

## Description

See Figure 1. The Drum Level Detect Module uses roller plunger limit switches on guide rails to monitor the distance between the bottom of the follower/platen and the base surface of the bulk unloader frame.

The actuating rod connects to the bulk unloader crossover bar. It actuates each roller plunger on the limit switches during the downward movement of the follower/platen.

The assembly detects three conditions during the downward movement of the follower/platen:

- Follower/Platen in drum
- Drum Low
- Drum Empty

Refer to the *Adjusting Limit Switches* section for more information on setting the limit switches.

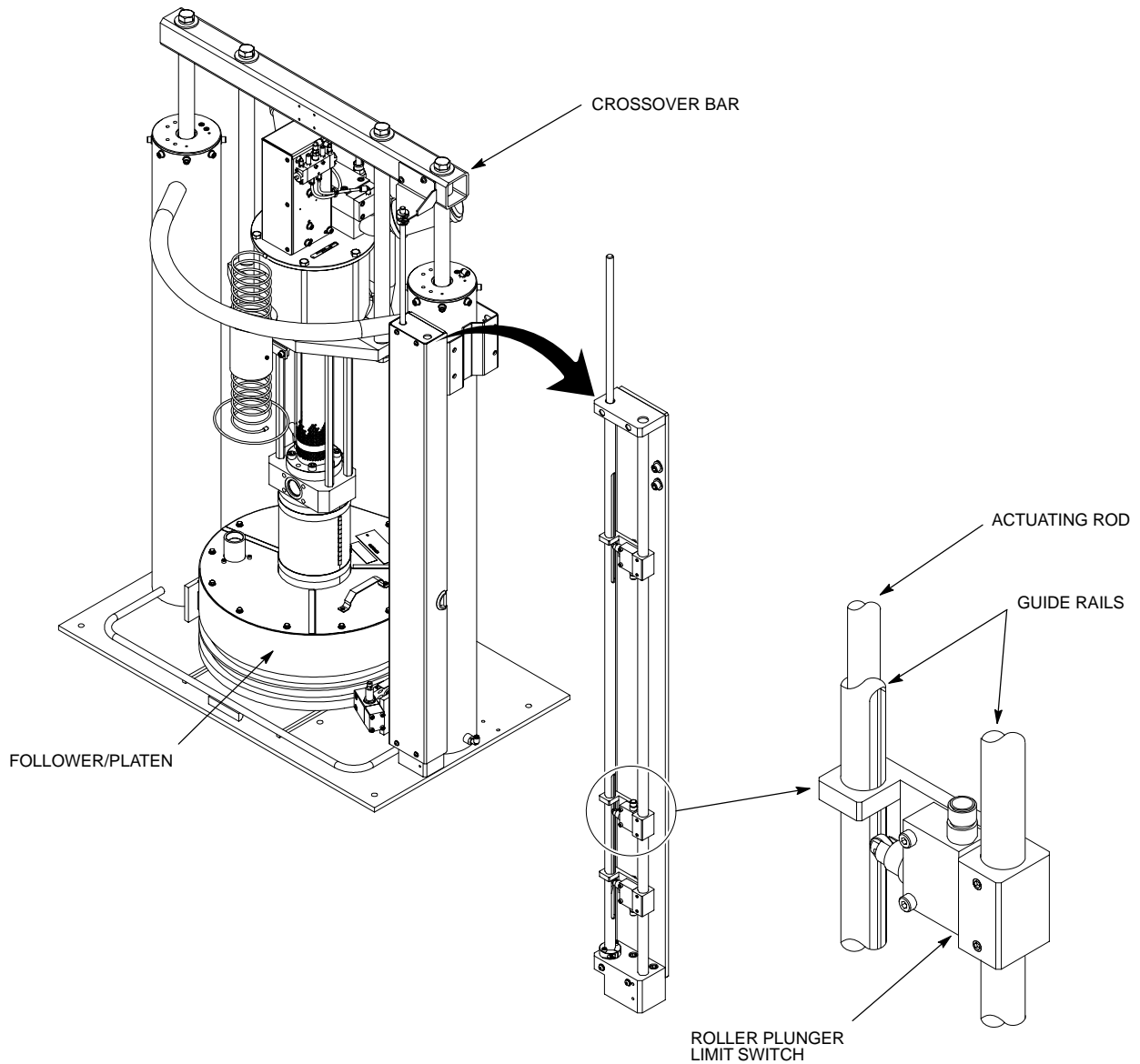


Figure 1 Drum Level Detect Assembly

## Repair

Repairs consist of replacing the actuating rod wiper seal along with replacing and adjusting the roller plunger limit switches.



- Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.
- Disconnect and lock out power to the system before performing repairs.

### Wiper Seal

1. See Figure 2. Remove the screws (6) and washers (5) securing the cover (4) to the base plate (9).
2. Remove the screws (1) and washers (2) securing the mounting bracket (7) to the crossover bar (3).
3. Remove the actuating rod assembly (8) from the guide tube (11).
4. Loosen the screw (15) on the split collar (14). Push the guide tube (13) downward to access the wiper seal (10). Remove the wiper seal from the base plate (9) and discard.
5. Assembly is the reverse order of disassembly. Verify the settings of the limit switches (12) before installing the cover (4).

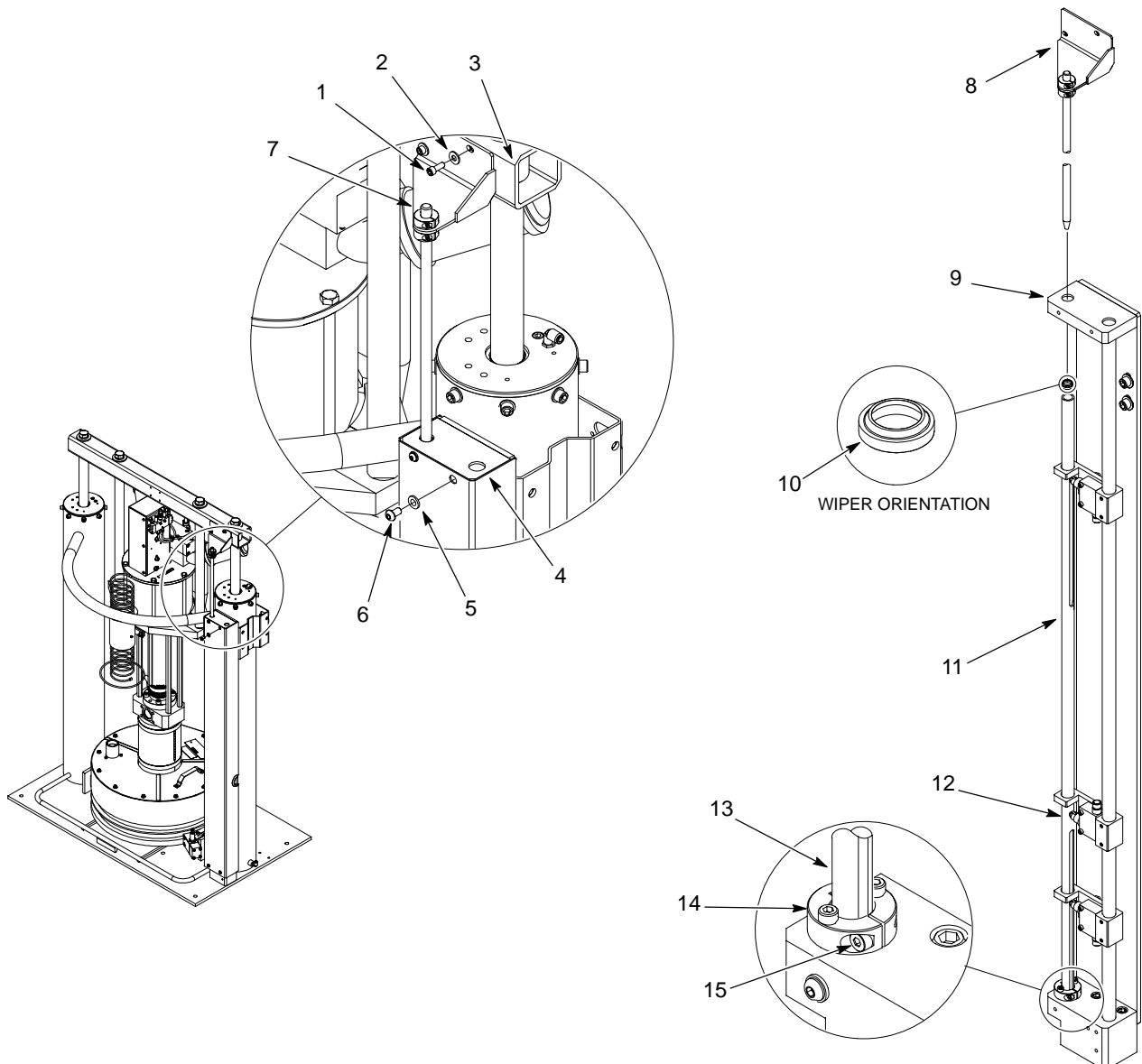


Figure 2 Wiper Seal Replacement

## Limit Switch

1. See Figure 2. Remove the screws (6) and washers (5) securing the cover (4) to the base plate (9).
2. See Figure 3. Disconnect the cable (6) from the limit switch (5).
3. Remove the lock nut (4), washer (3), and screws (1) securing the limit switch (5) to the switch bracket (2).
4. Install the new limit switch (5) to the switch bracket (2) using the screws (1), washers (3), and lock nut (4). Do not tighten the screws at this time.
5. Slide the limit switch (5) toward the actuating rod (7) until the limit switch roller plunger is compressed 0.060–0.090 in. (1.54–2.28 mm). Tighten the screws (1) securely.
6. Verify the settings of the limit switch (5).
7. See Figure 2. Install the cover (4) to the base plate (9) using the screws (6) and washers (5). Tighten the screws securely.

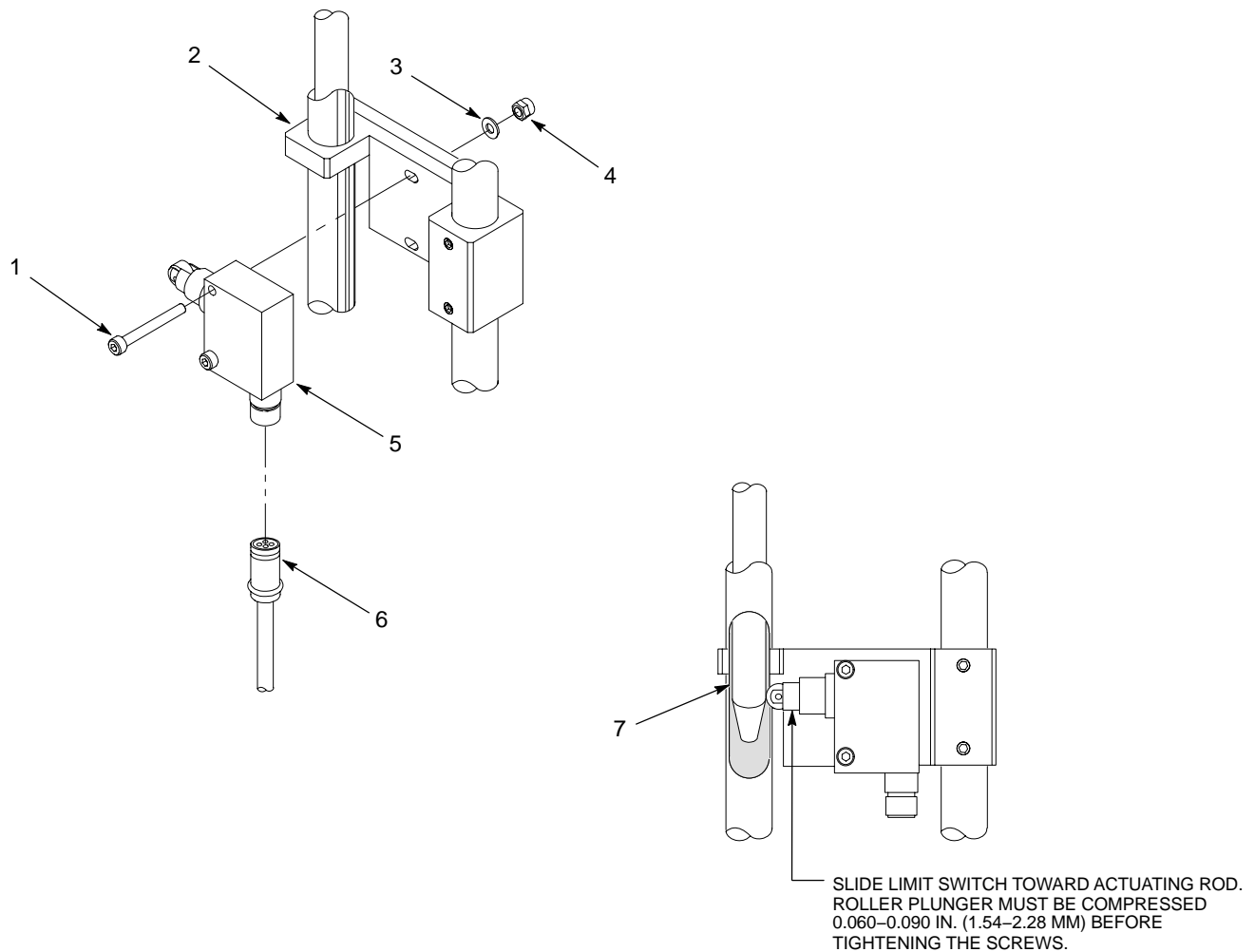


Figure 3 Limit Switch Replacement

### Adjusting Limit Switches

See Figure 4 and review the following switch descriptions in Table 1 before making adjustments. Perform the following to reset the limit switches:

1. See Figure 2. Remove the screws (6) and washers (5) securing the cover (4) to the base plate (9).
2. See Figure 4. Loosen the set screws (1) securing the switch bracket (3) to the guide rails (4).
3. Slide the switch bracket (3) to the desired height and tighten the set screws (1).
4. Verify the settings of the limit switches (2).
5. See Figure 2. Install the cover (4) to the base plate (9) using the screws (6) and washers (5). Tighten the screws securely.

Table 1 Limit Switch Descriptions

Switch	Description
Follower/Platen in Drum (A)	Switches two-hand lowering mode to normal automatic lowering mode. This switch is not factory set. It must be set before the system is put into service.
Drum Low (B)	Factory set to activate when the bottom of the follower plate/platen is 7 inches from the drum support rails.
Drum Empty (C)	Factory set to activate when the bottom of the follower plate/platen is 1.5 inches from the drum support rails. This switch can be adjusted to minimize material waste. Adjust this switch for drums with the tallest seam height to ensure that the follower/platen does not bottom out before the switch is activated. The pump will cavitate and may cause damage to the system if the follower/platen bottoms out.

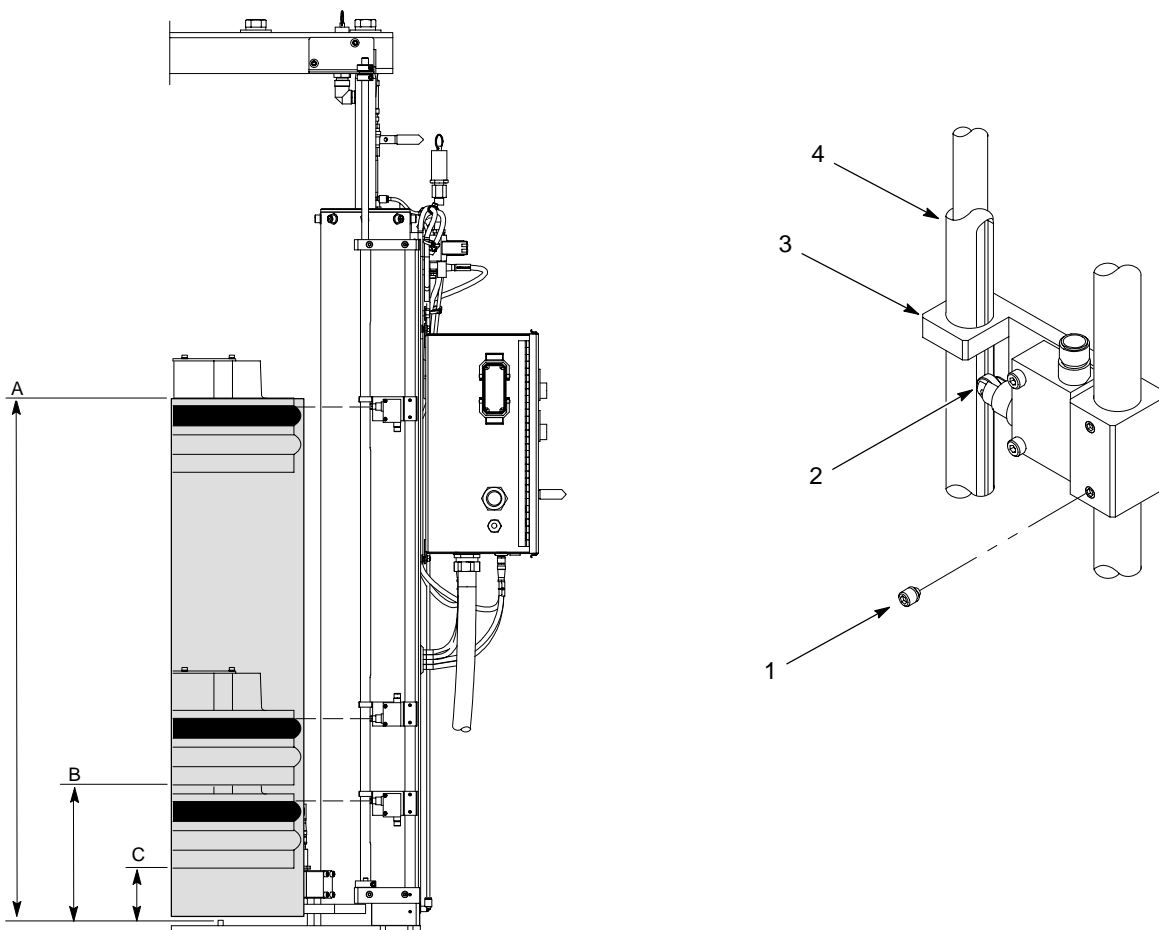


Figure 4 Adjusting the Limit Switches

## Parts

See Figures 5 or 6 and refer to the following parts list. To order parts, call the Nordson Customer Service Center or your local Nordson representative.

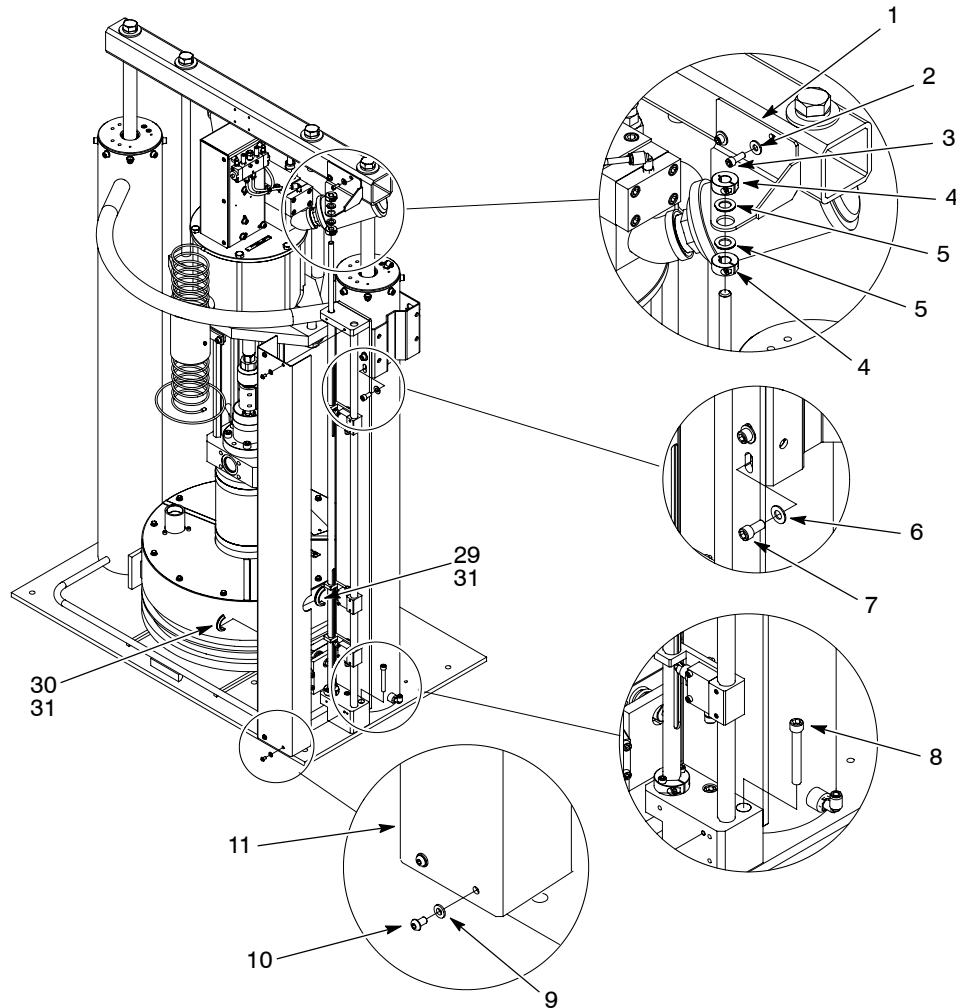


Figure 5 Parts

Item	Part	Description	Qty
—	1081662	Level detect module, drum, Rhino XD2H	1
1	1081670	• Bracket, mounting	1
2	345913	• Washer, flat, 1/4 zinc	2
3	345749	• Cap screw, socket head, 1/4-20, 0.625 in., alloy steel	2
4	1082172	• Collar, split, threaded, 1/2-13 x 1.13OD x 0.50	2
5	1084415	• Washer, UHMW/POLYETH, 0.515 ID x 0.885 OD X 0.055	2
6	345929	• Washer, flat, regular, 3/8, zinc	2
7	981710	• Screw, hex head, 3/8-16 x 0.750	2
8	981494	• Screw, socket, 3/8-16 x 2.750	2
9	983410	• Washer, flat, M, narrow, M6	4
10	982919	• Screw, button, socket, M6 x 12	4
11	1081664	• Cover	1

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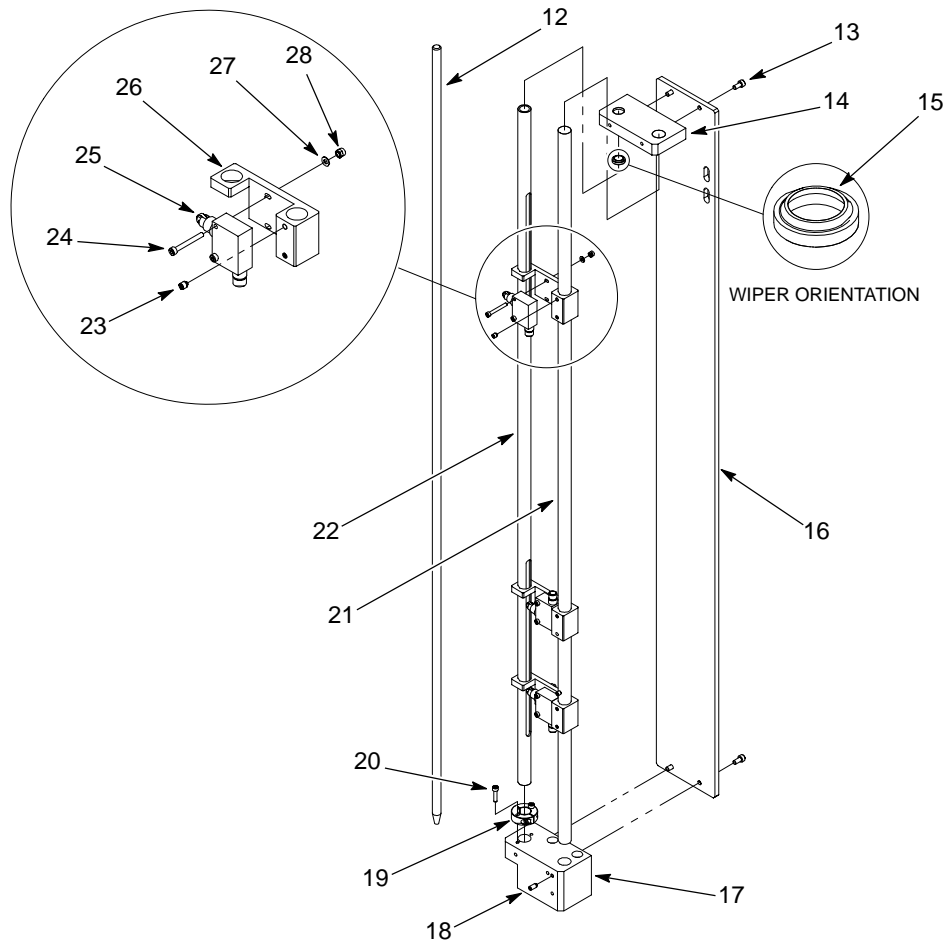


Figure 6 Parts (Continued)

Item	Part	Description	Qty
—	1081662	Level detect module, drum, Rhino XD2H	1
12	1081667	• Rod	1
13	982910	• Screw, socket, M6 x 12	4
14	1081671	• Plate, mounting	1
15	1081852	• Wiper, heel, 0.500 x 0.750 x 0.210	1
16	1081665	• Plate, base	1
17	1081672	• Bracket, mounting, rod	1
18	1084416	• Screw, socket, set, M6 x 12 mm black oxide	2
19	1082144	• Collar, split, 0.75 ID x 1.50 OD x 0.50	1
20	982028	• Screw, socket, M5 x 20	2
21	1081668	• Post, level	1
22	1081666	• Tube, guide	1
23	1084350	• Screw, socket, set, M6 x 6 mm, black oxide	6
24	982453	• Screw, socket, M4 x 35	6
25	1082145	• Switch, plunger, roller	3
26	1081669	• Bracket, switch	3
27	983402	• Washer, flat, M, narrow M4	6
28	345642	• Nut, lock, Nylon, M4	6
29	1082603	• Grommet 1.50 ID x 2.12 OD x 1/16	1
30	226110	• Grommet, 7/8 ID x 1 <sup>5</sup> / <sub>8</sub> ID x 1/16	1
31	900409	• Adhesive, rubber, gasket	1