Assembly and Operating Instructions

# SuperCorona<sup>®</sup> Retrofit set for the PG 1-A Automatic Powder Gun





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## SuperCorona<sup>®</sup> Retrofit set for the PG 1-A Automatic Powder Gun

### About these assembly and operating instructions

These assembly and operating instructions contain important information which is required to operate the SuperCorona<sup>®</sup>.

In order to be able to exploit all the advantages of the SuperCorona<sup>®</sup> the user should already be familiar with the working techniques and functioning of the powder coating equipment. It is not the purpose of this manual to give instruction on how to use powder coating equipment. If, however, problems do arise which are connected with the PG 1-A automatic powder gun or with the PGC 1 Powder Gun Control while working with the SuperCorona<sup>®</sup>, then the corresponding operating instruction manual should be consulted.

### Field of application

SuperCorona<sup>®</sup> is a retrofit set for the proven PG 1-A Powder gun with a Flat Spray Nozzle, with which an even better surface quality can be achieved when automatic powder coating. When coating wheel rims, drawers, radiators, lamps etc it is shown that the surface quality is exceptional also in the places where the coating is thicker. With many powder types an "orange peel" finish can be avoided completely.

The performance of the PG 1-A Powder gun with SuperCorona<sup>®</sup> is convincing due to its very good charging and very high deposit rate as well as improved penetration in "Faraday cages". The distance between nozzle and workpiece can be reduced to 100 mm without influencing the surface finish.

Due to the modular construction of the PG 1-A Automatic Powder Gun the light-weight SuperCorona<sup>®</sup> (approx. 60 g) can be fitted very quickly and easily. Even after retrofitting the PG 1-A remains maintenance and repair-friendly.

### Scope of delivery

The SuperCorona® retrofit set (Order No. 351 679) consists of :

Item 1	SuperCorona <sup>®</sup> Ring - complete	351 652
Item 2	Milled screw - M4 x 16 mm	239 879
Item 3	Gun holder bracket	351 687

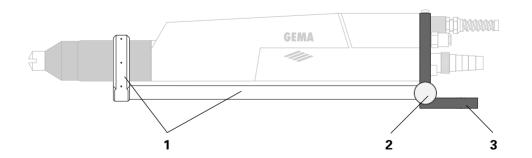


Fig. 1

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## Fitting the SuperCorona®

Before operating the SuperCorona<sup>®</sup> it is necessary to replace the original gun holder bracket of the PG 1-A with the modified gun holder bracket supplied with the SuperCorona<sup>®</sup>.

## Important: - Before disassembling the gun, switch off the control module and detach the gun connector at the gun socket (A Gun).

#### a) Replacing the gun holder bracket

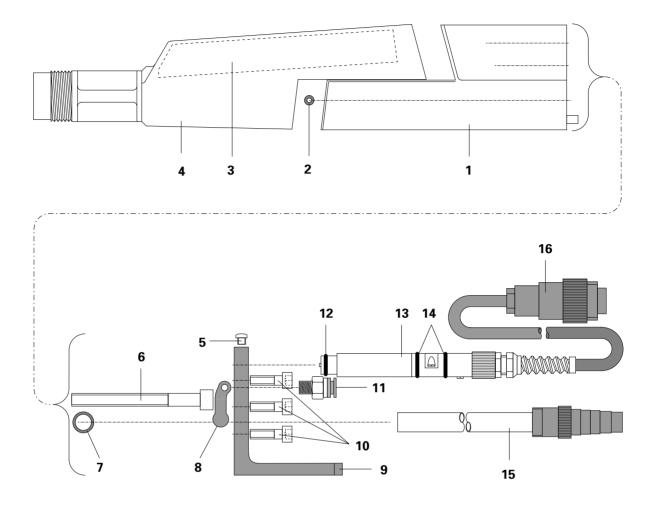
The new gun holder bracket can be left on the PG 1-A even when the SuperCorona<sup>®</sup> is not being used.

- 1. Detach the powder hose at connection (15)
- 2. Detach the rinsing air hose at the connection (11)
- 3. Remove the nozzle
- 4. Unscrew the rinsing air connection (**11**) and the powder hose connection (**15**) with the powder tube and pull it out of the gun support bracket (**9**)
- 5. Unscrew the lock screw (5)
- 6. Give the cable connector (13) a 1/4 turn counterclockwise and pull it out of the support bracket (9)
- 7. Screw the lock screw (5) provisionally into the new gun support bracket so that it will not get lost
- 8. Unscrew the three socket head screws (**10**) holding the gun support (**9**) with the correct size Allen key
- 9. Check the rinsing air gasket (8) and relpace, if necessary
- 10. Fit the new gun holder bracket to the gun body with the three socket head screws (10)
- 11. The gun is reassembled by performing the previously described disassembling steps in the reverse order
  - Careful handling is recommended!
  - If the gun connector (**13**) cannot be inserted properly without applying force, disassemble the gun again and reassemble it.

#### After the gun has been reassembled check that:

- the gun connector (13) is properly seated; the fixing screws (5) must be screwed fully into the counterbores.





- 1. Gun support
- 2. O-ring gasket
- 3. High-voltage cascade
- 4. Shaft
- 5. Locking screw
- 6. Plastic screw
- 7. O-ring gasket
- 8. Gasket

- 9. Gun support bracket10. Socket head screw
- 11. Rinsing air hose connection
- 12. O-ring gasket
- 13. Cable connector
- 14. O-ring gasket
- 15. Powder hose connection/Powder tube
- 16. Gun connector



### b) Fitting the SuperCorona® ring

A prerequisite for the following steps is that the new gun holder bracket must already be fitted (according to section "a) Replacing the gun holder bracket").

Before fitting the SuperCorona<sup>®</sup> make sure that the rod and the corresponding hole are free from contamination otherwise the electrical contact cannot be guaranteed.

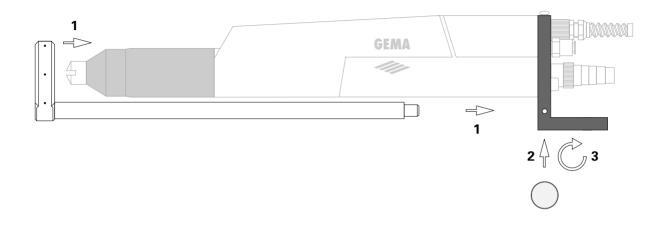


Fig. 3

- 1. Pass the PG 1-A threaded sleeve through the SuperCorona<sup>®</sup> ring and at the same time position the rod in the corresponding hole (to the stop) in the gun holder bracket.
- 2. Place the milled screw in the gun holder bracket and
- 3. screw tight.

## Cleaning

Conscientious maintenance at regular intervals increases the service life of the coating equipment and will result in uniform coating quality over a longer period!

### Important:

- Before cleaning the gun, switch off the control module and detach the gun connector at the gun socket (A Gun).
- The compressed air used for cleaning should be free of oil and water.

Daily:

1. Clean the outside of the gun and SuperCorona®

Weekly:

- 1. Unscrew the milled screw in the gun holder bracket and remove the SuperCorona<sup>®</sup> from the gun.
- 2. Detach the powder hose at the connector
- 3. Detach the nozzle from the gun and clean it
- 4. Blow out the gun through the powder inlet in the direction of flow
- 5. Clean the gun tube with the spiral brush supplied
- 6. Blow out the gun with compressed air again
- 7. Clean the powder hose
- 8. Reassemble and reconnect the gun



Documentation SuperCorona® / PG 1-A

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