

## Nozzle Extension Installation for Versa-Spray® and Versa-Spray® II Manual Guns used with Versa-Spray® Control Units

#### 1. Introduction

This instruction sheet covers the installation of the gun air and nozzle extension kits listed below. It also includes a nozzle extension repair procedure, test specifications for the extension resistor, and parts lists for the kits. The gun air flows through the center of the nozzle extension and out around the electrode, preventing powder particles from collecting on the electrode.

183 333 Gun Air Kit

183 334 Nozzle Extension Kit

#### 2. Gun Air Kit Installation

This kit is installed in the control unit IN port. The kit is shipped fully assembled. See Figure 1.

**NOTE:** This kit will allow air to flow continuously to the nozzle extension until the air supply to the control unit is shut off.

Disconnect the supply air tubing from the 10-mm or <sup>3</sup>/<sub>8</sub>-in. tube connector (3) in the IN port (5) of the control unit. Remove the tube connector.

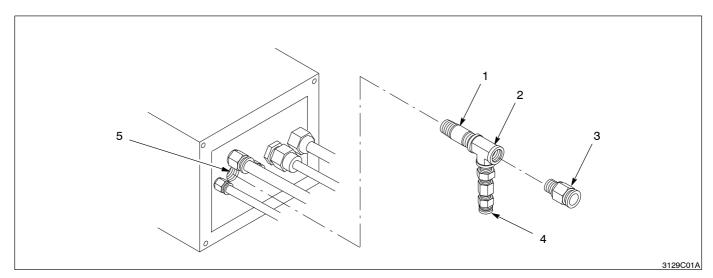


Fig. 1 Installing gun air kit

- 1. Nipple
- 2. Tee

- 3. 10-mm tube connector
- 4. 6-mm tube connector
- 5. IN port

# 2. Gun Air Kit Installation (contd.)

- 2. Wrap the nipple (1) threads with PTFE tape and thread the nipple into the IN port. Orient the assembly so the 6-mm connector (4) is pointing down.
- 3. Wrap the threads of the tube connector removed in step 1 with PTFE tape and install it into the open end of the tee (2).
- 4. Connect the supply air tubing to the tube connector installed in step 3.

#### 3. Nozzle Extension Installation

- 1. See Figure 2. Remove the deflector (2), nozzle (3) and wear sleeve (1) from the gun.
- 2. Install the nozzle extension (4) onto the gun. The resistor probe (7) goes into the nozzle extension wear sleeve (5). Be careful not to damage the electrode (6).
- 3. Install the nozzle (3) and deflector (2) onto the nozzle extension.
- 4. Install 6-mm air tubing between the 6-mm tube connector (4, Fig. 1) and the nozzle extension. The tubing should be approximately 1 ft (0.3 meter) longer than the gun cable. Tubing must be ordered separately. Refer to the parts lists on the following pages for the tubing part number.

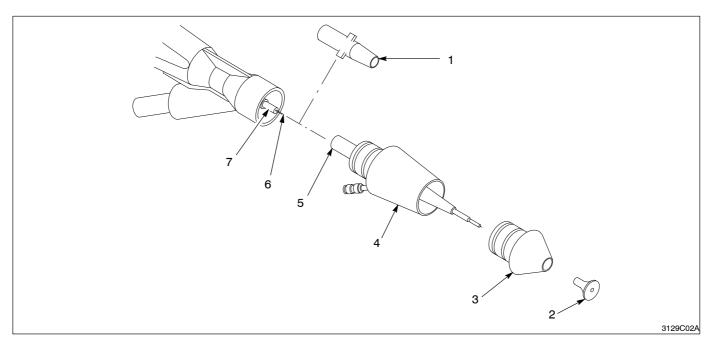


Fig. 2 Installing a nozzle extension (Versa-Spray II conical nozzle shown)

- 1. Wear sleeve
- 2. Deflector
- 3. Conical nozzle

- 4. Nozzle extension
- 5. Nozzle extension wear sleeve
- 6. Electrode
- 7. Resistor probe

## 4. Nozzle Extension Repair

- 1. See Figure 3. Push on the wear sleeve (3) to get the wear sleeve/spider/resistor holder assembly (3, 4, 5, 6) out of the nozzle adapter (2).
- 2. Unscrew the wear sleeve (3) and resistor holder (6) from the spider (4).
- 3. Remove the resistor (5) from the resistor holder.
- 4. Test the resistor continuity and resistance with a megohm meter. The megohm meter should read between 18 and 22 megohms at 500 volts. If the reading is out of this range, replace the resistor.
- 5. Replace any worn or damaged parts.
- 6. Install the resistor in the resistor holder.
- 7. Install the wear sleeve and resistor holder onto the spider.
- 8. Align the small pin (7) on the spider with the slot (8) in the nozzle adapter. Press the spider/resistor holder assembly (3, 4, 5, 6) back into the nozzle adapter.

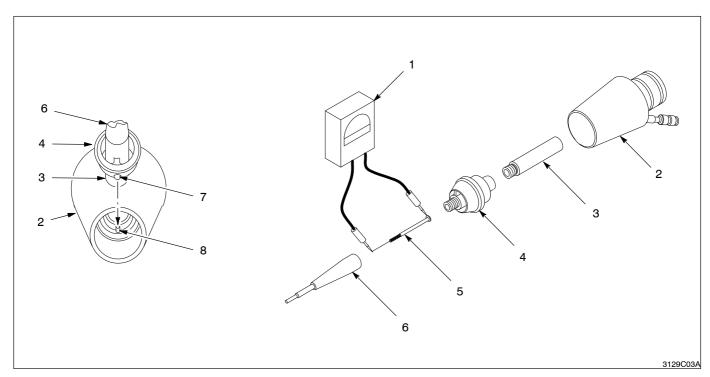


Fig. 3 Nozzle extension repair

- 1. Megohm meter
- 2. Nozzle adapter
- 3. Wear sleeve

- 4. Spider
- 5. Resistor
- 6. Resistor holder

- 7. Pin
- 8. Slot

#### 5. Parts Lists

#### Gun Air Kit

See Figure 4.

Item	Part	Description	Quantity	Note
_	183 333	Kit, VS1 manual controls gun air	1	
1	973 117	• Nipple, steel, sched. 40, <sup>1</sup> / <sub>4</sub> -in. NPT, 1.50-in.	1	
2	973 260	• Tee, pipe, hydraulic, <sup>1</sup> / <sub>4</sub> -in. NPT	1	
3	973 372	• Bushing, pipe, hydraulic, $^1/_4$ -in. NPT x $^1/_8$ -in. NPT	1	
4	972 244	• Orifice, .010 in., <sup>1</sup> / <sub>8</sub> -in. NPT x <sup>1</sup> / <sub>8</sub> -in. NPT, brass	1	
5	972 141	<ul> <li>Connector, male, 6-mm tube x <sup>1</sup>/<sub>8</sub>-in BSPT</li> </ul>	1	

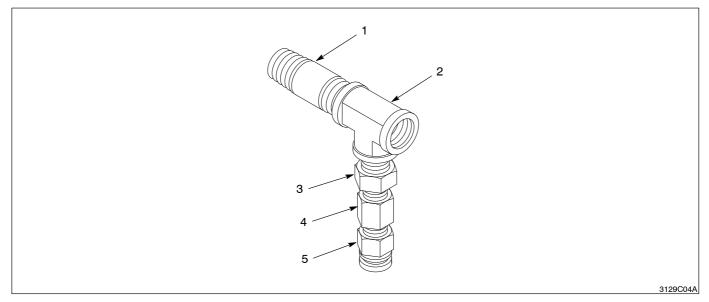


Fig. 4 Gun air kit

#### Nozzle Extension Kit

#### See Figure 5.

Item	Part	Description	Quantity	Note
_	183 334	Kit, extension, nozzle	1	
1	183 645	Service kit, resistor, w/holder, VS2	1	
2	179 182	Holder, resistor	1	
_	183 646	Service kit, resistor, nozzle extension, VS2	1	
3		Resistor, nozzle extension, VS2	1	
4	182 255	Kit, spider, w/O-ring	1	
5		Spider, air inlet, VS2	1	
6	940 104	• • O-ring, silicone, .250 x .375 x .063 in.	1	
7	173 179	Sleeve, wear, VS2	1	
8	182 254	Kit, adapter, nozzle, VS2, w/O-ring	1	
9		Adapter, nozzle, VS2	1	
10	941 181	• • O-ring, silicone, .875 x 1.063 x .094 in.	2	
11	173 177	Fitting, M6, straight	1	
12	971 790	Union, straight, 6 mm, plastic	1	

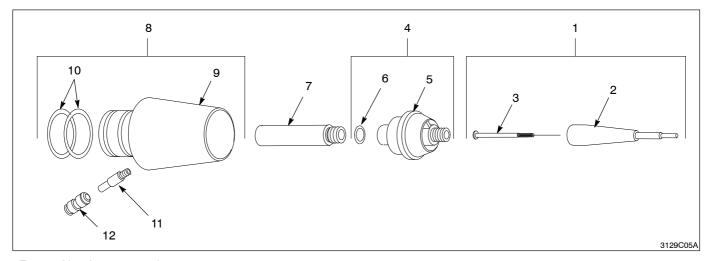


Fig. 5 Nozzle extension kit

## 5. Parts Lists (contd.)

## Powder Feed and Air Tubing

Part	Description			
900 550	Tubing, powder, <sup>1</sup> / <sub>2</sub> -in. I.D.	Α		
900 742	Tubing, polyurethane, 6-mm			
NOTE A: Bulk part numbers. Order in 1-ft increments.				

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