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AccuBoom™ Installation Manual

Miller Condor G-Series

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CHAPTER 1

Important Safety Information

Important Safety Information

NOTICE

Read this manual and the operation and safety instructions included with your implement and/or controller carefully before installing the AccuBoom™ system.

- Follow all safety information presented within this manual.
- If you require assistance with any portion of the installation or service of your Raven equipment, contact your local Raven dealer for support.
- Follow all safety labels affixed to the AccuBoom system components. Be sure to keep safety labels in good condition and replace any missing or damaged labels. To obtain replacements for missing or damaged safety labels, contact your local Raven dealer.

When operating the machine after installing AccuBoom, observe the following safety measures:

- Be alert and aware of surroundings.
- Do not operate AccuBoom or any agricultural equipment while under the influence of alcohol or an illegal substance.
- Remain in the operator's position in the machine at all times when AccuBoom is enabled.
- Disable AccuBoom when exiting from the operator's seat and machine.
- Do not drive the machine with AccuBoom enabled on any public road.
- Determine and remain a safe working distance from other individuals. The operator is responsible for disabling AccuBoom when the safe working distance has been diminished.
- Ensure AccuBoom is disabled prior to starting any maintenance work on AccuBoom or the machine.

⚠ CAUTION

- Always verify that the power leads are connected to the correct polarity as marked. Reversing the power leads could cause severe damage to the equipment.
- Ensure that the power cable is the last cable to be connected.

CHAPTER 2

Introduction

Introduction

Congratulations on your purchase of the Raven AccuBoom system! This system is designed to provide accurate and cost-efficient application control by avoiding no-spray zones and eliminating wasteful overlaps.

This manual applies to the following machines. For future reference, write your serial number in the space below.

MAKE: Miller
MODEL: Condor G-Series
YEAR:
SERIAL NUMBER:

FIGURE 1. **Miller Condor G-Series**

Recommendations

Raven Industries recommends the following best practices when installing the AccuBoom system.

- Use part numbers to identify the parts.
- Do not remove the plastic wrap from a part until it is necessary for installation.

Tools Needed

The following tools are recommended for installation of the AccuBoom system:

- SAE standard-sized wrenches
- Cable ties
- Set of tools

Preparing for Installation

Before installing AccuBoom, park the machine where the ground is level, clean, and dry. Leave the machine turned off for the duration of the installation process.

During the installation process, follow good safety practices. Be sure to carefully read the instructions in this manual as you complete the installation process.

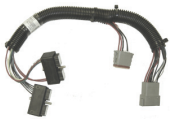
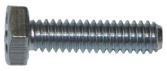
Point of Reference

The instructions in this manual assume that you are standing behind the machine, looking toward the cab.

AccuBoom Kit Contents

This section contains a list of the components that are included in the AccuBoom kit. Before beginning the AccuBoom installation, compare the items in the AccuBoom kit with the components on this list. If you have questions about the kit, contact your local Raven dealer.

TABLE 1. AccuBoom Installation Kit (P/N 117-1001-076)

Picture	Item Description	Part Number	Qty.
Not Pictured	Manual - Miller Condor G-Series AccuBoom Installation	016-1001-076	1
	Node - CAN AccuBoom	063-0172-316	1
	Cable - Miller Condor G-Series CAN AccuBoom	115-1001-042	1
	Bolt - 1/4”-20 x 1” Hex	311-0050-105	3
	Nut - 1/4”-20 Nylon Lock	312-4000-057	3
	Washer - 1/4” Flat	313-2300-009	6

CHAPTER 3

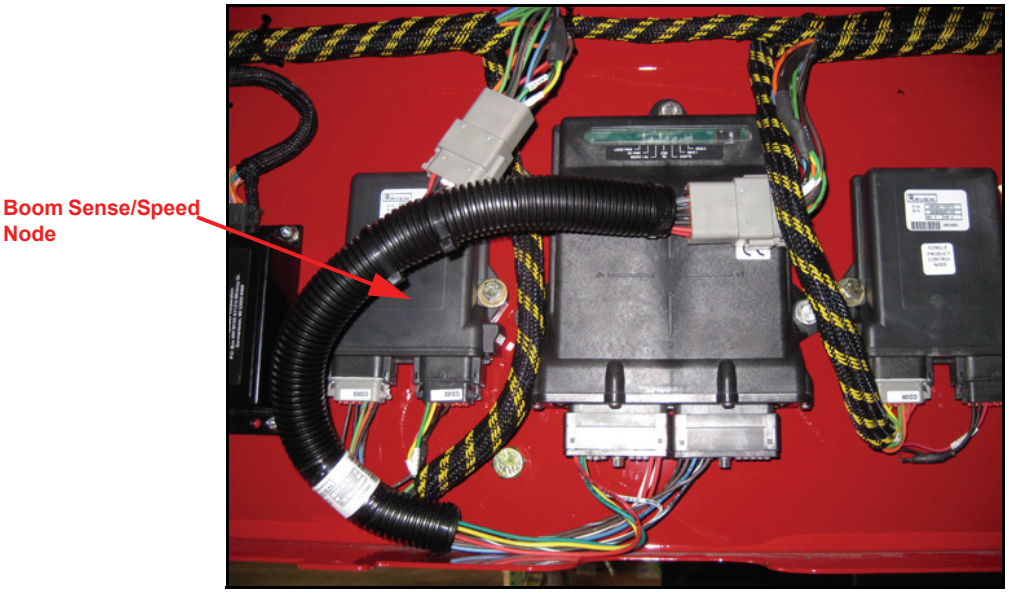
AccuBoom Installation

The instructions in this manual are designed to assist in the proper installation of the AccuBoom system on Miller Condor G-Series sprayers. Refer to your computer's Installation & Operation Manual for instructions on setting up the software and using the AccuBoom system.

Install the AccuBoom Node

1. Locate the node enclosure along the right rear chassis frame, beneath the product tank and open cover.
2. Locate the mounting holes to the right of the boom sense/speed node.
3. Mount the AccuBoom node (P/N 063-0172-316) to the node enclosure using three 1/4"-20 x 1" hex bolts (P/N 311-0050-105), six 1/4" flat washers (P/N 313-2300-009), and three 1/4"-20 nylon lock nuts (P/N 312-4000-057).

FIGURE 1. AccuBoom Node Installed

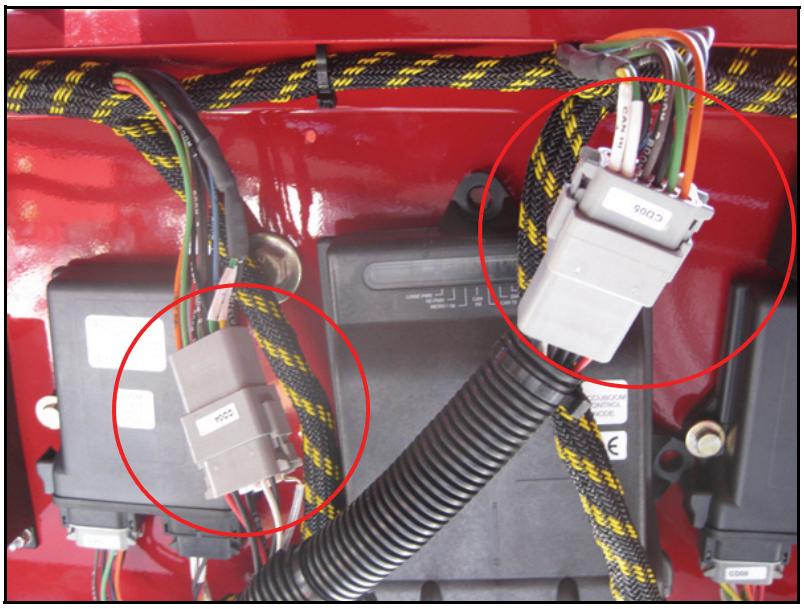


Install the AccuBoom Harness Cable

FIGURE 2. Deutsch Connectors on the Chassis Harness

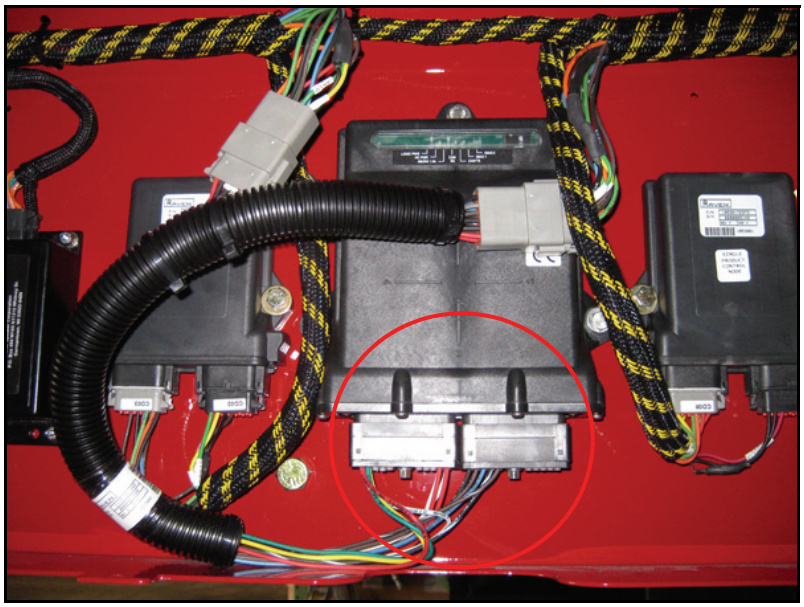
1. Locate the 12-pin Deutsch connectors labeled CD04 and CD05 connected together on the chassis harness cable.
2. Disconnect the connectors.

FIGURE 3. AccuBoom Harness Connected to the Machine's Harness



3. Install the Miller Condor G-series CAN AccuBoom cable (P/N 115-1001-042) between the CD04 and CD05 connectors.

FIGURE 4. **AccuBoom Node Installed**



4. Insert the large, rectangular node connectors on the cable (P/N 115-1001-042) into the AccuBoom node (P/N 063-0172-316).
5. Tighten the bolts on the node connectors to secure the connection.
6. Replace the cover on the machine's node enclosure.

CHAPTER 4

Section Mapping Setup

This section contains section mapping settings that are used to program the AccuBoom controller. Refer to the controller's Installation & Operation Manual and the appropriate section in this chapter for programming instructions and section mapping settings for your specific field computer.

Envizio Pro

Boom	Section Label
1	1
2	2
3	3
4	4
5	5

Viper Pro

Boom	Wired As	Display As
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5

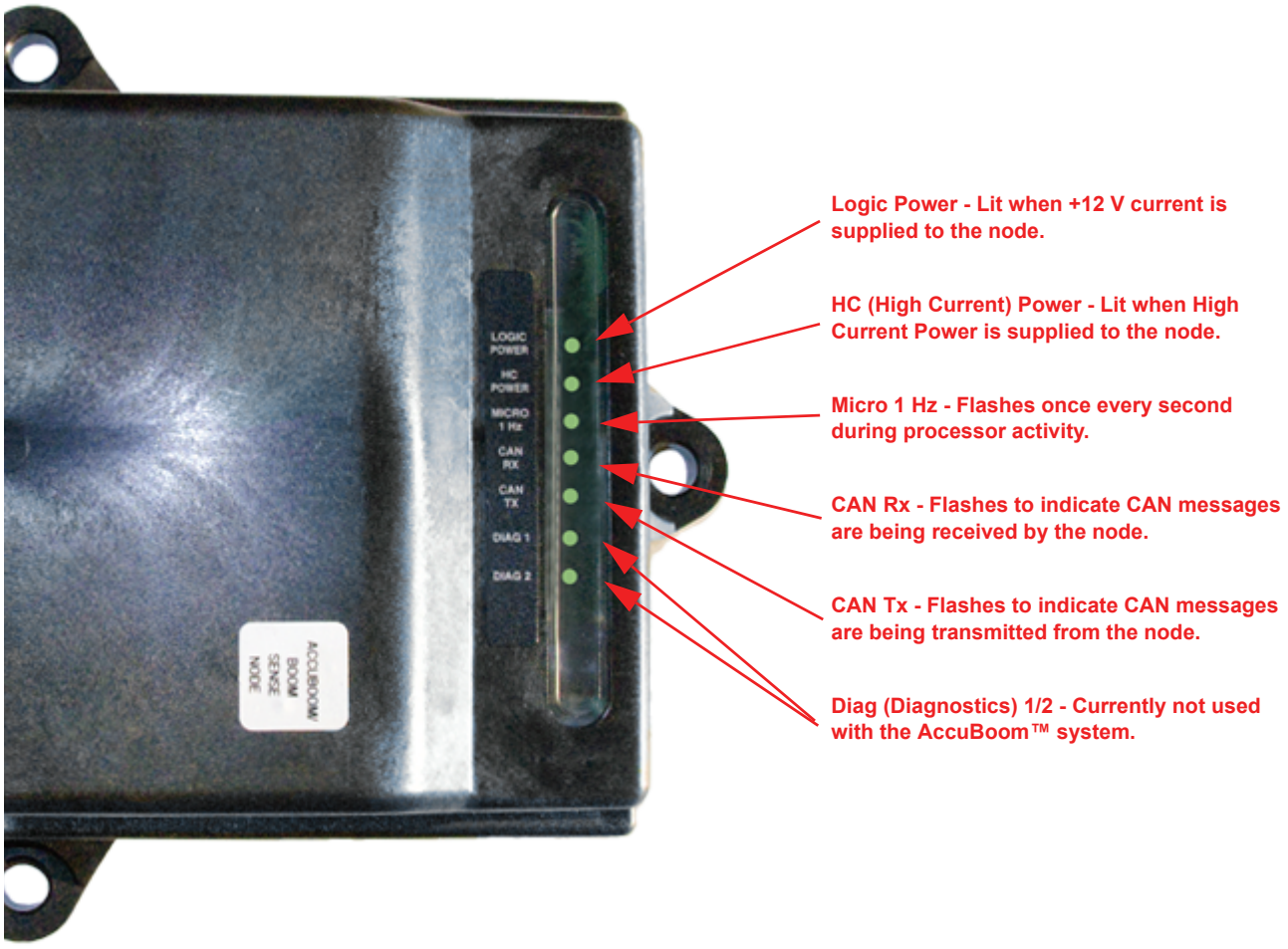
CHAPTER 5 Troubleshooting

The AccuBoom CAN control node (P/N 063-0172-316) features several green light-emitting diodes (LEDs) which may be used to diagnose issues within the AccuBoom system.

Note: *If the LEDs are not displayed as outlined in the figure below, check the CAN connections and the control cable connections on the node. If the issue persists, contact your local Raven dealer for additional technical support.*

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

FIGURE 1. AccuBoom CAN Control Node LEDs



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Limited Warranty

What Does this Warranty Cover?

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

How Long is the Coverage Period?

Raven Applied Technology Products are covered by this warranty for 12 months after the date of purchase. This warranty coverage applies only to the original owner and is nontransferable.

How Can I Get Service?

Bring the defective part and proof of purchase to your Raven Dealer. If your Dealer agrees with the warranty claim, the Dealer will send the part and proof of purchase to their distributor or to Raven Industries for final approval.

What Will Raven Industries Do?

Upon confirmation of the warranty claim, Raven Industries will, at our discretion, repair or replace the defective part and pay for return freight.

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 or other special 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.

Miller Condor G-Series
AccuBoom™ Installation Manual
(P/N 016-1001-076 Rev A 8/09)

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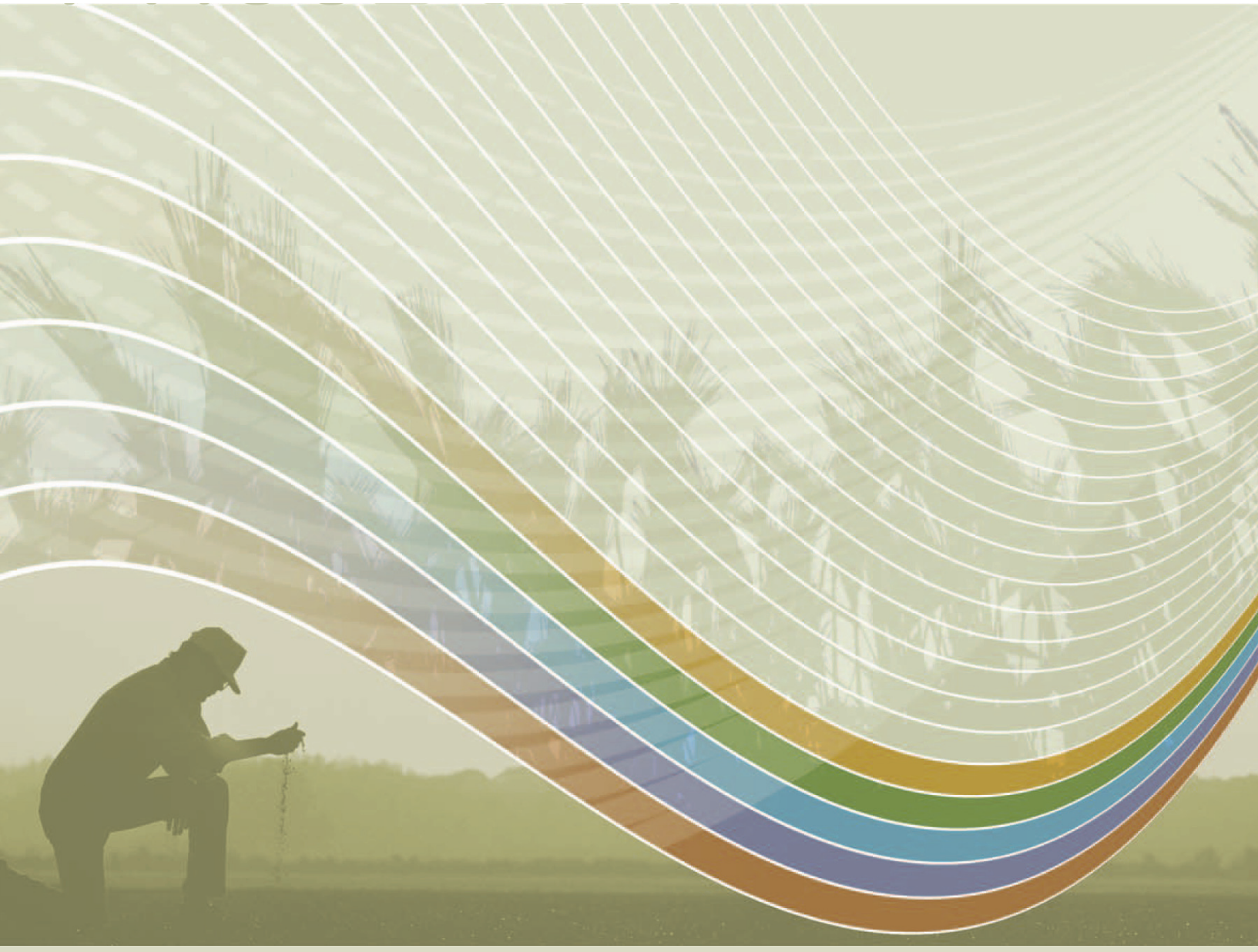

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