

DHU4 Installation Instructions

Model Name: **DHU4**



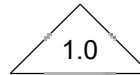
Picture showing the Toyota DHU4 unit to the left. Connected with a four-port mini-fakra to the Smarteq antenna to the right.

DHU4 is a telematic node, intended to be mounted into a Toyota forklift. It is always stationary installed in a forklift where it has several wired connections e.g., power, can buses etc.

It also communicates wireless with LTE, WiFi and Bluetooth technology. It has an external antenna connected.

Following Pages

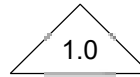
The following pages shows a typical forklift installation of the DHU4 and antenna. These pages shall be seen as one example of a forklift installation. More forklift variants exist, but the use is the same and the installation is similar.

**DHU4 and Antenna Installation****Model: RRE160****NPD****REVISION HISTORY**

Date	Revision Notes	PIC	Approved	Revision
9/24/2021	Initial Draft	VP		1.0

Table of Contents

1.	Purpose.....	3
2.	Scope.....	3
3.	Installation Instructions	3
3.1	Antenna and DHU Installation location overview	3
3.2	DHU4 Assembly Installation and Cables Connection	4
3.2.1	Mount the DHU4 onto the bracket as shown in the illustrations below. Align the DHU4 holes to the bracket holes and hand start the screws, then tighten.....	4
3.2.2	Use the electric impact to tighten the screws to TT = 4.5 Nm C.....	5
3.3	DHU4 Assembly Installation and Cables Connection	5
3.3.1	Install the DHU4 assembly with the bracket to the right-hand side of the drive motor.	5
3.4	Antenna Installation.....	6
3.4.1	For Cabin and STD models, install the antenna on the roof.....	6
3.4.2	Align the antenna on the roof in dedicated hole. Hand start the bolt from below, then tighten.....	6
3.5	Antenna Cable Installation	8
3.5.1	Antenna Cable Location Overview. Applicable for both Cabin and STD models. Antenna Cable Installation is routed along Main Roof Cabling and Main Driver Cab Cabling.	8
3.5.2	Antenna Cable Installation is routed along with Main Roof Cabling and Driver Cab Cabling. First press clamp into roof bracket, then place the cable into it. Make sure clamp is secure in bracket and the cable is secure within the clamp.	9
3.5.3	Secondly press clamp into roof post bracket, then place the cable into it. Make sure clamp is secure in bracket and the cable is secure within the clamp.	9



DHU4 and Antenna Installation	Model: RRE160	NPD
--------------------------------------	----------------------	------------

3.5.4 For both Cabin and STD models, Main Roof Cabling is connected to Main Driver Cab Cabling with connectors X60 and X61. Make sure the connectors are secured in the tabs and that the cable is also securely installed to the clamps. 10

3.5.5 Main Driver Cab Cabling. Make sure cabling is secured to the clamps and clamps secured into chassi. 10

3.5.6 Final antenna cabling and connection to DHU4. Make sure antenna cabling is secured to the clamps and antenna connectors are securely installed into the DHU4. 11

DHU4 and Antenna Installation	Model: RRE160	NPD
-------------------------------	---------------	-----

DHU4 and Antenna Installation Instructions

1. Purpose

This document describes the DHU4 and antenna installation performed on RRE 160 truck model.

2. Scope

This document applies to DHU4 and antenna installation used by TOYOTA Material Handling Manufacturing Sweden AB (TMHMS).

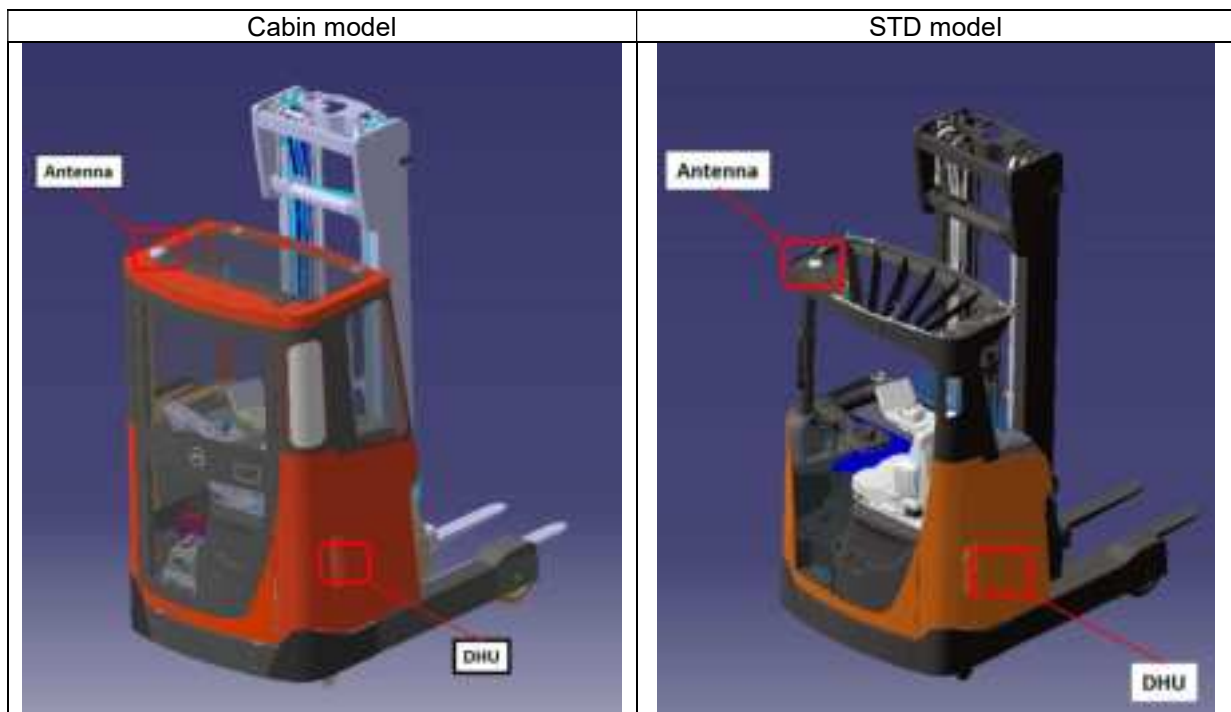
IMPORTANT: These installation instructions are for RRE160 models only. Installation instructions for other forklift truck models may be similar.

3. Installation Instructions

WARNING! Wear safety glasses, safety shoes and gloves at all times. Failure to do so may result in serious injury or death.

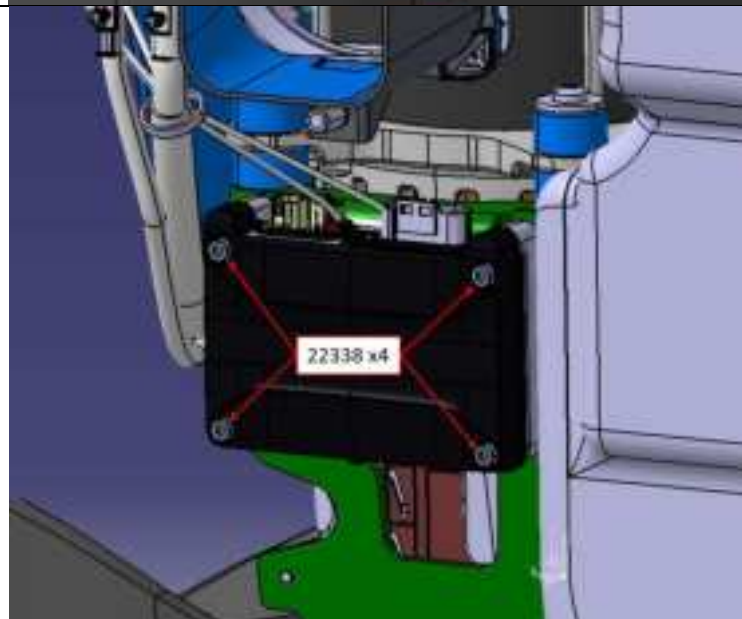
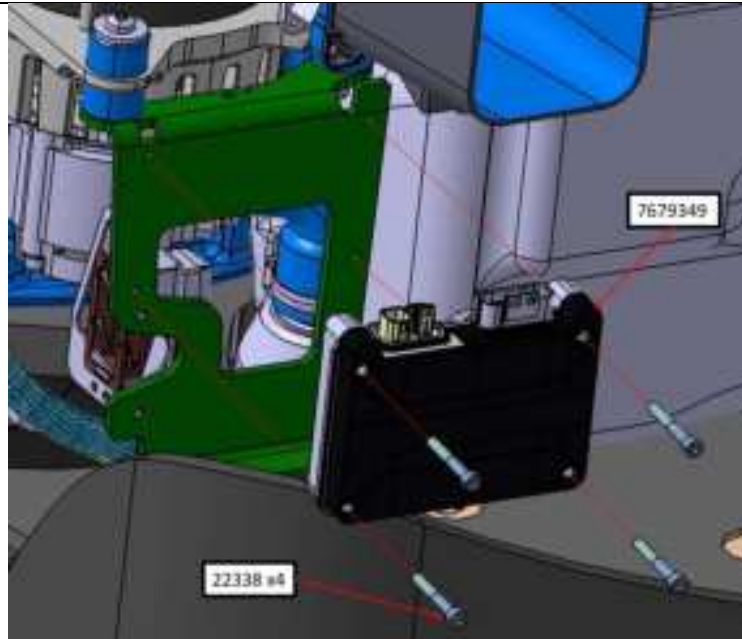
WARNING! Watch hand placement for pinch points. Failure to do so may result in serious injury.

3.1 Antenna and DHU Installation location overview



DHU4 and Antenna Installation**Model: RRE160****NPD****3.2 DHU4 Assembly Installation and Cables Connection**

- 3.2.1** Mount the DHU4 onto the bracket as shown in the illustrations below. Align the DHU4 holes to the bracket holes and hand start the screws, then tighten.

Sub Assembly DHU4 Controller

DHU4 and Antenna Installation	Model: RRE160	NPD
-------------------------------	---------------	-----

--

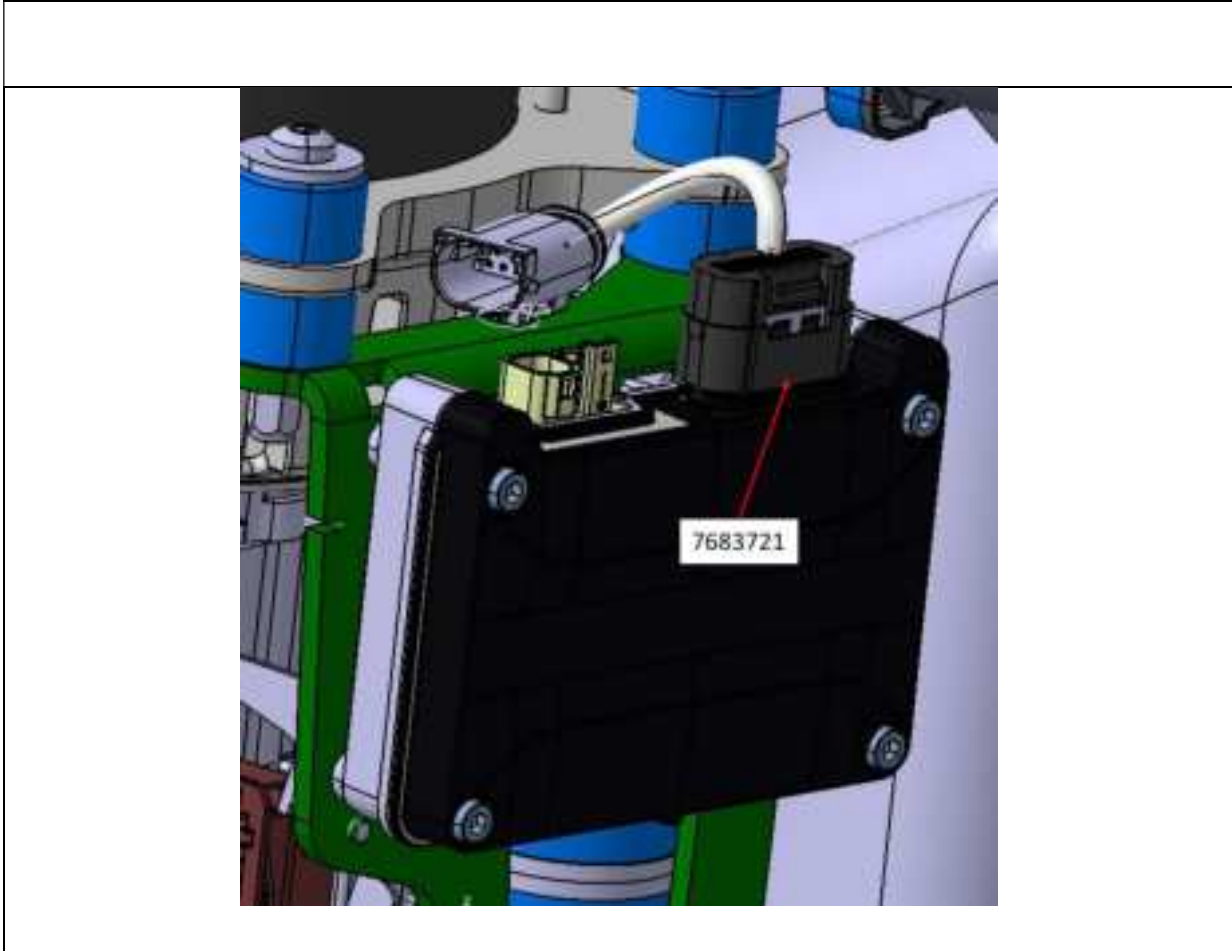
CAUTION! Do not handle DHU4 assembly roughly or drop it. If the DHU4 is handled roughly or dropped, it will need to be replaced due to damage and functioning issues.

3.2.2 Use the electric impact to tighten the screws to TT = 4.5 Nm C.

3.3 DHU4 Assembly Installation and Cables Connection

3.3.1 Install the DHU4 assembly with the bracket to the right-hand side of the drive motor.

Sub Assembly DHU4 Controller



DHU4 and Antenna Installation

Model: RRE160

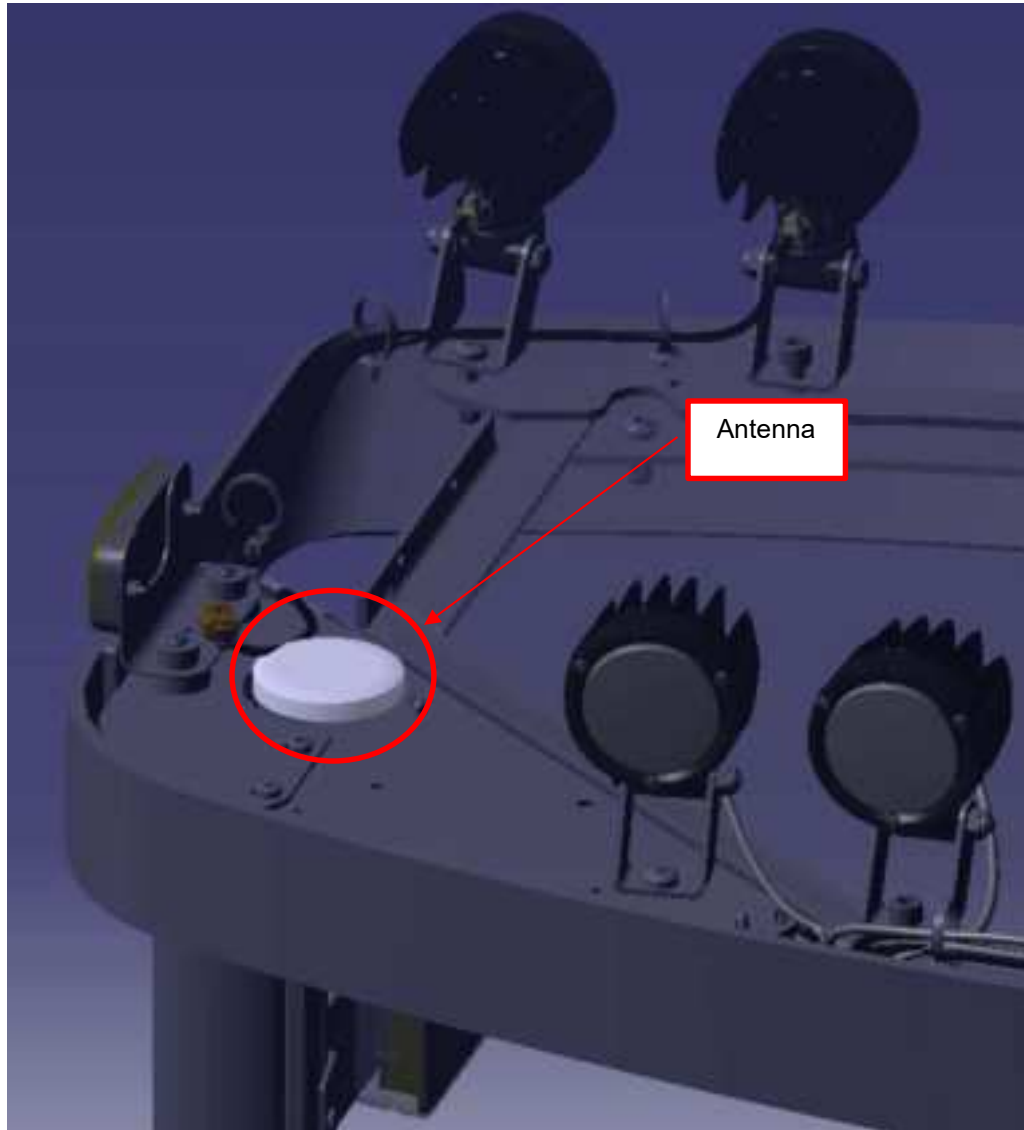
NPD

3.4 Antenna Installation

WARNING! The antenna should not be installed within 200 mm (8 inches) of the operator.

3.4.1 For Cabin and STD models, install the antenna on the roof.

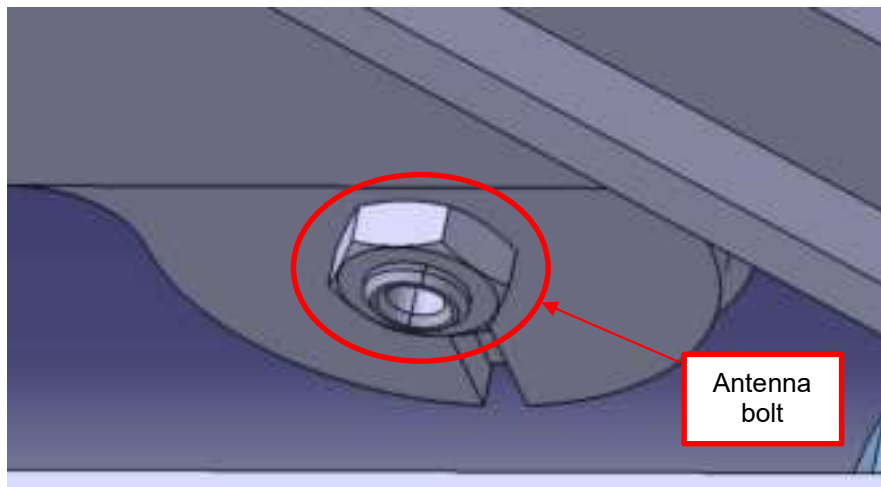
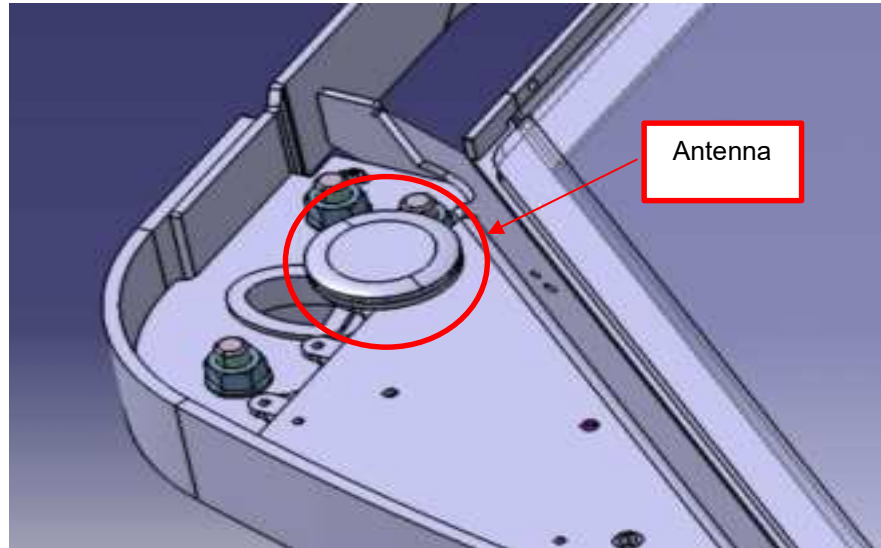
3.4.2 Align the antenna on the roof in dedicated hole. Hand start the bolt from below, then tighten.



DHU4 and Antenna Installation

Model: RRE160

NPD

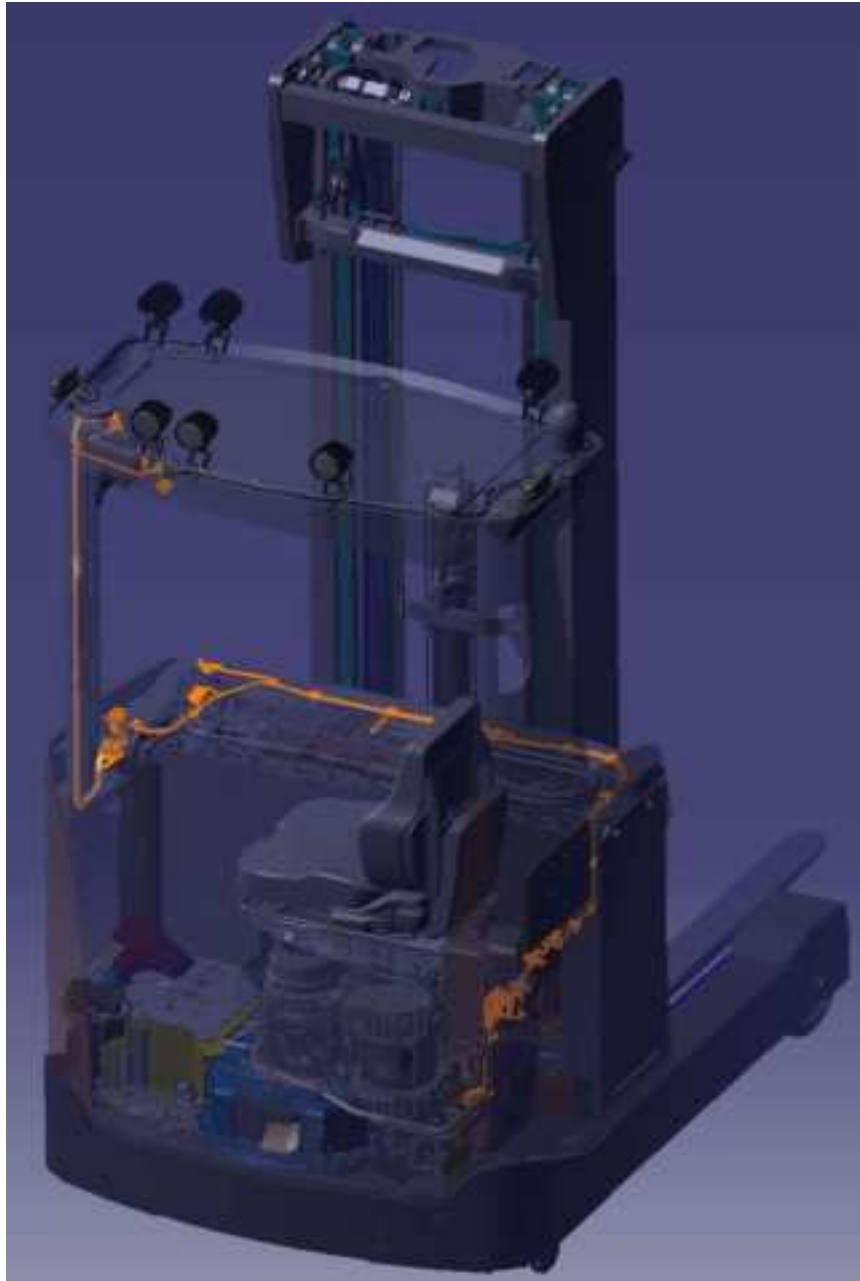


DHU4 and Antenna Installation**Model: RRE160****NPD**

CAUTION! Do not handle the cable assembly roughly or drop it. If the cable assembly is dropped, it will need to be replaced due to damage and functioning issues.

3.5 Antenna Cable Installation

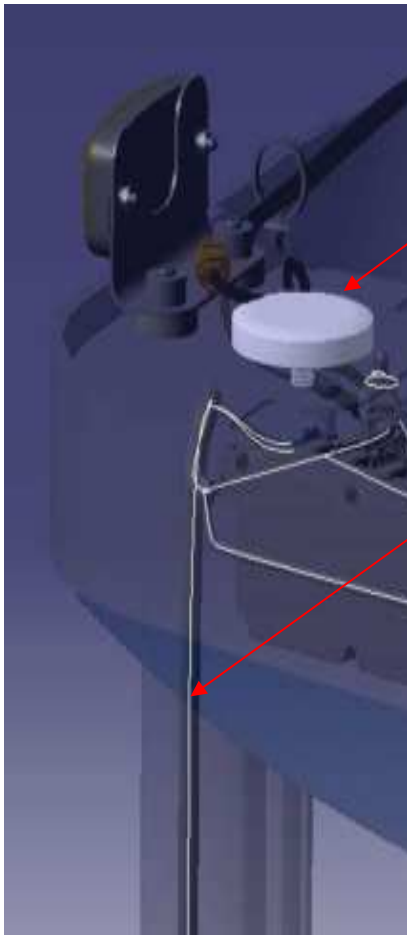
3.5.1 Antenna Cable Location Overview. Applicable for both Cabin and STD models. Antenna Cable Installation is routed along Main Roof Cabling and Main Driver Cab Cabling.



DHU4 and Antenna Installation**Model: RRE160****NPD**

3.5.2 Antenna Cable Installation is routed along with Main Roof Cabling and Driver Cab Cabling. First press clamp into roof bracket, then place the cable into it. Make sure clamp is secure in bracket and the cable is secure within the clamp.

3.5.3 Secondly press clamp into roof post bracket, then place the cable into it. Make sure clamp is secure in bracket and the cable is secure within the clamp.



Antenna

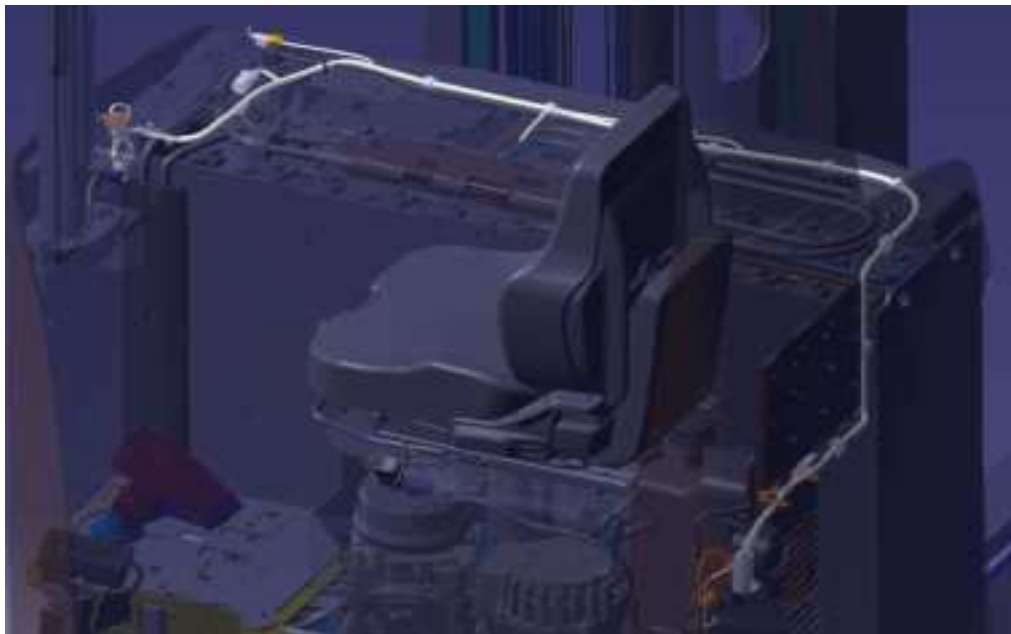
Antenna
cablingMain Roof
Cabling

DHU4 and Antenna Installation**Model: RRE160****NPD**

- 3.5.4** For both Cabin and STD models, Main Roof Cabling is connected to Main Driver Cab Cabling with connectors X60 and X61. Make sure the connectors are secured in the tabs and that the cable is also securely installed to the clamps.



- 3.5.5** Main Driver Cab Cabling. Make sure cabling is secured to the clamps and clamps secured into chassis.



DHU4 and Antenna Installation**Model: RRE160****NPD**

3.5.6 Final antenna cabling and connection to DHU4. Make sure antenna cabling is secured to the clamps and antenna connectors are securely installed into the DHU4.

