VOLVO

Service and Parts Business

Special Tools Bulletin

TITLE:

High Voltage (HV) Module Balancer Tool

NO:	ISSUE DATE: 2020-03-18	CAR MARKET:	Page 1 of 8
238	STATUS DATE: 2022-02-23	United States and Canada	

"Right first time in Time"

All tools have been classified as required, and will be allocated and billed to all U.S. and Canadian retailers by Volvo.

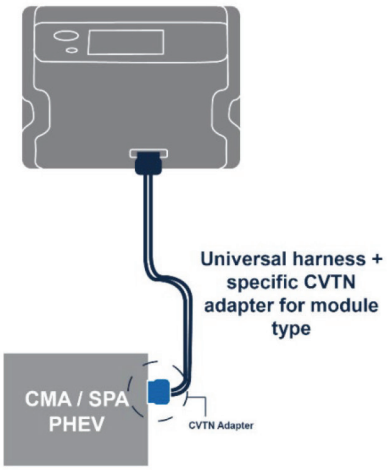
Tool orders are being handled by the Volvo Parts Operations and the Volvo Parts DC's.

When purchased new, balancer tool 9814249 may require a software update. Verify the new unit has the latest software installed. **Failure to do so could result in the balancer requiring service.** See Software Update section (Page 4) for latest version and instructions on how to update.

9989915 3m US Power Cord (Warranty and Repair see SMB 00-437)
9513162 (A720 Cable Kit) (Warranty and Repair see SMB 00-437)
9513192 BEV Adapter (IME 2404 see page 7) (Warranty and Repair see SMB 00-437)

- 2M Charging Cable (15A)
- 2M Cell Monitoring Cable
- PHEV SPA Battery Interface
- PHEV CMA Battery Interface

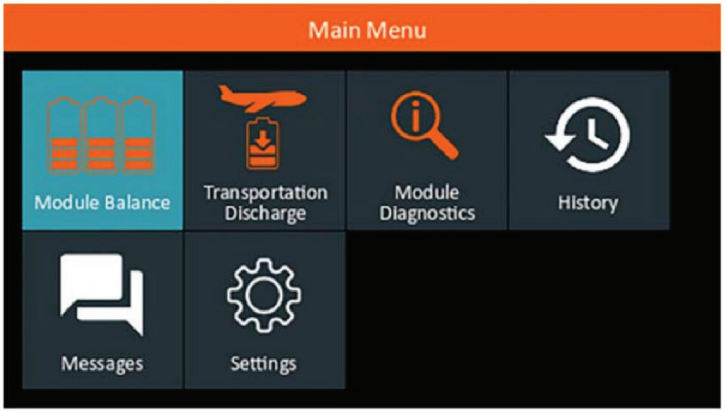




Service Personnel: Read and initial	SERVICE MANAGER	PARTS MANAGER	WORKSHOP FOREMAN	SERVICE TECHNICIANS										

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Usability



Module Balance

- Technician enters target voltage
- Technician connects to module
- xMB charges/discharges to set voltage to match other modules in pack

Transportation Discharge

- Technician connects to module
- xMB charges/discharges to preset voltage (under 30% SOC)

Module Diagnostics

- Technician connects to module
- xMB reads cell voltages/temperatures for tech to confirm cell issue

Product Specifications

Power:

- Input: 100 – 240, 50/60 Hz; 12A max.
- Output: 80 V, 15A
- Charge Cables
- 2m
- Power Cord: Accepts C19 locking connector for region-specific
- United States: NEMA 5-15 termination, rated 15A/125V UL CSA
- Lithium ion battery chemistry

Operating Parameters

- Humidity: 15% to 85% R.H., non-condensing

Weight: 17.84 KG (39 LBS)
44 CM (L) X 43.5 CM (W) X 23 CM (H)

Operating temperature range: (32°F to +140°F)

Storage temperature range: (14°F to 185°F)

Certifications

UL 2871	IEC 62477-1
CE	IEC 61000-4-2
RCM	IEC 61000-4-3
RoHS	IEC 61000-4-4
CSA 22.2 #107.1	IEC 61000-4-5
CU EAC	IEC 61000-4-6
KC	IEC 61000-4-11
FCC	IEC 61000-6-4

Connectivity

- USB 2.0 connection

Protection Features

- Reverse polarity

User Interface

- Advanced navigation and charge applications
- 5” Screen

Warranty and Repair (9814249 Only)

- Administration:

Administered by Midtronics, Inc.

- Warranty Period:

Five (5) years from date of purchase on the High Voltage (HV) Module Balancer #9814249 only.

- Repairs:

Contact Midtronics Customer Support for more information: 1-800-776-1995

Software Upgrade

It is necessary to upgrade the balancer to accommodate the PHEV-LR battery (Long Range).

The software is backwards compatible to accommodate prior models as well.

The new software contains upgrades and has new logic to choose a module to balance.

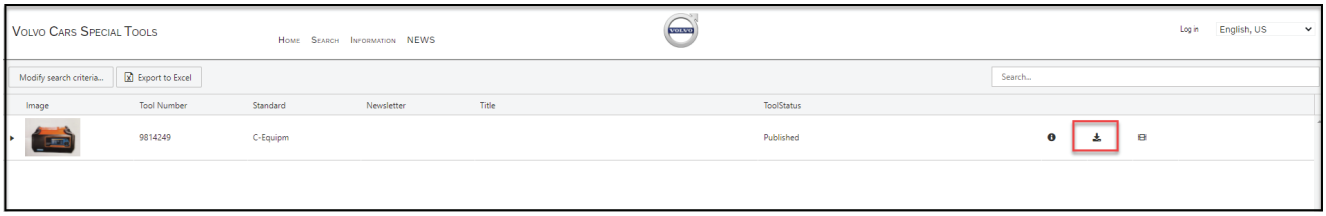
The revision is OTG_92-411899-H00-029, which can be uploaded in the same way as previous cell module balancer software.

Extract software according to the attached instructions - (same method as previous software upgrade)

Locating software

Software is found at https://volvocarstools.volvocars.biz/

- In the search area type in 9814249 for the Battery Balancer Part Number.
- Click on the magnifying glass.
- Click on the download icon (see image below).
- Do not extract to your hard drive – Extract window will prepopulate a drive, erase it and extract only to a FAT32 thumb drive.
    - 32Gb drive or smaller



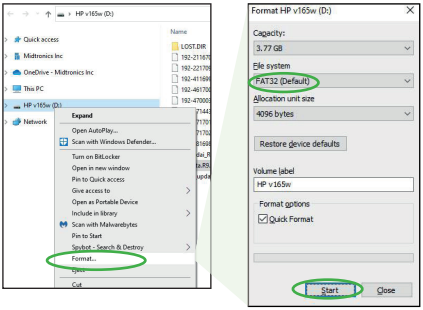
Continue to page 5 for illustrated and further instructions.

xMB Module Balancer Software Update

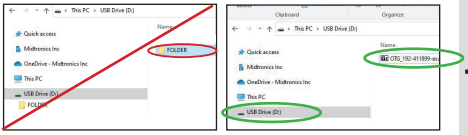
Instructions
SEP 2020
167-000967EN-A

Software update

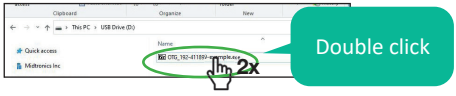
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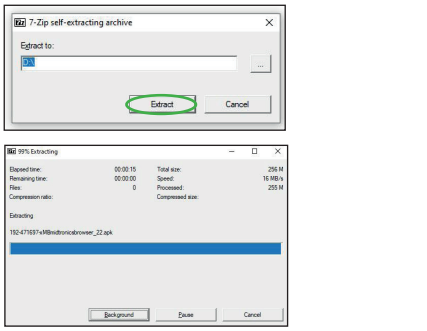
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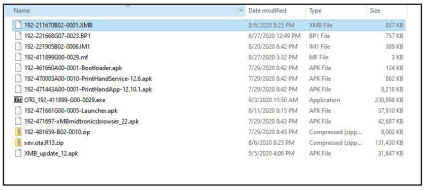


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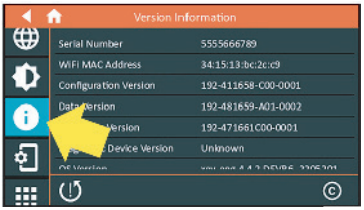




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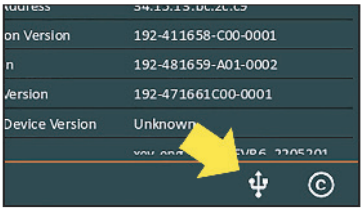
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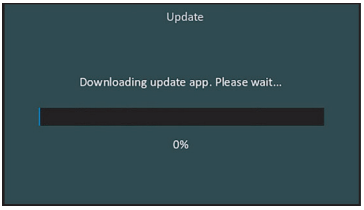


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Corporate Headquarters
Willowbrook, IL USA
Phone: 1.630.323.2800

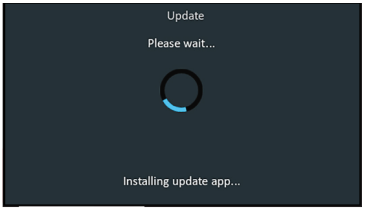
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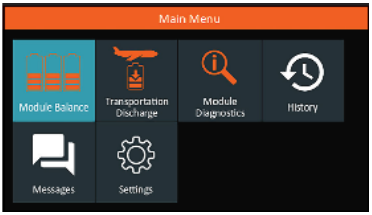
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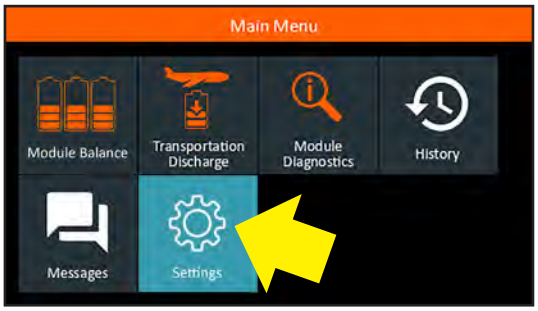
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Software Update

**PERFORM SOFTWARE UPDATE PRIOR TO INSTALLING IME-2404.
FAILURE TO DO SO WILL RESULT IN PRODUCT SERVICE REQUIREMENT**

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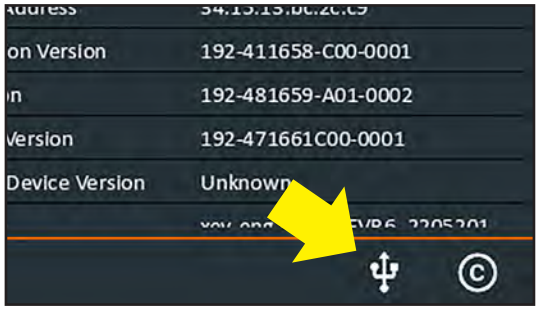
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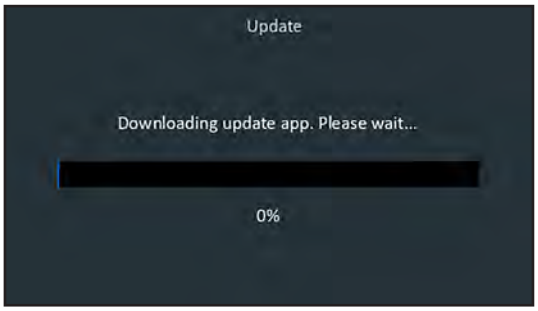
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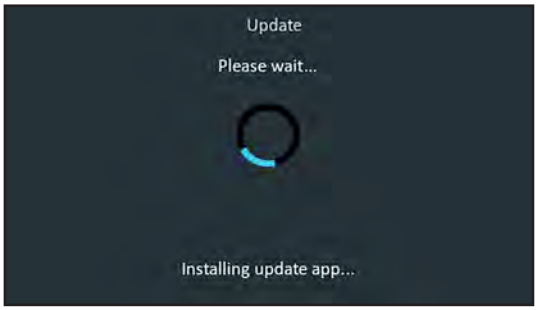


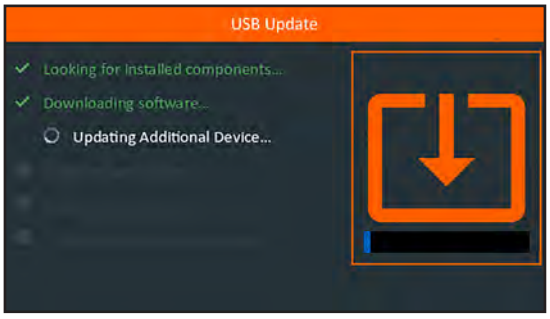
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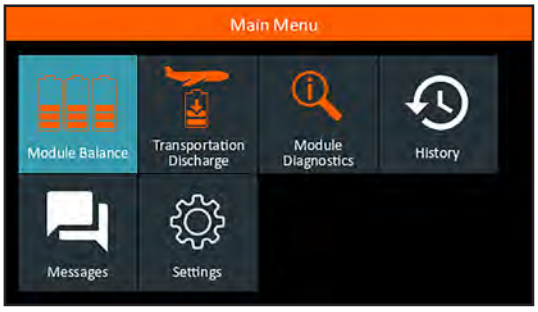


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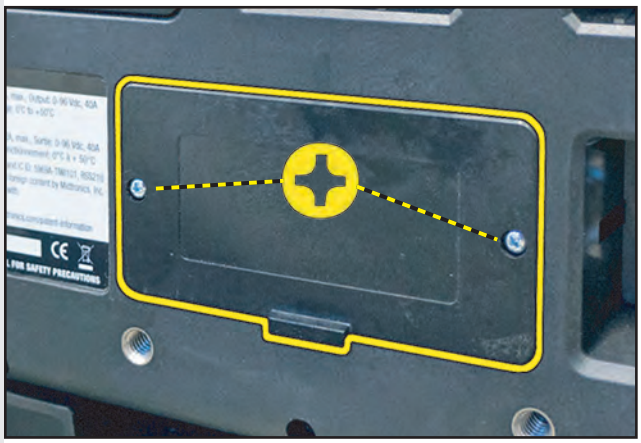


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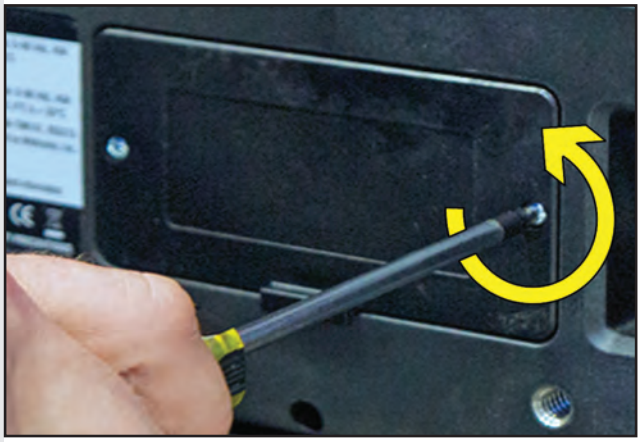
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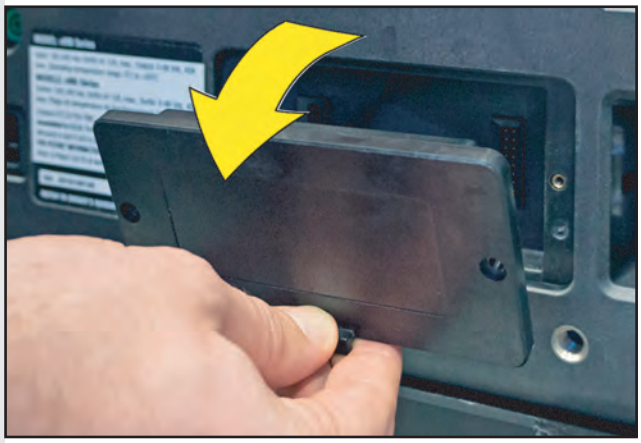
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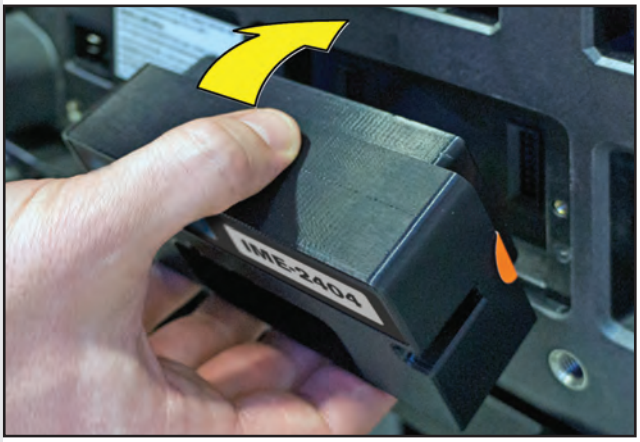
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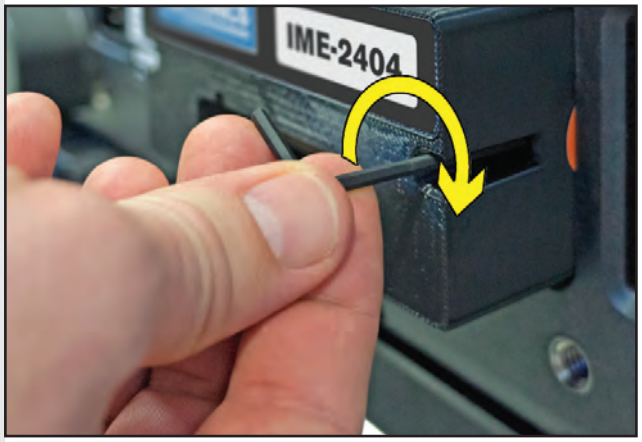
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