

NORDSON CORPORATION

Powder Coating Systems



Color Change Procedures

ColorMax® Powder Booth with Powder Port Feed Center **and Prodigy® HDLV® Powder Transfer System** 1093876A





WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in your powder coating equipment manuals.

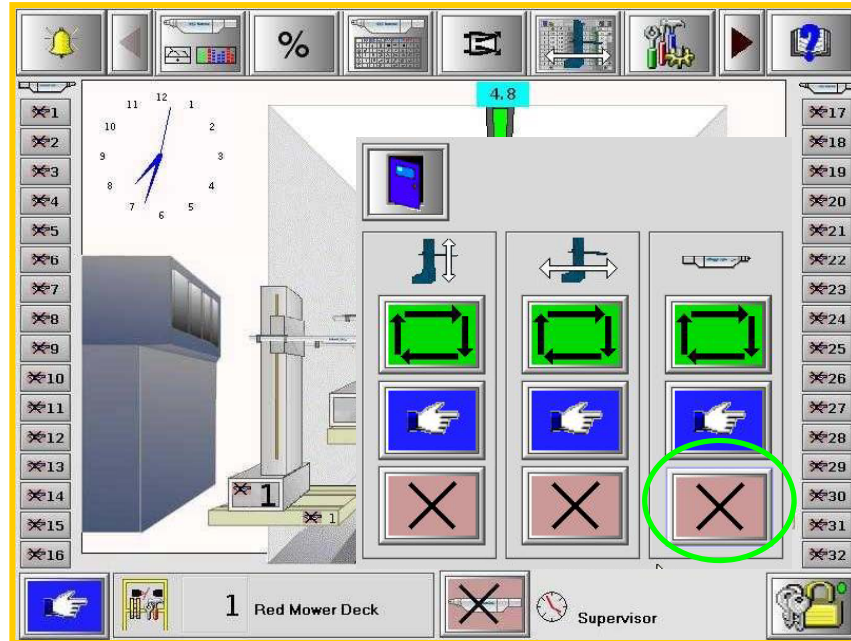
Operator A

1



Close the booth doors.
Move the booth offline if it is a
Roll On/Roll Off booth.

2



Turn all automatic spray guns off.
Wait until the Gun Blow Off/Purge Cycle is
complete. Go to page 10.

Operator B

1



Remove the powder lance from the hopper and insert it into the purge chute.

Rotate the hold-down latch over the lance to secure it in the chute.

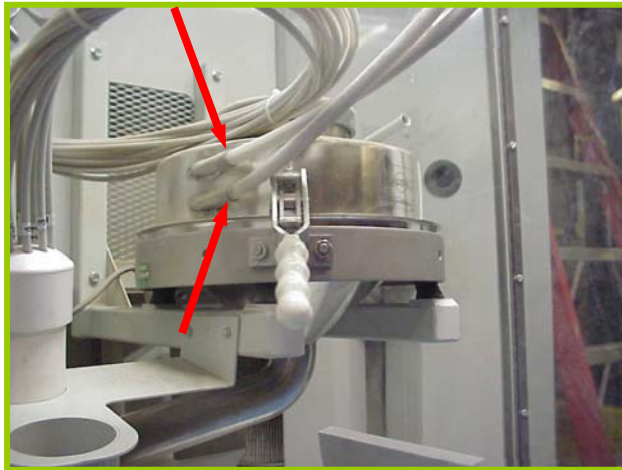
2



Press the **Color Change Start** button to start the automatic gun purge cycle.

Operator B

3



Disconnect the transfer hoses from the sieve deck.

4



Connect the transfer hoses to the purge ports on the back wall of the feed center.

5



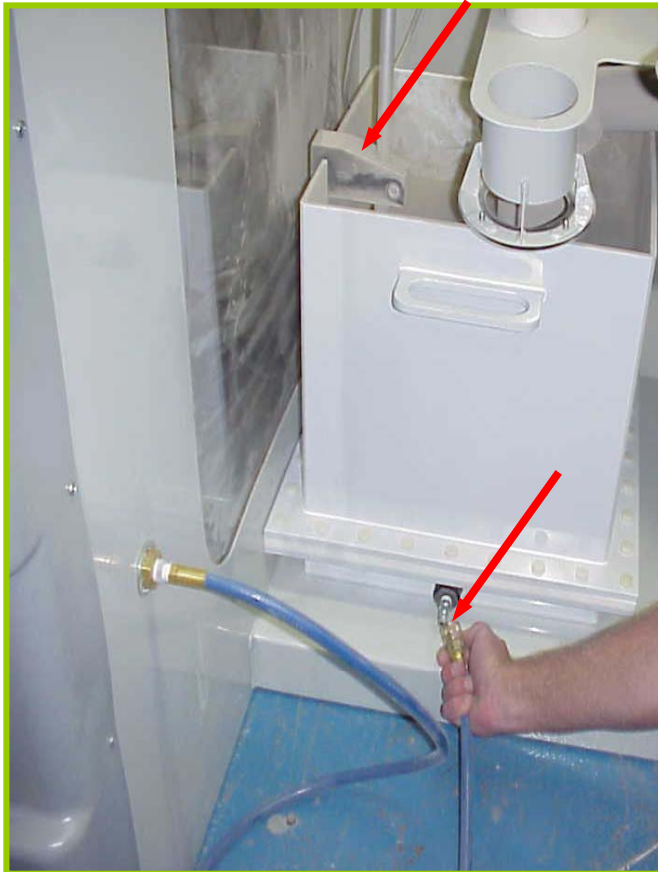
Turn off the Reclaim and Virgin Transfer Pumps.

Unclamp the sieve and rotate the pan so that the pan chute dumps into the waste chute.

Reclamp the sieve and restart the Reclaim transfer pump.

Operator B

6



Disconnect the fluidizing air line and remove the level sensor from the feed hopper.

Remove the feed hopper from the feed center

Install a lid on the hopper.

Blow down the lance, purge chute and hold-down latch, lance guide, walls, and floor.

Operator B

7



Turn off the Reclaim Transfer pump.

Disassemble and clean the sieve assembly.

Remove the screen gasket and clean it thoroughly.

Blow off the feed center walls and floor.

Re-assemble the sieve.

Turn on the Reclaim transfer pump.

Leave the transfer hoses connected to the purge ports.

Operator B

**WHEN OPERATOR A FINISHES
CLEANING THE BOOTH AND EXITS:**

8



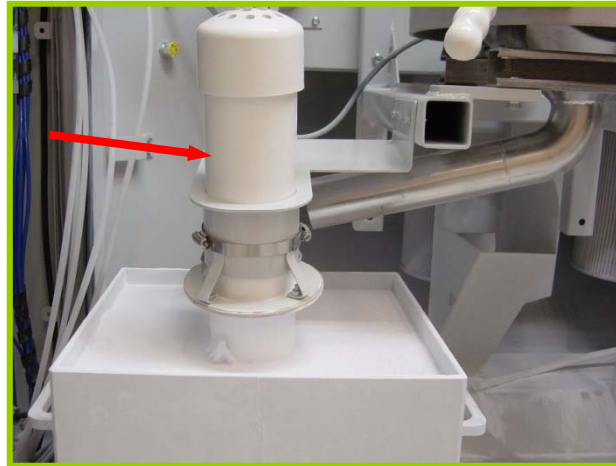
Press the Reclaim
Transfer Purge Start
button to purge the
reclaim pump.

9

Purge the Virgin
Transfer Pump at the
Bulk Feed Unloader.

Operator B

10



Install the new color feed hopper in the feed center.

Connect the fluidizing air line to the hopper.

Install the level sensor on the feed hopper.

Remove the lance from the purge chute and install it through the lance guide and into the powder.

Operator A

1



When Gun Blow Off/Purge Cycle is complete:

Blow off doors at entry end of the booth.

2



Starting from the open end of the booth, blow off the ceiling, walls, and floor, working from top to bottom and toward the closed doors.

Swing open the Aerodecks after blowing them off.

3



Blow off the inlet duct at the end of the booth.

Open the vertical duct door and blow off the duct.

For Hard-to-Clean Powders:
Wipe down the booth interior, inlet duct, and vertical duct with damp cotton towels.

Operator A

4



Exit the booth and make sure the Reclaim Transfer Pump purge has been started.

While the pump is being purged, open the transfer pan at the bottom of the cyclone and blow off the pan.

For Hard-to-Clean Powders:

Wipe down the interior of the transfer pan with damp cotton towels.

5



Open the cyclone doors and clean the interior of the cyclone with the long blow-off gun.

For Hard-to-Clean Powders:

Wipe down the interior of the cyclone with damp cotton towels.

Operator A

6



Remove the pickup tube from the old color powder drum.

Clean the pickup tube.

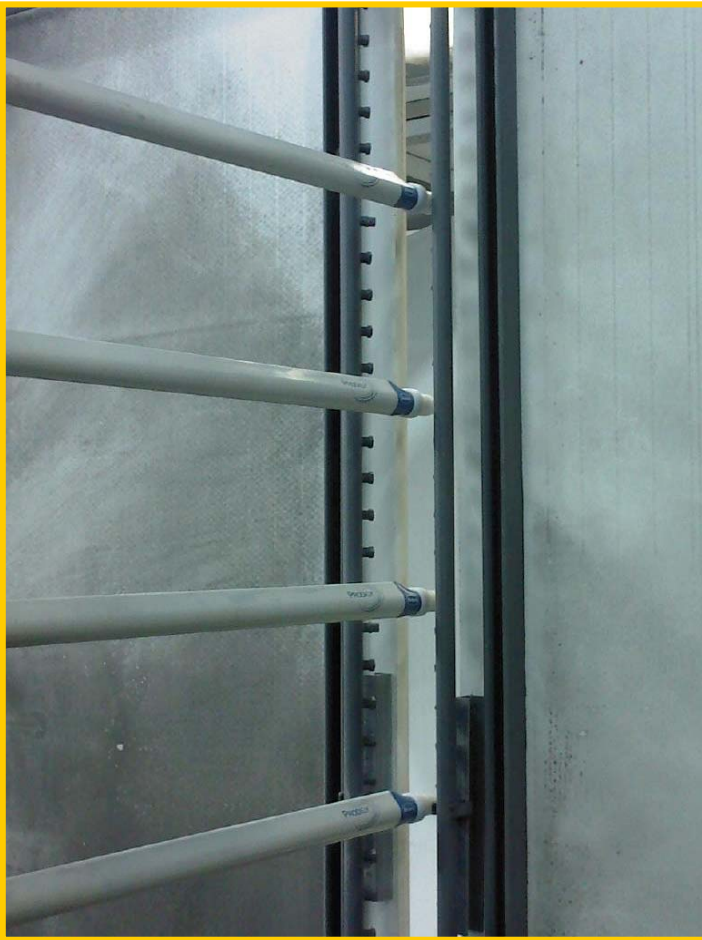
Vacuum the floor and drum cart.

Install the new color drum on the cart.

Install the pickup tube in the new drum.

Operator A

7



After the Gun Purge is complete:

Inspect the exterior of the guns.

Clean off any powder residue.

Inspect the gun positions and
blow-off nozzles.

Make sure the gun nozzles are
clean and there is no impact
fusion present on the nozzles.

System Startup

Before Starting Production:

Inspect the compressed air quality.

Check the powder fluidization in the feed hopper.

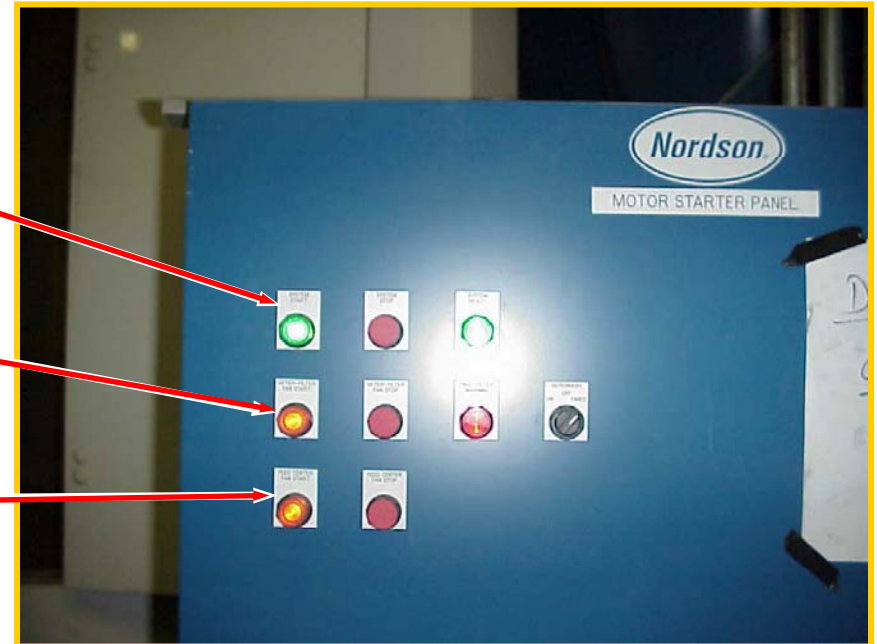
Manually turn on each automatic gun to check the spray pattern before switch the automatic guns to Automatic Mode.

Make sure the spray room is clean and all powder has been cleaned off the floor and exterior of the booth and equipment.

System Start

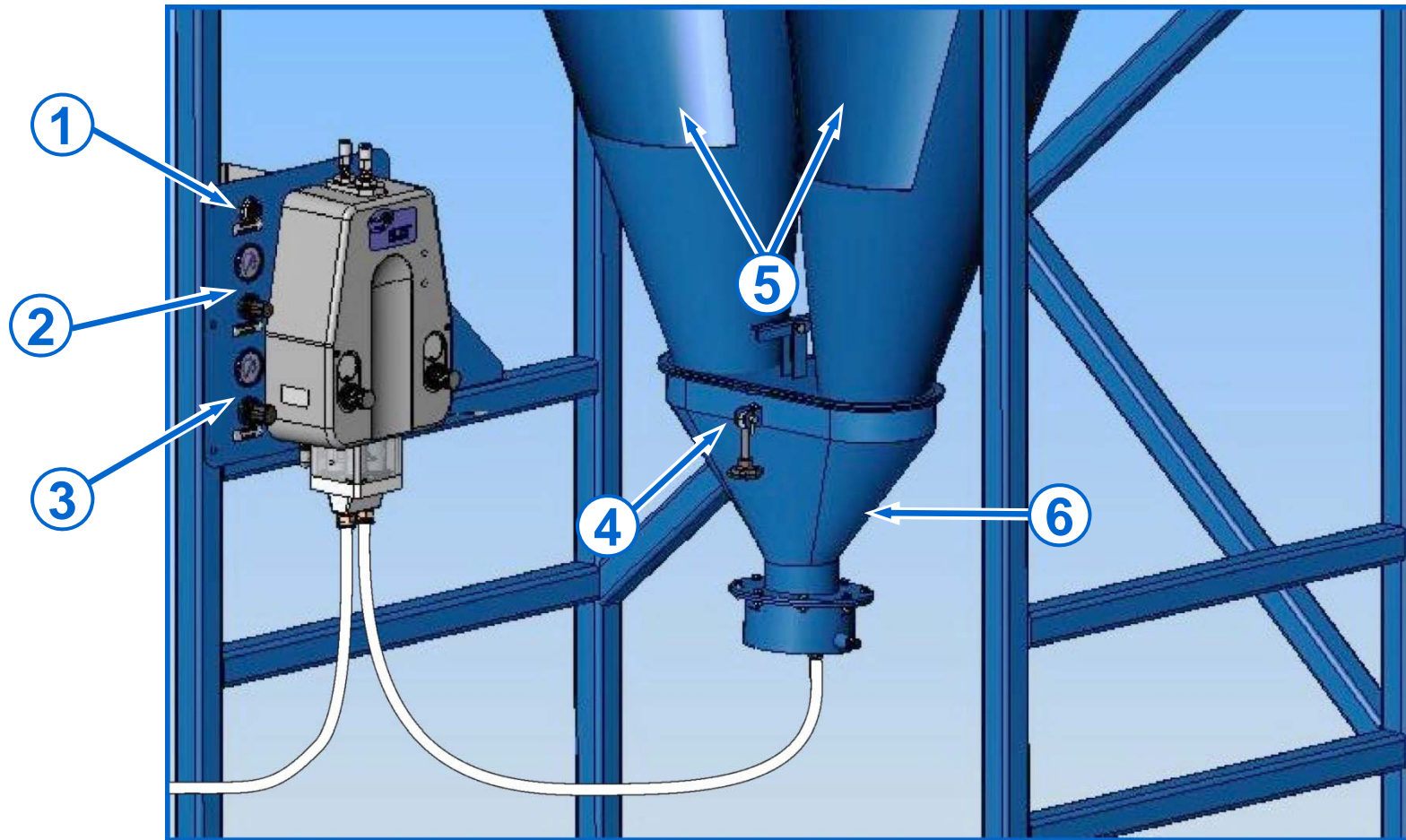
Afterfilter Start

Feed Center Start



Start the System, Afterfilter, and Powder Port Feed Center at the main electrical panel.

Cyclone Components



- 1. MANUAL PURGE button
- 2. Reclaim pump supply air regulator/gauge
- 3. Transfer pan fluidizing air regulator/gauge

- 4. Transfer pan latch
- 5. Cyclone access doors
- 6. Transfer pan

Feed Center Components



- 1. Control Panel
- 2. Fluidizing Regulator
- 3. Feed Pumps
- 4. Feed Hopper
- 5. Powder Lance
- 6. Sieve



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