

Product Bulletin # Catwalk 33

## **Unintentional Skate Movement**

## **Models Impacted**

This product bulletin applies to the Canrig Automated PowerCat PC3000/PC4000 series.

## lssue

It has been reported that the skate will sometimes have unintended movement without an existing command.

# Objective

This product bulletin will cover all possibilities that may cause an unintended skate movement. It also includes common symptoms that will help identify a possible skate system problem. It will also provide solution(s) to alleviate each probable symptom.

## Recommendation

Attempt to resolve following troubleshooting procedures below. If the problem still persists, contact RigLine 24/7<sup>™</sup> Support for further assistance.



Model: PC3000/PC4000 Serial #: All

## **Troubleshooting Procedure**

#### **Corrective Action(s)** Symptom Possible Cause(s) Unintended skate movement Operator error Refer to the Instruction, Operation, and Maintenance Manual for proper operation of control console or radio remote. Unrequested forward movement Sticky skate hydraulic valve With the HPU operating in ٠ of the skate. (AY50452) and idle pressure too idle mode, ensure the high. actual idle pressure is not greater than 550 psi Sticky skate hydraulic valve (optimum idle pressure when other functions are range is 500-525 psi). Use requested. the HMI system pressure readout (see Figure 2 on page 4). • Contact RigLine 24/7™ Support if idle pressure is out of the specified range. • Actuate the skate valve manual actuator with a 9 mm wrench. Ensure that the actuator freely moves with spring return to neutral position (see Figure 3 on page 5). If the manual actuation does not operate properly, disassemble the valve (AY50452). Clean inside and the spool. Take an oil sample in order ٠ to inspect for any signs of debris. If the issue persists contact • RigLine 24/7<sup>™</sup> Support for additional assistance.

#### Table 1: Symptoms, Possible Causes and Corrective Actions

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Symptom	Possible Cause(s)	Corrective Action(s)
Unrequested forward movement of the skate. (continued)	Damaged radio remote transmitter or faulty skate control lever.	Repair or replace wireless radio system.
	Short in electrical wiring for radio remote.	Check card number 0, input 12, wire number 0.12 on the PLC rack inside the main PLC cabinet. Ensure the input is false. If the input is true, troubleshoot wire number 0.12 between the PLC and the radio receiver (see Figure 4 on page 5).
	Short in electrical wiring for control console.	Check card number 4, input 14, wire number 4.14 on the PLC rack inside of the main PLC cabinet. Ensure the input is false. If the input is true, troubleshoot wiring between the PLC and the control lever contact in the control console (see Figure 4 on page 5).
	Faulty control console skate control lever or contact block.	Repair or replace skate control lever and/or contact block.
Skate will continue to move forward for up to 6" after the command has been removed by the operator.	Signal conditioning card improperly adjusted.	<ul> <li>In the carrier J-Box, ensure that the signal conditioning card output voltage is 6.0 VDC, on wire 2013+ or pin 8 on the card (skate in the neutral state). Refer to sheet 27 on the electrical schematics.</li> <li>If the voltage is incorrect readjust the zero potentiameter to 6.0 VDC.</li> </ul>
		(see Figure 1 on page 4).
After movement in either direction, the skate will move forward approximately 12".	Skate motor chain improperly adjusted.	Properly adjust the skate tension. (see Figure 5 on page 6).

### Table 1: Symptoms, Possible Causes and Corrective Actions (Continued)

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Figure 1: Signal Conditioning Card



Figure 2: HMI System Pressure Display

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Figure 3: Carrier Valve Bank Skate Control Manual Actuator



Card 0

Card 4

Figure 4: PLC Rack



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Figure 5: Skate Chain Adjustment