Fuji Spray®

LX-20 HVLP Compressor Spray Gun



User Manual

Contents

Contents and Specifications	1
Safety Precautions	2 - 3
Assembly	4
Operation	5 - 6
Technique	7
Parts Diagram	8 - 9
Viscosity Guide	10
Finish Problems	11
Troubleshooting	12 - 13
Needle Packing Nut	14
General Cleaning	15 - 16
Thorough Cleaning	16
Reassembly	17
Warranty Information	18
Service Information	19
Notes	20

SPECIFIC	CATIONS
Air Supply Pressure	26 PSI at gun inlet (1.8 bar)
Air Inlet Size	1/4 " BSP and NPS
Air Supply Hose Width	5/16" ID
Fluid Passages	Stainless Steel
Fluid Coupler (Pressure Feed)	3/8" x 19P
Fluid Coupler (Gravity)	M 16 x 1.5P
Air consumption	15.2cfm
Standard Air Cap Set	1.4mm
Gun Weight (Without Cup)	502g



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.
- \cdot Keep spray area well-ventilated. Keep a good supply of fresh air moving through the area.
- · Do not smoke in the spray area.
- \cdot Do not operate light switches, engines, or similar spark producing products in the spray area.
- \cdot 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.

- \cdot 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.
- \cdot 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 LX-20 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 better 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 HVLP and RP compressor Spray Guns will operate between 10 and 20cfm. A 20cfm Spray Gun will drain the air from a moderate sized 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.

The LX-20 Pressure Feed Model (6260S) has been designed to work with Pressure Pots, Pumps, Pressure Cups and Siphon Feed.

IMPORTANT



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 prevent 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.

IMPORTANT



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.

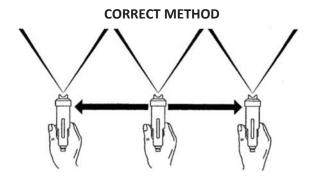
NOTE: In most cases, a combination of all three adjustments will provide the desired results. It is good practice to have a book handy and record these settings for future use.

IMPORTANT

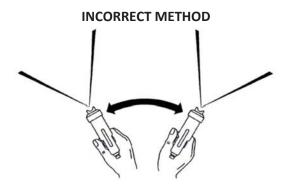


TECHNIQUE

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 50%.

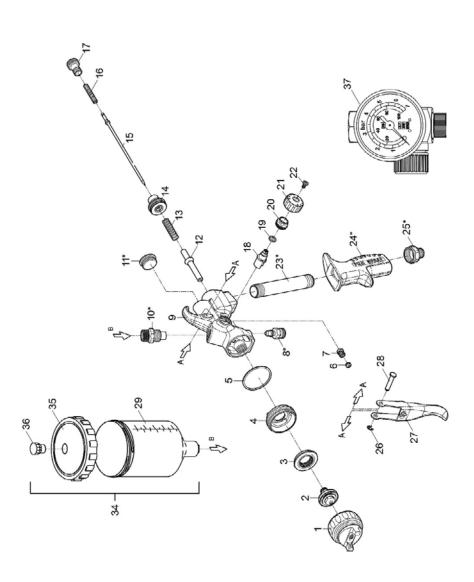


CAUTION: Never for any reason point the Spray Gun directly at the face or head of a person.

IMPORTANT



FUJI LX-20 SPRAY GUN



	ITEM	ITEM PART	NAME		ITEM	ITEM PART	NAME
\$	1	6201	6201 Air Cap and Collar	0	18	6318	18 6318 Air Deflector
\$	7	6302	6302 Fluid Nozzle	0	19	6319	19 6319 Deflector Seal
•	3	6303	6303 Air Distributor	0	20	6320	20 6320 Control Knob Nut
•	4	6204	6204 Air Diffuser	0	21	6221	21 6221 Pattern Control Knob
•	5	6305	6305 Air Diffuser Seal	0	22	6322	22 6322 Locking Screw
•	9	9089	6306 Needle Packing	*	23	6323	6323 Handle Tube
•	2	6307	6307 Needle Packing Nut	*	24	6324	6324 Handle
*	8	8089	6308 Fluid Coupler - Pressure Feed	*	22	6325	6325 Air Connector
	6	6309	6309 Gun Body		56	6326	Trigger Retaining Ring
*	10	6310	6310 Fluid Coupler - Gravity Model		22	6327	Trigger
*	11	6311	6311 Rear Barrel Plug		78	6328	6328 Trigger Pin
•	12	6312	6312 Spindle Valve		58	6329	6329 600cc Gravity Cup Non-pressur
•	13	6313	6313 Valve Spring		34	0989	6360 600cc Gravity Cup Assembly
•	14	6314	6314 Fluid Screw Nut		32	6335	35 6335 Gravity Cup Lid
\rightarrow	15	6315	6315 Needle		98	9889	6336 Cup Lid Air Vent - Gravity
•	16	6316	6316 Needle Spring		37	6380	37 6380 Regulator with Gauge
•	17	6217	17 6217 Fluid Control Knob				
١							

	Part	Description
•	6282	• 6282 Spray Gun Rebuild Kit consists of one each of these parts
0	6283	o 6283 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 of 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.

Viscosity Guide / Air Cap Set Selection Guide			
Air Cap Set Size	Runout time in secs	Runout time in secs	
	#4 Ford	#2 Zahn	
1.0mm	15 seconds and under	20 seconds and under	
1.2mm	15 - 19 seconds	20 - 24 seconds	
1.4mm (Standard)	19 - 23 seconds	24 - 30 seconds	
1.7mm	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.

Air Cap Set Sizes (sold separately)	Part Number
1.0mm	6200LX-1.0
1.2mm	6200LX-1.2
1.4mm (Standard)	6200LX-1.4
1.7mm	6200LX-1.7
2.0mm	6200LX-2.0

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

IMPORTANT



FINISH PROBLEMS

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

IMPORTANT



TROUBLESHOOTING

SPRAY GUN PROBLEMS

PROBLEM	CAUSE	FIX
	No pressure from air supply hose	Check for air leaks on hose or adjust to appropriate pressure
NO PAINT	The air passage in Lid of the Cup may be obstructed	Clean obstruction at pinhole located on Lid of the Cup
OR VERY LITTLE PAINT	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
	One of the holes in the Air Cap may be blocked	Remove Air Cap and clean by soaking in
UNEVEN SPRAY PATTERN	The paint / material could be contaminated and partially blocking Fluid Nozzle	appropriate solvent and using a soft bristle brush or a rag. NEVER use metal objects to clean holes in the Air Cap.
	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
LEAKAGE If paint material comes out of the	Needle Packing may be too tight preventing Needle from moving	See page 14 - Adjust Needle Packing Nut
Fluid Nozzle without pulling the Trigger	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

IMPORTANT



PROBLEM	CAUSE	FIX
	Lid of the Cup is not properly sealing at the rim of Cup	Change Gasket
CUP LEAKS (SIPHON MODEL)	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.
	Cup or Lid may be cracked	Replace Cup assembly
CUP LEAKS (GRAVITY MODEL)	Cup Lid is too loose	Tighten Cup Lid - hold Cup (not Gun) with one hand, and tighten Lid with the other
THE TRIGGER	Needle Packing is too tight	See page 14 - Leakage From The Needle Packing Nut
1.5 525 55.5.1		Lubricate shaft of needle
	Bent Needle	Replace
	Damaged Needle or Nozzle	Replace
DOOD CDDAY	Air holes in Air Cap or Nozzle	Clean Air Cap or Fluid
POOR SPRAY	clogged	Nozzle
PATTERN	Damaged Air Cap	Replace
	Gun too far from surface	Keep consistent distance of 8"- 20cm from surface
PAINT AT THE AIR	Fluid Nozzle is loose and paint	Tighten with supplied
NOZZLE HOLES	/ material is leaking around it	Wrench
	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
GUN SPRAYS IN A PULSATING MANNER	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



LEAKAGE FROM THE NOZZLE

This occurs when the Needle Packing Nut #7 is **overtightened** compressing the Needle Packing #6 restricting movement of 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.

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



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. We recommend using a Fuji Spray Gun Cleaning Kit (part # 3100).

WARNING

DO NOT disassemble the Fluid Coupler (#10 - Gravity, #8 - Pressure), 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.

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 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

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.



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, Air Diffuser #4, Air Diffuser Seal #5 and inspect for material residue
- 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, Air Diffuser #4 or Air Diffuser Seal #5 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.

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



REASSEMBLY

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

- 1. Fig. J Place the Air Diffuser Seal #5 on the groove at rear of the Air Diffuser #4 and match the Locating Pin of the Air Diffuser to Gun Body
- 2. Fig. F Put in place the Air Distributor #3
- 3. Fig. I Attach Fluid Nozzle #2 and tighten with the supplied Wrench
- 4. Fig. D Screw in the Aircap #1
- 5. Fig. C Carefully slide in the Needle Do not bend
- 6. Fig. A Add Needle Spring #16 and attach Fluid Control Knob #17





















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



For SERVICE & PARTS

USA

Cogent Bathtub Refinishing Coatings

Phone: 862-238-7224 Online: www.cogentcoatings.com

hvlp.net

Phone: 800-650-0930 Online: www.hvlp.net

Phelps Refinishing

Phone: 800-377-5662 **Online:** www.phelpsrefinishing.net

Paint Sprayers Plus

Phone: 877-293-5826 **Online:** www.paintsprayersplus.com

CANADA

Fuji Spray

Phone: 800-650-0930 Local: 416-650-1430

hvlp.ca

Phone: 800-650-0930 Online: www.hvlp.ca

UNITED KINGDOM

Axminster Power Tool Centre Axminster, Devon, England Phone: 01297 33656 **Online:** www.axminster.co.uk

AUSTRALIA & NZ

Spraychief Industries Campbellfield, Victoria 3061

Phone: 03-9357-8788 **Online:** 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

Phone: 812-242-8040 **Online:** www.varnishop.ru

NOTES

