CASE IH SPX 4410 CAN
AccuBoom Installation Manual

P/N 0160-0171-007 Rev C   01/17   E28992

Disclaimer

While every effort has been made to ensure the accuracy of this document, Raven Industries assumes no responsibility for omissions and errors. Nor is any liability assumed for damages resulting from the use of information contained herein.

Raven Industries shall not be responsible or liable for incidental or consequential damages or a loss of anticipated benefits or profits, work stoppage or loss, or impairment of data arising out of the use, or inability to use, this system or any of its components. Raven Industries shall not be held responsible for any modifications or repairs made outside our facilities, nor damages resulting from inadequate maintenance of this system.

As with all wireless and satellite signals, several factors may affect the availability and accuracy of wireless and satellite navigation and correction services (e.g. GPS, GNSS, SBAS, etc.). Therefore, Raven Industries cannot guarantee the accuracy, integrity, continuity, or availability of these services and cannot guarantee the ability to use Raven systems, or products used as components of systems, which rely upon the reception of these signals or availability of these services. Raven Industries accepts no responsibility for the use of any of these signals or services for other than the stated purpose.

C H A P T E R

1

INTRODUCTION

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
- CASE 4410 AccuBoom Cable – P/N 115-0171-553
- CAN Tee Cable 24 foot – P/N 115-0171-363
- CAN Terminator – P/N 063-0172-369
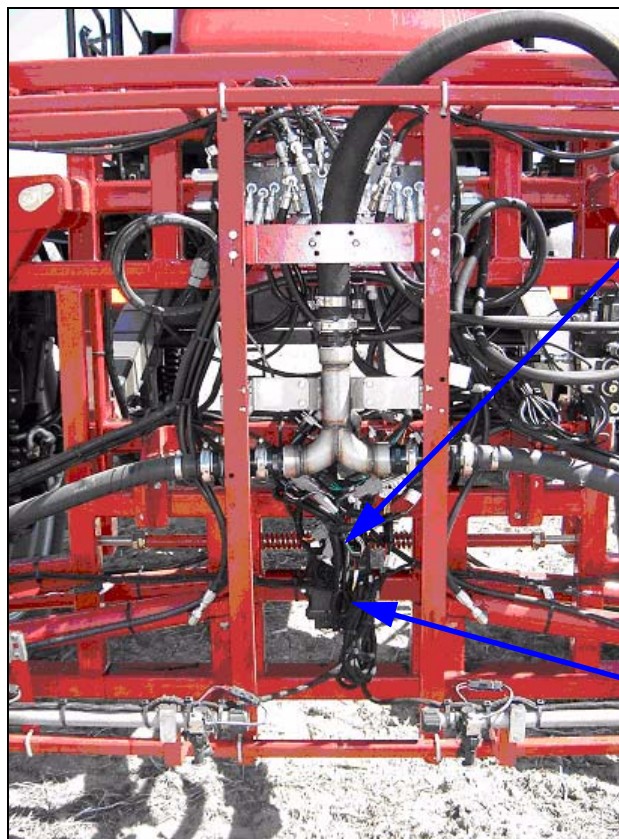- AccuBoom Control Activation Key – P/N 077-0180-010

Notes:

2

CABLE INSTALLATION

Use the following procedure to properly install AccuBoom on a Case SPX4410 sprayer:

1. Mount the CAN AccuBoom on the rear of the machine:

    a. Locate the SPX4410 boom cable connectors on the center boom section at the back of the machine.

    b. Mount the Raven CAN AccuBoom node (P/N 063-0172-316) within 5 feet of SPX4410 boom cable connectors.
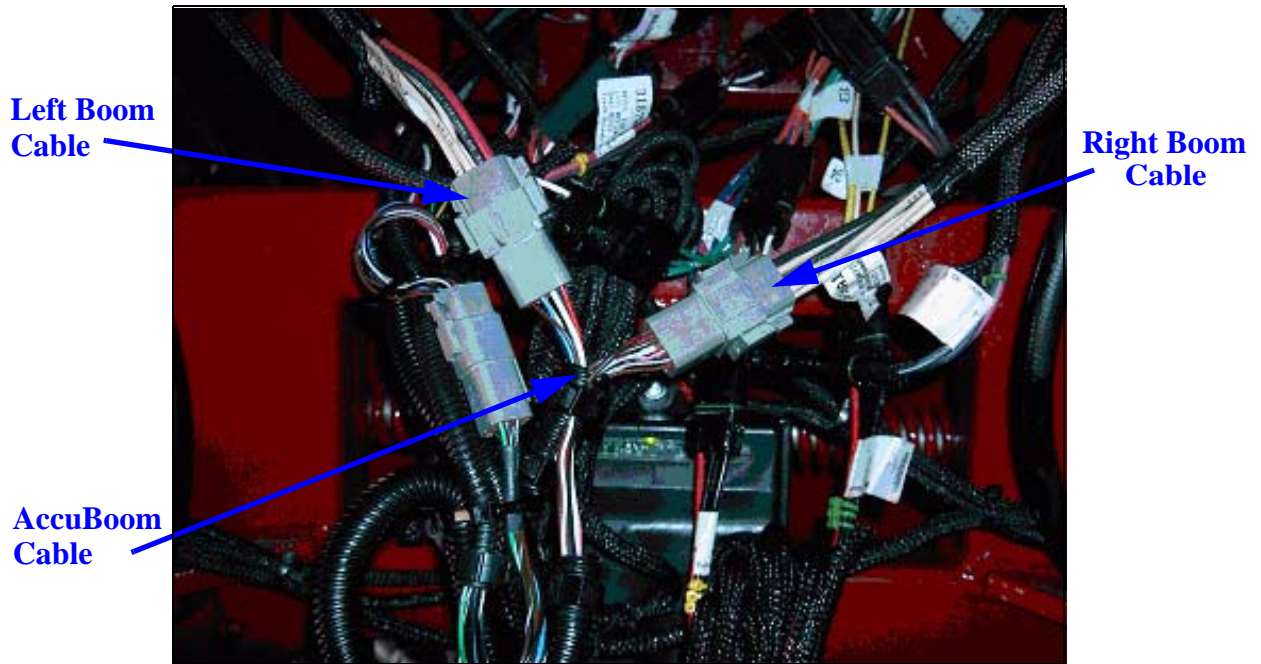

Boom Connectors

CAN Accuboom Node

2. Connect the AccuBoom cable to the AccuBoom node:

    a. Connect the rectangular connectors from the AccuBoom cable (P/N 115-0171-553) to the CAN AccuBoom node (P/N 063-0172-316).

Accuboom cable connected to accuboom node.

3. Connect the AccuBoom cable to the sprayer boom harness.

    a. Unplug the left-hand boom cable for booms 1 to 3.

    b. Tee in the AccuBoom cable (P/N 115-0171-553) connectors labeled Booms 1-3 LH Foam.

    c. Unplug the right-hand boom cable for booms 4-6.

d. Tee in the AccuBoom cable (P/N 115-0171-553) connectors labeled Booms 4-6 LH Foam.
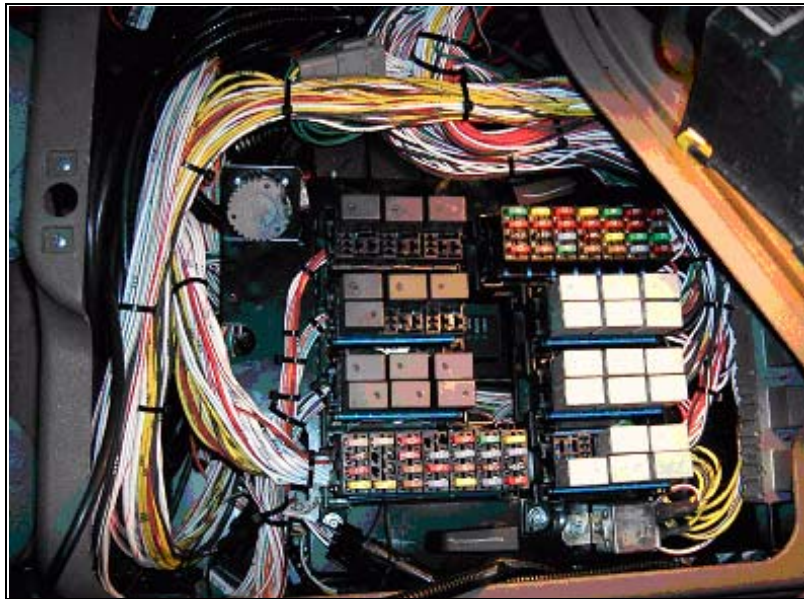

AccuBoom connections to boom harnesses

4. Route the CAN and the power cables from the AccuBoom node to the cab:

   a. Connect the 24 ft. CAN tee cable (P/N 115-0171-363) to the CAN connector located on the Accuboom cable (P/N 115-0171-553).

   b. Connect the CAN Terminator (P/N 063-0172-369) to the other tee end of the CAN tee cable (P/N 115-0171-363) and secure in place.

c. Route the CAN tee cable (P/N 115-0171-363) and the power and ground wires from the AccuBoom cable (P/N 115-0171-553) to the front of the machine.
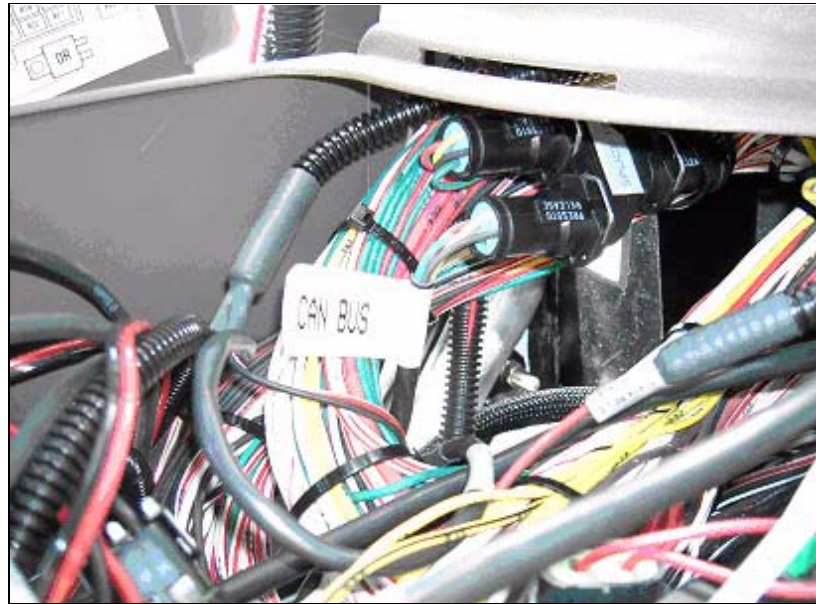

Can cable routed into cab from bottom side of cab

5. Access the CAN connector:

   a. Open the access cover to the right of the operator seat.

   b. Release the two latches securing the fuse panel and carefully pull the fuse panel out and lay it to the side.

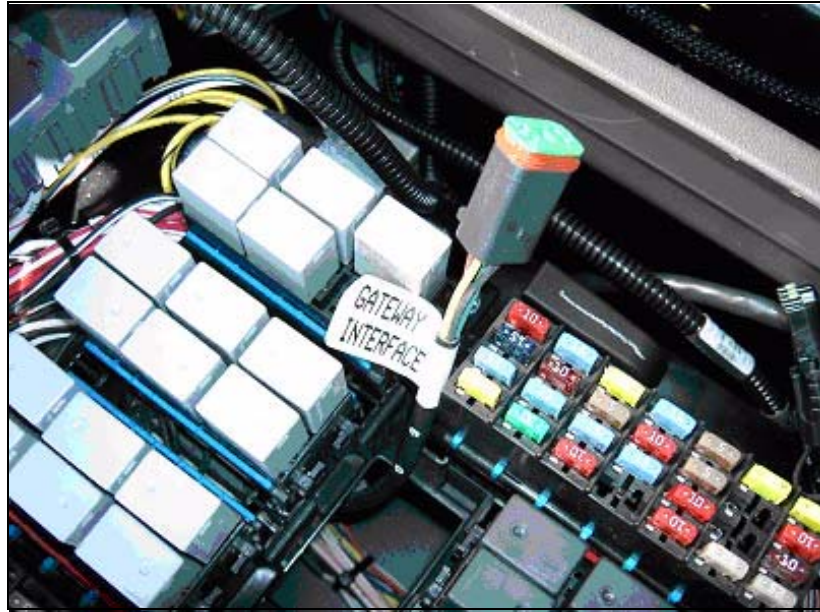**SPX 4410 Fuse panel located to the right of the operator's seat**

6. Enable the CANBus connector:

    a. Locate the round CanBus connector.

    b. Locate the CANBus splice jack.

    c. Remove the cover on the second splice connector.

    d. Insert the round CANBus cable into the CAN splice connector.

Connect the CANBus connector to the CAN splice connector

7. Connect the AccuBoom CAN cable to control the CANBus:

    a. Locate the 4-pin CANbus connector below the fuse panel.

b. Connect the AccuBoom CAN connector previously routed to the fuse panel area to the CANbus connector.

SPX 4410 CAN 4-pin Gateway Interface connector

Note: There may be a terminator located in the wiring harness directly behind the cab. Ensure that this terminator is disconnected. If not, there will be three terminators in the system and operation of the CAN system may be erratic.
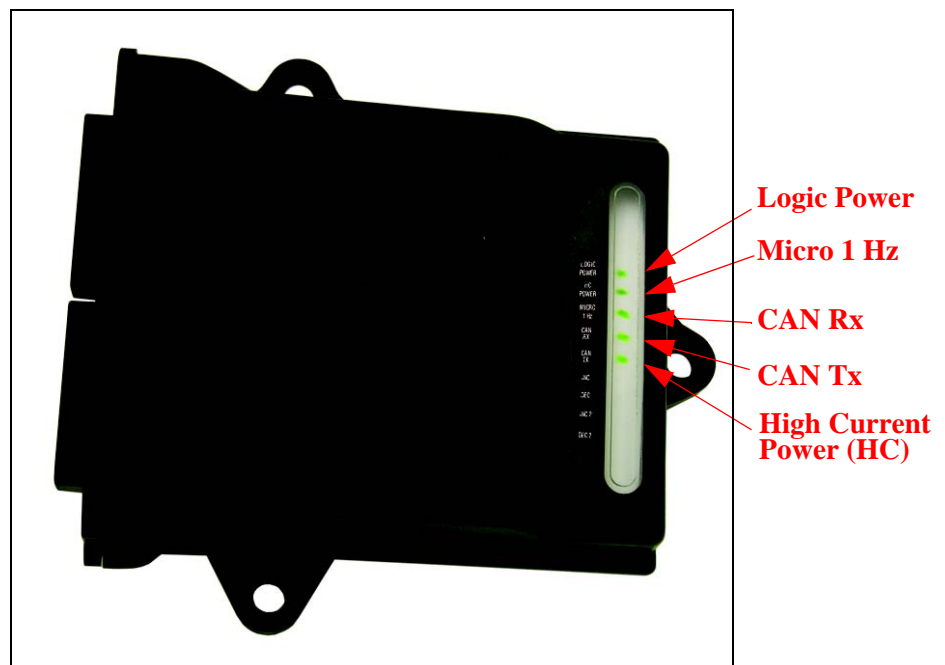
8. Connect power and ground:

a. Connect the power wire to a source of switched power.

b. Connect the ground wire to the battery ground.

9. Replace the fuse panel and cover.

10. The SPX4410 CAN AccuBoom installation is now complete.

C H A P T E R

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.

RAVEN

Limited 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.

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.

RAVEN

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 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.