

# EQSS Model6253 – OverWatch™ Haulotte HSxxE Pro



**\*\* Failure to follow this installation manual will void warranty \*\***



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Model6253 OverWatch™ Installation Manual

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DOCUMENT ABSTRACT:

This Installation Manual details the manufacturer's installation instructions for installing the Model6253 OverWatch on a Haulotte HSxxE Pro scissor lift.

PRODUCT NAME:

Model6253 OverWatch Operator Detection System

REFERENCE DOCUMENTS:

DO0001195 Model6253 OverWatch User Manual

CURRENT DOCUMENT REVISION:

1.1

REVISION INFORMATION:

- 1.0 Initial Document Creation for installation on a Haulotte HSxxE Pro
- 1.1 Update on CAN High and Low wiring description

### Important Information

Information contained in this publication regarding this device's applications and the like, is provided only for your convenience and may be superseded by updates. It is your responsibility to ensure that the application or our equipment meets with your specifications.

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N23041

This is a class A product certified to AS/NZS CISPR 22:2006. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



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## Preparation

### Required Tools

The OverWatch has been designed to be fitted using basic workshop tools. Shown below is a list of tools required to complete the installation

Item	Tool / Description
1	Electric Drill
2	Centre punch
3	Hammer
4	Side Cutters
5	Drill 20.0mm
6	Metric sockets or spanners
7	Needle nose pliers
8	Screw drivers


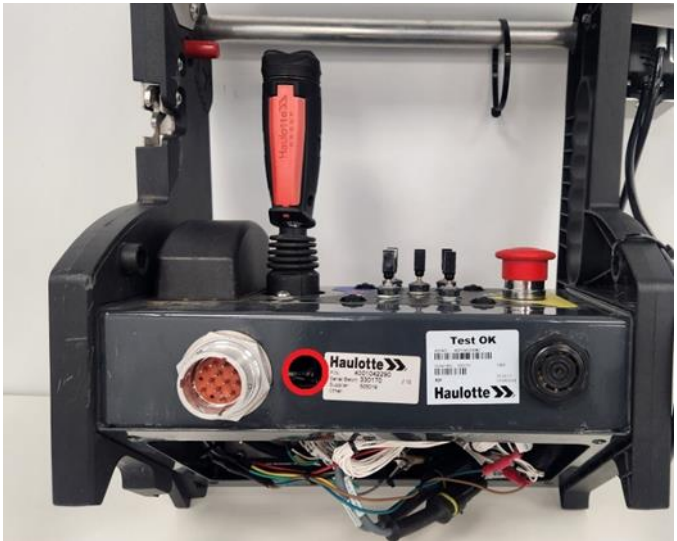
### Installation Time

The suggested time required to install the OverWatch is as detailed below

Task	Estimated Time (Minutes)
Open the operator control box	1
Drilling of all mounting holes for the various components	13
Mechanical assembly	10
Electrical assembly	10
Post installation system tests	10
Close the operator control box	1
<b>Total</b>	<b>45</b>

# Installation Instructions

## Operator Sensor

Step	Description	Diagram
1.	Remove the bottom cover of the control box to expose the internals.	
2.	Drill a 20mm hole at the back of the control box, using an existing hole and extending it to 20mm as depicted in the image.	

3. Mount the operator sensor to the mounting bracket using M4 washers and screws.



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	ME001873	Sensor Mounting Bracket
2	1	AS002039	OverWatch Operator Sensor
3	2	FA001235	M4 Plain washer
4	2	FA001417	M4 x 12mm Torx Butt Screw

4. Remove two screws on the left side of the control box enclosure and attach the sensor bracket in the same location as shown in the image.

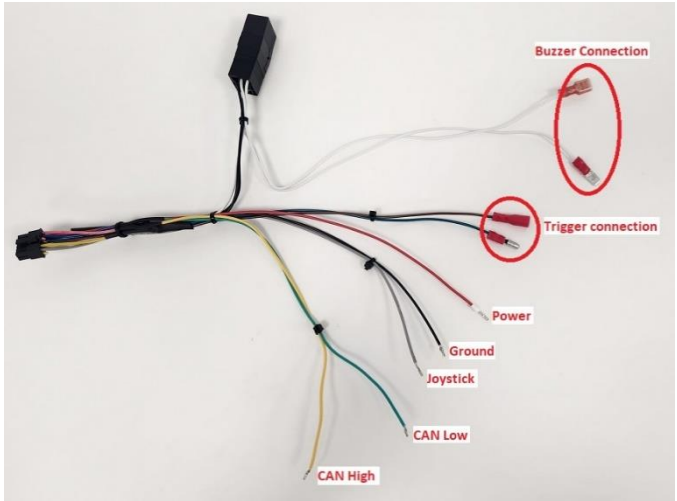
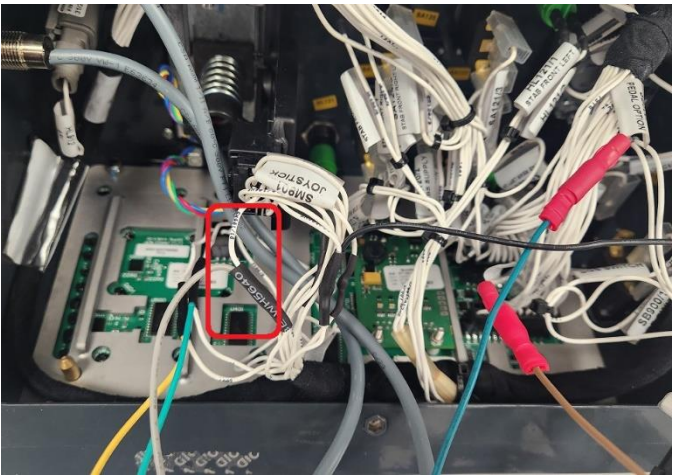


5. Install the cable gland and run the operator sensor cable as shown in the image and secure the cable by using a cable tie.

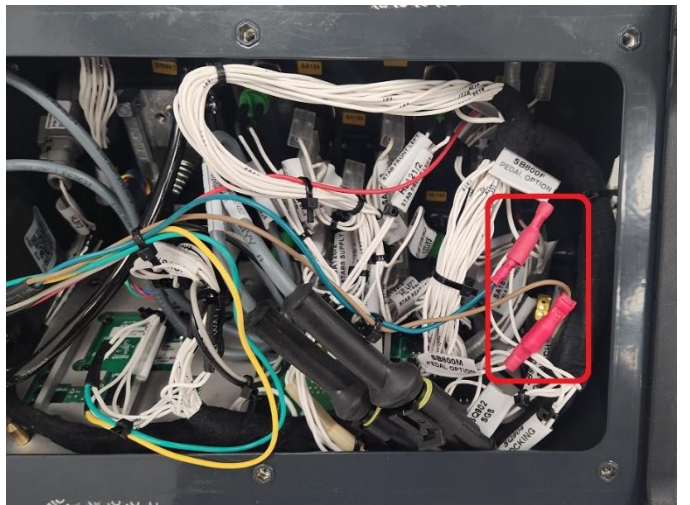




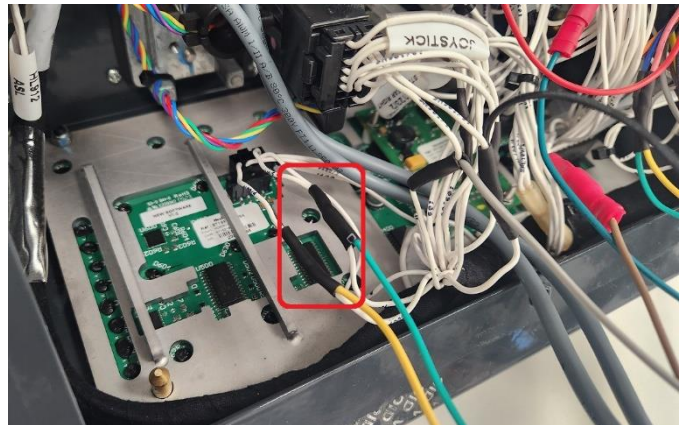
## Control Module

Step	Description	Diagram
1.	Wiring connections are made with <b>AS002365</b> OverWatch harness.	
2.	<p><b>Joystick Connection:</b></p> <p>Splice and solder the <b>Grey Joystick</b> wire from the OverWatch harness to the wire <b>SM901/10 (wire 73)</b> from the Joystick Switch <b>SM901</b>.</p> <p>Use heat shrink to secure the soldering joints.</p>	

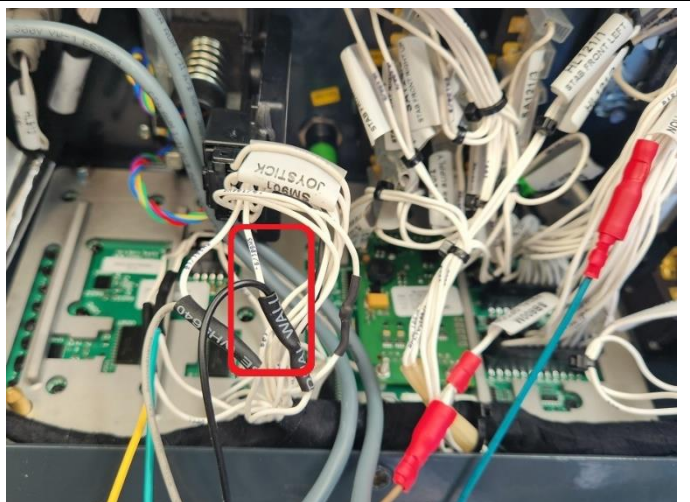
3. **Trigger Connection:**  
 Disconnect the bullet connection between the wires **37(SB800M)** and **37A(SB800F)**. Install the OverWatch harness bullet connectors in series. The **Brown** wire will go to the male connector (**wire 37**) and the **Green** wire will go to the female connector (**wire 37A**).



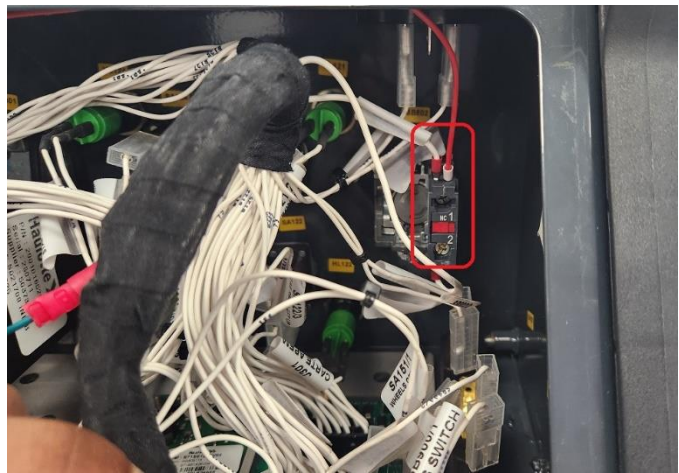
4. **CAN High and Low Connection:**  
 Splice and solder the **Yellow (CAN High)** wire from the OverWatch harness to the wire **J100/4 (wire 1002)**.  
 Splice and solder the **Green (CAN Low)** wire from the OverWatch harness to the wire **J100/5 (wire 1001)**.  
 Use heat shrink to secure the soldering joints.  
**Note:** To avoid incorrect connections, make sure to splice and solder the wires one at a time.



5. **Ground Connection:**  
 Splice and solder the **Black Ground** wire from the OverWatch harness to the wire **SM901/9** from the Joystick Switch **SM901**.  
 Use heat shrink to secure the soldering joints.



6. **Power Connection:**  
 At the back of the E-stop,  
 attach the **Red Power** wire from the  
 OverWatch harness into the E-stop  
**PIN1** as shown in the image.



7. **Buzzer Connection:**  
 At the back of the buzzer, disconnect  
 the connector with wire id **HA902-** and  
 replace with the female spade  
 connector from the relay. Connect the  
 disconnected wire **HA902-** to the male  
 spade connector from the relay as  
 shown in the image.



8. Mount the OverWatch ECU inside the  
 control box using the adhesive velcro  
 tape.  
**Make sure that the ECU is mounted so  
 the connectors are facing downwards.**



9. Connect the 8-pin connector from the operator sensor, and the 12-pin connector from the harness into the ECU. Place the relay next to the ECU using Velcro tape.

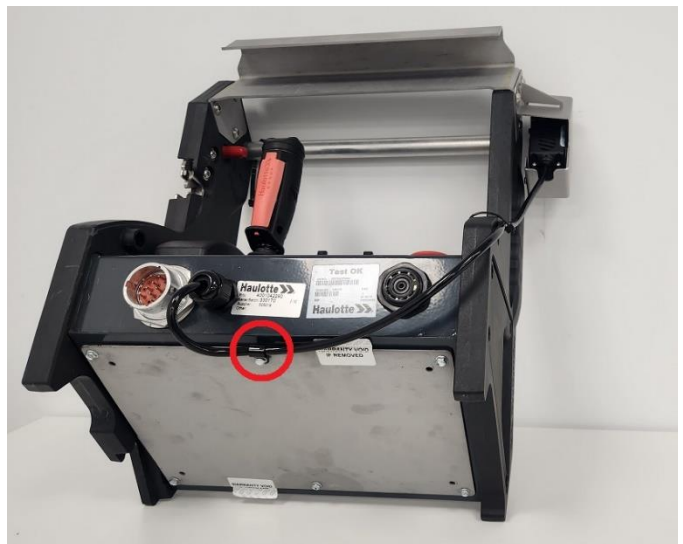


10. Re-attach the bottom plate to the control box. Secure the operator sensor cable by using a p-clip as shown in the image. After installation, power the machine for platform controls and press the emergency stop.

While the emergency stop is active the OverWatch should be switched off.

If the OverWatch remains powered, swap the connection to the correct side of E-Stop.

Care must be taken when closing the box, make sure all internal wires are clear of the box edges and bolt inserts, do not pinch or crush any internal wires when closing the boxes.



# Post Installation Configuration

## Overview

After the system has been installed it must be configured with the parameters to suit the machine. Follow the instructions below to configure the OverWatch.

## Minimum system requirements

Any smart phone, tablet or laptop that meets the following requirements:

- The device can connect to a Wi-Fi access point
- The device has an up-to-date web browser installed. Firefox, Chrome or Safari are recommended.

## Wi-Fi Connection & Web Page Access

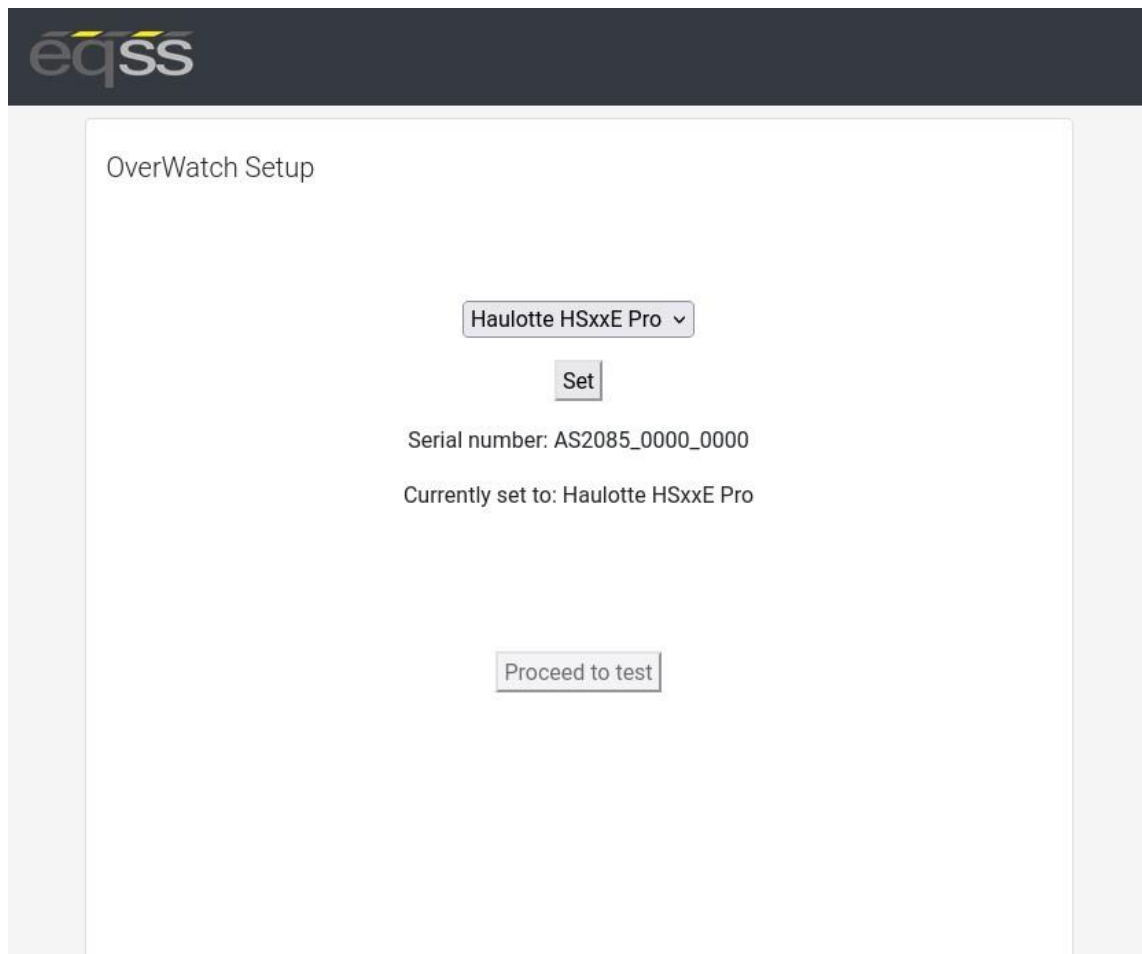
To enable the Wi-Fi connection on the OverWatch to complete the configuration follow the steps below.

1. Power down the platform control box with the ESTOP
2. Wait 5 seconds
3. Power up the platform control box with the ESTOP
4. While standing **in front of the operator sensor**, switch on the OverWatch
5. As the welcome chime starts to play, cover the sensor. The LED will flash white then black to acknowledge.
6. Remove your hand from the sensor. The LED will flash white then black to acknowledge.
7. After covering then uncovering the sensor this way 2 more times, "Wi-Fi On" will be announced
8. On your Wi-Fi enabled device (laptop, tablet, smartphone, etc), show the available wireless networks
9. Select the wireless network (starts with "overwatch") to connect to the OverWatch
10. When prompted, enter the **password 12345678**
11. Open your preferred web browser (Chrome, Firefox, Safari)
12. Enter the following into the address bar <http://192.168.4.1> to open the OverWatch main page

## Machine Model Selection

Follow the instructions below to configure the OverWatch.

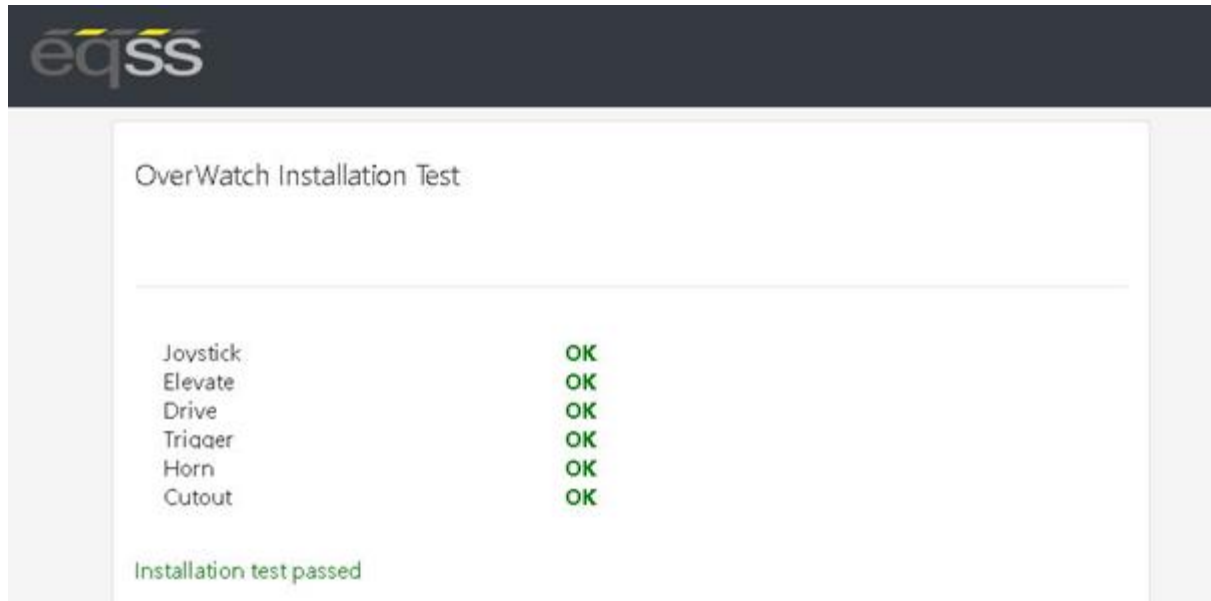
1. Select the Setup option
2. If there is a password field at the bottom of the page, follow the instructions in Change Model Configuration to obtain the password and enter the password field
3. Select the EWP Model from the drop-down list and click Set
4. Click on Proceed to test to begin the installation test



The screenshot shows the 'OverWatch Setup' interface. At the top left is the 'eqss' logo. The main content area is titled 'OverWatch Setup'. In the center, there is a dropdown menu showing 'Haulotte HSxxE Pro' with a downward arrow. Below the dropdown is a 'Set' button. Underneath the 'Set' button, the text 'Serial number: AS2085\_0000\_0000' is displayed. Below that, the text 'Currently set to: Haulotte HSxxE Pro' is shown. At the bottom of the setup area is a 'Proceed to test' button.

## Installation Test

After the model configuration has been set or updated an Installation Test must be performed. This will ensure the installation has been correctly performed and the OverWatch is functioning correctly. Follow the instructions on the web page to complete the Installation Test.




## Change Model Configuration

To reconfigure the OverWatch for a different model requires an authorisation password. The authorisation password is generated from the EQSS website. The EQSS website requires a login username and password, contact EQSS for these details.

Follow the instructions below to obtain an authorisation password. It is important to note that each ECU has a unique serial number and a unique password.

1. Open your web browser and enter the following into the address bar <http://www.eqss.com.au/overwatch> to open the Login page
2. Enter your username and password
3. Enter the EUC serial number which is shown on the setup page or on the ECU serial number sticker, also enter the owner and model details of the EWP and then click Generate Hash
4. The generated Hash code or password can be used to change the model configuration.



The screenshot shows a web interface with the EQSS logo at the top left. Below the logo is a section titled 'Details' containing a table of user and system information.

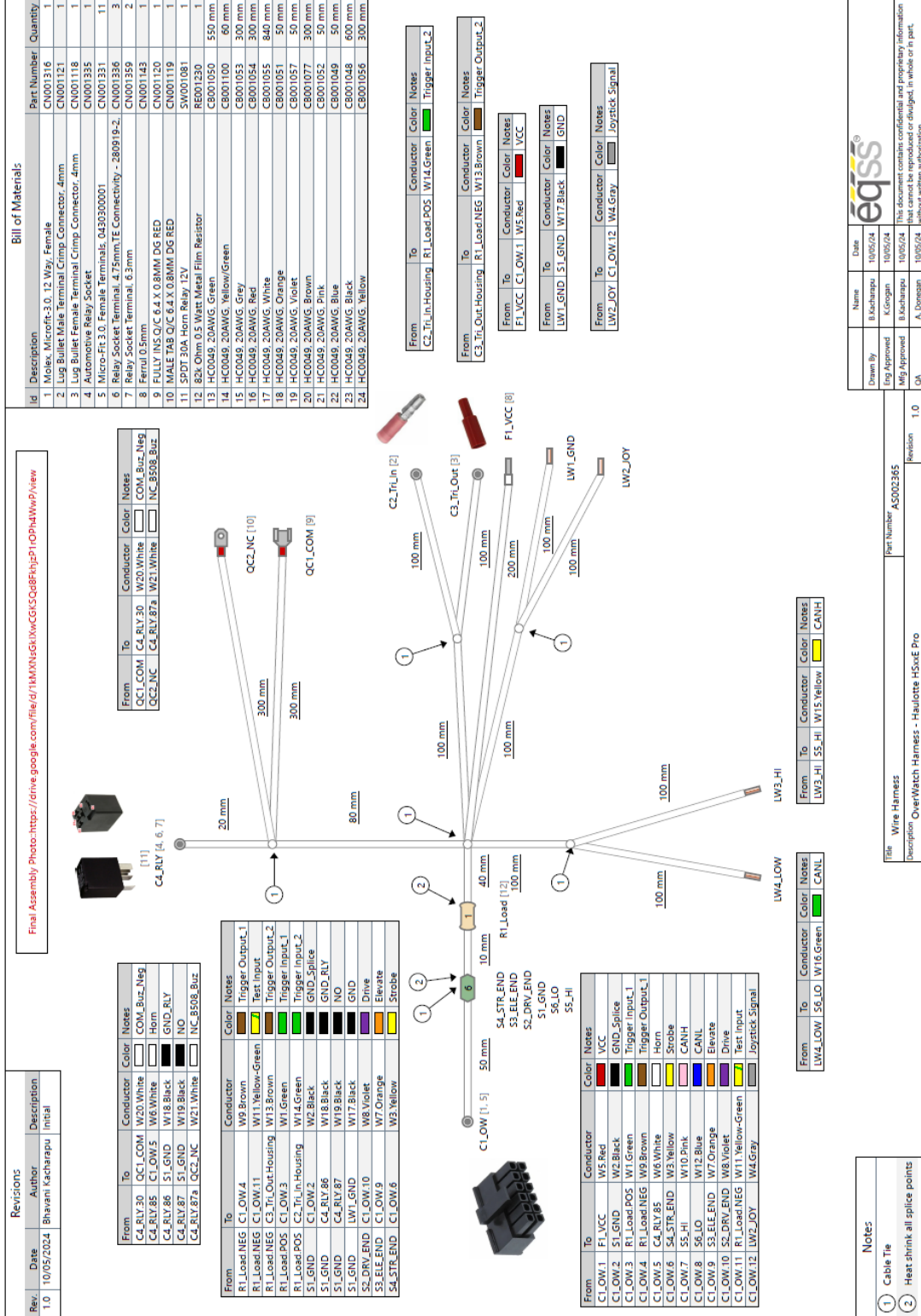
Details	
Name	John Smith
Email	john.smith@company.com
Phone	+61 9 9999 9999
EQSS Overwatch Serial Number	6253E-2004-0000
Scissor Lift Model	Haulotte HSxxE Pro
Hash	50244



## System Settings

Setting Name	Description	Default
max_safe_velocity	This is the velocity threshold for the cutout in cm/s for drive mode.	95
max_safe_displacement	This is the maximum permitted distance in cm the operator may be away from the calibration position in drive mode.	50
max_safe_velocity_elevate	This is the velocity threshold for the cutout in cm/s for elevate mode.	75
max_safe_displacement_elevate	This is the maximum permitted distance in cm the operator may be away from the calibration position in elevate mode.	50
zone_obstruction	If the lidar sensor reading is below this, the lidar is considered to be obstructed (with paint or thick coat of dust) and the system is cutout until the obstruction is cleared.	5
zone_minimum	The minimum calibration distance. If the operator is closer to the sensor than this "operator zone" will be announced.	15
zone_maximum	The maximum calibration distance. If the operator is further from the sensor than this "operator zone" will be announced.	120
throttle_time	Period after the trigger is pressed (ms) during which initial velocity reading is computed.	2000

# Harness Drawing AS002365



## Replacement Parts

Replacement parts for this OverWatch kit are available from EQSS, please email [sales@eqss.com.au](mailto:sales@eqss.com.au)

Shown below are the part numbers for the major components included in this model specific kit.

Part Number	Description
AS002364	OverWatch - Complete kit Haulotte HSxxE Pro
AS002039	OverWatch - Operator Sensor with M20 gland
AS002157	OverWatch - Electronic Control Unit (ECU)
AS002365	OverWatch - Haulotte HSxxE Pro Harness
ME001873	OverWatch - Sensor Guard V2