

NRPS-100 Rotary Sieve

Customer Product Manual
Part 107 131D

**For parts and technical support, call the Industrial Coating
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Table of Contents

1. Safety	1
Safety Symbols	1
Safety Precautions	1
2. Description	3
Operation	4
Specifications	6
Size	6
Air Requirements	6
Air Quality	6
3. Installation	6
Sieve Mounting and Hose Connections	6
Electrical Connections	8
Air Tubing Connections	8
4. Operation	9
Adjusting Vent-Assist Air Pressure	9
5. Maintenance	10
Every Shift	10
Daily	10
Periodically	11
6. Troubleshooting	11
Introduction	11
Troubleshooting Chart	11

7. Repair	13
Screen and Rotor	13
Removing the Screen and Rotor	14
Replacing the Screen	15
Installing the Rotor and Screen	18
Motor, Lip Seal, and Lantern Ring Replacement	19
End Door Repair	22
8. Parts	23
Sieves	23
Motors	23
Screens	23
Sieve Parts	24
Air Volume Control	26

NRPS-100 Rotary Sieve

1. Safety

This section contains general safety information for the Nordson NRPS-100 rotary sieve. Read and follow these safety instructions before installing, operating, or repairing this equipment. Also, read and follow the safety instructions in your powder-coating system manual.

Follow all applicable safety procedures required by your employer, industry standards, and government or other regulatory agencies. Refer to the National Fire Protection Association (NFPA) standard 33 for rules and regulations covering installation and operation of powder spray systems.

Safety Symbols

Safety symbols are used, along with the words WARNING or CAUTION and an explanation, to alert personnel to situations or conditions that could result in equipment damage, personal injury, or death.



WARNING: Warns of mechanical and pneumatic hazards that could result in personal injury or death.



WARNING: Warns of electrical hazards that could result in personal injury or death.



CAUTION: Warns of situations or actions that could result in equipment damage.

Safety Precautions

Follow these general safety precautions when installing, operating, maintaining, and repairing the sieve. Task-specific warnings are included in this document where appropriate.

- Allow only qualified personnel to operate, maintain, and repair the sieve. Qualified personnel are trained in the safe performance of these tasks, and are familiar with the instructions and safety precautions in this document.
- Read and follow the safety instructions on the warning labels attached to the sieve.
- Disconnect electrical power to the sieve before performing any adjustments or repairs. Lock out and tag disconnect switches.

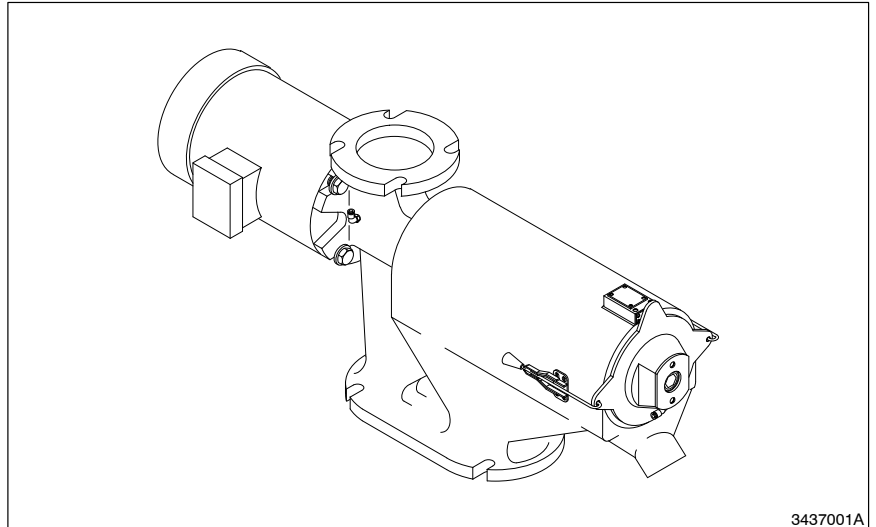
Safety Precautions *(contd)*

- Never remove any covers or other protective devices from the sieve while it is operating.
- Do not put your fingers, hands, or any object into the sieve while it is operating.
- Before adjusting or repairing the sieve, disconnect power and allow the motor to come to a full stop. Do not attempt to slow or stop the motor or rotor with your hands, or with any mechanical device.
- Use the sieve only for the purpose for which it was designed. Do not use it with materials other than those for which it was designed.
- Keep the area around the sieve free of debris and obstacles.
- Always know the location of emergency stops, shutoff buttons, fire extinguishers, and other safety devices.
- Do not disconnect power cords from live electrical outlets in the spray area while the powder coating system is operating. A spark could cause a fire or explosion.

2. Description

The NRPS-100 rotary sieve screens reclaimed powder coatings. The sieve supplies reclaimed powder for up to 24 spray guns, depending on the type of powder and screen mesh. A 60-mesh screen is standard. Optional 40-, 80-, 100-and 120-mesh screens are available.

A three-phase ac electric motor drives the sieve rotor. Motors with a variety of voltage and frequency ratings are available.



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Fig. 1 NRPS-100 Rotary Sieve

Operation

See Figure 2. The sieve mounts on top of a powder feed hopper (20). An accumulator (3) with connections for transfer hoses (21) mounts on the sieve inlet flange.

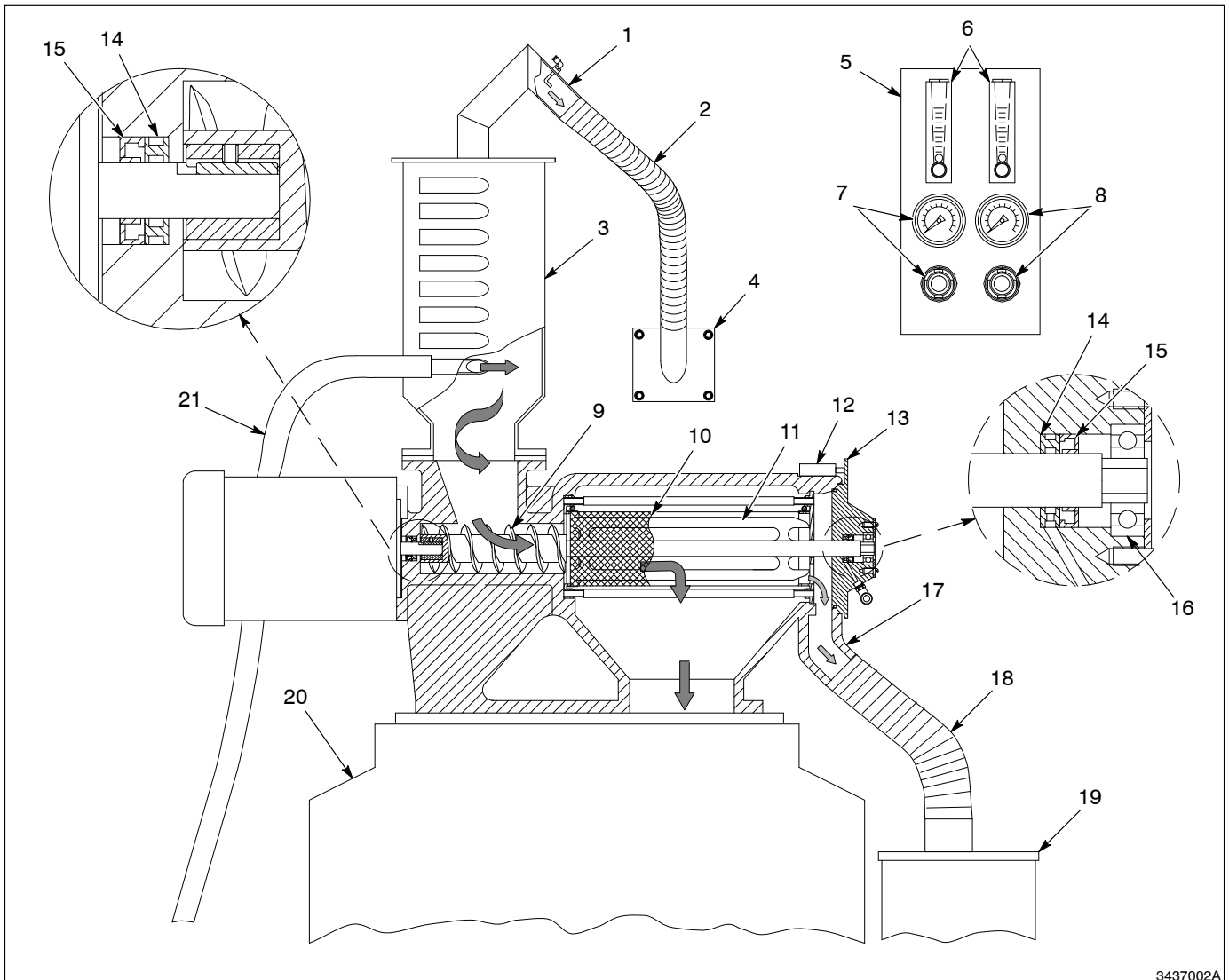
Compressed air conveys the reclaimed powder from the color module through the transfer hoses to the accumulator. A flexible hose (2) connects the accumulator vent tube (1) to the color module vent-stub (4). Without this connection, the compressed air will flow through the sieve inlet and force the powder out the discharge port (17). Vent-assist air, injected into the vent tube, increases the air flow through the hose. A regulator and gauge (7) on the air volume control panel (5) regulate the vent-assist air pressure.

The powder flows into the sieve inlet from the accumulator. The rotor's auger blades (9) transport the powder into the screen. The helical blades (11) blow the powder through the screen and into the feed hopper.

Particles that cannot pass through the screen flow out the discharge port. A flexible hose (18) connects the discharge port (17) to a scrap container (19). The hose connections and the scrap container must be air-tight.

The lip seals (15) and the purge air flowing through the lantern rings (14) protect the motor bearing and the hex bearing (16) in the sieve end door (13) from powder contamination. A regulator and gauge (8) controls purge-air pressure. Two flow meters (6) control purge-air volume.

Clamping the sieve end door against the sieve housing closes the limit switch (12). This completes an interlock circuit and allows the sieve motor to start. Another interlock circuit, in the system electrical panel, prevents the sieve motor from starting unless the booth exhaust fan is on.



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Fig. 2 Sieve Components and Operation

1. Vent tube
2. Flexible hose
3. Accumulator
4. Vent stub
5. Air volume control
6. Purge-air flow meters
7. Vent-assist air regulator/gauge

8. Purge-air regulator/gauge
9. Auger blades
10. Screen
11. Helical blades
12. Limit switch
13. End door
14. Lantern ring

15. Lip seal
16. Hex bearing
17. Discharge port
18. Flexible hose
19. Scrap container
20. Feed hopper
21. Transfer hose

Specifications

Size

79.85-cm (31.44-in.) long x 22.38-cm (8.81-in.) wide x 29.87-cm (11.76-in.) high

Air Requirements

Supply air pressure: 5.5 bar (80 psi) (minimum system pressure)

Purge air pressure: 1.0 bar (15 psi)

Purge air flow: 100 SCFH

Air Quality

The purge air must be the same quality as the powder application system air. Use 3-micron filter/separators with automatic drains, and a refrigerated or regenerative-desiccant air dryer capable of producing a 38 °F or lower dew point at 6.9 bar (100 psi).

3. Installation



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

All Nordson rotary sieves have the same mounting hole patterns and use the same gaskets. This makes it possible for you to replace an older sieve with a NRPS-100 sieve without modifying the hopper lid or replacing the accumulator.

NOTE: See Figure 3 for the mounting hole pattern.

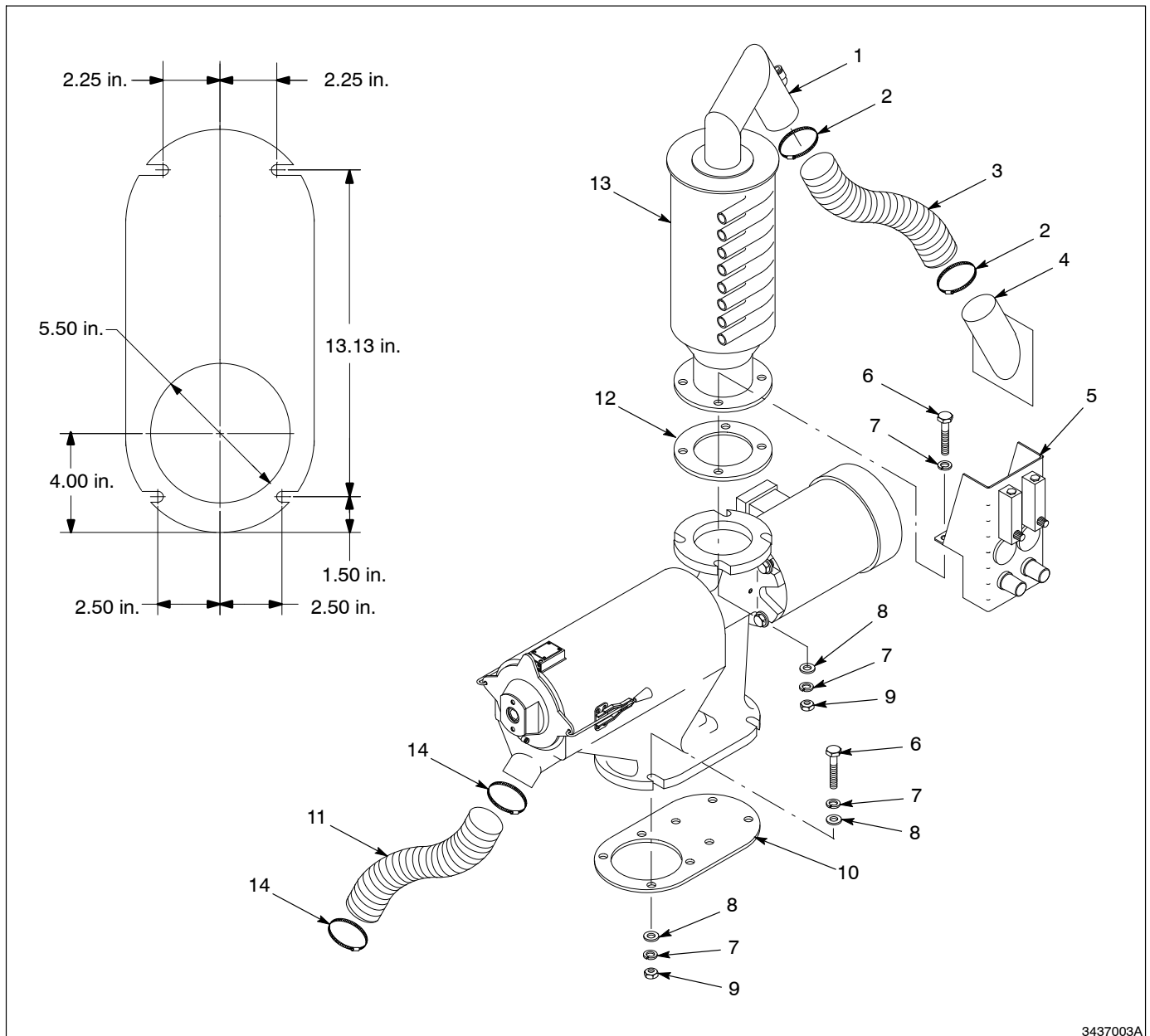
Sieve Mounting and Hose Connections

1. See Figure 3. Place the base gasket (10) and sieve on the hopper lid. Align the gasket holes and sieve flange slots with the holes in the hopper lid
2. Secure the sieve to the hopper with $\frac{5}{16}$ -in. fasteners (6, 7, 8, and 9).

NOTE: New hopper lids have tapped holes, eliminating the need to install nuts and washers on the underside.

3. Install the inlet gasket (12), accumulator (13), and air volume control (5) on the sieve inlet with $\frac{5}{16}$ -in. fasteners (6, 7, 8, and 9).
4. Install 2-in. diameter flexible hose (11) between the discharge port and the scrap container. Secure the hose to the sieve and scrap container lid with 2-in. worm-gear clamps (14). The hose connections must be air tight.

5. Install 3.5-in. diameter flexible hose (3) between the accumulator vent tube (1) and the vent-stub (4) on the color module. Secure the hose to the accumulator and vent stub with 3.5-in. worm-gear clamps (2). The hose connections must be airtight.



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Fig. 3 Sieve and Accumulator Installation

- | | | |
|-------------------------------|-----------------|------------------------------|
| 1. Vent tube | 6. Screws | 11. Flexible hose (2 in.) |
| 2. Worm-gear clamps (3.5 in.) | 7. Lock washers | 12. Inlet gasket |
| 3. Flexible hose (3.5 in.) | 8. Flat washers | 13. Accumulator |
| 4. Vent-stub | 9. Nuts | 14. Worm-gear clamps (2 in.) |
| 5. Air volume control | 10. Base gasket | |

Electrical Connections

Plug the sieve power and control cables into the junction boxes provided on the booth. If you are installing an NRPS-100 rotary sieve in an older system, contact your Nordson service representative for instructions.

NOTE: The sieve must rotate in a counterclockwise direction, as seen from the motor end. If the sieve does not rotate in the correct direction, shut off the system electrical power. Reverse the L1 and L2 connections at the motor junction box or at the motor starter in the system electrical panel.

Air Tubing Connections

1. See Figure 4. Connect 12-mm air tubing from the system air volume control to the tee connector (4) in the purge-air regulator (3).
2. Connect 6-mm tubing between the straight connectors (1) on the flow meters (2) and the tubing connectors in the sieve end door and housing.
3. Connect 10-mm tubing between the elbow connector (5) on the vent-assist air regulator (6) and the accumulator vent tube or the vent-stub on the color module.

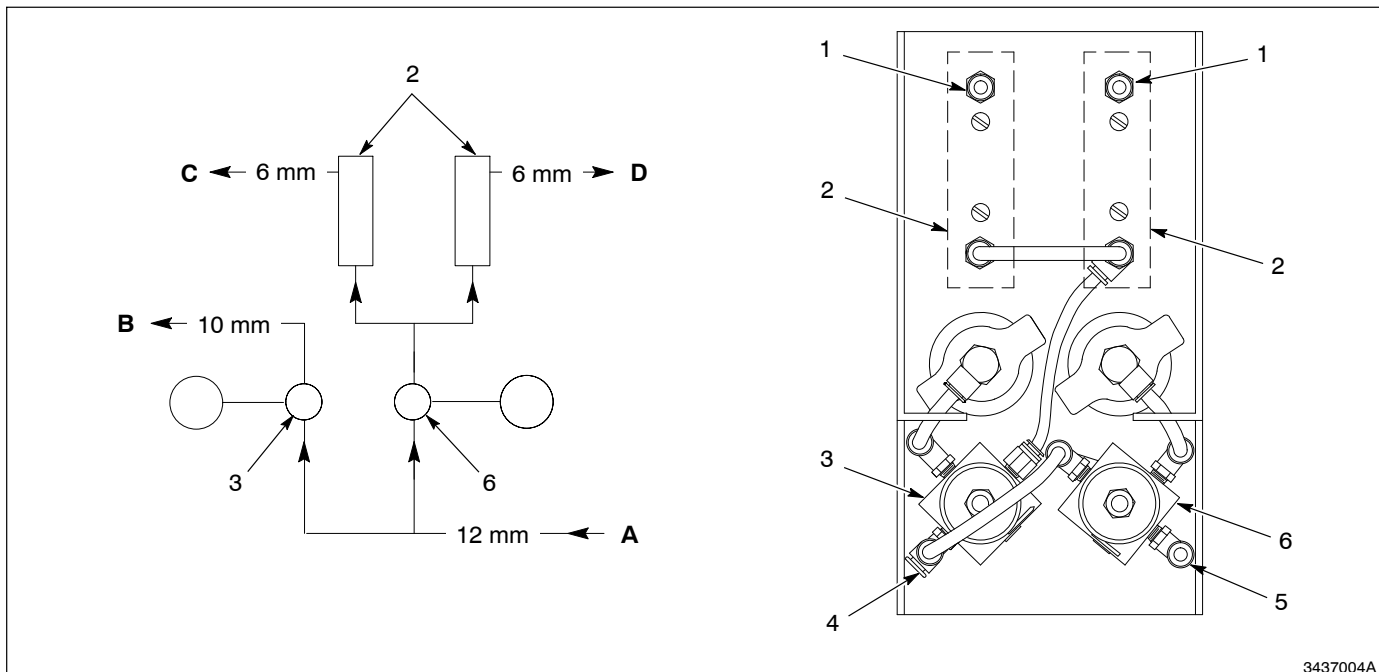


Fig. 4 Air Tubing Connections

1. Straight connectors
2. Flow meters
3. Purge-air regulator

4. Tee connector
5. Elbow connector
6. Vent-assist regulator

- A. Supply air
- B. Vent-assist air
- C. Hex bearing purge air
- D. Motor bearing purge air

4. Operation



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

1. Before starting your powder coating system, make sure
 - all air tubing, transfer hoses, vent and scrap hoses, and electrical cables are securely connected.
 - the end door is correctly installed and clamped to the housing.
2. Turn on the system compressed air supply and electrical power.
3. Start the booth exhaust fan. In most systems, this will start the sieve motor.
4. Set sieve air pressures and flow rates.

Vent-assist air pressure: 2.75 bar (40 psi)
Purge air pressure: 1.0 bar (15 psi)
Purge air flow: 100 SCFH

5. Adjust the vent-assist air pressure. Refer to *Adjusting Vent-Assist Air Pressure*.

NOTE: Check the air regulator and flow meter settings when you start the system. Check the flow meters periodically during the day to make sure air is being supplied to the bearings. Check the bearings for powder when you are cleaning the sieve. If the lip seals are undamaged, but powder has contaminated the bearings, increase the purge air pressure.

Adjusting Vent-Assist Air Pressure

Adjust the vent-assist air pressure to maintain a neutral pressure in the accumulator and sieve. This prevents powder that would normally pass through the screen from being blown into the scrap container.

1. Disconnect the flexible hose from the discharge port.
2. Secure a disposable rubber glove or plastic bag to the discharge port.
3. Start the sieve and transfer pumps.
4. Adjust the vent-assist air pressure. If the pressure is too low, the glove or bag will fill with air. If the pressure is too high, the glove or bag will deflate.
5. Record the vent-assist air pressure on the record sheet provided in the *Operation* section of your Nordson powder-coating system manual.

NOTE: You may have to readjust the vent-assist air pressure if you change the number of transfer hoses connected to the accumulator, or change the transfer-pump air pressure.

5. Maintenance



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



WARNING: Before performing the following procedures, disconnect electrical power to the sieve. Failure to observe this warning may result in personal injury or death.

Every Shift

Check the screen tension. If the screen is loose, tighten the screen clamps and adjust the screen frame to tighten the screen tension. Refer to *Screen and Rotor Replacement* in the *Repair* section.

Daily

1. Disconnect the system electrical power. Unplug the sieve power and control cords from the receptacles on the booth base.
2. Turn on the system electrical power and start the exhaust fan.
3. See Figure 5. Remove the end door (2), rotor (3), and screen frame (1). Refer to *Screen and Rotor Replacement* in the *Repair* section.
4. Place the parts inside the booth, and blow them clean with low-pressure compressed air. Use an OSHA-approved air gun.
5. Wipe the rotor and end door clean. If powder has impact-fused to the rotor, use a wooden or plastic tool to clean it. Use a soft brush to clean the screen.
6. Check the screen tension and inspect the screen for damage. Adjust the screen tension if necessary. Replace the screen if it is damaged. Refer to *Screen and Rotor Replacement* in the *Repair* section.
7. See Figure 8. Inspect the hex bearing in the end door. If it does not turn freely, replace it. Check the lip seal and lantern ring. If you remove the lip seal, make sure you have a replacement. Refer to *End Door Repair* in the *Repair* section.
8. Clean the sieve housing with low-pressure compressed air and a soft brush.
9. Reinstall the rotor, screen, and end door.
10. Disconnect the hose from the scrap container. Empty the container. If the container is full of fine powder, check and adjust the vent-assist air pressure.

Periodically

1. Refer to the *Motor, Lip Seal, and Lantern Ring Replacement* procedure in the *Repair* section. Remove the motor from the sieve housing.
2. Pull the lantern ring and lip seal out of the sieve housing.
3. Clean the lantern ring and lip seal. Replace them if they are damaged.

6. Troubleshooting

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

Introduction

This section contains troubleshooting procedures for the NRPS-100 rotary sieve. These troubleshooting procedures cover only the most common problems that you may encounter. If you cannot solve the problem with the information given here, contact your local Nordson representative for help.

Troubleshooting Chart

Problem	Possible Cause	Corrective Action
1. Excessive vibration	Damaged rotor	Inspect and replace the rotor if necessary.
	Hex bearing failing	Replace the hex bearing.
2. End door not seating properly	Rotor not fully seated on hex adapter	Make sure the hex adapter is flush with the shaft end and the rotor is fully seated on the adapter.
	End door latches are loose	Adjust the latch hook lengths to draw the door tight against the housing.
3. Motor overloading	Plugged sieve outlets	Clean the sieve outlets.
	Clogged screen	Clean or replace the screen. Check the powder for contamination. Add new powder to the hopper. Too large a ratio of reclaimed-to-new powder can cause clogging.
	Seized hex bearing	Replace the hex bearing.
	Powder feed rate exceeds sieve capacity	Reduce the transfer-pump air pressure and adjust the vent-assist air pressure.

Troubleshooting Chart (contd)

Problem	Possible Cause	Corrective Action
4. Excessive screen wear or tearing	Powder feed rate exceeds sieve capacity	Reduce the transfer-pump air pressure and adjust the vent-assist air pressure.
	Loose screens	Remove the screen frame. Tighten the screen tension.
	Erratic or heavy pulsating feed rate, causing excess pressure on screens	Check transfer-pump air supply and pressure. Check the transfer pumps, pickup tubes, and hoses for blockages. Check the fluidizing plates and the powder in the color module hoppers for contamination.
5. Screen blinding (plugging)	Loose screen	Remove the screen frame from the sieve. Adjust the screen tension.
	Screen mesh is too fine	Change to a coarser mesh screen.
	Powder contaminated with oil or water	Check the powder for contamination. If contaminated, remove the powder from the hopper. Clean the hopper and fluidizing plate. If the plate is contaminated, replace it. Eliminate the source of contamination.
6. Good powder in scrap container	Powder feed rate exceeds sieve capacity	Reduce the transfer-pump air pressure.
	Erratic or pulsating feed rate. Heavy surges may exceed sieve capacity	Check the transfer-pump air supply and pressure. Check the transfer pumps, pickup tubes, and hoses for blockages. Check the fluidizing plates and the powder in the color module hoppers for contamination.
	Too many oversized particles in reclaimed powder	Check the powder in the color module for contamination.
	Screen mesh is too fine	Change to a coarser mesh screen.
	Loose screens	Remove the screen frame from the sieve. Adjust the screen tension.

Problem	Possible Cause	Corrective Action
6. Good powder in scrap container (<i>contd</i>)	Clogged screens	Clean or replace the screen. Check the powder for contamination. Add new powder to the hopper. Too large a ratio of reclaimed-to-new powder can cause clogging.
	Vent-assist air pressure too low, or hose to scrap container and/or container not air tight	Adjust the vent-assist air pressure as described in the <i>Operation</i> section. Check the hose and scrap container connections and seals.
	Sieve not level, discharge end pitched down	Level the sieve and/or the feed hopper.
7. Capacity lower than normal	Loose screens	Remove the screen frame from the sieve. Adjust the screen tension.
	Sieve not level. Discharge end is higher than inlet end	Level the sieve and/or the feed hopper.
8. Powder backing up in accumulator	Motor running backward	The sieve must rotate counterclockwise, when viewed from the motor end. If it is not, reverse the L1 and L2 connections at the sieve motor junction box or system electrical panel. Refer to your system manual.
	Sieve inlet plugged	Clean the inlet.
	Vent-assist air pressure too high	Adjust the vent-assist air pressure. Refer to <i>Operation</i> .

7. Repair



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

Screen and Rotor

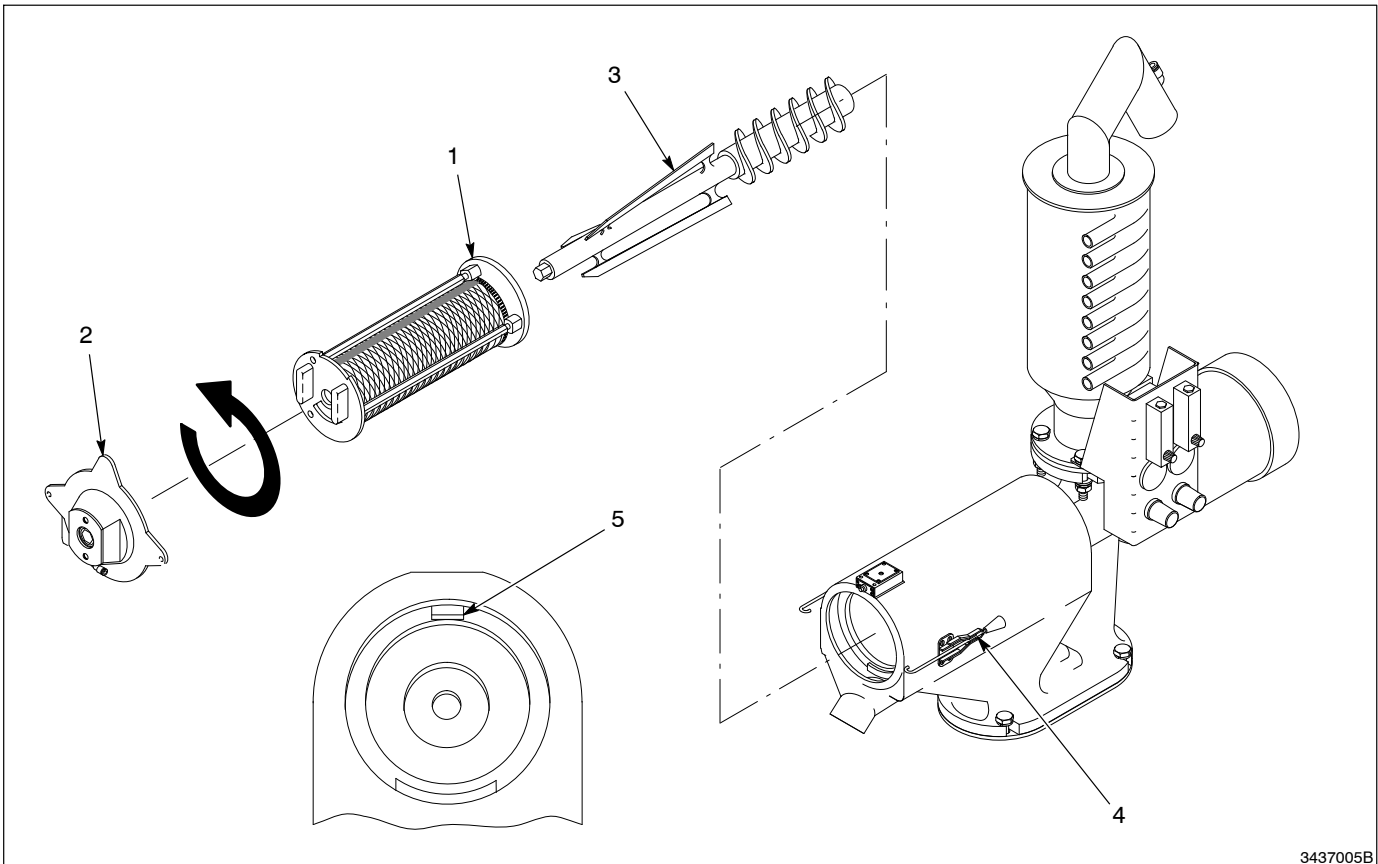
This procedure describes screen and rotor removal and replacement. The rotor should not have to be replaced unless it is damaged.



WARNING: Before performing the following procedures, disconnect electrical power to the sieve. Failure to observe this warning may result in personal injury or death.

Removing the Screen and Rotor

1. Shut off power at the system electrical panel. Unplug the sieve power and control cords from the booth base receptacles.
2. See Figure 5. Make sure the sieve has come to a full stop. Release the door latches (4) and slide the end door (2) off the rotor (3).
3. Turn the screen frame (1) counterclockwise to release the outlet screen ring from behind the locking block (5).
4. Remove the screen frame and rotor from the sieve housing. Clean the screen and frame with low-pressure compressed air. Make sure the threads on the frame rods are clean.



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Fig. 5 Removing the Rotor and Screen

- | | | |
|-----------------|-----------------|------------------|
| 1. Screen frame | 3. Rotor | 5. Locking block |
| 2. End door | 4. Door latches | |

Replacing the Screen

1. See Figure 6. Use a $\frac{7}{16}$ -inch open-end wrench on the screen frame rod (5) hexes and a $\frac{9}{16}$ -inch open-end wrench on the tensioning nuts (6).
 - a. Hold the screen frame rod stationary and rotate (loosen) the tensioning nut one complete turn.
 - b. Loosen the other tensioning nuts in the same manner with two complete turns.
 - c. Alternate between rods, loosening each tensioning nut two complete turns until the screen is sufficiently loose to turn the tensioning nuts by hand.
 - d. Continue to loosen the nuts by hand until they bottom-out on the hex portion of the screen frame rods.

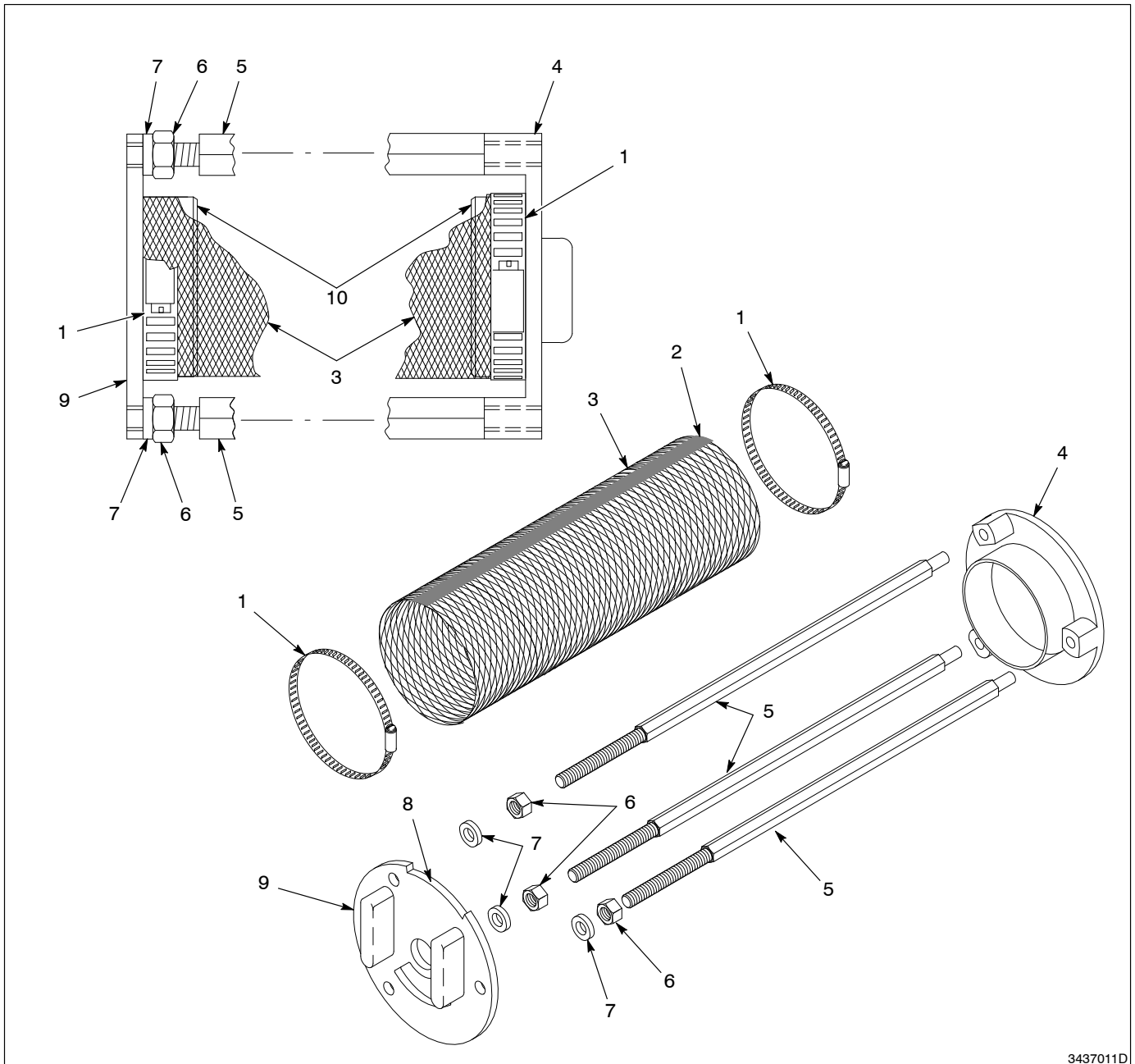
NOTE: Do not use wrenches larger than those specified above. The ends of larger wrenches could project far enough past the frame rods and tensioning nuts to catch and tear the screen.

2. Loosen the worm-gear clamps (1) and remove the old screen (3).
3. Install the worm-gear clamps over the new screen. Slide the new screen over the flanges (10) on the screen rings. Fit the ends of the screen up against the screen rings (4, 9).

NOTE: Install the screen with the seam (2) on the same side of the outer screen ring (9) as the flats on the edge (8).

Replacing the Screen *(contd)*

4. Slide the worm-gear clamps up against the screen rings. Tighten the clamps to hold the screen securely on the flanges.
5. Make sure the rods are reinstalled in the screen rings properly. Insert the threaded end of the rods through the inner screen ring (4). The nylon spacer (6) should be between the tensioning nut and the inner ring. Make sure the unthreaded end of the rod is inserted through the outer screen ring.
6. Tighten the tensioning nuts by hand until they contact the inner screen ring. All three nuts should apply about equal pressure on the inner screen ring.
7. Use a $\frac{7}{16}$ -inch open-end wrench on the screen frame rod hexes and a $\frac{9}{16}$ -inch open-end wrench on the tensioning nuts.
 - a. Hold the screen frame rod stationary and rotate (tighten) the tensioning nut one complete turn.
 - b. Tighten the other tensioning nuts in the same manner with two complete turns. Try to keep the inner screen ring from binding by tightening each tensioning nut equal distances and not more than two complete turns at a time.
 - c. Alternate between rods, tightening each tensioning nut two complete turns until all three rods are flush with the outside surface of the inner screen ring. Do not allow the screen to slip more than $\frac{1}{8}$ inch on either ring flange. The screen must be tight and smooth, with no wrinkles or twists.



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Fig. 6 Replacing the Screen

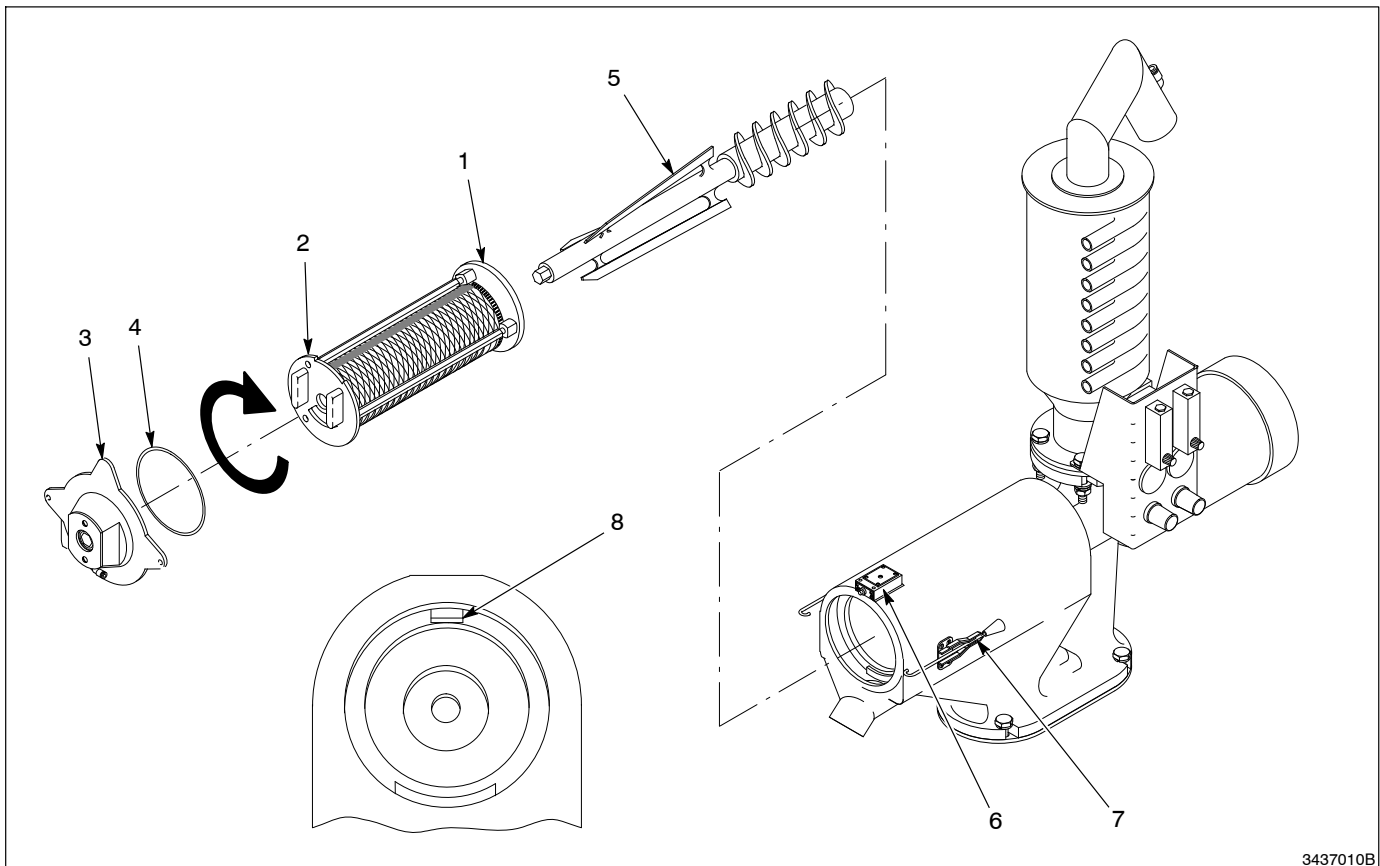
- 1. Worm-gear clamps
- 2. Screen seam
- 3. Screen
- 4. Inner screen ring

- 5. Frame rods
- 6. Tensioning nuts
- 7. Spacers

- 8. Flats on outer screen ring
- 9. Outer screen ring
- 10. Ring flanges

Installing the Rotor and Screen

1. See Figure 7. Install the rotor (5) into the housing. Fit the end of the rotor over the hex adapter on the motor shaft.
2. Install the screen frame (1) over the rotor and into the housing.
3. Slide the flats (2) on the top edge of the outlet screen ring past the locking block (8). Rotate the screen frame clockwise to lock the ring behind the locking block.
4. Make sure the O-ring (4) is undamaged and correctly installed on the end door.
5. Fit the hex on the end of the rotor into the hex bearing in the end door. Install the end door on the housing and clamp it into place with the door latches (7). Make sure the limit switch (6) closes.



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Fig. 7 Installing the Rotor and Screen Frame

- | | | |
|----------------------|-----------------|------------------|
| 1. Screen frame | 4. O-ring | 7. Door latches |
| 2. Outlet ring flats | 5. Rotor | 8. Locking block |
| 3. End door | 6. Limit switch | |

Motor, Lip Seal, and Lantern Ring Replacement

Use this procedure to replace the motor or the lip seal and lantern ring in the motor end of the housing. Removing the lip seal may damage it. Make sure you have a replacement seal.

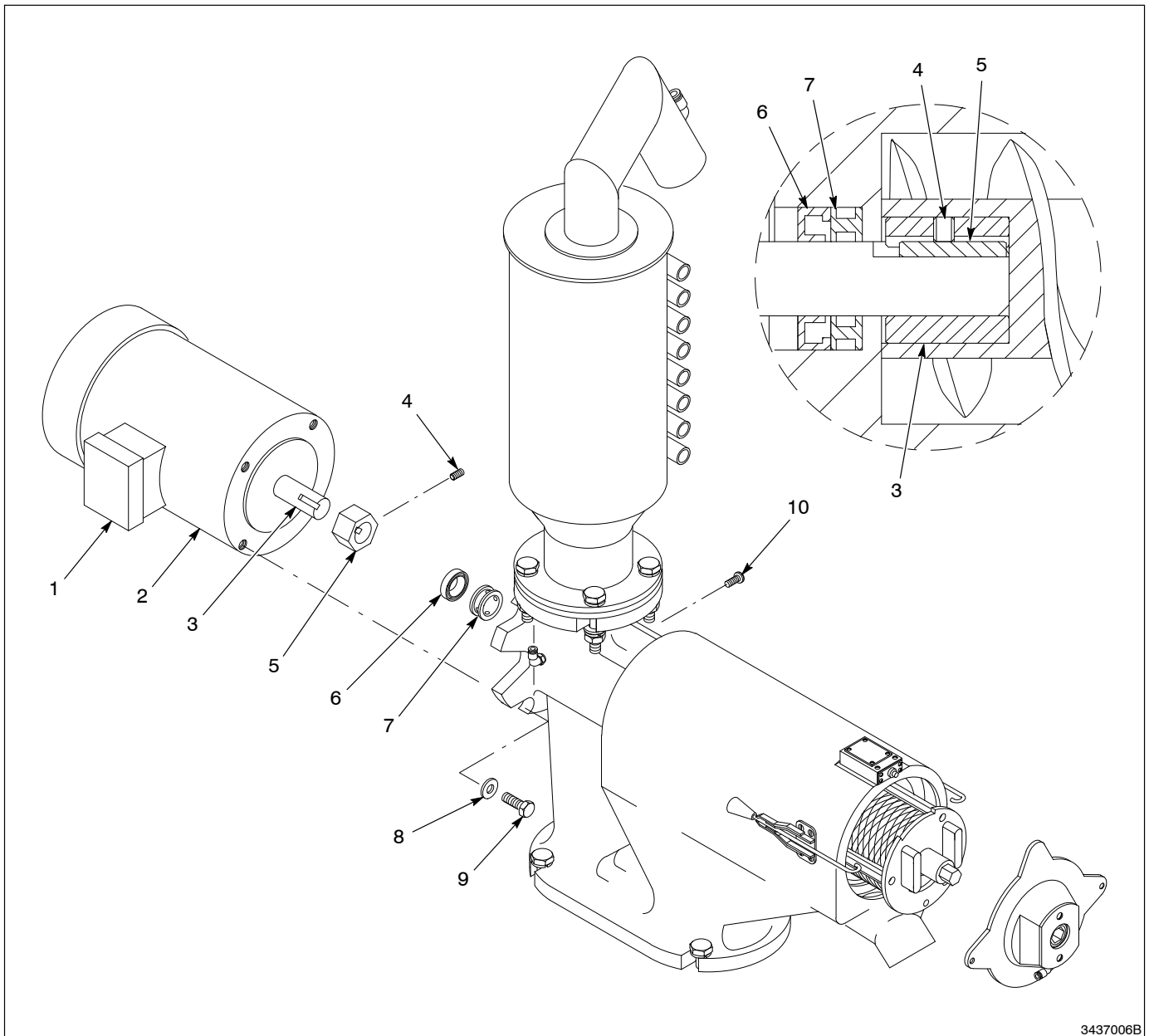


WARNING: Before performing the following procedures, disconnect power at the system electrical panel. Lock and tag the disconnect switch. Failure to observe this warning may result in personal injury or death.

1. Shut off power at the system electrical panel. Lock out and tag the disconnect switch or unplug. Allow the sieve to come to a full stop.
2. See Figure 8. If you are replacing the motor, open the motor junction box (1). Tag the cable leads so you can correctly reconnect them. Disconnect the cable leads from the motor leads, and the cable and strain relief from the junction box.
3. Remove the screen frame and rotor, as described in the *Screen and Rotor Replacement* procedure.
4. Remove the pan-head screw (10) from the threaded access hole in the side of the sieve housing.
5. Rotate the motor shaft (3) until the hex-adapter set screw (4) lines up with the access hole.
6. Insert a hex wrench through the access hole and loosen (do not remove) the set screw. Remove the hex adapter and key assembly (5) from the motor shaft.
7. Support the motor and remove the mounting screws (9) and washers (8). Carefully pull the motor straight out of the housing until the shaft is clear.
8. Remove the lip seal (6) and lantern ring (7) from the housing. You may have to drive them out with a dowel.

**Motor, Lip Seal, and Lantern
Ring Replacement** *(contd)*

9. Clean and inspect the lip seal and lantern ring. Replace them if they are damaged.
10. Clean the housing bore and flange.
11. Install the lantern ring, with the beveled edge facing in, into the housing bore. Install the lip seal, with the groove facing in, in the bore.
12. Carefully slide the motor shaft through the lip seal. Secure the motor to the housing flange with the screws and washers removed in step 7. Tighten the screws evenly.
13. Place the hex adapter in a $\frac{7}{8}$ -in. socket. Attach one or more extensions to the socket so you can reach the motor shaft from the discharge end of the housing.
14. Install the key in the hex adapter slot, if removed.
15. Install the hex adapter and key on the motor shaft. The end of the adapter must be flush with the end of the shaft.
16. Tighten the hex-adapter set screw 1.7 N•m (15 in. lb). Plug the access hole in the housing with the pan-head screw removed in step 4.
17. If you replaced the motor, open the motor junction box. Install the cable and strain relief through a knockout in the bottom of the box. Connect the cable leads to the motor leads.
18. Reinstall the rotor, screen frame, and end door.



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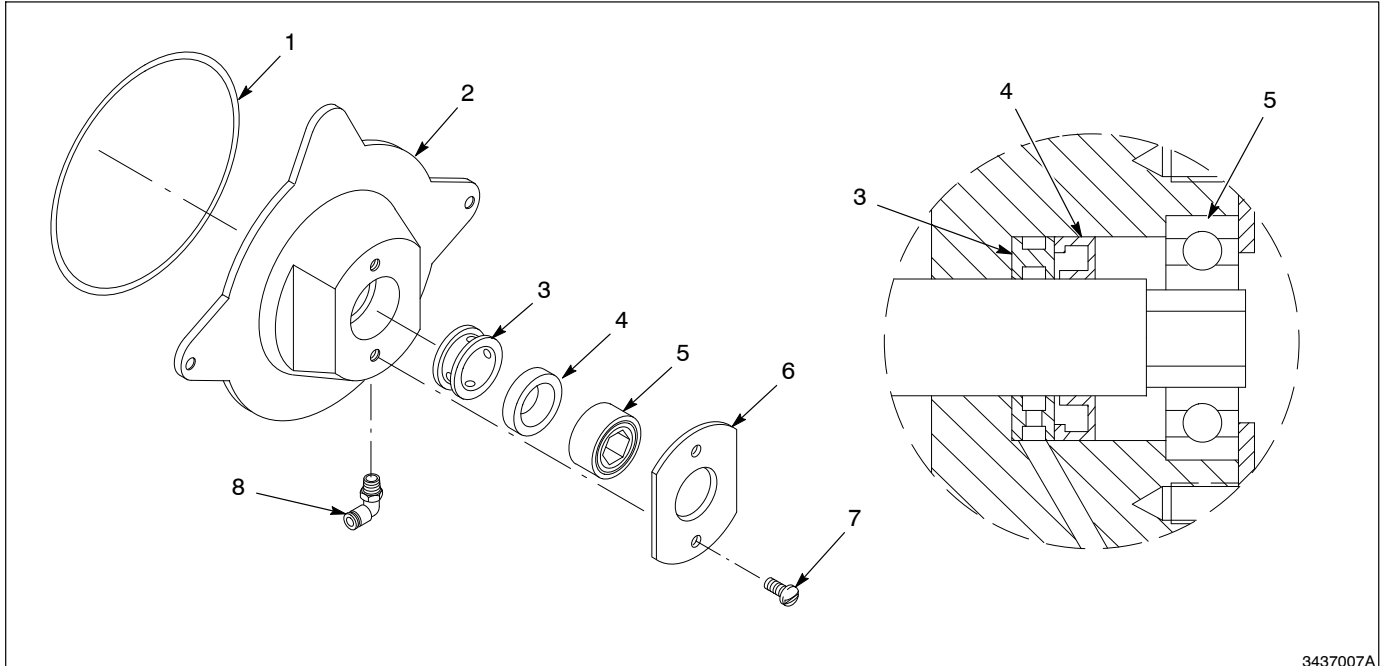
Fig. 8 Motor, Lip Seal, and Lantern Ring Replacement

- | | | |
|-----------------|---------------------------------|--------------------|
| 1. Junction box | 5. Hex adapter and key assembly | 8. Flat washers |
| 2. Motor | 6. Lip seal | 9. Screws |
| 3. Motor shaft | 7. Lantern ring | 10. Pan-head screw |
| 4. Set screw | | |

End Door Repair

Use this procedure to replace the hex bearing, lip seal, and lantern ring in the end door. Removing the lip seal may damage it. Make sure you have a replacement seal.

1. See Figure 9. Remove the end door (2) from the housing.
2. Remove the two screws (7) and the bearing cover (6).
3. Remove the hex bearing (5). You may have to place the end door on wooden blocks, bearing side down, and drive the bearing out of the bore with a dowel.
4. Remove the lip seal (4) and lantern ring (3). You may have to drive them out with a dowel.
5. Clean the end door. Remove the tubing connector (8), if necessary, to blow out the air passage. Use PTFE tape on the fitting threads. Check the O-ring (1) and replace it if it is damaged.
6. Install the lantern ring in the end door with the beveled edge facing in. Install the lip seal with the groove facing in.
7. Press the bearing into the end door.
8. Install the cover over the bearing.
9. Install the end door on the housing and clamp it in place.



3437007A

Fig. 9 End Door Repair

- | | | |
|-----------------|----------------|---------------------|
| 1. O-ring | 4. Lip seal | 7. Screws |
| 2. End door | 5. Hex bearing | 8. Tubing connector |
| 3. Lantern ring | 6. Cover | |

8. Parts

The parts lists in this section are for the sieves listed below.

Sieves

Part	Description
223 920	Sieve, NRPS-100, 230–460 Vac, 3 phase, 60 Hz
226 671	Sieve, NRPS-100, 200–400 Vac, 3 phase, 60 Hz
226 672	Sieve, NRPS-100, 200–400 Vac, 3 phase, 50 Hz
226 669	Sieve, NRPS-100, 380 Vac, 3 phase, 60 Hz
226 670	Sieve, NRPS-100, 380 Vac, 3 phase, 50 Hz
223 921	Sieve, NRPS-100, 575 Vac, 3 phase, 60 Hz

Motors

Part	Description
226 680	Motor, 1/2 hp, TEFC, 56C, 230/460 Vac, 3 phase, 60 Hz
226 693	Motor, 1/2 hp, TEFC, 56C, 200/400 Vac, 3 phase, 60 Hz
226 694	Motor, 1/2 hp, TEFC, 56C, 200/400 Vac, 3 phase, 50 Hz
226 691	Motor, 1/2 hp, TEFC, 56C, 380 Vac, 3 phase, 60 Hz
226 692	Motor, 1/2 hp, TEFC, 56C, 380 Vac, 3 phase, 50 Hz
226 689	Motor, 1/2 hp, TEFC, 56C, 575 Vac, 3 phase, 60 Hz

Screens

Part	Description
247 736	Screen, sieve, NRPS-100, 20 mesh
226 673	Screen, sieve, NRPS-100, 40 mesh
226 674	Screen, sieve, NRPS-100, 60 mesh
226 675	Screen, sieve, NRPS-100, 80 mesh
226 676	Screen, sieve, NRPS-100, 100 mesh
248 849	Screen, sieve, NRPS-100, 120 mesh

Sieve Parts

See Figure 10.

Item	Part	Description	Quantity	Note
—	-----	Sieve, rotary, NRPS-100	1	
1	-----	• Motor	1	A
2	226 688	• Adapter, hex assembly, sieve, NRPS-100	1	
3	226 695	• Seal, lip, PTFE, sieve, NRPS-100	2	
4	226 681	• Ring, lantern, brass, NRPS-100	2	
5	981 565	• Screw, pan head, $\frac{1}{4}$ -20 x 0.500 in.	1	
6	981 076	• Screw, round head, 8-32 x 1.500, sl, zn	2	
7	226 696	• Switch, limit, sieve, NRPS-100	1	
8	972 141	• Connector, male, 6 mm tube x $\frac{1}{8}$ in. BSPT	1	
9	983 061	• Washer, flat, 0.460 x 0.812 x 0.065 in.	4	
10	981 402	• Screw, hex head, cap, $\frac{3}{8}$ -16 x 1.00 in.	4	
11	226 701	• Clamp, pull action, sieve, NRPS-100	2	
12	981 877	• Screw, round head, self tapping, #10-16 x 0.500 in.	8	
13	226 674	• Screen, sieve, NRPS-100, 60 mesh	1	B
14	226 704	• Screen, frame assembly, NRPS-100	1	
15	-----	• • Ring, outer screen	1	C
16	247 738	• • Clamp, worm gear, #48	2	C
17	983 129	• • Washer, flat, nylon 0.38 x 0.62 x 0.125	3	C
18	984 152	• • Nut, hex, reg., $\frac{3}{8}$ -16	3	C
19	247 739	• • Rod, assy, rotary sieve, NRPS-100	3	C
20	-----	• • Ring, inner screen	1	C
21	226 682	• Rotor, sieve, NRPS-100	1	
22	942 510	• O-ring, silicone, 5.125 x 5.375 x 0.125 in.	1	
23	226 678	• Door, end, sieve, NRPS-100	1	
24	972 142	• Elbow, male, 6 mm tube x $\frac{1}{4}$ in BSPT	1	
25	226 686	• Bearing, hex, sieve, NRPS-100	1	
26	981 105	• Screw, pan head, slotted, #10-24 x 0.375 in.	2	
27	226 687	• Cover, end, sieve, NRPS-100	1	

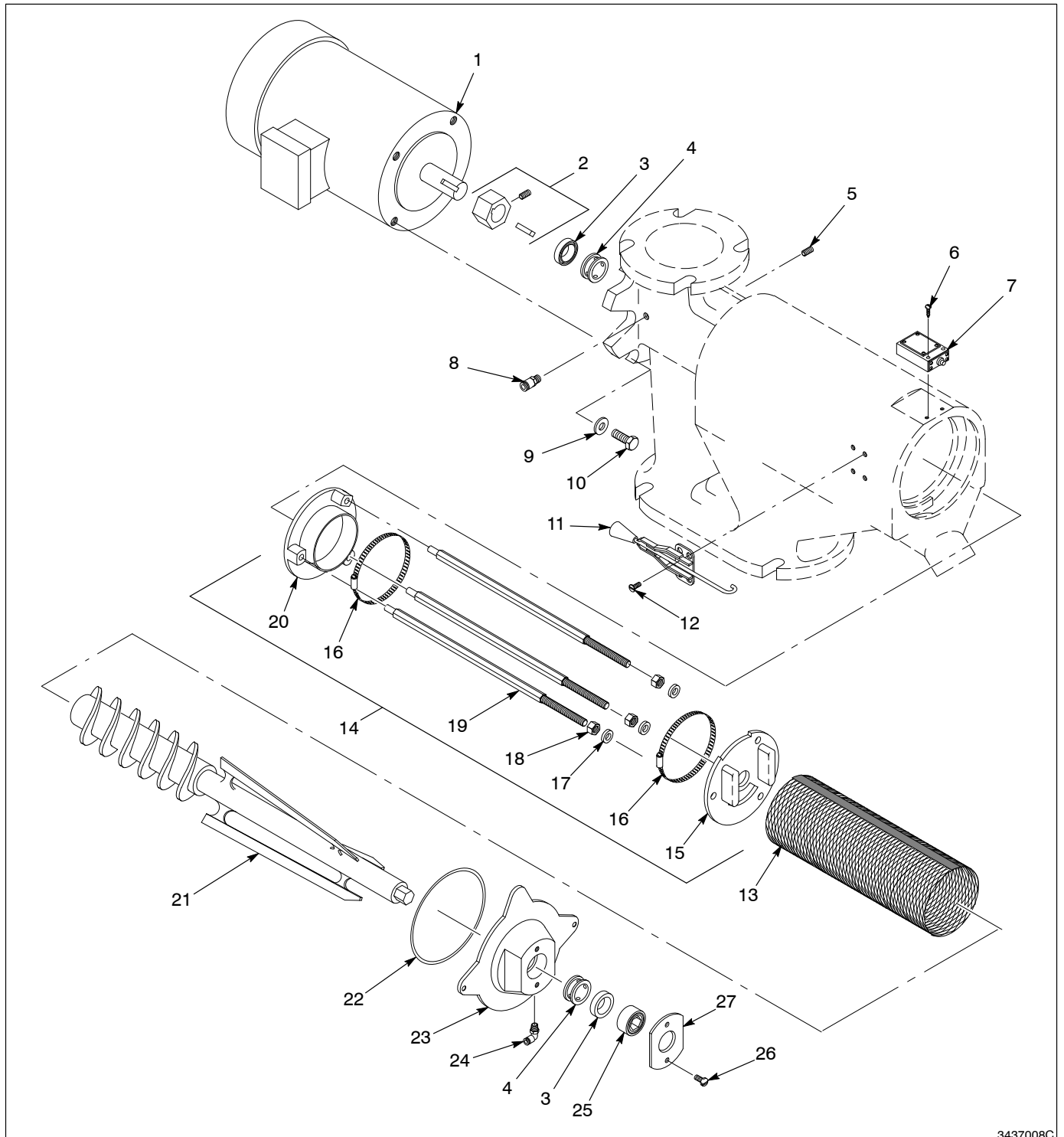
NOTE A: See *Motors* lists for part numbers.B: The 60 mesh screen is standard. See *Screens* list for part numbers of optional screens.

C: This part can be ordered separately or as part of the screen frame assembly.

Continued on next page

Item	Part	Description	Quantity	Note
NS	226 703	• Service kit, air volume control	1	D

NOTE D: Parts listed in *Air Volume Control* list and shown in Figure 11.
NS: Not Shown



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Fig. 10 Sieve Parts

Air Volume Control

See Figure 11.

Item	Part	Description	Quantity	Note
—	226 703	Service kit, air volume control	1	
1	981 729	• Screw, pan head, #10-32 x 0.375 in.	4	
2	972 141	• Connector, male, 6 mm x 1/8 in. BSPT	3	
3	226 699	• Flow meter, 20–200, with brass valve	2	
4	901 240	• Gauge, air, 0–30 psi	1	
5	901 228	• Gauge, air, 0–100 psi	1	
6	941 301	• O-ring, Viton, 1.625 x 1.813 x 0.094 in.	2	
7	972 915	• Tee, male run, 12 mm tube x 1/4 in. BSPT	1	
8	973 402	• Plug, pipe, socket, flush, 1/8 in. NPT	2	
9	972 125	• Elbow, male, 10 mm x 1/4 in. BSPT	1	
10	972 126	• Elbow, male, 6 mm tube x 1/8 in. BSPT	4	
11	901 444	• Regulator, air, 5–125 psi, 1/4 in. NPT	1	
12	972 093	• Elbow, male, 12 mm tube x 1/4 in. BSPT	1	
13	971 100	• Connector, male, 6 mm tube x 1/4 in. BSPT	1	
14	901 446	• Regulator, air, 0–25 psi	1	
15	973 572	• Coupling, pipe, hydraulic, 1/8 in. NPT	2	
16	972 840	• Tee, male run, 6 mm tube x 1/8 in. BSPT	1	
NS	900 742	• Tubing, polyurethane, 6/4 mm, blue	AR	
NS	226 690	• Tubing, polyurethane, 12/8 mm, blue	AR	
AR: As Required				
NS: Not Shown				

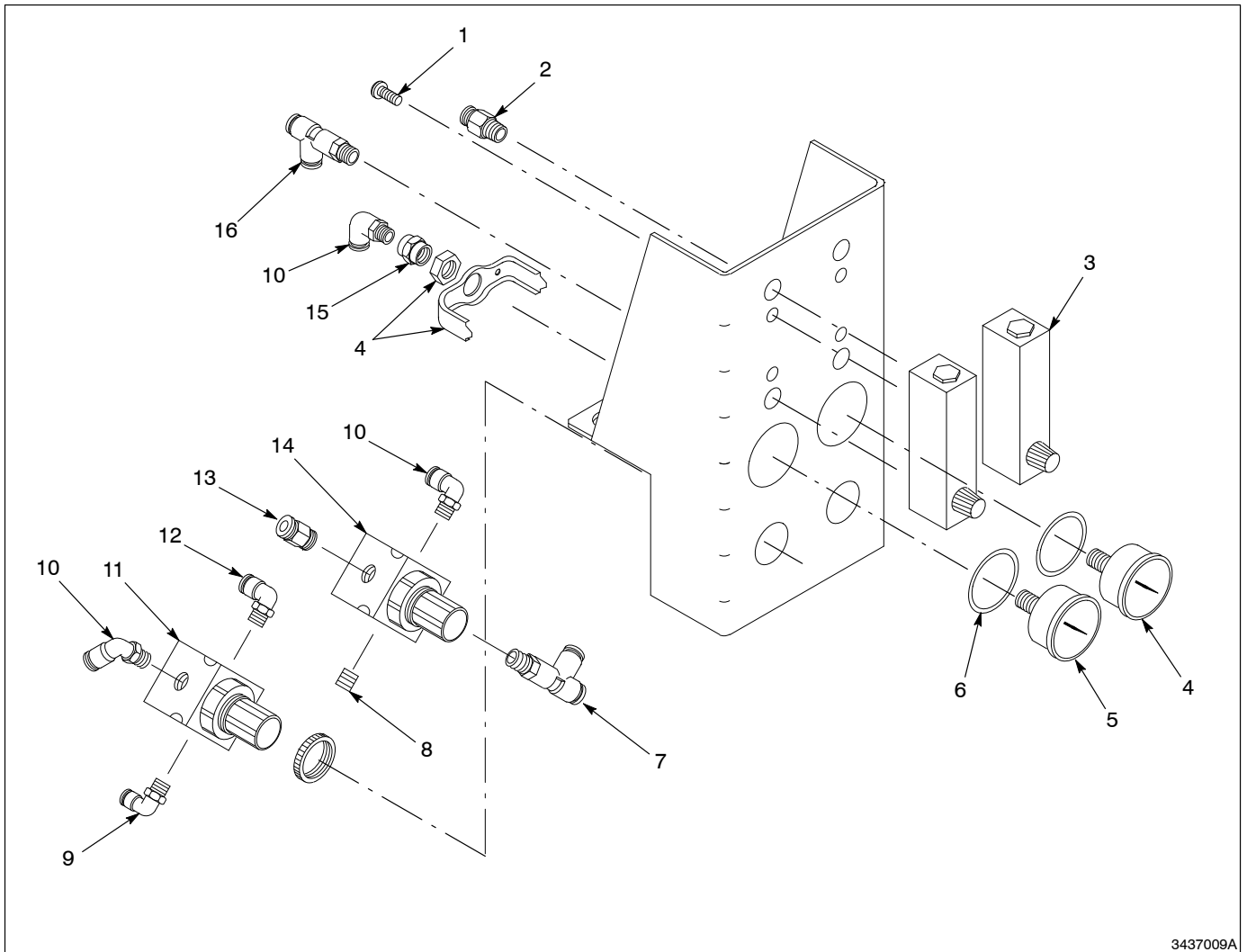


Fig. 11 Air Volume Control Parts

