MIDTRONICS

January 2020
167-000899EN-B

TOYOTA

LEXUS



DSS-5000

Battery Diagnostic Service System

Testing 6- and 12-volt Automotive Batteries

Instruction Manual

For additional support materials and the latest information go to toyota.dss5000.com

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Chapter 1: Introduction

Personal Precautions

⚠ DANGER



Risk of explosive gases.
Never smoke or allow a spark or flame in the vicinity of a battery.

Batteries can produce a highly explosive mix of hydrogen gas and oxygen, even when the battery is not in operation. Always work in a well-ventilated area.

⚠ WARNING

Wash hands after handling.

REQUIRED BY CALIFORNIA PROP. 65: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

Inspect the battery for damage. Always use the necessary safety precautions when working with batteries to prevent severe injury or death. Follow all manufacturers' instructions and BCI (Battery Council International) safety recommendations, which include the following precautions:

- ⇨ Battery acid is highly corrosive. If acid enters your eyes, immediately flush them thoroughly with cold running water for at least 15 minutes and seek medical attention. If battery acid gets on your skin or clothing, wash immediately with a mixture of water and baking soda.
- ⇨ Always wear proper safety glasses or face shield when working with or around batteries.
- ⇨ Keep hair, hands, and clothing as well as the analyzer cords and cables away from moving engine parts.
- ⇨ Remove any jewelry or watches before you start servicing the battery.
- ⇨ Use caution when working with metallic tools to prevent sparks or short circuits.
- ⇨ Never lean over a battery when testing, charging, or jump starting.

Symbols Conventions

Symbol	Description
	The safety symbol indicates instructions for avoiding hazardous conditions and personal injury.
	The safety symbol with the words **CAUTION**, **WARNING, or DANGER** indicates instructions for avoiding hazardous conditions and personal injury.
	The wrench symbol indicates procedural notes and helpful information.

Description

The analyzer uses function-specific applications accessed through a series of menus and icons to guide users through the battery testing process for consistent testing implementation and accuracy. These are accessed using the Controller's touch screen display. Test results can be displayed on the full-color screen, printed, or wirelessly emailed.

Accessories

Description	Diagram	Part Number
Amp Clamp		A657

Accessory Ording Information

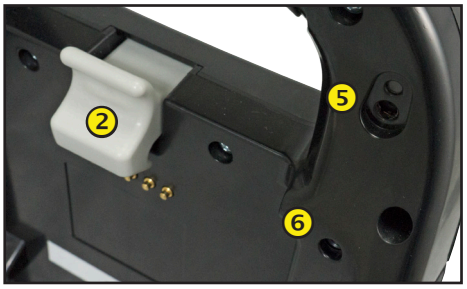
Online	Toyota: https://toyota.service-solutions.com
	Lexus: https://lexus.service-solutions.com
Phone	Call Us - 1-800-933-8335

Tester Components

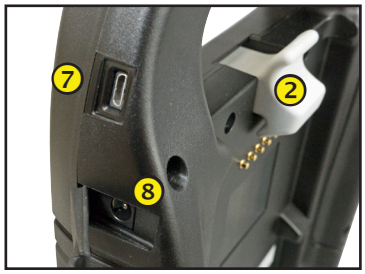
Controller



1. **Carrying Handle**: For carrying the Controller and Tester Pod (when attached).
2. **Controller Release Lever**: Press to release the Controller from the Tester Pod.
3. **Power Button**: Hold for 2 seconds to turn the Controller on and off independent of the Tester Pod. Flashes when the Controller is being charged.
4. **Touch Screen**: Primary user interface.



5. **Camera & Flashlight:** For VIN scanning and identification.
6. **Temperature Sensor:** For measuring battery temperature.



7. **Micro-USB Port**: For updating and servicing the Controller when a WiFi network is not available.
8. **Power Supply Connection**

Tester Pod



1. **Accessory Connector:** For connecting an optional accessory (ex. Amp Clamp / DMM Cable) to the Tester Pod.
2. **Controller Charging Contacts:** For charging and communicating with the Controller when mounted to the Tester Pod.
3. **Status Indicator LEDs:**

- Power is on	- Clamps reversed
- Tester Pod is communicating with the Controller	

4. **Integrated Printer:** For printing and sharing test results.
5. **Clamp Storage Mounts**: Use to keep the test clamps protected when the tester is not in use.
6. **Tester Pod Internal Batteries**

Charging Dock



1. **Tester Pod Charging Contacts:** For charging the Tester Pod
2. **Power Supply Connection**

IMPORTANT: Always place the DSS-5000 in the plugged-in charging dock when not in use to allow the tool to automatically check for and perform any available software updates.

Test Preparation

Inspecting the Battery

Before starting the test, visually inspect the battery for:

- Cracked, buckled, or leaking case. If you see any of these defects, replace the battery.
- Corroded, loose, or damaged cables and connections. Repair or replace them as needed.
- Corrosion on the battery terminals, and dirt or acid on the case top. Clean the case and terminals using a wire brush and a mixture of water and baking soda.
- Corroded or loose battery tray and hold-down fixture. Tighten or replace as needed.

Testing Out-of-Vehicle

The preferred battery test location is in the vehicle. However, if you plan to test out of the vehicle:

- Always disconnect the negative cable from the battery first and reconnect it last.
- Always use a carry tool or strap to lift and transport the battery.

⚠ WARNING

Failure to properly install lead terminal adapters, or using adapters that are dirty or worn, may cause false test results.

When testing side-post or Group 31 batteries, always use lead terminal adapters – do not test at the battery's steel bolts.

Testing In-Vehicle

The preferred test position is at the battery posts. If you must test at a remote-post location, it should have both a positive and negative post. Otherwise, you must remove the battery and perform an out-of-vehicle test.

At the start of the test, make sure all vehicle accessory loads are off, the key is not in the ignition, and the doors are closed.

Connecting To A Battery

⚠ CAUTION

Do not connect the tester to a voltage source greater than 30 Vdc.

Connect the clamps to the tester: the red clamp to the positive (+) terminal and the black clamp to the negative (–) terminal.

If you connect the clamps in the wrong polarity (positive to negative or negative to positive), the tester displays CLAMPS REVERSED! Reconnect the clamps.

A poor connection will prevent testing, and the tester will display the message CHECK CONNECTION. If the message reappears after you have correctly reconnected the clamps, clean the terminals and reconnect.

Connecting An Accessory Cable

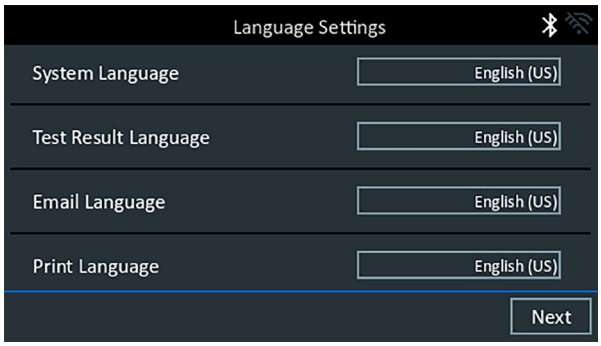
Optional accessories such as an Amp Clamp plug into the connector on the top of the Tester Pod. To lock the connector, rotate it to the left. Turn it to the right to unlock.

Setting User Preferences

Before starting your test you may want to customize the use of your analyzer by setting preferences in the Settings (⚙) Menu. The Settings Menu is described in Chapter 6.

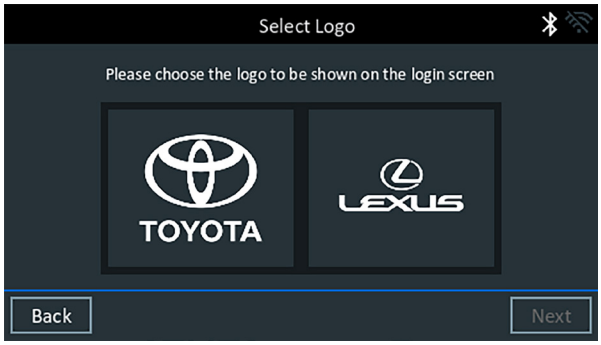
Initial Power Up

1. Upon initial power-up, select the Region.
2. The Language Settings screen is displayed. Tap **Next** to continue.

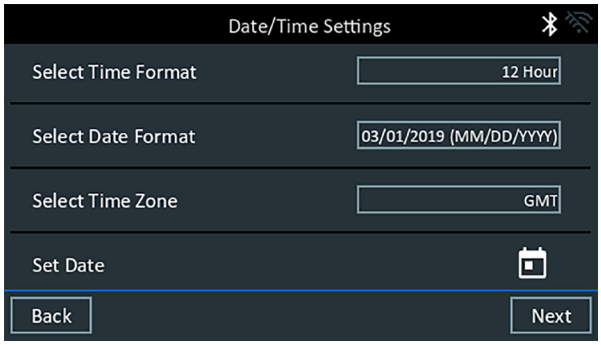


System Language	Select the Controller default language displayed on the screen.
Test Result Language	Select the Controller default language for all displayed tests and test results.
Email Language	Select the default standard language for the analyzer to use for all tests and results sent via email.
Print Language	Select the default standard language for the analyzer to use for all tests and results printed using a networked printer.

3. A Consent to collect data screen is displayed (details on page 4). Read the terms for collecting data, tap the Consent check box and then tap **Next** to continue.
4. Select the correct logo for the dealer location.

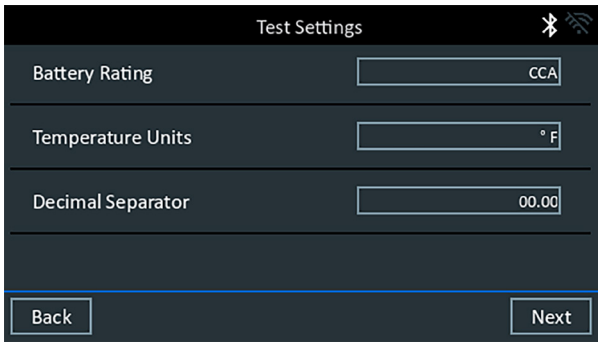


5. The Date/Time Settings are displayed. Tap **Next** to continue after making any adjustments.



Select Time Format:	12-hour or 24-hour format
Select Date Format:	DD/MM/YYYY, MM/DD/YYYY, or YYYY/MM/DD
Select Time Zone:	Time zone offset from Greenwich Mean Time
Set Date:	Set the current date
Set Time:	Set the current time in the selected time zone

6. The Test Settings are displayed. Tap **Next** to continue after making any adjustments.



Battery Rating	Default: CCA (Cold Cranking Amps)
Temperature Units	Select Fahrenheit or Celsius
Decimal Separator	Select decimal point or comma

7. If necessary, pair the DSS-5000 Controller with the Base.
8. A list of detected Configured WiFi networks is displayed.

   To select a network: For initial setup, no networks will be displayed here yet.

   To add a network: Tap the plus (+) sign, then select from one of the displayed detected networks.

   To manually add a network, tap the plus (+) sign again. Follow the on-screen instructions to select the Network SSID, Security, and IP Settings. Tap **Next** when finished.

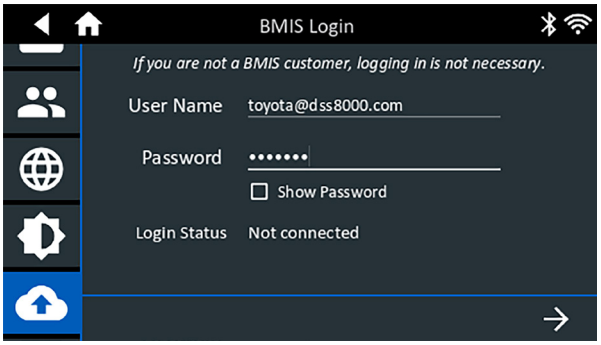
   Use the onscreen keypad to manually enter the Network SSID, security type, and IP settings. If necessary, enter the WiFi network password. Tap **Next** when finished.

   A confirmation screen is displayed when the analyzer has successfully connected to the WiFi network.

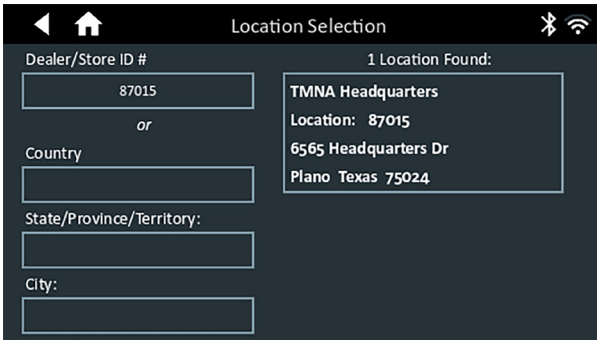
   To delete a network: Tap a displayed network to select it. Tap trash can icon (🗑) to delete it.
9. The BMIS (**B**attery **M**anagement **I**nformation **S**ystem) Account screen is displayed. If the username and password are not displayed, enter the correct username and password.

Country	Username	Password
Toyota U.S.	toyota@dss5000.com	Toyota1!
Toyota Canada	toyotacanada@dss5000.com	Toyota1!
Toyota U.S.	lexus@dss5000.com	LexusMdx1!
Toyota Canada	lexuscanada@dss5000.com	LexusMdx1!

IMPORTANT: If no WiFi connnection has been made, follow the procedure described in the WiFi section of Chapter 6: Settings.



10. Press → to download the list of BMIS locations.
11. Enter the Dealer ID or dealership name to search for the correct dealership and tap on the displayed location.



12. Tap on the displayed location to connect the analyzer to an existing BMIS account.
13. The email Address Book screen is displayed.

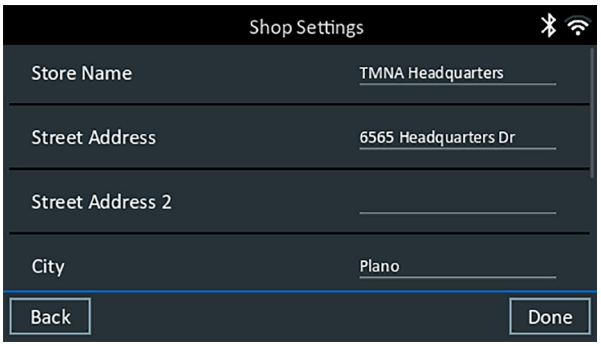
    To add an email address: Tap the plus (+) sign, then use the displayed keyboard to add the address.

    To edit an email address: Tap the pencil ✎ icon, then use the displayed keyboard to edit the address.

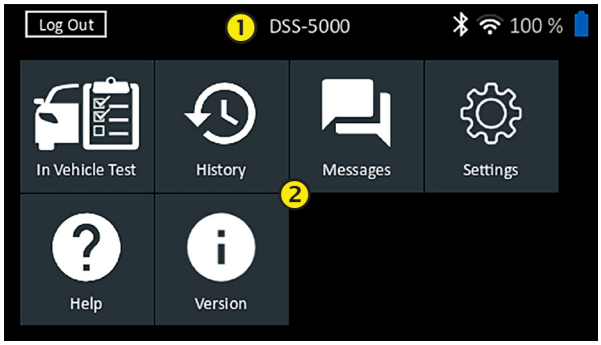
    To delete an email address: Tap a displayed email address to select it. Tap trash can icon (🗑) to delete it.

    To use the Default Email Server Settings: Tap the gear ⚙ icon to use the default.

14. The Shop Information screen is displayed. Use the on-screen keypad to enter the store name, address, and phone number. Tap **Next** to continue. The Main Menu screen is displayed.



Main Menu



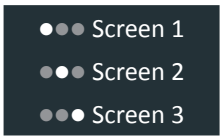
1 Menu Bar

Log Out	Log out current user	93%	Controller internal battery level
	Bluetooth connectivity status		Controller internal battery status
	WiFi signal strength		

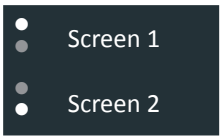
2 Main Menu Selection Area

Additional Screens

Swipe left, right, up or down across the Controller screen to view all of the results.



Swipe Horizontally



Swipe Vertically

Main Menu Icons

Icon	Description
In Vehicle Test	Perform Battery Tests on in-vehicle batteries using test parameters determined by the vehicle VIN or year, make, and model. A System Test (with the option to use an Amp Clamp) is also available.
History	Access archived test histories or search test history or by VIN.
Messages	Displays alerts and notifications for upcoming tests and activities including scheduled tests, tool software updates and maintenance opportunities.
Settings	Setup/adjust: WiFi, printer setup, email settings, user information, default language, display and sound settings, BMIS information, shop information, and connected devices. Also access to tester software version information.
Help	Access the analyzer Self-Test and a digitized version of the Instruction Manual that was shipped with the analyzer.
Version	Access to tester software version information.

Support

Help — Use the Support function to access built-in Self-Testing functions or to view a digitized version of the Instruction Manual.



WiFi Self-Diagnostics	Tests connectivity to the BMIS server via the selected WiFi network
WiFi Printer Self-Diagnostics	Use to configure a WiFi printer
Tester Pod Self-Diagnostics	Check connectivity between the Controller and the Tester Pod
Display Self-Diagnostics	Tests Controller pixel display
Touchscreen Self-Diagnostics	Tests Controller touchscreen responsiveness

Chapter 2: In Vehicle Test



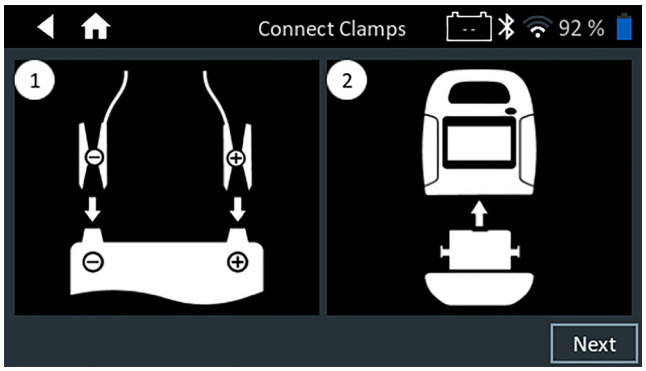
Use In Vehicle Test to perform Battery Tests on in-vehicle batteries based on test parameters entered by the user. A System Test (with the option to use an Amp Clamp) is also available.

At any time during the test tap ◀ to return to the previous screen or to return to the Main Menu.

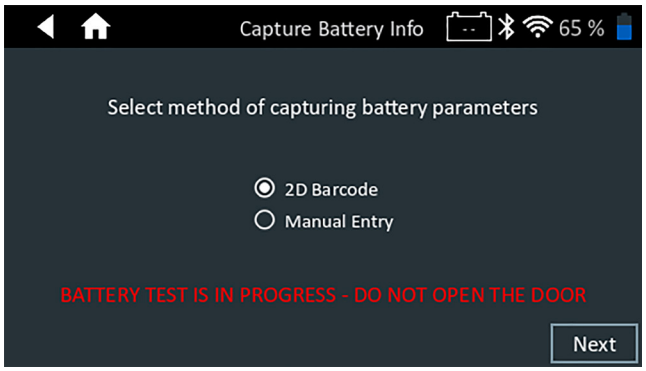
IMPORTANT: Always place the DSS-5000 in the plugged-in charging dock when not in use to allow the tool to automatically check for and perform any available software updates.

Battery Test

1. Connect the Tester Pod test clamps to the battery and remove the Controller.
2. On the Controller at the Main Menu tap **In Vehicle Test**. The Connect Clamps screen is displayed.



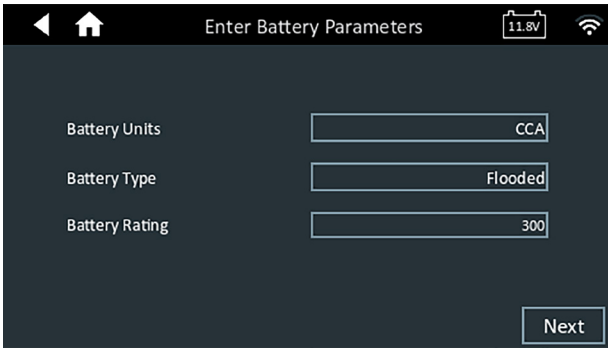
3. Tap **Next** to begin the test. If the Tester Pod clamps have already been connected to the battery terminals, the 60-second test begins automatically by applying a small load to the battery and measuring the reserve capacity.
4. Scan the 2D Barcode on the vehicle battery or manually enter the battery parameters.



5. When the 2D Barcode is scanned the battery temperature is also measured. Skip to Step 8.

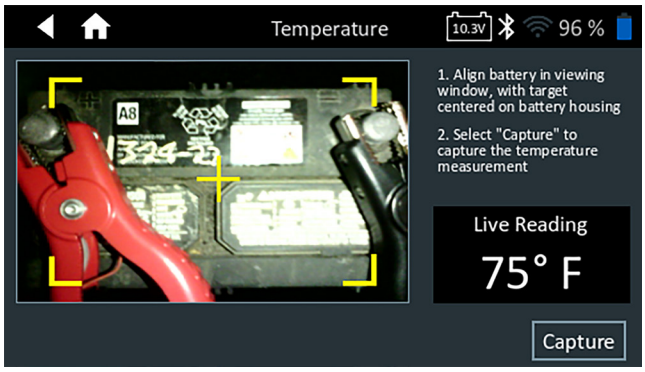


For Manual Entry, enter the Battery Rating Units, Type, and Rating.



Battery Rating Units	CCA	Cold Cranking Amps: Battery current at 0 ºF (–17.8 ºC).	100 to 3000
	JIS	Japanese Industrial Standard: Usually printed on battery label.	26A17 to 245H52
Battery Type	Flooded, AGM (Absorbed Glass Mat), AGM Spiral, Gel, EFB		
Battery Rating	Enter the Battery Rating Units value.		

6. Following the testing process, if the battery paramenters were entered manually, the Temperature screen is displayed. Otherwise skip to Step 7.



7. Align the temperature sensor on the Controller over the battery and tap **Capture**. The test begins when the temperature is successfully captured.

8. The Acquire VIN screen is displayed.

   Use the built-in camera to scan the VIN bar code, usually located on the driver's side door frame.

> **NOTE:** Refer to the Appendix for recommended scanning procedures and VIN scanning help.



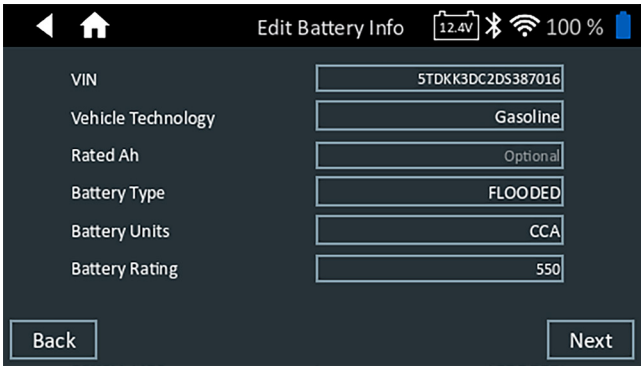
Manual Entry: Use the on-screen keypad to manually type the 17-digit VIN and tap **Next**.



The displayed Digits counter will count up the alphanumeric characters as they are being entered on the keypad.

Use Manual Entry if the battery being tested is not listed. Tap > to continue to the Edit Battery Information screen.

9. At the Edit Battery Info screen, tap on the corresponding box to edit the parameter information.



> **NOTE:** Battery Type, Units, and Rating must be filled in before proceding.

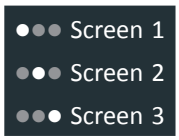
10. Tap **Next** to begin the Battery Test.

Battery Test Results

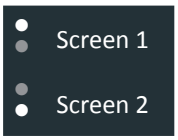
The test results are displayed on the Controller screen.

Additional Screens

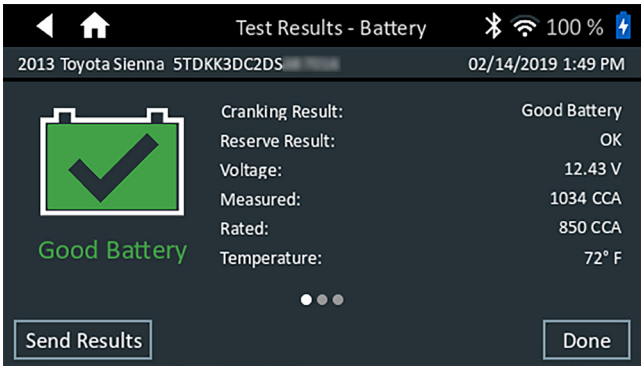
The dots at the bottom or side of a menu or results screen indicate additional screens are available. Swipe horizontally or vertically across the Controller screen to view additional results screens.

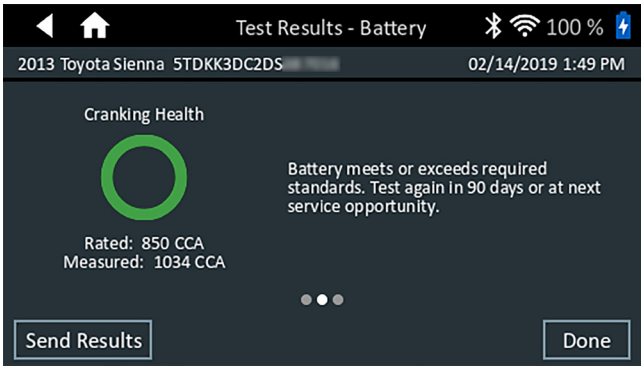


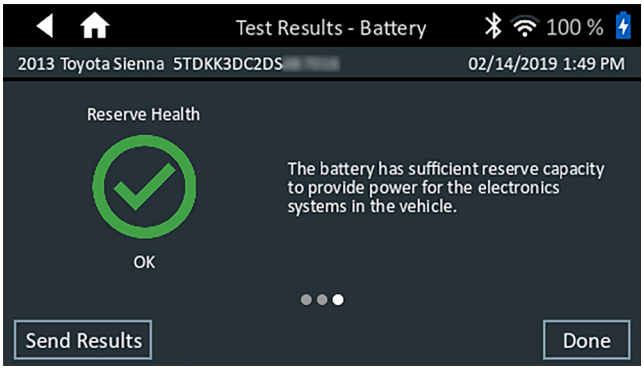
Swipe Horizontally



Swipe Vertically







Test Results - Battery Test

To print or send the test results to a configured printer tap **Send Results.** To return to the Home Screen, tap **Done** or **System Test** to continue with the System Test.

Decision	Cranking Health	Reserve Capacity	Description
Good Battery	Good Battery	Good Battery	Battery meets or exceeds required standards.
	Good Battery	Unknown Reserve	Battery meets or exceeds required standards.
	Good Recharge	Good Battery	Battery is good, but low on charge. Fully charge the battery for optimal performance and life. Check for causes of low charge.
Good Recharge	Charge & Retest	Good Battery	
	Good Recharge	Unknown Reserve	
Charge & Retest	Charge & Retest	Unknown Reserve	Battery requires charge to determine condition.
Replace Battery	Badcell Replace Short	Replace Battery	Battery fails to meet industry accepted standards.
	Charge & Retest	Replace Battery	Battery is low in charge and shows low reserve capacity. Low reserve capacity will compromise the battery's ability to provide system current and hold a charge.
	Good Battery	Replace Battery	Battery is good for cranking purpose but shows low reserve capacity. Low reserve capacity will compromise the battery's ability to provide system current and hold a charge.
	Good Recharge	Replace Battery	
	Replace Battery	Good Battery	Battery fails to meet industry accepted standards
	Replace Battery	Replace Battery	
	Replace Battery	Unknown Reserve	
Badcell Short Replace	Badcell Replace Short	Good Battery	
	Badcell Replace Short	Unknown Reserve	

System Test

1. If using the optional Amp Clamp, connect it to the Tester Pod and hold the clamp away from any cables with the jaws closed.

   NOTE: If no Amp Clamp is being used, begin the System Test at Step 4.

2. Tap **Next** to zero out the clamp or **Skip** if the Amp Clamp is not being used.
3. With the engine and electrical loads off, place the Amp Clamp around the negative (–) battery cable and tap **Next**.
4. When prompted, start the vehicle engine and select **Next**.
5. Ensure all vehicle accessories, including headlights and ventilation blower are off and select **Next**.

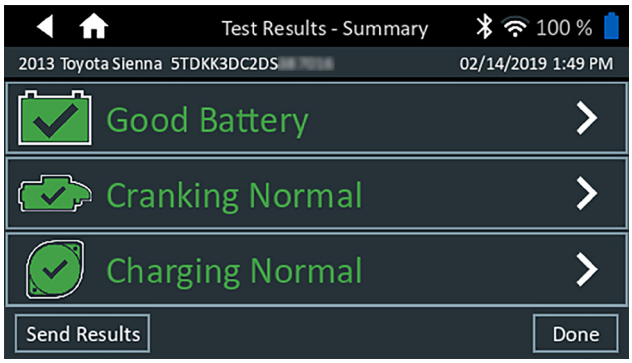
   The alternator output is tested at idle.

6. When prompted, rev and hold the engine to 2000-3000 RPM and select **Next**.
7. When prompted, return the engine to idle and select **Next**.
8. Turn on the high beam headlights and put the ventilation blower fan on "High" and select **Next**.

   The alternator output is tested at idle.

9. When prompted, rev and hold the engine to 2000-3000 RPM and select **Next**.
10. When prompted, return the engine to idle and select **Next**.
11. Turn all loads off and shut off the engine.
12. The test results are displayed on the Controller screen.

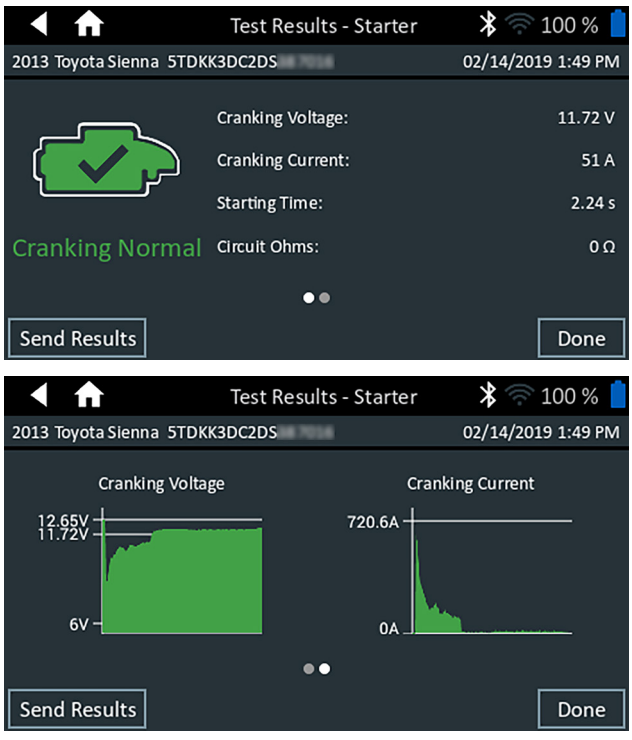
Test Results-Summary



A Test Results - Summary screen is displayed following a System Test. Tap > to view detailed test results for each part of the test.

To send the test results to a configured printer or via email tap **Send Results.** To return to the Home Screen, tap **Done** or to return to the Main Menu.

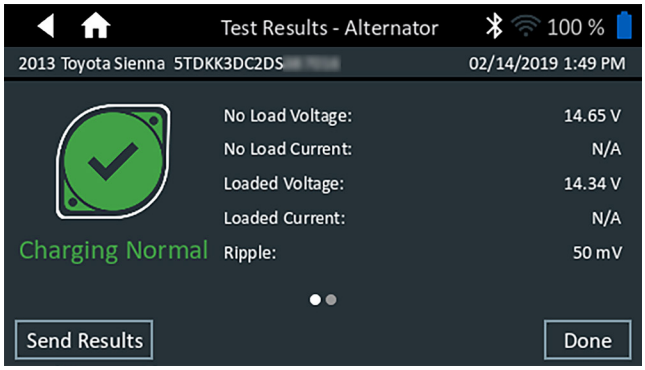
Starter Test Results

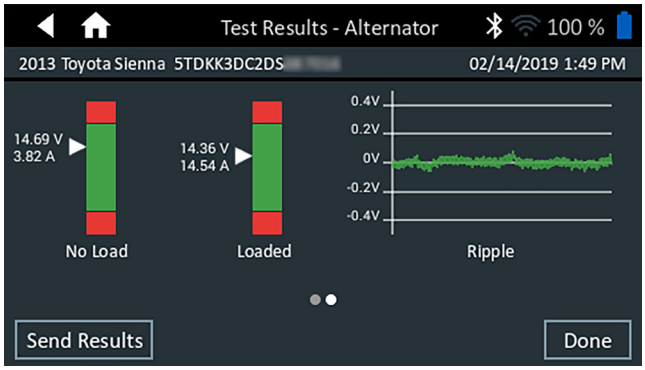


Test Results - Starter

Decision	Action
 Cranking Normal	The starter voltage is normal and the battery is fully charged.
 Low Voltage	The starter voltage is low and the battery is fully charged.
 Charge Battery	The starter voltage is low and the battery is discharged. Fully charge the battery and repeat the starter system test.
 Replace Battery	(If the battery test result was (REPLACE or BAD CELL.) The battery must be replaced before testing the starter.
 Low Current	The starter voltage is high but the cranking amps are low.
 No Start	The engine didn't start and the test was aborted or the vehicle's starting profile was not detected and the Starter Test was skipped.

Alternator Test Results





Test Results - Alternator

Decision	Action
 CHARGING NORMAL	The output from the alternator is normal.
 NO OUTPUT	No output detected. Check belts to ensure alternator is rotating when engine is running. √ Check all alternator connections including to the battery. Clean or replace if necessary and retest. √ If the belts and connections are in good working condition, replace alternator or external voltage regulator.
 LOW OUTPUT	Alternator not providing enough current to power electrical loads and charge the battery. √ Check belts to ensure the alternator is rotating with the engine running. √ Check alternator connections to and from the battery. If loose or heavily corroded, clean or replace the cable and retest.
 HIGH OUTPUT	Alternator voltage to the battery exceeds normal limits of a functioning regulator. √ Check for loose and normal ground connections. If no connection problems are found, replace the regulator. The normal high limit of a typical automotive regulator is 14.5 volts +/–0.5. Refer to the manufacturer specifications for the correct limit, which may vary by vehicle type.

Test Results - Diode

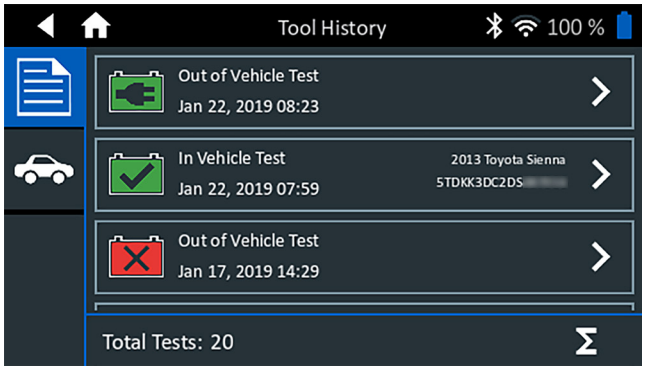
Decision	Action
 EXCESSIVE RIPPLE	One or more diodes in the alternator are not functioning or there is stator damage, which is shown by an excessive amount of AC ripple current supplied to the battery. √ Make sure the alternator mounting is sturdy and that the belts are in good shape and functioning properly. If the mounting and belts are good, replace the alternator.
 OPEN PHASE  OPEN DIODE  SHORTED DIODE	Replace the alternator.

Chapter 3: History



Use History to access the tool usage history and a vehicle history based on VIN. The search function can also be used to find test records for specific vehicles.

At the Main Menu, tap **History**. By default the Tool History screen is displayed.




Tool History


Totals


Vehicle History

Tool History



Use Tool History to view test total history as well as in vehicle test totals. Individual test results are also displayed.

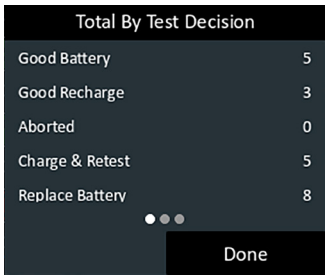
Tap > to view individual test details.

Tap **Σ** to view Total By Test Decision and Total By Date And Location.

Tap **Done** to return to the Tool History screen.

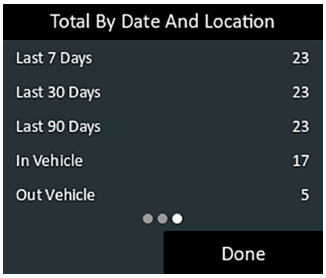
Totals By Test Decision

The totals are displayed by possible results for all battery chemistries and potential test results.



Totals By Date And Location

Displays test totals by time interval. Also displays the number of tests performed in and out of vehicle.

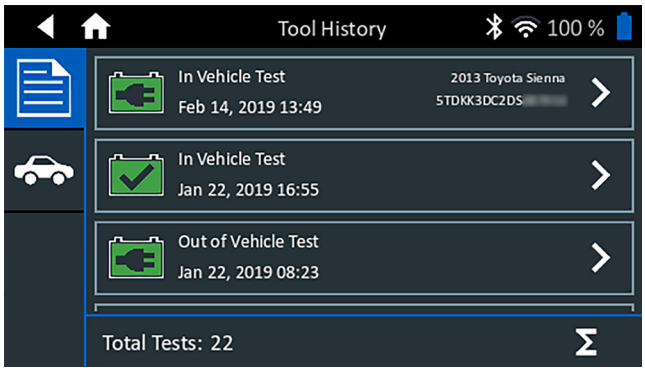


Vehicle History



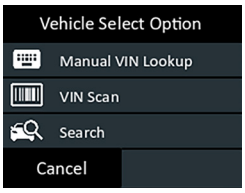
Vehicle History displays test totals conducted on specific vehicles based on VIN. It is also possible to scan or manually enter a VIN to search for a specific vehicle by tapping the displayed buttons.

Tap on the records displayed on the right side of the screen to view the individual test results.



Vehicle Select Option

Tap Q to select vehicle search option.

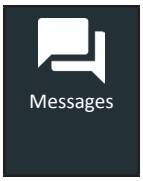


Manual VIN Lookup: Use the on-screen keypad to manually type the 17-digit VIN and tap **Next**.

VIN Scan: Use the camera built into the Controller to capture a VIN barcode, usually located on the driver's side door frame.

Search: Search records by Vehicle Year, Make, and Model.

Chapter 4: Messages



The Messages function displays alerts and notifications for upcoming tests and activities. This includes scheduled testing as well as tool software updates and maintenance opportunities.

 Mark Read Or Unread

 Delete Notification

 Perform Message Action

Tap ◀ to return to the previous screen or to return to the Main Menu.

Accessing Messages

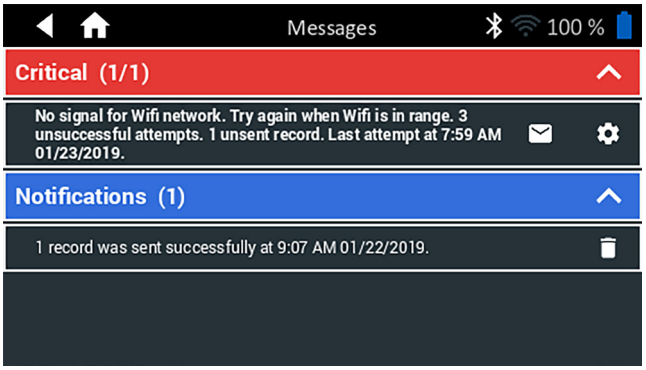


A number is displayed next to the Messages icon when the analyzer has received any critical messages. The number does not include non-critical Notifications.

2 Unread Critical Messages

2 Read Critical Messages

1. Tap **Messages** on the Main Menu screen.



2. Tap to read a message.

   Tap to perform the message action item.

   Tap to delete a message.

3. Tap ∧ to collapse a list of messages or ∨ to expand the list.

Message Types

Critical: An important action cannot be performed and may require user action.

Notifications: Indicates an action has been performed or data has been sent.

Chapter 5: Settings



Use the Setup options to setup and adjust WiFi, printer setup and selection, email settings, user information, default language, display settings, sound settings, BMIS login information, shop information, user management, connected accessories, and device information.

Tap ◀ to return to the previous screen or to return to the Main Menu.

WiFi



Use WiFi to view, add, and delete wireless networks.

Tap on the WiFi icon to display a list of detected and configured WiFi networks.

Add Network	Delete Selected Network
Connect Highlighted Network	Refresh Network List

Adding A Network

1. Tap ⊕ to add a WiFi network.

   A list of detected wireless networks is displayed with ● next to the selected network.

2. Tap > to access the network Security and IP Settings.

Security	None WEP WPA/WPA2 PSK
IP Address	DHCP Static

3. Tap → to configure the selected network.
4. Once the network has been successfully configured, tap → to return to the list of available configured networks. A ● indicates the selected network.

Deleting A Network

1. Tap a displayed network.
2. Tap 🗑 to delete the network and tap Yes to confirm.

Printer Settings



The Printer Setup function detects and displays a list of connected and available WiFi and Bluetooth printers.

NOTE: WiFi network communication must be successfully established before a printer or printers can be detected and setup.

Tap on the Printer icon to display a list of available printers on the configured WiFi and Bluetooth networks.

Edit Printer Settings	Printer Setup
Delete Selected Network	Configured Printers
Print Test Page	

Adding A WiFi Printer

1. Tap ⚙ to access the Printer Setup functions.
2. Tap ⊕ to add a WiFi printer.

   Make sure the printer is on and connected to the same wireless network as the analyzer.

3. Tap → to add the printer to the list of eligible printers.
4. Tap > to connect to the selected printer. A message is displayed when the configuration is successful.
5. Tap > to return to the printer list.

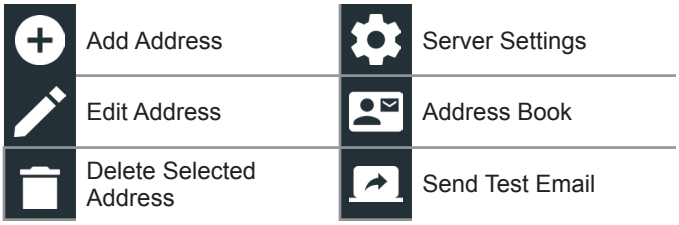
Deleting A Printer

1. Tap ⚙ to access the Printer Setup functions.
2. Tap a displayed printer.
3. Tap 🗑 to delete the printer and tap Yes to confirm.

Email



Displays all entered email addresses. Addresses can be added, edited, and deleted. Entered email accounts are added to the email address book. Frequently used email addresses can be selected from the displayed address list rather than being re-typed each time.



Add Address

1. Tap to add an email address.
2. Use the displayed keypad to enter the contact name and email address.
3. Tap Add to add the address to the email list or Cancel to exit and return to the email list.

Edit Address

1. Select a displayed email address by tapping it.
2. Tap to edit the address.
3. Use the displayed keypad to edit the contact name and email address.
4. Tap Add to add the address to the email list or Cancel to exit and return to the email list.

Deleting An Address

1. Select the email address by tapping it.
2. Tap to delete the address and tap Yes to confirm or Cancel to exit and return to the email list.

Server Settings

Enter and edit the email settings for sending outgoing email.

1. Tap to access the email sever settings.
2. Tap to enter or modify existing server settings including Host, Port, Login, Password, SMTP Authorization, Enable TLS, and From Email Address information.
3. Tap to clear all server settings.
4. Tap to return to the email Address Book.

User Settings



Modify Usernames and Passwords. Tap ☐ next to Enable Uer Accounts to turn the function on.



User Management

1. Tap to access User Management functions.
2. Tap to display the current logged in Admin user.
3. Select a displayed user by tapping it.
4. Tap to edit the Username, Password, and User Type (Standard or Admin).
5. Tap **X** when complete to return to the User Management screen.
6. Tap to delete the selected user and Yes to confirm.

Language Settings



Use the Language & Input function to select the default system language used by the tool. User defaults also include Test Results, Email, and Print languages.

System Language

Select the default standard language for the analyzer to use on the Controller.

Test Result Language

Select the default language for the analyzer to use for all tests and results displayed on the Controller.

Email Language

Select the default standard language for the analyzer to use for all tests and results sent via email.

Print Language

Select the default standard language for the analyzer to use for all tests and results printed using a networked printer.

Display Settings

Adjust the Controller display including the Brightness, Sleep Time, and Dim Time. Auto Brightness can also be turned on and off.

Brightness

Adjust the display Brightness by tapping and holding the slider, then moving it right or left to make the screen brighter or darker.

Auto Brightness

Enable and disable Auto Brightness by tapping on the check box.

Sleep Time

Adjust the amount of elapsed time before the Controller goes into a power saving (Sleep) mode. Default = 2 minutes.

Dim Time

Adjust the amount of elapsed time before the Controller goes into a power saving (Dim) mode. Default = 1 minute.

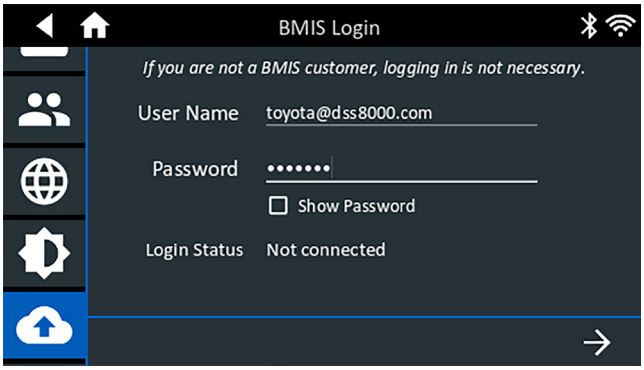
BMIS Login

Enter and edit the User Name, Location and Login Status. Log into a BMIS account.

Reconfigure

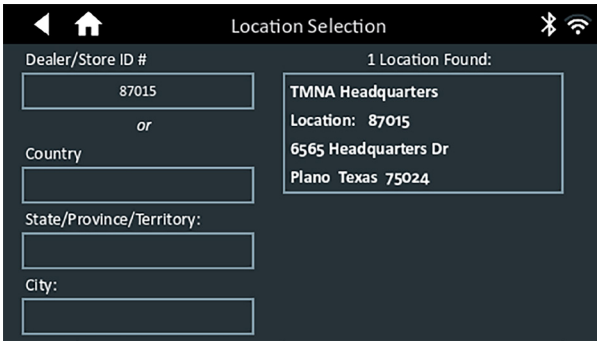
Logout

IMPORTANT: If no WiFi connnection has been made, follow the procedure described in the WiFi section.



Country	Username	Password
Toyota U.S.	toyota@dss5000.com	Toyota1!
Toyota Canada	toyotacanada@dss5000.com	Toyota1!
Toyota U.S.	lexus@dss5000.com	LexusMdx1!
Toyota Canada	lexuscanada@dss5000.com	LexusMdx1!

1. Press → to download the list of BMIS locations.
2. A searchable list of dealerships is displayed. Enter the Dealer ID or dealership name to search for the correct dealership and tap ➔.



3. Tap on a displayed location to connect the analyzer to an existing BMIS account.

Shop Information

Access default Shop Information including Store Name, address, and phone number. Also access battery test defaults including rating, temperature units, and decimal separator. Use also to adjust the tester date and time settings.

Settings Home

Date/Time Settings

Test Settings

Create MDCA Log File

Shop Information

Use the onscreen keypad to enter the store name, address, and phone number.

Store Name	TMNA Headquarters
Street Address	6565 Headquarters Dr
Street Address 2	
City	Plano
State	TX
Zipcode	75024
Phone #	

Test Settings

1. Tap to access the test setting defaults. Tap the boxes or icons to change the values.

Battery Rating	CCA
Temperature Units	° F
Decimal Separator	00.00

Battery Rating
Default battery rating units used when testing batteries.

Temperature Units
Default temperature units used when measuring battery temperature.

Decimal Separator
Default number display using commas or periods separators.

2. Tap to return to the Shop Information screen.

Date/Time Settings

1. Tap to access the Date/Time setting defaults.

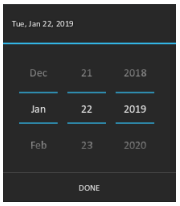
Select Time Format	12 Hour
Select Date Format	2/28/2019
Select Time Zone	CST
Set Date	
Set Time	

Select Time Format
12 or 24 Hour Format

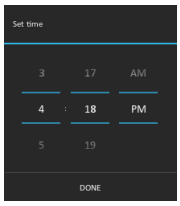
Select Date Format
Month/Day/Year, Day/Month/Year, or Year/Day/Month

Select Time Zone
Time zone in which the analyzer will be operated.

Set Date
Tap ▲ or ▼ to enter the month, day, and year. Tap Set to save the date or Cancel to exit without saving.



Set Time
Tap ▲ or ▼ to enter the hours, minutes, and AM/PM. Tap Set to save the date or Cancel to exit without saving.



2. Tap to return to the Shop Information screen.

Device List

Displays connected and linked accessory devices. Additional devices can also be added.

Add	Refresh
Delete Paired Device	Enabled

Add Tester Pod

1. Tap to add a device.
2. Move the device to be linked within 30 feet of the Controller, turn on the device, then tap →.
3. A list of detected devices is displayed. Tap > next to the desired device to select it. If the desired device is not displayed, tap to refresh the list.

> **NOTE:** A passkey number is automatically generated once the Bluetooth pairing has been established.

A confirmation message is displayed when the device has been successfully linked.

4. Tap → to return to the Device List screen.

Deleting A Diagnostic Base

1. Tap next to the base to be deleted.
2. Tap **Yes** to delete.

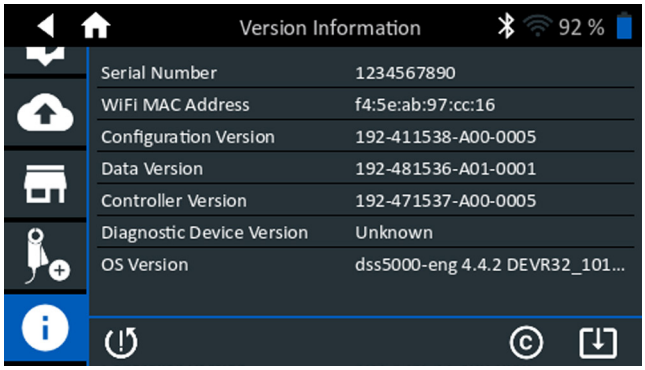
Version Information

Use Version Information to display WiFi connection data the DSS Controller, Diagnostic Device, and software version information.

Factory Reset

Check For Updates

Legal Information



Factory Preset

Use this function to return the tool to the original as built configuration including all history and test settings.

IMPORTANT: All previous modifications to the original settings will be overwritten.

Legal Information

Displays software attribution information via the Midtronics website. The analyzer must be connected to the Internet.

Check for Updates

Use this function to check via the internet connection for any updates to the tester software.

Appendix

Battery Information Screen Descriptions

VIN	A unique code, including a serial number, to identify individual motor vehicles, motorcycles, scooters and mopeds, as defined in ISO 3833.		
Vehicle Year	Model year that a vehicle was manufactured.		
Vehicle Make	Vehicle manufacturer		
Vehicle Model	Vehicle name or number		
Vehicle Technology	Hybrid, Gasoline, Electric, Start-Stop, Hybrid Start-Stop, Diesel		
Battery Installation	Single Battery or Dual Batteries		
Battery Application	Automotive		
Battery Post	Top Post		
Test Location	Top Post		
Battery Type	Flooded, AGM (Absorbed Glass Mat), AGM Spiral, Gel, Enhanced Flooded		
Battery Units	CCA	Cold Cranking Amps: Battery current at 0 °F (–17.8 °C).	100 to 3000
	JIS	Japanese Industrial Standard: Usually printed on battery label.	26A17 to 245H52
Battery Rating	Enter the Battery Rating Units value.		

Recommended Test Procedure

The Conductance Profiling™ technology determines battery cranking and Reserve Capacity testing. This additional process, can take up to 60 seconds to complete.

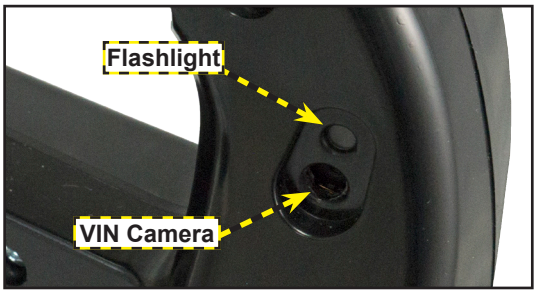
IMPORTANT: Always begin each test by connecting the Tester Pod clamps to the battery being tested. The test begins as soon as the clamps are connected.

VIN Scanning

The DSS-5000 uses a camera built into the Controller handle to scan the VIN of the vehicle being tested.

Scanning Tips

- **Camera:** Located in the upper left portion on the back of the Controller handle.



- **Hold Steady:** Hold Controller steady when scanning the VIN barcode. This allows the user to clearly see the barcode and allows the camera to focus on it.



- **Fill Viewfinder**: Make sure the entire barcode is visible. Keeping the entire VIN barcode visible while slowly moving the camera closer or further away will help capture.
- **Clean Barcode/Window**: Surface dirt can interfere with the scanning process. If necessary wipe the VIN barcode with a cloth or your finger remove any surface dirt.
- **Lighting/Glare:** The built-in flashlight will automatically turn on In low light situations. If the flashlight, or sunlight, is shining directly onto the VIN barcode, try pivoting the camera up or down slightly to reduce any glare.

PATENTS

This product is made by Midtronics, Inc., and is protected by one or more U.S. and foreign patents. For specific patent information, contact Midtronics, Inc. at +1 630 323-2800.

LIMITED WARRANTY

Midtronics products are warranted to be free of defects in materials and workmanship for a period of one (1) year from date of purchase. Midtronics will, at our option, repair or replace the unit with a re-manufactured unit. This limited warranty applies only to Midtronics products, and does not cover any other equipment, static damage, water damage, overvoltage damage, dropping the unit, or damage resulting from extraneous causes including owner misuse. Midtronics is not liable for any incidental or consequential damages for breach of this warranty. The warranty is void if owner attempts to disassemble the unit or to modify the cable assembly.

SERVICE

To obtain service, contact Toyota Special Service Tool Program at 800-933-8335. Have your model and serial numbers ready. This first step is critical as we will trouble-shoot the problem(s) over the phone, and many problems are resolved during this step. If the problem cannot be resolved, then the Customer Service Agent will issue you a Return Material Authorization (RMA). This number becomes your tracking number. The final step is to return the unit to Midtronics freight prepaid (you pay), to the attention of the RMA number obtained.

In USA:
Midtronics, Inc.
Attn: RMA # xxxxx (this is the RMA number that you must obtain from Midtronics)
7000 Monroe St.
Willowbrook, IL 60527

In Canada:
Midtronics c/o FTN (FTN is Fed-ex Trade Networks –this is NOT a Midtronics facility)
Attn: RMA # xxxxx (this is the RMA number that you must obtain from Midtronics)
7075 Ordan Drive
Mississauga, ON L5T1K6

Midtronics will service and return the unit using the same type of service as received. If Midtronics determines that the failure was caused by misuse, alteration, accident, or abnormal condition of operation or handling, purchaser will be billed for the repaired product and it will be returned freight prepaid with shipping & handling charges added to the invoice. Midtronics products beyond the warranty period are subject to the repair charges in place at that time. Optional re-manufacturing service is available to return our products to like-new condition. Out-of-warranty repairs carry a 3-month warranty. Re-manufactured units purchased from Midtronics are covered by a 6-month warranty.

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