

# Porcelain Enamel Powder Transfer Pump with Stainless Steel Tube Adapter

## Description

The porcelain enamel powder transfer pump is a highly efficient venturi-type powder pump designed to handle highly abrasive porcelain enamel powders. The air nozzle and ceramic throat are held into the body with interference fits provided by silicone O-rings. The hose adapter attaches to the pump with twist locks and has an internal ceramic wear sleeve for protection against wear.

Two versions of the pump are available. One version comes with an assembly that mounts the pump directly on the booth and collects the powder overspray from the booth.

The other version attaches to the bulk feeder unit and transfers the powder from a 55-gallon drum or other bulk loading device into the hopper.

Previous Generation

## Installation



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

### Booth Mounted Assembly

See Figure 1.

1. Install the powder transfer pump (5) to the powder booth collector dip leg.
2. Push the transfer hose (8) into the adapter (7) until the hose contacts the ceramic wear tube (6).
3. Connect the air supply into the air nozzle inlet of the elbow (1).

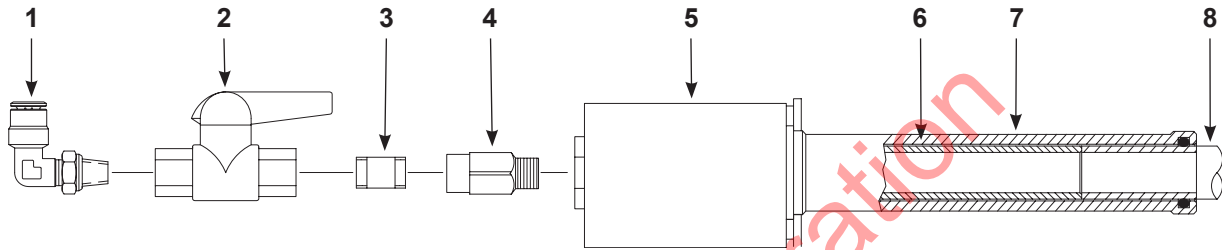


Figure 1 Porcelain Enamel Powder Transfer Pump (Booth Mounted Assembly)

- |                       |                         |                  |
|-----------------------|-------------------------|------------------|
| 1. Elbow              | 4. Check valve          | 7. Adapter       |
| 2. Shutoff ball valve | 5. Powder transfer pump | 8. Transfer Hose |
| 3. Steel nipple       | 6. Ceramic wear tube    |                  |

## Bulk Feeder Assembly

See Figure 2.

1. Install the pump (3) on the drum truck feed tube (4) adapter.
2. Connect the 1/4-in. ID air hose (1) to the check valve (2).

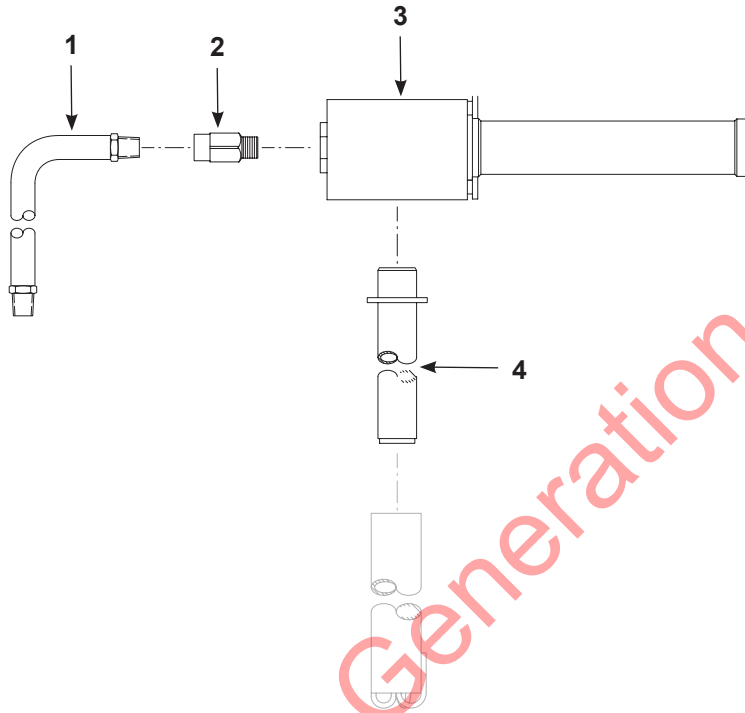


Figure 2 Bulk Feeder Assembly

- |                |                         |
|----------------|-------------------------|
| 1. Air hose    | 3. Pump                 |
| 2. Check valve | 4. Drum truck feed tube |

Previous Generation

## Operation

Typical operating consumption and air pressures are

- Normal: 186.9 cubic liters/minute (6.6 scfm) @ 2.8 bar (40 psi)
- Maximum: 277.4 cubic liters/minute (9.8 scfm) @ 4.1 bar (60 psi)

These pressures are given as an average starting point and can be adjusted higher or lower.

## Daily Maintenance



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



**WARNING:** Do not use compressed air to blow powder off skin or clothing. Compressed air injected under the skin can cause serious injury or death.

See Figure 3.

1. Remove the air nozzle (1) from the pump body (2).
2. Remove the transfer hose from the adapter (3).
3. Remove the feed tube (4) from the pump.



**WARNING:** Do not immerse O-rings in solvent. Solvents will swell and damage the O-rings.

**NOTE:** Blow parts clean with low-pressure compressed air and wipe with a clean, lint-free cloth. Moisten the cloth used for cleaning the pump with water or isopropyl alcohol if necessary. Do not scrape parts with sharp objects because burrs or scratches on powder contact surfaces contribute to powder buildup or impact fusion.

4. Blow out the pump body and transfer hose.
5. Inspect parts for wear and replace if necessary.

**NOTE:** Disassemble and thoroughly clean the pump periodically.

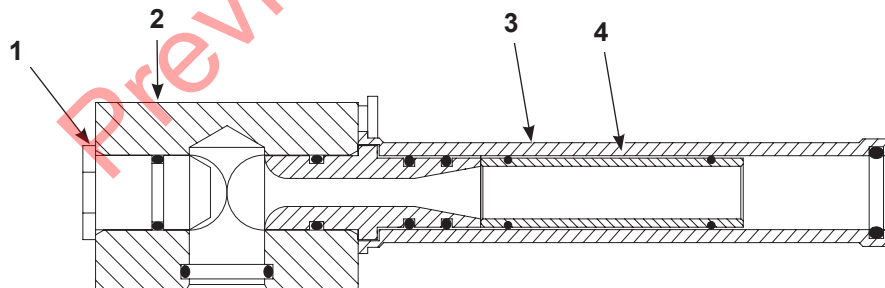


Figure 3 Porcelain Powder Transfer Pump

- |               |              |
|---------------|--------------|
| 1. Air nozzle | 3. Adapter   |
| 2. Pump body  | 4. Feed tube |

## Parts

To order parts, call the Nordson Finishing Customer Support Center at (800) 433-9319 or your local Nordson representative.

Item	Part	Description	Quantity	Note
—	1626558	PUMP, transfer, porcelain enamel	—	

## Transfer Fitting Kit

See Figure 4 and the following parts list.

Item	Description	Quantity	Note
1626038 - KIT, transfer fittings, PE transfer pump		—	
1	• CONNECTOR, male, elbow, 10 mm T X 1/4UNI	1	
2	• VALVE, ball, shutoff, 2 way 1/4 NPT	1	
3	• NIPPLE, steel, SCHED 40, 1/4, 1.68	1	
4	• VALVE, check, 1/4-in NPT	1	
5	• NOZZLE, air, powder, pump	1	
6	• O-RING, -210, 0.750 x 1.000 x 0.139 in., conductive silicone, 70 Duro	1	

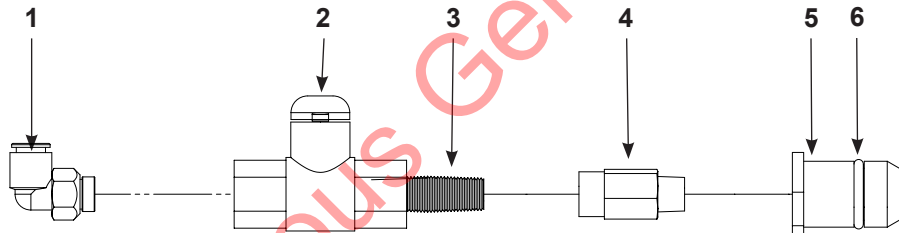


Figure 4 PE Transfer Fittings Parts

## Adapter Tube Kit

See Figure 5 and the following parts list.

1626037 - KIT, adapter tube, PE transfer pump		—	
7	• SCREW, lock, 5/16-18, L5-1, SH, zinc	2	
8	• ADAPTER, porcelain pump	1	
9	• O-RING, -214, 1.000 x 1.250 x 0.125 in., silicone, 70 Duro	1	

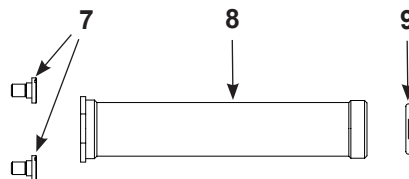


Figure 5 PE Adapter Tube Parts

## Wear Holder Kit

See Figure 6 and the following parts list.

Item	Description	Quantity	Note
1626036 - KIT, wear holder, PE Transfer Pump		—	
10	• O-RING, -210, 0.750 x 1.000 x 0.139 in., conductive silicone, 70 Duro	1	
11	• THROAT, transfer pump	1	
12	• O-RING, -117, 0.813 x 1.000 x 0.094 in., silicone, 70 Duro	2	
NS	• TUBE, 0.950 x 0.700 x 3.50 in., ceramic	1	
NS	• O-RING, -115, 0.688 x 0.875 x 0.094 in., silicone, 70 Duro	2	

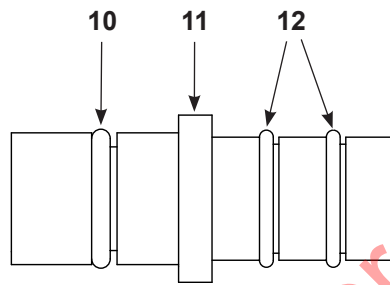


Figure 6 PE Wear Holder Parts

## Encore Pump Kit

See Figure 7 and the following parts list.

Item	Description	Quantity	Note
1628674 - KIT, pump, Encore PE			
13	• HOSE, air, 1/4-in. ID x 6 ft	3	
14	• TUBE, feed, drum truck	3	
15	• TUBE, guide, drum truck	3	

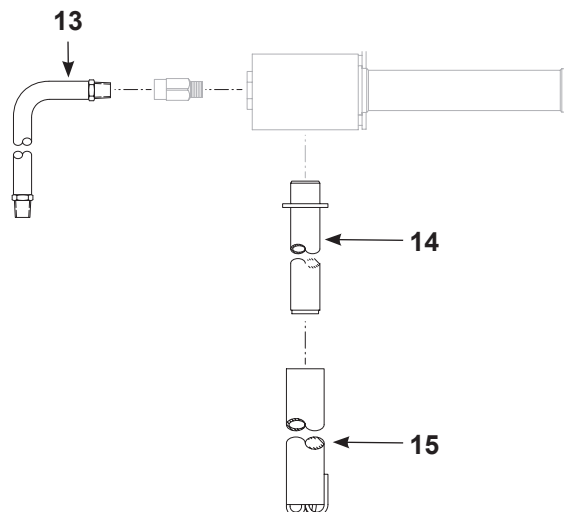


Figure 7 Encore Pump Kit

# Optional Kits

## O-ring Kit

See Figure 8 and the following parts list.

Item	Description	Quantity	Note
1623817 - KIT, O-rings, wear tube, transfer pump,			
10	• O-RING, -210, 0.750 x 1.000 x 0.139 in., conductive silicone, 70 Duro	15	
16	• O-RING, -214, 1.000 x 1.250 x 0.139 in., conductive silicone, 70 Duro	5	
NS	• O-RING, -014, 0.500 x 0.625 x 0.063 in., silicone, 70 Duro	10	A
NS: Not Shown			
NOTE: A. Additional O-ring shipped with O-ring kit not used in PE pump assemblies.			



Figure 8 Transfer Pump Wear Tube O-ring Kit

## Tubing Kit

See Figure 9 and the following parts list.

Item	Description	Quantity	Note
1623840 - KIT, tubing, dolly, drum, VT			
17	• VALVE, check, 1/4 NPT	4	
NS	• TUBING, polyethelene, 1/2 in. OD x 3/8 in. ID, black	50 ft	
NS	• TUBING, powder, transfer, 0.75 in. (19 mm) ID, blue	75 ft	
NS	• CLAMP, hose, 1.055 in. - 1.22 in. OD	6	
NS	• UNION, tee, 6mm T x 6mm T x 6mm T	1	
NS	• CONNECTOR, male, elbow, 6mm T X 1/8UNI	1	
NS	• NUT, hex serrated, 5/16-18, zinc	2	
NS: Not Shown			
NOTE: Additional items shipped with kit not used in PE pump assemblies.			

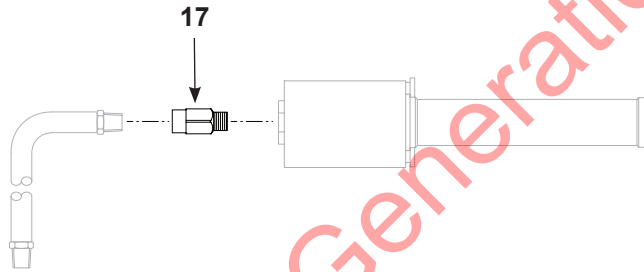


Figure 9 Transfer Pump Check Valve

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