

Description

See Figure 1. The Rhino SD2/XD2 NPN runaway sensor monitors pump strokes and runaway pump conditions. The system controller supplies the logic and control voltage to the sensor. The system controller indicates a runaway fault condition when the sensor senses a pump cycle rate of 10 strokes in 20 seconds or greater.

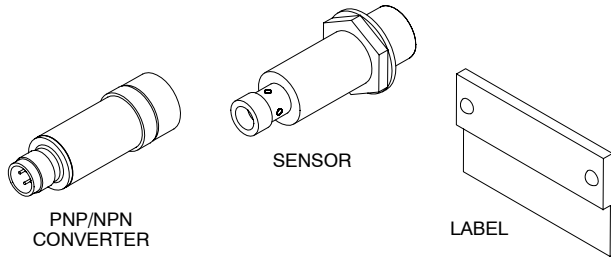


Figure 1 NPN Runaway Sensor Assembly

Installation

See Figure 2. Use the following procedure to install or replace a runaway sensor.



WARNING: 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. Relieve air and fluid pressure to the Rhino bulk unloader.

1. Remove the screws (11) securing the cover (1) to the trip rod assembly (2)
2. If a sensor is already installed, perform the following:
 - a. Disconnect the connector (5) from the PNP/NPN converter (4).
 - b. Disconnect the PNP/NPN converter from the sensor (6).
 - c. Loosen the jam nut (7). Remove the washer (8), jam nut, and sensor (4) from the trip rod assembly (2).
3. Install the new sensor (6) in the reverse order of the removal procedure.
4. **First-Time Installations:** Install the label (10) to the trip rod assembly (2) using the drive screws (9).

Set the Sensor Gap

1. Make sure that the sensor slightly touches the trip bar (12). It may be necessary to cycle the air motor.
2. Turn the sensor (6) 1½ to 2 turns counterclockwise to achieve a gap of 0.06–0.08 in. (1.54–2 mm).

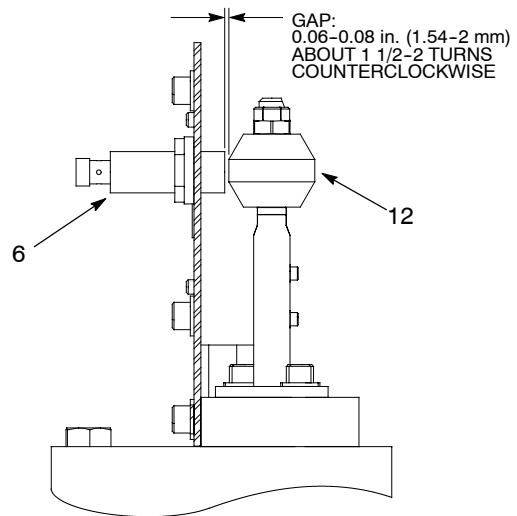
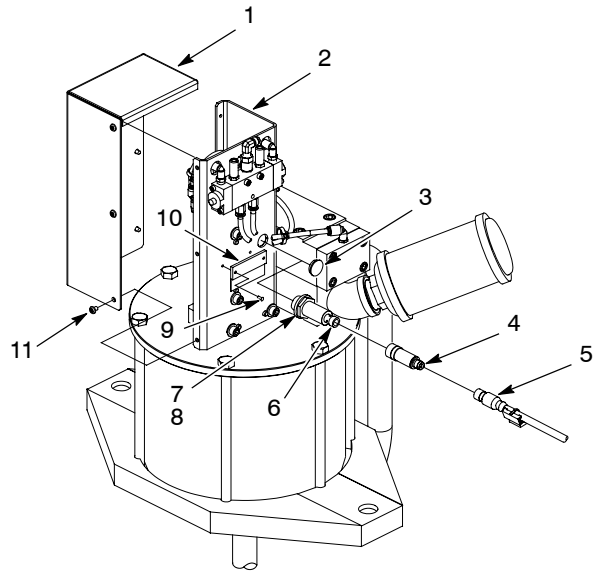


Figure 2 Installation

Parts

See Figure 2 and refer to the following parts lists.

Item	Part	Description	Qty
—	1082086	Module, runaway, proximity 18 mm, 24 volt, NPN	1
4	1081460	• Converter, PNP to NPN	1
6	1070254	• Sensor, proximity	1
9	1025108	• Screw, drive, 4 x 0.312	2
10	1070311	• Label	1

