

# 150-, 300-, and 450-mm Lance Extensions

## Installation



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



**WARNING:** Turn off the electrostatic voltage and ground the gun electrode before performing the following tasks. Failure to observe this warning could result in a severe shock.

The 150-, 300-, and 450-mm lightweight lance extensions can be used on manual and automatic Versa-Spray and Versa-Spray II powder spray guns. Follow the appropriate installation procedure based on which type of gun you have:

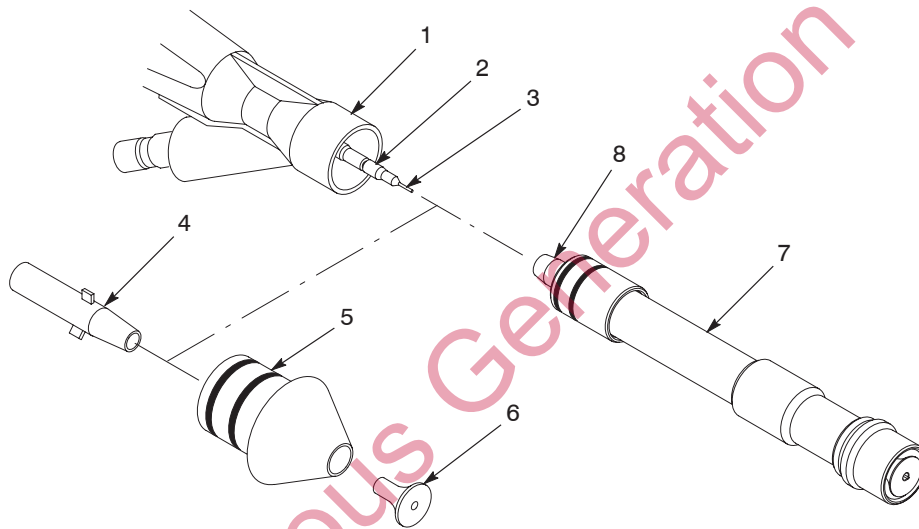
Gun Type	Installation Procedure
Versa-Spray	<i>Standard Installation</i>
Versa-Spray II without air	<i>Standard Installation</i>
Versa-Spray II with air	<i>Gun with Air Installation</i>

**NOTE:** Before installing the lance extension, disconnect the powder feed hose from the pump. Blow out the feed hose, powder inlet body, nozzle extension (if used), and nozzle with low-pressure compressed air. Use a clean, dry cloth to wipe off the remaining powder after removing the nozzle parts.

## Standard Installation

See Figure 1.

1. Remove the nozzle (5) and deflector (6), if used, from the powder inlet body (1).
2. Remove the wear sleeve (4) from the resistor probe (2).
3. Install the lance extension (7) into the end of the powder inlet body, guiding the resistor probe into the lance extension contact sleeve (8). Be careful not to damage the electrode (3).
4. If desired, the pattern adjust sleeve, deflector, and nozzle (See Figure 2, (7), (8), and (9)) can be removed from the lance extension and replaced with a flat-spray nozzle and adapter.



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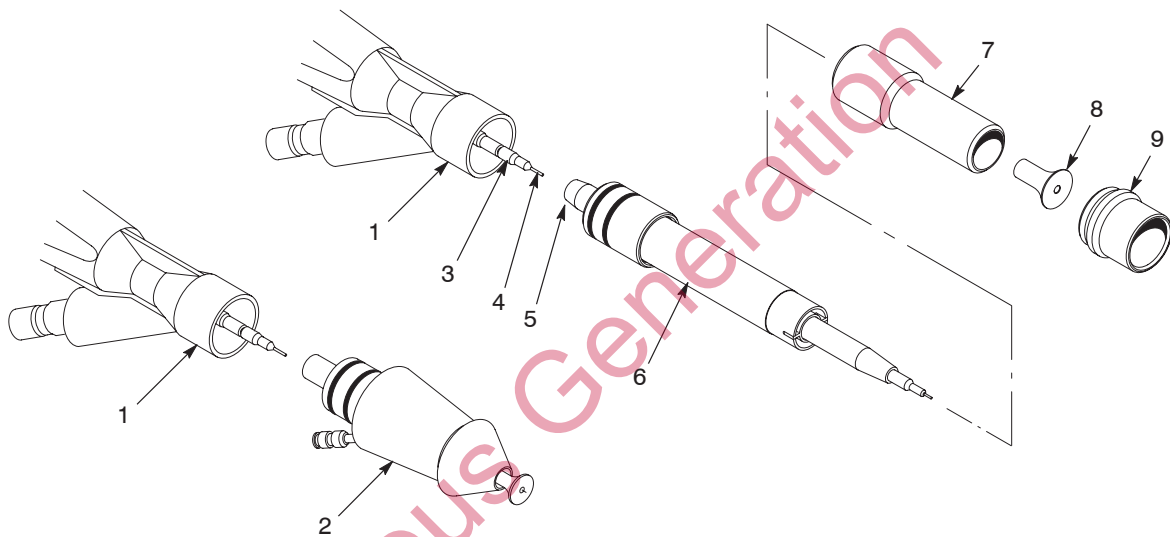
Figure 1 Standard Lance Extension Installation

- |                      |                   |                    |
|----------------------|-------------------|--------------------|
| 1. Powder inlet body | 4. Wear sleeve    | 7. Lance extension |
| 2. Resistor probe    | 5. Conical nozzle | 8. Contact sleeve  |
| 3. Electrode         | 6. Deflector      |                    |

## Gun with Air Installation

See Figure 2.

1. Disconnect the air tubing from the nozzle extension assembly (2), then remove it from the powder inlet body (1).
2. Install the lance extension (6) into the end of the powder inlet body, guiding the resistor probe (3) into the lance extension contact sleeve (5). Be careful not to damage the electrode (4).
3. Remove the pattern adjust sleeve (9), deflector (8), and conical nozzle adapter (7) from the end of the lance extension. Install the flat-spray nozzle adapter (See Figure 3 (1)) in place of the nozzle.



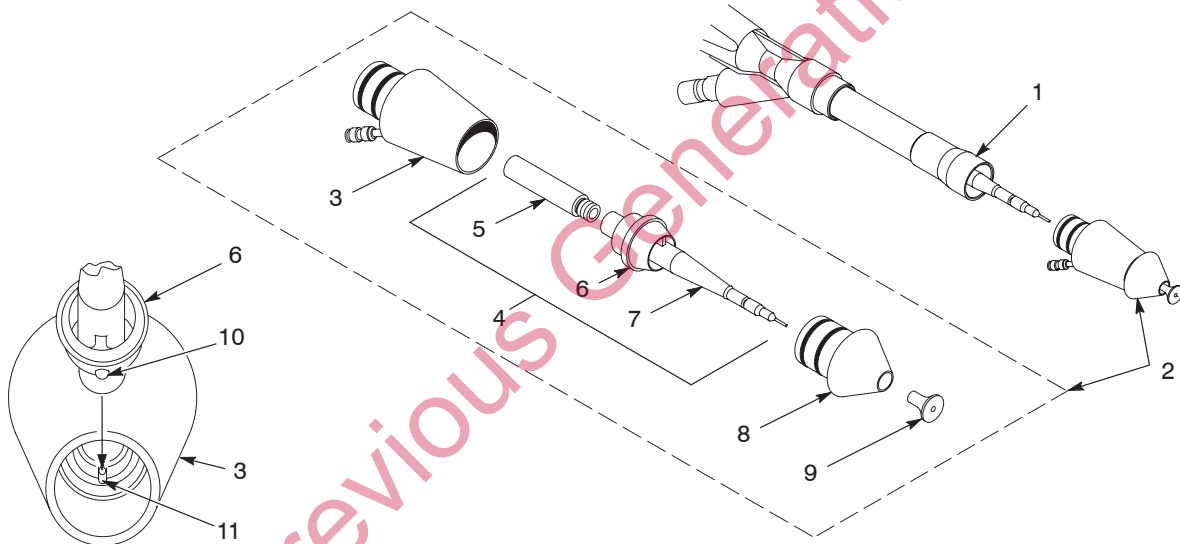
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Figure 2 Gun with Air Lance Extension Installation

- |                              |                    |                           |
|------------------------------|--------------------|---------------------------|
| 1. Powder inlet body         | 4. Electrode       | 7. Conical nozzle adapter |
| 2. Nozzle extension assembly | 5. Contact sleeve  | 8. Deflector              |
| 3. Resistor probe            | 6. Lance extension | 9. Pattern adjust sleeve  |

**Gun with Air Installation** (contd)

4. See Figure 3. Unscrew the wear sleeve (5) from the spider (6). If you need to remove the wear sleeve/spider/resistor holder assembly from the nozzle adapter in order to remove the wear sleeve, perform this procedure:
  - a. Remove the deflector (9) and nozzle (8), if used.
  - b. Push on the wear sleeve to get the wear sleeve/spider/resistor holder assembly (4) out of the body (3).
  - c. Unscrew the wear sleeve (5) from the spider (6).
  - d. Align the small pin (10) on the spider with the slot (11) in the body. Press the spider/resistor holder assembly (6, 7) back into the body.
  - e. Install the nozzle and deflector, if used, onto the extension assembly.
5. Install the nozzle extension assembly (2) onto the flat-spray nozzle adapter (1). The lance extension resistor probe fits up into the spider.



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Figure 3 Removing the Nozzle Extension Wear Sleeve

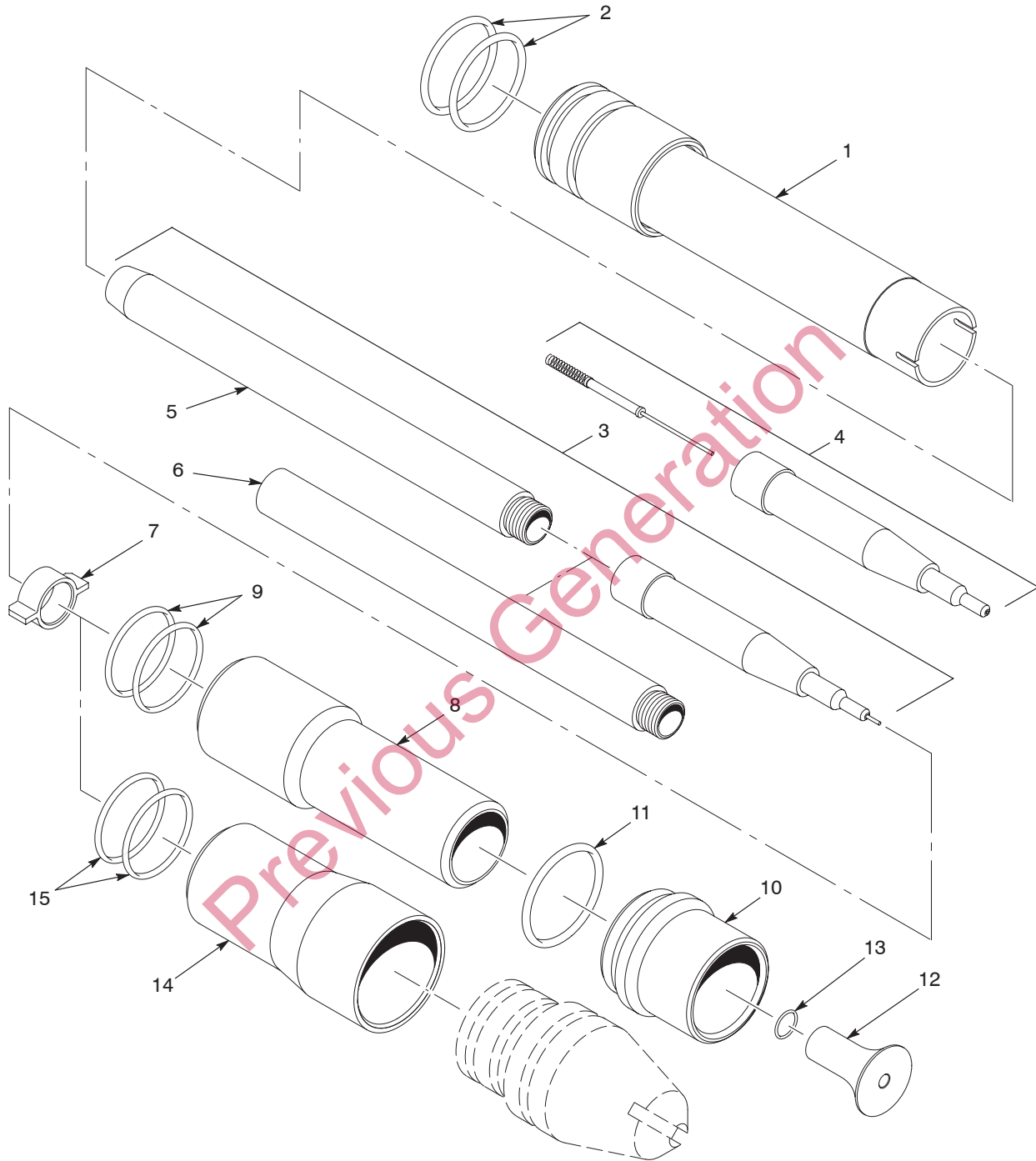
- |                                       |                    |              |
|---------------------------------------|--------------------|--------------|
| 1. Flat-spray nozzle adapter          | 5. Wear sleeve     | 9. Deflector |
| 2. Nozzle extension                   | 6. Spider          | 10. Pin      |
| 3. Nozzle extension body              | 7. Resistor holder | 11. Slot     |
| 4. Wear sleeve/spider/resistor holder | 8. Nozzle          |              |

## Parts

See Figure 4.

Item	Part	Description	Quantity	Note
—	233469	150 mm LANCE EXTENSION	1	
—	233468	300 mm LANCE EXTENSION	1	
—	233455	450 mm LANCE EXTENSION	1	
1	233467	• TUBE, 150 mm, gun, extension	1	
1	233466	• TUBE, 300 mm, gun, extension	1	
1	233454	• TUBE, 450 mm, gun, extension	1	
2	941181	• • O-RING, silicone, 0.875 x 1.063 x 0.094 in.	2	
3	160066	• ELECTRODE ASSEMBLY, lance, 150 mm	1	
3	160068	• ELECTRODE ASSEMBLY, lance, 300 mm	1	
3	233451	• ELECTRODE ASSEMBLY, lance, 450 mm	1	
4	170277	• • SERVICE KIT, lance resistor and electrode support	1	
5	160020	• • SLEEVING, contact	1	
6	160021	• • LINK, adapter	AR	A
7	233462	• SUPPORT, cable well	1	
8	233461	• ADAPTER, nozzle, light weight, with O-rings	1	
9	940203	• • O-RING, silicone, 0.875 x 1.000 x 0.063 in.	2	
10	233459	• ADJUSTER, pattern, lance, with O-ring	1	
11	941193	• • O-RING, silicone, 0.937 x 1.125 x 0.094 in.	1	
12	173138	• DEFLECTOR, 19 mm, flat, VS2, Tivar, with O-ring	1	
13	940084	• • O-RING, silicone, 0.188 x 0.312 x 0.063 in.	1	
14	233456	• ADAPTER, nozzle, flat spray, with O-rings	1	
15	940203	• • O-RING, silicone, 0.875 x 1.000 x 0.063 in.	2	
NOTE A: Not used on 150-mm lance extensions. Use one on 300-mm lance extensions. Use two on 450-mm lance extensions.				
AR: As Required				

# Parts *(contd)*



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Figure 4 Lance Extensions

Issued 3/03

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