Earlex®

EARLEX SPRAY STATION HV3500

US

OPERATING INSTRUCTION MANUAL

BEFORE USE – PLEASE READ THE MAIN MANUAL AND SAFETY INSTRUCTIONS. **Please retain for future reference.**

ES

MANUAL DE INSTRUCCIONES

ANTES DE UTILIZARLA - POR FAVOR LEA EL MANUAL PRINCIPAL Y LAS INSTRUCCIONES DE SEGURIDAD. **Guárdelo para futuras consultas.**

FR

MODE D'EMPLOI

AVANT CHAQUES UTILISATIONS - MERCI DE LIRE ATTENTIVEMENT LE MANUEL D'UTILISATION ET LES CONSIGNES DE SÉCURITÉ À RESPECTER.

Merci de conserver ce manuel pour toute consultation future.

STOP

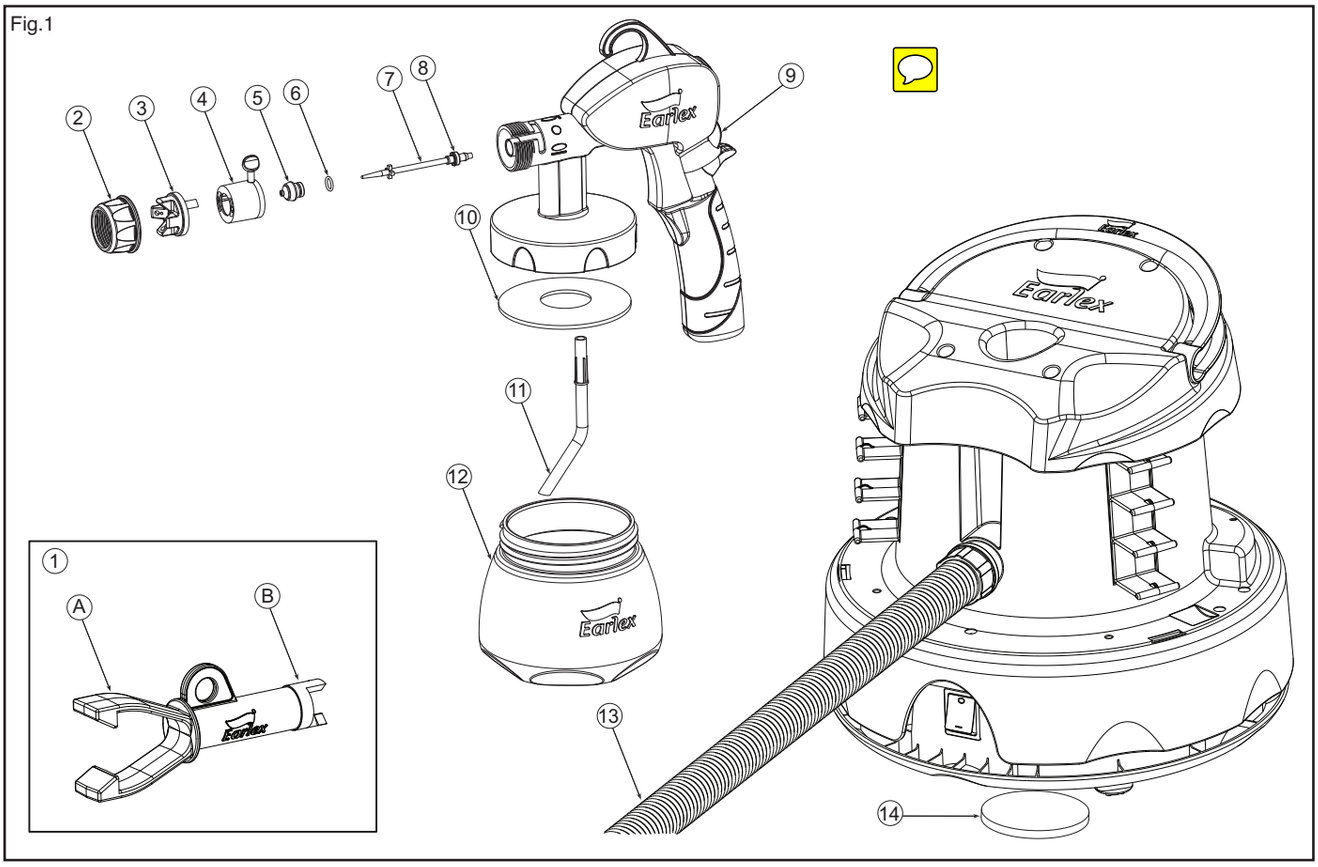
DO NOT RETURN TO STORE IF THIS PRODUCT HAS BEEN USED
If you have any questions relating to this product please contact Earlex customer service toll free: 888-783-2612

NO DEVUELVA EL PRODUCTO AL ESTABLECIMIENTO SI HA SIDO USADO
En caso de dudas y preguntas relacionado con el producto contacte con el servicio Earlex llamando al teléfono gratuito 888-783-2612

NE PAS RETOURNEZ LE PRODUIT AU MAGASIN SI CE DERNIER A DÉJÀ ÉTÉ UTILISÉ
Si vous avez des questions concernant ce produit merci de contactez le service client d'Earlex au 888-783-2612

EXPLODED PARTS VIEW

Fig.1



DIAGRAMS

Fig.3

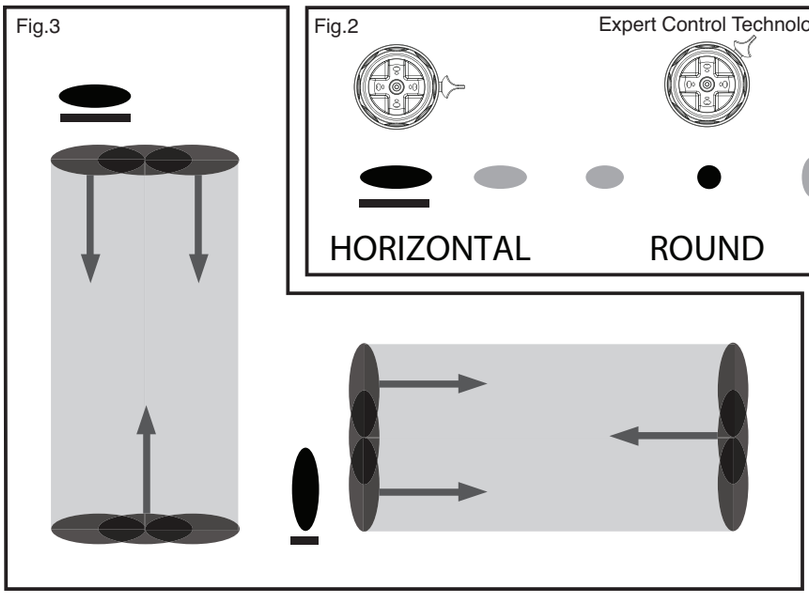


Fig.2

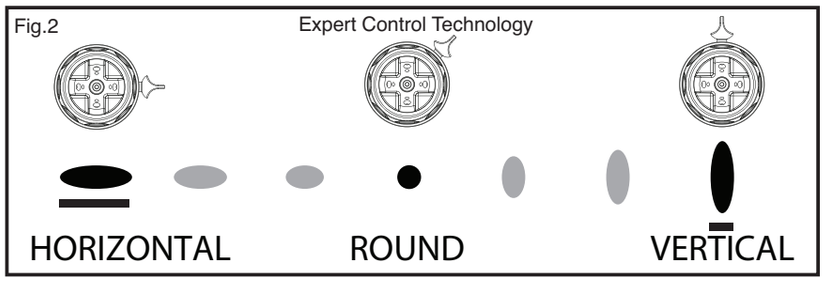


Fig.4

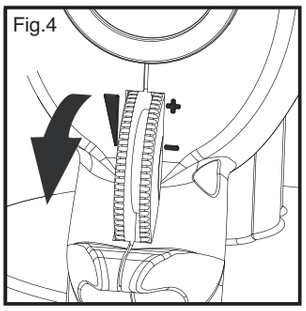


Fig.5

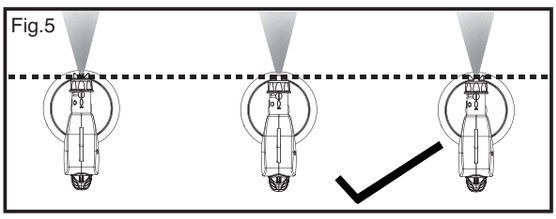
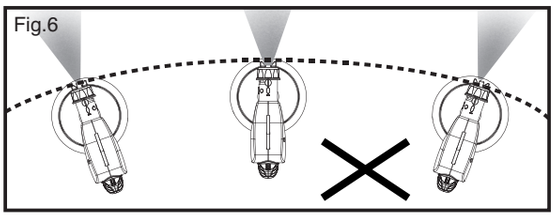


Fig.6



US

SAFETY OPERATING INSTRUCTIONS

WARNING! FIRE AND EXPLOSION HAZARD.

- **CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK OR INJURY, DO NOT EXPOSE TO RAIN; STORE INDOORS.**
- The materials used with this spray gun (paint, thinners etc) may contain hazardous, harmful, explosive or corrosive materials. ALWAYS COMPLY WITH THE SAFETY INSTRUCTIONS ISSUED WITH THIS PRODUCT AND THE MATERIAL BEING USED.
- The spray gun must be used only with paints and solvents that have a suitable flash point for spraying. If in doubt, consult the paint or solvent manufacturer's data.
- Always ensure there is adequate ventilation when spraying.
- NEVER spray near an open flame, including an appliance pilot flame.
- NEVER smoke when spraying.
- Always disconnect the unit from the electrical outlet when cleaning the spray applicator.
- Always ensure the spray area is safe and free from all debris that may present a fire or fall hazard.
- NEVER, under any circumstances, point the spray gun at another person or animal. In the event of an injury, seek immediate medical attention.
- NEVER allow children or unauthorized users to operate or play with the spray equipment.
- Always read the paint manufacturer's thinning instructions before use.
- Always wear the correct protective face mask when spraying. We also recommend wearing gloves, goggles and overalls.
- You must clean the spray gun thoroughly after each use.
- Use only genuine manufacturer replacement parts.
- Use the spray equipment only as detailed in these instructions.
- Do not use the air hose or power cord to move the Spray Station unit.
- Check the hoses, hose connectors and power cord frequently. Any worn or damaged parts should be replaced immediately.
- This spray station is recommended for household use only.
- This spray station 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.

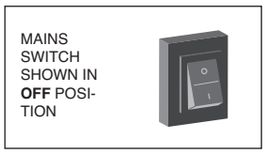
IMPORTANT ELECTRICAL INFORMATION

EXTENSION CORDS

Your HVLP spray station is supplied with a power cord that is 6 feet long. Make sure your power cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will utilize. For lengths up to 50 feet, No 18 AWG extension cords should be used.

DOUBLE INSULATED APPLIANCE

This spray station is a double insulated appliance and, as such, does not require three-way grounding. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other) and does not require a grounding adapter. This plug will fit into the power outlet only one way.If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact a qualified electrician for further details. Do not defeat the safety purpose of the polarized plug.



PARTS LIST Fig.1

No.	Description	Part Code
1.	Needle and Fluid Tip Tool	V0018
2.	Air Cap Ring	V0001
3.	Air Cap	V0002
4.	Spray Pattern Adjustor	V0003
5.	Fluid Tip 2.0mm	V0004
6.	Fluid Tip O-Ring	V0005
7.	Fluid Needle 2.0mm	V0006
8.	Lip Seal - Fluid Needle	V0007
9.	Paint Flow Adjuster	V0011
10.	Paint Container Seal	L0682
11.	Pick-up Tube	V0012
12.	Paint Container	V0014
13.	Hose	L0896
14.	Filter	L0290

IMPORTANT: SELECTING PAINT

Your spray station can be used with a wide variety of paints, stains and coatings such as latex, deck and fence stain, sealers, varnishes, wood preservatives, enamels, oil and water-based paints and automotive paints.
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 YOUR WARRANTY. TO OBTAIN THE BEST RESULTS FROM YOUR SPRAY STATION, PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE USE.

US

SURFACE AND JOB PREPARATION

With any paint job you should always ensure that you have prepared your surface to get the best finish. You must ensure all surfaces are free from dust, dirt, rust and grease. Lightly pressure wash decks or exterior surfaces and ensure they are dry before painting.

With pre-coated or pre-painted surfaces and lightly rub down with sandpaper to ensure a good key for the paint. With bare wood surfaces wipe with a wet rag to ensure the surface is free of dust.
Even though HVLP has very little overspray it is recommended masking of edges and other areas and using a drop cloth to ensure you protect those areas you wish to remain untouched.

VISCOSITY & THINNING

Viscosity is a technical term used to indicate if a liquid is thin or thick. Having the correct viscosity of paint is important to ensure the paint atomizes correctly and sprays well giving you a good quality finish. If your material is thin like water then the viscosity is said to be low, while if thick like latex interior paint then viscosity is said to be high. Viscosity is measured in seconds.

You should always test the viscosity (or thickness) of paint before spraying to see if thinning is required. The correct viscosity is important to ensure the paint atomizes correctly and sprays evenly.

Your spray station comes equipped with a viscosity cup The viscosity cup will help you determine the thickness of the paint. To test a liquids viscosity, dip the viscosity cup into the material and fill up to the top. Time how long it takes for the paint to empty the viscosity cup - stop when the continuous flow ends from the bottom of the cup. This will then determine if the material needs to be thinned before being sprayed.

The spray station 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. (see thinning section).

THINNING

Paint is “thinned” by adding the substance upon which the paint is based. If it is water-based paint then water is added; if oil based then mineral spirit or manufacturer’s recommended thinner. If the paint requires thinning, start with a 10% dilution of the paint. To do this, partially fill a container with one quart of paint. The viscosity cup supplied with the unit holds 1/10 of a quart. Block the hole in the viscosity cup with your finger and fill up with the required thinner. Add the thinner to the paint and stir, and re-measure the viscosity. If the paint requires additional thinning, repeat this step by adding 5% (5% will be equal to half a viscosity cup) with the required thinner until desired viscosity is achieved.

If mixing larger batches of paint, for instance a gallon then add four viscosity cups of appropriate thinner which is approximately 10% of a gallon. If further thinning is required repeat by adding two viscosity cups (approx 5% of a gallon) until desired viscosity is achieved.

We would also recommend you follow the paint/coating manufacturer’s guide for thinning in conjunction with a spray gun. If in doubt please contact the manufacturers of the paint.

FILLING THE PAINT CONTAINER

As some paints, wood preservatives and other sprayable materials contain particles that have differing qualities or you may be using an old paint, we recommend that you filter your material when filling the paint container of the spray gun or backpack, through either a funnel with a filter on it or through hosiery. This will ensure that no large particles enter the paint container, so preventing blockages and providing you with trouble-free spraying.

Fill the paint container (12) with the material to be sprayed. DO NOT OVERFILL above the start of the threaded neck. Push the pick-up tube (11) firmly into the base of the spray gun body. Screw the paint container onto the spray gun body tightly.

ALWAYS MAKE SURE THAT THE TURBINE IS ON A STABLE SURFACE AND FREE FROM DUST AND DEBRIS OR LIQUIDS.

Connect the hose (13) to the back of the spray gun. Connect the power cord in to the electrical outlet. **ALWAYS KEEP THE TURBINE AS FAR AWAY FROM THE SPRAYING AREA AS POSSIBLE TO PREVENT PAINT CONTAMINATING THE MOTOR. MASK ANY AREA YOU DO NOT WISH TO SPRAY.**

Tip: If you are spraying a ceiling angle the pickup tube (11) to the rear of the container or if you are spraying a floor surface angle the pickup tube to the front of the container. This will ensure you spray as much material as possible in the container before you need to refill the container.

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 plug in to the electrical outlet.

An airtight seal is essential for the correct operation of this spray gun. Before operating the unit please ensure that the paint container (12) is securely fixed to the spray gun body and the the gasket is in place.

OPERATION

Once you have set up and are ready to spray, turn the unit on. You will recognize the sound to be similar to that of a vacuum cleaner. Air will continually flow through the front of the gun but no paint will be sprayed until the trigger on the spray gun is pulled.

US

STARTING TO SPRAY

We recommend you spend some time practicing on cardboard, newspaper or scrap wood to familiarize yourself with how the spray gun works and the flow rate (i.e. how fast the material will spray) before starting any work regardless of experience level.

Start with the paint flow dial (4) 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. The spray gun will allow you to have great control for the spraying.

The gun has 3 spray patterns which can be changed by the external spray pattern adjuster from either a horizontal oval fan pattern, to a round detailed pattern to a vertical fan pattern. When adjusting through patterns you will notice the oval fan pattern width reduce and increase as it moves from horizontal to vertical positions. This is useful when you have particular size items you need to spray. The maximum with you can spray is 8" down to 1" on the round pattern.

Horizontal oval fan pattern  – is ideal for spraying up and down and for edges left to right (Fig.2).

Vertical oval fan pattern  – is ideal for spraying left to right and for edges top to bottom (Fig.2).

Round Spray  – is ideal for detailed areas or small objects (Fig.2).

Spraying with your spray station is very intuitive and through a little practice you will very quickly become a good sprayer.

When practicing – adjust the paint flow dial (Fig.4), and spray patterns to see the effect this has.

TECHNIQUE

It is recommended you spend some time practicing on cardboard to familiarize yourself with how the spray gun works and the flow rate of the how fast the material. When spraying always keep your arm at the same distance from the surface as possible and avoid moving your wrist as this will help give you an even paint distribution. You should spray a maximum of 10"-12" from a surface, this will give you your maximum spray width.
The most commonly used technique for painting a large surface is the 'crisscross' technique, i.e. you spray the paint in a horizontal strip and then cross over these strips by spraying the paint in vertical strips. When spraying always keep your arm at the same distance from the surface as possible and avoid moving your wrist as this will help give you an even paint distribution.

BE CAREFUL NOT TO APPLY TOO MUCH PAINT IN THE SAME AREA AS THIS WILL LEAD TO SAGS AND DRIPS – APPLYING LIGHT COATS IS ALWAYS BETTER UNTIL YOU GAIN CONFIDENCE AS YOU CAN ALWAYS GO BACK OVER WHAT YOU HAVE SPRAYED.

The most commonly used technique for painting a large surface is the 'crisscross' technique, i.e. you spray the paint in a horizontal strip and then cross over these strips by spraying the paint in vertical strips.

1) To achieve a horizontal strip adjust to the horizontal position then pull the trigger and move your arm up and down (Fig.3).

2) When you get to the end of the line, release the trigger for a moment and then spray the product in the opposite direction slightly over lapping the last strip you have sprayed (Fig.3).

3) Next, to achieve a vertical strip adjust the spray direction plate to the horizontal position then pull the trigger and move your arm up and down over the horizontal strips you just have sprayed slightly overlapping the last strip you have sprayed (Fig.3).

HINT: HVLP technology produces warm air through the air cap allowing the paint to dry quicker which can enhance the final effect and allow you to apply additional coats if necessary much sooner although you should follow the paint manufacturers recommended drying/curing times where possible.

TOP TIPS

- Always test spray onto cardboard to set up the gun as the flow rate will vary dependant on what you are spraying.
- 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.
- If spraying small areas or objects, keep the paint flow dial low as this will avoid excessive use of paints and will minimize overspray.
- Avoid stopping and starting when spraying a surface as this can lead to too much or not enough material on a surface.
- To ensure edges are covered, commence spraying just to the side or above/below the area being sprayed.
- If using a latex paint regularly wipe the needle/tip to ensure the airflow and paint flow are not restricted.
- Do not spray outside when humidity is above 60% or temperature is above 90˚F or below 45˚F.

US

CLEANING INSTRUCTIONS

SPRAY GUN

- 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 though 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 gasket (10).
- Unscrew air cap ring (2).
- Remove the air cap (3).
- Remove the spray direction plate (4).
- Using the needle and fluid tip tool - pincer end A (1) remove the fluid tip (1).
- 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.

FLUID TIP AND NEEDLE

- Unscrew air cap ring (2).
- Remove the air cap (3).
- Remove the spray direction plate (4).
- Using the needle and fluid tip tool - pincer end A (1) remove the fluid tip (1).
- 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.

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 plastic bag to prevent the paint from drying.

TURBINE UNIT

The turbine unit only requires minimal maintenance.

- Ensure its filter (14) element is kept clean at all times.

This is the filter underneath the outlet body of the turbine. Disconnect the unit from the outlet, turn on it's side and remove foam material. This can be washed out if necessary and replaced when dry. From time to time this filter will need replacing.

AFTER USE

- The hose is stored by coiling it between the motor housing and hose cover.
- The power cord is stored by wrapping around the base of the unit and locating the plug in the space at the back of the unit.

Place the gun into the slot on the top of the turbine near the handle using the storage adaptor.

FLUID TIPS AND NEEDLES

The fluid tip and needle that is supplied with your spray gun is ideal for most applications, however if you want to use you spray station to achieve a finer finish when spraying a material such as polyurethane, varnish or lacquer we recommend you invest in a fine finish tip and needle see chart below. Tips and needles may be obtained from the dealer where you purchased your spray station from, if not you can call our toll free number 888-783-2612 to purchase these directly.

US

NEEDLE SELECTION GUIDELINES

Needle fluid tip size	Material sprayed
Small tip	Acrylics, Synthetics, Polyurethane, Thinner, Lacquers, Fluorescent, Oil-Based Stains
Stain/latex tip	Oil base, Hammer, Oxide, Primer, Air Drying, Enamel, Varnish, Marine Paint, Multi-Color, industrial Synthetics, Oil, Polyurethane, Aluminum Thicker Lacquers, Water-Based Stains, Shellac
Large tip	Chlorinated Rubber, Oxide, Zinc Rich Primer, Epoxy, Plastic Additives, Floor Paving Paint, Latex

Note the HV3900 is supplied with a fine finish tip (small tip) already.

CHANGING THE TIP AND NEEDLE

YOU MUST ENSURE YOU REPLACE BOTH THE 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 (1).
- Using the needle and fluid tip tool - pincher end A (1) remove the fluid tip (1).
- Insert the needle and fluid tip end B (1) into the inner tube and unscrew the needle counter clockwise, then pull to release the needle.
- Insert the optional needle and screw into place
- Insert the corresponding fluid tip and screw into place
- Reassemble all other 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. Make sure 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.**

TROUBLESHOOTING

PROBLEM	CAUSE	ACTION REQUIRED
The paint splatters	Paint viscosity is too thick	Thin as required using appropriate thinner (see thinning instructions).
	An area inside the spray gun has a degree of blockage	Clean gun and filter paint in the container.
	Gun wasn't correctly cleaned from previous project	Clean Gun
The paint drips or sags on surface	Paint viscosity is low/thin	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
I'm getting too much over-spray or fogging in the room	Paint flow too high and spraying too close to the surface	Reduce paint flow and move further from the surface.
No paint being released	Paint too thick	Add thinner
	Fluid tip blocked	Clean the fluid tip (1)
	Pick-up tube blocked	Clean the gun
	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

FINISHING TIPS

Orange Peel: Reduce viscosity. Increase atomization with a smaller fluid tip (1). Spray area may be too cold.

Sags or Runs: Move spray gun faster. Spray lighter coat. Increase atomization.

Wet and Milky: Finish applied too heavy. This condition is prone to trap water within coats. Apply lighter coat.

Blushing: Seal coat applied over solvent-based stain that has not been completely dried.

Rough Surface: Seal coat not sanded enough. Sand smooth and re-coat.

Fish Eyes: Surface is contaminated. Clean surface, sand area and re-coat.

US

SERVICING OF DOUBLE-INSULATED APPLIANCES

In a double-insulated appliance, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated appliance, nor should a means for grounding be added to the appliance. Servicing a double-insulated appliance requires extreme care and knowledge of the system, and should be done only by a qualified service personnel. Replacement parts for a double-insulated appliance must be identical to the parts they replace. This double-insulated appliance is marked with the DOUBLE-INSULATED symbol (square within a square).

PLEASE NOTE: We have done all we can to ensure that if used correctly and according to these instructions, this spray gun will have a 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.

Earlex®

Design Registrations and Patents:

Spray Gun Design Registration
ECD 001096218-0001
CN 200930004457.X

Spray Gun Patent
GB 0903275.6

HVLP Turbine Design Registration
GB 3022947
ECD 001096242-0001
CN 200930004458.4
US 29/314,080

WARRANTY

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. Graco Inc. will accept no responsibility for the use of this product if used for any purposes other than detailed herein.

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