POWDER COATING EQUIPMENT USER'S MANUAL

E-GUN+3 C3

SERIES

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1. Safety Regulations

This section sets out the fundamental safety regulations that must be followed by the user and third parties using the E-COAT+3 Master These safety regulations must be read and understood before the E-COAT+3 Master is used.

1.1. Safety Symbols

The following warnings with their meanings can be found in the Sistem Teknik Makina operating instructions. The general safety precautions must also be followed as well as the regulations in the operating instructions.

DANGER!
Electrical and moving parts pose a hazard.
Possible Consequences: Death or serious injury.

WARNING!
Improper use will damage the device or cause malfunction.
Possible consequences: Minor injuries or damage to equipment.

1.2. Conformity Of Use

1. E-GUN+3 C3 Automatic Gun is built to the latest specification and conforms to the recognized technical safety regulations. It is designed for the normal application of powder coating.
2. Any other use is considered as non-conform. The manufacturer is not responsible for damage resulting from improper use of this equipment; the end-user alone is responsible. If the E-GUN+3 C3 is to be used for other purposes or other substances outside of our guidelines then Sistem Teknik Makina A.Ş. should be consulted.
3. Observance of the operating, service and maintenance instructions by the manufacturer is also part of conformity of use. The E-GUN+3 C3 should only be used, maintained and started up by trained personnel, who are informed about and are familiar with the possible hazards involved.
4. Start-up is forbidden until it has been established that the E-GUN+3 C3 has been set up and wired according to the guidelines for machinery EN 60204-1 (machine safety) must also be observed.
5. Unauthorized modifications to E-GUN+3 C3 exempt the manufacturer from any liability from resulting damage.
6. Relevant accident prevention regulations, as well as other generally recognized safety regulations, occupational health and structural regulations are to be observed.
7. In addition to above, country-specific safety regulations must be observed.

Explosion Protection Class of E-GUN+3 C3 Powder Paint Gun

Explosion Protection	Protection Type	Temp Class
Ex CE II 2 D	IP64	

Explosion Protection Class of E-COAT+3 Master Controller Unit

Explosion Protection	Protection Type	Temp Class
Ex CE II 3(2)D	IP54	

Note: EN 60204-1 this standard includes the non-mobile machines electronic machines and programmable electronic hardware and systems.

1.3. Technical Safety Regulations for Stationary Electrostatic Powder Spraying Equipment

1.3.1. General Information

The powder spraying equipment of Sistem Teknik Makina (Electron) is designed for safe use and to the latest technological specs. Electrostatic powder equipment could create dangerous situations unless it's used properly. In addition to that, there might be a danger to life and limb of the user or third party, a danger of damage to the equipment and other machinery that belongs to the user and hazards to the proper operation of equipment.

1. The powder spraying equipment should only be started up and used once the operating instructions have been carefully read. Apart from any usage from the user manual, there lies a danger of damaging the equipment and loss of control of the equipment.
2. Operational safety has to be observed before every start-up. Regular Servicing is the essence of working safely.
3. Local legislation should be considered for the safety.
4. The plug has to be disconnected before the machine is opened for repair.
5. The plug and socket connections between spraying equipment should only be taken out when the power is off.
6. The connection cables have to be installed in a manner that they wouldn't interfere or damage the normal machine operation. Also the local legislation should be observed for the installation.
7. Only original Electron spare parts should be used, because only the original products will guarantee the equipment's explosion protection. Any damage caused by other used parts is not covered by the guarantee.
8. If Electron powder spraying equipment is going to be used with other devices/machinery from other manufacturers, their safety regulations should be also considered.
9. Be cautious while working in a powder/air mixture area. In the right concentration the mixture would be flammable, thus smoking is forbidden in the entire plant area.
10. Rule of thumb says that any person who uses a pacemaker should NEVER enter a high voltage area or places with electromagnetic fields. Note that people with pacemakers ALSO SHOULDN'T work in powder spraying installations.

WARNING!
Only the cust omer itself is r esponsible for the safe usage of the equipment.
Sistem Teknik is not responsible for any damage resulted from the usage.

1.3.2. Consciously Working Safe

Every other individual who will be working for the assembly, start-up, operation, service and repair of powder spraying equipment must have read and understood the operating instructions and the "Safety Regulations". Operators have to be appropriately trained via Sistem Teknik assembly personnel and made aware of the possible danger of powder spraying equipment and the environment.

The control units for guns must only be set up and used in zone 22. The spray guns are permitted in the zone 21 which is created by them but only them.

Powder spraying equipment must only be used by trained and authorized personnel. This also applies for any kind of modification to the electrical equipment, which only should be carried out by a specialist.

It is essential that the operating instructions are understood before any kind of work is done with the equipment. All the procedures have to be done according to the instructions.

Powder spraying equipment can be turned off via the main power switch or the emergency shut down procedure.

1.3.3. Safety Regulations for the Operating Firm and/or Personnel

1. First of all, anything which would influence the equipment negatively should be avoided for the technical safety.
2. The machine user should be well informed about no other people than trained personnel would use the machine.
3. The employer has to provide an operating instruction manual for specifying the dangers for humans and the environment by handling dangerous materials, as well as all preventive measures and workplace behaviors. This "document" must be well written in an understandable form in the language that the person employed for the equipment.
4. The operator is obliged to check the equipment for external damage once every shift changed at the very least. The operation characteristic changes should also be reported.
5. Users should conform the satisfactory working conditions else the equipment should not be used.
6. The operating firm must ensure that the users wear protective clothing like facemasks and working suits.
7. The firm also guarantees the cleanliness of the workplace and proper checks for the powder spraying equipment.
8. Safety devices should be always on the equipment at all costs unless the equipment is going to be maintained or cleaned. After the maintenance all the devices should be put on the equipment. The users must be trained well for this purpose.
9. Powder fluidization or high voltage spray gun checks have to be done when the equipment is switched off.

1.3.4. Special Types of Hazard

1. ***Power*:** All the high voltage equipment should be unplugged before opened. This is a huge life risk thus it has to be taken under great care.
2. ***Powder:*** Powder/air mixtures could be ignited by sparks. Sufficient ventilation is a must while using powder spraying equipment. Powder, which is not swept from the floor creates risky environment.
3. ***Static Charges:*** These could result in the following: Charges to people, electric shocks, sparks. Charging of objects has to be avoided.
4. ***Grounding:*** All electricity conducting parts and machinery in the workplace must be earthed. Please connect a ground wire 1.5 meters before the entrance of the cabinet, in the middle of the cabinet and 1.5 meters after the exit of the cabinet. The grounding resistance must amount to a maximum of 1 MOhm resistance has to be tested regularly. The appropriate devices must be kept in the workplace for regular grounding checks.
5. ***Compressed Air*:** Compressed air could be created after long pauses of the equipment and this creates risk of pneumatic hose damage or uncontrolled release and improper use of compressed air. Compressed air should be drained properly.
6. ***Crushing and Cutting:*** There might be moving parts while operation (e.g. Conveyor Belt, Reciprocator). The operator must be trained to maintain the area safety and local security regulations.
7. ***Exceptional Circumstances:*** Local conditions must be met at all costs. Additional measures such as barriers can be used to prevent unauthorized access.
8. ***Conversions and Modifications to the Equipment:*** All conversions and must be asked to Sistem Teknik prior to the process and no process should be done without Sistem Teknik's permission. This is essential for the equipment safety and conformity. Powder coating equipment should never be used if damaged; these parts should be changed immediately with the original Sistem Teknik replacement. Other replacements then Sistem Teknik original equipment does not conform the guarantee, thus the guarantee will no longer be valid. Equipment repairs must be done only by specialist or at Sistem Teknik verified shops.

1.3.5. Safety Requirements for Electrostatic Powder Coating

1. All the equipment used for powder coating is dangerous unless the instructions are not conformed.
2. Every electrostatic conductive part must be earthed w ithin the 5 meter radius from the equipment.
3. The floor of the coating area should conduct electricity (Concrete is generally a conductive surface, check with your building project for more info)
4. The users should wear electricity conducting footwear.
5. The guns are earthed thus you must use them with your bear hands. If gloves are going to be used, make sure that they conduct electricity.
6. Grounding cable must be connected to the grounding screw of the electrostatic powder spraying hand appliance. It should have a good connection with the booth, hopper and conveyor chain (if used).
7. E-COAT+3 Master Device must be switched off while the hand gun is being cleaned.
8. The grounding must be checked every week. Remember that the grounding resistance must be 1 MOhm at a maximum.
9. The E-COAT+3 Master equipment should only be switched once the booth is working in proper conditions. If the booth malfunctions, E-COAT+3 Master should be turned off.
10. At nozzle changes, the E-COAT+3 Master device should be shut down.
11. Only use spare parts / attachments and accessories from Sistem Teknik's original parts page. This ensures the safety of the equipment and conformity of use.
12. Cleaning agents creates the risk of hazardous fumes. Please check the manufacturer's manual about more information about the cleaning agents if they are used in the site.
13. If there is any damage on the powder coating equipment or the spray gun, operators should stop using it.
14. Especially make sure that the environmental regulations and the manufacturer's instructions are being conformed while disposing the powder lacquer and cleaning agents.
15. Repairs have to be carried out via specialists of Sistem Teknik trained personnel and never to be done in the operating area under any circumstance.
16. Dangerous dust concentration levels should be avoided in powder spraying areas. There must be sufficient technical ventilation available (e.g. booth ventilation) to prevent a dust concentration of more than %50 of the lower explosion limit (UEG = max. permissible powder/air concentration). If the UEG is not known then a value of 10g/m3 should be used.

2. E-GUN+3 C3 General Information

Note: E-GUN+3 C3 Automatic Powder Coating Gun includes a 7 mt powder transfer cable.

2.1. Field of Application

E-GUN+3 C3 Automatic Powder Coating Gun is designed to use with the organic coating powder. Any other usage of the gun is non-conform. Electron is not responsible for the non-conform usage.

E-GUN+3 C3 Powder Coating Gun

Explosion Protection	Ingress Protection
CE Ex II 2D	IP64

Note:

Explosion Protection of the E-GUN+3 C3 Powder Coating Gun is only valid if the gun is used with Electron E-COAT+3 Master and Master P Control Units with proper connections don't by the trained personnel. The control unit must be earthed with a resistance below 1 M Ohm. Unless the right Zones are defined and the gun is setup without instructed, Electron is not responsible from any damage or potential damage.

Common User Mistakes

- Trying to coat without grounding the part
- Enamel Powder use
- Not calibrating the powder, supplementary and nozzle airs.
- Humid Powder use

Conformity between Products

Electron E-GUN+3 C3 Automatic electrostatic spray gun can be used with the products below:

- E-COAT+3 Master
- E-COAT Basic
- E-FEED V2 or E-FEED V3 Injector

2.2. Technical Data

Electrical Data

E-GUN+3 C3 Powder Coating Gun	
Input Voltage (Nominal)	20 Vp-p
Frequency	17 kHz (Average)
Output Voltage (Nominal)	120 kV
Polarity	Negative (Optionally Positive)
Output Current (Max.)	120 µA
Explosion Protection	EX 2mJ T6
Working Temperature	0 °C - +40 °C (32 °F - +104 °F)
Surface Temperature (Max.)	85°C (+185 °F)
Ingress Protection	IP 64
Certification	CE Ex II 2 D

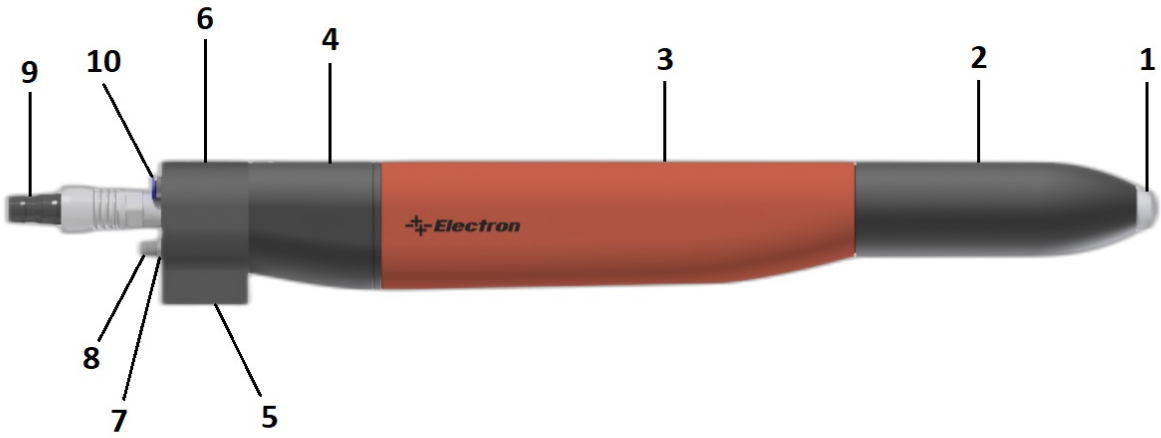
Weight

E-GUN+3 C3 Automatic Powder Coating Gun	
Weight	700 g

Usable Powders

E-GUN C3 Automatic Powder Coating Gun	
Plastic Coating Powder	Conform
Metallic Coating Powder	Conform
Enamel Coating Powder	Non-Conform

2.3 Design and Functions



1. Nozzle Group
2. Nozzle Torque Nut
3. Gun Body (Anti-Static)
4. Gun Body Back Lid (Anti-Static)
5. Gun Connection Clamp
6. Clamp Positioning Bot
7. Cable Connection Locking Ring
8. Powder Coating Cable Connection
9. Hose Connection
10. Nozzle Air Input

2.4. Optional Attachments

- FastPurge™ Fast Cleaning Module
- FastCorona™ De-Ionizer Ring
- Nozzle Extensions Types
- Different Nozzle Types
- Gun Cable Extension

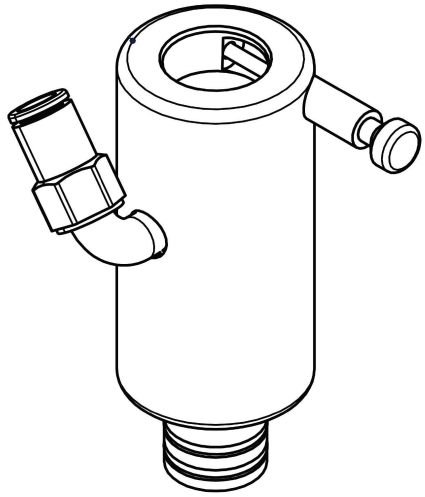
* For more information please check the Spare Parts Selection Guide.

FastPurge™ Fast Cleaning Module

FastPurge™ fast cleaning module is only usable with the E-COAT+3 Master control unit and the usable guns with this systems are E-GUN+3 C3 and C3 powder coating guns.

This module is used where the system does not need a thorough cleaning and colour change. It starts cleaning from the injectors to the tip of the guns with a very fast manner and cleans the powder channels.

E-COAT+3 Master powder coating device FastPurge™ mode starts the cleaning and the module under the injector starts blowing at the same pressure as input pressure through the hoses and the system is cleaned. FastPurge™ module ensures the air sealing while operating with a check valve.



FastPurge™ Module

Note: Since the E-COAT+3 Master P works with the E-Feed AP pump, the cleaning module is not used. For the E-COAT+3 Master P, Quick Clean mode scenario, see the corresponding manual.

2.5. Working Principle

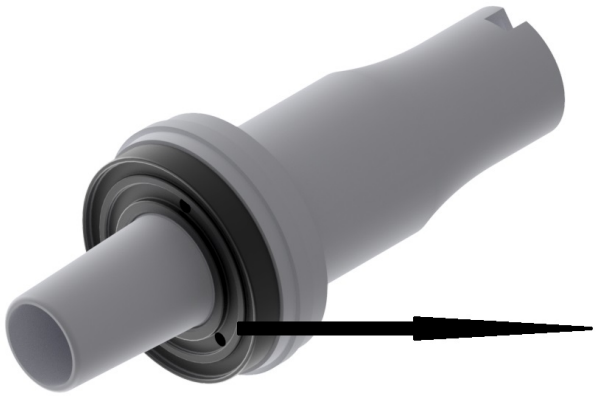
2.5.1. High Voltage Generation

Electrostatic Powder Coating Conrol Unit sends at most 20 Vp-p valued 17 kHz electrical signal to the E-GUN+3's. This signal which travels through the gun cable to the gun reaches an item called “Cascade” which multiplies the voltage. This voltage multiplier system is made from two tiers one of which is the transformer (1). This transformer gets the signal up to a voltage and its then delivered to the second tier (2) where there is capacitor and diodes. The signal gets rectified and multiplied. This multipled signal is delivered to the pre resistor which ensures the safety of the electricity level differences then to the output nozzle group. This high voltage is first loaded to the carbon ring then the tip of the nozzle and transferred to the powder paint while operating.

E-CASCADE+3

2.5.2. Flat Type Nozzle Structure

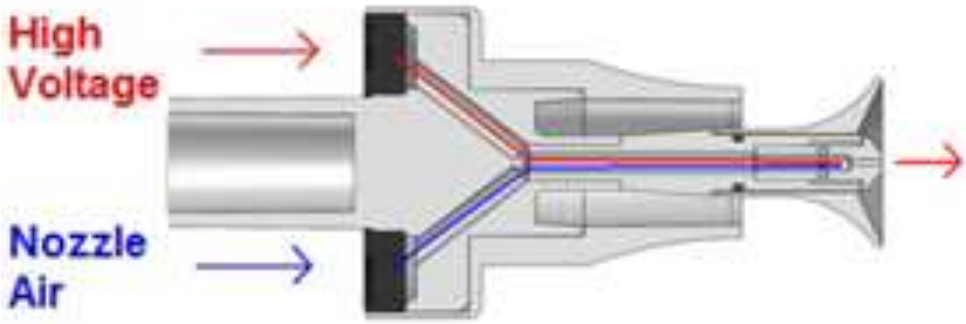
Flat Type Nozzle creates a hand fan shape on the powder while operating and also ensures that the powder is loaded as intended. The nozzle loads the high voltage from the output center to the powder. The high voltage electrode reaches to the tip of the nozzle from a white conical material. This conical isolator and the electrode has to stay clean at all times so the nozzle air should be arranged accordingly. Check the E-COAT+3 Master manual for the preference setup.



WARNING!
The corrugated surface of the carbon ring must face out. If it is inserted opposite, the gun can be damaged.

2.5.3. Deflector Type Nozzle Structure

Deflector type nozzle creates a cloud like pattern as the powder paint comes out from the gun. The nozzle loads the powder with high voltage. High voltage electrode travels through a cylindirical white material to the tip of the nozzle. This isolator and the electrodu should stay clean at all times so the nozzle air has to be set accordingly. Check the E-COAT+3 Master Control Unit guide for the calibration instructions.



2.5.4. Fast Corona Ring

The Fast Corona Ring is an optional extension for the gun, allowing for a better surface quality when coating with the powder coating equipment.

The performance of the gun with Fast Corona Ring is convincing due to its very good charging and very high deposition rate as well as an improved penetration into Faraday cages. The distance between nozzle and workpiece can be reduced to 100 mm without influencing the surface finish. In this way, the orange peel effect is minimized in cases where more delicate powder coating needs to be performed.

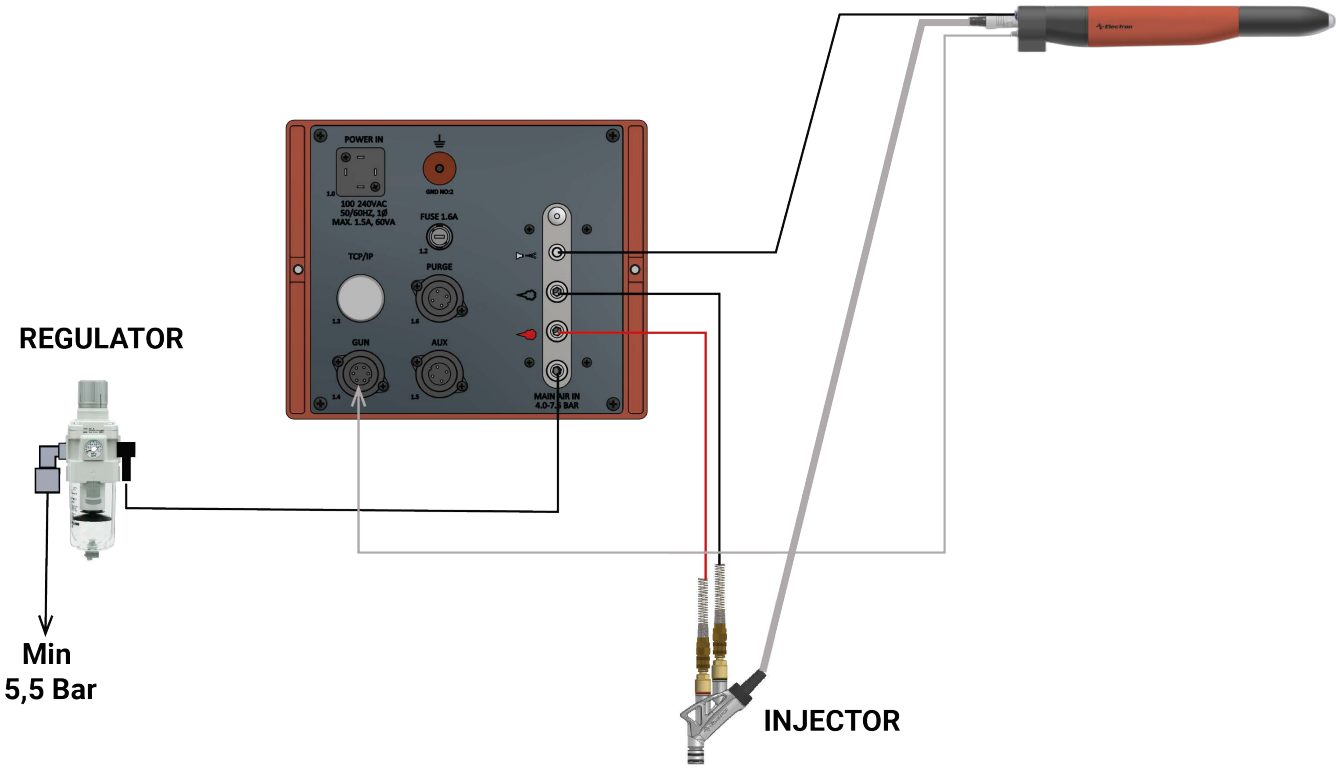
Before fitting the Fast Corona ring, make sure that the connection and the plug-in connector are free from grease and powder, otherwise the electric contact cannot be guaranteed.

E-GUN+3 C3 Fast Corona Ring Assembly

3. Installation

The procedure of the connections between the gun and the control unit is explained below:

- Connect the nozzle air hose and the powder paint hose to the gun.
- Put the connected cable and the gun downwards. Get the “touch and close fastener” from the materials package and tie the hose and the gun cable.
- Put the gun cable into the #1.4 7 pin socket at the back of E-COAT+3 Master Control Unit
- Connect the gun nozzle air hose on the  signed connector at the back of the control unit.
- Connect the Powder Paint hose to the injector.



3.1. Operation

3.1.1. Trigger

E-GUN+3 C3 type electrostatic powder coating gun can be only triggered from the trigger button at the front of the gun handle.

When the gun is triggered, the preferences on the control unit (electrical and pneumatic values will directly effect the signal on the gun and air will be sent to the injector to transfer powder paint.

Double Trigger, Changing between Recipes

The E-GUN+3 C3 is rather a special type of gun where the user can change the recipes from the gun trigger. This is done by using double trigger. The user can press the trigger twice in a row to change between the user defined recipe. Using the double trigger again will result in changing back to the first recipe.

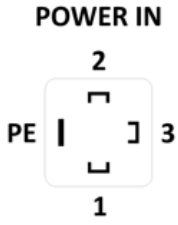
FastPurge™ Mode Trigger Function

When the E-COAT+3 Master control unit is in FastPurge™ mode the system will only start sending air if the gun is triggered. Once the gun is triggered, the control unit will start sending pressurized air through the air channels for cleaning. Releasing the trigger for a consecutive three seconds will stop the cleaning mode and the control unit will change to the normal mode.

WARNING: 1.0 numbered POWER IN socket's inner connections and the main cable connections should be checked and installed thoroughly from an ELECTRON employee or an ELECTRON approved employee. Electron will not be responsible for any possible damages from an unauthorized installation.

PIN Connection

1) Neutral (Energy Feed)
2) Phase (100-240 VAC)
3) External Trigger (Automatic Conf.) PE)
Grounding



4. Cleaning and Maintenance

4.1. Cleaning

4.1.1. Gun Body Cleaning

Daily:

- Clean the body of the gun with pressurized air and a clean towel.
- Remove the nozzle torque nut.
- Remove the gun nozzle and the electrode and clean the gun with pressurized air.

Weekly:

- Remove the powder paint hose.
- Clean the powder paint input of the gun with pressurized air.
- Clean the powder paint hose starting from the injector.

Warning: The following solvents may not be used to clean the gun:

Ethylene chloride, acetone, ethyl acetate, methyl ethyl ketone, methylene chloride, premium gasoline, turpentine, tetrachloromethane, toluene, trichloroethylene, xylene!

4.1.2. Nozzle Cleaning

Every other shift or at the end of a working day:

- Remove the nozzle torque nut.
- Remove the gun nozzle and clean both the electrode and the nozzle.
- Clean all the powder thoroughly. Never try to scratch the body with a strong material.

Weekly:

- Check the nozzle group for scratches. Change the nozzle group using the spare parts list if needed.

4.2. Maintanence

E-GUN+3 C1 type manual and C3 type automatic coating guns is designed to be maintained with minimum effort.

- Clean the powder gun body with a clean towel.
- Make an eye check on the gun cable and input hoses.
- Change the powder and pneumatic hoses if needed.

4.3. Part Change

The user can only change the consumables of the gun and some of the E-GUN+3 coating gun parts.

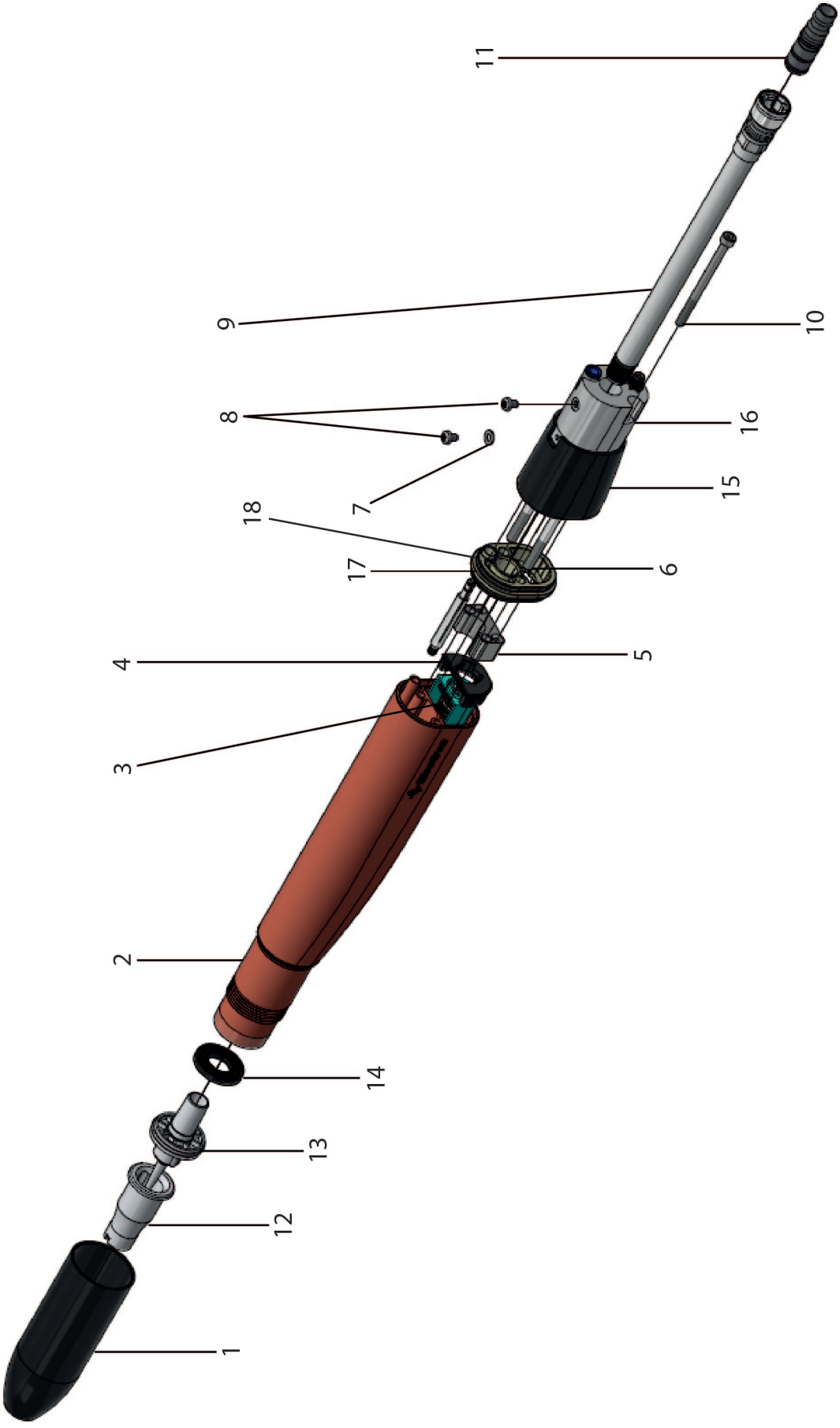
Note: Operations like Changing the Cascade, Trigger mechanism or Gun Cable can only be done by an ELECTRON® approved personnel.

5. Troubleshooting

Failure	Explanation	Suggestions
There isn't any high voltage and the control unit is flashing with kV and µA signs	1. Gun cable is not connected. 2. The gun cable is connected but not well fixed to the socket 3. Gun cable is damaged. 4. Cascade is damaged.	1. Connect the gun hose. 2. Fix the cable to the socket. 3. Consult an ELECTRON expert.
Powder Paint is being blown from the gun but the paint doesn't hold on the material (No High Voltage Output)	1.Blockage in the powder route 2.The Air or Powder Ratio segment is set to 0 3.Tearing or disconnection between the injector and the control unit. 4.If the preferences are adjusted in a well manner, the proportional valve inside the gun might be damaged	1. Purge in the powder route 2. Change powder ratio (%) 3. Check the connection between the injector and the control unit. 4. Consult an ELECTRON expert
The gun trigger is working and the High Voltage is working but there is no pow- der output.	1. Blockage in the powder route 2. Tearing or disconnection between the injector and the control unit.	1. Remove the blockage in the powder route. 2. Change the Air or Powder Ratio other than 0 on the control unit. 3. Remove the blockage or fix the disconnection.
Pressing the trigger doesn't start the control unit (The LED in front of the control unit is not lit)	1. Gun trigger is damaged	1. Consult an ELECTRON expert
Parameters at the installation are con- figured but the powder pattern is not well.	1. Teflon bushing in the injector's life cycle is ended. 2. Nozzle life cycle is ended. 3. Pneumatic hoses are damaged/broken or plugged. 4. The air channels are plugged. 5. Injector jet's life cycle is ended	1. Change the Teflon bushing. 2. Change the nozzle 3. Fix the pneumatic hoses or change them if needed. 4. Clean the injector and the filters. Change any necessary parts. 5. Change the injector jet.

6. Spare Parts List

Part No	Order Code	Part Name	Wearing Part
1	B07EGC300+3	E-GUN+3 C3 AUTOMATIC POWDER COATING GUN	N/A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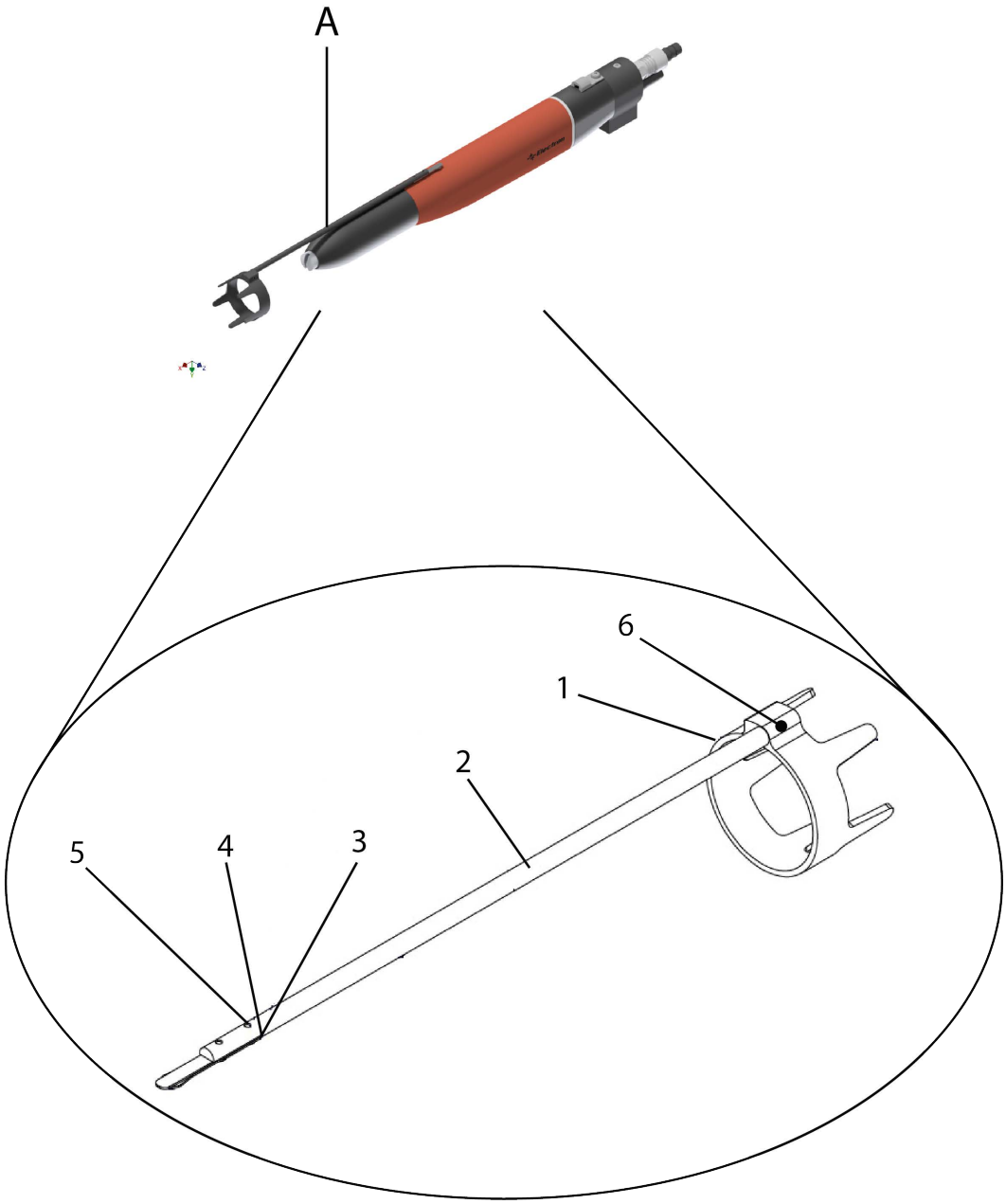
Part No	Order Code	Part Name	Wearing Part	RECOMMENDED STOCK PARTS
1	B10631007	E-GUN+3 C3 NOZZLE TIGHTENING NUT	N/A	N/A
2	B10632001	E-GUN+3 C3 PLASTIC FRONT BODY	✓	✓
3	B07EGCN02	E-CASCADE+3	N/A	✓
4	ENEM04012	E-GUN+3 C3 CASCADE ISOLATION GASKET	N/A	N/A
5	TRTM06245	E-GUN+3 C3 INSIDE ASSEMBLY PART	N/A	N/A
6	BECV03128	M6X60 CYLINDER HEAD CAP SCREW	N/A	N/A
7	BEPL03002	A 4.3 WASHER	N/A	N/A
8	BECV01020	M4X6-H SCREW	N/A	N/A
9	B07531001	E-GUN+3 C3 PAINT INLET TUBE	✓	✓
10	BECV08003	M5X70 CYLINDER HEAD CAP SCREW	N/A	N/A
11	B07EC0004	E-GUN+3 C3 HOSE CONNECTION PART W/ORING	✓	✓
12	TRTM01046	E-GUN+3 FLAT CAP	✓	✓
13	B07531006	E-GUN+3 FLAT ELECTRODEGROUP	✓	✓
14	TRTM08282	E-GUN+3 Ø35 CARBON RING	✓	✓
15	B10632003	AUTOMATIC GUN PLASTIC BODY BACK PART	✓	✓
16	TRTM04196	AUTOMATIC GUN BACK FINISHER	✓	✓
17	B10632004	CASCADE COMPRESSION PLASTIC	✓	✓
18	IZOR01079	O-RING - CASCADE COMPRESSION PLASTIC	✓	✓

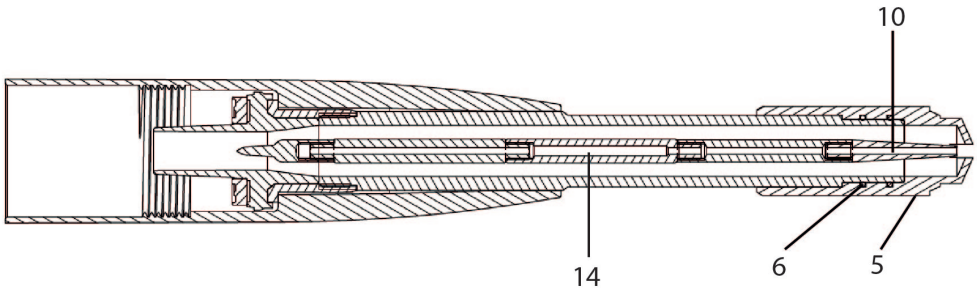
Note: Please check the nozzle types selection list



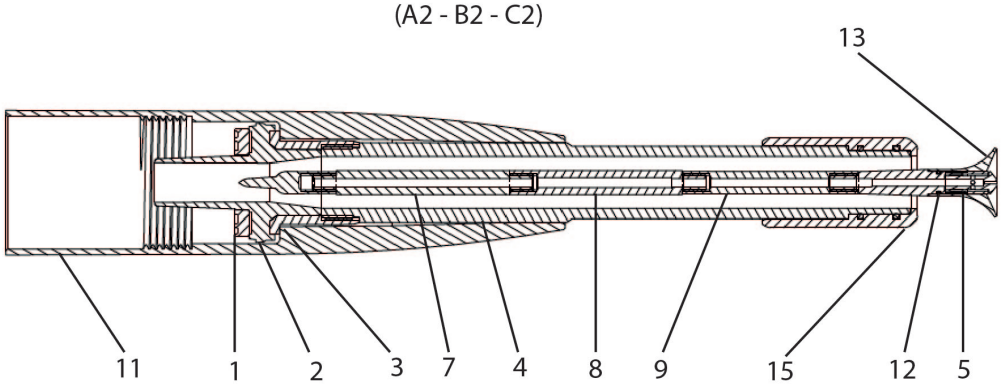
Part No	Order Code	Part Name	Wearing Part
A	B07FCR301	E-GUN+3 C3 FAST CORONA RING	N/A
1	TRTM04199	E-GUN+3 FAST CORONA RING CHARGE COLLECTOR	N/A
2	TRTM04201	E-GUN+3 FAST CORONA RING SHAFT Ø6XL193	N/A
3	BEDH09017	E-GUN+3 FAST CORONA LOCKING SPRING	N/A
4	BEDH09016	E-GUN+3 FAST CORONA LOCKING BASE SPRING	N/A
5	BECV02041	SCREW M2,5X5	N/A
6	BEDH08003	SETSCREW M4X06	N/A

EXTENSION HEAD GROUPS - FLAT

EXTENSION HEAD GROUPS - DEFLECTOR (A1/B1/C1)



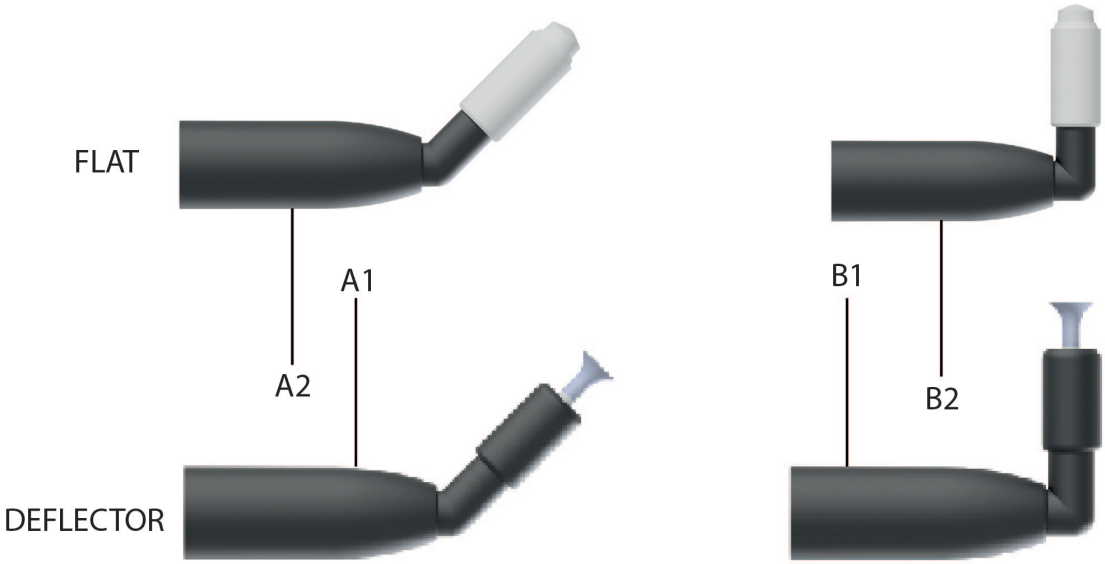
(A2 - B2 - C2)



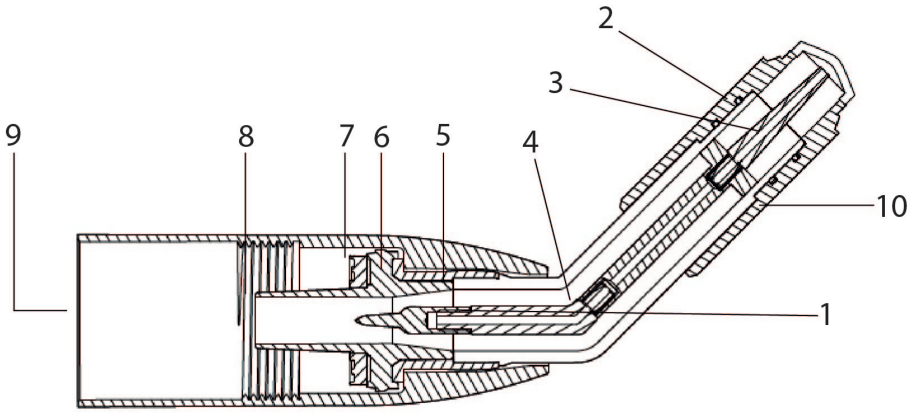
(A1 - B1 - C1)

If any extension head assembly is used, the gun is no longer comply with the explosion protection regulation.

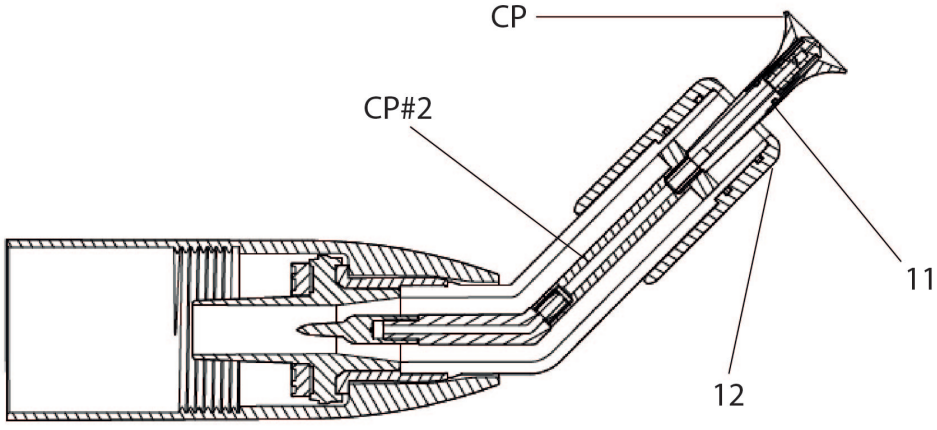
Part No	Order Code	Part Name	Wearing Part	RECOMMENDED STOCK PARTS
A1	B07EXT031D	E-GUN+3 150 MM EXTENSION HEAD GROUP - DEFLECTOR	N/A	N/A
A2	B07EXT032F	E-GUN+3 150 MM EXTENSION HEAD GROUP - FLAT	N/A	N/A
B1	B07EXT032D	E-GUN+3 250 MM EXTENSION HEAD GROUP - DEFLECTOR	N/A	N/A
B2	B07EXT032F	E-GUN+3 250 MM EXTENSION HEAD GROUP - FLAT	N/A	N/A
C1	B07EXT033D	E-GUN+3 400 MM EXTENSION HEAD GROUP - DEFLECTOR	N/A	N/A
C2	B07EXT033F	E-GUN+3 400 MM EXTENSION HEAD GROUP - FLAT	N/A	N/A
1	TRTM08282	E-GUN+3 CARBON RING Ø31	✓	✓
2	B10631003D	E-GUN+3 ELECTRODE BODY W/RESISTANCE	N/A	N/A
3	ENEM01049	E-GUN ANGLED-EXTENSION ELECTRODE FEMALE PART	N/A	N/A
4	*	EXTENSION ELECTRODE (MALE)	N/A	N/A
4.1	TRTM03109	150 MM EXTENSION ELECTRODE (MALE)	N/A	N/A
4.2	TRTM03113	250 MM EXTENSION ELECTRODE (MALE)	N/A	N/A
4.3	TRTM03108	400 MM EXTENSION ELECTRODE (MALE)	N/A	N/A
5	TRTM01049	E-GUN+3 ANGLED-EXTENSION ELECTRODE FLAT CAP	✓	✓
6	IZOR01007	O-RİNG Ø18X1,5	N/A	N/A
7	TRTM02017	EXTENSION ELECTRODE RESISTOR SHAFT ADDITIONAL PART	N/A	N/A
8	TRTM02018	EXTENSION ELECTRODE RESISTOR SHAFT T PART	N/A	N/A
9	ENEM01048	EXTENSION ELECTRODE RESISTOR SHAFT FRONT T PART	N/A	N/A
10	TRTM01022	E-GUN+3 FLAT HEAD GROUP CONICAL ISOLATOR	N/A	N/A
11	TRTM03111	E-GUN+3 EXTENSION TYPE TIGHTENING NUT	N/A	N/A
12	B07524502	E-GUN HEAD GROUP SHAFT SET W/ DEFLECTOR	N/A	✓
13	*	DEFLECTOR	N/A	N/A
13.1	ENEM01044	DEFLECTOR Ø16	✓	✓
13.2	ENEM01045	DEFLECTOR Ø20	✓	✓
13.3	ENEM01046	DEFLECTOR Ø24	✓	✓
14	ELON01012	RESISTANCE 15 MΩ 1/4 W (for every 150 mm)	N/A	N/A
15	TRTM01050	EXTENSION-ANGLED ELECTRODE DEFLECTOR CAP	N/A	✓



ANGLED HEAD GROUPS DEFLECTOR & FLAT

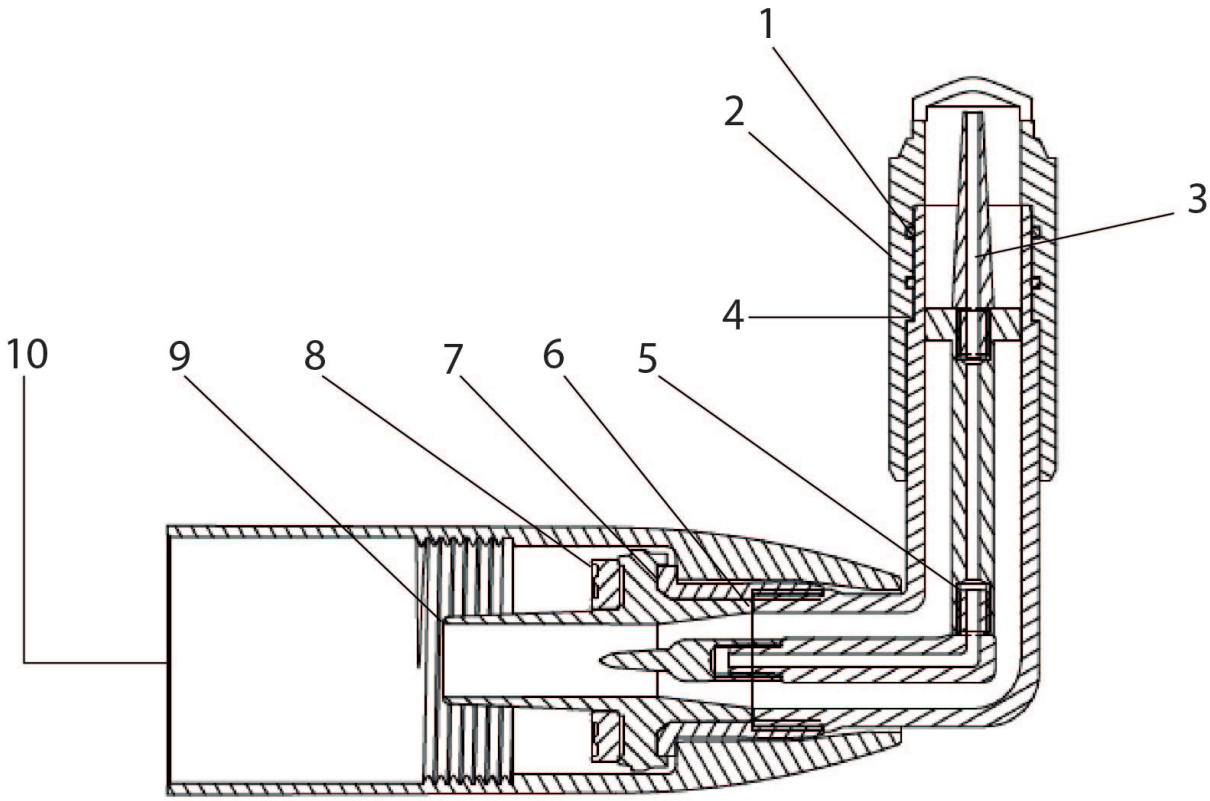


(A2)

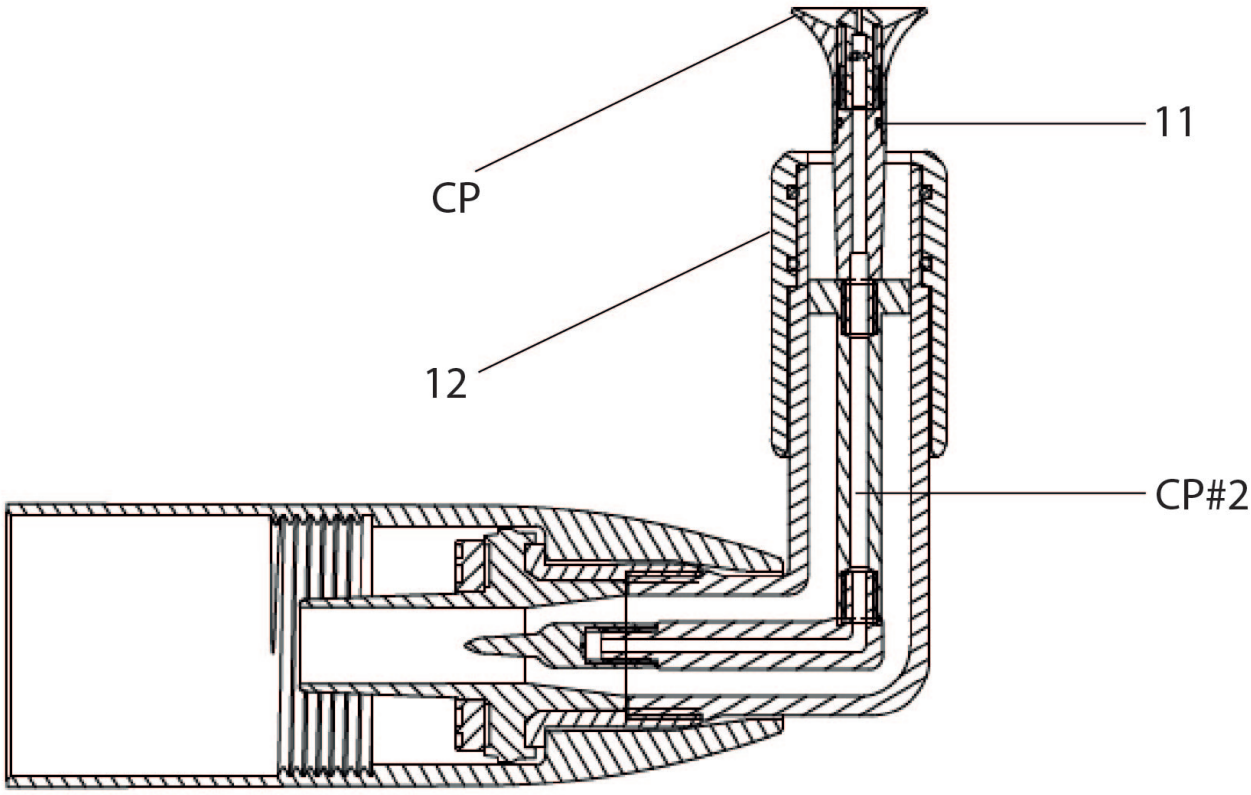


(A1)

ANGLED HEAD GROUPS DEFLECTOR & FLAT



FLAT (B2)



DEFLECTOR (B1)

Part No	Order Code	Part Name	Wearing Part	RECOMMENDED STOCK PARTS
A1	B07EXT034D	E-GUN+3 45° ANGLED HEAD GROUP - DEFLECTOR	N/A	N/A
A2	B07EXT034F	E-GUN+3 45° ANGLED HEAD GROUP - FLAT	N/A	N/A
1	ENEM01051	E-GUN 45° ANGLED ELECTRODE MALE PART	N/A	N/A
2	IZOR01007	O-RİNG Ø18X1,5	N/A	N/A
3	TRTM01022	FLAT HEAD GROUP CONICAL ISOLATOR	N/A	N/A
4	ENEM01048	ANGLED EXTENSION ELECTRODE RESISTOR SHAFT FRONT T PART	N/A	N/A
5	ENEM01050	E-GUN 45° ANGLED SHAFT	N/A	N/A
6	ENEM01049	ANGLED EXTENSION ELECTRODE FEMALE PART	N/A	N/A
7	TRTM08282	E-GUN+3 Ø31 CARBON RING	N/A	N/A
8	B10631003D	E-GUN+3 ELECTRODE BODY W/RESISTANCE	N/A	N/A
9	TRTM03114	E-GUN+3 ANGLED TYPE TIGHTENING NUT	N/A	N/A
10	TRTM01049	E-GUN+3 ANGLED-EXTENSION ELECTRODE FLAT CAP	N/A	N/A
11	B07524502	E-GUN HEAD GROUP SHAFT SET W/ DEFLECTOR	N/A	✓
12	TRTM01050	E-GUN+3 EXTENSION-ANGLED ELECTRODE DEFLECTOR CAP	N/A	✓

Part No	Order Code	Part Name	Wearing Part	RECOMMENDED STOCK PARTS
B1	B07EXT035D	E-GUN+3 90° ANGLED HEAD GROUP - DEFLECTOR	N/A	N/A
B2	B07EXT035F	E-GUN+3 90° ANGLED HEAD GROUP - FLAT	N/A	N/A
1	IZOR01007	O-RİNG Ø18X1,5	N/A	N/A
2	TRTM01049	E-GUN+3 ANGLED-EXTENSION ELECTRODE FLAT CAP	N/A	N/A
3	TRTM01022	FLAT HEAD GROUP CONICAL ISOLATOR	N/A	N/A
4	ENEM01048	ANGLED EXTENSION ELECTRODE RESISTOR SHAFT FRONT T PART	N/A	N/A
5	ENEM01052	E-GUN 90° ANGLED ELECTRODE MALE PART	N/A	N/A
6	ENEM01053	E-GUN 90° ANGLED SHAFT	N/A	N/A
7	ENEM01049	E-GUN ANGLED EXTENSION ELECTRODE FEMALE PART	N/A	N/A
8	TRTM08282	E-GUN+3 Ø31 CARBON RING	N/A	N/A
9	B10631003D	E-GUN+3 ELECTRODE BODY W/RESISTANCE	N/A	N/A
10	TRTM03114	E-GUN+3 ANGLED TYPE TIGHTENING NUT	N/A	N/A
11	B07524502	E-GUN HEAD GROUP SHAFT SET W/ DEFLECTOR	N/A	✓
12	TRTM01050	E-GUN+3 EXTENSION-ANGLED ELECTRODE DEFLECTOR CAP	N/A	✓
CP	*	DEFLECTOR	N/A	N/A
1	ENEM01044	DEFLECTOR Ø16	✓	✓
2	ENEM01045	DEFLECTOR Ø20	✓	✓
3	ENEM01046	DEFLECTOR Ø24	✓	✓
CP#2	ELON01012	RESISTANCE 15 MΩ 1/4 W (for every 150 mm)	N/A	N/A

Note: CP means Common Parts. The deflector group and resistance used in this listing is the same as the extension group. It is not shown again in the images.

FLAT TO DEFLECTOR HEAD GROUP REPLACEMENT IN 6 STEPS

1.

2.

3.

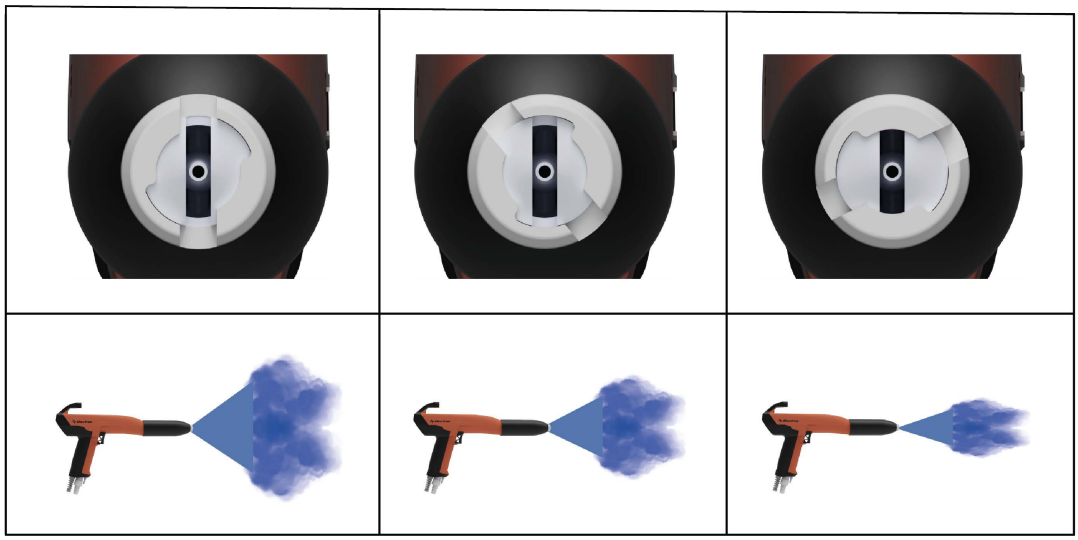
4.

5.

6.

Note: The steps shown can be applied to only **"complete set"** kits.

Part No	Order Code	Part Name	Wearing Part	RECOMMENDED STOCK PARTS
1	TRTM03112	E-GUN+3 FLAT CAP PATTERN ADJUSTER	N/A	✓
2	B07EGC100+3	E-GUN+3 C1 MANUAL GUN	N/A	N/A
3	B07EGC300+3	E-GUN+3 C3 AUTOMATIC GUN (Not Shown)	N/A	N/A
4	B07EGC200+3	E-GUN+3 C2 MANUAL GUN (Not Shown)	N/A	N/A

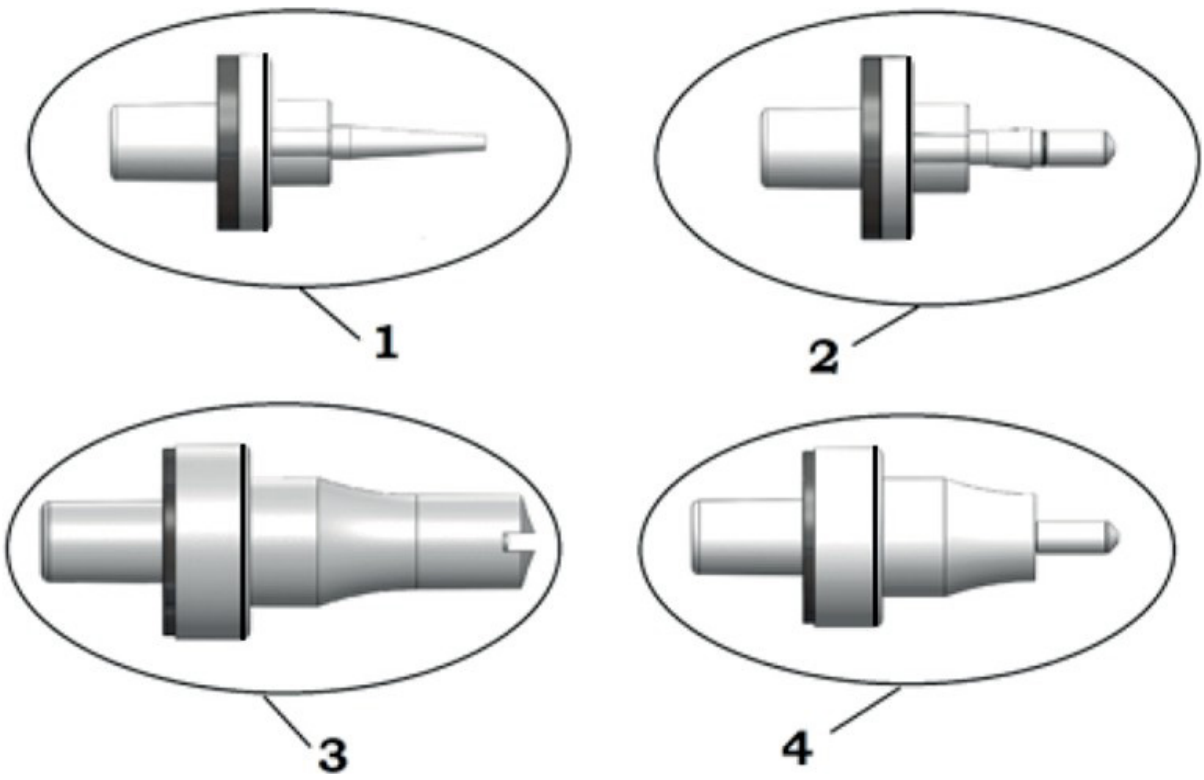


STANDARD PATTERN NARROW PATTERN FOCUSED PATTERN

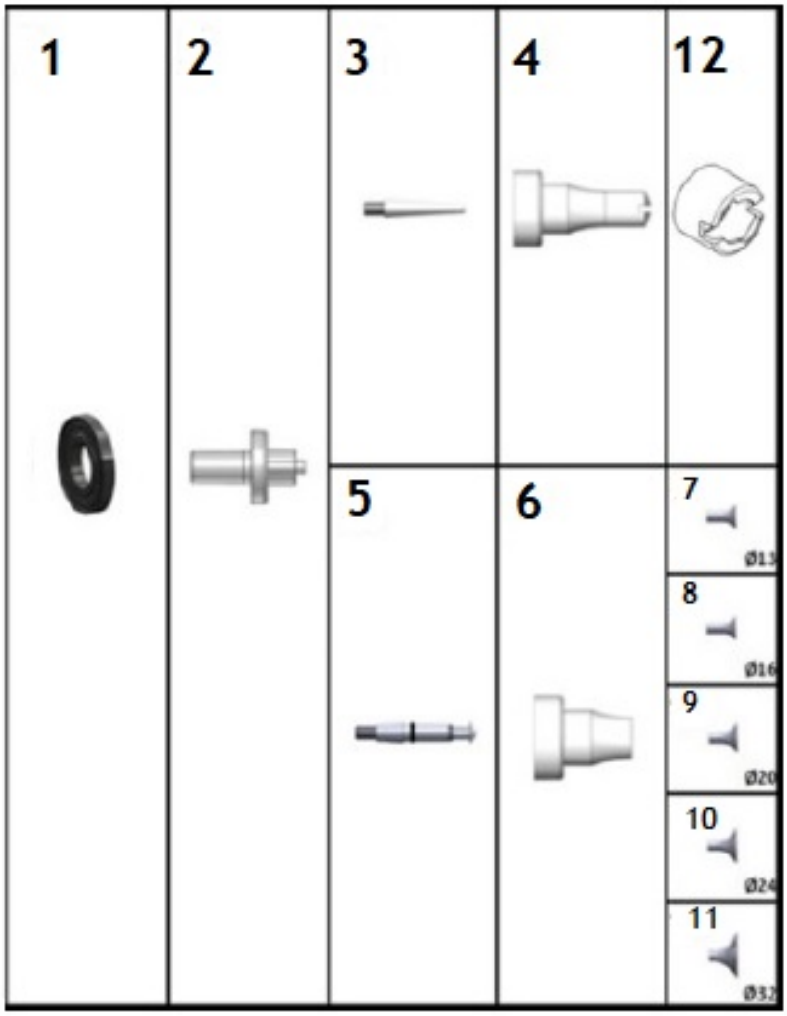
The Pattern adjuster attached to the tip of the manual or automatic gun ensures that the paint coming out of the gun is formed in a narrowed form. It is used by rotating and has three positions.

1.Standard
Pattern
2.Narrow Pattern
3.Focused Patern

The pattern adjuster ensures that the powder paint reaches the deepest points of the recessed parts. It is recommended for use in coating parts with recesses or complex geometry.



Part No	Order Code	Part Name	Wearing Part	RECOMMENDED STOCK PARTS
1	B07531006	E-GUN+3 FLAT ELECTRODE GROUP	✓	✓
2	B07531007	E-GUN+3 ELECTRODE GROUP WITH DEFLECTOR	✓	✓
3	B07531002	E-GUN+3 FLAT HEAD GROUP	✓	✓
4	B07531008	E-GUN+3 HEAD GROUP WITH DEFLECTOR	✓	✓



Part No	Order Code	Part Name	Wearing Part	RECOMMENDED STOCK PARTS
1	TRTM08282	E-GUN+3 Ø35 CARBON RING	✓	✓
2	B10631003D	**E-GUN+3 ELECTRODE BODY**	✓	✓
3	TRTM01022	E-GUN+3 FLAT HEAD GROUP CONICAL INSULATOR	✓	✓
4	TRTM01046	E-GUN+3 FLAT CAP	✓	✓
5	B07524503	**E-GUN+3 DEFLECTOR HEAD ASSEMBLY SHAFT SET**	✓	✓
6	TRTM01048	E-GUN+3 DEFLECTOR CAP	✓	✓
7	TRTM03013	E-GUN+3 Ø13 DEFLECTOR	✓	✓
8	ENEM01044	E-GUN+3 Ø16 DEFLECTOR	✓	✓
9	ENEM01045	E-GUN+3 Ø20 DEFLECTOR	✓	✓
10	ENEM01046	E-GUN+3 Ø24 DEFLECTOR	✓	✓
11	ENEM01067	E-GUN+3 Ø32 DEFLECTOR	✓	✓
12	TRTM03112	E-GUN+3 FLAT CAP PATTERN ADJUSTER	✓	✓

7.Service and Maintenance Table

DATE	MAINT.TYPE --Weekly --Yearly --Servicearly	MAINT. OR SERVICE PERSONNEL	PROCEDURE CHANGED PARTS NOTES	CONTROL SUPERVISOR

8. Product Life and Warran

8.1. Product Life

• The economic life of E-COAT+3 Master is approximately 10 years.
• This product life is highly dependent on the periodic maintenances and spare part changes in a timely manner. Improper maintenance will lead to lower product life.
• SİSTEM TEKNİK A.Ş. warrants supplying the needed service and the spare parts for the entire product life.

8.2. Warranty and Warranty Conditions

• The control unit is warranted for production and parts failure for 2 (two) years.
• Spare parts that are changed from the warranty are free-of-charge.
• The parts that are supplied in the system which are not produced by SİSTEM TEKNİK A.Ş. are warranted with their own manufacturers and their own conditions.
• SİSTEM TEKNİK A.Ş. will not be held responsible for the improper usage of the machine or any unauthorized usage. These are not in the warranty.
• SİSTEM TEKNİK A.Ş. will not be held responsible for any malfunctions that may occur when grounding conditions are not met.

8.3. Operating Conditions

- Read the user manual before using the gun.
- Only legally allowed people can operate E-COAT+3 Master.
- Only trained and authorized people can operate E-COAT+3 Master .
- SİSTEM TEKNİK A.Ş.'s suggested spare parts should be used at all times.
- Proper maintenance has to be done and the spare parts has to be changed in a timely manner
- The operational safety has to be assured by the customer; the operators who are not capable of working under safety rules shouldn't be operating the Control Unit.
- All the suggestions and warnings in this manual have to be carefully considered and applied.

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