

INSTRUCTION MANUAL

FOR

FLOW GUN

300-963



Reference: FG-6 Gun



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SAFETY PRECAUTIONS



READ THIS CAREFULLY BEFORE OPERATING SPRAY EQUIPMENT.

It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.

RELEASED: REVISED:



HIGH PRESSURE EQUIPMENT

IMPROPER USAGE OF EQUIPMENT COULD RESULT IN SERIOUS INJURY. THE POSSIBILITY OF INJECTION INTO THE FLESH IS A POTENTIAL HAZARD. NEVER ALLOW ANY PART OF THE HUMAN BODY TO COME IN FRONT OF OR IN DIRECT CONTACT WITH THE MATERIAL OUTLET.

AN INJECTION INJURY CAN BE SERIOUS! FINDECTION SHOULD OCCUR, CONTACT A QUALIFIED PHYSICIAN FOR IMMEDIATE TREATMENT OF SUCH INJURIES.



WARNING HIGH PRESSURE DEVICE: High pressure can cause serious injury. Safety precautions should be taken while servicing or operating high pressure equipment.

PREVENT STATIC SPARKING

If static sparking occurs, fire or explosion could result.

Pump, spray gun and containers **must** be grounded when handling inflammable fluids such as solvents, paints, lacquers, etc., and wherever discharge of electricity is a hazard.

Use grounded hoses (static wire) and be sure the object you are coating is grounded if it can produce a static charge. `

Continuity (a good static wire connection) of a hose can be checked by using an ohmmeter. Place one probe on one hose fitting and the other probe on the other hose fitting. Continuity or proper grounding through hose is good when a reading is obtained on the ohmmeter.

Use only conductive airless spray hose.



Do not grab front end of gun, do not aim gun at any person or any part of the body. Paint or coating fluid under high pressure can penetrate the human body due to velocity with which it is released, and may cause serious injury.

DO NOT exceed the maximum working pressure of any component in the system (including but not limited to spray guns, hose, hose connections, heaters and pumps. NOTE: Liquid pressure at the outlet or gun may be many times the air inlet gauge pressure of air operated pumps.

DO NOT alter equipment in any manner whatsoever.

DISCONNECT pump power source and release all pressure before disassembly or removal of any part.

CHECK hoses for weak or worn condition before each use, and tighten all fluid connections securely.

RELIEVE all pressure from system when not in use.

SAFETY PRECAUTIONS

READ AND UNDERSTAND THIS INSTRUCTION MANUAL BEFORE OPERATING THIS UNIT.

- 1. Never point gun at anyone or any part of your body. High pressure material can cause injury by penetrating the skin. If penetration occurs, immediate medical aid must be obtained.
- 2. Never exceed max fluid pressure of 3000 PSI.
- 3. Always store gun in a safe place when gun is not in use.
- 4. Never put hand or fingers in front of gun. Never point gun at your body or at anyone else. Wear eye protection to avoid eye injury.
- 5. Never leave gun unattended without releasing pressure.
- 6. Before servicing, cleaning or removing any parts be sure to stop air supply to pump and release all internal pressure from gun and material passage.

OPERATING INSTRUCTIONS 300-963 FLOW GUN

A. HOW TO USE:

- Connect Material hose securely to the material inlet at the lower part of the flow gun.
- 2. Operate pump at low pressure and pull trigger (*17) until material jets continuously.
- 3. Fit nozzle tip to nozzle gland set (*20) by nozzle tip holder (*2).
- Operate pump at proper pressure and hold flow gun nozzle tip 1-2 inches away from part for a sample flow test.

B. CAUTION:

- Pay careful attintion to flow gun during pump operation.
 When using the flow gun, very high pressures can be produced. Never point flow gun towards the body of face. Be extremely careful in handling the gun. (If material penetrates the human body, consult a doctor immediately.)
- 2. Be sure to decrease fluid pressure to 0 PSI when you remove the nozzle tip or clean the gun. Release fluid pressure in fluid piping to 0 PSI when the gun is not in use and before nozzle tip or flow gun is removed for cleaning. (Even if the pump stops, fluid pressure remains inside the unit. Reduce the pressure to 0 PSI by pulling the trigger with the pump off.
- 3. Always release fluid pressure to 0 PSI when the gun is not in use or when the nozzle tip is exchanged.
- 4. Never exceed max pressure of 3000 PSI.
- 5. If material leaks during operation, stop immediately and make necessary repairs. If, at any time, material leaks from a sealed portion such as the body (*5), nozzle gland set (*3), material inlet at lower part of flow gun, ore needle packing (*9), stop immediately and make necessary repairs.

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C. AFTER USE:

- 1. Decrease fluid pressure to 0 PSI.
- 2. Be sure to clean exterior of flow gun for longer life after use.
- 3. Clean nozzle tip with brush soaked in proper solvent, especially material remaining in nozzle tip.

D. **TROUBLESHOOTING**:

Problem	Causes	Correction
Material leaks from needle packing (*9) or needle seat (*1)	Wear or insufficient tightening of needle packing (*9). Wear on fluid needle seat	Tighten needle spring holder (*5-8) to tighten fluid needle packing (*5-6). Replace needle packing if it is worn excessively.
	(*4)	Replace fluid needle set (*4) if it is worn excessively.
		When replacing fluid needle packing (*5-6), replace sub packing (*5-7) and spring washer (*5-8) at the same time.
Material leaks from nozzle gland set (*3) when trigger (*17) is released.	Fluid needle set does not return because of excessive pressure.	Adjust fluid pressure below max. pressure.
	Fluid needle set is not closed completely.	Remove nozzle gland set (*2) and check for wear. Remove needle set (*4) and check for wear. If either one is worn
	Over tightening of fluid needle packing (*9).	replace them both.
		3. Loosen needle spring holder (*5-8).

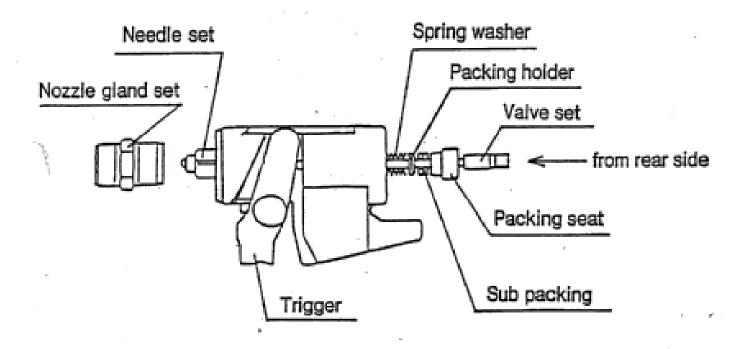
Corrections should be preformed only after referring to "Disassembly & Reassembly" Instructions.

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E. DISASSEMBLY & REASSEMBLY

E-1. Disassembling needle packing.

- 1. Loosen and remove all parts using spanner wrench supplied.
- 2. Unscrew needle set while holding valve set stationary.
- 3. Unscrew packing seat and remove needle packing.

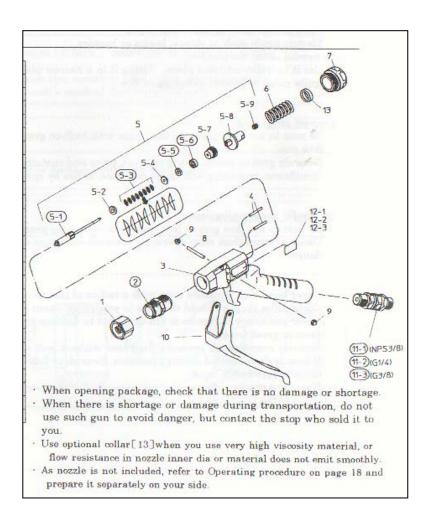


E-2. Assembling needle packing.

- 1. From the rear side of the gun body insert the spring washers, packing holder and sub Packing then tighten packing seat firmly.
- 2. From the front side of the gun body, insert the needle spring, spring guide, packing and the needle set then tighten the needle set by hand. (do nut use the spanner wrench)

E-3. Caution when Assembling.

- 1. The alignment of the sub packing, packing holder and spring washers is very important.
- 2. Tighten needle set by hand (do not use the spanner wrench).
- 3. Completely tighten nozzle gland set.



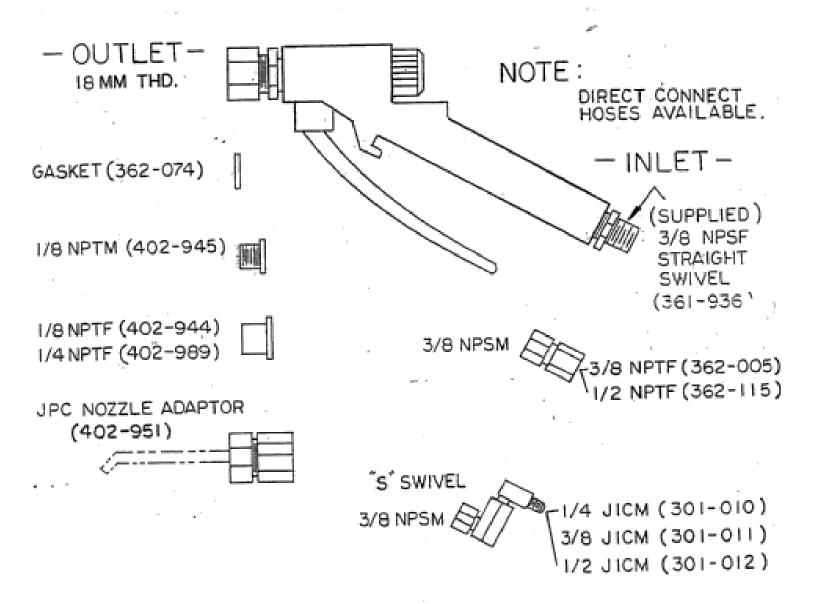
SYM	QTY	PART NUMBER	DESCRIPTION
1	1	361-935	Nozzle Tip Holder
2	1	361-918	Nozzle Gland Set
3	1	361-920	Gun body
4	4	361-917	Needle Seat
5	1	361-919	Fluid Needle Set
5-1	1	361-934	Needle Bar Set
5-2	1		Conical spring Holder
5-3	8	361-921	Conical Spring Washer
5-4	1	361-922	Packing holder
5-5	1	362-923	Sub Packing
5-6	1	361-924	Needle Packing
5-7	1	361-925	Needle Packing Seat
5-8	1	361-926	Needle spring Holder
5-9	1	361-929	Screw
6	1	361-927	Needle Spring
7	1	361-928	Needle Spring Seat
7*	1	363-723	Aluminum Spring Seat Optional
8	1		Trigger Stud
9	2		Hex Cap Nut
10	1		Trigger Set
11	1	361-936	Universal Joint NPSM 3/8
Repair Kit 300-963RK			



JOHNSTONE PUMP COMPANY

<u> 300-963</u>

FLOW GUN INLET/OUTLET OPTIONS



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