

Earlex®  
**SPRAY**  
**STATION**® 3000  
THE COMPLETE PAINT SPRAYING SYSTEM



## **OPERATING INSTRUCTIONS**

Thank you for purchasing the Earlex HVLP Spray Kit. This is a highly versatile spray kit and can be used on a variety of applications.

**BEFORE USE - PLEASE READ THE SAFETY & OPERATING INSTRUCTIONS.**

Please retain for future reference

# **SAFETY**

## **OPERATING INSTRUCTIONS**

**PLEASE READ BEFORE USE**

**NEVER** under any circumstances aim the nozzle 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 suitable flash point for spraying. If in doubt consult paint or solvent manufacturer's data.



**Always** ensure there is adequate ventilation when spraying.

**NEVER** spray near a naked flame, including appliance pilot flame.

**NEVER** smoke whilst spraying.

**NEVER** allow children to operate or play with the spray gun.

**Always** read the paint manufacturers thinning instructions before using.

**Use** only genuine manufacturer replacement parts

# **SAFETY**

## **OPERATING INSTRUCTIONS**

Always disconnect unit from mains supply when refilling the paint container.

Before cleaning, always disconnect unit from the mains supply.

Always wear the correct protective face mask when spraying. We would also recommend the use of gloves, goggles and overalls.

After every use ensure that you clean your spray gun thoroughly and grease the fluid needle packing.

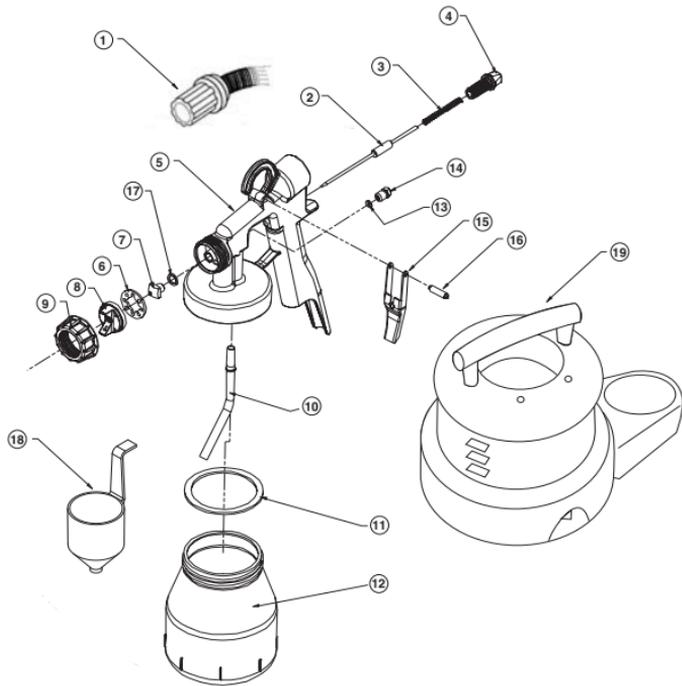


**WARNING:** The substances used with this spray gun (paint, thinner etc) may contain hazardous, harmful, explosive or corrosive materials. **ALWAYS COMPLY WITH THE SAFETY INSTRUCTIONS ISSUED WITH THIS PRODUCT AND THE MATERIAL BEING USED.**

Only use the unit as detailed in these instructions.

# EXPLODED PARTS VIEW

(Descriptions Overleaf)



# PARTS LIST

<b>Key Description</b>	<b>Part No.</b>
No.	
01. Hose Assembly	L0078
02. Fluid Needle Assembly	L0236
03. Spring	L0216
04. Fluid Adjusting Screw	L0210
05. Gun Body	L0200
06. Air Flow Plate	L0206
07. Fluid Tip	L0237
08. Air Cap	L0205
09. Adjustment Ring	L0215
10. Fluid Tube	L0214
11. Container Gasket	L0335
12. Container	L0240
13. Fluid Needle Packing	L0272
14. Needle Packing Screw	L0208
15. Trigger	L0202
16. Trigger Pin	L0209
17. Nozzle Washer	L0211
18. Viscosity Cup	SG243
19. Motor Housing Assembly	L0126

## **INTRODUCTION**

HVLP stands for High Volume, Low Pressure. This is a type of spraying that allows you to spray extremely accurately but without all the overspray that occurs with the high pressure tank type equipment. In fact, in some parts of the world the high pressure systems are banned by law on environmental grounds and HVLP type systems are the only alternative for professional type spraying. This gun is extremely easy to use, very safe and reduces the amount of paint used.

### **PLEASE NOTE**

We have done all we can to ensure that used correctly and according to these instructions, this spray gun will give long and trouble free life. We accept no responsibility for damage caused by the use of incorrect or unsuitable substances, paints or fluids which have not been thinned correctly or are unsuitable for the surfaces to which they are applied, health hazards arising from lack of ventilation when working in confined spaces or failure of the equipment due to inadequate cleaning of the components after use. If in doubt, always test a small inconspicuous area first. Always read the paint manufacturer's instructions first. Neither our guarantee nor the above statement affects your statutory rights.

## **IMPORTANT SELECTING PAINT**

This is a highly versatile spray kit that can be used with several different spray mediums including varnishes, wood preservatives, enamels, oil and water based paints and cellulose. However some materials cannot be sprayed so please check the recommendation of the manufacturer before buying the paint. *If a material refers to brush application only then it usually cannot be sprayed.*

**THIS UNIT CANNOT BE USED FOR TEXTURED PAINTS. USE OF THESE MATERIALS WILL CAUSE PREMATURE WEAR, WHICH WILL VOID THE GUARANTEE.**

**TO OBTAIN THE BEST RESULTS FROM YOUR SPRAY KIT PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE USE.**

## PREPARATION

Preparation of the surface and thinning of the paint are the two most important areas to be concerned with to obtain the best results from your spray kit.

Ensure all surfaces are free from dust, dirt, rust and grease. If necessary rub down with sandpaper, or similar.

Masking of areas is important to ensure you do not spray those areas you wish to remain untouched.

## THINNING

Your spray kit is supplied with a viscosity cup. Viscosity is a technical term used to indicate if a product is very thin or very thick. If thin, the viscosity is said to be low, while if very thick the viscosity is said to be high.

Viscosity is measured in seconds. In order to spray some materials they need to be “thinned” (diluted).

Thinning is very important when spraying. Most paints etc are supplied ready for brush application and *may need to be thinned (diluted)* for spraying purposes.

Follow the manufacturers guide for thinning in conjunction with a spray gun. If in doubt please contact the manufacturers of the paint. The viscosity cup supplied will help you determine the correct thickness of the paint. Paint is “thinned” by adding the substance which the paint is based upon. If a water based paint then water is added, if oil based then white spirit, if cellulose then a cellulose thinner is added.

As some paints, wood preservatives and other sprayable materials contain particles that have differing qualities, please ensure that when filling the paint container of the spray gun, that the paint is filtered through either a funnel with a filter on it or through nylon tights or stockings. This will ensure that no large particles enter the paint container, so preventing blockages and providing you with trouble free spraying. Ensure that a face mask, gloves and goggles are worn at all times when spraying.

# IDEAL VISCOSITY

<b>Water based paints and emulsions.....</b>	45 - 60 seconds
<b>Oil based paints.....</b>	45 - 50 seconds
<b>Wood preservatives.....</b>	No dilution
<b>Primers.....</b>	45 - 50 seconds
<b>Varnishes.....</b>	No dilution
<b>Aluminium paints.....</b>	No dilution
<b>Wood stains.....</b>	No dilution
<b>Cellulose.....</b>	Manufacturers ratio

This gun can be used with products having a viscosity ranging from 10 to a maximum of 60 *seconds*. Dip the viscosity cup into the material and fill up. Time how long it takes for the viscosity cup to empty (Fig.1).

Using the above chart (or manufacturer's instructions) as a guide determine if the material requires further thinning, if so then thin accordingly.



## **OPERATION**

Fill the paint container with the material to be sprayed. **DO NOT OVERFILL.** Push the fluid tube firmly into the base of the gun body. Screw the container onto the gun *body* tightly.

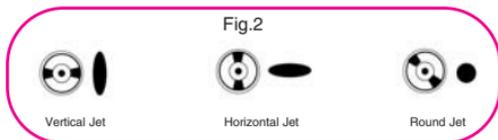
Place the unit onto a clean floor space, free from any loose debris, liquids or dust sheets that could block the motor inlet. Unwind the hose from the main housing and connect to the back of the gun. Uncoil the mains cable from the base of the unit and plug in.

**ALWAYS KEEP THE MOTOR UNIT AS FAR AWAY FROM THE SPRAYING AREA AS POSSIBLE TO PREVENT PAINT CONTAMINATING THE MOTOR.**

**MASK ANY AREA YOU DO NOT WISH TO SPRAY.**

Once you have set up ready to spray, switch on the unit. No paint will be sprayed from the gun until the trigger on the spray gun is pulled. Before starting any work on spraying actual objects we suggest you spend a small amount of time practicing on cardboard or newspaper until you have got used to how the gun works.

## SPRAY PATTERNS



The gun has 3 different spray patterns – Horizontal, Vertical and Round (Fig.2)

The horizontal and vertical are recommended for large surfaces. The round spray is used for small objects or for areas - such as corners – that are difficult to reach.

To adjust the spray pattern, loosen the adjustment ring (9), adjust the position of the air cap (8) to obtain either a vertical, horizontal or round pattern then re-tighten the adjustment ring.

## **PAINT VOLUME**

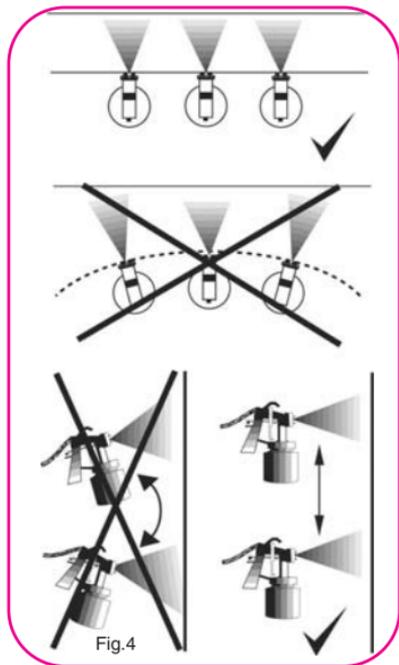
The volume of paint sprayed is easily adjustable.  
(Fig.3)



Completely close adjustment screw (4) by turning this clockwise as far as it will go. Whilst pulling the trigger, begin turning the adjustment screw anti-clockwise until the volume of paint you require is obtained. If the paint spray is too wide or contains too much paint turn the adjustment screw clockwise again. Once the correct spray pattern is obtained you are able to commence spraying.

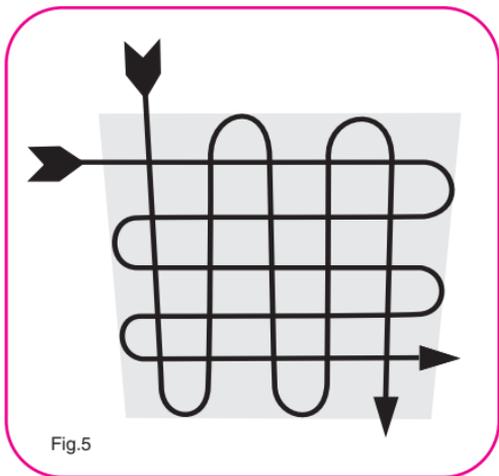
## **SPRAYING TECHNIQUE**

- 1.** To obtain the best results always keep your spray gun level and spray equally from side to side or up or down 25-30cm (10"-12") from the surface. Avoid spraying at an angle as this will lead to runs on the surface (Fig.4).
- 2.** Let your arm control the left to right movement rather than your wrist as this will aid even paint distribution over the whole area (Fig.4).
- 3.** Do not tip the sprayer to more than 45° angle.



## HELPFUL HINTS

1. Evenly control the speed of movement of the spray gun. A fast speed will give a thin coat and a slow speed will give a heavy coat.
2. Only apply one coat at a time. If a further coat is required follow the paint manufacturer's instructions for drying times.
3. If spraying small areas or objects keep the output setting low as this will avoid excessive use of paints and will minimise overspray.
4. When spraying large areas or objects, it is best to use a criss-cross pattern, either from left to right then up or down or vice-versa. This will ensure maximum coverage (Fig. 5).
5. Avoid stopping and starting when spraying as this can lead to too much or not enough material on a surface.
6. To ensure edges are covered, commence spraying just to the side of area being sprayed
7. **CLEAN SPRAYER AFTER EVERY USE (SEE CLEANING INSTRUCTIONS)**



## **CLEANING INSTRUCTIONS**

**THE SPRAY GUN MUST BE THOROUGHLY CLEANED IMMEDIATELY AFTER USE. IF THE PAINT DRIES INSIDE THE GUN, CLEANING WILL BECOME MUCH MORE DIFFICULT AND MAY RENDER THE GUN INOPERABLE. THIS IS NOT COVERED BY GUARANTEE.**

The spray gun is the same as a paintbrush, if it is not cleaned it will go hard and can become useless. You must therefore clean this out after use.

### **GUN**

- Disassemble the gun container
- Pour any residual material into its container so that it can be used for the future.
- Pour a quantity of the respective thinner into container, shake the gun lightly, reassemble the gun, then spray this liquid through the 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 gun
- Clean the gasket (11) inside the gun body

## **NOZZLE & NEEDLE**

- Unscrew Adjustment Ring (9)
- Remove the Air Cap (8)
- Completely remove Adjustment Screw (4)
- Remove the Spring (3)
- Push out the Needle (2) – do not use tools for this
- Remove the Fluid Tip (7)
- Remove Air Flow Plate (6)
- Remove Nozzle Washer (17)
- Place all of these items into a container and clean them using a brush and clean thinners
- Clean the inside of the gun
- Thoroughly dry these parts before reassembling
- Grease the Fluid Needle Packing (13)
- Reassemble parts in reverse order.  
It is recommended fitting the fluid tip (7) prior to the needle

**NEVER DISPOSE OF PAINTS OR SOLVENTS INTO DRAINS. CONTACT YOUR LOCAL COUNCIL TO ARRANGE COLLECTION OR FOR DETAILS OF NEAREST REGISTERED DISPOSAL SITE.**

## TURBINE UNIT

The turbine unit only requires minimal maintenance

- Ensure its filter element is kept clean at all times. This is the filter underneath the main body (19). Disconnect the unit from the mains, turn on side and remove foam material. This can be washed out if necessary and replace when dry. From time to time this filter will need replacing (part no.L0058).
- The turbine bearings are sealed and lubricated for life. There is no maintenance or adjustment required.
- Clean the turbine and hose unit with a damp cloth after use.
- The hose is stored by locating this into the clips on the side of the main body
- The mains lead is stored by wrapping around the base of the unit and locating the plug in the space at the back of the unit.
- The compartment on the top of the unit can be used for the storage of accessories.

# TROUBLE SHOOTING

PROBLEM	CAUSE	ACTION REQUIRED
The paint drips on to item being painted	Paint too diluted	Add undiluted material
	Paint volume too high	Reduce the paint flow by adjusting screw (4)
	Moving too slowly	Increase speed of application
	Gun trigger being held for too long	Release trigger earlier
	Gun too close	Increase the distance between gun and workpiece
Paint is thin or irregular	Paint too diluted	Add undiluted material
	Paint volume too low	Increase the paint flow by adjusting screw (4)
	Moving too fast	Reduce speed of application
	Gun clogged	Clean the gun
	Gun too far away	Reduce the distance between gun and work piece
No paint being produced	Paint too thick	Add thinner
	Gun clogged	Clean the gun
	Pick up pipe clogged	Clean pick up pipe
	Air hose split	Replace air hose
	Grainy paint	Filter the paint
	Container almost empty	Refill container
	Gun at an Angle	Ensure Fluid Tube (10) is angled towards paint
Air intake blocked	Check no paper or loose debris can block the air intake underneath the unit	

## **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.

Your unit has been supplied with a mains lead with a fitted plug. This is identified by the fuse holder in the base of the plug. Please read the following safety instructions before use.

1. If the fitted plug is cut off from the mains lead then the plug must be disposed of safely. **NEVER** under any circumstances insert such a plug into a 13 amp socket.
2. **NEVER** under any circumstances use the appliance or mains lead without the fuse cover fitted.  
This is the little cover fixed into the base of the plug to hold the fuse in place.
3. If you lose the fuse cover then please contact any electrical dealer for a replacement or ring our helpline.
4. A replacement fuse must be rated at 5 amp. These must be manufactured and approved to BS 1362.
5. **IF IN ANY DOUBT CONTACT AN ELECTRICIAN.**

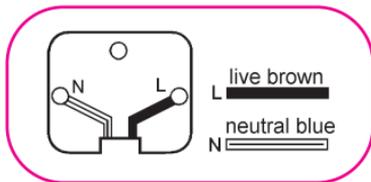
If you need to fit a plug to the mains lead, this should be fitted in accordance with the wiring instructions below, and will need to be used with a 5 amp fuse. If in doubt consult an electrician.

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.

As the colours of the wires in the mains lead of the application may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.



EC Declaration of Conformity

We declare that the unit: HV3000 conforms to: 73/23/EEC,  
EN60335-1 & 89/336/EEC, EN55014-1, EN55014-2, EN61000-3-2,  
EN61000-3-3.



Tim Hopper Technical Director

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**GUARANTEE**

This product is guaranteed for a period of 24 months against faulty manufacture and materials. It is not guaranteed for industrial or hire purposes. The guarantee does not affect your statutory rights. In the event of any problem occurring please contact us on our Helpline No between 8.30 a.m. and 6 p.m. Mondays to Fridays (excluding Bank Holidays) or visit our Website on [www.earlex.co.uk](http://www.earlex.co.uk)  
**HELPLINE No 01483 – 454666**

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