



Volvo Chassis - Unable To Program VECU: Error Code 155; Possible EMS DTC U000188 CAN Communication Backbone 2 Net - VECU5 Only

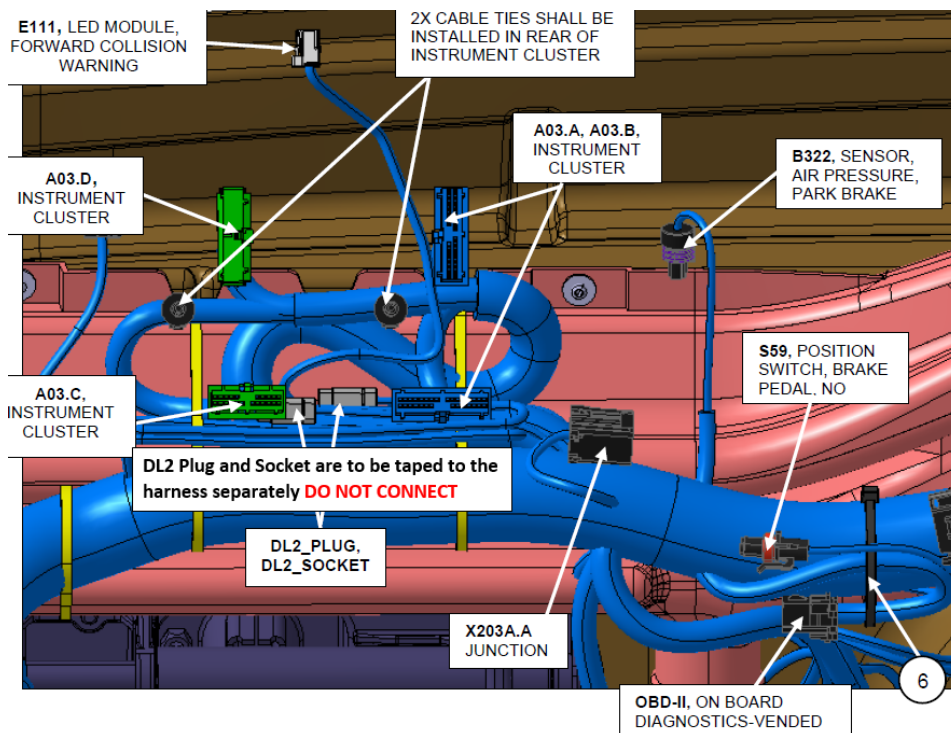


> Internal Content

For vehicles exhibiting these symptoms, there is an interconnect located behind the instrument panel that connects the instrument panel to the DL2 backbone. The current instrument panel does not support DL2 and when hooking it up to the DL2 there will be intermittent operations on the network.

This effects Volvo VN, VHD and VAH with variant ELS-BP+ built 1/1/2020 thru 4/19/2021

A quick way to identify if the innerconnect has been connected is to take an ohm reading between Pins 6 and 14 of the OBD diagnostic connector. If the resistance is around 40 ohms, pull the instrument cluster per [3811-03-02-10 Instrument Cluster, Replacement](#) and see if the Deutsch two way connector has been connected. If they have, disconnect and tape each connector to the main harness separately.



 Tags

- [error 155](#)
- [u000188](#)
- [programming failure](#)
- [volvo](#)
- [dl2](#)
- [data link](#)
- [terminating resistor](#)
- [no communications with acm](#)
- [vecu5](#)

Related links and attachments

[3811-03-02-10 IC Replacement](#)

 **Feedback**

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to help improve the content of this article

38168-2 Instrument Cluster, Replacement



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



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](#)



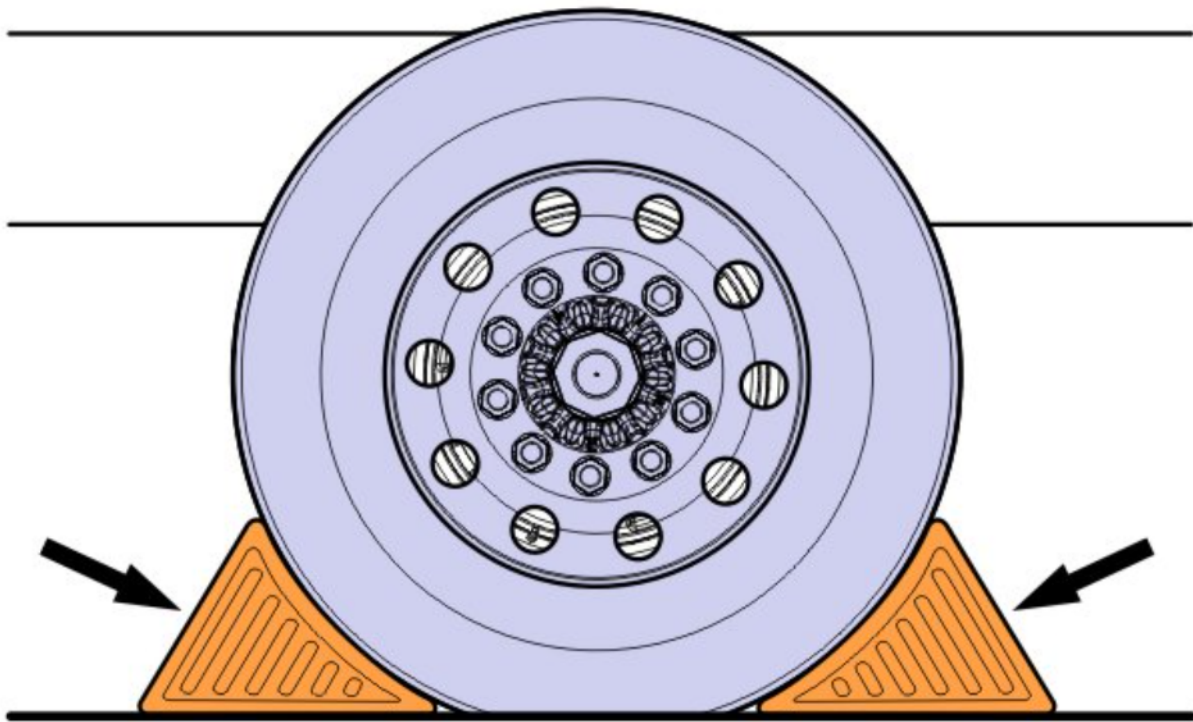
CAUTION

Service Information Advisory.

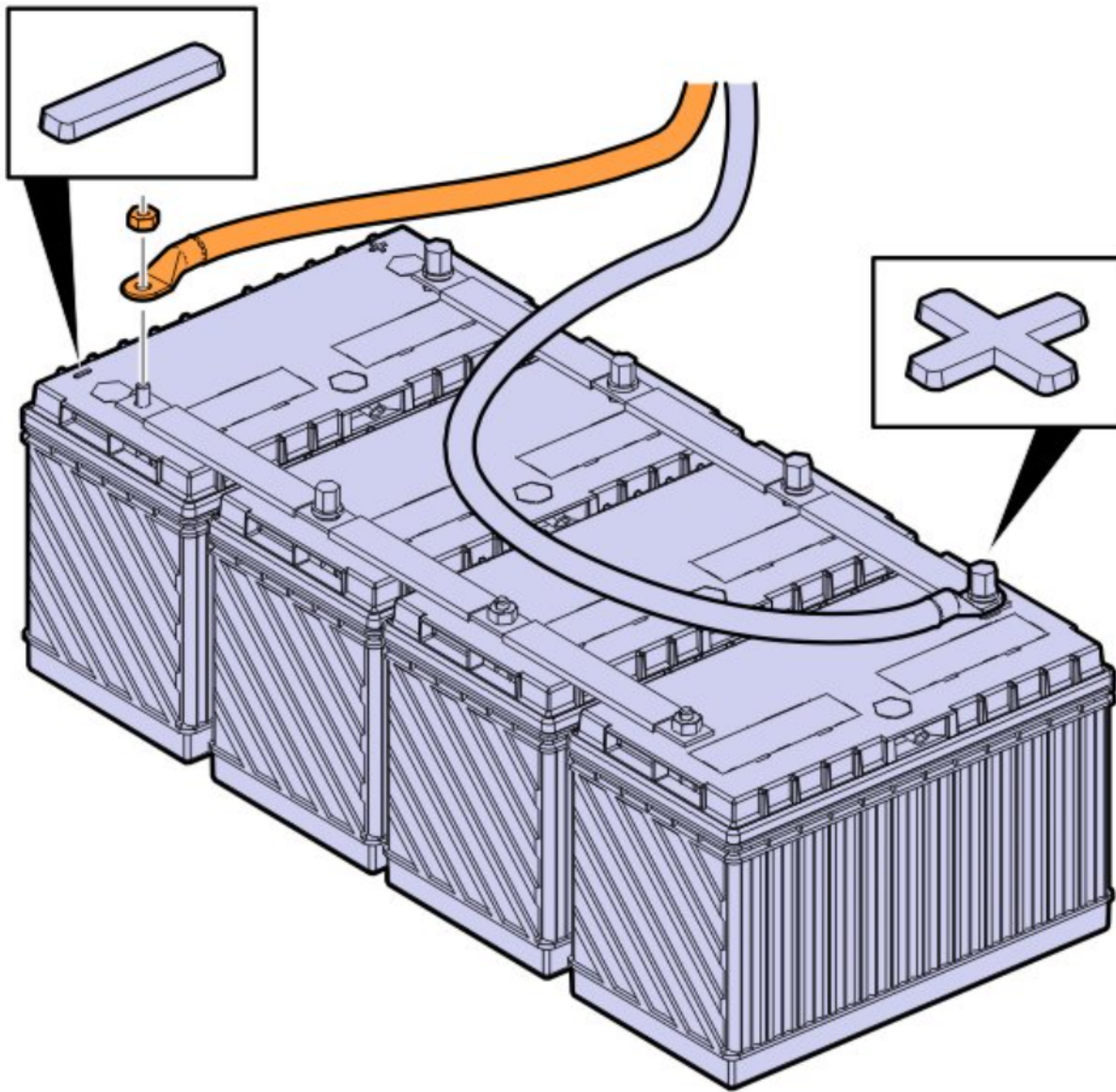
If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

- ▶ 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.

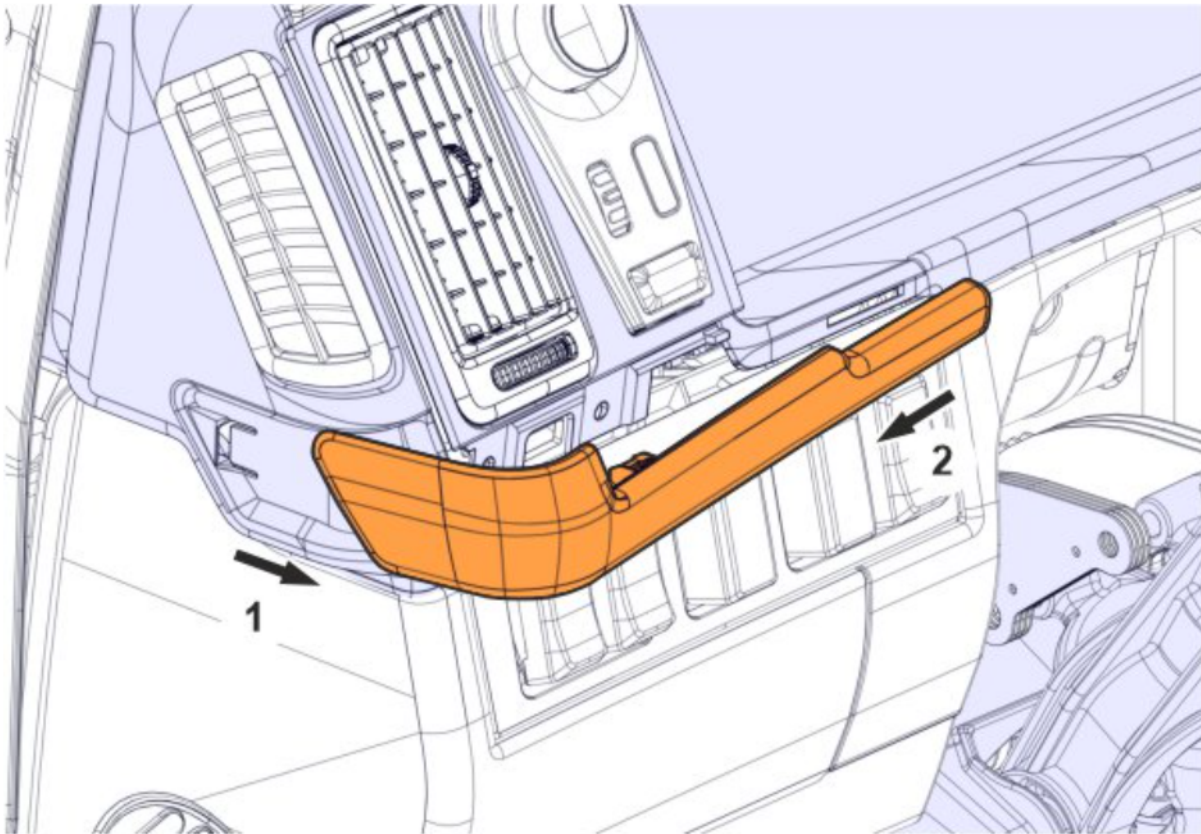
- 1 Park the vehicle on a level surface with the steering wheel in the straight ahead position.
- 2 Apply the parking brake.
- 3 Place the gear lever in neutral.
- 4 Install the wheel chocks.



| | |
|---|--|
| 5 | Disconnect the cable from the negative terminal. |
|---|--|

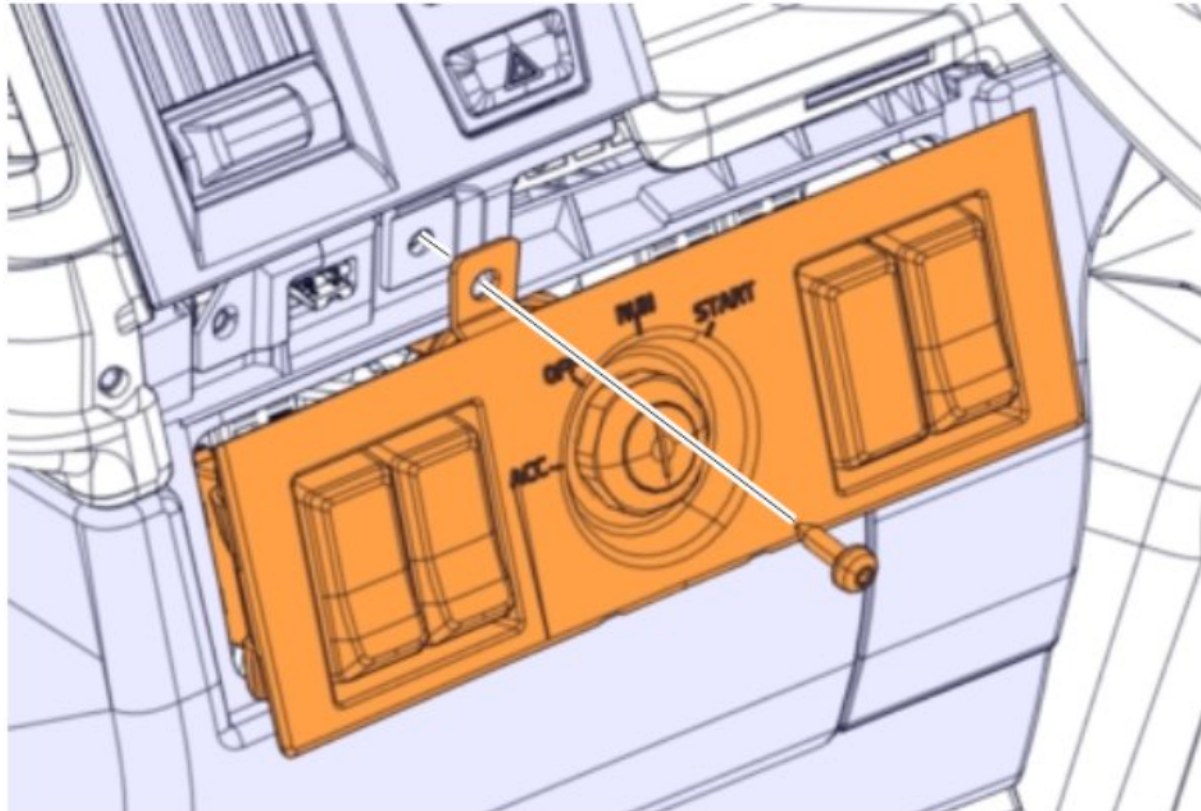


| | |
|---|---|
| 6 | <p>Remove the dashboard trim panel.</p> <div data-bbox="165 1361 710 1467" style="border: 1px solid black; padding: 5px;"> <p>i Note Ensure not to damage the component.</p> </div> |
|---|---|



| | |
|---|-------------------|
| 7 | Remove the screw. |
|---|-------------------|

| | |
|---|-------------------|
| 8 | Remove the panel. |
|---|-------------------|



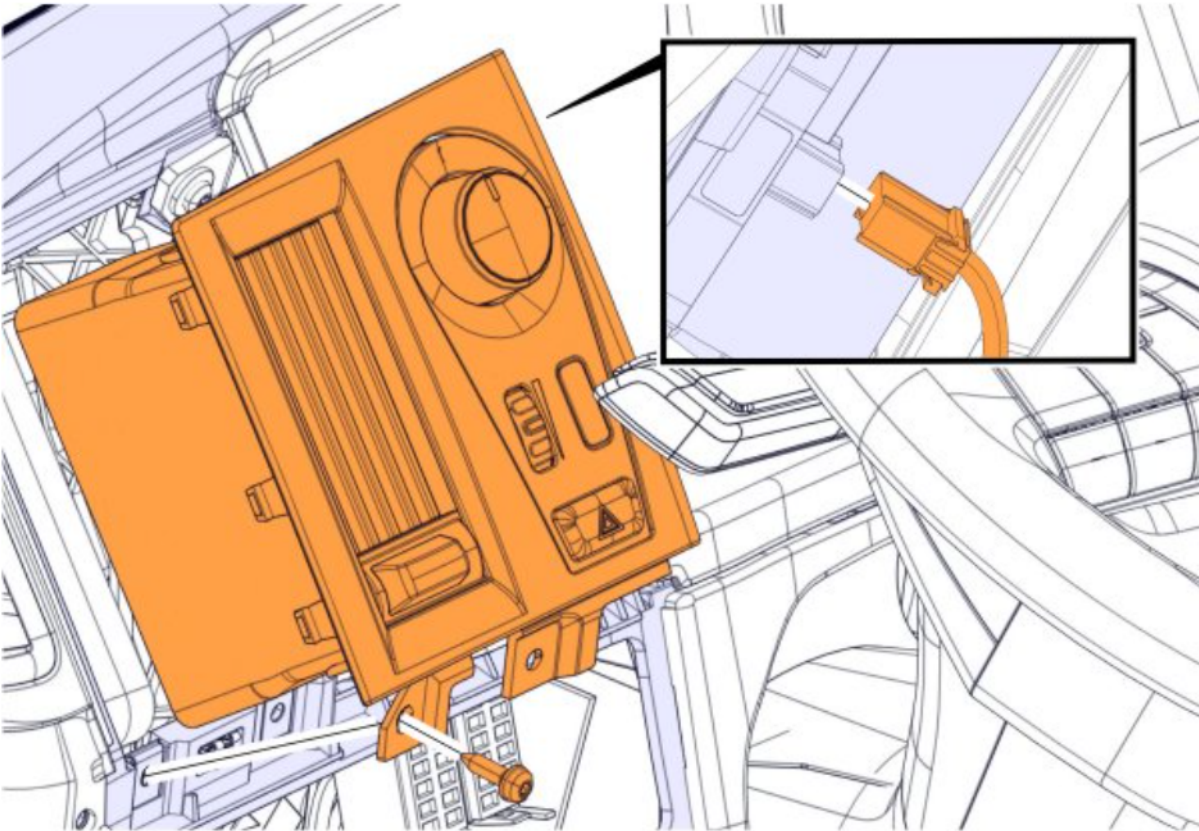
| | |
|---|-------------------|
| 9 | Remove the screw. |
|---|-------------------|

| | |
|----|----------------------|
| 10 | Remove the assembly. |
|----|----------------------|

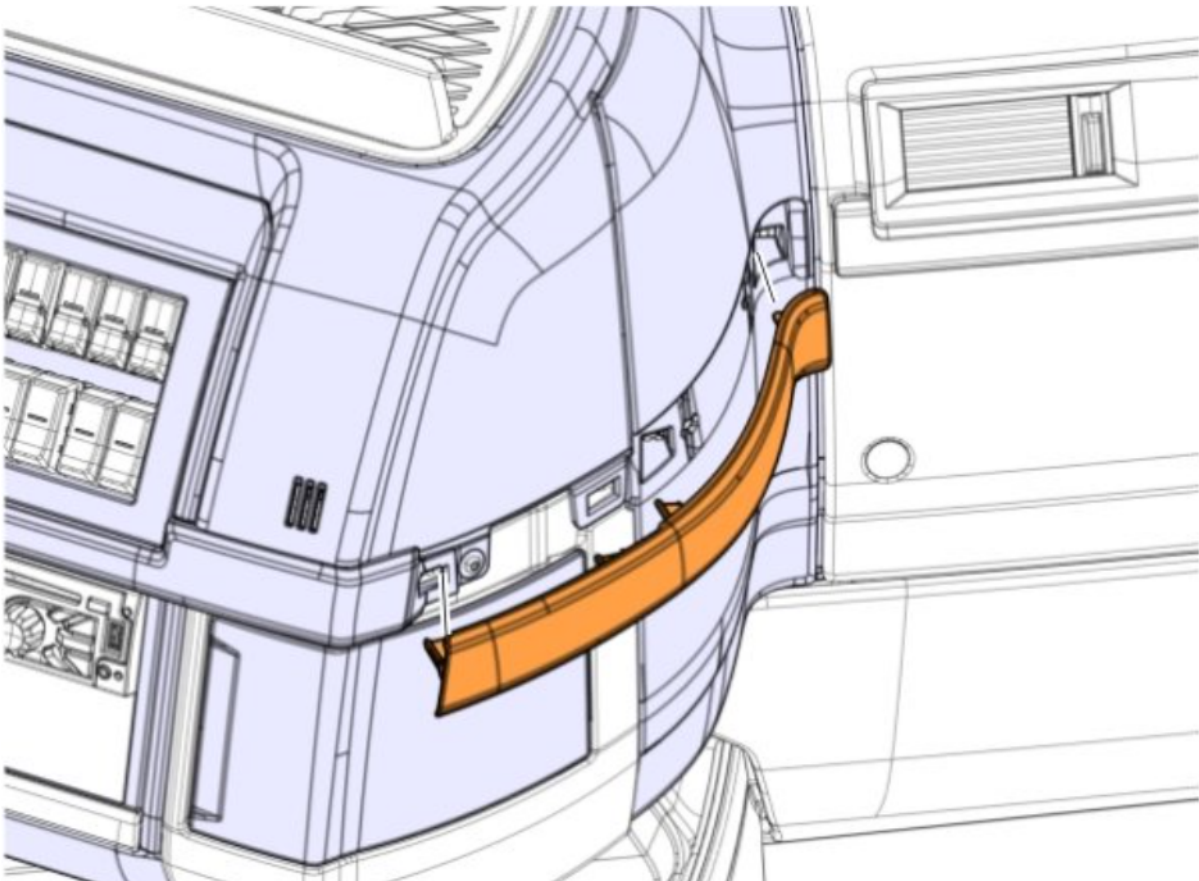
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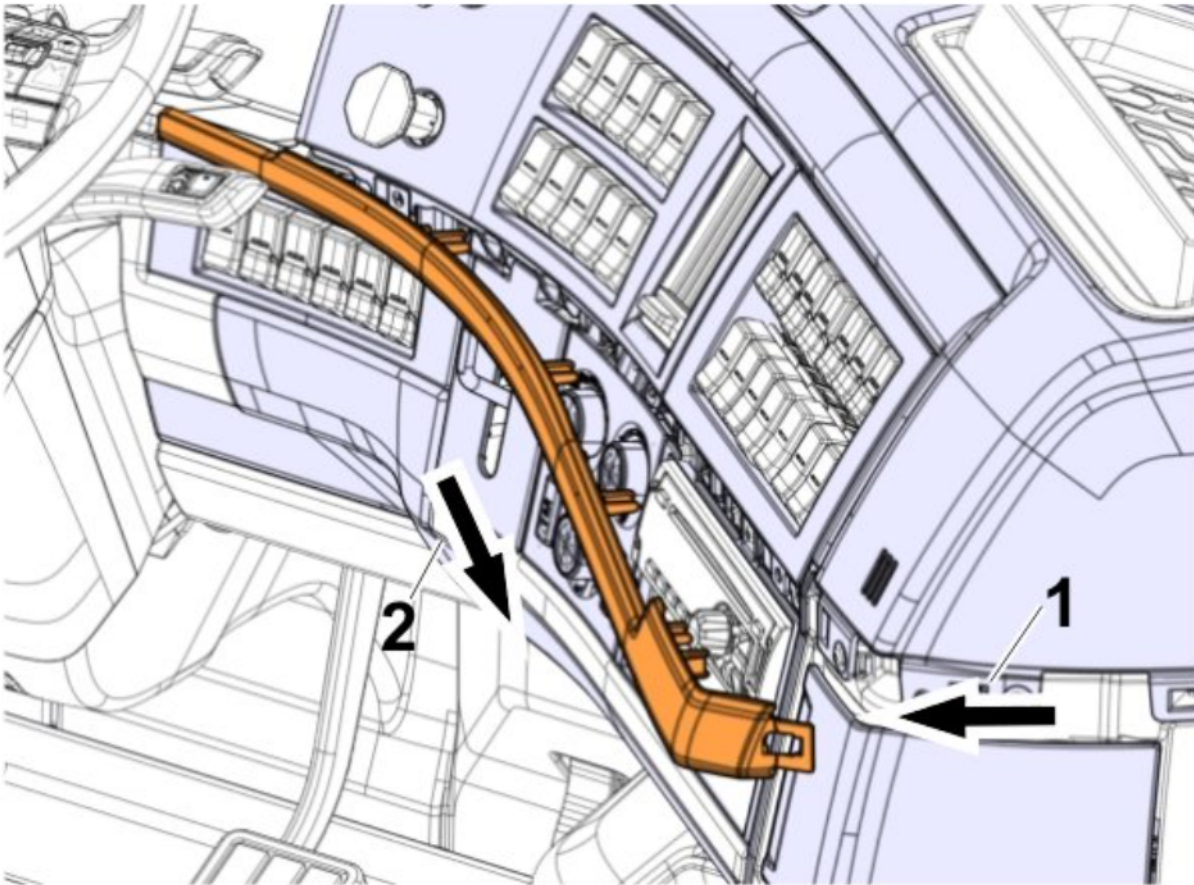
| | |
|----|---------------------------|
| 11 | Disconnect the connector. |
|----|---------------------------|



| | |
|----|------------------|
| 12 | Remove the trim. |
|----|------------------|



| | |
|----|------------------|
| 13 | Remove the trim. |
|----|------------------|



| | |
|----|--------------------|
| 14 | Remove the screws. |
|----|--------------------|

| | |
|----|---------------------------------|
| 15 | Pull out the radiator assembly. |
|----|---------------------------------|

| | |
|----|----------------------------|
| 16 | Disconnect the connectors. |
|----|----------------------------|

| | |
|----|----------------------|
| 17 | Remove the assembly. |
|----|----------------------|

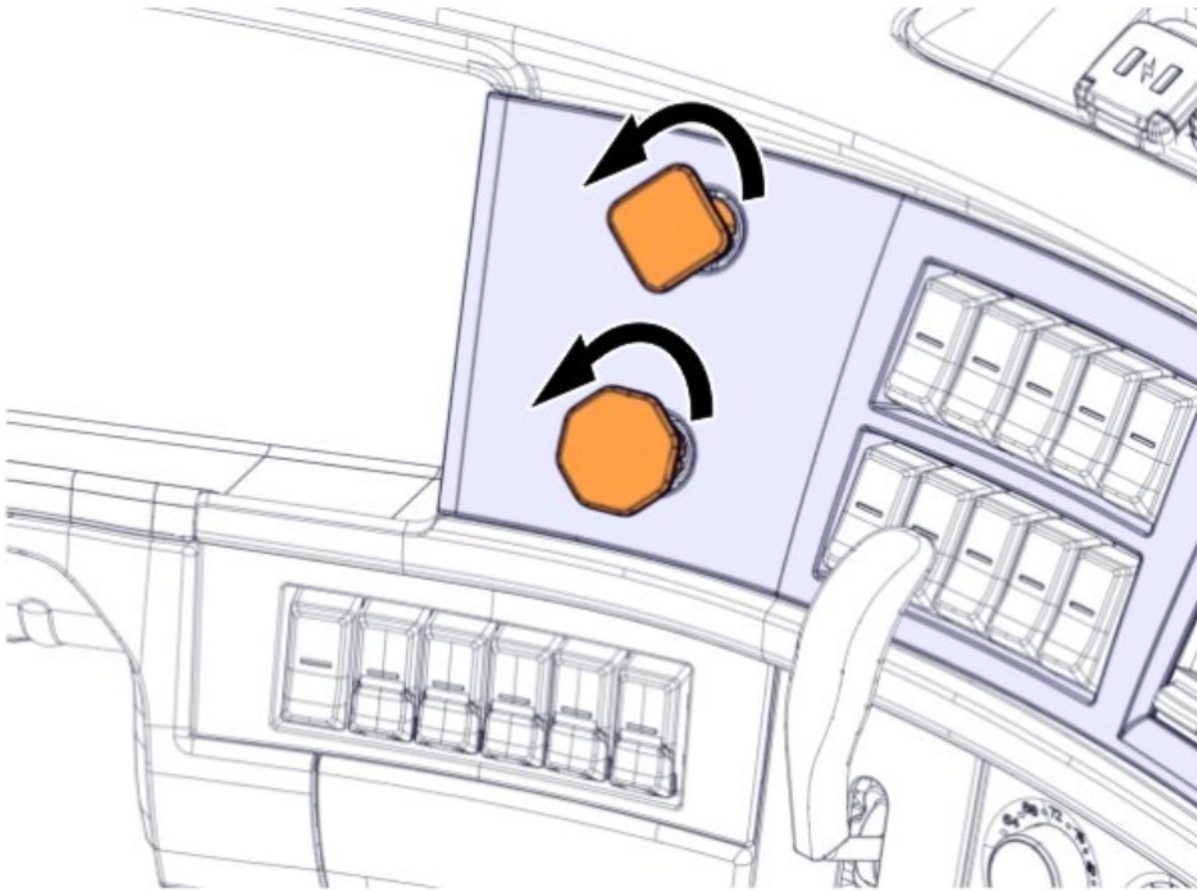


18 Remove the brake valve knobs.

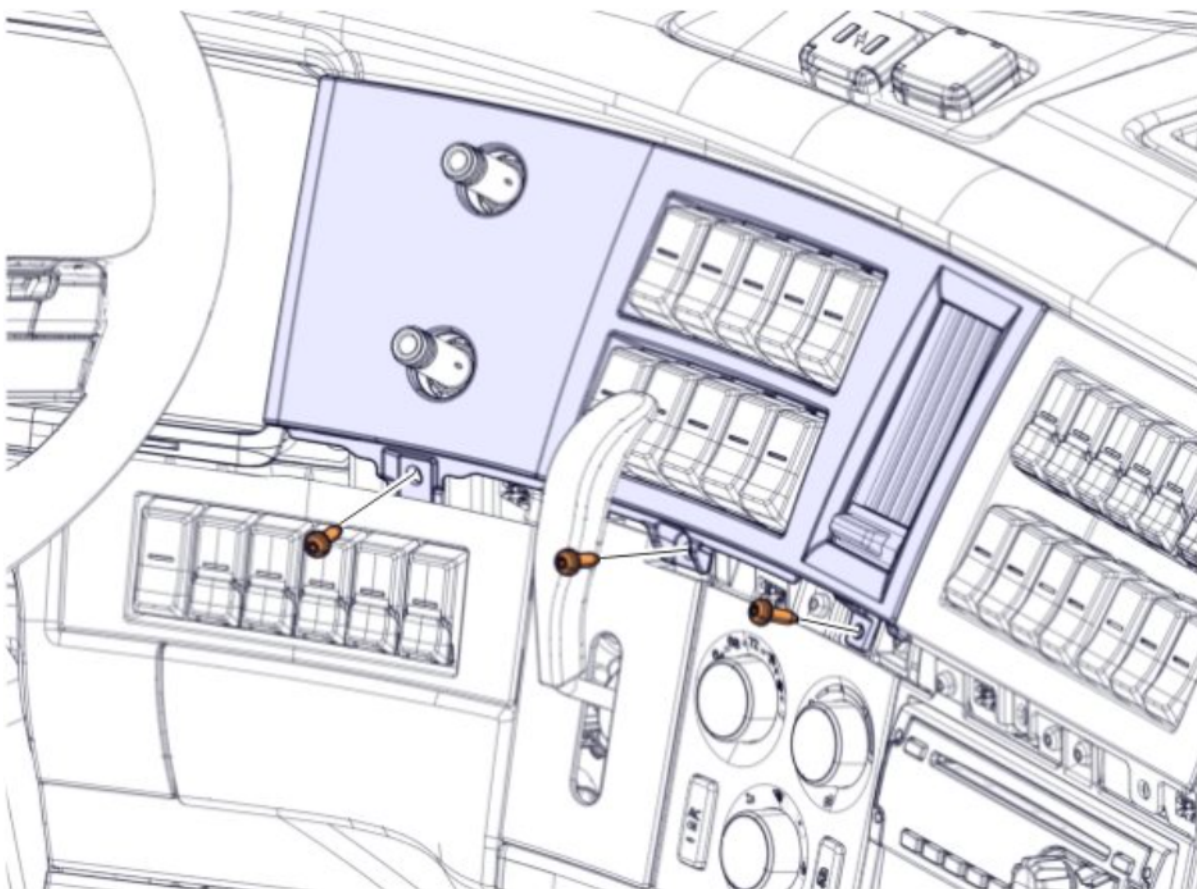


Note

Note the orientation of the knobs before removal.



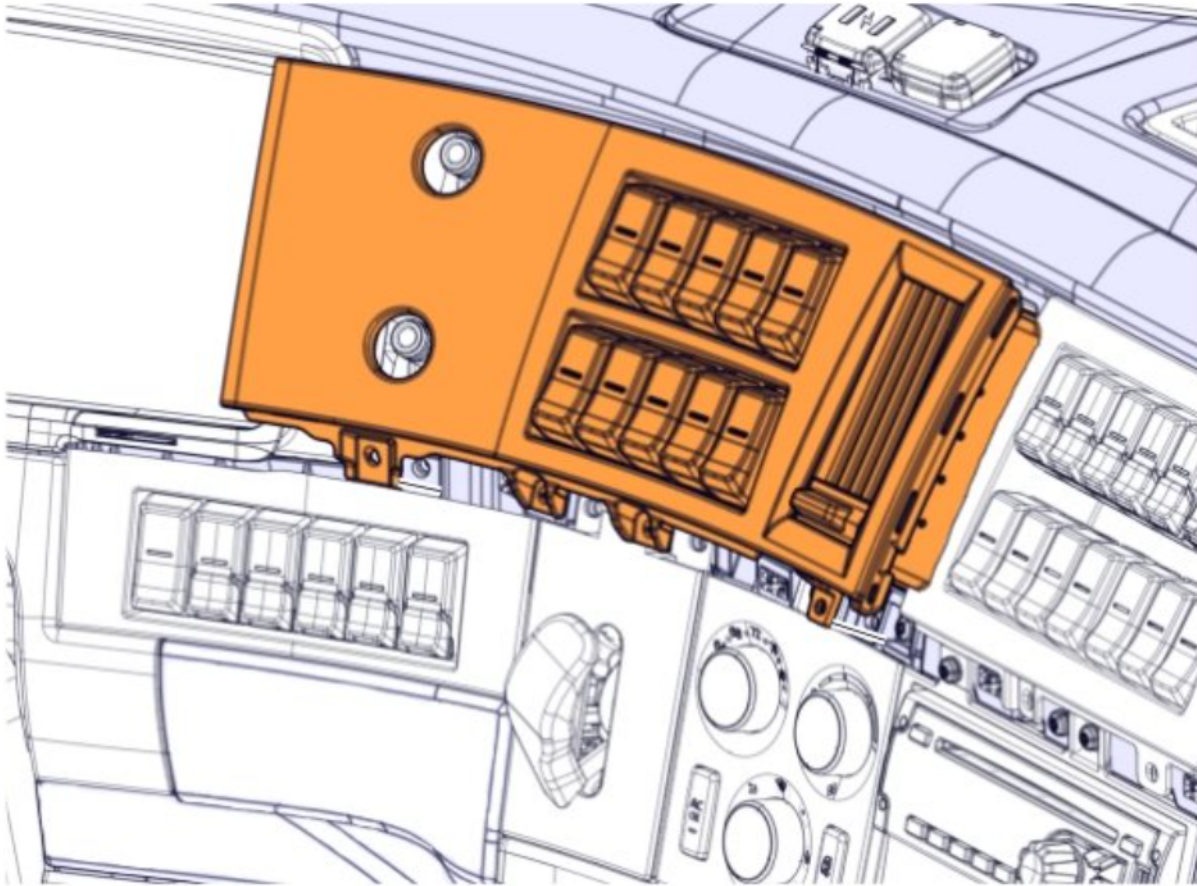
19 Remove the screws.



20 Remove the panel.

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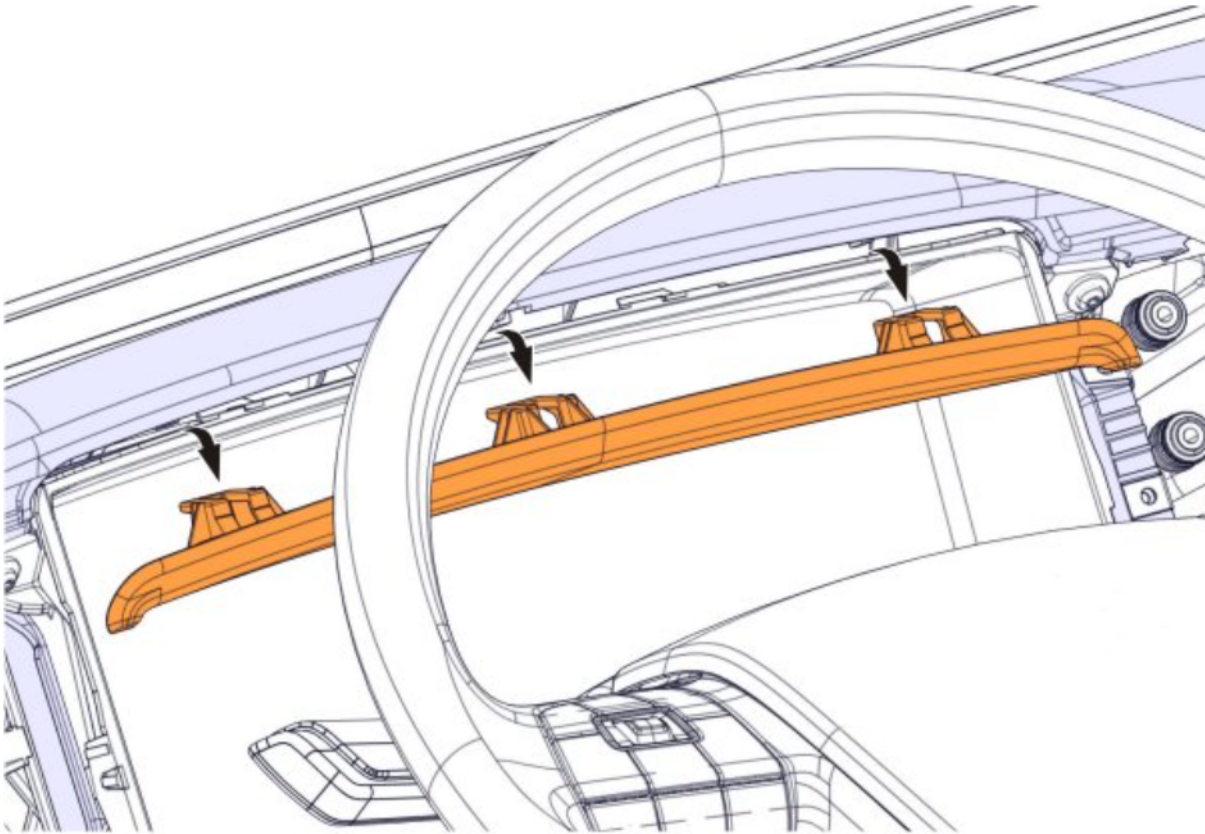


21 Remove the trim.

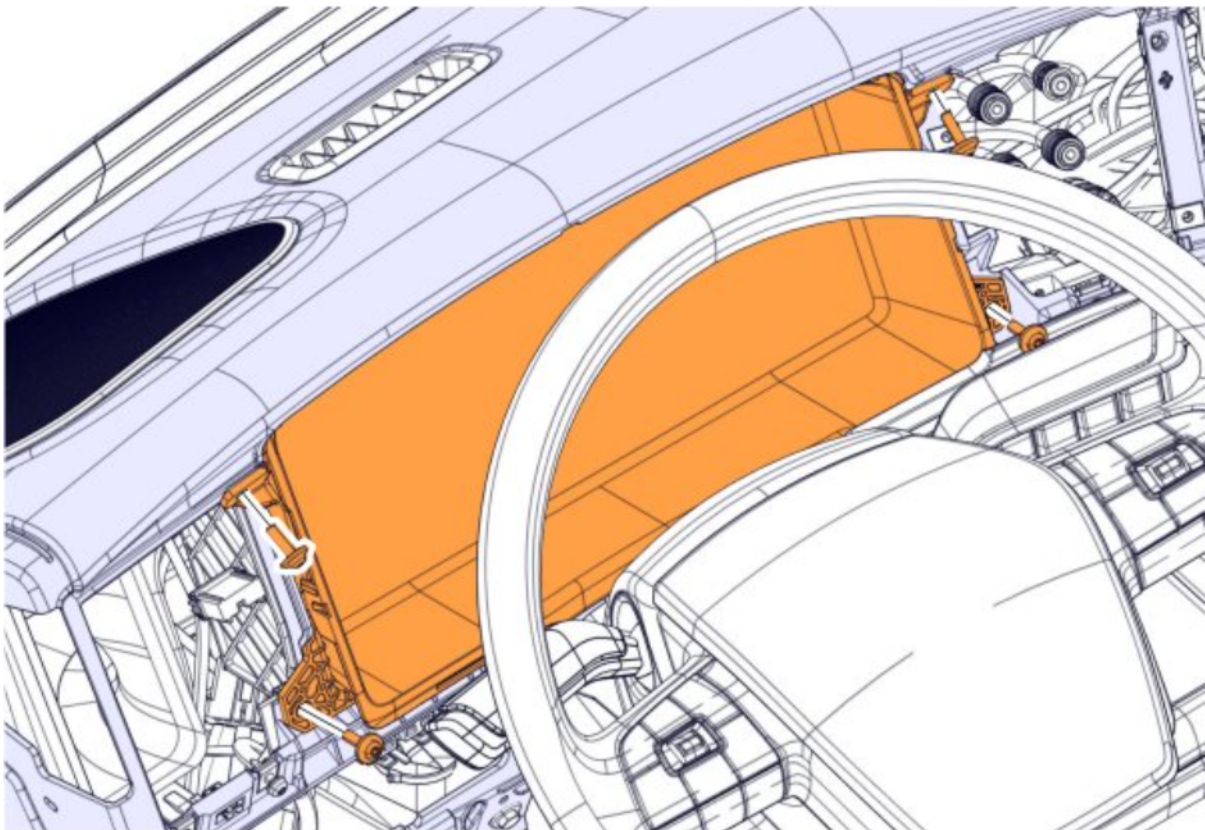


Note

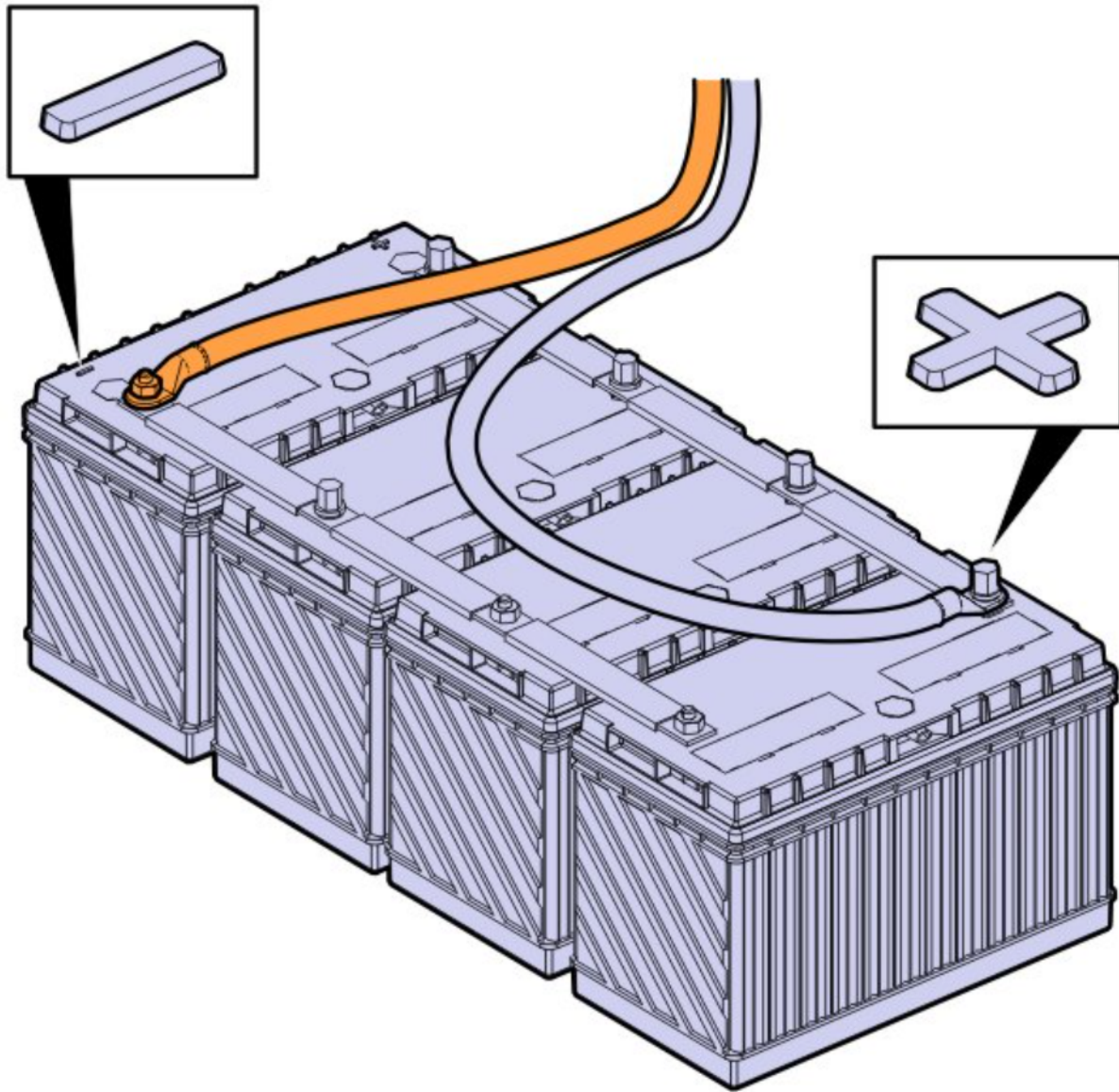
Take care not to damage the component.



| | |
|----|--------------------|
| 22 | Remove the screws. |
|----|--------------------|



| | |
|----|---|
| 23 | Connect the cable to the negative terminal. |
|----|---|



| | |
|----|--|
| 24 | Connect the diagnostic tool (Premium Tech Tool). |
|----|--|

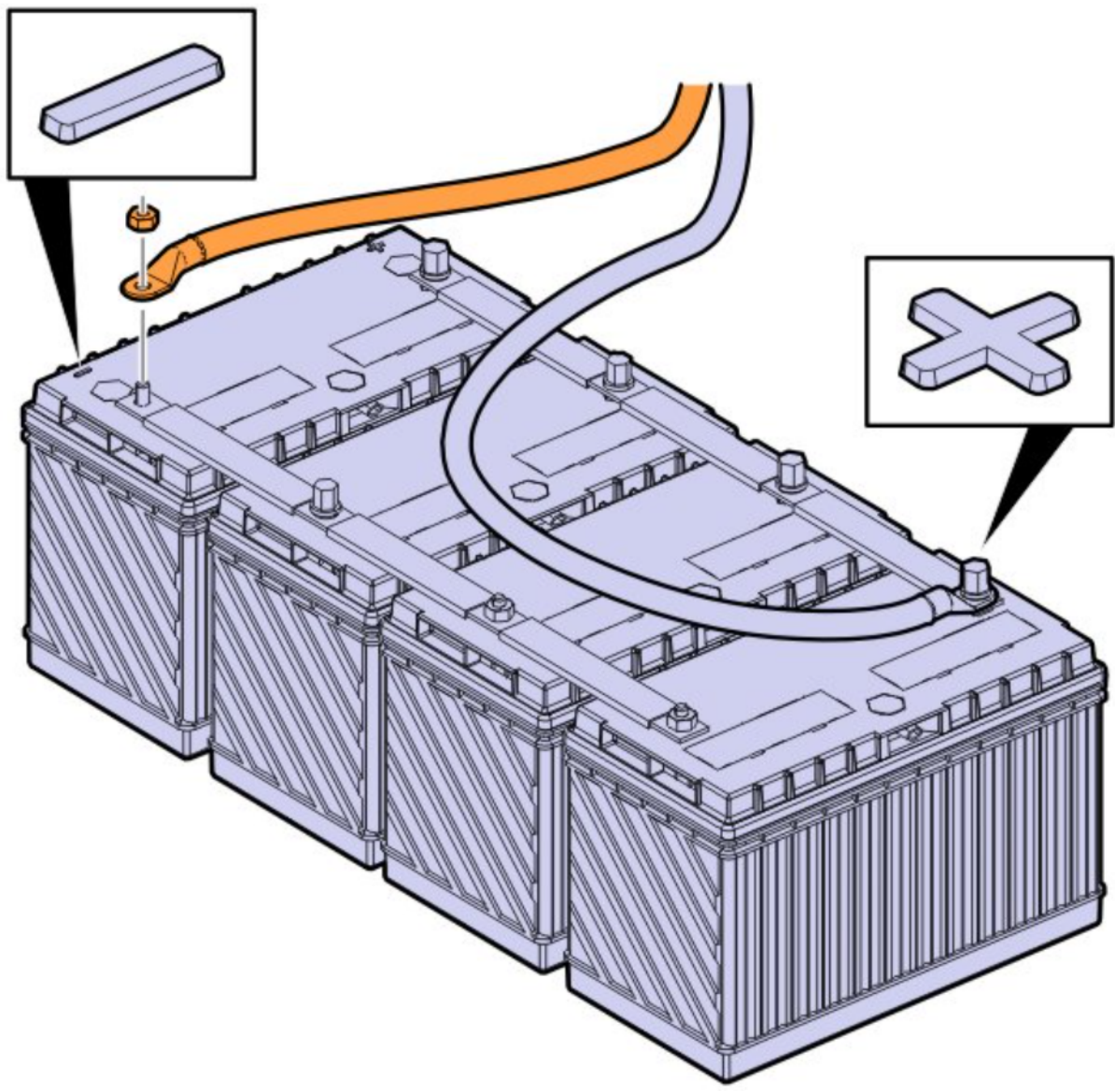


| | |
|----|---|
| 25 | Perform Replace hardware, programming in the diagnostic tool (Premium Tech Tool). |
|----|---|

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| | |
|----|---|
| 26 | Select MID 140 in the diagnostic tool. |
| 27 | Follow the instructions. |
| 28 | Perform System date and time, programming in the diagnostic tool (Premium Tech Tool). |
| 29 | Perform Odometer, programming in the diagnostic tool (Premium Tech Tool). |
| 30 | Disconnect the cable from the negative terminal. |

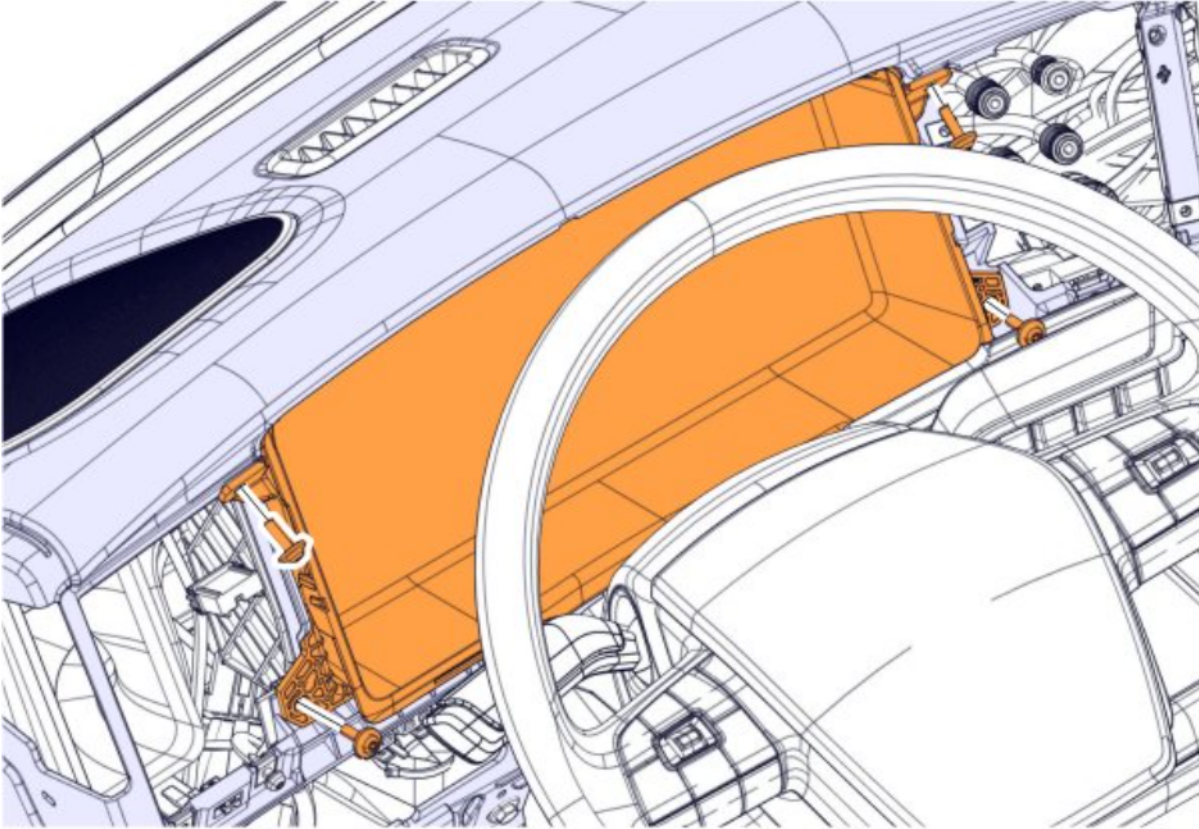


| | |
|----|---|
| 31 | Disconnect the diagnostic tool (Premium Tech Tool). |
| 32 | Install the screws. |
| 33 | Torque tighten the screws. |
| | Tightening torque |
| | Instrument cluster, screw |

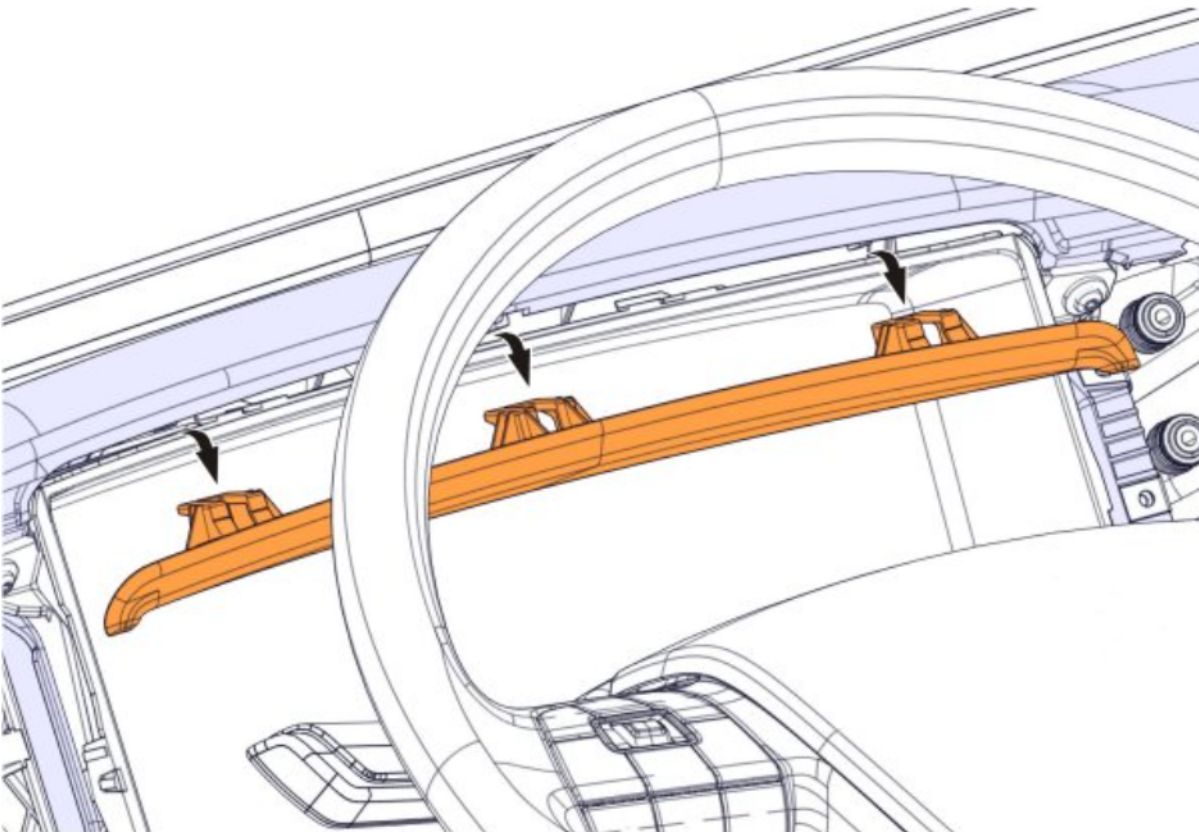
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(9 ±1 lb_f.ft)



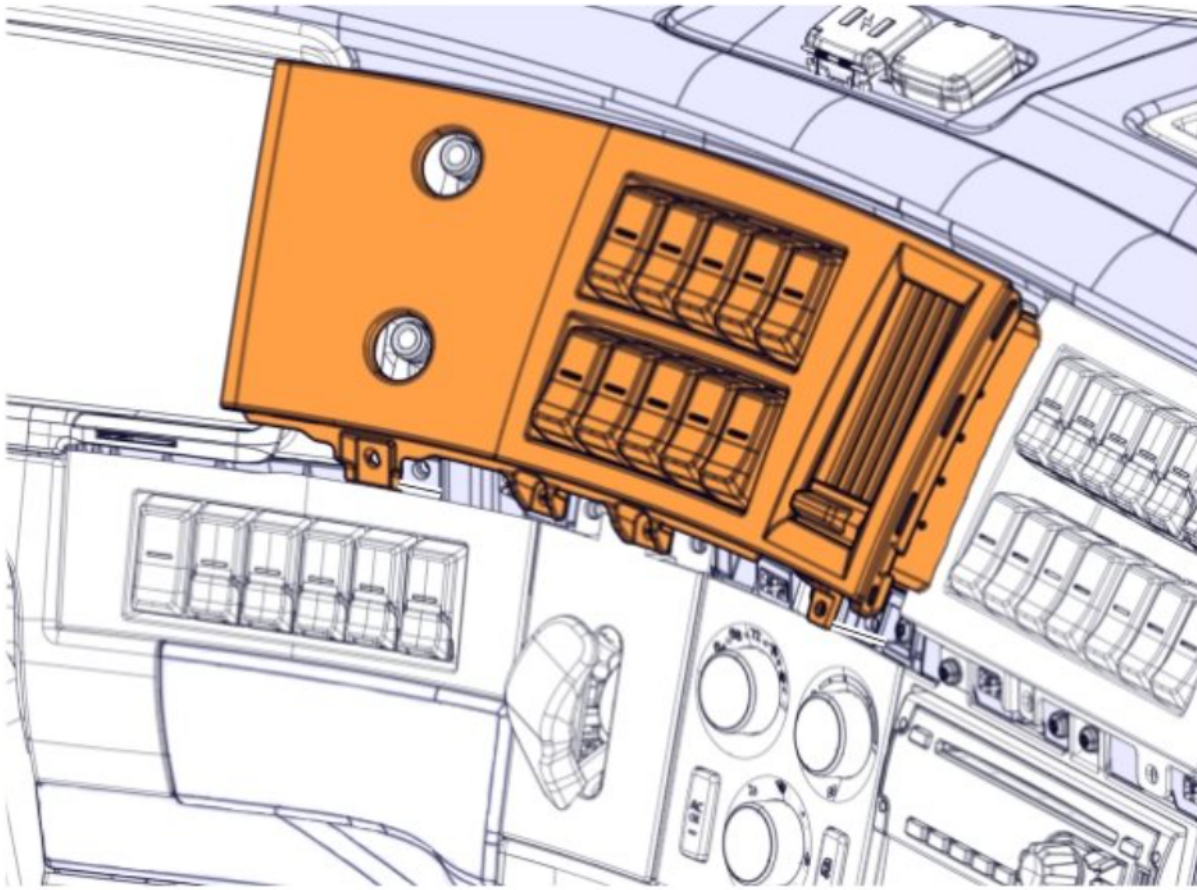
34 Install the trim.



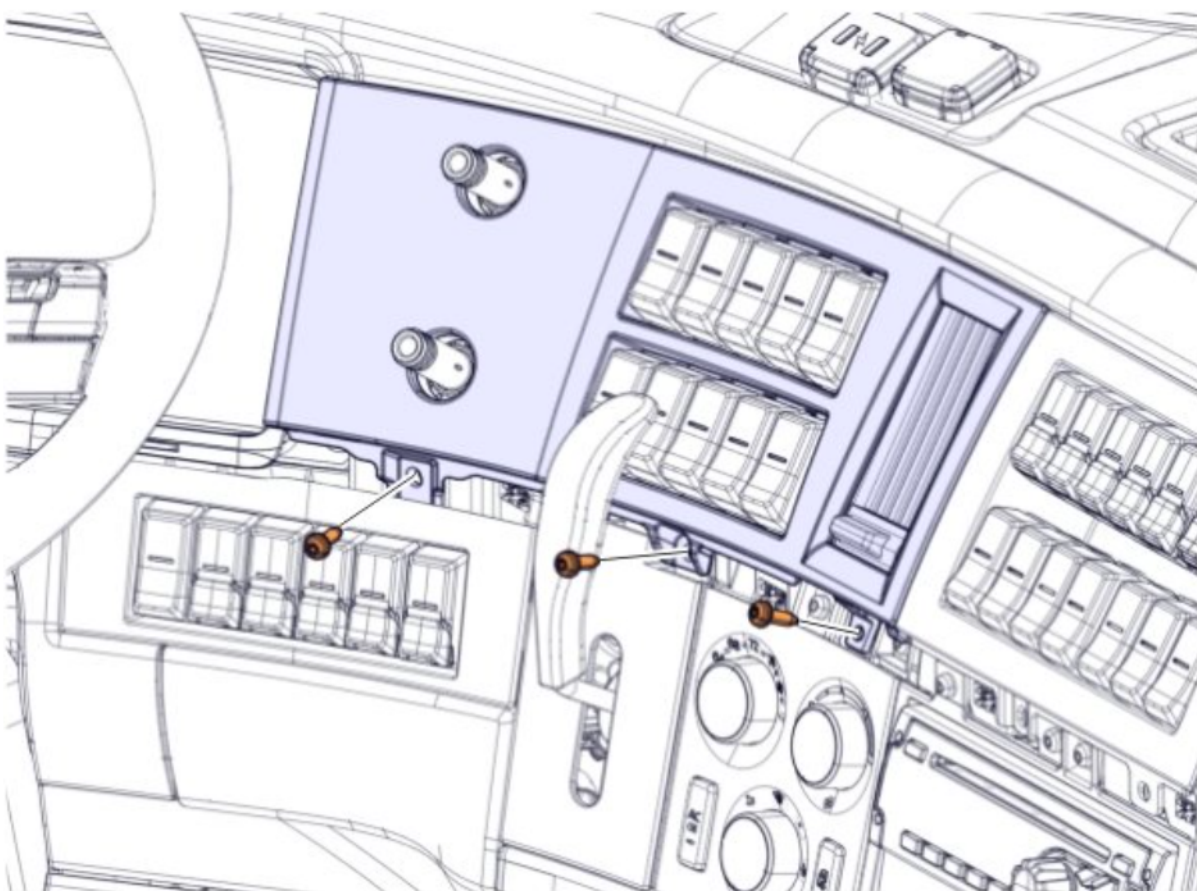
35 Install the panel.

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36 Install the screws.



37 Install the brake valve knobs.

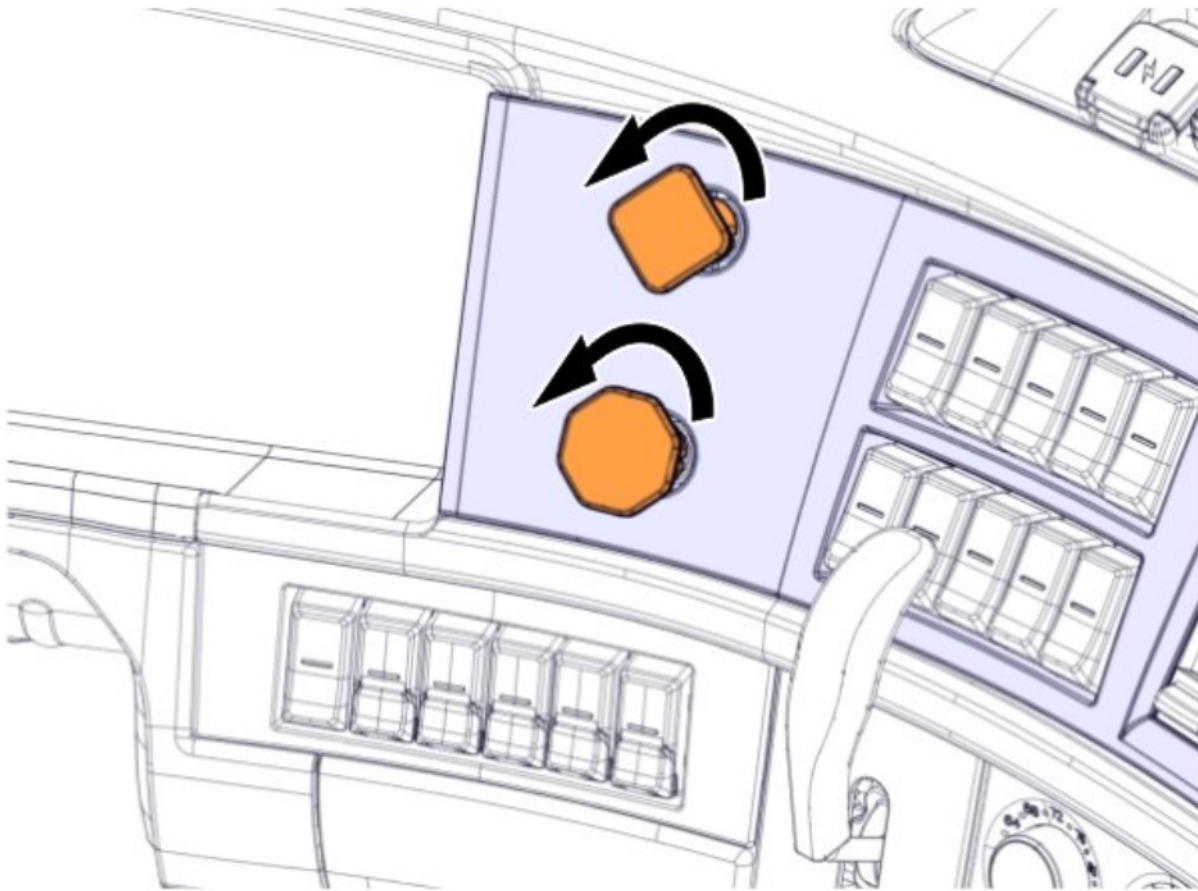
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Note

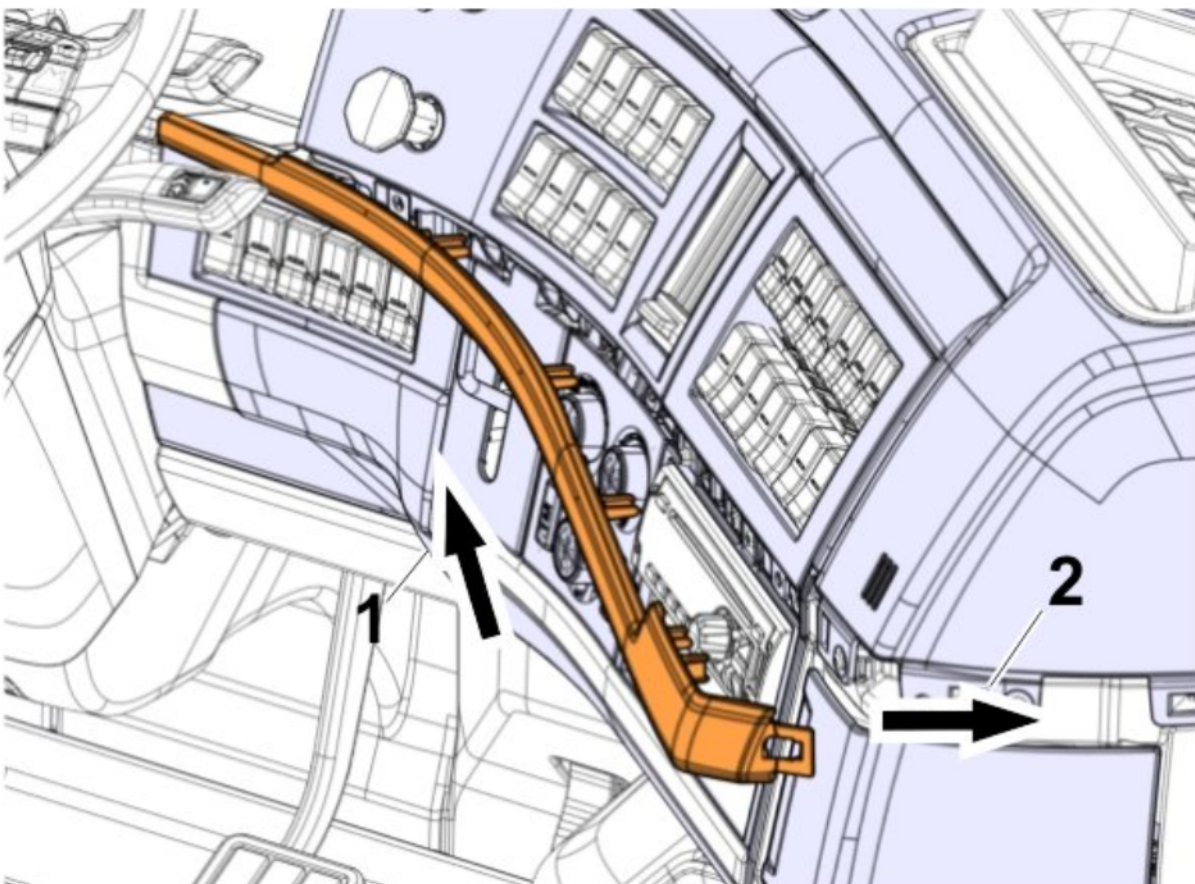
Install as noted in removal.



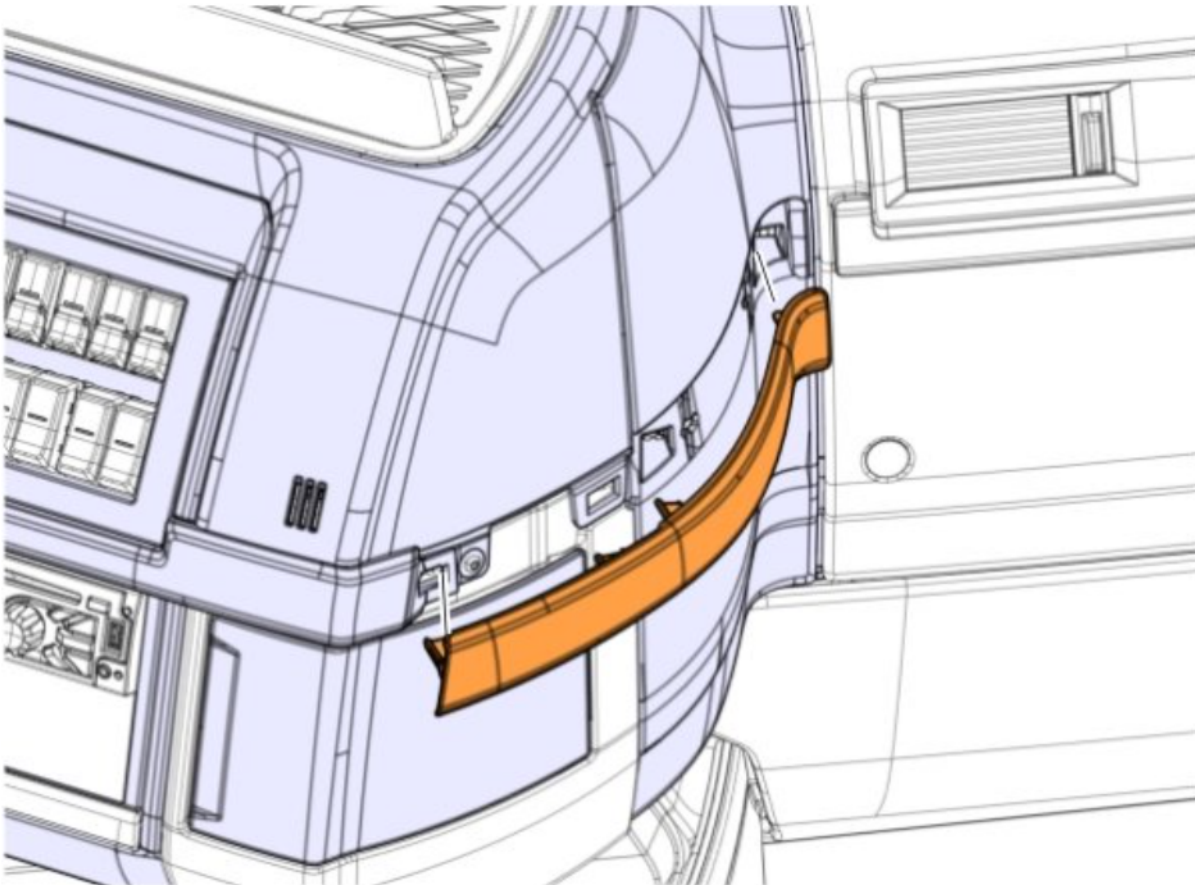
| | | |
|----|----------------------------|--|
| 38 | Connect the connectors. | |
| 39 | Install the assembly. | |
| 40 | Install the screws. | |
| 41 | Torque-tighten the screws. | |
| | Tightening torque | |
| | Dashboard, panel, screw | M4 |
| | | 1.5 ±0.5 Nm (13 ±4 lb _f ·in) |



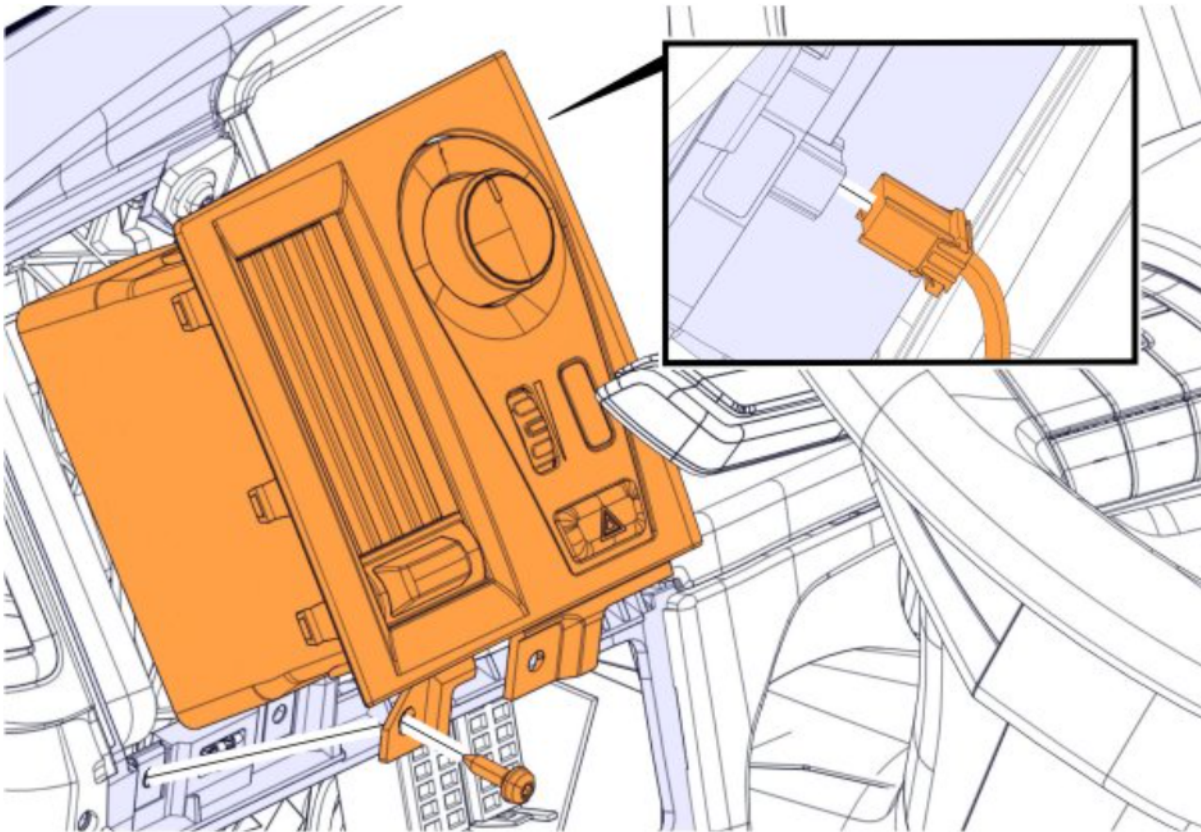
| | |
|----|-------------------|
| 42 | Install the trim. |
|----|-------------------|



| | |
|----|-------------------|
| 43 | Install the trim. |
|----|-------------------|

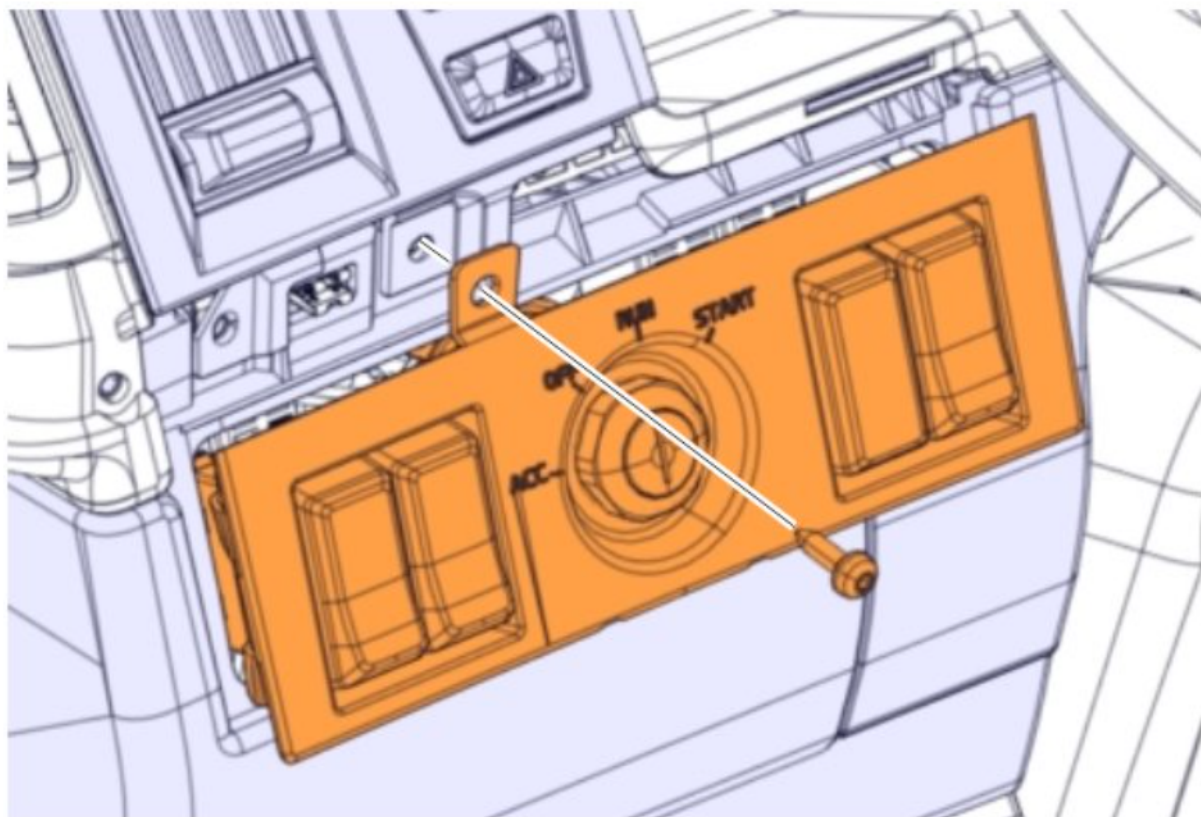


| 44 | Connect the connector. | | | | | | | | |
|-------------------------|---|-------------------|--|-------------------------|----|--|-------------|--|-----------------------------|
| 45 | Install the assembly. | | | | | | | | |
| 46 | Install the screw. | | | | | | | | |
| 47 | <p>Torque tighten the screw.</p> <table border="1" data-bbox="161 1317 1299 1545"> <tr> <th colspan="2" data-bbox="161 1317 1299 1370">Tightening torque</th> </tr> <tr> <td data-bbox="161 1370 842 1424">Dashboard, panel, screw</td> <td data-bbox="842 1370 1299 1424">M4</td> </tr> <tr> <td data-bbox="161 1424 842 1478"></td> <td data-bbox="842 1424 1299 1478">1.5 ±0.5 Nm</td> </tr> <tr> <td data-bbox="161 1478 842 1532"></td> <td data-bbox="842 1478 1299 1532">(13 ±4 lb_f·in)</td> </tr> </table> | Tightening torque | | Dashboard, panel, screw | M4 | | 1.5 ±0.5 Nm | | (13 ±4 lb _f ·in) |
| Tightening torque | | | | | | | | | |
| Dashboard, panel, screw | M4 | | | | | | | | |
| | 1.5 ±0.5 Nm | | | | | | | | |
| | (13 ±4 lb _f ·in) | | | | | | | | |

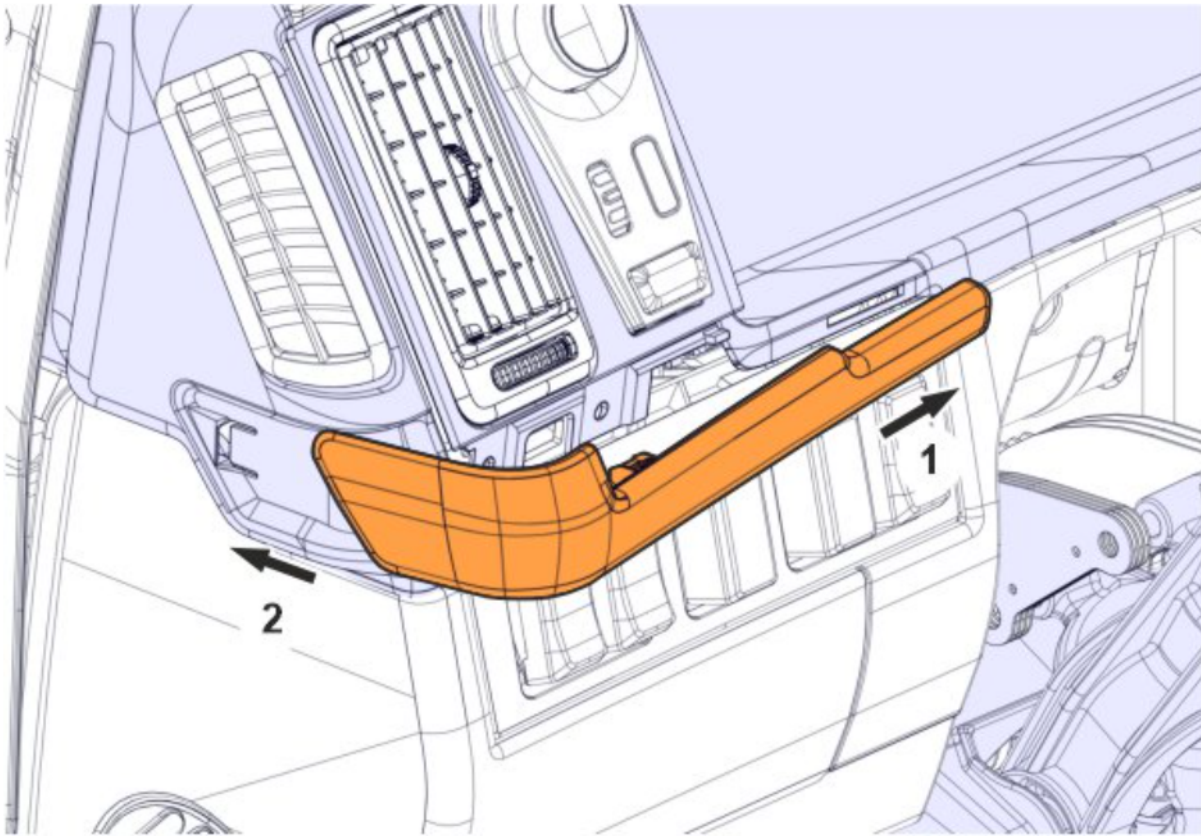


| | |
|----|--------------------|
| 48 | Install the panel. |
|----|--------------------|

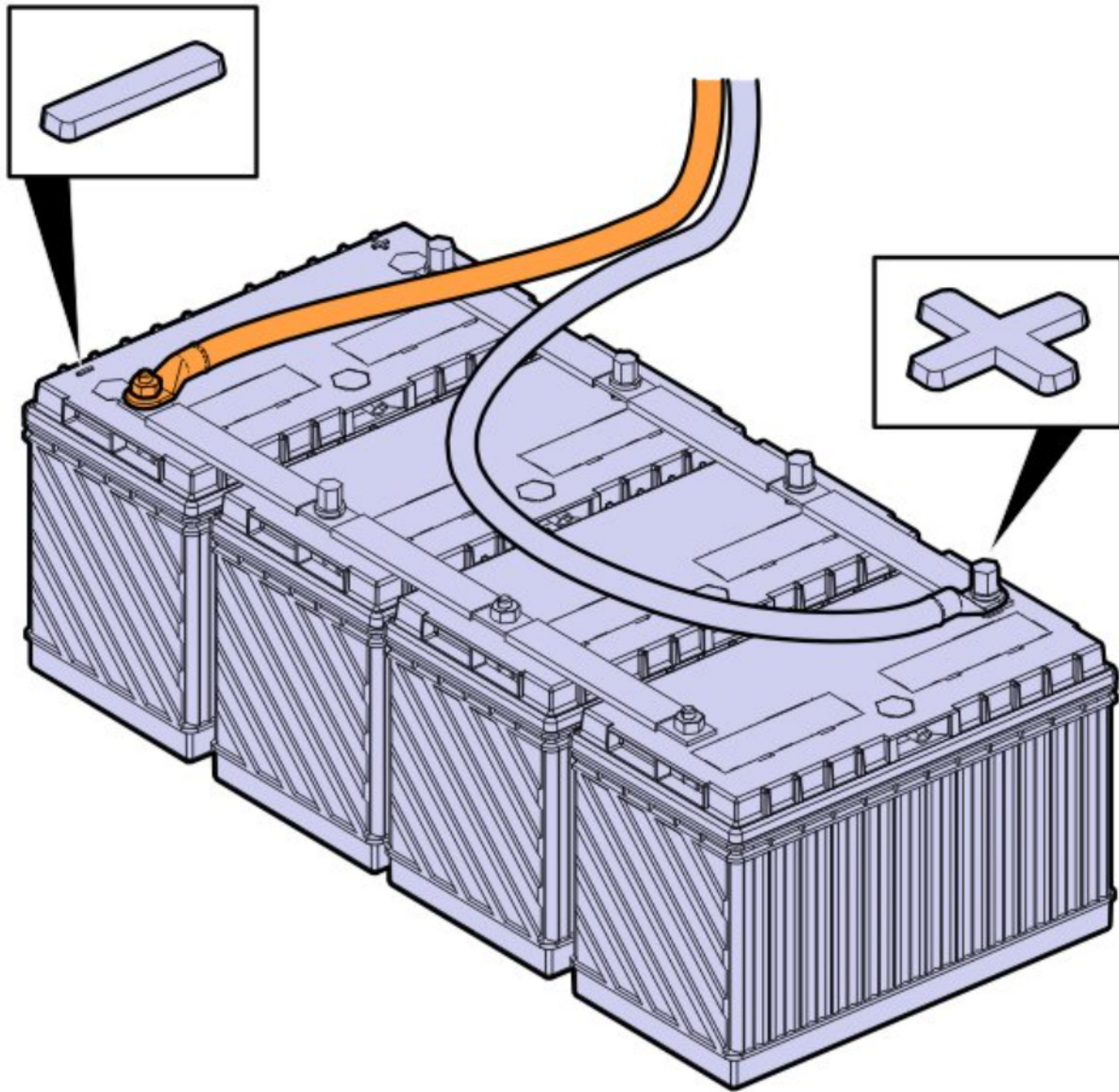
| | |
|----|--------------------|
| 49 | Install the screw. |
|----|--------------------|



| | |
|----|-----------------------------------|
| 50 | Install the dashboard trim panel. |
|----|-----------------------------------|



| | |
|----|---|
| 51 | Connect the cable to the negative terminal. |
|----|---|



| | |
|----|--------------------------|
| 52 | Remove the wheel chocks. |
|----|--------------------------|

