TECHNICAL SERVICE BULLETIN No. XX/2025

19/12/2025

Heavy Commercial Vehicles

Information bulletin to be circulated to:	Service Manager	Warranty Manager	Parts Manager	Master Technician	Service Consultant	BMIS
	✓	✓	✓	✓	✓	✓

Subject	Installation Procedure of DTCO 4.1a Tachograph on F-LINE Vehicles.
Model	F-LINE Vehicles
Abstract	This bulletin outlines the procedures, required parts, and technical details for installing the DTCO 4.1a tachograph in F-LINE vehicles.

General Information:

- The Transitional Tachograph was introduced due to delays in the European Union's OSNMA(Open Service Navigation Message Authentication) service. According to Regulation (EU) 2023/980

Starting from December 24, 2025, newly registered vehicles will be required to have a new-level tachograph and GNSS antenna with OSNMA capability, and vehicles with old-level tachographs without OSNMA capability will not be allowed to be registered

- In order to use OSNMA services, the GNSS antenna installation described in this TSB must be done on the vehicles. **All related costs will be covered by the importers. Labor codes will not be claimed and are provided solely for time estimation purposes.**

- **This TSB applies only to vehicles manufactured before July 24, 2025 for non-ADR vehicles and before April 14, 2025 for ADR vehicles, and that will be registered after December 24, once the regulation takes effect.**
- For non-ADR vehicles manufactured between April 22 and July 24, only tachograph replacement is required. The GNSS antenna and its harness were installed during production, and the existing harness has the blue Fakra connector taped in place.

- **To support you in this process, we have applied special discounts on the relevant parts: RC46 17A266 AB (wo/ADR), RC46 17A266 BB (w/ADR)**

1. **Labour For Vehicles manufactured before March 27 (All Vehicles)**

Labour Name	Duration	Description
DTCO 4.1a Tachograph Replacement	0.1	All
*External GNSS Antenna R/I (Including jumper wire connection to tachograph)	0.3	F-Line vehicles without body modification
External GNSS Antenna R/I (trimming & Bracket installation)	0.3	F-Line vehicles without body modification
UTILITY CMPT LWR COVER R/I	0.05	All
A Pillar Cover R/I	0.16	All
Total Duration	**0.91**	

Vehicles without Body Modification

2. **Labour For Vehicles manufactured between March 27 and April 22 (Non-ADR)**

Labour Name	Duration	Description
DTCO 4.1a Tachograph Replacement	0.1	Vehicles with DTCO 4.1
*External GNSS Antenna R/I (Including jumper wire connection to tachograph)	0.3	F-Line vehicles without body modification
External GNSS Antenna R/I	0.1	F-Line vehicles without body modification
UTILITY CMPT LWR COVER R/I	0.05	All
A Pillar Cover R/I	0.16	All
Total Duration	**0.71**	

Vehicles with antenna hole, without GNSS antenna & harness

3. **Labour For Vehicles manufactured between March 27 and April 14 (ADR Vehicles)**

Labour Name	Duration	Description
DTCO 4.1a Tachograph Replacement	0.1	Vehicles with DTCO 4.1
*External GNSS Antenna R/I (Including jumper wire connection to tachograph)	0.3	F-line vehicles without body modification
External GNSS Antenna R/I	0.1	F-line vehicles without body modification
UTILITY CMPT LWR COVER R/I	0.05	All
A Pillar Cover R/I	0.16	All
Total Duration	**0.71**	

4. **Labour For Vehicles manufactured between April 22 and July 24 (Non-ADR)**

Labour Name	Duration	Description
DTCO 4.1a Tachograph Replacement	0.1	Vehicles with DTCO 4.1

If the vehicle is ADR-compliant, the tachograph must be RC46 17A266 BB level. Therefore, no action is required on ADR vehicles; it is sufficient to check whether the blue Fakra connector behind the tachograph is properly connected.

Parts to be Used

Part Number	Part Name	Number of Parts to be Used	Description
RC46-17A266-BB	DTCO 4.1a W/ ADR	1	For vehicles manufactured before April 14
RC46-17A266-AB	DTCO 4.1a W/O ADR	1	For vehicles manufactured before July 24
SC46-19C175-AA	External GNSS Antenna	1	For vehicles manufactured before April 22
TC46-18812-ASA	GNSS Harness	1	For Extra High Roof vehicles & vehicles manufactured before April 22
TC46-18812-ARA	GNSS Harness	1	For Low and High Roof vehicles & vehicles manufactured before April 22
TC46-18812-APA	Jumper Harness	1	For vehicles manufactured before April 22
TC46 E04545 CA	Bracket	1	For vehicles manufactured before March 27

The implementation dates of the Tachograph, GNSS Antenna, IP holes for the Antenna to be installed and Harness changes are specified in the table above.

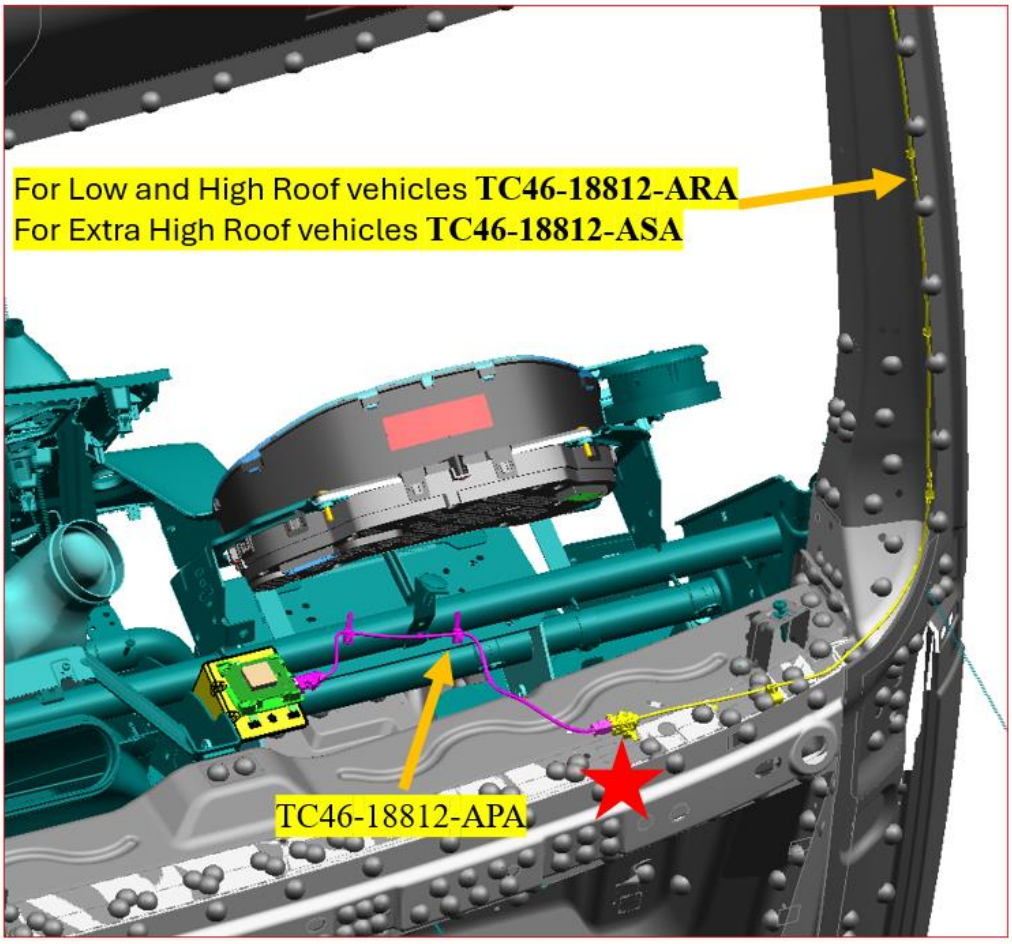
For non-ADR vehicles, the latest part number is RC46 17A266 AB, while for ADR vehicles it is RC46 17A266 BB. Before starting rework, the tachograph part number must be checked. If the part number differs from the specified one, tachograph replacement will be required. The tachograph level can also be identified by the blue GNSS connector at the back; AA and BA level tachographs do not have this connector.

The antenna bracket started being installed on vehicles in serial production on March 27, the antenna and harness on April 22, and the new-level tachograph on July 24 for non-ADR vehicles and on March 17 for ADR vehicles. Since the bracket, antenna-harness, and new-level tachograph were introduced at different times, only the missing components should be added to each vehicle. For vehicles registered after December 24, the new-level tachograph and antenna must be installed and fully operational to ensure regulatory compliance

Service Procedure:

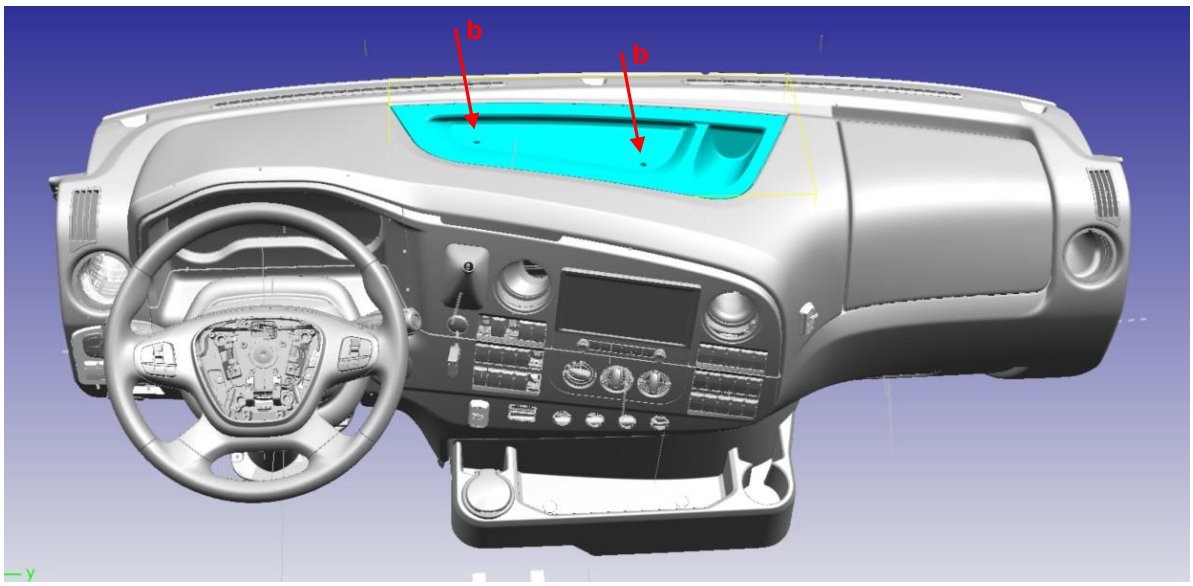
I. Rework Procedure for Vehicles Produced Before March 27 which means Without Antenna, Antenna Bracket, Harness, and Equipped with Tachograph RC46 17A266 AA/BA

- Firstly, the A pillar trim parts on the driver's side should be removed.

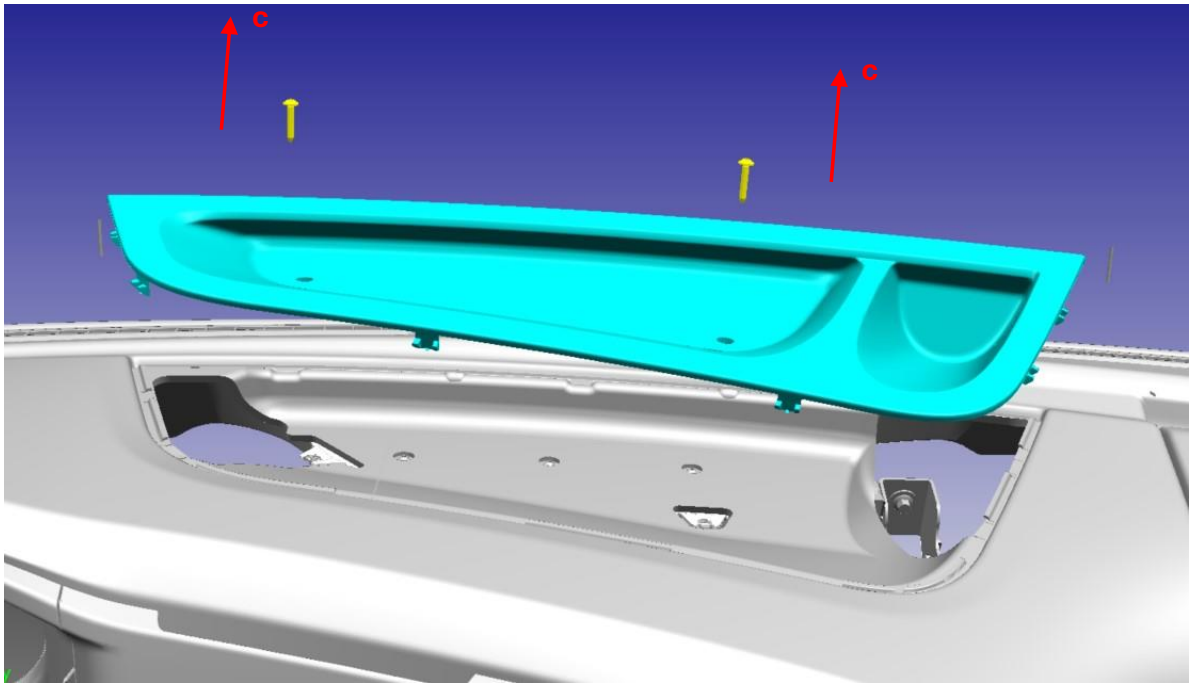


  - For Low and High Roof vehicles, TC46-18812-APA and TC46-18812-ARA must be used
  - For Extra High Roof vehicles, TC46-18812-APA and TC46-18812-ASA must be used
- The disassembly process should begin with the left A-Pillar transition part, part number JC46-E04395-A*.

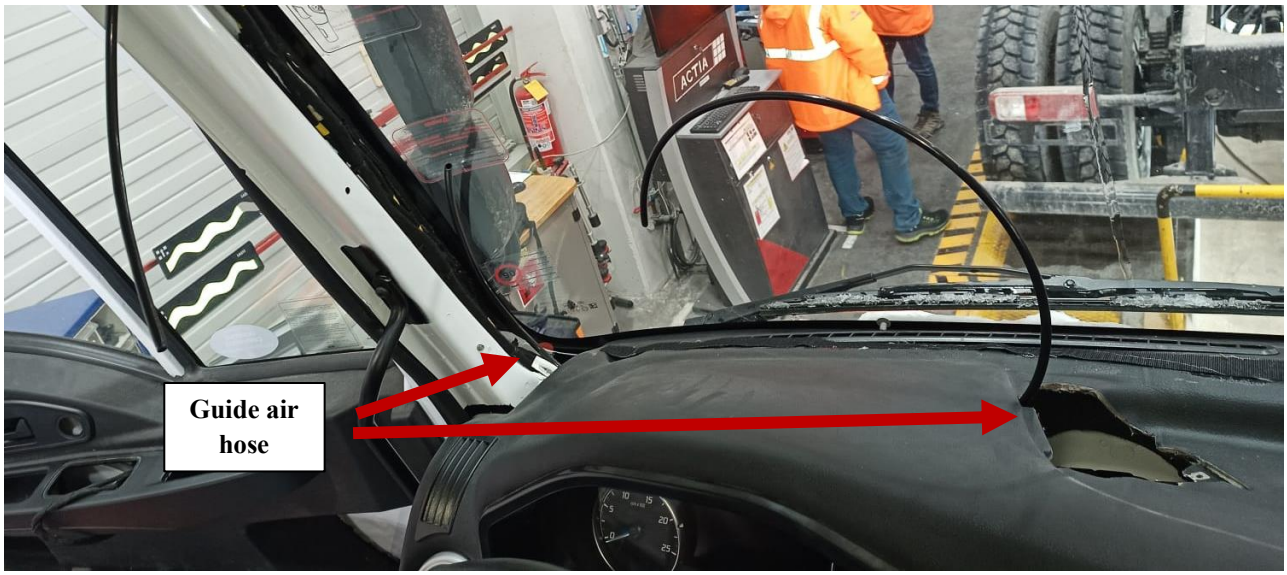
a. The UTY LWR (7013594) component, shown in blue below, must be disassembled from the IP console (E04304).
b. To disassembly the UTY LWR (7013594) component, the two screws (W502664 S) indicated by red arrows must be disassembled using a Torx screwdriver.



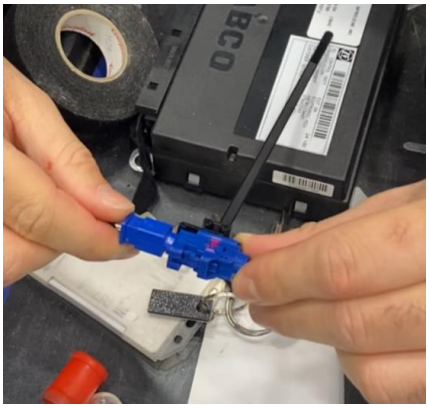
c. After disassembling the screws, the UTY LWR (7013594) must be released from its clips and extracted from the IP in the direction indicated by the red arrow.



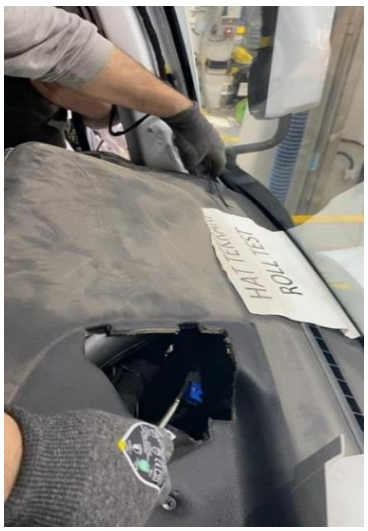
To allow the TC46-18812-APA cable to pass through the marked area, first a guide air hose or another cable must be routed through the IP up to the beginning of the A-pillar. Then, the TC46-18812-APA should be taped to the end of this air hose and pulled carefully through to the A-pillar opening without causing any damage.

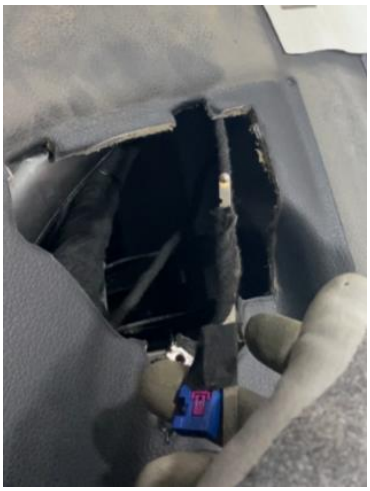


Before start cable rooting; For Low Roof or High Roof vehicles, connect the connectors of TC46-18812-APA and TC46-18812-ARA. For Extra High Roof vehicles, connect the connectors of TC46-18812-APA and TC46-18812-ASA. After connecting, tape the connectors to prevent any damage.



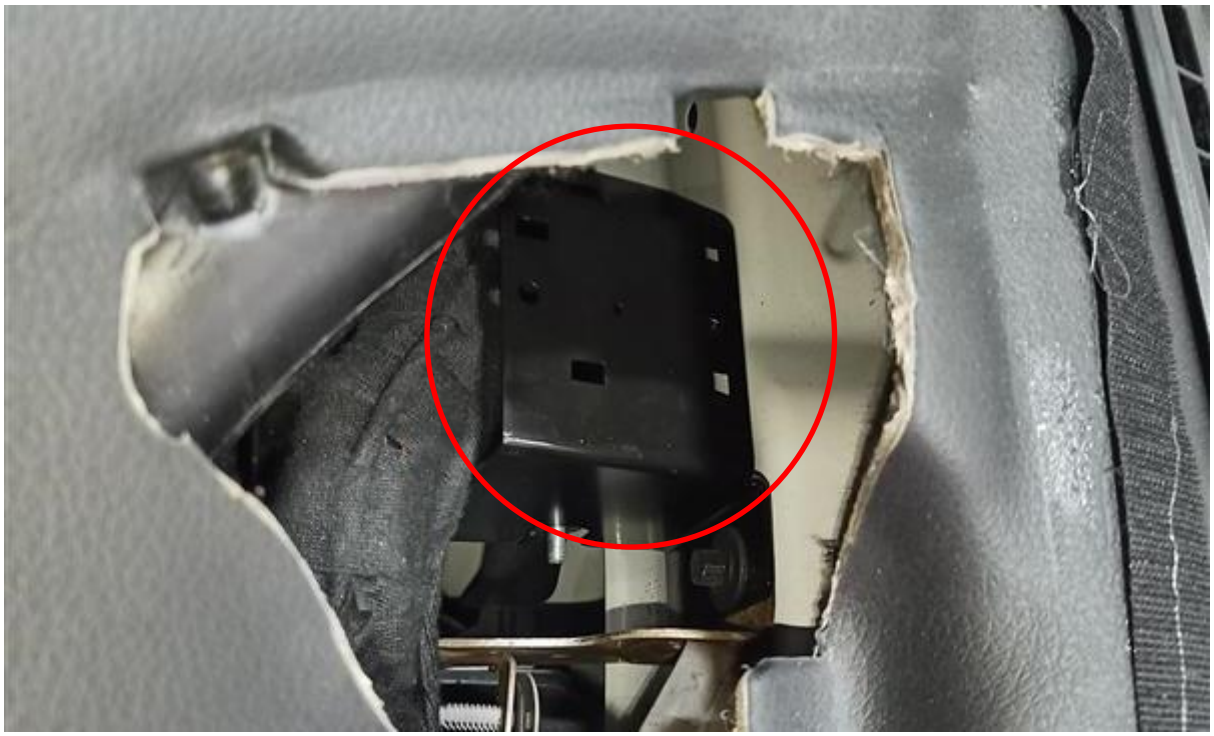
Remove the straps from the cable, then carefully tape the free end of TC46-18812-APA to the end of the guide air hose, ensuring that neither part is damaged during the process.



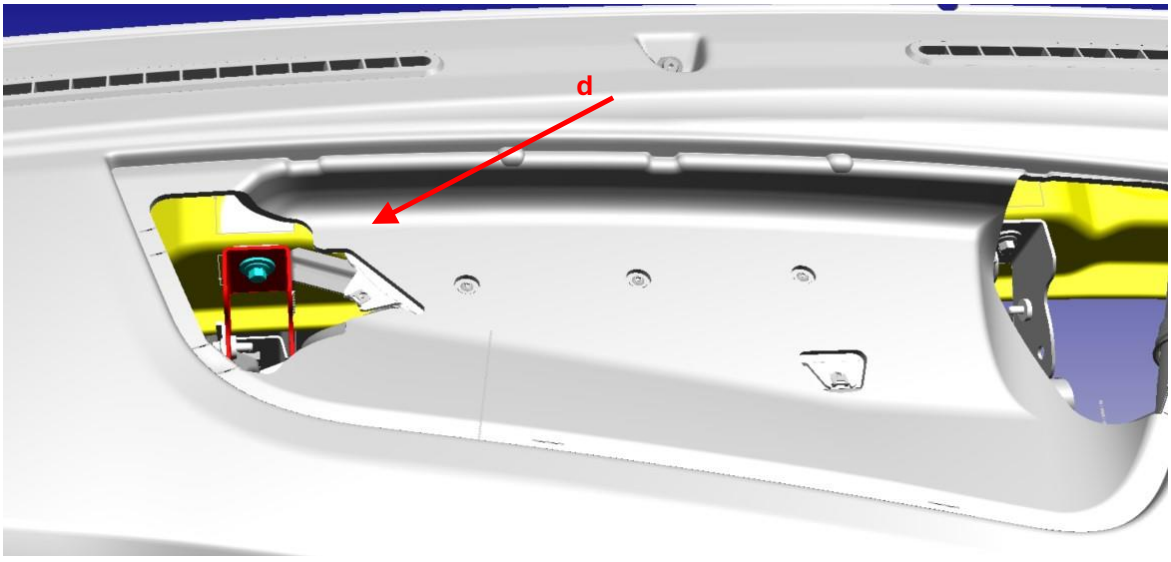
The other connector of TC46-18812-APA is ready for antenna installation

If the vehicle was manufactured after March 27, the antenna bracket is already installed, and there is no need to perform the steps between d and m These steps are related to the installation of the bracket.

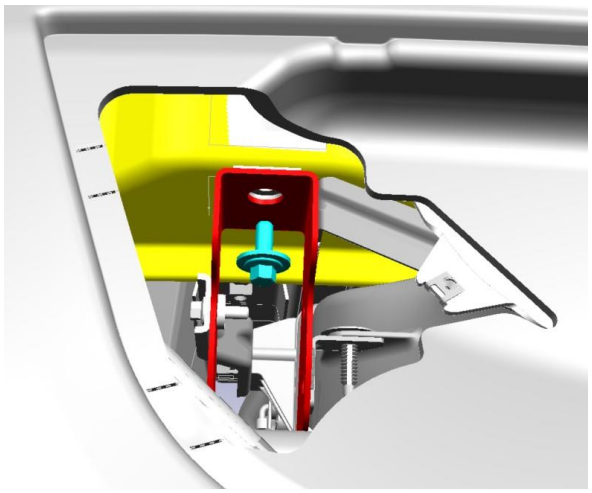


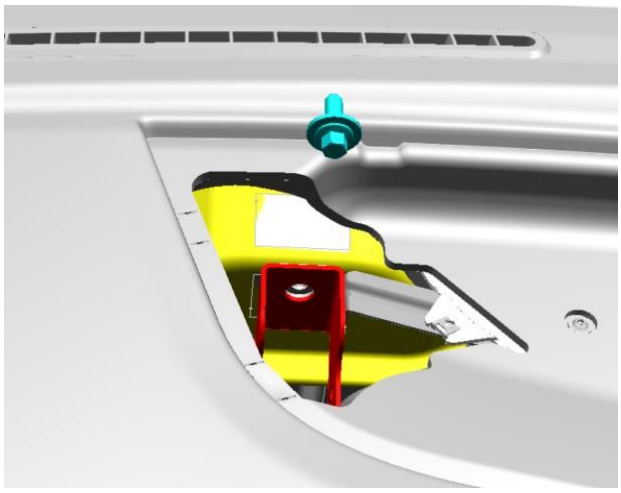
The GNSS antenna bracket is highlighted within the red circle in the image

d. After disassembling the UTY LWR (7013594) from the IP, the bolted connection between the panel and bracket on the driver's side will become visible. The hex-head bolt (W714921 S_Bolt&Wshr M8X20), marked in blue, which connects the CCB bracket (E04545) shown in red to the cowl top component (02030) shown in yellow, must be disassembled. During removal, a magnetic tool suitable for the hex head should be used, and care must be taken to prevent the bolt from falling inside.

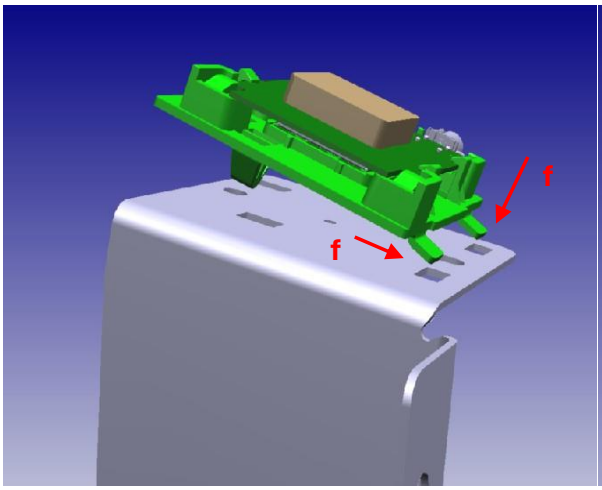


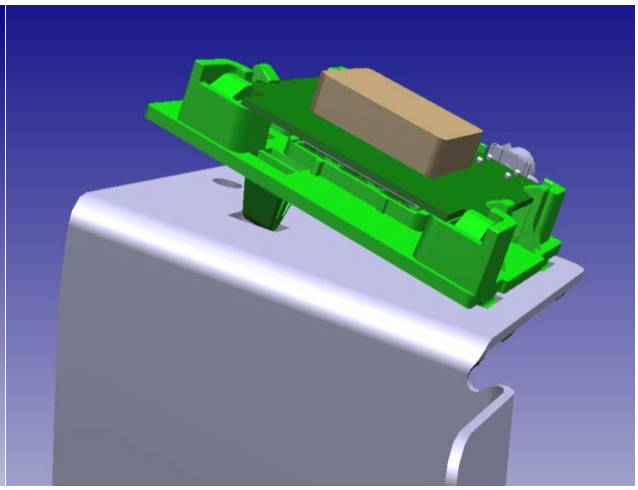
e. The disassembled hex-head bolt (W714921 S_Bolt&Wshr M8X20), marked in blue, must first be extracted in the X direction. Then, it should be pulled upward in the Z direction to be fully removed. Care must be taken to prevent the bolt from being dropped during removal.



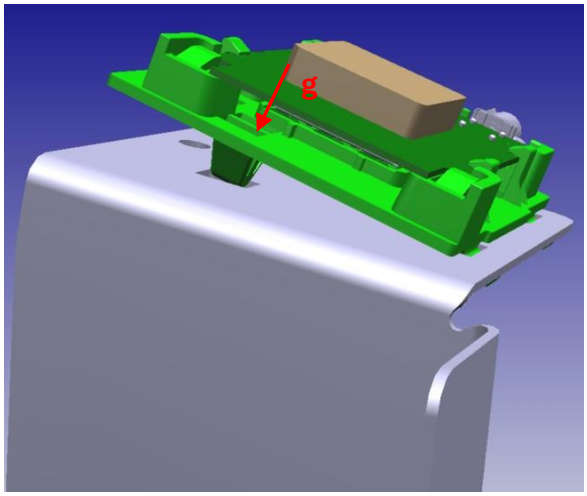


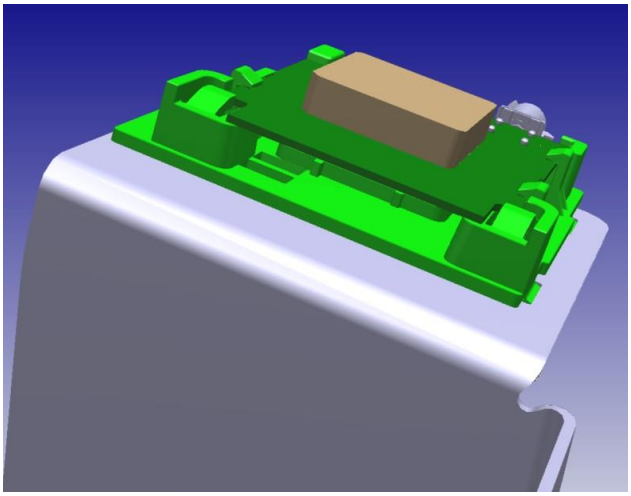
f. The plastic housing with the antenna, shown in green, must first be positioned by securing its locator tabs, indicated by the red arrows, onto the bracket "TC46 E04545 CA" shown in gray.

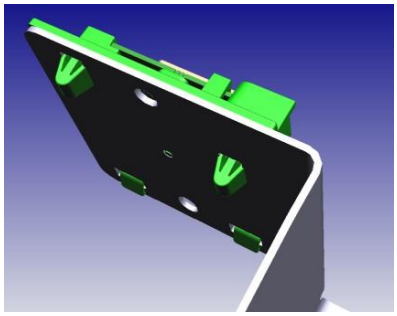




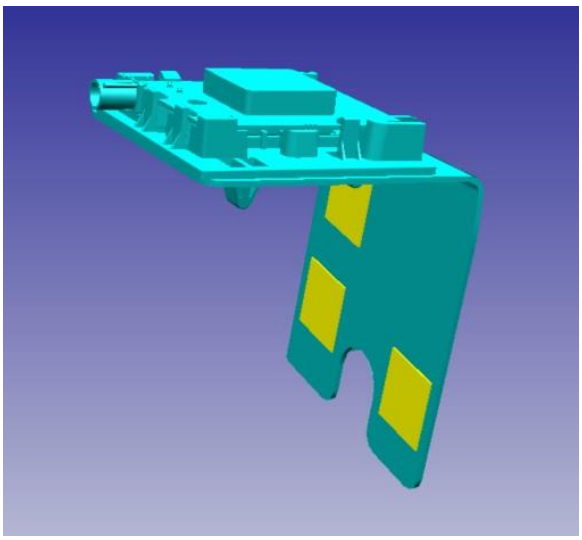
g. After positioning the tabs, the plastic housing with the antenna, shown in green, must be gently pressed to secure the clips, indicated by the red arrows, onto the bracket "TC46 E04545 CA" shown in gray.



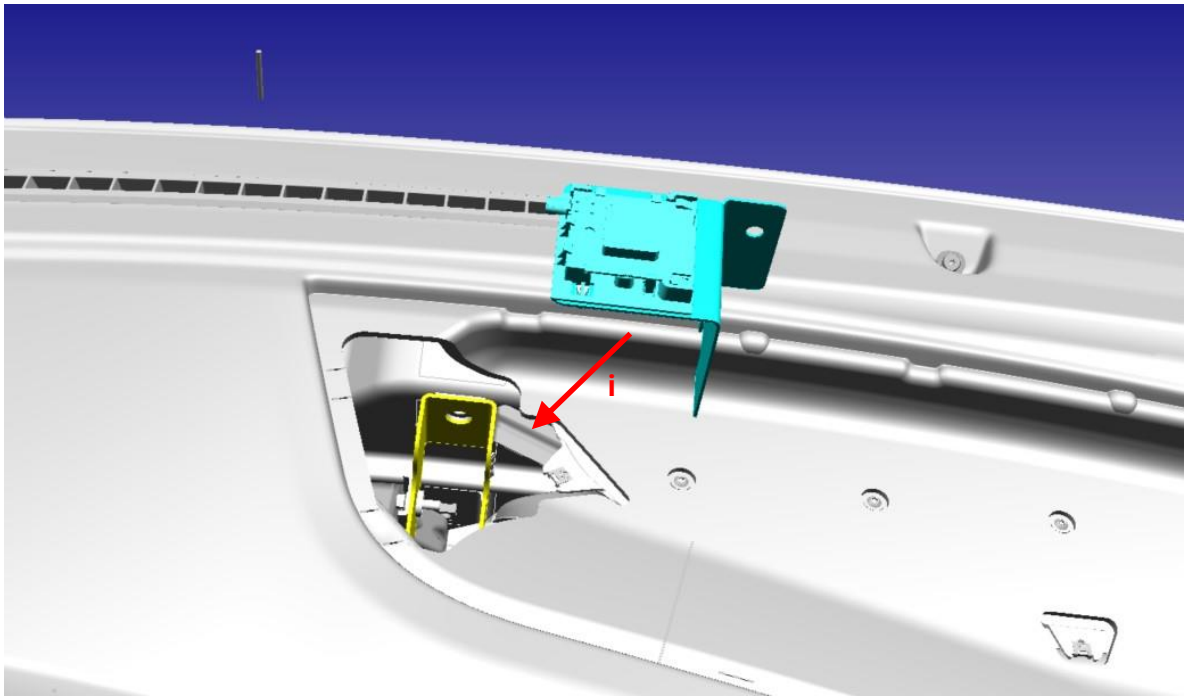




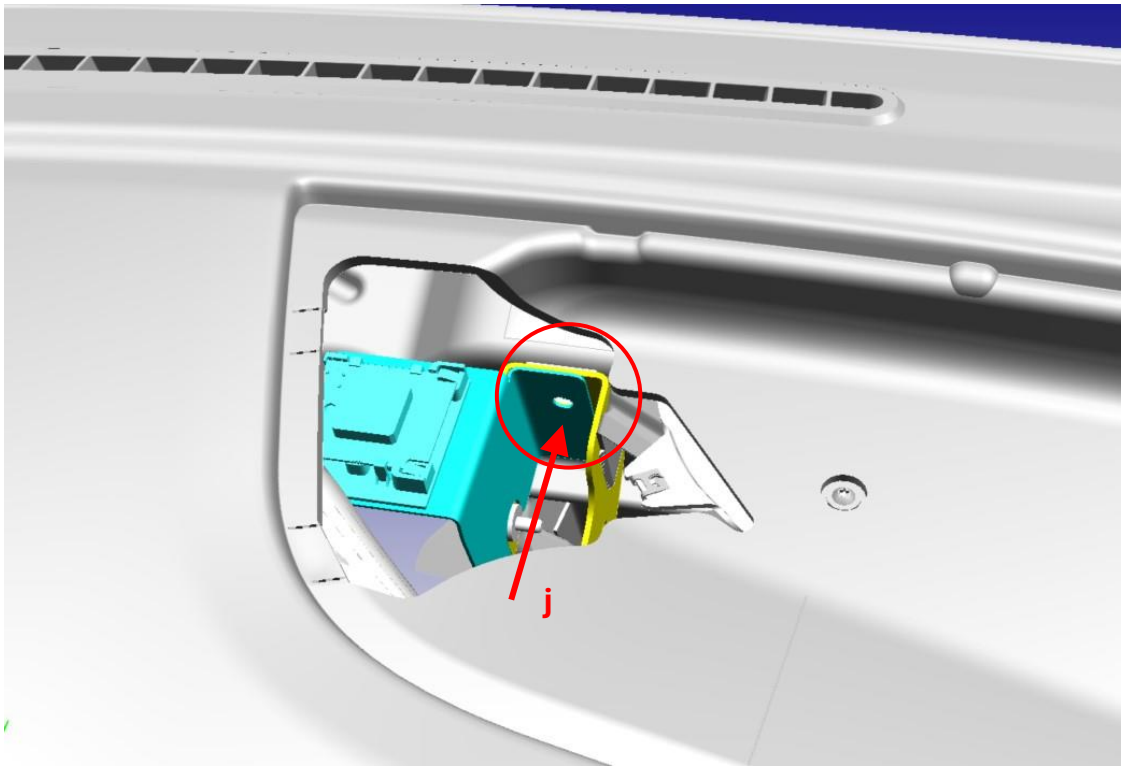
h. The protective film on the double-sided tapes, marked in yellow, on the shown bracket must be removed to prepare it for the adhesive process.



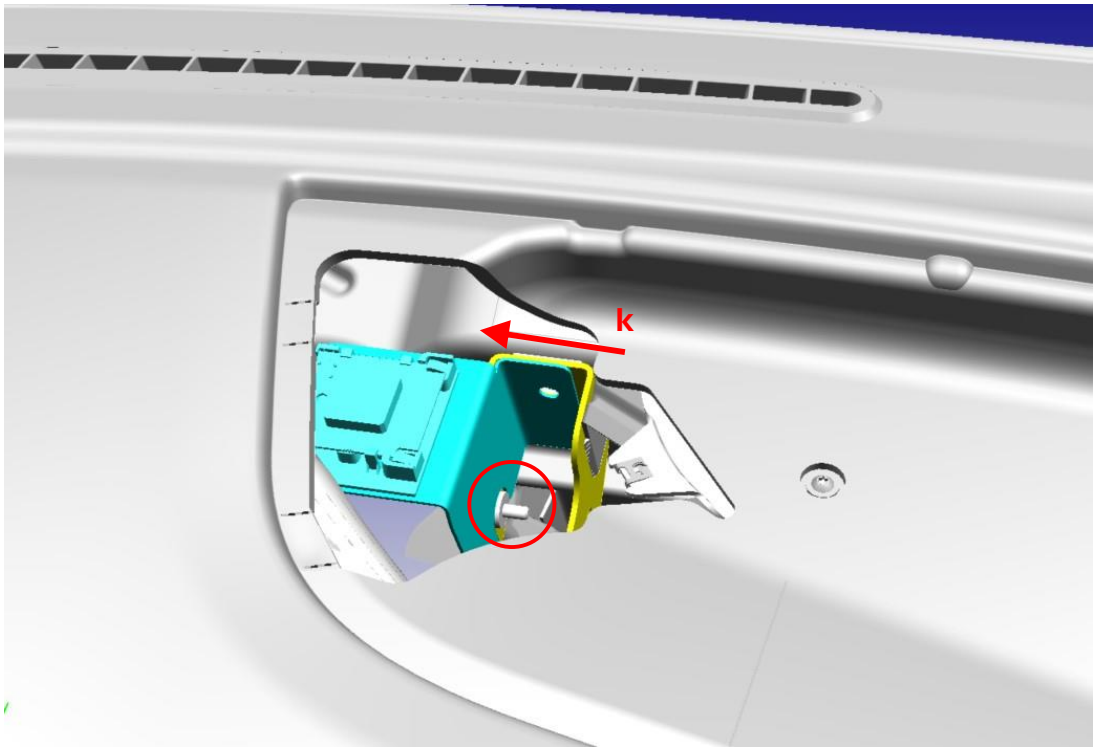
i. The bracket, marked in blue, must be inserted into the cut-out on the IP as indicated by the red arrow, aiming the inside of the yellow CCB bracket, as shown in the image.

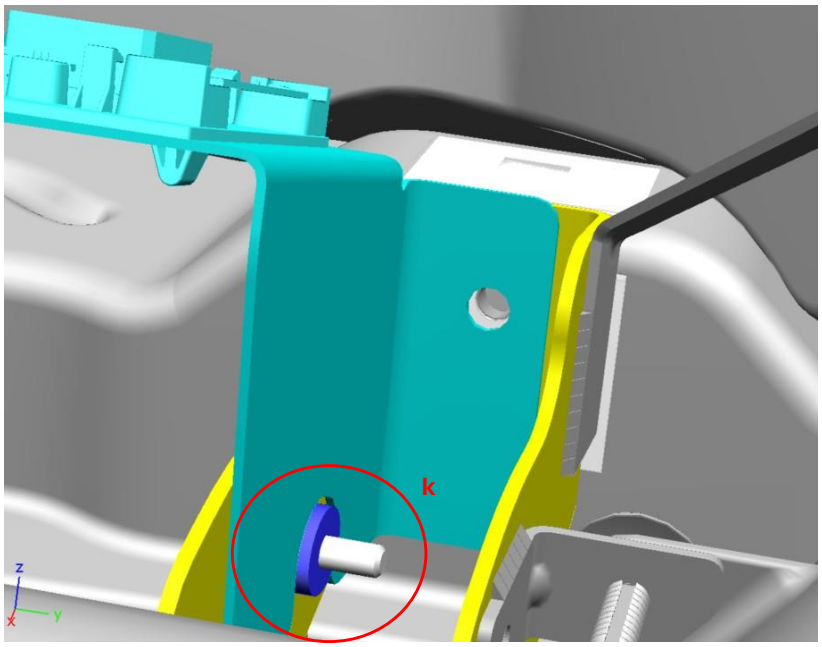


j. After the bracket, marked in blue, is inserted into the cut-out on the IP, aiming the inside of the yellow CCB bracket, it must first be brought into contact with the opposite wall of the yellow bracket, as indicated by the red arrow.

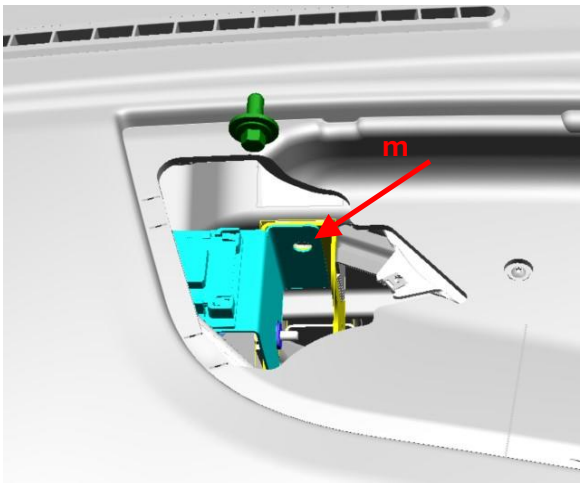


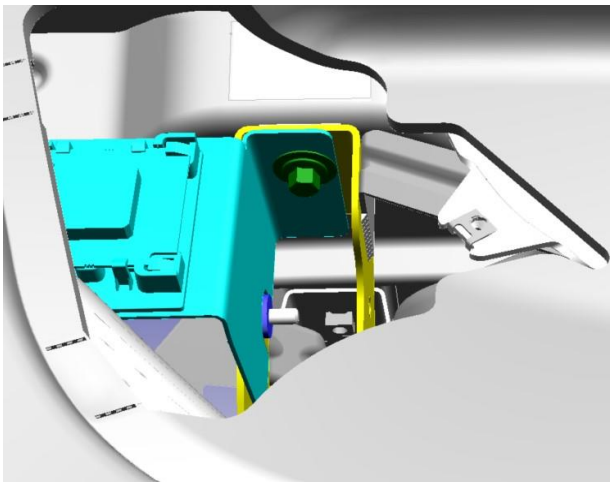
k. It should be pressed toward the driver's side while being in contact with the opposite wall. During this process, the bracket's slot must be referenced to the welded nut, indicated in dark blue, and it should be pressed for approximately five minutes to ensure the adhesive tapes mounting properly.



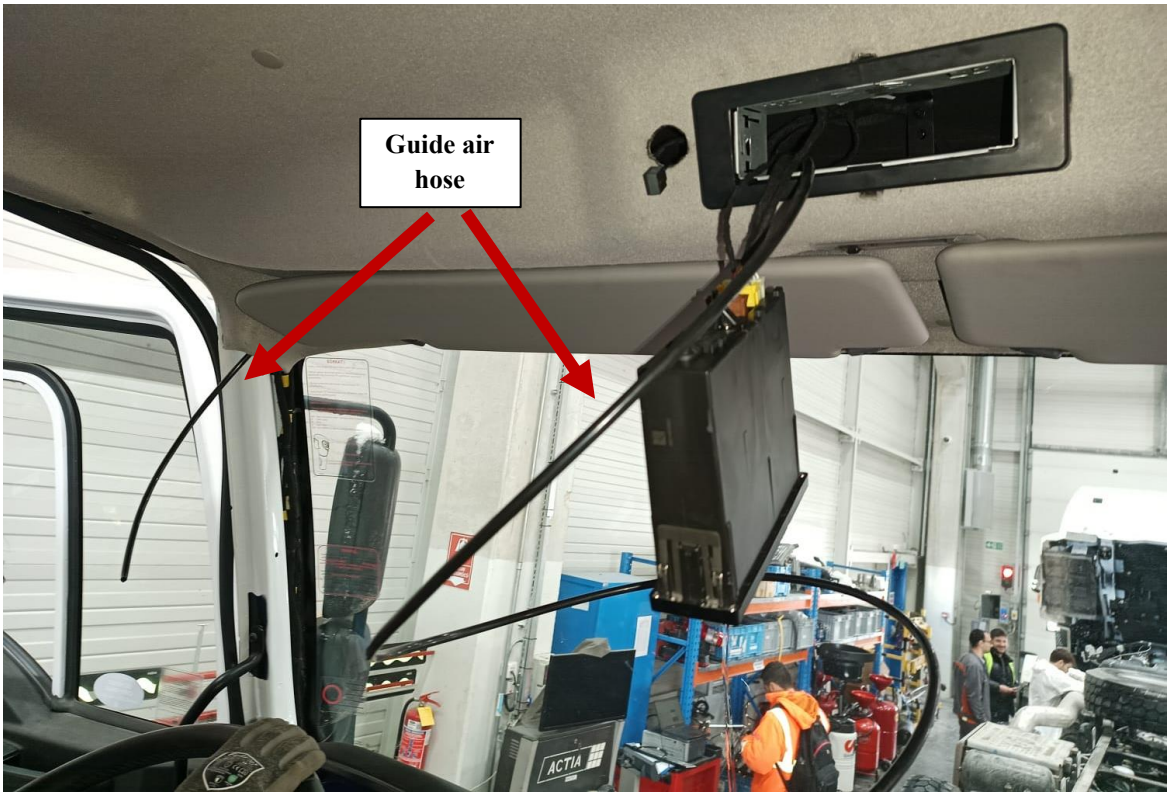


m. As a precaution against dropping, the new hex-head bolt (W714921 S_Bolt&Wshr M8X20), marked in green, should be mounted into the hole indicated by the red arrow using a magnetic hex-head fastening tool.
The mounting force should be: INST TORQ (N*M): NOM: 30.0 VAR: 4.5

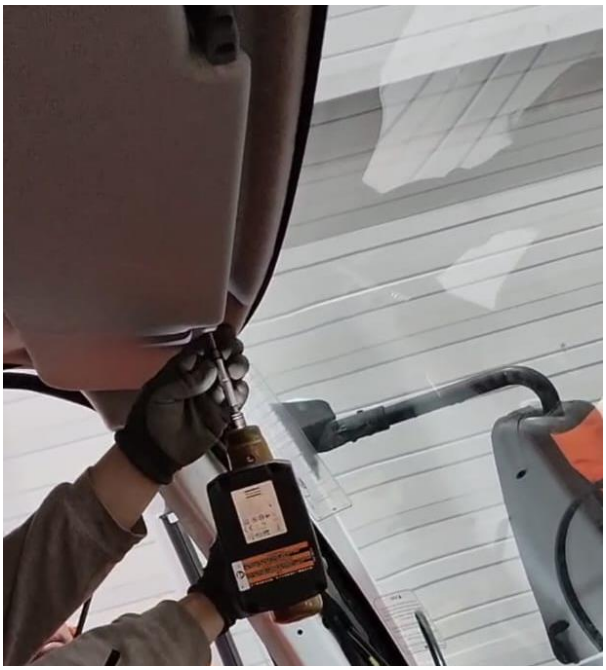




Connect the TC46-18812-APA connector to the GNSS antenna



Remove the tachograph from its slot and, as we did in the previous step, pull the guide air hose from the tachograph slot toward the upper point of the A-pillar. The A-pillar sun visor was loosened to allow easier routing. Tape the free end of the antenna cable to the guide air hose and carefully pull it from the tachograph side of the hose

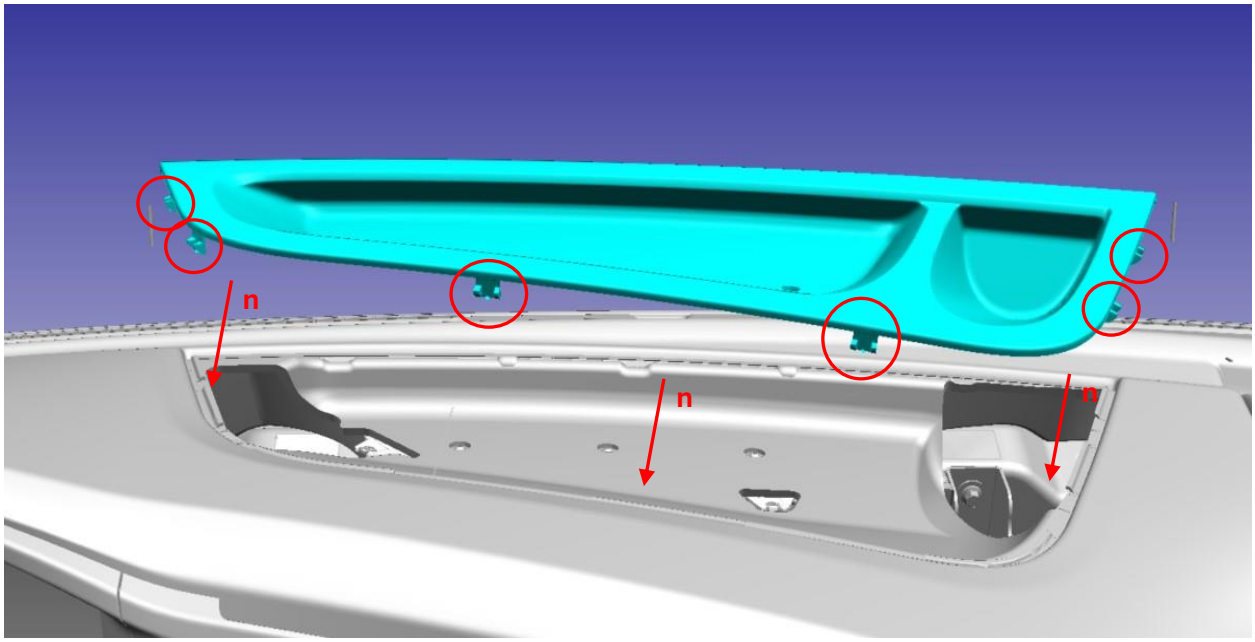


Attach the newly routed GNSS antenna cable tightly with straps at the marked points

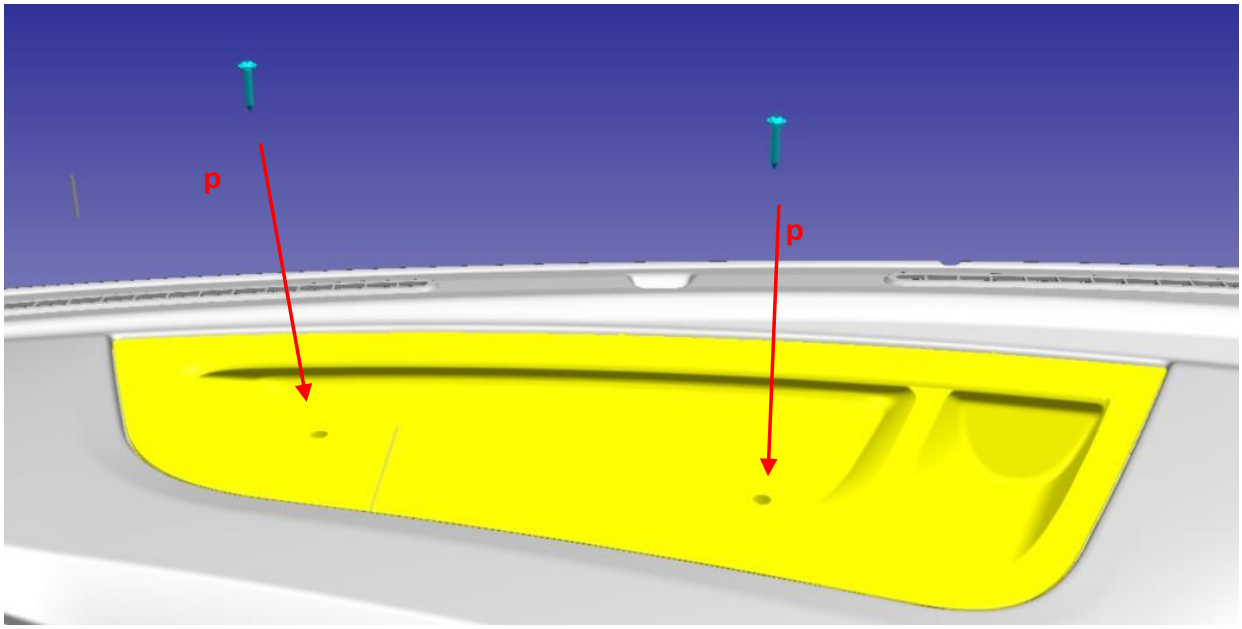
Connect the free end of the antenna cable to the blue Fakra GNSS connector behind the tachograph, and if any other tachograph cables were disconnected, reconnect them and reinstall the tachograph in its slot

Antenna installation is complete; reinstall the removed A-pillar part

n. The UTY LWR (7013594) component, shown in blue, must be installed in place by securing its clips.



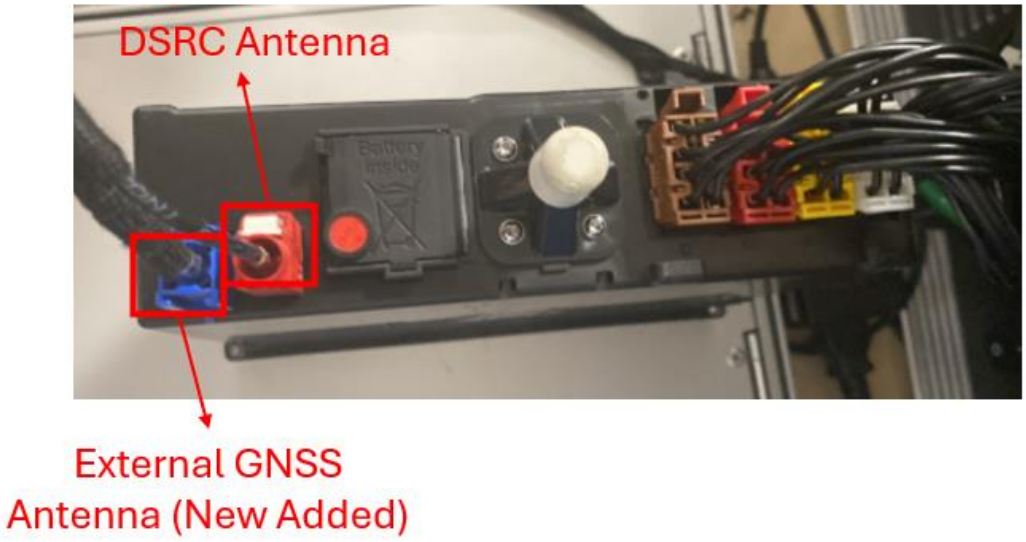
p. The two screws (W502664 S), shown in blue, must be screwed in the direction indicated by the red arrow to secure the robust connection between the yellow UTY LWR (7013594) part and the IP.
The mounting force should be: <u>INST TORQ (N*M): NOM: 1.5 VAR: 0.5</u>



After the existing tachograph is removed from the vehicle using the rod bars, the RC46-17A266-BB tachograph will be installed if the vehicle is ADR-compliant; otherwise, the RC46-17A266-AB tachograph will be installed.

The following procedures must be applied for the installation of the DTCO 4.1a tachograph in F-Line vehicles:

- The electrical cable connections and antenna cable connectors must be removed from the old version tachograph in the vehicle. The same cable connections should then be attached to the newly installed tachograph. Additionally, the blue Fakra connector of the SC46-19C175-AA GNSS antenna should be connected to the external GNSS antenna slot of the new tachograph, as shown in the image below.



- The DTCO 4.1a tachograph, with the socket and antenna connections made, will be installed into its designated slot.

After the tachograph and GNSS antenna installation is completed, the removed trim parts must be reassembled in the order.

Best Regards,

Ford Trucks Service Engineering

Ford Otomotiv San. A.S.