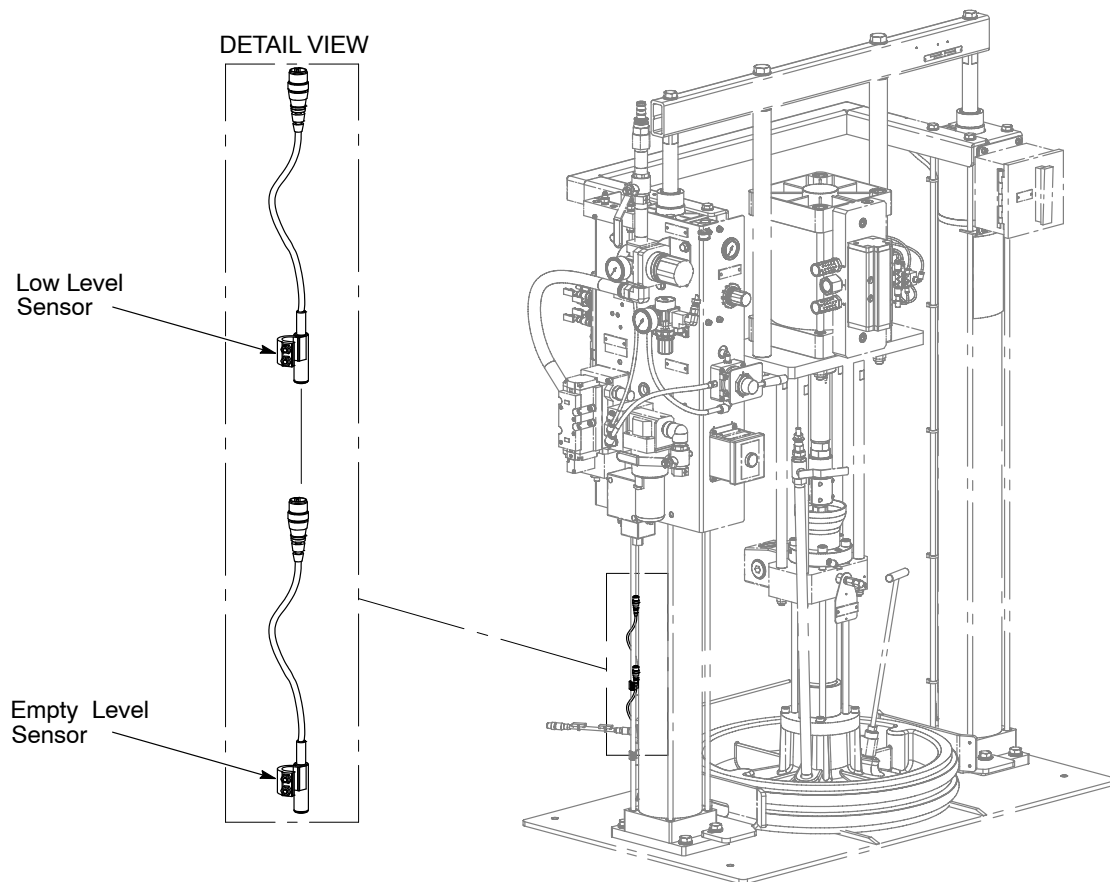


Rhino[®] SD2/XD2 Electric Container Level Sensors for 125-mm Frames

Description

See Figure 1. The Rhino[®] SD2/XD2 electric container level sensor module uses magnetic sensors to monitor the distance between the bottom of the follower plate and the base surface of the unloader frame.

The *Low Level* sensor sends a signal to the controller when the magnet on the frame piston moves in front of the *Low Level* sensor. The *Empty Level* sensor sends a signal to the controller when the magnet on the frame piston moves in front of the *Empty Level* sensor.



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Figure 1 Container Level Sensors

Repair



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



CAUTION: To prevent damage to the equipment, personnel performing these procedures must know how to safely operate the elevator control valve on the Rhino SD2/XD2 unloader.

Repair consists of replacing the magnetic sensors and setting the *Low* and *Empty Level* signals.

NOTE: Read and understand these procedures before performing repairs. If necessary, contact a local Nordson representative for assistance.

Replace a Magnetic Sensor

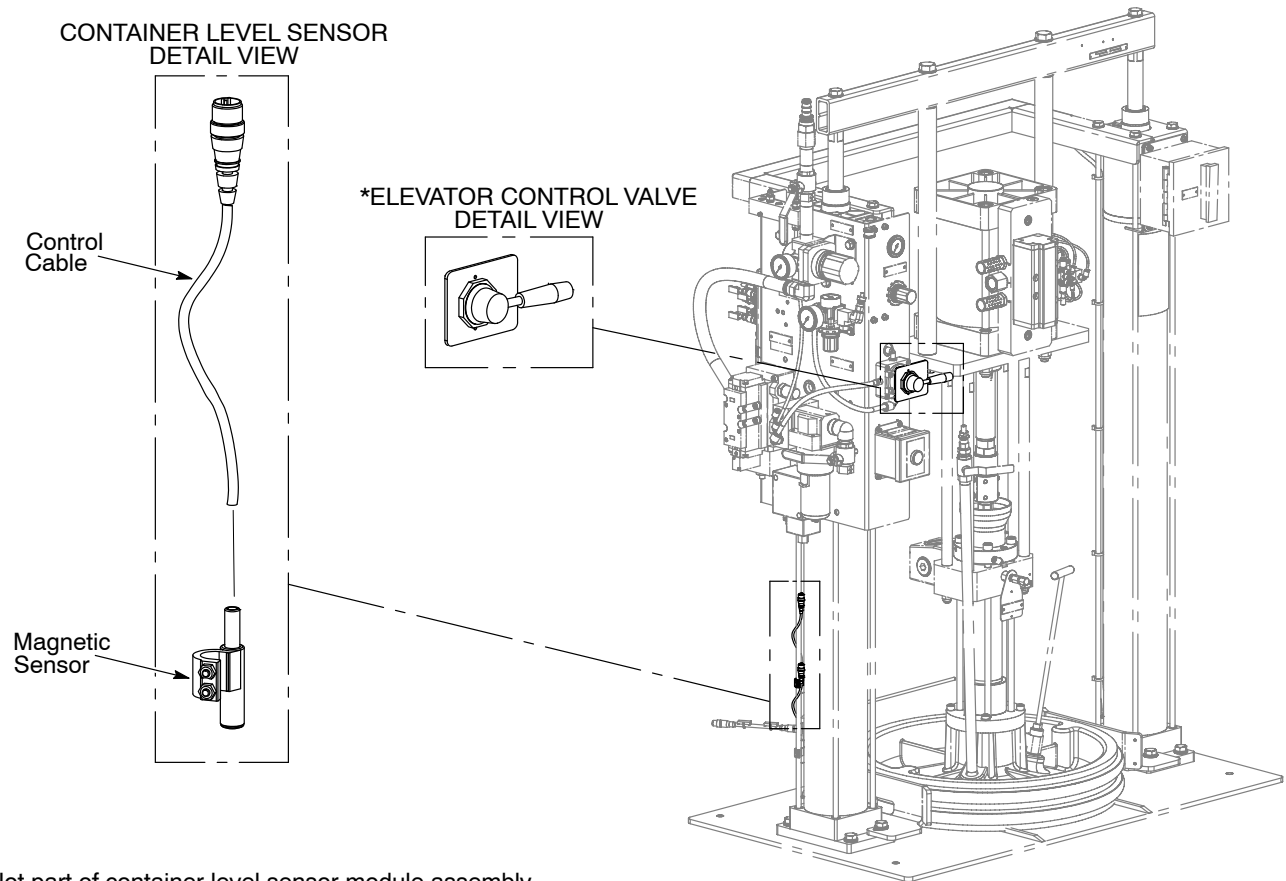
See Figure 2.

1. Disconnect the control cable from the magnetic sensor.
2. Mark the position of the magnetic sensor.
3. Remove the set screws securing the magnetic sensor to the frame tie rod. Remove the magnetic sensor.
4. Install the new magnetic sensor into the frame tie rod at the marked position using two set screws. Ensure the magnetic sensor sits against the frame cylinder.



CAUTION: To prevent damage to the proximity sensor, do not overtighten the set screws.

5. Connect the control cable to the magnetic sensor.
6. Using the elevator control valve, raise and lower the follower plate to test the *Low* and *Empty Level* signals.



*Not part of container level sensor module assembly.

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Figure 2 Replacing a Magnetic Sensor

Set the Low and Empty Level Signals

Refer to Table 1. The *Low* and *Empty Level* signals are factory-set. If desired, adjust the proximity sensor to change the factory settings.



CAUTION: To prevent damage to the equipment, personnel performing these procedures must know how to safely operate the elevator control valve on the Rhino SD2/XD2 unloader.

Perform the *Change the Factory Settings* procedure to change the factory settings. Perform the *Reset the Factory Settings* procedure to reset the *Low* and *Empty Level* signals back to the factory settings.

Table 1 *Low and Empty Level* Signal Factory Settings

Signal	Setting
Low	5-Gal Follower Plate: 4.5 in. between the bottom of the follower plate and the frame base plate
	55-Gal Follower Plate: 7.5 in. between the bottom of the follower plate and the frame base plate
Empty	1.5 in. between the bottom of the follower plate and the frame base plate .
Follower in drum	55-Gal Follower Plate: ≥ 36 -in. between the bottom of the follower plate and the frame base plate.

Change the Factory Settings

NOTE: The bottom lip on standard containers can vary and must be taken into consideration when making adjustments to the magnetic sensors.

See Figures 2 and 3.

1. Loosen the set screws, move the magnetic sensor to the desired position, and tighten the set screws.
2. Repeat step 1 for the remaining magnetic sensor if necessary.
3. Use the elevator control valve to raise and lower the follower plate to test the *Low* and *Empty Level* signals.

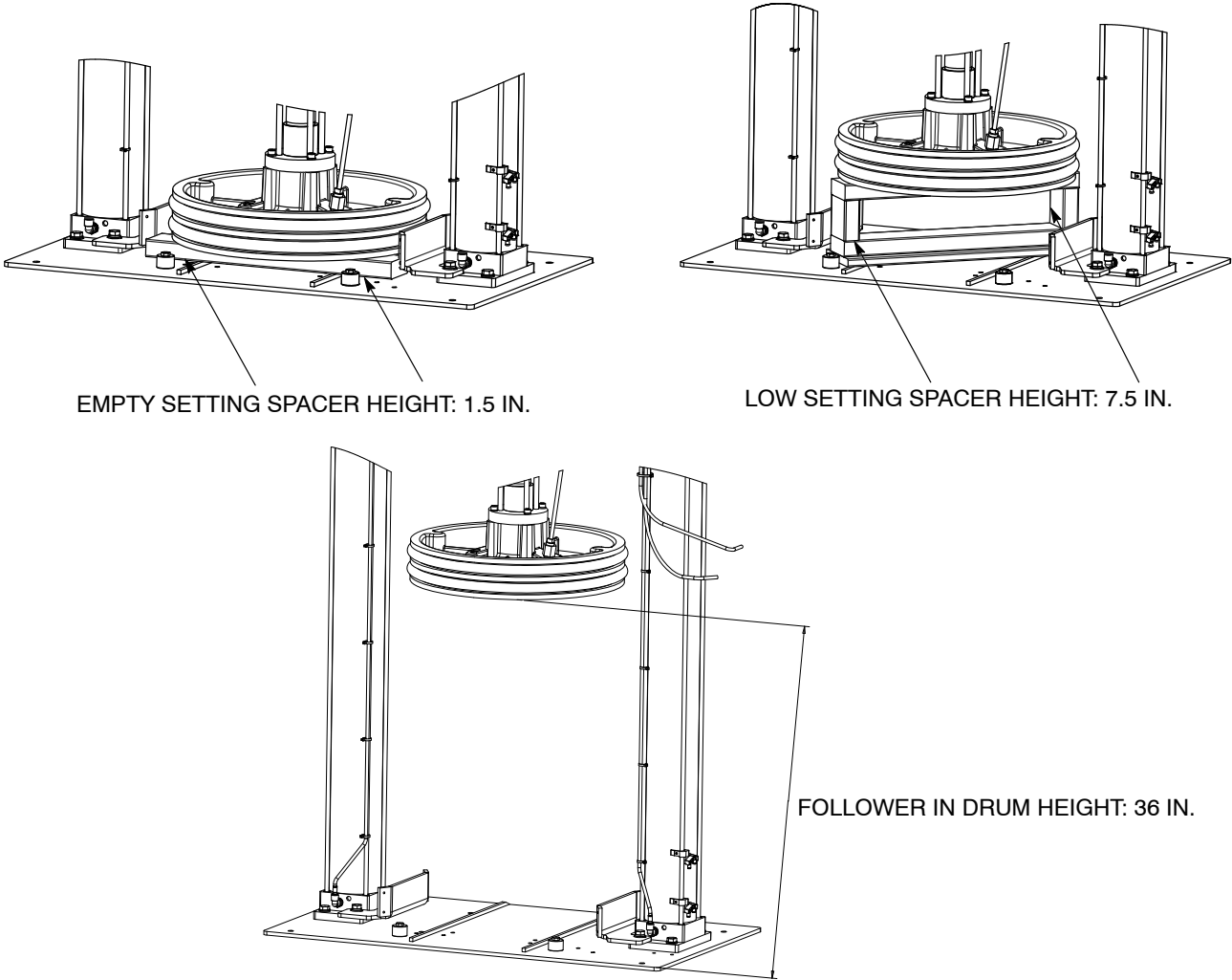
Reset the Factory Settings

NOTE: Have spacers of proper height on hand before performing this procedure.

See Figures 2 and 3.

1. Set spacers on the frame base plate. Use the elevator control valve to lower the follower plate onto the spacers.
2. Loosen the set screws on the magnetic sensor. Starting from the bottom of the frame cylinder, move the sensor up until the sensor is activated. Tighten the set screws to secure the magnetic sensor.
3. Raise the follower plate. Remove the spacers from the base plate.
4. Repeat steps 1–3 for the remaining magnetic sensor if necessary.
5. Use the elevator control valve to raise and lower the follower plate to test the *Low* and *Empty Level* signals.

55-GAL FOLLOWER PLATE



5-GAL FOLLOWER PLATE

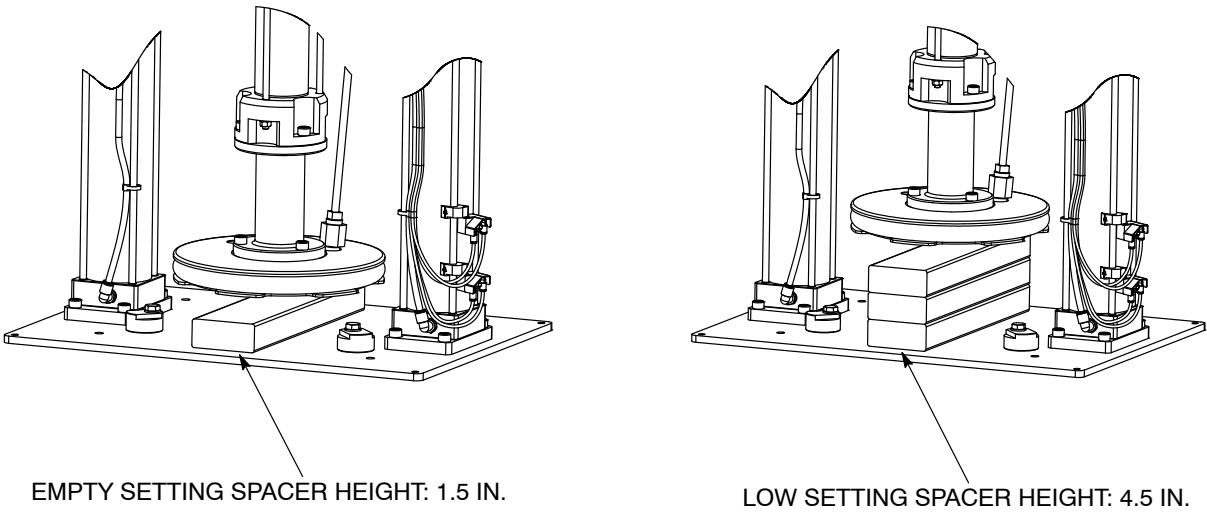


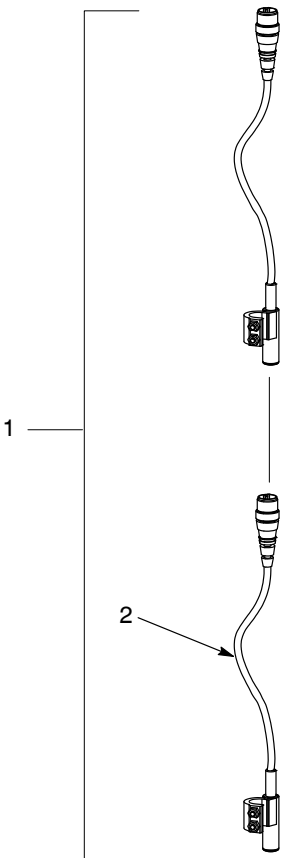
Figure 3 Spacer Height for Factory Settings

Parts

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

Container Level Sensor

See Figure 4 and refer to the following parts list.



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Figure 4 Container Level Sensor

Item	Part	Description	Quantity	Note
1	1606883	MODULE, container low, magnetic proximity, 125 mm	1	
	1613458	MODULE, level detect, empty, in drum, magnetic proximity	1	
2	1606882	MODULE, container empty, magnetic proximity, 125 mm	1	

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