

Encore[®] 90 Degree Spray Extension

Description

The Encore 90 Degree Spray Extension is used on Encore Automatic Powder Spray Guns. It allows powder to be sprayed at right angles to the gun mounting orientation.

The extension uses the nozzle, nozzle nut, and electrode support from the gun it is being installed on. It will accept all Encore flat spray and conical spray nozzles.

Installation



WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

1. If the gun is in use, purge it before installing the extension.
2. See Figure 1. If using a conical nozzle, remove the deflector (4). Unscrew the nozzle nut (1) and remove it, the nozzle (2), and the electrode holder (3) from the spray gun.

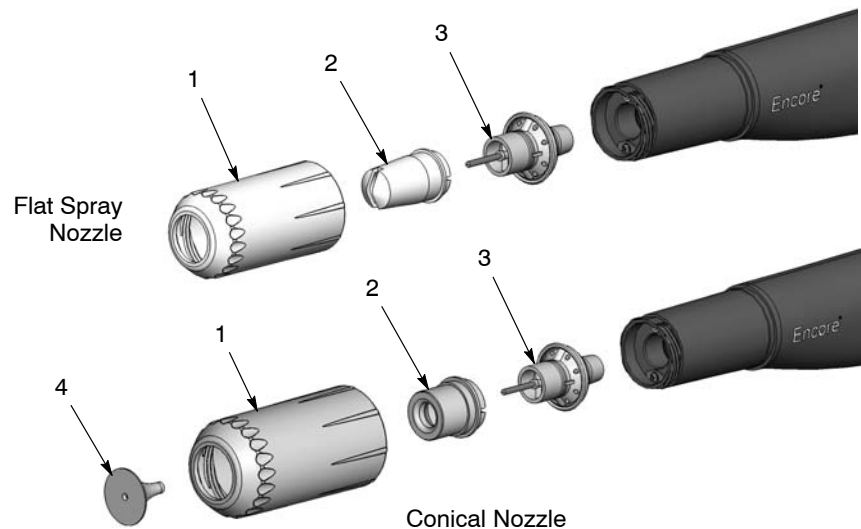


Figure 1 Removing the Nozzle from the Spray Gun

- | | |
|---------------|---------------------|
| 1. Nozzle nut | 3. Electrode holder |
| 2. Nozzle | 4. Deflector |

Installation *(contd)*

3. See Figure 2. Unscrew the body nut (1) from the 90 degree extension. Pull the retainer nut (2) out of the extension.

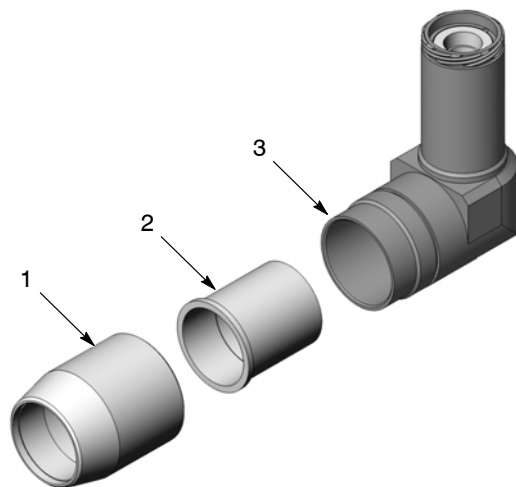


Figure 2 Removing Body and Retainer Nuts from Extension

1. Body nut
2. Retainer nut
3. Extension

4. See Figure 3. Slide the body nut (1) over the end of the spray gun (3). Thread the retainer nut onto the front of the spray gun, using the spanner wrench (4) included with the extension. With the retainer nut installed, the body nut should spin freely when rotated.

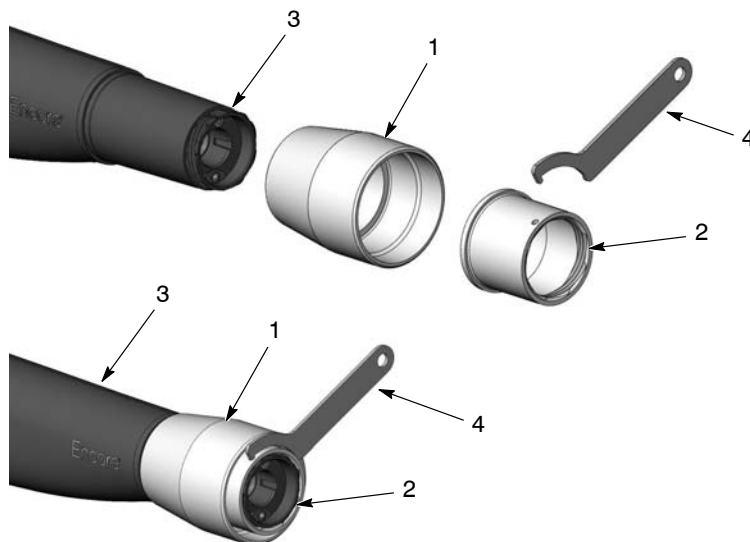


Figure 3 Installing the Body and Retainer Nuts onto the Spray Gun

1. Body nut
2. Retainer nut
3. Spray gun
4. Spanner wrench

- See Figure 4. Install the extension body (2) onto the gun, orient it as desired, then thread the body nut (1) onto the extension. Tighten the nut hand-tight.

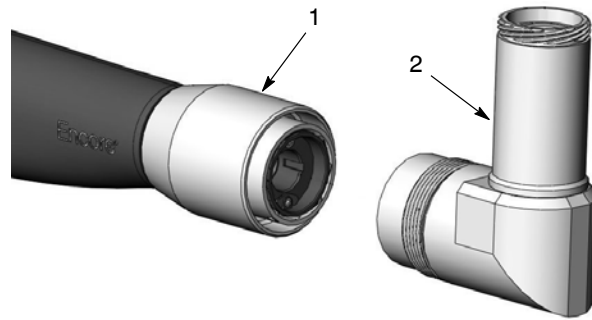


Figure 4 Installing the Extension on the Spray Gun

- Body nut
- Extension

- See Figure 5. Install the electrode holder, nozzle, and nozzle nut onto the extension. If using a flat spray nozzle, orient the nozzle as desired before tightening the nozzle nut hand-tight. If using a conical nozzle, install the deflector over the electrode holder after tightening the nozzle nut.

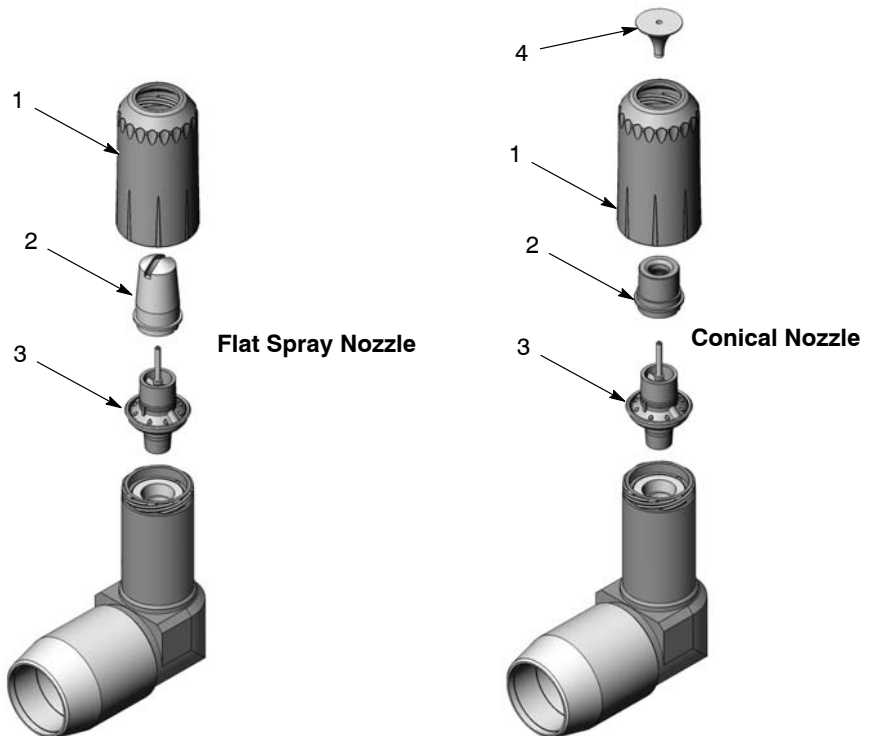


Figure 5 Installing Electrode Holder and Nozzle on the Extension

- Nozzle nut
- Nozzle
- Electrode holder
- Deflector

Repair

Two service kits are available: a powder body kit, and an extension body kit. In addition, you can also order individual service parts.



CAUTION: When repairing the spray extension, replace any parts with carbon tracking or pin holes.

Removal

1. If the gun is in use, purge it before removing the extension.
2. See Figure 5. Remove the nozzle and electrode holder from the extension.
3. See Figure 4. Unscrew the body nut (1) and remove the extension (2) from the spray gun.
4. Unless the body nut or retainer nut need to be replaced, you can leave them attached to the spray gun. If they must be replaced, remove the retainer nut from the spray gun with the spanner wrench as shown in Figure 3.

Disassembly

1. See Figure 6. Pull the powder tube (1) out of the gun end of the extension.
2. Pull the powder body (3) up and out of the nozzle end of the extension.

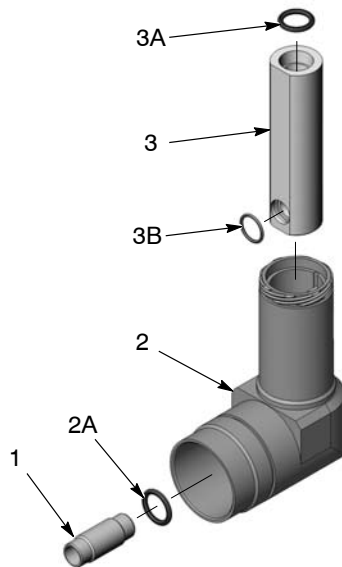


Figure 6 Exploded View of Extension Assembly

- | | |
|-------------------|----------------|
| 1. Powder tube | 3. Powder body |
| 2. Extension body | 3A. O-ring |
| 2A. O-ring | 3B. O-ring |

Cleaning and Inspection

NOTE: The O-rings shown in Figure 6 are included in the extension body and powder body service kits. If replacing either component, there is no need to remove the O-rings.

1. Clean the extension parts with low-pressure compressed air and a clean, soft cloth. Remove any impact-fused powder with a plastic or wooden tool. Do not scratch powder contact surfaces; powder will build up and impact fuse on scratches.



CAUTION: If necessary, remove the O-rings and clean the parts with a cloth dampened with isopropyl or ethyl alcohol. Do not immerse the parts in alcohol, or allow the O-rings to come in contact with alcohol. Do not use any other solvents.

2. Replace any O-rings that are damaged or swollen.
3. Replace any parts that are damaged or show signs of carbon tracking or pin-holing.

Assembly

1. See Figure 6. If replacing the extension body, make sure the O-ring (2A) is installed in the groove in the gun end of the new body before proceeding.
2. If replacing the powder body, make sure the two O-rings (3A, 3B) are installed in the new body before proceeding. Slide the powder body into the extension body, with the pin in the powder body aligned with the slot in the extension body.
3. Install the powder tube into the gun end of the extension body, and press it in with your finger until it bottoms out.

Installation

1. See Figure 4. Install the extension body onto the gun, orient it as desired, and thread the body nut onto the extension. Tighten the nut hand-tight.

Continuity and Resistance Check

See Figure 7.

If the powder being sprayed is not charging properly, check the continuity and resistance of the high voltage path, from the electrode ring in the gun end of the extension to the electrode, with a 500 volt megohm meter.

The reading should be less than 19–22 megohms. If it is not, disassemble the extension and make sure that all parts are undamaged.

The round brass contact in the end of the voltage multiplier must be up against the electrode ring in the extension, and the wire in the nozzle end of the extension must contact the electrode ring in the electrode holder to complete the high voltage path.

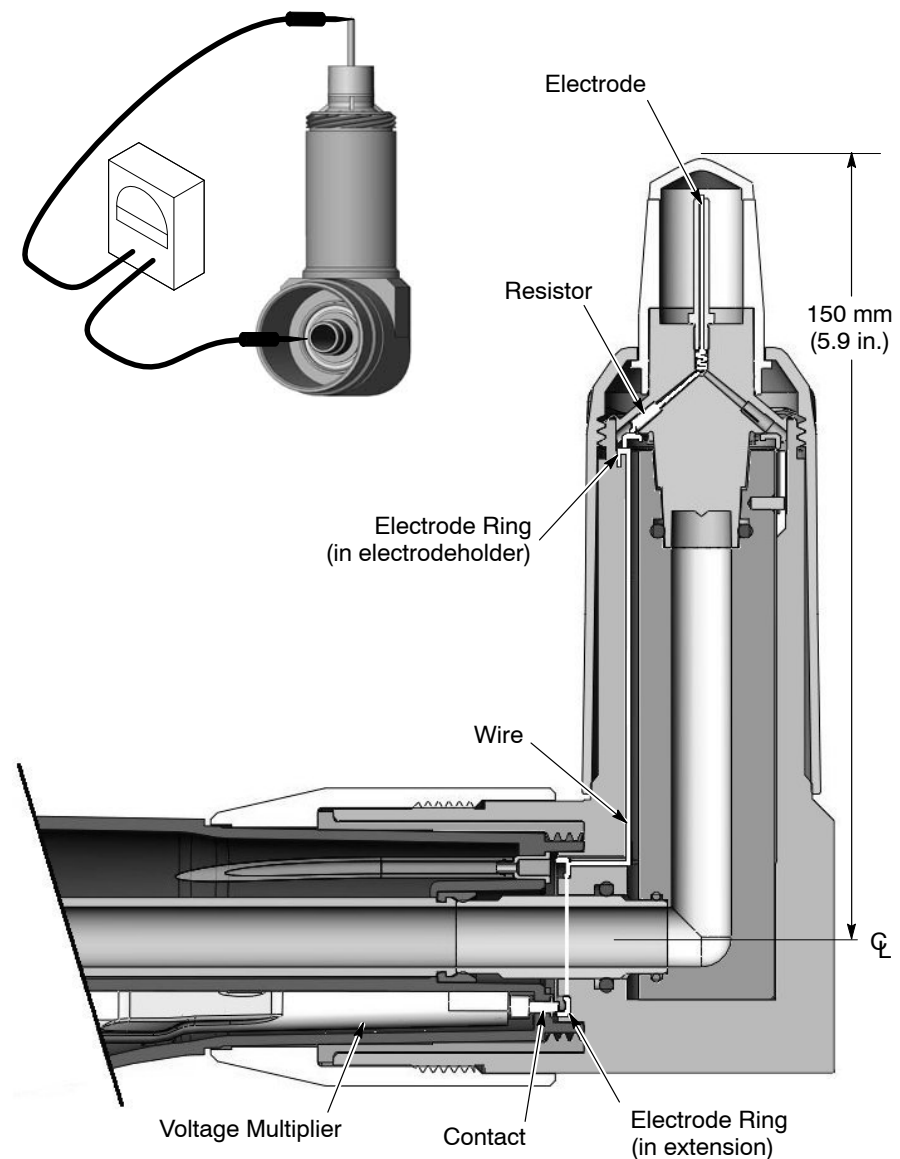


Figure 7 Continuity and Resistance Check

Parts

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

See Figure 8.

Item	Part	Description	Quantity	Note
—	1604084	Extension, spray, 90 degree, Encore	1	
1	1604085	• Nut, body, 90 degree extension, Encore	1	
2	1604086	• Nut, retainer, 90 degree extension, Encore	1	
3	1604088	• Tube, powder, 90 degree extension, Encore	1	
4	-----	• Body, 90 degree extension, auto, Encore	1	A
4A	941144	• O-ring, Viton, 0.625 x 0.813 x 0.094 in.	1	A
5	-----	• Body, powder, 90 degree extension, auto, Encore	1	B
5A	1604111	• O-ring, silicone, 14 mm ID x 1.5 mm wide	1	B
5B	941131	• O-ring, silicone, 0.563 x 0.750 x 0.094 in.	1	B

NOTE A: Included in 1604132 Kit, Service, 90 Degree Extension Body, Encore.
 B: Included in 1604131 Kit, Service, Powder Body, 90 Degree Extension, Encore.

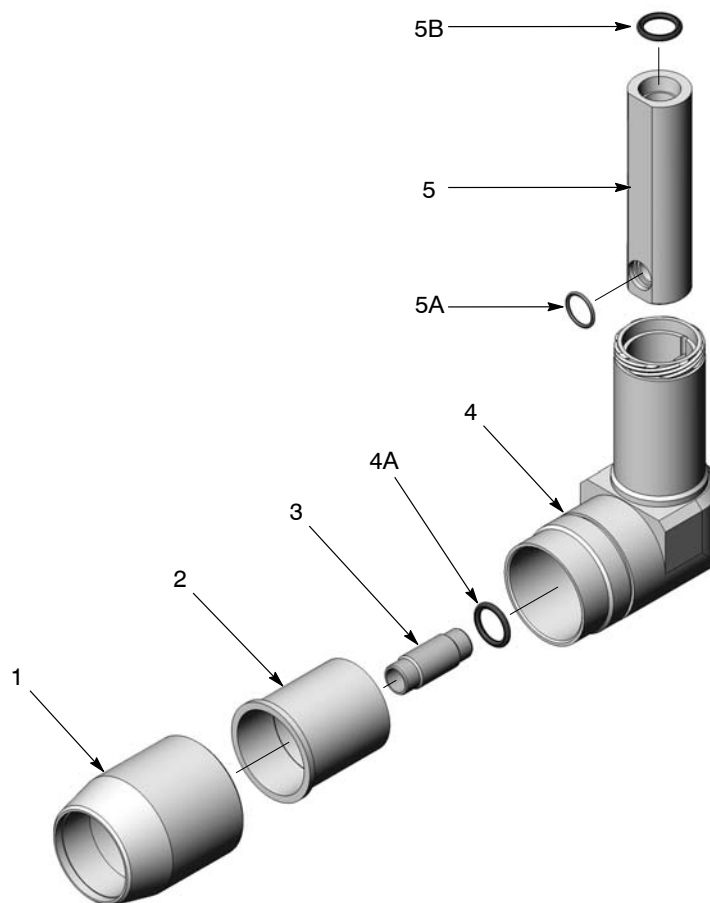


Figure 8 Extension Parts

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