

# **1254 Series Rogator CAN AccuBoom Installation and Operation Manual**

*P/N 016-0171-010 Rev C*

*01/17*

*E29115*

## ***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 Viper Installation and Operators Manual for instructions on setting up the software and using the AccuBoom system. You will also need a valid AccuBoom Control Activation Key for your Viper system in order to activate 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
- Cable, CAN AccuBoom 1254 Rogator - P/N 115-0171-579
- CAN Tee Cable 12 foot - P/N 115-0171-362
- AccuBoom Control Activation Key - P/N 077-0180-010

**Notes:**

## CHAPTER

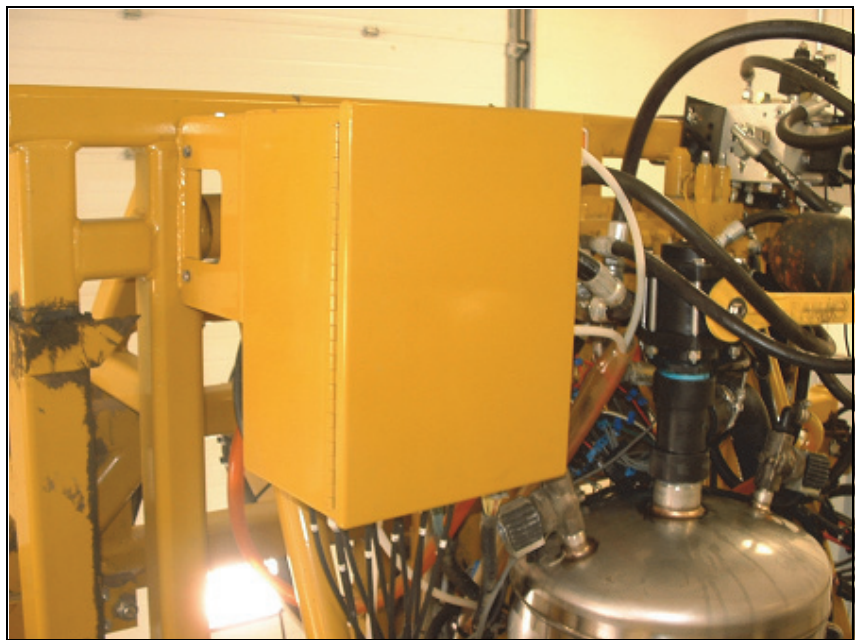
# 2

## INSTALLATION

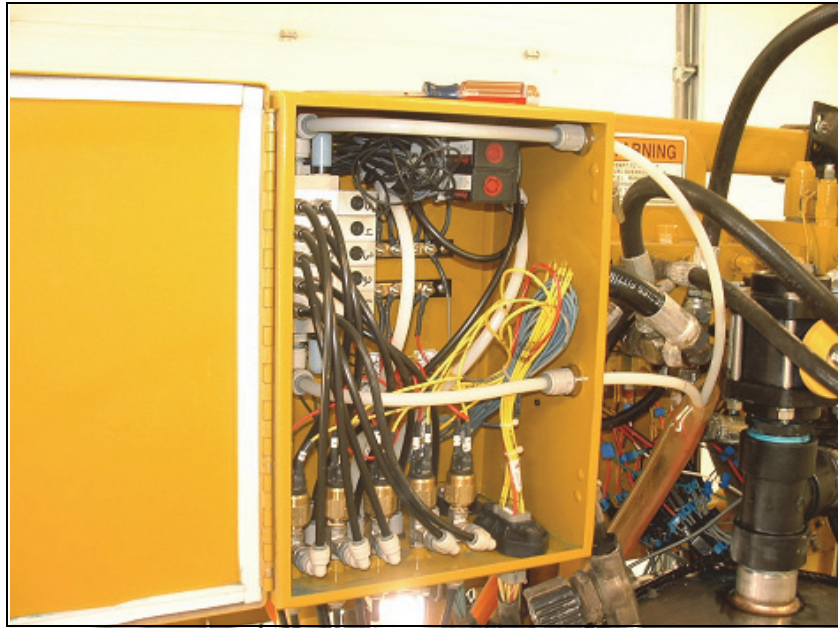
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Use the following procedure to properly install the CAN AccuBoom system on a 1254 Series Rogator sprayer:

1. Mount the CAN AccuBoom node on the rear of the machine:
  - a. Locate the air control box on the rear of the Rogator.



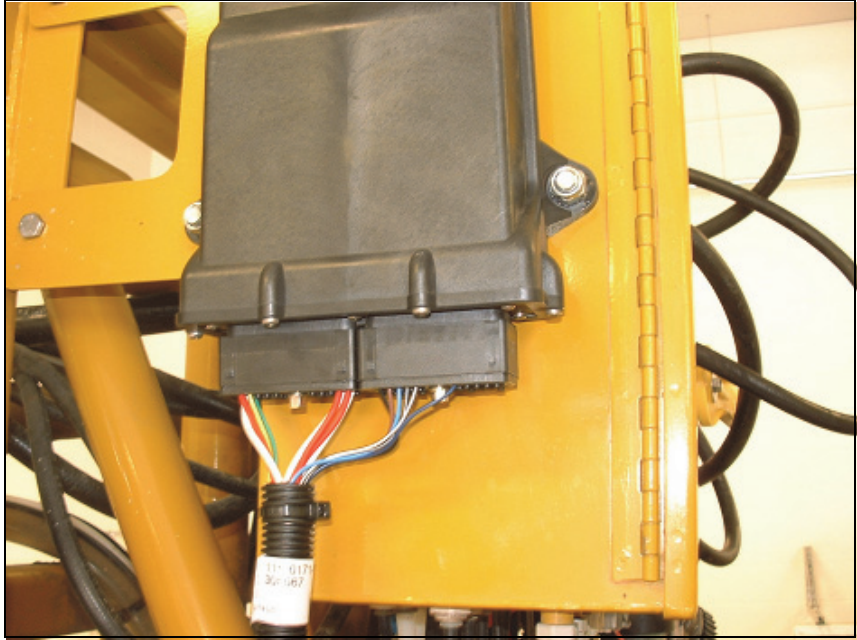
- b. Open the air box so that you can see the location of the air control valves.



- c. Drill a hole in the air box mounting bracket and in the side of the air box, being careful not to drill into the air control valves.
- d. Securely bolt the CAN AccuBoom node (P/N 063-0172-316) to the side of the air box.



2. Connect the AccuBoom cable to the AccuBoom node:
  - a. Connect the rectangular connectors from the AccuBoom cable (P/N 115-0171-579) to the CAN AccuBoom node (P/N 063-0172-316).

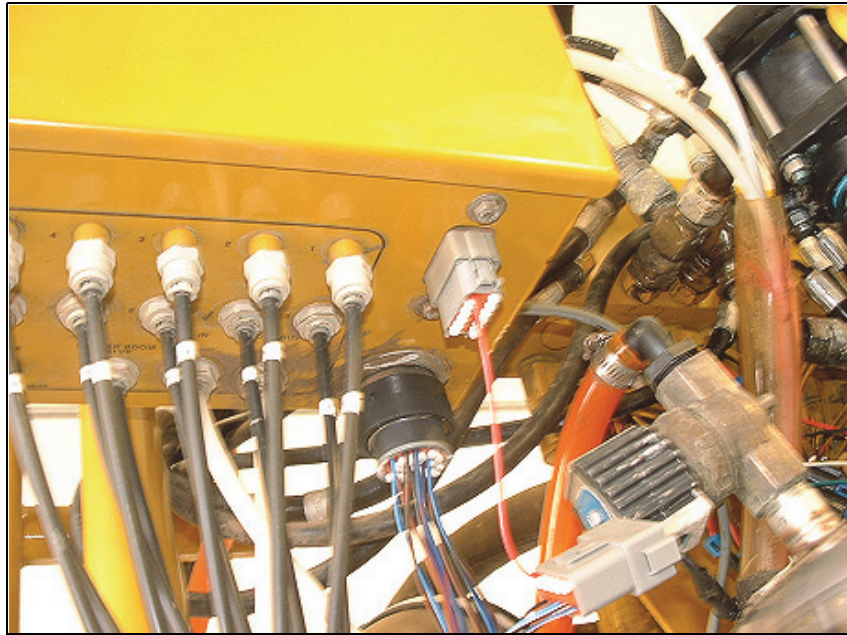


3. Connect the AccuBoom cable to the sprayer boom harness:
  - a. Disconnect the circular and rectangular Deutsch connectors from the bottom of the air control box.

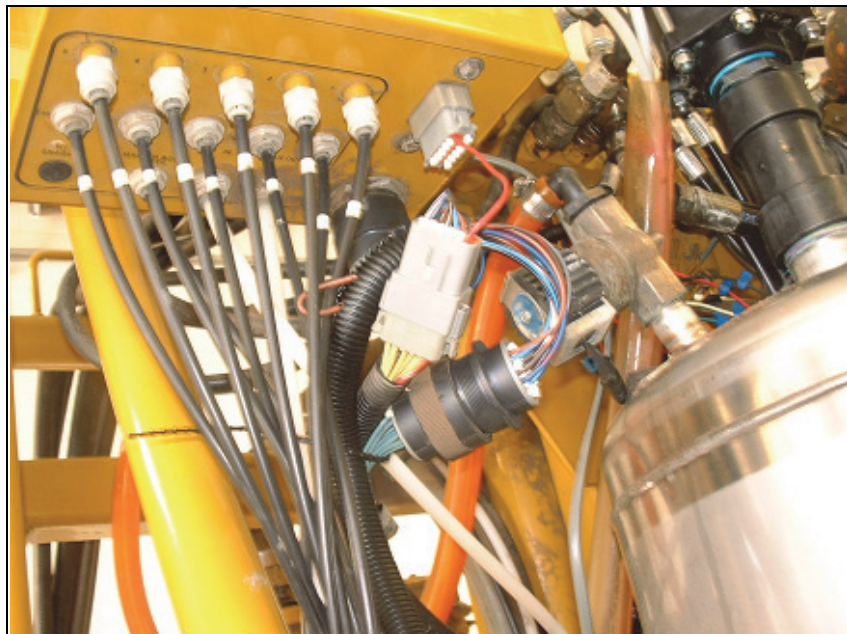




- b. Connect the corresponding round and rectangular Deutsch connectors from the AccuBoom cable (P/N 115-0171-579) to the air box connectors.



- c. Connect the remaining round and rectangular Deutsche connectors from the AccuBoom cable (P/N 115-0171-579) to the harness cables that were previously disconnected from the air box.



4. Route the CAN and power cables from the AccuBoom node to the cab:
  - a. Connect the 12 foot CAN tee cable (P/N 115-0171-362) to the CAN connector located on the AccuBoom cable (P/N 115-0172-579).



- b. Remove the CAN tee terminator (P/N 063-0172-369) from the end of the CAN cable located on the Viper harness.
- c. Connect the CAN terminator (P/N 063-0172-369) to the other CAN connector on the CAN tee cable (P/N 115-0171-362) and secure it in place.



- d. Route the CAN tee cable (P/N 115-0171-362), power, and ground wires from the AccuBoom cable (P/N 115-0171-556) to the Rogator cab area.



- 5. Connect the CAN cable to the product CANbus:

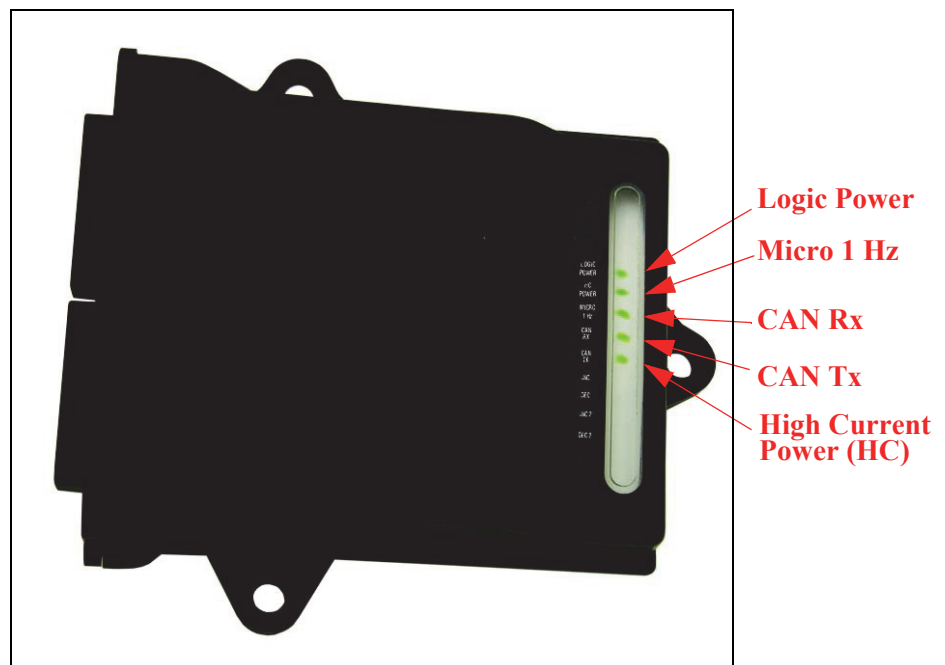
- a. Connect the other end of the CAN tee cable (P/N 063-0171-362) to the CAN connector that previously had the CAN terminator (P/N 063-0172-369) connected to it.
6. Connect the power and ground:
  - a. Wire the power wire to a secure source of clean, switched battery power.
  - b. Connect the ground wire directly to the battery ground.
7. The CAN AccuBoom installation is now complete. Install the Activation Key into the Viper system and program the look-ahead values in the AccuBoom look-ahead setup screen. See the Viper Installation and Operators Manual (P/N 016-0159-894) for more information on setting the look-ahead value.

## 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.
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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.**