

Upgrading the Modem and LTE Antenna

Tools needed:

- 2mm Hex Driver
- 2.5mm Hex Driver
- 3mm Hex Driver
- 7mm Socket Wrench
- Zip Ties

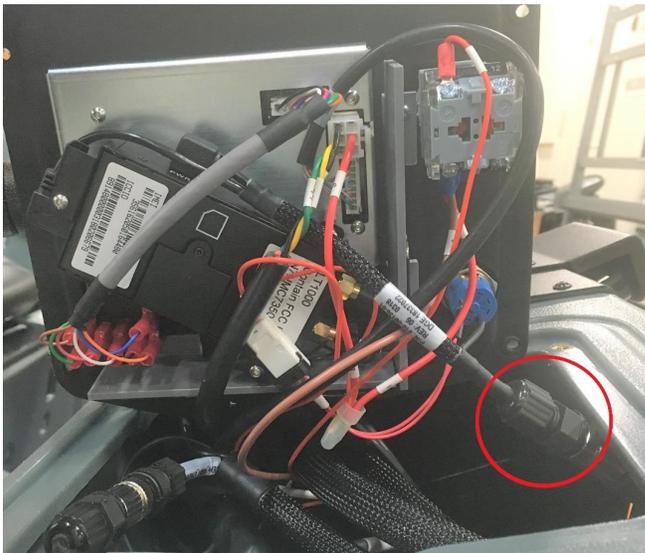


IMPORTANT

Turn the key to power off the scrubber. Raise the seat and disconnect the red battery coupling.



Disconnect the cable shown below and set it aside.



Unscrew the metal LTE antenna connectors.

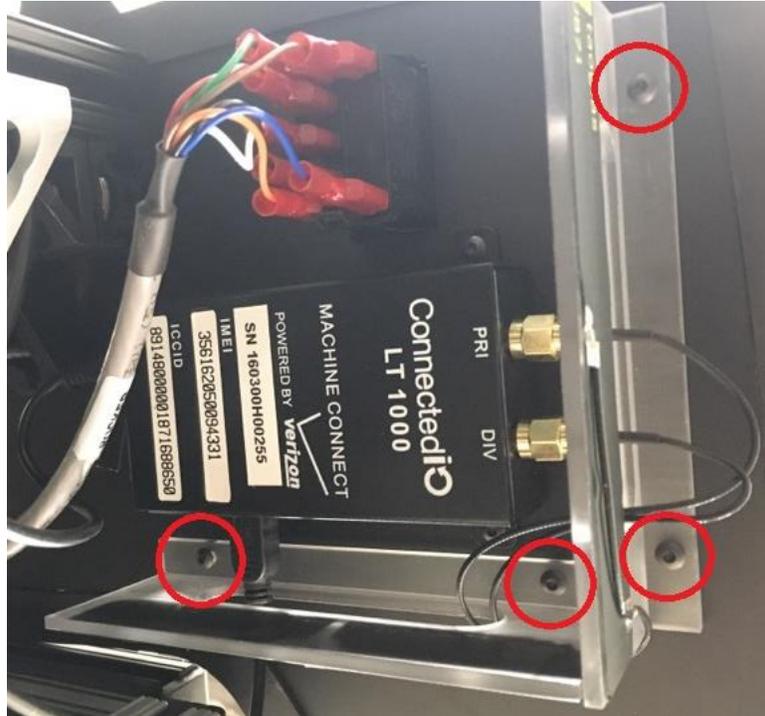


Use a 2 mm hex driver to remove the 3 following mounting screws.



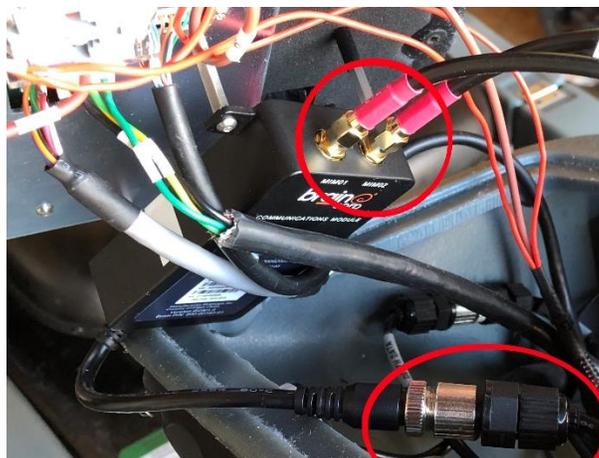
The Modem should now be freed.

Remove the old style antennae brace and put it aside.



Install the new modem.

Review the following picture for guidance. However, this modem shown needs to be rotated along the axis, so that the Brain logo is facing up. This will minimize the hardware foot print.



Part 2: Replacing the LTE Antenna

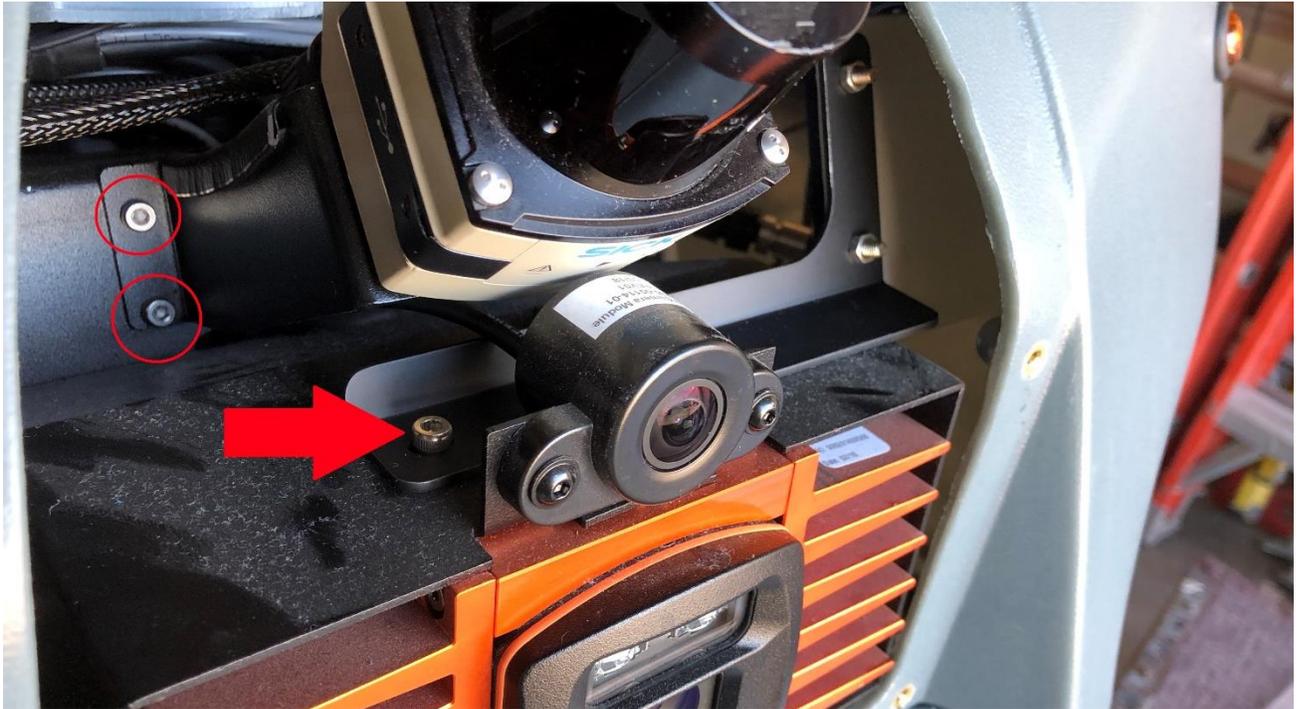
Unscrew and detach: 1) Front center black panel (8x 2.5mm hex)

2) Left UI screen panel (4x 2.5mm hex)

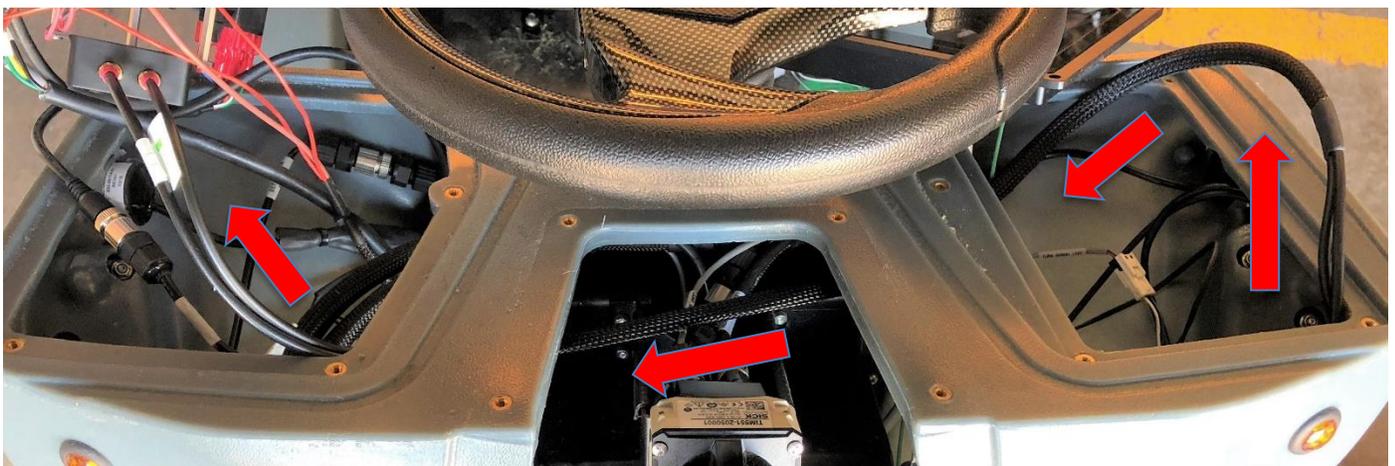
Assemble the bracket, mounting case and antennae. Use the adhesive pad to hold the modem flush to the plastic case.



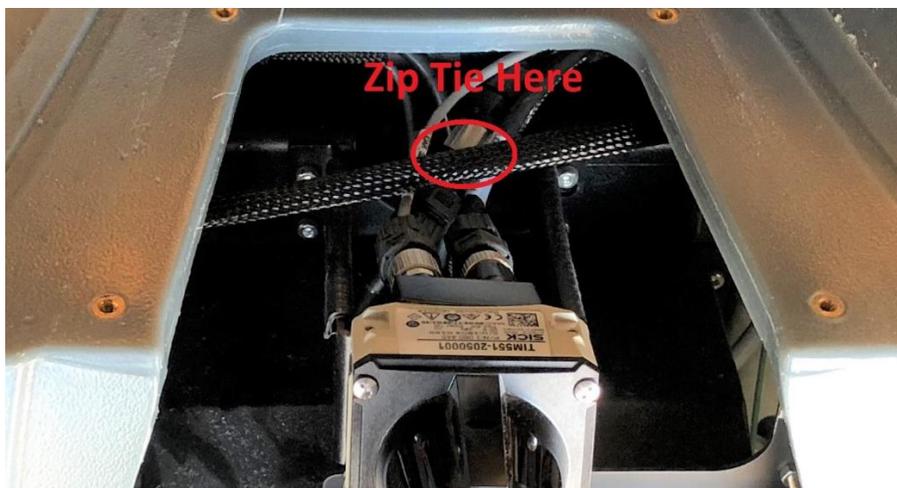
To mount the Antennae, loosen/remove the Slanted LIDAR hex screws. It is **VERY** important to be careful with this sensor. Do not disconnect the rear cables, but rather keep them tethered to allow the Slanted LIDAR to be maneuvered so the antenna bracket can be mounted. Be **VERY careful** not to scratch or damage the LIDAR.



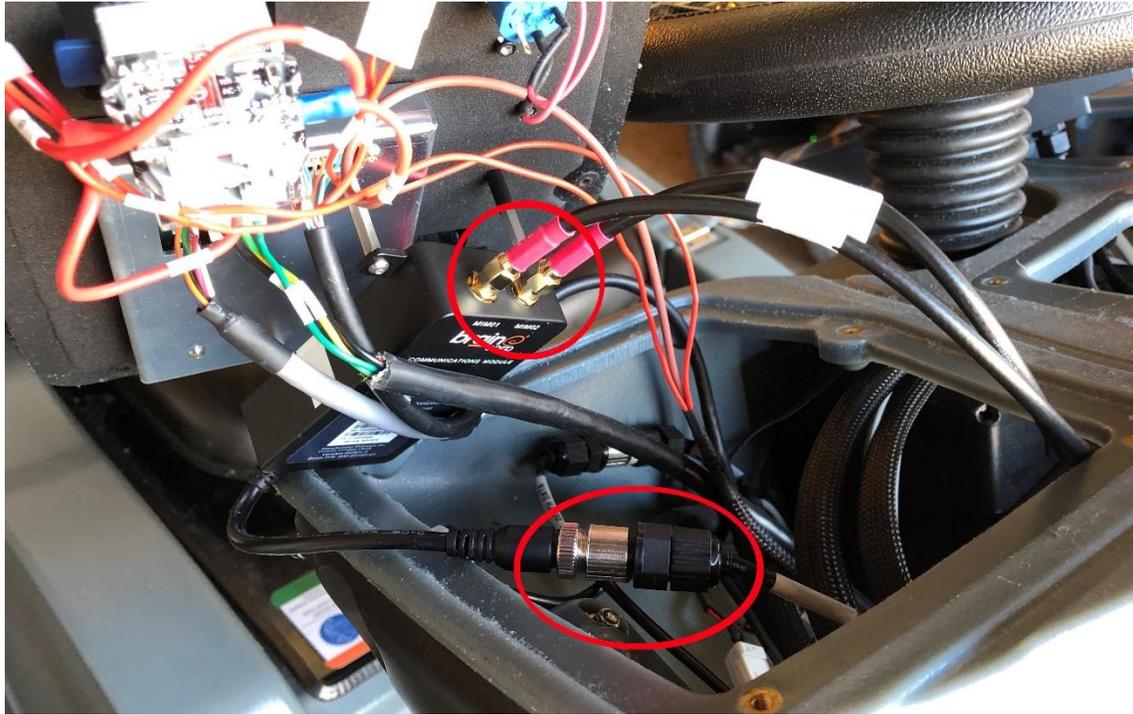
Insert the black bracket end through the UI port. Gently move the Slanted LIDAR to allow room for the bracket to be mounted above the front IFM. Use the two screws that are present to secure the bracket as shown. Re-secure the Slanted LIDAR, making sure the hex screws are tight. Route the antennae cable as shown in the following photos.



The view looking through the UI port

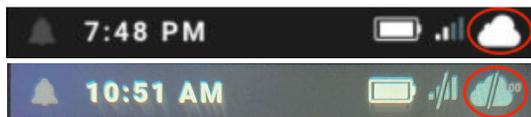


Plug in the antenna cables to the modem. If the machine has the newer version antenna the leads must be installed to the correct port on the modem (labeled MM01 and MM02) on the modem and the antenna leads. Plug in the connector as shown below:



Part 3: Testing Connection

Reconnect the red power coupling beneath the seat and turn the key clockwise to power on the machine. Allow the machine to fully boot up. Confirm cellular and cloud connection by looking at the top right of the touchscreen. The cloud should be white and you should also see bars illuminated next to it. If there is a diagonal line through the cloud and bars, then the machine isn't connected.



NOTE: If you are having a hard time establishing connection, try moving the machine to a different location next to a window or door.