

# USER'S MANUAL

**INNOVA®**

**SDS50**

**SDS-Tech**

OE-Level Diagnostic Tablet



POWERED BY

**REPAIR SOLUTIONS** **PRO**

## HELLO...

On behalf of everyone at INNOVA, we want to welcome you and thank you for purchasing the **INNOVA® SDS50 SDS-Tech** tablet! Our tablet includes tons of pro-level features designed to help maximize your OBD2 diagnostic routine. In this manual, we will guide you on how to access a comprehensive library of time-saving diagnostic and service tools including:

- ☑ Check Engine Light Diagnostics
- ☑ Full OEM Network Scans
- ☑ Smog Check /Emissions Readiness
- ☑ Bi-Directional/Active Tests & Special Functions
- ☑ Workshop Tools (16 service resets including Oil Maintenance Reset, Electronic Parking Brake Reset, ABS Bleeding, DPF Reset, etc.)
- ☑ Read OEM ECU Information
- ☑ Enhanced Data Stream For All Systems
- ☑ Read Oil Life, Oil Level, Brake Pad Life, Transmission Temperature, Odometer
- ☑ TPMS/Tire Pressure Readings
- ☑ Battery/Charging System Check
- ☑ Hybrid Battery Cell Voltage Readings
- ☑ And Much More...

Plus, gain the benefit of having unlimited access to real world solutions on your mobile device:

POWERED BY



**RepairSolutionsPRO™** increases the power of your INNOVA OBD2 diagnostic tablet by delivering the most complete automotive repair database with verified fixes from ASE Certified Master Technicians. Get the right fix and the right parts instantly right on your SDS Tablet.

Enjoy using your INNOVA SDS Tablet!

Yours sincerely,

The Innova Technical Team

**P.S.:** Connect with us to see what we're up to...





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## **LEGAL INFORMATION**

### **FCC COMPLIANCE STATEMENT**

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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**FCC ID: 2AWLZ-7111**

#### **FCC RF Radiation Exposure Statement**

- The transmitters within this device must not be co-located or operating in conjunction with any other antenna or transmitter.
- This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain with IC RF exposure compliance requirements please follow operation instruction as documented in this manual.

### **TRADEMARKS**

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Title, ownership rights, and intellectual property rights in the Products and Services shall remain in Innova and/or its licensors and other suppliers. Licensee and End Users acknowledge such ownership, confidential information, and intellectual property rights and will not take any action to jeopardize, limit or interfere in any manner with Innova's or its licensors' or other suppliers' ownership of or rights with respect to the Products and Services. The Products and Services may be protected by Patent, Trademark, Copyright and/or other intellectual property laws and by international treaties. All trademarks used in connection with the Products and Services are owned by Innova, its affiliates or its licensors and other suppliers, and no license to use any such trademarks is provided hereunder. Licensee and End Users agree that Innova may use in any manner and without limitation all comments, suggestions, complaints and other

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feedback Licensee and End Users provide relating to the Products and Services. For more information and current listing of trademarks, please visit <https://www.innova.com/pages/trademarks>.

## PATENTS

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Innova Electronics Corp. protects its intellectual property with numerous U.S. patents, which were used to research, design and manufacture this product. Please visit <https://www.innova.com/pages/patents> for additional information.

## FIRMWARE VERSION

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Please note that the images and functions on this manual may differ based on the current **Firmware Version** you have. To check your tablet's current version and to check for updates, please see the **SETTINGS** tab under the **About** section. [[See page 52](#)]

## CALIFORNIA PRODUCT WARNINGS

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### **WARNING**

This product can expose you to chemicals including DiNP, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## SAFETY PRECAUTIONS

### SAFETY FIRST!

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It is important that every user utilizing this product read all instructions and warnings included within this manual to ensure your safety, the safety of others, and to prevent damage to this product & vehicles being diagnosed and repaired. This manual describes common test procedures used by experienced service technicians. It is inferred that the user has a good understanding of vehicle systems before using this product.

Many test procedures require precautions to avoid accidents that can result in personal injury, and/or damage to your vehicle or test equipment. At a minimum, the following safety standards should be followed whenever using this product, or whenever working on a vehicle.

- ❑ When an engine is running, it produces carbon monoxide, a toxic and poisonous gas. To prevent serious injury or death from carbon monoxide poisoning, **operate the vehicle ONLY in a well-ventilated area.**
- ❑ To protect your eyes from propelled objects as well as hot or caustic liquids, **always wear approved safety eye protection.**
- ❑ When an engine is running, many parts (such as the coolant fan, pulleys, fan belt etc.) turn at high speed. To avoid serious injury, **always be aware of moving parts.** Keep a safe distance from these parts as well as other potentially moving objects.
- ❑ Engine parts become very hot when the engine is running. To prevent severe burns, **avoid contact with hot engine parts.**
- ❑ Before starting an engine for testing or troubleshooting, make sure the parking brake is engaged. **Put the transmission in park** (for automatic transmission) **or neutral** (for manual transmission). **Block the drive wheels** with suitable tire blocks.
- ❑ Connecting or disconnecting test equipment when the ignition is ON can damage test equipment and the vehicle's electronic components. **Turn the ignition OFF before connecting the tablet to or disconnecting the tablet from the vehicle's Data Link Connector (DLC).**
- ❑ To **prevent damage to the on-board computer** when taking vehicle electrical measurements, always use a digital multimeter with at least 10 Megohms of impedance.
- ❑ Fuel and battery vapors are highly flammable. To prevent an explosion, keep all sparks, heated items, and open flames away from the battery and fuel vapors. **DO NOT SMOKE NEAR THE VEHICLE DURING TESTING.**
- ❑ **Don't wear loose clothing or jewelry when working on an engine.** Loose clothing can become caught in the fan, pulleys, belts, etc. Jewelry is highly conductive and can cause a severe burn if it makes contact between a power source and ground.

## SAFETY ALERT ICONS

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As you read this manual, color-coded icons are used throughout to identify safety alerts and warnings. These are provided to help prevent serious injury to you, injury to bystanders, and damage to property or equipment. They are characterized as follows:



**Yellow Icon** – Provides a **"NOTE:"** statement to offer special information or tip on what is being instructed.



**Orange Icon** – Potential hazardous situation. Provides a **"WARNING:"** statement on how to proceed to avoid serious injury to the user, bystanders, and/or equipment.



**Red Icon** – Imminent hazardous situation. Provides an immediate **"DANGER:"** alert on what must be done to prevent serious injury or death to the user or bystanders.

## INTRODUCTION

### TABLET CONTROLS

See Figure 1 for the locations of items 1 through 8, below.

1. **POWER Button** - Turns the tablet "On" and "Off". When tablet is off, press and hold for approximately 3 seconds to turn on. When tablet is on, press and hold for approximately 3 seconds to display the "Power Off" button to turn off tablet.
2. **USB Type C Charging Port** - Supports charging of the tablet battery using provided USB cable and power adapter.
3. **5.0-inch LCD Screen** - Color LCD display shows menu and sub-menus, test results, tablet functions and vehicle status information.
4. **OBD2 HDMI Cable** - Connects the tablet to the vehicle's on-board Data Link Connector (DLC). Cable is detachable from tablet.
5. **Rear Kickstand** - Lets you freely stand the tablet on a solid surface.
6. **GREEN LED** - Indicates that all engine systems are running normally, and all emission monitors are active and performing their diagnostic testing. The Malfunction Indicator "Check Engine" Lamp on the vehicle's instrument panel is off.
7. **YELLOW LED** - Indicates there is a possible problem in one or more of the vehicle's systems. Either a "Pending" DTC is present and/or some of the vehicle's emission monitors have not run their diagnostic testing.
8. **RED LED** - Indicates there is a problem in one or more of the vehicle's systems. The Malfunction Indicator "Check Engine" Lamp on the vehicle's instrument panel is on.



Figure 1. Controls and Indicators

### POWERING THE TABLET ON AND OFF

To power ON the tablet:

1. With the tablet off, press and hold the **POWER** button for approximately 3 seconds, then release.
  - The screen displays the message "LOADING" while the firmware loads.
  - When the firmware has been loaded, the Home Screen displays. [\[See page 6\]](#)

2. If the tablet is connected to a vehicle, the message “Retrieving vehicle information...” automatically shows while the tablet establishes communication with the vehicle.



**To power OFF the tablet:**

1. With the tablet on, press and hold the  **POWER** button for approximately 3 seconds.




**NOTE:** The tablet can only be turned off when the USB is removed from the tablet and the DLC cable is removed from the vehicle.

- The screen displays a message “POWER OFF”.
- If **POWER OFF** is selected, the tablet powers down and turns off.

2. When the tablet is on, press  **POWER** button once to go into sleep mode. Similarly, press the  **POWER** button one more time to wake up the tablet.



**NOTE:** Another way to turn OFF the tool is by pressing and holding the  **POWER** button for about 15 seconds - the tool will turn off right away.

## INITIAL TABLET SETUP

---

**Follow these steps to setup the tablet for the first time.**

1. **Charge Tool** – use the included charging cable to completely charge your tool before conducting your first scan.
2. **Setup Wi-Fi Network** – The tablet requires a Wi-Fi network connection to activate all its features. [[See page 49](#)]
3. **Check for Updates** – We’re continuously making free software, data, and firmware updates. It is important to keep your tablet up to date to ensure its best performance. Please follow the steps to check and automatically update your tablet under **SETTINGS**. [[See page 52](#)]
4. **Adjust Personal Settings** – Further customize your tool experience with several available settings. [[See page 47](#)]
5. **Enjoy your INNOVA® Smart Diagnostic System!**

**Have questions? We’re here to help:**

- **Live Chat:** [www.innova.com](http://www.innova.com)
- **Email Us:** [support@innova.com](mailto:support@innova.com)
- **Call Us:** 800-544-4124 (Monday through Friday, 6am - 6pm PST)





## THE HOME SCREEN

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The **Home Screen** provides access to all the tablet’s primary functions.

**See Figure 2 for the explanation of items 1 through 13, below:**

1.  **Menu** – Quick access to Home, Previous Vehicle, Support, Settings.

2. **Vehicle Info Bar** – When connected to a vehicle, dialog displays vehicle's make, model, year, VIN, and current mileage (ODO).
3. **OBD2 Diagnostics Tab** – Use to perform OBD2 scans, view & record Live Data, create RepairSolutionsPRO reports, and Erase OBD2 DTCs and more. [\[See page 12\]](#)
4. **Previous Vehicles Tab** – Access and view reports for all previously tested vehicles, including pre- recorded Live Data streams. [\[See page 46\]](#)
5. **OEM Diagnostics Tab** – Provides enhanced OEM level diagnostics that are not available over generic OBD2. Access all modules to read & erase DTCs, view live data and get ECU Information. Perform bi-directional control on fuel pump, injectors, ignition coils, and much more. Other additional special functions may be available depending on the vehicle being tested. Plus, create a Vehicle Inspection report, also considered a full Network Scan, to obtain a comprehensive overview of the vehicle's current health status. [\[See page 24\]](#)
6. **Settings Tab** – Setup your tablet's settings (including Wi-Fi), update tablet to latest version, and other personal settings. [\[See page 47\]](#)
7. **Workshop Tools Tab** – Perform several OEM service reset procedures, including Oil Maintenance Reset, Battery Reset, Electronic Parking Brake Reset, Steering Angle Sensor (SAS) Reset, ABS Bleeding, Battery/Alternator Test, and EV/HEV/PHEV Battery Health. Access dealership level re-learn procedures to complete repairs or maintenance and much more. [\[See page 37\]](#)
8. **Support Tab** – Access the tablet's Tool Library for DTC and tool icon definitions; connect with Innova's ASE Certified Technical Team for support. [\[See page 57\]](#)
9.  **Bluetooth Icon**: the Bluetooth icon will be ON when the *RepairSolutionsPRO*™ app is connected to the tablet.
10.  **Wi-Fi Icon** - Displays ON or OFF depending on the tablet's Wi-Fi network connection status.
11.  **Vehicle Icon** – Indicates whether or not the tablet is being properly powered through the vehicle's Data Link Connector (DLC). A visible icon indicates that the tablet is being powered through the vehicle's DLC connector.
12.  **Home Icon** – Quick access to home screen.
13.  **DLC Locator** – Quick access to find the location of the Data Link Connector (DLC) for a specified vehicle. [\[See page 60\]](#)

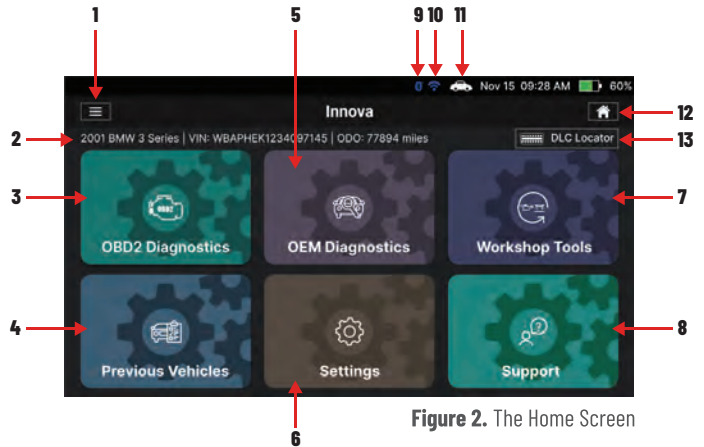


Figure 2. The Home Screen

## TECHNICAL SPECIFICATIONS

The following table provides the tablet's current technical specifications\*:

Display Type	5.0 Inch Panel
--------------	----------------

<b>J1962 DLC Cable</b>	6-foot Detachable 16-pin OBDII Compliant Connector
<b>Wi-Fi</b>	802.11b/g/n
<b>Operating Temperature</b>	23°F to 113°F (-5°C to 45°C)
<b>Memory</b>	4GB Memory
<b>Tablet Case</b>	Rugged ABS Shock & Drop Resistant
<b>Included Accessories</b>	Molded Storage Case, Quick Start Guide, USB Cable

\*Manufacturer reserves the right to change technical specifications at any time.

## THE RepairSolutionsPRO™ APP

Innova's **RepairSolutionsPRO™ (RSPRO)** app is a web-based service created to assist professional technicians simplify and augment their vehicle diagnostic process.

In essence, it helps you decode the diagnostic data collected by your INNOVA® OBD2 Tablet to arrive at a most likely fix. At its core, the app uses a database of millions of real-world verified fixes—collected over the last 25 years by ASE Master Technicians across the U.S.—that is cross-referenced to your specific vehicle's problem to instantly arrive at a verified fix. Think of it as a second opinion from your most trusted peers to help you diagnose and repair more vehicles.

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### THE RSPRO APP OFFERS...

- **Verified Fixes** – Find the most likely fixes reported and verified by ASE Technicians for the retrieved DTCs. Plus, quickly purchase the exact parts you need right from the app.
- **Predicted Repairs** – With millions of verified repair solutions, get a statistical probability of what repairs the vehicle may need within the next 12 months.
- **TSBs & Recalls** – Learn if there are any special NHTSA safety recalls or Technical Service Bulletins (TSBs) issued by the vehicle's manufacturer.
- **Upcoming Maintenance** – View the vehicle manufacturer's recommended maintenance intervals. Plus, conveniently order the correct maintenance parts right from the app.
- And much more...

### HARDWARE REQUIREMENTS

- Innova OBD2 Tablet with Bluetooth/Wi-Fi connectivity.

- Android or iOS Mobile Device.

## DOWNLOAD THE RSPRO APP

- Available for Apple iOS & Android Devices (Scan QR Code)



## USING THE RepairSolutionsPRO APP

1. Retrieve your vehicle's diagnostic data. [[See page 10](#)]
2. Download and install the **RSPRO** app (see above).
3. Launch the app and log in to your account.
  - If you have not yet established an account, you must register for a FREE account before proceeding.
4. Follow the screen prompts to pair your INNOVA Tablet.
  - Turn On Bluetooth® on your mobile device.
  - Turn the tablet On.
  - Be sure your mobile device is connected to an available Wi-Fi network.
  - Begin the pairing process by selecting your handheld tablet from the list.



**NOTE:** The RSPRO app can only store up to two Wi-Fi configurations.

5. Once paired, the data from your tablet is automatically transferred to the app to create a report.



**NOTE:** If the data does not automatically transfer, simply keep the app and tablet paired and scan your vehicle again.



**NOTE:** Once the tablet is paired and registered with the RepairSolutionsPRO App, the tablet must be connected to a Wi-Fi network by using the RepairSolutionsPRO App or by going to Settings / Wi-Fi Setting tab on the tablet in order to access functions such as viewing Fix for DTCs, OBD2 Report, and Vehicle Inspection. [[See page 49](#)]



## GETTING STARTED

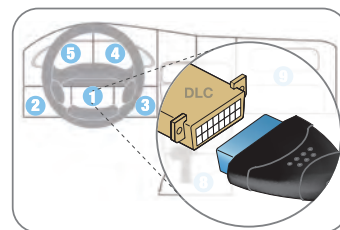
### CONNECTING THE TABLET

1. Turn the vehicle's ignition OFF.
2. Locate the vehicle's 16-pin Data Link Connector (DLC).



**NOTE:** Some DLCs have a plastic cover that must be removed before connecting the Tablet.

3. Connect the tablet to the vehicle's DLC. The cable connector is keyed and will only fit one way.
  - If you have problems connecting the cable to the DLC, rotate the connector 180°.
  - If you still have problems, check the DLC on the vehicle and on the tablet.



### AUTOLINK CONNECTION

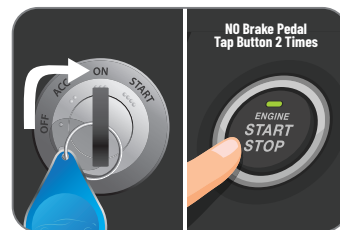
The tablet features an “**AutoLink Connection**” function, which automatically retrieves vehicle information upon plugging the tablet into the vehicle's Data Link Connector (DLC) port.

#### USING THE AUTOLINK FUNCTION

1. Verify that the tablet is connected as indicated above (**Connecting the Tablet**).
2. Turn the ignition ON. **DO NOT** start the engine.
  - Tablet begins communicating and displays “Retrieving Vehicle Information...”.
3. Once complete, tablet displays the vehicle's Year, Make, Model, VIN, and mileage on the Vehicle Info Tab.



**NOTE:** With certain vehicles, you may be required to manually input some of the vehicle's information. This may include the vehicle's Year, Make, Model, Trim, Body Code, Engine; and the vehicle's VIN.



#### PROVIDING THE VEHICLE'S VIN INFORMATION

1. A dialog appears requesting a Vehicle Identification Number (VIN).
2. Tap the **dialog window** and enter the vehicle's 17-digit VIN number.
  - The Submit button becomes “active” once all 17-digits are entered.

3. Tap the **Submit** button.
  - An error dialog will display if the VIN is unable to be decoded. Re-enter VIN.
  - If you are still unable to decode the VIN, tap **Select Vehicle** (see steps below).

## PROVIDING VEHICLE SELECTION INFORMATION

1. A dialog appears requesting Vehicle Selection.
2. Tap on each of the available entries (**Year, Make, Model, Trim, Body Code, Engine**).
  - A grayed-out selection means that an entry is not available or not necessary for this vehicle.
3. Make a selection under each option.
4. Tap **Continue** to save your selections and return to the Home screen.
5. Tap **Cancel** to exit without selecting and return to the Home screen.

## SCANNING A VEHICLE

Never replace a part based only on the DTC definition. Each DTC has a set of testing procedures, instructions and flow charts that must be followed to confirm the location of the problem. Always refer to the vehicle's service manual for detailed testing instructions.



**NOTE:** Check your vehicle thoroughly before performing any test.



**WARNING:** ALWAYS observe safety precautions whenever working on a vehicle.

*Retrieving and using Diagnostic Trouble Codes (DTCs) for troubleshooting vehicle operation is only one part of an overall diagnostic strategy.*

Refer to the appropriate diagnostic test you wish to perform:


- ☐ **OBD2 Diagnostics** – [[See page 12](#)]
- ☐ **OEM Diagnostics** – [[See page 24](#)]
- ☐ **Workshop Tools** – [[See page 37](#)]

## OBD2 DIAGNOSTICS

The OBD2 Diagnostics function allows you to perform OBD2 scans, view & record Live Data, create RepairSolutionsPRO reports, and Erase OBD2 DTCs.



### PERFORMING A SCAN – OBD2 Diagnostics

1. Follow the **AutoLink Connection** steps. [[See page 10](#)]
  2. Tap **OBD2 Diagnostics**.
    - The tablet automatically starts a check of the vehicle's computer to determine which communication protocol it is using. When the tablet identifies the computer's communication protocol, a communication link is established.
-  **NOTE:** A *PROTOCOL* is a set of rules and procedures for regulating data transmission between computers, and between testing equipment and computers. As of this writing, five different types of protocols (ISO 9141, Keyword 2000, J1850 PWM, J1850 VPW and CAN) are in use by vehicle manufacturers.
- If the tablet fails to link to the vehicle's computer, a "Scan Failed" message shows.
      - Ensure the vehicle is OBD2 compliant—check vehicle emission control information (VECI) label located in the vehicle's engine compartment.
      - Verify the connection at the DLC, and verify the ignition is ON.
      - Turn the ignition OFF, wait 5 seconds, then back ON to reset the computer.
      - Tap **Try Again** to try again or tap **Cancel** to return to the Home screen.
  3. A progress dialog displays while the tablet retrieves any Diagnostic Trouble Codes, Monitor Status and Freeze Frame Data from the vehicle's computer memory.
  4. When the retrieval process is complete, the OBD2 Diagnostics screen displays with the scan results.

### VIEWING SCAN RESULTS – OBD2 Diagnostics

Scan results are shown immediately following completion of a scan and can also be viewed later using the **Previous Vehicles** functions available through the Home page [[See page 46](#)].

Each report begins with a vehicle information bar that includes the vehicle's description (year/make/ model), the Vehicle Identification Number (VIN) and the odometer reading (ODO) at the time the scan was performed.



## EMISSIONS INSPECTION STATUS – Interpreting Results

Indicates whether the vehicle is ready for an Emissions Test (Smog Check) through a “traffic light” type display. When viewing the Emission Readiness field, use the following definitions to identify the vehicle’s Emissions Test readiness status:



- **I/M State: CA (California)** – Displays the acronym of I/M program location.



**NOTE:** With the Country is Canada, Mexico, or Others, the I/M State will be removed.



**Green** - Indicates all engine systems are operating normally. The vehicle is ready for an Emissions Test (Smog Check), and there is a good possibility it can be certified.



**Yellow** - Indicates one of the following two conditions is present:

- A “Pending” Diagnostic Trouble Code is present. It is possible the vehicle can be tested for emissions and certified. Many areas (states / countries) allow an Emissions Test to be performed if the only code present is a “PENDING” code.
- One or more monitors “Incomplete” their diagnostic testing. The issue of the vehicle being ready for an Emissions Test will depend on the emissions regulations and laws of your local area.
- Some areas require that all Monitors indicate a “Complete” status before an Emissions Test (Smog Check) can be performed. Other areas only require that some, but not all, Monitors indicate a “Complete” status before an Emissions Test can be performed.

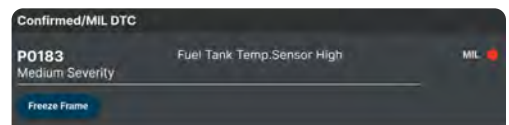


**Red** - Indicates there is a problem with one or more of the vehicle's systems, and Diagnostic Trouble Code(s) (DTCs) are present. The vehicle is not ready for an Emissions Test. The problem(s) that caused the DTCs to set must be repaired before an Emissions Test can be performed.

## CONFIRMED/MIL DTC CODE

This is the code that has commanded the vehicle’s Malfunction Indicator Lamp (MIL) “on,” and is the code for which Freeze Frame data stored. This field includes the DTC number, description, and MIL status (ON or OFF).

- In OBD2 systems, when an emissions-related engine malfunction occurs that causes a DTC to set, a record or snapshot of engine conditions at the time that the malfunction occurred is also saved in the vehicle's computer memory. The record saved is called Freeze Frame data.

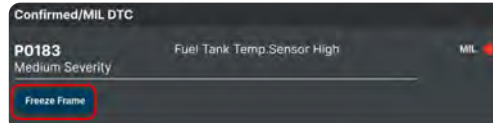


## Viewing Freeze Frame Data

Under Freeze Frame, saved engine conditions can include, but are not limited to engine speed, open or closed

loop operation, fuel system commands, coolant temperature, calculated load value, fuel pressure, vehicle speed, air flow rate, and intake manifold pressure. These values are typically used to further diagnose and pinpoint the issue.

- Tap the **Freeze Frame** button to view the captured results.



## FIX FOR DTCs

POWERED BY

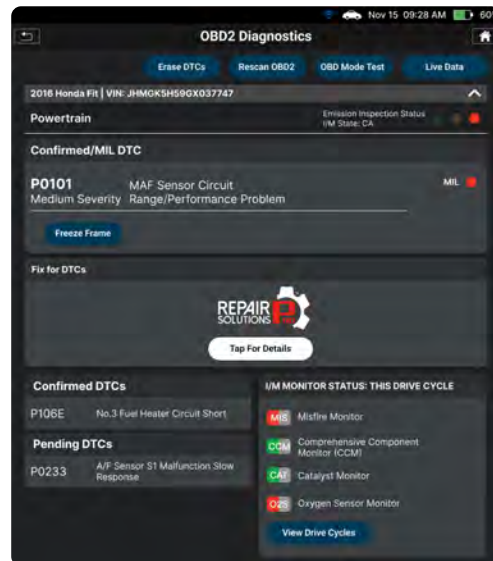


Innova's **RepairSolutionsPRO™** reports offer a fix, which is cross referenced for accuracy against a database of millions of verified fixes. It is real-world data that has been collected for over 25 years by Innova's network of ASE Master Technicians across the U.S.

If available, it includes the most likely fix(es) for the MIL DTC and the parts required to repair it. If not, it only shows the OBD2 Report to upload data to the RepairSolutionsPRO (RSPRO) App. [[See page 16](#)]



**NOTE:** Certain fields and pages require that you create a RepairSolutionsPRO report to access, download and display the associated "enhanced" data...



1. Tap the **Tap For Details** in the OBD2 Diagnostics screen.



**NOTE:** Verify the tablet is registered to the RepairSolutionsPRO App.

- If you haven't registered for the RSPRO app yet, the screen displays the app's QR Code for you scan it with a mobile device and download it. Continue by pairing and registering your tablet with the RSPRO app. [[See page 8](#)]
2. With the tablet paired and registered with the RepairSolutionsPRO App.

## Viewing Scan Results – OBD2 Diagnostics



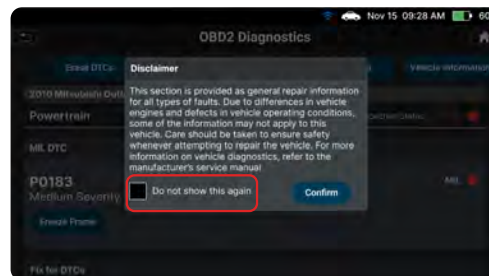
- The tablet also verifies if it's connected to a Wi-Fi network.



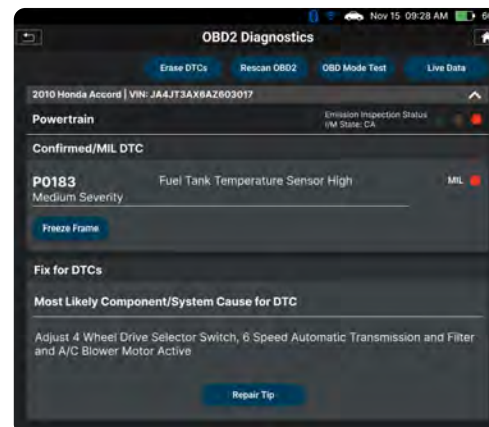
**NOTE:** The tablet can be connected to a Wi-Fi network by using the RepairSolutionsPRO app, or by using the Settings tab on the tablet. [See page 49]

3. A **Disclaimer** is provided every time a fix is requested.

- To stop showing this screen, tap the “**Do not show this again**” check-box and tap **Confirm** to confirm your selection and get Fix for DTCs. Alternatively, select **Confirm** without the check-mark to not make any changes.



4. The tablet's screen displays the Most Likely Component/System Cause for the DTC.





**NOTE:** If a Fix is not available for DTC, an advisory message displays.

5. Tap **Repair Tip** to view the repair tip for the highlighted item.



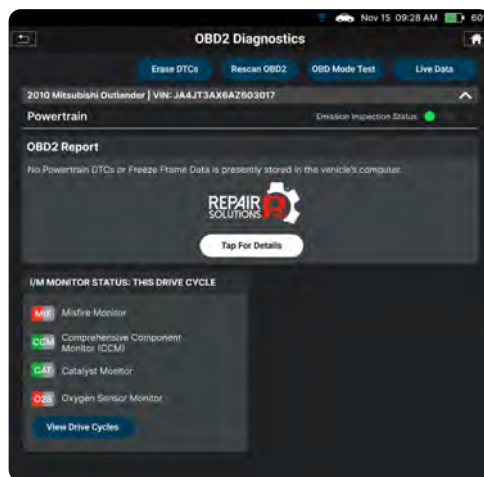
**NOTE:** If a Repair Tip is not available for the DTC, an advisory message displays. Tap **Close** to return to the previous screen.

6. The screen displays **Repair Tip for DTCs** and includes the *initial inspection*, the *possible cause*, the *diagnostic procedure(s)*, and a *repair validation*.
7. When you finished viewing the Repair Tip, tap  **Back** to return to the previous screen or tap  **Home** to return to the Home Screen.

## OBD2 REPORT

The **OBD2 Report** feature allows you to create an OBD2 diagnostics report, which can be sent and viewed with the RSPRO app. This function will be removed once you have successfully completed a report and will reappear after each relink.

1. Tap the **Tap For Details** in the OBD2 Diagnostics screen.



**NOTE:** Verify that the tablet is connected to a Wi-Fi network and is registered to the RepairSolutionsPRO App.

- If you haven't registered for the RSPRO app yet, the screen displays the app's QR Code for you scan it with a mobile device and download it. Continue by pairing and registering your tablet with the RSPRO app. [\[See page 8\]](#)
2. With the tablet paired and registered with the RepairSolutionsPRO App.
    - A report will begin to generate once the tablet verifies it's connected to a Wi-Fi network.



**NOTE:** The tablet can be connected to a Wi-Fi network by using the RepairSolutionsPRO app, or by using the Settings tab on the tablet. [\[See page 49\]](#)

3. A "One moment please..." message displays.
  - If the report was successfully created, a confirmation message displays. Tap **Close** to return to the OBD2 Diagnostics screen.

- If the report was not successfully created, a warning message displays. Tap **Try Again** to re-perform or tap **Close** to return to the OBD2 Diagnostics screen.


I/M MONITOR STATUS

Shows the current status for all **Monitors** supported by the vehicle. Available monitors are listed and identified as follows (*The CCM - Comprehensive Component Monitor is being used as an example.*):

Green Solid Icon = 

*Description:* This icon indicates the monitor has completed both *Since DTCs Cleared* and *This Drive Cycle* testing.

*Tips:* The monitor has met all conditions required to complete self-diagnosis and testing of the assigned system.

Red Flashing Icon = 

[View Glossary](#)

*Description:* This icon indicates that the monitor has not completed testing *Since DTCs Cleared*.

*Tips:* The monitor has not met all conditions required to complete self-diagnosis and testing of the assigned system. A drive cycle may need to be performed to complete the testing.

Green/Gray Flashing Icon = 

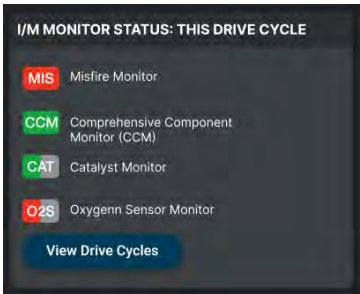
*Description:* This icon indicates that the monitor has not completed testing *This Drive Cycle*.

*Tips:* The monitor has not met all conditions required to complete self-diagnosis and testing of the assigned system. A drive cycle may need to be performed to complete the testing.

Red/Gray Flashing Icon = 

*Description:* This icon indicates that the monitor has disabled *This Drive Cycle*.

*Tips:* The monitor is unable to complete self-diagnosis and testing of the assigned system. The monitor is disabled for this driving cycle, check for failed OBD Monitor Test and refer to the service information before continuing.



DRIVE CYCLE PROCEDURES

A Drive Cycle for a monitor requires that the vehicle is driven in such a way that all the required “Enabling Criteria” for the monitor to run and complete its diagnostic testing are met. You can use the tablet to view the Drive Cycle Procedures for a selected Monitor.

1. From the I/M Monitor Status field on the OBD2 Diagnostic page, tap the **View Drive Cycles** button.
  - The Drive Cycle Procedures page displays.





2. Tap a **monitor name** to view the Drive Cycle Procedures.
  - The screen displays the Drive Cycle Procedures for the selected monitor.
3. Follow the provided steps to perform and complete the monitor's "Enabling Criteria".



## CONFIRMED DTCs

Shows all "confirmed" powertrain Diagnostic Trouble Codes (DTCs) for the vehicle. Each entry in the list includes the DTC number and description.

### Confirmed DTCs

P0102	Mass Or Volume Air Flow Circuit Low Input
-------	---

## PENDING DTCs

Shows all "pending" powertrain Diagnostic Trouble Codes (DTCs) for the vehicle. Each entry in the list includes the DTC number and description.

### Pending DTCs

P0408	Exhaust Gas Recirculation Sensor "B" Circuit (High)
-------	---

## PERMANENT DTCs

Shows all "permanent" powertrain Diagnostic Trouble Codes (DTCs) for the vehicle. Each entry in the list includes the DTC number and description.

### Permanent DTCs

P0141	Oxygen Sensor Heater (B1S2)
-------	-----------------------------

## ADDITIONAL TESTING UTILITIES

The following utilities are also included under the **OBD2 DIAGNOSTICS** scan results.

### ERASING OBD2 DTCs



**NOTE:** When the Erase function is used to erase DTCs from the vehicle's on-board computer "Freeze Frame" data and manufacturer-specific-enhanced data are also erased. "Permanent" DTCs **ARE NOT** erased by the Erase function.



**NOTE:** When DTCs are erased, the I/M Readiness Monitor Status program resets the status of all Monitors to a not run condition. To set all Monitors to a COMPLETE status an OBD2 Drive Cycle must be performed.

**Erase DTCs from the vehicle's computer memory as follows:**

1. Perform the **AutoLink Connection** steps. [\[See page 10\]](#)
  - If the tablet is already connected and linked to the vehicle's computer, proceed directly to **Step 2**.
  - Ensure that the ignition is in the Key ON, Engine OFF position.
2. Tap the **Erase DTCs** button at the top of the OBD2 Diagnostic results page.
  - Ensure that the vehicle is stopped and place the transmission in Park or Neutral.
  - If you want to proceed, tap **Erase DTCs** to continue.
  - If you do not want to proceed, choose **Cancel** to exit the erase procedure.
3. By selecting to Erase DTCs, a "One moment please..." progress dialog displays during the erase process.
  - If the erase was successful, a confirmation message shows. After 3 seconds, the tablet automatically re-scans the vehicle to confirm DTC deletion.
4. If the erase was not successful, an advisory dialog displays indicating the erase request was sent to the vehicle's computer. After 3 seconds, the tablet automatically re-links to the vehicle's computer.

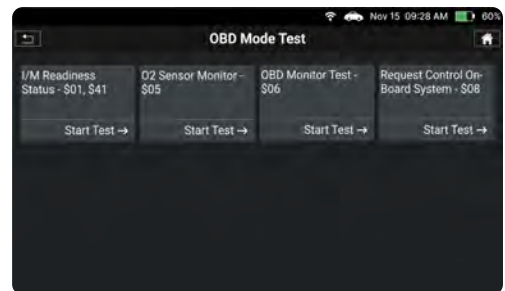


**NOTE:** If the erase was not successful and a ECU error code \$22 is present, an advisory message displays. Start the engine and maintain vehicle speed at 0. Tap **Erase DTCs** to try again.

**OBD MODE TEST**



The OBD Mode Test are accessed from the OBD2 Diagnostic results page. [\[See page 12\]](#)

1. Tap the **OBD Mode Test** button.
2. The OBD Mode Test screen is displayed with the following selections:
  - **I/M Readiness Status - \$01, \$41** – Lets you view the Drive Cycle Procedures for incomplete monitors supported by the vehicle.
  - **O2 Sensor Monitor - \$05** – Retrieves and displays O2 sensor monitor test results from your vehicle's on-board computer.
  - **OBD Monitor Test - \$06** – Retrieves test results for emission-related powertrain components and systems that are not continuously monitored.
  - **Request Control On-Board System - \$08** – Enable the external test equipment to control the operation of an on-board system, test, or component.

**I/M Readiness Status - \$01, \$41**

The vehicle's computer stores a record of monitor status upon completion of a full diagnostic check of all monitored components and systems since the computer's memory was last cleared.

The **I/M Readiness Status - \$01 & \$41** feature displays which vehicle particular Monitor has or has not run and completed testing of their designated sections within the vehicle's emissions control system. Additionally, it also provides the descriptions for each monitor.



- From the OBD Mode Test screen, tap **I/M Readiness Status - \$01, \$41**. The I/M Readiness Status page displays.
  - **Since DTCs Cleared - \$01** – indicates status of the monitors since the DTCs are erased.
  - **This Drive Cycle - \$41** - indicates status of monitors since the beginning of the current drive cycle.
- Select **Since DTCs Cleared - \$01** or **This Drive Cycle - \$41** as appropriate.
  - If the vehicle under test does not support **Since DTCs Cleared - \$01** or **This Drive Cycle - \$41**, a warning message displays "**This vehicle does not support this monitor type.**"
- The Select Monitor screen displays listing all monitors supported by the vehicle.
- Tap a **incomplete monitor name** to view its Drive Cycle Procedures.
  - The Drive Cycle Procedures screen for the Monitor display.
- When you finished viewing the Drive Cycle Procedures, tap the  **Back** icon to view other monitors or tap the  **Home** icon to return to the Home Screen.

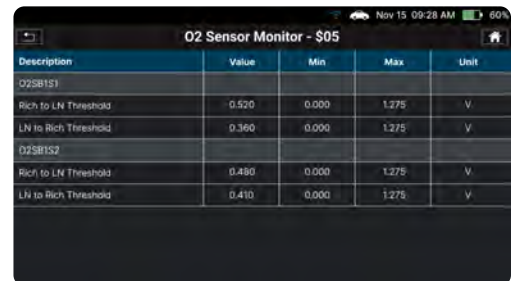
## O2 Sensor Monitor - \$05

The **O2 Sensor Monitor - \$05** lets you view the test results of the vehicle's two or more O2 sensors. These sensors are designed to help identify problems that can reduce fuel efficiency or increase emissions. Each O2 sensor has a unique name that identifies its location in the exhaust system – cylinder bank location (bank 1 or bank 2) and its location in relation to the catalytic converter (upstream or downstream). Please reference the vehicle's service manual for further information.



**NOTE:** Service Mode \$05 is not supported in ISO 15765-4 (CAN) applications – it includes the majority of 2008 and older vehicles. For CAN applications, the functionality of Service Mode \$05 was implemented in Service Mode \$06.

- From the OBD Mode Test screen, tap **O2 Sensor Monitor - \$05**.
  - The O2 Sensor Monitor - \$05 page displays.
  - If the vehicle under test does not support **O2 Sensor Monitor**, a warning message displays "**O2 Sensor Monitor is not supported.**"
- When you finished viewing the O2 Sensor values. Tap the  **Back** icon to return to the OBD Mode Test selection screen or tap the  **Home** icon to return to the Home Screen.



Description	Value	Min	Max	Unit
O2S01S1				
Rich to LN Threshold	0.520	0.000	1.275	V
LN to Rich Threshold	0.360	0.000	1.275	V
O2S01S2				
Rich to LN Threshold	0.480	0.000	1.275	V
LN to Rich Threshold	0.410	0.000	1.275	V

## OBD Monitor Test - \$06

The **OBD Monitor Test - \$06** retrieves and displays test results for emission-related powertrain components and systems that are not continuously monitored. The tests available are determined by the vehicle manufacturer.

- If the vehicle under test does not support **OBD Monitor Test**, a warning message displays “**OBD Monitor Test is not supported.**”



**NOTE:** The tablet does not perform the OBD mode test. Instead, it retrieves results from the most recently performed tests from the on-board computer's memory.

1. From the OBD Mode Test screen, tap **OBD Monitor Test - \$06**.
2. When test results have been retrieved, the test results screen displays. The following information is provided for each available test:

- **Description**
- **Module No.**
- **Test Value**
- **Min or Max** test limit



**NOTE:** Only one test limit, either Min or Max, is shown for any given test.

- **Unit**
- **Status**



**NOTE:** Status is calculated by the tablet by comparing the test Value against the displayed test limit (either Min or Max). Status is shown as either Low, High, or OK.

Description	Module No.	Value	Min	Max	Unit	Status
Catalysts Efficiency (\$01)						
Catalyst deterioration (Bank 1) (\$01)	\$10	0.000	N/A	0.640	V	OK
EVAP System (\$02)						
Component ID: \$B1	\$10	1.275	0.145	N/A	V	OK
Component ID: \$02	\$10	0.000	N/A	0.305	V	OK
Component ID: \$03	\$10	0.000	N/A	0.305	V	OK
Component ID: \$04	\$10	0.000	N/A	1.275	V	OK
O2 Sensor (\$05)						

3. Tap the **Back** icon to return to the OBD Mode Test screen or tap the **Home** icon to back to the Home Screen.

## Request Control On-Board System - \$08

The **Request Control On-Board System - \$08** allows you perform EVAP Test or Particulate Filter Regeneration and Inducement System Reinitialization.

- **EVAP Test** - lets you initiate a fuel vapor leak test for the vehicle's EVAP system.
- **Particulate Filter (PF) Regeneration** – this service requests the vehicle to initiate a PF regeneration. The vehicle manufacturer is responsible to determine the criteria to enable, start and stop the test, such as engine running, vehicle speed, or engine RPM.
- **Inducement System Reinitialization** - This service requests the vehicle to initiate a reinitialize the inducement system. The vehicle manufacturer is responsible to determine the criteria to enable, start and stop the test, such as engine running, vehicle speed, or engine rpm.



**NOTE:** The tablet does not perform the leak test, but sends the command to the vehicle's on-board computer to initiate the test. The vehicle manufacturer determines the criteria and method for stopping the test once it has been started. **BEFORE** using the Request Control On-Board System function, refer to the vehicle's service manual to determine the procedures necessary to stop the test.

1. From the OBD Mode Test selection screen, tap **Request Control On-Board System - \$08**.

- If the vehicle under test does not support **Request Control On-Board System - \$08**, a warning message displays "**Request Control On-Board System is not supported.**"



**NOTE:** The EVAP Test is used for Spark Ignition, and the Particulate Filter Regeneration and Inducement System Reinitialization is used for Compression Ignition.

2. Tap the test you wish to perform (**EVAP Test** or **Particulate Filter Regeneration, Inducement System Reinitialization**).

- A "One moment please..." message displays while the tablet performs the test.

3. When the test has been initiated by the vehicle's on-board computer, a confirmation message displays. Tap **Exit** to close the message and return to the OBD Mode Test screen.



**NOTE:** If the Request Control On-Board System - \$08 is not supported by the vehicle, an advisory screen shows the message "Request Control On Board System is not supported."



## LIVE DATA MODE

The tablet allows you view and/or record "real-time" **Live Data** for further vehicle analysis. This information includes values (volts, rpm, temperature, speed, etc.) and system status information (open loop, closed loop, fuel system status, etc.) generated by the various vehicle sensors, switches, and actuators.

The real time (Live Data) vehicle operating information (values/status) that the computer supplies to the tablet for each sensor, actuator, switch, etc. is called Parameter Identification Data (PID).

Each PID (sensor, actuator switch, status, etc.) has a set of operating characteristics and features (parameters) that serve to identify it. The tablet displays this information for each sensor, actuator, switch, or status that is supported by the vehicle under test.



**DANGER:** If the vehicle must be driven to perform a troubleshooting procedure, **ALWAYS** have a second person help you. One person should drive the vehicle while the other person observes the tablet data. Trying to drive and operate the tablet at the same time is dangerous and could cause a serious injury to you and by standers.

## Viewing Live Data

1. Connect with the vehicle by following the steps for **OBD2 DIAGNOSTICS - Performing A Scan**. [\[See page 12\]](#)
2. While linked to the vehicle, start the engine.
3. Tap the **Live Data** button to place the tablet in Live Data mode.
  - A progress dialog displays while the vehicle is scanned, and Live Data mode is activated.
  - Tap **Cancel** to exit the procedure.
4. The results screen displays all the vehicle's available PIDs with reported values. Tap the **PIDs** you wish to view the PID description for, then the PID Description screen will display.



**NOTE:** The Playback button remains “disabled” until a live data stream is recorded and saved.

Parameter Identification	Value
Engine Speed	267 (rpm)
Absolute Throttle Position	3.7 (%)
Commanded EGR	0.0 (%)
Water Temperature	196.2 (°F)
Intake Air Temperature Voltage	99 (°F)
Engine Oil Temperature	43.34 (lb/min)

## Custom Live Data

1. From Live Data results screen, tap **Custom**.
2. Select the PID(s) you wish to investigate further.
  - A “check mark” indicates the associated PID is selected for viewing.
  - An “empty check-box” indicates the PID is not selected for viewing.
  - Tapping a check-box repeatedly will toggle it on and off.
  - Tap the check-box again to unselect PIDs.
  - Tap the **Select All** check-box to select all PIDs. Tap it again to unselect all PIDs.
3. Tap **Done** to view the selected PIDs data in tabular format.
  - Each entry in the table shows the name of the PID, and a numerical representation of the current value for the PID.

Parameter Identification	Value
<input checked="" type="checkbox"/> 1 Engine Speed	267 (rpm)
<input type="checkbox"/> 2 Actual Engine Speed	267 (rpm)
<input checked="" type="checkbox"/> 3 Vehicle Speed	0 (mph)
<input type="checkbox"/> 4 Engine Oil Temperature	38.8 (°F)
<input checked="" type="checkbox"/> 5 Purge Control Valve	86.6 (%)
<input checked="" type="checkbox"/> 6 Adapted Cruise Control Built-in	ON

- Tap **View All** to return to the full PID results list.



Parameter Identification	Value
Engine Speed	267 (rpm)
Vehicle Speed	0 (mph)
Purge Control Valve	86.6 (%)
Adapted Cruise Control Built-in	ON

## Graph Live Data Mode

1. Tap the **Graph** button to view the selected PIDs in graph mode.



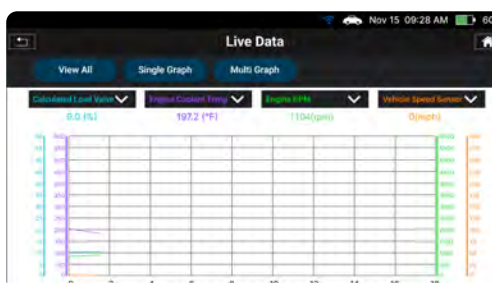
**NOTE:** The Graph function button will stay inactive if the selected PID does not report a numerical value. An example is the Fuel System Status PID, which reports either Open Loop (OL) or Closed Loop (CL).



2. Tap the **Multi Graph** button to view 2 Graphs in one screen.



3. Tap the **Merge Graph** button to view more PIDs on a single graph.







**NOTE:** A maximum of four PIDs can be merged with the Merge Graph mode.

4. Tap **Back** to return to the OBD2 Diagnostics results page, or tap **Home** to exit to the Home Screen.

VEHICLE INFORMATION

The **OBD2 DIAGNOSTICS** test results page includes vehicle information, which can be accessed by tapping the **Arrow** button on the results page. This page allows you to view **Additional Vehicle Information** and **In-Use Performance Tracking (IPT)**.

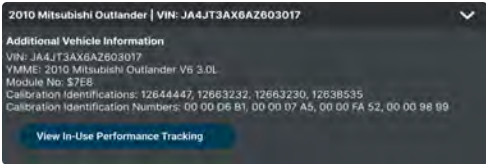


- 1. Tap on the **Arrow** button to display the details.
- 2. A dialog screen shows. Scroll to view each section.

Additional Vehicle Information

Offers basic information such as VIN and Year, Make, Model and more information.

- **VIN:** The complete Vehicle Identification Number.
- **YMME:** The vehicle's year, make, model, engine and option.
- **Module #:** The control module identification number(s).
- **Calibration Verification Numbers:** The vehicle's calibration ID(s). These IDs uniquely identify the software version(s) for the vehicle's control module(s).
- **Calibration Identification:** The Vehicle's Calibration Verification Number(s) (CVNs) required by OBD2 regulations. CVNs are used to determine if emission-related calibrations for the vehicle under test have been changed.



In-Use Performance Tracking (IPT)

The tablet can retrieve In-use Performance Tracking (IPT) statistics for monitors supported by the vehicle under test. Two values are returned for each monitor; the number of times that all conditions necessary for a specific monitor to detect a malfunction have been encountered (XXXCOND), and the number of times that the vehicle has been operated under the specific conditions for the monitor (XXXCOMP). Statistics are also provided for the number of times the vehicle has been operated in OBD monitoring conditions (OBDCOND), and the number of times the vehicle's engine has been started (IGNCNTR).

In-Use Performance Tracking	
OBDCOND	1024
IGNCNTR	3337
CATCOMP1	824
CATCOND1	824
CATCOMP2	435
CATCOND2	435



## OEM DIAGNOSTICS

The OEM Diagnostics function allows you to perform enhanced, OEM level diagnostics not available over generic OBD2. Access ABS, Airbag, Transmission, Tire Pressure, Battery, and many body control modules to view and erase their DTCs. Perform bi-directional tests on fuel pumps, injectors, ignition coils, and much more. Plus, get access to hundreds of additional parameters that you can view in real-time.



1. Follow the **AutoLink Connection** steps to connect with the vehicle [\[See page 10\]](#).
2. From the Home Screen, tap the **OEM Diagnostics** tab.
3. A selection dialog is provided.
4. Select the type of test you wish to perform.
  - Tap **Select System** to initiate a thorough scanning of the Powertrain, Body, or Chassis systems. [\[See page 28\]](#)
  - Tap **Scan All Systems** to perform a comprehensive vehicle scan of all available network modules. [\[See page 27\]](#)
  - Tap the “**individual**” listed control module name (for example: ABS - Anti-Lock Braking) to perform a diagnostic check on that single module. [\[See page 33\]](#)
  - Tap **Vehicle Inspection** to perform a complete vehicle health status report, including: OBD2 check, all network system scan, service checks, warning lights, tire pressures, and more. [\[See page 33\]](#)

## SELECT SYSTEM

1. From the OEM Diagnostics results screen, tap the **Select System** button.
  - The Module Selection displays.
2. Choose either Powertrain, Body, or Chassis modules that you wish to scan.



- A message displaying “Retrieving Vehicle Information...” will appear while the tablet scans all systems within each module. Please be patient as this process may take a few moments. The Module Selection displays.
- Tap **Cancel** to stop the scan and return to the previous screen.
- For Powertrain on **BMW** models only, follow these additional steps:

- Turn the ignition OFF, then back ON.
  - Tap **Continue** to complete the scan.
  - If the tablet fails to link to the vehicle's computer, a "Scan Failed" message shows.
    - Ensure the vehicle is OBD2 compliant.
    - Verify the connection at the DLC, and verify the ignition is ON.
    - Turn the ignition OFF, wait 5 seconds, then back ON to reset the computer.
    - Tap **Try Again** to try again; or tap **Cancel** to return to the Home screen.
3. The Select System screen will display the diagnostic test results.

## VIEWING THE "SELECT SYSTEM" TEST RESULTS

Each report begins with a vehicle information bar that includes a Report ID, the vehicle's description (year/make/model), the last six digits of the Vehicle Identification Number (VIN) and the odometer reading (ODO) at the time the scan was performed.

The results window lists all tested Control Modules with its corresponding result:

- **# Fault** – Indicates the number of reported DTCs.
- **No Fault** – Indicates that no DTCs were found.
- **Available** – Indicates that the module is part of the system but does not report DTCs.

The results screen also allows too either:

- **Erase All DTCs** - Erases all the vehicle's retrieved Diagnostic Trouble Codes (DTC). [[See page 27](#)]
- **Rescan All Systems** - Performs a complete "Select System" report. [[See page 27](#)]

## SCAN ALL SYSTEMS

1. From the OEM Diagnostics results screen, tap the **Scan All Systems** button.
2. A progress bar appears, "Scanning All Systems...", while the tablet scans all the vehicle's equipped modules. Please note that it will take a few minutes while it scans all the vehicle's systems.
  - Tap **Cancel** to stop the scan and return to the previous screen.
  - Tap **Stop** to stop scanning, the tablet will show results that systems were scanned.
  - If the vehicle under test is a **BMW**, the message "Turn ignition Off, then back On" displays. Tap **Continue** to complete the scan.
  - If the tablet fails to link to the vehicle's computer, a "Communication Error" message shows.
    - Ensure the vehicle is OBD2 compliant.
    - Verify the connection at the DLC, and verify the ignition is ON.

- Turn the ignition OFF, wait 5 seconds, then back ON to reset the computer.
- Tap **Try Again** to try again; or tap **Cancel** to return to the OEM Diagnostics menu.

3. The Scan All Systems screen displays the diagnostic test results.

## VIEWING THE “SCAN ALL SYSTEMS” TEST RESULTS

Each report begins with a vehicle information bar that includes the vehicle's description (**year/make/model**), the Vehicle Identification Number (**VIN**) and the odometer reading (**ODO**) at the time the scan was performed.

The results window lists all tested Control Modules with its corresponding result:

- **# Fault** – Indicates the number of reported DTCs.
- **No Fault** – Indicates that no DTCs were found.
- **Available** – Indicates that the module is part of the system but does not report DTCs.

The results screen also allows to either:

- **Erase All DTCs** – Erases all the vehicle's retrieved Diagnostic Trouble Codes (DTC). [\[See page 32\]](#)
- **Rescan All Systems** - Performs to scan all systems again. [\[See page 33\]](#)



## VIEWING & SCANNING AN INDIVIDUAL CONTROL MODULE

Perform diagnostics for a single, selected vehicle module. Depending on the module selected, you can **Read DTCs**, **Erase DTCs**, view **Live Data**, perform **Active Test** and/or **Special Function** procedures, and read **ECU Information**.

### READING DTCs FOR A SELECTED MODULE

- From the OEM Diagnostics page, tap the **name of the module** you wish to explore further.
  - With the vehicle stopped, place the transmission in Park or in Neutral.
  - The tablet retrieves and displays DTCs stored in the vehicle's computer for the currently selected module.
  - Each entry shows the DTC number, status, and definition.





**NOTE:** If no DTCs for the selected module are currently stored in the vehicle's computer, the message "No DTCs are presently stored in the vehicle's computer" displays. Or if the selected module does not support reading DTCs, the message "<Module> is not supported." displays.

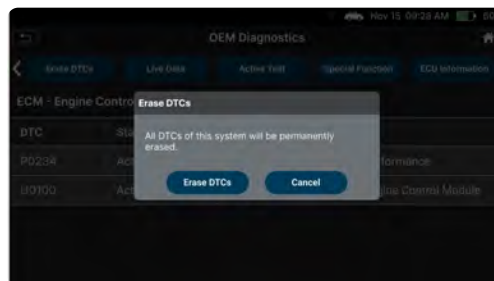


**NOTE:** In addition, the tablet also supports users in viewing most likely fixes and repair tips for ABS and SRS systems. When viewing the ABS or SRS DTCs screen, if there's available data, the tablet will show the **Fix for DTCs** button. Simply tap this button to see the fix data and repair tips. Refer to the **Fix for DTC** section. [[See page 14](#)]

2. Tap the **> arrow** icon at the top right of the screen to view more available functions.

## ERASING DTCs FOR A SELECTED MODULE

1. Tap the **module** for which you wish to Erase DTCs.
2. Tap **Erase DTCs**. A confirmation message shows.
  - With the vehicle stopped, place the transmission in Park or in Neutral.
  - If you are sure you want to proceed, tap **Erase DTCs**.
  - If you do not want to proceed, tap **Cancel** to stop the erase procedure.



3. If you chose to **Erase DTCs**, a "One moment please..." message displays while the erase function is in progress.
  - If the erase was successful, a confirmation message shows. Tap **Scan Again** to re-scan the currently selected module.
  - If the erase was not successful, an advisory message displays. Make sure the tablet is properly connected to the vehicle's DLC, then tap **Try Again** to repeat the erase procedure.
  - Tap **Cancel** to cancel the erase procedure and close the message.

## VIEWING LIVE DATA FOR A SELECTED MODULE

1. While linked to the vehicle, start the engine.
2. Tap the **module** you wish to view its Live Data.
3. Tap the **Live Data** button to place the tablet in Live Data mode.

- The results screen displays all of the vehicle's available PIDs with reported values. Each PID is unselected to offer customization on which component you wish to select and explore further. A total PID count is provided at the top left of the screen.



Parameter Identification	Value
Cylinder 1 Injector Control Circuit Status	OK
Cylinder 2 Injector Control Circuit Status	OK
Cylinder 3 Injector Control Circuit Status	OK
Cylinder 4 Injector Control Circuit Status	OK
Cylinder 5 Injector Control Circuit Status	OK
Cylinder 6 Injector Control Circuit Status	OK

- Select the **PIDs** you wish to explore further and continue as desired.
- Refer to **OBD2 Live Data** on how to use the Live Data mode. [\[See page 22\]](#)

## PERFORMING ACTIVE TEST FOR ECM/PCM, TCM SYSTEMS

**Active Tests** enables you perform active tests for ECM/PCM, TCM systems on various vehicles. It offers the most popular function tests available for 7 vehicle makes - Chrysler, GM, Ford, Hyundai, Nissan, Toyota and Honda.

- Tap the **module** you wish to perform its Active Test.
- Tap the **Active Test** button you perform active tests for ECM/PCM, TCM systems on various vehicles. The specific tests available are dependent on the vehicle's make and model.
  - The tablet retrieves and displays a menu of Active Tests available for the vehicle under test.



**NOTE:** If Active Tests are not supported for the vehicle under test, the message "Active Test is not supported" displays. Tap **Exit** to return to the previous page.

- Select the desired test.
- The tablet may display one or more instructional screens to prepare the vehicle for testing.



- Prepare the vehicle for testing, as necessary, then tap **Continue**.



*Viewing & Scanning An Individual Control Module*

- The tablet displays a “control” screen to perform the test.



4. Tap the appropriate **control** to operate the actuator as desired.

- The screen refreshes to show its test results.



5. Repeat **step 3** as desired.
6. Tap **Back** to return to the Active Test menu.

## PERFORMING SPECIAL FUNCTION FOR ECM/PCM, TCM SYSTEMS

**Special Functions** allows you perform diagnostic and calibration procedures for ECM/PCM, TCM systems on various vehicles. It offers the most popular function tests available for 7 vehicle makes - Chrysler, GM, Ford, Hyundai, Nissan, Toyota and Honda.

1. Tap the **module** you wish to perform its Special Functions.
2. Tap the **Special Function** button.
  - The tablet retrieves and displays one or more menus of Special Functions available for the vehicle under test.





**NOTE:** If Special Functions are not supported for the vehicle under test, the message “Special Function is not supported” displays. Tap **Exit** to return to the previous page.

3. Make the necessary selections to perform the desired test.

- A series of instructional screens display.



4. Follow the on-screen prompts to prepare and perform the selected test procedure.

- Upon completion, a “results” screen displays.



5. Tap **Finish** or **Exit** to return to the previous menu.

## RETRIEVING ECU INFORMATION FOR A SELECTED MODULE

This function retrieves and displays the specific information for the tested control unit, including Protocol, ECU ID, version number and other specifications. The sample ECU Information screen displays as below:

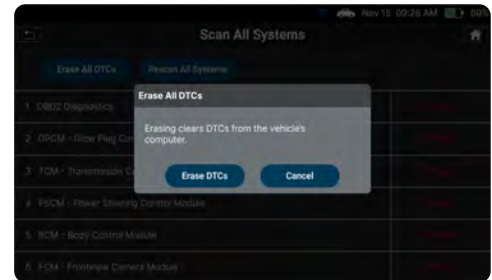


## ERASE ALL OEM DTCs

Erase all the stored OEM DTCs from the vehicle's computer memory as follows:

**From the Scan All Systems test results screen:**

1. If the tablet is already connected and linked to the vehicle's computer, proceed directly to **Step 2**.
  - Ensure that the ignition in the Key ON, Engine OFF position.
2. Tap the **Erase All DTCs** button at the top of the Scan All Systems results page.
  - With the vehicle stopped, place the transmission in Park or in Neutral.
  - To proceed, tap **Erase DTCs**.
  - Or, choose **Cancel** to exit the erase procedure.
3. By selecting to **Erase DTCs**, a "One moment please..." progress dialog displays during the erase process.
  - If the erase was successful, a confirmation dialog displays.
  - After 3 seconds, the tablet automatically re-scans the vehicle to confirm DTC deletion.
4. If the erase was not successful, an advisory dialog displays. Follow the instructions again and perform an **Erase DTCs**.
5. Once all DTCs are erased, tap **Scan Again** to confirm that all DTCs were erased. Or after 3 seconds, the tablet automatically re-scans the vehicle to confirm DTC deletion.



## RESCAN ALL SYSTEMS

Use this function to get the most current diagnostic status for the vehicle under test – particularly as you continue to troubleshoot each individual control module.

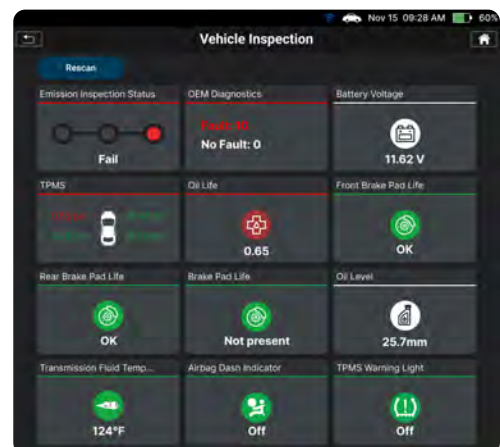
1. From the "Scan All Systems" result page, tap the **Rescan All Systems** button at the top right of the page.
2. Tool generates a new report and updates the "Scan All Systems" results page. [\[See page 27\]](#).

## VEHICLE INSPECTION

Performing a full vehicle scan ensures peace of mind for you and your customers. Many systems do not turn on a warning light or sets a message on the vehicle's Diagnostic Information Center, so following this process can help uncover hidden issues.

**A good practice is to perform a pre-scan before any work is done to uncover all issues; then a post-scan once repairs are complete to confirm the repairs were completed properly.** Furthermore, several manufacturers mandate a pre- and post-scan for all warranty work; and insurance carriers require it for pre- and post-collision work.

The **Vehicle Inspection** report, also considered a full Network Scan, provides a comprehensive overview of the vehicle's current health





status. It reports the vehicle's emissions readiness status, system status, service status, dashboard warning light status, and current odometer reading.

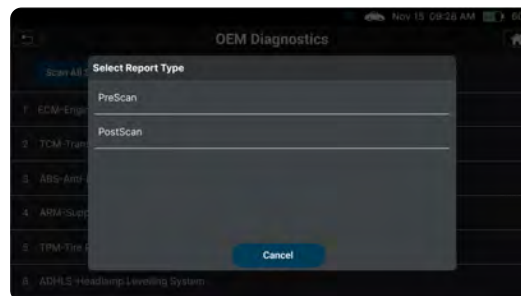
- From the OEM Diagnostics screen, tap the **Vehicle Inspection** button.
  - With the vehicle stopped, place the transmission in Park or in Neutral.
  - If the vehicle under test is a **BMW**, the message "Turn ignition Off, then back On" displays. Tap **Continue** to complete the scan.
  - The Select Business Report screen displays.




- Tap the **Business Report** type you wish to complete.
  - Diagnostic Report** – Provides a report with OBD2 Data, additional MIL DTC Information, Scan All Systems Data, and Vehicle Care.
  - Customer Report** – Provides a report with OBD2 Data, Scan All Systems Data, Service Check, Service Warning Lights, and Vehicle Care.
  - Collision Industry Report** – Provides a report with OBD2 Data, Scan All Systems Data, and Service Warning Lights & Service Check.
- Tap the report type you wish to perform.
  - PreScan** - A vehicle diagnostic report **before** making any repairs.
  - PostScan** - A vehicle diagnostic report **after** completing the repairs.




**NOTE:** You must conduct the PreScan report before generating the PostScan report.



- A progress bar appears, "Retrieving Vehicle Information...", while the tablet scans all of the vehicle's equipped modules.
  - It can take several minutes depending on the number of available systems available on the vehicle being tested. Tap **Cancel** to abort the scan.

5. Tap **Rescan** to get the most current diagnostic status for vehicle under test – particularly as you continue to troubleshoot each individual control module.
  - An “instructional” dialog displays to confirm the selection.
  - Select **Yes** to rescan the vehicle. Or, **No** to cancel.
6. When finished viewing all desired information, tap  **Back** to return to the OEM Diagnostics menu.

## VIEWING THE VEHICLE INSPECTION TEST RESULTS

Scan results are shown immediately following completion of a scan; and can also be viewed later using the **PREVIOUS VEHICLE** function available through the  **Menu** or **Home** screen. [\[See page 22\]](#)

Each report begins with a vehicle information tab that includes a Report ID, the vehicle’s description (**year/make/model**), the last six digits of the Vehicle Identification Number (**VIN**) and the odometer reading (**ODO**) at the time the scan was performed.

### Emissions Readiness Monitors Status

Indicates whether the vehicle is ready for an Emissions Test (Smog Check) based on DTCs present, Freeze Frame data, Monitor Status, MIL (Check Engine Light) status, State/Region, and Engine Type. Results are shown as “**Pass**” or “**Fail**”.

- Tap the **Emission Readiness Monitor** tab to view the OBD2 Diagnostics report. [\[See page 13\]](#)
- **Emission Readiness Monitor** - For a “Not Complete” result, drive cycle procedures can be found in the OBD2 Diagnostics screen. [\[See page 13\]](#)

### System Diagnostics (DTC Status Overview)

Gives a quick snapshot of all Diagnostic Trouble Codes (DTCs) found on the vehicle with “**Fault – DTCs reported**” or “**No Fault – no DTCs present**”.

- Tap the **Systems Diagnostics** tab to open the Scan All Systems window to view scan details. [\[See page 14\]](#)

### Vehicle Service Status

Some vehicles are capable of checking and reporting on their various service items. If available, the tablet displays these as individual tab segments as defined below. Use these results to share with customers or to create a service due task list.

- **Battery Life:** Indicates the current battery charge voltage and suggests if the battery requires replacement. The Battery Life field is color-coded to provide a visual indication of battery status: Green = good; Yellow = poor; Red = replace battery.
  - Tap the **Battery Life** tab to access the Battery/Alternator Test. [\[See page 43\]](#)
- **TPMS / Tire Pressure Readings:** Shows the status of the vehicle Tire Pressure Monitoring System (TPMS) and the individual tire pressures for all vehicle tires. The TPMS field is color-coded

to provide a visual indication of tire pressure status: Green = good; Red = low pressure.

- **Oil Life:** Shows the current oil life for the vehicles lubricating oil as a percentage of 100. The Oil Life field is color-coded to provide a visual indication of oil life status: Green = good; Red = poor.
- **Oil Level:** Shows if the level is normal or below the manufacturer's set threshold: Green = Good; Red = Low Level Warning.
- **Brake Pad Life – Front & Rear:** Shows the current measured brake pad life for the Front and Rear axle as a percentage of 100. The Brake Pad Life is color-coded and provides a visual status: Green = OK; Red = Not OK.
- **Transmission Fluid Temperature:** Shows the current measure temperature of the vehicle's Transmission Fluid Temperature. The temperature is color-coded and provides a visual status: Green = Good Condition; Red = Inspect.

### **Dashboard Warning Light Status**

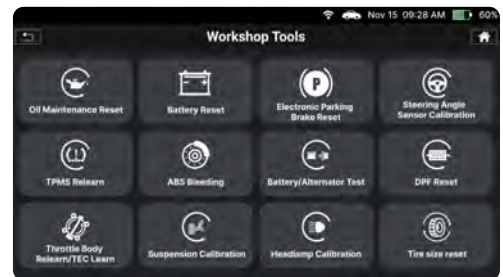
The tablet can read if the vehicle's systems are reporting a dashboard warning light status. If available for the vehicle under test, the tablet displays these as individual tab segments as defined below. Use these as part of the inspection process to confirm a lit dashboard warning light.

- **Airbag Dash Indicator:** Reports if the airbag dashboard light is currently ON or OFF. It is color-coded to provide a quick visual status: Red = ON; Green = OFF.
- **TPMS Warning Light:** Reports if the Tire Pressure Monitoring System (TPMS) dashboard light is currently ON or OFF. It is color-coded to provide a quick visual status: Red = ON; Green = OFF.
- **ABS Dash Indicator:** Reports if the Anti-Lock Brake System (ABS) dashboard light is currently ON or OFF. It is color-coded to provide a quick visual status: Red = ON; Green = OFF.

## WORKSHOP TOOLS

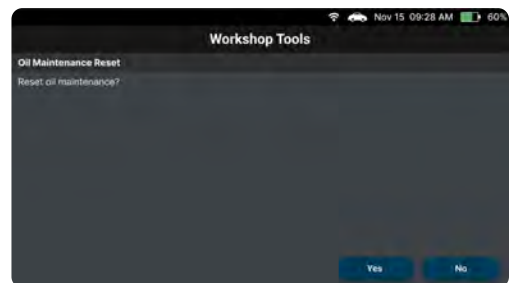
The WORKSHOP TOOLS tab allows you to perform several OEM services reset procedures. Depending on the vehicle being tested, it can offer up to 16 options:

- ☐ Oil Maintenance Reset
- ☐ Battery Reset
- ☐ Electronic Parking Brake (EPB) Reset
- ☐ Steering Angle Sensor Calibration
- ☐ TPMS Relearn
- ☐ ABS Bleeding
- ☐ Battery/Alternator Test, EV/HEV/PHEV Battery Health
- ☐ DPF Reset
- ☐ Throttle Body Relearn/ TEC Learn
- ☐ Maintenance Reset
- ☐ Transmission Reset
- ☐ Transmission Fluid Change Reset
- ☐ Transmission Fluid Level Check
- ☐ Suspension Calibration
- ☐ Headlamp Calibration
- ☐ Tire Size Reset



## OIL MAINTENANCE RESET

1. Tap **Oil Maintenance Reset** on the Workshop Tools screen.
  - An “instructional” dialog displays to confirm the selection.
  - Tap **Yes** to continue. Or, **No** to cancel.
  - A “*One moment please...*” message displays while the procedure is in process.
2. When the reset process has been completed, a confirmation message displays. Tap **Exit** to return to the Workshop Tools screen.
  - If the oil reset was not successful, an advisory message displays.





**NOTE:** If the Tablet cannot reset the Oil Maintenance Light, an “instructional” dialog displays, showing the manual procedures for resetting the indicator light. When finished viewing the instructions, tap **Back** to return to the Workshop Tools screen.

## BATTERY RESET

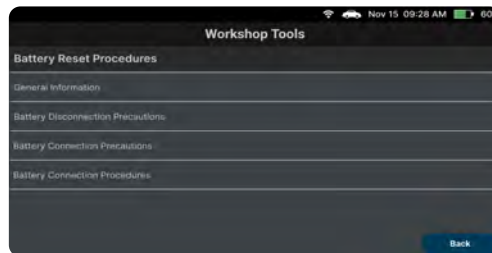
You can use the tablet to view the procedures for resetting the battery monitor system following battery replacement or perform battery reset OBD service (**for Audi, BMW, Ford, Volkswagen, and Volvo models only**).

### TO VIEW BATTERY RESET PROCEDURES:

1. Tap **Battery Reset** on the Workshop Tools screen.
  - The Battery Reset menu displays.
2. Tap **Battery Reset Procedures**.
  - The Battery Reset Procedures menu displays. The menu provides access to General Information, and procedures to be followed Battery Disconnection Precautions, Battery Connection Precautions, Battery Connection Procedures.



**NOTE:** If battery reset procedures are not available, an advisory message shows. Tap **Back** to return to the Workshop Tools screen.



3. Tap the **procedure** you wish to view.
  - The selected procedure displays.
4. When you have finished viewing the retrieved information, tap **Back** to return to the Battery Reset Procedures menu. Repeat **step #3** to view additional procedures.



- When you have finished viewing all desired procedures, tap **Back** to return to the Workshop Tools screen.

## TO PERFORM BATTERY RESET OBD SERVICE (BMW / Ford / Volvo):

1. Tap **Battery Reset** on the Workshop Tools screen.
  - The Battery Reset menu displays.
2. Tap **Battery Reset OBD Service** – available selection depends on the vehicle being serviced.
  - An “instructional” message displays.
3. Follow the instructions provided to prepare the vehicle for battery reset OBD service. When all necessary procedures have been performed, tap **Next** to continue.
  - A “Live Data” screen displays, if applicable.
4. Tap **Next** to continue.
  - A “One moment please...” message displays while the battery reset is in process.
5. If the battery reset process is successful, a “Reset Complete” message displays.
  - Tap **Exit** to return to the Workshop Tools.
  - If the battery reset process is not successful, a “Reset Fail” message displays. Tap **Back** to return to the Workshop Tools screen.

## TO PERFORM BATTERY RESET OBD SERVICE (Audi / Volkswagen):

1. Tap **Battery Reset** on the Workshop Tools screen.
  - The Battery Reset menu displays.
2. Tap **Battery Reset OBD Service**.
  - An “informational” screen display.
3. Tap **Next** to continue.
  - A series of “instructional” screens display, directing you to enter reference information for the battery (part number, manufacturer, serial number).
4. Tap **Next** as necessary to scroll the screen and enter the necessary information.
  - A “confirmation” screen display.
  - The screen shows the previously entered Battery part number, Battery manufacturer and Battery serial number.
5. Select the desired option:
  - To proceed with coding, tap **Carry out coding**. Proceed to **step 6**.
  - To re-enter battery reference information, tap **Repeat input**. Repeat **steps 3 and 4**.
  - To cancel the battery reset process, tap **Cancel**.
6. If battery coding was successful, a “confirmation” screen display. Tap **Back** to return to the Workshop Tools.
  - If battery coding was not successful, an “advisory” screen displays. Tap **Exit** to return to the Workshop Tools screen.

## ELECTRONIC PARKING BRAKE (EPB) RESET

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The Electronic Parking Brake (EPB) reset procedures vary between vehicle makes and models.



**NOTE:** If an error occurs while performing calibration procedures, an “advisory” message displays. Tap **Back** to return to the Workshop Tools screen.

1. Tap **EPB Reset** in the Workshop Tools screen.
  - A “One moment please...” message displays.
  - For some vehicles, one or more sub-menus display. Choose the desired module and/or option, as appropriate. Proceed to **step 2**.



**NOTE:** If EPB reset is not supported by the vehicle under test, an “advisory” message displays. Tap **OK** to return to the Workshop Tools screen.

2. One or more “informational/instructional” screens display.
  - Perform test procedures as directed. Tap **Next**, as appropriate, to scroll to the next screen.
3. For some vehicles, “status” screens display as each phase of the calibration procedure is successfully completed. Tap **Next**, as appropriate, to scroll to the next screen.
  - A “One moment please...” message displays while the procedure is in process.
  - A “results” screen displays when the calibration procedure has completed.



**NOTE:** If the procedure is stopped due to a communication error, an “advisory” message display. Tap **Back** to return to the Workshop Tools screen.

4. Tap **Back** to return to the Workshop Tools screen.

## STEERING ANGLE SENSOR (SAS) CALIBRATION

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The Steering Angle Sensor Calibration function is available for **BMW, Chrysler, Ford, GM, Hyundai, Nissan, Toyota, Volkswagen**, and **Volvo** vehicles only. Calibration procedures vary between vehicle makes and models.



**NOTE:** If an error occurs while performing calibration procedures, an “advisory” message display. Tap **Exit** to return to the Workshop Tools screen.

1. Tap **Steering Angle Sensor Calibration** in the Workshop Tools screen.
  - For some vehicles, a sub-menu displays. Choose the desired option. Proceed to **step 2**.



**NOTE:** If SAS calibration is not supported by the vehicle under test, an “advisory” message display. Tap **OK** to return to the Workshop Tools screen.

2. A “One moment please...” message displays, followed by one or more “informational/ instructional” screens.
  - Perform test procedures as directed. Tap **Next** or **Continue**, as appropriate, to scroll to the next

screen. Or, tap **End** or **Exit** to terminate the procedure.

3. For some vehicles, “status” screens display as each phase of the calibration procedure is successfully completed. Tap **Next**, as appropriate, to scroll to the next screen.
  - A “results” screen displays when the calibration procedure has been completed.
4. Tap **End** or **Exit**, as appropriate, to return to the SAS Calibration menu.
5. Tap **Back** to return to the Workshop Tools screen.

## ABS BLEEDING

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The ABS Bleeding function is available for **Chrysler, GM, Hyundai/KIA, Mazda, Toyota, Ford, Honda, Nissan, Mitsubishi, Subaru, Volvo, Mercedes, Volkswagen, BMW**, and **Jaguar** vehicles only. Procedures vary between vehicle makes and models.



**NOTE:** If an error occurs while performing ABS Bleeding procedures, an “advisory” message display. Tap **Exit** or **Back**, as necessary, to return to the Workshop Tools.



**NOTE:** If ABS bleeding is not supported for the vehicle under test, an “advisory” message display. Tap **OK** to return to the Workshop Tools.

1. Tap **ABS Bleeding** on the Workshop Tools screen.
  - One or more sub-menus will display. Select the desired options, then proceed to **step 2**.
2. One or more “informational/ instructional” screens display.
  - Perform test procedures as directed. Tap **Next** to scroll to the next step.
3. For some vehicles, “status” screens display as each phase of the calibration procedure is successfully complete. Tap **Next** to scroll to the next step.
  - A “results” message displays when the procedure has completed.
4. Tap **End** to close the results message.
5. Tap **Back** to return to the Workshop Tools screen.

## DPF RESET

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Use this function to initialize the regeneration of the vehicle’s diesel particulate filter, or DPF, to prevent it from causing damage because of stuck of soot and ash in the vehicle’s exhaust system. It also initializes the sensor and DPF component after they are replaced, when the DPF warning light came on, or when replacing the DPF pressure sensor.

1. Tap **DPF Reset** on the Workshop Tools screen.



**NOTE:** If the DPF Reset is not supported by the vehicle under test, an “advisory” message displays. Tap **Exit** to return to the Workshop Tools screen.





**NOTE:** The DPF Reset is only performed on Diesel vehicle.

- An “instructional” dialog displays to confirm selection. Select **Yes** to continue. Or, **No** to cancel.
  - A “One moment please...” progress dialog displays.
2. The DPF Reset menu displays, select the desired option.
  3. Tap the **DPF Regeneration Procedure**.
    - The DPF Regeneration Procedure screen displays.




**NOTE:** If the vehicle under test does not support DPF Regeneration Procedure, an “information” screen displays the procedures for “passive” DPF regeneration. Choose **Back** to return to the DPF Reset menu.

4. Choose **Next** to continue.
  - An “informational” screen displays the procedures for “passive” or “active” DPF regeneration, as applicable. Choose **Back** to return to the DPF Reset Menu.
5. Tap the **DPF OBD Service**.
  - A “One moment” message displays, followed by the Diesel Particulate Filter Reset menu. Select the desired option.
  - An “instructional” screen displays. Prepare the vehicle for test as directed.
6. Choose **Next** to continue.
  - A series of “status” screens display while the routine is in process.
  - A “confirmation” screen displays when the routine is completed.



**NOTE:** If the routine does not complete successfully, an “advisory” message displays. Choose **Exit** to return to the DPF Reset menu.

7. Tap **End** to return to the DPF Reset menu, then tap the  **Back** icon at the top of the page to return to the Workshop Tools screen.

## BATTERY / ALTERNATOR TEST

### TO PERFORM A CHARGING SYSTEM (ALTERNATOR) CHECK:

1. Tap **Battery/Alternator Test** on the Workshop Tools screen.
  - The Battery / Alternator Test menu displays.
2. Tap **Alternator Test**.
  - An “instructional” message shows.
3. Start and warm the engine to normal operating temperature. Turn on the headlights. Tap **Continue** to proceed.
  - An “instructional” message shows.

4. Press the accelerator pedal to raise engine speed to 2000 RPM and maintain the engine speed.
  - When engine speed is within the required range, the alternator test begins. A progress screen shows.
  - When the “countdown” timer expires, an “instructional” message shows.
5. Turn the vehicle’s headlights off and return the engine to idle speed.
  - A “One moment please...” message displays while the test results are retrieved.
6. When the alternator check is complete, a results screen shows charging system voltage and indicates whether the charging system is within acceptable limits.
7. Tap **Back** to return to the Battery/Alternator Test menu.
8. Tap **Back** again to return to the Workshop Tools screen.

## VIEW ALTERNATOR LIVE DATA

1. Tap **Battery/Alternator Test** on the Workshop Tools screen.
  - The Battery/Alternator Test menu displays.
2. Tap **Alternator Live Data**.
  - The Alternator Live Data screen displays.
3. When you are finished viewing the Alternator Live Data, tap **Back** to return to the Battery/Alternator Test menu.

## PERFORM A BATTERY CHECK ONLY

1. Tap **Battery/Alternator Test** on the Workshop Tools screen.
  - The Battery/Alternator Test menu displays.
2. Tap **Battery Test**.
  - An “instructional” message displays, showing the procedures to prepare the vehicle for the battery check.
3. Prepare the vehicle for the battery check:
  - Turn the engine off.
  - Place the transmission in **PARK** or **NEUTRAL** and set the parking brake.
  - Make a visual check of the battery’s condition. If the battery terminals are corroded or other damage is present, clean or replace the battery as appropriate.
  - For “unsealed” batteries, make sure the water level in each cell is above the battery plates.
  - Turn the ignition on. **DO NOT** start the engine.
4. Tap **Continue** to proceed.



**NOTE:** If the engine is running, an advisory message shows. Turn the engine off, then turn the ignition on. **DO NOT** start the engine. Tap **Continue** to proceed.

- An “instructional” message displays.

5. Turn the vehicle's headlights on, then tap **Continue** to proceed.
  - A "countdown" message shows while the battery check is in process.
6. Turn the vehicle's headlights off, then tap **Continue** to proceed.
  - An "instructional" message shows.
    - If battery voltage is **less than 12.1 volts**, an advisory message shows. Turn the ignition off and disconnect the tablet from the vehicle. Fully charge the battery, then repeat the battery check.
    - If battery voltage is **between 11.8 and 12.1 volts**, a "Battery voltage is low, this may affect the accuracy of the test results." message displays.
    - If battery voltage is **greater than 11.8 volts**, an "instructional" message show.
7. Start the vehicle's engine. Allow the engine to run for several seconds, then turn the engine off. Repeat for a total of **three** "start/stop" cycles.



**NOTE:** If the Scan Tool did not detect "cranking status" for the vehicle's engine, an advisory message shows. Tap **Retest** to repeat the battery check or tap **Back** to return to the Battery/Alternator Test menu.

8. When the battery check is complete, a results screen displays with the battery's status.
9. Tap **Back** to return to the Battery/Alternator Test menu.
10. Tap **Back** again to return to the Workshop Tools screen.

## VIEW BATTERY LIVE DATA

1. Tap **Battery/Alternator Test**.
  - The Battery/Alternator Test menu displays.
2. Tap **Battery Live Data (12 Volt)**.
  - The Battery Live Data (12 Volt) screen displays.
3. When you are finished viewing the Battery Live Data (12 Volt), tap **Back** to return to the Battery/Alternator Test menu.

## EV/HEV/PHEV BATTERY HEALTH

The Tablet can perform a check of the vehicle's battery and alternator system (or hybrid/EV battery system) to ensure the system is operating within acceptable limits.

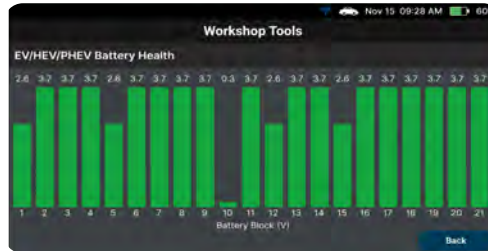
1. Tap **EV/HEV/PHEV Battery Health** in the Workshop Tools screen.
  - The EV/HEV/PHEV Battery Health menu displays.



**NOTE:** If the Hybrid/EV Battery Test is not supported by the vehicle under test, an "advisory" message displays. Tap **Exit** to return to the Workshop Tools screen.

- If the vehicle is not an electric or hybrid vehicle, the Battery/Alternator Test menu displays.

2. Tap **EV/HEV/PHEV Battery Health** to display a graphical representation of the current state of charge for all the cells within the battery pack.



3. Tap **Battery Live Data (12 Volt)** in the menu to view real time values of the battery (i.e., battery current, battery temperature, battery state of charge, battery state of health, etc.).
4. When finished, tap **Back** to return to the Battery/Alternator Test menu.
5. Tap **Back** again to return to the Workshop Tools screen.

## PREVIOUS VEHICLES

The Tablet has a built-in memory that stores OBD2 Diagnostic reports and Workshop Tools reports whenever you conduct a test.



## VIEWING PREVIOUS VEHICLES

1. Tap the **Previous Vehicle** tab on the Home Screen.
2. The Previous Vehicles menu displays, entries on the *Previous Vehicles* tab are listed in reverse chronological order (most recent scan first). Each entry in the list provides the following information:



**NOTE:** If there are no vehicles currently stored in the Tablet, an advisory message displays. Tap **Home** to return to the Home Screen.

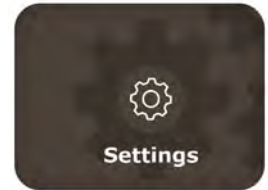
Date	Time	Vehicles	DTCs	Report Type	Status
12/11/2022	10:02 AM	2001 BMW 3 Series	4	Diagnostic Report/PostScan	
12/11/2022	04:38 AM	2018 Audi A8 V8, 3.0L, Supercharged	17	Customer Report/PreScan	
11/11/2022	06:14 PM	2020 Chevrolet Equinox I-4, Z 4L (VIN 8H11 = K)	11	Collision Industry Report/PreScan	
11/11/2022	04:29 PM	2015 Chevrolet Equinox I-4, Z 4L (VIN 8H11 = K)	5	N/A	

- **Date** – The date on which the scan was performed.
  - **Time** – The time at which the scan was performed.
  - **Vehicle** – The year, make, model, trim and engine size of the tested vehicle.
  - **DTCs** – The total number of Diagnostic Trouble Codes retrieved by the scan.
  - **Report Type** – Identifies whether the Vehicle Inspection was saved as a Diagnostic Report, a Customer Report, or a Collision Industry Report, as well as whether it was saved as a PreScan or PostScan report.
  - **Cloud Icon** – This status indicates that all scanned items have been successfully uploaded to the server.
  - **Cloud Icon w/ X** – This status indicates that there is at least 1 system that was not uploaded or failed to upload to the server.
3. The report view differs based on the Scan Type previously performed:
    - **OBD2 Diagnostics** – the OBD2 Diagnostic test result screen displays. [\[See page 12\]](#)
    - **Scan All Systems** – the test result of all systems displays. [\[See page 27\]](#)
    - **Vehicle Inspection** – the Vehicle Inspection Health report displays [\[See page 33\]](#).
    - Navigate as usual to view the report.
  4. When finished, tap **Back** to return to the Previous Vehicles screen.

## SETTINGS

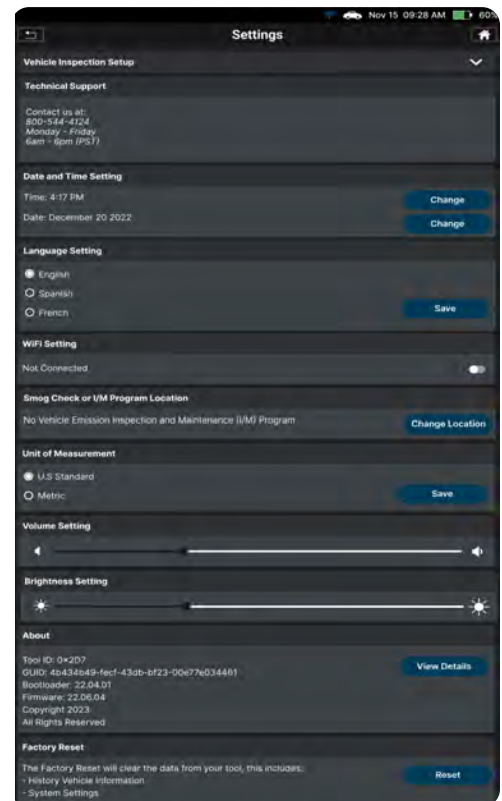
The Tablet offers several adjustments and settings to configure the tool to your particular needs. The following functions can be performed:

- ❑ **Vehicle Inspection Setup**
- ❑ **Technical Support**
- ❑ **Date and Time Setting**
- ❑ **Language Setting**
- ❑ **Wi-Fi Setting**
- ❑ **Smog Check or I/M Program Location**
- ❑ **Unit of Measurement**
- ❑ **Volume Setting**
- ❑ **Brightness Setting**
- ❑ **About (Version Information)**
- ❑ **Factory Reset**



**To enter the Settings mode:**

1. Tap the **Settings** tab on the Home Screen.
2. You can also access this page by tapping on the **Menu** icon in the upper left corner of the page and tapping on **Settings**.
  - The Settings screen displays.
3. Swipe **up** or **down** to scroll to the desired option.
4. Make adjustments and settings as outlined in the next pages.
5. To return back to the Home screen, either tap the **Back** icon on the top left, or tap the **Home** icon on the top right.

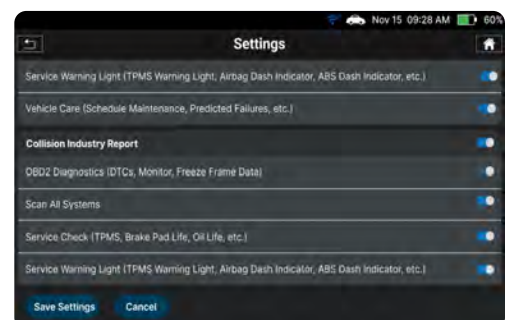


## VEHICLE INSPECTION SETUP

1. Tap **Change** in the **Vehicle Inspection Setup** tab.
  - The Vehicle Inspection Setup screen displays.
2. **Select** or **unselect** functions you wish to show on reports, tap **Save Settings** to save your changes.




**NOTE:** The OBD2 Diagnostics (DTCs, Monitor, Freeze Frame Data), MIL DTC Diagnostic Information and vehicle Care (Schedule Maintenance, Predicted, etc.) are always turned ON, this item cannot be turned OFF.





**NOTE:** When you turn ON/OFF main item, the tablet will turn ON/OFF all button of sub-item below (except OBD2 Diagnostics). In case of, you do not turn all buttons of sub-item, the button in main item is OFF.

3. Tap the **Cancel** button or  **Home** icon on the top right to return to the Home Screen.

## TECHNICAL SUPPORT

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The Innova Electronics technical team is here to help if you encounter any issues or if you have any questions. You can reach them directly with the tablet from Monday through Friday, 6:00AM to 6:00PM, Pacific Time.

### Technical Support

Contact us at:

800-544-4124  
Monday - Friday  
6 am - 6 pm (PST)

## DATE AND TIME SETTING

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Here you can set the tablet's current date and time.

### Setting Date and Time Formats

1. Tap the **Settings** tab on the Home Screen and scroll to the **Date and Time Setting** field.
  - The Date and Time Setting field shows the currently set date and time for the tablet.



2. To specify the current date:
  - Tap **Change** the date format field.
    - The Set Date dialog displays.
  - Scroll the “**month**,” “**day**,” and “**year**” fields to set the current calendar date, then tap **OK** to save.
    - Tap **Cancel** to close the Set Date dialog and retain the previous date.
3. To specify the current time:
  - Tap **Change** the time format field.
    - The Set Time dialog displays.
  - Scroll the “**hour**,” “**minute**,” and “**am/pm**” fields to set the current time, then tap **OK** to save.
    - Tap **Cancel** to close the Set Time dialog and retain the previous time.

## LANGUAGE SETTING



Let you set the display language for the tablet to English, Spanish or French.

### Setting the Display Language

1. On the Settings page, scroll to the **Language Setting** field.
2. Select the desired language, tap **Save** to save your changes.

## WI-FI SETTING

To access all the features provided in your diagnostic tablet, a local Wi-Fi network connection is necessary.

### Connecting to a Wi-Fi Network



**NOTE:** Before making a Wi-Fi connection, you need to successfully register to the **RepairSolutionsPRO** App. [[See page 8](#)]

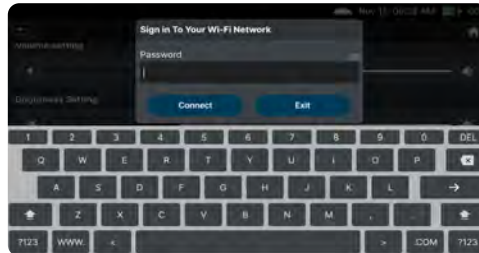
1. On the **Settings** page scroll to the **Wi-Fi Setting** field.
  - If it is the first time doing a Wi-Fi setup, the network name is shown as “Not Connected.”
  - If you are currently connected to a Wi-Fi network, the network name is shown.
2. Tap the **Connect Wi-Fi** icon.
  - If you haven't registered for the RSPRO App yet, the screen will show “The QR Code of the RSPRO App” for you to download it. To pair and register your tablet with the RSPRO app. [[See page 8](#)]
3. With the tablet registered the RepairSolutionsPRO App, tap **OK** to perform the Wi-Fi connection.
  - The Sign in To Your Wi-Fi Network dialog displays.
  - The dialog lists all of the available Wi-Fi networks within the tablet's range.





4. Swipe up or down to scroll to the desired Wi-Fi network, then tap your **network name**.



- To cancel changes and retain your current network connection, tap **Cancel** to return to the Settings field.
- The Enter Password dialog displays.



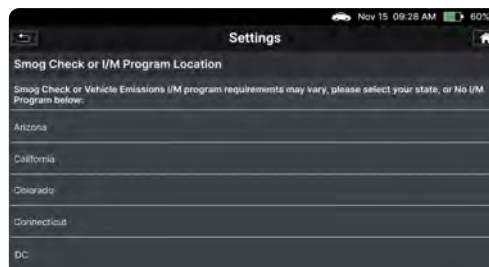
5. Tap the **Password text box**, then enter the Wi-Fi network password using the keyboard.
  - As you type, the password displays as a series of bullets by default. Tap **show** to show the password as you type. Tap **hide** to display the password as bullets.
6. When the password has been entered, tap **Connect** to save your changes and connect to the selected Wi-Fi network.
  - Tap **Cancel** to cancel your changes and return to the Sign in To Your Wi-Fi Network dialog to select a different network.
7. Tap the  **Back** icon on the top left to return to the Settings menu. Or tap the  **Home** icon on the top right to return to the Home Screen.

## SMOG CHECK OR I/M PROGRAM LOCATION

Use this function to select the state where the smog (emissions) inspection will be performed.

### Specifying the State:

1. On the Settings page, scroll to the **Smog check or I/M Program Location** field.
  - If you previously specified a location, the name of the retailer is shown in the upper left corner of the Location field.
2. Tap **Change Location**.
  - The Smog check or I/M Program Location dialog displays.



3. When the desired location has been selected, the tablet will automatically save your changes and return to the

Settings field.

4. Tap the  **Back** icon on the top left to return to the Settings menu. Or tap the  **Home** icon on the top right to return to the Home Screen.

## UNIT OF MEASUREMENT

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Sets the tablet's numerical unit of measurement – US (Imperial) or Metric.

1. On the Settings page, scroll to the **Unit of Measurement** field.



2. Tap the desired unit of measurement; the tool automatically saves your changes.

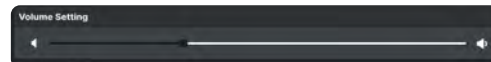
## VOLUME SETTING

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Sets the volume level of the tablet's audio speakers.

### Adjusting Speaker Volume:

1. On the Settings page, scroll to the **Volume Setting** field.
2. Use the Volume “slider” to increase or decrease speaker volume:



- Touch and slide right to make the volume louder.
- Touch and slide left to make the volume softer.
- The current Volume setting shows above the slider as you adjust the slider position.

## BRIGHTNESS SETTING

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Sets the tablet's LCD screen display brightness.

### Adjusting Display Brightness:

1. On the Settings page, scroll to the **Brightness Setting** field.



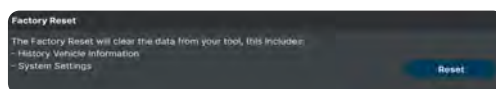
2. Use the Brightness “slider” to increase or decrease display brightness:

- Touch and slide right to make the display brighter.
- Touch and slide left to make the display darker.
- The current Brightness setting shows above the slider as you adjust the slider position.

## FACTORY RESET

The Factory Reset will clear the data from your tablet, including History Vehicle Information and System Settings.

1. On the Settings page, scroll to the **Factory Reset** field.



2. Tap **Reset** to clear data from your tablet. When a factory reset function is performed, the tablet will reset to apply the change.

## ABOUT

The **About** field shows the tablet's Tool Version. This screen also lets you check for software updates or report an issue with the tablet.

1. On the Settings page, scroll to the **About** field.
  - The field shows the tablet's current firmware version (**FW**), bootloader version (**BL**), **Tool ID**, and **GUID** for the tablet.
2. Tap **View Details** for more information about the tablet's version.
  - The Version Information screen displays.



3. To check for updates, tap the **Check for Update** button.
  - When the tablet is connected to the Internet and an update is available, the tool will display a dialog box containing information about the update, such as FW, BL, and DB. Tap **Close** to return to the Version Information screen.



- When the tablet is connected to the Internet and an update is available, the tablet will automatically prompt the user with a 'Check for Updates' message dialog box if the user is on the Home, Settings, or Support screen. If the user selects the 'Close' button, an orange update notification icon will persistently appear at the top of the screen until the tablet's software is updated.



4. To perform updates, please refer to the **Tool Firmware Updates** section below. [\[See page 12\]](#)

## TOOL FIRMWARE UPDATES

The following provides detailed instructions on how to download the **INNOVA® OBD Tool Updater** application and update your INNOVA OBD2 diagnostic tablet.

### DOWNLOAD & INSTALL APPLICATION

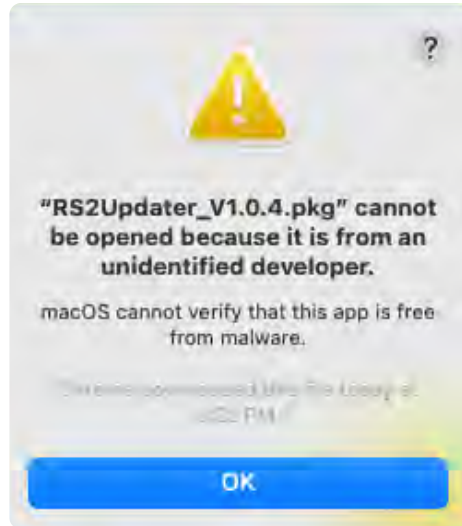
#### Windows OS

1. From your Windows PC, download the software by clicking on this link: [DOWNLOAD](#)
  - The application "**OBDToolUpdaterPC\_V1.3.1\_Live.exe**" begins downloading to your Windows PC.
2. Locate the downloaded application and double click the file to begin installation.
  - If a Windows protection pop-up displays.
    - Click on the "**More info**" link.
    - Click on "**Run Anyway**" to proceed with the installation.
3. The InstallShield Wizard launches.
4. Follow the prompts to complete the installation.
  - See **Updating Your Tablet** section to proceed.

#### MacOS

1. From your Mac, download the software by clicking on this link: [DOWNLOAD](#)

- The file “**RS2UpdaterMac\_V1.0.4\_Live.zip**” begins downloading to your Mac.
- 2. Locate the downloaded application on your Downloads folder.
- 3. Unzip the file and double click the “**RS2Updater\_V1.0.4.pkg**” file to begin installation.
  - If the following security protection pop-up displays, click **OK** to close the window.



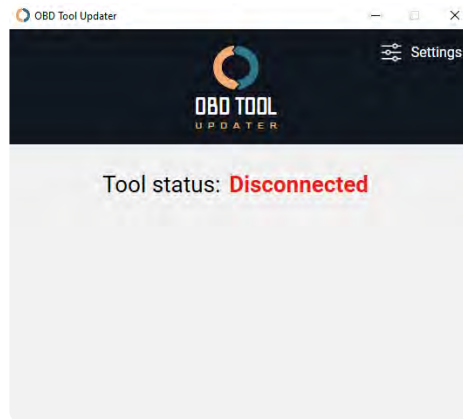
- ‘Right click’ on the **RS2Updater\_V1.0.4.pkg** file and click “Open”.
- Safely continue the installation by clicking the “Open” button.



4. Follow the prompts to complete the installation.
  - See **Updating Your Tablet** section to proceed.

## UPDATING YOUR TABLET

1. Locate and Open the “**OBD Tool Updater**” application.
  - Double click to launch it.
  - Once open, the software will initially display “**Disconnected**”.

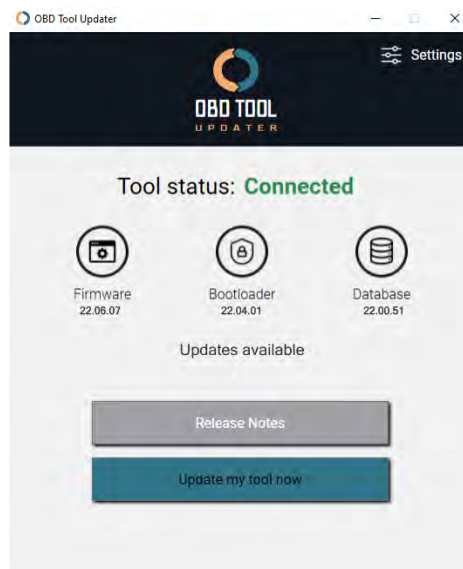


2. Using a standard mini-USB cable, connect your tool to your computer.
  - Wait a few seconds for the software to detect it.

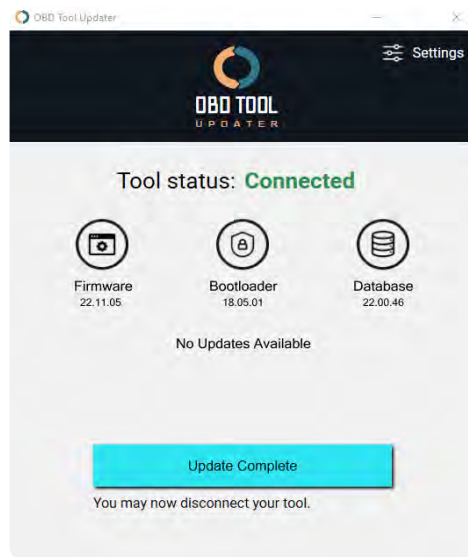


**NOTE:** If using a USB charging cable, and not a USB data cable, you will get the 'Disconnected' message. Charging Cables: Can only charge devices, but cannot transfer data. These are commonly called 'Charge-only' cables. Data Cables: Does both; charges your devices and transfers data.

3. Upon a good connection, the status changes to “**Connected**” and displays the tool's current Firmware, Bootloader, and Database versions.



- Wait a few more seconds for the software to check for updates.
  - If an update is available, the following displays:
  - If an update is not available, a “*No Updates Available*” message displays:
4. If an update is available, click the “**Update my tool now**” button to begin.
    - The update is divided into individual steps such as bootloader, firmware, and database. Please be aware that this **process may take up to 25 minutes**. Do not disconnect the tool or close the app until all updates have been completed.
    - Click on the “**Release Notes**” button to view what features and functions were added or corrected with this new version.
  5. If the update was successful, the message “*Update Complete*” displays. At this point the tool has been updated and can be safely disconnected.

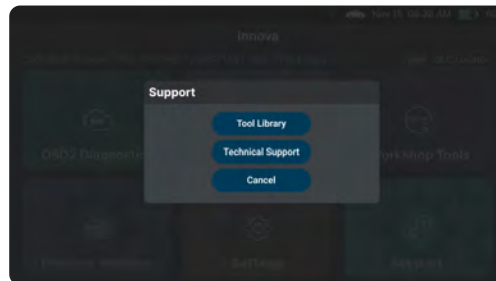


- If an error occurred during the update, the progress bar turns red and stops with the message “Update Error”. Please disconnect the tool and follow the steps indicated above to attempt the update process again.

## SUPPORT

The **SUPPORT** tab includes various support resources, including:

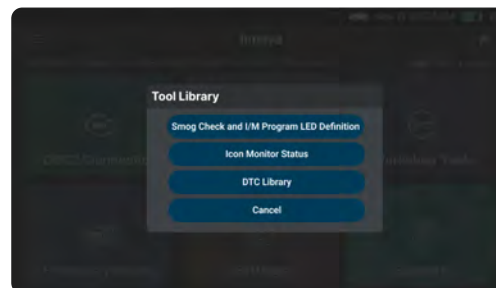
- ❑ **Tool Library** – access tool definitions and terminology.
- ❑ **Technical Support** – you can reach them directly with the tablet from Monday through Friday, 6:00AM to 6:00PM, Pacific Time.



## TOOL LIBRARY

The Tool Library contains valuable reference information and includes:

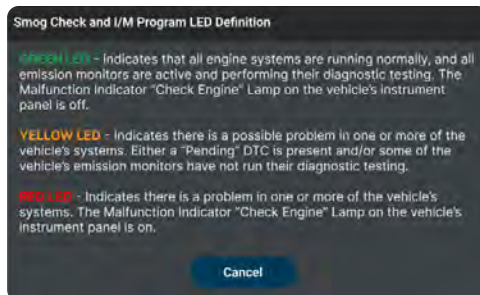
- **Smog Check or I/M Program LED Definition** - Defines and provides more information on the Tablet's red/yellow/green SYSTEM STATUS LEDs.
- **Icon Monitor Status** - Defines the icon monitor status' color coding and provides tips on how to proceed.
- **DTC Library** – Provides quick access to OBD2 DTC definitions.



## SMOG CHECK AND I/M PROGRAM LED DEFINITION

1. Tap the **Smog Check and I/M Program LED Definition** in the Tool Library menu.
  - The Smog Check and I/M Program LED Definition dialog displays.

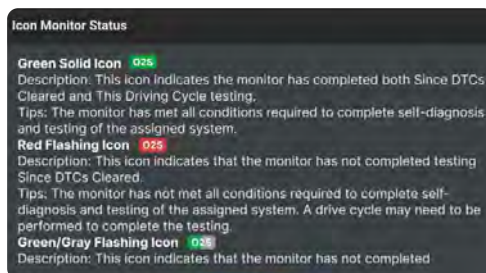




- When finished, tap the **Back** icon on the top left to return to the Tool Library menu. Or tap the **Home** icon on the top right to return to the Home Screen.

## ICON MONITOR STATUS

- Tap the **Icon Monitor Status** button in the Tool Library menu.
  - The Icon Monitor Status dialog displays.

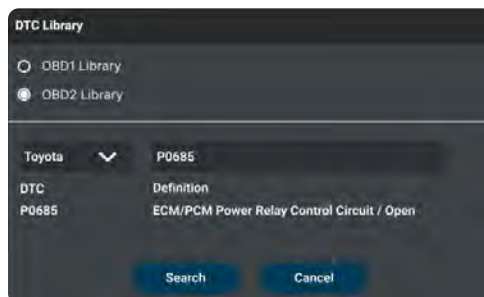


- When finished, tap the **Back** icon on the top left to return to the Tool Library menu. Or tap the **Home** icon on the top right to return to the Home Screen.



## DTC LIBRARY

Search for the Diagnostic Trouble Code (DTC) definitions for most 1996 and newer vehicles.

- Tap the **DTC Library** in the Tool Library menu.
  - The DTC Library dialog displays.



- Tap on **Make** and scroll to select the vehicle's make from the pull-down menu.

3. Tap on **Enter DTC Code** box, enter the numeric DTC you want to define using the keyboard.
  - Be sure to include all characters – letters and numbers.
4. Tap **Search** to begin the search.
  - Search dialog appears with the retrieved definition.
5. Tap **Cancel** to return to the Tool Library menu screen.
6. When finished, tap the  **Back** icon on the top left to return to the Tool Library menu. Or tap the  **Home** icon on the top right to return to the Home Screen.

## DLC LOCATOR

Use this search function to quickly find the location of the Data Link Connector (DLC) for a specified vehicle.

### USING THE DLC LOCATOR

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1. Tap the **DLC Locator** icon on the Home Screen.
2. Tap **Make** to display the Select Make menu. Select the **▼ arrow** button for the desired vehicle manufacturer.
3. Tap **Year** to display the Select Year menu. Select the **▼ arrow** button for the vehicle model year.
4. Tap **Model** to display the Select Model menu. Select the **▼ arrow** button for the desired vehicle model.
5. Tap the **Search** button.
  - The DLC Locator screen for the selected vehicle displays.
  - The DLC Location screen shows a description of the DLC location and whether the DLC is “covered” or “uncovered,” and includes a picture of the DLC location.



6. Tap the **Close** button to exit the DLC Locator screen and return to the Home screen.

## **WARRANTY+ CUSTOMER SERVICE**

### **LIMITED WARRANTY**

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The Manufacturer warrants to the original purchaser that this unit is free of defects in materials and workmanship under normal use and maintenance for a period of one (1) year from the date of original purchase.

If the unit fails within the one (1) year period, it will be repaired or replaced, at the Manufacturer's option, at no charge, when returned prepaid to the Service Center with Proof of Purchase. The sales receipt may be used for this purpose. Installation labor is not covered under this warranty. All replacement parts, whether new or remanufactured, assume as their warranty period only the remaining time of this warranty.

This warranty does not apply to damage caused by improper use, accident, abuse, improper voltage, service, fire, flood, lightning, or other acts of God, or if the product was altered or repaired by anyone other than the Manufacturer's Service Center.

The Manufacturer, under no circumstances shall be liable for any consequential damages for breach of any written warranty of this unit. This warranty gives you specific legal rights, and you may also have rights, which vary from state to state. This manual is copyrighted with all rights reserved. No portion of this document may be copied or reproduced by any means without the express written permission of the Manufacturer. **THIS WARRANTY IS NOT TRANSFERABLE.** For service, send via U.P.S. (if possible) prepaid to Manufacturer. Allow 3-4 weeks for service/repair.

### **CUSTOMER SERVICE**

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Our ASE Certified technical staff is here to help if you have any questions or require service. For information on UPDATES and OPTIONAL ACCESSORIES, please contact your local store, distributor or Innova's Service Center.

**USA & Canada:** (800) 544-4124

*Monday through Friday: 6:00 AM to 6:00 PM PST*

**All others:** (714) 241-6802

*Monday through Friday: 6:00 AM to 6:00 PM PST*

**Web:** [www.innova.com](http://www.innova.com)

## GLOSSARY

### OBD2 TERMINOLOGY

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The following terms and their definitions are related to OBD2 systems.

- **Powertrain Control Module (PCM)** - The PCM is the OBD2 accepted term for the vehicle's "on-board computer." In addition to controlling the engine management and emissions systems, the PCM also participates in controlling the powertrain (transmission) operation. Most PCMs also have the ability to communicate with other computers on the vehicle (ABS, ride control, body, etc.).
- **Monitor** - Monitors are "diagnostic routines" programmed into the PCM. The PCM utilizes these programs to run diagnostic tests, and to monitor operation of the vehicle's emissions-related components or systems to ensure they are operating correctly and within the vehicle's manufacturer specifications. Currently, up to fifteen Monitors are used in OBD2 systems. Additional Monitors will be added as the OBD2 system is further developed.



**NOTE:** *Not all vehicles support all fifteen Monitors*

- **Enabling Criteria** - Each Monitor is designed to test and monitor the operation of a specific part of the vehicle's emissions system (EGR system, oxygen sensor, catalytic converter, etc.). A specific set of "conditions" or "driving procedures" must be met before the computer can command a Monitor to run tests on its related system. These "conditions" are known as "**Enabling Criteria**." The requirements and procedures vary for each Monitor. Some Monitors only require the ignition key to be turned "**On**" for them to run and complete their diagnostic testing. Others may require a set of complex procedures, such as, starting the vehicle when cold, bringing it to operating temperature, and driving the vehicle under specific conditions before the Monitor can run and complete its diagnostic testing.
- **Complete / Incomplete** - The terms "**Complete**" or "**Incomplete**" are used throughout this manual. "**Complete**," means the PCM **has** commanded a particular Monitor to perform the required diagnostic testing on a system to ensure the system is operating correctly (within factory specifications). The term "**Incomplete**" means the PCM **has not** yet commanded a particular Monitor to perform diagnostic testing on its associated part of the emissions system.
- **Trip** - A Trip for a particular Monitor requires that the vehicle is being driven in such a way that all the required "Enabling Criteria" for the Monitor to run and complete its diagnostic testing are met. The "Trip Drive Cycle" for a particular Monitor begins when the ignition key is turned "**On**." It is successfully completed when all the "Enabling Criteria" for the Monitor to run and complete its diagnostic testing are met by the time the ignition key is turned "**Off**." Since each of the fifteen monitors is designed to run diagnostics and testing on a different part of the engine or emissions system, the "Trip Drive Cycle" needed for each individual Monitor to run and complete varies.
- **OBD2 Drive Cycle** - An OBD2 Drive Cycle is an extended set of driving procedures that takes into consideration the various types of driving conditions encountered in real life. These conditions may include starting the vehicle when it is cold, driving the vehicle at a steady speed (cruising), accelerating, etc. An OBD2 Drive Cycle begins when the ignition key is turned "On" (when cold) and ends when the

vehicle has been driven in such a way as to have all the “Enabling Criteria” met for all its applicable Monitors. Only those trips that provide the Enabling Criteria for all Monitors applicable to the vehicle to run and complete their individual diagnostic tests qualify as an OBD2 Drive Cycle. OBD2 Drive Cycle requirements vary from one model of vehicle to another. Vehicle manufacturers set these procedures. Consult your vehicle’s service manual for OBD2 Drive Cycle procedures.



**NOTE:** Do not confuse a “Trip” Drive Cycle with an OBD2 Drive Cycle. A “Trip” Drive Cycle provides the “Enabling Criteria” for one specific Monitor to run and complete its diagnostic testing. An OBD2 Drive Cycle must meet the “Enabling Criteria” for all Monitors on a particular vehicle to run and complete their diagnostic testing.

- **Warm-up Cycle** - Vehicle operation after an engine off period where engine temperature rises at least 40°F (22°C) from its temperature before starting, and reaches at least 160°F (70°C). The PCM uses warm-up cycles as a counter to automatically erase a specific code and related data from its memory. When no faults related to the original problem are detected within a specified number of warm-up cycles, the code is erased automatically.

## OBD2 MONITORS

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To ensure the correct operation of the various emissions-related components and systems, a diagnostic program was developed and installed in the vehicle’s on-board computer. The program has several procedures and diagnostic strategies. Each procedure or diagnostic strategy is made to monitor the operation of, and run diagnostic tests on, a specific emissions-related component or system. These tests ensure the system is running correctly and is within the manufacturer’s specifications. On OBD2 systems, these procedures and diagnostic strategies are called “Monitors.”

Currently, fifteen Monitors are supported by OBD2 systems. Additional monitors may be added because of Government regulations as the OBD2 system grows and matures. Not all vehicles support all fifteen Monitors. Additionally, some Monitors are supported by “spark ignition” vehicles only, while others are supported by “compression ignition” vehicles only.

Monitor operation is either “**Continuous**” or “**Non-Continuous**,” depending on the specific monitor.

### CONTINUOUS MONITORS

Three of these Monitors are designed to constantly monitor their associated components and/or systems for proper operation. Continuous Monitors run constantly when the engine is running.

**CCM** = Comprehensive Component Monitor

**MIS** = Misfire Monitor

**FUEL** = Fuel System Monitor

## NON-CONTINUOUS MONITORS

The other twelve Monitors are “non-continuous” Monitors. “Non-continuous” Monitors perform and complete their testing once per trip.

**O2S** = Oxygen Sensor Monitor

**HTR** = Oxygen Sensor Heater Monitor

**CAT** = Catalyst Monitor

**HCAT** = Heated Catalyst Monitor

**EGR** = EGR (Exhaust Gas Recirculation) System Monitor

**EVAP** = EVAP System Monitor

**AIR** = Secondary Air System Monitor



**NOTE:** The following Monitors became standard beginning in 2010. The majority of vehicles produced before this time will not support these Monitors.

**HCCAT** = NMHC (Non-Methane Hydrocarbon Converting) Catalyst Monitor

**NCAT** = NOx/SCR Aftertreatment Monitor

**BP** = Boost Pressure System Monitor

**EGS** = Exhaust Gas Sensor Monitor

**PM** = PM (Particulate Matter) Filter Monitor

## ADDITIONAL TERMINOLOGY + ACRONYMS

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- **ABS** = Anti-Lock Brakes
  - **DLC** = Data Link Connector (vehicle’s data port)
  - **DTC** = Diagnostic Trouble Codes
  - **KOEO** = Key On, Engine Off
  - **KOER** = Key On, Engine Running
  - **MIL** = Malfunction Indicator Lamp (Check Engine Light)
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- **OBD** = On Board Diagnostics
- **OBD2 / OBD II** = On Board Diagnostics, Second Generation
- **OEM** = Original Equipment Manufacturer
- **PID** = Parameter Identification Data
- **SRS** = Safety Restraint System
- **TPMS** = Tire Pressure Monitoring System
- **TSBs** = Technical Service Bulletins





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