

INSTRUCTIONS—PARTS LIST



307—935

Rev. E

Supersedes D

This manual contains **IMPORTANT
WARNINGS AND INSTRUCTIONS**
READ AND RETAIN FOR REFERENCE



ROUND PATTERN KIT

For use on the PRO3500™, PRO4500™, PRO4600™ Electrostatic Air Spray Guns

Part Number 222–329

102 to 152 mm (4 to 6 in.) pattern size

Part Number 222–330

203 to 254 mm (8 to 10 in.) pattern size

INSTALLATION

WARNING

Before installing or removing the air cap/fluid nozzle assembly, always turn off the electrostatics to the gun and relieve all pressure in the system. This helps reduce the risk of fire, explosion, or electrostatic shock, which could cause serious bodily injury and property damage, and reduces the risk of splashing fluid in the eyes or on skin if the gun is accidentally triggered.

Pressure Relief Procedure

1. Turn the **ES Valve (electrostatics) OFF**.
2. Turn off the air and fluid supply to the gun.
3. Trigger the gun into a grounded metal waste container to relieve fluid pressure.

Installing the Kit

CAUTION

Be sure to hold the front end of the gun up while removing the nozzle and resistor stud to prevent any paint or solvent left in the gun from entering the air passages.

1. Remove the air cap assembly. Point the front end of the gun up and squeeze the trigger while removing the fluid nozzle/resistor stud assembly.

NOTE: If the resistor stud remains in the gun when the fluid nozzle is removed, start the nozzle thread onto the stud and pull the stud out.

2. Using the 8 mm hex key, supplied with the gun, unscrew and remove the resistor stud.
3. Lightly lubricate the o-ring on the resistor stud with a very small amount of petroleum jelly. Using the 8 mm hex key, install the resistor stud (A) in the fluid nozzle (2). Tighten to 10 in-lb (1.12 N•m). Make sure the needle electrode is properly tightened.

CAUTION

Be sure to install the resistor stud into the nozzle to prevent paint leakage into the gun's air passages and ensure proper electrostatic operation.

4. Trigger the gun while installing the fluid nozzle (2) and resistor stud (A) assembly. Tighten until the fluid nozzle seats in the gun barrel.

CAUTION

To avoid bending the electrode, carefully guide the electrode all the way through the hole in the fluid nozzle before engaging its threads.

5. Place the spacer (5) on the fluid nozzle (2).
6. Place the diffuser (1) over the spacer (5) and onto the fluid nozzle (2).
7. Install the air cap (3) over the fluid nozzle (2), being careful not to bend the electrode.
8. Screw the gun's retaining nut (Part No. 185–098) over the air cap (3), onto the spray gun.
9. Tighten the retaining nut until it is snug, allowing the air cap to turn with resistance. If too tight, the spray pattern will be distorted.
10. Test the gun resistance as instructed in your gun instruction manual.

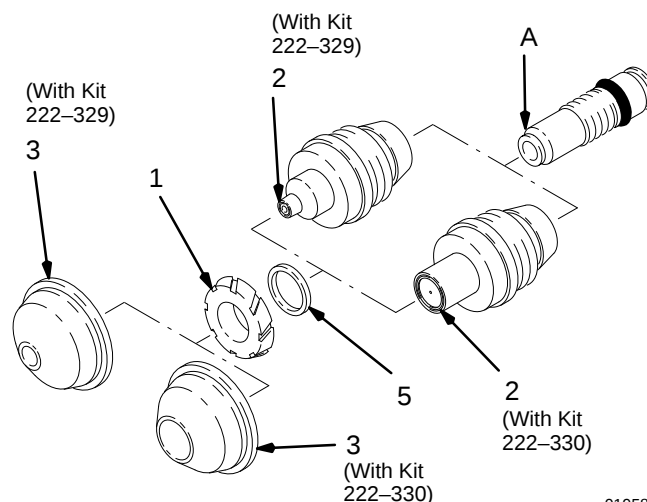


Fig 1

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PARTS DRAWINGS AND LISTS

Part Number 222-329

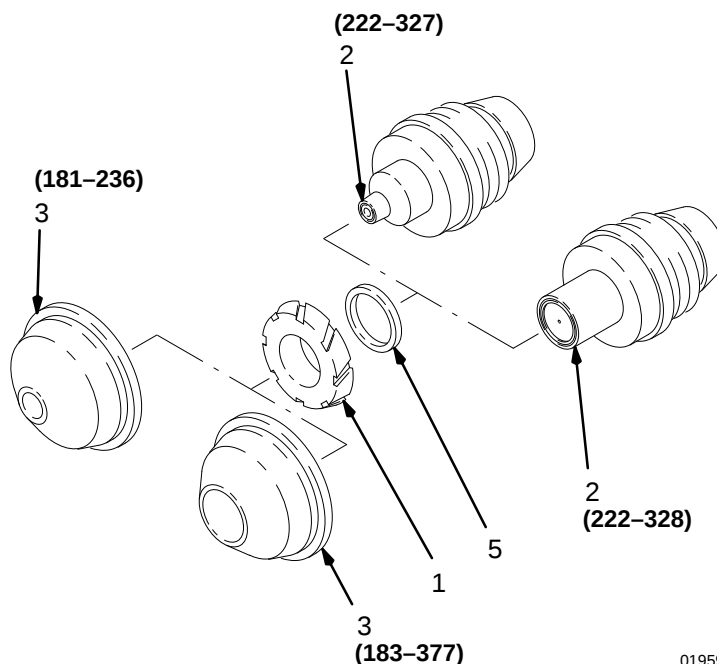
102 to 152 mm (4 to 6 in.) Pattern Size

REF NO.	PART NO.	DESCRIPTION	QTY
1	181-237	DIFFUSER	1
2	222-327	NOZZLE, fluid	1
3	181-236	AIR CAP	1
5	183-378	SPACER	1

Part Number 222-330

203 to 254 mm (8 to 10 in.) Pattern Size

REF NO.	PART NO.	DESCRIPTION	QTY
1	181-237	DIFFUSER	1
2	222-328	NOZZLE, fluid	1
3	183-377	AIR CAP	1
5	183-378	SPACER	1



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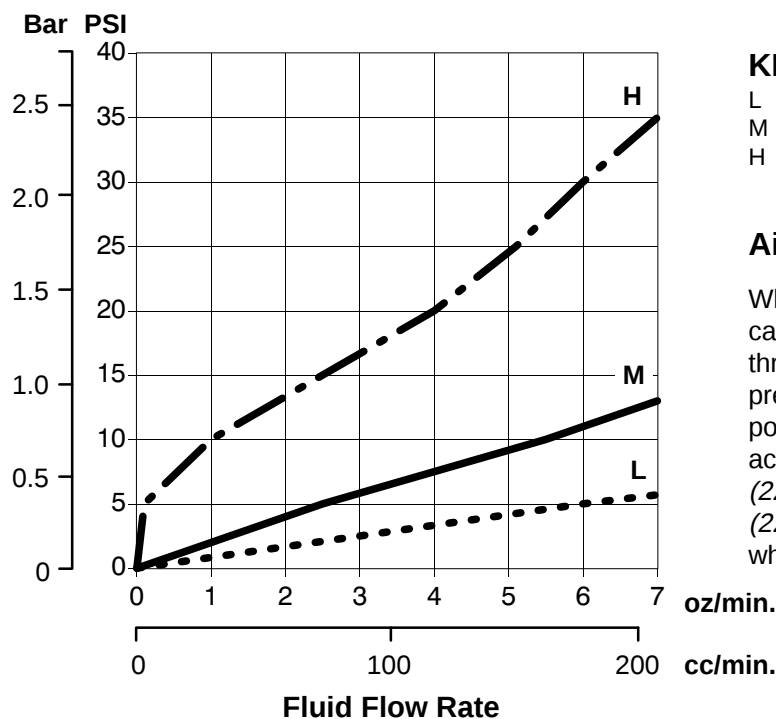
Manual Change Summary

The manual was revised to correct the nozzle illustration.

ROUND PATTERN AIR SPRAY PERFORMANCE CHARTS

Part Number 222-329 and 222-330

Fluid Pressure



KEY

L ——— Light Viscosity; 18 sec. #2 Zahn
M ——— Medium Viscosity; 30 sec. #2 Zahn
H ——— Heavy Viscosity; 30 sec. #3 Zahn

Air Flow Adjustment

When using the round pattern kits, in most applications it is desirable to use a very low air flow through the air cap while maintaining enough pressure at the gun inlet for full electrostatic power (about 40 psi [2.8 bar]). This can be achieved by using the gun's air restrictor valve (222-322) and by closing the gun's fan air valve (222-321). The pattern width cannot be adjusted when using the round pattern kits.

NOTE: Not recommended for flow rates above 7 oz/min. (207 cc/min.)

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