INSTALL MANUAL

EQSS Model6253 – OverWatch
Haulotte Star 6/8S

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

AUTHORS: Kieren Grogan	AUTHORISED BY: Kieren Grogan	CHECKED BY: Andrew Donegan

DOCUMENT ABSTRACT:
This Installation Manual details the manufacturer's installation instructions for installing the Model6253 OverWatch on a Haulotte Star 6/8S vertical mast.

PRODUCT NAME:
Model6253 OverWatch Operator Detection System

REFERENCE DOCUMENTS:
DO0001195 Model6253 OverWatch User Manual

CURRENT DOCUMENT REVISION:
1.2

REVISION INFORMATION:

- 1.0 Initial Document Creation for installation on a Haulotte star 6 / 8S vertical mast
- 1.1 Update device configuration to include OverWatch app.
- 1.2 Inclusion of sensor mounting angle

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in this publication regarding this device's applications and the like, is provided only for your convenience and may be superseded by updates.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 5.2mm
6	Drill 6.0mm
7	Metric sockets or spanners
8	Needle nose pliers
9	Screw drivers

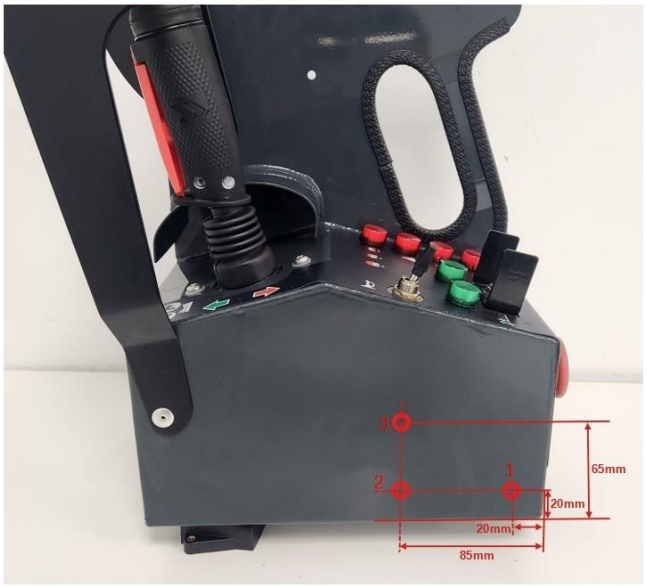
Installation Time

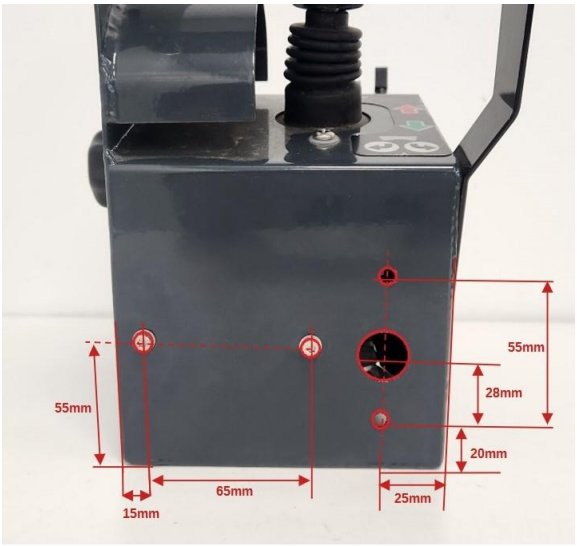
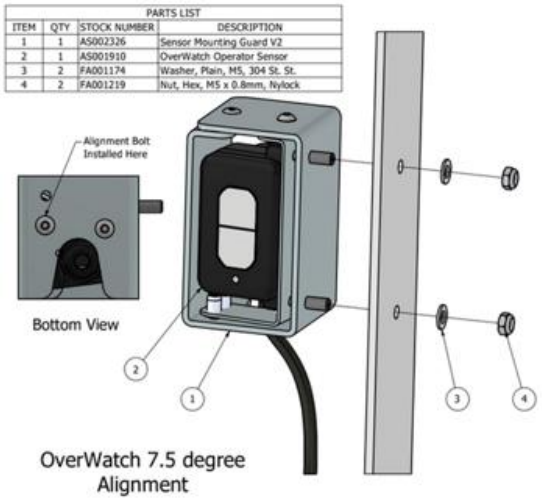
The suggested time required to install the OverWatch is as detailed below

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
Total	**45**

Installation Instructions

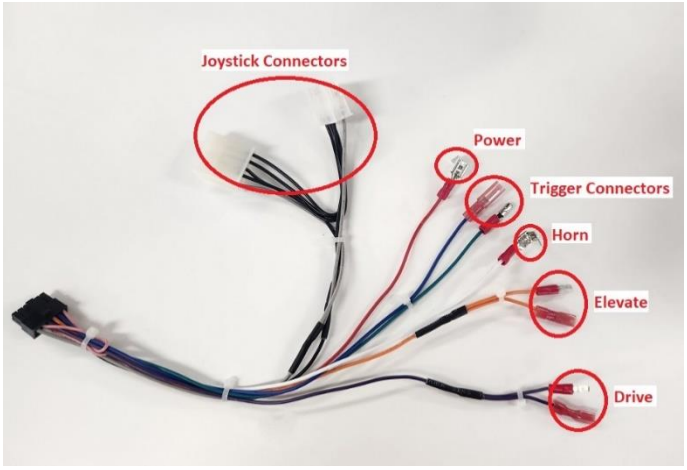
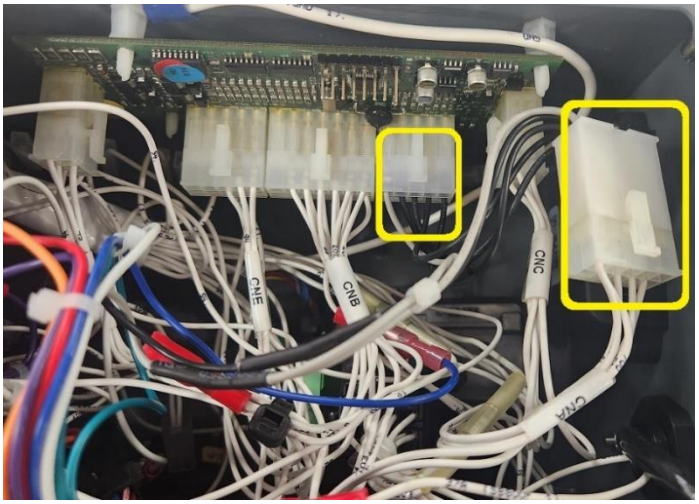
Operator Sensor

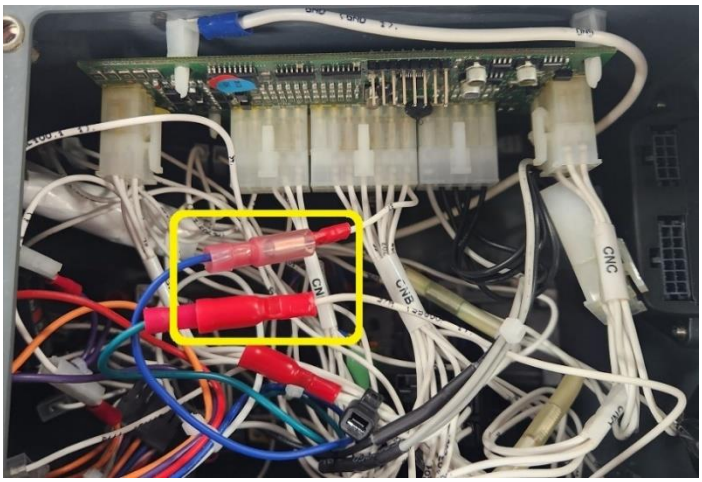
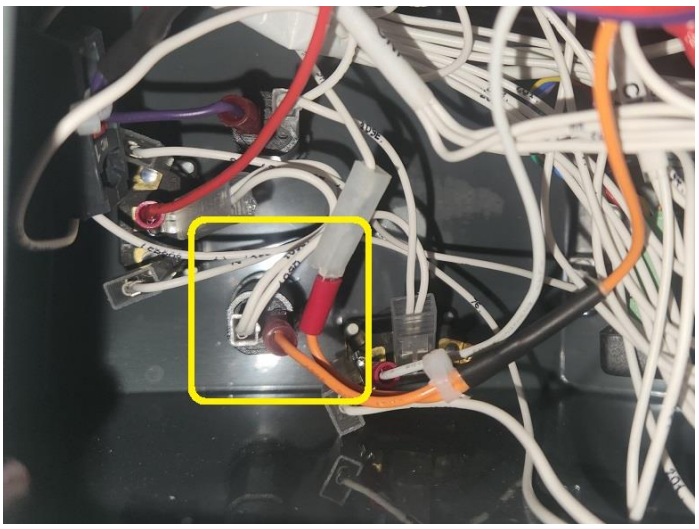
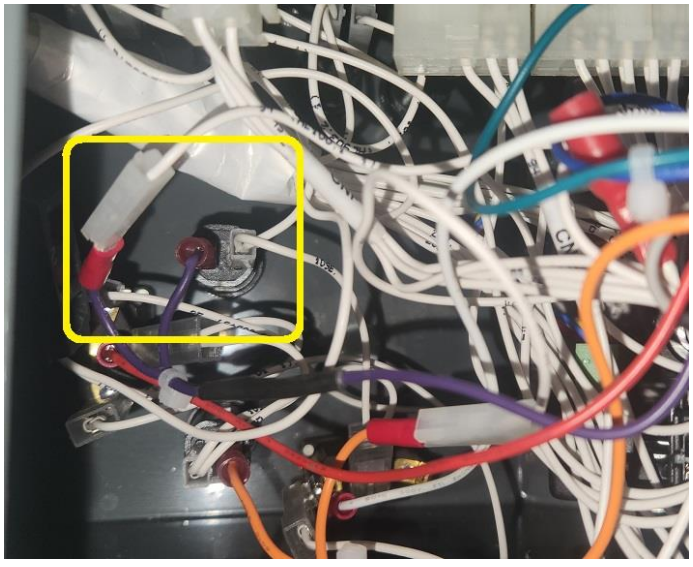
Step	Description	Diagram
1.	Remove the bottom cover of the control box.	
2.	Drill three **5.2mm** holes into the metal enclosure in the location as shown. While drilling, monitor the electrical wires and move them out of the way as needed to prevent tangling or damage. Limit the drilling depth to a maximum of approximately 5-7 mm. These holes are required to mount the operator sensor mounting bracket. **Hole1: 20mm** left and **20mm** up from the bottom vertical edge to the centre of the hole **Hole2: 85 mm** left and **20 mm** up from the bottom vertical edge to the centre of the hole. **Hole3**: **85 mm** left and **65 mm** up from the bottom vertical edge to the centre of the hole.	

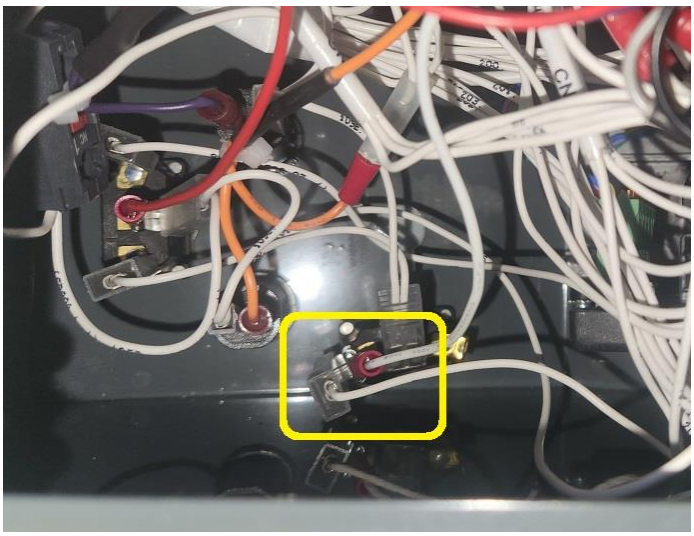
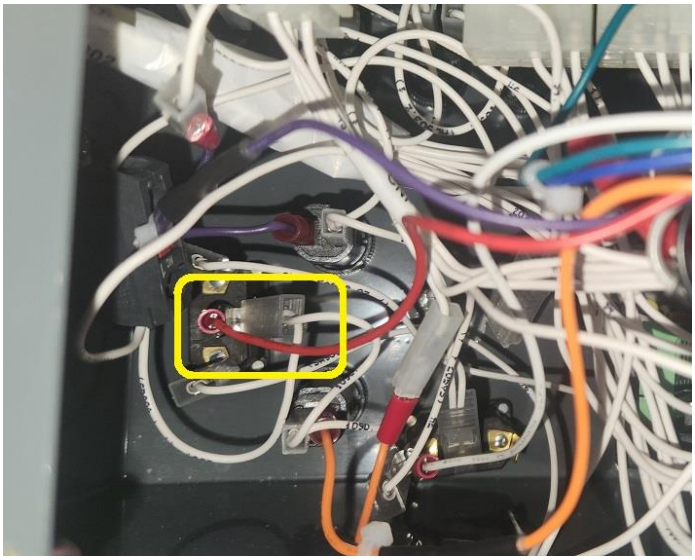
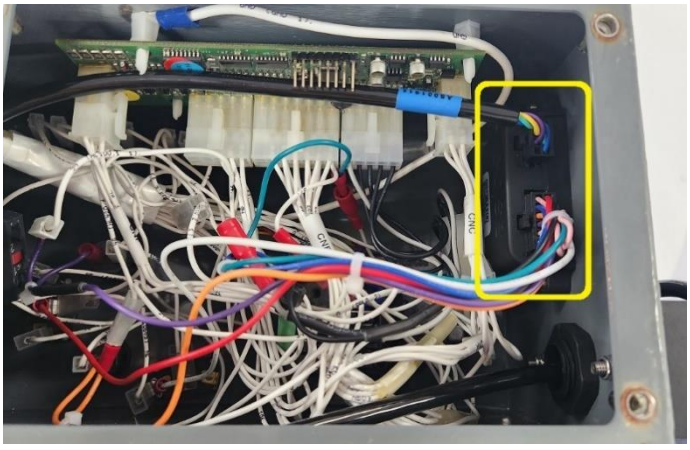
3.	Drill a **20mm** hole to run the operator sensor M20 Gland into the metal enclosure. The position of the hole is detailed as in the image. Drill four **5.2mm** holes to install the ECU module and cable gland cover as sown in the image.	
4.	**Sensor Mounting Guard** Attach the operator sensor and guard to the mounting bracket (ME001889) at the 30-degree position using the M5 nuts and washers. Make sure that the sensor is on the 7.5- degree angle, such that it is twisted outwards from the joystick controller. **The 7.5-degree twist is achieved by rotating the sensor inside the assembly and using the bolt hole as show in the image.**	PARTS LIST ITEM / QTY / STOCK NUMBER / DESCRIPTION 1 / 1 / AS002326 / Sensor Mounting Guard V2 2 / 1 / AS001910 / OverWatch Operator Sensor 3 / 2 / FA001174 / Washer, Plain, M5, 304 St. St. 4 / 2 / FA001219 / Nut, Hex, M5 x 0.8mm, Nylock  OverWatch 7.5 degree Alignment

5.	Mount the operator sensor and sensor mounting bracket to the control box enclosure by using the nuts, bolts, and washers. Use the following hardware from the kit. 5 x M5 x 16mm Button Head Screws 5 x M5 Lock Nuts 10 x M5 Washers	
6.	Install the cable gland and cable gland cover in the pre-drilled holes. Route the operator sensor cable as shown in the image and secure the cable to the sensor mounting bracket by using the P-clips.	

Control Module

Step	Description	Diagram
1.	Wiring connections are made with **AS002004** harness.	
2.	**Joystick Connection:** Disconnect the 7-pin connector (**CNA**) from the PCB and install the OverWatch harness connection in series. **Warning: Check that the CN-A plug is connected to CN-A and not to CN-E (as the connectors are the same)**	

3.	**Trigger Connection:** Disconnect the bullet connection between the wires **37** and **37A**. Install the OverWatch harness bullet connectors in series. The blue wire will go to the male connector (**wire 37**) and the green wire will go to the female connector (**wire 37A**).	
4.	**Elevate Connection:** At the back of the elevate light, disconnect the connector with wire ID **46** and install the OverWatch orange wire in between the **wire 46** and the elevate light as shown in the image. **Note: Check that the connectors are tight, use needle nose pliers to squeeze the connection if necessary**	
5.	**Drive Connection:** At the back of the drive light, disconnect the connector with wire ID **94** and install the OverWatch purple wire in between the **wire 94** and the drive light as shown in the image. **Note: Check that the connectors are tight, use needle nose pliers to squeeze the connection if necessary**	

6.	**Horn Connection:** At the back of the horn switch, disconnect the connector with wire ID **34** and install the white wire from the OverWatch harness inline using the spade connector.	
7.	**Power Connection:** Disconnect the connector with wire ID **109(b)** located on the middle of the **drive/lift** switch and install the red wire from the OverWatch harness inline using the spade connector. **Note: If the Overwatch harness does not have the spade connector but instead a fork connector on the red wire. Power can also be taken from Terminal 1 of the E-stop.**	
8.	Mount the ECU module inside the control box by using the supplied M4 bolts and washers. Connect the 8-pin connector from the operator sensor, and the 12-pin connector from the harness into the ECU. Install the cover back onto the bottom of the joystick enclosure.	

9.	Re-attach the bottom plate to the control box. 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.	

Device Configuration

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.

Install the OverWatch App

The OverWatch App is available for download on the Apple App Store and the Google Play Store. The App is used to replace the tradition web browser method for software updates, diagnostics and configuration of the EQSS OverWatch Secondary Guarding System. Search for the “EQSS OverWatch” App or download using the QR codes below

Download on the App Store

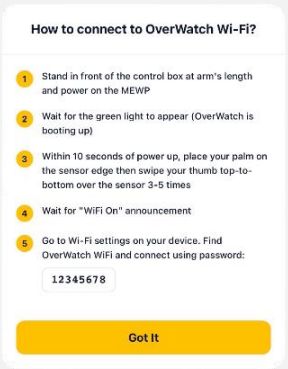
GET IT ON Google Play

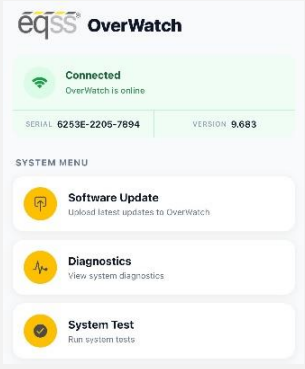
Open the App

Open the EQSS OverWatch App on your device, when the App starts it will automatically download the latest OverWatch software from the web.

Enable Wi-Fi on the Overwatch

The OverWatch connects to the App via Wi-Fi. Follow the onscreen instructions under **Connect to OverWatch Wi-Fi** in the App



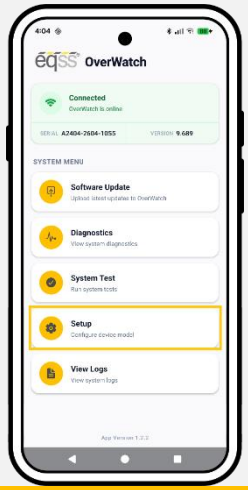


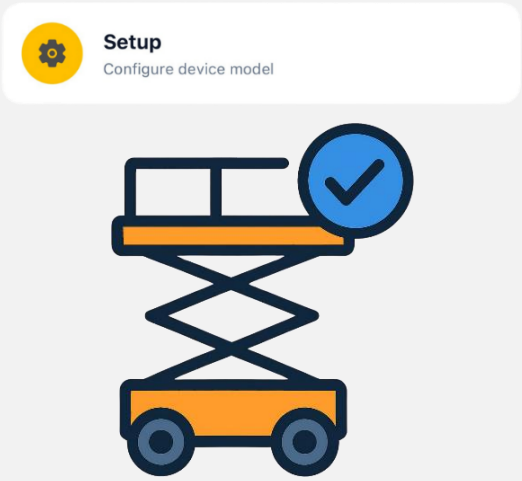
Machine Setup

Set the Machine Model

Haulotte Star 6 Version 2 Or Haulotte Star 8S Version 2

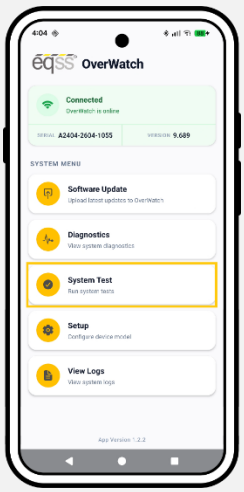
After a new kit installation or a software update, the OverWatch must be told what machine model it is installed on. Each machine model has unique settings such as input thresholds from the electronics and parameters relating to the sensor mounting position. When the OverWatch is connected to the App on Wi-Fi, select setup to select the scissor lift model. Refer to the specific machine installation manual for more information.

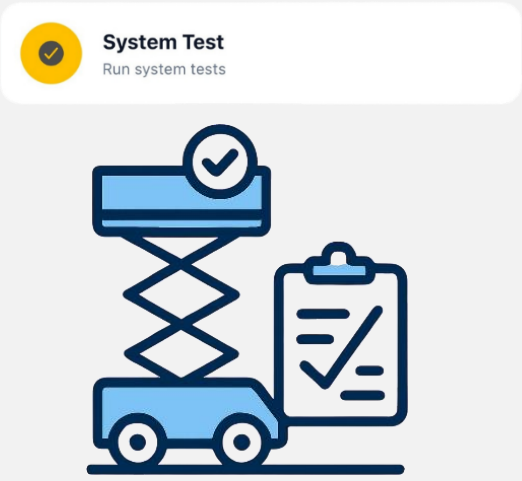


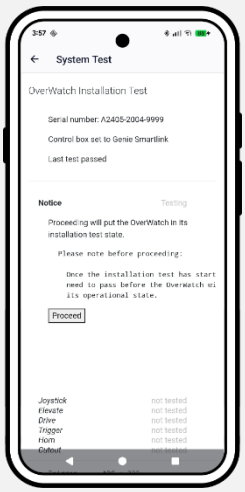


System Test

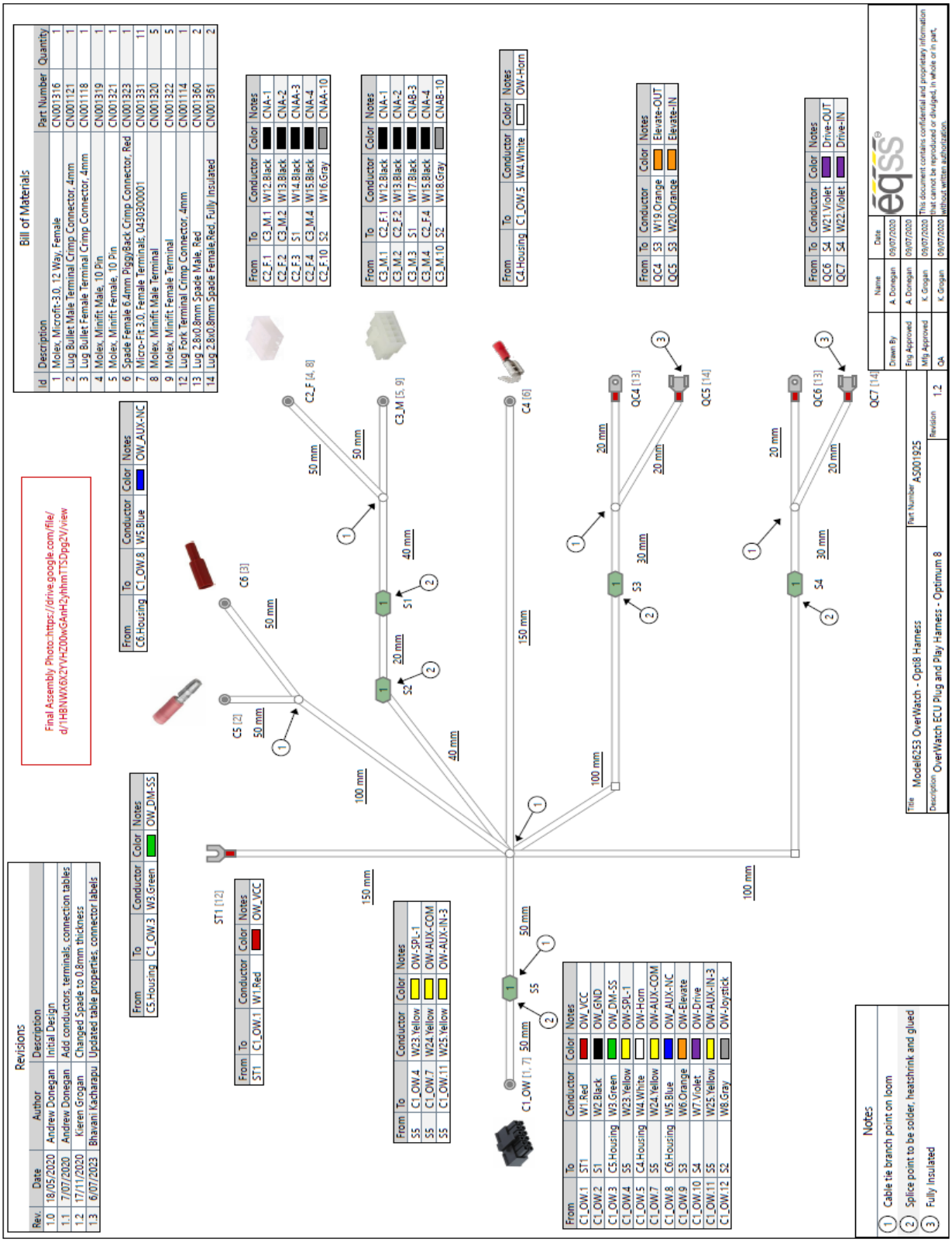
The system test is used to verify the OverWatch is installed correctly and all signals are working. The system test is used on a new installation or after a software update. The onscreen prompts will guide the test process, and the test must pass for the OverWatch to become operational.







Harness Drawing AS002004



Replacement Parts

Replacement parts for this OverWatch kit are available from EQSS, please email sales@eqss.com.au

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

Part Number	Description
AS002538	OverWatch - Complete kit Haulotte 6S/8S Vertical Mast
AS001910	OverWatch - Operator Sensor with M20 gland
AS001916	OverWatch - Electronic Control Unit (ECU)
AS002004	OverWatch - Haulotte 6S/8S Harness
AS002326	OverWatch - Sensor Guard V2
ME001889	OverWatch - Sensor Bracket
ME001902	OverWatch - Sensor Mounting Bracket