Instructions - Parts

25N836 Small Round Spray Kit (8 mm)
and 25N837 Medium Round Spray Kit (12 mm)

To convert a Pro Xp™ Electrostatic Air Spray Gun to a round spray pattern. For professional use only.

Important Safety Instructions
Read all warnings and instructions in this manual and in your Pro Xp™ Electrostatic Air Spray Gun manual before using the equipment. Save these instructions.

100 psi (0.7 MPa, 7.0 bar) Maximum Fluid Working Pressure
100 psi (0.7 MPa, 7.0 bar) Maximum Air Working Pressure
## Related Manuals

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## Overview

Round spray kits provide a swirling, slow, round cone pattern for excellent finish and transfer efficiency. The fan valve can be used to adjust pattern size. Round spray kits work best with low to medium production rates.

- **Part No. 25N836 small pattern (8 mm)**  
  Uses a dual inner and outer atomizing air design for improved atomization at low air flows. Produces smaller patterns less than 4 inches. Best for flow rates below 8 oz/min.

- **Part No. 25N837 medium pattern (12 mm)**  
  Uses a dual inner and outer atomizing air design for improved atomization at low air flows. Produces smaller patterns less than 6 inches. Best for flow rates up to 12 oz/min.

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### Diagram

![Diagram of a round spray gun with labels for fluid flow (FL), outer air flow (A1), and inner air flow (A2).](image-url)

### Item Table

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<th>Item</th>
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<td>FL</td>
<td>Fluid flow</td>
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<td>A1</td>
<td>Outer air flow</td>
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<td>A2</td>
<td>Inner air flow</td>
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Installation

**WARNING**

FIRE AND EXPLOSION HAZARD
To prevent fire and explosion, turn off electrostatics and follow the Flushing procedure in your electrostatic gun manual before installing this kit.

PRESSURIZED EQUIPMENT HAZARD
This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as splashing, follow the Pressure Relief Procedure in your electrostatic gun manual before installing this kit.

1. Flush the gun as instructed in your electrostatic gun manual.
2. Follow the Pressure Relief Procedure in your electrostatic gun manual.
3. Remove the retaining ring and air cap.
   **NOTE:** Trigger the gun while removing the nozzle to help drain the gun and prevent any paint or solvent left in the gun from entering the air passages.
4. Trigger the gun while removing the fluid nozzle.
   **NOTE:** Use non-silicone grease, Part No. 111265, on the small o-ring (4c). Do not over-lubricate. Do not lubricate the conductive contact ring (4b).
5. Make sure the conductive contact ring (4b) and the o-ring (4a) are in place on the round spray nozzle (4). Lightly lubricate the o-ring (4a).
6. Make sure the electrode needle is finger-tight.
7. Trigger the gun while installing the fluid nozzle (4) with the multi-tool provided with the gun. Tighten until the fluid nozzle seats in the gun barrel (1/8 to 1/4 turn past hand-tight).
8. Make sure that the o-rings (4c and 4d) are in place. Slide the inner air cap (3) over the electrode and thread it onto the nozzle.
9. Press on the round spray diffuser (3c) and install the air cap (5). Reinstall the retaining ring (6).
   **NOTE:** Items marked with a ★ are shown for reference and are not included in the kit.

10. Test the gun resistance as instructed in your gun manual.

![Figure 1 Round Spray Air Cap, Diffuser, and Nozzle](image-url)
Installation

Fluid and Air Flow Adjustment

In many round spray applications, it is desirable to use a very low air cap flow to minimize pattern velocity and maximize efficiency. Follow this procedure to achieve the most efficient pattern.

1. Close the fan valve by turning the valve fully clockwise. This controls the outer air flow.
2. Close the atomizing valve fully counterclockwise and then open it one turn. This controls the inner air flow.
3. Open the ES on/off valve and then adjust the gun air inlet pressure to maintain 45 psi at the gun inlet. The LED indicator should remain green.
4. Turn off the ES on/off switch.
5. Adjust the fluid pressure to the gun to achieve the desired fluid flow rate.
6. Spray a test pattern to check the atomization level.
   • To improve the atomization, increase the inner air flow by turning the atomization valve clockwise.
   • If more air flow is needed, increase the gun inlet pressure.
7. To reduce the pattern size, add outside air and increase the air flow by opening the fan valve.
8. When you are ready to begin spraying, turn the ES on/off switch to on.

Cleaning the Air Cap

To clean the air cap, do the following:
1. Follow the Pressure Relief Procedure in your electrostatic gun manual.
2. Remove the retaining ring and outer air cap.
3. Unthread the inner air cap to remove the inner air cap and diffuser.
4. Soak the parts in a compatible solvent and blow the passages out with air.
5. If you suspect that some passages are plugged, use a screwdriver to pry off the diffuser from the inner air cap to inspect the inner fluid flow passages.
6. Use a thin tool to pry the deflector from the inner air cap to expose the inner air flow passages. Be very careful not to damage or distort the edges of the parts.
7. After cleaning, verify that all the o-rings are in place. Reassemble the air cap.
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