

DC WallBox

Replace 4G module(Gemalto)

May. 18, 2021

DS16_v1.0



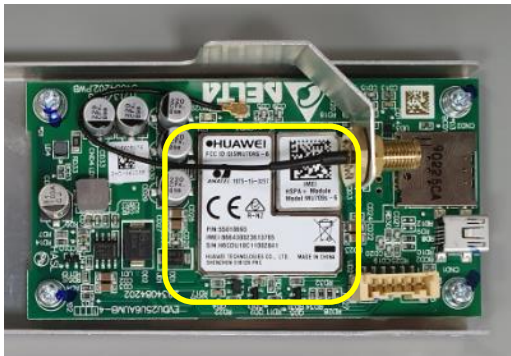


Change History

Version	Description	Editor
V1.0	Replace 4G module(Gemalto)	Bryan LEE

Introduction

1. Once the local 3G mobile signal does not provide service, suggest replace the 3G module(Huawei) to 4G module(Gemalto). Has to replace the antenna at the same time.
2. The 4G module(Ublox) could keep using, no need to replace it to 4G module(Gemalto)
3. 4G module(Ublox) and 4G module(Gemalto) use the same 4G antenna
4. If 3G module(Huawei) or 4G module(Ublox) is failed, recommend replacing it to 4G module(Gemalto)



3G module
(Huawei)



4G module
(Ublox)



4G module
(Gemalto)

Tool Preparation



Screwdriver



Diagonal Pliers



Monkey spanner



Needle nose



FW Requirement

- For using 4G module(Gemalto), the FW version of DCWB must be

Module	FW version
BA CSU	V02.05 or higher

- The details of FW update can refer to OI: “**DA06_DCWB FW 2.05 upgrade instruction**”



Relevance part number

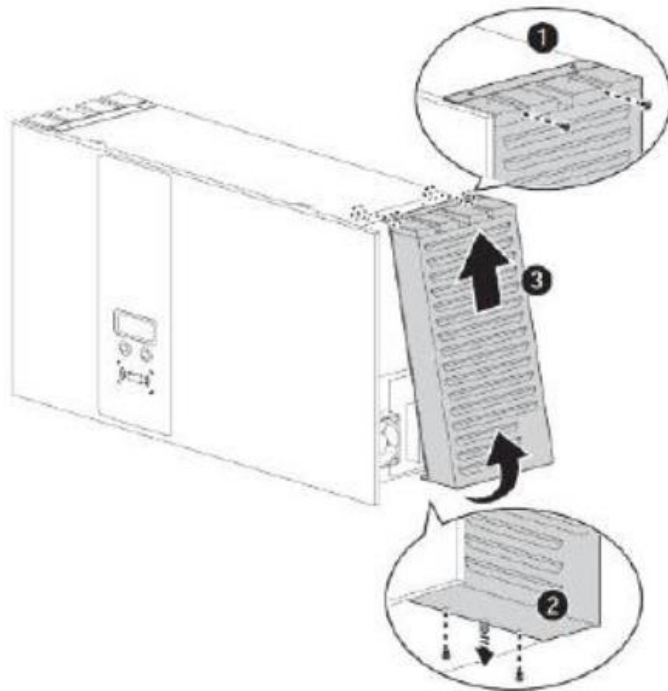
Title	Part number	Remark
Memalto 4G modem_Pls8-x	5042220500	For US model
Memalto 4G modem_Pls8-j	5042220700	For JP model
Memalto 4G modem_Pls8-e	5042220600	For EU model
4G Antenna	0990252525	

Remove **both** side covers

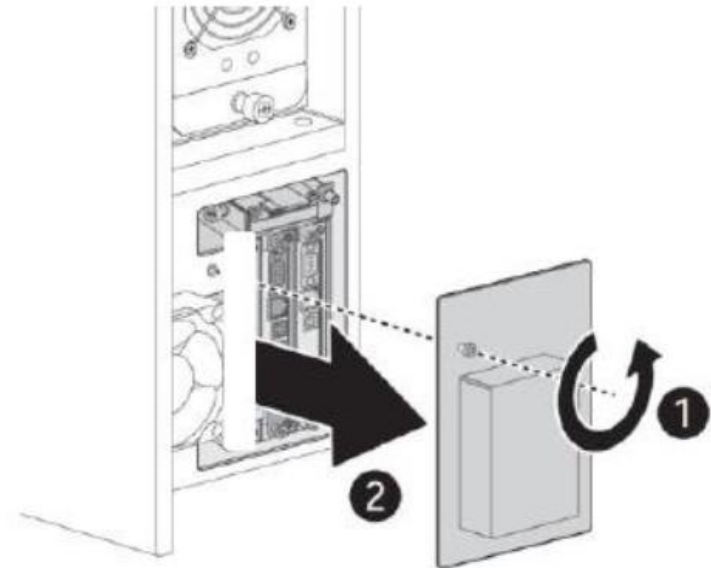
- Below photo is the example for removing right side cover

Remove filter cover with T20 torx driver

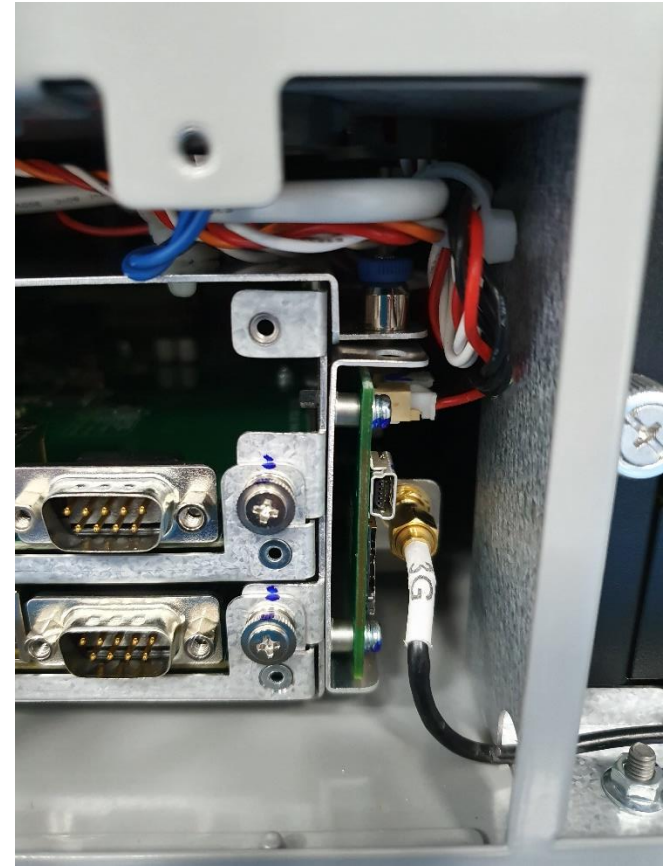
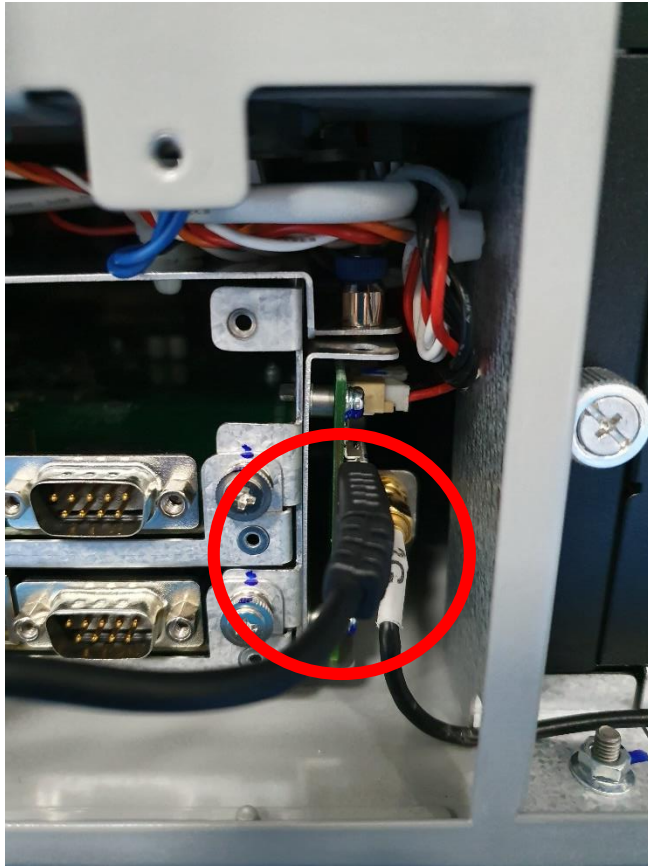
- Release the two screws on top.
- Release the two screws on bottom and pull out the latch.
- Open and remove the filter cover.



Remove protection cover

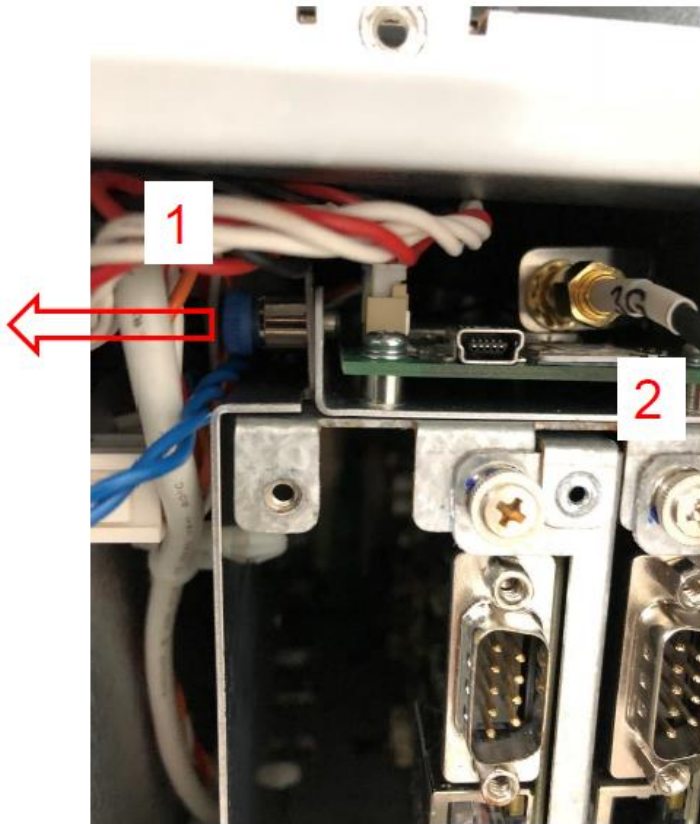


Step 1. Remove Micro-USB cable

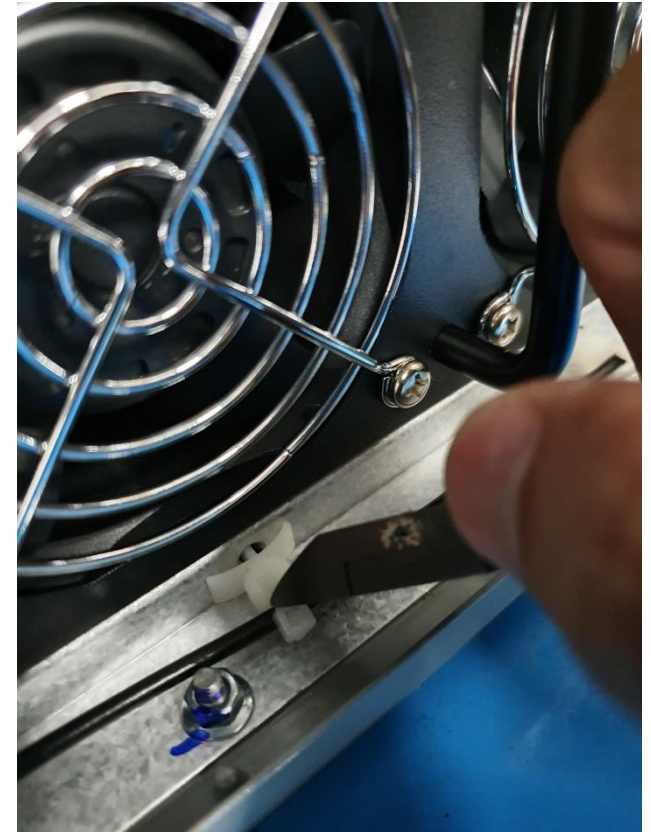


Step 2. Pull out 3G/4G module

1. Pull blue latch
2. Pull out 3G/4G module a little bit

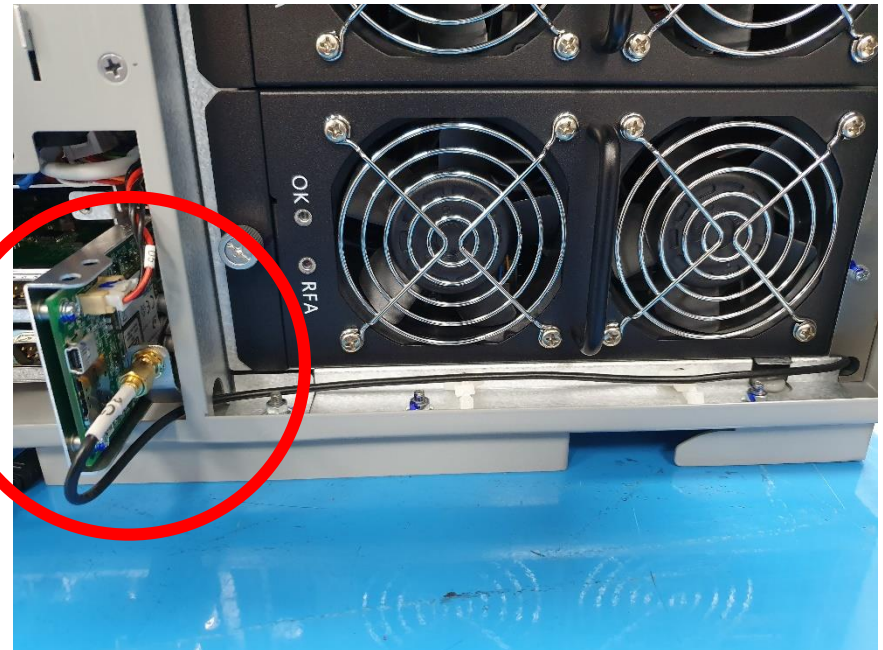
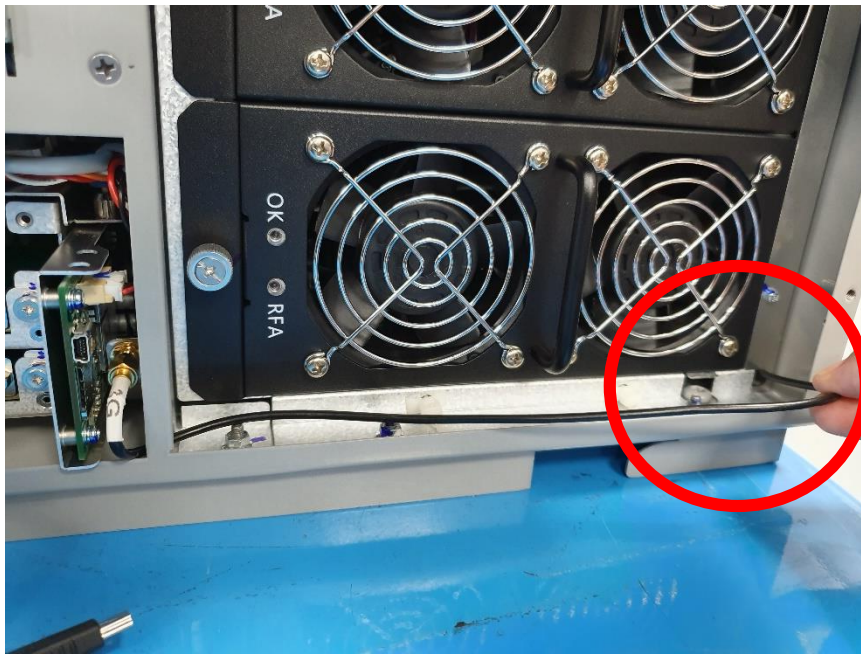


Step 3. Cut off the cable tie



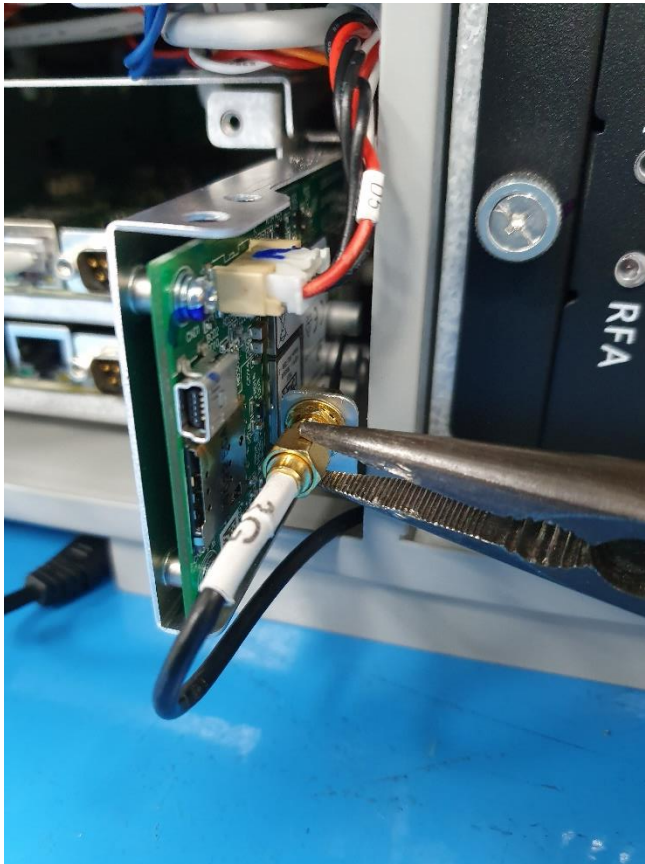
Step 4. Pull out the antenna cable

Pull out the antenna cable so that the 3G/4G module can be pulled out more and disassembly antenna cable from 3G/4G module easily.

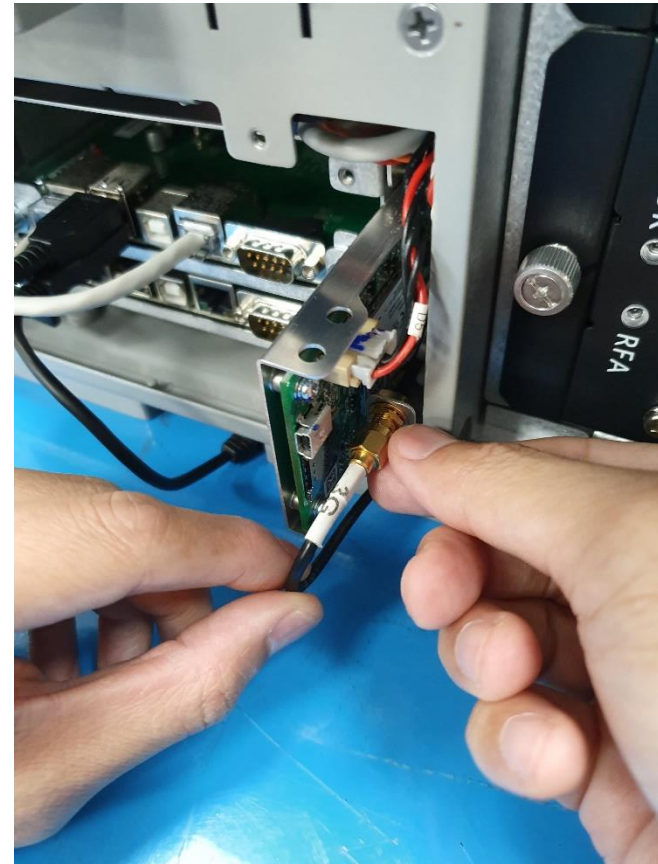


Step 5. Disassembly antenna cable

Disassembly antenna cable from 3G/4G module by needle nose or hand.

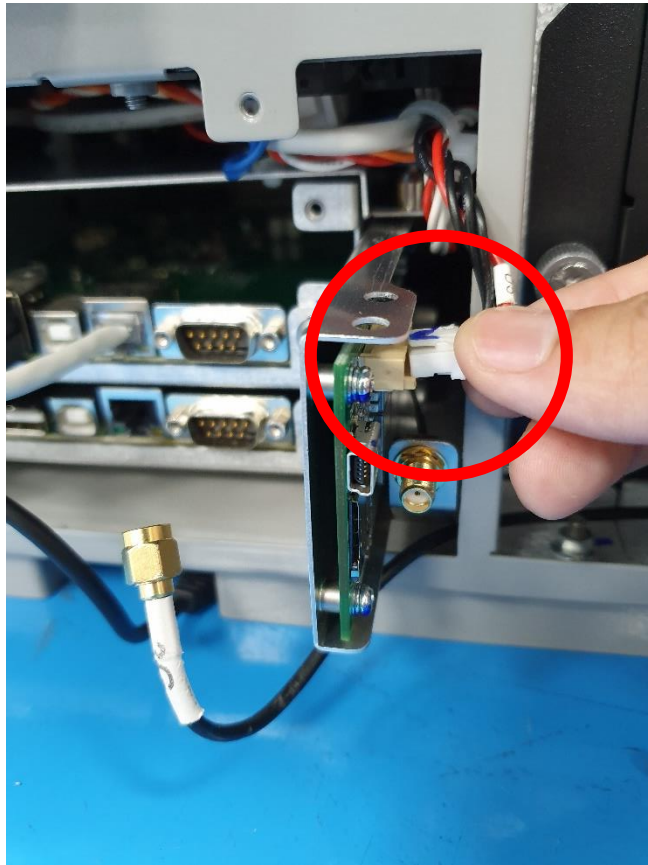


or



Step 6. Disassembly power cable

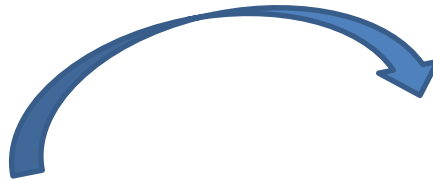
Disassembly the power cable of 3G/4G module, and then module can be pulled out completely.



Step 7. Replace 4G module

Case 1:

If the spare part is already with the base, could directly replace the whole module. Then continue the process to Step 8.

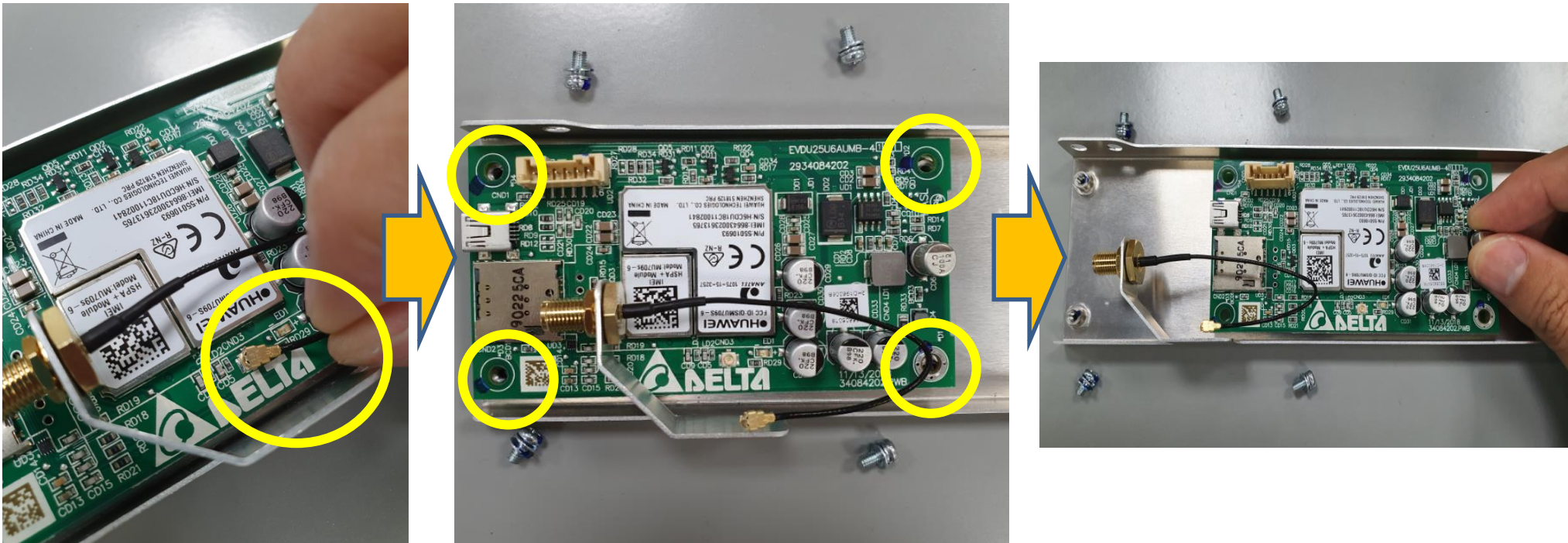


Step 7. Replace 4G module

Case 2:

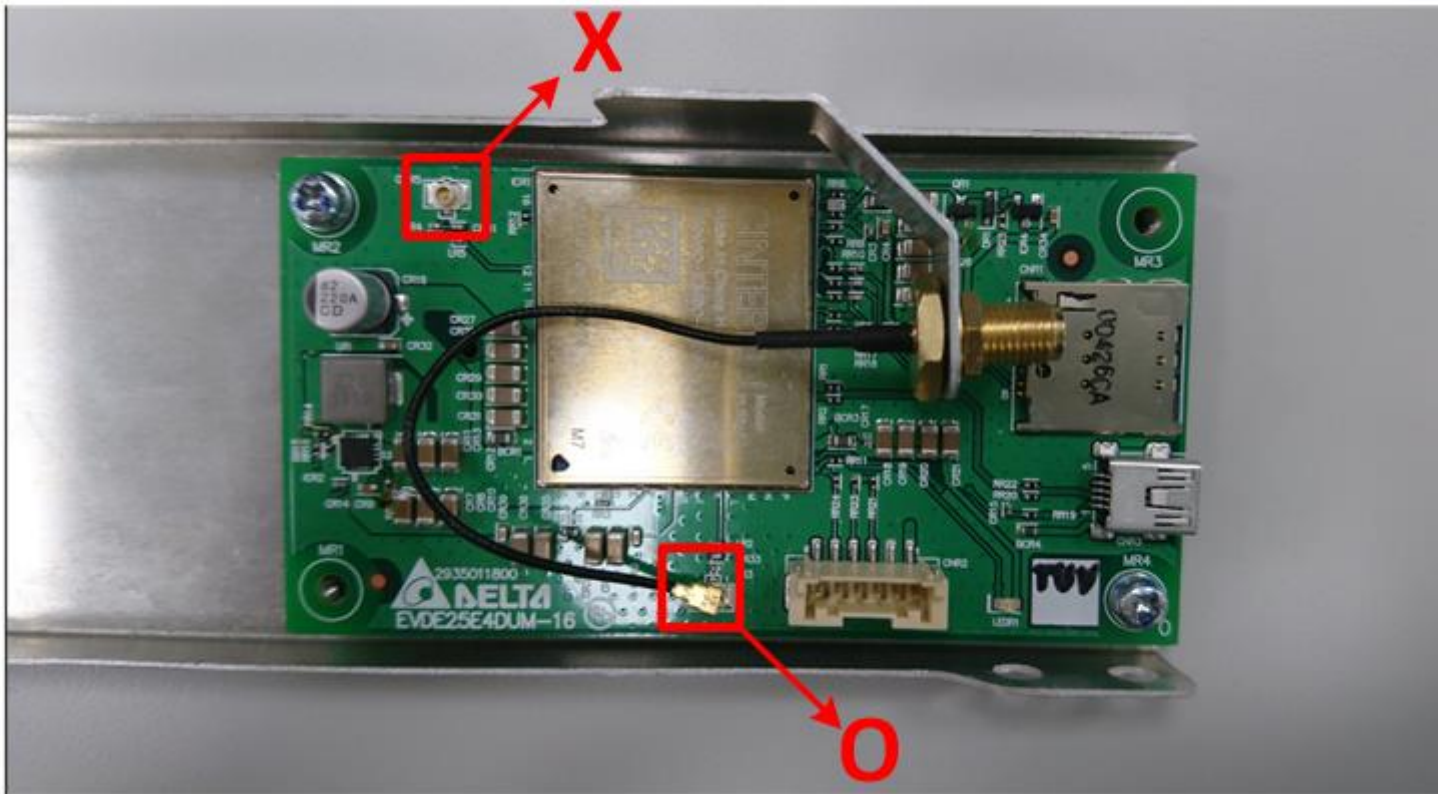
If the spare part is without the base, follow the steps as below.

- 1) Remove the cable on board by hand, **don't use hand tools**.
- 2) Release the 4 screws on board, don't use electric screwdriver
- 3) Remove the module from the base



Step 7. Replace 4G module

- 4) Install 4G module(Gemalto) on the base
- 5) Install the 4 screws
- 6) Install antenna cable to the correct position (as below photo)

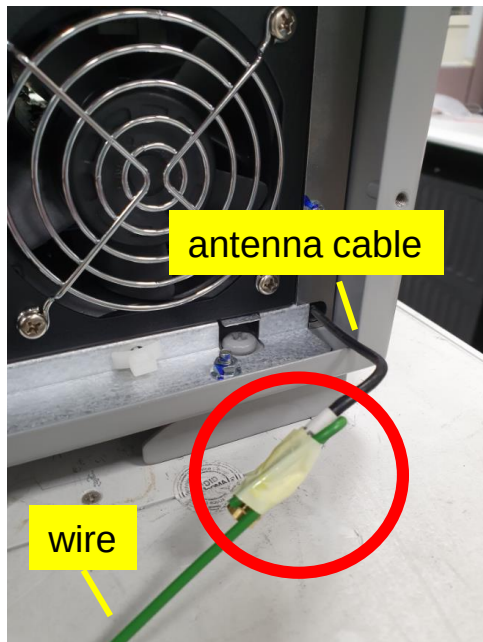


Step 8. Replace 4G antenna (1/3)

[If DCWB is already with 4G antenna, no need to execute this Step 8.]

Tie a wire to the original antenna cable.

- release the plate to let the antenna pass through
- pull out the antenna cable from another side (left side)
- release the wire from the antenna cable, and keep the wire



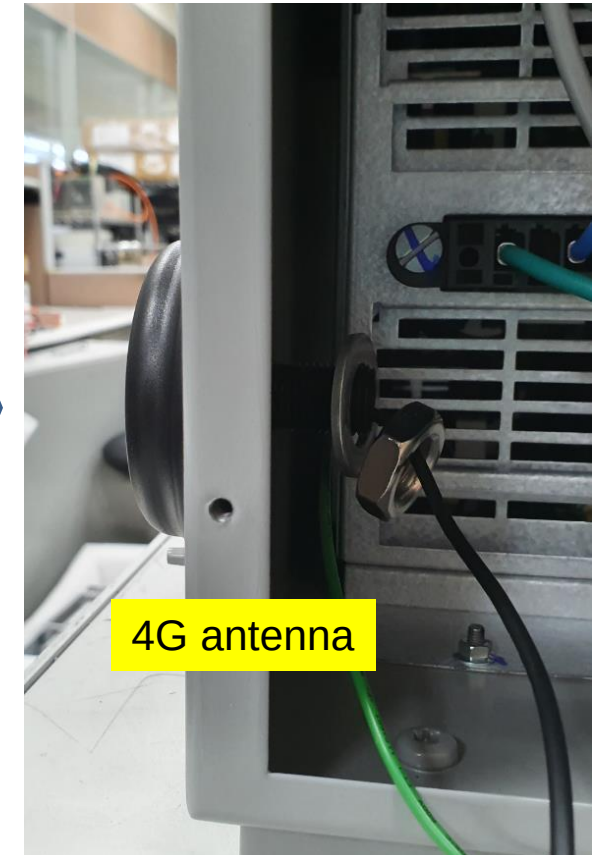
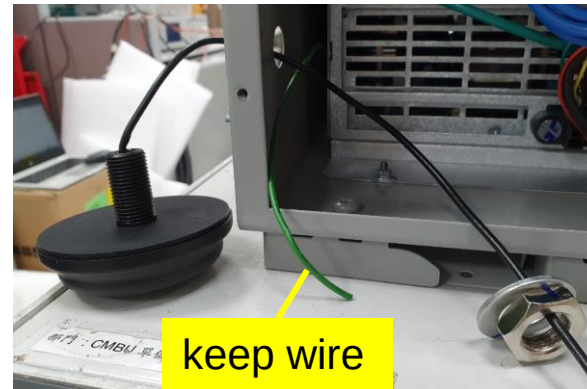
Right side



Left side

Step 8. Replace 4G antenna (2/3)

Release the screw of antenna
→ replace 4G antenna and install it

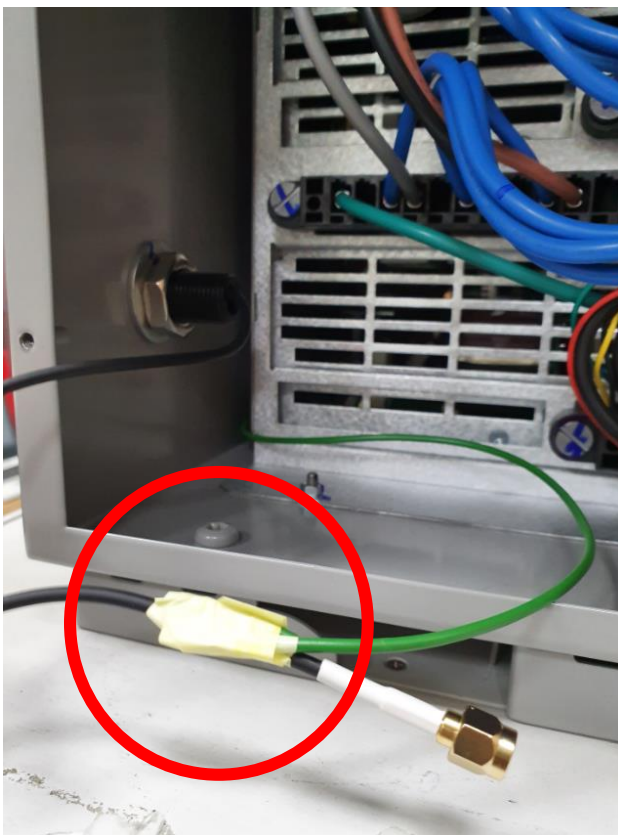


Step 8. Replace 4G antenna (3/3)

Tie a wire to the 4G antenna cable

→ pull out the 4G antenna cable from right side

→ Straighten the 4G antenna cable on the left side, so that the antenna cable is long enough for 4G module installation



Left side



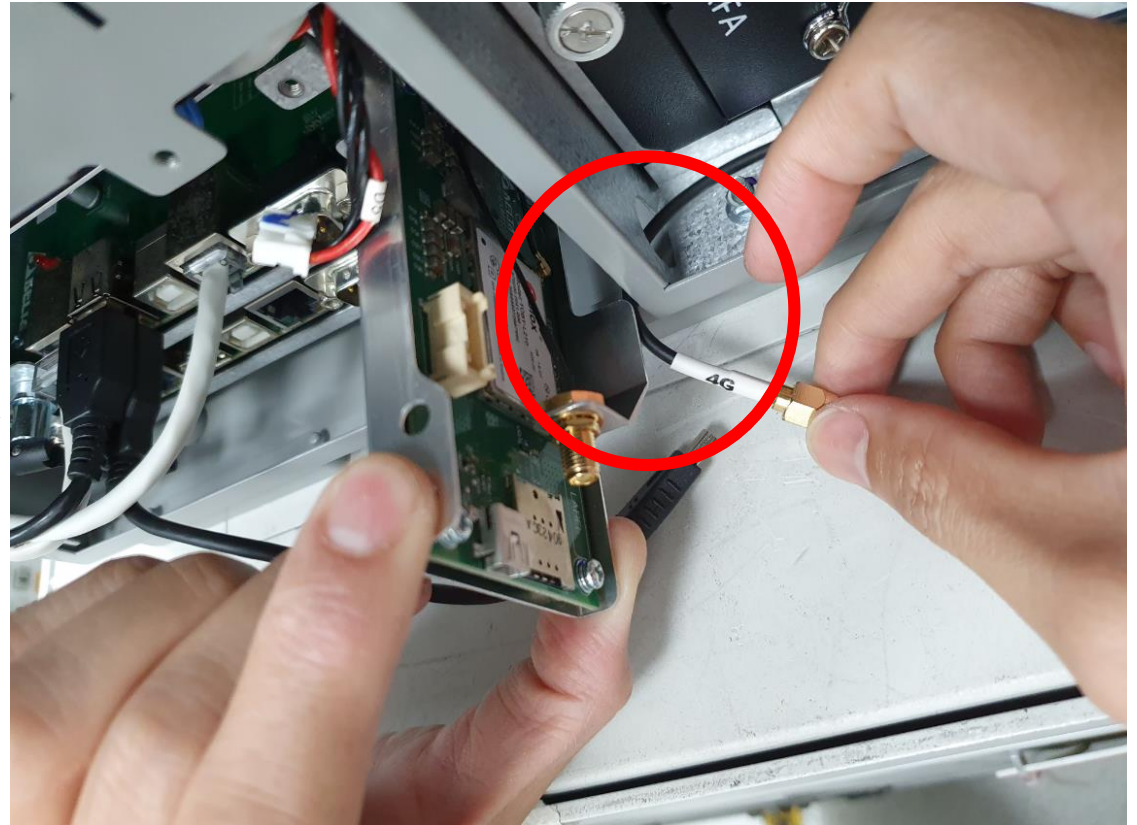
Right side



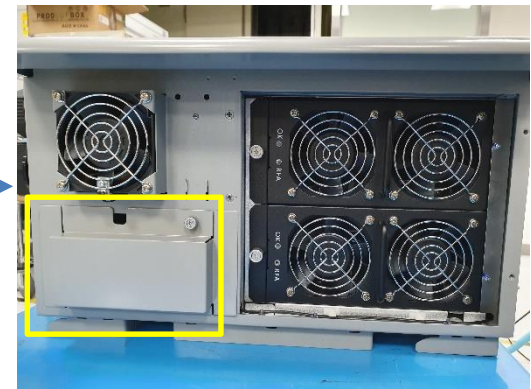
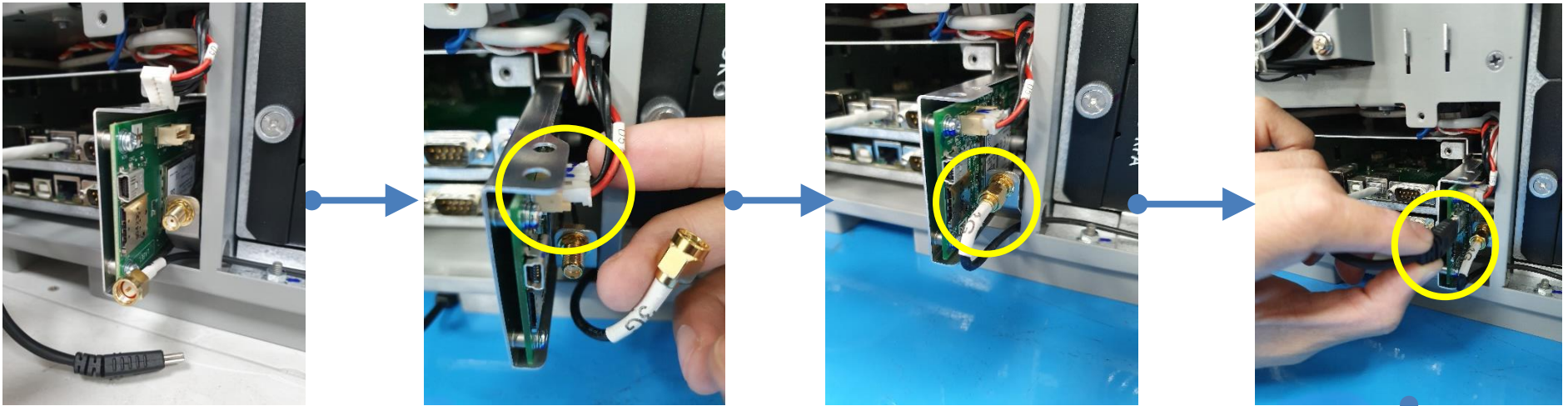
Left side

Step 9. Install 4G module (1/2)

Setup the 4G antenna cable firstly, and keep the cable under 4G module



Step 9. Install 4G module (2/2)



Recommend to tighten the antenna cable

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