



Technical Journal

TITLE:

Sensus Navigation. IAM 2.1 software upgrade to allow map upgrade via USB

REF NO:
TJ 31762.1.0

ISSUING DEPARTMENT:
Technical Service

CAR MARKET:
United States and Canada

PARTNER:
3 US 7510 Volvo Car USA

ISSUE DATE:
2016-10-21

STATUS DATE:
2016-11-07

FUNC GROUP:
3972

FUNC DESC:
Road navigation

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“Right first time in Time”

Attachment

File Name	File Size
SENSUS RTI IAM.JPG	0.0195 MB

Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
124							2012-2015		0151001-0184738	201120-201419
134							2011-2015		0000194-0034319	201020-201419
136							2012-2015		0118001-0202917	201120-201419
155							2015-2015		0001147-0214070	201335-201419
156							2011-2015		0175379-0677509	201046-201419

CSC Customer Symptom Codes

Code	Description
DO	Audio other/Audio unit (complete) does not work
FC	Audio other/Other audio problems
XD	Audio other/Audio unit display does not work
7N	Navigation/Other navigation problems
EO	Navigation/Does not work
IC	Navigation/Updates of information slow/does not work
IP	Navigation/Error message on screen



VST Operation Number

VST Operation Number	Description
36004-2	Software control module downloading
36002-3	Software control module downloading (2:nd)

DTC Diagnostic Trouble Codes

Control Module	Code	Fault Type
CEM	U015600	Intermittent
DIM	U015600	Intermittent
CCM	U015600	Intermittent

Text

DESCRIPTION:

VIDA = Vehicle Information and Diagnostics for Aftersales.

DICE = Diagnostic Communication Equipment

IAM = Integrated Audio Module

ICM = Infotainment Control Module

AUD = Audio Amplifier

There is a new process for upgrading maps on cars with Sensus (IAM2.1) navigation.

Map updates for Sensus navigation systems in MY2011-2015A cars (identified as shown in attached picture) can now be downloaded online and transferred to the car via a USB flash drive in the same way as current models. **Updating via DVDs is no longer possible.**

This Technical Journal informs the technician how to perform the software upgrade.

SERVICE:

To allow map upgrades via USB, the IAM software must be upgraded to the latest status.

Before starting the IAM software upgrade, secure following:

- The Volvo USB stick must be formatted to FAT32. The 64GB Volvo USB stick formatted to exFAT or NTFS will not work.
- Make sure that the Volvo USB Stick and USB port in the car works by trying to play .mp3 files from the Volvo USB stick in the car.
- Battery support / Power supply connected to the car. See SPJ 25673 and 31145.
- Read out DTC's and check network status.
If there are any DTC's related to communication or if any control unit is red on the network, **resolve these issues first** and don't start to download software.
Note! IAM or AUD may show as red on the network but if you can play music from a USB stick then it is OK.
- Leave the FM radio on during the entire software loading process to make sure the system is awake.



- If possible, use USB cable connection to the DICE and not Bluetooth. USB cable P/N 9513002 (5 m) or 9513003 (1 m). The USB connection is more reliable than Bluetooth.

IAM Upgrade Software Product numbers:

S60/V60/XC60: SP 31285187

XC70/S80: SP 30775609

Note!

If the IAM upgrade was successful, the software version visible in the ICM screen will be “1100”.

Once the IAM is upgraded, proceed to **Map data upgrade with USB** to upgrade the maps.

Note: Once this IAM upgrade is performed, the customer will be able to upgrade their vehicle’s maps on their own as well. Instructions can be found at support.volvocars.com

Map data upgrade with USB

Map data is available for download by using the links found in SPJ 29181. Downloading from the website to the USB is the same as with current model vehicles.

The USB flash drive used for the map upgrade must meet the following requirements:

- 32GB
- USB 2.0
- FAT32 format
- No files other than the map data on the drive

Note: A PNY Attache 3 32GB USB 2.0 flash drive was used during testing and performed well.

Once the map data is loaded to the flash drive, it can be inserted in the vehicle’s USB port. A pop-up message will indicate “New Software Found.” Follow the prompts to begin the upgrade.

The upgrade will take approximately 2hrs 50min if done continuously. Ensure that the vehicle battery charge level is maintained during the upgrade by using an appropriate battery charger (preferred) or by running the engine (not preferred).

If the vehicle is shut off during the map upgrade, the upgrade will resume from where it left off at the next ignition cycle.

If the IAM Software upgrade was successful and you download the new map data to a USB stick but the infotainment system doesn’t successfully load the new map data from the USB flash drive, the flash drive is probably not formatted correctly or does not meet one or more of the specifications listed above.

When the upgrade completes there will be a pop-up message on the ICM display indicating it is finished. At this point, leave the flash drive in the car’s USB port, close and lock the car for 3+ minutes to allow the system to go to sleep. Then open the car and remove the USB stick before re-starting.



VEHICLE REPORT:

Yes, please submit a Vehicle Report if the service solution described in this TJ has no effect. Use concern area "Vehicle Report" and sub concern area "Support needed", use function group 3972.

To view TJ attachment see below. This TJ has one attachment.

