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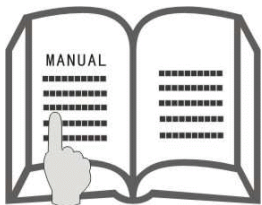


2647 24th Street North, Saint Petersburg, Florida USA

HIGH PRESSURE SPRAY GUN G960-1L-2.5



Read this Instruction Manual carefully and understand it completely, basic precaution should be strictly followed to prevent the damage to the tool and injury to the operator. Retain this manual for further reference.



CONTAIN:

- ◆ Description
- ◆ Specification and Technical Data
- ◆ Important Safety Instruction
- ◆ Instructions for Operation
- ◆ Maintenance/Storing
- ◆ Troubleshooting/Repairs
- ◆ Parts List

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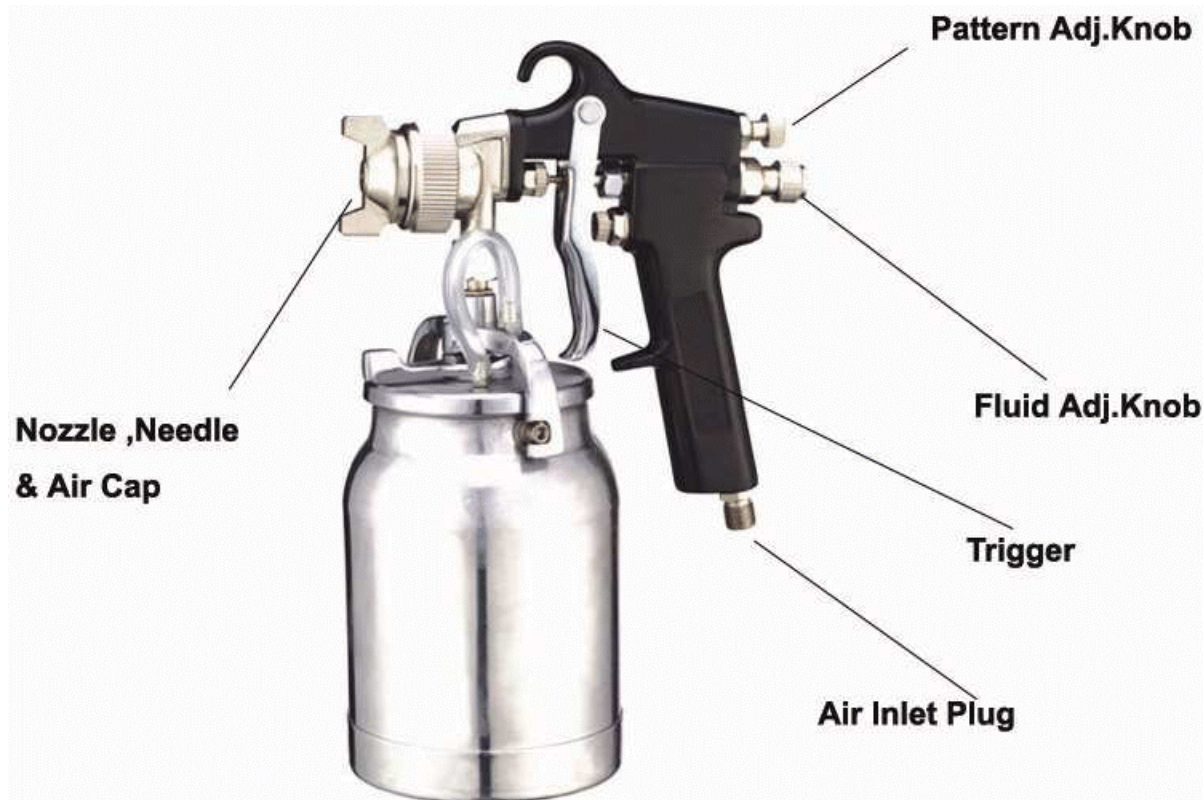
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Description

A high pressure spray gun is ideal for refinishing a boats or a wide variety of gel coat repair projects. This high pressure material sprayer features air fluid and fan controls to offer a wide variety of patterns. It is supplied with a 1000 cc suction feed aluminum cup.



◆ Specifications And Technical Data

1. Name of Parts

2 Technical Data

Type of Feed.....	Suction
Air Inlet.....	1/4"
Standard Dia of Nozzle.....	2.5mm
Optional Dia of Nozzle.....	1.5-2.3mm
Recommended air pressure.....	3.0-4.0bar (45 – 60psi)
Max. pressure of air	8.3 bar (120psi)
Paint Capacity.....	1000cc
Avg. Air Consumption.....	170 – 250 l/min (6.0-8.8cfm)
Pattern Width.....	180-230mm(7.1-9.1")
Weight.....	1.1kgs (2.42 lbs)
A-weighted sound pressure level.....	77.1 dB(A)
Sound power level.....	90.1 dB(A)

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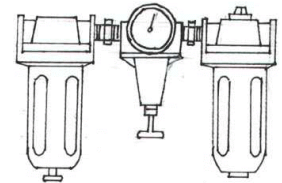
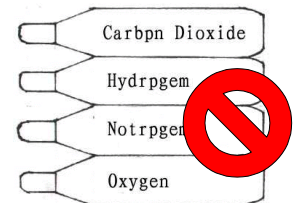
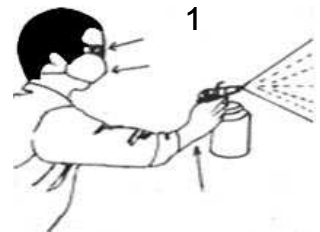
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◆ Important Safety Instructions

1. For toxic vapors produced by spraying certain materials can create intoxication and serious damage to health. Always wear safety glasses, gloves and respirator to prevent the toxic vapor hazard, solvent and pointing paint coming into contact your eyes or skin. (see fig 1)
2. Never use oxygen, combustible or any other bottle gas as a power source or would cause explosion and serious personal injury. (see fig 2)
3. Fluid and solvent can be highly flammable or combustible. Pls Use the tool only in well-ventilated area, and avoid any ignition sources, such as smoking, open flames and decrial hazard. (see fig 3)
4. Disconnect tool from air supply hose before doing tool maintenance andduring non-operation, for emerge stop and prevention of unintended operation, a ball valve near the gun to air supply is recommend.
5. Use clean, dry and regulate compressed air rated at 3.0-4.0bar, never exceed maximum permissive operating pressure 8.3bar (120psi) (see fig 4)
6. Never use homogenate hydrocarbon solvent, which can chemically react with aluminum and zinc parts and chemically compatible with Alum. and zinc pats.
7. Never point gun at you and others at any time.
8. Before operating the tool, make sure all the screws & caps are securely tightened in case of leaking;
9. Before painting, make inspection for free movement of trigger and nozzle to insure tool can operate well.
10. Never modify this tool for any other applications. Only use parts, nozzles and accessories recommended and accessories recommended by manufactures.



◆ Instructions For Operation

Preparation

1. After unpacking the product, inspect carefully for any damage that may have occurred during transit.
Make sure to tighten fittings, bolts, etc., before putting unit into service.
2. Thoroughly mix material in accordance with the paint manufacturer's instructions. Most materials will spray readily if thinned properly.
3. Strain material through filter, cheese cloth or a paint strainer.
4. Fill the canister about $\frac{3}{4}$ full and start the air compressor.
DO NOT EXCEED Maximum Pressure of Spray Gun or any other parts in the compressor system.
5. After connecting the gun to your air supply, please make sure that the fluid cap, container and air hose have been connected tightly with spray gun.
6. Set up a piece of cardboard or other scrap material to use as a target and adjust for best spray pattern.
Never aim or spray at yourself or anybody else which would cause serious injury.
7. Test the consistency of the material by making a few strokes on a cardboard target. If material still appears too thick, add a small amount of styrene. THIN WITH CARE! Do not exceed material manufacturer's thinning recommendations.

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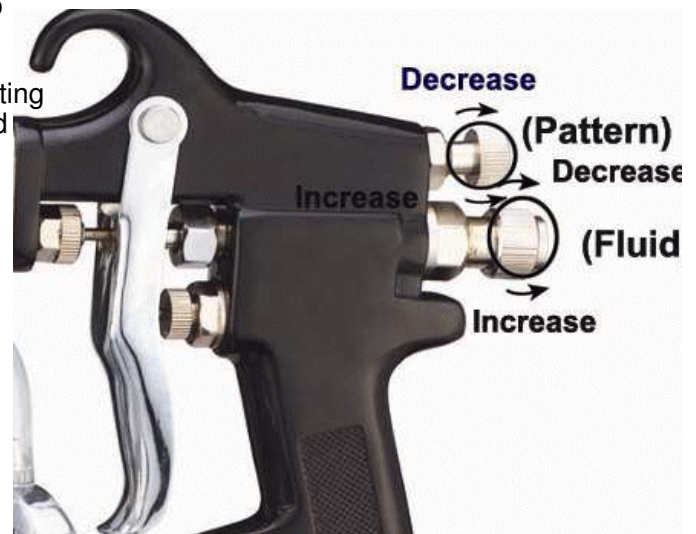
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Adjustment

The desired pattern, volume of fluid output and fine atomization can easily be obtained by regulating the Pattern Adjusting Knob, Fluid (MATERIAL) Adjusting Knob

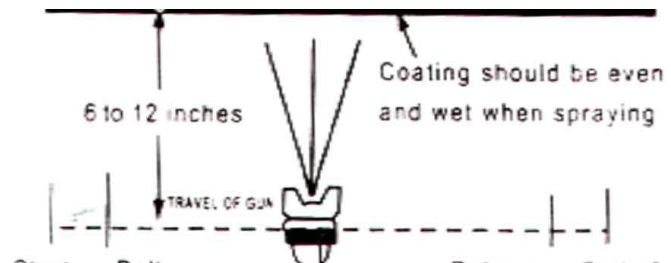
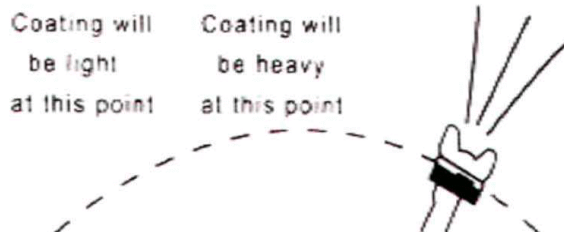
PATTERN ADJUSTMENT: Turning Pattern Adjusting Knob to the right until tight will make spray pattern round, or turning left make spray pattern ellipse.

Fluid (MATERIAL) ADJUSTMENT: Turn the Material Adjusting Knob clockwise will decrease the volume of fluid output and counter-clockwise will increase fluid output.



Operation

1. Begin spraying. Always keep the gun at right angles to the work .
2. Keep the nozzle about 6 to 12 inches from the work surface. Grip the gun keeping perpendicular with spraying area then move it parallel for several times, Stopping gun movement in mid-stroke will cause a build up of paint and result in runs. Do not fan the gun from side to side while painting. This will cause a build-up of paint in the center of the stroke and an insufficient coating at each end.
3. Trigger the gun properly. Start the gun moving at the beginning of the stroke **BEFORE SQUEEZING THE TRIGGER** and release the trigger **BEFORE STOPPING GUN MOVEMENT** at the end of the stroke. This procedure will blend each stroke with the next without showing overlap or unevenness .
4. The amount of paint being applied can be varied by the speed of the stroke, distance from the surface and adjustment of the fluid control knob.
5. Overlap strokes just enough to obtain an even coat.
6. Use a piece of cardboard as a shield to catch overspray at the edges of the work to protect other surfaces.



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◆ Maintenance

Incomplete cleaning could cause function failures and a degradation of the fan form.

1. Remove any remaining material by pouring it into another container.
2. Disassemble the spray gun making sure to remove the needle before disassembling the nozzle to avoid damage to the housing of the nozzle closure.
3. Clean all the material passages and the nozzle. Clean the other components using a brush soaked in solvent.
4. Clean all overspray from air cap and all frontal passages.
5. When using water based cleaners in place of solvent, always thoroughly dry all components before reassembly.
6. Reassemble the spray gun and spray a small quantity of solvent to eliminate all the residues in the paint passages.
7. Replace any components that are visually or functionally damaged.
8. Dispose of all waste materials in accordance with local regulations.

WARNING:

NEVER USE METAL OR OTHER OBJECTS THAT COULD DAMAGE THE HOLES IN THE NOZZLE AND CAP. NEVER IMMERSE THE SPRAY GUN COMPLETELY IN SOLVENT. NEVER USE COMPONENTS OR PARTS THAT ARE NOT MANUFACTURER ORIGINALS.

Storing

- When not using spray gun, turn the fluid adjustment knob counter-clockwise to open which will reduce spring tension on needle fluid tip.
- Spray gun MUST BE well cleaned and lightly lubricated.

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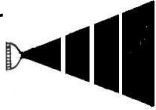
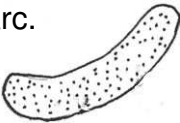
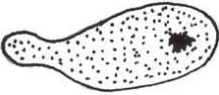
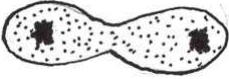
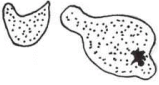


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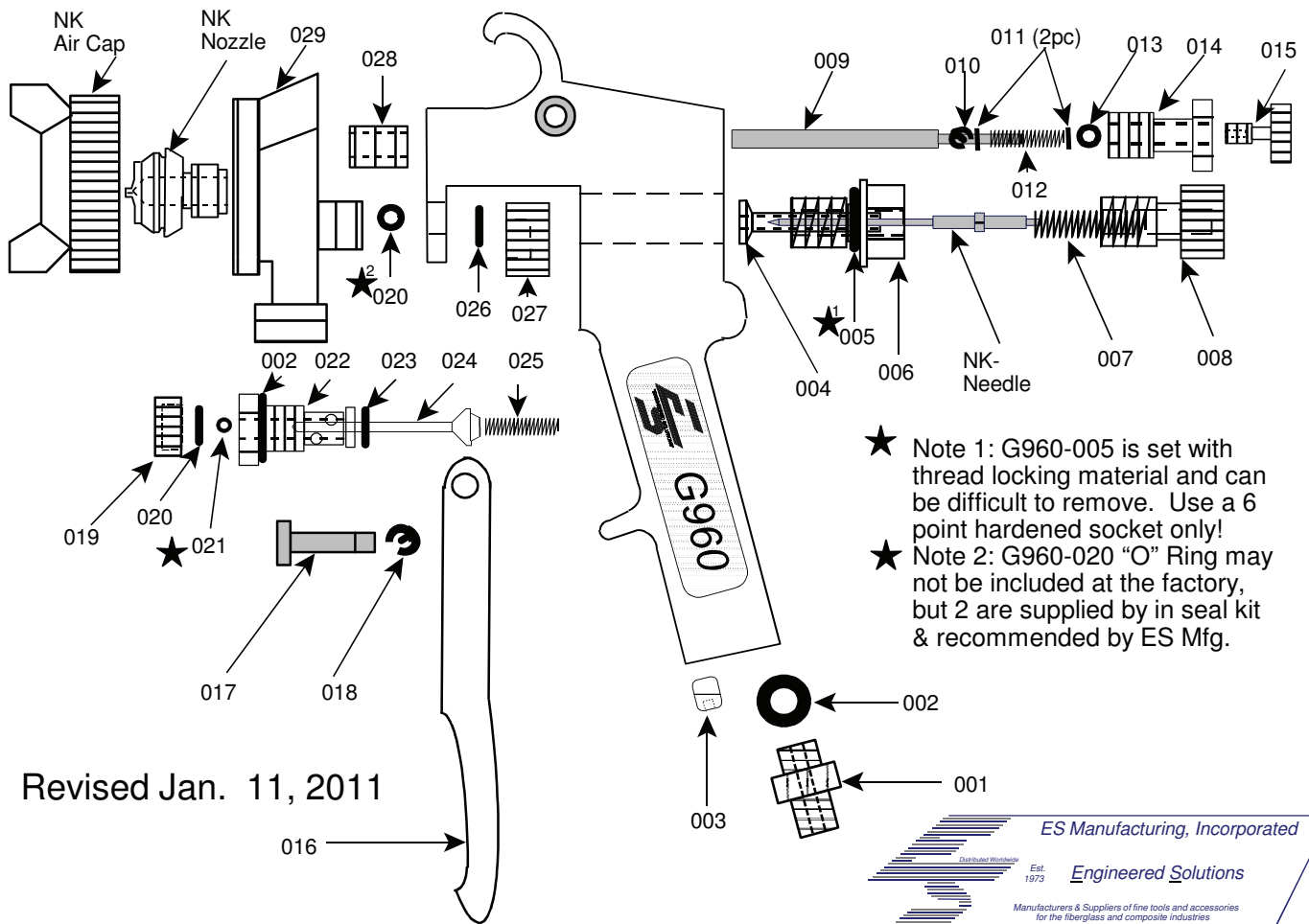


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◆ Trouble shooting

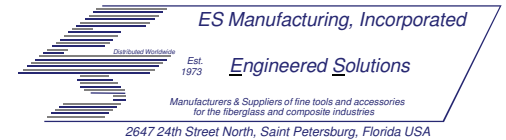
Symptom	Problems	Solution
Fluttering or spitting 	<ol style="list-style-type: none"> 1. Material level too low. 2. Container tipped too far. 3. Loose fluid inlet connection. 4. Loose or damaged fluid tip/seat. 5. Dry or loose fluid needle packing nut. 6. Air vent clogged 	<ol style="list-style-type: none"> 1. Add material into container. 2. Hold more upright. 3. Tighten. 4. Adjust or replace. 5. Lubricate and or tighten. 6. Clear vent hole.
Pattern is arc. 	<ol style="list-style-type: none"> 1. Worn or loose Fluid nozzle. 2. Material build-up on Air cap. 	<ol style="list-style-type: none"> 1. Tighten or replace Fluid nozzle. 2. Remove obstructions from holes, but don't use metal objects to clean it.
D. 	<ol style="list-style-type: none"> 1. Material build-up on Air cap. 2. Fluid nozzle dirty or worn. 	<ol style="list-style-type: none"> 1. Clean or replace Air cap. 2. Clean or replace Fluid nozzle.
The center of Pattern too narrow 	<ol style="list-style-type: none"> 1. Material too thin or not enough. 2. Atomization air pressure too high. 	<ol style="list-style-type: none"> 1. Regulate material viscosity. 2. Reduce air pressure.
Pattern width of fan-sharp is not enough 	<ol style="list-style-type: none"> 1. Material too thick. 2. Atomization air pressure too low. 	<ol style="list-style-type: none"> 1. Regulate material viscosity. 2. Increase air pressure.
Air leaking from air cap without pulling trigger	<ol style="list-style-type: none"> 1. Sticking air valve stem 2. Contaminate on air valve or seat 3. Worn or damaged air valve or seat 4. Broken air valve spring 5. Bent valve stem 	<ol style="list-style-type: none"> 1. Lubricate 2. Clean 3. Replace 4. Replace 5. Replace
Fluid leaking from packing nut	<ol style="list-style-type: none"> 1. Packing nut loose 2. Packing worn or dry 	<ol style="list-style-type: none"> 1. Tighten, but do not restrict needle 2. Replace or lubricate (non-silicone oil)
Excessive overspray	<ol style="list-style-type: none"> 1. Too high atomization pressure 2. Too far from work surface 3. Improper stroking (arcing, gun motion too fast) 	<ol style="list-style-type: none"> 1. Reduce pressure 2. Adjust to proper distance 3. Move at moderate pace, parallel to surface.
Will not spray	<ol style="list-style-type: none"> 1. No pressure at gun 2. Fluid control not open enough 3. Fluid too heavy 	<ol style="list-style-type: none"> 1. Check air lines 2. Open fluid control 3. Thin fluid or change to pressure feed system.

G960 Spray Gun Parts Diagram



Revised Jan. 11, 2011

- ★ Note 1: G960-005 is set with thread locking material and can be difficult to remove. Use a 6 point hardened socket only!
- ★ Note 2: G960-020 "O" Ring may not be included at the factory, but 2 are supplied by in seal kit & recommended by ES Mfg.



- | | |
|---|--|
| G960001- Air Inlet Coupling | G960016- Plated Trigger |
| G960002- Air Inlet /Inlet Body "O" Ring (2Pc) | G960017- Trigger Pin |
| G960003- Hex Socket Plug | G960018- Trigger Retaining Clip |
| G960004- Needle Sleeve | G960019- Knurled Inlet Sleeve Nut |
| G960005- Needle Body "O" Ring | G960020- Inlet Sleeve Nut Flat Seal |
| G960006- Needle Body | G960021- Inlet Sleeve Shaft "O" Ring (2Pc) |
| G960007- Needle Spring | G960022- Inlet Sleeve Body |
| G960008- Knurled Fluid Adjust Body | G960023- Inlet Sleeve Flat Seal |
| G960009- Pattern Needle | G960024- Inlet Sleeve Shaft |
| G960010- Pattern Needle "E" Clip | G960025- Inlet Sleeve Spring |
| G960011- Pattern Needle Washer (2) | G960026- Gun Body Flat Seal |
| G960012- Pattern Needle Spring | G960027- Gun Body Knurled Nut |
| G960013- Pattern Needle "O" Ring | G960028- Gun Body Connecting Nipple |
| G960014- Pattern Needle Body | G960029- Gun Body Head |
| G960015- Pattern Needle Knob | G960SKT-Spray Gun Seal Kit |
| G960-NK17 1.7mm Nozzle Kit | G960-NK20 2.0mm Nozzle Kit |
| G960-NK18 1.8mm Nozzle Kit | G960-NK25 2.5mm Nozzle Kit (Std.) |

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Model G960 Resin/Gelcoat Spray Gun

Documentation & Warranty Packet/Documentación y Paquete de Garantía

Thank you for purchasing G960 Spray Gun. If properly maintained, this sprayer will provide years of trouble free service. Gracias por comprar la Pistola de Copa más favorita en el mundo. Si se mantiene apropiadamente, "ESTA" le proveerá muchos años de servicio sin problemas.

WARRANTY/GARANTIA

This model G960 Spray Gun is warranted against defects for a period of 60 days. Keep your original sales receipt for proof of purchase. ES Manufacturing, Inc. will replace or repair any defective part, either direct, or through the distributor, at the option of ES Manufacturing. ES Manufacturing reserves the right to inspect the merchandise at our facility. Transportation to and from the service center is the responsibility of the purchaser. ES Manufacturing, Inc. doesn't warrant uninterrupted or error-free operation of the products, and is not responsible for damage, loss, lost production or any other expenses due to the failure of this product. The supplied listing of nozzle suggestions is based on use comments and are no way guaranteed. This warranty in no way guarantees the suitability of this equipment for use with any material. No other warranty is expressed or implied.

El modelo G960 (Pistola Rociadora) esta garantizada si hay algun defecto por un periodo de 60 dias. Guarde el original de su recibo como prueba de compra. ES MFG., Inc. le reemplaza o repara alguna parte que venga defectuosa al momento de su compra. Si bien directamente o a través de nuestro Distribuidor. (Es la opción de ES Manufacturing, Inc.) ES Manufacturing se reserva el derecho de inspeccionar la mercancía devuelta en nuestras Oficinas. La transportación de la mercancía devuelta es responsabilidad única del comprador. ES Manufacturing, Inc. no garantiza interrupciones o algún error en la operación de este producto, tampoco es responsable por danos, perdidas o cualquier otro gasto debido al fallo de este producto. La lista que le proveemos con sugerencias para el uso de las boquillas están basados en comentarios de los usuarios y no hay forma que puedan ser garantizadas. Esta garantía no garantiza de ninguna manera el uso de este equipo con ningún material. Ninguna otra

Important! Important! Important!

Enclosed warranty sheet must be returned with a copy of your original bill of sale to ES Manufacturing for any service or returns!

¡Importante! ¡Importante! ¡Importante!

Adjunto el Formulario de Garantía que debe ser retornada con una copia del recibo original al momento de la compra a ES Manufacturing para cualquier tipo de servicio o devolución.

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US/Canada: 800-55ES-MFG, Local/International: 727-323-4040, Fax: 727-327-9872, Website:

www.esmfg.com Email Address: sales@esmfg.com