

EZ-Boom™ Automated Application Control System

Troubleshooting Guide

Version 1.00
Revision B
AL P/N 2005860
October 2006

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EZ-Boom System Error Messages

In this chapter:

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[EZ-Boom system error messages](#)

This chapter describes the controller LED states and system error messages from the EZ-Boom™ automated application control system. It then explains how to correct the errors.

LED errors

The status LED on the EZ-Boom controller indicates the current operating state.




It does this by displaying different colours and flash patterns:

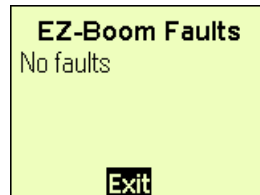
	Description
Off	No power
Steady green	Normal operation
Flashing 1 Hz yellow	CAN bus errors detected (error active/passive state)
Steady yellow	CAN bus off
Steady red	Hardware or initialization failure
Flashing 1 Hz red	Firmware download in process
Flashing fast red	Firmware download error

Viewing error messages on the EZ-Guide Plus lightbar guidance system

To view error messages on the EZ-Boom system when it is connected to an EZ-Guide® Plus lightbar guidance system:

1. From the lightbar navigation screen, select .
2. Select *EZ-Boom / Fault History*.

The *EZ-Boom Faults* screen appears. The previous four error messages that the EZ-Boom system has encountered appear on the screen.



EZ-Boom system error message: “Setup Invalid”

Cause

A critical EZ-Boom system error has occurred. This message appears at start-up and every time the setup process is ended, if the configuration is invalid.

Possible failure modes

- One or more of the setup parameters are invalid.

Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press **OK**.

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select **⚙**.
- b. Select *EZ-Boom*.

Check through the EZ-Boom system settings, to ensure that they are correct.

EZ-Boom system error message: “Rate Not Responding”

Cause

A critical EZ-Boom system error has occurred. The error between the actual flow and the target flow has been greater than 30% for at least 6 seconds. This message appears when the error first occurs and every second of continuous error after that until it is corrected.


Possible failure modes

- Make sure the proper control valve type is selected.
- Check the machine for plugged strainers.
- Check the flow control valve connections.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

EZ-Boom system error message: “Boom 1 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- Write down the error message.
- Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- From the main navigation screen, select .
- Select *EZ-Boom*.
- Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- With a multimeter, check the current to the EZ-Boom controller.
- If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 2 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 3 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 4 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 5 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 6 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 7 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 8 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 9 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.

Possible failure modes

- There is a faulty boom valve.

Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press **OK**.

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select **⚙**.
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 10 Over Current”

Cause

A critical EZ-Boom system error has occurred. The boom is turned on and the current feedback is greater than 5.3 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than 5.3 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 1 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 2 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 3 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 4 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 5 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 6 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 7 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 8 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 9 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Boom 10 Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The boom is turned off and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty boom valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller.
- b. If the current is greater than approximately 2.0 A, check the vehicle wiring and the boom valve.

EZ-Boom system error message: “Flow Valve Over Current”

Cause

A critical EZ-Boom system error has occurred. When the valve is being adjusted, the current feedback is greater than approximately 4.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty control valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- a. With a multimeter, check the current to the EZ-Boom controller while the valve is being adjusted.
- b. If the current is greater than approximately 4.0 A, check the vehicle wiring and the control valve.

EZ-Boom system error message: “Flow Valve Driver Failure”

Cause

A critical EZ-Boom system error has occurred. The valve is not being adjusted and the current feedback is greater than approximately 2.0 A. This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.

Possible failure modes

- There is a faulty flow control valve or wiring harness.

Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- Write down the error message.
- Press **OK**.

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- From the main navigation screen, select **⚙**.
- Select *EZ-Boom*.
- Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Check the current to the EZ-Boom controller

- With a multimeter, check the current to the EZ-Boom controller while the valve is *not* being adjusted.
- If the current is greater than approximately 2.0 A, check the vehicle wiring and the flow control valve.

EZ-Boom system error message: “Flow Valve Open”

Cause

A critical EZ-Boom system error has occurred. There are two possible causes of this error code:

- The driver part has a digital status feedback. The error is triggered when the status indicates an error opening or closing.
- A count is kept for the digital status feedback of the driver part. When normal operation occurs, the count decreases by 1. When an error occurs, the count increases by 1. If the error count reaches 50, the device enters a error state and the valve is no longer adjusted.

This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty flow control valve or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

STEP 3: Turn the controller off and on again

If the error count has reached 50 and the device has entered a error state:

- a. Turn the controller off.
- b. Wait for 5 seconds.
- c. Turn the controller on again. This will reset the error count to 0.

EZ-Boom system error message: “Main Pressure Below Min”

Cause

A critical EZ-Boom system error has occurred. A possible cause could be a pressure indication lower than 0 psi for a period of more than three consecutive seconds.

This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- A faulty pressure sensor.
- A faulty wiring connection.
- An improperly-calibrated pressure sensor.

Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.


Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Recalibrate Pressure Sensor

STEP 3: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

EZ-Boom system error message: “Main Pressure Above Max”

Cause

This error message indicates a wiring failure or mechanical failure. A possible cause could be that the input voltage is greater than approximately 4.95 V for 3 seconds continuously.

This message appears when the error first occurs and every 10 seconds of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty pressure sensor or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

EZ-Boom system error message: “Minimum Flow”

Cause

A critical EZ-Boom system error has occurred. This error message appears when the actual flow is less than the *Minimum Flow* setting (scaled for the current swath) *and* the target flow is less than the actual flow:

This message appears when the error first occurs and every second of continuous error after that until it is corrected.


Possible failure modes

- There is a faulty flow meter or wiring harness.


Note – If this is only an occasional problem, use the display to clear the controller error and continue to operate.

Solution

STEP 1: Clear the error message (EZ-Guide Plus lightbar)

- a. Write down the error message.
- b. Press .

STEP 2: Check all setup parameters (EZ-Guide Plus lightbar)

- a. From the main navigation screen, select .
- b. Select *EZ-Boom*.
- c. Check through the EZ-Boom system settings, to ensure that they are correct.

EZ-Boom System Harness Schematics

In this chapter:

EZ-Boom system cable pinout information

EZ-Guide-to-EZ-Steer harness: AL P/N 4000440 (TNL P/N 52763)

EZ-Steer-to-EZ-Boom harness: AL P/N 4000981 (TNL P/N 58377)

Terminator connector: AL P/N 400891 (TNL P/N 58378)

Raven 4x0 series "Y" cable: AL P/N 4000904 (TNL P/N 58560)

Raven 4x00 series "Y" cable: AL P/N 4000905, (TNL P/N 59942)

EZ-Boom-to-Raven-4x00 adaptor harness: AL P/N 4000906 (TNL P/N 59943)

Implement switch harness: AL P/N 4000335 (TNL P/N 60477)

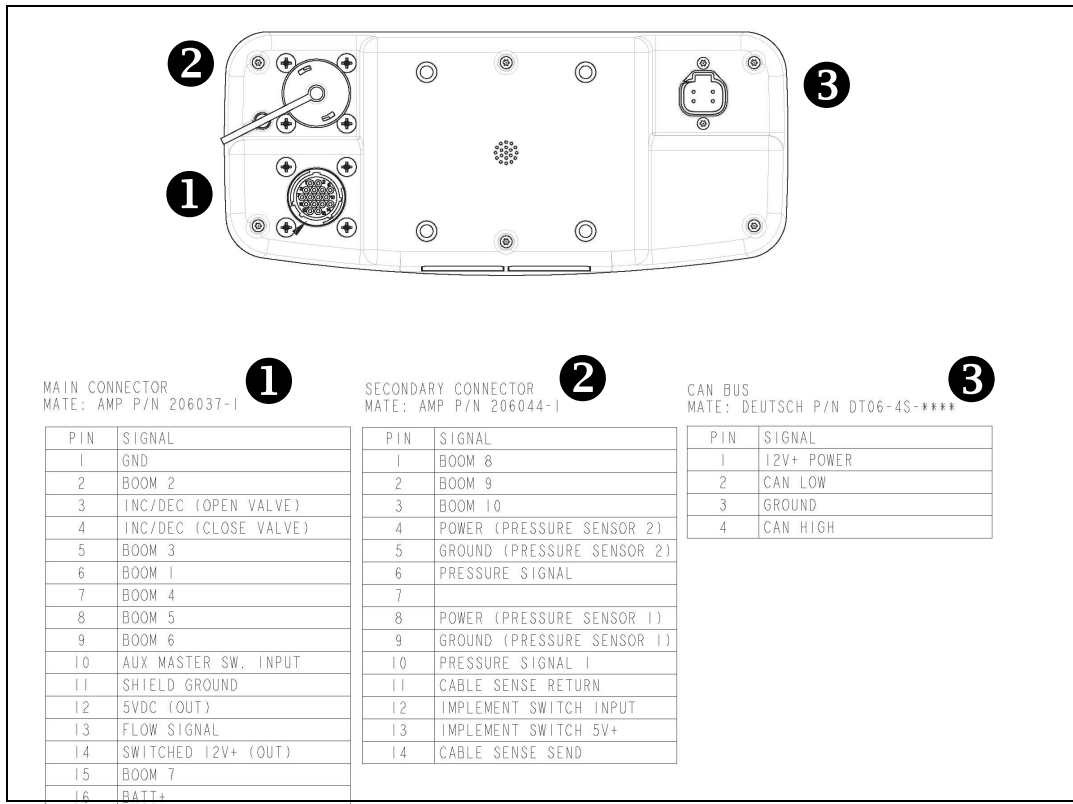
Implement tee harness: AL P/N 4000991 (TNL P/N 60567)

Implement switch extension harness (10 ft): AL P/N 2000453-2 (TNL P/N 60478)

Implement switch extension harness (25 ft): AL P/N 2000453-3 (TNL P/N 60479)

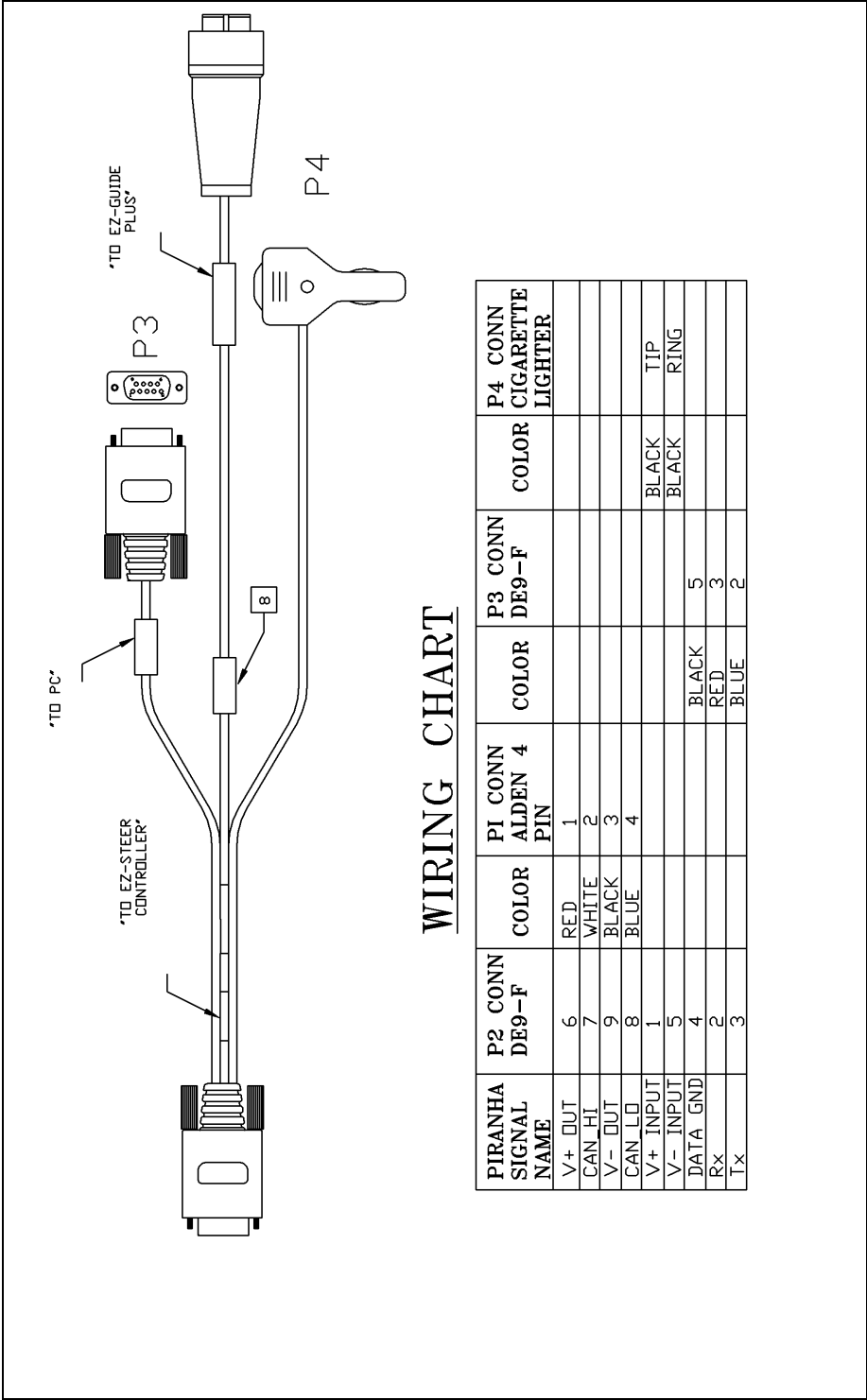
This chapter describes the EZ-Boom system harness schematics.

EZ-Boom system cable pinout information

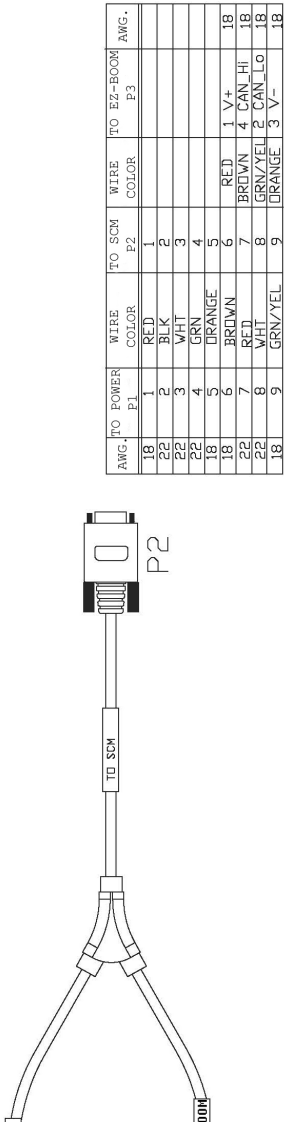


EZ-Guide-to-EZ-Steer harness: AL P/N 4000440 (TNL P/N 52763)

This connects the EZ-Guide Plus lightbar guidance system to the EZ-Steer[®] assisted steering system:

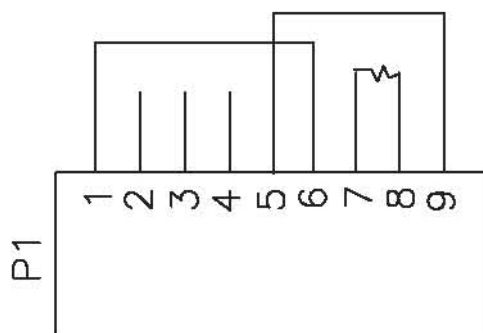
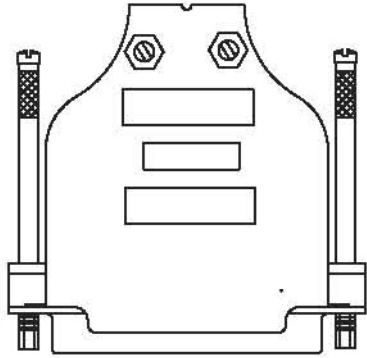


EZ-Steer-to-EZ-Boom harness: AL P/N 4000981 (TNL P/N 58377)

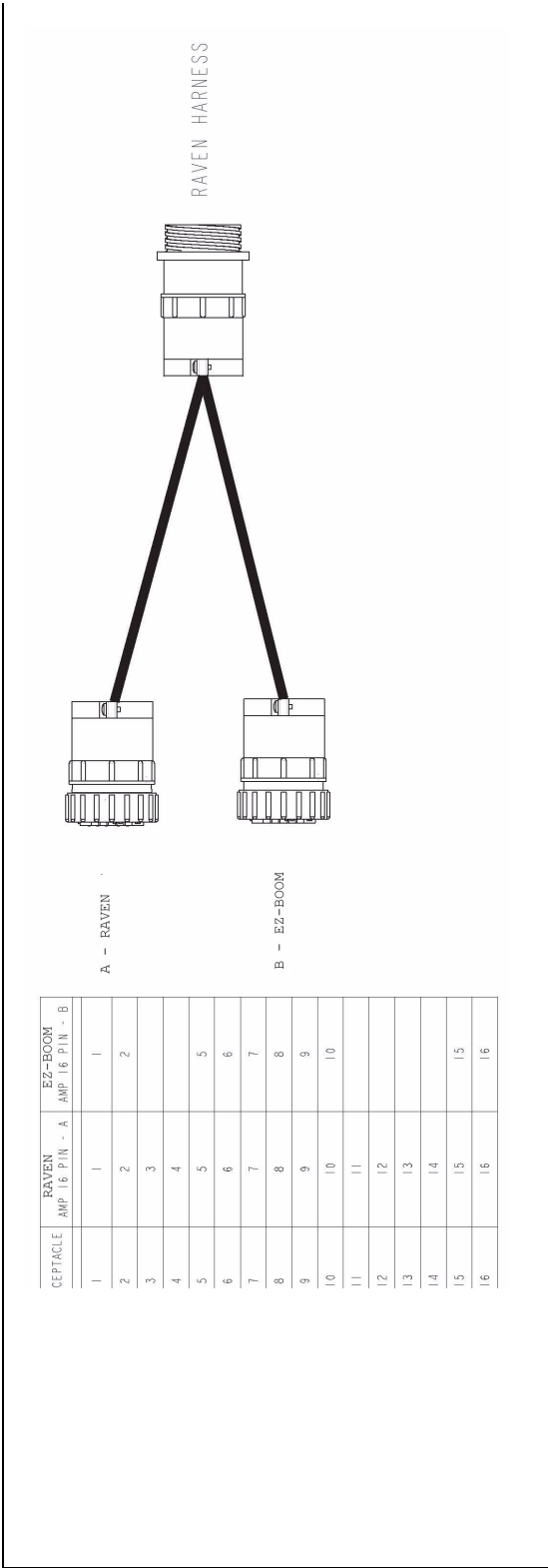


AWG.	TO POWER P1	WIRE COLOR	TO SCM P2	WIRE COLOR	TO EZ-BOOM P3	AWG.
18	1	RED	1			
22	2	BLK	2			
22	3	WHT	3			
22	4	GRN	4			
18	5	ORANGE	5			
18	6	BROWN	6	RED	1 V+	18
22	7	RED	7	BROWN	4 CAN HI	18
22	8	WHT	8	GRN/YEL	2 CAN LO	18
18	9	GRN/YEL	9	ORANGE	3 V-	18

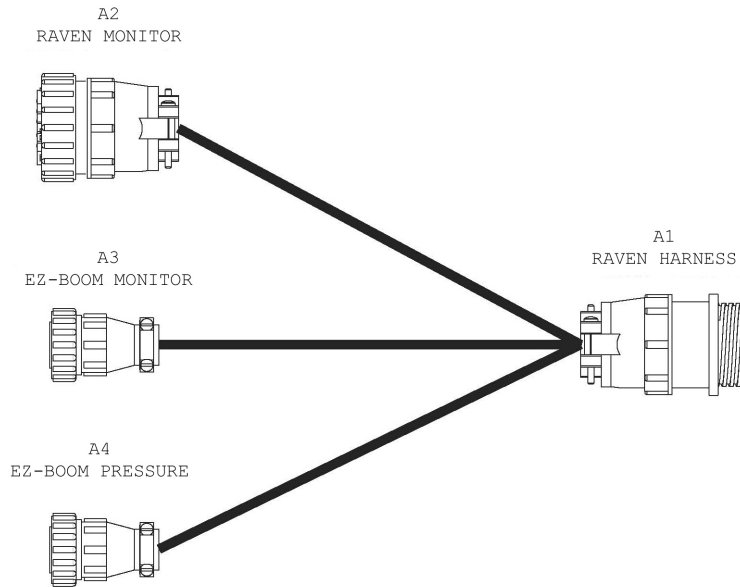
Terminator connector: AL P/N 400891 (TNL P/N 58378)



Raven 4x0 series "Y" cable: AL P/N 4000904 (TNL P/N 58560)



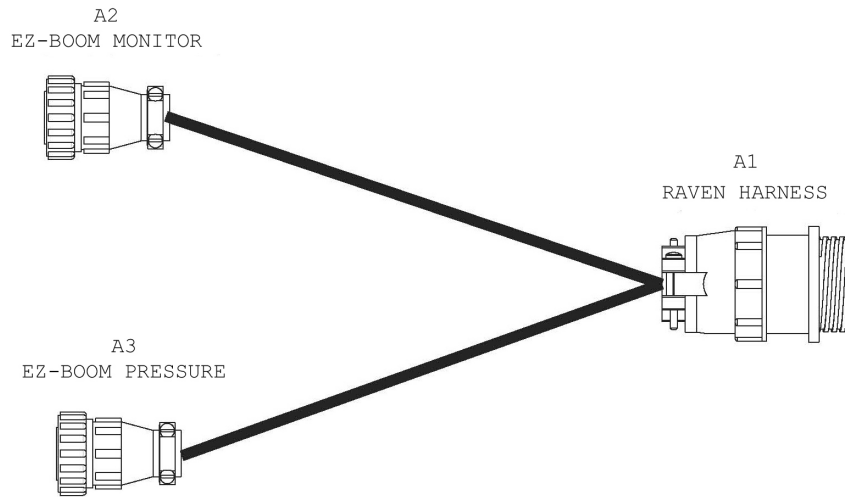
Raven 4x00 series "Y" cable: AL P/N 4000905, (TNL P/N 59942)



SIGNAL	RAVEN HARNESS A1	RAVEN MONITOR A2	EZ-BOOM MONITOR A3	EZ-BOOM PRESSURE A4
GROUND	1	1	1	
GROUND	2	2		
+12 SWITCHED	3	3		
BOOM 1	4	4	6	
BOOM 2	5	5	2	
BOOM 3	6	6	5	
BOOM 4	7	7	7	
BOOM 5	8	8	8	
BOOM 6	9	9	9	
BOOM 7	10	10	15	
BOOM 8	11	11		1
BOOM 9	12	12		2
BOOM 10	13	13		3
FAN SPEED	14	14		
DECREASE	15	15		
INCREASE PWM OUT	16	16		
SERIAL - RX	17	17		
SERIAL - CTX	18	18		
SERIAL - TX	19	19		
SERIAL - DTR	20	20		

SIGNAL (CONTINUED)	RAVEN HARNESS A1	RAVEN MONITOR A2	EZ-BOOM MONITOR A3	EZ-BOOM PRESSURE A4
FLOW GROUND	21	21		
FLOW 2, 5V	22	22		
SHAFT SPEED SIGNAL	23	23		
BIN LEVEL SIGNAL	24	24		
FLOW, +5V	25	25		
RADAR, 5V	26	26		
RADAR SPEED SIGNAL	27	27		
FLOW SIGNAL	28	28		
PRESSURE GROUND	29	29		9
PRESSURE, +12V	30	30		4
PRESSURE SIGNAL 1	31	31		10
CAN HI	32	32		
CAN LO	33	33		
PRESSURE +12V	34	34		8
PRESSURE SIGNAL 2	35	35		6
BOOM SWITCH POWER	36	36		
BATTERY	37	37	16	

EZ-Boom-to-Raven-4x00 adaptor harness: AL P/N 4000906 (TNL P/N 59943)

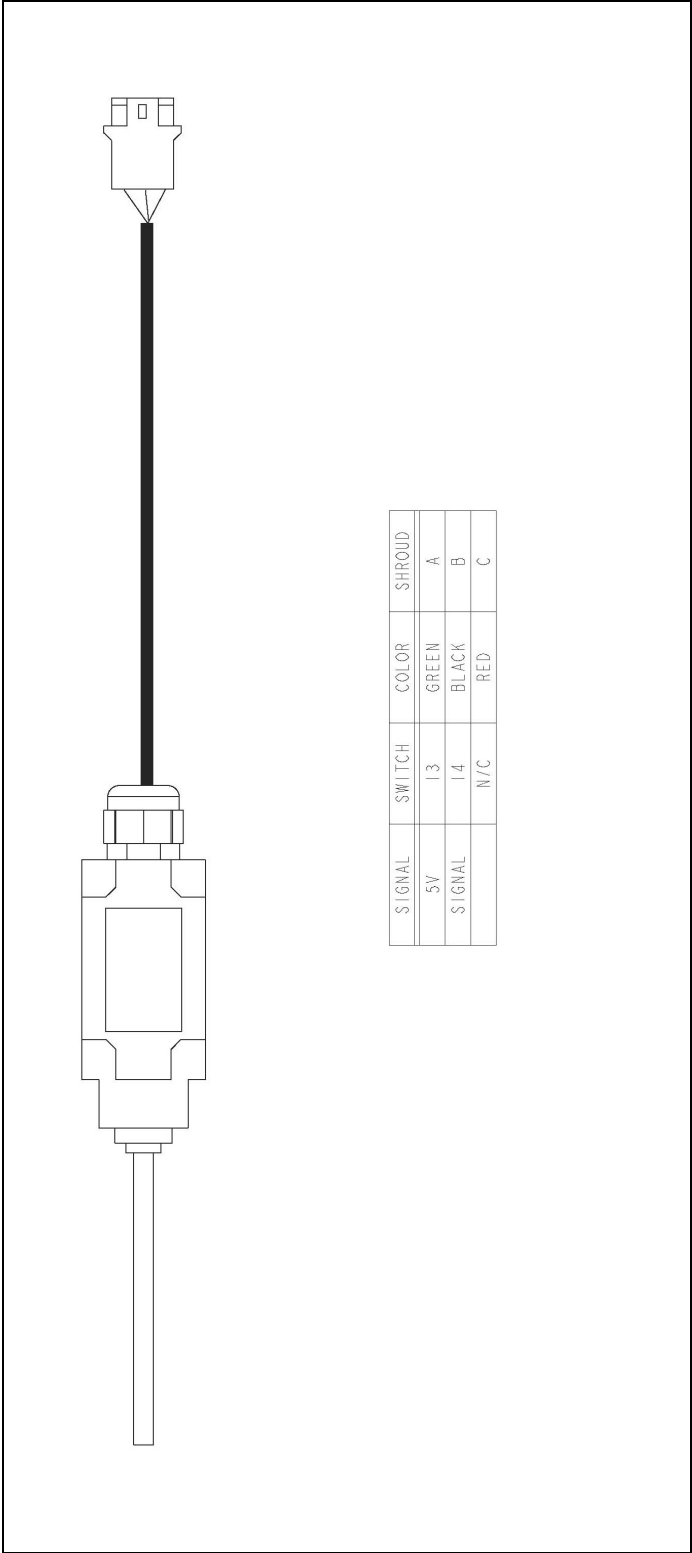


SIGNAL	RAVEN HARNESS A1	EZ-BOOM MONITOR A2	EZ-BOOM PRESSURE A3
GROUND	1	1	
GROUND	2		
+12 SWITCHED	3	14	
BOOM 1	4	6	
BOOM 2	5	2	
BOOM 3	6	5	
BOOM 4	7	7	
BOOM 5	8	8	
BOOM 6	9	9	
BOOM 7	10	15	
BOOM 8	11		1
BOOM 9	12		2
BOOM 10	13		3
FAN SPEED	14		
DECREASE	15	4	
INCREASE/ PWM OUT	16	3	
SERIAL - RX	17		
SERIAL - CTX	18		
SERIAL - TX	19		
SERIAL - DTR	20		
FLOW GROUND	21	11	

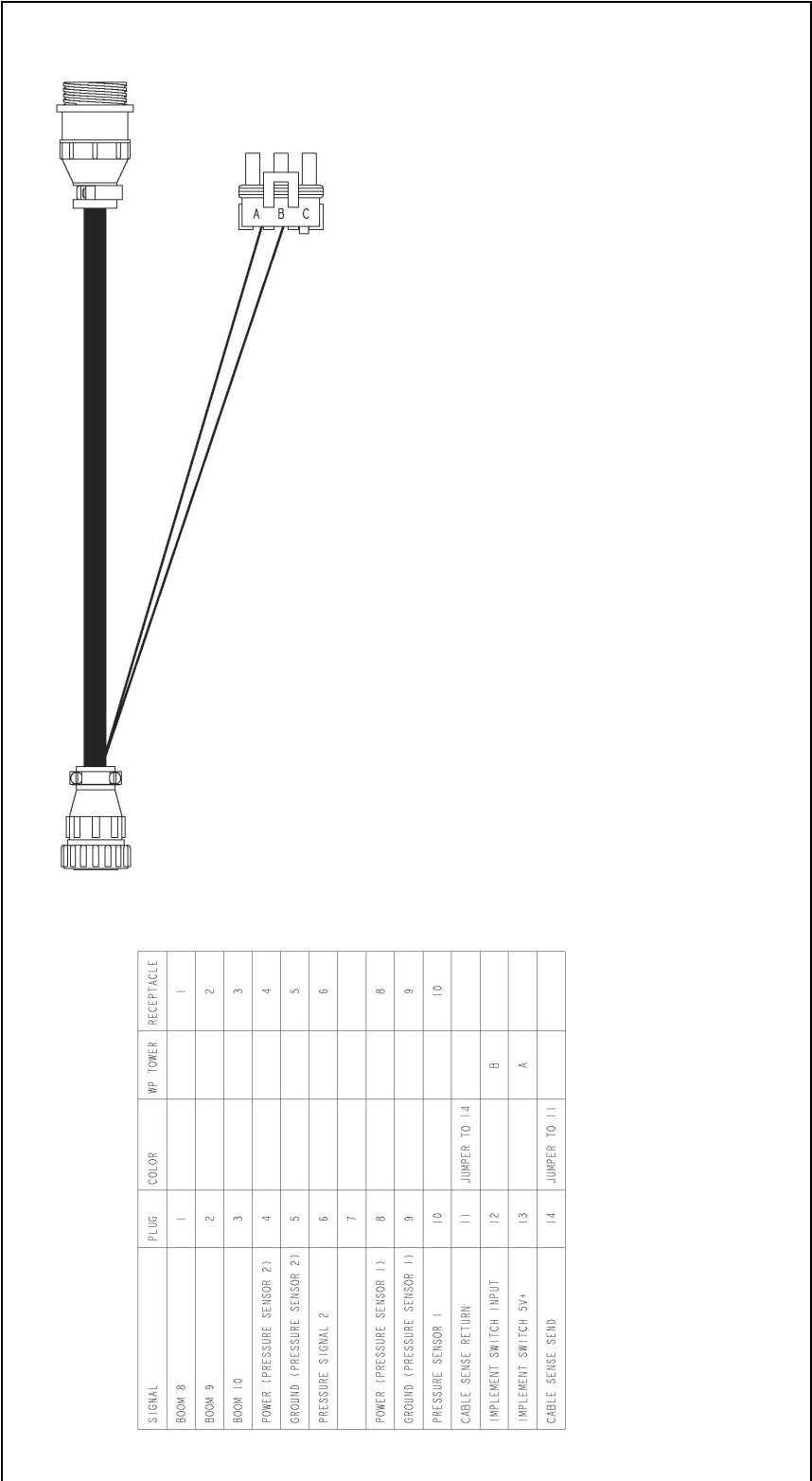
2 EZ-Boom System Harness Schematics

SIGNAL (CONTINUED)	RAVEN HARNESS A1	RAVEN MONITOR A2	EZ-BOOM PRESSURE A4
FLOW 2, 5V	22		
SHAFT SPEED SIGNAL	23		
BIN LEVEL SIGNAL	24		
FLOW +5	25	12	
RADAR, 5V	26		
RADAR SPEED SIGNAL	27		
FLOW SIGNAL	28	13	
PRESSURE GROUND	29		9
PRESSURE +12V	30		4
PRESSURE SIGNAL I	31		10
CAN HI	32		
CAN LO	33		
PRESSURE +12V	34		8
PRESSURE SIGNAL 2	35		6
BOOM SWITCH POWER	36	10	
BATTERY	37	16	

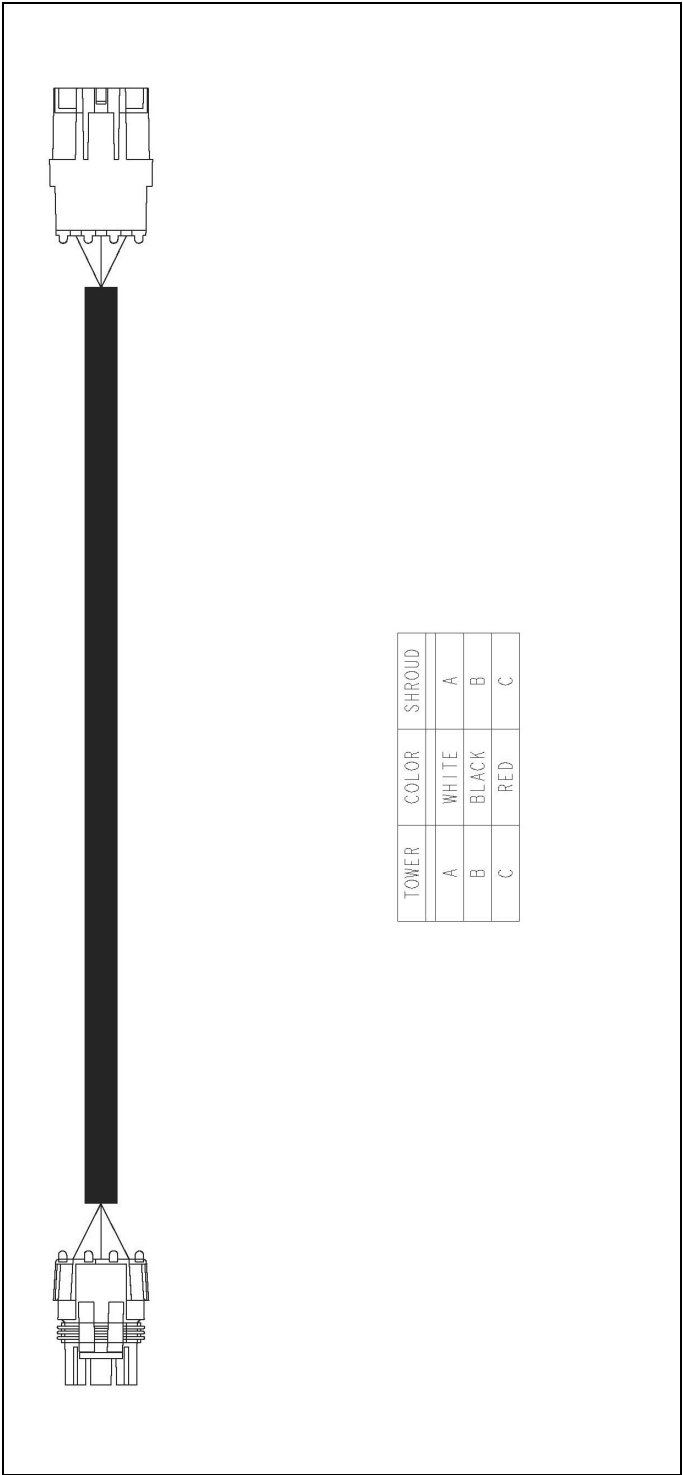
Implement switch harness: AL P/N 4000335 (TNL P/N 60477)



Implement tee harness: AL P/N 4000991 (TNL P/N 60567)



Implement switch extension harness (10 ft): AL P/N 2000453-2
(TNL P/N 60478)



Implement switch extension harness (25 ft): AL P/N 2000453-3 (TNL P/N 60479)

