Premium Tech Tool: Frequently Asked Questions and News
Letter Version 1.57 (Released April, 2018)

Notes:

- **Updates and changes are indicated with the Change Bar on the left side of the text.**
- **To quickly find something, use the "Ctrl+F" and then search using a keyword.**

Table of Contents

c. **General Questions**

Back to Top

Premium Tech Tool News

Release Schedule; Improvement Areas

- The new and improved Vocom II is now available for sale! P/N 88894000
  - Note that the Firmware updates are now downloaded in the Client update agent. The Vocom II must be updated using the Vocom Configurator.
- 2.6.55 Planned to be released April 25th, 2018
  - Design and Function information in the operations
  - Improvements to some DTC fault tracing information
- 2.6.46-Released March 15th, 2018
  - Vocom II Firmware is now in the Client Update-use the Vocom Configurator to update to the latest firmware version
- Important application update-related to starting services
- 2.6.45- Released March 14th, 2018
  - Improvements to the SCR system test graph refresh
  - NOx conversion, better explanation or tips at the result step
  - Fuel pressure testing enabled for D11, D13
- 2.6.40-Released March 7th, 2018
  - More information to the user on why a Node (ECU) is locked.

- o Improvements to the Product History-Support added to make possible to show the value ranges for the expected values.
  - o Added option to add or remove all parameters at once when creating a template
  - o Clear all DTCs for ECUs with codes on the J1939
  - o Support for removal of pending remote software download
  - o Support added to read and display Version 2 sub hardware part numbers
- 2.6.36-New updates to the Client Update application. Released Feb 18th, 2018
- 2.6.36- Released December 13th, 2017
  - o Application updates for improved performance
- 2.6.30- Released November 29th, 2017
  - o Wiggle wire test has been added 3711-08-03-02. Monitors the status of the code as the tech "wiggles" the wire/connector.
  - o Improvements for local parameter cache handling that help reduce the possibility of losing the product configuration if an ECU programming fails.
  - o Improvement of the Product History. The log session that before only did a DTC readout is now stored on the client (PC) and sent to Central Systems.
- 2.6.26-Released November 1st, 2017
  - o Important application updates
  - o New links to the Volvo and Mack complete electrical schematics are found under the links section in Tech Tool.
- 2.6.25- Released October 25th
  - o Improvements made to the Exhaust Aftertreatment Diagnostics operation.
  - o The ESP control unit configuration has been moved to the Calibrate tab.
  - o Improved fault tracing for OBD2018 vehicles.
- 2.6.20- Released October 11th
  - o Addition of software for the soon to be released Vocom II
  - o New Search feature for operations. (Test, Calibrate and Programming)
- 2.6.15-Installed directly after the 2.6.0.
  - o Added replay functionality to key operations. Updated graphic functionality and appearance.
  - o Support of the New Mack models. (GR, PI, AN and TE)
  - o DTC fault tracing improvements made in support of new Mack models.
- 2.6.0-Tech Tool version 2.6.0 will be released starting the first week of October and continue thru November. The update will be sent to all registered and current Tech Tool users. We are sending on a USB memory stick/thumb drive.
  - o Add links directly to the Electrical Schematics Viewers (Mack and Volvo) for users in North America. Synchronize when you login. Go to "Links"
  - o Improvement to the parameter template function. OBD2013 and newer vehicles.
  - o Added an external monitor for the Central Systems connection. Located in the Help menu, under "Central Systems Status".
  - o Updates to the Tech Tool Help.
  - o Added an option to not leave the Tech Tool services and processes running in the background when Tech Tool is closed.
  - o Vocom name has been changed to Vocom I.
- 2.5.86-Released July 6th, 2017
  - o Improvement for the data in the Product History
- 2.5.85-Released June 14th, 2017

Back to Top

- o The Graphs have been updated in several operations.
- o Updates to the text in the Injector calibration operation 2371-07-03-01.
- o Correction to the fuel consumption data values for PTO and Idle.
- o Corrections to the Preheat test 3330-08-03-01for engine coolant and oil temperature and intake manifold temperature.
- o Improvements to the Suspension level sensor calibration 7281-07-03-01.
- o Corrected an empty error message in Injector calibration 2371-07-03-01.
- o Correction to the tank pressure pre-condition for the suspension level sensor calibration 7281-07-03-01.
- o Updated the AHI nozzle flow test set points for the EATS diagnostics.
- o Improvements to the error handling for the VGT function test 2551-08-03-02
- o Improvements to the SCR system test 2589-08-03-05
- o Updated illustration for the EATS diagnostics 2584-08-03-02
- o Correction to the coolant level sensor resistance test range (select models)
- o Improvement to allow the gearbox calibration when removed from the vehicle.
- 2.5.80-Released June 14th, 2017
  - o The Vocom driver updates can be installed through the client update, independently from the Tech Tool releases.
  - o Improved stability and speed when submitting concern reports.
  - o Corrected an issue where a failed ECU programming could be indicated as successful.
  - o Corrected an issue where a control unit can become locked when a network connection is lost.
- 2.5.75-Released April 26th, 2017
  - o Aftertreatment Hydrocarbon Doser and fuel flow test has been replaced by the AHD "air flow test". This provides a more accurate test of the doser.
  - o Correction to the electrically controlled engine cooling fan test pre-conditions.
  - o Correction to the Cylinder balancing test pre-conditions.
  - o Correction to the programming stored software function for multiple ECU's.
  - o Data Link diagnostics now support the Export vehicles and vehicles equipped with the Cummins engine.
  - o Data Link diagnostics are now applicable to Mack cab over models 2017 and forward

- 2.5.70-Released April 5th, 2017
  - o New End User License Agreement (EULA)
  - o Improved parameter programming for Version 3 and VMAC IV+ vehicles.
  - o Now possible to search and update parameter values without waiting for the complete readout to be finished.
  - o Improvements made to the information regarding possible mismatch scenarios.
  - o Cautions added to inform about issues connected to creating and editing a parameter template without connection to a vehicle.
  - o Corrected an issue where the parameters that should not be replicated using templates (vehicle specific) would be available when creating templates.
  - o Corrected an issue where a change to a parameter would be applied to a different parameter.
  - o Corrected an issue where parameters would not load if the vehicle had two ECU's with the same name/ID.

- o Corrected an issue where it was not able to read PID when DTC is active.
- o New Vocom driver to correct an issue with WIN 10 and USB 3.0, where the Vocom was not detected when using the USB 3.0 port.
- 2.5.65-Released-Mid February 2017
  - o Corrections to the text and added new data to the ECS system status, test
  - o Added value for distance at top gear, for the Fuel consumption data, test
  - o Improvements for Diagnostic fault tracing
- 2.5.60-Released-February 2017
  - o Corrected an issue with campaign programming a node that is not part of the kit
  - o Corrected an issue where Tech Tool would uninstall while trying to perform an installation.
  - o Corrected an issue to help recover from a failed operation routine.
  - o Improved DTC clearing for codes from the J1939 (DL1) data line.
  - o Note that a USB flash drive is required to update the SEM. (Services and Entertainment Module)

- 2.5.55-Released-February 2017
  - o Updated the images in the "flywheel and camshaft signal, test"
  - o Updated the images in the " Gear Activation, control housing"
  - o Increased support for non-Volvo/Mack control units. (Telematics, LDWS, Fusion)
  - o Electrical coolant pump test- on some of the OBD2017 vehicles

- 2.5.46-Released December 2016
  - o Important application updates for using a Digi-Pass
- 2.5.45-Released-November 2016
  - o Diagnostic fault tracing updates for several DTCs
  - o New DTCs for the OBD2017 vehicles
  - o Added link to the CBR system under the Diagnose tab. (Dealers only)
  - o 4000-08-03-11 Gear Activation Corrected an issue so the graphs (ball on strings) will now display values correctly in preferred units. (Inches or metric).
  - o 4111-08-03-06 PWM Valves Clutch Activation, Test Corrected an issue with activation not working when transmission was out of the vehicle.
  - o 4311-08-03-02 Inputs signals for gear selection, Corrected an issue where the current gear and selected gear did not work in the graph.

- 2.5.40-Released
  - o Added a caution for Vocom firmware update, to make sure that the Vocom is not connected to the vehicle during the update process.
  - o Improved the handling of an ECU "lock" status to avoid the situation where the ECU remains locked but the software would not download due to a failure during the ordering process.
  - o Corrected an issue with accessing test and or calibrations after performing a software update on a control unit. (error code 10007)
  - o Corrected an issue where Tech Tool would crash intermittently when refreshing or clearing DTCs.
  - o Corrected an issue where a check box was missing in Accessory Kit.

Back to Top

- o Corrected an issue in the Product Session Log where the J1939 DTCs appear with a faulty status.   Now it will be Active or Inactive.
  - o Corrected an issue where the J1939 DTCs appeared with the wrong ECU terminology. (MID 0 instead of SA 0)
  - o Corrected an issue where the VCP application for updating the Bendix ECU parameters would not work on all ECUs.   Note that this issue may still exist if you are using the Dearborn 5 interface.
  - o Corrected an issue with clearing all DTCs on OBD2013 and newer vehicles with J1939 that has the same ID number as a J1587 MID.
- 2.5.35 Released. Oct 26th, 2016
  - o Diagnostic fault tracing updates for several DTCs
  - o Updates for Data link fault tracing for vehicles with Cummins engine
  - o Application updates
- 2.5.30 Released. Oct 5th, 2016
  - o Corrected an issue that could cause TT to crash when updating the Vocom firmware with thru the USB with WLAN setup.
  - o Corrected an issue where the physical ECU removal and addition was not requested when applying a stored accessory kit.
  - o Corrected an issue that could cause TT to crash after running MID 128 Programming
  - o Corrected an issue where it was not possible to calibrate an AMT-F with crawler gears after updating the TECU software.
  - o Corrected an issue that could cause the test tab to be empty after running 1700-08-03-06 "Sensor and parameter values, monitoring"
  - o Corrected an issue where the graph would not display properly in the 4320-08-03-04 "Gears Test"
- 2.5.25 Network update is now available.
  - o Support for the I-See functionality-certain OBD2017 vehicles only
  - o Programming text updates
  - o Programming for MID 233 corrections
  - o Diagnostic fault tracing updates
  - o Diagnostic application corrections-related to application lockup
- 2.5.23 Network update is now available
  - o Parameter programming; corrected bug for parameter AI
  - o Advanced setting for RP1210 adapter corrections
  - o Corrected an issue where the send report function may fail on some clients
  - o Improved stability for software downloads related to error code 1000
- 2.5.20 Deployment is now available.
  - o Non-Admin users will be able perform network updates with the Client Update.
    - ▪ Administrator access is still required to install the Tech Tool Software.
  - o Improvements for Tech Tool compatibility with the latest Windows updates.
    - ▪ There will be a WIN 10 registry repair tool included. (please see installation instructions)
  - o Improvements to the Product Identification page:
    - ▪ Status bar will now show if the user is connected to Central Systems.
    - ▪ Status bar shows the progress on Product Identification
    - ▪ Status bar will now show the work order number.
    - ▪ Improved user feedback during the identification process.

Back to Top

- Support for the 2017 emissions vehicles.
- Improvements to the Tech Tool help files.
- Updated to allow software downloads up to 2GB
- Improvements to the "Parameter Programming" operation for Version 3 vehicles
- Corrected an issue where "Parameter and Sensor Values, Monitoring" operation would not replay.
- Corrected an issue where the clear DTC function did not work correctly. For example it would have taken multiple attempts to clear DTC's.
- Added support to allow removal of ECUs through the accessory kit operation.
- Improvements made to the RP1210 adapter performance in Tech Tool. Newer version of the device configuration files
- Bug correction to the Oscilloscope functions. New version 1.33.2
- Support for latest Noregon drivers v4.0.5868.2.
- Updates for the Vocom firmware and WLAN function.
- Improvements to EATS regen function to support newer vehicles.
- Common High Fuel pressure operation

Tech Tool contact information

- Contact the IT support desk for PC and software related issues, please contact 877-978-6586.
- Dealers should contact the dealer tech support helpdesk for vehicle support at 800-888-2039, must provide a dealer code.
- Fleets should contact fleet service for vehicle related issues at 800-628-6586 for truck support and truck related issues.

General Information

- Premium Tech Tool version 2.04 has expired January, 2018. Please update to the current version.
- The new and improved Vocom II is now available for sale. P/N 88894000.
  Note that the cables are sold separately. USB 88890313; OBD 88890253;
  9 pin (green) 88890315

- The www.premiumtechtool.com website is updated every month.
- Please note that Tech Tool works offline. You don't have to connect to Central Systems unless you need to program an ECU. Initial connection and synchronization is required, after installation. You must connect and update at least every 90 days.
- Programming an ECU will require a connection to Central Systems.
- A Password requires that you have at least 8 characters
- For UD vehicles built prior to 2011 you must continue to use PC Consult
- The Help Desk will provide best effort support on Tech Tool installations on Tablets. 877-978-6586 or e-mail to: dlrcomm@volvo.com
- **The Vocom I (88890300) and Vocom II (88894000) warranty has been extended to two years.** Please consult your local dealer warranty administrator for details.

Back to Top

Support Tool and Vocom I and Vocom II

- The required updated driver and instructions for the Vocom-II can be found at premiumtechtool.com under the support tab.
  http://www.premiumtechtool.com/technical-support/

- Vocom I may "lockup" when updating the device.   To fix this, disconnect the Vocom and wait 2 minutes.   Then connect to the PC <u>only</u> and update the Vocom.
- USB cable for the Vocom (88890305(early) 88890313) may experience a break in the circuit when bent, at the Vocom side.   If the USB light on the Vocom is not working (flashing is OK) gently flex the cable at the Vocom end to check for internal breaks.
- Warranty for the 88890300 is 2 years from date of purchase.
  - o Cables are warrantied 1 year.
- When performing a Service Regeneration and you get Routine error code 38. This is a failure with the ECM routine.   The fix is to update the ECM and ACM software. Note that only 1 regen should be performed.

Installation/performance tips

- Ensure that all Critical Windows updates are installed <u>before</u> TT is installed.
- User Account Control Settings should be set to the lowest setting. (Never Notify)
- Note TT is Java independent.   Tech Tool uses its own version of Java. The PC can run more than one version of Java, if necessary.
  - Java Security settings must be to the lowest possible setting
- For better PC performance, perform a disk clean up and defragmentation once a week.
  - Note defragmentation is not required for a Solid State Hard Drive.
- If you are getting a Blue Screen while using Tech Tool, check the available free space on the C drive.   If you are more than 95%, clean up some free space.   Restart the PC.

Improved Support for Tech Tool

- Password reset wait time is reduced! Press option # 1 at the help desk number.
  - o 877-978-6586 or e-mail to: dlrcomm@volvo.com

Back to Top

Premium Tech Tool 2 Frequently Asked Questions

When I attempt to perform a regen with Tech Tool, the regen will fail. What can cause this?
There are many issues that can affect the EATS regen function. A likely cause can be add-on ELDs or Telematics systems that are not properly connected to the vehicle.   Please reference CBR for more help with this issue.   If you cannot access CBR, contact the helpdesk.

What is the best way to find the road speed parameters on the newer trucks? We have noticed that there are different parameters for road speed on the newer trucks.
In parameter programming, use the Search feature and Search for "road speed".

Why is Tech Tool slow to update the Ambient Air Temp as compared to the Cluster?
Tech Tool is reading the ambient air temperature from the ECM, as this is required to run the Regen operation. The ambient air temp to the ECM is only being updated under certain conditions.   The cluster reads the ambient air temp directly from the sensor. The cluster then sends this signal to the VECU which in turn updates the ECM when certain conditions are met.   Reference CBR: K06837732

When I exit Tech Tool it asks me if I want to keep the "services running", what does this mean?
Answer: These are the services that Tech Tool uses to communicate with the truck.   If you keep the services running, (recommended) Tech Tool will start up faster than if the services were stopped.   More information can be found under Settings; System Startup.

I am using Tech Tool Version 2.6.XX and the Sensor and Values test is not working correctly.
If a sensor template is being used and there are a large number of sensors to be monitored on the template, this operation may not work correctly. Consider making a new template with fewer sensors, or using a specific test for your problem. An example would be the EATS regen operation will also capture all the sensor values that you need and store in the product history. You can also use Tech Tool version 2.5.87.

I am having difficulty finding the operation that I need.
There is now a search feature available in the Test, Calibrate and Program sections of Tech Tool.
For example, when you open the test section, there is now a Search feature on the left side, just above the list of operations. Type in a key word and then enter.

Why does the same test/operation look different when connected to different vehicles?
Tech Tool is comprised of old and new test and operations. It is the vintage of the vehicle that dictates if you will get the early test/operation or the newer version.   In most cases the newer version of the operations are used on the OBD2013 and newer vehicles.

Back to Top

When working on an older (Pre US-2007) vehicle, where are the diagnostics?
Click the Impact tab on the top of Tech Tool, then search under the service tab for diagnostics in the function group for the system that you are working on. There should be several documents found and a list of fault codes for that system/module.

When should I use the Synchronize Electronic Control unit data operation?
This operation can be used to Sync the vehicle with Central Systems. For example, if you have installed a component like a radio or cluster from a different vehicle, you may get a mismatch in the hardware and or the software.   Use the Sync operation to Sync the truck with Central Systems.   This will update Central Systems with the correct hardware and or software.   Note that if the installed component is not compatible with the vehicle you will get an error message.

What is the Central Systems Status under the Help section?
This is a new feature that started with Tech Tool 2.6.0. This opens the Dotcom Monitor and allows the user to see the connection status to the different central systems sites.   The TEA2+/BP is for the OBD2013 and newer vehicles.   TEA2 is for the pre-OBD2013 vehicles.

I programmed the instrument cluster and I noticed that the clock changed, why does this happen sometime? There are two clocks in the instrument cluster (MID 140).   The display date and time is shown in the driver's display.   There is also a system date and time that is used for the date time stamp for DTCs.   Both clocks are set using the System Date and Time programming.

What is VADA?
VADA is the Volvo branded version of the Bendix Fusion. Go to www.bendix.com for details on the Bendix Fusion.   Fusion can include the following ECUs; Bendix (SA11), Safety Direct Processor (SA209), Wingman (SA219) and the Forward Looking Camera (SA232). Use the Bendix ACom for these systems.

Why do I get error PAR90002 when attempting to change parameter settings?
This is most often caused by parameters that are "out of range", or "inconsistent". There should be a caution symbol at the top the parameter page with information on the issue.

I get a message in Tech Tool that my adapter is not supported, what does this mean?
All communication adapters and their respective software/drivers must be validated by the Tech Tool team and then the adapter can show as green on Tech Tool under the connectivity section. If you select an adapter whose software is not fully tested and approved, they you may get a caution symbol next to the adapter description.   This does not mean that the adapter will not work, but usually that the adapter is not fully tested and approved.

Which scanner should I use to scan the injector QR code?
The scanner to be used must include a QR reader function.   There are several models that we have tested and work well.
Zebra DS4308-DL, Zebra DS4308-SR or Zebra DS4308-HD
DataLogic QuickScan QBT2400 Model BC2030 Type BK-BT

How can I clear the DTCs from the Takata Lane Departure Warning System (OnLane™)?
>The OnLane™ LDWS uses the MeritorWabco ToolBox™ software program.

There is a message in the driver's display that says "Brake test Failed". What does this mean?
There are two brake switches, if one or both are not working correctly, then this message appears. Check and ensure that they are both working with the Brake contact test, or the cruise function test. If all appears to be correct, update the VECU SW for updated brake switch parameter.

How can I clear the Bendix Fusion System DTCs with Tech Tool?
>This should be corrected in a future release. TT can only read the Bendix DTCs.

Why is the MIL on but there are no active DTCs?
On the OBD (On Board Diagnostics) DTC's (Diagnostic Trouble Codes) you must check the sub status.
If a DTC is inactive, but also pending and or Confirmed this can activate the MIL.
The MIL turning ON and OFF strategies are designed by the California Air Resources Board Regulations.
The MIL is lit when the fault at least became active in 2 consecutive drive cycles (in general). (Confirmed DTC will be TRUE when MIL is lit)
MIL can only be healed after 3 consecutive drive cycles of fault free evaluations.
Hence drive cycles 1, 2, 3, 4 and 5 can have MIL ON with in-active fault.
Example, if a particular fault code only happens when engine is running high speed, high load and is required to light MIL. 2 Drive cycles with back to back high speed and high load causes the MIL to be LIT.
If vehicle keeps driving at least once for every 3 drive cycles high speed, high load MIL will be ON all the time and vehicle would show inactive DTC. (Low speed/low load).

Two things that can help with MIL ON diagnostics:
- Always look for confirmed DTC to figure out which fault may have caused MIL at this point.
- Notice freeze frame for the fault to understand what the conditions are during first fault event.

How can I manually reset the soot level?
>The DPF soot level is based on several different inputs and this data is calculated by the
ECM. When the DPF filter is replaced or reinstalled after having been cleaned the soot ratio value must be reset. This reset is needed to indicate to the ECM that the filter has been serviced. Note that the soot level should never be reset unless the filter has been serviced or replaced. Resetting the soot level, without servicing the filter may result in the regeneration cycle being disrupted and can lead to the filter becoming prematurely overloaded and or damaged.
The reset function is found in the "Exhaust Aftertreatment Diagnostics" test.

When do I need to manually run Update product Information?
>The update product information is designed to run automatically. If you are having connection issues with a newer vehicle, or after software update you may need to manually run the UPI function. On some occasions you may be requested to run the UPI after changes/updates are made to the database.

When I attempt to read parameters, why do I get an error code "PAR90025"?

       This is related to the Bendix Fusion system. Tech Tool is attempting to read parameters from the Safety Direct Processor, for the Lane departure warning system. If you pull the fuses for the SDP and then go back to parameter programming, you should be able read parameters.

Why do we offer ECU programming options to customers?

       We are required to provide access to program certain emissions related ECU's under the Service Information Requirement law, step 2013. Both the EPA and CARB require this. The following EPA software reprogramming requirement is described on page 8418 EPA OBD & SIR: 40 CFR Part 86.010-38

Are Windows updates needed for Premium Tech Tool?

       All PC's that are running Premium Tech Tool should have the lasted Windows updates installed. There are several Windows updates that are required to allow Tech Tool to work correctly.

What are the ECU's that are labeled SA 11, SA 209 and SA 232?

       These are all part of the Bendix Fusion system. www.bendix.com
SA 11 is for Source Address 11 for the Bendix 8 ECU. This is now on the DL 1.
SA 209 is the Safety direct ECU. SA 232 is the Lane Departure Warning System.
You will need to use Bendix ACom to work with this system.

I have two similar trucks and with one truck I can change some parameters like interior lighting. On the other truck I cannot, why is this?

       This is most likely related to the vintage of the vehicles that you are working on. For OBD2013 and newer vehicles Tech Tool is using a new type operation for parameter programming. This newer operation has fewer system dependencies when programming some parameters. For vehicles built prior to OBD2013 Tech Tool must connect to central systems as more parameters are stored in VDA. Fleet users cannot change most of these parameters.

When I use the operation "Sensor and parameter values, monitoring", what are the two different view options?

       The control unit view shows the parameters grouped from each control unit. The function view shows the parameters grouped by Function. These parameters may be stored in different control units.

How do I perform a search on the FAQ document?

       Select the "Ctrl+F" keys and then type in a keyword.

How do I print and save the current parameter values?

In order to print the parameter values, go to the Tech Tool menu in the top left of the screen on the front page and choose the "Print" option.   You can also save parameters and then print from the Product History.

What is the Sulfur regen and when should I run it?

- There are 3 different types of regens for the OBD2017 vehicles.   The sulfur regen has been added to help remove any sulfur that may have accumulated on the surface of the SCR catalyst.

What are the new or changed operations for the OBD2017 vehicles?

- Injector Calibration operation – 2371-07-03-01
- Fuel pressure test for the high pressure system - 2373-08-03-02
- EATS regen modifications – 2589-08-03-02

Does Tech Tool version 2.5.XX support OBD 2017 vehicles?

- There will be new and changed operations and diagnostics to support the new vehicles. These updates will be included with Tech Tool 2.6 which is being released in August 2017.   Update to PTT 2.6 as soon as possible.

I have noticed when I add an accessory kit, sometimes Tech Tool will also program the ECU automatically, but sometimes I must program the ECU manually.   Why is this?

There are three different ways that Tech Tool handles the Accessory kits:
- For the earlier ECU's that are programmed on the J1587 data link (DL4), you apply the Acc. Kit with Tech Tool and this updates Vehicle Data Administration, then you must reprogram the ECU.
- For the newer style ECU's that are programmed on the ISO data link (DL2), you apply the Acc. Kit with Tech Tool and this will update Vehicle Data Administration and then program the ECU. So there is no need to program these ECU's as a separate step after applying the Acc. Kit.
- Third, less common option: If an accessory kit involves early and newer ECUs, the newer ECU(s) will be programmed in the Accessory Kit operation, but the earlier ECUs will need to be reprogrammed after the accessory kit as a separate step.

When will PTT fully support older Mack legacy vehicles?

Premium Tech Tool 2 supports the Mack Legacy vehicles (VMAC I, II and III) for all functions. To reprogram an ECU you must use download the Mack Dealer Programming, which works as a plugin to Tech Tool. https://www.trucksdealerportal.com/tdp/mack-us/en-mu/service/tech_support/legacy_information/software_zone/Pages/software_zone.aspx
  Note that only authorized Mack service centers can program VMAC I, II, III ECU's

What are the definitions for the control unit data?

Product Data shows the connection to that ECU on the vehicle
Central Data shows that Tech Tool is reading the data Central Systems
Hardware shows if the control unit P/N is the same as in Central Systems
Software shows if the control unit SW matches what is in VDA

What is the purpose of the synchronization box on the login screen?

> The manual synchronization helps to improve the login time and connection speed. You only need to check the box when requested to by the help desk or when prompted to.

How often does the Premium Tech Tool login password expire?

> The Premium Tech Tool password expires every 180 days.

What is the best way to export the PHL for Tech Support to use?

> Click the Product History tab, then Export. You can then save to your PC and then attach to the E-Service case, or email directly to the requestor.

How can I locate engine hours?

> The Engine hours can be located in Product History session details.

How can I manually select DTC's?

> After manually entering the vehicle information, go to the Diagnose Tab, go to step 2 and on the left side of the screen, and click the "edit list". Now you can manually search for DTC's.

What is the best way to export the PHL for tech support to use?

> Click the History tab and then Export. You can then save to your PC and then attach to the E-Service case, or email directly to the requestor.

I'm having trouble using TT on a vehicle with a Cummins engine.

> **For New (first time) connection only.** To ID the vehicle correctly, always connect to the vehicle and to Central Systems.

Once the vehicle has been Identified by TT, you will need to remove from the recently selected to change the electrical system type.
If the vehicle has been incorrectly Identified has a VMAC-IV+ you must then following the steps below and remove from the recently selected list.

If you have connected to the vehicle only, (no Central Systems) you can "fix" the electrical system by following these steps.

1. Select the "finish work" on the right side.
2. Go to "latest selections" and "remove" this vehicle from the list.
3. Go to the "Tech Tool" in the top left of the screen and Connect to Central Systems.
4. Click the "Connect" button on the left to reestablish connection with the vehicle.
   This will read the correct data from CS and ID correctly as a VMAC-IV.

Back to Top

How can a customer check their Tech Tool subscription expiration date?

The customer will need to check on their E media account. Login to the account and look on the menu bar at the top, and select the "my account" on the menu to view the details.

How do I get the latest version of PTT?

Dealers may contact support at 877.978.6586. Customers should check their subscription data in eMedia center. If the subscription is active, please contact the Support IT for a copy of PTT. If your subscription has expired, please order a PTT sub renewal from the eMedia center

Why does the date time stamp show the year 1753?

If the date/time stamp is missing, or cannot be read from the ECU, Tech Tool may fill in the blanks with the 1753 date. This is not when the error occurred, but only a fill in the blank date.

Does Tech Tool Support the Nexiq USB Link-2?

Yes, the Nexiq USB Link™2 is compatible with Premium Tech Tool version 2.04.50 and higher. Note the USB-Link™2 uses a different OBD cable (P/N 493013) than the earlier USB Link (P/N 442023).

I'm having trouble connecting to the product with the Dearborn adapter

If you are using the Dearborn 5, ensure that the "DGDPA5SA" driver is the ACTIVE one in the settings tab. You can have both the DGDPA5MA and DGDPA5SA driver versions, but TT works best with the "SA" version. Select the version in the settings menu under communication unit.

When I cycle the key off on the vehicle with the Vocom connected; the engine continues to run/dash lights stay on; why?

If the ignition circuit stays "ON" after the key is switched off while the Vocom connected; a likely cause is a defective Vocom adapter. Please take this unit out of service.

Why do I lose communication with the TGW at times?

Some vehicles have a "low voltage disconnect" feature. If the vehicle battery voltage falls below a pre-defined value, some circuits can be switched off. On some vehicles this may include the TGW or other devices. Check the battery voltage it should be at or above 12v. A fully charged battery should be 12.6v

Why can I not communicate with the ACM?

The ACM could be in a "locked" state, to correct this issue, disconnect the 62 pin connector from the ACM for 10 sec. then reconnect. Try again.

I am having trouble connecting to the Vehicle with the Vocom. How can I test the Vocom?

Vocom Troubleshooting Steps:

Error Code / Description: Communication issues with the Vocom adapter (88800300) unit. Note that the Help menu in Tech Tool contains details on the Vocom functionality.

Steps to resolve:

1. Check that all the LED's flash briefly when powering up the unit.
2. The top LED (PC) is green. When connected to the PC and Tech Tool is running, this light should flash intermittently when communicating.
3. The second LED (vehicle) should be green when connected to the vehicle. Note that this is to the vehicle battery. Ensure that the Ignition key is ON for communication.
   - If the "Power USB/Communication"-LED does not light up,
   - Try another USB-port
   - Check if Windows performs "Installing device driver software"
   - Check the USB cable and try different cable, or try another PC
   - Still no function? If under warranty (24 months), return the unit.
4. When connected only to the vehicle: The unit should flash the LED's, and then light the "Power Vehicle"-LED.
   - If nothing lights up at all, Try replacing the vehicle cable,
   - Check that ignition is on, or try another vehicle.
   - If the "Critical Error"-LED lit, try to update software
   - Still no function? If under warranty (24 months), return the Vocom unit.
     - Dealer can file a Parts warranty claim for the Vocom.
     - Customers must go to an authorized dealer for warranty.

I am looking for a particular operation or test, but it is missing, why?

Navigate to the Product screen and then click the "finish work" button in the upper right of screen. Then from the "Tech Tool" menu (top left) click "Work offline". Now click and open the "Latest Selections" and remove the vehicle/product that you were connected to. Now reconnect to the vehicle/product once identified, check for the previously missing test/operation.

If I lose communication with the vehicle, is there a way to refresh the connection without restarting the PC?

Yes, use the Support tool to Stop and the Start the Baf service.
Check for a video on instructions, found at www.premiumtechtool.com

When instructed to update the firmware in the Vocom adapter, the adapter "locked-up", or quit working.

Disconnect from the vehicle before performing adapter updates.
If the adapter is locked/not working, disconnect from the vehicle and from the PC for 2 minutes.

What does the "Product Status" tell me?

This is showing you the Hardware and software of the vehicle as compared to Central Systems. For example, if the Product Status column is Red, this ECU is not being detected from the vehicle. Check for a video on instructions.

Back to Top

When will Tech Tool be compatible with Windows 10?

> WIN 10 is compatible with Tech Tool 2.04.32 and newer.
>> o See website for details: www.premiumtechtool.com

How do I get a new client ID for a new laptop that will have PTT installed on it?

> **Customers:** To get a new client ID, the software must be purchased via www.premiumtechtool.com
> **Dealers:** Your DSA (Dealers System Administrator) can place the request for you in the "Security Request" portion of Dealer Manager. They will be able to list what is needed in the "Comments" section at the bottom of the request form. The most common comment is "Please grant us an additional client ID for Premium Tech Tool so we can add it to our new laptop."
> *Note*: There is one client ID per PC.

What does the "Inconsistent Parameters" in parameter programming mean?

> There are two or more parameters in different ECUs that don't match.
> This can only be changed on the "inconsistent parameter" tab.
> Check for a video on instructions.

What is Premium Tech Tool 2?

> Premium Tech Tool 2 is the second generation of Premium Tech Tool.
> Advancements were made for the OBD2013 and newer Volvo and Mack vehicles that are using the 16 pin OBD diagnostic connector.
> The 16 pin OBD connector includes three data links. J1939, J1587 and ISO 15765.

Is Tech Tool 2 reading all three Data Links?

> Yes, if you are using version 2.5 or higher with a compliant interface.
> J1587 (DL4), J1939 (DL1) and ISO14229 (DL2)

What are the approved operating systems for Tech Tool 2?

- For Tech Tool 2.5.87 and higher- Windows 7, WIN 8, 8.1 and WIN 10
- Visit the website: www.premiumtechtool.com

What would be the PC/system to use for optimum performance?

> TT 2 The Panasonic Semi-Rugged CF-5x series, with a Solid State Hard Drive, I-5 processor, Windows 7 Professional 64 bit operating system with 4 GB of RAM or higher.
> For Tech Tool 2- Windows 7, WIN 8, 8.1 and 10
> - Processor: Intel i5 or AMD FX 8 core series
> - Memory: 6 GB (more memory improves performance)
> - Storage: 120 GB SSD (Solid State Drive)

Which version of Internet Explorer can Tech Tool 2 be used with?

> IE 8, 9, 10 and 11 are compatible with Tech Tool

Back to Top

Can I connect Tech Tool 1 to an OBD2013 Volvo or Mack vehicle?

> Tech Tool 1 will connect to these vehicles, but Tech Tool 1 will not communicate with the Volvo or Mack powertrain ECUs: ECM, ACM and the TCM.
> Note that there will be no more connection to Central Systems for Tech Tool 1 after December 2015.

I am having trouble connecting to an OBD2013 vehicle.

> Make sure that you have the latest updates, by using the Client Update Agent found in the bottom right of the screen. Also within TT2, perform the Update Product Information found under the Tech Tool menu in the top left of screen. Check and make sure that the communications interface settings are correct.
> Check for battery voltage and ground connection at the 16 pin diagnostic connector. Note: This is a fused circuit.

What happened to the GDR that is found in Tech Tool 1?

> Tech Tool 2 has a similar session history. On the top bar, go to the Product History tab.

Can a customer purchase Tech Tool 2?

> Yes at http://volvotrucksemedia.com/ and at
> http://www.macktrucksemedia.com/
> There are several versions available for customers and fleets.
> Visit www.premiumtechtool.com for more details.

If a fleet purchases Tech Tool 2 with programming capability, what should they expect to be able to program?

> They can program the ECM, ACM and VECU for OBD2013 and newer vehicles. You can also make changes to some parameters.

Why doesn't Tech Tool 2 automatically identify Mack V-MAC III?

> Tech Tool 2. will automatically connect, in most cases. If it does not, you must manually select the vehicle Make and Model.

Why did we change to the new Vocom adapter?

> This new adapter is more rugged and suited to the workshop environment.
> The cables are also more suited to the workshop and should last a long time. The Vocom supports three data-links at the same time. This is needed to fully support the OBD2013 vehicles.

Can we use the 88890020 communications interface on the OBD2013 trucks with the 16 pin Diagnostic connector?

> Yes and no. There is a 16 pin cable, 88890026 that you can use with the 88890020 interface but this combination can only support two data-links at a time. This will support ISO and J1587. J1939 is not supported with this cable.

Does Tech Tool 2 work with different brands of communication adapters?

Yes, Tech Tool 2 works with some RP1210 adapters. Check http://volvotrucksemedia.com/Default.aspx and http://www.macktrucksemedia.com for a complete list.

Is there a 16 pin cable for the Dearborn interface? P/N: DG-V13-cable-kit

Yes, please visit www.dgtech.com

Is there a 16 pin cable for the Noregon interface? P/N: 12159

Yes, please visit www.noregon.com

Is there a 16 pin cable for the Nexiq USB interface?

Yes, for the early Nexiq USB Link™ P/N: 442023 for the USB-Link™2 use the OBD cable (P/N 493013). Make sure that you update the drivers to the correct version. Drivers are available at www.Nexiq.com.

What is the current version of Bendix ACOM?

To obtain the current version of Bendix ACOM visit their website: www.bendix.com

Why are Diagnostics not enabled for pre-2007 vehicles?

The Diagnostics tab is always available; but for Pre-2007 there will only be the DTC viewer with no diagnostic instructions.   Look in service information for help with pre-2007 Mack and Volvo vehicles.

How can I read the Diagnostic Trouble Codes on pre 2007 vehicles?

The Diagnostics tab is always available; but for Pre-2007 there will only be the DTC viewer with no diagnostic instructions. You can also go to test and then Function Group 1.

Can Tech Tool 2 be used to program a customer's vehicle at a location without network access?

Yes, by using the Manage Software function found under Tech Tool menu in the top left of the front page, the software can be downloaded with an internet connection and then TT2 can be used offline (no internet connection) to program ECUs for the vehicle in question.
Note: Manage Software New is for the OBD2013 and newer vehicles.

As a small fleet we would like to be able to perform diagnostics on our own trucks. What tools do you recommend that we get?

There are a large variety of tools available. Please consult with your Mack or Volvo fleet manager or local dealer for help.

Back to Top

Does Tech Tool 2 have a fuel trip data report?

Yes, under Test you can find the vehicle fuel data report. Line 12 will be a summary showing for example the MPG. You can perform a print function from this operation. Note that this data is not saved to the Product History and must be printed to paper, or to a file (ex. XPS file). Mack Vehicle Life and Trip report is under Function Group 1. Volvo Fuel Consumption Data is under Function Group 20. Both reports are identical.

I am getting an error on the SRS product data Hardware and Software.

This is most likely caused by an error with the Lane Departure Warning System. Remove the fuse for the LDWS, restart the PC and try again.

Where can I find the saved information from the tests and programming that have been performed with Tech Tool 2?

Look under the Product History tab.
Note: There may be more than one session file for each vehicle.

Is parameter programming with templates supported by Tech Tool 2?

Yes, with version 2.04.60 and higher

Can I save the parameters from a vehicle in Tech Tool 2?

Yes, with version 2.04.60 and higher. To print this data, go to the top left of the page and click on the "Tech Tool" dropdown and select Print. This does a print screen type document.

Can I print the parameters from a vehicle in Tech Tool 2?

There is a print screen function that is working now. You can also print from the Product History.

Where is the EGR valve test?

This test is in Function Group 29. Both in Impact and in Tech Tool. Function Group 25 was too full, so the EGR was put in FG 29.

Where is the "Learned Data Reset" for the OBD2013 vehicles?

This test is found under the Calibration tab Function Group 1 Function Monitoring Parameters.

How long is an Outstanding Campaign displayed in PTT once Warranty is filed?

The Outstanding Campaign is displayed for approximately 30 minutes. You will have to select the refresh button to see updated data.

How do I find out if there is updated software available for the ECU?

You will need to attempt to program the ECU. Early in the programming process you will get a confirmation message informing you "There are no

Software updates for the selected ECU". If you receive this message, programming is not needed; unless directed to by tech support.

If you have a 2016 or newer Cummins powered vehicle, it may have two diagnostic connectors. When should you use the 9 pin connector vs. the 16 pin connector?
The 9 pin connector is to be used with Cummins INSITE. The 16 pin connector is to be used with Premium Tech Tool.

Back to Top