

# FG-6 / FG-61 / FG-62 FLOW GUN

**GB** Before use, adjustment or maintenance, it is important to read this instruction manual very carefully. This manual must be stored in a safe place for any future reference that may be necessary.

This **ANEST IWATA** flow guns kit complies to ATEX regulations 94/9/EC.

Protection level: II 2 G X Suitable for using Zones 1 and 2.



X marking: Any static electricity discharge from the flow gun is to be diverted to the grounded the conductive air hose as a stipulated.

## IMPORTANT

This flow gun should be operated only by an adequately trained operator, for safe use and maintenance of the equipment. Any misuse or handling other than those indicated in this Instruction Manual is not covered by guarantee. ANEST IWATA disclaims all responsibility for any accident or damage caused by failure to observe the operational and safety procedures as from this manual. In the interest of user friendliness, this manual contains information in a brief and concise form.

For any additional information you may require regarding flow guns operations, or if any missing parts or any damage during transportation is found, please contact your nearest ANEST IWATA Company (see last cover page).

Be sure to observe warnings and cautions in this instruction manual. If not, it can cause paint ejection and serious bodily injury by drawing organic solvent. Be sure to observe following  marked items which are especially important.	
<b>WARNING</b>	Indicates a potentially hazardous situation which, if not avoided, may result in serious injury or loss of life.
<b>CAUTION</b>	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.
<b>IMPORTANT</b>	Indicates notes which we ask you to observe. The safety precautions in this instruction manual are the minimum necessary conditions. Follow national and local regulations regarding fire prevention, electricity and safety as well as your own company regulations.

## IMPORTANT SPECIFICATIONS

Max. Pressure:	250 bar (3600 PSI)	Max. Temperature:	
		Atmosphere	5 ~ 40 °C
		Air and fluid	5 ~ 43 °C

## TECHNICAL SPECIFICATIONS

Model	Max. Operating pressure bar (PSI)	Use	Size of Nozzle Orifice	Shape of tip of fluid needle	Fluid Hose connection	Mass g (lbs)
FG-6	250 (3600)	Sealants & Adhesives (High Viscosity)	Ø 3.0	Tapered seat	NPS 3/8"	440 (0.97)
FG-61					G 1/4"	
FG-62					G 3/8"	

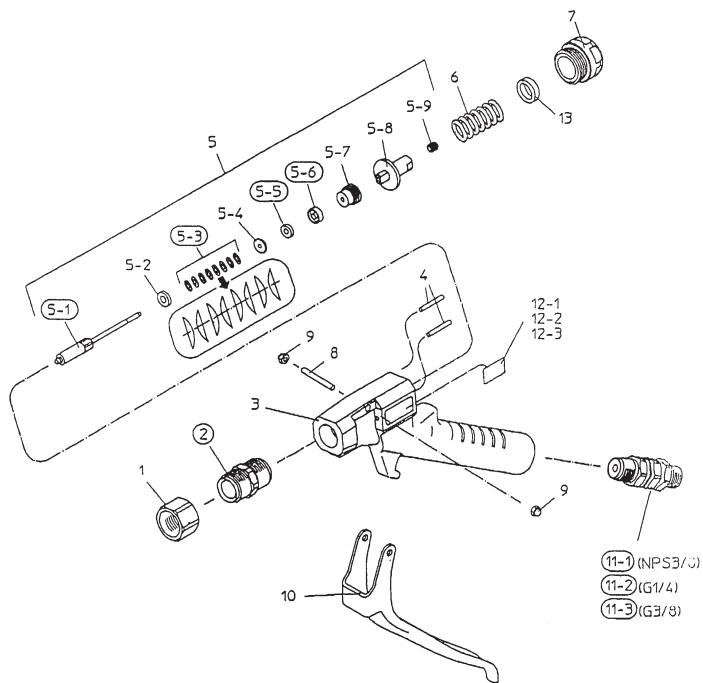
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# SPARE PARTS LIST



PART NAME	Ref.part
NOZZLE HOLDER	1
NOZZLE GLAND SET	● 2
GUN BODY	3
NEEDLE SEAT	4
FLUID NEEDLE SET	5
NEEDLE BAR SET	● 5-1
CONICAL SPRING HOLDER	5-2
CONICAL SPRING WASHER	● 5-3
PACKING HOLDER	5-4
SUB PACKING	● 5-5
NEEDLE PACKING	● 5-6
NEEDLE PACKING SEAT	5-7
NEEDLE SPRING HOLDER	5-8
SCREW	5-9
NEEDLE SPRING	6
NEEDLE SPRING SEAT	7
TRIGGER STUD	8
HEX. CAP NUT	9
TRIGGER SET	10
UNIVERSAL JOINT (NPS 3/8")	● 11-1
UNIVERSAL JOINT (G 1/4")	● 11-2
UNIVERSAL JOINT (G 3/8")	● 11-3
NAME PLATE	12
COLLAR	13

● Marked parts are consumable parts

- Use optional collar [13] when you use very high viscosity material, or flow resistance in nozzle inner dia, or material does not emit smoothly.
- As nozzle is not included, refer to Operating procedure on page 3 and prepare it separately on your side.



## OTHER PRECAUTIONS

- 1. Never alter this flow gun.**  
If done, it can cause insufficient performance and failure.
- 2. Enter working areas of other equipment (robots, reciprocators, etc.) after machines are turned off.**  
If not, contact with them can cause injury.
- 3. Never flow foods or chemicals through this gun.**  
If done, it can cause accident by corrosion of fluid passages or adversely affect health by mixed foreign matter.
- 4. Securely connect fluid hose.**  
If hose is disconnected during operation, hazardous hose movement and paint ejection will cause severe bodily injury.
- 5. If something goes wrong, immediately stop operation and find the cause. Do not use again until you have solved the problem.**

## CHEKING THE PRODUCT

- When you open the package, be sure to check that all goods are included and are in good condition.
- If there is any damage or missing components, do not use the product to avoid danger and immediately contact the distributor who sold it to you.
- Always keep caution plates (warning display) in good condition and clean.  
If they are damaged or missing, replace with new ones.

## OPERATING PROCEDURE

### CONNECT HIGH PRESSURE HOSE

#### WARNING



Securely connect high pressure hose without leak or loosening.  
If hose is disconnected during operation, hazardous hose movement and material ejection will cause severe bodily

When material leaks, never try to stop it by hand. In that case, stop pump immediately and reduce material pressure down to 0 pressure.

Material or solvent can enter human body directly through eye, mouth or skin. It is very dangerous. If you feel any abnormality or receive any injury, consult a medical doctor immediately.



#### CAUTION

Before using a new flow gun, clean inside of the new flow gun. If not, rust preventive inside flow gun can cause materialing failure.

### FIT OR REMOVE NOZZLE

Fit nozzle to flow gun

#### WARNING



Be sure to stop pump, reduce fluid pressure down to [0 MPa] and securely apply safety lock of flow gun before you fit or remove nozzle tip.

Material or solvent can enter human body directly through eye, mouth or skin. It is very dangerous. If you feel any abnormality or receive any injury, consult a medical doctor immediately.

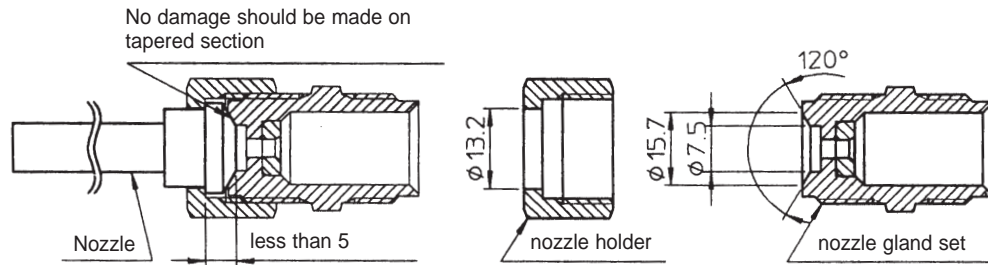


#### IMPORTANT

We are not responsible for any death, injury, failure or damage caused by nozzle.

**ATTENTION**

When you try to make a nozzle, refer to the figures below.

**Sealing job****WARNING**

During materialing, be sure to wear protective cover such as glasses, mask or gloves to avoid serious injury caused by material or solvent which might enter your eyes or you might inhale.

**CAUTION**

Before you use new flow gun for the first time, clean its inside. If not done, rust preventive inside gun can cause sealing failure.

**ATTENTION**

As fluid pressure increases, fluid output increases with increasing wear on parts. For longer life span of flow gun, adjust fluid pressure as low as you can, maintaining satisfactory fluid output.

**CLEANING AND MAINTENANCE**

In order to get longer lifetime of flow gun and good performance at the next job, fully clean its inside with cleaning liquid which is compatible with material used, after you finish the job.

**WARNING**

During materialing, be sure to wear protective cover such as glasses, mask or gloves to avoid serious injury caused by paint or solvent which might enter your eyes or you might inhale.

Be sure to stop pump and reduce fluid pressure down to 0 pressure before disassembling flow gun.

Only an experienced person who is fully conversant with the equipment can do maintenance and inspection.

**CAUTION**

Never use commercial or other parts instead of ANEST IWATA original spare parts.

**PROBLEMS AND REMEDIES**

**IMPORTANT** : As for \* marked items, ask our distributor to remedy it for you. Incorrect remedy cannot achieve satisfactory performance.

Problem	Where	Cause	Remedies
Material does not come out.		Nozzle tip is clogged.	Inspect or replace.
Material leaks or comes out weakly.	Nozzle(Material leaks from of nozzle)	Material is not fed. Pump pressure is high.	Inspect pump. Reduce pump pressure down to 150bar (2142PSI).
		Flow resistance in pump is too high. • Material viscosity is high. • Nozzle orifice is small.	Use material of lower viscosity. Use collar [13] or nozzle with larger orifice.
		Material or dust sticks to needle packing [5-6]. Material or dust sticks to needle seat [4]. Seat between needle bar set [7-11] and nozzle gland set [3] is worn. Needle bar set [5-1] is over- tightened.	Disassemble, inspect or replace part*
	Nozzle gland set [2]	Nozzle gland set [2] is loose.	Tighten.
	Needle spring seat [7] needle seat[4]	Needle packing seat [5-7] is loose.	Tighten with needle spring holder [5-8].
		Needle packing [5-6] is worn, damaged or stuck with material or dust.	Tighten with needle spring holder [5-8]. Disassemble, inspect or replace part.
		Needle bar set [5-1] is worn, damaged or stuck with material	Tighten with needle spring holder [5-8]. Disassemble, inspect or replace part.
	Nozzle holder [1]	Nozzle gland set [2] and taper section of nozzle are damaged or stuck with material or dust Nozzle holder [1] is loose.	Disassemble, inspect or replace part. Tighten.
	Universal joint [11]	Wear of packing in universal joint	Replace universal joint.