

Description

See Figure 1.

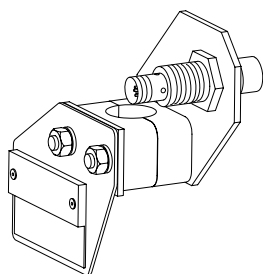


Figure 1 Typical Runaway Sensor

The Rhino SD/XD runaway sensor mounts to the pump assembly. The sensor monitors pump cycles 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 5 cycles in 20 seconds or greater.

Three sensors are available:

- 18 mm 24 vdc with micro connector
- 30 mm 24 vdc with micro connector
- 30 mm 120 vac with mini connector

Repair

See Figure 2. Use the following procedure to 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.
1. Disconnect the connector (5) from the sensor (4).
 2. Remove the nuts (1) and washers (2) securing the sensor (4) to the mounting plate (3).
 3. Install the new sensor in the reverse order of the removal procedure.
 4. If removed, make sure that the
 - a. distance between the pump mounting plate (6) and the sensor plate (3) is 2.75 in. (6.7 mm).
 - b. sensor plate (3) is at an angle of approximately 45 degrees to the coupler (7).
 5. Make sure that there is a 0.15–0.25 in. (4–6.35 mm) gap between the coupler (7) and the sensor (4).

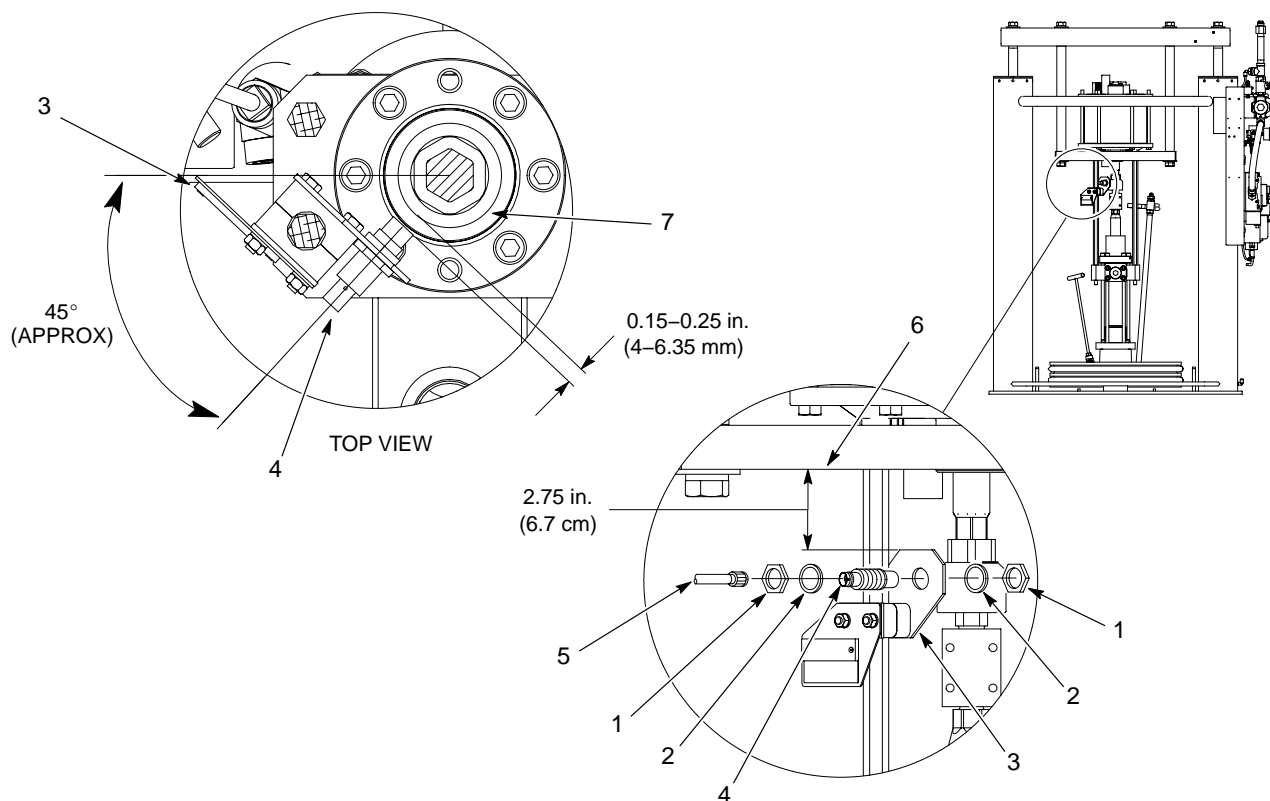


Figure 2 Replacing a Runaway Sensor

Parts

See Figure 3 and refer to the following parts lists.

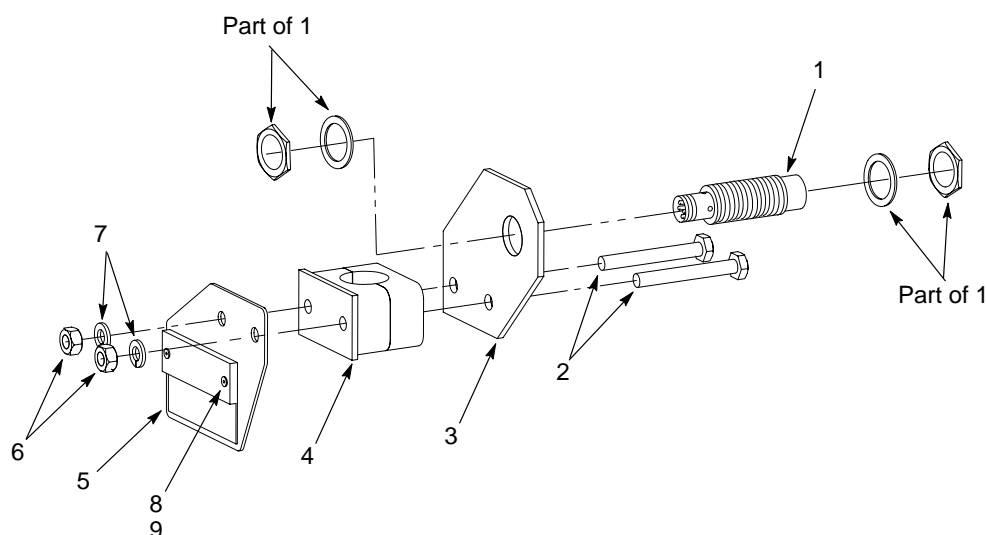


Figure 3 Parts

18 MM 24 Volt with Micro Connector

Item	Part	Description	Qty
—	1039188	Module, runaway, 18 mm, 24 volt	1
1	223492	• Switch, proximity	1
2	981229	• Screw, 1/4-20 x 2	2
3	296498	• Bracket	1
4	1032923	• Clamp	1
5	1024626	• Plate	1
6	345977	• Washer, lock	2
7	984086	• Nut, 1/4-20	2
8	1039186	• Label	1
9	985112	• Rivet, 3/32 x 0.250	2

30 MM 120 Volt with Mini Connector

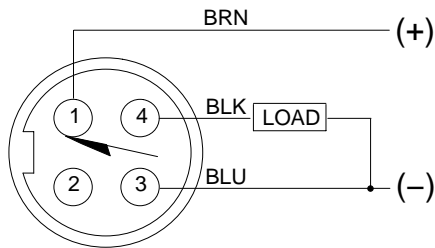
Item	Part	Description	Qty
—	1040138	Module, runaway, 30 mm, 120 volt	1
1	295802	• Sensor, inductive, 3-pin	1
2	981229	• Screw, 1/4-20 x 2	2
3	239729	• Bracket	1
4	1032923	• Clamp	1
5	1024626	• Plate	1
6	345977	• Washer, lock	2
7	984086	• Nut, 1/4-20	2
8	1039186	• Label	1
9	985112	• Rivet, 3/32 x 0.250	2

30 MM 24 Volt with Micro Connector

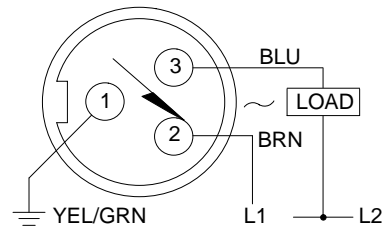
Item	Part	Description	Qty
—	1039187	Module, runaway, 30 mm, 24 volt	1
1	332947	• Switch, proximity	1
2	981229	• Screw, 1/4-20 x 2	2
3	239729	• Bracket	1
4	1032923	• Clamp	1
5	1024626	• Plate	1
6	345977	• Washer, lock	2
7	984086	• Nut, 1/4-20	2
8	1039186	• Label	1
9	985112	• Rivet, 3/32 x 0.250	2

Wiring Diagrams

See Figure 4.



18 mm and 30 mm 24 vdc
M12 x 1 Male Thread Micro Connector



30 mm 120 vac
7/8-16 Male Thread Mini Connector

Figure 4 Wiring Diagrams

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