

# Fuji Spray®

**MPX-30**

**Reduced Pressure Compressor Spray Gun**

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**6355G**

**MPX-30 Gravity**

**6350**

**MPX-30 Siphon**

**User Manual**

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SPECIFICATIONS	
Air Supply Pressure	36 PSI at gun inlet (2.5 bar)
Air Inlet Size	1/4 " BSP and NPS
Air Supply Hose Width	5/16" ID
Fluid Passages	Stainless Steel
Fluid Coupler (Siphon)	3/8" x 19P
Fluid Coupler (Gravity)	M 16 x 1.5P
Air consumption	13.8cfm (390L/min)
Standard Air Cap Set (Siphon)	1.7mm
Standard Air Cap Set (Gravity)	1.4mm
Gun Weight (Without Cup)	503g

**Please read these instructions before using the equipment**



### **FIRE AND EXPLOSION HAZARD**

**Equipment must not be used in an area contaminated by volatile or flammable materials. This could ignite the contaminants causing a dangerous explosion.**

- Do not spray flammable or combustible materials near an open flame or sources of ignition such as cigarettes, motors, and electrical equipment.
- Never use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in equipment with aluminum wetted parts. Such use could result in a serious chemical reaction, with the possibility of explosion. Consult your fluid suppliers to ensure that the fluids being used are compatible with aluminum parts.
- Keep spray area well-ventilated. Keep a good supply of fresh air moving through the area.
- Do not smoke in the spray area.
- Do not operate light switches, engines, or similar spark producing products in the spray area.
- Keep area clean and free of paint or solvent containers, rags, and other flammable materials.
- Fire extinguisher equipment shall be present and working.



### **TOXIC FLUID OR FUMES HAZARD**

**Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.**

- Read MSDS (Material Safety Data Sheet) to know the specific hazards of the fluids you are using.
- Always wear appropriate gloves and eye protection.
- Always wear a respirator. Read all instructions of the respirator to ensure that it will provide the necessary protection against the inhalation of harmful vapors. Also check with the local jurisdiction.
- Paint, solvents, insecticides and other materials may be harmful if inhaled.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guideline.
- Do not stop or deflect fluid leaks with your hand or body.



## EQUIPMENT MISUSE HAZARD

### Misuse of equipment can cause serious injury or death.

- Health and safety, accident prevention, work and environment protection regulations and policies are mandatory.
- Never aim the spray gun at another person or animal. In the event of injury, seek expert medical attention immediately.
- Do not operate or spray near children. Keep children away from equipment at all times.
- Do not overreach or stand on an unstable support. Keep effective footing and balance at all times.
- Stay alert and watch what you are doing.
- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Check the hose, hose connectors and Spray Gun before every use. Any worn or damaged parts should be replaced immediately.
- Before performing any maintenance to the equipment, de-energize, depressurize, disconnect and lock out all power sources.
- Use only genuine Fuji Spray replacement parts. Never modify the equipment.



**PROP 65 WARNING** - This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Warning:** Sound levels produced by spray guns during use may be harmful to the ear depending on the set-up. It is recommended that ear protection is worn at all times when spraying.

**THE EMPLOYER IS RESPONSIBLE TO PROVIDE THIS INFORMATION TO THE OPERATOR OF THE EQUIPMENT**

## ASSEMBLY

### Cup Assembly Installation:

Attach the cup assembly by screwing on to the Fluid Coupler of the Spray Gun. Use supplied multi-purpose wrench to tighten and secure in place.

### Air Supply:

Included with your MPX-30 Spray Gun is an Inlet Pressure Regulator with gauge (part #6380). Attach the Pressure Regulator to the Air Connector Fitting at the handle of the Spray Gun; adding Teflon Tape to the threads of the Air Connector Fitting will promote a more efficient seal.

Attach hose connector nipple (not included) into the Pressure Regulator and connect air supply hose.

**NOTE:** For best spray results, it is recommended using a 5/16" ID air pressure hose. If hose is over 20ft then a 3/8" diameter would be better. Using a smaller diameter hose will result in a significant drop in pressure.

**NOTE: Air supply must be clean, moisture free, oil free air and properly regulated.**

Most RP and HVLP compressor Spray Guns will operate between 10 and 20cfm. A 20cfm Spray Gun will drain the air from a moderate 5hp compressor. If an additional air tool is connected to the circuit and used during this time, the Spray Gun's atomizing pressure will vary. This causes a lesser quality and inconsistent outcome. For best results, a larger compressor is recommended.

## IMPORTANT

**Clean your Spray Gun after each use**

**Failure to do this may result in clogging that leads to poor spray results**

## OPERATION

To clean out any impurities that may have accumulated during assembly or shipping of the Spray Gun, we recommend spraying a small quantity of clean paint thinner through the gun. If you intend to use water-based paints and materials, spray water in place of paint thinner. Before tackling any serious spraying, experiment with the Gun on a scrap piece until you become familiar with all the controls.

- Mix material to manufacturer's requirements, and properly strain.
- Fill the material cup no more than maximum 3/4 full - Do not overfill.
- As a safety guard and reference point, turn Fluid Control Knob (#17) clockwise, do not force. This will impede any accidental trigger pull as you complete setting up.
- Rotate the Air Cap so that the two horns are situated at 3 and 9 o'clock position.
- Turn the side-mounted Pattern Control Knob (#21) clockwise, this will set the spray gun to the widest pattern.
- Connect air supply to the Spray Gun and rotate the Fluid Control Knob counter-clockwise four (4) full turns.
- Point spray gun away from you, pull the trigger and gauge the spray gun's settings. You may need to adjust material flow, air pressure, or fan pattern settings at this time.

**Fluid Control** - If the material flow is too heavy, turn the Fluid Control Knob clock-wise, this will reduce volume flow. To increase volume flow for a wet finish, turn the Fluid Control Knob counter-clockwise.

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**Pressure Regulator** - Air Pressure adjustment will significantly affect how the material is atomized. If looking too coarse, increase air supply pressure at the pressure regulator. If looking too fine, decrease pressure.

**Pattern Control** - To produce a smaller fan pattern, turn the Fan Pattern Control Knob counter-clockwise. For widest pattern, turn Fan Pattern Control Knob clock-wise.

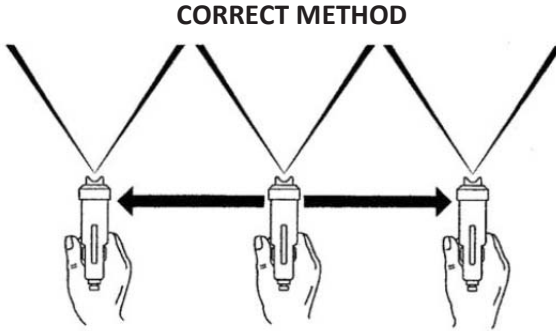
**NOTE: In most cases, a combination of all three adjustments will provide the desired results. It is good practice to have a book handy and record these settings for future use.**

**IMPORTANT**

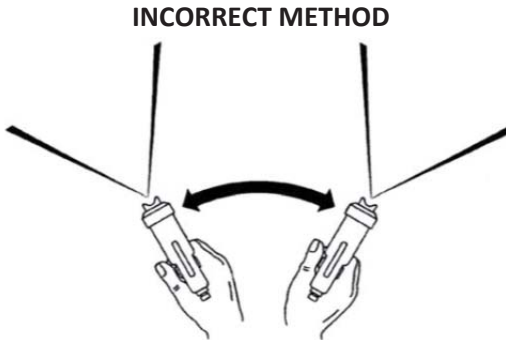
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## TECHNIQUE

The Spray Gun should be held perpendicular to the surface at all times. HOLD THE GUN NO MORE THAN 8" (20cm) AWAY FROM THE SURFACE TO BE SPRAYED.



Begin spraying by pulling the Trigger and move the Spray Gun in the direction you want to spray. Start your pass from off the edge of the piece; then continue off the edge of the piece on the other end before releasing the Trigger. Between each successive pass, overlap by about a 1/2.



**CAUTION:** Never for any reason point the Spray Gun directly at the face or head of a person.

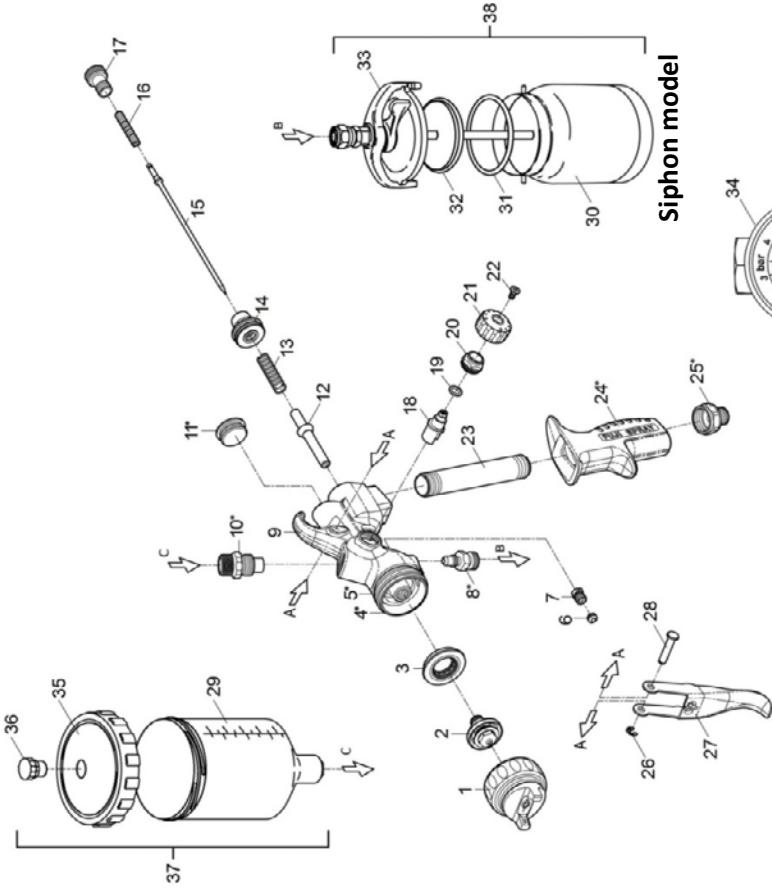
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# FUJI MPX-30 SPRAY GUN

Gravity feed model



**IMPORTANT:**

Removal of Air Diffuser (item #4) may cause loss of performance.

**Do not remove.**

ITEM	PART	NAME
◇	6301	Air Cap and Collar
◇	6302	Fluid Nozzle
●	6303	Air Distributor
*	6304	Air Diffuser
*	6305	Air Diffuser Seal
●	6306	Needle Packing
●	6307	Needle Packing Nut
*	6308	Fluid Coupler - Siphon Model
	6309	Gun Body
*	6310	Fluid Coupler - Gravity Model
*	6311	Rear Barrel Plug
●	6312	Spindle Valve
●	6313	Valve Spring
●	6314	Fluid Screw Nut
◇	6315	Needle
●	6316	Needle Spring
●	6317	Fluid Control Knob
○	6318	Air Deflector
○	6319	Deflector Seal

ITEM	PART	NAME
○	6320	Control Knob Nut
○	6321	Pattern Control Knob
○	6322	Locking Screw
*	6323	Handle Tube
*	6324	Handle
*	6325	Air Connector
	6326	Trigger Retaining Ring
	6327	Trigger
	6328	Trigger Pin
	6329	600cc Gravity Cup Non-pressurized
	6330	1Qt. Siphon Cup Non-pressurized
	6331	Cup Gasket
	6332	Diaphragm
	6333	Yoke
	6380	Regulator with Gauge
	6335	Gravity Cup Lid
	6336	Cup Lid Air Vent - Gravity
	6360	600cc Gravity Cup Assembly
	6372	1Qt Siphon Cup Assembly

	Description
●	6382 Spray Gun Rebuild Kit consists of one each of these parts
○	6383 Spray Gun Pattern Control Assembly Kit parts
*	Parts not removable
◇	Air Cap Set consists of one each of these parts

The Viscosity Chart below is to provide a general idea in which Air Cap Set will be suitable for your spraying needs. **This is only an approximate guide.** Keep in mind that some heavier bodied materials may require some dilution.

<b>Viscosity Guide / Air Cap Set Selection Guide</b>		
<b>Air Cap Set Size</b>	<b>Runout time in secs #4 Ford</b>	<b>Runout time in secs #2 Zahn</b>
1.0mm	15 seconds and under	20 seconds and under
1.3mm	15 - 19 seconds	20 - 24 seconds
1.4mm (Standard - Gravity)	19 - 23 seconds	24 - 30 seconds
1.7mm (Standard - Siphon)	23 - 31 seconds	30 - 41 seconds
2.0mm	31 seconds and higher	41 seconds and higher

**Please note the above runout times are to be used as a general guide only.**

<b>Air Cap Set Sizes (sold separately)</b>	<b>Part Number</b>
1.0mm	6300-1.0
1.3mm	6300-1.3
1.4mm (Standard - Gravity)	6300-1.4
1.7mm (Standard - Siphon)	6300-1.7
2.0mm	6300-2.0

It is recommended to use a smaller Air Cap Set size for Gravity Guns and Pressure Feed set-ups. Use larger Air Cap Set size for Siphon Feed Guns.

<b>IMPORTANT</b>
<p><b>Clean your Spray Gun after each use</b>  <b>Failure to do this may result in clogging that leads to poor spray results</b></p>

## FINISH PROBLEMS

PROBLEM	CAUSE	FIX
<b>ORANGE PEEL</b> - Finish is rough and resembles orange peel. Surface is spotty	Material is too thick	Add more thinner (or appropriate solvent)
	Air inlet pressure is too low	Increase air pressure to the gun
	Drying too fast	Add retarder
	Too close to surface	Keep distance 8" (20cm) away from surface
	Volume Control Knob set to heavy flow	Turn Fluid Control Knob clock-wise to decrease flow
		Spray an extremely thin film, but still wet coat
Surface is rough or dirty	Prep or clean thoroughly	
<b>GRITTY FINISH</b> - Sprayed surface is rough and dry to the touch	The material is too thin, it is likely to be over-atomized	Set the fluid control knob to increment material flow
		Spray a wetter coat
	Too far from surface	Keep distance 8" (20cm) away from surface
<b>FISH EYES</b> - A sprayed surface or spot that the paint/material does not adhere to	Contamination such as silicone or oil on the surface that interferes with the finish	Thoroughly clean, wash or sand the area, then spray over. Start with light coats
<b>RUNS AND SAGS</b> - When paint/material is pooling in an area causing drips	Volume Control Knob set to heavy flow	Turn Fluid Control Knob clock-wise to decrease flow
	The speed of your pass is too slow	Bring your pass to a moderate speed
	Inconsistent distance from surface per pass	Keep distance 8" (20cm) away from surface. See page 7 - Technique

### IMPORTANT

**Clean your Spray Gun after each use**  
**Failure to do this may result in clogging that leads to poor spray results**

# TROUBLESHOOTING

## SPRAY GUN PROBLEMS

PROBLEM	CAUSE	FIX
<b>NO PAINT OR VERY LITTLE PAINT</b>	No pressure from air supply hose	Check for air leaks on hose or adjust to appropriate pressure
	The air passage in Lid of the Cup may be obstructed	Clean obstruction at pinhole located on Lid of the Cup
	Cup is empty	Refill Cup with paint/material
	Metal Fluid Tube is blocked with paint / material (Siphon Feed model)	Remove Cup Assembly from Gun and clean with tube brush
	Fluid Coupler is blocked with paint / material	Clean Fluid Coupler
<b>UNEVEN SPRAY PATTERN</b>	One of the holes in the Air Cap may be blocked	Remove Air Cap and clean by soaking in appropriate solvent and using a soft bristle brush or a rag. NEVER use metal objects to clean holes in the Air Cap.
	The paint / material could be contaminated and partially blocking Fluid Nozzle	
<b>LEAKAGE</b> If paint material comes out of the Fluid Nozzle without pulling the Trigger...	The Needle is not seating in Fluid Nozzle properly - check if Needle or Fluid Nozzle is damaged or worn	Lubricate Needle or Replace Needle and Fluid Nozzle
	Needle Packing may be too tight preventing Needle from moving	See page 14 - Adjust Needle Packing Nut
	Foreign matter trapped between Needle and Fluid Nozzle	Remove Needle and Fluid Nozzle and thoroughly clean
	Loose Fluid Nozzle	Tighten Fluid Nozzle
	Wrong Fluid Nozzle or Needle size installed	Check and Install Correct Fluid Nozzle or Needle size to match

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<b>PROBLEM</b>	<b>CAUSE</b>	<b>FIX</b>
<b>CUP LEAKS</b> (SIPHON MODEL)	Lid of the Cup is not properly sealing at the rim of Cup	Change Gasket
	Cup is loose - rim of the Cup may be warped from tightening too much or cracked	Check rim of the Cup, if warped or cracked, replace.
<b>CUP LEAKS</b> (GRAVITY MODEL)	Cup or Lid may be cracked	Replace Cup assembly
	Cup Lid is too loose	Tighten Cup Lid - hold Cup (not Gun) with one hand, and tighten Lid with the other
<b>THE TRIGGER IS SLUGGISH</b>	Needle Packing is too tight	See page 14 - Leakage From The Needle Packing Nut Lubricate shaft of needle
	Bent Needle	Replace
<b>POOR SPRAY PATTERN</b>	Damaged Needle or Nozzle	Replace
	Air holes in Air Cap or Nozzle clogged	Clean Air Cap or Fluid Nozzle
	Damaged Air Cap	Replace
	Gun too far from surface	Keep consistent distance of 8" - 20cm from surface
<b>PAINT AT THE AIR NOZZLE HOLES</b>	Fluid Nozzle is loose and paint / material is leaking around it	Tighten with supplied Wrench
<b>GUN SPRAYS IN A PULSATING MANNER</b>	Needle Packing has worn a little or is loose	Tighten with supplied Wrench, see page 14 - Adjust Needle Packing Nut
	Cup is almost empty	Refill Cup with paint/material
	Blocked fluid passage	Thoroughly clean fluid passages with appropriate solvent
	Air passage in the Lid of the Cup may be obstructed	Clean obstruction at pinhole located on Lid of the Cup
	Fluid Nozzle is loose or damaged	Tighten with supplied Wrench or replace

## **IMPORTANT**

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## LEAKAGE FROM THE NOZZLE

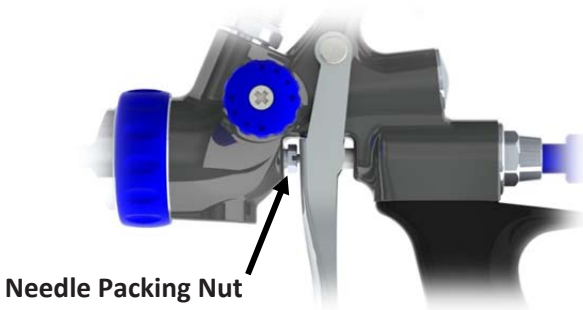
This occurs when the Needle Packing Nut #7 is **too tight** compressing the Needle Packing #6 too tightly around the Needle.

Half fill the cup with water. Attach the Gun to the air supply hose then pull the Trigger and release. Check the Nozzle for water spurting out.

**Adjust Needle Packing Nut** - Use the supplied wrench to **GRADUALLY** loosen the Nut (1 or 2 degrees only at a time). **This is a very sensitive adjustment.** Again pull the Trigger and release. Wipe away the water in between adjustments. Repeat until no water is seen at the Nozzle Hole.

## LEAKAGE FROM THE NEEDLE PACKING NUT

This occurs when the Needle Packing Nut is **too loose**. Half fill the cup with water. Attach the Gun to the air supply hose Use the supplied wrench to **GENTLY** tighten the Needle Packing Nut 1 or 2 degrees only. **This is a very sensitive adjustment.** Wipe away the water in between adjustments. Repeat until no water is seen where the Needle passes through the Needle Packing Nut #7.



It is a good idea to apply Oil to the Needle Shaft where it passes through the Needle Packing Nut and work it in and out by pulling the Trigger back and forth. This will lubricate the Needle Packing #6.

### IMPORTANT

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## GENERAL CLEANING

It is very important to properly clean your Spray Gun after each use. This will prevent any build-up and/or contamination when spraying other materials. Keeping your Spray gun clean will also prevent spray problems due to blockage.

PLEASE DO NOT USE A WIRE BRUSH OR ANYTHING METAL TO CLEAN THE GUN OR CUP AS THIS WILL CAUSE DAMAGE. Recommended Fuji Spray Gun Cleaning Kit (part # 3100).

### WARNING

**DO NOT disassemble the Fluid Coupler (#8 - Siphon, #10 - Gravity), the threads in your Spray Gun have been sealed at the factory to prevent leakage.**

### CAUTION

**Never soak the complete Spray Gun in solvent** as this removes the grease from the parts and distributes thinned paints throughout the air passages. It could also damage internal parts such as the Spindle Valve, Valve Seals or Diffuser Seal.

### CAUTION

**Do not lay the Gun down on its side with liquid material in it. For siphon model, when not in use the Cup Lid should not be clamped down hard as this will cause the Gasket to flatten out.**

## CLEANING FLUID PASSAGES (Level 1)

1. Remove lid of the cup and pour left over paint/material into a container
2. Wipe the inside of the Cup and metal Pick-up Tube with a dampened cloth with solvent
3. Add some solvent into the Cup, reattach to Spray Gun and spray
4. Pull the trigger repeatedly to properly flush the fluid passages, Needle and Nozzle

This process flushes solvent through the Spray Gun while it is still connected to the air supply hose and the paint is still wet inside the Gun.



5. (Siphon Model) Backwashing is performed when a rag is held tight over the Air Cap and Nozzle. This will eject fluid backwards through the metal Pick-up Tube when the Trigger is pulled

If this type of quick cleaning is performed frequently, the Spray Gun will function well for many years. 90% of problems with a Spray Gun stem from clogs in the fluid passages and (perhaps more important), the air passages.

### **PRESSURE FEED CLEANING**

1. Change the material in the pressure pot with clean solvent
2. Flush material line with the pot's pressure. Spray Gun does not need to be connected to air supply
3. Pull the trigger repeatedly to properly flush the fluid passages, Needle and Nozzle

### **THOROUGH CLEANING (Level 2)**

#### **DISSASSEMBLY**

**You may soak only the metal parts in solvent and clean with the soft bristle cleaning brush.**

1. Fig. A - Remove Fluid Control Knob #17 and Needle Spring #16
2. Fig. B - Pull the Trigger #27 and the end of Needle #15 will come out from the rear of the gun
3. Fig. C - Carefully slide the Needle out - Do not bend
4. Fig. D - Remove the Aircap #1
2. Fig. E - Using the supplied Wrench, remove the Fluid Nozzle #2
3. Fig. F - Remove Air Distributor #3
4. Fig. G - Use the supplied cleaning brush and appropriate solvent to clean behind the Fluid Nozzle
5. Fig. H - Soak the Air Cap #1, Nozzle #2 and Needle #15 in appropriate solvent, and clean It is not necessary to soak or clean Air Distributor #3 unless there are traces of paint/material on it

After cleaning the Spray Gun, it is recommended that the fluid passages, threads and cup be blown dry with clean compressed air.

**PLEASE DO NOT SOAK THE WHOLE GUN IN ANY LIQUID - THIS IS NEVER NECESSARY OR ADVISABLE.**

## REASSEMBLY

To reassemble, first oil or grease all moving and threaded parts.

1. Fig. F - Put in place the Air Distributor #3
2. Fig. I - Attach Fluid Nozzle #2 and tighten with the supplied Wrench
3. Fig. D - Screw in the Aircap #1
4. Fig. C - Carefully slide in the Needle - Do not bend
5. Fig. A - Add Needle Spring #16 and attach Fluid Control Knob #17

When replacing the Fluid Nozzle #2 or Needle #15, replace both at the same time. Using worn parts can cause fluid leakage.



### **Fuji Limited 1 year warranty**

Fuji Industrial Spray Equipment LTD. ("Fuji") provides a 12 month limited warranty on the product to the original purchaser effective from the date of purchase against defects in materials and workmanship.

The warranty does not cover damage or defects arising as a result of abuse, misuse, accident, negligence, malfunction, corrosion, normal wear and tear, inadequate or lack of spray gun or other aspects of maintenance of the product, damage arising from improper assembly, installation or operation or damage arising from the product being used for a purpose other than that for which it was designed or intended. The warranty is void if repairs to the product are made or attempted by anyone other than Fuji or its authorized agent, or if any modifications to the product are made or attempted.

### **IMPORTANT**

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**For SERVICE & PARTS**

**USA**

**Cogent Bathtub Refinishing Coatings**

Phone: 862-238-7224

**Online:** [www.cogentcoatings.com](http://www.cogentcoatings.com)

**hvlp.net**

Phone: 800-650-0930

**Online:** [www.hvlp.net](http://www.hvlp.net)

**Phelps Refinishing**

Phone: 800-377-5662

**Online:** [www.phelpsrefinishing.net](http://www.phelpsrefinishing.net)

**Paint Sprayers Plus**

Phone: 877-293-5826

**Online:** [www.paintsprayersplus.com](http://www.paintsprayersplus.com)

**CANADA**

**Fuji Spray**

Phone: 800-650-0930

Local: 416-650-1430

**hvlp.ca**

Phone: 800-650-0930

**Online:** [www.hvlp.ca](http://www.hvlp.ca)

**UNITED KINGDOM**

**Axminster Power Tool Centre** Axminster, Devon, England

Phone: 01297 33656

**Online:** [www.axminster.co.uk](http://www.axminster.co.uk)

**AUSTRALIA & NZ**

**Spraychief Industries** Campbellfield, Victoria 3061

Phone: 03-9357-8788

**Online:** [www.spraychief.com.au](http://www.spraychief.com.au)

**PUERTO RICO**

**Eagle Tools Mfg. Corp** San Lorenzo, Puerto Rico, 00754

Phone: 787-736-0444

**Fra-Marson Warehouse Distributors** San Juan PR, 00926

Phone: 787-761-4810

**RUSSIA**

**varnishop.ru** St. Petersburg, Russia

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**Online:** [www.varnishop.ru](http://www.varnishop.ru)

# NOTES