AccuBoom
Automatic Boom Control Option

CaseIH 3150/3185/3200

CHAPTER
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 Operation 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 in order to activate the AccuBoom system.

Important! All boom switches must remain in the **OFF** position while AccuBoom control is in operation!

COMPONENTS NEEDED

- Kit, CAN AccuBoom CaseIH SPX3150/3185/3200 which includes:
    - AccuBoom Control Node – P/N 063-0172-316
    - Cable, CAN Accuboom, CASE IH 4260 Patriot Cab P/N 115-1001-017
    - Cable, 6', CANBus (Includes "T")
    - AccuBoom installation Sheet, CASE SPX3150/3185/3200 – P/N 016-0171-045

Notes:

CHAPTER

2

INSTALLATION

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Use the following procedure to properly install AccuBoom on a Case SPX3150/3185/3200 sprayer.

1. Open the access door located on the left side of the cab.

2. Locate the boom control cable toward the rear of the cable compartment.

3. Disconnect the 6-pin boom connections.

Important: There may be two sets of 6-pin connectors. Be sure to use the connectors coming directly from the boom switches.

4. Plug the mating connectors from the CAN AccuBoom cable (P/N 115-1001-017) to the corresponding connectors previously disconnected.

5. Mount the CAN AccuBoom Node (P/N 063-0172-316) in a suitable location in the cable compartment.
6. Connect the AccuBoom cable (P/N 115-1001-017) to the Accuboom Node (P/N 063-0172-316).
7. Connect one connector from the supplied CAN tee cable to the CAN connection on the CAN AccuBoom cable P/N 115-1001-017.
8. Connect a CAN terminator P/N 063-0172-369 to other tee end of the CAN cable P/N 115-0171-362.

Note: If the machine already has a CAN system installed, remove the terminator from the existing CAN system and move it to the CAN cable previously installed. If no CAN system exists on the machine, refer to Chapter 3 and use on of the terminators contained in the CAN Tee With Power kit P/N 117-0159-923.

9. Connect the CAN system.
   a. Connect the single end of the CAN cable P/N 115-0171-362 to the product control CAN bus or to the CAN system installed in Chapter 3.

10. Connect power and ground.
   a. Wire the red power wire to a clean source of switched 12 volt power.
   b. Connect the white ground wire directly to the battery ground.
11. Connect orange wire to the master switch so that 12 volts is supplied to the orange wire when the master switch is in the "ON" position.
12. The CAN AccuBoom installation is now complete.

CASEIH 3150/3185/3200/3200B (PAT. CAB) ACCUBOOM
INSTALL SCHEMATIC 4X0/6X0 CONSOLE

DISPLAY CONSOLE MAIN HARNESS

CAN BUS POWER TEE KIT
117-0159-923

+12V
SW GND

NOTE:
CONNECT CAN POWER TEE TO CLEAN
SOURCE OF SWITCHED POWER/GND

CONTROL CONSOLE

PASSIVE
TERMINATOR

PASSIVE
TERMINATOR

CAN TEE EXTENSION
6", 6', 12',
18', OR 24'

CAN POWER TEE

RED (POWER)
WHITE (GROUND)

CAN/CONSOLE
ACCUBOOM
CABLE

POWER/GROUND CONNECTIONS:
CONNECT HIGH CURRENT (LARGER
WIRES) TO ANY POWER/GND SOURCE.
CONNECT LOGIC POWER (SMALLER
WIRES) TO CLEAN SOURCE OF
SWITCHED POWER/GND.

RED (+12V SW)
WHITE (GROUND)

CONNECT TO
MASTER
SPRAY/HOLD
SWITCH

CAN ACCUBOOM NODE

BOOM VALVES

Notes: 7

CHAPTER

3

CAN INSTALLATION

If the machine you are working on does not currently have a Raven CAN system, you will need a Kit, CANbus, Terminators & Power Adapter "T" P/N 117-0159-923. This kit contains the CAN Cable Adapter Tee With Power P/N 115-0171-368 and two(2) CANBus Terminators P/N 063-0172-369. To install a Raven CAN system:

1. Connect CAN Tee to power and ground.
    a. Locate a convenient source of power and ground near the control system.
    b. Connect the red wire of the CAN Cable Adapter Tee With Power P/N 115-0171-368 to a source of clean 12 volt power.
    c. Connect the white wire from the CAN Cable Adapter Tee With Power P/N 115-0171-368 to a clean battery ground.

2. Connect the CAN bus to the Controller.
   a. Connect CAN Terminator P/N 063-0172-369 to one connector on the Can Cable Adapter Tee With Power P/N 115-0171-368.

CAN Terminator

   b. Connect the second connector on the CAN Cable Adapter Tee With Power P/N 115-0171-368 to the CAN connector on the Envizio or Viper interface cable.
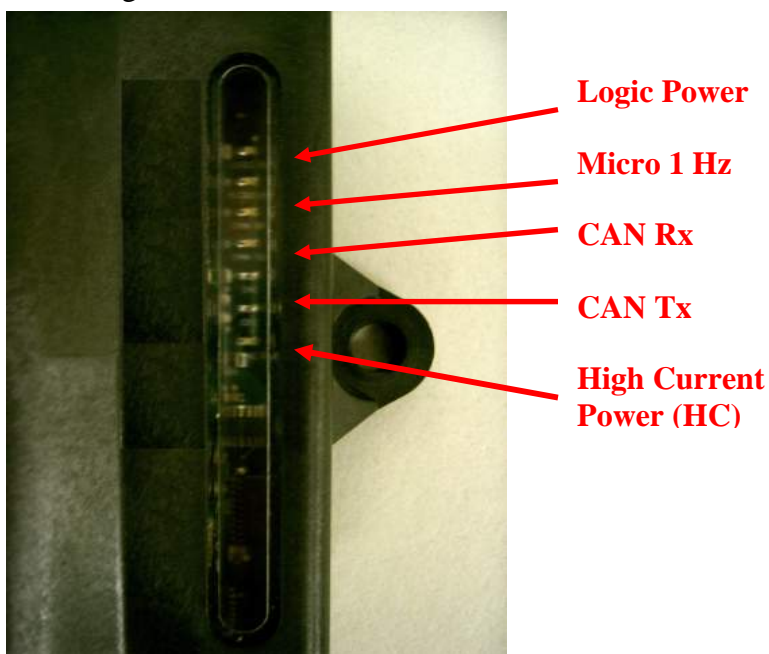

The CAN bus system is now installed and CAN nodes may be connected to it.

CHAPTER

4

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 and function of each of the LED lights.

Logic Power

Micro 1 Hz

CAN Rx

CAN Tx

High Current Power (HC)

- **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:

RAVEN INDUSTRIES

LIMITED WARRANTY

WHAT IS COVERED?

This warranty covers all defects in workmanship or materials in your Raven Flow Control Product under normal use, maintenance, and service.

HOW LONG IS THE COVERAGE PERIOD?

This warranty coverage runs for 12 months from the purchase date of your Raven Flow Control Product. This warranty coverage applies only to the original owner and is not transferable.

HOW CAN YOU GET SERVICE?

Bring the defective part, and proof of date of purchase, to your local dealer. If your dealer agrees with the warranty claim, he will send the part, and proof of purchase to his distributor or to Raven for final approval.

WHAT WILL RAVEN INDUSTRIES DO?

When our inspection proves the warranty claim, we will, at our option, repair or replace the defective part and pay for return freight.

WHAT DOES THIS WARRANTY NOT COVER?

Raven Industries will not assume any expense or liability for repairs made outside our plant without written consent. We are not responsible for damage to any associated equipment or product and will not be liable for loss of profit or other special damages. The obligation of this warranty is in lieu of all other warranties, expressed or implied, and no person is authorized to assume for us any liability. Damages caused by normal wear and tear, misuse, abuse, neglect, accident, or improper installation and maintenance are not covered by this warranty.

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