <ul style="list-style-type: none">• Turn off and disconnect power cord before servicing equipment.• Use only grounded electrical outlets.• Use only 3-wire extension cords.• Ensure ground prongs are intact on sprayer and extension cords.• Do not expose to rain. Store indoors.• Ground sprayer with grounding clamp to earth ground for safe sprayer operation
	<p>SKIN INJECTION HAZARD</p> <p>High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment.</p> <ul style="list-style-type: none">• Do not point gun at anyone or at any part of the body.• Do not put your hand over the spray tip.• Do not stop or deflect leaks with your hand, body, glove, or rag.• Engage trigger lock when not spraying.• Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.

	<p>PRESSURIZED EQUIPMENT HAZARD</p> <p>Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.</p> <ul style="list-style-type: none"> • Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment. • Tighten all fluid connections before operating the equipment. • Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.
	<p>RECOIL HAZARD</p> <p>Brace yourself; gun may recoil when triggered and cause you to fall, which could cause serious injury.</p>
	<p>MOVING PARTS HAZARD</p> <p>Moving parts can pinch or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> • Keep clear of moving parts. • Do not operate equipment with protective guards or covers removed. • Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the Pressure Relief Procedure in this manual. Disconnect power or air supply.
 	<p>EQUIPMENT MISUSE HAZARD</p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data in all equipment manuals. • Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. • Check equipment daily. Repair or replace worn or damaged parts immediately. • Do not alter or modify equipment. • Use equipment only for its intended purpose. Call your distributor for information. • Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. • Do not kink or over bend hoses or use hoses to pull equipment. • Keep children and animals away from work area. • Comply with all applicable safety regulations. • Do not operate the equipment when fatigued or under the influence of drugs or alcohol.
 	<p>PRESSURIZED ALUMINUM PARTS HAZARD</p> <p>Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use can cause serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.</p>
	<p>SUCTION HAZARD</p> <p>Never place hands near the pump fluid inlet when pump is operating or pressurized. Powerful suction could cause serious injury.</p>

	<p>CARBON MONOXIDE HAZARD</p> <p>Exhaust contains poisonous carbon monoxide, which is colorless and odorless. Breathing carbon monoxide can cause death. Do not operate in an enclosed area.</p> <p>TOXIC FLUID OR FUMES HAZARD</p> <p>Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none"> • Read MSDS's to know the specific hazards of the fluids you are using. • Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.
	<p>BURN HAZARD</p> <p>Equipment surfaces and fluid that's heated can become very hot during operation. To avoid severe burns, do not touch hot fluid or equipment. Wait until equipment/fluid has cooled completely.</p>
 	<p>PERSONAL PROTECTIVE EQUIPMENT</p> <p>You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to:</p> <ul style="list-style-type: none"> • Protective eyewear • Clothing and respirator as recommended by the fluid and solvent manufacturer • Gloves • Hearing protection

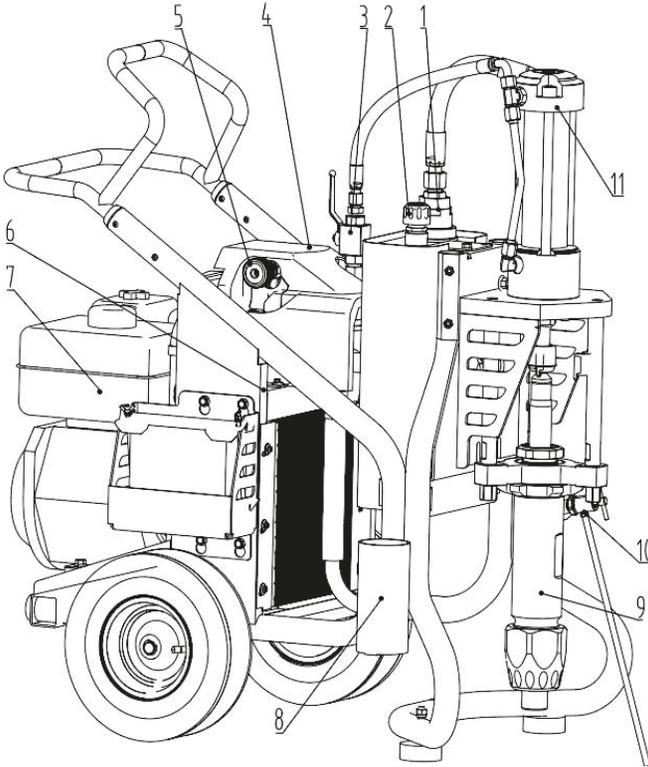


Special Focus

- A) Forbidden use of machines which are not designed for potentially explosive atmospheres
- B) Use of electrostatic atomizing and spraying equipment with machines not specially designed for this equipment, because it may result in serious hazards for the operators
- C) Hazards resulting from contact with and/or breathing of toxic materials, gases, mists and vapors which may be created by operation of the machine. Such warnings shall also include such regarding the use of personal protective equipment and reminding the user to be aware of the recommendations of the coating material manufacturer;
- D) Surface temperatures of any part of the machine, reachable during normal operation, maintenance and servicing but not normally in contact with the human body, which can exceed 48°C or be less than 0°C.
- E) Pressured coating material and /or compressed air not to be directed towards persons or animals;
- F) Relating to training for the safe operation, adjustment, cleaning and maintenance of the machine;
- G) Regarding any special grounding measures;
- H) Stating that a list of the materials used in the construction of the machine will be made available on request to validate the compatibility with the coating materials being used;
- I) Regarding the requirements of using the machine only in a well ventilated area with regards to health, fire and explosion risks;
- J) Regarding the visually inspection for damage on hoses which may be subjected to friction
- K) Requirements for environmental protection to be observed
- L) Reduce the quantity of coating and/or auxiliary materials at workplaces to a minimum

※Description

AEROPRO's 522 Gasoline-Powered hydraulic airless sprayers are ideal for contractors who need versatility and flexibility. Achieve the results you're looking for in your interior and exterior work with the ability to spray a variety of different materials and a full range of paints and primers.



1.Oil filter	4.Paint tube holder	7. Serial number/parameter label	10.Commutation assembly
2.Motor	5.Oil valve	8.Pressure relief valve	11.Hoist pointing stickers
3.Dipstick	6.Piston pump assembly	9.Pressure adjustment knob	

Setup

1. Connect the Hose and Gun

1.1 Remove the plastic cap plug from the outlet tee and screw an accessory, conductive or grounded spray hose onto the 1/4 npsm(f) outlet fitting.

1.2 Connect a small diameter, whip hose between the main hose and a spray gun, if desired, for more flexible gun movement.

1.3. Don't use thread sealant on the swiveling nut of the hose couplings, and **don't install the spray tip yet.**

NOTE: Use thread sealant on all male threads except at swivel unions. Swivel unions are made to self--seal, and using thread sealant prevents the swivel from turning freely.

2. Fill the Packing Nut/Wet Cup

3. Check the Hydraulic Oil Level

- 3.1. Unscrew the hydraulic oil fill cap. The dipstick is attached to the cap. The oil should be up to the full line on the dipstick.
- 3.2. Add oil as needed to the proper level.

4. Check the Engine Oil Level

- 4.1. Remove the dipstick.
- 4.2. Check to be sure the oil is up to the full mark on the dipstick.

5. Fill the Fuel Tank

- 5.1. Close the fuel shutoff valve..
- 5.2. Use only clean, fresh, well-known brands of *unleaded regular grade gasoline*. The minimum octane requirements are 87 octane in the U.S.A. and 96 octane elsewhere.
- 5.3. Remove the gasoline fill cap and fill the tank. Be sure the air vent in the fill cap is not plugged so gasoline can flow to the carburetor, then replace the cap.

6. Grounding

Connect the ground wire and clamp (provided) to a true earth ground!

7. **Flush the sprayer** to remove the oil which was left in the pump after factory testing to protect the pump from corrosion.

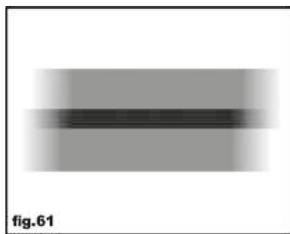
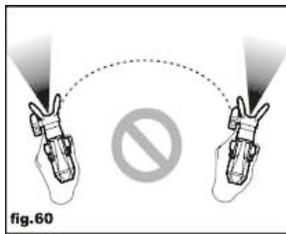
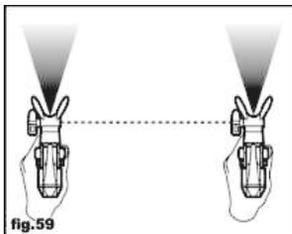
8. Battery Maintenance

Always charge a new battery or a battery that has not been in use for a long period.

 WARNING	 WARNING
 FIRE AND EXPLOSION HAZARD Fuel spilled on a hot surface can cause a fire or explosion and serious bodily injury and property damage. Shut off engine and let it cool before filling the tank. Carefully follow steps 5.1. to 5.3., below, being sure not to spill any fuel.	 FIRE AND EXPLOSION HAZARD To reduce the risk of static sparking, fire or explosion which can result in serious bodily injury and property damage, ground the sprayer, all system components, and the object being sprayed as instructed under FIRE OR EXPLOSION HAZARD

PAINTING TECHNIQUES.

- Before painting, ensure the the unit has been primed and verify that nozzle tip is aligned properly
- Keep the airless gun approximately 30 cm from the surface
- Keep airless gun straight and move arm across at a steady rate while staying 30 cm from the surface (fig.59)
- Do not fan the airless gun or paint will be uneven (fig.60)
- Overlap strokes by half, always aim stroke at bottom edge of last stroke (fig.61).



CLEARING AIRLESS GUN TIP.

- Occasionally, the airless gun tip will become clogged with paint
- Follow these instructions to clear airless gun tip
- Switch power to "off" (fig.62)

- Adjust nozzle to "clean/eject" setting (fig.63)
- Turn "spray/prime" switch to "spray" mode (fig.64)
- Turn power to "on" (fig.65)
- Spray into waste bucket until clog clears (fig.66)
- Release trigger Adjust nozzle to "spray" mode (fig.67).

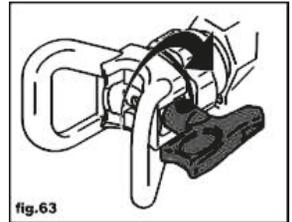
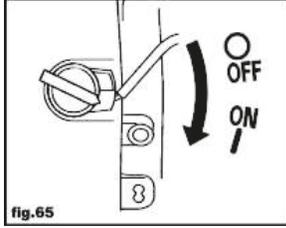
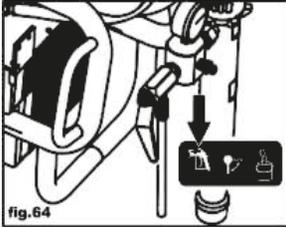


fig.63



fig.66

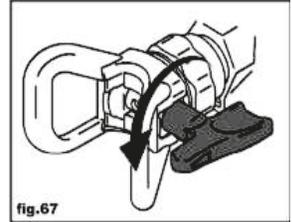


fig.67

CLEANING.

- Turn power off and turn "prime/spray" switch to "prime" mode to relieve pressure (fig.68)
- Unthread airless gun tip and remove (fig.69-70)

Relieve pressure and drain paint from tubes (fig.71)

- Place priming tube in empty waste bucket (fig.72)

- Submerge suction tube in water or flushing fluid (fig.73)

- Plug in the unit and turn "on" power (fig.74)

-The unit will start pumping and water or flushing solvent as well as air bubbles will be purged from system

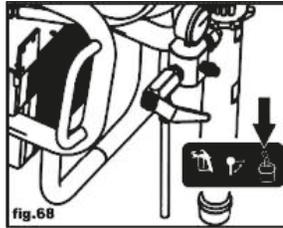


fig.68

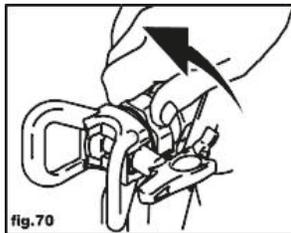


fig.70

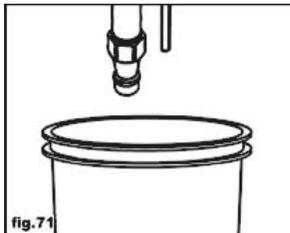


fig.71

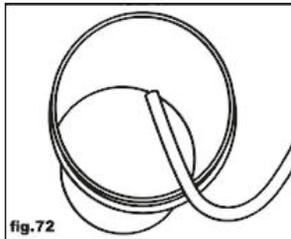


fig.72

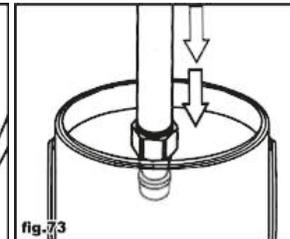


fig.73

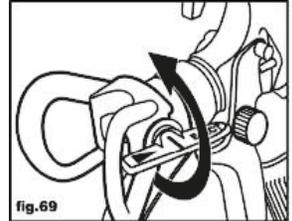


fig.69

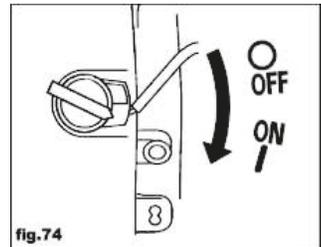


fig.74

- Let fluids discharge from priming tube into waste bucket until fluid is clear (fig.75)

- After fluid in priming tube is clear, switch power to "off" (fig.76)

- Turn "spray/prime" switch to "spray" mode (fig.77)

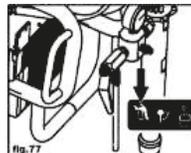


fig.77

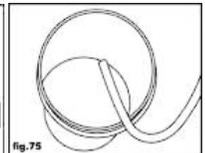
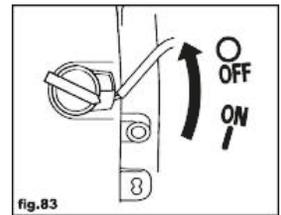
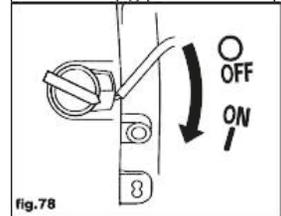
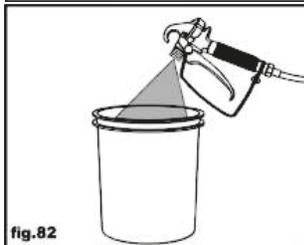
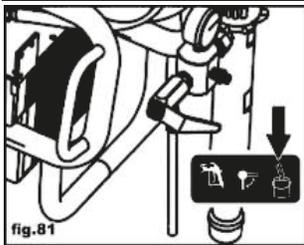
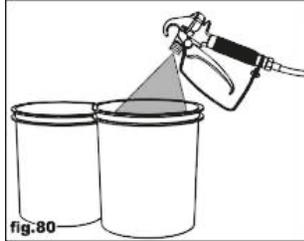


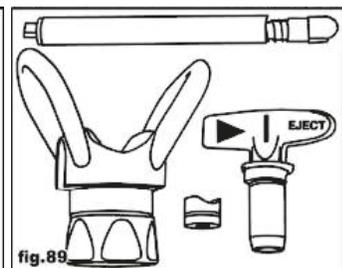
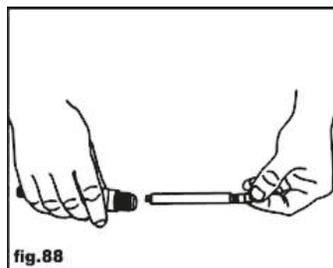
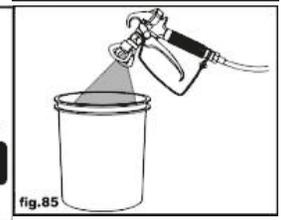
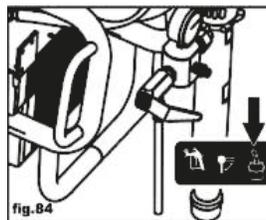
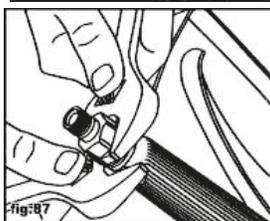
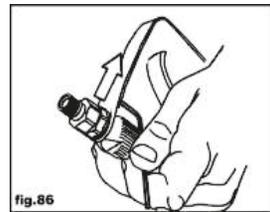
fig.75

- Switch power to "on" (fig.78)
- Paint into paint pail (fig.79)
- Change to waste bucket as paint thins (fig.80)
- Turn "prime/ spray" switch to "prime" mode (fig.81)
- Continue to flush until clear (fig.82)



- Release trigger, turn power "off" and relieve pressure (fig.83- 85)
- Remove the trigger guard from housing (fig.86)

- Unscrew nut from housing, it is behind the swivel connector (fig.87)
- Remove filter (88)
- Clean all parts in warm, soapy water or flushing fluid with a bristled brush (fig.89).



※Storage.

-When cleaning for long term storage (more than 48 hours), it is important that the unit is not stored with any water or water-based material left in the pump, hose, tubes, or airless gun

-This will corrode the product PIs very important clean the the unit before storage

-Remove paint hose if not already removed (fig.90)

-Add about 30 millilitres of light household oil or a pump storage product into each inlet (fig.91)

-Turn "prime/spray switch to "spray" (fig.92)

-Turn pressure control knob to "low pressure spray" (fig.93)

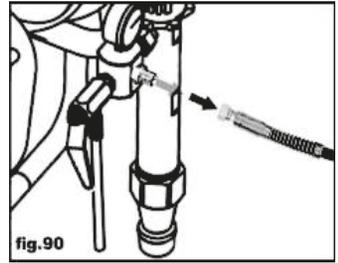


fig.90

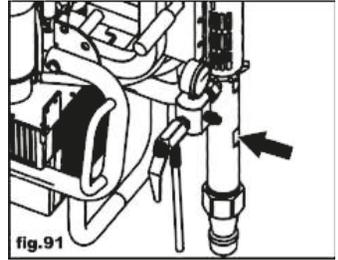


fig.91

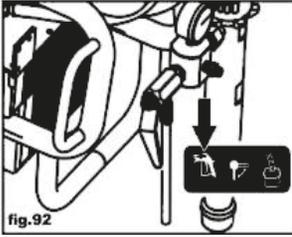


fig.92

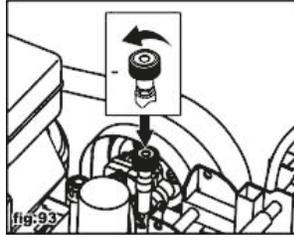


fig.93

-Hold a rag over the paint hose outlet (fig.94)

-Switch power to "on" for five seconds, then turn the power to "off" (fig.95)

-Turn "prime/spray" switch to "prime", this will keep storage fluids in the unit (fig.96)

-Wipe the the unit with a clean cloth

-Store in a clean dry location out of reach of children.

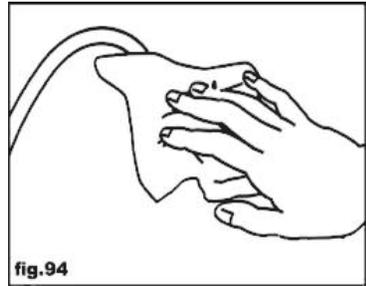


fig.94

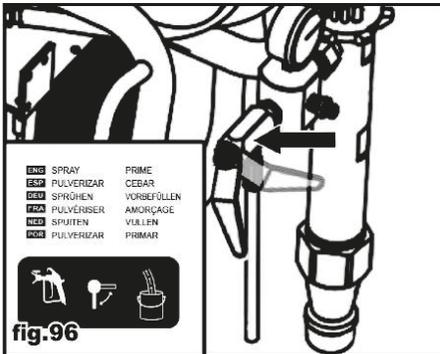


fig.96

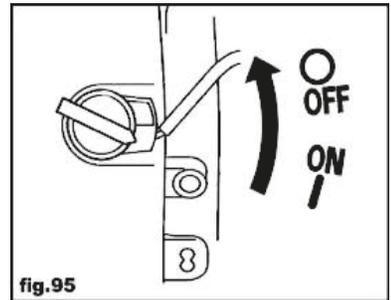


fig.95

※Maintenance.

- The gasoline airless hydraulic equipment has been designed for a long working life with minimum maintenance
- Optimum use depends on correct care of the gasoline airless hydraulic equipment and regular cleaning
- The gasoline airless hydraulic equipment may be cleaned effectively using compressed air after each use
- If compressed air is not available, use a brush to remove dust from the gasoline airless hydraulic equipment
- Motor ventilation vents and switch levers must be kept clean and free of foreign matter
- Do not attempt to clean by inserting pointed objects through openings
- Certain cleaning agents and solvents damage plastic parts, among them are gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household cleaners containing ammonia. Do not use any of these to clean the gasoline airless hydraulic equipment.



SKIN INJECTION HAZARD

The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the Pressure Relief Procedure whenever you:

- are instructed to relieve the pressure,
- stop spraying,
- check or service any of the system equipment,
- or install or clean the spray tip.



CAUTION

For detailed engine maintenance and specifications, refer to separate Honda Engines Owner's Manual, supplied.

DAILY: Check engine oil level and fill as necessary.

DAILY: Check hydraulic oil level and fill as necessary.

DAILY: Check hose for wear and damage.

DAILY: Check gun safety for proper operation.

DAILY: Check pressure drain valve for proper operation.

DAILY: Check and fill the gas tank.

DAILY: Check that displacement pump is tight.

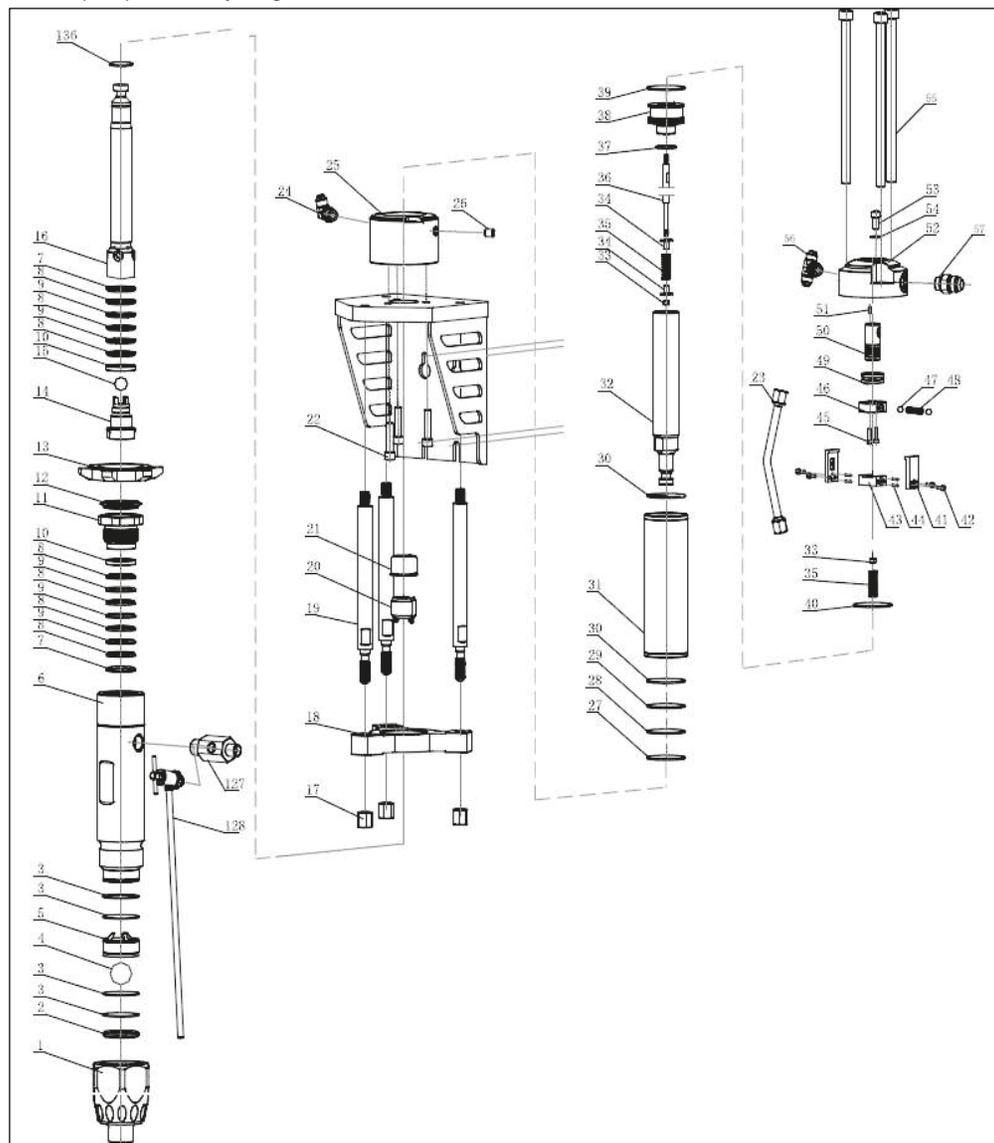
DAILY: Check level in displacement pump packing nut. Fill nut, if necessary. Keep TSL in nut to help prevent fluid buildup on piston rod and premature wear of packing and pump corrosion.

※Troubleshooting

Problem	Cause	Solution
Gas engine will not start	Switch OFF, low oil, no gasoline	Consult engine manual, supplied
Gas engine pulls hard (won't start)	Hydraulic pressure is too high	Turn hydraulic pressure knob counterclockwise to lowest setting
Gas engine doesn't work properly	Elevation	Consult engine manual, supplied.
Gas engine operates, but displacement pump doesn't operate	Pump valve is OFF Pressure setting too low Displacement pump outlet filter (if used) is dirty or clogged Tip or tip filter (if used) is clogged Hydraulic fluid too low Belt worn or broken Hydraulic pump worn or damaged Dried paint seized paint pump rod Hydraulic motor not shifting	Set pump valve ON Increase pressure Clean filter Remove tip and/or filter and clean Shut off sprayer. Add fluid Replace Bring sprayer to AeroPro distributor for repair Service pump. Set pump valve OFF. Turn pressure down. Turn engine OFF. Pry rod up or down until hydraulic motor shifts
Displacement pump operates, but output is low on upstroke	Piston ball check not seating properly. Piston packing worn or damaged.	Service piston ball check Replace packing
Displacement pump operates but output is low on down stroke and/or on both strokes	Piston packing worn or damaged. Intake valve ball check not seating properly. Suction tube air leak	Tighten packing nut or replace packing. Service intake valve ball check Tighten suction tube
Paint leaks and runs over side of wet-cup	Loose wet-cup Throat packing worn or damaged	Tighten packing nut enough to stop leakage Replace packing.
Excessive leakage around hydraulic motor piston rod wiper	Piston rod seal worn or damaged	Replace these parts
Fluid delivery is low	Pressure setting too low Displacement pump outlet filter (if used) is dirty or clogged Intake line to pump inlet is not tight Hydraulic motor is worn or damaged Large pressure drop in fluid hose	Increase pressure. Clean filter Tighten Bring sprayer to AeroPro distributor for repair Use larger diameter or shorter hose
The sprayer overheats	Paint buildup on hydraulic components Oil level is low	Clean Fill with oil.
Spitting from gun	Air in fluid pump or hose Loose intake suction Fluid supply is low or empty	Check for loose connections on siphon assembly, tighten, then re-prime pump Tighten Refill supply container
Excessive hydraulic pump noise	Low hydraulic fluid level	Shut off sprayer. Add fluid

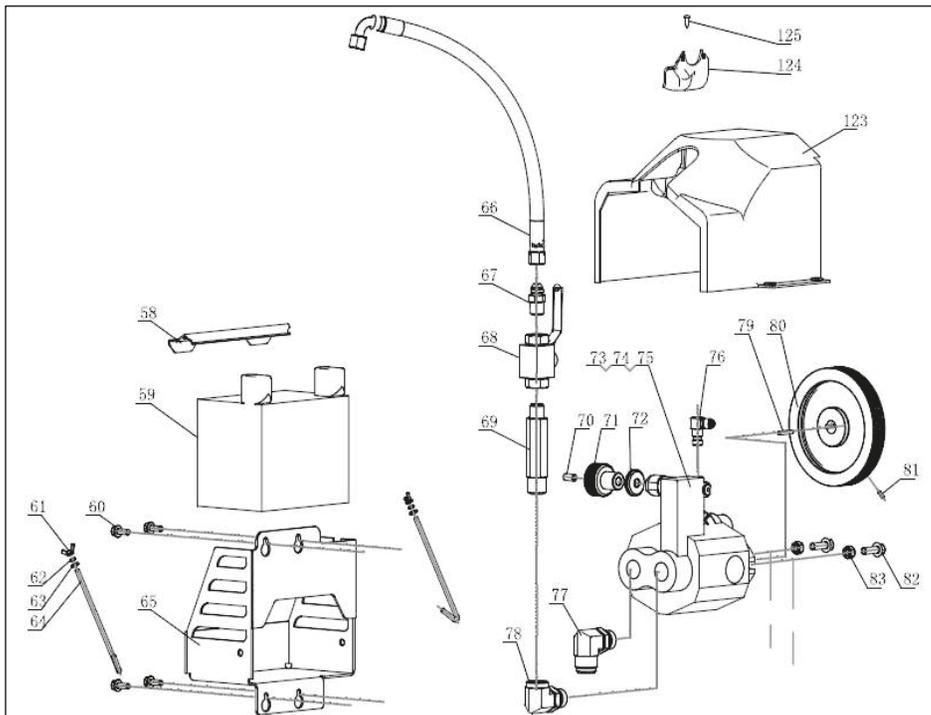
※Explosive view & Parts list

-Piston pump assembly diagram



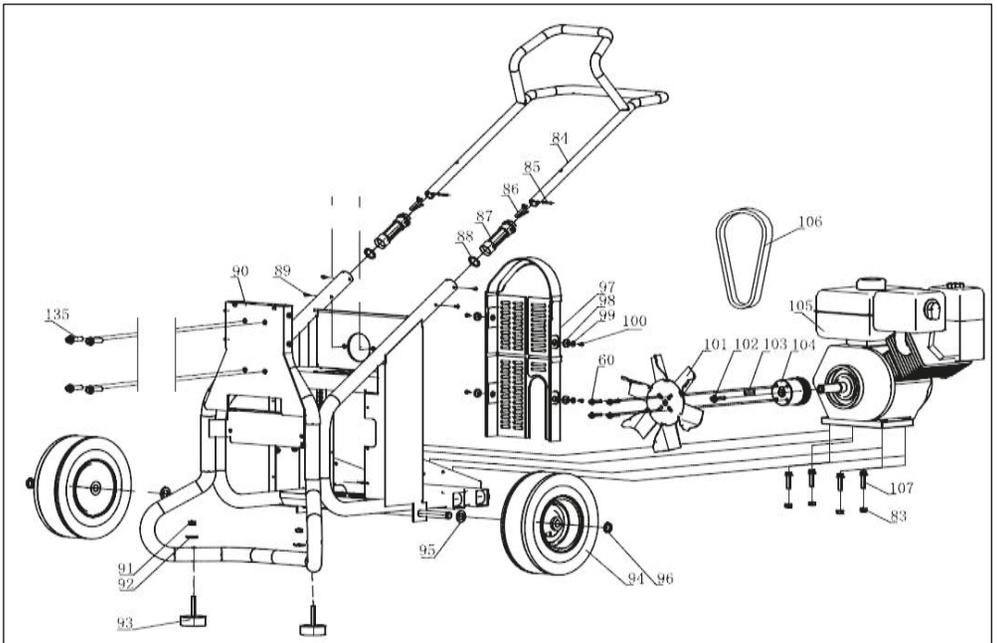
No.	Description	Qty.	No.	Description	Qty.	No.	Description	Qty.
1	Lower pump body	1	21	Cover	1	41	Reversing limit block	2
2	Inlet valve assembly	1	22	Hex screw	3	42	Hexagon screws (grade 12.9)	4
3	Sealing ring	4	23	Connecting pipe assembly	1	43	Reversing limit seat	1
4	steel ball 38.1	1	24	Tube Connector	1	44	Pin	4
5	Limit seat	1	25	Cylinder block	1	45	Hex screw	2
6	Upper pump body	1	26	Hexagon socket plug	1	46	Reversing stop block	1
7	V-ring retaining ring	2	27	Dust ring	1	47	Steel ball S09.525	2
8	V-ring support ring	7	28	Sealing ring	1	48	Reversing stop spring	1
9	V-shaped sealing ring	5	29	Guide ring	1	49	Reversing ring	1
10	V-ring press ring	2	30	O-ring 62.6x2.65	2	50	Reversing column	1
11	Seal lock nut	1	31	Cylinder	1	51	Screws	1
12	Dust cover	1	32	piston rod	1	52	Cylinder head	1
13	Pump body lock nut	1	33	Nuts	2	53	Hex screw	1
14	V-ring set screw assembly	1	34	Push rod limit baffle	2	54	Washer	1
15	Feed valve steel ball	1	35	push rod spring	2	55	Screws	3
16	Plunger rod	1	36	Pusher	1	56	Oil pipe tee joint	1
17	Lock Nuts	3	37	O-ring (30*3)	1	57	Oil return pipe joint	1
18	Fixing plate	1	38	Piston	1	127	Outlet connecting pipe	1
19	Connecting rod	3	39	Piston seal	1	128	Pressure relief valve assembly	1
20	Connection kit	1	40	Piston guide ring	1	136	Connection gasket	1

-Hydraulic assembly



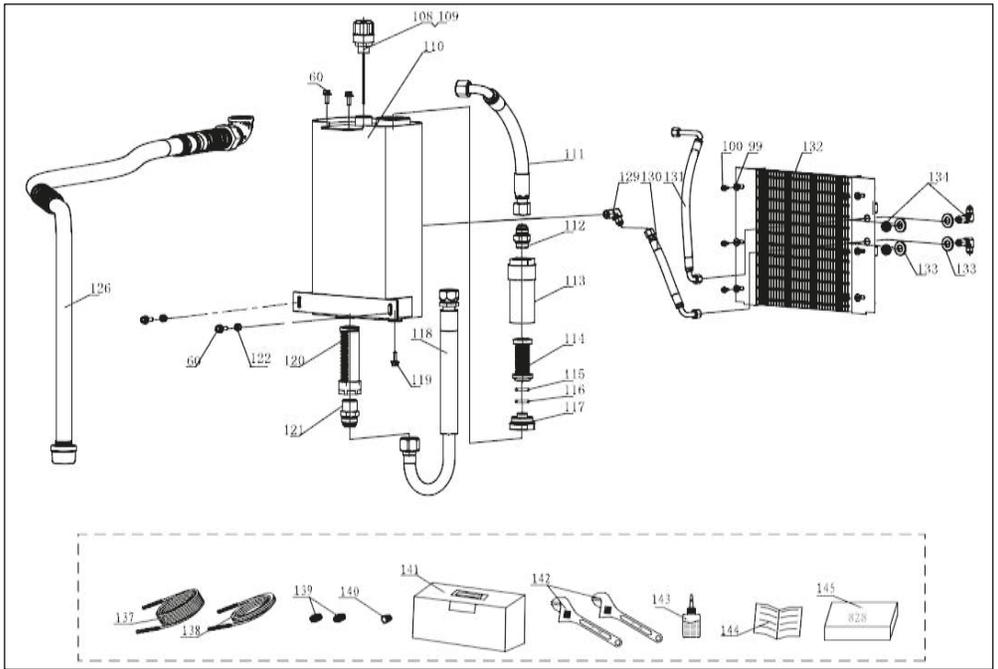
No.	Description	Qty.	No.	Description	Qty.	No.	Description	Qty.
58	Battery platen	1	68	1/2 oil valve	1	78	Aangle connector	1
59	Battery	1	69	Connecting pipe 3/4-1/2	1	79	Flat key	1
60	Hexagon bolt M8X20	8	70	Hexagon screw M10×1-12	1	80	Driven wheel	1
61	Wing nut M6	2	71	Pressure adjustment knob	1	81	Screws	3
62	Spring washer M6	2	72	Pressure adjustment knob cap	1	82	Bolt M10X40	3
63	Flat washer M6	2	73	Adjusting bolt	1	83	Hexagon nut M10	6
64	Battery fixing screw	2	74	Adjusting bolt Nut	1	123	oil pump guard	1
65	battery rack assembly	1	75	Oil pump assembly (HHPC-P22)	1	124	Oil pump guard cover	1
66	High pressure oil pipeline components	1	76	Angle joint	1	125	Screw ST4.8X13	1
67	Valve pipe joint 1/2	1	77	Angle connector	1			

-Cart Frame Assembly



No.	Description	Qty.	No.	Description	Qty.	No.	Description	Qty.
83	Hex nut M10	4	92	Flat Washers	2	101	Wind blade	1
84	Armrest Components	1	93	Shock Absorbing Pads	2	102	Hexagon Flange Bolts	1
85	Spring pin	2	94	Wheel	2	103	Ordinary flat key	1
86	V-shaped elastic pin	2	95	Gasket	4	104	Wheel	1
87	Slider	2	96	Split ring	2	105	Multi V-belt 6PK970	1
88	Slip ring	2	97	Flywheel guard	1	106	Motor assembly 13HP (25 axis Zongshen)	1
89	Screws	4	98	Rubber ring	4	107	Bolts M10X45	4
90	Frame components	1	99	Large washer d=6	10	135	Bolts M12X45	4
91	Nut	2	100	Screw ST4.8X20	10			

-Fuel Tank Radiator Diagram



No.	Description	Qty.	No.	Description	Qty.	No.	Description	Qty.
60	Bolts M8×20	8	118	Oil inlet pipe assembly	1	134	Radiator oil return pipe joint	2
108	Oil dipstick cap joint assembly	1	119	Oil plug	1		Packaging accessories	
109	Dipstick cover	1	120	Oil filter assembly	1	137	High pressure paint pipe 3/8	1
110	Tank	1	121	Fuel tank outlet pipe connector	1	138	High pressure paint pipe 1/2	1
111	High pressure oil return pipe assembly	1	122	Nut M8	2	139	1/2-3/8 connector	2
112	Fuel tank return pipe connector	1	126	Feed tube assembly	1	140	Spray gun adapter	1
113	Filter seat	1	129	Tank overflow right angle joint	1	141	Plastic tool box	1
114	Oil filter assembly	1	130	Radiator oil outlet pipe assembly	1	142	Adjustable wrench	2
115	O-ring	1	131	Oil pump overflow pipe assembly	1	143	Oiler (contains oil)	1
116	O-ring	1	132	Radiator assembly	1	144	Manual	1
117	Oil filter cover	1	133	Washer d=15	4	145	High pressure airless spray gun	1

Note: With # for electric motor accessories, with & for gasoline engine accessories



MACCHINE ED ACCESSORI PER LA VERNICIATURA,
SABBIATURA, INCOLLAGGIO E DOSAGGIO

EC DECLARATION OF CONFORMITY
(Directive 2006/42/EC, Annex II.A)
Translation of the original declaration

The importer **VAL SPRAY BERGAMO S.r.l.**
address **Via Marconi 8/F - 24030 Brembate di Sopra (BG)-Italy**
Phone / fax **+39 035 4376196 / +39 035 6222719**
Web / E-mail **www.valspray.it - info@valspray.it**

HEREBY DECLARES THAT THE MACHINERY DESCRIBED BELOW:

denomination _____
type / model **HSS23000** _____
serial number _____
year of manufacture _____

- Complies with the provisions of the "Machinery" Directive: 2006/42/CE (former 98/37/EC - 89/392/EEC, 91/368/EEC, 93/44/EEC and 93/68/EEC) and the regulations transposing it into national law.
- Also complies with the provisions of the European Directive relating to electrical equipment designed for use within certain voltage limits: 2006/95/EC (former 73/23/EEC and 93/68/EEC) and complies with the harmonized European standard: IEC EN 60204-1 (2005).
- Also complies with the provisions of the European Directive relating to electromagnetic compatibility: 2004/108/EC (former 89/336/EEC, 92/31/EEC and 93/68/EEC) and complies with the following harmonized European standards: IEC EN 61000-6-4 (2006); IEC EN 61000-6-2 (2005).

Person authorised to compile the technical file:

name **Fabrizio Beretta**
address **Val Spray Bergamo S.r.l.**
Done at **Brembate di Sopra (BG)**

On _____

Name of the signatory **Fabrizio Beretta, C.E.O.**
Signature

WARRANTY CERTIFICATE

Val Spray Bergamo s.r.l. currently in via Marconi, 8/F, Brembate di Sopra (BG) guarantees the purchaser of the product (Purchaser) that under normal conditions of use, the guns (Products) are without any material or manufacturing defects, and have been constructed in compliance with the current regulations in force. Same Products have been tested and subjected to severe quality control inspections. This document is the sole, valid guarantee. With the exception of Val Spray Bergamo s.r.l., no-one is authorized to extend or amend the terms herein, nor can anyone issue written or verbal guarantees. In any event, the Product cannot be replaced, nor can the guarantee be extended if found to be non-compliant.

PERIOD OF WARRANTY AND AREA OF COVER

The electrical components of the Products, that is to say new products, are guaranteed for a period of 6 months and the mechanical components are guaranteed for 12 months from the date of purchase, proof of which is shown on presentation of this certificate, together with the invoice sales document used at the time of purchase, proving the date of purchase of the Products, their type and the name of the dealer. Purchase documents, which have been amended and/or added to, will not be accepted. Failure to show valid documents proving purchase within the aforementioned terms will result in the cancellation of the guarantee and all repair costs will be at the Purchaser's expense. Val Spray Bergamo S.r.l. shall not be held liable for the loss of the certificate of guarantee and is under no obligation to issue duplicates. After 12 months from the date of purchase, the Product is no longer covered by the guarantee and customer service will be handled by the Technical Assistance centres (TAC) authorized by Val Spray Bergamo S.r.l., which will charge the customer the current rates in force. Repairs carried out under guarantee will not, however, prolong or renew the guarantee itself. This guarantee is valid only if the Product was purchased in Europe and kept in the nation in which it was purchased.

SERVICES UNDER THE WARRANTY

All the services covered by this guarantee are subject to a concrete defect being found in the Product according to this guarantee. If the damage and/or defect is not covered by this guarantee and/or is included in the exclusions of the guarantee, all the costs regarding the assessment, labour, spare parts and transport of the Product will be charged to the Purchaser. The guarantee shall be upheld and shall be effective only on presentation of the Product to the TAC authorised by Val Spray Bergamo s.r.l.

The Product shall, in any case, be repaired at one of the TACs authorised. Under no circumstance shall the seller or the Purchaser of the Product be able to repair or replace the Product, either directly or by third parties, other than by the authorised TACs. Failure to do so shall result in the cancellation of the Product guarantee. The burden shall be on the Purchaser to inform the TAC or the direct seller of the Product of any defects or faults of same and of its wish to exercise its rights under the guarantee. Transport costs and risks to and from the aforementioned TACs shall be at the Purchaser's expense.

As regards only the Products which Val Spray Bergamo considers unable to be transported by reason of their particular weight or size, the guarantee will be recognised so long as the intervention allows the TAC normal and easy access to the Product. In the event of Products installed under special conditions, recovery and positioning are under the responsibility of the Purchaser. Intervention by the authorised TAC, withdrawal of the Product, its repair and any replacements shall be carried out within the time limit, consistent with the service to be performed, with the exception of difficult repairs and/or replacements. Any faulty component part which has been replaced shall become the property of Val Spray Bergamo s.r.l.

EXCLUSION FROM THE WARRANTY

Not covered by the guarantee are all those parts which may prove faulty or damaged by transport, negligent or careless use, incorrect installation or maintenance by the Purchaser or by unauthorised personnel, improper or unintended use of the Product or by any circumstances, however, which cannot be traced to any manufacturing defects of the Product. Excluded in any event from the guarantee are membranes, washers, valves, nozzles, piping, guns, any removable pieces, and any accessories, unless proved to have a manufacturing defect. Also excluded from the guarantee are the technical interventions regarding the installation and/or testing of the Product, as well as those parts subject to normal wear and tear. In any event, the guarantee does not cover the Products with: an illegible, cancelled, amended or removed serial number; Defects due to any type of use which does not comply with the detailed instructions given in the user manual; Defects due to blackouts or fluctuations in the electrical power and/or electrical plant; Defects due to any damage caused by the use of connected accessories, products or component parts which are not part of the Product covered by this guarantee; Damage and malfunctioning as a result of use.

Furthermore, the guarantee does not cover all that can be considered deterioration due to normal use of the Product.

RESTRICTION OF LIABILITY

Compensation is excluded for any direct or indirect damages to people or things resulting from the improper use or from suspending the use of the Product. In particular, Val Spray Bergamo S.r.l. declines every liability for any damage which may occur, either directly or indirectly, to people or things, as a consequence of failure to adhere to all the measures indicated in the user manual for the Product, and above all to the warnings regarding the installation, use and maintenance of the Product itself.

INFORMATION NOTE PURSUANT TO ARTICLE 13 OF THE LEGISLATIVE DECREE 196/03

Personal data communicated by the Purchaser in the reply slip of the certificate of guarantee issued by the dealer or on the form presented to the authorised TAC shall be processed by Val Spray Bergamo S.r.l. with the aid of computerized and manual tools for the sole purpose of allowing the Purchaser to benefit from this guarantee and of facilitating intervention by the TAC authorised by Val Spray Bergamo S.r.l. This shall also include management purposes connected with the financial activities of Val Spray Bergamo S.r.l. and purposes of providing statistical, marketing, and commercial information involved in the activity run by Val Spray Bergamo S.r.l.

Val Spray Bergamo shall be able to communicate this data to other companies in the Val Spray group for purposes connected with the organisation of the guarantee service, technical assistance and maintenance. In order to exercise any of the rights provided for by article 7 of the Legislative Decree 196/2003, the Purchaser shall be able to contact the data controller at Via Marconi, 8/F, Brembate di Sopra (BG) Italy. In any case, the Purchaser shall be able to oppose the processing of personal data for the purposes of marketing and commercial information by ticking the special box in the reply slip of the certificate of guarantee issued by the dealer from the very beginning.