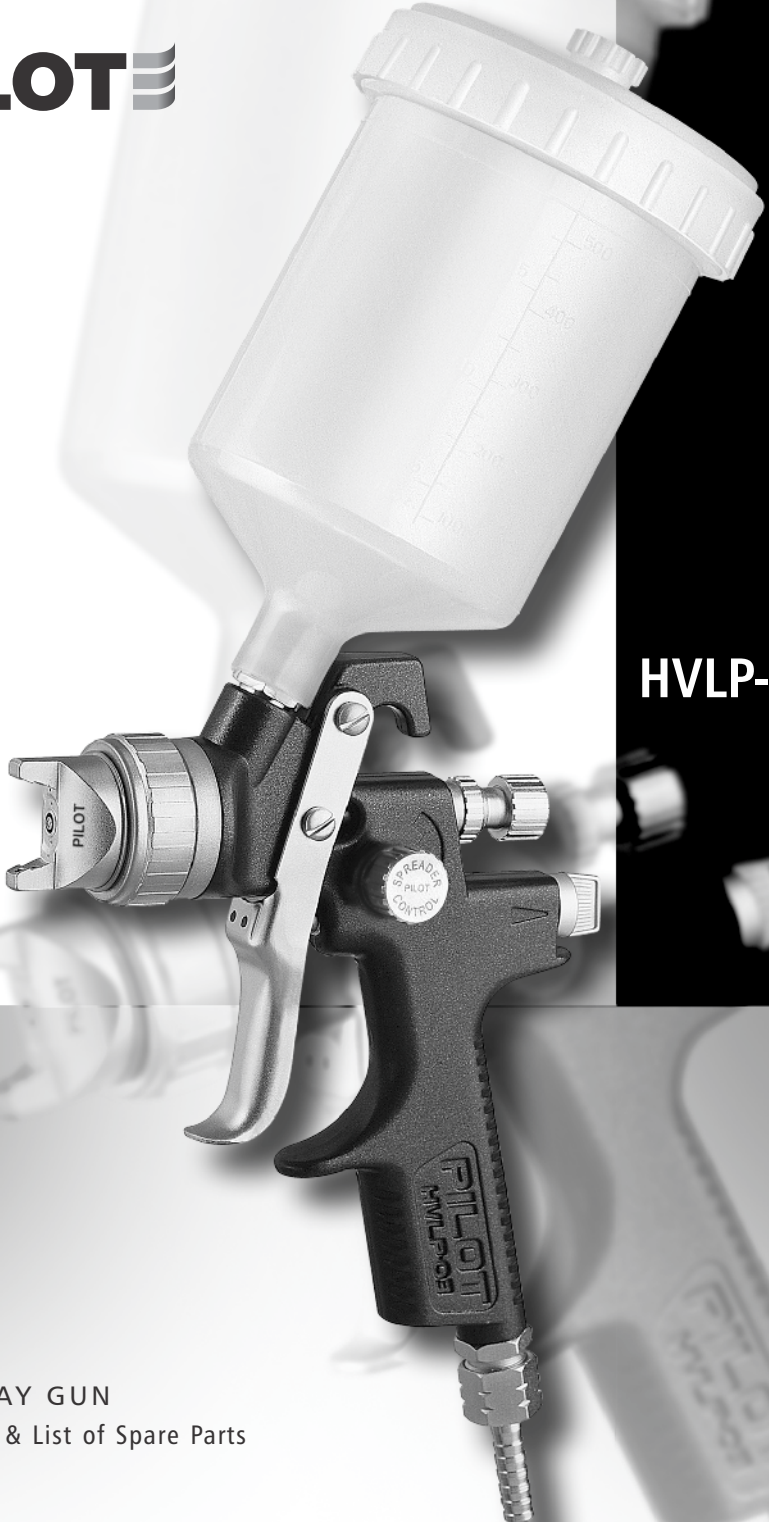


PILOT



HVLP-03

PILOT SPRAY GUN
Service Sheet & List of Spare Parts

Dear customer,

Now as you've brought home one of your favourite Pilot spray guns. We'd like to say a special 'thank you'. These precision-engineered tools have been designed to excel, making every spray job the work of a professional.

As you know Pilot has always spelt reliability and safety, earned by 5 decades of experience and overwhelming customer satisfaction. We are certain we have met all safety requirements. Our products bear the identification plate in conformance to the CE ruling.

To facilitate easy understanding of the working procedures please refer to the detailed instruction manual. Along with the manual you will also find a certificate with the declaration of conformity to various amendments.

Description

HVLP (High Volume Low Pressure) spray guns are easier to use than most spray guns. These lightweight gravity feed spray guns are suitable for production work on articles of medium or large sizes. They are ideal for spray-painting motorcar bodies, refrigerators, machinery, etc. Perfect balance, comfortable handle and trigger action makes them easy and non-tiring to operate. A knob on the left can easily control round to fan spray of pattern.

These gravity feed spray guns are supplied with a 0.6 lit. gravity cup.

Important: These guns are not designed to be used with highly corrosive or highly abrasive coating materials. Violation may increase the need for thorough cleaning and /or the necessity for replacement of parts. If there is any doubt regarding the suitability of a specific material you may seek advise and /or submit a sample for test.

Safety Warnings

Fire and Explosion

- Solvents and coating materials can be highly flammable or combustible, especially when sprayed.
- Workstations must be provided with adequate ventilation/exhaust to prevent the build-up of flammable vapours.
- Smoking and naked flames must not be allowed in the spraying or mixing areas.
- Fire extinguishing equipment must be provided in the spraying and mixing areas.
- Users must comply with all local and national codes of practice and insurance company requirements governing ventilation, fire precautions, operation, maintenance and housekeeping of workstations.

Halogenated hydrocarbon solvents for example 1,1,1 Trichloroethane & Methylene Chloride can chemically react with aluminium and galvanized or zinc coated parts and cause an explosion hazard. Read the label and data sheet of the material you intend to spray.

Do not use solvents or coating materials containing halogenated hydrocarbons with this equipment.

Static electricity is generated by fluid moving through pipes and hoses. A static spark, capable of igniting certain solvents and coating materials could be produced by high fluid flow rates. To prevent the risk of fire or explosion, earth continuity to the spray equipment and object being sprayed should be maintained.

Personal Protective Equipment

Toxic vapours - Certain materials when sprayed may be poisonous, create irritation or otherwise be harmful to health. Always carefully read all labels and safety / performance data about the material being sprayed and follow the necessary recommendations.

If in doubt, consult the material supplier

- The use of respiratory protective equipment is recommended at all times while spraying. The type of respiratory protective equipment used must be compatible with the material being sprayed and the level of concentration.
- Always wear eye protection while spraying or cleaning the equipment.
- Gloves must be worn while spraying or cleaning the equipment with certain coating materials and solvents.

Training

Personnel should be given adequate training in the safe use and maintenance of this equipment. Training courses on all aspects of the equipment are available. For details contact your local representative. The instructions and safety precautions contained in this literature and the literature supplied with the coating material should be understood before using the equipment.

Misuse

- All spray guns project particles at high velocity and must never be aimed at body parts.
- Never exceed the recommended safe working pressure for any of the equipment used.
- The fitting of non-recommended or non-original accessories or spare parts may create hazardous conditions.
- Before dismantling the equipment for cleaning or maintenance, pressure, air and materials must be isolated and released.
- The disposal of non-metallic materials must be carried out in an appropriate manner. Burning may generate toxic fumes. The removal of waste solvents and coating materials should be carried out by an authorized local waste disposal service.
- The materials used in the construction of this equipment are (bearing in mind the warning on Halogenated Hydrocarbons) solvent resistant enabling the equipment to be cleaned using gun washing machines. However, this equipment must not be left inside the gun washing machine for prolonged periods of time after the automatic cleaning cycle has been completed. The solvents used in the gun washing machine should be regularly checked to ensure that the equipment is not flushed through with contaminated material. Follow the recommendations of the machine manufacturer.

Noise Levels

The continuous A-weighted sound pressure level of this spray gun may exceed 85 dB (A) depending on the air cap/nozzle set-up being used. Sound levels are measured using an impulse sound level meter and analyzer, when the gun is being used in a normal spraying application. Details of actual noise levels produced by the various air cap/nozzle set-ups are available on request.

Installation

IMPORTANT: To ensure that this equipment reaches you in perfect condition, protective coatings, rust inhibitors, etc. have been used. Flush all equipment through with a suitable solvent before use to remove these agents present in the material passages.

- Attach the air supply line to the air inlet (24). An air transformer installed as close as possible to the gun will provide filtered and regulated air.

Recommended air hose sizes

Attach air hose connector from a filtered regulated air supply.

Recommended air supply hose size upto 10 meters long, (1/4") bore.

Attach the gravity feed cup to the material inlet and ensure that the sealing washer is compressed.

Operation

The PILOT spray gun is designed for spraying paint and lacquers as well as other media with a spraying viscosity of up to 70sec. in a DIN4 mm cup. The compressed air supply required for the spraying is fed to the air connection that is screwed into the gun grip. Squeezing the trigger as far as the first pressure point opens the air valve. When

the trigger is squeezed further the paint needle is pulled out of the paint nozzle. The spraying medium flows then unpressurized out of the paint nozzle due to gravity and is simultaneously atomized by the compressed air that flows from the air nozzle.

1. Fill the gravity feed cup with the material. Do not overfill. Ensure that the vent hole in the cup lid is clear.
2. Adjust the atomizing air pressure to 2-4 kgs / sq.cm. (28-56 psi).
3. It requires air about (12-13 cfm) 340-370 liter per minute depending on the liquid to be spray.
4. Close the fluid needle adjusting screw by turning clockwise.
5. Turn on the air at the source of supply and spray test area by turning the fluid needle adjusting screw counter-clockwise until a full coat is obtained.

Maximum coating material temperature 50 deg C.

If the finish is too sandy and dry, reduce the viscosity of the coating material supply by turning the adjusting screw counter-clockwise.

Increasing or decreasing the atomizing air pressure can also correct both the above. The most efficient atomizing air pressure is the lowest possible air pressure that will give the desired effect.

The gun should be held perpendicular to the spray surface at all times. Do not arc the gun as this produces an uneven coat of paint. The recommended spraying distance is 230mm (9").

Preventive Maintenance

Cleaning

1. Turn off air supply and release pressure.
2. Empty surplus coating material from cup and clean.
3. Remove air cap and clean by immersing in solvent, brush or wipe clean. If any holes in the air cap are blocked use a toothpick or broom straw to remove the obstruction. Never use a steel wire or hard implement which will damage the air cap and result in a distorted pattern.

Lubrication

Lubricate all moving parts daily with a few drops of light oil and occasionally place a light coating of Vaseline on the needle spring. The packing may need to be oiled occasionally to keep them pliable.

Adjustment of Fan Width

To adjust fan width use spreader control. Spray pattern can be altered from flat to round.

Reduction of Material Flow

Needle stroke and therefore material flow is infinitely reducible by turning the material flow control screw.

Exchanging the Nozzle Set

When changing to another nozzle size, make sure that the complete nozzle set is exchanged. Fix paint nozzle before paint needle.

After Use

Immediate cleanup with the appropriate cleaning solution must be done after use.

Replacement of Parts

Needle

1. Remove needle adjusting screw, spring for needle and needle. Replace any worn or damaged parts ensuring that the fluid needle seats correctly in the fluid tip so that the movement of the needle is not restricted.

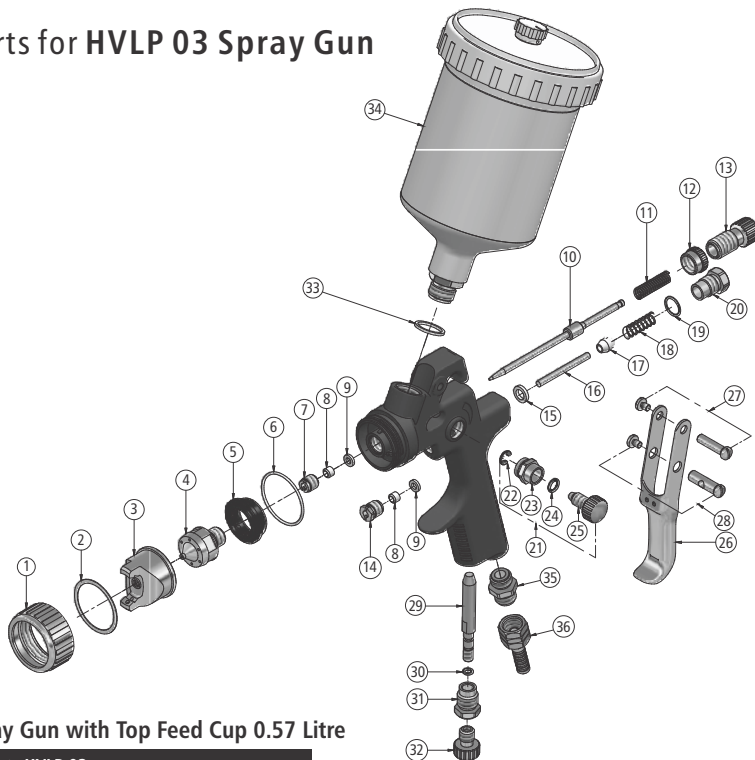
Needle Packing

1. Remove needle as 1 above.
2. Remove nozzle and needle
3. Remove needle packing set. Replace any worn or damaged parts.
Re-assemble, reversing steps 1 to 3. Adjust packing so that the movement of the needle is not restricted.

Air Valve Head

Remove threaded pin and air control knob. Replace any worn or damaged parts and re-assemble.

Spare Parts for HVLP 03 Spray Gun



HVLP 03 Spray Gun with Top Feed Cup 0.57 Litre

List of Spare Parts HVLP 03

Sr. No.	Description	Code No.
	Spray Gun Type HVLP - 03 With Plastic Cup 0.57 Litre	HVLP 03000
1	Air Cap Locking Nut	HVLP 03001
2	Air Cap Washer	HVLP 03002
3	Air Cap	HVLP 03003
4	S.S. Nozzle	HVLP 03004
5	Air Baffle Ring	HVLP 03005
6	Air Locking "O" Ring	HVLP 03006
7	Needle Packing Nut	HVLP 03007
8	Packing Bush Set	HVLP 03008
9	Needle Packing Nut WashER	HVLP 03009
10	Needle Valve	HVLP 03011
11	Needle Spring	HVLP 03012
12	Needle Locking Nut	HVLP 03013
13	Needle Adjusting Screw	HVLP 03014
14	Air Valve Nut	HVLP 03015
15	Air Valve Pin Washer	HVLP 03016
16	Air Valve Pin	HVLP 03017
17	Air Valve Pin Head	HVLP 03018
18	Air Valve Pin Spring	HVLP 03019
19	Plug "O" Ring	HVLP 03020
20	Plug	HVLP 03021

Sr. No.	Description	Code No.
21	Spreader Control Assembly	HVLP 03022
22	E Clip	HVLP 03022A
23	Spreader Control Housing	HVLP 03022B
24	Spreader Control "O" Ring	HVLP 03022C
25	Spreader Control Valve	HVLP 03022D
26	Trigger Assembly	HVLP 03023
27	Fulcrum Screw	HVLP 03024
28	Trigger Screw	HVLP 03025
29	Air Control Spindle Valve	HVLP 03026
30	Control Spindle "O" Ring	HVLP 03027
31	Air Control Knob Guide	HVLP 03028
32	Control Knob	HVLP 03029
33	Nylon Cup Washer	HVLP 03030A
34	Plastic Top Feed Cup 0.57 Litre	HVLP 03030
35	Air Intake Connector	HVLP 03032
36	Hose Coupling	HVLP 03033
37	Repair Kit	HVLP 03080



Accessories

* This Set Contains An Air Cap, Nozzle, Needle, Air Piston Head Complete & Packing.

@ Please Mention Nozzle Size While Ordering Spare Parts.

Service Checks

Troubleshooting

Fault	Cause	Remedy
Not spraying	<ol style="list-style-type: none">1. No pressure at the gun2. Needle adjustment Screw not properly adjusted.	<ol style="list-style-type: none">1. Check air supply2. Adjust
Uneven spray 	<ol style="list-style-type: none">1. Material build up on air cap/nozzle2. Coating material flow or viscosity incorrect	<ol style="list-style-type: none">1. Clean air cap / nozzle2. Adjust needle adjustment screw, or Reduce viscosity
Intermittent spray 	<ol style="list-style-type: none">1. Insufficient material in cup2. Gun material passage blocked3. Loose or damaged nozzle4. Needle sealing damage.	<ol style="list-style-type: none">1. Fill cup2. Clean3. Tighten or replace4. Replace
Fluid leakage from packing nut	<ol style="list-style-type: none">1. Needle packing damage	<ol style="list-style-type: none">1. Replace packing.
Dripping from the nozzle	<ol style="list-style-type: none">1. Damaged nozzle or needle2. Foreign substances between fluid tip and needle prevent sealing	<ol style="list-style-type: none">1. Replace2. Clean needle and nozzle in thinner or Replace.

Manufactured by :

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