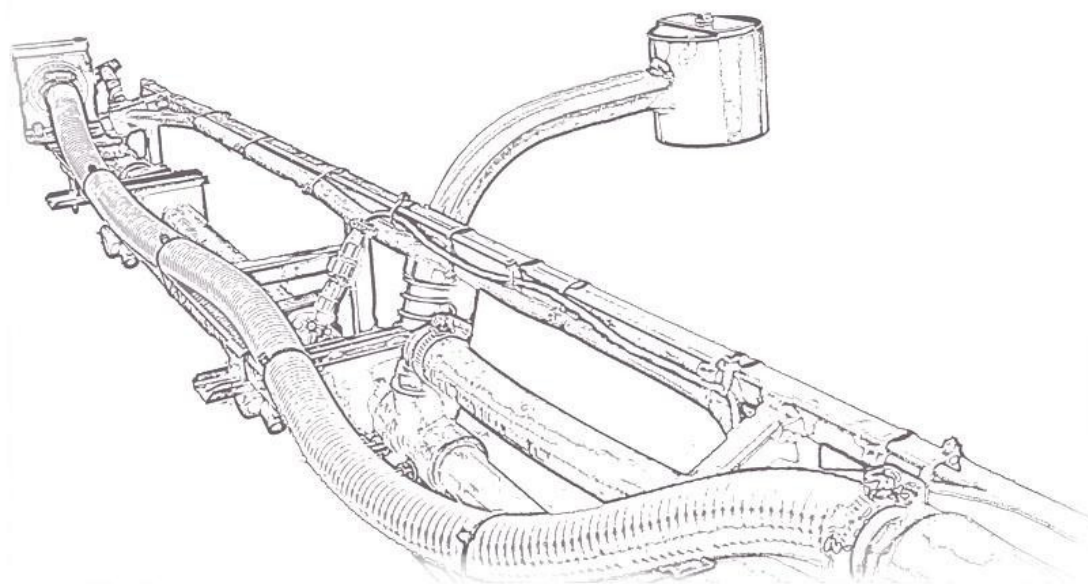




UC5TM CAN BUS Spray Height Control System



Topcon X30 Display Kit Installation Manual

Printed in Canada

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Reorder P/N: 54VT-TC-X30-INST Rev D (Topcon X30 Display Kit)

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I Introduction

The Topcon X30 Display Kit Manual is intended to be used in conjunction with the UC5 Spray Height Control Installation Manual. This manual provides instructions to interface the UC5 Control Module to the Topcon X30 Display. For installation of the rest of the UC5 Spray Height Control System please refer to the sprayer specific manual provided with the kit.

I.1 List of Parts

Item	Part Number	Name	Quantity
C25	44602-01	BOX SWITCH UC4 REMOTE HAND CONTROL VER.1 RMR	1
C26	43240-26	CABLE UC5 INTERFACE SWITCH BOX	1
C40	43260-08	CABLE UC5 INTERFACE CANBUS 4 PIN DEUTSCH	1
M01	UC5-BC-MANUAL-ECHO-VT	MANUAL UC5 OPERATORS - ECHO/VT	1
M04	54VT-TC-X30-INST	MANUAL UC5 DISPLAY KIT TOPCON X30	1

2 Technical Specifications



CAN ICES-3(A)/NMB-3(A)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

This Class A digital apparatus complies with Canadian ICES-003.

Pursuant to EMC Directive – Article 9, this product is not intended for residential use.

Table 1: System Specifications

Supply Voltage (rated)	12VDC
Supply Current (rated)	10A
Hydraulic Pressure (maximum)	3300 psi
Baud Rate	250 kbps
Clock Frequency (maximum)	96 MHz
Solenoid Valve PWM Frequency	300 Hz
Ultrasonic Sensor Transmit Frequency	50 kHz
Operating Temperature Range	0°C to 80°C

3 Installation

3.1 CANbus Interface Installation

1. Securely mount the control module (E01) in the cab of the sprayer.
2. Tee the CANbus interface cable (C40) in to the *CAN 1* connection on the Topcon wiring harness.
3. Connect the Deutsch plug on cable C40 to the end of the control module with only one Deutsch connector.

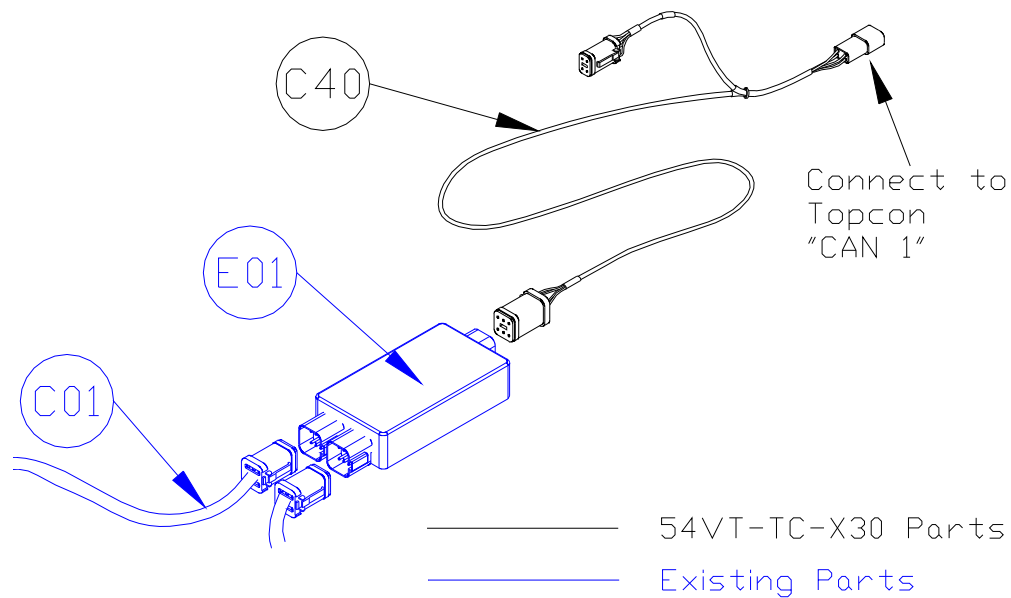


Figure 1: CANbus Interface Installation

3.2 Switch Box Installation

1. Disconnect cable C20 (*Thru 2* connector) from the Input Module (E03). Remove the wedge from the face of the 12 pin Deutsch plug.
 2. Insert the Roll CW pin from C26 into position 3 of the 12 pin plug on C20. Insert the Roll CCW pin from C26 into position 4 of the 12 pin plug on C20. Insert the wedge back into the plug. Connect C20 to the *Thru 2* connector on the Input Module.
 3. Connect the 12 pin Deutsch plug on C26 to the *OEM 3* connector on the input module. Route the other end of the cable to the hitch of the sprayer (pull type) or to the cab (self propelled).
 4. Attach the switch box (C25) inside the cab and connect it to cable C26. An extra label is provided with the switch box if you prefer to remove the switches from the housing and mount them in the existing sprayer switch panel.
- * Some sprayer types may not use all the switch functions.
- * Refer to “Appendix A” for sprayers with European style slant control.

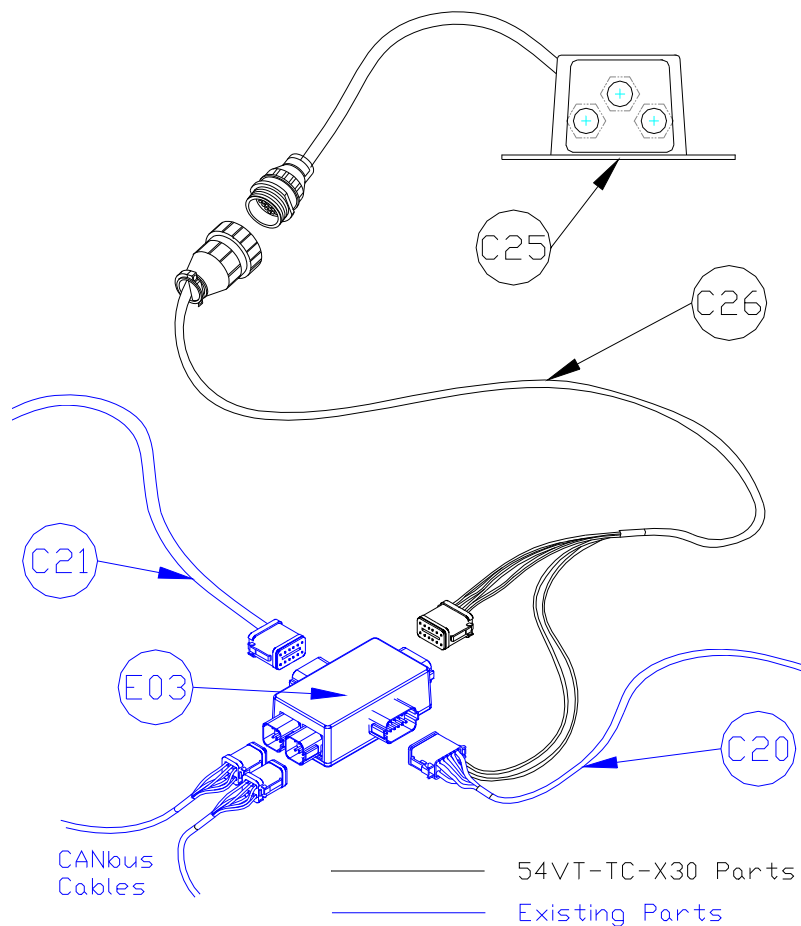
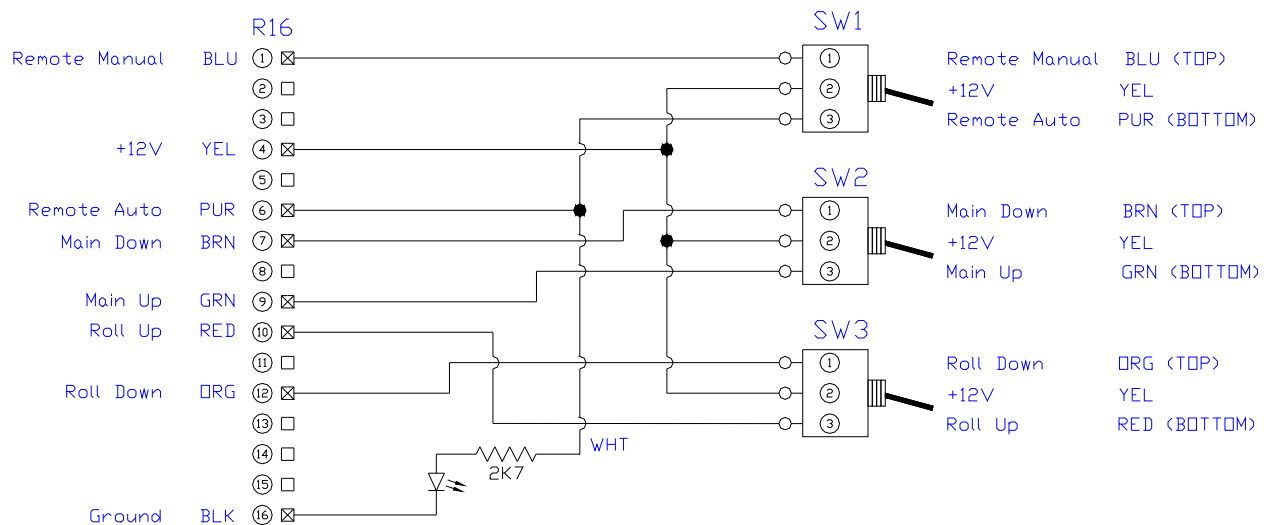
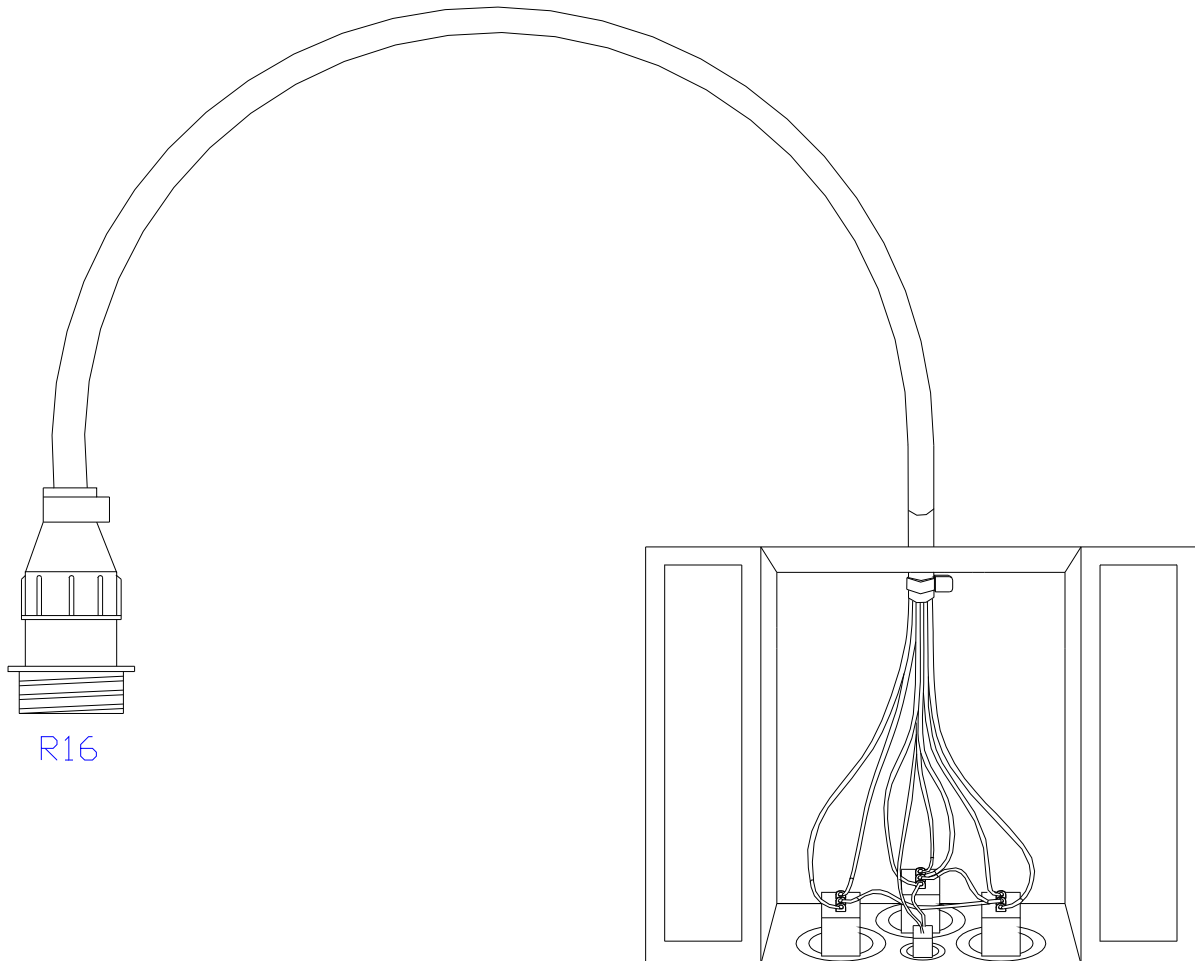


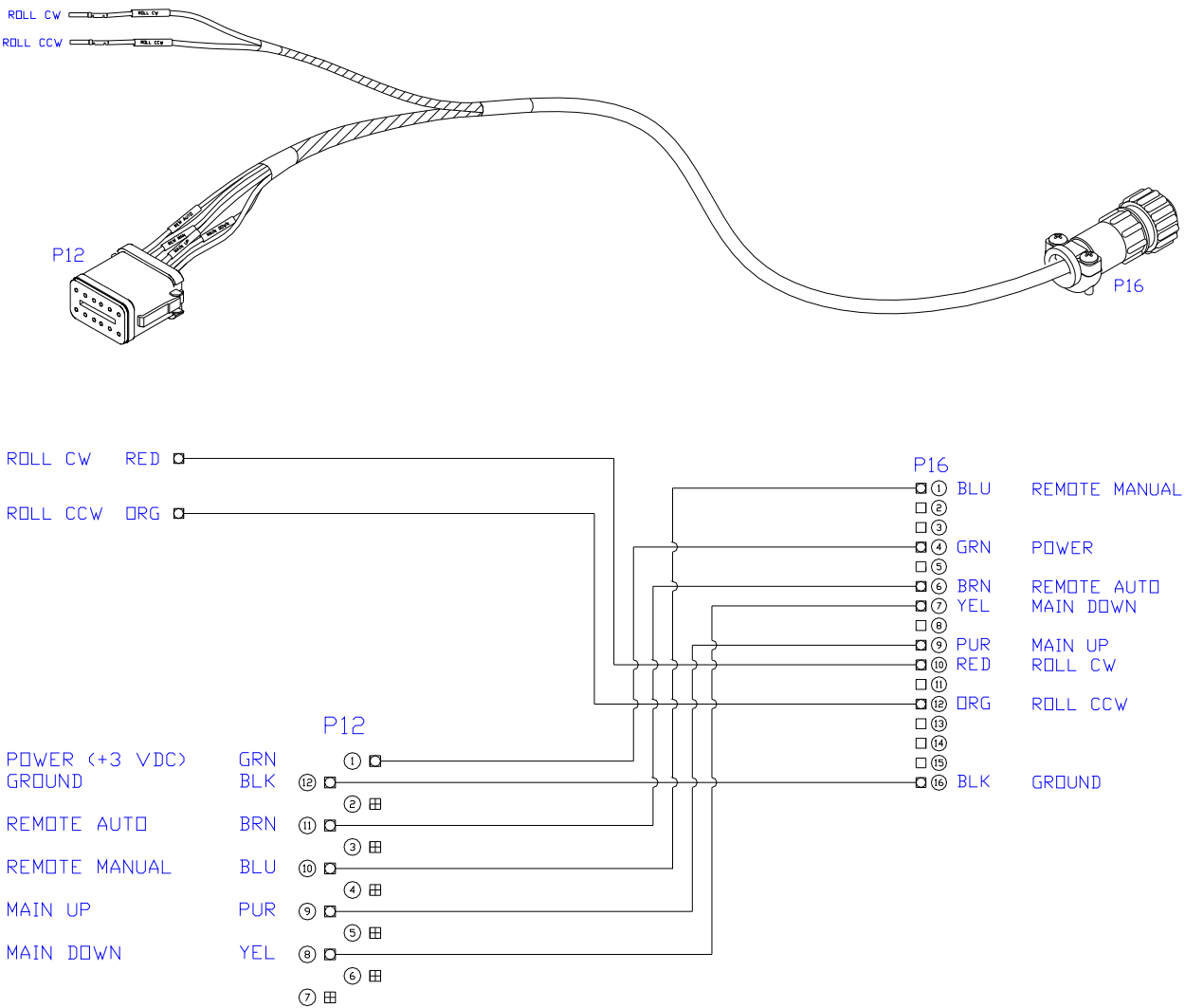
Figure 2: Switch Box Installation

4 Cable Drawings

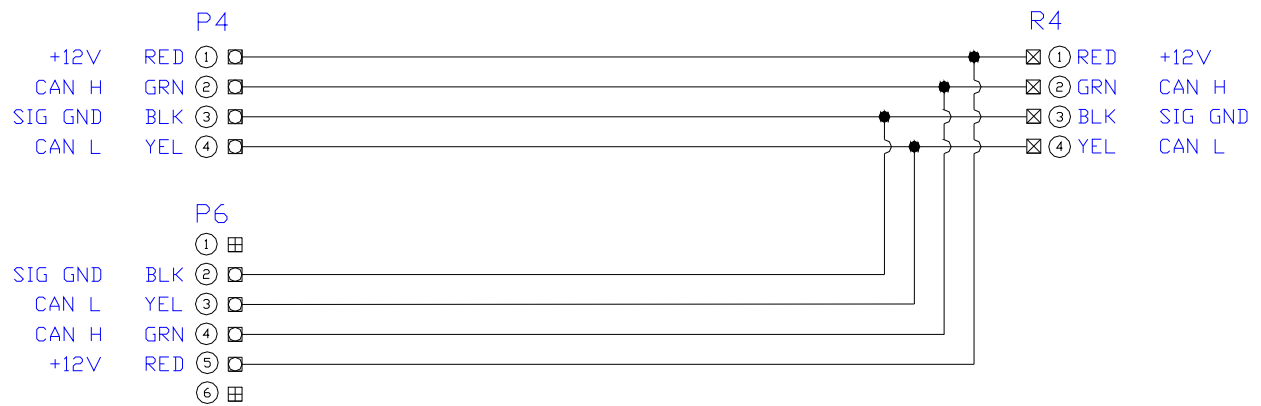
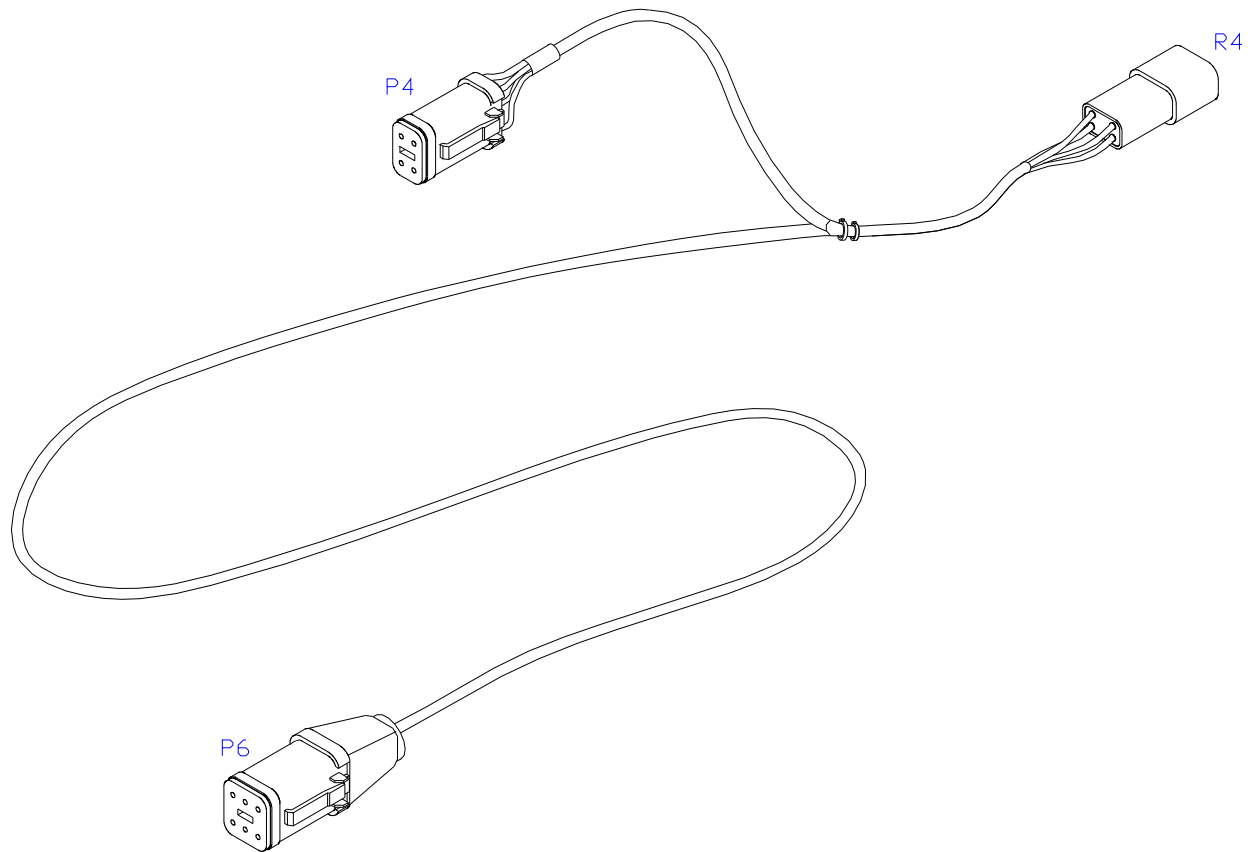
4.1 ITEM C25: 44602-01 – Switch Remote Hand Control



4.2 ITEM C26: 43240-26 – Cable UC5 Switch Box



4.3 ITEM C40: 43260-08 – Cable UC5 Interface CANbus 4-Pin Deutsch



5 Appendix A: Alternate Configuration

If your sprayer has European style slant control, you will need to reconfigure the switch box as shown below. This is only required for sprayer types which are driving the slant output from the Input Module. Reconfigure the pins on cable C26 as follows:

Function (Cable C26)	Wire Color	Normal Configuration		European Style Slant Configuration	
		Connector	Pin Location	Connector	Pin Location
Power	White	Grey End (C26)	1	Grey End (C26)	1
Ground	Black	Grey End (C26)	12	Grey End (C26)	12
Remote Auto	Brown	Grey End (C26)	11	Grey End (C26)	11
Remote Manual	Blue	Grey End (C26)	10	Grey Side (C20)	4
Main Up	Purple	Grey End (C26)	9	Grey End (C26)	9
Main Down	Yellow	Grey End (C26)	8	Grey End (C26)	8
Roll CW	Red	Grey Side (C20)	3	Grey End (C26)	6
Roll CCW	Orange	Grey Side (C20)	4	Grey End (C26)	10

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