

Ion Collector Kit – Encore[®] Automatic PE Gun

Description

This kit is used on the Encore Automatic Porcelain Enamel Powder Spray Gun. The ion collector can improve the smoothness and appearance of cured powder coatings. It collects ions emitted from the gun's charging electrode instead of allowing them to deposit on the part. This reduces the rate of charge buildup in the powder deposited on the part, which may reduce defects in the cured coating such as pin-holing and orange peel.

After installing the ion collector, adjust the collector rod position for best results as described in *Adjusting the Ion Collector Rod*.

Installation

1. See Figure 1. Install the mounting block (5) on the gun with the M5 lockwasher and screw (6, 7).
2. Insert the collector rod (1) into the block and secure it with the M5 x 8 set screw (4).
3. Slide the multi-point tip (3) onto the nozzle nut and attach it to the collector rod with the M3 screw (2).

NOTE: Remove the pattern adjust sleeve from the conical nozzle before installing the multi-point tip.

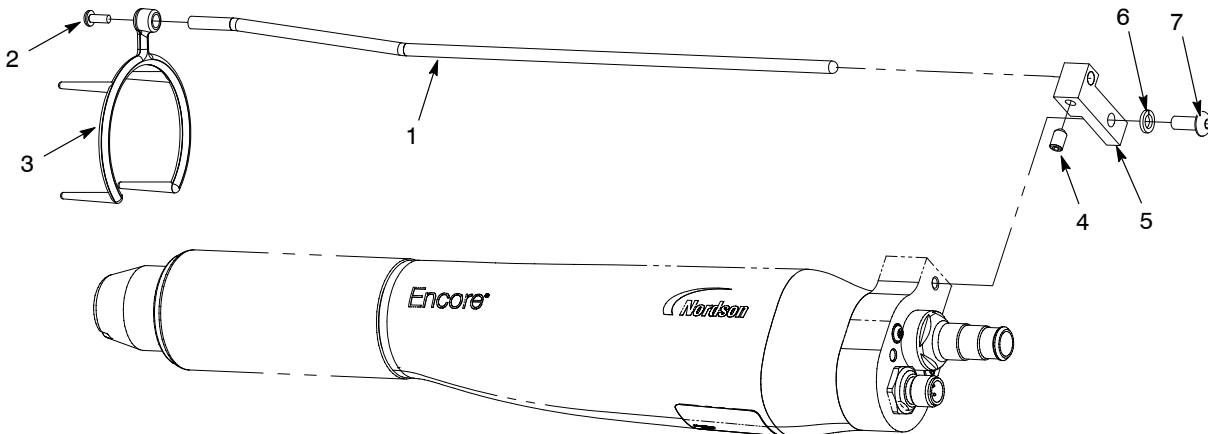


Figure 1 Ion Collector Installation

Adjusting the Ion Collector Rod

Use this procedure to position the end of the ion collector rod.

- If the tip at the end of the rod is too far away from the tip of the electrode, the ion collector will not collect any ions or improve the appearance of the cured coating.
 - If the tip at the end of the rod is too close to the tip of the electrode, powder particles may not be charged efficiently and the powder transfer efficiency may be reduced.
1. Before installing the ion collector rod on the gun, coat several parts. Note the current (μA) shown on the control unit display when coating the parts. Cure the coatings.
 2. Install the ion collector kit on the gun with the end of the rod far away from the front end of the gun.
 3. Turn on the electrostatic voltage and spray powder with a part in front of the gun. Slide the rod forward until the current shown on the control unit display is 5 to 7 μA higher than that displayed in step 1. Tighten the set screw to secure the rod.
 4. Cure the coating on the test parts. Compare the surface finish on these parts with the finish on the parts coated in step 1 (before the ion collector kit was installed).
 5. If the desired improvement in the surface finish has not been obtained, loosen the set screw and slide the rod forward approximately 1-in. Tighten the set screw.
 6. Repeat step 5 until the desired improvement in surface finish is obtained.

Parts

To order parts, call the Nordson Industrial Coating Systems Customer Support Center at (800) 433-9319 or contact your local Nordson representative.

See Figure 1 for item numbers.

Item	Part	Description	Quantity	Note
–	1602227	KIT, collector, ion, Encore PE	1	
1	-----	• ROD, ion collector, offset	1	
2	982017	• SCREW, pan, rec, M3 x 8, zinc	1	
3	-----	• TIP, ion collector, multi-point	1	
4	1097543	• SCREW, set, nylon tip, M5 x 8, black	1	
5	-----	• BLOCK, ion collector, Encore PE	1	
6	983401	• WASHER, lock, split, M5, steel, zinc	1	
7	982636	• SCREW, button, socket, M5 x 12, zinc	1	

Issued 9/12

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