

## Encore® 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 50-lb Feed Hopper.

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

A 100 Plus pump adapter retrofit kit is shipped with the hopper for use with older powder pumps. Powder pumps are sold separately or are included in configured systems.

### 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

## Hopper Body Installation

See Figure 1.

1. When assembling the body (1) on the fluidizing drum (4), make sure the body is centered on the gasket (2). Verify that there are equal amounts of the gasket exposed along the edge of the body. If exposed gasket is not equally distributed, reposition the body.
2. Lock the body (1) in place by clamping clamps A and C down together. Then, repeat for clamps B and D.
3. Re-verify that the gasket (2) is exposed equally along the inside edge of the body (1).

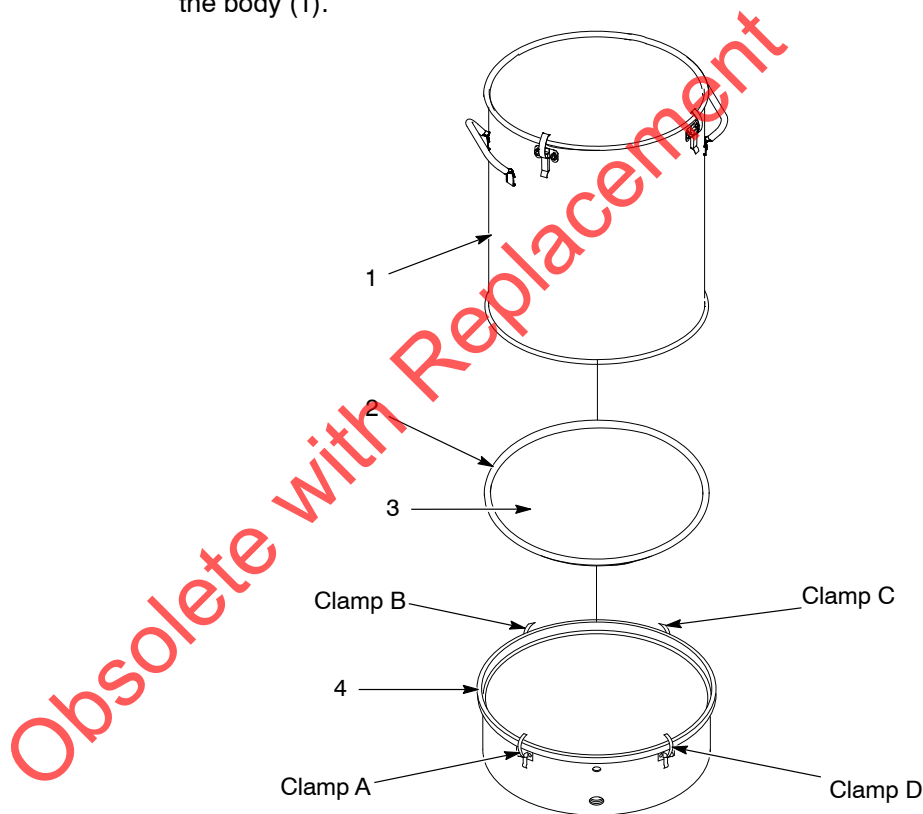


Figure 1 Hopper Body Installation

1. Body
2. Gasket

3. Fluidizing plate
4. Drum

## Basic Installation and Connections

See Figure 2.

1. Make sure the fluidizing drum (6) and lid (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 fluidizing icon or AUX on the rear or side of the control unit, or another source of regulated fluidizing air. 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.

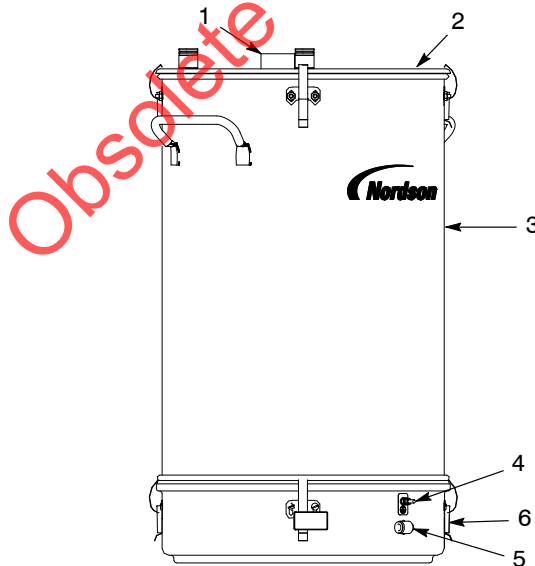


Figure 2 NHR-2-50 Encore Feed Hopper

- |                      |                             |
|----------------------|-----------------------------|
| 5. Vent hose adapter | 8. Ground stud              |
| 6. Lid               | 9. Fluidizing air connector |
| 7. Body              | 10. Fluidizing drum         |

### ***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 lid and install the adapter, pickup tube, and pump.

Obsolete with Replacement

## 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.

**NOTE:** Inspect and verify hopper ground connection periodically.

Obsolete with Replacement

## Parts

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

See Figure 3.

Item	Part	Description	Quantity	Note
	1107949	HOPPER ASSEMBLY, NHR Encore, 50 lb., packaged	1	
1	1008082	• HOSE, flexible, 3 m (10 ft)	1	
2	970966	• CLAMP, hose	1	
3	1608053	• PLATE, fluidizing	1	
4	1608054	• 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	• LID, hopper, packaged	1	B
11	1074535	• ELBOW, male, $\frac{3}{8}$ -in. RPT x 10-mm tube	1	
12	1105689	• TUBE, pickup, 50 lb, packaged	1	
13	1082198	• • ADAPTER, pump, Encore	1	
14	941145	• • O-RING, silicone, conductive, 0.625 x 0.812 in.	2	
15	164063	• • MOUNT, pump	1	
16	164065	• • TUBE, pickup, 0.360-in. ID x 18 in.	1	
17	983055	• • WASHER, pump mount	1	
18	939613	• • LOCKNUT, conduit, $\frac{3}{4}$ -in. NPS	1	
NS	134575	• WIRE, ground	1	
NOTE A: Refer to <i>Fluidizing Drum</i> on page 9 for a parts breakdown.				
B: Refer to <i>Hopper Lid</i> on page 8 for a parts breakdown.				

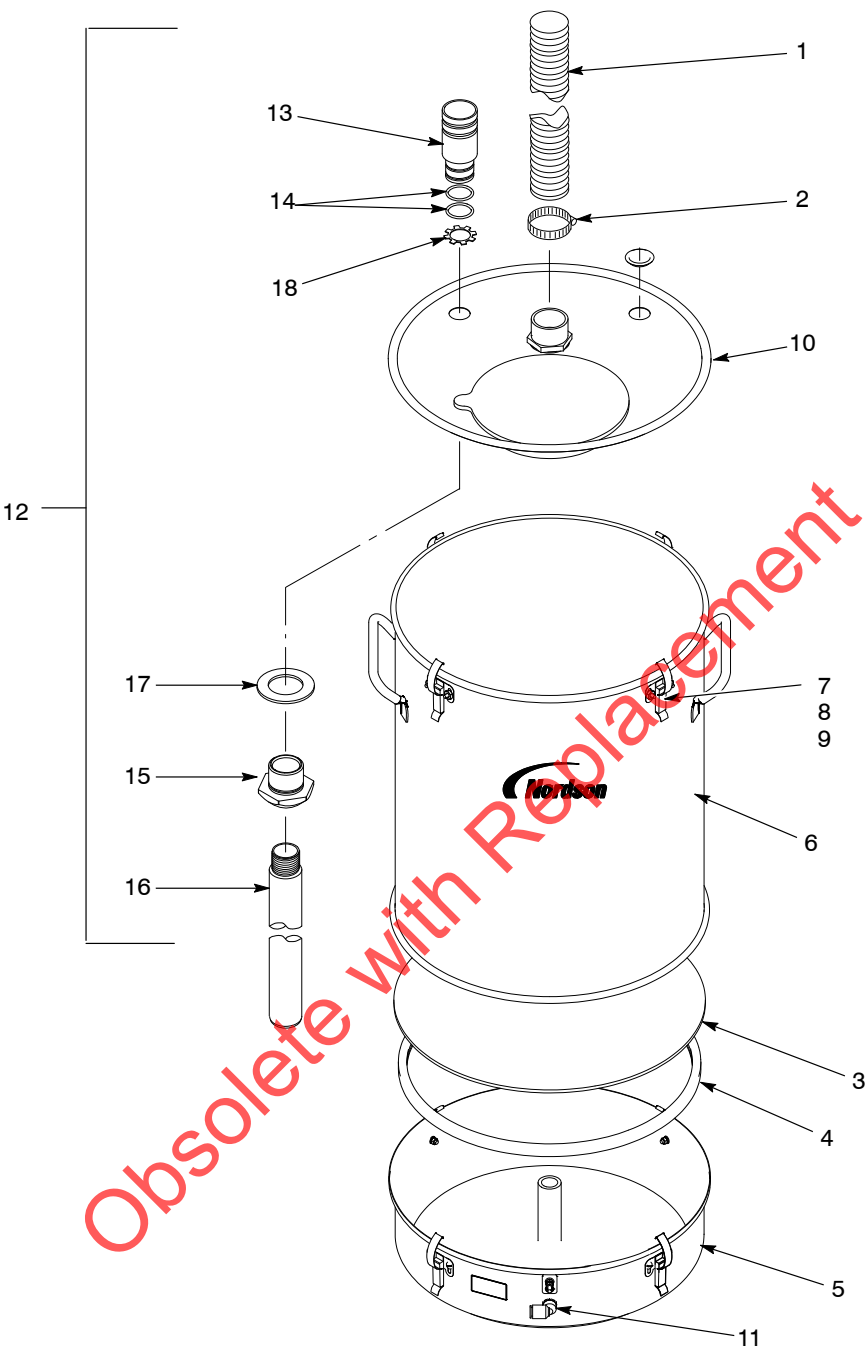


Figure 3 Hopper Parts

## Hopper Lid

Item	Part	Description	Quantity	Note
—	1074532	LID, hopper, 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 LID SERVICE KIT	1	
NS: Not Shown				

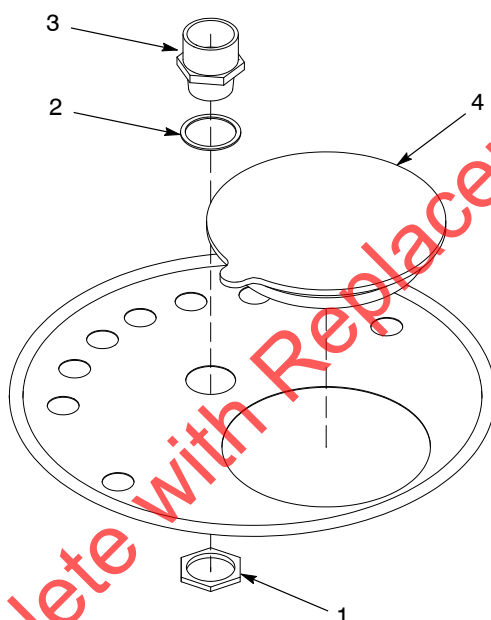


Figure 4 Hopper Lid



# Fluidizing Drum

Item	Part	Description	Quantity	Note
—	1074531	DRUM, fluidizing	1	
1	1074535	• ELBOW, male, 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	

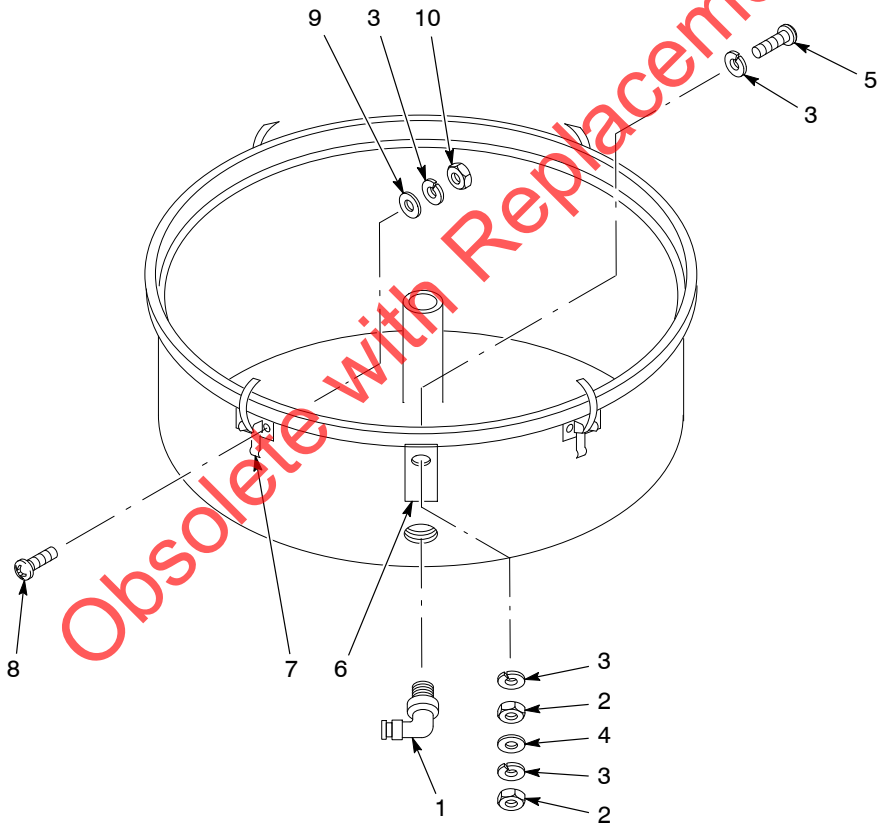


Figure 5 NHR Fluidizing Drum

## 100 Plus Pump Adapter

These parts are shipped loose with the hopper. To use them, pull the Encore pump adapter out of the pump mount and unscrew the pickup tube from the Encore pump adapter.

Install the O-rings on the 100 Plus adapter, then screw the pickup tube into the 100 Plus pump adapter and then install the assembly into the pump mount.

Item	Part	Description	Quantity	Note
1	152227	ADAPTER, pump	1	
2	941185	O-RING, silicone, conductive, 0.875 x 1.062 in.	2	
3	941145	O-RING, silicone, conductive, 0.625 x 0.812 in.	2	

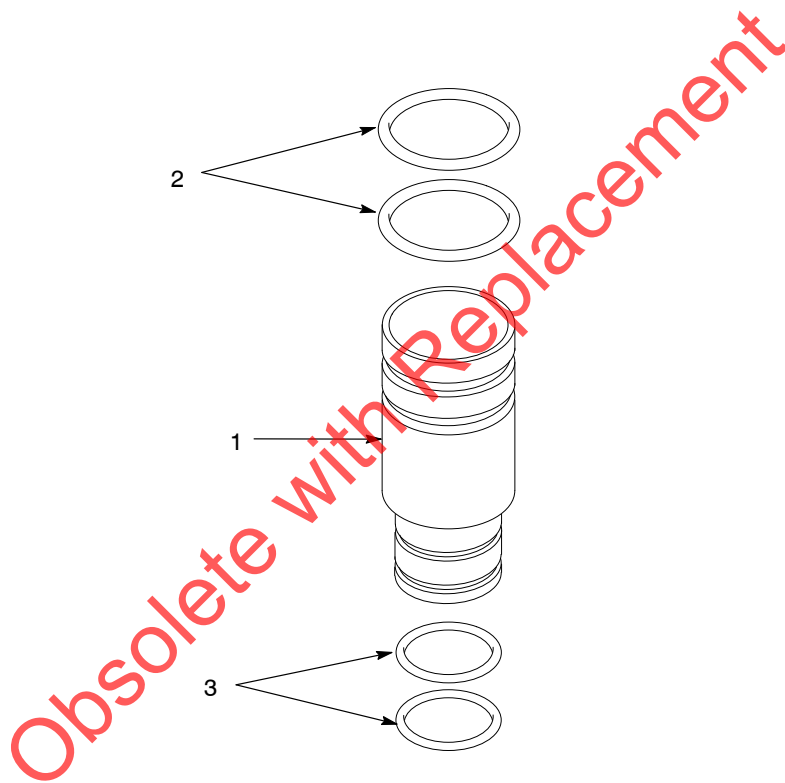


Figure 6 100 Plus Pump Adapter

Issued 02/16

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