







## **User manual**

### Nanogun Airmix® and GNM 6080 versions LR - HR

SAMES KREMLIN SAS - 13, Chemin de Malacher - 38240 MEYLAN - FRANCE Tel. 33 (0)4 76 41 60 60 - www.sames-kremlin.com

This document may not be passed on or reproduced in any form whatsoever nor may its contents be used or disclosed without express written permission from SAMES KREMLIN.

The descriptions and characteristics contained in this document are subject to change without notice.

#### © SAMES KREMLIN 2016



SAMES KREMLIN SAS is registered with the Ministry of Labour as a training institution.

Throughout the year, our company offers training courses in the operation and maintenance of your equipment.

A catalogue is available on request. Choose from a wide range of courses to acquire the skills or knowledge that is required to match your production requirements and objectives.

Our training courses can be delivered at your site or in the training centre at our Meylan head office.

Training Department: Tel.: 33 (0)4 76 41 60 04

E-mail: formation-client@sames-kremlin.com

SAMES KREMLIN SAS user manuals are written in French and translated into English, German, Spanish, Italian and Portuguese.

The French version is deemed the official text and SAMES KREMLIN will not be liable for the translations into other language

# Nanogun Airmix® and GNM 6080 versions LR - HR

5
5 5 5
7
7 7 8 0
2
2 3
5
5 7 7
8
9
1
2
3
3 3 3 3 4
5
6
678890145

	10.8. Switch	
	10.9. Trigger	36
	10.10. Air valve	
	10.10.1. Repairing the air valve	38
	10.11. Fastening hook	39
	10.12. High-voltage cascade	
	10.13. Barrel	
	10.14. Handle	
	10.15. Electrical diagrams	43
	10.15.1. GNM 6080 / Nanogun Airmix <sup>®</sup> connection cable	
11.	. Cleaning	44
	11.1. Cleaning of the product circuit	44
	11.2. Cleaning of the gun	
	11.3. Elimination of wastes	
	11.4. Dismantling and Recycling	45
	11.4.1. Nanogun Airmix <sup>®</sup>	
	11.4.2. GNM 6080	
12.	. Common malfunctions and repairs	48
13.	. Spare parts	50
	13.1. Nanogun Airmix® guns for both high resistivity (HR)	<b>5</b> .0
	and low resistivity (LR) solvent-based paints	50
	13.1.1. The nozzles as an option	53 54
	13.1.3. Equipped Air cap	
	13.2. Nanogun Airmix® gun	57 55
	13.3. Equipped seat casing	58
	13.4. Equipped adapter	
	13.5. Equipped barrel	
	13.6. Equipped air valve and air valve Nut	
	13.7. Equipped needle	
	13.8. Electro-pneumatic couplings	61
	13.9. Paint hoses	62
	13.9.1. For Nanogun Airmix HR guns	62
	13.9.2. For Nanogun Airmix® LR guns	62
	13.10. Nanogun Airmix® seal kit	
	13.11. GNM 6080 control module	
	13.12. Options for Nanogun Airmix® guns	
	13.13. Appendices	00
	13.13.1. Hose protection casing	
	13.13.3. Warning sign	
	13.13.4. Safety relief valve	
14.	The various versions	
	14.1. Equipment	67
	14.2. Configurations	

### 1. Product identification

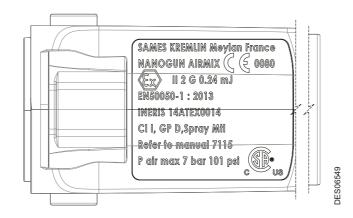
The **Nanogun Airmix**<sup>®</sup> gun markings will allow differentiating between the 120-bar and the 200-bar model configuration.

These equipment are designed in accordance with the ATEX 2014/34/UE directive and for use in Zone 1.

### 1.1. Version identification

### 1.1.1. On the gun barrel

The marking on the barrel is the same across the entire **Nanogun Airmix**<sup>®</sup> line.



### 1.1.2. On the lower part of the gun handle



This marking combines, under a single number, the configurations of guns operating at the same level of pressure generation.

Pressure generated	Nanogun Airmix <sup>®</sup> versions
120 bar	JP-LR; JP-HR
200 bar	JP-LR; JP-HR

#### 1.2. GNM 6080 control module

The **GNM 6080** control module has been installed outside of the "ATEX" zone. According to ATEX Directive definition, it is considered "accessory hardware".

### Markings





**CSA** marking



Example: \* 2014: Year of manufacturing

26: Week number

123: n<sup>th</sup> generator built during week 26.

WARNING: The Nanogun Airmix® equipment are all compliant with the operational safety standard (i.e. Standard EN13849, level SIL 1); maintaining this level of safety requires periodic inspections of the equipment, at least once every 5 years or 15,000 hours of operations (whichever comes first). This control step pertains to each of the electrical and electronic components as well as to the set of very specific program(s); you should contact your subsidiary, distributor or regular SAMES KREMLIN representative, who will inform you of the appropriate steps to take.

### 2. Health and safety guidelines



WARNING: This equipment may be hazardous if it is not used, disassembled and reassembled in accordance with the rules indicated in this manual and in any applicable European Standard or national safety regulations.

The warning sign summarising the safety rules (procedures and precautions) of the present user's manual must be placed in a visible location within the zone of the coating product spraying station.



WARNING: The good working order of this equipment is only under warranty provided use of original spare parts distributed by "SAMES KREMLIN" companies.

### 2.1. Regulations

The **Nanogun Airmix** gun must always be used under the set of conditions required by current standards and rules as regards the application of paints and varnishes (see the Standards and Directive EN 50.053 Directive, Part 1 ISO 12100, EN 1953 and 99/92/CE).

In **Canada**, the installation must comply with the Code "C22.1 Canadian Electrical Code, Part I, Safety Standard for Electrical Installations".

In the **United States**, the installation must comply with the Code "NFPA 70: National Electrical Code".

CAUTION: Model Nanogun Airmix<sup>®</sup> spray applicator is suitable for use in CLASS I, DIVISION 1, GROUP D HAZARDOUS LOCATIONS" when connected to model GNM 6080 power supply unit.

The **Nanogun Airmix**® gun has been designed to operate within a 2nd-degree pollution environment, as defined according to the Standard IEC-664-1.

**2nd-degree pollution:** Under normal use conditions, only non-conductive type pollution arises. On a temporary basis, conduction caused by condensation may arise.



WARNING: Before using the Nanogun Airmix® gun, be sure that all operators:

- have received preliminary training by the SAMES KREMLIN companies, or by the Distributors they have certified for this purpose.
- have read and understood the user's manual as well as all installation and use rules listed below.

It is incumbent upon the Operators' Workshop Manager to ensure and verify that all operators have read and understood the user's manuals relative to peripheral electrical devices present within the spraying perimeter.

### 2.2. Installation rules

- The hand-held electrostatic projection equipment can only be used in designated projection spots in accordance with Standard EN 12215 or under equivalent ventilation conditions.
- Install the control module away from any explosive zone.
- Servo-control the control module start-up to the "on" position of the booth's suction fan.
- Correctly connect the control module to the installation's ground terminal.
- Connect both the pump and paint (or solvent) tank to one of the installation's ground terminals.

- Connect to the ground all metal parts of the installation (paint pumps, containers, stools, spin coaters, etc.) positioned within three meters of the gun.
- Keep the spray zone clean and free of all unnecessary components.
- The floor where the operator works must be antistatic (either unclad concrete flooring or a metal grating). Never cover the floor with an insulating covering. In potentially explosive locations, the floor assemblies must be antistatic, in accordance with Standard EN 61340-4-1
- The use inside the booth of an uncovered flame, any incandescent object, a device or object capable of generating sparks other than the gun is strictly prohibited.
   It is also prohibited to store in the vicinity of the booth or in front of the doors flammable products or containers in which such products had been stored.
- The jars and cans containing paint or solvent must be systematically closed after use.
- The paint feed pump used must be rated with a maximum 1:1 ratio, and the pump's air supply must be equipped with a safety relief valve to limit pressure to a maximum value of 6.5 bar.
- **Inside the explosive zone**, it is prohibited to use electrical or non-electrical equipment that has not been certified, like electrical extension cables, surge protector power bars, switches, etc.

#### 2.3. Rules of use

- Verify the extraction ventilation system efficiency on a daily basis.
- Once a week, verify the adequate operations of the ventilation system servo controls.
- Before starting to spray, be sure the gun contains a nozzle and an air cap, and moreover verify that the air cap ring has been perfectly clamped.
- Correctly ground all metal parts of the booth, along with the parts to be painted. The resistance relative to the ground must be less than or equal to  $1M\Omega$  (for a 500-V voltage measurement). This resistance must be regularly checked and, in any case, at least once a week.
- The operator must wear antistatic shoes in accordance with Standard EN 61340-4-3 and moreover hold the **Nanogun Airmix**® gun either with a bare hand or with antistatic gloves or gloves modified so as to establish a direct contact between the handle and his/her hand. The shoes intended to be worn by the operator must be compliant with Standard ISO 20344. The measured insulation resistance must not exceed  $100M\Omega$ .
- The protective clothing intended to be worn, including gloves, must be compliant with Standard EN 1149-5. The measured insulation resistance must not exceed  $100M\Omega$ .
- The operator must also wear ear defenders when using the guns Nanogun Airmix<sup>®</sup> (see § 4 page 15).
- Ensure that anyone entering the spray zone is wearing the antistatic shoes or has been grounded by any other means.
- Never throw or intentionally allow the electrostatic gun to fall. A gun drop could damage
  the high-voltage generator. After a fall, it is advised to verify the good working order of
  the gun outside of the zone before its subsequent reuse.
- Never point the gun in the direction of another person.
- Verify the gun at least once a week.
- Refrain from using the equipment in the following cases:
  - 1 If an air leak is observed around the gun when the trigger is released;
  - 2 If the gun's electrical connector is not being securely held in place by means of the two safety screws;
  - 3 If the gun barrel and handle show signs of a shock capable of altering the seal on the gun's internal parts.
- The manual electrostatic projection device can only be operated if it is in perfect condition. Any damaged equipment must be immediately removed from active service and repaired.
  - Worn parts must be immediately replaced.
- Only use paints whose flash point is at least 15°C higher than room temperature.

- Closely follow use guidelines for the paints and solvents being applied (e.g. wear a mask).
- Close and purge both the air and paint inlet prior to any extended equipment downtime.
- Verify the good working order of the paint hose prior to any equipment start-up.
- The electro-pneumatic link connector, secured by means of two screws, **MUST NEVER BE DIS- CONNECTED WHILE IN AN EXPLOSIVE ATMOSPHERE**.
- Use of the equipment must imperatively cease if any of the following elements barrel, handle, electro-pneumatic connector, air cap or air cap ring is damaged.

#### 2.4. Maintenance rules

- Regularly maintain and repair the electrostatic projection equipment according to the instructions contained in this user's manual.
- Only use metal containers to hold the cleaning liquids and connect to ground according to a safe procedure.
- Before any maintenance procedure:
  - 1 Turn off the control module.
  - 2 Verify that the air and paint circuits are no longer pressurised.
  - 3 Bleed the paint circuit.
  - 4 All energy sources must be locked out.
- Clean the gun either in their dedicated spots with mechanical ventilation or by using cleaning liquids with a flash point at least 15°C higher than ambient temperature.
- Opt to use non-flammable cleaning products.
- Do not restore electrical power supply as long as the air cap and nozzle have not been correctly remounted onto the gun.
- Never soak or immerse the gun in the solvent. The operator is able, as needed, to use a cloth soaking in solvent in order to clean the gun and then immediately dry it to avoid solvent from entering the gun.



ARNING: Never spray solvent when the control module is turned on and/or when the switch placed at the back of the gun is in the "I" position.



VARNING: Shutting off the compressed air supply line does not prohibit triggering high voltage should the trigger be activated.

 The operator must have been trained by a SAMES KREMLIN company or else by the Distributors it has certified for this purpose, in order to carry out the Nanogun Airmix<sup>®</sup> gun maintenance operations.



ARNING: It is strictly prohibited to use solvents derived from halogenated hydrocarbons as well as products containing these solvents in the presence of aluminium or zinc. Failure to comply with these guidelines exposes the user to the risks of explosion.

### 2.4.1. Products used

Given the diversity of products used and the impossibility to inventory the characteristics of these products, SAMES KREMLIN cannot be held liable for:

- for any incompatibility in the materials of products used whenever they come into contact with the materials listed below:
  - · Stainless steel
  - Fluoro-Ethylene-Propylene (FEP)
  - Polyamide Imide (PAI)
  - Polyoxymethylene (POM)
  - Tungsten carbide and tungsten
  - PTFE elastomer
  - Polypropylene
  - IXEF
  - Glass fibre
  - Ceramic
  - Aluminium
  - Titanium
  - PEEK
  - PEHD and PEBD
  - · Chemically inert rubber
- Risks related to the use of these products on both personnel and the environment.
- Wear, misalignment, equipment or machine malfunction as well as subpar quality of the application caused by use of these products.

### 3. Description of spray gun and GNM 6080 control module

The **Nanogun Airmix**<sup>®</sup> guns are intended to spray paint or varnish, whose resistivity exceeds 0.5  $M\Omega$ .cm, to the exclusion of all other paints.

The LR configurations may also spray water-soluble paints or varnishes provided they have been fitted with the appropriate product feeding systems. The use of any other type of paint is excluded.

The Nanogun Airmix<sup>®</sup> guns will be connected to the GNM 6080 control module.

The versions of the **Nanogun Airmix**<sup>®</sup> line are distinct by the base, the paint hose and the allowable product pressure.

	Characteristics
Nanogun Airmix <sup>®</sup> 120 7.5	Flat spray - 120 bar hose 7.5 m
Nanogun Airmix <sup>®</sup> 120 15	Flat spray - 120 bar hose 15 m
Nanogun Airmix <sup>®</sup> 120 30	Flat spray - 120 bar hose 30 m
Nanogun Airmix <sup>®</sup> 200 7.5	Flat spray - 200 bar hose 7.5 m
Nanogun Airmix <sup>®</sup> 200 15	Flat spray - 200 bar hose 15 m
Nanogun Airmix <sup>®</sup> 200 30	Flat spray - 200 bar hose 30 m

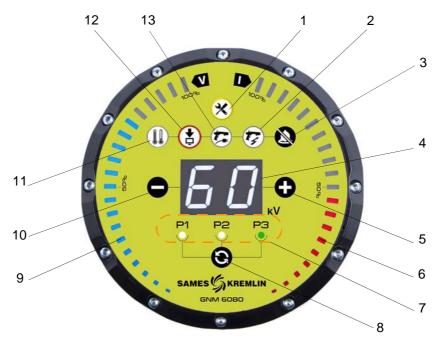
### 3.1. Functions available based on this gun



- The switch (Rep. 1) allows turning on or off the high voltage supply. When this switch is placed in position "I", activating the trigger turns on the high voltage. When this switch is placed in position "0", activating the trigger does not turn on the high voltage.
- The detented knob in back of the gun (Rep. 2) must always be held in place (clockwise); it does not influence the paint flow rate.
- The side detented knob (Rep. 3) serves to adjust the spray dimension. Its action will become even weaker as product pressure rises.

### 3.2. GNM 6080 control module

The **GNM 6080** control module serves to display the use parameters along with their settings.



Front side of the GNM 6080 control module

1	Maintenance indicator light
2	High voltage default indicator light
3	Acknowledgement of defaults
4	Display of the voltage set point
5	Increase of the voltage set point
6	Bar graph of current consumption
7	Active, preset memory indicator lights
8	Selection of the active memory
9	Voltage bar graph
10	Decrease in the voltage set point
11	Temperature default indicator light
12	Generator default indicator light
13	Low-voltage cable default indicator light



**Temperature default:** The temperature default forces the indicator lights (Rep. 11 and 12). Once the temperature drops below the minimum, the temperature indicator light (Rep. 11) shuts off, and the operator has the option of deleting the default by pressing the "Default Acknowledgement" button (Rep. 3).



**Generator default:** This default combines all internal generator defaults. If it is impossible to acknowledge this default, the problem would require a service call by the repairs department, please contact SAMES KREMLIN.



**Low-voltage connection default**: The generator fails to detect or no longer detects the presence of the gun. After shutting off the power supply, verify the gun/generator connection.



**High-voltage default:** Defaults specific to gun operations related to the high voltage:

- Generator service start-up with the trigger activated.
- Demand for a abrupt current surge during high-voltage operations.
- Defective operations of the high-voltage cascade.



**Maintenance indicator light:** This indicator light turns on (orange) once the trigger has been pulled 800,000 times or after 1,000 hours of gun operations (see § 10.1 page 26).

This indicator light in the on position notifies that the gun is in need of a maintenance visit. No specific maintenance on the GNM 6080 module.

The generator is capable of managing up to 20 different guns.



Side face of the GNM 6080 control module

12	Gun cable connector
13	Connector for external cabling
14	On/off switch
15	Power supply
16	Ground connector
17	Pressure balancing membrane
18	Diagnostic outlet (mini USB type)

### 4. Technical characteristics

### 4.1. General characteristics of the guns

	120	200
Type of spray	Flat	
Original nozzle assembled	09	
Maximum incoming paint pressure	120 bar	200 bar
Incoming compressed air pressure	6 bar :	± 1 bar
Min/max ambient temperature	0°C -	40°C
Maximum water flow rate	See tab	le below
Spray width at 25 cm	See tab	le below
Air flow rate, in Nm <sup>3</sup> /h	10.3	- 25.2
Acoustic pressure	90 d	IB(A)
AFNOR Cup No. 4 suggested paint viscosity	20 s to	120 s
Space requirements	305 x 2	220 x 52
Mass (without either the hose or the cable)	59	5 g
Output voltage	60 kV maximum [+0 kV; -1.5 k	kV] (adjustable on GNM 6080)
Output current	- 80 μA m	naximum
Output current in a short-circuit	< 20	Αμ Ο
Input voltage of the high-voltage cascade	45 V AC	maximum
Input current of the high-voltage cascade	300 mA ı	maximum
Air coupling	1/4 N	PS - F
Paint coupling	1/2 J	IC - F
Paint resistivity ρ	•	Version QD (high resistivity)
. a , p	-	MΩ.cm (low resistivity)
Electrical functions available on the gun		On / Off switch
Electrical / pneumatic connector	MUST NEVER BE DISCONI ATMOS	secured by means of two screws.  NECTED IN AN EXPLOSIVE  SPHERE
Maximum operating altitude	2,00	00 m
Maximum relative humidity of 80% for		
temperatures of up to 31°C, then linear	Maximum of 80% w	vithout condensation
decrease until 50% relative humidity at 40°C		
Surface temperature	T6	
Protection index	IP 20	
Transport / Storage		
Time spent in storage	Max. 2 years	
Min/max storage temperature	-10°C + 45°C	
Humidity	95% without condensation	
Min. pressure	750 mbar	
Exposure to UV rays	Stored out of direct light	
Exposure to ionising radiation		ccepted

Flow rate (in cc/min)			Width, in	
Gauge	at 70 bar	at 120 bar	at 200 bar	cm
03-05	150	200	260	12
03-07	150	200	260	17
04-05	220	290	380	12
04-07	220	290	380	17
04-09	220	290	380	21
04-11	220	290	380	25
04-13	220	290	380	29
06-09	330	430	570	21
06-11	330	430	570	25
06-13	330	430	570	29
06-15	330	430	570	33
09-09	450	590	770	21
09-11	450	590	770	25
09-13	450	590	770	29
09-15	450	590	770	33
12-11	600	790	1030	25
12-13	600	790	1030	29
12-15	600	790	1030	33
14-09	720	940	1230	21
14-11	720	940	1230	25
14-13	720	940	1230	29
14-15	720	940	1230	33
14-17	720	940	1230	37



WARNING: The flow rate measurements were conducted with water.

The width of the impact is measured at a distance of 25 cm (10 inches).

### 4.2. Characteristics of the GNM 6080

Category II installation (in accordance with Standard EN 61010-1).

General	
Mass	1.7 kg
Space requirements	Diameter: 168 mm
space requirements	Height: 91 mm
Operating temperature	0 - 40°C
GNM 6080 input	
Voltage	88 - 264 V AC
Frequency	50 - 60 Hz
Maximum current	0.25 A
Maximum power	25 V.A
GNM 6080 output	
Voltage	40 V RMS
Current	200 mA RMS



WARNING: The GNM 6080 automatically adapts to the power supply voltage.

### 4.3. Characteristics of the compressed air

Required characteristics of the compressed air supply according to Standard NF ISO 8573-1

Characteristics	Value
Maximum dew point at 6 bar (87 psi)	Category 4, i.e. +3°C (37° F)
Maximum particle size distribution of the solid pollutants	Category 3, i.e. 5 mm
Maximum oil concentration	Category 1, i.e. 0.01mg / m <sub>0</sub> <sup>3</sup> *
Maximum concentration of solid pollutants	5 mg / m <sub>0</sub> <sup>3</sup> *

(\*): The values are given for a temperature of 20°C (68°F) at atmospheric pressure.

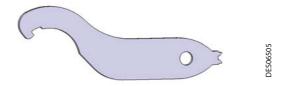
### 5. Operations

Pressing the trigger serves to delay the order to open the air valve, then activation of the high voltage, and lastly the paint nozzle needle. The high-voltage order may be inhibited by shifting the gun switch.

The **Nanogun Airmix** gun is equipped with a magnetic sensor that detects the trigger position. This sensor serves to activate the high-voltage power supply once the air valve returns to a value lying between 1 and 1.8 mm.

- The button located in back of the gun does not serve to adjust the paint flow rate; nonetheless, it is possible to adjust it by modifying the nozzle gauge and/or the incoming product pressure.
- The side button serves to adjust the jet dimension within a range that narrows as the product pressure increases.
  - Clamped screw: large impact.
  - Loosened screw: reduced impact.
- In order to modify the jet dimension, it is necessary to change the nozzle.

### 6. Specific tooling



Part Number	Designation	Qty	Sales unit
900012843	Multipurpose wrench	1	1



Part Number	Designation	Qty	Sales unit
H1GMIN017	White Vaseline (100 ml)	1	1
H1GSYN037	Dielectric grease for the high-voltage cascade and nozzle needle channel (100 ml)	1	1



Part Number	Designation	Qty	Sales unit
900010160	Cartridge and air valve assembly tool	1	1



Part Number	Designation	Qty	Sales unit
240000301	Seal extractor tool	1	1



Part Number	Designation	Qty	Sales unit
129400923	Air cap cleaning brush	1	10



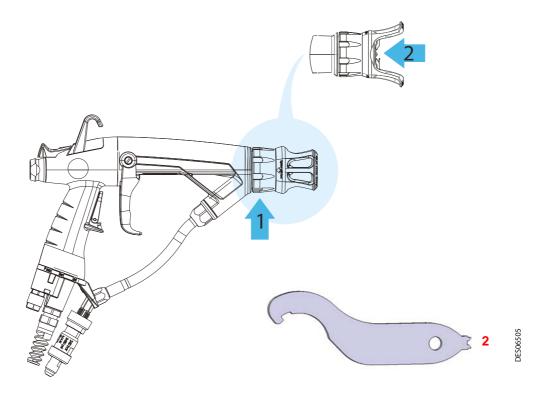
Part Number	Designation	Qty	Sales unit
000094000	Unplugging needles for gauges 04 through 09	1	1 box (12)
000094002	Unplugging needles for gauges above 09	1	1 box (12)

### Other necessary tools and accessories:

It is recommended to possess the tools listed below to install and maintain the product.

- Flat-head screwdriver (2.5 x 75; 4 x 100, 5, 5 x 100)
- Crosspoint screwdriver(0 x 75; 2 x 125)
- Allen wrenches (3 6 mm)
- Torque wrench 1 to 5 Nm (R.304DA Facom) (Ref. SAMES KREMLIN: 240000095)
- Flat wrenches (5 5.5 15 17 18 21 24 27)
- Pipe wrench (4 13)
- Flat pliers
- Cutting pliers.

### 6.1. Use of the multipurpose wrench



1 : Clamping of the air cap ring.2 : Extraction of the head nozzle.

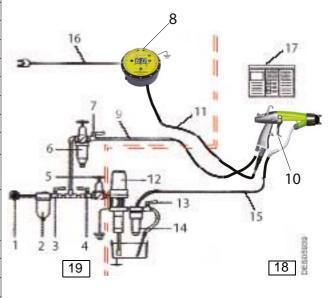
### 7. Installation



WARNING: Before proceeding with any operation, please refer to the installation rules (see § 2.2 page 7).

With a piston pump for all versions

1	Overall air supply
2	Air cleaner
3	Primary air valve
4	Pump air shut-off valve
5	Pump air expansion valve
6	Spray air cleaner / expansion valve
7	Spray air valve
8	GNM 6080 control module
9	Gun air intake hose
10	Nanogun Airmix <sup>®</sup> gun
11	Low-voltage electrical power supply cable
12	Pump compliant with the ATEX Directive for explosive atmos-
	pheres
13	Dump valve
14	Product filter
15	Product supply hose
16	Power supply cable (220 V + ground) or (115 V + ground)
17	Warning sign
18	Explosive zone
19	Non-explosive zone



7115

The paint supply must be installed within a ventilated zone.

The paint tank as well as the pump must absolutely be grounded.

The dump hose end must be immersed in the paint.



WARNING: The paint supply pump:

- must feature a maximum ratio of 19:1 for the 120-bar version and of 30:1 for the 200-bar version;
- and the pump's air inflow must be equipped with a safety relief valve to limit pressure to a maximum value of 6.5 bar.

### 8. Use

### 8.1. Recommendations regarding the paint to use

Generally speaking, all paints and varnishes used with the conventional pneumatic guns are typically used with the Nanogun Airmix $^{\text{\tiny B}}$  gun as well. The dyes contained in the paint must be less than 5 mm.

### 8.1.1. Viscosity

The best results are obtained with a viscosity that extends from 25 to 90 seconds, as measured with the AFNOR Cup no. 4. Nonetheless, some paints with a lower or higher viscosity (e.g. 120 seconds or more) may be projected as well.

### 8.1.2. Resistivity

Use a paint whose resistivity is adapted to the Nanogun Airmix gun version that you own. The optimal resistivity range lies between 0.5 and 500 M $\Omega$ .cm. Weak resistivity yields a good electrostatic covering, yet may cause returns on the operator in the event of insufficient booth ventilation.

A much weaker resistivity level (e.g. 0.1 M $\Omega$ .cm) will short-circuit the high-voltage cascade and, consequently, remove all electrostatic covering. A high resistivity (e.g. 1000 M $\Omega$ .cm), will greatly reduce the electrostatic covering. The SAMES KREMLIN resistance meter "AP 1000" provides for easy control of paint resistivity.

### 8.1.3. Flash point

Only use paints whose flash point is at least 15°C higher than room temperature.

### 8.2. Spraying rules

Regardless of the type of nozzle, the quality of spraying depends on both the supply pressure and the product viscosity: as viscosity increases, pressure must also rise, yet the final outcome is also influenced by the product's proportions of heavy solvent / light solvent.

### A few key points:

- Viscosity: 40 sec CA4: minimum product pressure of 70 bar.
- Viscosity: 60 sec CA4: minimum product pressure of 90 bar.
- Viscosity: 90 sec CA4: minimum product pressure of 130 bar.

The addition of more air serves to reduce the impact width by 25% at a 120-bar pressure; moreover, the higher the product pressure, the smaller the influence being exerted by the additional air. In order to limit the production of overspray, it is recommended to never exceed an air pressure of 4 bar.

Using the nozzles with small impact width (XX-09 or 11), whenever the additional air is open, the jet is practically round.

Table of impact widths in water at a gun/part distance of 25 cm (closed to any additional air).

Nozzles	Impact width	
03-05	12 cm	
04-05	12 0111	
03-07		
04-07	17 cm	
04-09		
06-09		
09-09	21 cm	
12-09		
14-09		
04-11		
06-11		
09-11	25 cm	
12-11	20 0111	
14-11		
17 11		
04-13		
06-13		
09-13	29 cm	
12-13		
14-13		
06-15		
09-15		
12-15	- 33 cm	
14-15		
17-10		
14-17	37 cm	

### 9. Examples of poor equipment use

The non-exhaustive list below indicates the primary cases of poor paint spraying equipment use.



WARNING: SAMES KREMLIN would like to recall therefore that it is essential to comply with the prescriptions listed below.

It is prohibited to install the control module in an explosive atmosphere.

**It is prohibited** to perform excessive and repeated traction on the paint and air hose or on the electrical cable connecting the gun.

It is prohibited to disconnect the gun's electrical coupling in an explosive atmosphere.

**It is prohibited** to leave the hoses and electrical cable in a space where vehicles circulate, preventing the risk of them being crushed or severed.

It is prohibited to spray a liquid other than paint or varnish using the Nanogun Airmix model.

It is prohibited to leave the gun or subject it to mechanical shocks.

It is prohibited to leave the gun on the floor.

It is prohibited to use the gun in order to handle or displace the parts to be painted.

It is prohibited to let the gun soak in a solvent or spray it with solvent.

**It is prohibited** to spray solvent without first having turned off the control module and/or shut down the high voltage at the level of the gun.

It is essential to connect the control module ground terminal to the paint insulation ground terminal.

It is essential to clamp both safety screws on the electrical coupling.

### 10. Maintenance

**10.1. Summary table of preventive maintenance**To be carried out when the maintenance indicator light on the GNM 6080 turns on.

Subassembly	Designation	Reference	Qty	Minimum replacement period
	O-ring - chemically inert	J3STKL046	1	3 months
Seat casing	3		·	
	O-ring - chemically inert	J3STKL075	1	3 months
	Flat seal	900014821	1	6 months
Adapter	O-ring - FEP Viton	J2FENV288	1	12 months
	o mig 12. Then	3212111200		12 111011113
	Seal cartridge	910015881	1	6 months or 500,000 handling operations(*)
D 1	O-ring (Seal cartridge)	J3STKL005	1	3 months
Barrel	O-ring - chemically inert	J3STKL014	1	6 months
	O-ring - FEP Viton	J2FENV435	1	12 months
	O-ring - chemically inert	J3STKL078	2	12 months
	O-ring - chemically inert	J3STKL032	1	12 months
	O-ring - chemically inert	J3STKL019	1	12 months
Handle	O-ring (electrical connector)	160000041	1	12 months
	O-ring (handle base)	160000067	1	12 months
	O ring (air pipple) J2FTCF018	1	12 months	
	O-ring (air nipple)	J3STKL018	1	12 months
Air valve	O-ring - chemically inert (exterior valve)	J3STKL005	1	12 months
	O-ring - chemically inert (interior valve)	J3STKL032	1	12 months
	Sealing ring	900010256	1	12 months
Nozzle	Sieve or flat seal depending on the gauge	129609901 or 900012793	1	When chang- ing the nozzle or every month
Air cap ring	O-ring - FEP Viton	160000170	1	12 months



WARNING: (\*) Once either of these two time periods has elapsed.

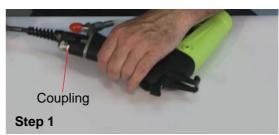


WARNING: Prior to any maintenance operation carried out on the gun, please refer to the health and safety instructions (see § 2 page 7):

- Disconnect the control module.
- Check that the air and paint circuits are no longer pressurised.
- Dump the paint circuit.

### 10.2. Electro-pneumatic coupling

 Step 1: Unscrew the 7/10 air hose coupling nut using a 16 flat wrench (not mandatory for Step 3)



• **Step 2**: Disassemble the low-voltage cable using a 3 Allen wrench, unscrew the two captive screws of the electro-pneumatic coupling.



• **Step 3**: Disconnect the electro-pneumatic coupling by pulling on it.



### 10.3. Paint hoses

It is not necessary to remove the electro-pneumatic coupling (see § 10.2 page 27) to complete these operations.

10.3.1. Paint hose - Version QD (HR)

• **Step 1**: On the handle side, unscrew the coupling using a 15 flat wrench.



• Step 2: Remove the paint hose from the base.



• Step 3: Using a 21 flat wrench, unscrew the upper nut on the paint hose, and then finish the unscrewing manually while holding the lower nut.



• Step 4: Verify the presence of the O-ring on the paint nut. Verify the presence of this O-ring (P/N # J3STKL028) and the anti-extrusion ring (P/N # 910013398) on the paint hose. In the event both the O-ring and ring need to be removed, they must be replaced by new ones.

For the reassembly step, proceed in the reverse order. Screw the upper nut on the paint hose until reaching its stop point.

• **Step 1**: Unscrew the locknut of the stuffing box using a 27 flat wrench, remove the stuffing box from the bracket.



• **Step 2**: With a 21 flat wrench, unscrew the upper nut on the paint hose. Unscrew the nut while turning the hose.



**For the reassembly step**, screw the upper nut on the paint hose until reaching its stop point. Position the locknut of the stuffing box below the bracket, with the stuffing box above in the hexagonal imprint. Clamp the locknut of the stuffing box onto the bracket.

### 10.4. Spraying head assembly

• Step 1: With the multipurpose wrench (P/N # 900012843), unscrew the air cap ring.



 Step 2: Extract the head nozzle using the multipurpose wrench.
 Do not use your fingers.



If necessary, replace the head seal.



For the reassembly step, proceed in the reverse order.

### 10.5. Replacement of the electrode located in the air cap

### Disassembly:

• Step 1: Pull out the conductive PTFE washer. Using one of the two housings on the back of the air cap, insert the screwdriver blade under the washer (do not use the housing where the centering pin is located). Make a slight turning motion with the screwdriver and proceed in the same manner with the second housing. Remove the washer by hand.



The rear part of the electrode is visible.



• **Step 2**: Straighten the electrode vertically with the flat pliers.



• **Step 3**: Push the electrode toward the back of the air cap.

When the electrode is sufficiently pulled out, remove it from the back with the flat pliers.



 Step 4: With the flat pliers, remove the small PTFE tube surrounding the electrode.
 Check that no residue remains in the electrode housing. If necessary pass by hand, a drill or a 1 mm metal rod into the hole.



### Reassembly:

The repair kit includes an electrode equipped with its small PTFE tube.

 Step 1: If necessary, clean the electrode manually and with precaution with a drill or metal rod of 1mm diameter

• Step 2: Insert the electrode equipped with the PTFE tube. As soon as it appears on the other side of the air cap, pull it with fingers. Then push it to the bottom of the housing with the screwdriver, the return strand of the electrode must fit into a small bore, only the rear part of the electrode must flush with the bottom of the counterbore.



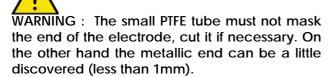
• **Step 3**: Clip the PTFE conductive washer. Replace it if necessary. It is advised not to reuse it more of 3 or 4 times, the washer should not be able to be removed without the use of a tool.



• Step 4: Check the continuity between the conductive PTFE washer and the metal end of the electrode. The usually measured value is of the order of 200 to 300  $\Omega$  but a value up to 1000  $\Omega$  is admissible.



• **Step 5**: Fold the electrode with the flat pliers and cut to about 5 mm.





WARNING: The electrode must not be in contact with the injector when the air cap is mounted on the gun.

• **Step 1**: Unscrew the seat casing using a 13-mm pipe wrench.

Then remove it.

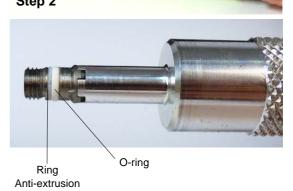
Should the O-rings and anti-extrusion rings located in front and back of the nozzle require replacement, remove them using a screwdriver, position the new rings and new seals in place while double checking their correct location and after coating them first with Vaseline.



• Step 2: Seal cartridge: Unscrew the cartridge using the tool (P/N # 900010160).

Should the ring and external seal require replacement, remove them using a screw-driver, position the new ring and new seal in place while double checking their correct location.

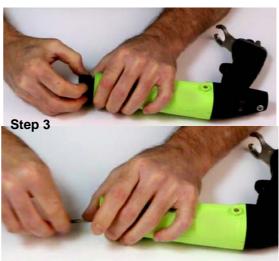
**Note**: The lip seals located inside the cartridge cannot be changed.





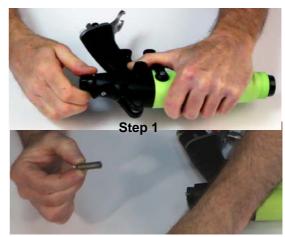


WARNING: Be careful not to damage the resistance during its extraction.



### 10.7. Paint nozzle needle

• **Step 1**: Unscrew the paint nozzle needle in back of the gun, recover the spring.



• Step 2: Press on the trigger and pull it manually towards the back of the paint nozzle needle.



7115

WARNING: After every 4 or 5 reassemblies, add some dielectric grease (P/N # H1GSYN037) within the open channel in the barrel.

### 10.8. Switch

• **Step 1:** With a 5.5-mm screwdriver, unscrew the washer head screw. Pull the switch lever upward.



• Step 2: Replace the O-ring (see § 13.2 page 55). Insert the new switch into its housing. Coat the retaining screw with LOCTITE low strength thread lock and then clamp the screw so that the switch shows slight resistance.



### 10.9. Trigger

 Step 1: Using a screwdriver, unscrew the two washer head screws and remove both sides of the trigger.



### Reassembly of the trigger:

• Insert one of the trigger sides onto its shoulder and then slide the other side into its housing.

#### 10.10. Air valve

• Step 1: Disassemble the paint nozzle needle (see § 10.7 page 35).

• **Step 2**: Unscrew the air valve stop nut using an 18 flat wrench.



Point the gun barrel upwards and recover the spring and air valve. Should the parts not fall, tap in the palm of your hand



or use the paint nozzle needle to withdraw the air valve.



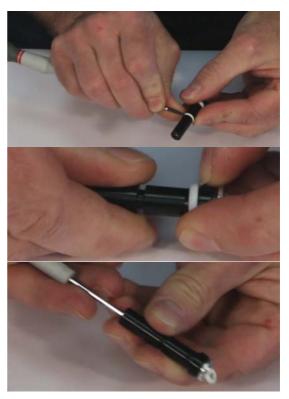
#### 10.10.1. Repairing the air valve

Three levels of maintenance are indeed possible:

- Level 1: Standard level of maintenance since the air valve body is not subject to any friction or wear.
- Level 2: Corrective level, to be performed in case the valve body has deteriorated.
- Level 3: Exceptional level, to only be performed in case the magnet gets lost or broken.

**Level 1: Replacement of the three o-rings** (P/N # J3STKL032 inner ring, J3STKL005 outer ring and 900010256 conical seal).

- For all three seals, extract the former one in taking care not to damage the air valve body (they may however be destroyed).
- The conical seal must be pushed down into its locking mechanism on the valve body in being sure not to alter its conic range.



Level 2: If the air valve body (black part) has damaged.

 Manually extract or insert an M4 screw into the aluminium ring (activating the locking mechanism), pull along the axis of the part, remove the magnet in paying attention to identify its direction (silver-plated / black sides).



• Raise the magnet in the right direction (see § 10.10.1.1 page 39) and lock the ring into the valve body by pushing firmly with your finger.

Once the gun has been completely reassembled, inspect the high-voltage activation and shutdown. If the high-voltage is permanently activated or does not turn off: verify the magnet direction.

#### Level 3: If the magnet is broken or lost.

• Replace the complete air valve (P/N # 910015405) (see § 10.10 page 37). Before using the gun, inspect the high-voltage on and off switches.

If the high-voltage is permanently activated, disassemble the handle and remove one of the washers that serve to adjust the reed sensor position; proceed step by step without removing multiple washers at a time.

If the high-voltage does not activate, don't disassemble the handle and instead add a washer to adjust the reed sensor position; proceed step-by-step without adding multiple washers at the same time.



WARNING: Various washer thicknesses may be installed, always begin by adding or removing the thinnest.

#### 10.10.1.1. Magnet assembly direction

- Case no. 1: For guns of type 1 (see serial no.). Back stop without a marking, the sliver-plated side of the magnet must make contact with the shoulder of the back stop.
- Case No. 2: For guns of type 2 (see serial no.). Back stop with markings, the black side of the magnet must make contact with the shoulder of the back stop.



## 10.11. Fastening hook



 Place the switch in the "I" position. Using a 5.5-mm screwdriver, unscrew the washer head screw and remove the hook by pulling upward.



#### 10.12. High-voltage cascade

- Step 1: Remove the trigger see § 10.9 page 36, and remove the paint nozzle needle.
- **Step 2**: Unscrew the 4 screws using a 2-mm crosspoint screwdriver while holding the barrel on the handle.

Note: Each time a screw is disassembled, replace the fibre washers as well (P/N # J4BRND039).



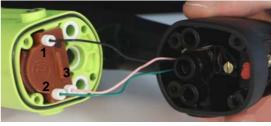
• **Step 3:** Manually unscrew or by using a small flat pliers the three cascade connection wires, then carefully pull the contacts towards the back.



• **Step 4**: Unscrew the high-voltage contact in front of the barrel with a flat screwdriver. Extract the cascade.







## For the reassembly step, proceed in the reverse order.

Replace the high-voltage cascade. Coat the cascade with some dielectric grease (P/N # H1GSYN037) and then place it in its housing.

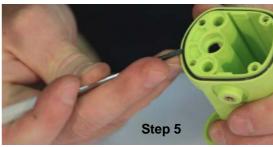
Push the cascade until its stop in the barrel. Connect the three wires and clamp all three. Verify the condition of the O-rings, replace them as needed.

#### 10.13. Barrel

- Step 1: Remove the trigger see § 10.9 page 36, and the paint nozzle needle.
- Step 2: Unscrew the four screws used to fasten the barrel onto the handle.
- **Step 3**: Manually unscrew or by using a small flat pliers the three cascade connection wires, then carefully pull the contacts towards the back.
- Step 4: Replacement of the O-rings of both air channels and the air valve (step 3: not required): Remove and replace the three Orings.



Step 5: Replacement of the barrel/handle orings (step 3: mandatory): Remove and replace the O-ring.
 This joint is to be replaced every year.



 Step 6: Replacement of a o-ring in back of the nozzle needle: Remove and replace the O-ring.



WARNING: Coat the O-rings with a fine layer of Vaseline before setting them into place.

For the reassembly step, proceed in the reverse order.

#### 10.14. Handle

- Step 1: Separate the barrel from the handle.
- Step 2: Gun handle base
   Unscrew the air nipple using a 16 Allen wrench. Replace the seals every 12 months.



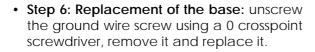
• **Step 3**: Unscrew the two screws (K35 x 14) with a 2 crosspoint screwdriver. Upon each screw removal, replace the fibre washers.



• **Step 4:** Raise the base in order to gain access to the handle base seal. Replace this seal every 12 months.



- **Step 5**: Remove the electrical connector by pushing it to a point where the base exits.
  - Replace the connector joint every 12 months.





For the reassembly step, proceed in the reverse order. Replace the pin of the connector in the base polarising slot and re-screw the ground connection.

Coat the air nipple seals with dielectric grease.

Clamp the air nipple with 1.5 N.m of torque. Clamp the two screws ( $K35 \times 14$ ) with a 1.3 N.m tightening torque.

#### 10.15. Electrical diagrams

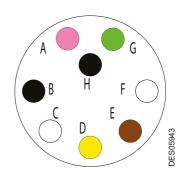
# 10.15.1. GNM 6080 / Nanogun Airmix® connection cable

#### **Output on the Nanogun Airmix<sup>®</sup> side** Output on the GNM 6080 side Yellow C Yellow Brown Brown D Ε White White Ε C Α В F Pink Pink В Green Green F G Black Black G

10.15.2. GNM 6080 trigger cable

#### Output on the GNM 6080 side

Α	Pink	Primary transformer HVU 3
В	Shield	Shield
С	White	REED sensor (trigger)
D	Yellow	Dallas chip
Е	Brown	0 V joint chip / reed
F		Third-party shield
G	Green	Primary transformer HVU 2
Н	Black	Return IHV 1



(\*)
Switch open: Nanogun Airmix® trigger released
Switch closed: Nanogun Airmix® trigger activated.

Characteristics of the dry contact: 0.5 A max / 24 V AC/DC max.

#### 11. Cleaning

Prior to any maintenance operation carried out on the gun, please refer to the health and safety instructions (see § 2 page 7).

#### 11.1. Cleaning of the product circuit

- Unplug the **GNM 6080** control module.
- Install a bucket of solvent instead of a barrel of paint.
- Open the recirculation valve in order to clean the pump.
- Close the recirculation valve and press the trigger until clean solvent exits the gun nozzle.

#### 11.2. Cleaning of the gun

The gun must be cleaned immediately after use and at the end of the day. In order to proceed with the cleaning steps, follow the instructions listed below:



WARNING: It is strictly prohibited to immerse the Nanogun Airmix® gun into the solvent



WARNING: Use an appropriate solvent: not greasy, with high resistivity and non-chlorinated.

- Step 1: Unplug the GNM 6080 control module.
- Step 2: Depressurise the gun's air circuit.
- Step 3: Drain the gun's paint circuit and rinse it using an appropriate solvent (see § 2.4 page 10).
- Step 4: Depressurise the gun's paint circuit.
- **Step 5**: Dry the gun head using a dry soft cloth that remains intact.
- Step 6: Unscrew the gun's air cap ring, remove the gun air cap (see § 10.4 page 30).
- Step 7: Clean the air cap with a wet brush of solvent and dry the air cap.
- Step 8: Raise the air cap and its ring.
- Step 9: Carefully dry the gun with compressed air (head placed downward) before turning the GNM 6080 control module back on.



RNING: Never disassemble the nozzle needle line whenever the paint hose still contains either paint or solvent.



WARNING: During cleaning of the nozzle, aim the spray gun nozzle towards the floor in order to prevent solvent or paint from flowing into the barrel ducts.



WARNING: After each cleaning cycle, dry using compressed air the supply hose and ducts in order to eliminate all traces of solvent.

#### 11.3. Elimination of wastes

The removal, transport and elimination of wastes generated by use of the equipment (used solvent, unused paint, residue, dirty cloths, booth sludge, water from curtains applied in the booth, used dry filters, ventilation air, etc.) must take place in strict compliance with current local regulations.

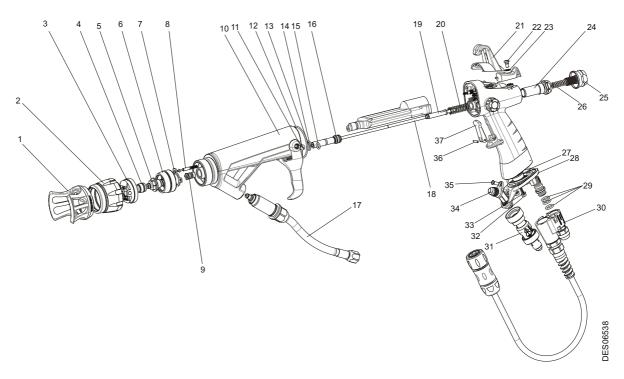
## 11.4. Dismantling and Recycling

## 11.4.1. Nanogun Airmix®



WARNING: All parts may be contaminated by paint and/or solvent residue.

Before proceeding to dismantle the equipment, clean the gun and more specifically the inside of the paint hoses with an appropriate cleaning product and dry them with compressed air.

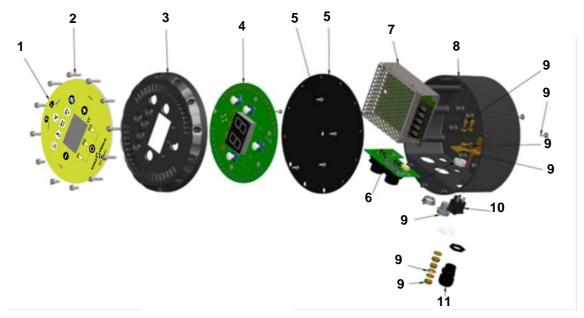


Rep.	Material
1	Polypropylene not containing with glass fibre
2, 6*	POM C, PTFE, chemically inert rubber
3	Plastic material containing glass fibre, PTFE, stainless steel
4	PEEK, tungsten carbide, PTFE, stainless steel
5*	PEEK, chemically inert rubber, stainless steel
7*	PTFE
8*	Brass, agglomerated carbon
9*	Stainless steel, chemically inert rubber, PTFE
10*,11	Plastic material containing fibre, PEEK
23, 12, 13, 14, 15	Chemically inert rubber
16	Loaded PEEK, chemically inert rubber, PTFE
17*	Stainless steel, PTFE, polyurethane, aramid, PEEK, chemically inert rubber
18*	Plastic material, copper, steel, ceramic, ROH electronic components,
19*	Tungsten, PEEK, stainless steel, aluminium

20*, 26*, 22, 31, 32, 34, 35, 36	Stainless steel
21	Plastic material containing fibre
24*	Plastic material, chemically inert rubber
25*, 28	Aluminium
27, 29	Rubber
30	Plastic material containing fibre, copper, stainless steel
33	Fibre joint
37	Polyamide not loaded
Not represented	Air hose: PU
Not represented	Product hose: PTFE - aramid - PU Couplings: Zinc-plated steel or stainless steel Cable gland: plastic material containing fibres

 $<sup>^*\, \</sup>text{These parts (5, 6, 7, 8, 9, 10, 11, 17, 18, 19, 20, 24, 25, 26) may be fouled due to dielectric grease.}$ 

# 11.4.2. GNM 6080



Rep.	Designation	Material
1	Keyboard / front side*	Plastic material
2	Fastening screws front side	Steel
3	Primary card support and front side	Aluminium
4	Primary card	Electrical and electronic components, ROH printed circuit
5	Bottom sheet metal and fastening screws	Steel
6	Connector card	Electrical and electronic components, ROH printed circuit
7	Electrical power supply	Electrical and electronic components, ROH printed circuit
8	Box	Aluminium
9	Fastening accessories	Steel and brass
10	Electrical switch	ROH electrical component
11	Cable gland	Plastic material
	Not s	hown
12	Power supply cable	Plastic material and copper

<sup>\*</sup> Reminder: This part may become fouled by paint residue.

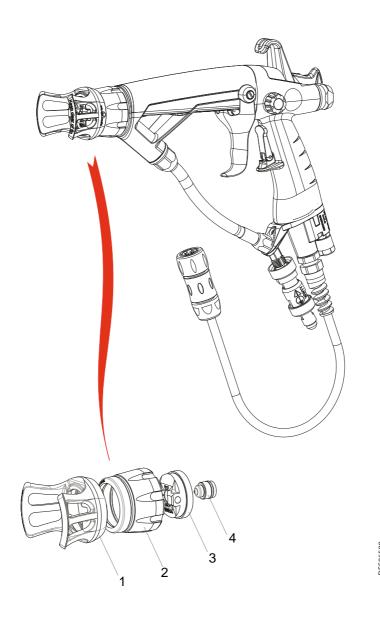
# 12. Common malfunctions and repairs

Defaults	Possible Causes	Remedies		
	Presence of air in the paint circuit	Dump the paint circuit		
	Paint flow rate too slow	Increase pressure at the pump or pressurised tank.		
Uneven paint flow	Impurities in the circuit	Verify the filters, then dump the circuit.		
	Lack of paint in the paint tank	Refill paint tank		
	Paint too viscous	Verify the paint viscosity		
	Nozzle clogged	Clean the nozzle		
The paint is not flow-	The nozzle needle does not retract	Verify the nozzle needle line		
ing or only barely	Clogged filters	Clean the filters		
flowing upon exiting	No pump pressure	Verify the pump		
the gun.	Paint too viscous	Verify the paint viscosity		
	Obstructed paint hose	Unclog or change the paint hose		
The paint is con-	Foreign body preventing the nozzle needle from closing.	Disassemble the seat casing, clean it along with the seat. Clean the nozzle needle tip		
stantly flowing.	Worn nozzle needle	Replace needle and, if necessary, the nozzle/tip holder		
	Damaged seat casing	Change the seat casing		
The paint exits by the	Damaged cartridge	Change the cartridge		
head air holes.	Damaged paint joint	Change the seal		
	Nozzle partially clogged	Clean the nozzle		
	Insufficient paint pressure	Increase the paint flow rate		
Door spray	Excessive viscosity	Dilute the paint		
Poor spray	Lack of air in the spray	Increase the air pressure		
	Excessive paint flow rate	Decrease the paint flow rate		
	Nozzle damaged or worn	Change the nozzle		
	Evaporation of solvents too fast	Use heavier solvents		
		Increase the spraying distance		
Orange peel effect		Dilute the paint		
Orange peer effect	Paint droplets too large	Increase the paint pressure		
		Reduce the nozzle size		
		Increase the electrostatic effect		

Defaults	Possible Causes	Remedies
	Evaporation of solvents too slow	Use more lightweight solvents
Running / dripping		Slow the paint flow rate
paint	Speed of application too slow	Decrease the electrostatic effect
	Excessive paint flow rate	Decrease the paint flow rate
Paint spray poorly	·	Increase the air pressure
distributed	Nozzle too thick	Use a smaller and thinner nozzle
	Viscosity of the paint excessive	Dilute the paint
	Air orifices partially blocked	Clean the spraying head
	Absence of high voltage	See indication on the control module
	Insufficient high voltage	Increase the high voltage
	Distance too great between	Control the Nanogun Airmix <sup>®</sup> output voltage
	spraying head and part	Spray at a distance lying between 200 and 300 mm
	Part not grounded	Clean the hooks. Verify the grounding of parts and the conveyor
Little algetreetetie	Excessive ventilation	Reduce the booth's suction flow rate, while respecting current regulations
Little electrostatic effect	Spraying pressure too high	Reduce the spraying pressure of the product and/or air
	Excessive paint flow rate	Reduce the paint flow rate
	Excessive product resistivity	Reduce the product resistivity so that $\rho$ < 500M $\Omega$ .cm
	Generator short-circuit:	Clean the gun exterior using a non-conductive solvent ( $\rho$ > 15 M $\Omega$ .cm)
	- by the exterior	Take a new cover, one that's clean and dry
	Generator short-circuit: - by the nozzle needle line	Change both the cartridge and the nozzle needle
	Generator short-circuit: - by the air channel	Clean the air channels in the barrel
	Generator short-circuit: - by the product hose	Verify product resistivity based on the gun model version
The operator has felt electrical discharges when touching the part.	Part not grounded or poorly grounded	Verify the ground connections. The user must wear gloves and conductive shoes, in accordance with Standards EN 61340-4-3 and ISO20344.

# 13. Spare parts

# 13.1. Nanogun Airmix<sup>®</sup> guns for both high resistivity (HR) and low resistivity (LR) solvent-based paints



7115

# For the various options: see § 13.12 page 65.

Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)	
	910021070	Nanogun Airmix <sup>®</sup> 120 bar HR JP with nozzle 09- 091	1	1	-	
	-	Nanogun Airmix <sup>®</sup> gun (see § 13.2 page 55)	-	-	-	
1	900013829	HP nozzle protection (included in Rep. 2)	1	1	3	
2	910019358	Air cap ring (see § 13.1.2 page 54)	1	1	1	
3	130001435	Air cap (see § 13.1.3 page 54)	1	1	3	
4	130001420	Nozzle (see § 13.1.1 page 53)	1	1	1	
	Not shown					
	050123306	Adapter M1/2 JIC - F3/8NPS paint hose	1	1	3	

Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)	
	910021071-075	Nanogun Airmix <sup>®</sup> 120 bars LR JP with nozzle 09- 091 and paint hose 7.5 m	1	1	-	
	-	Nanogun Airmix <sup>®</sup> gun (see § 13.2 page 55)	-	-	-	
1	900013829	HP nozzle protection (included in Rep. 2)	1	1	3	
2	910019358	Air cap ring (see § 13.1.2 page 54)	1	1	1	
3	130001435	Air cap (see § 13.1.3 page 54)	1	1	3	
4	130001420	Nozzle (see § 13.1.1 page 53)	1	1	1	
	Not shown					
	050123306	Adapter M1/2 JIC - F3/8NPS paint hose	1	1	3	

Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)	
	910021071-150	Nanogun Airmix <sup>®</sup> 120 bars LR JP with nozzle 09- 091 and paint hose 15 m	1	1		
	-	Nanogun Airmix <sup>®</sup> gun (see § 13.2 page 55)	-	-	-	
1	900013829	HP nozzle protection (included in Rep. 2)	1	1	3	
2	910019358	Air cap ring (see § 13.1.2 page 54)	1	1	1	
3	130001435	Air cap (see § 13.1.3 page 54)	1	1	3	
4	130001420	Nozzle (see § 13.1.1 page 53)	1	1	1	
	Not shown					
	050123306	Adapter M1/2 JIC - F3/8NPS paint hose	1	1	3	

Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)	
	910021071-300	Nanogun Airmix <sup>®</sup> 120 bars LR JP with nozzle 09- 091 and paint hose 30 m	1	1	-	
	-	Nanogun Airmix <sup>®</sup> gun (see § 13.2 page 55)	-	-	-	
1	900013829	HP nozzle protection (included in Rep. 2)	1	1	3	
2	910019358	Air cap ring (see § 13.1.2 page 54)	1	1	1	
3	130001435	Air cap (see § 13.1.3 page 54)	1	1	3	
4	130001420	Nozzle (see § 13.1.1 page 53)	1	1	1	
	Not shown					
	050123306	Adapter M1/2 JIC - F3/8NPS paint hose	1	1	3	

Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)	
	910021076	Nanogun Airmix <sup>®</sup> 200 bars HR JP with nozzle 09-091	1	1	-	
	-	Nanogun Airmix <sup>®</sup> gun (see § 13.2 page 55)	-	-	-	
1	900013829	HP nozzle protection (included in Rep. 2)	1	1	3	
2	910019358	Air cap ring (see § 13.1.2 page 54)	1	1	1	
3	130001435	Air cap (see § 13.1.3 page 54)	1	1	3	
4	130001420	Nozzle (see § 13.1.1 page 53)	1	1	1	
	Not shown					
	050123306	Adapter M1/2 JIC - F3/8NPS paint hose	1	1	3	

Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)	
	910021077-075	Nanogun Airmix <sup>®</sup> 200 bars LR JP with nozzle 09- 091 and paint hose 7.5 m	1	1	-	
	-	Nanogun Airmix® gun (see § 13.2 page 55)  HP nozzle protection (included in Rep. 2)	-	-	-	
1	900013829	HP nozzle protection (included in Rep. 2)	1	1	3	
2	910019358	Air cap ring (see § 13.1.2 page 54)	1	1	1	
3	130001435	Air cap (see § 13.1.3 page 54)	1	1	3	
4	130001420	Nozzle (see § 13.1.1 page 53)	1	1	1	
	Not shown					
	050123306	Adapter M1/2 JIC - F3/8NPS paint hose	1	1	3	

Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)		
	910021077-150	Nanogun Airmix <sup>®</sup> 200 bars LR JP with nozzle 09- 091 and paint hose 15 m	1	1	-		
	-	Nanogun Airmix <sup>®</sup> gun (see § 13.2 page 55)	-	-	-		
1	900013829	HP nozzle protection (included in Rep. 2)	1	1	3		
2	910019358	Air cap ring (see § 13.1.2 page 54)	1	1	1		
3	130001435	Air cap (see § 13.1.3 page 54)	1	1	3		
4	130001420	Nozzle (see § 13.1.1 page 53)	1	1	1		
	Not shown						
	050123306	Adapter M1/2 JIC - F3/8NPS paint hose	1	1	3		

Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	910021077-300	Nanogun Airmix <sup>®</sup> 200 bars LR JP with nozzle 09- 091 and paint hose 30 m	1	1	-
	-	Nanogun Airmix <sup>®</sup> gun (see § 13.2 page 55)	-	-	-
1	900013829	HP nozzle protection (included in Rep. 2)	1	1	3
2	910019358	Air cap ring (see § 13.1.2 page 54)	1	1	1
3	130001435	Air cap (see § 13.1.3 page 54)	1	1	3
4	130001420	Nozzle (see § 13.1.1 page 53)	1	1	1
	050123306	Adapter M1/2 JIC - F3/8NPS paint hose	1	1	3

(\*) Level 1: Standard preventive maintenance.

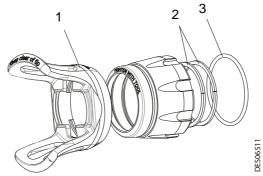
Level 2: Corrective maintenance.

Level 3: Exceptional maintenance.

## 13.1.1. The nozzles as an option

Part Number	Description	Quantity
130001597	Nozzle MX03.05	Option
130001563	Nozzle MX03.07	Option
130001564	Nozzle MX04.05	Option
130001565	Nozzle MX04.07	Option
130001566	Nozzle MX04.09	Option
130001414	Nozzle MX04.111	Option
130001415	Nozzle MX04.131	Option
130001416	Nozzle MX06.091	Option
130001417	Nozzle MX06.111	Option
130001418	Nozzle MX06.131	Option
130001419	Nozzle MX06.151	Option
130001420	Nozzle MX09.091	1
130001421	Nozzle MX09.111	Option
130001422	Nozzle MX09.131	Option
130001423	Nozzle MX09.151	Option
130001424	Nozzle MX12.091	Option
130001425	Nozzle MX12.111	Option
130001426	Nozzle MX12.131	Option
130001427	Nozzle MX12.151	Option
130001428	Nozzle MX14.091	Option
130001429	Nozzle MX14.111	Option
130001430	Nozzle MX14.131	Option
130001431	Nozzle MX14.151	Option
130001432	Nozzle MX14.171	Option
130001433	Nozzle MX18.111	Option
129609901	Sieve no. 4	10
129529903	Sealant washer	10

#### 13.1.2. Fitted air cap ring



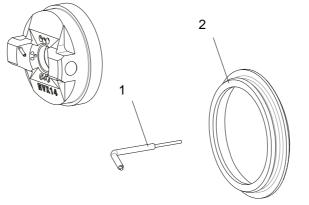
Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	910019358	Fitted air cap ring	1	1	1
1	900013829	HP nozzle protection	1	1	3
2	900010164	PTFE flat seal	2	1	1
3	160000170	FEP/FKM seal	1	1	1

(\*)

Level 1: Standard preventive maintenance.

Level 2: Corrective maintenance. Level 3: Exceptional maintenance.

## 13.1.3. Equipped Air cap



Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	130001435	Equipped air cap	1	1	3
1	132284012	Electrode and PTFE tube	1	5	1
2	132284010	PTFE conductive washer	1	1	2

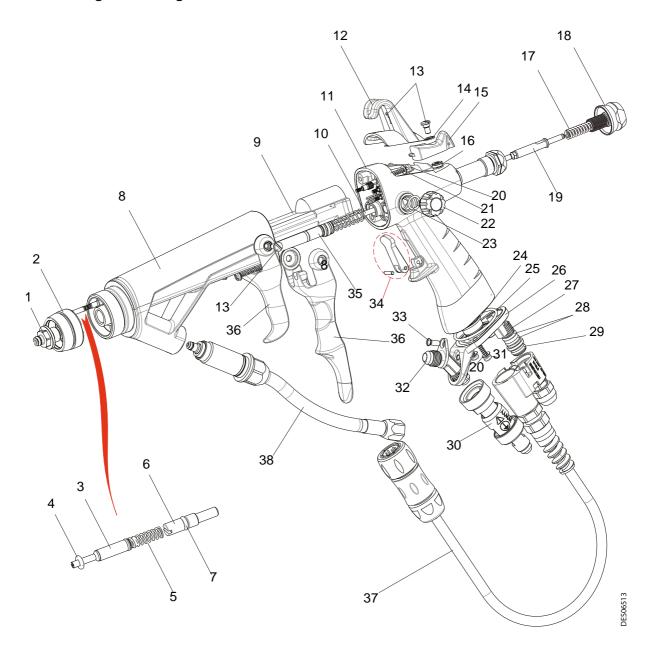
(\*)

Level 1: Standard preventive maintenance.

Level 2: Corrective maintenance.

Level 3: Exceptional maintenance.

# 13.2. Nanogun Airmix® gun



Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	-	Nanogun Airmix <sup>®</sup> gun	-	-	-
1	910019359	Fitted seat casing (see § 13.3 page 58)	1	1	1
2	910019360	Nanogun Airmix® fitted adapter (see § 13.4 page 58)	1	1	3
3	910015934	Fitted high-voltage contact (included in item 8)	1	1	2
4	J3STKL014	Chemically inert O-ring (included in item 3)	1	1	2
5	900014787	Spring (included in item 3)	1	1	1
6	910019356	High-voltage contact screw (included in item 8)	1	1	1
7	J2FTDF014	O-ring (included in item 6)	1	1	1
8	910019514	Equipped barrel (see § 13.5 page 59)	1	1	3
9	910015508	Equipped high-voltage cascade	1	1	3
10	910019508	Fitted needle (see § 13.7 page 61)	1	1	1
11	910022672	Fitted Nanogun Airmix® handle 120 bar	1	1	3
11	910022679	Fitted Nanogun Airmix® handle 200 bar	1	1	3
12	900010239	Fastening hook	1	1	3
13	900010385	C M4 curved washer head screw	4	1	3
14	900013808	PTFE flat washer (included in item 15)	1	1	2
15	910018204	On/off handle with o-ring and magnet (included in item11)	1	1	3
16	J3STKL005	Chemically inert O-ring (included in item 15)	1	1	1
17	900010266	Paint spring 120 bar	1	1	1
17	900010267	Paint spring 200 bar	1	1	1
18	900015784	Knurl back of paint	1	1	3
19	900010882	High-pressure paint stop	1	1	3
20	250000036	Handle / barrel fastening screw	4	1	3
21	J4BRND039	Fibre joint for fastening screw	6	1	3
22	910014166	Fitted additional air settings button (included in item11)	1	1	3
23	J2FTDF121	Black FKM O-ring (included in item 22)	1	1	1
24	160000041	Gray chemically inert seal (included in item 11)	1	1	1
25	160000067	Red FKM seal (included in item11)	1	1	1
26	900010013	HR gun base	1	1	3
	900010009	LR gun base	1	1	3
27	910006118	Fitted air nipple	1	1	2
28	J2FTCF018	Black FKM O-ring (included in item 27)	2	1	1
29	J3STKL018	White chemically inert O-ring (included in item 27)	1	1	1

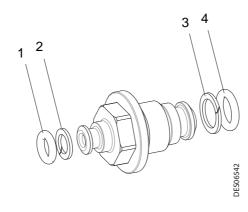
30	F6RLUF171	Rotating air coupling	option	1	3
31	250000037	Base-handle fastening screw	2	1	3
32	900010605	55° elbow	1	1	3
33	250000214	Elbow fastening screw	1	1	3
34	910022663	Trigger / pin lock assembly	1	1	3
35	910018203	Fitted air valve (see § 13.6 page 60)	1	1	3
	900010237	Trigger	1	1	3
36	900014446	4-finger trigger	1 option	1	3
37	910015869-XXX	Electro-pneumatic coupling (see § 13.8 page 61)	1	1	3
38	910020147	Equipped HR product hose Ø 4	1	1	2

(\*) Level 1: Standard preventive maintenance.

Level 2: Corrective maintenance. Level 3: Exceptional maintenance.

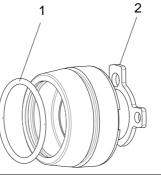
WARNING: It is strictly forbidden to disassemble the knurl back of paint (Item 18) when the spray gun is under pressure.

# 13.3. Equipped seat casing



Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	910019359	Equipped seat casing	1	1	1
1	J3STKL046	O-ring - chemically inert	1	1	1
2	900013368	Anti-extrusion ring	1	1	1
3	900012300	Anti-extrusion ring	1	1	1
4	J3STKL075	O-ring - chemically inert	1	1	1

## 13.4. Equipped adapter



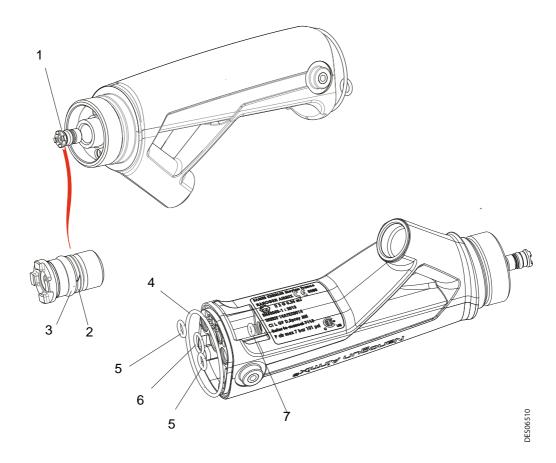
Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	910019360	Equipped adapter	1	1	3
1	J2FENV288	O-ring - FEP FKM	1	1	1
2	900014821	Flat seal	1	1	1

(\*) Level 1: Standard preventive maintenance.

Level 2: Corrective maintenance.

Level 3: Exceptional maintenance.

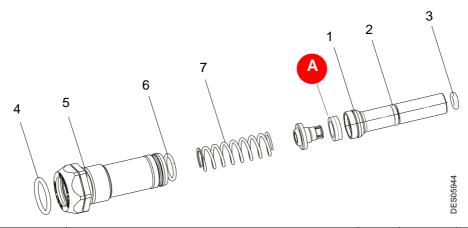
# 13.5. Equipped barrel



Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	910019514	Equipped barrel	1	1	3
1	910015881	Seal cartridge	1	1	1
2	900012782	Anti-extrusion ring (included in Rep. 1)	1	1	1
3	J3STKL005	O-ring - chemically inert (included in Rep. 1)	1	1	1
4	J2FENV435	O-ring - FEP Viton	1	1	1
5	J3STKL078	O-ring - chemically inert	2	1	1
6	J3STKL019	O-ring - chemically inert	1	1	1
7	J3STKL032	O-ring - chemically inert	1	1	1

(\*)
Level 1: Standard preventive maintenance.
Level 2: Corrective maintenance. Level 3: Exceptional maintenance.

#### 13.6. Equipped air valve and air valve Nut



Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	910018203	Equipped air valve	1	1	3
1	900010256	Sealing ring	1	1	1
2	J3STKL005	O-ring - chemically inert (exterior valve)	1	1	1
3	J3STKL032	O-ring - chemically inert (interior valve)	1	1	1
	910015922	Equipped air valve nut	1	1	3
4	J2FTDF155	Black FKM O-ring	1	1	1
5	J2FTDF160	Black FKM O-ring	1	1	1
6	J2FTDF999	Black FKM O-ring	1	1	1
7	900009024	Air spring	1	1	1

(\*)

Level 1: Standard preventive maintenance.

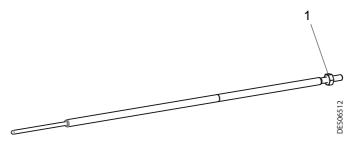
Level 2: Corrective maintenance.

Level 3: Exceptional maintenance.

WARNING: Recover the magnet A on the former air valve in order to retain the same trigger values.

In case the magnet is lost, contact SAMES KREMLIN.

# 13.7. Equipped needle

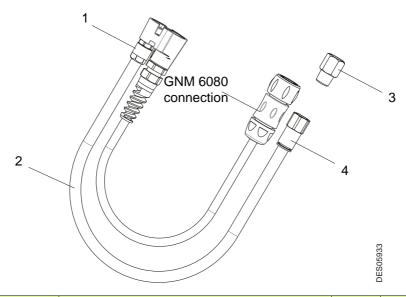


Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	910019508	Equipped needle	1	1	1
1	X7CEHU003	H M3 U brass nut	1	1	3

(\*)
Level 1: Standard preventive maintenance.
Level 2: Corrective maintenance.

Level 3: Exceptional maintenance.

## 13.8. Electro-pneumatic couplings

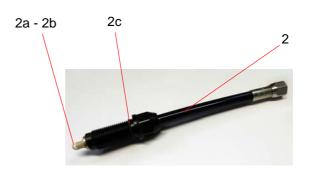


Item	Part Number	Description		Sales unit	Spare parts level
	910015869-100	10-m electro-pneumatic coupling	1	1	3
	910015869-200	20-m electro-pneumatic coupling	1	1	3
	910015869-300	30-m electro-pneumatic coupling	1	1	3
1	900015289	Simple male union	1	1	3
	910021087-100		10 m		
2	910021087-200	Equipped air hose outer diameter: 10	20 m	1	1
	910021087-300		30 m		
3	F6RLHG362	NPT female / BSP male adapter	option	1	3
4	130000527	Quick coupling	1	1	3

#### 13.9. Paint hoses

# 13.9.1. For Nanogun Airmix® HR guns





Item	Part Number	Description		Sales unit	Spare parts level (*)
	910019204-075	Black 7.5-m HR product hose Ø 5	1	1	1
1	910019204-150	Black 15-m HR product hose Ø 5	1	1	1
	910019204-300	Black 30-m HR product hose Ø 5		1	1
2	910020147	Equipped product hose Ø 4		1	2
2a	J3STKL028	Chemically inert O-ring (included in item 2)		1	1
2b	900013398	Anti-extrusion ring (included in item2)	1	1	1
2c	J2FTDF177	Black FKM O-ring (included in item 2)	1	1	1

13.9.2. For Nanogun Airmix<sup>®</sup> LR guns



Item	Part Number	Description		Sales unit	Spare parts level (*)
	910020165-075	PTFE 7.5-m LR product hose Ø 5	1	1	1
1	910020165-150	PTFE 15-m LR product hose Ø 5	1	1	1
	910020165-300	PTFE 30-m LR product hose Ø 5	1	1	1
1a	J3STKL028	Chemically inert O-ring (included in item 1)		1	1
1b	900013398	Anti-extrusion ring (included in item1)	1	1	1
1c	J2FTDF177	Black FKM O-ring (included in item 1)	1	1	1
2	910018292	Stuffing box + nut	1	1	2

(\*) Level 1: Standard preventive maintenance. Level 2: Corrective maintenance.

Level 3: Exceptional maintenance.

# 13.10. Nanogun Airmix® seal kit

Part Number	Designation	Location	Quantity
910022694	Nanogun Airmix <sup>®</sup> seal kit		1
J3STKL005	Chemically inert O-ring	Barrel, air valve, on/off button	3
J2FENV435	FEP/FKM O-ring	Barrel	1
J3STKL078	Chemically inert O-ring	Barrel	2
J3STKL019	Chemically inert O-ring	Barrel	1
910015881	Seal cartridge	Barrel	1
J3STKL032	Chemically inert O-ring	Barrel, air valve	2
900012782	Anti-extrusion ring	Barrel	1
160000041	Chemically inert O-ring	Handle	1
160000067	Red FKM O-ring	Handle	1
J2FTCF018	Black FKM O-ring	Air nipple	2
J3STKL018	Chemically inert O-ring	Air nipple	1
J4BRND039	Fiber seal	Handle-barrel fastening, base-handle fastening	6
900010256	Sealing ring	Air valve	1
J3STKL075	Chemically inert O-ring	Equipped seat casing	1
900012300	Anti-extrusion ring	Equipped seat casing	1
J3STKL046	Chemically inert O-ring	Equipped seat casing	1
900013368	Anti-extrusion ring	Equipped seat casing	1
900014821	Adapter flat joint	Equipped adapter	1
J2FENV288	FEP/FKM O-ring	Equipped adapter	1
J3STKL014	Chemically inert O-ring	High-voltage contact	1

#### 13.11. GNM 6080 control module



Item	Part Number	Description	Qty	Sales unit	Spare parts level (*)
	910017193	GNM 6080 CE control module	1	1	3
	910017192 GNM 6080 CSA control module (only USA and CANADA)		1	1	3
	910005759	GNM 6080 fastening kit	1	1	3
	842635	5-m mass cable, lug D: 6	1	1	3

(\*) Level 1: Standard preventive maintenance.

Level 2: Corrective maintenance. Level 3: Exceptional maintenance.

# 13.12. Options for Nanogun Airmix® guns

## Online product filter

Designation	Part Number	Versions
Filter (M / F 1/2 JIC)	130000322	HR / LR* 120 or 200 bar
Sieve 6	129609908	HR/LR 120 or 200 bar

<sup>\*</sup> Reduced filter dimension installed under the gun handle for the HR versions or at the pump outlet for the LR versions (in which case, the pump must be equipped with a M 1/2 JIC output coupling)

# **Rotating coupling**

Designation	Part Number	Versions
High-pressure product rotating coupling (M / F 1/2 JIC)	129670405	HR (versions 120 and 200 bar)

## 13.13. Appendices

## 13.13.1. Hose protection casing

This casing protects the hoses and cables, thereby guaranteeing flexibility and longevity.

Description		Part Number	Sales unit
	Rilsan hose protection duct with 30 collars	910021086	50-m roll

## 13.13.2. Gun protection cover

	Description	Part Number	Sales unit
DES01269	Protective cover	900011711	10

## 13.13.3. Warning sign

Description	Part Number	Sales unit
	1407684	1

## 13.13.4. Safety relief valve

Description		Part Number	Sales unit
	Safety relief valve 6.5 bar 1/4 G	903080401	1

# 14. The various versions

# 14.1. Equipment

Titre	Pistolet Nanogun Airmix ® "Haute Pression" HP		
Title	Nanogun Airmix ® gun type High Pressure" HP		
-	Pistolet Nanogun Airmix® CE+ CSA		
	-		
N° GUN	Pistolet Nanogun Airmix ® HP Haute résistivité HR		
	Nanogun Airmix ® gun type HP High Resistivity LR		
	CE + CSA		
910021070	Haute résistivité 120 bars		
	Haute résistivité 120 bars		
	Haute résistivité 120 bars		
	Haute résistivité 120 bars		
910021076	Haute résistivité 200 bars		
910021076-075	Haute résistivité 200 bars		
910021076-150	Haute résistivité 200 bars		
910021076-300	Haute résistivité 200 bars		
N° GUN	Pistolet Nanogun Airmix ® HP Basse résistivité LR		
	Nanogun Airmix ® gun type HP Low Resistivity LR		
	CE		
910021071-075	Basse résistivité 120 bars		
	Basse résistivité 120 bars		
910021071-300	Basse résistivité 120 bars		
	Basse résistivité 200 bars		
	Basse résistivité 200 bars		
910021077-300	Basse résistivité 200 bars		
N° GUN	Equipement Nanogun Airmix ® CE	N° GUN	Equipement Nanogun Airmix ® US + CSA
	Equipment Nanogun Airmix ® CE		Equipment Nanogun Airmix ® US + CSA
	Equipement Nanogun Airmix ® HR 120b lg 7,5 EU		Equipement Nanogun Airmix ®HR 120b lg 7,5 US
	Equipement Nanogun Airmix ® HR 120b lg 15 EU		Equipement Nanogun Airmix ® HR 120b lg 15 US
910021113-30	Equipement Nanogun Airmix ® HR 120b lg 30 EU	910021113-302	Equipement Nanogun Airmix ® HR 120b lg 30 US
	Equipement Nanogun Airmix ® HR 200b lg 7,5 EU		Equipement Nanogun Airmix ® HR 200b Ig 7,5 US
	Equipement Nanogun Airmix ® HR 200b lg 15 EU		Equipement Nanogun Airmix ® HR 200b lg 15 US
910021115-30	Equipement Nanogun Airmix ® HR 200b lg 30 EU	910021115-302	Equipement Nanogun Airmix ® HR 200b lg 30 US
040004444.07	5	040004444.070	F : (A) A: : 0   D 400    7 F   10
910021114-07	Equipement Nanogun Airmix ® LR 120b Ig 7,5 EU Equipement Nanogun Airmix ® LR 120b Ig 15 EU		Equipment Nanogun Airmix ® LR 120b lg 7,5 US
910021114-15	Equipement Nanogun Airmix ® LR 120b ig 15 EU Equipement Nanogun Airmix ® LR 120b ig 30 EU		Equipement Nanogun Airmix ® LR 120b lg 15 US
910021114-30	Equipement Nanoguri Airmix ® LR 1200 ig 30 E0	910021114-302	Equipement Nanogun Airmix ® LR 120b lg 30 US
010021116 07	Equipement Nanogun Airmix ® LR 200b lg 7,5 EU	010021116 072	Equipement Nanogun Airmix ® LR 200b lg 7,5 US
010021110-07	Equipment Nanogun Airmix ® LR 200b lg 1,5 EU		Equipement Nanogun Airmix ® LR 200b lg 15 US
	Equipement Nanogun Airmix ® LR 200b lg 30 EU		Equipement Nanogun Airmix ® LR 200b lg 30 US
910021110-30	Equipement Nanogun Airmix & Ett 2000 ig 30 E0	910021110-302	Equipernent Nanoguri Airmix & Liv 2000 ig 30 03
N°	Module GNM 6080 CE	N°	Module GNM 6080 US + CSA
14	Control module GNM 6080 CE	14	Control module GNM 6080 US + CSA
	Control module Givin 6000 CE		Control module Givin 0000 03 1 CSA
910017193	Module de commande GNM 6080 version Europe	910017192	Module de commande GNM 6080 version US
310017133	Module de commande Grain 6000 version Europe	310017132	INOCALIC DE COMMINANCE CIVIN 0000 VEISION 00
N°	Liaison électro-pneumatique CE / CSA		
	Electro-pneumatic coupling set CE / CSA		
	Electro-pricumatic coupling set of 7 con		
910015869-100	Liaison électropneumatique 10m		
	Liaison électropheumatique 70m		
	Liaison électropheumatique 30m		
0.00.0000 000			
N°	Tuyau produit Nanogun Airmix ® HR CE / CSA		
	Nanogun Airmix ® HR paint hose CE / CSA		
	The section of the paint floor OL / OUR		
910019204_075	Tuyau produit HR 7,5m noir D: 5		
	Tuyau produit HR 15m noir D: 5		
	Tuyau produit HR 30m noir D: 5		
010010204-000	Tray and product fire out in the D. O		
N°	Tuyau produit Nanogun Airmix ® LR CE / CSA		
14	Nanogun Airmix ® LR paint hose CE / CSA		
	Tranogan Allinix & Liv paint 110se CE / CSA		
910020165 075	Tuyau produit LR PTFE 7,5m D: 5		52
	Tuyau produit LR PTFE 7,5m D: 5 Tuyau produit LR PTFE 15m D: 5		DE:06562
	Tuyau produit LR PTFE 30m D: 5		ESO
010020100-000	Tayaa produit Ert File Ooili D. O	1	·

# 14.2. Configurations

Configuration	Part Number	GNM 6080	GNM6080	Electro-pneumatic coupling	Electro-pneumatic coupling   Electro-pneumatic coupling   Electro-pneumatic coupling	Electro-pneumatic coupling	Ξ	HR hose	HR hose	LR hose	se	e Nozzle
		910017193	910017192	10m 910015869-100	20m 910015869-200	30m 910015869-300	7,5m 910019204-075	15m 910019204-150	30m 910019204-300	7,5m 910020165-075	15m 30m 910020165-150 910020165-300	
Spray Guns		ш										
Spary Gun HR 120 bars alone	910021070	0										
Spray Gun HR 120 bars	910021070-075	10		×			×					×
Spray Gun HR 120 bars	910021070-150	0			×			×				×
Sparay Gun HR 120 bars	910021070-300	0				×			×			×
Some Gun D 430 hom	940004074 078			>						>		>
Spray Gun ID 130 hars	910021071-073			<	>					<	>	< >
Spray Gun LR 120 bars	910021071-300				<	×					×	× ×
Spray Gun HR 200 bars alone	910021076	-										×
Spray Gun HR 200 bars	910021076-075	10		×			×					×
Spray Gun HR 200 bars	910021076-150	0			×			×				×
Spray Gun HR 200 bars	910021076-300					×			×			×
Spray Gun I B 200 hare	910021077078			>						×		>
Speny Gun LD 200 have	910021077-010			<	>					<	>	< >
Spray Gun LR 200 bars	910021077-130				<	×					×	< ×
Equipments												
Eq. Nanogun Airmix ® HR 120b lg 7.5 EU	910021113-07	×		×			×					×
Eq. Nanogun Airmix ® HR 120b lg 15 EU	910021113-15	×			×			×				×
Eq. Nanogun Airmix ® HR 120b lg 30 EU	910021113-30					×			×			×
Eq. Nanogun Airmix ® LR 120b lg 7.5 EU	910021114-07			×						×		×
Eq. Nanogun Airmix ® LR 120b lg 15 EU	910021114-15	×			×						×	×
Eq. Nanogun Airmix ® LR 120b lg 30 EU	910021114-30					×					×	×
Eq. Nanogun Airmix ® HR 200b lg 7.5 EU	910021115-07			×			×	;				×
Eq. Nanogun Airmix ® HR 200b lg 15 EU	910021115-15	×			×			×				×
Eq. Nanogun Airmix ® HR 200b Ig 30 EU	910021115-30					×			×			×
	040000440007			>						>		>
Eq. Nanoguii Allillix & EN 2000 lg 7.3 EO	910021116-07			<	>					<	>	< >
Eq. Nanoguri Airmix ® LR 2000 kg 19 EU	910021116-13	< ×			<	×					<	< >
						c c						<
Eq. Nanogun Airmix ® HR 120b lg 7.5 US	910021113-072	01	×	×			×					×
Eq. Nanogun Airmix ® HR 120b lg 15 US	910021113-152	01	×		×			×				×
Eq. Nanogun Airmix ® HR 120b lg 30 US	910021113-302	0.1	×			×			×			×
			;	:						:		:
Eq. Nanogun Airmix ® LR 120b lg 7.5 US	910021114-072	01	×	×						×		×
Eq. Nanogun Airmix ® LR 120b lg 15 US	910021114-152	01	×		×	;					×	×
Eq. Nanogun Airmix ® LR 120b lg 30 US	910021114-302	21	×			×					×	×
Ea. Nanoaun Airmix ® HR 200b la 7.5 US	910021115-072		×	×			×					×
Eq. Nanogun Airmix ® HR 200b to 15 US	910021115-152		×		×			×				×
Eq. Nanoqun Airmix ® HR 200b lg 30 US	910021115-302		×			×			×			×
Eq. Nanogun Airmix ® LR 200b lg 7.5 US	910021116-072	01	×	×						×		×
Eq. Nanogun Airmix ® LR 200b lg 15 US	910021116-152	01	×		×						×	×
Eq. Nanogun Airmix ® LR 200b lg 30 US	910021116-302	01	×			×					×	×