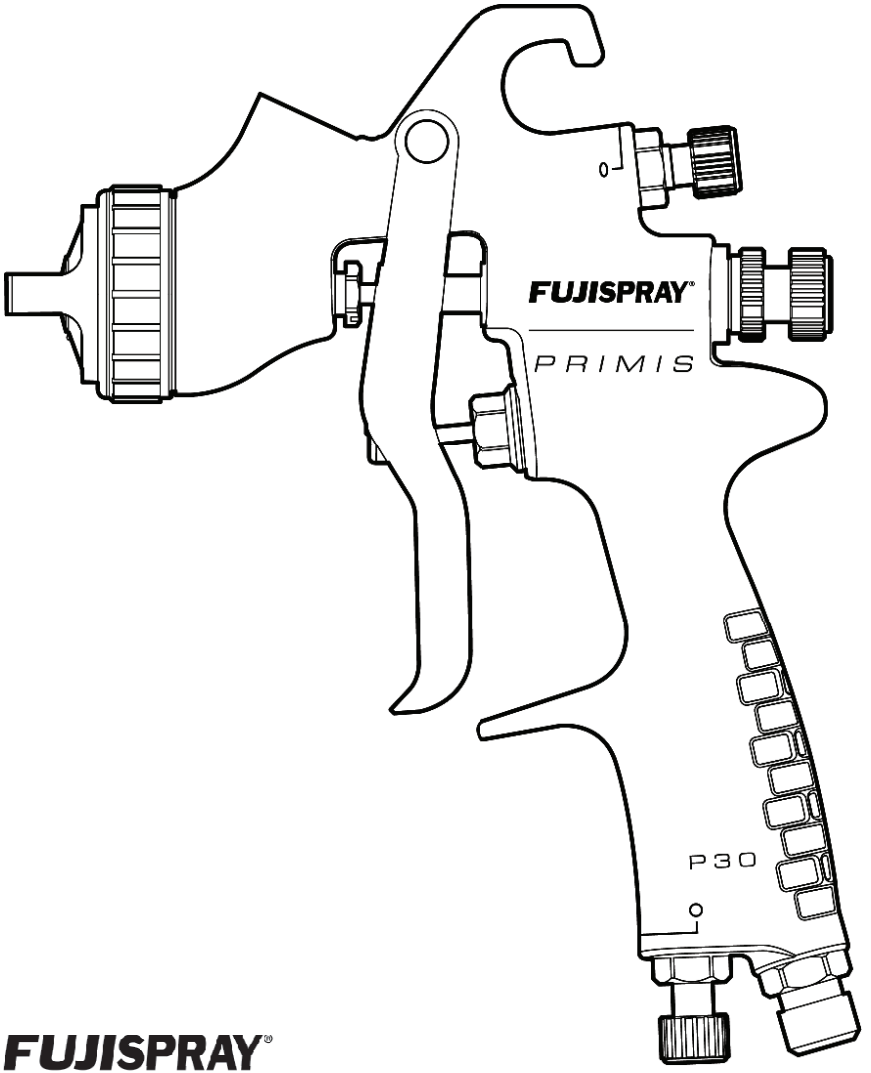
PRIMIS

USER MANUAL



FUJISPRAY AUTO

PRIMIS GRAVITY FEED SPRAY GUN

P30 PRIMER MODEL

Table of Contents

SPECIFICATIONS

Model	P30
Air Consumption	310 l/min
Operating Range	9-28 psi
Standard Aircap Set	1.8mm
Aircap Sets Available	2.0, 2.2
Air Inlet Size	1/4” PF
Air Supply Hose Width	5/16” ID
Fluid Coupler	3/8” PF
Gun Weight	448g

Spray Gun Materials

Body	Aluminum
Aircap	Copper
Nozzle	Stainless Steel
Needle Spring	Stainless Steel
Fluid Passages	Copper
Seal Gaskets	PTFE (Teflon)

SAFETY PRECAUTIONS

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.
- Always keep spray area well-ventilated. Always 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.
- Always 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. Always keep children away from equipment at all times.
- Do not overreach or stand on an unstable support. Always keep effective footing and balance.
- 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.

Static Charge Hazard

Static electricity may be produced by fluid. Make sure any electrically conductive object being sprayed, spray area, and spray equipment is properly grounded to prevent static sparking. Improper grounding or sparks can cause a hazardous condition and result in electric shock, fire, or even explosion and other serious harm.

CA PROP **65**

PROP 65 WARNING FOR CALIFORNIA RESIDENTS

WARNING: This product may contain chemicals known to the State of California to cause cancer, 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.

SETUP

Cup Assembly Installation

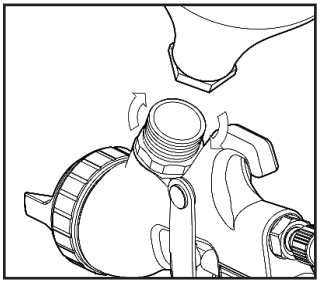


Figure 1. Screw Cup into Fluid Coupler

1. Attach the cup assembly by screwing into the fluid coupler of the spray gun. Hand-tightened is enough

Air Supply Connection

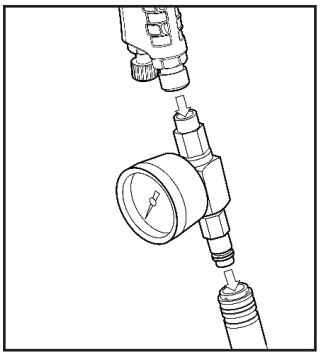


Figure 2. Attach Hose Connector Fitting to Pressure Gauge and Air Inlet

1. Attach pressure regulator with gauge (not included) to the spray gun's air inlet (optional)
2. Attach hose connector fitting (not included) to pressure regulator with gauge
3. Connect air supply hose

Optimal Equipment Use

For best spray results, it is recommended using high flow fittings (1/4" NPT) and a 5/16" inner diameter air pressure hose. If hose is over 20 ft then a 3/8" inner diameter would be ideal. Using a smaller diameter hose will result in a significant drop in pressure.

Most HVLP and MP (mid-pressure or reduced pressure) compressor spray guns will operate between 10 and 20 cfm.

A 20 cfm spray gun will drain the air from a moderate sized 5 hp 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 will result in a lower quality performance and inconsistent outcome. For best results, a larger compressor is recommended.

SPRAY GUN FEATURES

Fan Pattern Control

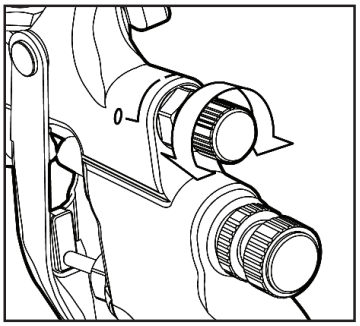


Figure 3. Fan Pattern Control

The Fan Pattern Control is located at the rear of the spray gun. Turn clockwise to make a narrow pattern and counter-clockwise to make a wider pattern.

The widest fan pattern will work best when spraying large surfaces.

The narrow pattern size will be the ideal setting for spraying small surfaces, tight corners and small details.

Wide Pattern **Narrow Pattern**

Fluid Control

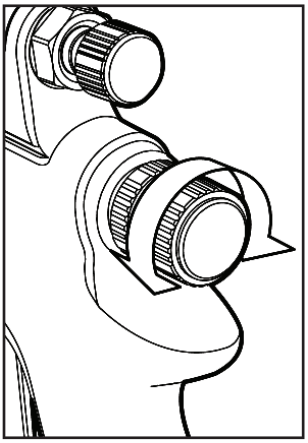


Figure 4. Fluid Control

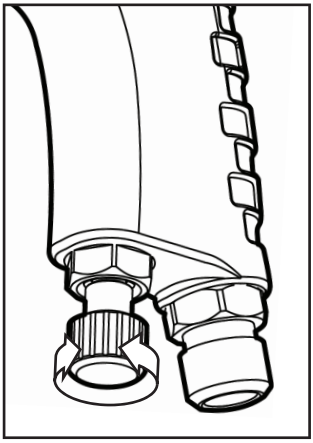
To set the fluid output, turn the Fluid Control. The Fluid Control is located at the back of the spray gun. Turn clockwise to reach the “closed position,” do not force beyond this point.

Turn counter-clockwise to increase material and clockwise for less material. Once you set the fluid to your liking, leave it in this position - unless of course, you change the size of the fan pattern. Use the lines engraved on the Fluid Control as reference points.

To create the smallest possible spray pattern, the spray gun must be moved closer to the workpiece. Make sure to reduce the amount of material flow at the Fluid Control to prevent running.

When initially setting the material flow, it is best to measure fluid setting in rotations, starting from a "closed" position.

Air Control Valve



The Air Control Valve is located on the bottom of the gun next to the Air Inlet. It provides a means of controlling the air flow to the spray gun. It offers control when in need of reducing bounce-back and overspray. It is important to ensure that the Air Control Valve is the last adjustment made when dialing in the settings on the spray gun.

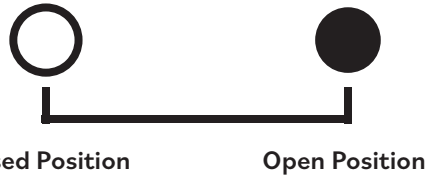


Figure 5. Air Control Valve

Users should consider the following adjustments before changing the setting on the air control valve:

1. Dilute the paint (if applicable)
2. Adjust the shape and size of the spray pattern
3. Adjust the flow of paint through the gun

After performing these operations, spray a few passes onto a test piece. This will allow you to determine if the paint levels nicely. Once the spray gun is producing a perfect finish with full air, experiment with turning the air down until bounce-back is reduced to a minimum. However, if the result is orange peel, turn the air up slightly.

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 solvent through the gun.

If you intend to spray water-based paints and materials, make sure fluid passages and components that may have come in contact with solvent are completely dry.

- 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 safe-guard and reference point, turn fluid control clockwise, do not force. This will prevent any accidental trigger pull as you complete setting up.
- Turn the fan pattern control counter-clockwise, this will set the spray gun to the widest fan pattern.
- Connect air supply to the spray gun and rotate the fluid control counter-clockwise two full turns. This will allow for some material to flow out of the nozzle to atomize.
- 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 to achieve desired settings.

Fluid Control

If the material flow is too heavy, turn the fluid control clockwise, this will reduce material volume flow. To increase material volume flow for a wet finish, turn the fluid control counter-clockwise.

Air Pressure Control

Air pressure adjustment will significantly affect how the material is atomized. If looking too coarse when wet, increase air supply pressure at the pressure regulator located at base of the spray gun's handle. If looking too fine, decrease pressure. For pressure specifications of the spray gun, see page 2.

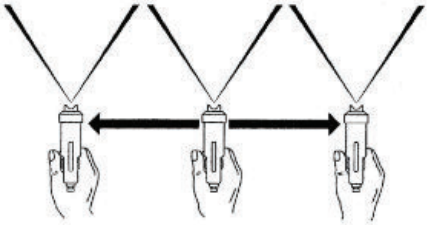
Pattern Control

To produce a smaller fan pattern, turn the fan pattern control clockwise. For widest pattern, turn fan pattern control counter-clockwise.

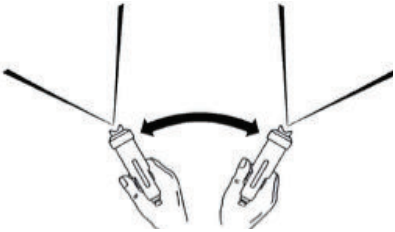
In most cases, a combination of all three adjustments will provide the desired results.

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.



Correct method



Incorrect method

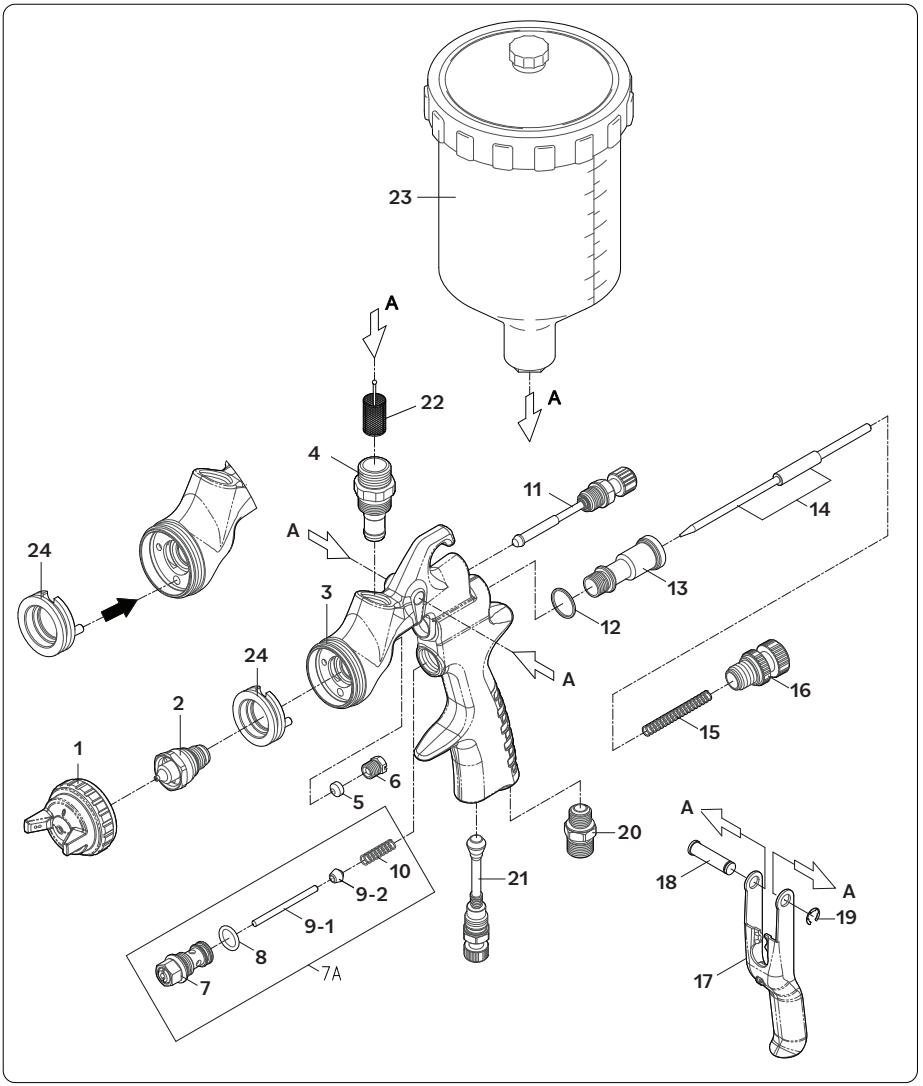
Begin spraying by pulling the trigger and move the spray gun in the direction you want to spray. Start your pass from off the edge of the piece; then continue off the edge of the piece on the other end before releasing the trigger. Between each successive pass, overlap by 50%.

CAUTION

Never for any reason point the spray gun directly at the face or head of a person.

SPRAY GUN DIAGRAM

PRIMIS Series™



Aircap Sets

Aircap Sets Available	P30 Part #
1.8mm (Standard P30)	7420 - 1.8
2.0mm	7420 - 2.0
2.2mm	7420 - 2.2

Item	Part	Name	Note
1	7420	Air Cap	
2	7420	Fluid Nozzle	
3	7475	Gun Body	X
4	7476	Fluid Coupler	X
5	7477	Needle Packing	
6	7478	Needle Packing Nut	
7A	7479	Trigger Valve Assembly	X
7	7480	Trigger Valve Seat Set	X
8	7481	Trigger Valve O-Ring	X
9-1	7482	Trigger Valve Stem	X
9-1	7483	Trigger Valve Seat	X
10	7484	Trigger Valve Spring	X
11	7485	Fan Pattern Assembly	X
12	7486	Fluid Screw Gasket	X
13	7487	Fluid Screw Nut	X
14	7420	Needle	
15	7488	Needle Spring	
16	7489	Fluid Control	
17	7490	Trigger	
18	7491	Trigger Pin	
19	7492	Trigger Retaining Ring	
20	7493	Air Inlet	X
21	7494	Air Control Valve	X
22	9030	Inline Barrel Strainer	
23	6360	600cc Nylon Cup	
24	7495	Air Distributor with Seal	

(X) Part not to be removed

CLEANING

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 any metal tools (wires or picks) to clean the spray gun or cup as this may cause damage to internal air or fluid passages. We recommend using Fuji Spray's spray gun cleaning kit.

WARNING

Never soak the complete spray gun in solvent as this is detrimental to any internal seals and removes factory lubricant from parts.

Cleaning Fluid Passages (Level 1)

1. Remove lid of the cup and pour left over material into a container
2. Wipe the inside of the cup with a solvent-soaked cloth
3. Add some appropriate solvent into the cup, reattach lid to the cup and spray
4. Pull the trigger repeatedly to properly flush the fluid passages, needle and nozzle
5. 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

It is important this type of cleaning is completed after each use to preserve the functionality of the spray gun. Cleaning the fluid passages and air passages on your spray gun will ensure effective atomization and greatly reduce potential spray issues.

Cleaning Disassembly

You may soak only the metal parts in neutral cleaning solution (pH value 6-8) and clean with a soft bristle cleaning brush.

Thorough Cleaning (Cleaning Level 2)

After performing Level 1 cleaning and removing the cup from the spray gun:

1. Remove the fluid control (#16) and needle spring (#15)
2. Pull the trigger (#17) and the needle (#14) will extend from the rear of the gun
3. Carefully pull the needle (#14) out - do not bend
4. Remove the aircap with collar (#1)
5. Using the supplied wrench, remove the fluid nozzle (#2)
6. Remove air distributor (#24) and inspect for material residue
7. Use the supplied cleaning brush and appropriate solvent to clean behind the fluid nozzle (#2)
8. Soak the aircap with collar (#1), nozzle (#2) and needle (#14) in appropriate solvent, and clean. It is not necessary to soak or clean air distributor (#24) unless there are traces of 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.

Prior to assembly, always make sure ALL gun components are present. Assembly of spray gun with missing parts may cause damage or harm.

Reassemble

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

1. Insert the air distributor (#24), ensuring the alignment pin matches the hole at the 6 o'clock position
2. Attach fluid nozzle (#2) and tighten with the supplied wrench
3. Screw in the aircap with collar (#1)
4. Add lubricant to the shaft of the needle (#14)
5. Carefully slide in the needle - do not bend
6. Add needle spring (#15) and attach fluid control (#16)

ASSEMBLY FOR REPAIRS

Needle Packing Nut Assembly

Follow disassembly instructions on page 14 up to step number 6, then continue with the following:

Leakage From the Nozzle

This occurs when the needle packing nut is overtightened compressing the needle packing around the needle.

Half fill the cup with water. Attach the spray gun to the air hose. Pull the trigger and release. Check the nozzle for water leaking at the tip. Use the supplied wrench to gently loosen the needle packing nut (1 or 2 degrees only at a time). Again, pull the trigger and release. Wipe or blow away the water in between adjustments. Repeat until no water is seen at the tip of the fluid nozzle.

Leakage From the Needle Packing Nut

This occurs when the Needle Packing Nut is too loose.

Half fill the cup with water. Attach the spray gun to the air hose. Use the supplied wrench to gently tighten the needle packing nut 1 or 2 degrees only. Wipe or blow away the water in between adjustments. Repeat until no water is seen where the needle passes through the needle packing nut.

TROUBLESHOOTING

Finish Issues

Problem	Cause	Solution
Orange peel **Finish is textured 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
	Fluid volume control knob set to heavy flow	Turn fluid control knob clockwise to decrease flow
		Spray an extremely thin film, but still wet coat
	Surface is rough or dirty	Prep or clean thoroughly
Gritty finish **Sprayed surface is rough 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
	Contaminated surface	Prep and clean thoroughly
Fish eyes **A sprayed surface or spot that the 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
Runs and sags **When paint/material is pooling in an area causing drips**	Fluid volume control Knob set to heavy flow	Turn fluid control knob clockwise 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 9 - Technique

Spray Gun Issues

Problem	Cause	Solution
No paint, or very little paint	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 material
	Strainer may be clogged	Replace/remove strainer
	Fluid coupler is blocked with material	Clean fluid coupler
Uneven spray pattern	One of the holes in the aircap may be blocked	Remove aircap or nozzle 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 Aircap
	The material could be contaminated and partially blocking fluid nozzle	
Leakage **If material comes out of the fluid nozzle without pulling the trigger**	The needle is not seated in the fluid nozzle properly. Check if needle or fluid nozzle is damaged or worn	Lubricate needle or replace needle and fluid nozzle
	Material 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
Cup leaks	Cup or lid may be cracked	Replace cup assembly
	Cup lid is too loose	Tighten cup lid - hold cup (not spray gun) with one hand, and tighten lid with the other

Problem	Cause	Solution
Cup leaks	Cup or lid may be cracked	Replace cup assembly
	Cup lid is too loose	Tighten cup lid - hold cup with one hand, tighten lid with the other
Poor spray pattern	Damaged needle or nozzle	Replace
	Air holes in aircap or nozzle clogged	Clean aircap or fluid nozzle
	Damaged aircap	Replace
	Gun too far from surface	Keep consistent distance of 8”- 20cm from surface
Gun sprays in a pulsating manner	Cup is almost empty	Refill cup with material
	Blocked fluid passage	Thoroughly clean fluid passages with 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
The trigger is sluggish	Bent needle or not lubricated	Replace
		Lubricate shaft of needle
Paint at the air nozzle holes	Fluid Nozzle is loose and material is leaking around it	Tighten with supplied Wrench

FUJI SPRAY AUTO™ LIMITED WARRANTY

Fuji Industrial Spray Equipment Ltd. (“Fuji”) provides a 12 month limited warranty on PRIMIS series spray guns 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, damage arising from the product being used with parts that are not genuine Fuji Spray® parts, 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.

Purchasers located in North America must obtain a Return Material Authorization number by calling Fuji at 1-800-650-0930 before returning the product to Fuji or its designated representative.

Purchasers located outside North America must contact the vendor from which they purchased the product. In all instances purchasers must return the product together with proof of purchase and with shipping prepaid. For valid warranty claims the product will be returned to the purchaser with shipping prepaid.

This is the only warranty provided by Fuji with respect to the product and is in lieu of any other warranties, express or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose. Fuji’s sole obligation under this warranty shall, at its option, be to either repair or replace a product determined by Fuji to be defective. In no event shall Fuji be liable for loss or profits, incidental or consequential damages, injury to any person or property, or any other damages of whatsoever nature.

NOTES

NOTES

Fuji Spray Auto™

CONNECT WITH US

@fujisprayauto

@fujisprayauto

@fujisprayauto

NEED HELP?

fujispray.com
fujisprayauto.com

support@fujispray.com

+1-800-650-0930

Fuji Industrial Spray Equipment Ltd.
800 Alness Street, Toronto, ON, Canada M3J 2H5

The perfect finish starts with

FUJISPRAY® AUTO