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ID # CBR-2429

Version 2

Title

Volvo Chassis - VN (4) - Flexible Switch Panel Replacement and Calibration Procedures

Abstract

This CBR solution outlines the procedures for diagnosing, replacing, calibrating, and programming Flexible Switch Panels and the Security and Cab Interface Module (SCIM) to resolve switch malfunction notifications and associated fault codes.

Content

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Valid For

Volvo Chassis - VN(4)

Model Year - 2025

This CBR solution outlines the procedures for diagnosing, replacing, calibrating, and programming Flexible Switch Panels and the Security and Cab Interface Module (SCIM) to resolve switch malfunction notifications and associated fault codes.

Overview

This document provides instructions for the following procedures:

- **Contact Workshop – Switch Malfunction IC Notification**
- **Replacing Flexible Switches**
- **Replacing Flexible Switch Panels**
- **Adding a Flexible Switch or Flexible Switch Panel**
- **Replacing the SCIM (Security and Cab Interface Module)**
- **Diagnosing Fault Codes Associated with Flexible Switch Panels**

Switch Malfunction IC Notification Example:

 Live UI



SCIM Sub Hardware Mismatch Example:

Control Unit Data Mismatch					
Readout Time: 11/5/2024 12:30 PM					
Control Unit	Product Data	Central Data	Hardware	Sub hardware	Software
Passenger Door Module (PDM)	✓	✓	✓	✓	✓
Engine Control Module (EMS)	✓	✓	✓	✓	✓
Transmission ECU (TECU)	✓	✓	✓	✓	✓
Security and Cab Interface Module (SCIM)	✓	✓	✓	✗	✓
Driver Assistance Control Unit (DACU)	✓	✓	✓	✓	✓
Living Environment Control Module (LECM)	✓	✓	✓	✓	✓
Forward Looking Camera (FLC)	✓	✓	✓	✓	✓
Front Chassis I/O Module (FCIOM)	✓	✓	✓	✓	✓
Supplementary Restraint System (SRS)	✓	✓	✓	✓	✓
Forward Looking Radar (FLR)	✓	✓	✓	✓	✓
Services and Entertainment Module (SEM)	✓	✓	✓	✓	✓
Side Radar, Right-hand side, Forward-looking (S	✓	✓	✓	✓	✓
Details (Security and Cab Interface Module (SCIM))					
Sub hardware	23624589	23624589	18000322		
Sub hardware	23624599	23624599	04000322		
✗ Flexible Switch Module	22026373	23656794	21549946		
✗ Flexible Switch Module	22026373	23656794	21550158		
✗ Flexible Switch Module	22026373	23656794	21549995		
✗ Flexible Switch Module	22026373	23656794	21549996		
✗ Flexible Switch Module	22026373	24806698	21549915		

Procedure

Step 1: Verify Flexible Switch Panel (FSP) Part Numbers



The installed Flexible Switch Panels (FSPs) have the **correct** part numbers.



Old (Incorrect) Switch Panel:



New (Correct) Switch Panel:

- **Procedure:**
 - Physically inspect each FSP by removing it to locate the part number on its back.
 - Follow **Impact operation 3646-03-02-89** for FSP removal.
- **Part Numbers:**
 - Old (Incorrect): **23656794**
 - New (Correct): **24806698**

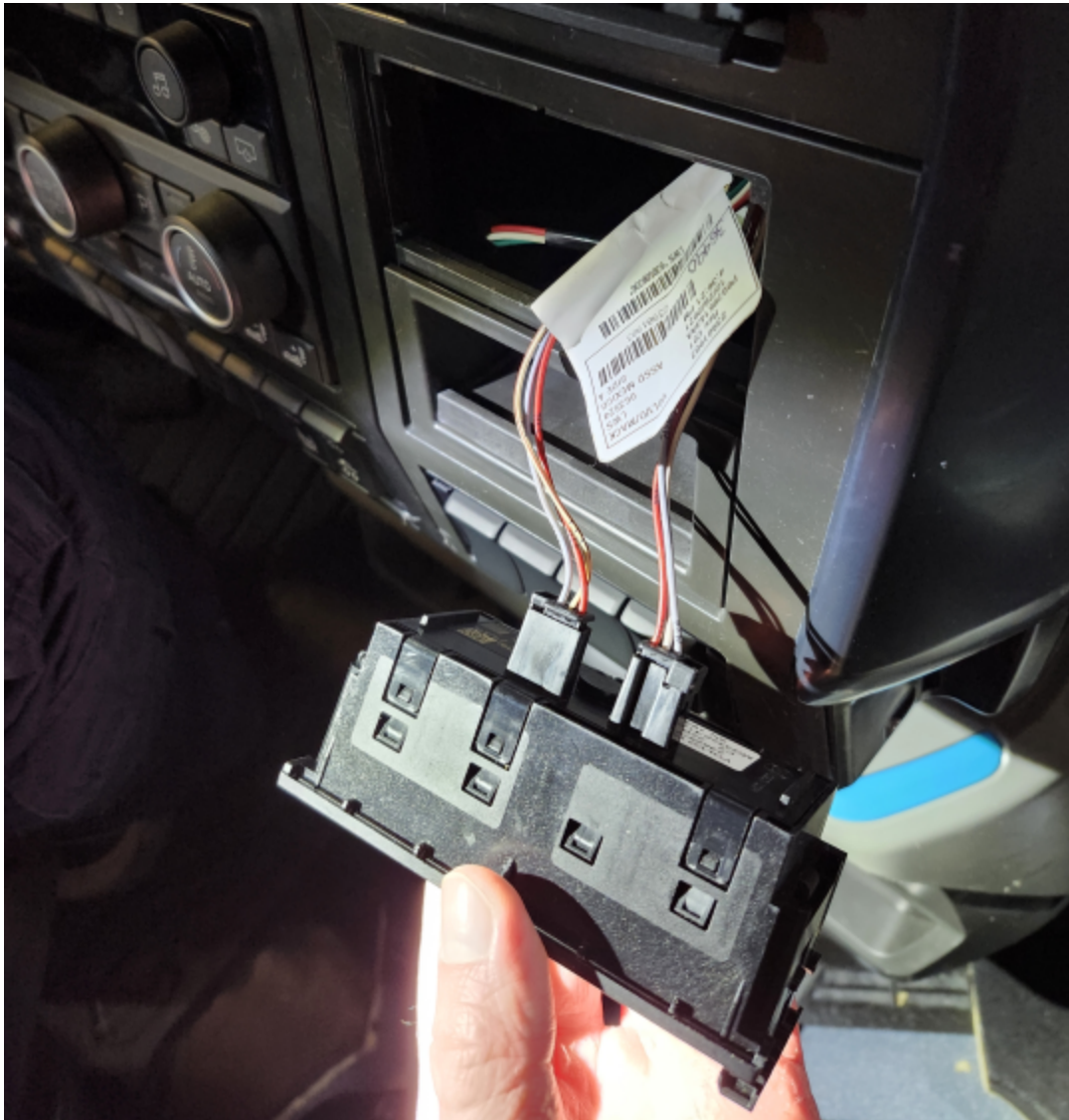


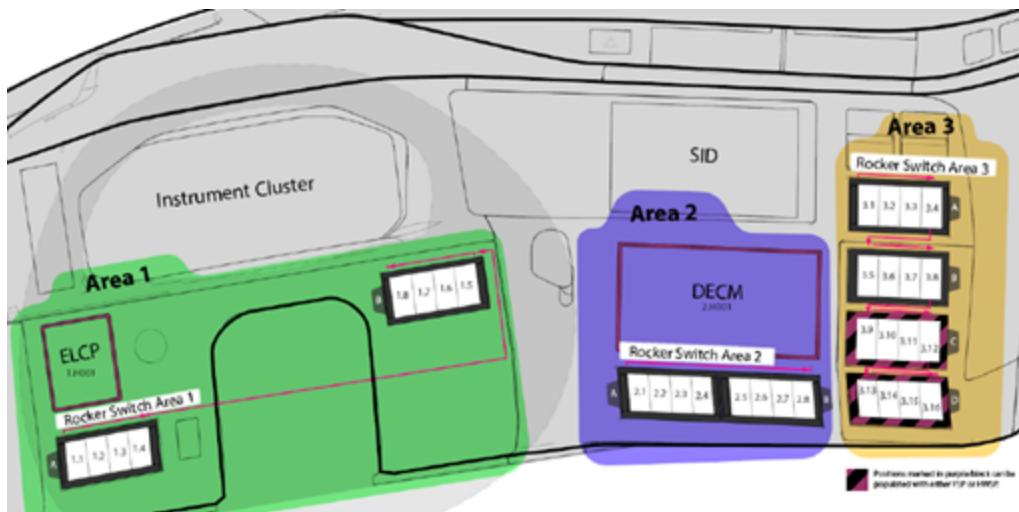
Verify Proper FSP Connections

1. Ensure that all FSPs are connected correctly:

- These are **LIN (Local Interconnect Network) switches**, requiring the input of one panel to be connected to the output of the previous panel in each switch area.

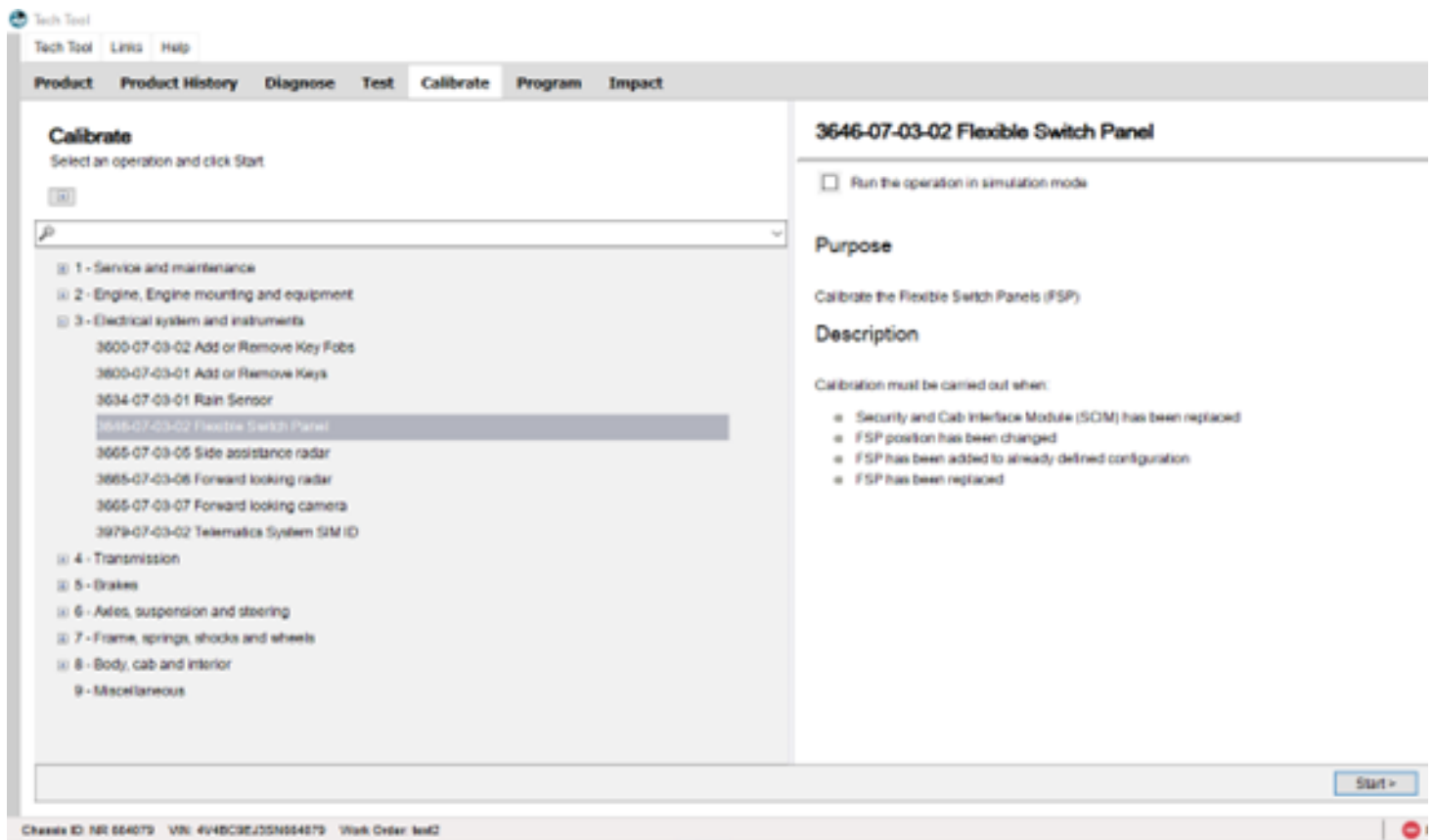
Diagram of Connections (View from Above the FSP When Removed):





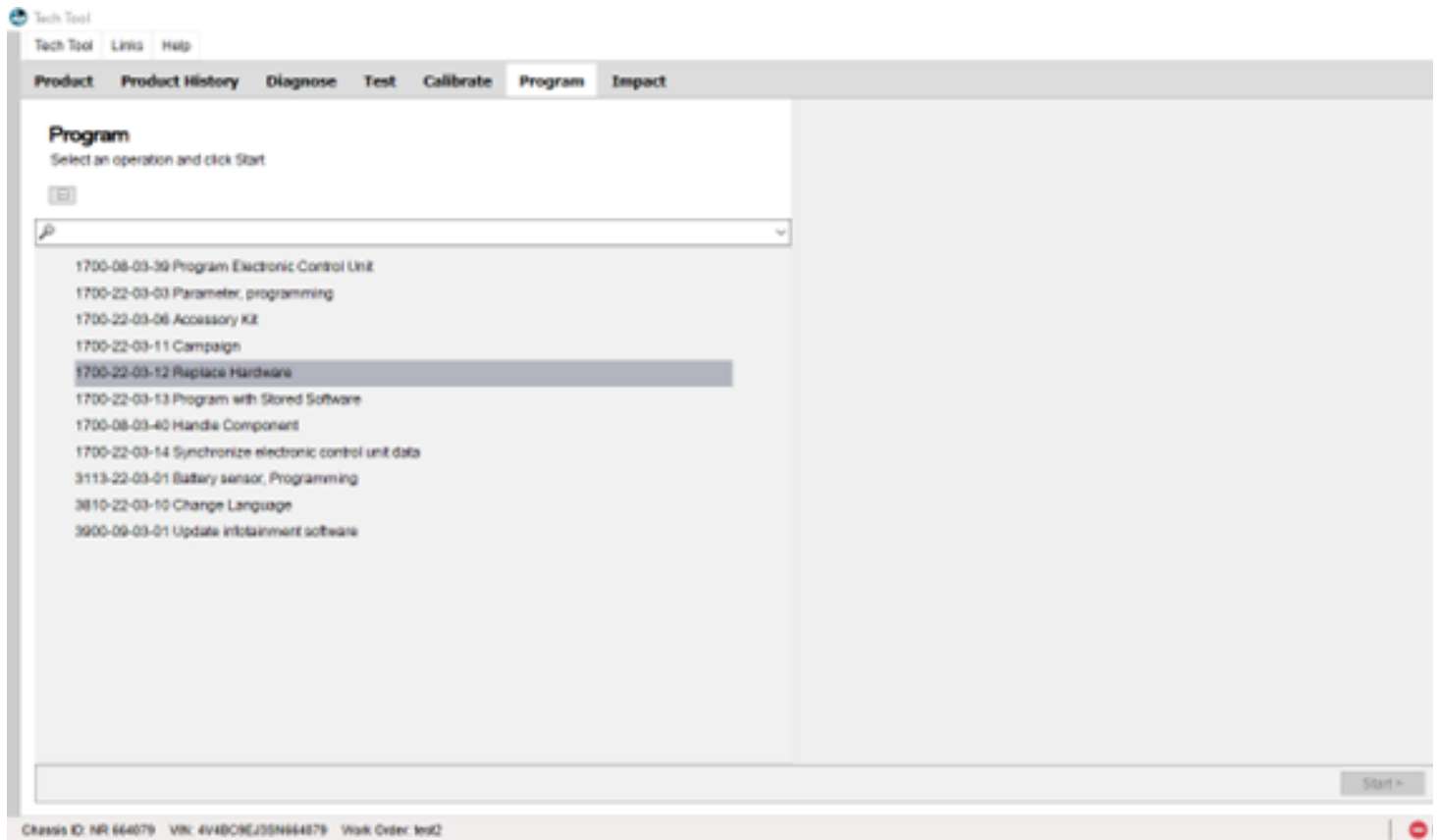
Calibrate Switches Using TechTool

1. Use **TechTool** to calibrate the FSPs, ensuring they are recognized by the SCIM.



Calibrate SCIM Using TechTool

1. Perform the **Replace Hardware** function in TechTool to calibrate the SCIM to work with the new FSPs.



Verify Calibration and Connections

1. Refresh the vehicle readout using TechTool.
2. Confirm there are **no sub-hardware mismatches** listed under the SCIM.

Additional Information

For further reference, consult the following resources in **Impact FG 364**:

- **Flexible switch, replace**
- **Flexible switches and panel, component description**

Tags

mismatch

fsp

volvo

vn4

vn 4

Categories

Make and Model > Volvo > All-New VNL

36592-2 Module, Flexible Switch, Replacement



Illustrations may differ slightly from the actual vehicle being serviced. However, key components addressed in this information are represented as accurately as possible.



Colors used in illustrations are for highlighting purposes only and do not correspond to the actual colors of the vehicle.



All threaded fasteners that do not have a tightening torque specification in the information are tightened to a standard torque. Standard torques are available in the following specification. ➔
[Standard Tightening Torques](#)



CAUTION

Service Information Advisory.

If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

- ▶ You must read and understand the precautions and guidelines in Service Information, Function Group 3, "General Safety Practices, Electrical and Electronics" before performing this procedure.



CAUTION

Risk of material damage.

Paintwork and panels can be easily damaged if you use the wrong type of tool.

- ▶ Only use plastic tools when working on fragile parts.

Special tools

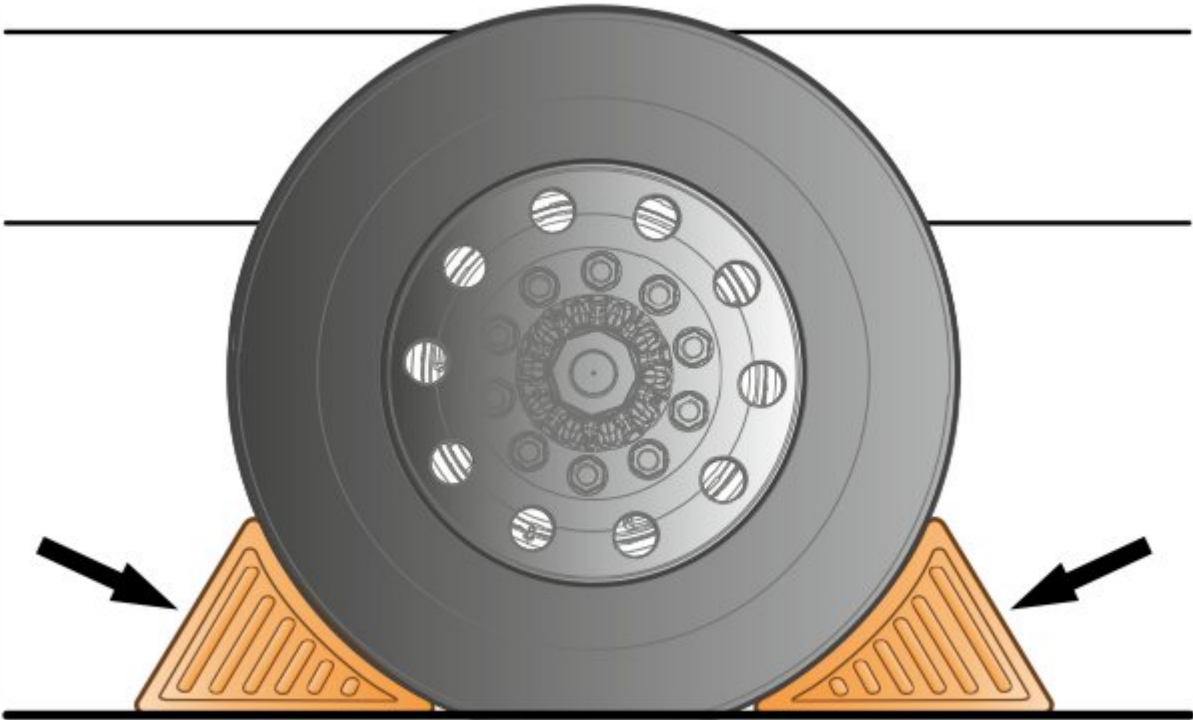
[88800271](#)

1 Park the vehicle on a level surface.

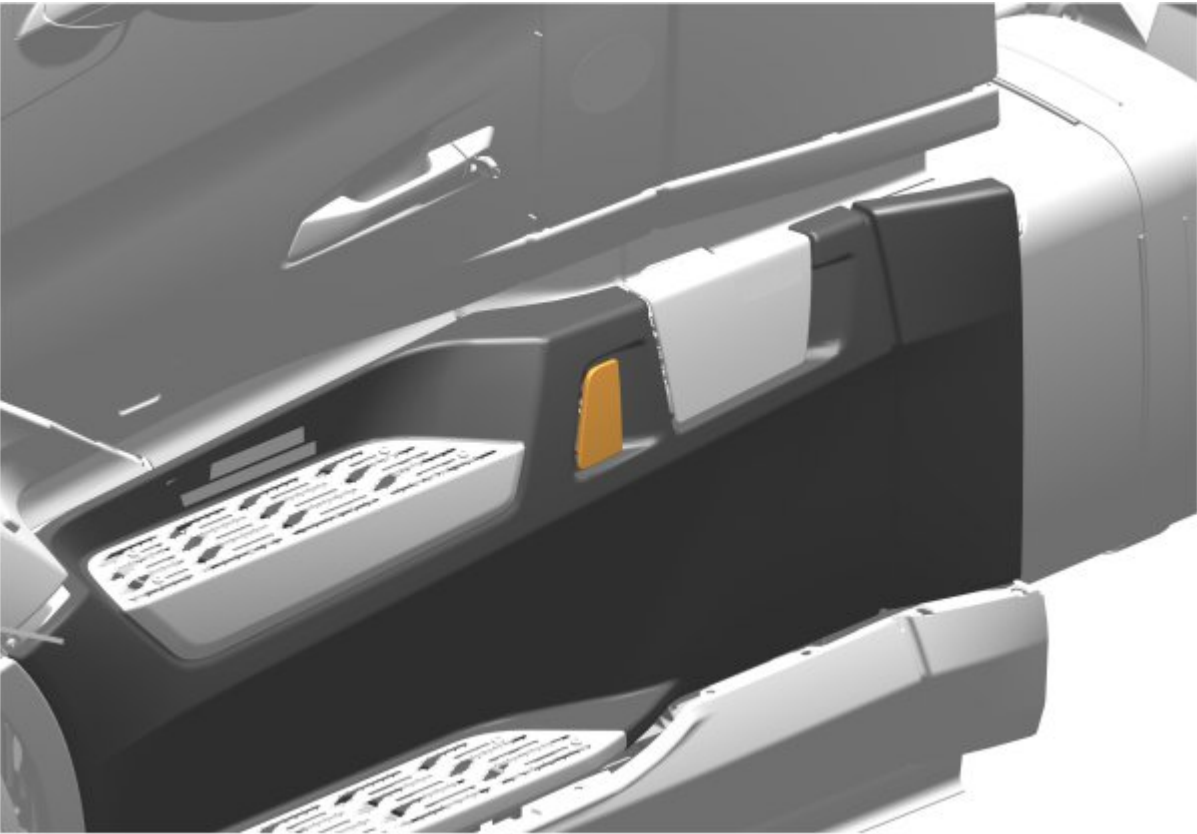
2 Apply the parking brake.

3 Place the gear lever in neutral.

4 Install the wheel chocks.

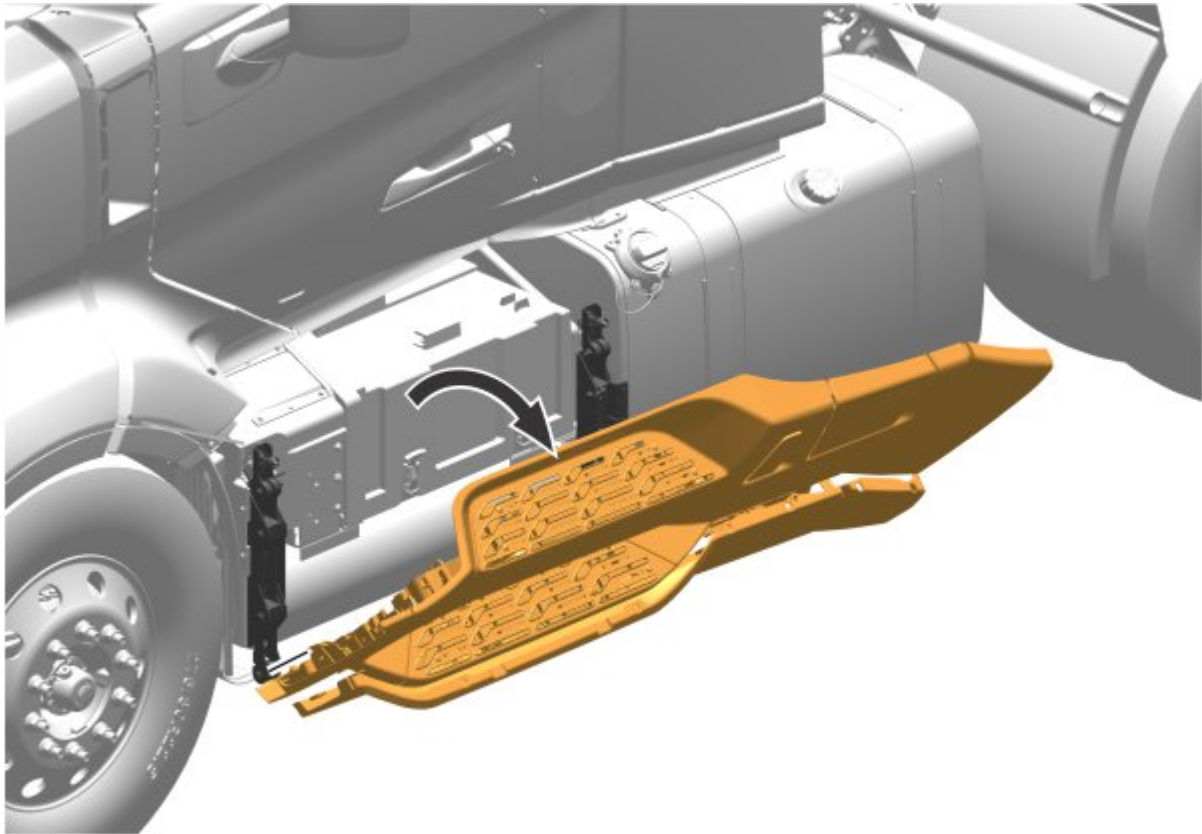


5	Unlatch the fairing.
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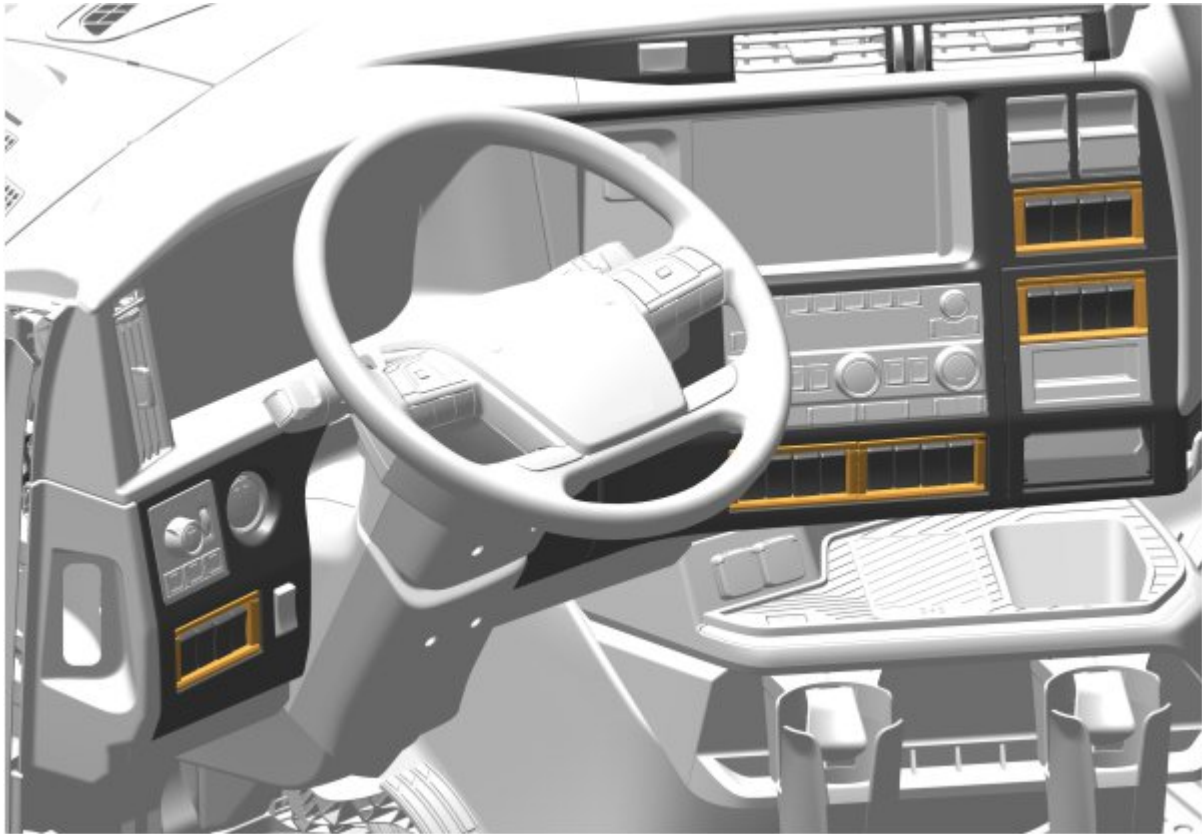


6	Remove the tether.
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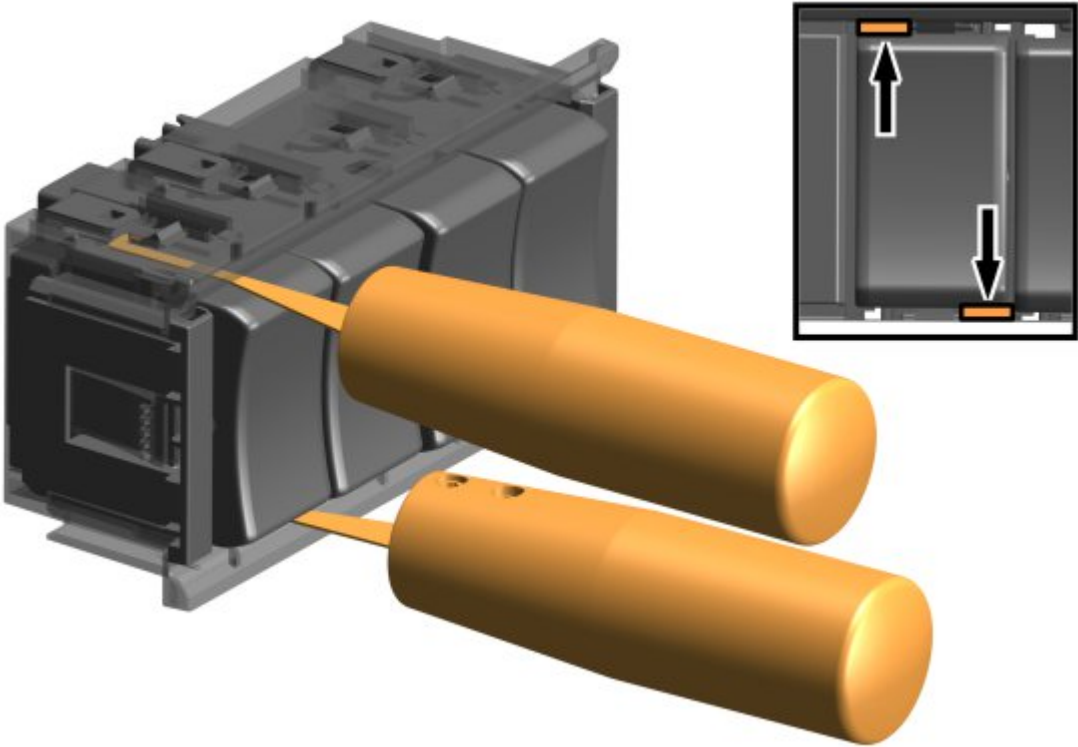
7	Remove the fairing.
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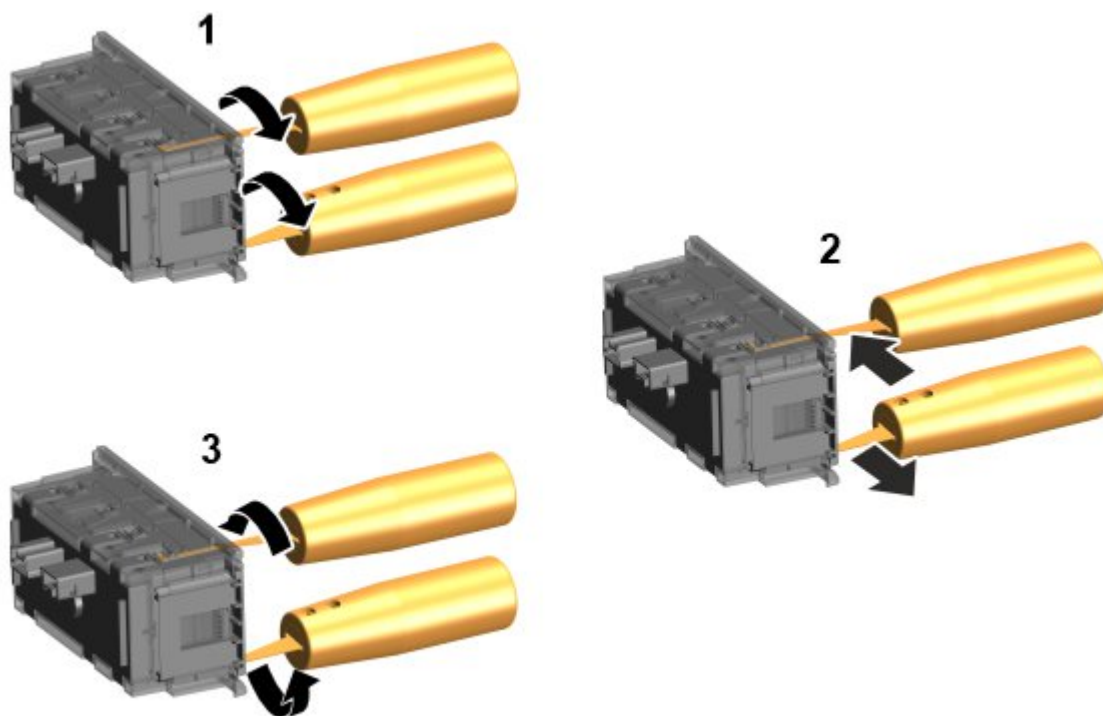
8	Decommission the low voltage system. i Note See header link for more information. Low Voltage System, Decommissioning
9	Identify the module.



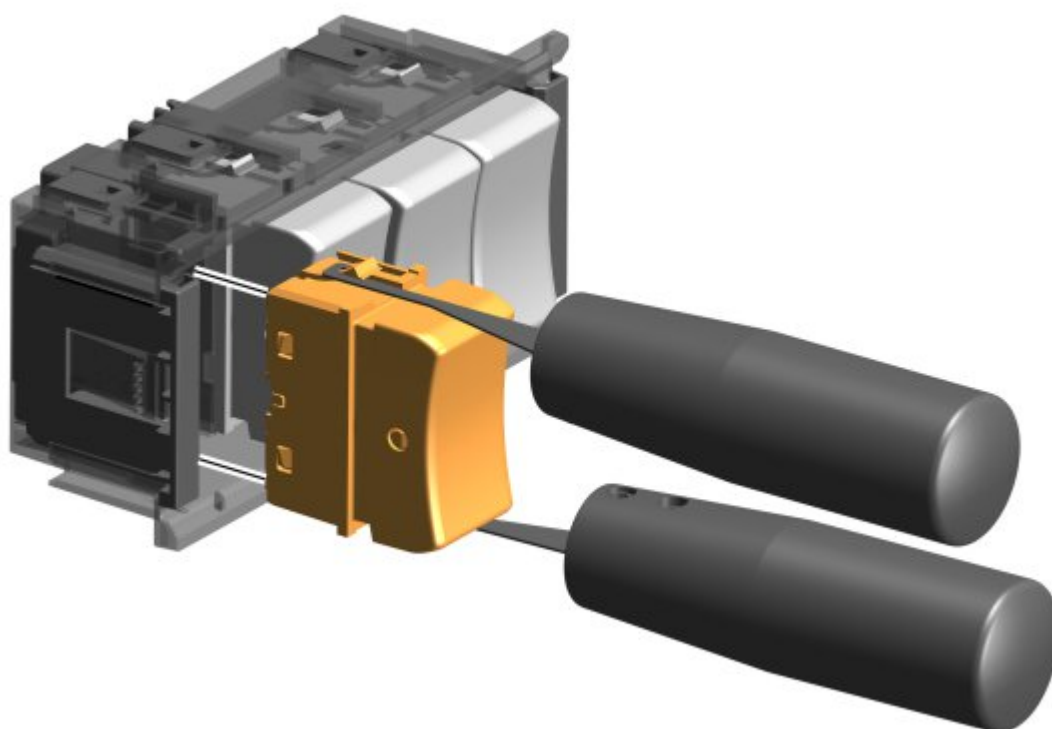
10	Position the tool.	
	Required material	
	EXTRACTOR	88800271
	 Service hint To make the operation easier, validate the tool position on the new switch.	



11	Turn the tools counterclockwise (1).
12	Move the tool over the switch locks (2).
13	Turn the tool clockwise (3). i Note No force needed.



14	Remove the switch.
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15	Perform the same procedure on the other switches.
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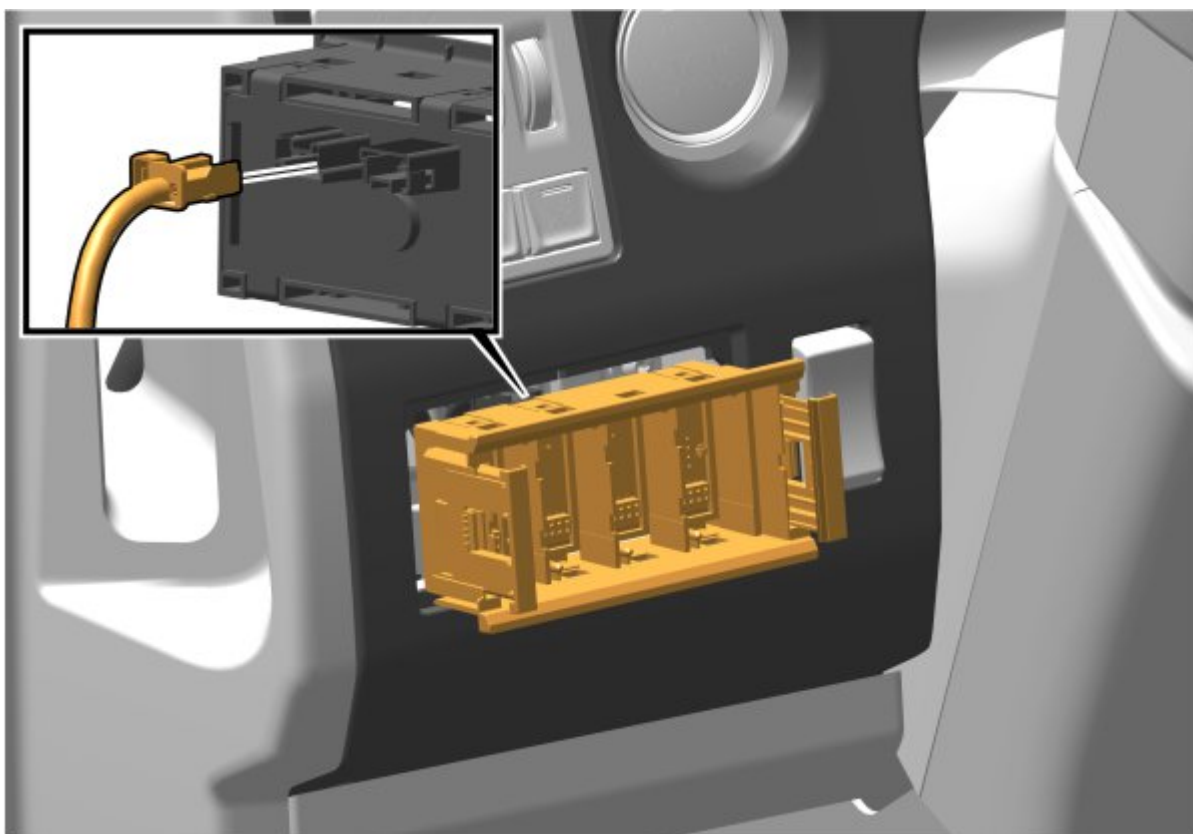
16	Pull the locks.
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17	Pull out the module.
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18	Disconnect the connector.
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19	Remove the module.
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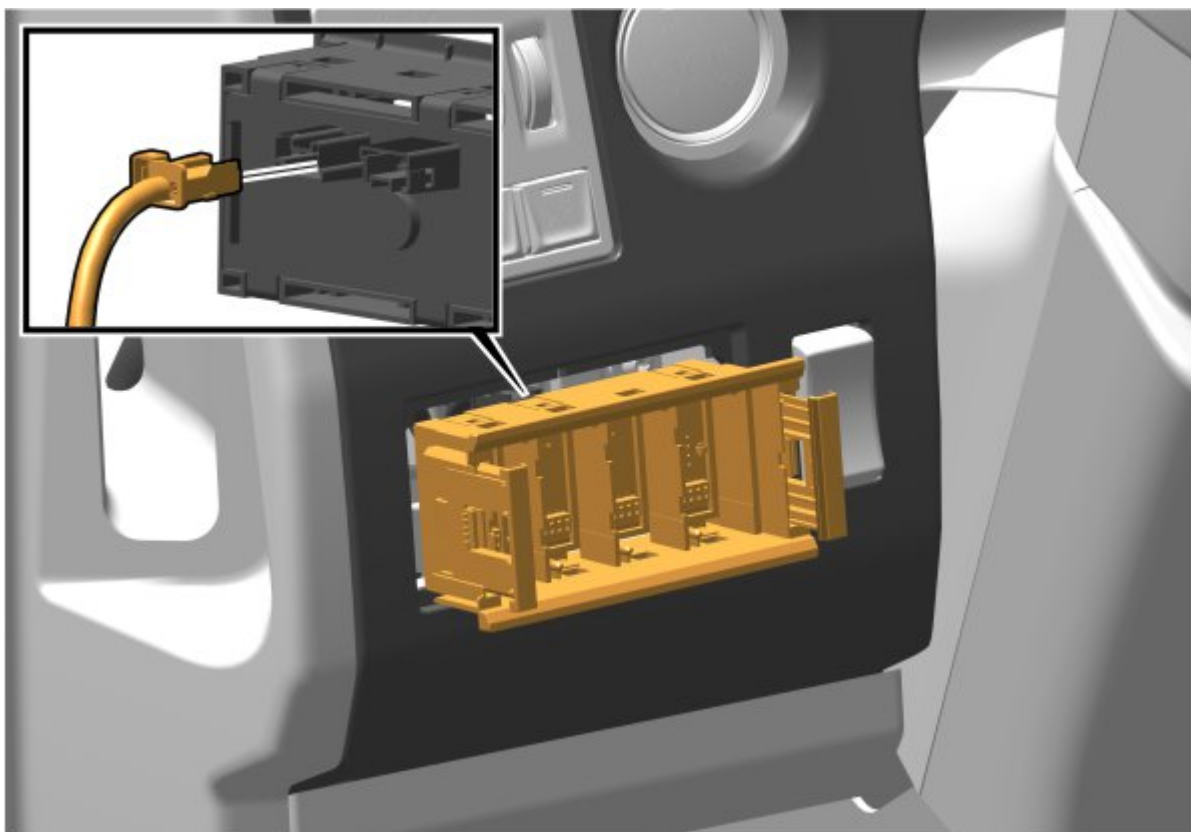


20	Connect the connector.
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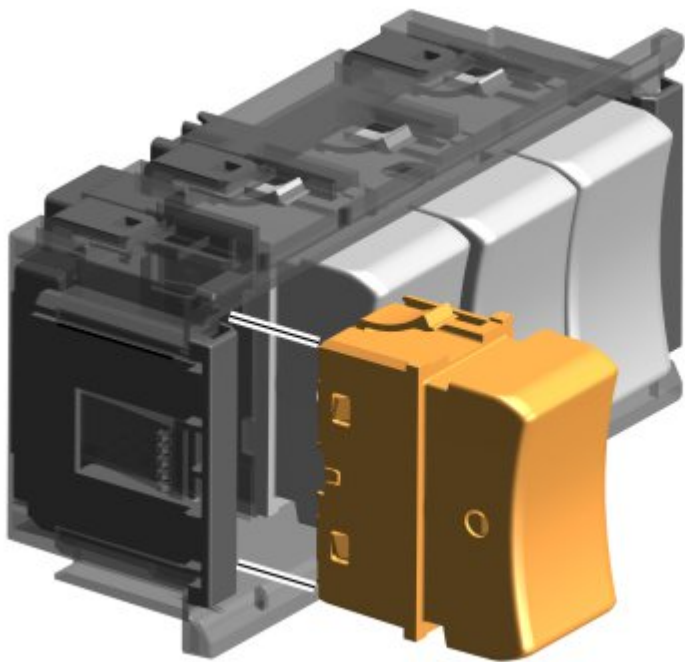
21	Install the module.
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22	Push the locks back to the locked position.
----	---



23	Install the switch.
----	---------------------



24	Perform the same procedure on the other switches.
25	Commission the low voltage system. Note See header link for more information. Low Voltage System, Commissioning
26	Connect the diagnostic tool (Premium Tech Tool).



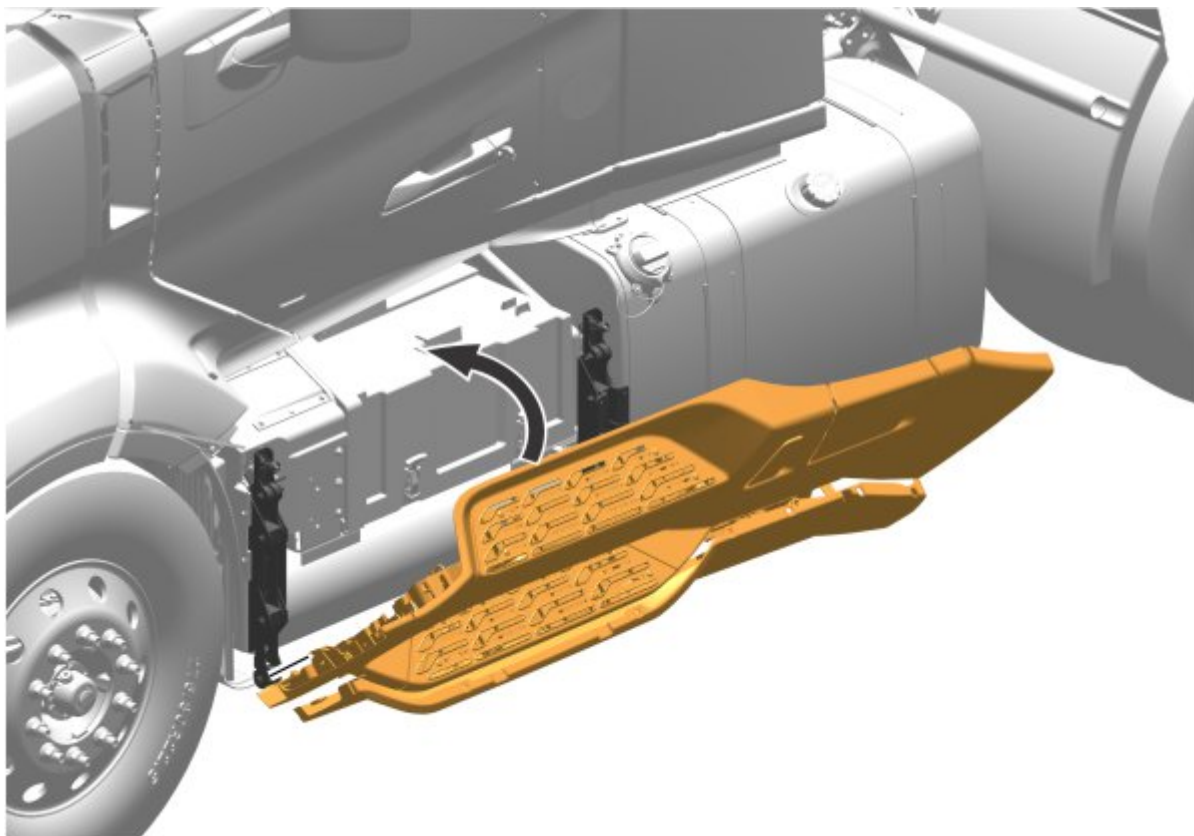
27	Perform Program control unit in the diagnostic tool (Premium Tech Tool).
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28	Disconnect the diagnostic tool (Premium Tech Tool) .
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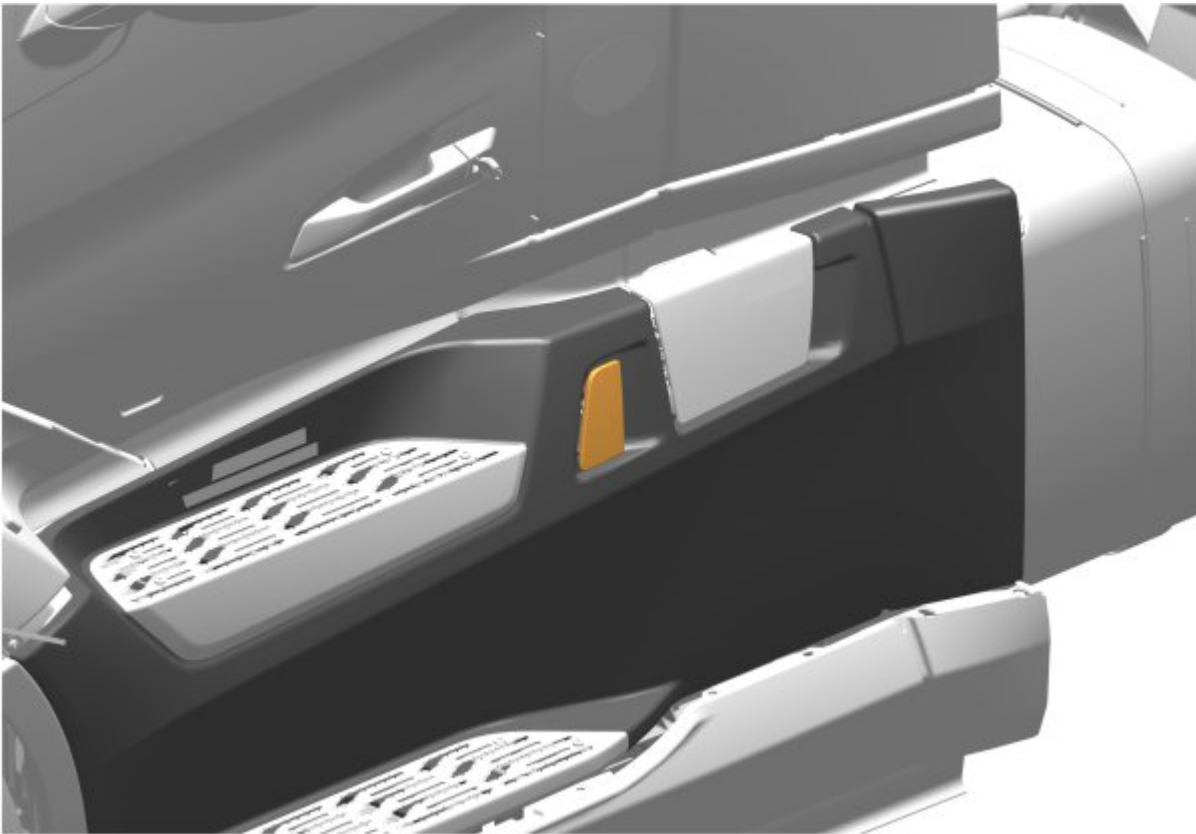


29	Install the fairing.
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30	Install the tether.
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31	Latch the fairing.
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32	Remove the wheel chocks.
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