



Vantage Mobility International

Field instructions upgrading VMIQ for Powerkneel™ current increase

Document Number: TS-WI-0256

VMIQ FIRMWARE UPGRADE TO PREVENT POWERKNEEL™ OVERCURRENT

ASSEMBLY AREA	N/A	ENGINEER	Mark Miller
MODEL	ALL MODELS WITH VMIQ	STATION #	N/A

RELEASE SIGNATURES

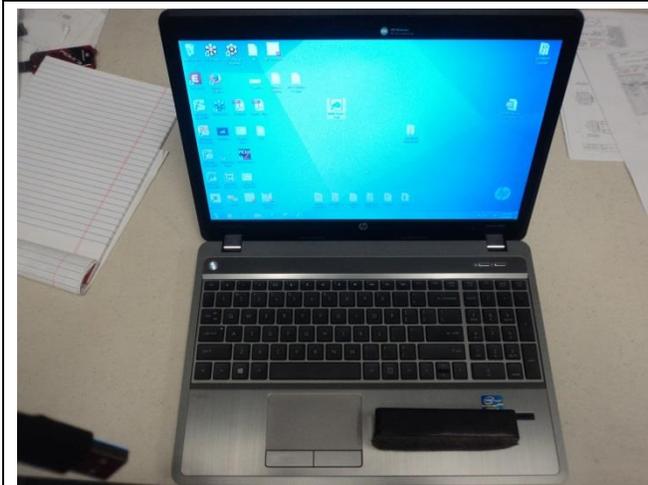
TITLE	SIGNATURE	DATE
TECHNICAL SUPPORT	David Hagstrom	1/12/18
MANUFACTURING ENGINEER	Mark Miller	1/12/18
DIRECTOR OF MANUFACTURING ENGINEERING	Brian Mark	1/12/18
DIRECTOR OF DESIGN ENGINEERING	Steve Ungetheim	1/12/18

REVISION HISTORY

AUTHOR	DESCRIPTION OF CHANGE	REV	RELEASED	ECO#
David Hagstrom	[Initial Release]	A	1/12/18	n/a

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TOOLS REQUIRED



Laptop with VMIQ service tool loaded



Mini USB cable

SCOPE

VMI has been made aware that in certain cases the VMI Powerkneel™ may not trip the “Up-Limit” switch when releasing due to current limitations set by the VMIQ. This may result in the vehicle not being able to shift out of PARK or it may result in the conversion not deploying properly when next cycled. This upgrade is to raise the electrical current threshold to the Powerkneel™ allowing it to extend and retract fully.

SPECIAL INFORMATION

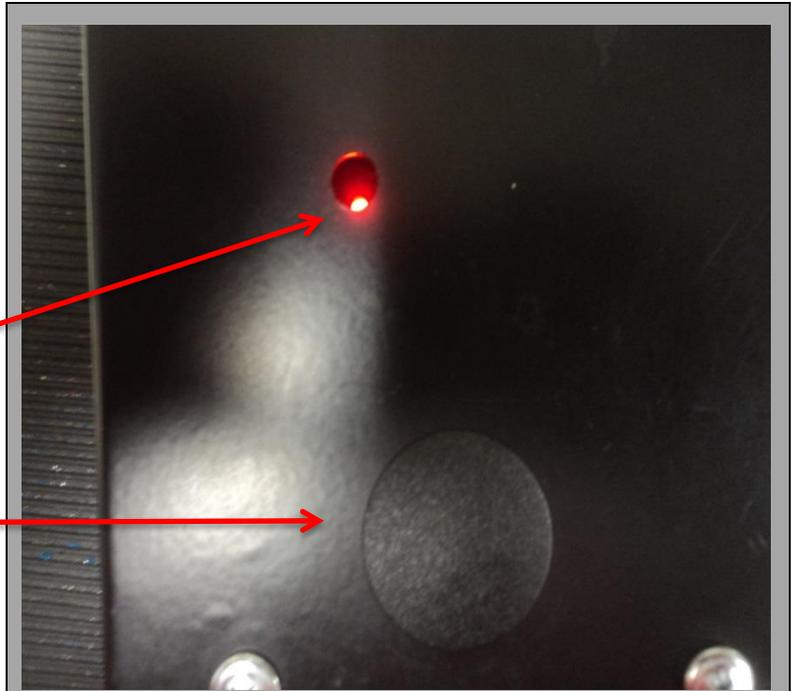
You will need the newest version of the VMIQ service tool software loaded on your computer and the latest firmware version available on the Tech Support Portal. You can find the files for download at www.vantagemobility.com/technicalsupport go to VMIQ_Tools_Firmware, VMIQSupport, Firmware Updates

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1. Locate and remove the plastic snap cover on top of the VMIQ housing to expose the reset button and the USB connection.

FLASHING LED STATUS LIGHT

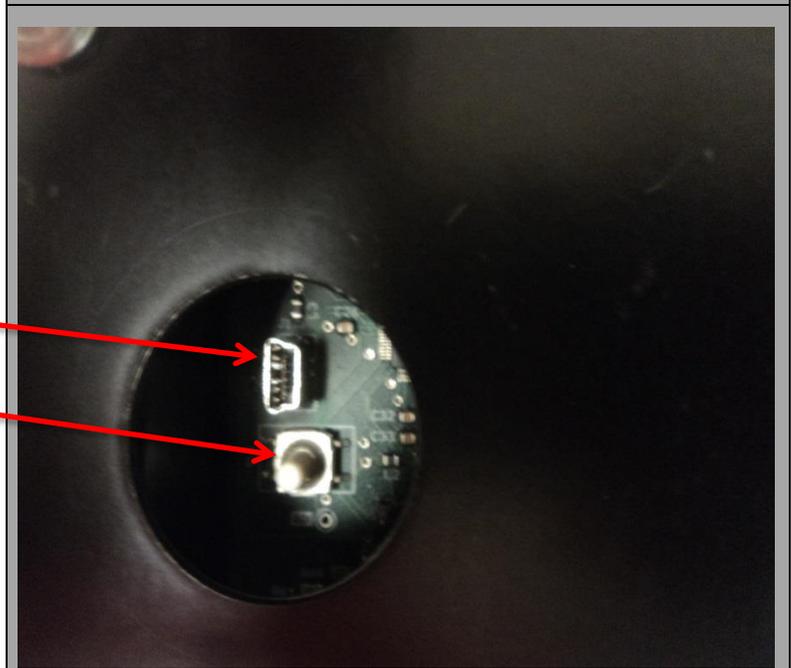
PLASTIC SNAP ON COVER



2. Connect computer to USB port using the Mini USB Cable.

MINI USB CONNECTION

RESET BUTTON



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UPGRADING THE FIRMWARE ON VMIQ BOX

Before you begin loading new firmware make sure the USB is connected to the VMIQ and that the red LED on the VMIQ board is flashing. The easiest way to accomplish this is to have the vehicle ignition in the “ON” position or to push the reset button on the VMIQ box.

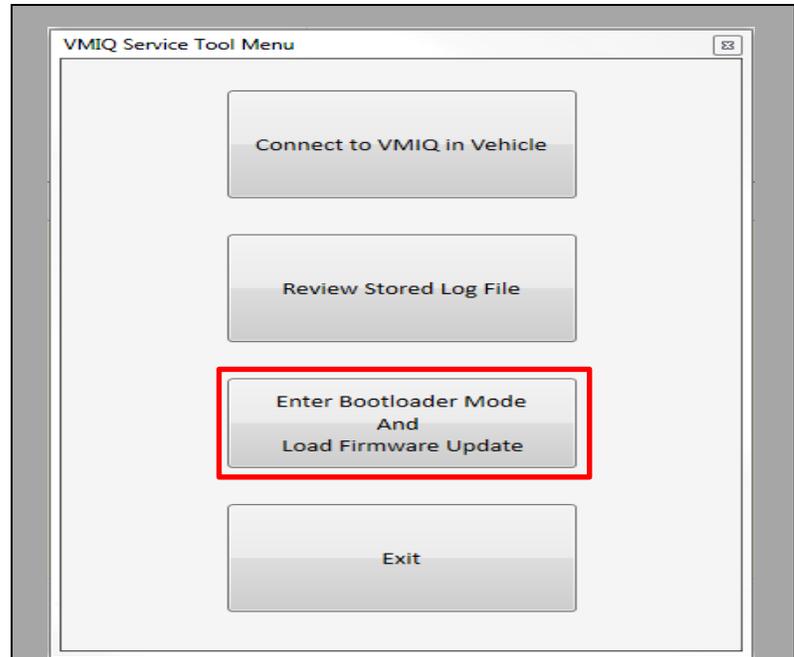
3. Locate and double-click on the VMIQ service tool icon on your computer desk top. (Make sure your laptop is connected to the Internet.)



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4. On the main menu click on the; **“Enter Bootloader Mode And Load Firmware Update”** button.

If you are not ready and chose **Exit**, you will return to the previous screen.

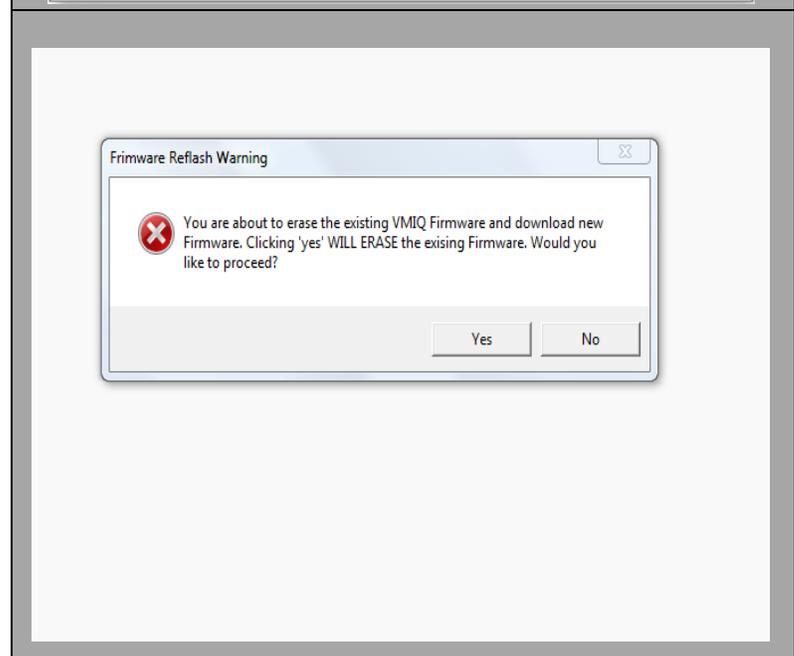


5. Before proceeding you will be asked if you wish to continue. If you are ready click “Yes.”



CAUTION:
Once you have clicked yes you will be entering the Bootloader mode and you will erase the existing firmware.

6. If you are not ready and chose “No,” you will be returned to the previous screen.

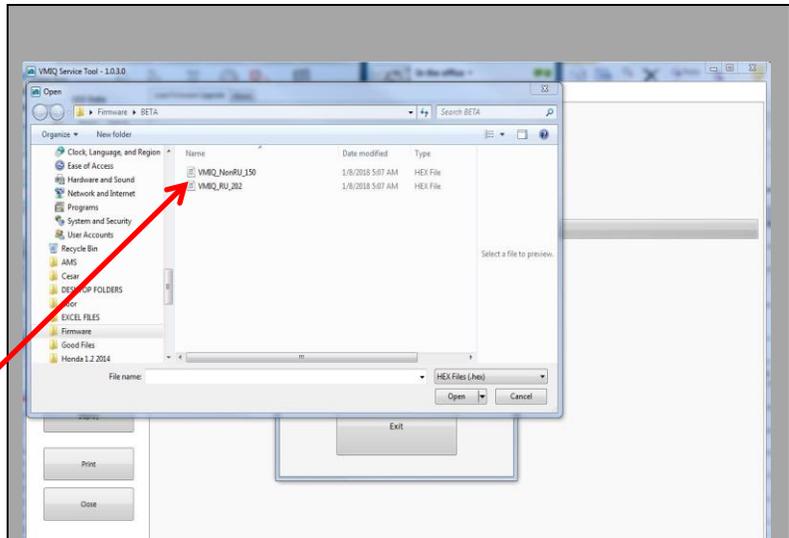


Locate the folder where your upgraded hex file is located. Hi-light it and click “Open.” The file will begin downloading automatically.



CRITICAL

Please ensure you select the correct file for your application. Chrysler Pacifica (RU) or Toyota/Honda/Grand Caravan



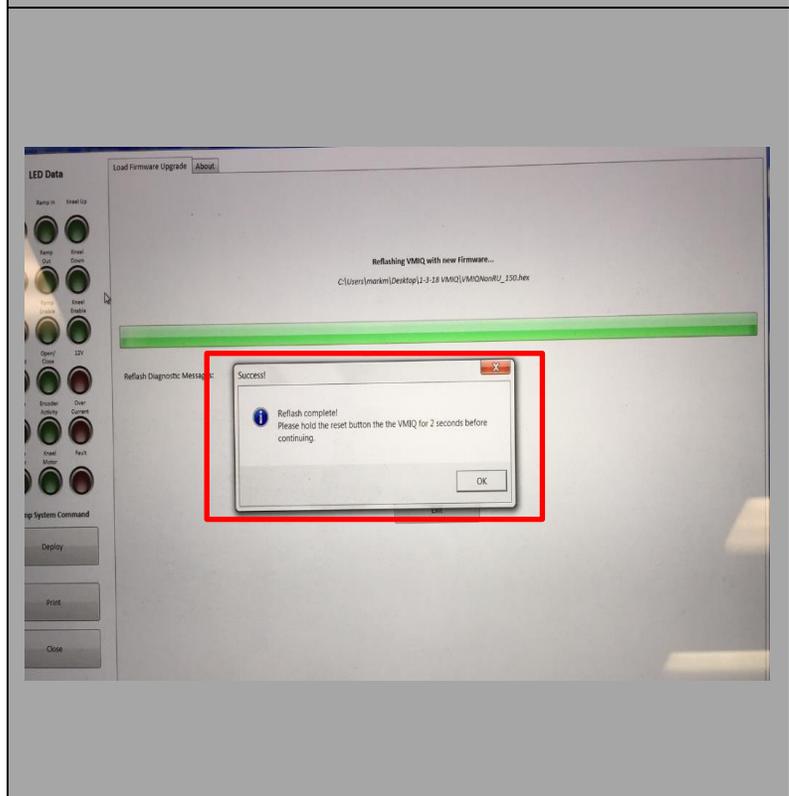
The download process will take approximately 30 seconds.

- When the download is complete exit out to the main menu by clicking on the “ok” in the lower right hand corner of the message box. Press the reset button on the VMIQ.



CRITICAL

IF the bar does not turn COMPLETELY green and /or this screen does not pop up documenting the file has fully transferred (Reflash Complete), disconnect the tool from the VMIQ and restart the process.



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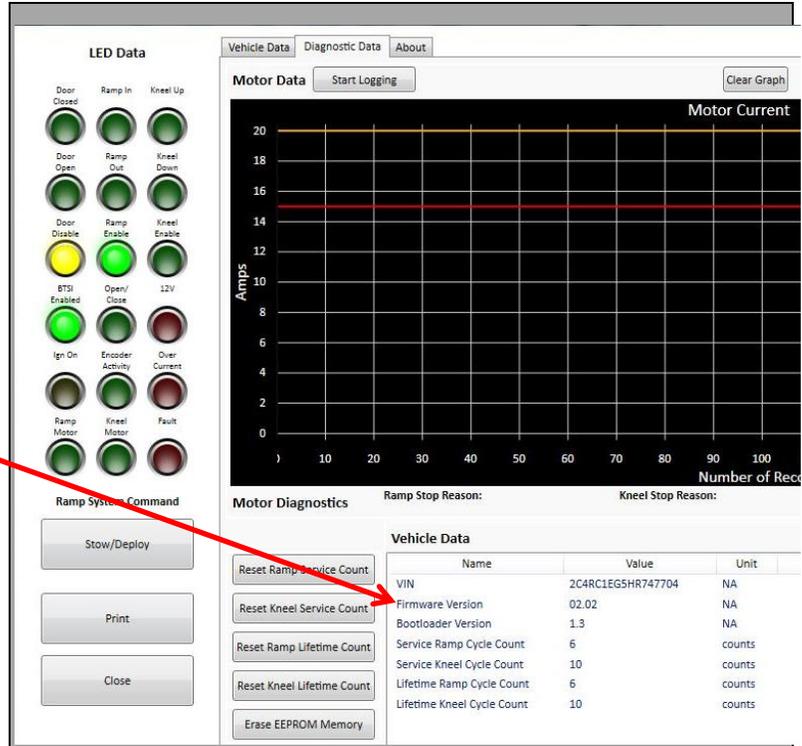
Exit out of the system or go on to step #8.

- To connect to the van and *confirm* the firmware version click on “Connect to VMIQ in Vehicle”. Click on the Diagnostic Data tab to confirm that the firmware you have loaded is correct.

Chrysler Pacifica should be version 2.0.2.

Honda and Toyota should be version 1.5.

Hit close and exit. Note the update on the front cover sticker



Name	Value	Unit
VIN	2C4RC1EG5HR747704	NA
Firmware Version	02.02	NA
Bootloader Version	1.3	NA
Service Ramp Cycle Count	6	counts
Service Knee Cycle Count	10	counts
Lifetime Ramp Cycle Count	6	counts
Lifetime Knee Cycle Count	10	counts

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