



Volvo CarPlay Update with SEM

Description:

Some Volvo trucks were built with an infotainment unit that does not support Apple CarPlay. To enable CarPlay, the infotainment hardware must be replaced and additional software must be installed directly to the infotainment unit. The software update process does not use TechTool. This update also includes updated navigation maps.

Corrective Action:

Replace the infotainment SEM (Service and Entertainment Module). Refer to Special Tools Bulletin STB20-002V v2 and use the USB stick to update the software according to the campaign instructions. The USB stick is preloaded with the appropriate software.

UCHP SCC CODE: S7486

EXPIRATION DATE: 5/30/2021

CAUSAL PART NUMBER: 22375441

UCHP Labor Code:

1720-16-09-01 – Campaign, General – 0.6

3931-03-02-04 – Infotainment Control Unit, Replacement – 0.8

PARTS MARKUP: 30%

PARTS LIST:

PN – Description – QTY

22375441 – RADIO, SEM UNIT – 1

23750821 – USB UPDATE Volvo with navigation – provided

23750823 **REV2** – USB UPDATE Volvo without navigation – provided

***Be sure to scrap all original 23750823 Flash Drives**

FOR MORE INFORMATION CONTACT: Sean Gallagher

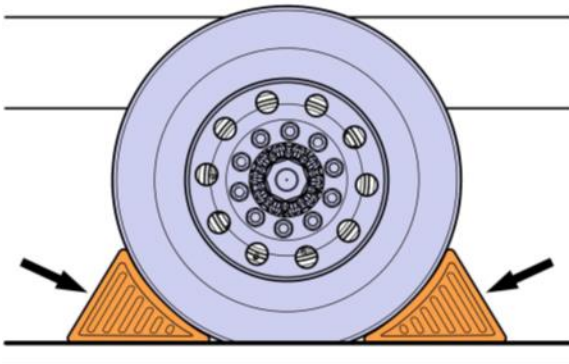
sean.gallagher@volvo.com

Decommissioning the Truck for Repair

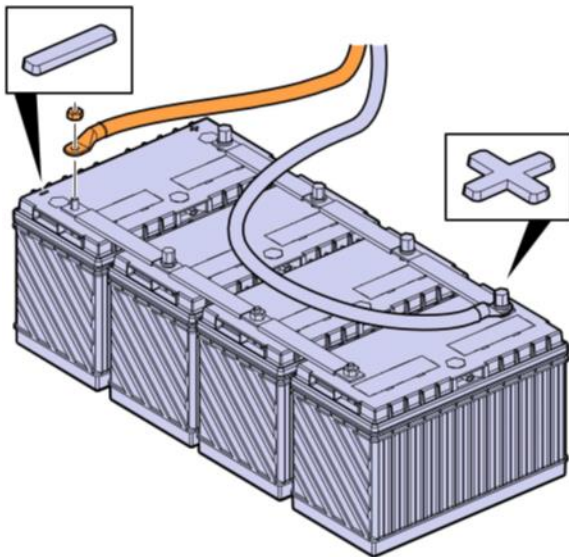
You must read and understand the precautions and guidelines in Service Information, group 30, "General Safety Practices, Electrical" before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

NOTE: Information is subject to change without notice. Illustrations are used for reference only and can differ slightly from the actual vehicle being serviced. However, key components addressed in this information are represented as accurately as possible.

1. Park the vehicle on a flat and level surface.
2. Apply the parking brake.
3. Place the transmission in neutral or park.
4. Install the wheel chocks.

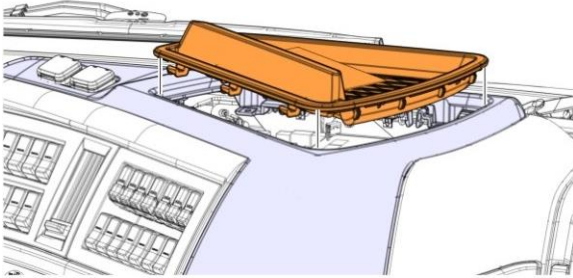


5. Disconnect the battery.

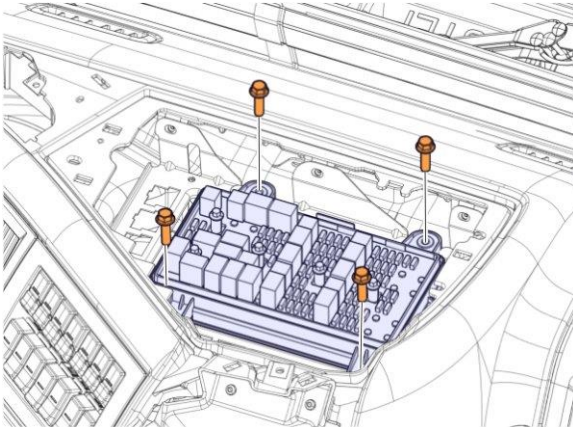


Replacing Infotainment SEM (Service and Entertainment Module)

1. Remove the cover panel.



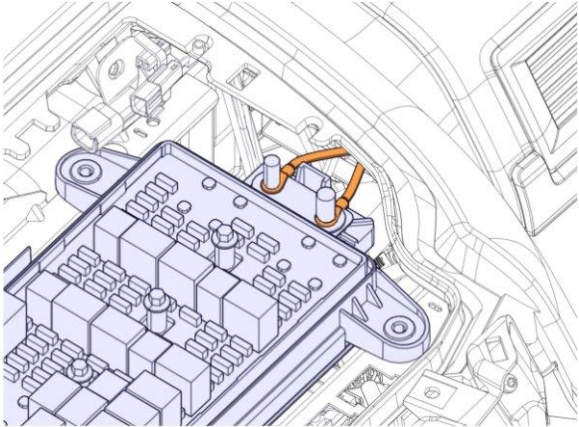
2. Remove the screws.



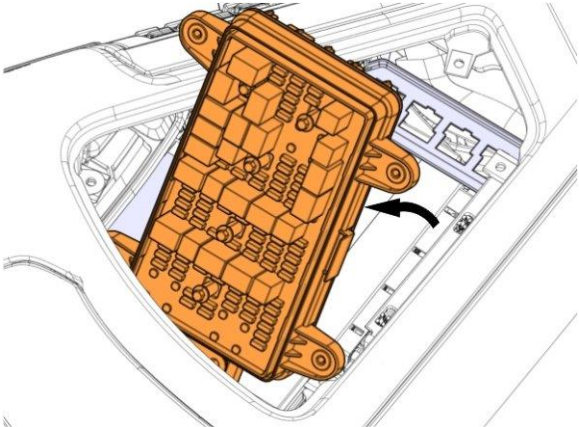
3. Remove the nuts.



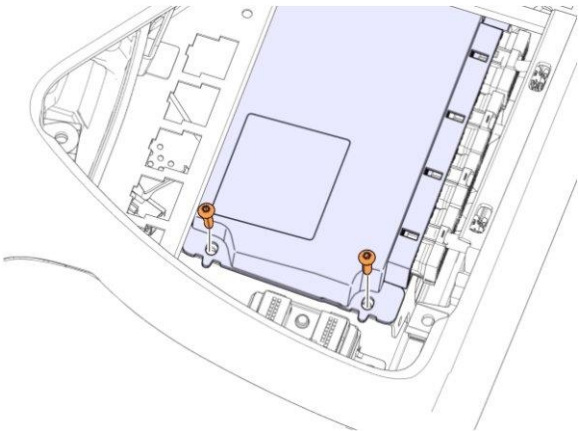
4. Remove the cables.



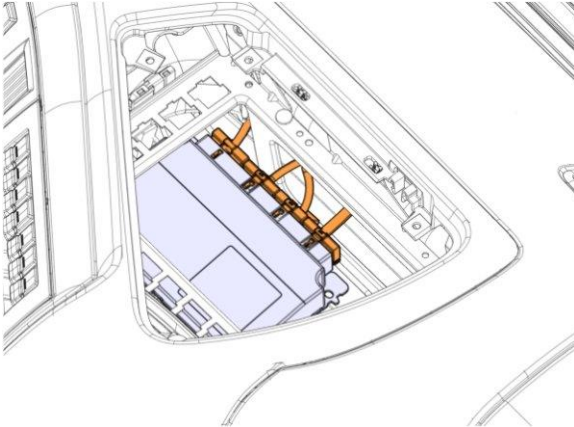
5. Move aside the FRC (Fuse and Relay Centre). Take care not to damage the panel.



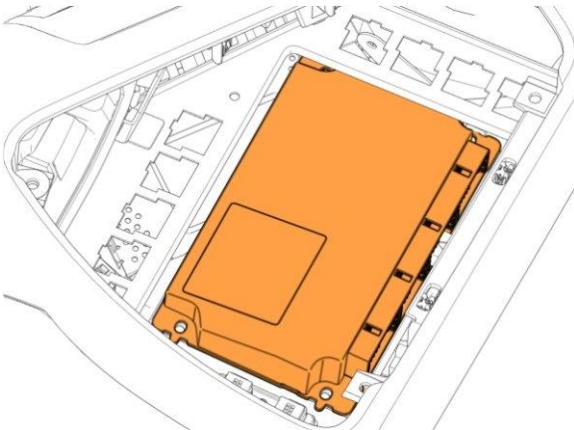
6. Remove the screws.



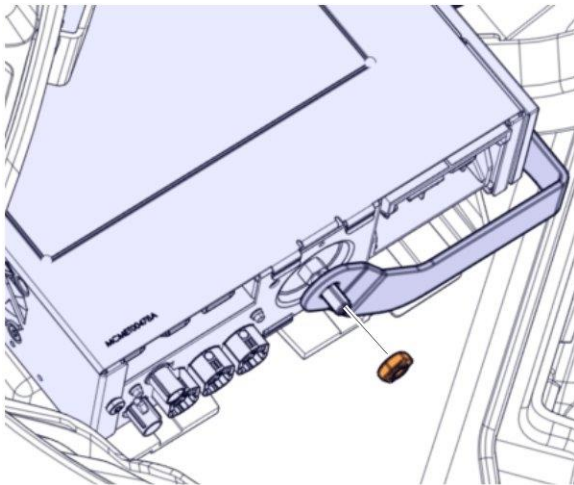
7. Note the orientation of the connectors. Disconnect the connectors.



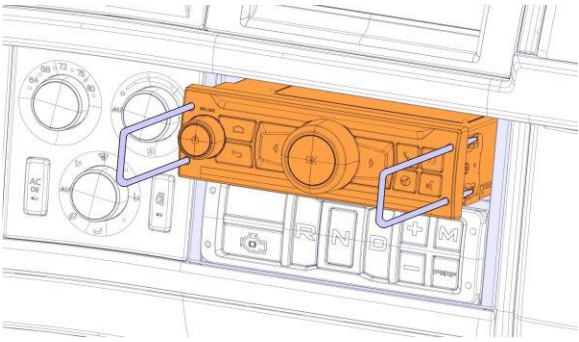
8. Remove the LCM (Light Control Module).



9. Remove the nut. Note: Wires removed for clarity.

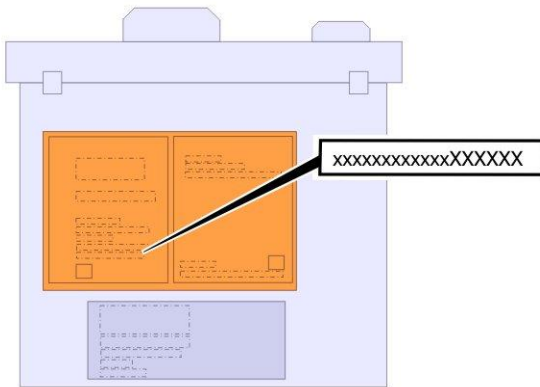


10. Install the tools. Remove the radio.

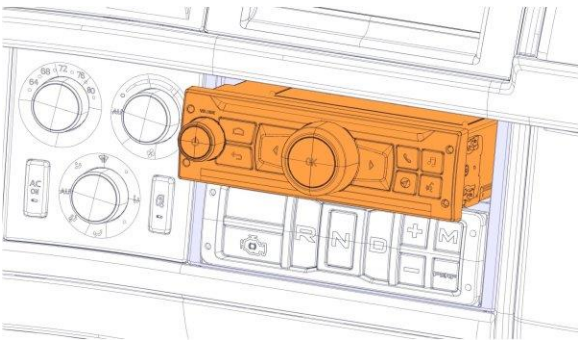


11. Disconnect the connectors.

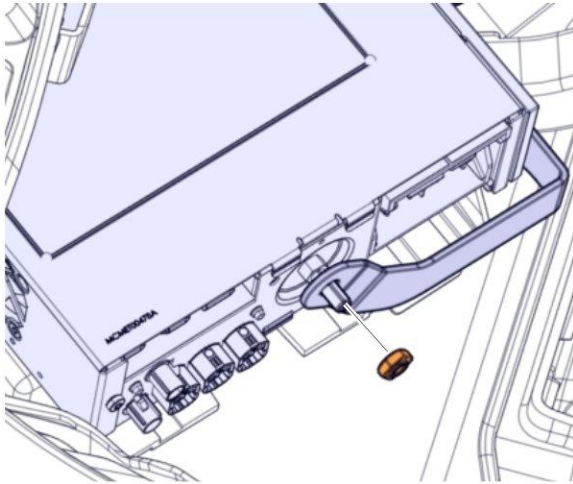
12. Record the serial number of the new infotainment control unit in case troubleshooting is necessary.



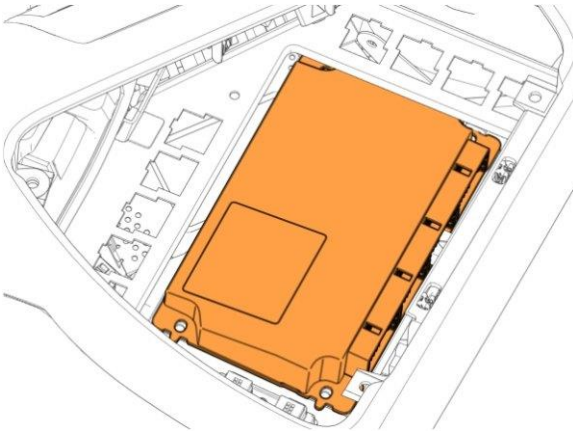
13. Connect the connectors and install the radio.



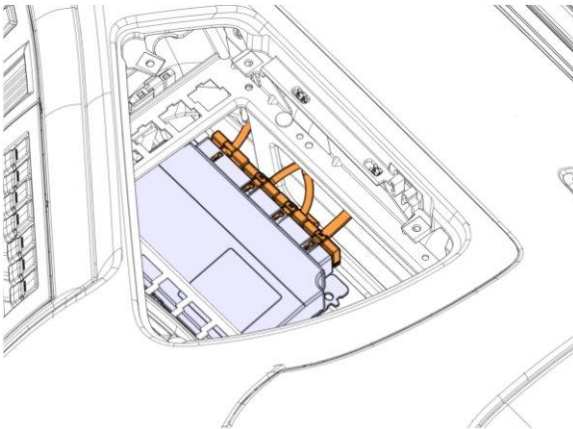
14. Install the nut. Note: Wires removed for clarity.



15. Install the LCM (Light Control Module)



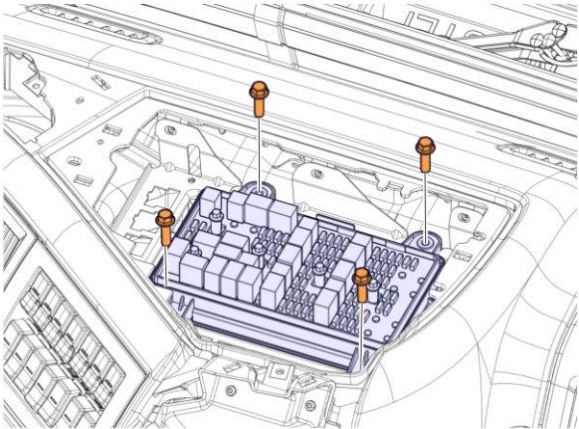
16. Connect the connectors.



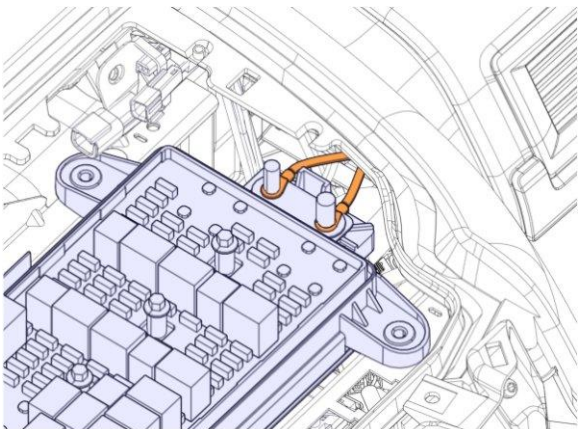
17. Install the screws. Tighten the screws to torque.
Tightening torque: Screw M5 3.1 \pm 0.8 Nm (27 \pm 7 lbf·in)



18. Position the FRC. Install the screws. Torque tighten the screws.
Tightening torque: Screw M5 3.1 \pm 0.8 Nm (27 \pm 7 lbf·in)



19. Install the cables.



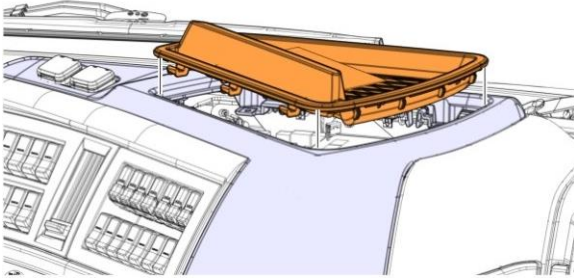
20. Install the nuts. Tighten the nuts to torque.

Tightening torque: Stud nut M10 18 ± 1 Nm (13 ± 1 lbf·ft)

Tightening torque: Stud nut M8 16 ± 1 Nm (12 ± 1 lbf·ft)

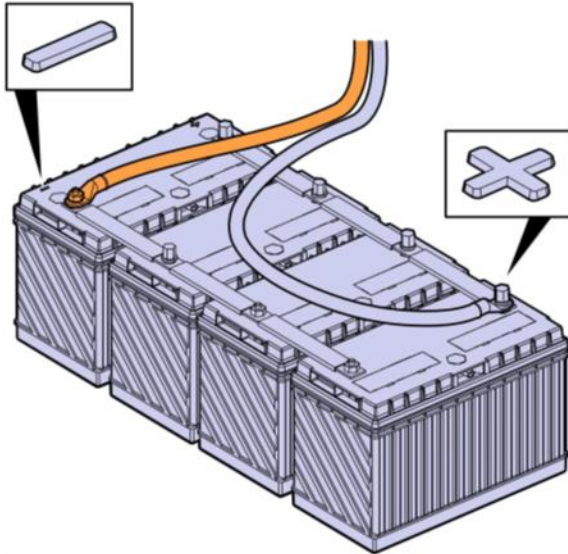


21. Install the cover panel.



Prepare the Truck for Software Update

1. Connect the battery cable to the negative (ground) terminal.



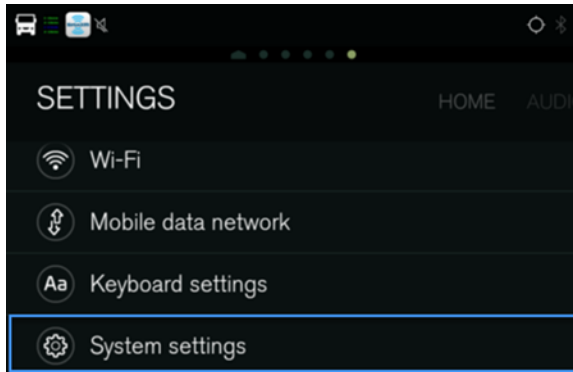
2. Check the battery voltage. **The battery voltage must be greater than 12V. The batteries must remain connected throughout the software update process. The key must remain in the Run position. Do not start the truck or turn the key to Off.**
3. Place the USB stick PN 23750821 into the dash. **Note: using an incorrect USB stick will cause software issues. Do not remove the USB stick until all programming operations are complete.**



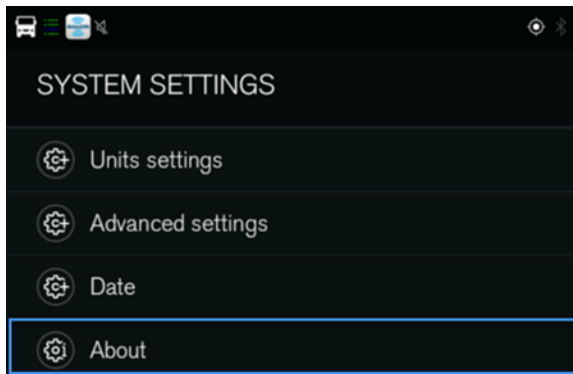
Software Update Procedure

1. From the Home Screen, Go to the Settings Menu by swiping to the right from the Home Screen and select “System settings”:

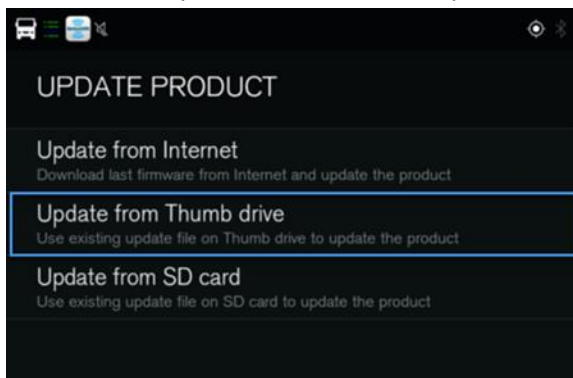
Note: If the popup menu “New files found” is displayed, select “No”. Those files will be updated in Update Voice Recognition and Navigation/Map Files Procedure on page 13.



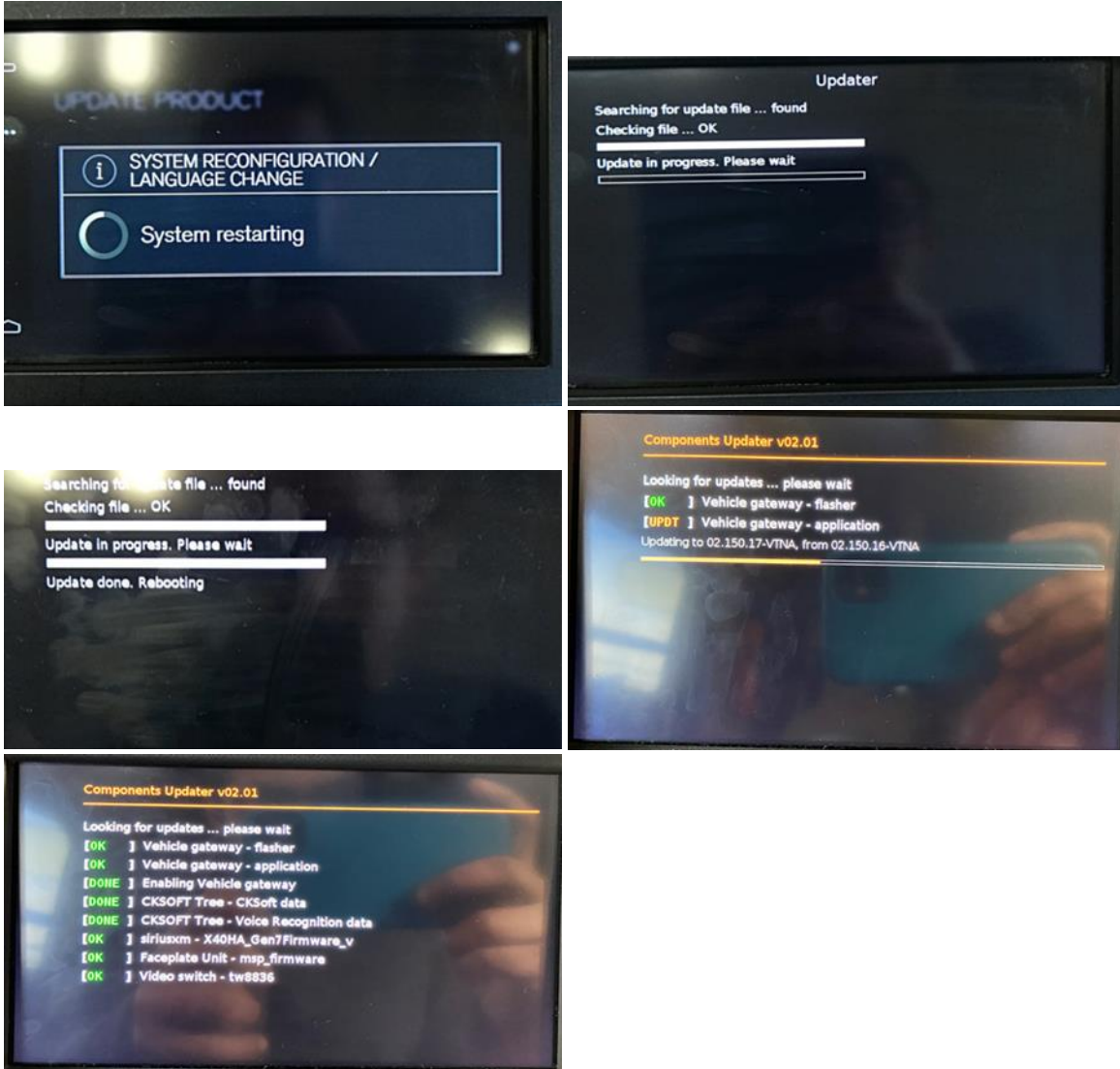
2. Select on “About” (swipe to the top if needed)



3. Then select “Update Product” and “Update from Thumb drive”



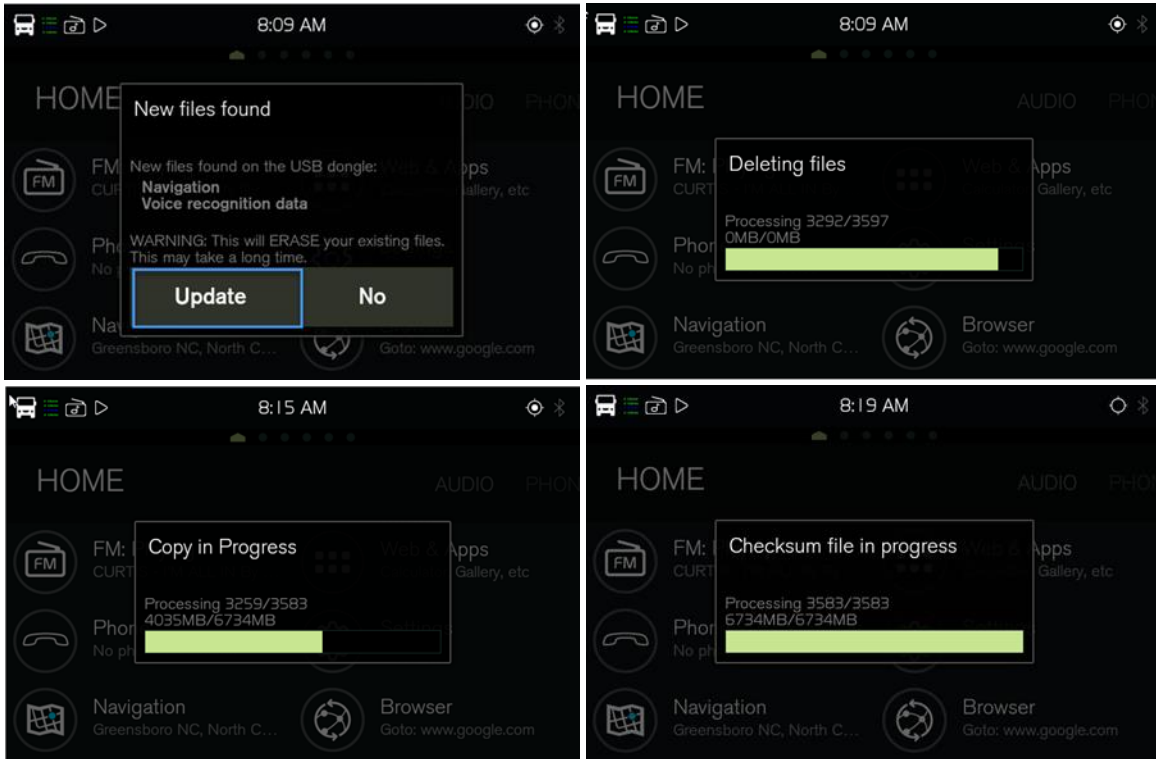
- The product will restart and begin updating software automatically



- The unit will automatically return to the Home Screen when the update is complete

Update Voice Recognition and Navigation/Map Files Procedure

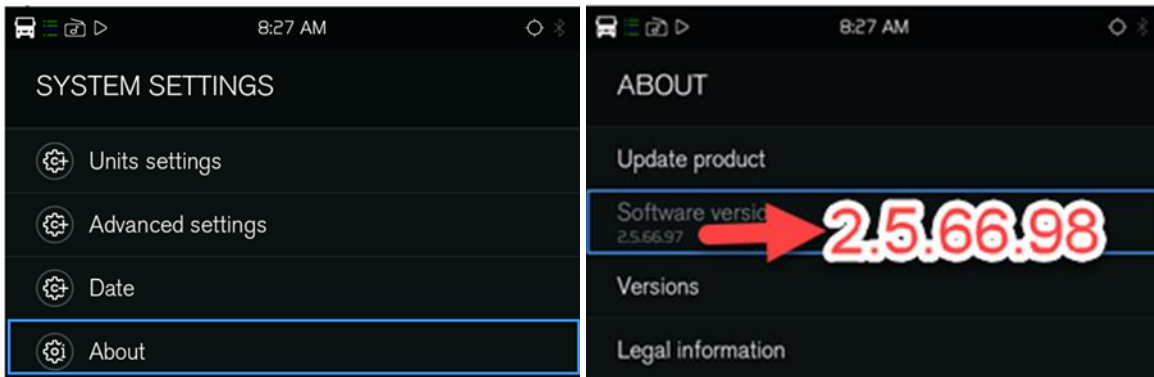
1. From the Home Screen, a Notification should be displayed. Select "Update" to start the process



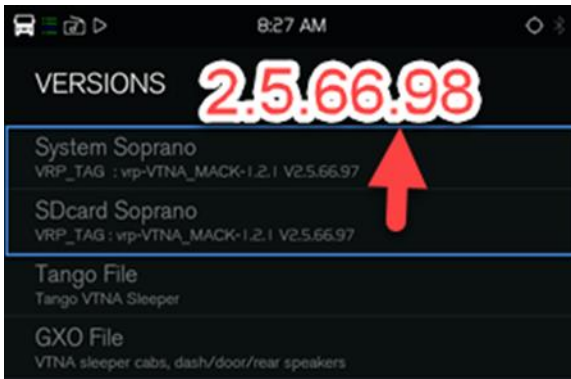
2. The unit will automatically return to the Home Screen

Check the Update Versions

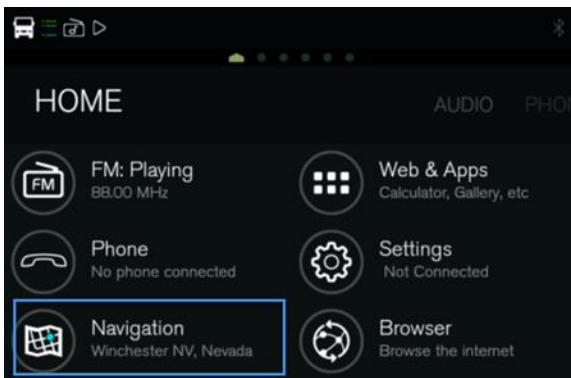
1. From the Home Screen, go to System Settings and select “About” to check the Software version matches 2.5.66.98



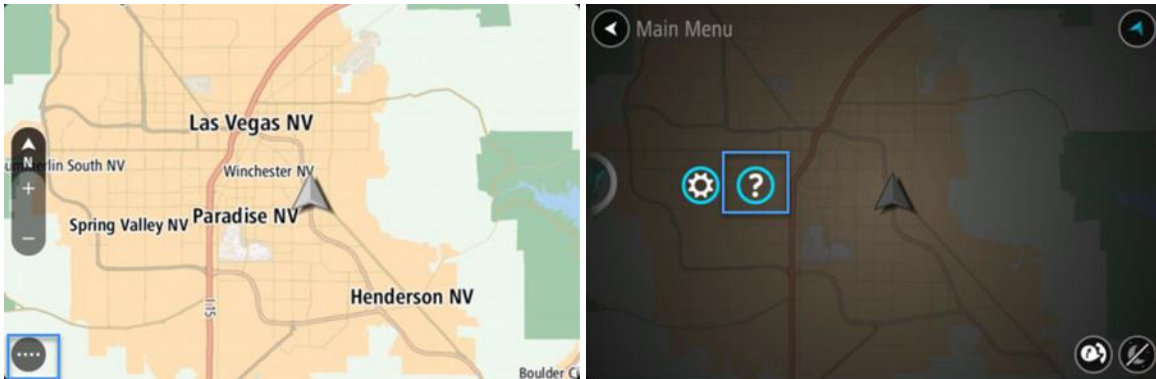
2. Select “Software version” and check that the voice recognition package versions are correct



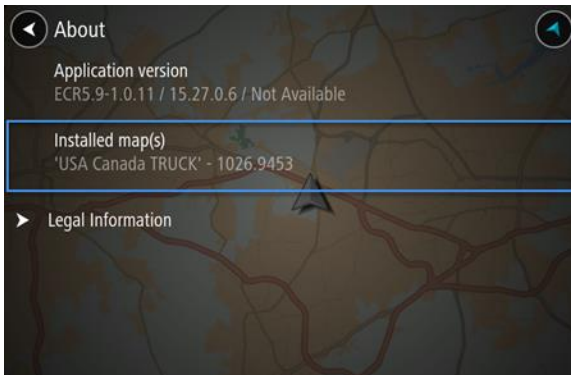
3. If the Infotainment unit has navigation, proceed to step 4.
If the Infotainment unit does not have navigation, proceed to Commissioning the Truck for Operation on page 16.
4. Return to the Home Screen and select “Navigation”
Note: If Navigation is unavailable, check that the correct USB stick is being used. Using an incorrect USB stick will remove navigation, and the steps in Software Update Procedure on page 11 will need to be performed again using the correct USB stick.



5. Select “...” then “?” then “About”



6. Check that the Installed Maps version is 1026.9453



Commissioning the Truck for Operation

1. Remove the USB stick from the dash



2. Remove the wheel chocks.

