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SmartBoom™ Installation Manual



3000/4000 Series Spra-Coupe

CHAPTER

1

INTRODUCTION

Congratulations on your purchase of the Raven Smartboom system! This system is designed to provide worry-free turn on and turn off of your booms with respect to an as-applied area. The following instructions are designed to assist you in the proper installation of the Smartboom system. See the Operation Manual of your Smartboom console for instructions on setting up the software and using the Smartboom system.



Important! All boom section switches must remain in the OFF position while Smartboom is in operation!

Notes:

CHAPTER

2

INSTALLATION

Use the following procedure to properly install the Smartboom system on a Spra-Coupe 3000/4000 Series sprayer.

1. Connect the cable P/N 115-1001-027 to the 5-Channel Driver P/N 063-0172-753.

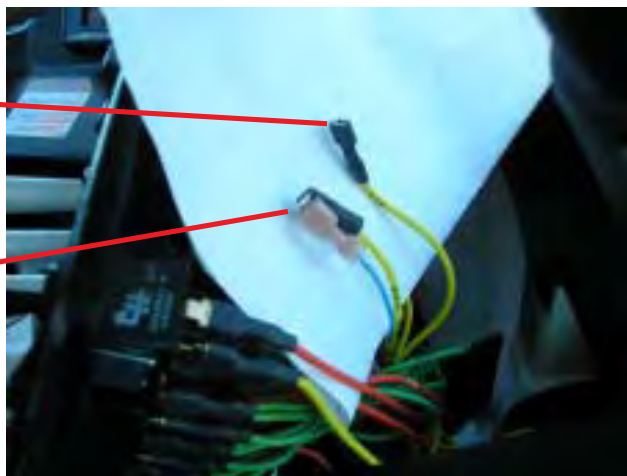


2. Mounting the 5-Channel Driver
 - a. Locate a suitable mounting location on the side of the cab below the console.
 - b. Drill two holes to mount the 5-Channel Driver.



**Negative Boom
Switch Wire**

**Positive Boom
Switch Wire**



- c. Route the two smaller wire bundles from the Smartboom Cable P/N 115-1001-027 up into the switch location.



3. Connect the Smartboom Cable to the boom switch wires.
 - a. Remove the four screws securing the switch panel cover.



- b. Carefully pull the switch panel upward to access the switches.
 - c. Locate the boom wires that parallel with the console wires.



Helpful Hint: One of the switch connectors has an adapter allowing two wires to be connected to the switch connector. This is the positive boom switch wire. The connector this wire is connected to will be used to trigger the relay box in manual mode. Make sure you identify these connectors for later connection.

- d. Remove each boom section wire from each boom switch and substitute the corresponding boom wire from the Smartboom Cable P/N 115-1001-027 following the chart below.



3-Boom System

Boom Number	Smartboom Wire Color	Connector Shielding	SpraCoupe Wire Number
1+	Black	Un-Shielded	505B
1-	Gray	Shielded	506B
2+	Brown	Un-Shielded	507B
2-	Yellow	Shielded	508B
3+	Blue	Un-Shielded	509B
3-	Orange	Shielded	510B
	Blk/Wht	Un-Shielded	N/C
	Purple	Shielded	N/C
	Brn/Wht	Un-Shielded	N/C
	Green	Shielded	N/C

NOTE: Remove insulating connectors from booms 4 and 5 prior to installing on a 5-boom system.

5-Boom System

Boom Number	Smartboom Wire Color	Connector Shielding	SpraCoupe Wire Number
1+	Black	Un-Shielded	503B
1-	Gray	Shielded	504B
2+	Brown	Un-Shielded	505B
2-	Yellow	Shielded	506B
3+	Blue	Un-Shielded	507B
3-	Orange	Shielded	508B
4+	Blk/Wht	Un-Shielded	509B
4-	Purple	Shielded	510B
5+	Brn/Wht	Un-Shielded	511B
5-	Green	Shielded	512B

4. Connect the Smartboom Cable to the boom control switch.
 - a. Connect the Smartboom control switch from the Smartboom Cable P/N 115-1001-027 to the previously identified positive boom connection on each boom switch, being sure to follow the Switch Connection chart.
 - b. Remove the white ground wire from each switch.

No Conection

Ground Wire

**Positive Boom
Switch Connection**



- c. Attach supplied insulating terminals to remaining empty posts on switch.

Switch Connection

Smartboom Wire Color	Boom Number 3-Boom System	Boom Number 5-Boom System
Black	1	1
Brown	2	2
Blue	3	3
Blk/Wht	N/C	4
Brn/Wht	N/C	5

5. Connect Power and Ground to the Smartboom Cable.
 - a. Route the two white wires from the Smartboom Cable P/N 115-1001-027 to a secure battery ground.



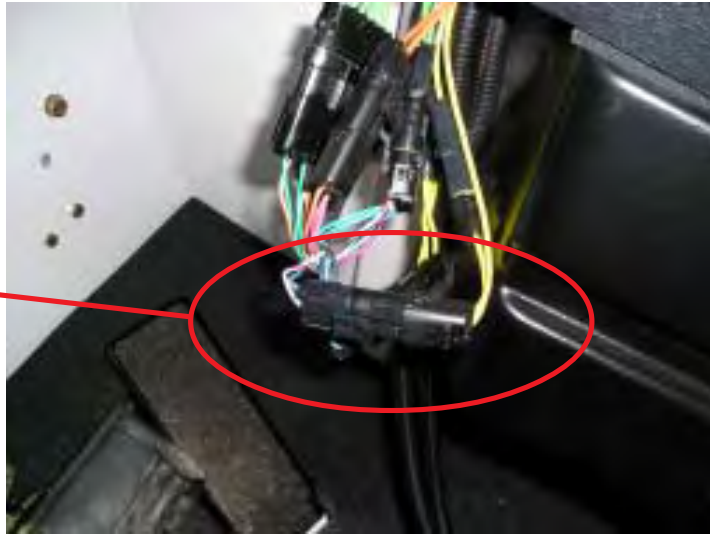
Helpful Hint: The main ground lug is located under the dash in the right hand corner of the cab.

Ground

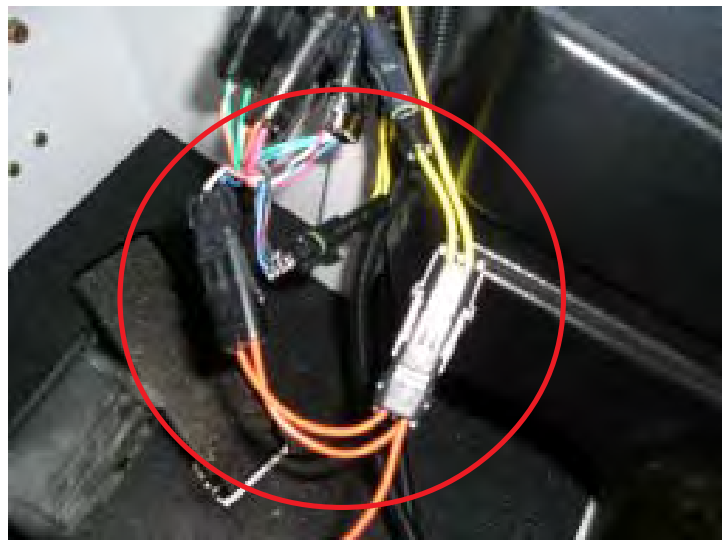


- b. Connect red wires to a good source of switched power.

**Master Spray/Hold
Switch Connection**



6. Connect the orange wire from the Smartboom cable P/N 115-1001-027 to the master boom enable switch on the machine.
 - a. Pull the joystick cable connectors out from under the side console.
 - b. Identify the master spray/hold switch connector.
 - c. Disconnect the two pin weatherpack connectors.
 - d. Plug in the orange "Tee" connector from the Smartboom cable P/N 115-1001-027 into the weatherpack connectors.
 - e. Return the wires and connectors to their location under the side console.



7. Installation is now complete.

Notes:

RAVEN

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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.

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