

# AccuBoom Universal CAN Cable (10 Section) Installation Manual

*P/N 0160-0171-020 Rev D 01/17*

*E28992*

## ***Disclaimer***

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## CHAPTER

## 1

INTRODUCTION

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Congratulations on your purchase of the Raven AccuBoom system! This system is designed to provide worry free turn-on and turn-off of your booms with respect to the as-applied coverage map. The following instructions are designed to assist you in the proper installation of the AccuBoom system. See the Installation and Operator's Manual of your specific console for instructions on setting up the software and using the AccuBoom system.



**Important:** All boom switches must remain in the **ON** position while AccuBoom control is in operation.

## Components Needed

- CAN AccuBoom Control Node (P/N 063-0172-316)
- Universal CAN AccuBoom Cable (10 Sections) (P/N 115-0171-488)
- 24 foot CAN Tee Cable (P/N 115-0171-363)
- Universal AccuBoom Cable Installation Manual (P/N 016-0171-020)

**Notes:**

CHAPTER

2

CABLE INSTALLATION

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Use the following procedure to properly install the Universal CAN AccuBoom cable:

1. Locate the boom valve connectors:
  - a. **Banked Boom Valves** - The CAN AccuBoom Universal cable (P/N 115-0171-488) is designed for applications where the boom valves are located in a bank at the rear of the machine.



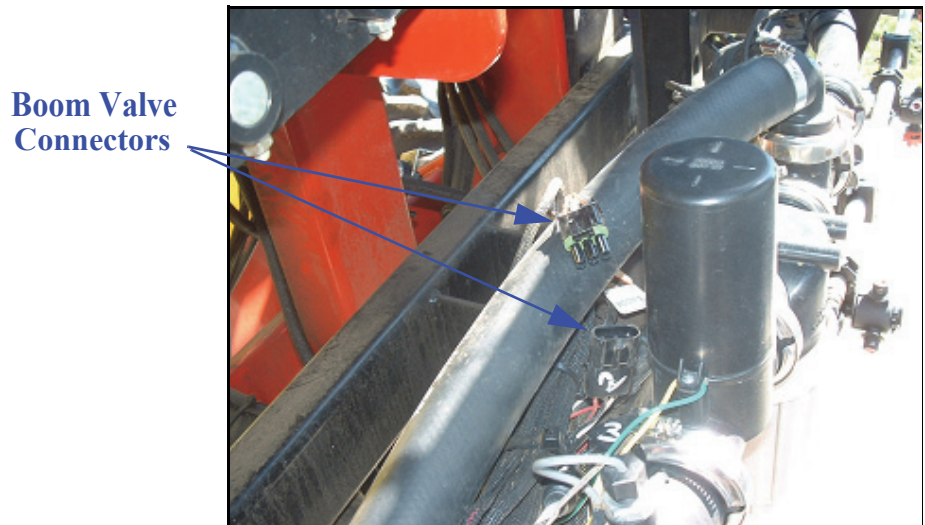
- b. **Distributed Valves** - If the boom valves are located along the length of the boom, you will need to make extension cables to connect from the CAN AccuBoom Universal cable (P/N 115-0171-488) to the individual boom valves



- 2. Connect the AccuBoom cable:
  - a. Disconnect each boom valve from the existing control cable.

**Note:** The existing control cable connectors will remain disconnected.

  - b. Connect the CAN AccuBoom Universal cable (P/N 115-0171-488) to the boom valve connections. The CAN AccuBoom Universal cable is supplied with 3 pin connectors. If different connectors are used on the sprayer, you will need to modify the connectors on the cable to match the connectors on the sprayer.



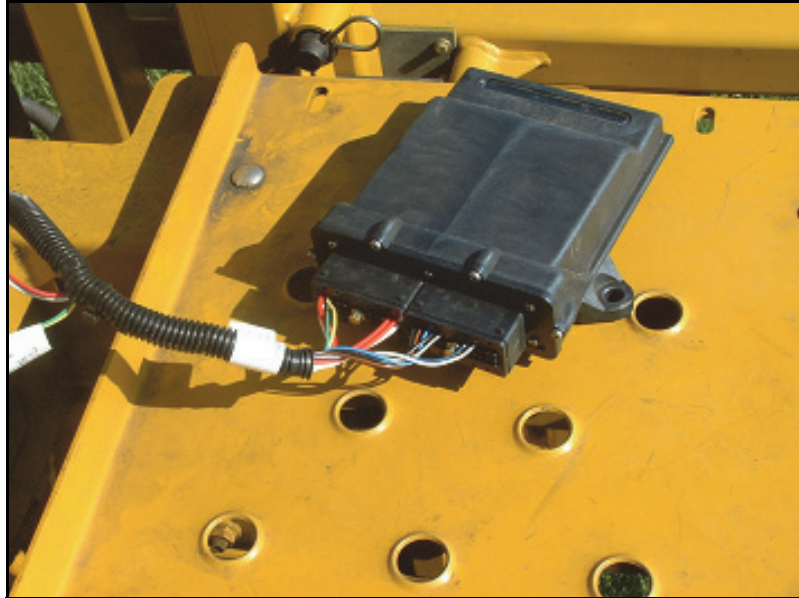
3. Route the AccuBoom cable:
  - a. Route the CAN AccuBoom Universal cable (P/N 115-0171-488) from the boom valves toward the front of the machine.
  - b. Cable tie the CAN AccuBoom Universal cable (P/N 115-0171-488).



4. Mount the AccuBoom node:
  - a. Identify a location for the CAN AccuBoom node (P/N 063-0172-316) that is protected from the elements as much as possible.
  - b. Bolt the CAN AccuBoom node (P/N 063-0172-316) securely in place.

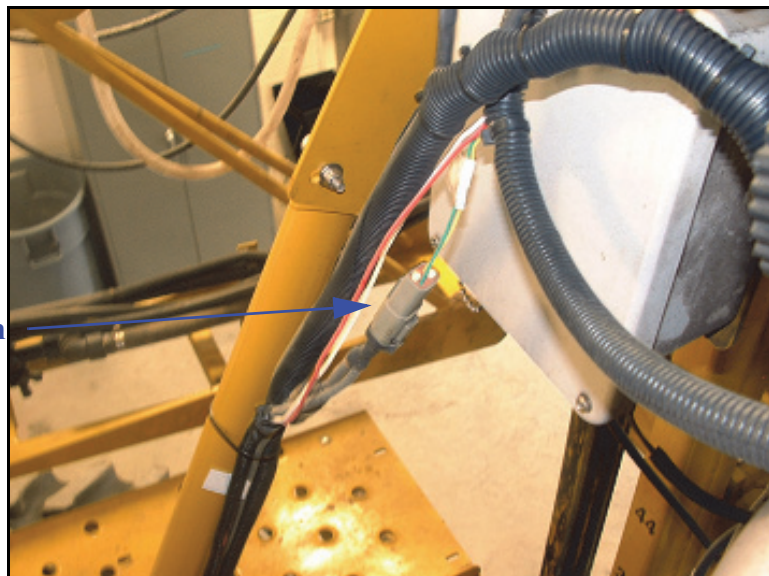


- 5. Connect the AccuBoom cable to the AccuBoom node:
  - a. Connect the rectangular connectors from the CAN AccuBoom Universal cable (P/N 115-0171-488) to the CAN AccuBoom node (P/N 063-0172-316).



- 6. Connect the AccuBoom node to the CANBus:
  - a. Locate the CAN terminator for the CANBus system.
  - b. Disconnect terminator and attach the CAN Tee extension cable (P/N 115-0171-363).
  - c. Route the Can Tee harness to AccuBoom node and connect to the CANBus.
  - d. Attach previously removed CAN terminator to CAN Tee harness near AccuBoom node.

CAN Connection





7. Connect power to the AccuBoom node:
  - a. Connect the power wires to a clean ground. Battery ground is preferred.
  - b. Connect the larger power wire to a source of 12 volt power. (Battery power is preferred)
  - c. Connect the smaller power wire to a source of clean 12 volt switched power.
8. The CAN AccuBoom installation is now complete. Refer to the console specific user's manual for set up instructions

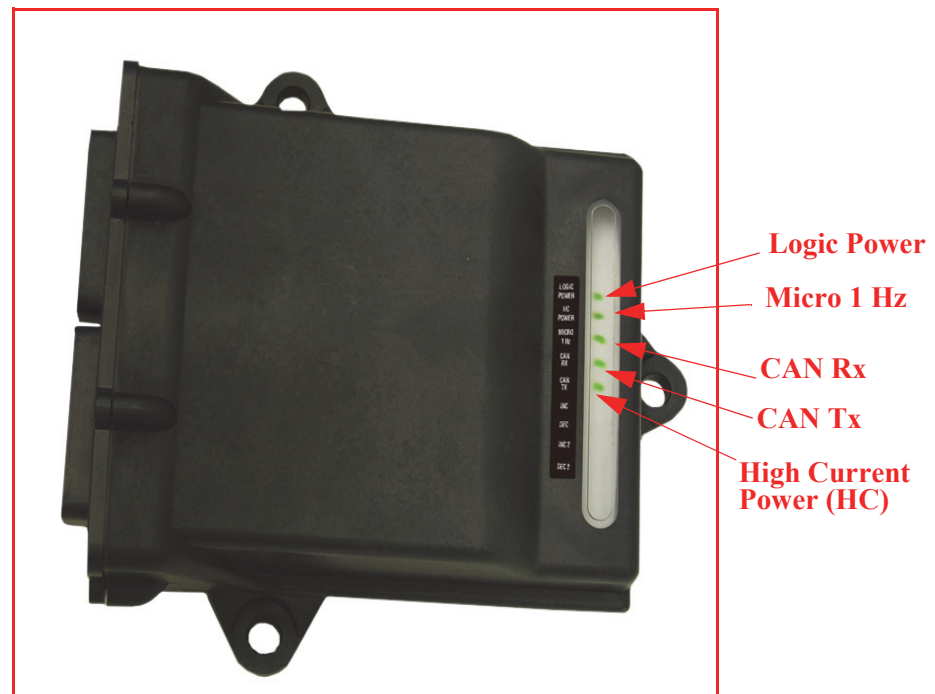
**Notes:**

## CHAPTER

## 3

## SYSTEM TROUBLESHOOTING

The CAN AccuBoom node (P/N 063-0172-316) has additional features to allow the user to diagnose the AccuBoom system. The CAN AccuBoom node has a plastic window in the case that allows the user to view green diagnostic lights. The picture below shows the positioning of the lights.



- **Logic Power:** Lit when 12VDC logic power is available at the node
- **Micro 1 Hz:** Flashes at 1 Hz interval when processor is active.
- **CAN Rx:** Flashes when CAN messages are being received.
- **CAN Tx:** Flashes when CAN messages are being transmitted
- **High Current Power:** Lit when High Current Power is applied to the node.

**Notes:**

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## Limited Warranty

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### ***What Does this Warranty Cover?***

This warranty covers all defects in workmanship or materials in your Raven Applied Technology Division product under normal use, maintenance, and service when used for intended purpose.

### ***How Long is the Coverage Period?***

Raven Applied Technology products are covered by this warranty for 12 months from the date of retail sale. In no case will the Limited Warranty period exceed 24 months from the date the product was issued by Raven Industries Applied Technology Division. This warranty coverage applies only to the original owner and is non-transferable.

### ***How Can I Get Service?***

Bring the defective part and proof of purchase to your Raven dealer. If the dealer approves the warranty claim, the dealer will process the claim and send it to Raven Industries for final approval. The freight cost to Raven Industries will be the customer's responsibility. The Return Materials Authorization (RMA) number must appear on the box and all documentation (including proof of purchase) must be included inside the box to be sent to Raven Industries.

### ***What Will Raven Industries Do?***

Upon confirmation of the warranty claim, Raven Industries will (at our discretion) repair or replace the defective product and pay for the standard return freight, regardless of the inbound shipping method. Expedited freight is available at the customer's expense.

### ***What is not Covered by this Warranty?***

Raven Industries will not assume any expense or liability for repairs made outside our facilities without written consent. Raven Industries is not responsible for damage to any associated equipment or products and will not be liable for loss of profit, labor, or other damages. The obligation of this warranty is in lieu of all other warranties, expressed or implied, and no person or organization is authorized to assume any liability for Raven Industries.

**Damages caused by normal wear and tear, misuse, abuse, neglect, accident, or improper installation and maintenance are not covered by this warranty.**



## Extended Warranty

### ***What Does this Warranty Cover?***

This warranty covers all defects in workmanship or materials in your Raven Applied Technology Division product under normal use, maintenance, and service when used for intended purpose.

### ***Do I Need to Register My Product to Qualify for the Extended Warranty?***

Yes. Products/systems must be registered within 30 days of retail sale to receive coverage under the Extended Warranty. If the component does not have a serial tag, the kit it came in must be registered instead.

### ***Where Can I Register My Product for the Extended Warranty?***

To register, go online to [www.ravenhelp.com](http://www.ravenhelp.com) and select Product Registration.

### ***How Long is the Extended Warranty Coverage Period?***

Raven Applied Technology products that have been registered online are covered for an additional 12 months beyond the Limited Warranty for a total coverage period of 24 months from the date of retail sale. In no case will the Extended Warranty period exceed 36 months from the date the product was issued by Raven Industries Applied Technology Division. This Extended Warranty coverage applies only to the original owner and is non-transferable.

### ***How Can I Get Service?***

Bring the defective part and proof of purchase to your Raven dealer. If the dealer approves the warranty claim, the dealer will process the claim and send it to Raven Industries for final approval. The freight cost to Raven Industries will be the customer's responsibility. The Return Materials Authorization (RMA) number must appear on the box and all documentation (including proof of purchase) must be included inside the box to be sent to Raven Industries. In addition, the words "Extended Warranty" must appear on the box and all documentation if the failure is between 12 and 24 months from the retail sale.

### ***What Will Raven Industries Do?***

Upon confirmation of the product's registration for the Extended Warranty and the claim itself, Raven Industries will (at our discretion) repair or replace the defective product and pay for the standard return freight, regardless of the inbound shipping method. Expedited freight is available at the customer's expense.

### ***What is Not Covered by the Extended Warranty?***

Raven Industries will not assume any expense or liability for repairs made outside our facilities without written consent. Raven Industries is not responsible for damage to any associated equipment or products and will not be liable for loss of profit, labor, or other damages. Cables, hoses, software enhancements, and remanufactured items are not covered by this Extended Warranty. The obligation of this warranty is in lieu of all other warranties, expressed or implied, and no person or organization is authorized to assume any liability for Raven Industries.

**Damages caused by normal wear and tear, misuse, abuse, neglect, accident, or improper installation and maintenance are not covered by this warranty.**