

Ion Collector Kit for Encore Manual Spray Guns

Description

Use this kit for the following Nordson manual powder spray guns:

- Encore (obsolete)
- Encore LT
- Encore XT

The ion collector can improve the smoothness and appearance of cured powder coatings. It collects ions emitted from the gun's charging electrode and reduces the rate of charge buildup in the powder deposited on the part. This may reduce defects in the cured coating such as "pin-holing" and "orange peel".

See Figure 1. The kit consists of an collector rod (1), rod bracket (2), and fasteners. The distance from the end of the collector rod to the end of the spray gun is adjusted by sliding the rod through the bracket. The rod and bracket are electrically grounded through the gun cable and control unit.

A support bracket and longer rods are available to adapt the kit for use with 150-mm lance extensions.



Figure 1 Ion Collector Kit installed on a Encore XT manual spray gun

1. Collector rod

2. Rod bracket

Installation

NOTE: Before installing the ion collector kit on the spray gun, coat several parts. While coating the parts, write down the current (μA) value shown on the control unit display. Cure the coatings. This establishes a baseline that will help you adjust the rod length.

1. See Figure 2. If the threaded brass insert is not visible in the center of the boss on the gun body, use a utility knife to remove the plastic flash covering the insert.
2. Install the rod bracket (2) on the boss with the pan-head screw (3) and lock washer (4).
3. Slide the collector rod (1) through the bracket.
4. Install the set screw (5) into the rod bracket. Do not tighten it until you have adjusted the position of the end of the collector rod.

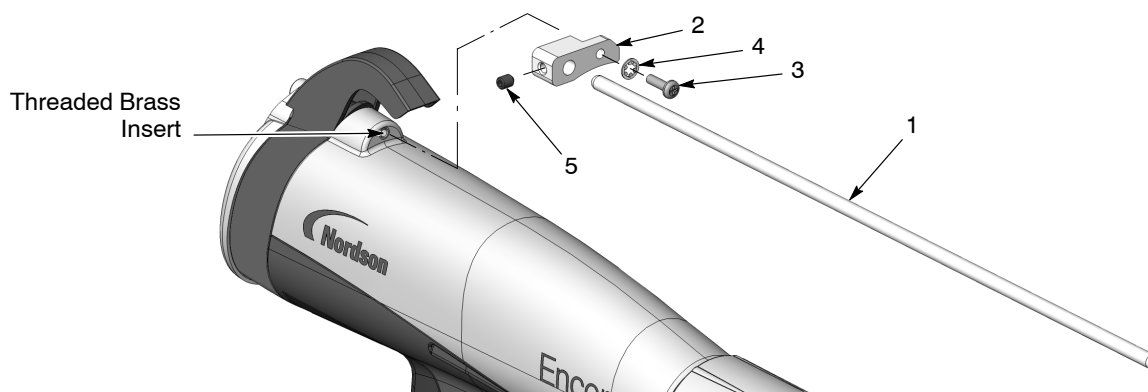


Figure 2 Installing the Ion Collector Kit on a Standard Spray Gun

- | | | |
|------------------|---------------------------|----------------------------|
| 1. Collector rod | 3. Pan-head screw M3 x 10 | 5. Set screw M4 x 5, black |
| 2. Rod bracket | 4. Lock washer M3 | |

Adjusting Rod Tip Position

After installing the ion collector kit, you must adjust the distance from the end of the collector rod to the tip of the spray gun's charging electrode. Finding the optimum location for the rod end requires some experimentation.

If the rod end is too far away from the tip of the electrode, the ion collector will not function properly. If the rod end is too close to the tip of the electrode, powder charging and transfer efficiency may be reduced.

1. See Figure 2. Slide the collector rod (1) back through the rod bracket until the end is 102–127 mm (4–5 in.) from the front end of the spray gun.
2. Start your powder coating system. While coating parts, slide the collector rod forward until the current shown on the control unit display is 5 to 7 μA higher than the current values you recorded before you installed the kit. Tighten the set screw (5) to secure the rod.

3. Cure the coating on the new parts. Compare the surface finish on these parts with the finish on the parts you coated before installing the kit.
4. If you did not obtain the desired improvement in the surface finish, loosen the set screw and slide the rod forward approximately 25 mm (1-in.). Tighten the screw.
5. Repeat steps 3 and 4 until you obtain the desired improvement in surface finish.

Parts

See Figure 3 for this kit. See Figure 4 for rods and support bracket for lance extensions.

Item	Part	Description	Quantity	Note
—	1603854	KIT, ion collector assembly, manual, Encore	1	
1	189482	• ROD, ion collector, 11 in.	1	
2	1603853	• BRACKET, support, ion collector	1	
3	982017	• SCREW, pan head, recessed, M3 x 8, zinc	1	
4	983520	• WASHER, lock, internal, M3, steel, zinc	1	
5	345225	• SCREW, set, socket, M4 x 5, cup, steel, black oxide	1	

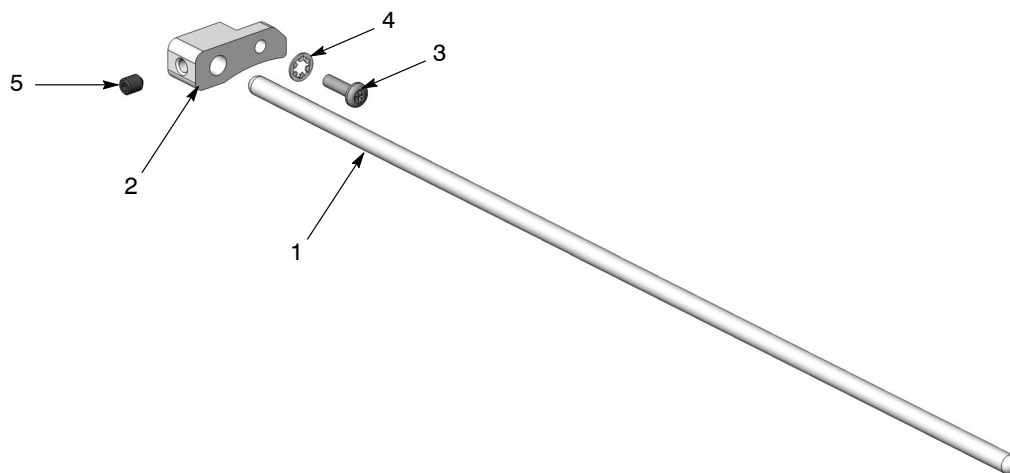


Figure 3 Ion collector kit

Components for Lance Extensions

Item	Part	Description	Quantity	Note
1	189483	• ROD, ion collector, 15 in.	1	A
6	1603939	• BRACKET, lance extension, ion collector, Encore	1	
NOTE A: Use for 150-mm lance extension.				

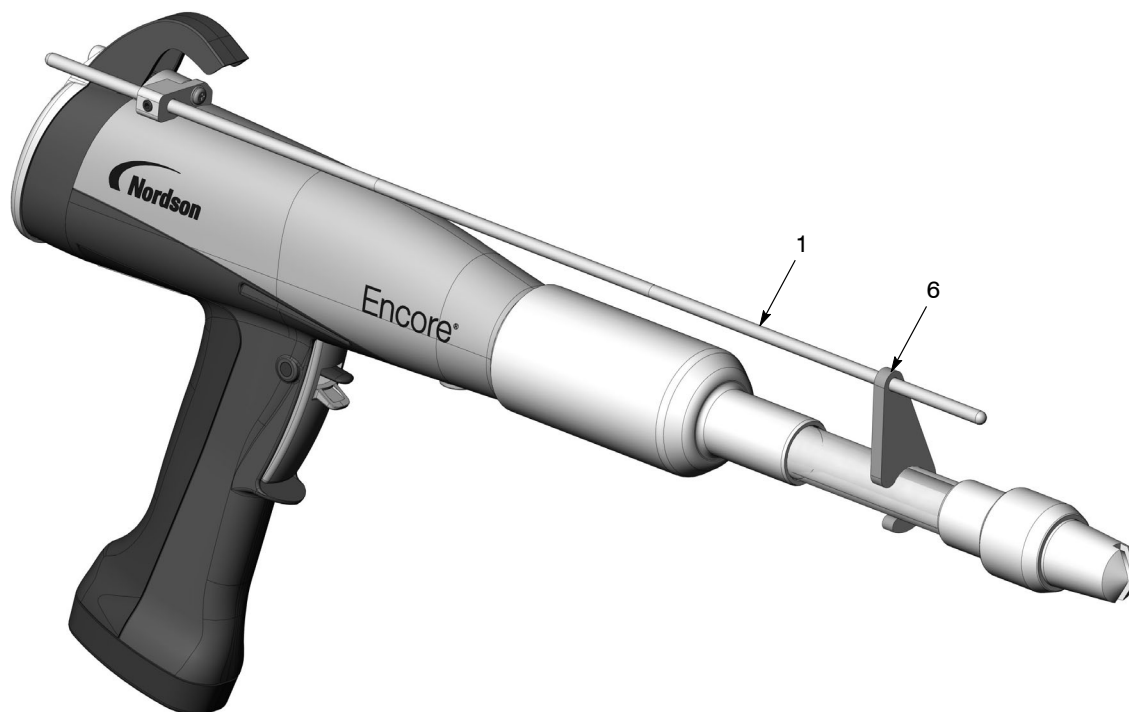


Figure 4 Components for use with Lance Extensions

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