

AutoMate™ Equipment Specific Installation Kit

P/N: 750-3007



Fits Spra-Coupe 3000/4000 Series Sprayers

Overview

A series of equipment-specific kits have been developed to allow the interface of the AutoMate system with your product rate controller. This kit contains the necessary components and instructions to connect AutoMate with the equipment models listed above. Please read this manual thoroughly before beginning the installation.

Kit Contents:

Unpack the installation kit and identify the required parts as shown.

REF	ITEM	QTY	COMMENTS	PHOTOGRAPH
A	Interface Cable	1	Spra-Coupe 3000/4000	
B	5-Channel Driver	1		
C	Spade Covers	10		Not Shown
D	Tie Straps	6	Black, 13 inch	Not Shown
E	Installation Instructions	1		Not Shown

Installation:

Install the AutoMate interface onto the sprayer with the following steps.

1. Remove the four screws securing the boom switch control panel on the right console in the sprayer cab.



Fig. 1: Boom switch control panel

2. Raise the boom switch panel and locate the four connections for each switch.

Each boom switch will have two signal wires (yellow), a ground (white), and a power (orange).

One of the signal wires will have an additional wire piggy-backed onto the same spade connection. This is the positive boom signal connection.

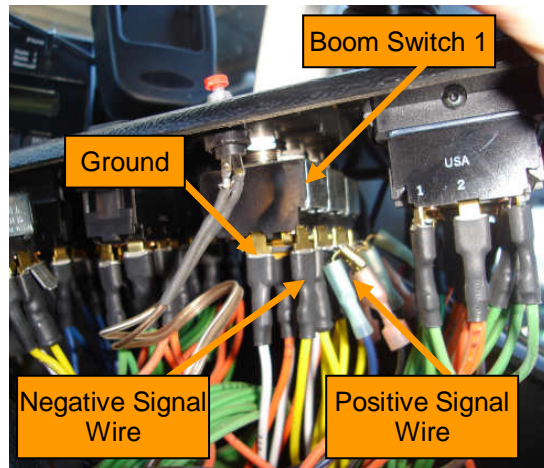


Fig. 2: Boom switch wiring

3. Route the two small ends (wires w/ spade connectors) of the interface cable (A) from the floor up through the console to the switch panel.

The bundle of wires with male spades is for connection with existing Spra-Coupe signal wires. The smaller bundle of wires with female spades is for connection with the Spra-Coupe boom switch terminals.



Fig. 3: Interface cable routing

4. Disconnect the positive and negative boom signal wires from boom switch 1. Connect the signal wires to the two corresponding wires of the interface cable (A), according to the table below.

Note: After connecting the interface cable to the positive signal wire, be sure to wrap the electrical connectors with electrical tape.

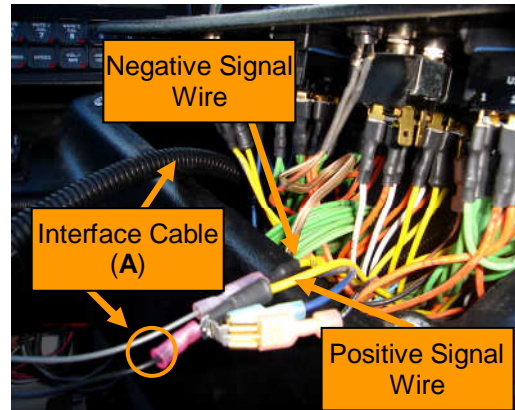


Fig. 4: Boom 1 signal wire connection

5. Disconnect the white ground wire from the boom switch. The system will now be grounded through the AutoMate interface.

NOTE: After detaching the ground (white) wire, be sure to wrap black electrical tape on the tip of the female connectors.

3-Boom System

Boom Number	AutoMate Wire Color	Connector Shielding	Spra-Coupe 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

5-Boom System

Boom Number	AutoMate Wire Color	Connector Shielding	Spra-Coupe 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

- Connect the AutoMate boom 1 switch wire to the positive signal terminal of the Spra-Coupe boom 1 switch. Refer to the table below for the appropriate wiring code.

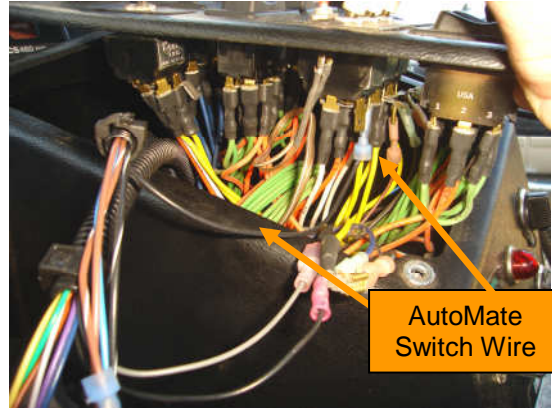


Fig. 5: AutoMate switch wire

AutoMate Switch Wire Connection

AutoMate 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

- Repeat steps 4 - 6 for the remaining boom sections/switches.

Note: If you have 5 boom switches, remove the spade covers on the Automate wiring harness (A) before connecting them to the signal wires.

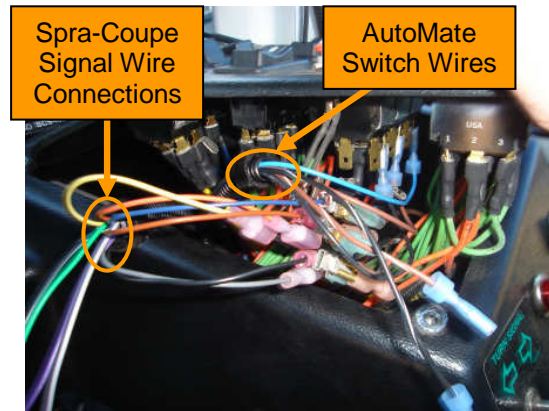


Fig. 5: Boom switch wiring complete

8. Use the provided spade covers to insulate the two blank terminals on every boom switch.

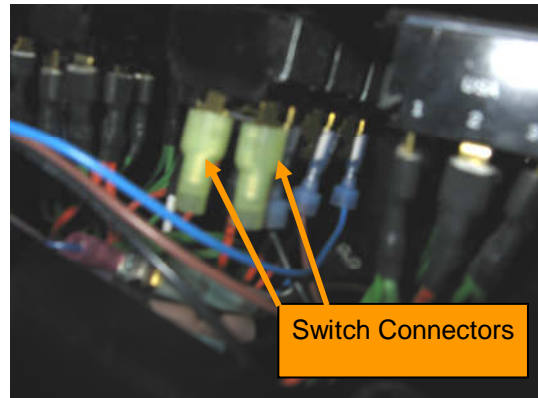


Fig. 6: Boom Switch Connectors Insulated

9. Connect the AutoMate interface cable (A) to the 5-channel driver (B).
10. Find a suitable mounting location for the 5-channel driver and install securely using screws or tie-straps.



Fig. 7: 5-Channel driver install

11. Locate the joystick wiring harness at the bottom front area of the cab console. The end of this harness will branch into several packard connections.

Identify the two pin packard connector which carries the master spray/hold connection. This connection will typically have one blue and one white wire entering and two yellow wires exiting.

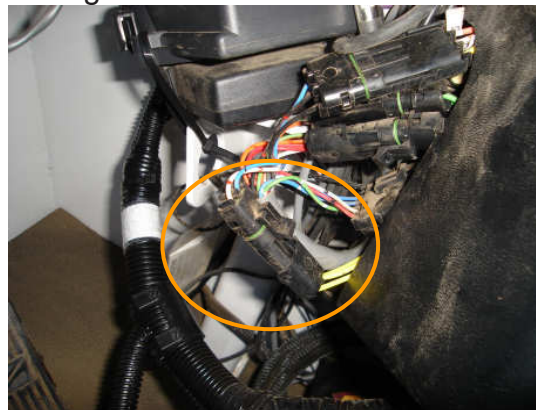


Fig. 8: Master spray/hold connection

12. Disconnect the master spray/hold connection and insert the tee connector from the AutoMate interface cable



Fig. 9: Master spray/hold tee inserted

13. Locate the ground terminal under the Spra-Coupe dash and connect the two white ground wires from the AutoMate interface cable.

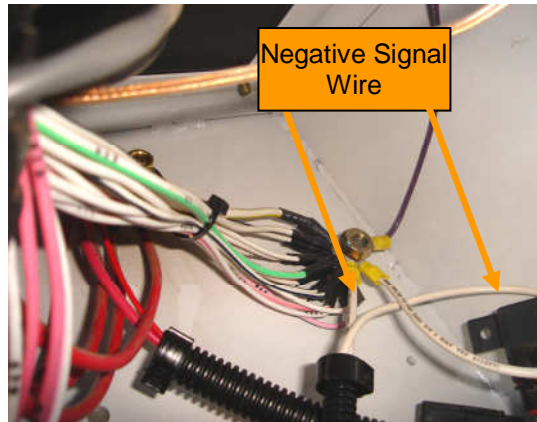


Fig. 10: Ground wires connected

14. Connect red power wires from the AutoMate interface cable to a secure source of switched power.

15. Connect the Power and Control connectors of the Interface Cable (A) to the AutoMate console.



Fig. 11: AutoMate console

16. Secure all wiring with tie-straps and clean up the installation.

17. In order for AutoMate to have control of the boom sections the rate controller Master Switch must be in the ON position and all individual boom switches must be OFF.

Important: If the conditions of step 16 are met, AutoMate will begin to spray if 1) AutoMate recognizes that it is in an un-applied area and 2) AutoMate recognizes a positive ground speed.