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SeedMaster is continuing to improve its product line up. Some of these improvements are being offered free of charge to our existing customers through software updates.

SeedMaster always maintains the latest Raven software available on the SeedMaster FTP site. It is an expectation that all SeedMaster customers will check to ensure that they are running the most current Raven software available before each seeding season.

This package contains all necessary tools and information required to update software on the Viper Pro console and CAN nodes that are part of your SeedMaster seeding system. Please follow the included step by step instructions to successfully update your software.

The yellow USB stick has the most recent Raven software preloaded onto it. There is no need to go to the SeedMaster website to download software. All SeedMaster units this spring will be running the software package that is contained on the provided USB stick. For future software updates, you will need to copy software files from the SeedMaster FTP site and place them correctly onto the USB stick provided before updating software.

The black USB stick is to be used as external storage for as-applied job information that the Viper console produces. The Viper console has a finite amount of internal memory. When the Viper memory becomes full, all field operations are halted until internal memory can be freed. This can become a time consuming and frustrating process if left until all internal memory is used up. It is recommended that job information be downloaded from the Viper console every 640 acres to ensure that it operates at optimal efficiency and no work stoppages occur.

If you have any questions, please contact your local SeedMaster dealer.

Please follow this procedure to successfully update the Raven software on your SeedMaster seeding system. The updates included in this package will allow your seeding system to operate at peak efficiency with minimal anomalies occurring.

Part of this update includes clearing the Viper's hard drive of any unnecessary files that may be corrupt and causing the Viper to perform at less than optimal efficiency. Before we clean the Viper's hard drive though, we must record certain essential settings so that they can be re-entered after the software update is completed. The settings can be recorded with a pen and paper. We recommend using a camera to take pictures of the screens that have the outlined settings on them for future reference.

Power on the Viper as per normal to get to the main work screen. Your drill electrical connections have to be connected to your tractor. This is because some of the updates are for the nodes located on your SeedMaster drill.

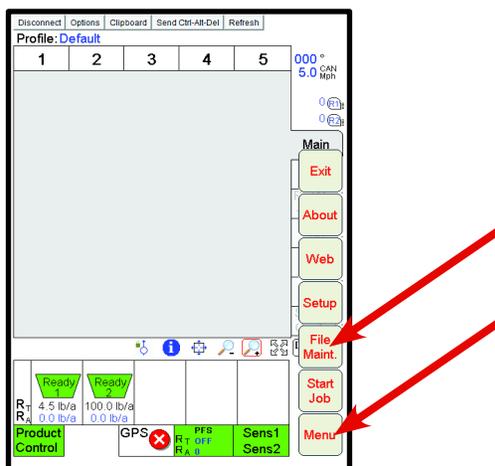
PART 1 - FILE MAINTENANCE

If you are using the Viper for the first time, please skip Part 1 and go directly to Part 2.

This will remove any recorded job information that is currently stored on the Viper hard drive (as-applied maps, etc.). Please insert the provided black USB stick into the USB slot on the front-bottom-left side of the Viper screen.



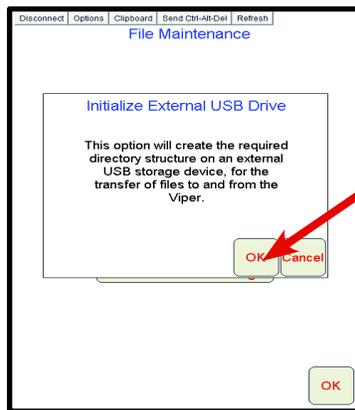
From the main work screen, press "Menu". Then press "File Maintenance".



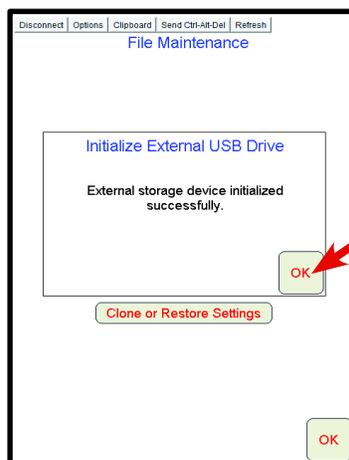
Press "Initialize External USB Drive".



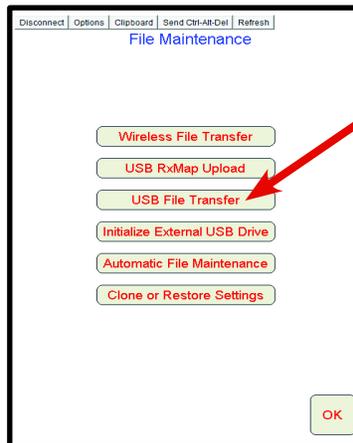
Press "OK".



Press "OK". The USB stick has now been formatted for transferring files to it from the Viper monitor. The "Initialize External USB Drive" step only needs to be completed the first time a USB stick is used. You can skip this step next time as long as you are using the same USB stick.

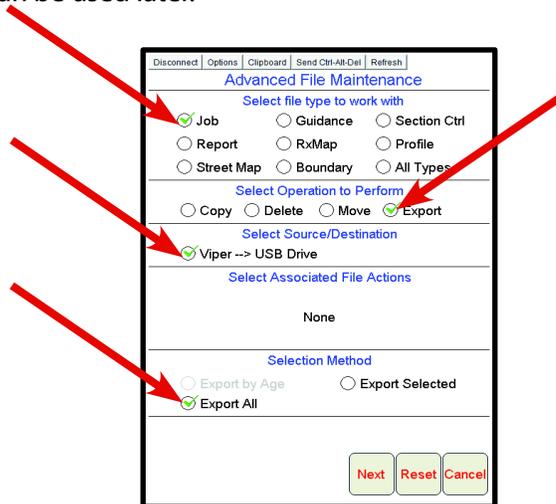


Press "USB File Transfer".

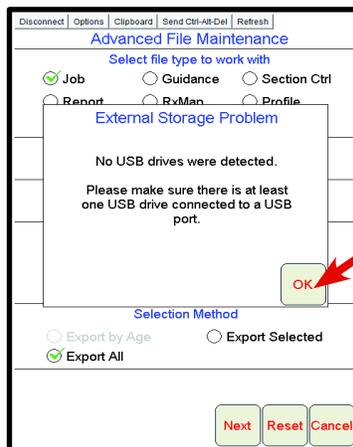


Press "Job". Press "Export". Press "Viper to USB Drive". Press "Export All". Job files contain as-applied maps created previously while seeding.

If the Viper was used for tractor guidance, repeat this step with "Guidance" selected. This will save A-B lines and other guidance information so that it can be used later.



Press "OK". Files will now be transferred from the Viper to the USB stick. This process may take as little as a few minutes up to an hour depending on the number/size of files to be transferred.



Now that the files have been exported to the USB drive, they can safely be erased from the Viper. Select all boxes as seen below. Then press "Next".

Disconnect | Options | Clipboard | Send Ctrl-Alt-Del | Refresh

Advanced File Maintenance

Select file type to work with

Job Guidance Section Ctrl

Report RxMap Profile

Street Map Boundary All Types

Select Operation to Perform

Copy Delete Move Export

Select Source/Destination

From Viper From USB Drive

Select Associated File Actions

Delete AccuBoom File Delete RxMap Files

Prompt Select All

Select Method

Delete by Age Delete Selected

Delete All

Next Reset Cancel

Select "OK".

Disconnect | Options | Clipboard | Send Ctrl-Alt-Del | Refresh

Advanced File Maintenance

Select file type to work with

Job Guidance Section Ctrl

File Maintenance Warning

This is an Advanced File Maintenance feature.

Deleting or moving a job that shares files with another job may cause the other job to be unusable.

OK

Select Method

Delete by Age Delete Selected

Delete All

Next Reset Cancel

Select "OK" to exit when the file transfer is complete. This will take you to the home screen. We have now saved a back up for all files on the Viper.

Disconnect | Options | Clipboard | Send Ctrl-Alt-Del | Refresh

File Maintenance

Wireless File Transfer

USB RxMap Upload

USB File Transfer

Initialize External USB Drive

Automatic File Maintenance

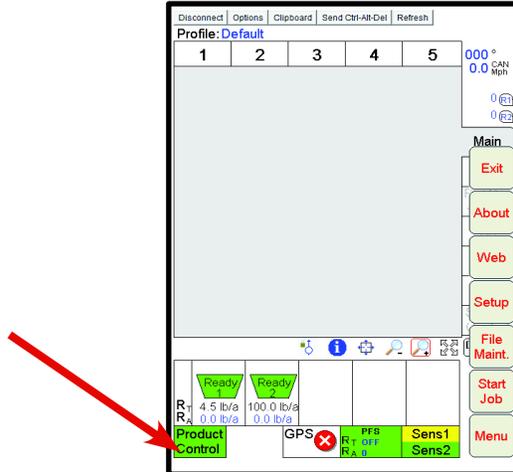
Clone or Restore Settings

OK

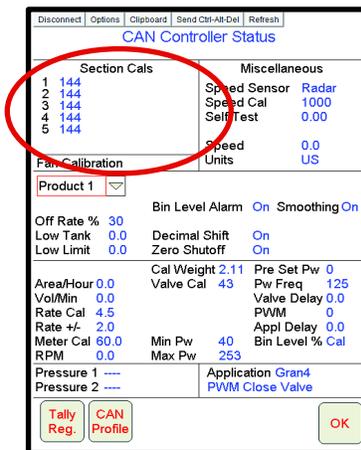
PART 2 - RECORD SETTINGS

The next step is to record all important settings that will be erased in a later step. **It is very important to save a copy of all the settings outlined so that they can be used again.** Failure to re-enter correct settings will result in unsatisfactory tank operation.

Press "Product Control".



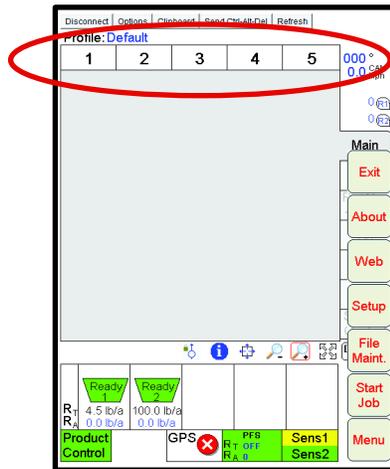
Press within the "Section Cals" area.



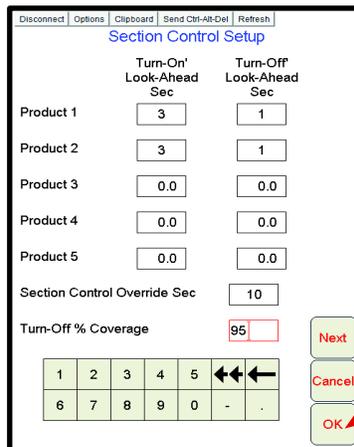
Record all circles that have a check mark seleted and which ones do not. Then press "OK". Then press "OK" one more time to return to the main work screen.



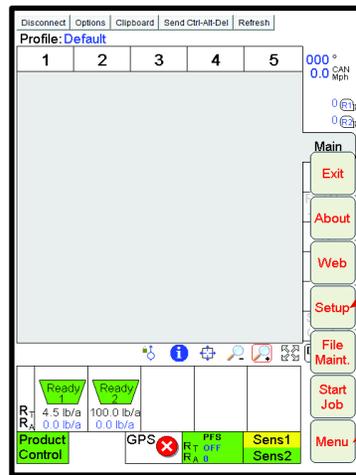
Press within any of the zone on/off indications.



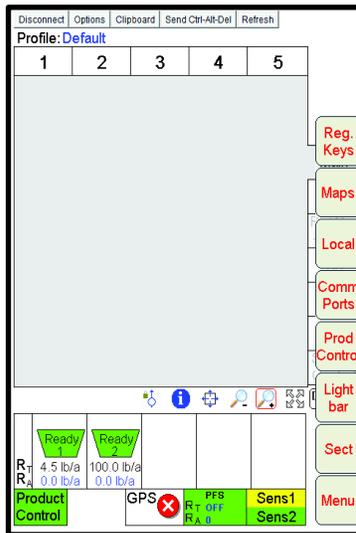
Record all settings within this page. Then press "OK".



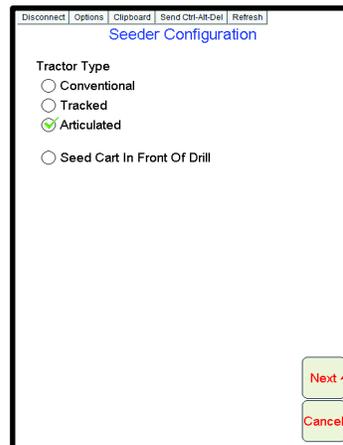
Press "Menu". Then press "Setup".



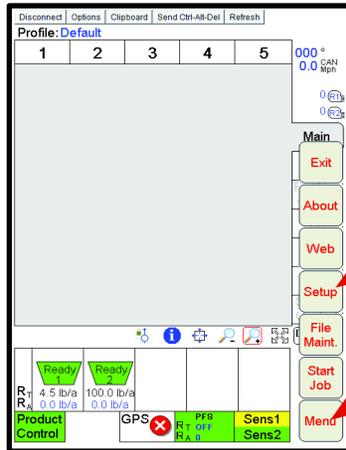
Press "Sect".



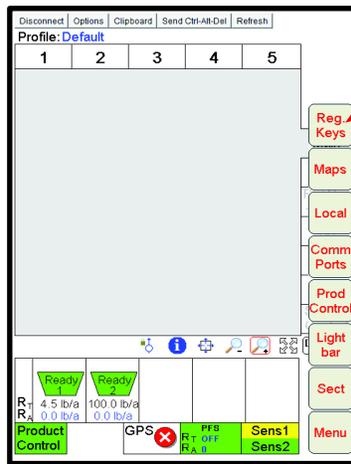
Record all numbers entered and all boxes that are checked or not checked. Select "Next" and make recordings from next page. Continue to select "Next" after recordings are made for each page. Depending on drill set-up, there may be up to 14 pages of information to record. Be diligent in recording accurate settings so that they can be re-entered later. When you get to the last page to record, selecting "Next" will not be an option. Press "OK". This will return you to the main work screen. **Ensure all page settings are being recorded.**



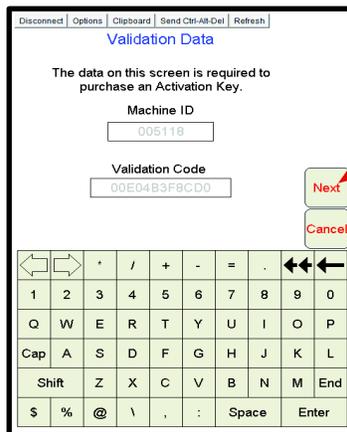
Press "Menu". Press "Setup".



Press "Reg Keys".



Press "Next".



Record the OmniSeed activation key. Press "OK" when finished. You have now recorded all of the settings that will be lost during the software upgrade.

Disconnect | Options | Clipboard | Send Ctrl-Alt-Del | Refresh

Key 1

If you've purchased an Activation Key
enter it on this screen.

Activation Key

- -

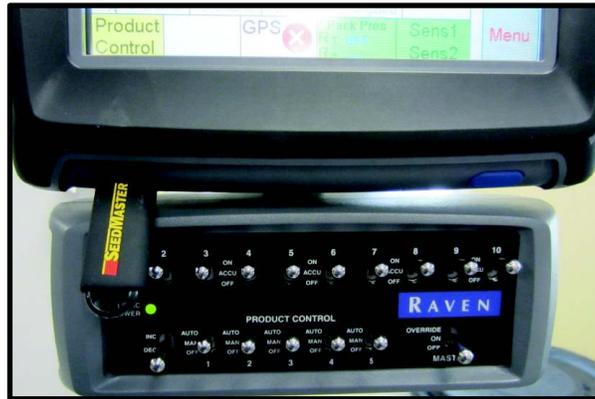
Prev
Next
Cancel
OK

←	→	*	/	+	-	=	.	←	←
1	2	3	4	5	6	7	8	9	0
Q	W	E	R	T	Y	U	I	O	P
Cap	A	S	D	F	G	H	J	K	L
Shift	Z	X	C	V	B	N	M	End	
\$	%	@	\	.	:	Space	Enter		

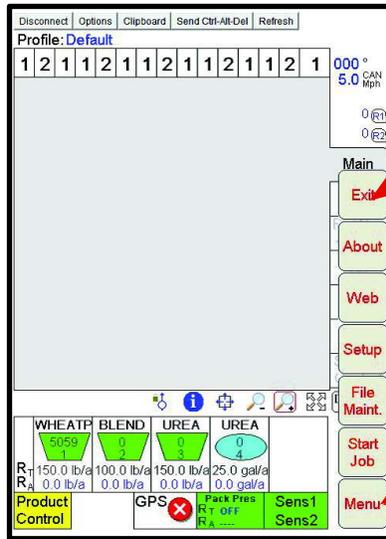


PART 3 - UPLOADING SOFTWARE TO VIPER MONITOR

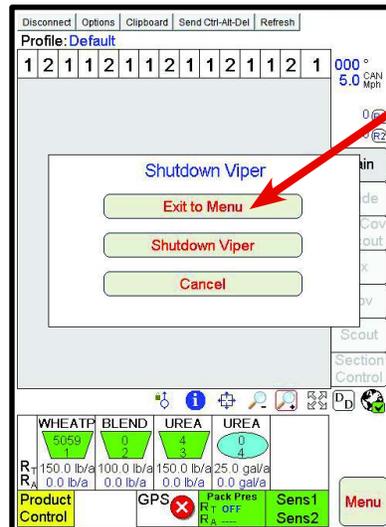
Insert your USB stick into the Viper as shown below.



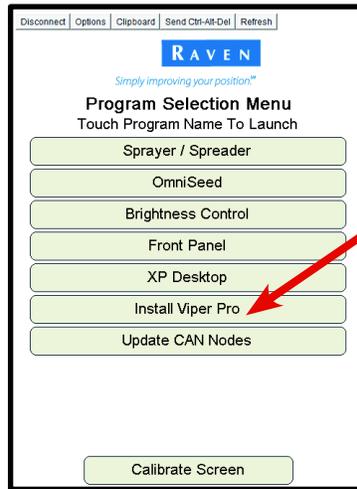
Press "Menu". Press "Exit".



Press "Exit to Menu".



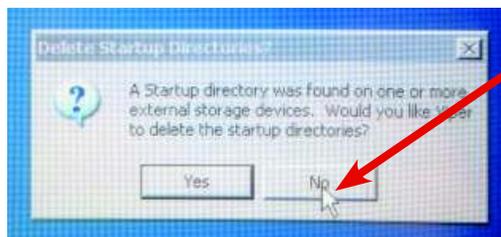
Press "Install Viper Pro". If "Install Viper Pro" is not an option, your memory stick has not been set up properly.



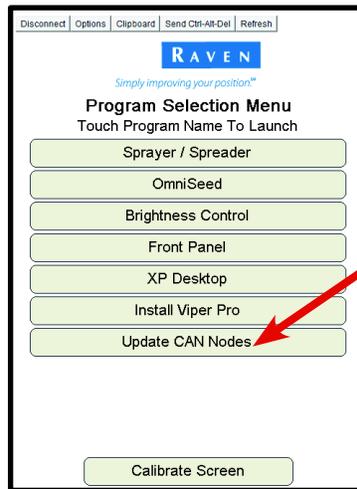
Select "OK".



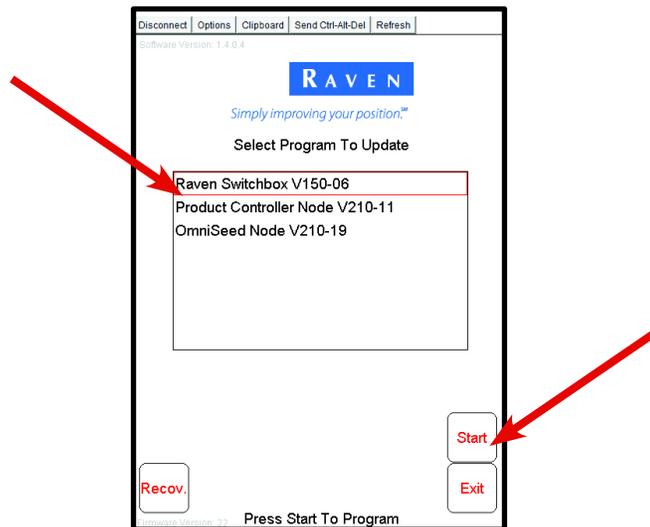
Select "No".



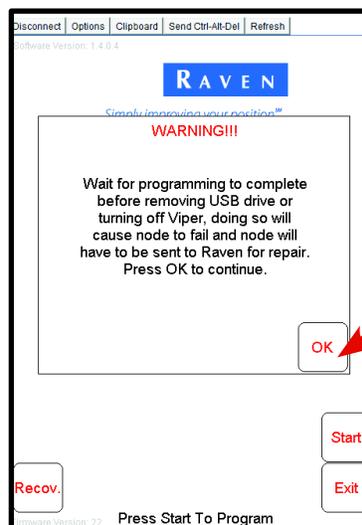
Select "Update CAN Nodes".



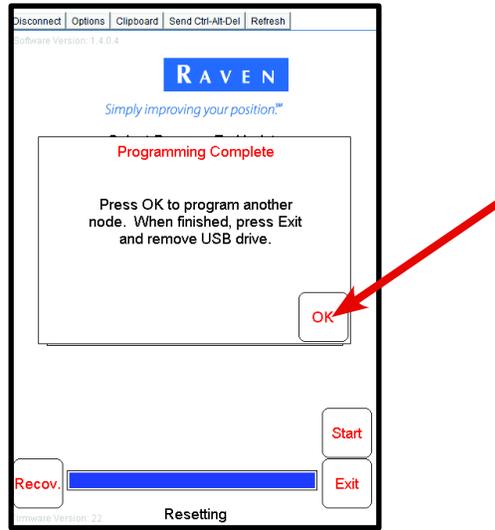
Press "Raven Switch Box V...". Then press "Start".



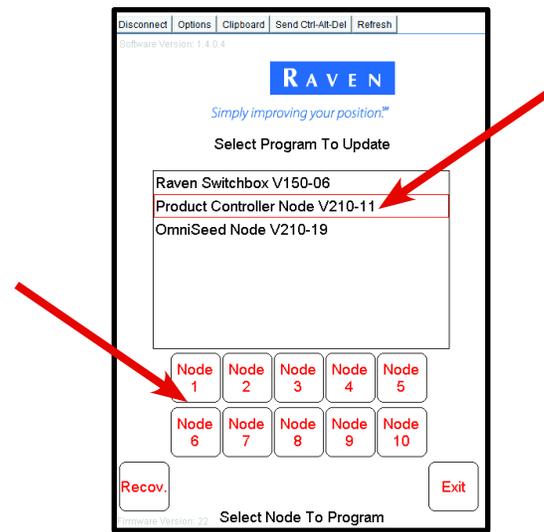
Press "OK". If you encounter a timeout error, select "Yes" to try again.



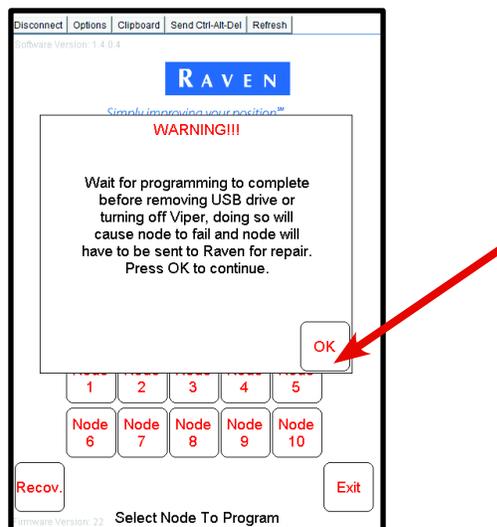
Press "OK".



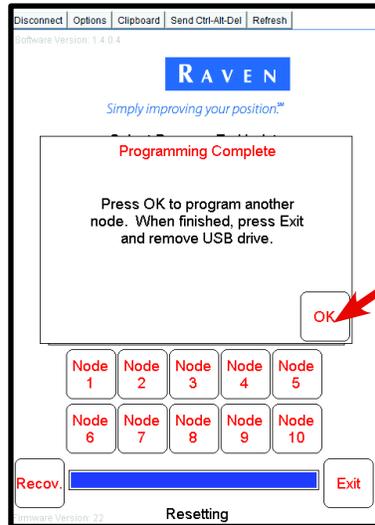
"Initializing... Please Wait" will display on the bottom of the screen. Wait until "Programming... Finished" is displayed. Press "Product Controller Node V...". Then press "Node 1".



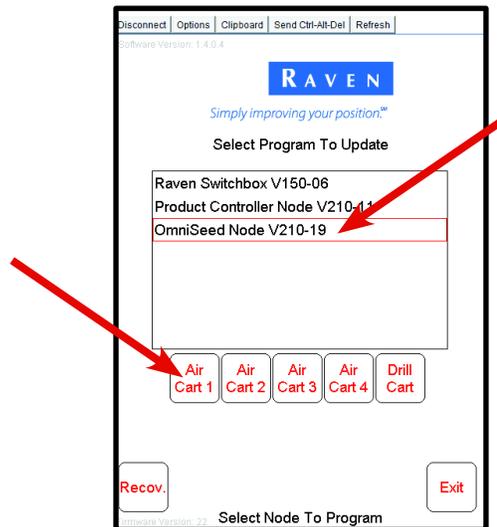
Press "OK". If you encounter a timeout error, select "Yes" to try again.



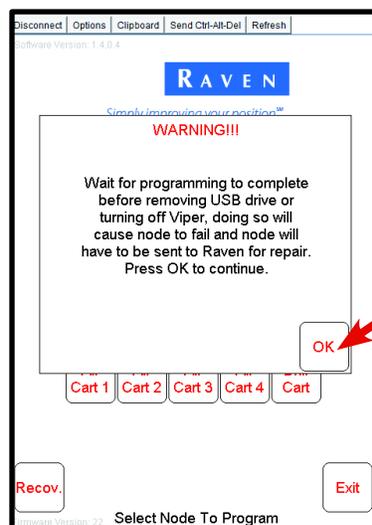
Press "OK".



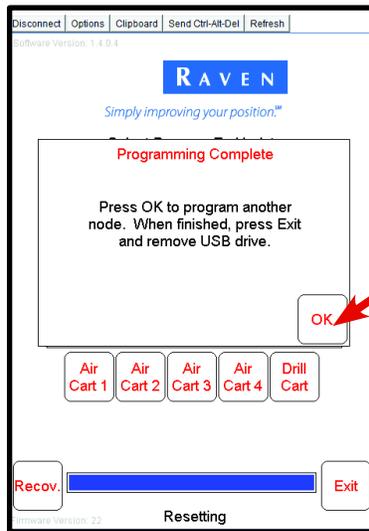
"Initializing...Please Wait" will display on the bottom of the screen. Wait until "Programming...Finished" is displayed. Press "OmniSeed Node V...". Then press "Air Cart 1".



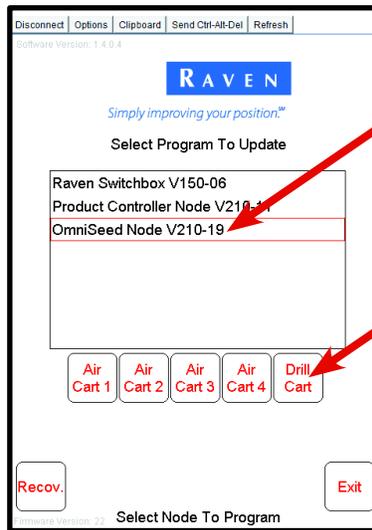
Press "OK". If you encounter a timeout error, select yes to try again.



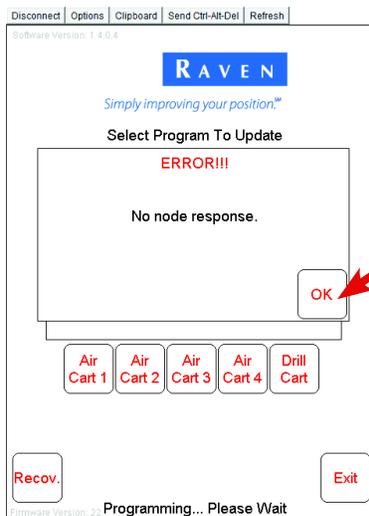
Press "OK". "Initializing...Please Wait" will display. Wait until "Programming... Finished" displays.



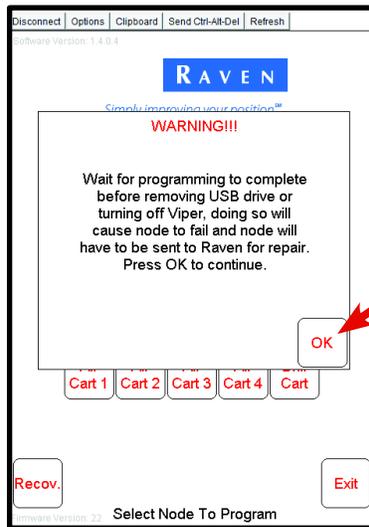
Press "OmniSeed Node..." If you see "Drill Cart" as seen below, press "Drill Cart". If you don't see "Drill Cart", press "Exit", you are finished updating software.



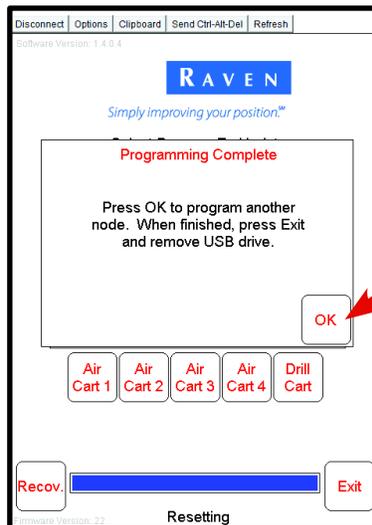
If you see the screen shown below, press "OK". Then press "Exit". You are finished updating software. If you don't see the screen below, continue to next screen shot.



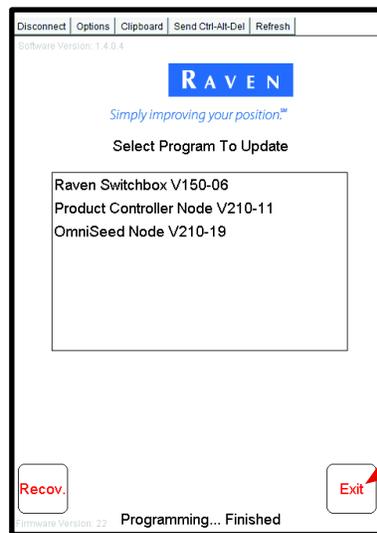
Press "OK". If you encounter a timeout error, select yes to try again.



Press "OK". "Initializing... Please Wait" will display. Wait until "Programming...Finished" displays.



Press "Exit"

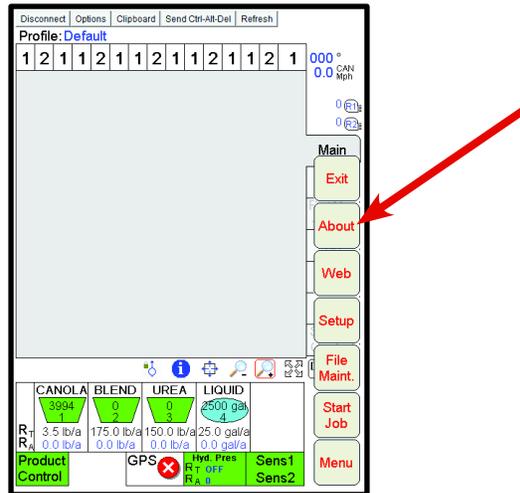


You have successfully updated your Raven software!

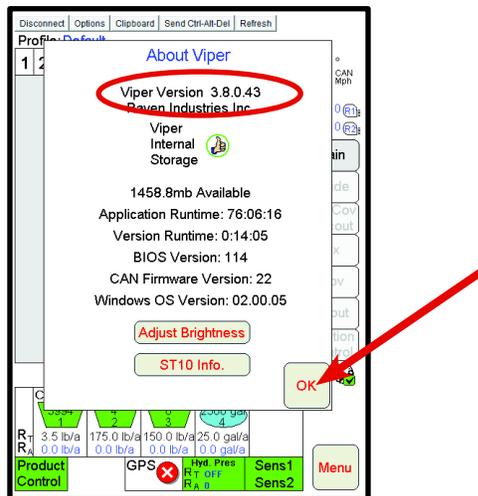
You must now re-enter the settings that you recorded during Part 2. It is very important that all settings get re-entered into the Viper properly. Once all settings have been re-entered, continue to the next procedure to ensure software has been updated properly.

PROCEDURE TO ENSURE YOU ARE USING CORRECT SOFTWARE

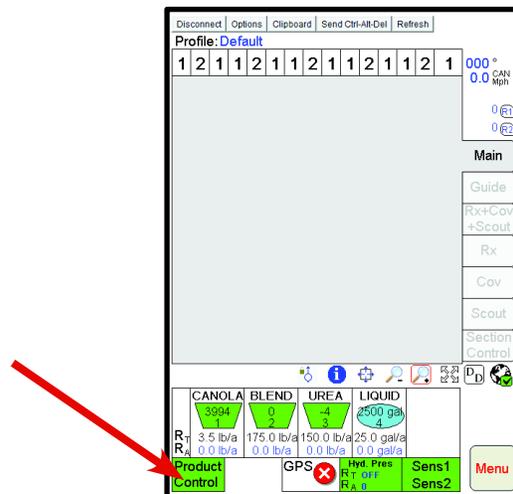
Press "Menu", and then press "About".



Your Viper version should be the same as the one shown below. Press "OK".



Press "Product Control".



Press within the "Miscellaneous" area.

Disconnect Options Clipboard Send Ctrl-Alt-Del Refresh

CAN Controller Status

Section Cals				Miscellaneous	
1	120	1	240	Speed Sensor	Radars
1	120	1	240	Speed Cal	785
1	120	1	240	Self Test	0.00
1	120	1	240		
1	120	1	240		
1	120	2	240	Speed	0.0
1	120	2	240	Units	US

Fan Calibration

Product 1

Off Rate % 30 Bin Level Alarm On Smoothing On

Low Tank 0.0 Decimal Shift On

Low Limit 0.0 Zero Shutoff On

Area/Hour 0.0 Cal Weight 2.11 Pre Set Pw 0

Vol/Min 0.0 Valve Cal 43 Pw Freq 125

Rate Cal 3.5 Valve Delay 0.0

Rate +/- 0.1 PWM 0

Meter Cal 60.0 Min Pw 40 Appl Delay 0.0

RPM 0.0 Max Pw 253 Bin Level % Cal

Pressure 1 ---- Application Gran4

Pressure 2 ---- PWM Close Valve

Tally Reg. CAN Profile OK

Press "Next".

Disconnect Options Clipboard Send Ctrl-Alt-Del Refresh

Miscellaneous Settings

Speed Sensor Radars Wheel

Speed Source Air Cart Switch Box

Speed Cal

Self Test

Audible Alarm Off On

Remote Master

Boom Capacity Off On

Max Capacity

1	2	3	4	5	←	←
6	7	8	9	0	-	.

Below is an example of what should be seen. It will vary depending on particular drill set-up.

Switchbox Node software should be 1.50.6 (268).

If Product 1 is a granular tank, software should be 2.10.19 (308).

If Product 1 is a liquid tank, software should be 2.10.11 (279).

AccuBoom software should be 2.10.11 (279).

If your screen shows a "Drill Node", software should be 2.10.19 (308). Some set-ups will not have a drill node.

