

# Encore<sup>®</sup> PE 50-lb Feed Hopper



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

## Description

This instruction sheet provides specifications; installation and operation instructions; and parts lists for the Encore PE 50-lb Feed Hopper.

This hopper is used primarily with Nordson Mobile or Rail Mount Manual Powder PE Spray Systems. The hopper is shipped fully assembled, with an Encore PE pump adapter and pickup tube assembly, vent tube, and hopper fill plug.


## Specifications

Specification	Value
Powder Capacity:	23 kg (50 lb)
*Pump Knockouts:	2
*Pump Adapters Included:	1
Dimensions	
Height:	62 cm (24.5 in.)
Diameter:	40.00 cm (15.75 in.)
Weight (Empty):	9.5 kg (21 lb)
Weight (Full to Capacity):	32.5 kg (71 lb)
Fluidizing Pressure:	0.1–0.6 bar (2–8 psi)
Fluidizing Air Tubing:	10-mm OD
*Pumps and additional adapters must be ordered separately.	

# Installation

## Basic

See Figure 1.

1. Make sure the fluidizing drum (6) and cover (2) are securely clamped to the body (3), and that all gaskets are undamaged and sealing properly.
2. Connect 10-mm flexible air tubing to the fitting labeled with the fitting on the rear of the controller labeled with the hopper fluidizing icon (). Connect the opposite end of the tubing to the fluidizing air connector (5).



**WARNING:** All electrically conductive equipment in the spray area must be grounded. Ungrounded or poorly grounded equipment can store an electrostatic charge which can give personnel a severe shock or arc and cause a fire or explosion.

3. For stand-alone hoppers, connect the ground wire shipped with the hopper to the ground stud (4). Connect the spring clip to a true earth ground.  
For hoppers on a mobile powder system dolly, connect the dolly ground wire to the ground stud (4).
4. Make sure the O-rings are installed correctly in the pump or adapter grooves. Install the pump on or in the adapter with a slight twisting motion.
5. Connect the flexible vent hose shipped with the hopper to the vent hose adapter (1). Secure the hose to the adapter with a hose clamp. Connect the other end of the hose to the booth powder collector to prevent vented powder from contaminating the room air.

## Installing Additional Pumps

If you wish to install an additional pump, you must order a pump adapter and pickup tube for it. Remove the plug from the cover and install the adapter, pickup tube, and pump.

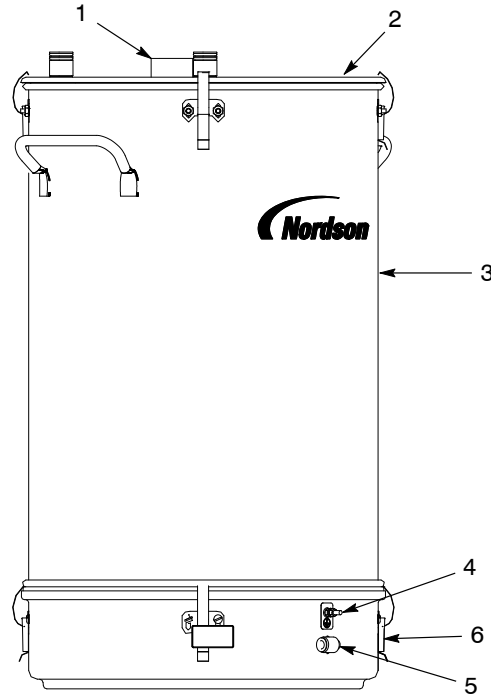


Figure 1 NHR-2-50 Encore PE Feed Hopper

- |                      |                             |
|----------------------|-----------------------------|
| 1. Vent hose adapter | 4. Ground stud              |
| 2. Cover             | 5. Fluidizing air connector |
| 3. Body              | 6. Fluidizing drum          |

## Operation



**WARNING:** Wear an approved respirator, protective clothing, and gloves when handling powder. Avoid skin contact with powder coatings, or breathing powder particles.

1. Fill the hopper half full of powder, to provide room for expansion as the powder is fluidized. Do not overfill. Overfilling may prevent powder from being fully fluidized, and affect coating performance.
2. Turn on the fluidizing air, and adjust the regulator until the powder is gently “boiling.” The air mixed with the powder will cause it to increase in volume. Fluidize the powder for five or ten minutes to make sure it is evenly fluidized and no clumps are left before spraying.

## Maintenance

Periodically, empty the hopper and clean the interior. Clean the fluidizing plate and inspect it for signs of air contamination. If the plate is discolored and appears to be contaminated, replace it. Check your air supply and correct any contamination problems.

## Parts

To order parts, call the Nordson Industrial Coating Systems Customer Service Center at (800) 433-9319 or your local Nordson representative.

See Figure 2.

Item	Part	Description	Quantity	Note
	1604292	HOPPER ASSEMBLY, NHR Encore PE, 50 lb., packaged	1	
1	1008082	• HOSE, flexible, 3 m (10 ft)	1	
2	970966	• CLAMP, hose	1	
3	1070232	• PLATE, fluidizing	1	
4	1070234	• GASKET, U-channel	1	
5	1074531	• DRUM, fluidizing	1	A
6	1107948	• BODY, hopper, packaged, 50 lb	1	
7	981170	• • SCREW, truss, unslotted, 10–32 x 0.375 in.	8	
8	984120	• • NUT, hex, small pattern, 10–32	8	
9	164064	• • LATCH, hopper, curve base	4	
10	1074532	• COVER, hopper, NHR-2, assy, packaged	1	B
11	1602284	• MOUNT ASSY, pump, 18 in.	1	
12	942161	• • O-RING, silicone, 1.125 x 1.375 x 0.125 in.	1	
13	1602261	• • MOUNT, pump	1	
14	309474	• • TUBE, pickup, 0.490-in. ID x 18 in., 3/8 NPS	1	
15	939613	• • LOCKNUT, conduit, 3/4-in. NPS	1	
16	142342	• • Plug	1	
NS	134575	• WIRE, ground	1	
NOTE A: Refer to <i>Fluidizing Drum</i> on page 7 for a parts breakdown.				
B: Refer to <i>Hopper Cover</i> on page 6 for a parts breakdown.				
NS: Not Shown				

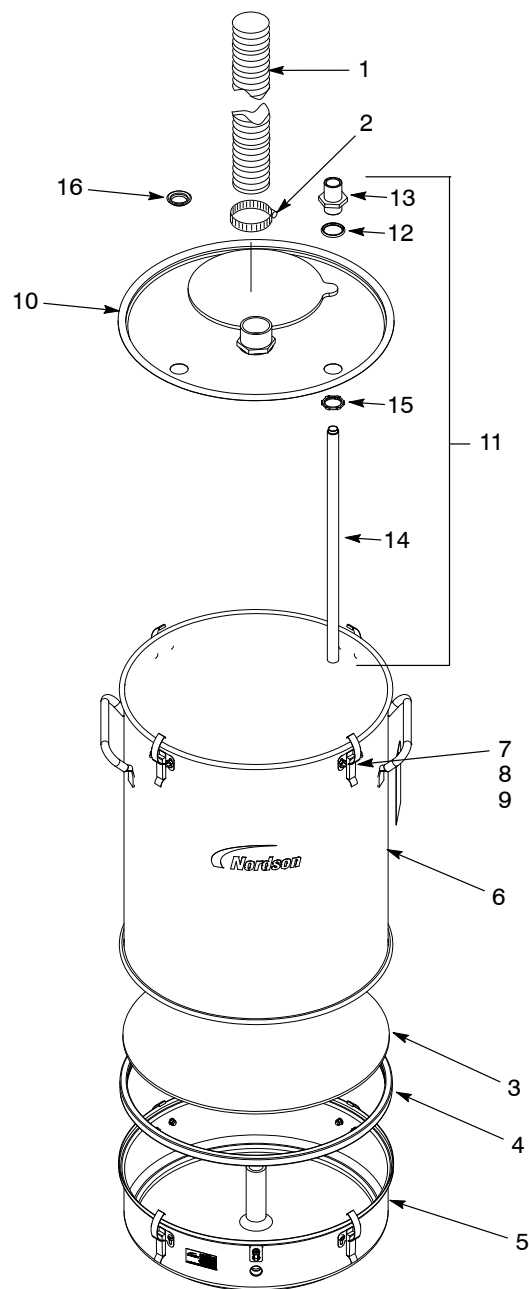


Figure 2 Hopper Parts

Hopper Cover

Item	Part	Description	Quantity	Note
—	1074532	COVER, hopper, NHR-2 assy, packaged	1	
1	1008081	• NUT, conduit, 1.25 in.	1	
2	1008080	• GASKET, vent stack	1	
3	1008079	• FITTING, pvc, 1 1/4 in., male adapter	1	
4	1070199	• PLUG, hopper fill, NHR	1	
NS	1074539	GASKET COVER SERVICE KIT	1	
NS: Not Shown				

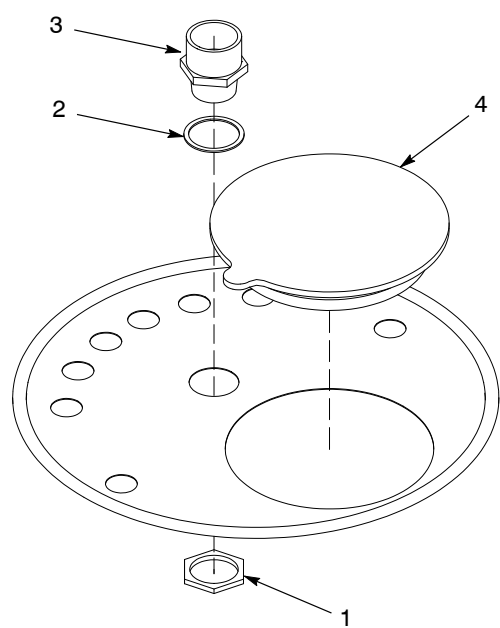


Figure 3    Hopper Cover

## Fluidizing Drum

Item	Part	Description	Quantity	Note
—	1074531	DRUM, fluidizing	1	
1	1074535	• ELBOW, male, $\frac{3}{8}$ -in. RPT x 10-mm tube	1	
2	984702	• NUT, hex, M5, brass	2	
3	983401	• LOCK WASHER, split, M5, steel, zinc	11	
4	983021	• WASHER, flat, 0.203 x 0.405 x 0.040 in., brass	1	
5	982126	• SCREW, pan head, M5 x 25, brass	1	
6	240674	• TAG, ground	1	
7	164064	• LATCH, hopper, curve base	4	
8	982000	• SCREW, pan head, M5 x 10, zinc	8	
9	983123	• WASHER, flat, 0.219 x 0.500 x 0.049 in.	7	
10	984706	• NUT, hex, M5, steel, zinc	8	

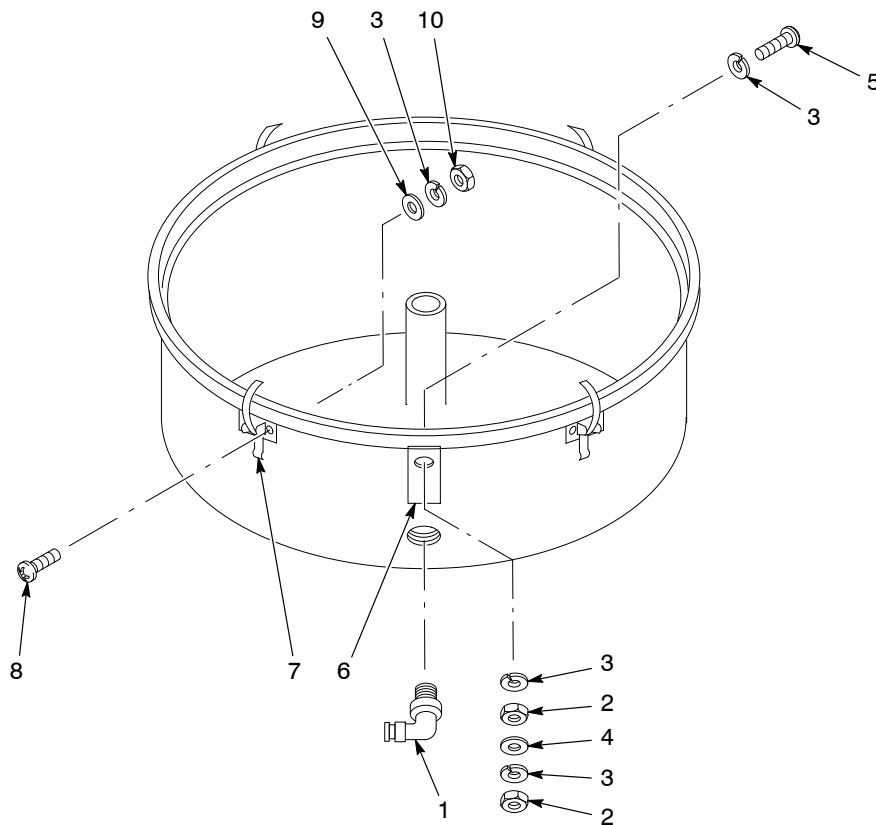


Figure 4 NHR Fluidizing Drum

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