

DOCUMENTATION

EXTRUSION MANUAL SPRAY GUN

500 BAR / 7251.5 PSI

Manual : 582.063.110-UK - 2103

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Modif.: Update

TRANSLATION FROM THE ORIGINAL MANUAL

IMPORTANT : Before assembly and start-up, please read and clearly understand all the documents relating to this equipment (professional use only).

THE PICTURES AND DRAWINGS ARE NON CONTRACTUAL. WE RESERVE THE RIGHT TO MAKE CHANGES WITHOUT PRIOR NOTICE..

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INSTALLATION AND SAFETY INSTRUCTIONS

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1. SAFETY INSTRUCTIONS

GENERAL SAFETY INSTRUCTIONS



CAUTION : The equipment can be dangerous if you do not follow our instructions concerning installation and servicing described in this manual and in accordance with applicable European standards and local national safety regulations.

Please carefully read all the instruction literature before operating your equipment.

Only trained operators can use the equipment.

The foreman must ensure that the operator has understood the safety instructions for this equipment as well as the instructions in the manuals for the different parts and accessories.

Read carefully all instruction manuals, label markings before operating the equipment.

Incorrect use may result in injury. This equipment is for professional use only. It must be used only for what it has been designed for. Never modify the equipment. The parts and accessories supplied must be regularly inspected. Defective or worn parts must be replaced.







Guards (motor cover, coupling shields, connectors,...) have been designed for a safe use of the equipment.

The manufacturer will not be held responsible for bodily injury or failure and / or property damage due to destruction, the overshadowing or the partial or total removal of the guards.

Never exceed the equipment components' maximum working pressure.

Comply with regulations concerning safety, fire risks, electrical regulations in force in the country of final destination of the material. Use only products or solvent compatible with the parts in contact with the material (refer to data sheet of the material manufacturer).

PICTOGRAMS

					
NIP HAZARD	WARNING MOVING ELEVATOR	WARNING MOVING PARTS	WARNING MOVING SHOVEL	DO NOT EXCEED THIS PRESSURE	HIGH PRESSURE HAZARD
					
RELIEF OR DRAIN VALVE	WARNING HOSE UNDER PRESSURE	WEAR GLASSES OBLIGATORY	WEAR OF GLOVES IS OBLIGATORY	PRODUCT VAPOR HAZARDS	WARNING HOT PARTS OR AREAS
					
ELECTRICAL HAZARD	WARNING FIRE HAZARDS	EXPLOSION HAZARDS	GROUNDING	WARNING (USER)	WARNING SERIOUS INJURIES

PRESSURE HAZARDS



Current legislation requires that an **air relief valve** be fitted in the air supply circuit to the air motor to prevent over pressurisation. This safety feature, ensures that it is not possible to supply the air motor with excessive air pressure that may cause injury.

Please ensure that a **material drain valve** is fitted in the fluid circuit to drain and depressurise the circuit. Once depressurised and drained, work /servicing may then commence on the equipment. Please remember to close these valves when restarting the system.

HIGH PRESSURE INJECTION HAZARDS



When working with high pressure equipment, special care is required. Fluid leaks can occur. There is a risk of material being injected to any exposed parts of body, this could cause severe injury :



- medical care must be sought immediately if paint is injected under the skin or in other parts of the body (eyes, fingers).
- never point the spray gun at any one. Never try to stop the spray with your hands or fingers nor with rags or similars.
- **follow the shut down procedure and always depressurize air and fluid circuits** before carrying out any servicing on the gun (cleaning, checking, maintenance of the material or cleaning of the gun nozzles).
- for the guns equipped with a safety device, always lock the trigger when not in use.

FIRE - EXPLOSION - SPARKS - STATIC ELECTRICITY HAZARDS



A poor earth connection, inadequate ventilation, sparks or static electricity can cause an explosion or fire. to avoid these risks when using or servicing SAMES KREMLIN equipment, the following safety procedures must be followed :



- ensure a good earth connection and ground the parts to be handled i.e. solvents, materials, components and equipment,
- ensure adequate ventilation,
- keep working area clean and free from waste solvents, chemicals, or solid waste i.e. rags, paper and empty chemicals drums,
- never use electrical switches / power if in an atmosphere of volatile solvent vapour,
- stop working immediately in case of electrical arcs,
- never store chemicals and solvents in the working area.
- use paint whose flash point is the highest possible to prevent from any formation of gas and inflammable vapours (refer to materials' safety instructions),
- install a cover on the drums to reduce the diffusion of gas and vapours in the spraybooth.

TOXIC PRODUCT HAZARDS



Toxic products or vapours can cause severe injury not only though contact with the body, but also if the products are ingested or inhaled. It is imperative :



- to know the material products and their risks,
- notified or hazardous materials must be stored in accordance with the regulations,
- the material must be stored in an appropriate container, never place materials in a container where there is a risk of spillage or leakage,
- a procedure must be applied for the safe disposal of waste material. It must comply with all prevailing regulations and legislations of the country where the equipment is to be used,
- protective clothing should always be worn in compliance with the material manufacturers' recommendations,
- depending on the application and chemical safety instructions, safety glasses, hearing protective earplug, gloves, foot wear, protective masks and possible breathing equipment should be worn to comply with the regulations (Refer to chapter "Safety equipment of SAMES KREMLIN selection guide).



CAUTION!

It is forbidden to use material containing high concentrations of halogenated hydrocarbon solvents with **aluminium** or **zinc fillers**. Non-compliance with the instructions may cause explosion risk causing serious or fatal injury.



EQUIPMENT REQUIREMENTS

Guards (motor cover, coupling shields, connectors,...) have been designed for a safe use of the equipment.

The manufacturer will not be held responsible for bodily injury or failure and / or property damage due to destruction, the overshadowing or the partial or total removal of the guards.

PUMP



Before carrying out any work, it is imperative to read and clearly understand the disassembly and reassembly instructions before servicing. The operator must understand the equipment and the safety instructions. These instructions are available in the equipment manuals.



The air motor is designed to be mounted with a pump. Never modify any components or couplings. When operating, please keep hands away from moving parts. Before starting up the equipment, please read the PRESSURE RELIEF instructions. Please ensure that any relief or drain valves fitted are in good working order.

HOSES

- Keep hoses out of circulation areas, moving parts or hot surfaces,
- Never expose product hoses to temperature higher than + 60°C / 140° F or lower than 0°C / 32° F,
- Never pull or use the hoses to move the equipment,
- Tighten all fittings as well as the hoses before operating the equipment,
- Check the hoses regularly; change them if they are damaged,
- Never exceed the maximum working pressure (MWP) indicated on the hose.

USED PRODUCTS

Considering the wide variety of products that are available and can be used in our equipment it is impossible to check and make recommendations for all chemical data, regarding the risks of possible chemical attack and their long term chemical reaction

SAMES KREMLIN can not be held liable for :

- compatibility of wetted parts,
- risks to staff and the surroundings,
- for worn or defective parts, for faulty equipment or units, or the quality of final product.

It is the responsibility of the user to know and prevent any possible risks such as toxic vapours, fires or explosions. He shall determine the risks of immediate reactions or pursuant to repeated exposures of the staff,

SAMES KREMLIN shall not be liable for physical injuries, direct or indirect material damages caused by the use of chemicals.

2. HANDLING



Check the weight and the dimensions of the equipment

(☞ refer to 'Technical features' section of the instruction manual

If weight and dimensions are too important, the unloading must be carried out by means of a forklift or any other appropriate means with a qualified personnel and in a clear horizontal area to prevent from risks of damage injury or an accident.

The centre of gravity is not in the centre of the machine : carry out by hand a stability-test after having lifted the whole at 10 cm / 3.937" maximum.

After the unloading, the handling of the whole (eg: elevator pump) is carried out by means of a pallet truck taking the bottom part of the frame.

Remark : Each pump motor is fitted with a ring. The ring is designed for the hoisting of one pump and can not be used for the handling of the complete assembly.

3. STORING

Storing before installation :

- Storing ambient temperature : 0 / +50 °C / 0 / +122°F
- Protect the whole against dust, water trickling, dampness and shocks.

Storing after installation :

- Operating temperature : +15 / +35 °C / +59 / +138.2° F
- Protect the whole against dust, water trickling, dampness and shocks.

4. INSTALLATION OF THE EQUIPMENT

The machine is installed on a stable horizontal floor (for eg a concrete flag).

The machine shall be made stable by the use of holding down bolts or by the use of other anchoring methods, strong enough to prevent unintended bodily movement of the equipment.



To avoid risks caused by static electricity, the equipment as well as its components must be grounded.

- **For the pumping equipments** (pumps, pneumatic rams, frame...), a section wire of 2.5 mm² is fixed on the material. Use this wire to connect the material to "the general ground". In case of severe environments (mechanical protection of the wire of earthing insufficient, vibrations, mobile material...) where function damages at the ground are probable, the user have to replace the provided wire of 2.5 mm² by a device more adapted to its environment (wire with a more important section, bonding strip, fixing by thimble with eyelet...).

The continuity of the ground must be controlled by a qualified electrician. If the continuity of the ground is not ensured, check the terminal, the wire and the earthing point. **Never** use the material without have solved this problem.

- In the severe cases of environments (mechanical protection of the wire of earthing insufficient, vibrations, mobile material...) where damages of the function put at the ground are probable, the user will have to replace the wire of 2.5 mm² provided, by a device more adapted to its environment (wire of more important section, bonding strip, fixing by thimble with eyelet...),
- **The gun** must be 'grounded' via a material hose or an air hose. In case of spraying by means of a gun with cup, the air hose must be conductive,
- **The materials to be painted** must also be grounded.

All the materials situated in the working area shall be grounded.



- **Never store** more than necessary inflammable materials inside the working area,
- The materials must be stored into **approved drums** and grounded,
- Use only grounded **metals containers** for the use of cleaning solvents,
- **Cardboard and paper are prohibited.**

5. MARKING OF THE EQUIPMENT



Each equipment has a label plate with the name of the manufacturer, the equipment part number, the interesting informations to use correctly the equipment (pressure, voltage,...) and sometimes the above pictogram.

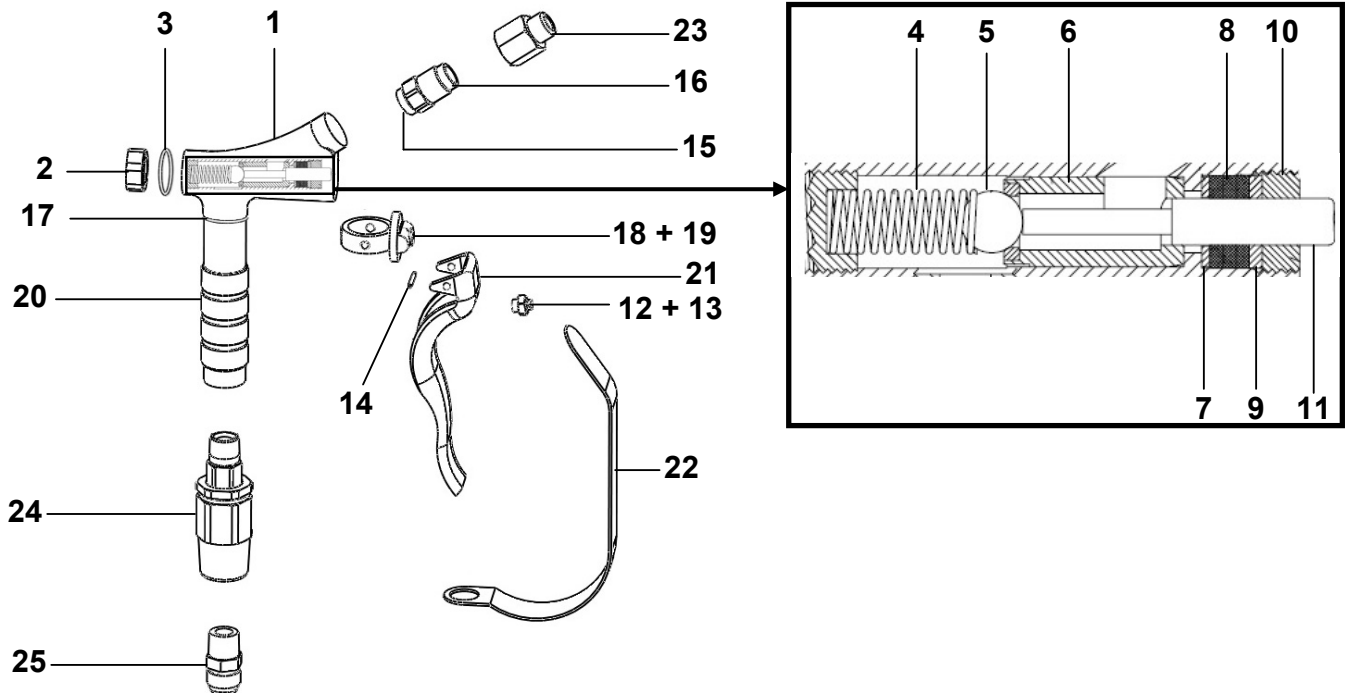
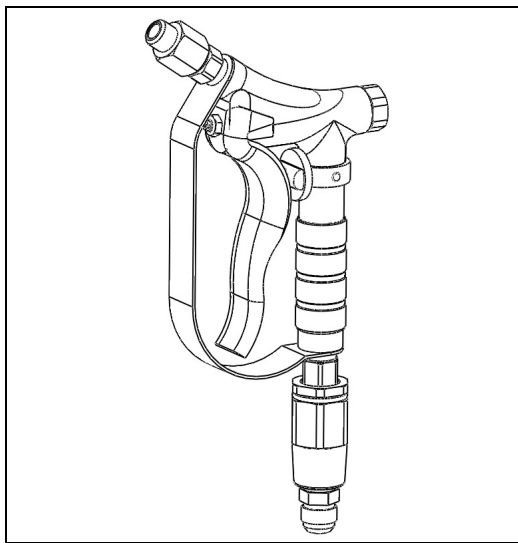
The equipment is designed with and consists of high quality materials and components which can be re-used.

The 2012/19/UE European Directive covers all equipments with a crossed-out bin pictogram. Please inform yourself about the collection systems for electric and electronic equipments.

Please act in accordance with local rules and **do not dispose of old equipment with household wastes**. A correct disposal of old equipment will help prevent negative consequences for the environment and health.

<p>Doc. 573.514.050 Date/Datum/Fecha : 23/02/18 Annule/Cancel/ Ersetzt/Anula : Doc. / Dok. 578.142.110</p>	<p>Modif. / Änderung : Mise à jour / Update / Aktualisierung / Actualización</p>	<p>Pièces de rechange Spare parts list Ersatzteilliste Piezas de repuesto</p>
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<p>PISTOLET MANUEL D'EXTRUSION, modèle 500 bar</p>	<p>EXTRUSION MANUAL SPRAY GUN model 500 bar / 7251.5 psi</p>
<p>MANUELLE EXTRUSIONSPISTOLE, Modell 500 bar</p>	<p>PISTOLA MANUAL DE EXTRUSIÓN, tipo 500 bar</p>



PISTOLET MANUEL D'EXTRUSION, modèle 500 bar	EXTRUSION MANUAL SPRAY GUN model 500 bar / 7251.5 psi	#
MANUELLE EXTRUSIONSPISTOLE, Modell 500 bar	PISTOLA MANUAL DE EXTRUSIÓN, tipo 500 bar	151.110.600

Ind	#	Désignation	Description	Bezeichnung	Denominación	Qté
-	922 080 001	Pistolet sans buse	Gun without nozzle	Pistole ohne Düse	Pistola sin boquilla	-
1	NC / NS	Corps	Body	Körper	Cuerpo	1
2	NC / NS	Bouchon	Plug	Stopfen	Tapón	1
*3	NC / NS	Joint	Seal	Dichtung	Junta	1
*4	NC / NS	Ressort	Spring	Feder	Muelle	1
*5	NC / NS	Bille	Ball	Kugel	Bola	1
*6	NC / NS	Soupape et siège de bille assemblés	Valve and ball seat assembly	Ventil und Kugelsitz kpl.	Válvula y asiento de bola equipados	1
7	NC / NS	Rondelle	Washer	Scheibe	Arandela	1
*8	NC / NS	Joint d'étanchéité (x3)	Tightness seal (x3)	Dichtungsscheiben (3x)	Junta de estanqueidad (x3)	1
9	NC / NS	Rondelle	Washer	Scheibe	Arandela	1
10	NC / NS	Butée	Retainer	Anschlag	Tope	1
11	NC / NS	Piston assemblé	Piston assembly	Kolben kpl.	Pistón equipado	1
*12	NC / NS	Vis	Screw	Schraube	Tornillo	1
13	NC / NS	Ecrou	Nut	Mutter	Tuerca	1
14	NC / NS	Axe de gâchette	Trigger spindle	Abzugshebelachse	Eje de gatillo	1
15	NC / NS	Gaine	Sleeve	Führungshülse	Funda	1
16	NC / NS	Adaptateur	Adaptor	Adapter	Adaptador	1
*17	NC / NS	Joint	Seal	Dichtung	Junta	1
18	NC / NS	Levier de sécurité	Lever, safety	Sicherungshebel	Leva de seguridad	1
19	NC / NS	Vis	Screw	Schraube	Tornillo	1
20	NC / NS	Poignée	Handle	Griff	Empuñadura	1
21	NC / NS	Gâchette	Trigger	Abzugshebel	Gatillo	1
22	NC / NS	Protège gâchette	Trigger protection	Abzugshebelschutz	Protección gatillo	1
23	151 110 601	Adaptateur M 11/16" - 16 UN pour M M15x150 & F M10x100	Fitting, M 11/16" - 16 UN for M M15x150 & F M10x100	Adapter AG 11/16" - 16 UN für AG M15x1,5 & IG M10x1	Racor M 11/16" - 16 UN para M M15x150 & H M10x100	1
24	922 080 002	Raccord tournant MF 3/8" NPT	Swivel fitting, MF 3/8" NPT	Drehgelenk IG/AG 3/8" NPT	Racor giratorio MH 3/8" NPT	1
25	905 160 206	Raccord M 3/8" NPT - M 3/4" JIC	Fitting, M 3/8" NPT - M 3/4" JIC	Anschluss AG 3/8" NPT - AG 3/4" JIC	Racor M 3/8" NPT - M 3/4" JIC	1

POCHETTES - KITS - SÄTZE - BOLSAS

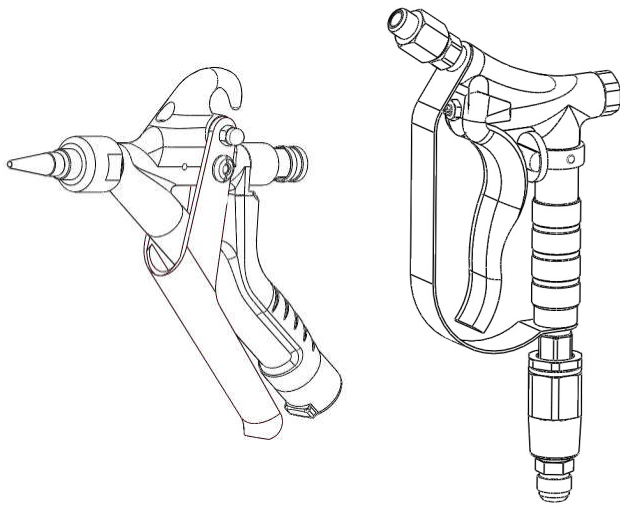
Ind	#	Désignation	Description	Bezeichnung	Denominación	Qté
*	151 110 695	Kit de maintenance (ind. 3, 4, 5, 6, 7, 11, 16)	Servicing kit (ind. 3, 4, 5, 6, 7, 11, 16)	Servicingkit (Pos. 3, 4, 5, 6, 7, 11, 16)	Bolsa de reparación (ind. 3, 4, 5, 6, 7, 11, 16)	1

* Pièces de maintenance préconisées.

* Preceding the index number denotes a suggested spare part.

* Bezeichnete Teile sind empfohlene Ersatzteile.

* Piezas de mantenimiento preventivas.



EXTRUSION MANUAL SPRAY GUN

**250 BAR / 3627 PSI
500 BAR / 7251.5 PSI**

PREVENTIVE MAINTENANCE

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Safety instructions :

- Never try to stop the spray fan with any part of the body (hands, fingers...) or with rags. Never point the spray gun at anyone or at any part of the body.
- The operator will need medical attention if the high pressure material spray is in contact with the the body (eyes, fingers...).
- **Always lock the gun trigger with the safety device when not operating the gun.**
- **Always depressurize air and hoses** before carrying out any servicing on the gun.



In order to protect the operator, protective clothing (gloves, respirator mask, glasses, hearing protective earplug, clothes...) are required.

Use the equipment in a properly ventilated area.

This spray gun is a precision tool. Its correct functioning requires regular maintenance, carried out with care. When it is carried out directly after use, the cleaning of the gun is faster and easier.

For a correct operating of the gun, replace seals every 6 months.

Never use metallic brushes, files or pliers when dismantling the gun.

▪ **SHORT DURATION SHUTDOWN**

Leave the equipment as it is if the material used makes it possible. In any case, if the tip becomes a little clogged with material, it is best to clean it with a brush and some solvent.

▪ **LONG DURATION SHUTDOWN**

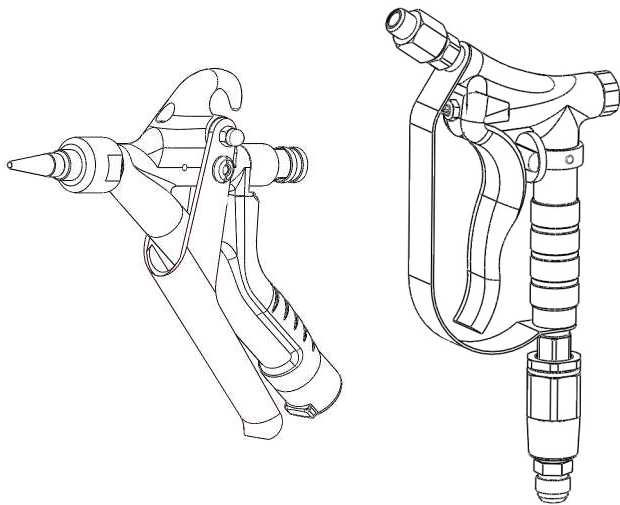
Depressurise the material circuits.

Unscrew the tip from the gun, clog it, put it in solvent to soak and then brush it clean.

Use only products or solvent compatible with the parts in contact with the material (refer to data sheet of the material manufacturer).

Flush the installation and leave it purged through with cleaning paste.

➔ **Never soak the gun itself in solvent.**



EXTRUSION MANUAL SPRAY GUN

**250 BAR / 3627 PSI
500 BAR / 7251.5 PSI**

TROUBLESHOOTING GUIDE

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The extrusion quality depends directly on the shape of the tip. It is recommended to replace it regularly to get a constant fan pattern.

A premature wearing deforms the tip and makes it bigger, thus resulting in higher output.

TROUBLE	CAUSE	SOLUTION
Material is no longer coming out of the gun	Clogged nozzle	Check material supply circuit. Cut the pressure on the pump Remove and clean the nozzle. Depressurise the hoses.
Deformed bead	Nozzle worn	Change it.
Extrusion of intermittent material	Lack of material	Check the material supply.
	Loose elements	Tighten the different elements (nozzle, fittings, etc.)
Fluid leak	Seals missing or damaged	Check the seals, replace if necessary.
	Loose elements	Tighten the different elements (nozzle, fittings, etc.).
Fluid leak in front of the gun	Dirt in the material	Trigger the gun 3 or 4 times or clean the seat.
	Bad tightness between the ball and its seat	Clean the seat or replace the needle assembly (model 250 bar / 3627 psi) / the ball (model 500 bar / 7251.5 psi) and the seat.
	Ball or ball seat misplaced	Replace the needle assembly (model 250 bar / 3627 psi) / the ball (model 500 bar / 7251.5 psi) and the ball seat*.
	Ball or ball seat are dirty	Clean the ball and the ball seat*.
	Worn ball or ball seat	Replace the needle assembly (model 250 bar / 3627 psi) / the ball (model 500 bar / 7251.5 psi) or / and the ball seat*.
Fluid leak around the needle	Worn fluid packing	Clean or replace it.
Fluid leak from the trigger end of the gun	Loose retainer (model 500 bar / 7251.5 psi)	Take out the lever and tighten the retainer (model 500 bar / 7251.5 psi).
	Worn fluid packing	Replace the fluid packing.

*When installing ball and ball seat, make sure that the seat is in line with the parts inside the gun.