



EARLEX SPRAY STATION



HV2900/3900



HV3500

OPERATING INSTRUCTION MANUAL

Thank you for purchasing the Earlex Spray Station.
BEFORE USE – PLEASE READ THE MANUAL AND SAFETY INSTRUCTIONS.
Please retain for future reference.

EXPLODED PARTS VIEW

Fig.1

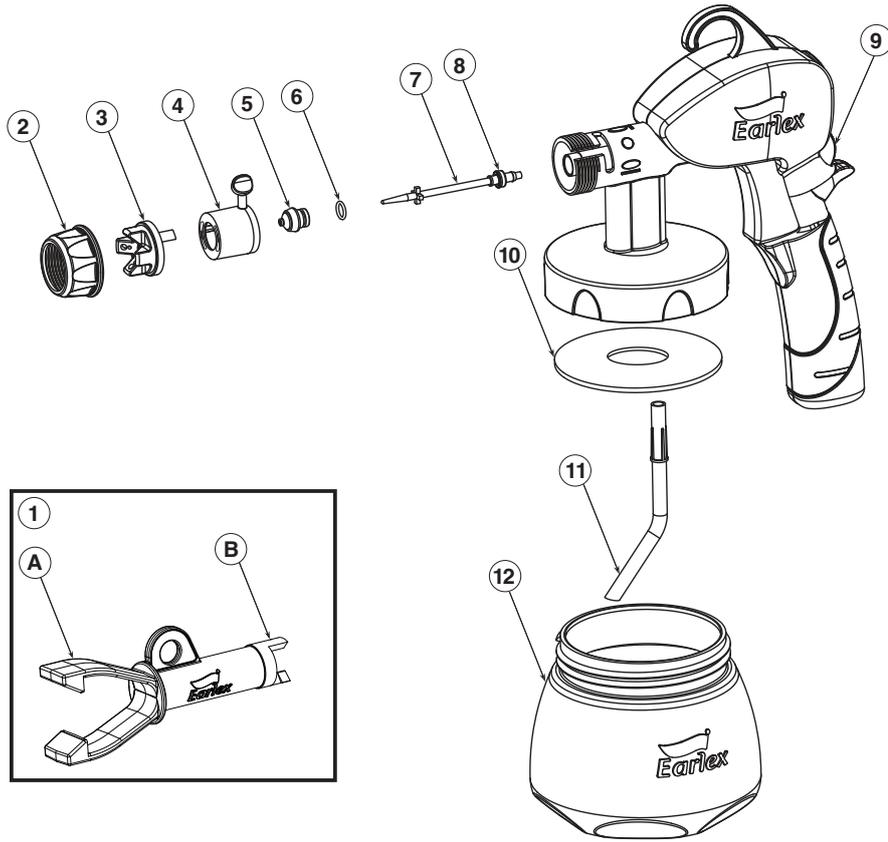
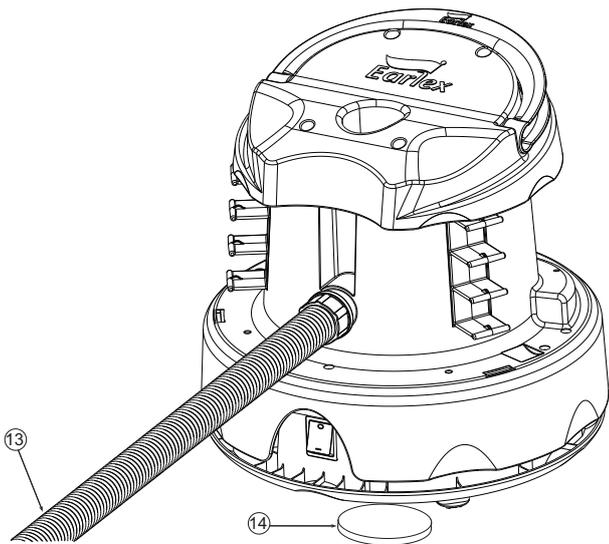
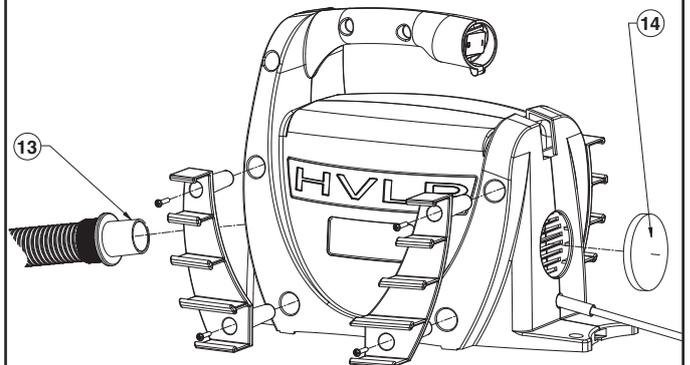


Fig.2



HV3500

Fig.3



HV2900/ 3900

PARTS LIST Fig.1

No.Description	Part Code	No.Description	Part Code
1. Needle and Fluid Tip Tool	V0018	7. Fluid Needle 2.0mm	V0006
2. Air Cap Ring	V0001	8. Lip Seal - Fluid Needle	V0007
3. Air Cap	V0002	9. Paint Flow Adjuster	V0011
4. Spray Direction Plate	V0003	10. Paint Container Seal	L0682
5. Fluid Tip 2.0mm	V0004	11. Pick-up Tube	V0012
6. Fluid Tip O-Ring	V0005	12. Paint Container	V0014

PARTS LIST HV3500 Fig.2

No.Description	Part Code
13. Hose	L1064
14. Filter	L0290

PARTS LIST HV2900/3900 Fig.3

No.Description	Part Code
13. Hose	L0896
14. Filter	L0290

SAFETY OPERATING INSTRUCTIONS

PLEASE READ BEFORE USE

- Never under any circumstances aim the Spray Gun at another person or animal. In the event of injury occurring seek expert medical advice immediately.
- The Spray Gun must only be used with paints and solvents that have a flash point suitable for spraying. If in doubt, consult the paint or solvent manufacturer's data.
- Always ensure there is adequate ventilation when spraying.
- NEVER spray near a naked flame, including appliance pilot light.
- NEVER smoke whilst spraying.
- NEVER allow children to operate or play with the Spray Gun.
- Always read the solvent manufacturer's instructions before use.
- Always disconnect unit from mains supply when filling the paint container.
- Always wear a suitable protective mask when spraying. We would also recommend the use of gloves, goggles and overalls.
- After each use, thoroughly clean the Spray Gun.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Use only genuine manufacturer replacement parts.
- Always disconnect the Spray Station from the mains supply before cleaning the appliance.
- **Warning:** The use of any accessory or attachment, other than those recommended in this instruction manual, may present a risk of personal injury.
- Use the Spray Gun for the job it was designed for only. Mis-use of the Spray Gun will invalidate the guarantee.
- Wear ear protection.

WARNING: The substances used with this Spray Gun (paints, solvents, etc.) may contain dangerous, harmful, explosive or corrosive materials. ALWAYS COMPLY WITH THE SAFETY INSTRUCTIONS ISSUED WITH THIS PRODUCT AND THE MATERIAL BEING USED.

INTRODUCTION

The concept

A motor feeds out a high volume of air (HV) and enables products to be sprayed at a low pressure (LP). The Hose feeds the air produced by the motor to the Spray Gun. The solution is released from the Fluid Tip of the Spray Gun at a very low pressure and is enclosed in a high volume of air.

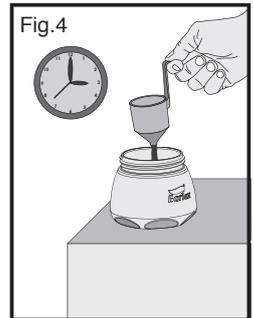
The powerful motor can spray a wide range of solutions with or without dilution. However, there will always be some which will not be suitable for the Spray Gun. Good quality paint contains a high percentage of solids which make the dilution easier. The users must keep in mind that low temperatures make the paint thicker, that's why we recommend spraying with the Spray Gun at a 15°C minimum temperature.

PREPARATION

- Carefully cover areas which are not to be painted with a plastic cover and protective tape.
- Wear a suitable mask when spraying products (and make sure there is adequate ventilation in the room when working indoors).
- Clean the surface you are going to paint. As well as being clean, it must also be dry and smooth.
- Practice first on some old wooden planks to make sure you are holding the Spray Gun correctly.
- We recommend you wear protective clothing.
- Stir the paint well using a mixer where possible.
- Make sure there are no solid particles in the paint.
- Many products can be sprayed without being thinned. However, if the application is not good, thin the product progressively in stages of 5%.
- Most paints can be sprayed by being thinned just a little, e.g. by 5% or 10%.
- Some thick paints such as outer wall paints and certain undercoats will need to be thinned by 20% or 25%.
- Use water to thin a water-based product.
- Use appropriate thinner to thin solvent-based products.
- Certain manufacturers will indicate on the can whether a specific thinner is to be used.
- Certain paint manufacturers have specific paints available for HVLP application.

DILUTION

Dip the viscosity cup into the material and fill up. Check the guide below for the viscosity rating for your machines. Time how long it takes for the paint to stop being a continuous flow, from the bottom of the cup (Fig.4). If the paint requires thinning, start with a 5% dilution of the paint. To do this, part fill a container with one litre of paint. The viscosity cup supplied with the unit holds 1/10 of a litre, block the hole in the viscosity cup and fill up with the required thinner. Add the thinner to the paint and stir, measure the viscosity. If the paint requires further thinning, dilute the paint by another 5% (5% will be equal to half a viscosity cup) with the required thinner and measure the viscosity, if the paint is not at its recommended viscosity, repeat the above step.



Viscosity Ratings

The spray station 2900/3500 has a viscosity rating of 160 seconds. If the paint has emptied the viscosity cup in less than 160 seconds then you will not need to thin your paint or material. If it is above this then thinning will be required.

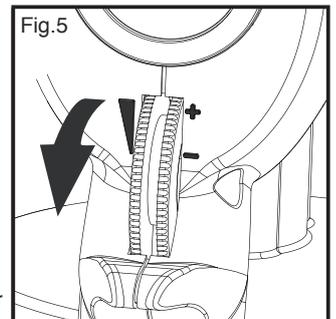
The spray station 3900 has a viscosity rating of 180 seconds. If the paint has emptied the viscosity cup in less than 180 seconds then you will not need to thin your paint or material. If it is above this then thinning will be required.

The spray pack has a viscosity rating of 70 seconds. If the paint has emptied the viscosity cup in less than 70 seconds then you will not need to thin your paint or material. If it is above this then thinning will be required.

The above ratings are a guide, dependent on paint formulation further dilution may be required in increments of 5%.

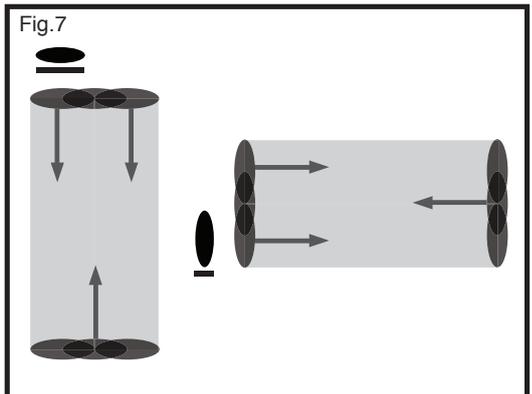
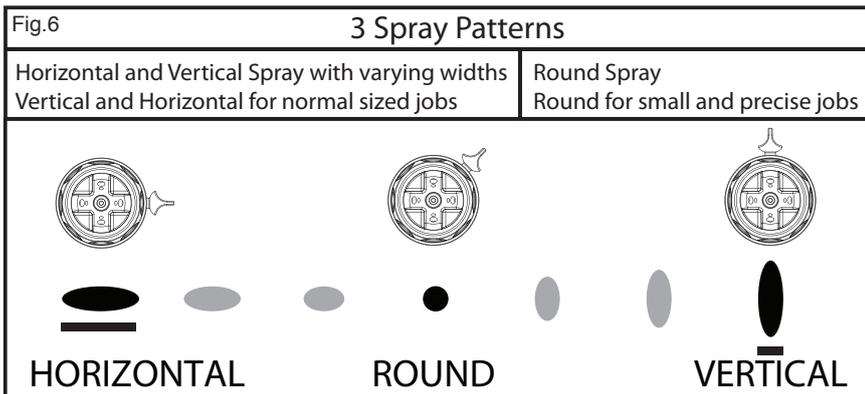
SET UP

- Fill the Paint Container (12) with the product to be sprayed. Stir well (as mentioned previously) and strain to remove any bits which will interfere with a smooth consistent spray.
- Make sure the Paint Container Seal (10) and Pick-up Tube (11) are firmly fitted into the base of the Spray Gun.
- Screw the Paint Container (12) to the base of the Spray Gun and tighten accordingly.
- Start with the Paint Flow Adjuster (9) at its minimum setting so the Trigger can not be pulled. Do not forget that the Paint Flow Adjuster controls the quantity of paint sprayed (Fig.4).
- Uncoil the air Hose and attach it to the back of the Spray Gun and the other end to the Spray Station.
- Uncoil the power cable and attach the plug to the mains supply.
- Switch the Spray Station on. This will immediately cause some air to be produced, which is quite NORMAL. However, none of the product will be sprayed until the Spray Gun Trigger is pulled.
- **Very important:** when spraying for the first time, we recommend that you always leave the motor unit to run for 1 to 2 minutes before applying the product. Do not forget that the Paint Flow Adjuster controls the quantity of paint sprayed (Fig.5).



ALWAYS MAKE SURE THAT THE MOTOR UNIT IS ON A RIGID SURFACE AND FREE FROM DUST.

SPRAYING



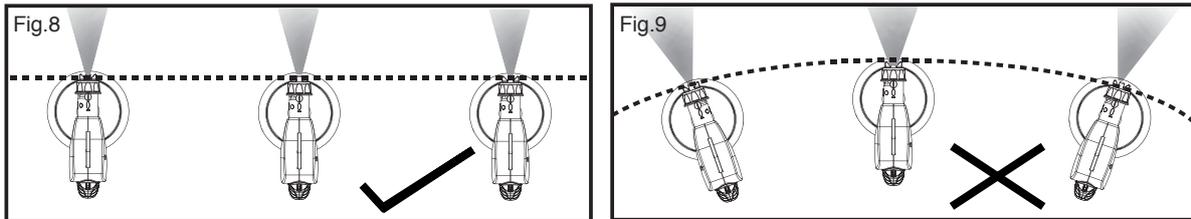
The most commonly used technique for painting a large surface is the 'crisscross' technique, i.e. you apply the product in a horizontal strips and then cross over these strips by applying the product in a vertical strips (Fig.7).

- 1) To achieve a horizontal strip adjust the Spray Direction Plate (4) to the vertical position then pull the Trigger and move your arm across to the right.
- 2) When you get to the end of the line, release the Trigger for a moment and then apply the product in the opposite direction just beneath the line you have sprayed.
- 3) Next, to achieve a vertical strip adjust the Spray Direction Plate (4) to the horizontal position then pull the Trigger and move your arm up and down over the horizontal strips you just have sprayed.



Through gradual movement of the Spray Direction Plate (4) between Horizontal, Vertical and Round spray pattern you can vary the width of the pattern (Fig.6)

HINT: To obtain the best results always keep your Spray Gun level and at an equal distance from the object you are spraying, ideally 25-30cm (10"-12") (Fig.8/9). Let your arm control the movement rather than your wrist (Fig.8/9). This will help give you an even paint distribution.



HINT: HVLP technology produces warm air through the Air Cap allowing the paint to dry quicker which can enhance the final effect.

HINT: Make sure the Pick-up Tube is properly oriented towards the handle for ceilings and away from the handle for floors.

CLEANING INSTRUCTIONS

SPRAY GUN

Type of paint	Cleaning
Water based paint	Clean with water
Oiled based paint	Clean with appropriate thinner e.g. White Spirit

HINT: Before removing or re-inserting the Needle and Fluid Tip ensure the Spray Gun has been flushed through with water or the appropriate thinner so the inner tube is clean.

HINT: When done immediately the cleaning operation can take you less than 5 minutes. If taking a break, leave the Spray Gun in a closed plastic bag to prevent the paint from drying.

- Remove the Paint Container (12).
- Pour any leftover paint into its container so that it can be used for the future. Pull the Trigger to allow paint to run out of the Pick-up Tube (11).
- Pour a quantity of the respective thinner into container, shake the Spray Gun lightly, reassemble the Spray Gun, then spray this liquid through the Spray Gun. Repeat this until the thinner being sprayed is coming through with no traces of paint.
- Clean any traces of paint off the outside of the Spray Gun.
- Clean the Paint Container Seal (10).

FLUID TIP AND NEEDLE

- Unscrew Air Cap Ring (2).
- Remove the Air Cap (3).
- Remove the Spray Direction Plate (4).
- It is recommended that you push the Trigger forward to help release the Fluid Tip (5).
- Using the Needle and Fluid Tip Tool - pincer end A (1) remove the Fluid Tip (5).
- Insert the Needle and Fluid Tip end B (1) into the inner tube and unscrew the Needle anticlockwise, then pull to release the Needle.
- Place all of these items into a container and clean, then using a brush and the respective thinners.
- Clean the inside of the body of the Spray Gun.
- Thoroughly dry all parts before reassembling.
- Reassemble parts in reverse order.
- Ensure the Air Cap Ring (2) is fully tightened and the Fluid Tip is pushed into place so that the Spray Gun Needle will shut off. NB: Ensure the Spray Direction Plate is free to move. If necessary loosen the Air Cap Ring (2) slightly.
- NEVER DISPOSE OF PAINTS OR SOLVENTS DOWN THE DRAIN. ALWAYS USE YOUR LOCAL WASTE COLLECTION SITE.
- The motor unit itself does not require any specific maintenance apart from checking that the filter is not clogged up (the filter can be removed and washed). The filter can be found in the base of the motor unit.

Important: Each Fluid Needle is manufactured to fit the size of the corresponding Fluid Tip. Do not try to fit a 2.0 mm Fluid Needle to a 3.0 mm Fluid Tip.

TRUBLESHOOTING

SPRAY GUN

PROBLEM	CAUSE	ACTION REQUIRED
The paint drips onto item being painted	Paint too diluted	Add undiluted paint
	Paint output too high	Reduce the paint output by adjusting the Paint Flow Adjuster (9)
	Moving too slowly	Increase speed of application
	Spray Trigger held for too long	Release Trigger sooner
	Spray Gun too close	Increase the distance between the Spray Gun and the work surface
Paint is too thin or irregular	Paint too diluted	Add undiluted paint
	Paint output too low	Increase the paint output by adjusting the Paint Flow Adjuster (9)
	Moving too fast	Reduce speed of application
	Spray Gun clogged	Clean the Spray Gun
	Spray Gun too far away	Move the Spray Gun closer to the work surface
No paint being released	Paint too thick	Add thinner
	Fluid Tip clogged	Clean the Fluid Tip (5)
	Pick-up Tube clogged	Clean Pick-up Tube (11)
	Air Hose split	Replace air Hose (13)
	Grainy paint	Filter the paint
	Paint Container almost empty	Refill Paint Container (12)
	Spray Gun at an angle	Check that the Pick-up Tube (11) is pointing towards the paint
	Air inlet blocked	Check the condition of the Filter (14) and clean if necessary
Too much paint in an area	You move your wrist	Move your forearm instead
Application	Either too much or not enough paint	Use the Paint Flow Adjuster (9) to control the flow

PLEASE NOTE: We have done all we can to ensure that when used correctly and in accordance with these instructions the spray gun has a long and fault-free life. We accept no responsibility for damage caused by the use of incorrect or unsuitable substances, paints or liquids which have not been thinned correctly or which are not suitable for the surfaces to which they are applied, health hazards arising from a lack of ventilation when working in confined spaces or equipment which is faulty due to inadequate cleaning of the components after use. If in doubt, test a small inconspicuous area first. Always read the manufacturer's instructions before use. Neither our guarantee nor the above statement affects your statutory rights.

MAINS CONNECTION

This unit is a Class II appliance which means it is double insulated for your protection, no earthing wire is necessary. If the supply cord is damaged, it must be replaced by Earlex Ltd or our appointed agents.

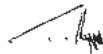
If you are using an extension lead it must be rated at a minimum of 6 amps and fully unwound. Do not operate with a lead rated at less than 6 amps as this will cause premature failure of the motor which is not covered by the guarantee.

If the plug is cut off from the mains lead, it must be disposed of safely. NEVER under any circumstances insert a plug which is cut off from the mains lead into socket.

Information on the disposal of waste electrical & electronic equipment is known as WEEE. Please do not dispose of tools with your household waste collected by the council. It is your responsibility to dispose of this type of waste by handing it over to a special designated collection point for recovery and recycling.



EC Declaration of Conformity
We declare that the unit: HV2900, 3500 and 3900 Conforms to LVD 2006/95/EC, EN60335-1, EMC 2004/108/EC, EN55014-1, EN55014-2, EN61000-3-2, EN61000-3-3, EMF EN50366, EN 62233



Tim Hopper Technical Director

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Design Registrations and Patents:

Spray Gun Design Registration

ECD 001096218-0001
CN 200930004457.X
US D609, 778S

Spray Gun Patent

GB 0903275.6

HV2900/HV3900 Turbine Design Registration

GB 3022947
EU 000608856
US D563,503

HV3500 Turbine Design Registration

ECD 001096242-0001
CN 200930004458.4
US 29/314,080

EARLEX LTD. WILL ACCEPT NO RESPONSIBILITY FOR THE USE OF THIS PRODUCT IF USED FOR ANY OTHER PURPOSES THAN THOSE DETAILED HEREIN.

GUARANTEE and HELPLINE

This product is guaranteed for a period of 24 months against faulty manufacture or materials. It is not guaranteed for industrial or hire purposes. This guarantee does not affect your statutory rights. For further information or any user advice, please phone our helpline between 08:30 to 17.00 Mondays to Thursday, Friday 08:30 to 15:45 (excluding Bank Holidays), or visit our website www.earlex.com.

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