Section 9

Servicing the 800M Slot Nozzle Assembly
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1. Introduction

This publication describes how to service the 800M Series Metered Applicator slot nozzle and pattern plate assembly.

In this documentation, the term “pattern plate” refers to the machined plate attached directly to the 800M adhesive manifold.

2. Preparing for Disassembly

1. Disconnect and lock out power from the applicator.

   **WARNING:** Risk of electrical shock. The applicator contains voltages that can cause injury or death.

2. Let the applicator cool down.

   **WARNING:** Applicator parts are extremely hot and can cause serious burns.

3. Turn module-operating air pressure to the applicator off.

4. Relieve system pressure according to the procedure *Relieving Hydraulic Pressure* in Section 7 of this manual.

   **WARNING:** Risk of burns. Failure to relieve system pressure can result in hot material being sprayed from a connecting point, possibly causing serious burns.
3. Disassembly

This procedure describes how to disassemble and remove the slot nozzle assembly and pattern plate while at the applicator. You may find it more efficient to remove the entire pattern plate assembly and complete disassembly afterwards.

Item numbers (in parenthesis) refer to Figure 9-1 and its parts list at the end of this publication.

5. Disconnect the lines for module-operating air pressure from the applicator.

Note: If necessary, label the air lines for easy reconnection later on.

6. (Figure 9-1) Remove the set screws (1) from the slot nozzle clamp (2).

![Figure 9-1 Slot Nozzle Clamp Assembly](image)

1. Set screw  
2. Nozzle clamp  
3. Die set clamp  
4. Doctor blade assembly  
5. Socket head screw  
6. Dowel pin

7. (Figure 9-1) Slide the die set clamp (3) away from the doctor blade assembly (4), then slide the doctor blade assembly down and free of the clamp.
8. (Figure 9-2) Remove the flat head screws (1) from the doctor blades (2 and 3), then separate the shims (4) from the doctor blades. 

Note: Note the exact order and position of the shims when separating them. This will ease reassembly later.

9. Remove the clamp assembly from the pattern plate. Store the screws in a labeled plastic bag until reassembly.

10. (Figure 9-1) Separate the die set clamp (3) from the slot nozzle clamp (2). It is not necessary to remove the dowel pins (6) from the die set clamp.
11. (Figure 9-3) Remove the socket head screws (1) that secure the slotted adapter (2) to the bottom of the pattern plate (3). Remove and discard the o-rings (4). Store the screws in a labeled plastic bag until reassembly.

Figure 9-3 Slotted Adapter Details

1. Socket head screw
2. Slotted adapter
3. Pattern plate
4. O-ring
12. (Figure 9-4) Remove the two screws that secure each module (1) to the pattern plate (2), then remove the modules and o-rings. Place the modules and mounting screws in a plastic bag for safe keeping, but discard the o-rings. New ones will be used during reassembly.

13. (Figure 9-4) Remove the socket head screws (3) that secure the pattern plate (2) to the applicator adhesive manifold.

14. (Figure 9-4) Remove and discard the o-rings (4 and 5) from between the pattern plate and adhesive manifold. They will be replaced with new ones during reassembly.

15. (Figure 9-4) Remove all plugs (7) from the pattern plate (2), then discard the o-rings.

Note: You may need to heat the pattern plate to remove the plugs.
4. **Cleaning**

16. Clean all items by following the same general procedure as for cleaning nozzles with R solvent. Refer to the procedure *Nozzle Cleaning* in Section 5 of this manual.

17. (Figure 9-4) Install new o-rings (P/N 945 085) on the plugs (7) removed in step 11 (above).

18. Reinstall the plugs in the pattern plates.

5. **Reassembly**

This procedure describes how to assemble and install the slot nozzle and pattern plate onto the applicator. You may find it more efficient to assemble the pattern plate assembly at a workbench first and complete installation afterwards.

1. (Figure 9-4) Lubricate the new small o-rings (5) and new large o-ring (4).

2. (Figure 9-4) Place these o-rings in their grooves in the back of the pattern plate, then attach the pattern plate to the adhesive manifold with the large socket-head screws (3). Use anti-seize compound on the threads of the screws. Torque the screws to 11 ft-lb (14.9 N-m).

3. (Figure 9-4) Clean the mating surface of each of the modules (1). Make sure that all grooves and fluid passages are free of old adhesive and any debris.

4. (Figure 9-4) Coat three new o-rings (P/N 940 111) with o-ring lubricant and place them in their grooves in one of the modules.

5. (Figure 9-4) Secure one of the modules to the pattern plate (2) with two of the socket-head mounting screws from the plastic bag. Use anti-seize compound on the threads of the screws. Torque the screws to 7 ft-lb (9.5 N-m).

6. (Figure 9-4) Repeat steps 4 and 5 for the other modules.
7. (Figure 9-3) Install new o-rings (4) in their grooves in the top of the slotted nozzle adapter (2), then secure the adapter to the bottom of the pattern plate with the socket head screws (1). Use anti-seize compound (P/N 900344) on the threads of the screws. Torque the screws to 3.6 ft-lb (4.9 N-m).

**Note:** Ensure that the modules seat firmly in the nozzle adapter before torquing the screws.

8. (Figure 9-1) Assemble the die set clamp (3) to the slot nozzle clamp (2), then secure the assembly to the pattern plate with the socket head screws (5). Use anti-seize compound on the threads of the screws. Torque the screws to 11 ft-lb (14.9 N-m).

9. (Figure 9-1) Apply anti-seize compound to the threads of the set screws (1), then install the set screws loosely in the slot nozzle clamp (2).

10. (Figure 9-2) Assemble the doctor blade assembly (1-4) exactly as it was before disassembly.

11. Slide the doctor blade assembly up and in between the slotted adapter and clamp assembly.

12. Torque the clamp set screws to 7 ft-lb (9.5 N-m).

13. Reconnect the air lines for module operation to their respective air ports.

14. The applicator is ready for operation.
6. **Slot Nozzle and Pattern**  
**Plate Parts List with Illustration (Typical)**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No.</th>
<th>Description</th>
<th>See Note</th>
<th>Qty. in Assembly</th>
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<tr>
<td>1</td>
<td></td>
<td>Pattern Plate</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>O-ring</td>
<td></td>
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<tr>
<td>3</td>
<td></td>
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<tr>
<td>4</td>
<td></td>
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<td>5</td>
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<td>Plug, Pipe, 1/8 NPT</td>
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<tr>
<td>7</td>
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Figure 9-5 Slot Nozzle and Pattern Plate Assembly