USER'S MANUAL

INNOVA®

SDS43

# SDS-Inspector

## 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® SDS Inspector**! Every automotive diagnostic scan tool we make includes tons of pro-level features designed to help maximize, and simplify, your OBD II diagnostic routine. In this manual, we will guide you on how to access your tablet's intuitive functions including:

- ☑ *Check Engine Light Diagnostics*
- ☑ *Full OEM Network Scans*
- ☑ *Smog Check/ Emissions Readiness*
- ☑ *Bi-Directional/Active Test & Special Function*
- ☑ *Enhanced Data Stream For All Systems*
- ☑ *Code Severity Level Identifier*
- ☑ *Battery/Charging System Test*
- ☑ *TPMS/Tire Pressure Readings*
- ☑ *OBD I Coverage (Optional)*
- ☑ *HD Truck Coverage (Optional)*
- ☑ *Oil Life, Oil Level, Brake Pad Life, Transmission Fluid Temperature*
- ☑ *Hybrid Battery Cell Voltage Readings*
- ☑ *Workshop Tools (12 service resets including Oil Maintenance Reset, Electronic Parking Brake Reset, ABS Bleeding, DPF Reset, etc.)*
- ☑ *FCA & Nissan SGW*
- ☑ *OEM ECU Information*
- ☑ *And Much More...*

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

POWERED BY REPAIR SOLUTIONS PRO®

**RepairSolutionsPRO®** increases the power of your INNOVA OBD II 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 or mobile device.

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

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 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

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 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

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.

# VERSION INFORMATION

Please note that the images and functions on this manual may differ based on the current **Version Information** you have. To check your tablet's current version and to check for updates, please see the **Settings** tab under the **Version Information** section. [See page 60]

# CALIFORNIA PRODUCT WARNINGS

**⚠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.

# SAFETY PRECAUTIONS

## SAFETY FIRST!

It is important that every user of this product read all instructions and warnings included in this manual to ensure your safety, the safety of others, and to prevent damage to this product and the vehicle being diagnosed and repaired. This manual describes common test procedures used by experienced service technicians. It is assumed 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

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. The meanings of these icons are as follows:



**Yellow Icon** – Indicates a *"**NOTE**:"* statement that offers special information or tips on what is being instructed.



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



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

# GLOSSARY

## OBD II TERMINOLOGY

The following terms and their definitions are related to OBD II systems.

- **Powertrain Control Module (PCM)** - The PCM is the OBD II 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 OBD II systems. Additional Monitors will be added as the OBD II 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.
- **OBD II Drive Cycle** - An OBD II 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 OBD II 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 OBD II Drive Cycle. OBD II Drive Cycle

requirements vary from one model of vehicle to another. Vehicle manufacturers set these procedures. Consult your vehicle's service manual for OBD II Drive Cycle procedures.

***NOTE:*** *Do not confuse a "Trip" Drive Cycle with an OBD II Drive Cycle. A "Trip" Drive Cycle provides the "Enabling Criteria" for one specific Monitor to run and complete its diagnostic testing. An OBD II 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.

## OBD II MONITORS

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 OBD II systems, these procedures and diagnostic strategies are called "Monitors."

Currently, fifteen Monitors are supported by OBD II systems. Additional Monitors may be added because of Government regulations as the OBD II 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 AND ACRONYMS

- **ABS** = Anti-Lock Braking System
- **DLC** = Data Link Connector (vehicle's data port)
- **DTC** = Diagnostic Trouble Code
- **KOEO** = Key On, Engine Off
- **KOER** = Key On, Engine Running
- **MIL** = Malfunction Indicator Light (Check Engine Light)
- **OBD** = On Board Diagnostics
- **OBD II** = On Board Diagnostics, Second Generation
- **OEM** = Original Equipment Manufacturer
- **PDTC** = Permanent Diagnostic Trouble Code
- **PID** = Parameter Identification Data

# GLOSSARY

*Additional Terminology and Acronyms*

- **SDC** = Since DTCs Cleared
- **SRS** = Supplemental Restraint System
- **TDC** = This Driving Cycle
- **TPMS** = Tire Pressure Monitoring System
- **TSBs** = Technical Service Bulletins

# INTRODUCTION

## TABLET CONTROLS AND INDICATORS

***See Figure 1 for the locations of items 1 through 12, below.***

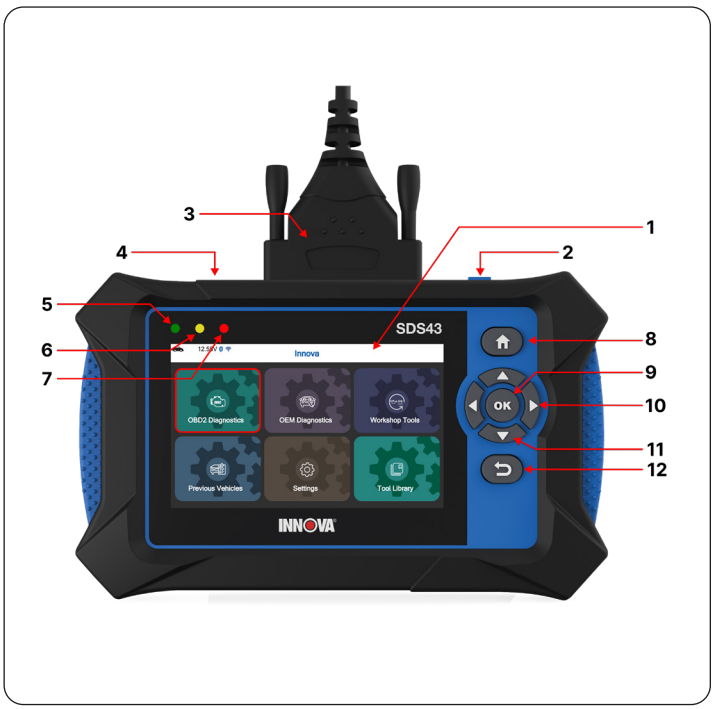



**Figure 1.** Controls and Indicators

1. **4.3-inch LCD Screen** - Color LCD display shows menus and sub-menus, test results, tablet functions and vehicle status information.
2. **POWER button** - Turns the tablet "On" and "Off". When the tablet is off, press to turn on. When the tablet is on, press to turn off.
3. **Diagnostic Port** - Connects the tablet to the vehicle's Data Link Connector (DLC).
4. **USB Port** - Allows connection to a PC using a standard USB cable.
5. **GREEN LED** - Indicates that all engine systems are running normally, and all emission Monitors are active and performing their diagnostic testing. The Malfunction Indicator Light (Check Engine Light) on the vehicle's instrument panel is off.
6. **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.
7. **RED LED** - Indicates there is a problem in one or more of the vehicle's systems. The Malfunction Indicator Light (Check Engine Light) on the vehicle's instrument panel is on.
8. **Home Button** - Press from any screen (except screens in Active Testss, Special Functions and service reset functions) to return to the Home screen.
9. **OK Button** - Confirms the selected option or value.
10. **Left / Right Button** - Moves selection cursor left or right, or helps scroll through pages when more than one page is displayed.
11. **Up / Down Button** - When in MENU mode, scrolls up/down through the menu options. When LINKED to a vehicle, scrolls up/down through the current display screen to display additional data.
12. **Back Button** - Exits the current function or returns to the previous screen.

# TABLET DISPLAY FUNCTIONS

***See Figure 2 for the locations of items 1 through 21 below.***

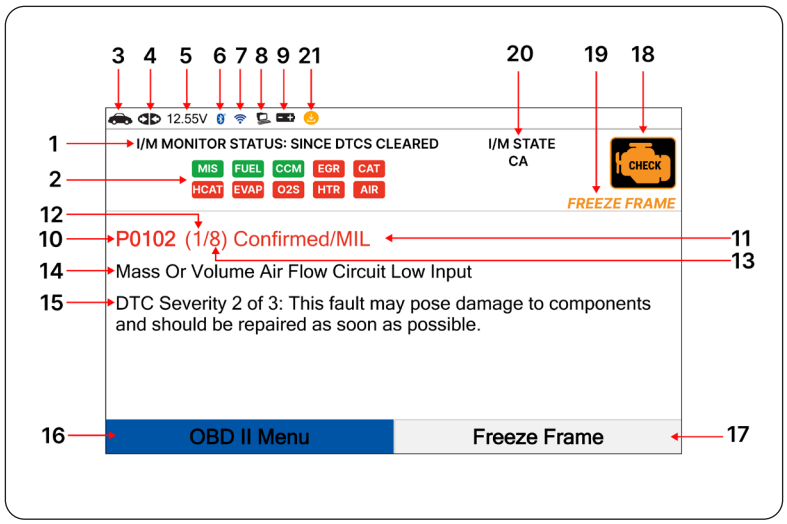



**Figure 2.** Tablet Display Functions

1. **I/M MONITOR STATUS: SINCE DTCs CLEARED** (or **THIS DRIVE CYCLE**) field - Identifies the I/M Monitor status area.
2. **Monitor Icons** - Shows the current status for all Monitors supported by the vehicle.
3. **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.
4. **Link Icon** - Indicates whether or not the tablet is communicating (linked) with the vehicle's on-board computers. When visible, the tablet is communicating with the computers. If the Link icon is not visible, the tablet is not communicating with the vehicle's computers.
5. **12.55V** – Displays the vehicle's current battery voltage.
6. **Bluetooth Icon** – Indicates communication status with a compatible INNOVA® mobile application. A solid blue icon indicates an active Bluetooth connection has been established.
7. **Wi-Fi Icon** – When OFF, indicates there is no Wi-Fi connection.
8. **Computer Icon** – When visible, indicates the tablet is linked to a personal computer.
9. **Tablet Internal Battery icon** – When visible, indicates the tablet batteries are "low" and should be replaced. If the batteries are not replaced when the battery icon is "on", all 3 LEDs will light to warn that the batteries need replacement. No data is displayed on screen when all 3 LEDs are lit.
10. **DTC Display Area** - Displays the Diagnostic Trouble Code (DTC) number. Each fault is assigned a code number that is specific to that fault.
11. **Code Type** – Indicates the type of code being displayed: **Confirmed**, **Confirmed/MIL**, **Pending**, **Permanent**.

12. **Code Number Sequence** - The tablet assigns a sequence number to each DTC that is present in the computer's memory, starting with "1". This helps keep track of the number of DTCs present in the computer's memory. Code number "1" is always the highest priority code and the one for which "Freeze Frame" data has been stored.

    ***NOTE:*** *If "1" is a "Pending" code, there may or may not be "Freeze Frame" data stored in memory.*

13. **Code Enumerator** - Indicates the total number of codes retrieved from the vehicle's computer.
14. **Test Data Display Area** – Displays DTC definitions, Freeze Frame data and other pertinent test information messages.
15. **Severity** – Indicates the level of severity for the priority code (code number "1"), as follows:

    **[1]** This fault typically does not cause damage to components and should be serviced when convenient.

    **[2]** This fault may pose damage to components and should be repaired as soon as possible.

    **[3]** This fault will cause damage to components and should be repaired immediately.

16. **OBD II Menu** – Displays menu to perform the 10 modes of OBD II functions.
17. **Fix for DTCs** – Displays the verified fix for retrieved DTCs.
18. **MIL Icon** - Indicates the status of the Malfunction Indicator Light (MIL). The MIL icon is visible only when a DTC has commanded the MIL on the vehicle's dashboard to light.
19. **FREEZE FRAME Icon** - Indicates that there is Freeze Frame data stored in the vehicle's computer memory (Captured when Priority Code was set / Code #1).
20. **I/M STATE** – Displays acronym of I/M program location.
21. **Update Icon** - When visible, indicates the tablet has an update available.

## HOME SCREEN

The **Home** screen provides access to all the tablet's primary functions.

***See Figure 3 for the explanation of items 1 through 6, below:***

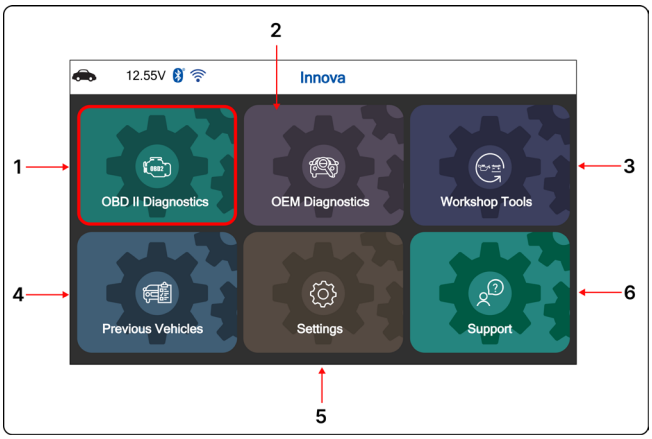



**Figure 3.** Home Screen

1. **OBD II Diagnostics Tab** – Use to access OBD II menu, display 10 modes of OBD II. [See page 12]
2. **OEM Diagnostics Tab** – Provides enhanced OEM level diagnostics that are not available over generic OBD II. Access ABS, Airbag, Transmission, Tire Pressure, Battery, and all modules to view and erase their DTCs. Perform bi-directional tests on fuel pump, injectors, ignition coils, and much more. Plus, get access to hundreds of additional parameters that you can view in real-time. Also provide access to the Vehicle Inspection function that shows Diagnostic Report, Customer Report and Collision Industry Report. [See page 37]
3. **Workshop Tools Tab** – Perform several OEM services, including Vehicle Inspection, Oil Maintenance Reset, Battery Reset, Battery Initialization, EV/HEV/PHEV Battery Health, Battery/Alternator Test, Electronic Parking Brake Reset, etc. Access dealership level relearn procedures to complete repairs or maintenance and much more. [See page 45]
4. **Previous Vehicles Tab** – Access and view reports for the 15 most recently tested vehicles, including pre-recorded Live Data streams. [See page 56]
5. **Settings Tab** – Setup your tablet's settings, including Wi-Fi, check for update, and other personal settings. [See page 56]
6. **Tool Library Tab** – Access the tablet's tool library for DTC and tool icon definitions, Smog Check or I/M Program LED Definition, DLC Locator, Monitor Icon Status. [See page 56]

## TECHNICAL SPECIFICATIONS

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

| | |
|---|---|
| **Display Type** | 4.3 Inch Panel |
| **J1962 DLC Cable** | 6-foot Detachable 16-pin OBD II Compliant Connector |
| **Wi-Fi** | 802.11b/g/n |
| **Operating Temperature** | 23°F to 113°F (-5°C to 45°C) |
| **Memory** | 4GB Memory |
| **Tablet Case** | Rugged ABS Shock & Drop Resistant |
| **Included Accessories** | 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® OBD II 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.

## 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 OBD II Tablet with Bluetooth/Wi-Fi connectivity.
- Android or iOS Mobile Device.

## DOWNLOAD THE RSPRO APP

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

Download on the App Store  ANDROID APP ON Google play

## USING THE RSPRO APP

1. Retrieve your vehicle's diagnostic data. [See page 17]
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. 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.*

## TABLET BATTERY REPLACEMENT

Replace batteries when the battery symbol is visible on display and/or the screen displays a warning message: *The batteries are low, the tool will auto shut off. Please replace the batteries before continuing.*

1. Locate the battery cover on the back of the tablet.
2. Use a suitable screwdriver to remove the screw securing the battery cover, then remove the cover with your fingers.
3. Replace batteries with three AA-size batteries (for longer life, use Alkaline-type batteries).
4. Reinstall the battery cover on the back of the tablet.

## INITIAL TABLET SETUP

For the initial use of the tablet, please complete the tablet setup by following these steps:

1. Select the desired display **language** (English, Spanish, French) and press **OK**.
2. Select the desired **unit of measurement** (US Standard or Metric) and press **OK**.
3. Select the preferred **Smog Check or I/M Program Location** and press **OK**.
4. The next screen displays the **Smog Check or I/M Program LED Definition**. Press **OK** to continue.
5. On the next screen, a QR code to **RepairSolutionsPRO (RSPRO)** is provided. Using any mobile device, scan the code to download and install the free RSPRO app. The app offers additional information including Most Likely Component/System Cause for DTC, Repair Tip, and much more. [See page 13]




6. **Enjoy your INNOVA Smart Diagnostic System!**

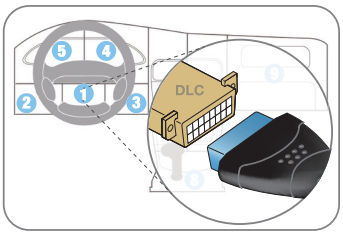
# USING THE TABLET

## 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.

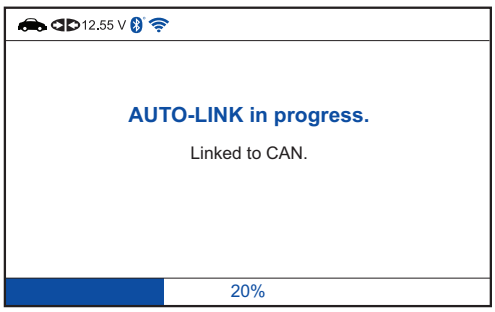



## AUTO-LINK CONNECTION

The tablet features an "Auto-Link Connection" function, which automatically retrieves vehicle information and diagnostics from the OBD II system upon plugging the tablet into the vehicle's Data Link Connector (DLC) port.

The **Auto-Link** function automatically sets up when connected with the tablet and can be turned off from the Settings tab. [See page 57]

1. Verify that the tablet is connected as indicated above (**Connecting The Tablet**).
2. Turn the ignition **ON**. **DO NOT** start the engine.
   - 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 "Verify the tool's cable connection at the DLC and make sure the ignition is ON." message displays.
     - Ensure your vehicle is OBD II compliant.

— Verify the connection at the DLC, and verify the ignition is ON.

— Choose **Relink** to try again or select **OBD II Menu** to return to the OBD II Menu.

- If the tablet cannot link to the vehicle's computer after two attempts, the message "Start the engine and try again" displays.

  — Start the engine and try again.

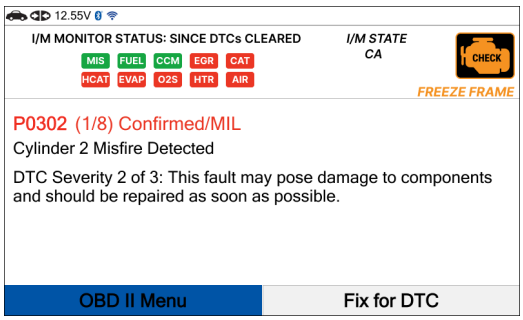
  — Choose **Relink** to try again or select **OBD II Menu** to return to the OBD II Menu.

- If the tablet cannot link to the vehicle's computer after three attempts, the message "Please call Technical Support" displays.

  — Choose **Relink** to try again or select **OBD II Menu** to return to the OBD II Menu.

  — Contact Technical Support for assistance.

3. Once complete, the tablet displays the OBD II Diagnostics screen.




# OBD II DIAGNOSTICS

OBD II Diagnostics provides access all **10 OBD II modes**. The following functions are available:

- **I/M Readiness Status – PIDs 01 & 41** [See page 17]
- **Read DTCs - Modes 03, 07, & 0A** [See page 17]
- **Erase DTCs - Mode 04** [See page 24]
- **Freeze Frame - Mode 02** [See page 25]
- **Live Data - Mode 01** [See page 26]
- **O2 Sensor Monitor - Mode 05** [See page 33]
- **OBD Monitor Test - Mode 06** [See page 33]
- **Request Control On-Board System - Mode 08** [See page 34]
- **Drive Cycle Procedures** [See page 35]
- **Vehicle Information - Mode 09** [See page 36]

There are two main ways to access OBD II Diagnostic functions:

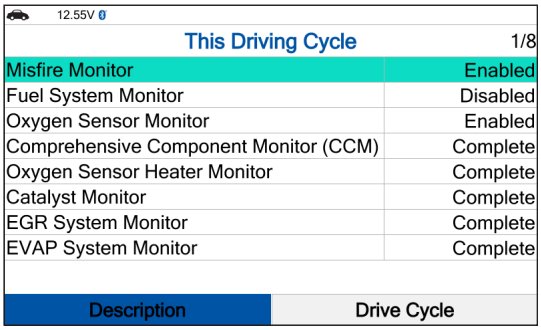
1. From the **Home** screen, select **OBD II Diagnostics** and press the **OK** button.
2. From the OBD II Control Display screen, select **OBD II Menu** and press the **OK** button.

## I/M READINESS STATUS - PIDS 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 - PIDs 01 & 41** feature displays which particular vehicle Monitors have or have 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.

1. From the OBD II Menu, select **I/M Readiness Status - PIDs 01 & 41**, then press the **OK** button.
2. A "One moment please. . ." message displays, followed by a selection dialog. Select **Since DTCs Cleared** or **This Driving Cycle** as appropriate. Press **OK** to continue.
   - If the vehicle under test does not support Since DTCs Cleared or This Driving Cycle, a warning message displays "This vehicle does not support this monitor type." Press the **Back** button to return to the previous dialog.




3. The Select Monitor screen displays listing all Monitors supported by the vehicle.
4. To view a Monitor description, select the desired **Monitor**, then choose **Description**.
   - A description for the selected Monitor displays.
5. To view Drive Cycle Procedures for a Monitor, select the desired **Monitor**, then choose **Drive Cycle**.

   ***NOTE:*** *If Drive Cycle Procedures are not available for the vehicle, an "advisory" message displays. Press* ***Back*** *to return to the OBD II Menu.*

   - The Drive Cycle Procedures screen for the Monitor displays.
6. The Drive Cycle Procedure screen shows the specific set of operating procedures that ensure 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.
7. When you are finished viewing the Drive Cycle Procedures, choose **Other Monitors** to view other Monitors or press the **Home** button to return to the Home screen.

## RETRIEVING OBD II DIAGNOSTIC TROUBLE CODES (DTCs)

**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. This information is found in the vehicle's service manual. 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. See SAFETY FIRST! for more information.* *[See page 3]*

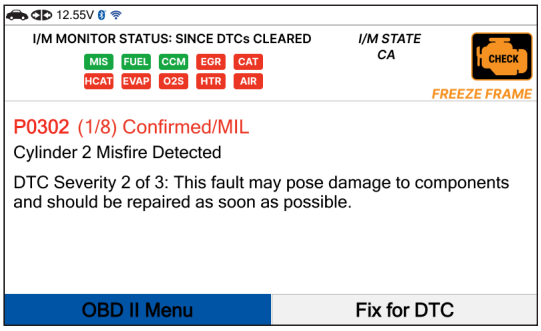
1. Follow the **Auto-Link Connection** steps. [See page 15]
2. If the tablet can decode the Vehicle Identification Number (VIN) for the vehicle under test, the OBD II results screen displays. Proceed to **step 4**.
3. If the tablet cannot decode the Vehicle Identification Number (VIN) for the vehicle under test, the Vehicle Selection screen displays.
4. The screen displays the RSPRO QR code. Using any mobile device, scan the code to download and install the free RSPRO app.
   - Select the **Skip** button to continue. Proceed to **step 5**.
   - Press the **OK** button to tick the check box, then select the **Skip** button to disable this screen the next time. Proceed to **step 5**.




5. After approximately 2~3 seconds, the tablet will retrieve and display any Diagnostic Trouble Codes (DTCs), I/M Monitor Status and Freeze Frame Data retrieved from the vehicle's computer memory.
   - The tablet will display a code only if codes are present. If no codes are present, the message "No Powertrain DTCs or Freeze Frame Data is presently stored in the vehicle's computer" displays.
6. Refer to **TABLET DISPLAY FUNCTIONS** for a description of display elements. [See page 10]

***NOTE:*** *In the case of long code definitions, a small arrow is shown in the upper/lower right-hand corner of the display area to indicate the presence of additional information. Use the arrow keys as necessary to scroll through the definition.*

***NOTE:*** *If a definition for the currently displayed code is not available, an "advisory" message displays "The definition for this DTC is not available. Please connect your tablet to the OBD Tool Updater and check for an update."*

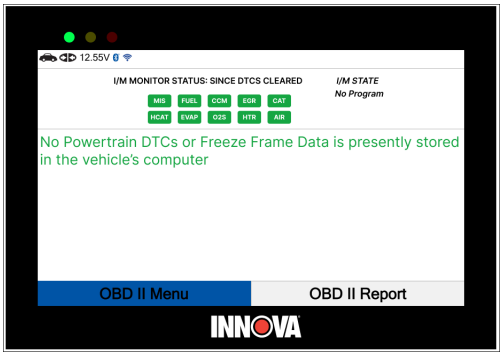



## LED Light Definitions

Read and interpret Diagnostic Trouble Codes/system condition using the display and the green, yellow, and red LEDs.

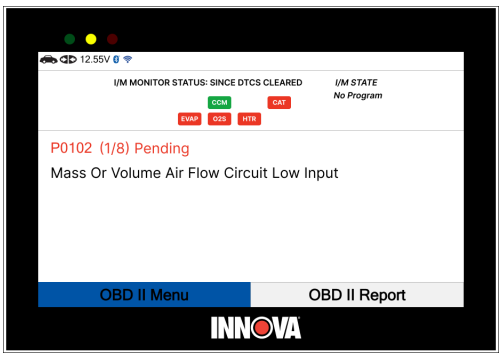
***NOTE:*** *The green, yellow, and red LEDs are used (with the display) as visual aids to make it easier to determine engine system conditions.*

- **Green LED** – Indicates that all engine systems are running normally, and all emission Monitors are active and performing their diagnostic testing. The Malfunction Indicator Light (Check Engine Light) on the vehicle's instrument panel is off.

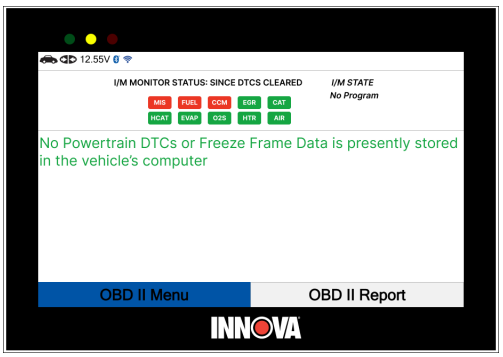



- **Yellow LED** – Indicates one of the following conditions:

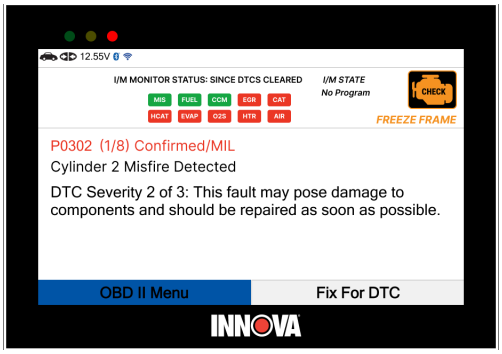
  **[A] A PENDING CODE IS PRESENT** – If the yellow LED is illuminated, it may indicate a Pending code is present. Check the display for confirmation. A Pending code is confirmed by the presence of a numeric code and the word Pending.




  **[B] MONITOR NOT RUN STATUS** – If the tablet displays "No Powertrain DTCs or Freeze Frame Data is presently stored in the vehicle's computer," but the yellow LED indicates that some of the Monitors supported by the vehicle have not yet run and completed their diagnostic testing, check the display for confirmation. All Monitor icons that are blinking have not yet run and completed their diagnostic testing; all Monitor icons that are solid have run and completed their diagnostic testing.




- **Red LED** – Indicates there is a problem in one or more of the vehicle's systems. The Malfunction Indicator Light (Check Engine Light) on the vehicle's instrument panel is on.




***NOTE:*** *DTCs that start with "P0", "P2" and some "P3" are considered Generic (Universal). All Generic DTC definitions are the same on all OBD II equipped vehicles. The tablet automatically displays the code definitions (if available) for Generic DTCs.*

***NOTE:*** *DTCs that start with "P1" and some "P3" are Manufacturer specific codes – their code definitions will vary with each vehicle manufacturer.*

## Monitor Icon Status

The I/M Monitor Status icons are associated with INSPECTION and MAINTENANCE (I/M) READINESS STATUS. Some states require that all vehicle Monitors have run and completed their diagnostic testing before a vehicle can be tested for Emissions (Smog Check). A maximum of fifteen Monitors are used on OBD II systems. Not all vehicles support all fifteen Monitors. When the tablet is linked to a vehicle, only the icons for Monitors that are supported by the vehicle under test are visible on the display.

**Green Solid Icon =** MIS

- **Description:** This icon indicates the Monitor has completed testing both Since DTCs Cleared (KOEO) and This Driving Cycle testing (KOER).
- **Tips:** The Monitor has met all conditions required to complete self-diagnosis and testing of the assigned system.

**Red Flashing Icon =** MIS

- **Description:** This icon indicates that the Monitor has not completed testing Since DTCs Cleared (KOEO).
- **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 Solid Icon =** MIS

- **Description:** This icon indicates that the Monitor has not completed testing This Driving Cycle (KOER).
- **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.

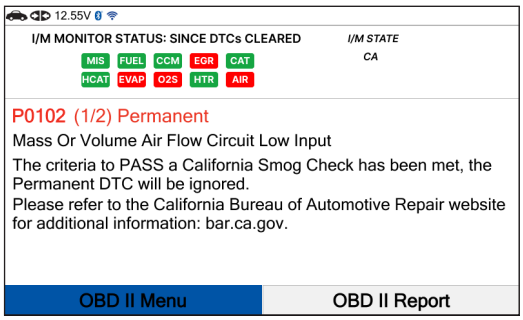
**Red/Gray Solid Icon =** MIS

- **Description:** This icon indicates that the Monitor has been disabled This Driving Cycle (KOER).
- **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.

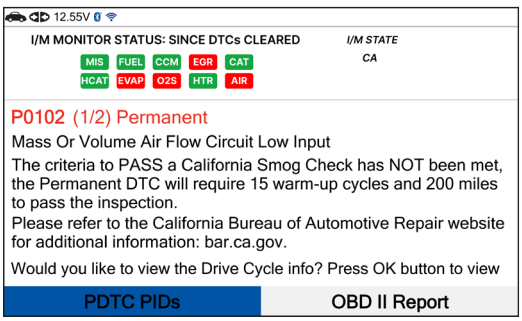
## *Permanent Diagnostic Trouble Codes (PDTCs)*

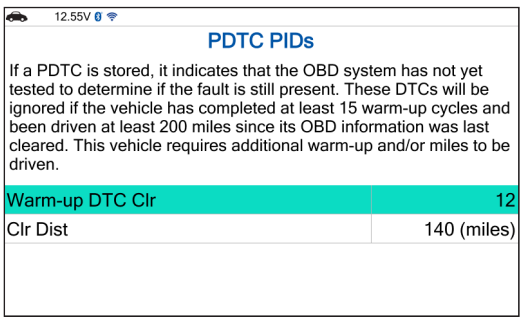
For vehicles from 2010, meeting specific Permanent DTCs (PDTCs) criteria is a new requirement of the Smog Check program in California. Permanent DTCs are similar to regular DTCs, but they cannot be reset by disconnecting the vehicle's battery or cleared with an On-Board Diagnostic scan tool. PDTCs will only be ignored if the vehicle has completed at least 15 warm-up cycles and driven at least 200 miles since its OBD information was last cleared.

1. If the vehicle meets the criteria to pass the Smog Check, the Permanent DTC will be ignored.




2. If the vehicle does not meet the criteria to pass the Smog Check, follow the PDTC PIDs and Drive Cycle procedure to ensure it meets the requirements for PDTCs to be ignored.




# FIX FOR DTC

Innova's **RepairSolutionsPRO** (**RSPRO**) 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. (For the **RSPRO** app, [See page 13])

1. From the OBD II Diagnostics screen, select **Fix for DTC**, then press **OK**.

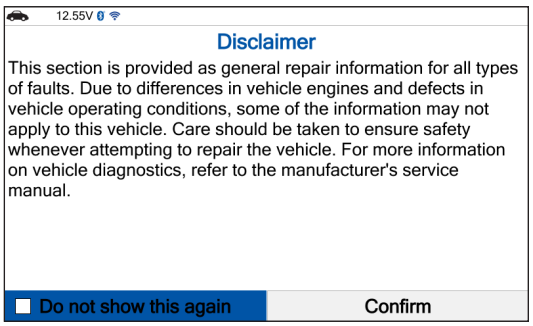
- The tablet verifies that it has a registered RSPRO account. If not, the screen displays a message requesting that the tablet be registered with an RSPRO account. Follow the steps to create your account.




- The tablet also verifies if its connected to a Wi-Fi Network. [See page 58]
- If the tablet fails to establish communication, the screen shows a notification. Select **Cancel**, then press **OK** to return to the OBD II Diagnostic screen or select **Try Again**, then press **OK** to try again.

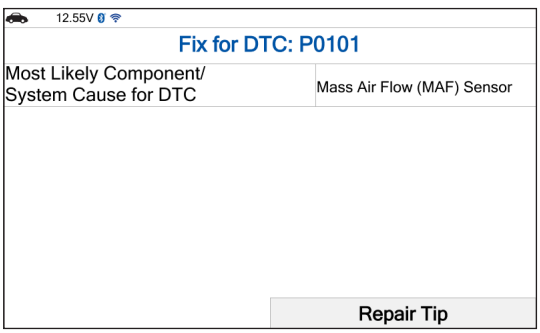
**2.** A "One moment please…" message displays while the results are retrieved.

- A **Disclaimer** is displayed each time a fix is requested.




**3.** To stop showing this screen, press the **OK** button to check the "*Do not show this again*" check-box, select **Confirm** and press **OK** to confirm your selection. Alternatively, select **Confirm** without the check-mark, and press **OK** to not make any changes.

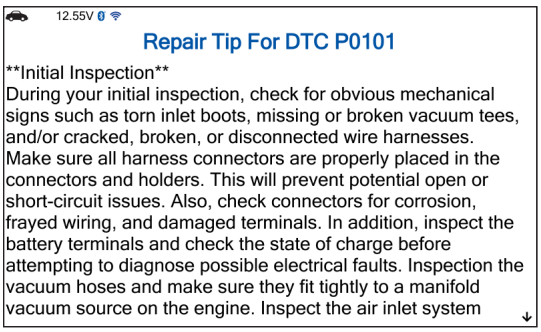
- The results screen displays the recommended Fix for DTCs, and provides the Most Likely Component/System Cause for the DTC, and any additional most likely fix recommendations.



- If a Fix is not available for the retrieved DTC, an “advisory” message displays. Press the **Back** button to return to the OBD II Diagnostic screen.

***NOTE:*** *A Repair Tip offers additional insight and helpful tips to solve the issue.*

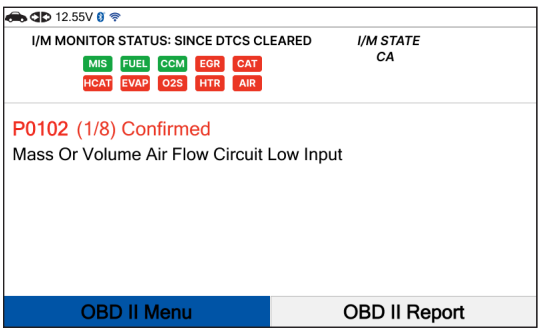
4. Select **Repair Tip** and press **OK**.
   - If a DTC Repair Tip is not available, an “advisory” message displays. Press the **Back** button to return to the Fix for DTCs screen.
5. Each Repair Tip for DTC includes: **Initial Inspection**, **Possible Cause**, **Diagnostic Procedure** and **Repair Validation**.




6. When finished viewing, press the **Back** button to return to the Repair Tip menu.

## OBD II REPORT

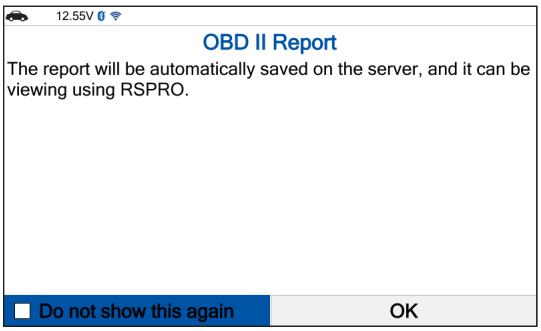
The OBD II Report function lets you create an OBD II Diagnostics Report and upload it to your account, which you can view at a later time on your registered RSPRO app. The OBD II Report function is available from the second DTC or from the first DTC that does not offer a Fix for DTC. This option is removed once a report has been successfully completed and will display again after each vehicle relink.




1. From the OBD II Diagnostics screen, select the **OBD II Report** button then press **OK**.
   - The tablet verifies that it has a registered RSPRO account. If not, a screen displays requesting that the tablet be registered with an RSPRO account. Follow the steps to create your account.
   - The tablet also verifies that it’s connected to a Wi-Fi Network. [See page 58]

- If the tablet fails to establish communication, a notification is displayed. Select **Cancel**, then press **OK** to return to the OBD II Diagnostic screen or select **Try Again**, then press **OK** to try again.

2. A "Submitting data…" message displays.
   - If the report creation fails, the screen displays a notification and returns to the OBD II Diagnostics screen after 3 seconds.
   - If the report was successfully created, a "confirmation" screen displays.




3. To bypass all these steps, press the **OK** button to check the "*Do not show this again*" check-box, then select and press **OK** to confirm your selection. The tool will bypass this screen the next time it is used, and after each successful data submission, the screen will return to the OBD II Diagnostics screen. Alternatively, select **OK** without the check-mark and press **OK** to not make any changes.

## ERASING DIAGNOSTIC TROUBLE CODES (DTCs) - MODE 04

***NOTE:*** *When the tablet's ERASE function is used to erase the DTCs from the vehicle's on-board computer, "Freeze Frame" data and manufacturer-specific enhanced data are also erased.*

If you plan to take the vehicle to a Service Center for repair, DO NOT erase the codes from the vehicle's computer. If the codes are erased, valuable information that might help the technician troubleshoot the problem will also be erased.

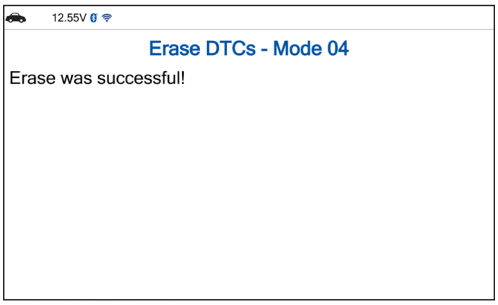
**Erase DTCs from the computer's memory as follows:**

***NOTE:*** *When DTCs are erased from the vehicle's computer memory, the I/M Readiness Monitor Status program resets status of all the Monitors to a not run "flashing" condition. To set all the Monitors to a* ***DONE*** *status, an OBD II Drive Cycle must be performed. Refer to your vehicle's service manual for information on how to perform an OBD II Drive Cycle for the vehicle under test.*

1. Perform the **Code Retrieval procedure** [See page 17]
   - Wait until the codes are displayed.
   - Press the **OK** button to access the OBD II Menu.
2. From the OBD II Menu, select **Erase DTCs - Mode 04**, then press **OK**. A "confirmation" message displays.

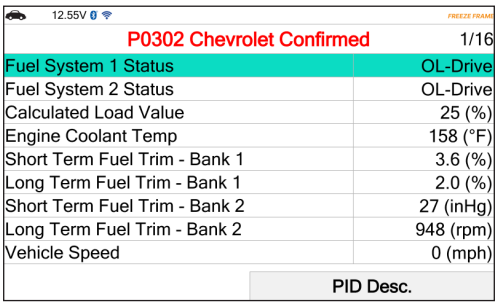
- If you are sure you want to proceed, choose **Erase DTCs** to continue.
- If you do not want to proceed, press the **Back** button to return to the OBD II Menu.

3. Select **Erase DTCs** then press the **OK** button.
   - If the vehicle's engine is running, an "advisory" message displays "Please stop the vehicle and place transmission in Park or Neutral then press "Erase DTCs" to continue."
   - A "One moment please…" message displays while the erase function is in progress.
4. If the erase was successful, a "confirmation" message displays. After 3 seconds, the tablet automatically re-links to the vehicle's computer.
   - If the erase was not successful, an "advisory" message 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.
   - If the erase was not successful and ECU error code $22 is present, an "instructional" message displays. Follow the instructions and press **Erase DTCs** to try again.




## FREEZE FRAME - MODE 02

1. From the OBD II Menu, select **Freeze Frame - Mode 02** and press the **OK** button.
   - The Freeze Frame data displays.




   - In OBD II 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. Saved engine conditions 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, intake manifold pressure, and more.

***NOTE:*** *If more than one malfunction is present that causes more than one DTC to be set, only the code with the highest priority will contain Freeze Frame data. The code designated "01" on the tablet's display is referred to as the PRIORITY code and Freeze Frame data always refers to this code. The priority code is also the one that has commanded the MIL (Check Engine Light) on.*

   - To view a description of the displayed PID, press **PID Desc.**

# LIVE DATA - MODE 01

The tablet lets you view "real-time" Live Data. 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. These are the same signal values generated by the sensors, actuators, switches and/or vehicle system status information used by the vehicle's computer when calculating and conducting system adjustments and corrections.

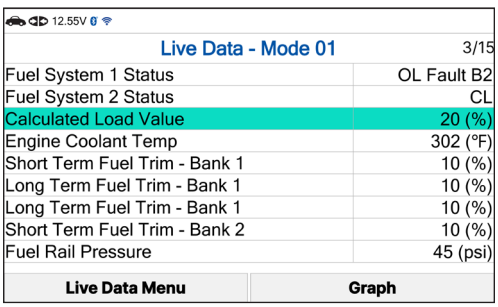
The real time (Live Data) vehicle operating information (values/status) that the computer supplies to the tablet for each sensor, actuator, switch, etc. is called Parameter Identification Data (PID).

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 in order 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 traffic accident.*

## *Viewing Live Data*

1. From the OBD II Menu, select **Live Data - Mode 01**, then press **OK**.
2. A "One moment please . . ." message displays while the tablet establishes communication with the vehicle.
   - If the tablet fails to establish communication with the vehicle, a "Communication Error" message displays.
     - Ensure the vehicle is OBD II 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.
     - Press **Relink** to continue.
3. Real-time Live Data (PID) information supported by the vehicle under test displays.



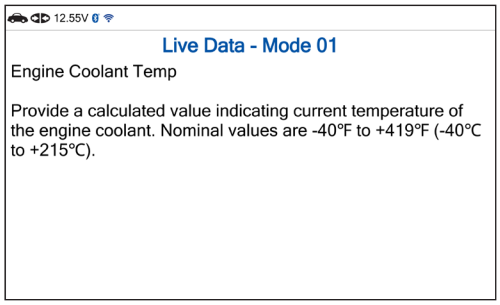

***NOTE:*** *The values for the various PIDs displayed may change as the vehicle's operating conditions change.*

***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 Close Loop (CL).*

4. Only a limited amount of PID data can be displayed on the screen at one time. If additional PID data is available, a small arrow is shown on the display. Press ▲ **UP** and ▼ **DOWN**, as necessary, to view available PID data.

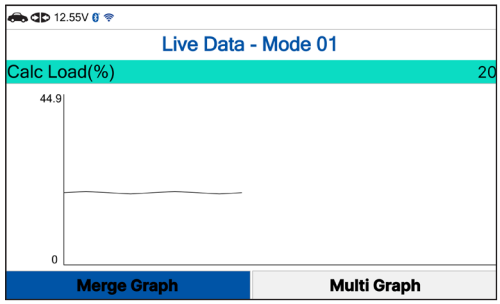
- If communication with the vehicle is lost while viewing Live Data, an “advisory” message displays.

5. Select and press **OK** to view the expanded definition and description for the selected PID.

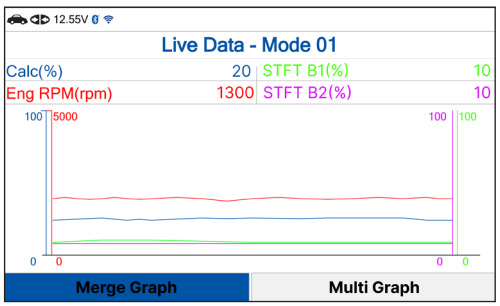


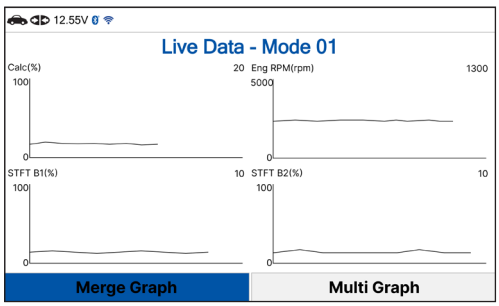

- Press the **Back** button to return to the Live Data – Mode 01 screen after you have finished viewing. Proceed to **step 6**.

6. Select **Graph** and press **OK** to view the currently selected PID in “graph” mode.




- Choose **Merge Graph** to view more PID results on one graph.
- Choose **Multi Graph** to view more Graphs in one screen.



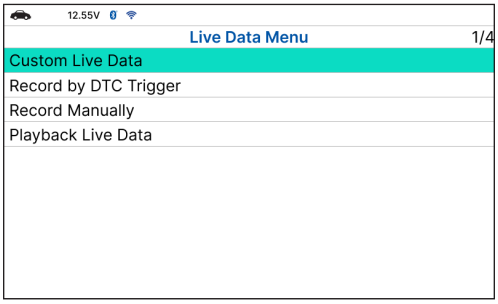




7. Troubleshoot any diagnostic issues by referencing your vehicle’s repair manual to view and/or compare Live Data (PID) information displayed on the tablet against recommended vehicle specifications.

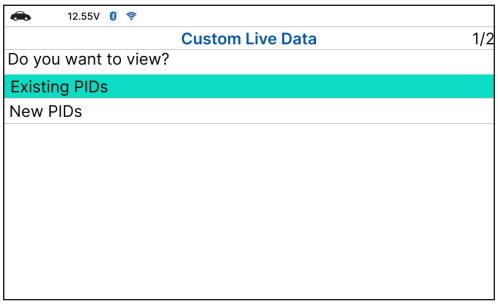
## Customizing Live Data (PIDs)

You can customize the Live Data display by placing the tablet in “Custom Live Data” mode and selecting only the PIDs that you wish to display.

1. With the tablet in Live Data mode, select **Live Data Menu** to access the Live Data menu, then select **Custom Live Data** and press the **OK** button.

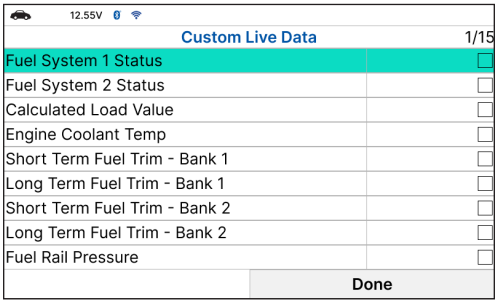



- If the tablet fails to establish communication with the vehicle, a "Communication Error" message displays.
  - Ensure the vehicle is OBD II compliant.
  - Verify the connection at the DLC, and verify the ignition is ON.
  - Turn the ignition OFF, wait 5 seconds, then back ON to reset the computer.
  - Press **Relink** to continue.
- If Live Data is not supported by the vehicle under test, an "advisory" message displays. Press **Back** to return to the OBD II Menu.
- If custom Live Data was previously configured, the **Select PIDs to Use** screen displays.
  - To use the existing custom Live Data selections, select **Existing PIDs**, then press **OK**. Proceed to **step 4**.
  - To configure new custom Live Data, select **New PIDs**, then press **OK**. The Custom Live Data menu displays. Proceed to **step 2**.

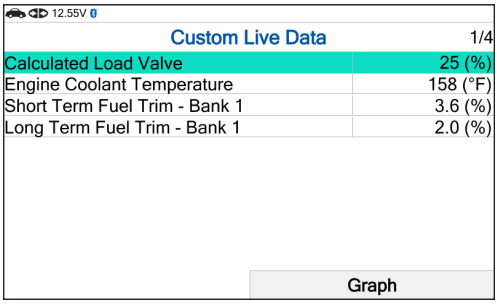



- If custom Live Data was not previously selected, the Custom Live Data menu displays. Proceed to **step 2**.

2. Press ▲ **UP** and ▼ **DOWN** to scroll through the available PIDs. When a PID you wish to display is highlighted, press **OK** (a "check-mark" shows to confirm your selection). Repeat until only the PIDs you want to display are selected.
   - To deselect a PID, highlight the PID, then press **OK**. The check-mark is removed.



3. When you are finished making your selection(s), choose **Done** to continue.
   - If no PIDs have been selected, an "advisory" message displays. Press **OK** to return to the Custom Live Data menu.
4. The tablet is now in "Custom Live Data" mode. Only the PIDs you selected are shown.
   - Select **Graph** and press **OK** to view the currently selected PID in "graph" mode.
5. To exit the "Custom Live Data" mode, press **Back** to return to the Live Data Menu.




## Record Live Data

You can record and save several frames of Live Data information for each PID supported by the vehicle in the tablet's memory. Once recorded, each session can be played back for further analysis.

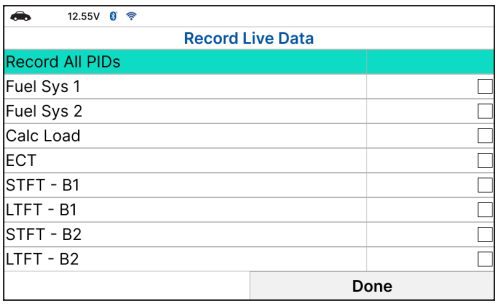
There are two ways that the tablet can record Live Data:

- **Record by DTC Trigger**
- **Record Manually**

## Record by DTC Trigger

This function automatically records Live Data information when a DTC sets and saves it in the tablet's memory. The recorded data can be a valuable troubleshooting aid, particularly if you are experiencing a fault that is causing a DTC to set. The tablet can record approximately 100 frames of Live Data.

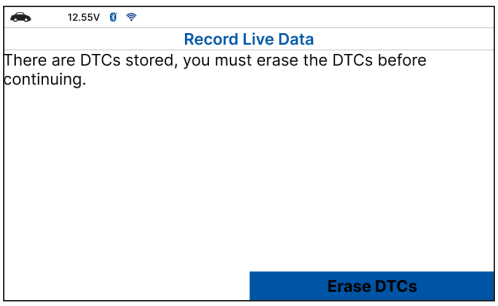
1. With the tablet in Live Data mode [See page 26], select **Live Data Menu** and press **OK** to display the Live Data Menu.
2. Select **Record by DTC Trigger**, then press **OK**.
   - The Select PIDs to Record screen displays.
   - If the tablet fails to establish communication with the vehicle, a "Communication Error" message displays.
     - Ensure the vehicle is OBD II 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.
     - Press **Relink** to continue.



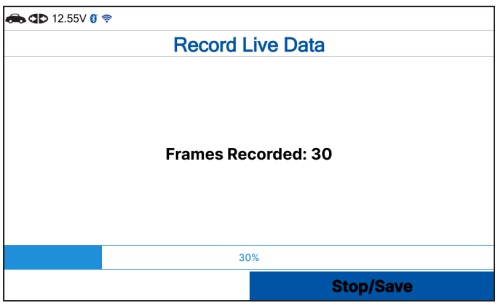

3. Press ▲ **UP** and ▼ **DOWN** to scroll through the available PIDs. When a PID you wish to display is highlighted, press **OK** (a "check-mark" shows to confirm your selection). Repeat until only the PIDs you want to record are selected.
   - To select all PIDs, choose **Record All PIDs**.

- To deselect a PID, highlight the PID, then press **OK**. The check-mark is removed.

4. When you are finished making your selections, choose **Done** to continue.
   - If DTCs are presently stored in the vehicle's computer, an "advisory" message displays.
     - Choose **Erase DTCs**. A "One moment please…" message displays while DTCs are erased from the vehicle's computer.




   - If the erase is not successful, an "advisory" message displays.
     - To retry the erase process, verify that the tablet is properly connected to the vehicle's DLC and that the ignition is on. Choose **Erase DTCs**.
     - To exit the record function, press **Back** to return to the Record Live Data menu.
   - When the Erase process is complete, the Record Live Data screen displays the message "Ready to record. Waiting for DTCs."
5. Put the engine in the operating condition that causes the DTC to set.
   - If necessary, drive the vehicle until you reach the vehicle speed at which the problem occurs.
6. When the tablet detects a fault that causes a DTC to set, it automatically records and saves approximately 100 frames of Live Data information in its memory for each PID selected.
   - A progress message displays.
     - You can stop and save recorded Live Data at any time by choosing **Stop/Save**.




   - When the recording is complete, a "confirmation" screen displays. Choose **Yes** to Playback Live Data [See page 31] or **No** to return to the Live Data menu, as desired.
   - If recording **was not successful**, an "advisory" message displays. Choose **Continue** to return to the Live Data menu.

## Record Manually

This option lets you select the precise time at which the Live Data recording will occur. Recording Live Data manually can be a very valuable tool when troubleshooting intermittent problems that do not meet the requirements for a DTC to set. The tablet is capable of recording approximately 100 frames of Live Data.

1. With the tablet in Live Data mode [See page 26], select **Live Data Menu** and press **OK** to display the Live Data Menu.
2. Select **Record Manually**, then press **OK**.
   - The Select PIDs to Record screen displays.
   - If the tablet fails to establish communication with the vehicle, a "Communication Error" message displays.

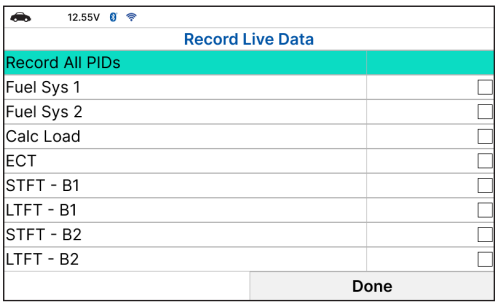
— Ensure your vehicle is OBD II compliant.

— 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.

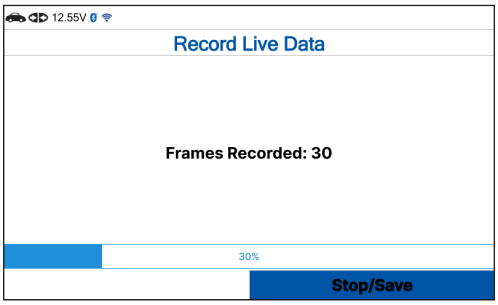
— The tablet should power up once the ignition is in the ON position.

3. Press ▲ **UP** and ▼ **DOWN** to scroll through the available PIDs. When a PID you wish to record is highlighted, press **OK** (a "check-mark" shows to confirm your selection). Repeat until only the PIDs you want to record are selected.
   - To select all PIDs, choose **Record All PIDs**.
   - To deselect a PID, highlight the PID, then press **OK**. The check-mark is removed.




4. When you are finished making your selections, choose **Done** to continue.
   - The Record Live Data screen displays.
   - Put the engine in the operating condition where the problem manifests itself.
     — If necessary, drive the vehicle until you reach the vehicle speed at which the problem occurs.

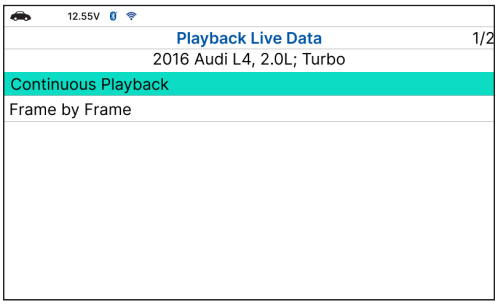
5. When the problem occurs, choose **Record**.
   - A progress message displays.
   - When recording is complete, a "confirmation" screen displays. Choose **Yes** to Playback Live Data [See page 31] or **No** to return to the Live Data menu, as desired.
   - If recording was not successful, an "advisory" message display. Choose **Continue** to return to the Live Data menu.




## *Playback Live Data*

Once Live Data has been recorded, it is saved in the tablet's memory. You can view recorded Live Data immediately after recording by selecting **Yes** from the Record Live Data "confirmation" screen, or you can view it later using the "Playback" function.

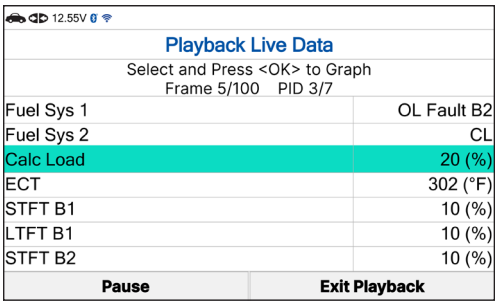
1. From Live Data Mode, select **Live Data Menu** and press **OK**.
2. Select **Playback Live Data**, then press **OK**.
   - The Playback Live Data menu displays.



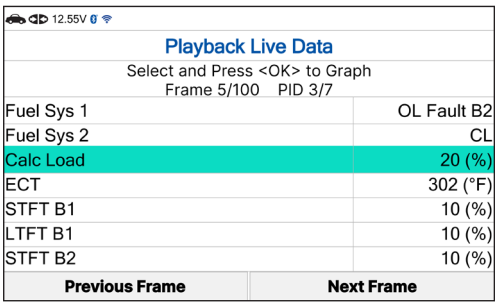
***NOTE:*** *If there is no Live Data currently stored in the tablet's memory, an "advisory" message displays. Press* ***Back*** *to return to Live Data mode.*

***NOTE:*** *When you select* ***Yes*** *from the Record Live Data "confirmation" screen, the tablet enters the "Live Data Playback" mode, and the Playback Live Data menu displays.*

3. Select **Continuous Playback** or **Frame by Frame**, as desired, then press **OK**.
   - The display shows the recorded Live Data, beginning with the "trigger" frame.
   - Only a limited amount of PID data can be displayed on the screen at one time. If additional PID data is available, a small arrow is shown on the display. Press ▲ **UP** and ▼ **DOWN**, as necessary, to view all available PID data.
   - When viewing recorded Live Data, look for any irregularities in any of the PID values/signal information (LTFT %, RPM, MAP, TEMP, etc.). If any PIDs are not within specification, or irregularities are detected, follow the procedures in the vehicle's service repair manual to perform additional troubleshooting and repair.
4. When you select **Continuous Playback**, the tablet plays recorded data at a rate of one frame per 2 seconds.
   - Press **OK** on any selected PID to open a graph view for that PID.
   - Select **Pause** to "pause" the Live Data playback. Select **Play** to resume the playback mode.
   - Select **Exit Playback** to exit the Live Data Playback mode and return to the Playback Live Data menu.
   - Once playback finishes, the tablet automatically returns to the Playback Live Data menu.
     - To replay the data again, select **Continuous Playback** or **Frame by Frame**, as desired, then press **OK**.




5. When **Frame by Frame** is selected, you must scroll the individual frames manually.
   - When you have viewed all PID information for the current frame of Live Data, choose **Next Frame** or **Previous Frame**, as desired.
   - Press **OK** on any PID to open a graph view for that PID.
   - To exit Live Data Playback mode, select **Exit Playback** at the bottom of the list, then press **OK**.



## O2 SENSOR MONITOR - MODE 05

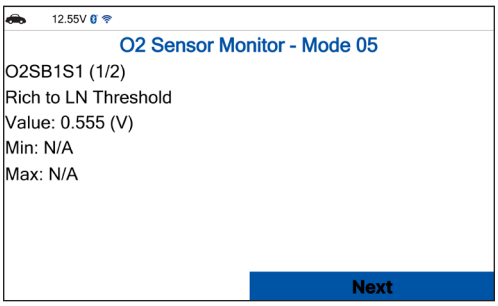
The O2 Sensor Monitor - Mode 05 lets you view the test results of the vehicle's two or more O2 sensors. These sensors are designed to help identify problems that can reduce fuel efficiency or increase emissions. Each O2 sensor has a unique name that identifies its location in the exhaust system – cylinder 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 06 was revised and implemented in Service Mode 06.*

1. From the OBD II Menu, select **O2 Sensor Monitor - Mode 05**, then press **OK**.
   - The O2 Sensor Monitor - Mode 05 screen displays.

***NOTE:*** *If the O2 Sensor Monitor is not supported by the vehicle under test, a notification is displayed. Press the* ***Back*** *button to return to the OBD II Menu.*

2. Choose the item you wish to view, then press **OK**.
   - The screen will show the test result.




3. When you have finished viewing the retrieved test data, press **Next** to view results for the next test, or press **Back** to return to Select Test menu.

## OBD MONITOR TEST - MODE 06

The OBD Monitor Test function 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's manufacturer.

***NOTE:*** *The tablet does not perform the OBD Monitor Test but retrieves results from the most recently performed tests from the on-board computer's memory. You may retrieve OBD Monitor Test results for only one test at any given time.*

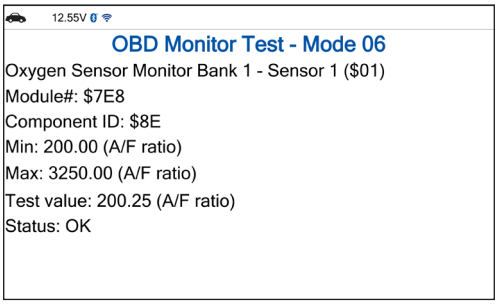
1. From the OBD II Menu, select **OBD Monitor Test - Mode 06**, then press **OK**.
2. A "One moment please…" message displays, followed by the Select Test menu screen. (Refer to the vehicle's service repair manual for information related to non-continuous tests.)

***NOTE:*** *If OBD Monitor Test data is not presently stored in the vehicle's computer, an "advisory" message displays. Press the* ***Back*** *button to return to the OBD II Menu.*

***NOTE:*** *If the OBD Monitor Test is not supported by the vehicle under test, an "advisory" message displays. Press the* ***Back*** *button to return to the OBD II Menu.*

3. Select the desired test, then press **OK** to display the test results. The display shows the following information:

   - **Test ID** number
   - **Module ID** number
   - **Component ID** number
   - **Min** or **Max** test limit
   - **Test Value** and **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****.*

4. When you have finished viewing the retrieved test data, press **Next** to view results for the next test, or press **Back** to return to Select Test menu.
5. When you have finished viewing test data for all desired tests, press **Back** from the Select Test menu to return to the OBD II Menu, or press the **Home** button to return to the Home screen.

## REQUEST CONTROL ON-BOARD SYSTEM - MODE 08

The Request Control On-Board System - Mode 08 lets you perform an **EVAP Test** or **Particulate Filter Regeneration** and **Inducement System Reinitialization**.

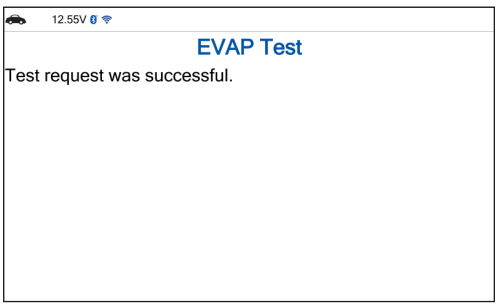
- **EVAP Test** - Lets you initiate a leak test for the vehicle's EVAP system.
- **Particulate Filter Regeneration** – This service requests the vehicle to initiate a PF regeneration. The vehicle manufacturer is responsible to determine the criteria to enable, start and stop the function such as engine 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 function such as engine running, vehicle speed, or engine rpm.

***NOTE:*** *The tablet does not perform the leak test, but signals to 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.*

***NOTE:*** *Some vehicle manufacturers do not allow tablets or other external devices to control vehicle systems. If the Request Control On-Board System is not supported by the vehicle under test, an "advisory" message displays. Press* ***Back*** *to return to the OBD II Menu.*

1. From the OBD II Menu, select **Request Control On-Board System - Mode 08**.
   - A Request Control On-Board System - Mode 08 screen displays.

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

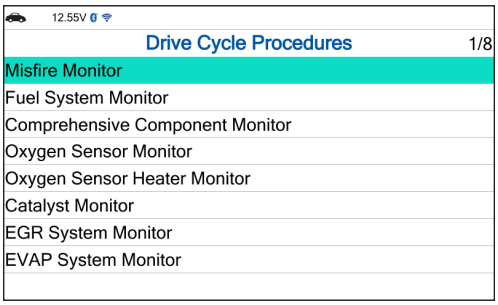



2. Select the test/function displayed on screen, then press **OK**.
   - A "One moment please…" message displays while the tablet performs the test/function.
3. When the test/function has been initiated by the vehicle's on-board computer, a "confirmation" message displays.

## 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 OBD II Menu, select **Drive Cycle Procedures**, then press **OK**.
   - A "One moment please…" message displays while the tablet retrieves Monitor status.
2. The screen displays a list of the available Monitors supported by the vehicle.
   - If Drive Cycle Procedures are not available for the vehicle, an "advisory" message displays.




3. Select the **Monitor** for which you wish to view Drive Cycle Procedures, then press **OK**.
   - A "One moment please…" message displays while the tablet retrieves the requested Drive Cycle Procedure. Once retrieved, the Drive Cycle Procedures screen displays.
   - If a Drive Cycle Procedure for the selected Monitor is not available, an "advisory" message displays. Press **Back** to return to the OBD II Menu.

4. The Drive Cycle Procedure screen shows the specific set of operating procedures that ensure the vehicle is driven in such a way that all the required "Enabling Criteria" for the Monitor to properly run and complete its diagnostic testing are met.
5. When finished viewing the Drive Cycle Procedures, press **Back** to return to the Drive Cycle Procedures menu.

## VIEWING VEHICLE INFORMATION - MODE 09

The tablet offers three options for retrieving reference information for the vehicle under test: **Vehicle ID**, **Available Modules** and **In-use Performance Tracking**.

### *Viewing Vehicle ID*

***NOTE:*** *The Vehicle ID function is applicable to model year 2000 and newer OBD II-compliant vehicles.*

The tablet can retrieve a list of information (provided by the vehicle's manufacturer), unique to the vehicle under test, from its on-board computer. This information may include:

- The vehicle's VIN number.
- The control module identification number.
- The vehicle's calibration ID(s). These IDs uniquely identify the software version(s) for the vehicle's control module(s).
- The vehicle's Calibration Verification Number(s) (CVNs) required by OBD II regulations. CVNs are used to determine if emission-related calibrations for the vehicle under test have been changed. One or more CVNs may be provided by the vehicle's computer.

1. From the OBD II Menu, select **Vehicle Information - Mode 09**, then press **OK**.
   - The Vehicle Information - Mode 09 menu displays.
2. Select **Vehicle ID**, then press **OK**.

***NOTE:*** *The first time the Vehicle ID function is used, it may take several minutes to retrieve the information from the vehicle's computer.*

3. When the retrieval process is completed, the vehicle ID information displays.
4. When finished viewing the retrieved vehicle ID information, press **Back** to return to the Vehicle Information menu.

### *Viewing Available Modules*

The tablet can retrieve a list of modules supported by the vehicle under test.

1. From the OBD II Menu, select **Vehicle Information - Mode 09**, then press **OK**.
   - The Vehicle Information - Mode 09 menu displays.
2. Select **Available Modules**, then press **OK**.

3. When the retrieval process is completed, a complete list of modules supported by the vehicle under test displays.
4. When you have finished viewing the list of available modules, press **Back** to return to the Vehicle Information menu.

### Viewing In-Use Performance Tracking

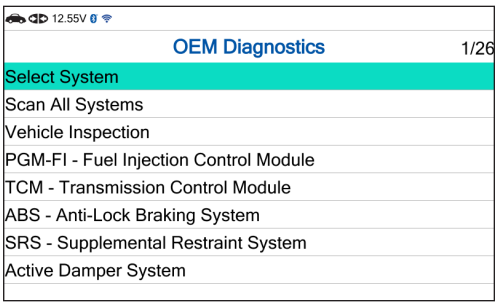
The tablet can retrieve In-Use Performance Tracking (IPT) statistics for Monitors supported by the vehicle under test. Two values are returned for each Monitor; the number of times that all conditions necessary for a specific Monitor to detect a malfunction have been encountered (XXXCOND), and the number 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).

1. From the OBD II Menu, select **Vehicle Information - Mode 09**, then press **OK**.
   - The Vehicle Information - Mode 09 menu displays.
2. Select **In-Use Performance Tracking** then press **OK**.
3. When the retrieval process is completed, the In-Use Performance Tracking statistics for the vehicle under test display.
   - If In-Use Performance Tracking is not available for your vehicle, an "advisory" message displays. Press **Back** to return to the Vehicle Information menu.
4. When you have finished viewing the In-Use Performance Tracking statistics, press **Back** to return to the Vehicle Information menu.

## OEM DIAGNOSTICS

The OEM Diagnostics function allows you to perform enhanced, OEM level diagnostics not available over generic OBD II. A network scan allows you to scan all or just one vehicle module to retrieve DTCs associated with the module(s). Get access to hundreds of additional parameters that you can view in real-time for all modules. Plus, perform bi-directional tests and special functions on fuel pumps, injectors, ignition coils, and much more. It also provides a comprehensive Vehicle Inspection report that shows the complete Diagnostic Report, Customer Report, and the Collision Industry Report – offering a complete overview of the vehicle's current health status.

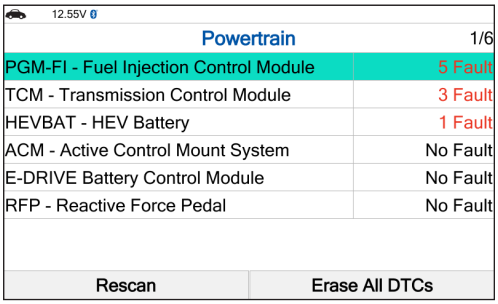
1. From the **Home** screen, select **OEM Diagnostics** and press **OK**.
   - For BMW models only, follow these additional steps:
     - Turn the ignition off, then back on.
     - Press **Continue**.
2. The OEM Diagnostics screen displays.
3. Select the type of test you wish to perform.
   - **Select System** - Performs a comprehensive module scan in each Powertrain, Body, or Chassis group.
   - **Scan All Systems** - Performs a comprehensive vehicle scan of all available network modules.



- **Vehicle Inspection** - Performs a complete vehicle health status report, including: OBD II check, all system scan, service checks, warning lights, tire pressures, and more.
- Select the "individual" listed **control module name** to perform a diagnostic check on that single module.

## PERFORM A SCAN - SELECT SYSTEM

1. Select **Select System** from the OEM Diagnostics screen, then press **OK**.
   - The Module Selection screen displays.
2. Choose either **Powertrain**, **Body**, or **Chassis** modules you wish to scan, then press **OK**.
   - A "Linking…" message displays while the tablet scans all available modules.
   - When the scan completes, the <Module> screen displays. The screen shows the number of DTCs recorded for each available module.
3. The results window lists all tested control modules with their 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 you to either:
     - **Erase All DTCs** - Erases all DTCs retrieved from all modules.
     - **Rescan** - Scans all systems again.



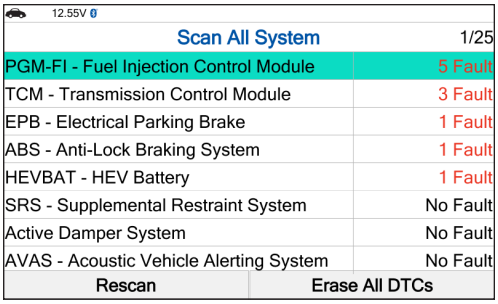

4. Select the desired system, then press **OK**.
   - The menu for each module displays a list of options.
   - Depending on the selected module, you can Read DTCs, Erase DTCs, view Live Data, perform Active Tests, Special Functions or read ECU Information.
5. Choose the function you would like to run, or press ⮌ Back to return to the selected module screen.
   - **Read DTCs -** [See page 40]
   - **Erase DTCs -** [See page 40]
   - **Live Data -** [See page 41]
   - **Active Tests -** [See page 41]
   - **Special Functions -** [See page 41]
   - **ECU Information -** [See page 42]

## PERFORM A SCAN - SCAN ALL SYSTEMS

1. Select **Scan All Systems** from the OEM Diagnostics screen, then press **OK**.

- If the vehicle's engine is running, an "advisory" message displays.
  - Stop the vehicle.
  - Place the transmission in Park or Neutral.
  - Press **Try Again** to continue.

2. A "Linking…" message displays while the tablet scans all available modules.
   - When the scan completes, the Scan All System screen displays. The screen shows the number of DTCs recorded for each available module.
3. The results window lists all tested control modules with their 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 you to either:
     - **Erase All DTCs** - Erases all the vehicle's retrieved DTCs.
     - **Rescan** - Scans all systems again.




4. Select the desired system, then press **OK**.
   - The menu for each module displays a list of options.
   - Depending on the selected module, you can Read DTCs, Erase DTCs, view Live Data, perform Active Tests, Special Functions or read ECU Information.
5. Choose the function you would like to run, or press **Back** to return to the selected module screen.
   - **Read DTCs -** [See page 40]
   - **Erase DTCs -** [See page 40]
   - **Live Data -** [See page 41]
   - **Active Tests -** [See page 41]
   - **Special Functions -** [See page 41]
   - **ECU Information -** [See page 42]

## PERFORM A SCAN FOR INDIVIDUAL MODULES

1. Select a **module** from the OEM Diagnostics screen, then press **OK**.
2. The menu for each module displays a list of options. These options depend on the selected module.
   - **Read DTCs -** [See page 40]
   - **Erase DTCs -** [See page 40]
   - **Live Data -** [See page 41]

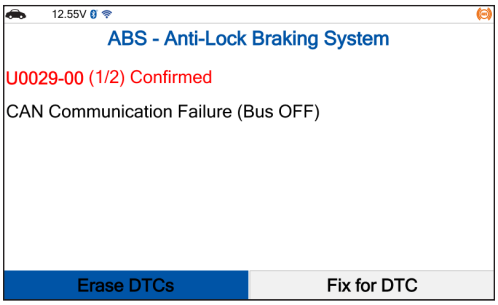
- **Active Tests -** [See page 41]
- **Special Functions -** [See page 41]
- **ECU Information -** [See page 42]

## Reading DTCs for a Selected Module

1. Select the **module** for which you wish to read DTCs, then press **OK**.
   - The individual module menu screen displays.
2. Select **Read DTCs**, then press **OK**.
   - If the vehicle's engine is running, an "advisory" message displays.
     - Stop the vehicle.
     - Place the transmission in Park or Neutral.
     - Press **Try Again** to continue.
3. A "One moment please…" message displays while the tablet is scanning.
4. The tablet retrieves and displays DTCs stored in the vehicle's computer for the currently selected module.

***NOTE:*** *If no DTCs for the selected module are currently stored in the vehicle's computer, the message "No 'modules' DTCs are presently stored in the vehicle's computer" displays.*

5. The tablet supports the **Fix for DTC** feature for the ABS and SRS systems. Refer to the **Fix for DTC** section [See page 16] to identify the Most likely component/System causing the DTC.




## Erasing DTCs for a Selected Module

1. Select the **module** for which you wish to erase its DTCs, then press **OK**.
   - The individual module menu screen displays.
2. Choose **Erase DTCs**. A "confirmation" message displays.
3. If you are sure you want to proceed, press **Erase DTCs**.
   - If the vehicle's engine is running, an "advisory" message displays.
     - Stop the vehicle.
     - Place the transmission in Park or Neutral.
     - Press **Try Again** to continue.
4. A "One moment please…" message displays while the erase function is in progress.
   - If the erase **was** successful, a "confirmation" message displays. After 3 seconds, the tablet will automatically re-scan the currently selected module.

- If the erase **was not** successful, an "advisory" message displays indicating the erase request was sent to the vehicle's computer. After 3 seconds, the tablet will automatically re-scan the currently selected module.

## Viewing Live Data for a Selected Module

1. Select the **module** for which you wish to view Live Data, then press **OK**.
   - The individual module menu screen displays.
2. Select **Live data**, then press **OK**.
   - The results screen displays all the vehicle's available PIDs with reported values.
   - Refer to Viewing Live Data [See page 26] for information on how to use Live Data mode.

## Performing Active Tests for a Selected Module

The **Active Tests** function lets you perform active tests for various vehicle actuators and systems. The specific tests available depend on the vehicle year, make, and model.

1. Select the **module** for which you wish to perform an Active Test, then press **OK**.
   - The individual module menu screen displays.
2. Select **Active Tests**, then press **OK**.
   - The tablet retrieves and displays a menu of Active Tests available for the vehicle under test.

***NOTE:*** *If Active Test is not supported for the vehicle under test, the message "Active Test is not supported" displays. Press* ***Exit*** *to return to the previous screen.*

3. Choose the desired test displayed on the Active Tests menu.
   - The tablet may display one or more instructional screens to prepare the vehicle for testing.
4. Prepare the vehicle for testing, as necessary.
   - The tablet displays a "control" screen to run the test.
5. Select the appropriate control to operate the actuator as desired.
   - The screen refreshes to show the result.
6. Repeat **step 5** as desired.
7. Press **Back** to return to the Active Tests menu.

## Performing Special Functions for a Selected Module

The **Special Functions** function lets you perform diagnostic, relearn or calibration procedures for various vehicle actuators and systems. The specific functions available depend on the vehicle year, make, and model.

1. Select the **module** for which you wish to perform a Special Function, then press **OK**.
   - The individual module menu screen displays.

2. Select **Special Functions**, then press **OK**.
   - The tablet retrieves and displays a menu of Special Functions available for the vehicle under test.

***NOTE:*** *If Special Function is not supported for this vehicle under test, the message "Special Function is not supported" displays. Press* ***Exit*** *to return to the previous screen.*

3. Make the necessary selections to choose the desired test.
   - A series of "instructional" screens display.
4. Follow the on-screens prompts to prepare the vehicle for testing, and to perform the selected function.
   - A "results" screen displays when the procedure has been completed.
5. Press **Finish** or **Exit** to return to the previous menu.
6. Press **Back** to return to the Special Functions menu.

### Reading ECU Information

This function retrieves and displays the specific information for the tested control unit, including Protocol, ECU ID, version number and other specifications.

1. Select the **module** for which you wish to view ECU Information, then press **OK**.
   - The individual module menu screen displays.
2. Select **ECU Information**, then press **OK**.
   - The tablet retrieves and displays the ECU Information screen.

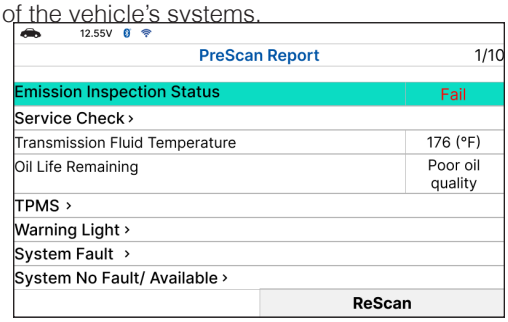
## VEHICLE INSPECTION

Performing a full vehicle scan ensures peace of mind for you and your customers. Many systems do not turn on a light or place 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.

- **Emission Inspection 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," "Fail" or "Warning".
- **Service Check** – Provides values for Engine Oil Level, Oil Life Remaining, Brake Pad Life, Transmission Temperature.
- **TPMS** – Shows the status of the vehicle's Tire Pressure Monitoring System (TPMS) and the individual tire pressures for all tires.
- **Warning Light** – Confirms the ON or OFF status for the vehicle's ABS Dash Indicator and Airbag Dash Indicator.

- **System Fault** – Shows number of DTCs retrieved for all of the vehicle's systems.
- **System No Fault/Available** – Provides information on which vehicle systems are not reporting any DTCs and/or do not support reading DTCs.
- **System No Response** – Shows the systems that the vehicle does not support.
- **DTC Detail** – Displays system details, including DTC definitions and status.




1. From the OEM Diagnostics screen, select the **Vehicle Inspection** button.
   - The Select Business Report screen displays.
2. Choose the **Business Report** you wish to retrieve, then press **OK**.
   - **Diagnostic Report** – Provides a report for OBD II Data, MIL DTC additional Information, Scan All Systems Data, and Vehicle Care.
   - **Customer Report** – Provides a report for OBD II Data, Scan All Systems Data, Service Check, Service Warning Lights, and Vehicle Care.
   - **Collision Industry Report** – Provides a report for OBD II Data, Scan All Systems Data, Service Warning Lights, and Service Check.
3. Choose the report type you wish to view, then press **OK**.
   - **PreScan** – View the vehicle's diagnostic report before making any repairs.
   - **PostScan** – View the vehicle's diagnostic report after completing the repairs or improvements.
4. If the vehicle's engine is running, an "advisory" message displays.
   - Stop the vehicle.
   - Place the transmission in Park or Neutral.
   - Press **Try Again** to continue.
5. A "One moment please..." message displays while the tablet scans all of the vehicle's equipped modules.
   - The tablet verifies that it has a registered RSPRO account. If not, a screen displays requesting that the tablet be registered with an RSPRO account. Follow the steps to create your account. To view the report result, press **Cancel**.
6. A "Submitting data…" message displays while this function is in progress.
   - The screen displays the result after submitting.
7. Select **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 selection.
   - Select **Yes** to rescan the vehicle, or **No** to cancel.
8. When finished viewing all desired information, select **Back** to return to the OEM Diagnostics menu.

# FCA & NISSAN SECURE GATEWAY ACCESS

Innova has partnered with FCA, Nissan and AutoAuth® to grant authentic access to FCA & Nissan Secure Gateway (SGW). Our partnership allows us to offer SGW-unlocking solutions. This feature applies only to FCA (Chrysler, Dodge, Jeep, RAM, etc.) vehicles manufactured after 2018 and certain Nissan vehicles manufactured after 2020.

## *What is SGW?*

Starting with 2018 models, a Secure Gateway Module (SGW) was implemented in the electrical architecture to secure the vehicle's network and control access. This module is similar to a firewall that prevents unauthorized vehicle network access, which may put vehicle systems and customers at risk.

## *Functions Limited By SGW*

Certain functions are restricted due to SGW implementation:

- Erase OEM DTCs (FCA vehicles only)
- OEM Active Tests / Special Functions
- Workshop Tools (Resets, Relearns, Routines, Calibrations)

However, you can still carry out the following:

- OBD II Diagnostics
- Reading OEM DTCs
- Viewing OEM Live Data
- Erase OEM DTCs (Nissan vehicles only)

## *Preparing The Tablet For SGW*

1. Make sure your tablet is up-to-date by installing the latest firmware.
2. Register for an authorized AutoAuth® account.
   - Click **Register** to create your account.
   - Fill in the necessary '*User Signup*' fields and agree to the AutoAuth Terms & Conditions.
   - Click the **Sign-Up** button.
   - Check your email for account verification.
   - Follow the steps to sign up as a **Service Center** or as an **Independent Technician**.
3. Register your device.
   - Go to **Version Information** under Settings to view and copy your tool's GUID. [See page 60]
   - On your AutoAuth account, navigate to **Manage Tools** and select **Add Tool**.
   - Select **Innova Electronics** as the manufacturer.
   - Under model, select **All Models**.

- Enter, or paste, your tool's GUID.

***NOTE:*** *Be cautious with the number '0' and the letter 'O.' Both can look quite similar.*

- Click **Add Tool** to complete the process.

4. Your tablet is SGW ready!

### *Unlocking The SGW*

Follow these steps when working on an FCA or Nissan vehicle with a secure gateway.

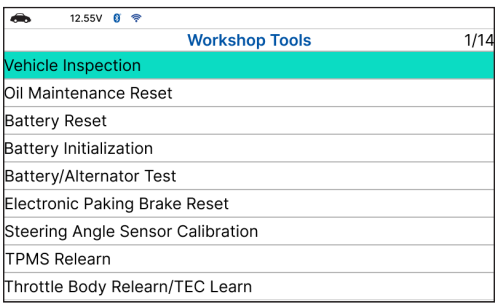
1. Open the RSPRO app and pair it with the tablet.
2. In the RSPRO app, select the **Workshop Tools** from the side menu.
3. Select **Unlock Secure Gateway** to log in to the AutoAuth account.
   - A login screen displays.
4. Enter your AutoAuth login credentials and tap **Continue**.
   - The "Unlocking Secure Gateway..." message displays while the process is in progress.
5. After completion, a "Successful" message displays.
6. Return to the tablet and proceed as usual to complete your diagnosis.

## WORKSHOP TOOLS

The Workshop Tools tab allows you to perform over 12 OEM / dealership services. Depending on the vehicle being tested, the tablet will display only the procedures which are specific to your vehicle. It can include a combination from any of the following procedures. The most commonly used services are described in this chapter.

**AVAILABLE WORKSHOP TOOLS**

- ☐ Vehicle Inspection
- ☐ Oil Maintenance Reset
- ☐ Battery Reset
- ☐ Battery Initialization
- ☐ EV/HEV/PHEV Battery Health, Battery/Alternator Test
- ☐ Electronic Parking Brake (EPB) Reset
- ☐ Steering Angle Sensor Calibration
- ☐ TPMS Relearn
- ☐ Throttle Body Relearn/TEC Learn
- ☐ ABS Bleeding
- ☐ DPF Reset



- ☐ Maintenance Reset
- ☐ Transmission Reset
- ☐ Transmission Fluid Change Reset

## OIL MAINTENANCE RESET

1. Select **Oil Maintenance Reset** on the Workshop Tools screen.
   - An "instructional" dialog displays to confirm selection.
   - Select **Yes** to continue, or N**o** to cancel.

   **NOTE:** *If the tablet cannot reset the Oil Maintenance Light, an "instructional" dialog displays, showing the manual procedures for resetting the indicator light.*

2. When the reset process has completed, a "confirmation" message displays. Select **Back** to return to the Workshop Tools screen.
   - If the Oil Maintenance Reset was not successful, an "advisory" message displays.
3. To perform the Oil Maintenance Reset by procedure, choose **Yes** to continue.
   - An "instructional" dialog displays, showing the manual procedures for resetting the indicator light.
4. If you do not wish to perform the Oil Maintenance Reset by procedure, choose **No** to return to the Workshop Tools screen.
   - A "status" message displays while the Oil Maintenance Reset is in progress.
5. When finished viewing the instructions, press **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 a battery replacement.

1. Select **Battery Reset** on the Workshop Tools screen.
   - The Battery Reset Procedures screen displays.
2. Select **Continue**, then press **OK**.
   - The Battery Reset Procedures menu displays. The menu provides access to **General Information**, **Battery Disconnection Precautions**, **Battery Connection Precautions**, and **Battery Connection Procedures**.

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

3. Choose the information you wish to view, then press **OK**.
   - The selected information displays.

4. When you have finished viewing the retrieved information, choose **Back** to return to the Battery Reset Procedures menu. Repeat **step 3** to view additional information.
    - When you have finished viewing all desired information, choose **Back** to return to the Workshop Tools screen.

## BATTERY INITIALIZATION

Follow these steps to perform a battery OBD reset service for **Audi/Volkswagen**, **BMW**, **Ford**, and **Volvo** models.

**To perform battery reset OBD service (BMW / Ford / Volvo):**

1. Select **Battery Initialization** on the Workshop Tools screen.
    - The Battery Reset OBD Service screen displays.
2. Select **Next**, then press **OK**.
    - 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, choose **Next** to continue.
    - A "Live Data" screen displays, if applicable.
4. Choose **Next** to continue.
    - A "One moment please…" message displays while battery reset is in process.
5. If the battery reset process is successful, a "Reset Complete" message displays.
    - Choose **Exit** to return to the Workshop Tools screen.
    - If the battery reset process is not successful, a "Reset Fail" message displays. Choose **Back** to return to the Workshop Tools screen.

**To perform battery reset OBD service (Audi / Volkswagen):**

1. Tap **Battery Initialization** on the Workshop Tools screen.
    - The Battery Reset OBD Service screen displays.
2. Select **Battery Reset OBD Service**, then press **OK**.
    - An "informational" screen displays.
3. Choose **Next** to continue.
    - A series of "instructional" screens display, directing you to enter reference information for the battery (part number, manufacturer, serial number).
4. Choose **Next** as necessary to scroll the screen and enter the necessary information.
    - A "confirmation" screen displays.
    - The screen shows the previously entered Battery part number, Battery manufacturer and Battery serial number.
5. Select the desired option:
    - To proceed with coding, select **Carry Out Coding** and press **OK**. Proceed to **step 6**.

- To re-enter battery reference information, select **Repeat Input** and press **OK**. Repeat **steps 3 and 4**.
- To cancel the battery reset process, select **Cancel** and press **OK**.

6. If battery coding was successful, a "confirmation" screen displays. Choose **Back** to return to the Workshop Tools screen.
   - If battery coding was not successful, an "advisory" screen displays. Choose **Exit** to return to the Workshop Tools screen.

## STEERING ANGLE SENSOR (SAS) CALIBRATION

The Steering Angle Sensor Calibration procedures vary between vehicle makes and models.

***NOTE:*** *If an error occurs while performing calibration procedures, an "advisory" message displays. Choose* ***Exit*** *to return to the Workshop Tools screen.*

1. Select **Steering Angle Sensor Calibration** on the Workshop Tools screen, then press **OK**.
   - For some vehicles, a sub-menu displays. Select the desired option, then press **OK**. Proceed to **step 2**.

***NOTE:*** *If SAS calibration is not supported by the vehicle under test, an "advisory" message displays. Choose* ***Back*** *to return to the Workshop Tools screen.*

2. A "One moment please…" message displays, followed by one or more "informational/instructional" screens.
   - Perform calibration procedures as directed. Choose **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. Choose **Next**, as appropriate, to scroll to the next screen.
   - A "results" screen displays when the calibration procedure has completed.
4. Choose **Back** to return to the Workshop Tools screen.

## ELECTRONIC PARKING BRAKE (EPB) RESET

Electronic Parking Brake Reset procedures vary between vehicle makes and models.

***NOTE:*** *If an error occurs while performing reset procedures, an "advisory" message displays. Choose* ***Exit*** *to return to the Workshop Tools screen.*

1. Select **Electronic Parking Brake Reset** on the Workshop Tool screen, then press **OK**.
   - A "One moment please…" message displays.
   - For some vehicles, one or more sub-menus display. Select the desired module and/or option, as appropriate, then press **OK**. Proceed to **step 2**.

***NOTE:*** *If Electronic Parking Brake reset is not supported by the vehicle under test, an "advisory" message displays. Choose* **Back** *to return to the Workshop Tools screen.*

2. One or more “informational/instructional” screens display.
   - Perform reset procedures as directed. Choose **Next**, as appropriate, to scroll to the next screen.
3. For some vehicles, “status” screens display as each phase of the reset procedure is successfully completed. Choose **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 reset procedure has completed.

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

## DPF RESET

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

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

***NOTE:*** *DPF Reset is only performed on Diesel vehicles only.*

1. Select **DPF Reset** on the Workshop Tools screen, then press **OK**.
   - An “instructional” dialog displays to confirm selection. Select **Yes** to continue, or **No** to cancel.
2. The DPF Reset menu displays, select the desired option.
   - For the DPF Regeneration Procedure, proceed to **step 3**.
   - For the DPF OBD Service, proceed to **step 5**.
3. Select **DPF Regeneration Procedure**, then press **OK**.
   - The DPF Regeneration Procedure screen displays.

   ***NOTE:*** *If the vehicle under test does not support DPF Regeneration Procedure, an “informational” 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. Select **DPF OBD Service**, then press **OK**.
   - A “One moment please…” message displays, followed by the DPF Reset menu.
6. Select the desired option, then press **OK**.

- An “instructional” screen displays. Prepare the vehicle for reset as directed.

7. Choose **Yes** 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.*

8. To finish, choose **Back** to return to the DPF Reset Menu, then choose **Back** to return to the Workshop Tools screen.

## ABS BLEEDING

The ABS Bleeding procedures vary between vehicle makes and models.

***NOTE:*** *If an error occurs while performing ABS bleeding procedures, an “advisory” message displays. Choose* ***Exit*** *or* ***Back****, as necessary, to return to the Workshop Tools screen.*

1. Select **ABS Bleeding** in the Workshop Tools screen, then press **OK**.
   - A “One moment please…” message displays.
   - Once complete a sub-menu displays. Select the desired option, then press **OK**. Proceed to **step 2**.
2. One or more informational/instructional screens display.
   - Perform procedures as directed. Choose **Next** or **Continue**, as appropriate, to scroll to the next screen.
3. For some vehicles, “status” screens display as each phase of the procedure is successfully completed. Choose **Next** or **Continue**, as appropriate, to scroll to the next screen.
   - A “results” screen displays when the procedure has completed.

   ***NOTE:*** *If the procedure is stopped due to a communication error, an “advisory” message displays. Choose* ***Exit*** *or* ***Back****, as necessary, to return to the Workshop Tools screen.*

4. Choose **Exit** or **Back**, as necessary, to return to the Workshop Tools screen.

## EV/HEV/PHEV BATTERY HEALTH

Follow these steps to check the vehicle’s battery and alternator system (or hybrid/EV battery system) to ensure the system is operating within acceptable limits.

1. Select **EV/HEV/PHEV Battery Health, Battery/Alternator Test** on the Workshop Tools screen.
   - If the vehicle is an electric or hybrid vehicle, the EV/HEV/PHEV Battery Health menu displays. Proceed to **step 2**.

- If the vehicle is not an electric or hybrid vehicle, the Battery/Alternator Test menu displays. [See page 46]

2. Select **EV/HEV/PHEV Battery Health**, then press **OK**.
   - The screen shows a graphic representation of the vehicle's current state of charge for all battery pack cells.

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

3. When you have finished viewing the retrieved information, choose **Back** to return to the Workshop Tools screen.

## BATTERY/ALTERNATOR TEST

The tablet can perform a check of the vehicle's battery and alternator system to ensure the system is operating within acceptable limits. Follow these steps to perform a battery check only, or an alternator system (battery and alternator) check.

### *Perform a Battery Test Only*

If the **EV/HEV/PHEV Battery Health, Battery/Alternator Test** is selected from the Workshop Tools screen and the vehicle is not an electric or hybrid vehicle, the Battery/Alternator Test menu displays. Proceed to **step 2**.

1. From the Workshop Tools screen, select **Battery/Alternator Test**, then press **OK**.
   - The Battery/Alternator Test Menu displays.
2. Select **Battery Test**, then press **OK**.
   - 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. Choose **Continue** to proceed.

   ***NOTE:*** *If the engine is running, an "advisory" message displays. Turn the engine off, then turn the ignition on. DO NOT start the engine. Press* **OK** *to continue.*

   - An "instructional" message displays.
5. Turn the vehicle's headlights on, then choose **Continue** to proceed.

- A "countdown" message displays while the battery check is in process.

6. Turn the vehicle's headlights off, then choose **Continue** to proceed.
   - An "instructional" message displays.
     - If battery voltage is *less than* 12.1 volts, an "advisory" message displays. Choose **Home** to return to the Home screen. Turn the ignition off and disconnect the tablet from the vehicle. Fully charge the battery, then repeat the battery check.
     - If the 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* 12.1 volts, an "instructional" message displays.
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 tablet did not detect "cranking status" for the vehicle's engine, an "advisory" message displays. Choose **Retest** to repeat the battery check or choose **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. Choose **Back** to return to the Battery/Alternator Test menu.

## View Battery Live Data

1. From the Workshop Tools screen, select **EV/HEV/PHEV Battery Health, Battery/Alternator Test**, then press the **OK** button.
   - The EV/HEV/PHEV Battery Health or Battery/Alternator Test menu displays.
2. Select **Battery Live Data (12 Volts)**, then press **OK**.
   - The Battery Live Data (12 Volts) screen displays.
3. When you are finished viewing the Battery Live Data (12 Volts), choose **Back** to return to the Battery/Alternator Test menu.

## Perform a Charging System Check

If the **EV/HEV/PHEV Battery Health, Battery/Alternator Test** is selected from the Workshop Tools screen and the vehicle is not an electric or hybrid vehicle, the Battery/Alternator Monitor menu displays. Proceed to **step 2**.

1. From the Workshop Tools screen, select **Battery/Alternator Test**, then press **OK**.
   - The Battery/Alternator Test menu displays.
2. Select **Alternator Test**, then press **OK**.
   - An "instructional" message displays.
3. Start and warm the engine to normal operating temperature. Turn on the headlights. Choose **Continue** to proceed.
   - An "instructional" message displays.

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 displays.
   - When the "countdown" timer expires, an "instructional" message displays.
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. Choose **Back** to return to the Battery/Alternator Test menu.

### View Alternator Live Data

If the **EV/HEV/PHEV Battery Health, Battery/Alternator Test** is selected from the Workshop Tools screen and the vehicle is not an electric or hybrid vehicle, the Battery/Alternator Monitor menu displays. Proceed to **step 2**.

1. From the Workshop Tools screen, select **Battery/Alternator Test**, then press **OK**.
   - The Battery/Alternator Test menu displays.
2. Select **Alternator Live Data**, then press **OK**.
   - The Alternator Live Data, screen displays.
3. When you've concluded viewing the Alternator Live Data, choose **Back** to return to the Battery/Alternator Test menu.

## TPMS RELEARN

***NOTE:*** *The function procedures vary between vehicle makes and models.*

1. From the Workshop Tools screen, select **TPMS Relearn**, then press **OK**.
   - The TPMS Relearn menu displays.

   ***NOTE:*** *If TPMS Relearn is not supported by the vehicle under test, an "advisory" message displays. Choose* **Back** *to return to the Workshop Tools screen.*
2. To view TPMS Relearn Procedures, select **TPMS Relearn Procedures**, then press **OK**.
   - The TPMS Relearn Procedures screen displays.
   - If the TPMS Relearn Procedures is not available, an "advisory" message displays.
3. To perform TPMS Relearn OBD, select **TPMS Relearn OBD**, then press **OK**.
   - A "One moment please…" message displays.
   - One or more sub-menus display.
   - Select the desired options. A "results" screen displays when the relearn procedure has been completed. Select **End**, then press **OK** to terminate the process.
4. Choose **Exit** to return to the Workshop Tools screen.

## THROTTLE BODY RELEARN/TEC LEARN

***NOTE:*** *The function procedures vary between vehicle makes and models.*

1. From the Workshop Tools screen, select **Throttle Body Relearn/TEC Learn**, then press **OK**.
   - A "One moment please..." dialog displays.

   ***NOTE:*** *If Throttle Body Relearn/TEC Learn is not supported by the vehicle under test, an "advisory" message displays. Choose* **Back** *to return to the Workshop Tools screen.*
2. Once ready, the Throttle Body Relearn/TEC Learn menu displays.
3. Tap **Throttle Body Relearn Procedure**.
   - The Throttle Body Relearn Procedure screen displays. Tap **Exit** to return to the Throttle Body Relearn/TEC Learn menu.
4. Tap **Idle Learn Reset**.
   - An "instructional" screen displays. Choose **Reset** to perform the procedures as directed, or, choose **Exit** or **Cancel** to terminate the procedure.
5. A "results" screen displays when the reset procedure has been completed. Choose **Exit** to terminate the procedure.
6. Choose **Back** to return to the Workshop Tools screen.

## MAINTENANCE RESET

***NOTE:*** *The function procedures vary between vehicle makes and models.*

1. From the Workshop Tools screen, select **Maintenance Reset**, then press **OK**.
   - A "One moment please..." dialog displays.

   ***NOTE:*** *If Maintenance Reset is not supported by the vehicle under test, an "advisory" message displays. Choose* **Back** *to return to the Workshop Tools screen.*
2. One or more "informational/instructional" screens display.
   - Select the desired option, then perform the procedures as directed. Choose **Next**, as appropriate, to scroll to the next screen, or, choose **Exit** or **Cancel** to terminate the procedure.
3. A "results" screen displays when the reset procedure has been completed. Choose **End** to terminate the procedure.
4. Choose **Back** to return to the Workshop Tools screen.

## TRANSMISSION RESET

***NOTE:*** *The function procedures vary between vehicle makes and models.*

1. From the Workshop Tools screen, select **Transmission Reset**, then press **OK**.
   - A "One moment please..." dialog displays.

   ***NOTE:*** *If Transmission Reset is not supported by the vehicle under test, an "advisory" message displays. Choose* **Back** *to return to the Workshop Tools screen.*

2. Once you select a module on which to perform the Transmission Reset function, the Transmission Reset menu displays.
   - Select the desired option, then perform the procedures as directed. Choose **Start** or **Continue**, as appropriate, to scroll to the next screen, or, choose **Exit** or **Cancel** to terminate the procedure.
3. A "results" screen displays when the reset procedure has been completed. Choose **End** to terminate the procedure.
4. Choose **Back** to return to the Workshop Tools screen.

## TRANSMISSION FLUID CHANGE RESET

***NOTE:*** *The function procedures vary between vehicle makes and models.*

1. From the Workshop Tools screen, select **Transmission Fluid Change Reset**, then press **OK**.
   - A "One moment please..." dialog displays.
   - One or more sub-menus display. Select the desired options, then proceed to **step 2**.

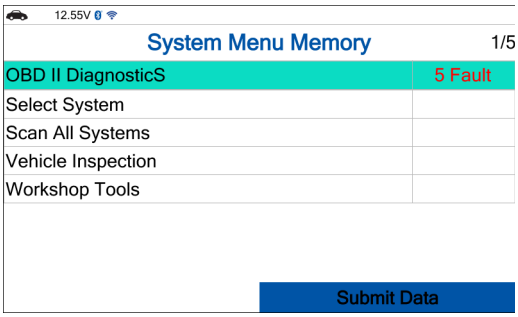
   ***NOTE:*** *If Transmission Fluid Change Reset is not supported by the vehicle under test, an "advisory" message displays. Choose* **Back** *to return to the Workshop Tools screen.*

2. One or more "informational/instructional" screens display.
   - Perform procedures as directed. Choose **Next** or **Continue**, as appropriate, to scroll to the next screen.
3. For some vehicles, "status" screens display as each phase of the reset procedure is successfully completed. Choose **Next** or **Continue**, as appropriate, to scroll to the next screen.
   - A "results" screen displays when the procedure has been completed.
4. Choose **Exit** to close the results message.
5. Choose **Back** to return to the Workshop Tools screen.

# PREVIOUS VEHICLES

The tablet stores the results of the most recent vehicle scans you have performed. The Previous Vehicles function allows you to retrieve these historical scan records and view them as needed.

1. From the **Home** screen, select the **Previous Vehicle** tab and press **OK**.
2. If more than one vehicle is stored in the tablet's memory, the Vehicle Selection menu displays. Select the desired vehicle, then press **OK**.
   - The Memory System Menu displays and includes: OBD II Diagnostics, Select System, Scan All Systems, Vehicle Inspection, and Workshop Tools.



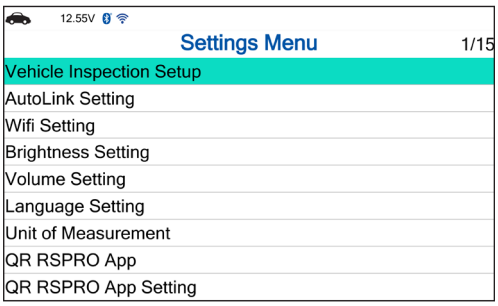

***NOTE:** If there are no vehicles currently stored, an "advisory" message displays. Press* ***Home*** *to return to the Home screen.*

   - **OBD II Diagnostics** – The Memory OBD II Diagnostic test result allows you to review the available 10 modes of OBD II.
   - **Select System** – The Select System Memory displays previously saved systems.
   - **Scan All Systems** – The Scan All Systems Memory displays previously saved systems.
   - **Vehicle Inspection** – The Vehicle Inspection Report test results are displayed.
   - **Workshop Tools** – The Memory Workshop Tools allows you to review Oil Maintenance Reset procedures and Battery Reset procedures.
3. Press **Submit Data** to send the data to the RSPRO app, where the customer can view it later.
4. When you have finished viewing the information, choose **Back** to return to the Previous Vehicles screen or press **Home** to exit to the Home screen.
   - A "confirmation" message displays.
   - Select **Yes** to exit and return to the Home screen, or, select **No** to proceed.

# SETTINGS

The tablet lets you make several adjustments and settings to configure it to your particular needs. The following functions can be performed:

- Vehicle Inspection Setup
- AutoLink Setting
- Wifi Setting
- Brightness Setting
- Volume Setting



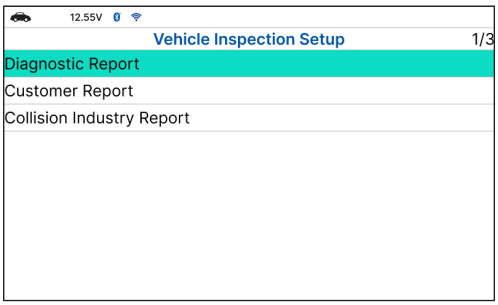
- Language Setting
- Unit of Measurement
- Smog Check or I/M Program Location
- QR RSPRO App
- QR RSPRO App Setting
- Secure Gateway Access Disclaimer Setting
- Product Support
- Version Information
- Check For Update
- Factory Reset

**Access the Settings Menu:**

1. From the Home screen, select **Settings** and press **OK**.
   - The Settings Menu displays
2. Make adjustments and settings as desired below.

## VEHICLE INSPECTION SETUP

1. Select **Vehicle Inspection Setup** in the Settings Menu, then press **OK**.
   - The Vehicle Inspection Setup screen displays.
2. Select the type of report you wish to setup, then press **OK**.
   - The Report Selection screen displays.
   - **Select** or **unselect** functions as desired, then press **OK**.

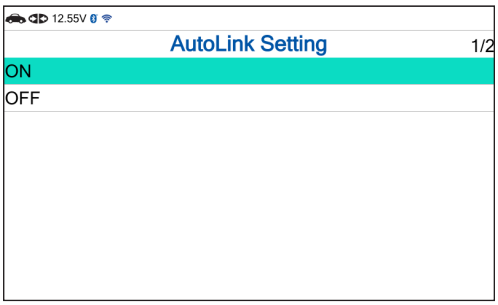



***NOTE:*** *The OBD II Diagnostics (DTCs, Monitor, Freeze Frame Data) status is always ON; this function cannot be turned OFF.*

3. Select **Save** to save your changes and auto-return to the Report Selection screen.
   - To exit and not proceed, select **Cancel** to return to the Report Selection screen.

## AUTOLINK SETTING

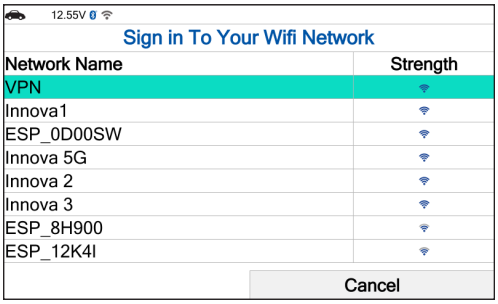
1. Select **AutoLink Setting** in the Settings Menu, then press **OK**.
   - The AutoLink Setting screen displays.
2. Select **ON** or **OFF** as desired, the tablet automatically saves your changes.




***NOTE:*** *To return to the Settings Menu without making changes, press the* ***Back*** *button.*

## WI-FI SETTING

1. Select **Wi-Fi Setting** in the Settings Menu, then press **OK**.
   - The tablet verifies if it is registered to the RSPRO app. If not, the screen displays a request that the tablet be registered to the RSPRO app.
   - If the tablet is registered with the RSPRO app, the Wi-Fi Setting screen displays.
   - If you are not currently connected to a Wi-Fi network, the Wi-Fi icon is shown in the **Strength** column for all available Networks.
   - If you are currently connected to a Wi-Fi network, the message "Connected" is shown in the **Strength** column for the Network to which you are connected.




2. To connect to a Network or to change your Network connection, select the desired **Network Name**, then press **OK**.
   - The **Sign in To Your Wi-Fi Network** dialog displays.
3. Use the keyboard to enter the Wi-Fi Network password, then press the ✓ button to save your changes and complete your connection.
   - To select a different network, press **Back** to cancel your changes and return to the **Sign in To Your Wi-Fi Network** dialog screen.

## ADJUSTING DISPLAY BRIGHTNESS

1. Select **Brightness Setting** in the Settings Menu, then press **OK**.
   - The Brightness screen displays.
2. Press ▲ **UP** and ▼ **DOWN** to make the display brighter or darker.

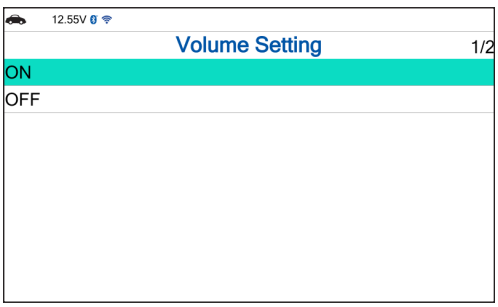
***NOTE:*** *To return to the Settings Menu without making changes, press the* ***Back*** *button.*




## ENABLING/DISABLING THE AUDIBLE TONE

1. Select **Volume Setting** in the Settings Menu, then press **OK**.
   - The Volume Setting screen displays.
2. Select **ON** or **OFF** as desired, the tablet automatically saves your changes.

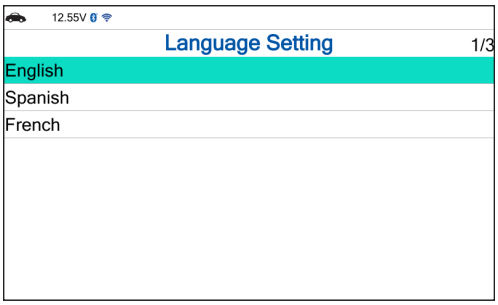
***NOTE:*** *To return to the Settings Menu without making changes, press the* ***Back*** *button.*



## SELECTING THE DISPLAY LANGUAGE

1. Select **Language Setting** in the Settings Menu, then press **OK**.
   - The Language Setting screen displays.
2. Select the desired display language (English, Spanish, French), the tablet automatically saves your changes.

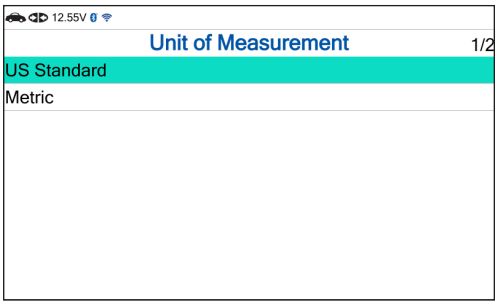
***NOTE:*** *To return to the Settings Menu without making changes, press the* ***Back*** *button.*




## SETTING THE UNIT OF MEASUREMENT

1. Select **Unit of Measurement** in Settings Menu, then press **OK**.
   - The Unit of Measurement screen displays.
2. Select the desired unit of measurement (US Standard or Metric), the tablet automatically saves your changes.

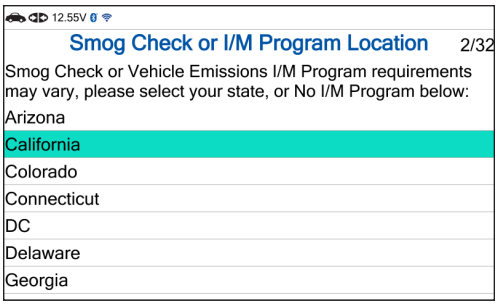
***NOTE:*** *To return to the Settings Menu without making changes, press the* ***Back*** *button.*




## SELECTING THE SMOG CHECK OR I/M PROGRAM LOCATION

1. Select **Smog Check or I/M Program Location** in the Settings Menu, then press **OK**.
   - The Smog Check or I/M Program Location screen displays.
2. Select the desired U.S. state, the tablet automatically saves your changes.

***NOTE:*** *To return to the Settings Menu without making changes, press the* ***Back*** *button.*




## VIEWING THE APP QR CODE - RepairSolutionsPRO

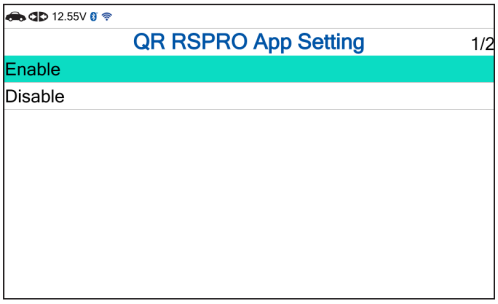
1. Select **QR RSPRO App** in the Settings Menu, then press **OK**.
   - The QR RSPRO App screen displays.
2. Press ▲ **UP** and ▼ **DOWN** to navigate through the options.
   - Using a mobile device, scan the **QR Code** to download the RepairSolutionsPRO App.
   - To exit, choose **Back** to return to the Settings Menu.



## SETTING THE QR RepairSolutionsPRO APP MODE

1. Select **QR RSPRO App Setting** in the Settings Menu, then press **OK**.
   - The QR RSPRO App Setting screen displays.
2. Select **Enable** or **Disable** as desired.

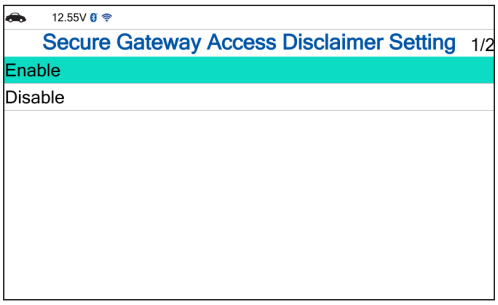
***NOTE:*** *To return to the Settings Menu without making changes, press the* **Back** *button.*




## SETTING THE SECURE GATEWAY ACCESS DISCLAIMER

1. Select **Secure Gateway Access Disclaimer Setting** in the Settings Menu, then press **OK**.
   - The Secure Gateway Access Disclaimer Setting screen displays.
2. Select **Enable** or **Disable** as desired.

***NOTE:*** *To return to the Settings Menu without making changes, press the* **Back** *button.*



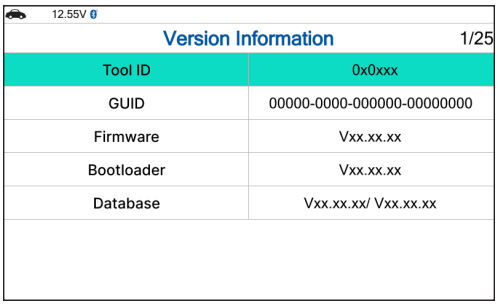

## PRODUCT SUPPORT

1. Select **Product Support** in the Settings Menu, then press **OK**.
   - The Product Support screen displays.
   - The screen displays a QR code that links to the tablet's landing page for additional information, including specifications, the manual, a coverage checker, and more.
2. Press **Back** to return to the Settings Menu.



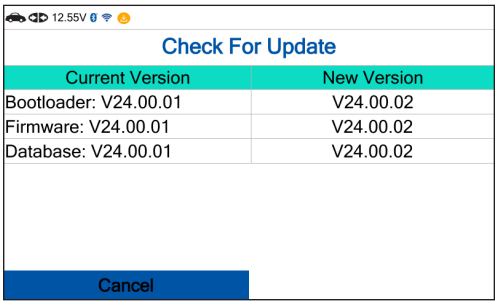

## VIEWING VERSION INFORMATION

1. Select **Version Information** in the Settings Menu, then press **OK**.
   - The Version Information screen displays.
   - The screen shows the tablet's **Tool ID**, **GUID**, current **Firmware** version, **Bootloader** version and **Database** version.
2. Press **Back** to return to the Settings Menu.



## CHECK FOR UPDATE

1. Select **Check For Update** in the Settings Menu, then press **OK**.
   - The Check For Update screen displays.
2. If there is an update available, the tablet displays the current version along with the new version for the update.
   - Refer to the **Tool Firmware Updates** section for instructions on updating the tablet. [See page 54]
3. If there is no update available, the message "No update available" is displayed.

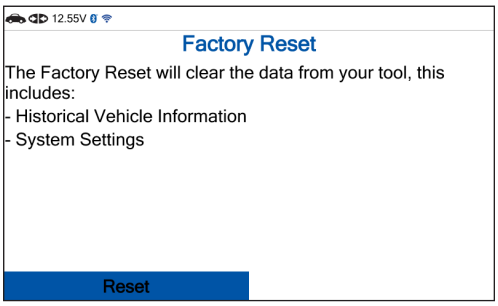



***NOTE:*** *To return to the Settings Menu without making changes, press the* ***Back*** *button.*

## FACTORY RESET

1. Select **Factory Reset** in the Settings Menu, then press **OK**.
   - The Factory Reset screen displays.
2. Press the **Reset** button to continue.
   - The tablet will clear the data, including history reports and system settings.

***NOTE:*** *To return to the Settings Menu without making changes, press the* ***Back*** *button.*




# TOOL FIRMWARE UPDATES

The following provides detailed instructions on how to download the **INNOVA® OBD Tool Updater** application and update your INNOVA OBD II Diagnostic Tablet.

## DOWNLOAD & INSTALL APPLICATION

### *Windows OS*

1. From your Windows PC, download the software by clicking this link: DOWNLOAD
   - In the "To update your tool:" section, click the **Windows** hyperlink to download the app for Windows.
   - The application "***<File Name_Vx.x.x>.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 the "**More info**" link.
     - Click "**Run Anyway**" to proceed with the installation.

3. The InstallShield Wizard launches.
4. Follow the prompts to complete the installation.
   - See the **Updating Your Tablet** section to proceed.

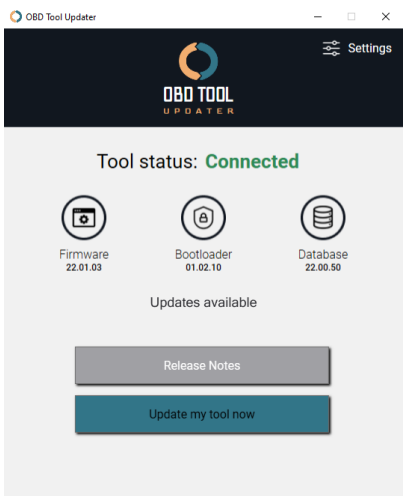
### *MacOS*

1. From your Mac, download the software by clicking this link: DOWNLOAD
   - In the "To update your tool:" section, click the **Mac** hyperlink to download the app for Mac.
   - The file "***<File Name_Vx.x.x>.zip***" begins downloading to your Mac.
2. Locate the downloaded application in your Downloads folder.
3. Unzip the file, if it is not automatically extracted to begin the installation.
4. Go to the System Settings, and then select Privacy & Security on your Mac.
   - Look for OBDUpdaterMac and click "Open Anyway".
5. 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 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.*

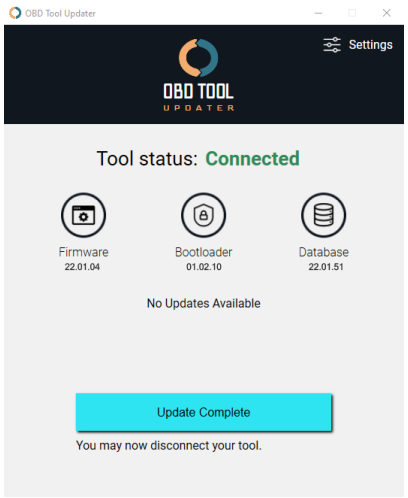



3. Upon a good connection, the status changes to "**Connected**" and displays the tool's current Firmware, Bootloader, and Database versions.
   - Wait a few more seconds for the software to check for updates.
   - If an update is available, the "Updates available" message displays.
   - If an update 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 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.



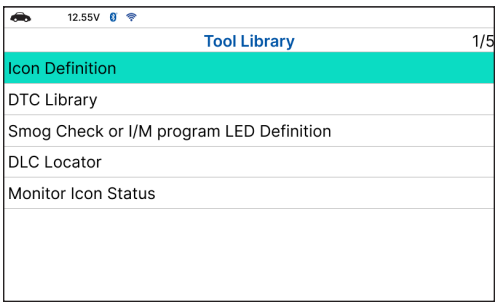

## TROUBLESHOOTING TIPS

1. Tool is connected to the computer, but the app shows a '**Disconnected**' status.
   - Make sure the USB data cable connections at the computer and your tool are properly seated.
   - Try switching to a different USB port.
   - Try using another USB cable.
   - Make sure you are using the right Updater. Older model tools are not compatible with the new, OBD II Tool Updater.
2. Tool is connected, but you do not see the "**Update my tool now**" button.
   - That means your tool is up to date and there are no new updates for your tool.
3. The update is stuck at 1% (or 5%) and not progressing.
   - Please install the latest updater for your tool. Visit https://pro.repairsolutions.com/Support to get the latest software.
   - Reboot your computer.
   - Disable any Antivirus software running in the background.
   - Attempt the update again by following the steps indicated above.

# TOOL LIBRARY

Tool Library contains valuable reference information for the tablet. The following functions are available:

- **Icon Definition** – Shows the full names for the I/M Monitor Status icons shown and descriptions of informational icons.
- **DTC Library** – Provides access to libraries of OBD I and OBD II DTC definitions.



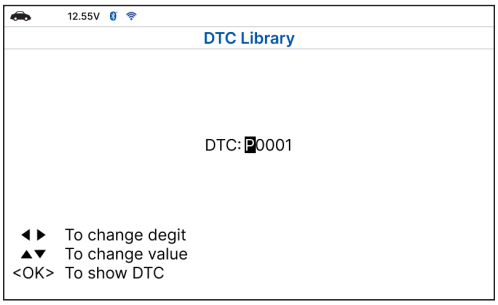
- **Smog Check or I/M Program LED Definition** - Provides descriptions of the meaning of the tablet System Status LEDs.
- **DLC Locator** - Use this search function to quickly find the location of the Data Link Connector (DLC) for a specified vehicle.
- **Monitor Icon Status** - Defines the Monitor icon status' color coding and provides tips on how to proceed.

## ICON DEFINITION

1. Select **Icon Definition** in the Tool Library menu, then press **OK**.
   - The Icon Definition menu displays.
2. Select the type of icons you wish to view – **Spark Ignition Monitors**, **Compression Ignition Monitors**, or **Tool Icons**, the press **OK**.
   - The screen shows a list of icons and descriptions for the selected category.
   - Choose **Back** to return to the Icon Definition menu. If desired, repeat **step 2** to view additional icon definitions.
3. When you have finished viewing the descriptions, choose **Back** to return to the Icon Definition menu.

## DTC LIBRARY

1. From the Tool Library menu, select **DTC Library**, then press **OK**.
   - The Select Library screen displays.
2. Select **OBD I Library** or **OBD II Library**, then press **OK**.
   - The Select Manufacturer screen displays.
3. Select the desired **vehicle manufacturer**, then press **OK**.
   - A "confirmation" message displays.
     - If the correct manufacturer is not shown, choose **No** to return to the list of vehicle manufacturers.
     - If the correct manufacturer is shown, choose **Yes**.
4. The Enter DTC screen displays.
   - **For OBD I DTCs**: The screen shows the code "000," with the first character highlighted. Press ▲ **UP** and ▼ **DOWN**, as necessary, to scroll to the first digit of the DTC, then press **OK**.
   - **For OBD II DTCs**: The screen shows the code "P0001," with the "P" highlighted. Press ▲ **UP** and ▼ **DOWN**, as necessary, to scroll to the desired DTC



type (**P**=Powertrain, **U**=Network, **B**=Body, **C**=Chassis), then choose **Next Digit**.

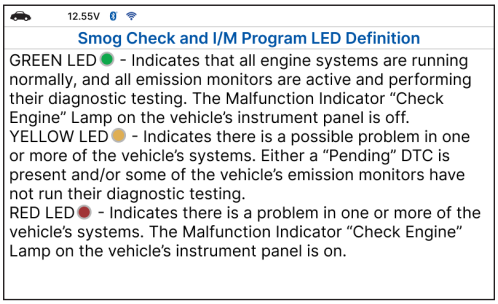
- The selected character displays solid, and the next character is highlighted.

5. Select the remaining digits in the DTC in the same way. When you have selected all the DTC digits, press **OK** to view the DTC definition.
6. When you have finished viewing the DTC definition, choose **Back**, to return to the Enter DTC screen to search for additional DTCs.

***NOTE:*** *If a definition for the DTC you entered is not available, an "advisory" message displays. Choose* ***Back*** *to return to the Enter DTC screen and enter additional DTCs.*

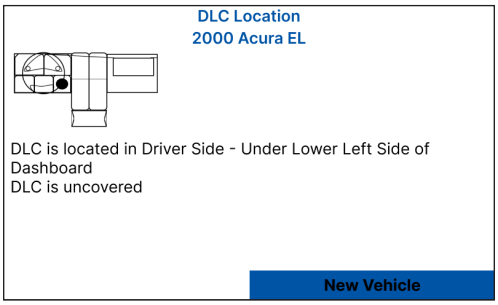
## SMOG CHECK OR I/M PROGRAM LED DEFINITIONS

1. From the Tool Library menu, select **Smog Check or I/M Program LED Definition**, then press **OK**.
   - The Smog Check or I/M Program LED Definition screen displays.
2. When you have finished viewing the Smog Check or I/M Program LED Definition, choose **Back** to return to Tool Library menu.




## USING THE DLC LOCATOR

1. Select **DLC Locator** in the Tool Library menu, then press **OK**.
   - The Select Vehicle Model Year screen displays.
2. Select the desired **vehicle model year**, then press **OK**.
   - The Select Vehicle Manufacturer screen displays.
3. Select the desired **vehicle manufacturer**, then press **OK**.
   - The Select Vehicle Model screen displays.
4. Select the desired **model**, then press **OK**.
   - The DLC Location screen for the selected vehicle displays.




- The DLC Location screen shows the selected vehicle make and model, a description of the

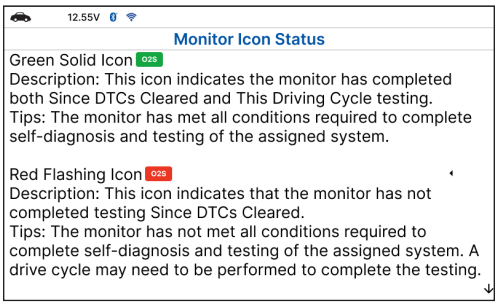
DLC location and whether the DLC is “covered” or “uncovered,” and includes a picture of the DLC location.

5. When you have finished viewing the DLC location, choose **New Vehicle** (to view the DLC location for another vehicle) or choose **Back** to return to the Tool Library menu.

## MONITOR ICON STATUS

Defines the Monitor icon status color coding and provides tips on how to proceed.

1. Select **Monitor Icon Status** in the Library menu, then press **OK**.
   - The Monitor Icon Status dialog displays.




2. When you have finished viewing the Monitor Icon Status, press **Back** to return to Tool Library menu.

# OBD I DIAGNOSTICS

The tablet provides diagnostic capabilities for OBD I vehicles manufactured between 1981 and 1995, including Chrysler/Jeep, Ford Cars, Trucks and Vans, Honda, GM, and Toyota.

## CHRYSLER/JEEP OBD I SYSTEMS

***NOTE:*** *Please ensure that the tablet has AAA batteries inserted before performing diagnostics on Chrysler/Jeep OBD I vehicles.*

1. Locate the vehicle's Data Link Connector (DLC).

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

2. Connect the tablet (with the Chrysler Connector Cable Adaptor attached) to the vehicle's DLC.
   - Set the parking brake, and make sure all vehicle accessories are turned off.
   - Turn the ignition **ON**. **DO NOT** start the engine.
3. From the Home screen, select **OBD I Diagnostics** then press **OK**.
   - The Select Make menu displays.
4. Select the desired Make of Chrysler manufacturer then press **OK** to continue.
   - The Chrysler OBD I System Menu displays.
5. To retrieve codes from the vehicle's computer:
   - Press the **UP** ▲ or **DOWN** ▼ buttons, as necessary, to highlight the model year of the vehicle, then press **OK**.
6. A "One moment please…" message displays while codes are being retrieved.
   - If the tablet fails to link to the vehicle's computer, a "Communication Error" message displays.
     - Verify the ignition is ON.
     - Check the cable connections at the tablet and at the vehicle's DLC.
     - Turn the ignition OFF, wait 10-12 seconds, then turn back ON to reset the computer.
     - Press the **POWER** button to continue.
   - If the tablet cannot link to the vehicle's computer after three attempts, the message "Contact Technical Support" displays.
7. If the tablet was able to link to the vehicle successfully, the tablet displays the retrieved DTCs.
   - The tablet will display a code only if codes are present. If no codes are present, the message "No DTCs are presently stored in the vehicle's computer" displays.
8. Select **Erase DTCs** to erase ALL retrieved Diagnostic Trouble Codes (DTCs).

# FORD OBD I SYSTEMS

## OVERVIEW OF FORD CODE RETRIEVAL PROCESS

Ford's computer self-diagnostic system is divided into four main sections:

1. "Key On Engine Off" (KOEO) Self-Test.
2. "Continuous Memory" (CM) Self-Test.
3. "Key On Engine Running" (KOER) Self-Test.
4. Other EEC-IV System tests.

These Self-Tests are designed to monitor and/or test the components and circuits that are controlled by the vehicle's computer, and to save and/or transmit test results to the tablet. The "Continuous Memory" Self-Test is designed to run continuously whenever the vehicle is in normal operation. If a fault is detected by the "Continuous Memory" Self-Test, a fault code is saved in the vehicle's computer memory for later retrieval. Self-Tests are designed in such a way that to properly diagnose a problem, you must perform all the Self-Tests, in the proper sequence.

If you fail to perform a test, or you perform a test out of sequence, you might miss a problem that is only detected during that part of the test.

## KEY ON ENGINE OFF (KOEO) TEST

During the KOEO Self-Test, two groups of codes are retrieved.

- The first group of codes are called "KOEO codes." A "KOEO" icon shows to indicate the code is a "KOEO" code.
- The second group of codes are called "Continuous Memory" codes. A "Continuous Memory" icon shows to indicate the code is a "Continuous Memory" code.

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

1. Locate the vehicle's Data Link Connector (DLC)

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

2. Connect the tablet (with the Ford Connector Cable Adaptor attached) to the vehicle's DLC. Connect the tablet to **BOTH** connectors. Press the **POWER** button to turn the tablet On.
3. From the Home screen, select **OBD I Diagnostics** then press **OK**.
   - The Select Make menu displays.
4. Select the desired Make of Ford manufacturer then press **OK** to continue.
   - The Ford OBD I System Menu displays.
5. Highlight **KOEO Test**, then press **OK**.

- The LCD display shows instructions to prepare the vehicle for the KOEO Test.

6. Start and warm the engine to normal operating temperature. Then press **OK** to continue.
7. Turn the ignition key **OFF** and wait for the on-screen prompt.
8. Turn the ignition **ON**. **DO NOT** start the engine. If your vehicle is equipped with one of the following engine types, perform the added procedures described below:
   - **For 4.9L engines with standard transmission:** Press and hold the clutch until all codes are sent (**steps 7 through 9**).
   - **For 7.3L diesel engines:** Press and hold the accelerator until all codes are sent (**steps 7 through 9**).
   - **For 2L turbo engines with octane switch:** Put switch in premium position.
9. Press the **OK** button to continue.
10. A "One moment please. KOEO test is in progress…" message displays while codes are being retrieved.



***NOTE:*** *When the ignition is turned "on," the vehicle's computer enters the Self-Test mode. Clicking sounds will be heard. This indicates the vehicle's computer is activating relays, solenoids, and other components to check their operation.*



***WARNING:*** *On some vehicles equipped with an Electric Cooling Fan, the computer activates the cooling fan to check its operation. To avoid injury, keep your hands or any part of your body a safe distance from the engine during this test.*

- If the tablet fails to link to the vehicle's computer, a "Vehicle is not responding" message displays.
  - Verify the ignition is **ON**.
  - Check the cable connections at the tablet and at the vehicle's DLC.
  - Turn the ignition **OFF**, wait 10 seconds, then turn back **ON** to reset the computer. Press the **OK** button to continue.
- If the tablet cannot link to the vehicle's computer after three attempts, the message "Contact Technical Support" displays.

11. If the tablet was able to link to the vehicle successfully a "Code retrieval was successful..." message displays temporarily, followed by any retrieved DTCs.



***NOTE:*** *Most Ford EEC-IV vehicle computers up to 1991 use a two-digit code system. From 1991 to 1995 most use a three-digit code system.*

- The tablet will display a code only if codes are present in the vehicle's computer memory.
- If no problems are found during the KOEO Self-Test, the computer sends a "PASS" code (code 11 or 111) to the tablet.
- If no Continuous Memory codes are present in the vehicle's computer memory, the tablet displays a "PASS" code (code 11 or 111).
- The tablet will display a code only if codes are present. If no codes are present, the message "No DTCs are presently stored in the vehicle's computer" displays.

12. Select **Erase DTCs** to erase ALL retrieved Diagnostic Trouble Codes (DTCs).
13. Disconnect the tablet from the vehicle and turn the ignition key OFF.
14. To prolong battery life, the tablet automatically shuts "Off" after approximately three minutes of no button activity. The DTCs retrieved will remain in the tablet's memory and may be viewed at any time. If the tablet's batteries are removed, or if the tablet is re-linked to a vehicle to retrieve codes, any prior codes in its memory are automatically cleared.
15. Follow the testing and repair procedures outlined in the vehicle's service repair manual to correct "hard" DTCs. Codes should be addressed and eliminated in the order they were received, erasing, and retesting after each repair is done to be sure the fault was eliminated.

***NOTE:*** *Before "Continuous Memory" codes can be serviced, both the KOEO and the KOER Self-Tests must pass (a PASS code 11 or 111 is obtained). After both of these tests have passed, erase the vehicle's computer memory, take the vehicle for a short drive, then repeat the KOEO Self-Test. If any Continuous Memory faults are present, service them all this time.*

***NOTE:*** *Do not proceed to the ignition timing check procedure or the KOER test until a PASS code (code 11 or 111) for KOEO test is obtained.*

## ENGINE TIMING CHECK

***NOTE:*** *Before performing the KOER Self-Test, the vehicle's Ignition Base Timing and the computer's ability to electronically control timing advance must be checked for proper operation.*

***NOTE:*** *This procedure is only applicable to 1992 and older vehicles (excluding diesel engines). For 1993 and newer vehicles, refer to the vehicle's service repair manual for procedures to check and adjust timing.*

For 1992 and older vehicles, the tablet can be used in combination with a timing light to check ignition timing and the vehicle computer's ability to advance ignition timing.

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

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

- A timing light is required to perform this test.
- The vehicle must pass the KOEO Test before performing this test.

1. Locate the vehicle's Data Link Connector (DLC).

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

2. Connect the tablet (with the Ford Connector Cable Adaptor attached) to the vehicle's DLC. Connect the tablet to **BOTH** connectors. Press the **POWER** button to turn the tablet On, then press **OK** button to continue.

3. From the Home screen, select **OBD I Diagnostics** then press **OK**.
   - The Select Make menu displays.
4. Select the desired Make of Ford manufacturer then press **OK** to continue.
   - The Ford OBD I System Menu displays.
5. Highlight **Timing Check**, then press the **OK** button.
   - The Select Model Year screen displays.
6. Highlight the vehicle model year, then press the **OK** button.
   - **For 1993 and newer vehicles**: The message "Follow instructions in vehicle service manual to perform timing check" displays. Press the **Back** button to return to the Ford Menu. Refer to the vehicle service manual for procedures.
   - **For 1992 and older vehicles**: The message "Warm up engine to operating temperature" displays.
7. Start and warm the engine to normal operating temperature. Press **OK** to continue.
8. When prompted, turn off all vehicle accessories, turn the ignition key OFF and wait for the on-screen prompt. If you wish to exit the Timing Check procedure at this time, press the **Back** button.
9. When instructed, start the engine, and press **OK**.
   - A "One moment please preparation for test is in progress" message displays temporarily, followed by the message "Perform Timing Check within 2 minutes."
10. Perform the Timing Check as follows:
    - The vehicle's computer is programmed to advance ignition timing 20° (±3°) above the vehicle's "base timing" value, and to freeze this setting for two minutes from the time the "Perform Timing Check within 2 minutes" message displays.
    - Within this two-minute period, follow instructions in the vehicle's service repair manual to check the ignition timing with a timing light and ensure that it is 20° above the specified base timing value (±3°).
11. If timing light readings are within the acceptable range:
    - Base timing and the vehicle computer's ability to advance timing are working properly.
    - Proceed to the KOER Self-Test.
12. If timing light readings are not within the acceptable range:
    - Base timing may be out of adjustment, or the computer may have problems with the timing advance circuit.
    - Refer to the vehicle's service repair manual for procedures on adjusting and/or repairing ignition timing. Repairs to ignition timing must be made before proceeding to the KOER Test.

## KEY ON ENGINE RUNNING (KOER) SELF-TEST

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

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

- The vehicle must pass the KOEO Test before performing this test.
- The vehicle must pass the Engine Timing Check before performing this test.

1. Locate the vehicle's Data Link Connector (DLC).

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

2. Connect the tablet (with the Ford Connector Cable Adaptor attached) to the vehicle's DLC. Connect the tablet to **BOTH** connectors. Press the **POWER** button to turn the tablet On, then press **OK** to continue.
3. From the Home screen, select **OBD I Diagnostics** then press **OK**.
   - The Select Make menu displays.
4. Select the desired Make of Ford manufacturer then press **OK** to continue.
   - The Ford OBD I System Menu displays.
5. Highlight **KOER Test**, then press the **OK** button.
   - The message "Make sure ignition timing is within factory specifications" displays. If necessary, press the **Back** button to return to the Ford Menu and perform an Engine Timing Check. Otherwise, press the **OK** button to continue.
6. The message "Warm up engine to operating temperature" displays. Start and warm the engine to normal operating temperature. Press **OK** to continue.
7. When prompted, turn off all vehicle accessories, turn the ignition key OFF. If you wish to exit the KOER test at this time, press the **Back** button.
8. When instructed, start the engine, and press the **OK** button to continue. A "One moment please KOER test is in progress..." message displays temporarily.
9. The tablet retrieves the Cylinder Identification (ID) Code. (Identifies the number of cylinders for the vehicle under test).
   - If the tablet cannot retrieve the Cylinder ID Code, an "advisory" message displays. Press the **Back** button to exit and repeat the Key On Engine Off (KOEO) test until DTC 11 or 111 displays.
10. Perform the following procedures when prompted.
    - Turn the steering wheel 1/2 turn to right, hold for four seconds and release.
    - Press the brake pedal to the floor and then release it.
    - Cycle the Overdrive Switch (if equipped).
    - Quickly press the accelerator pedal to the floor and then release it.
11. After the above procedures are performed a "One moment please KOER test is in progress..." message displays temporarily, followed by a "Retrieving codes" message.

    ***NOTE:** Most Ford EEC-IV vehicle computers up to 1991 use a two-digit code system. From 1991 to 1995 most use a three-digit code system.*

- If the tablet fails to link to the vehicle's computer, a "Vehicle is not responding" message displays.
  - Verify the ignition is ON.
  - Check the cable connections at the tablet and at the vehicle's DLC.
  - Turn the ignition OFF, wait 10 seconds, then turn back ON to reset the computer.
  - Press **OK** to continue.
- The tablet displays a code only if codes are present in the vehicle's computer memory. If no codes are present, a "No DTCs are presently stored in the vehicle's computer" message is displayed.

**12.** If no problems are found during the KOER Self-Test, the computer sends a "PASS code" (code 11 or 111) to the tablet.

**13.** Select **Erase DTCs** to erase ALL retrieved Diagnostic Trouble Codes (DTCs).

**14.** Turn the engine off and disconnect the tablet from the vehicle's test connectors.

***NOTE:*** *All retrieved DTCs will remain in the tablet's memory. If the KOER Test procedure is performed again, DTCs from a prior test will automatically clear and will be replaced by the most current DTCs retrieved.*

**15.** All KOER codes that are retrieved by the tablet during the KOER Self-Test represent problems that are present now (at the time the test is performed). The related vehicle problems that caused the codes to be sent must be repaired using the procedures described in the vehicle's repair manual.

**16.** After all repairs have been completed, repeat the KOER Self-Test.

**17.** If a "PASS code" (code 11 or 111) is received, it indicates that the repairs were successful, and all the related systems are working properly.

**18.** If a "PASS code" (code 11 or 111) is not received, the repair was unsuccessful. Consult the vehicle's service manual and recheck the repair procedure.

## CYLINDER BALANCE TEST

The Cylinder Balance Test assists in finding a weak or noncontributing cylinder. The computer shuts off fuel (cuts off power to injectors) to each cylinder, in sequence, and monitors for RPM changes (drop). Based on this information, the computer determines if all the cylinders are contributing power equally (for proper engine operation), or if some cylinders are only contributing partially or not contributing at all.

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

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

**1.** Locate the vehicle's Data Link Connector (DLC).

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

2. Connect the tablet (with the Ford Connector Cable Adaptor attached) to the vehicle's DLC. Connect the tablet to **BOTH** connectors. Press the **POWER** button to turn the tablet ON, then press **OK** to continue.
3. From the Home screen, select **OBD I Diagnostics** then press **OK**.
   - The Select Make menu displays.
4. Select the desired Make of Ford manufacturer then press **OK** to continue.
   - The Ford OBD I System Menu displays.
5. Highlight **Cylinder Balance Test**, then press the **OK** button.
   - An "advisory" message displays. If the vehicle is not equipped with Sequential Electronic Fuel Injection (SEFI), press **Back** to exit. Otherwise, press the **OK** button to continue.
6. An "instructional" message displays. Start and warm the engine to normal operating temperature. Press **OK** to continue.
7. When prompted, turn off all vehicle accessories, turn the ignition key OFF and wait for the on-screen prompt. If you wish to exit the Cylinder Balance Test at this time, press the **Back** button.
8. When instructed, start the engine, and press the **OK** button.
   - A "One moment please preparation for test is in progress..." message displays temporarily.
9. When prompted, lightly press the accelerator pedal halfway and release to activate the cylinder balance test.

   ***NOTE: For 1986 models ONLY:*** *Fully press the accelerator once and release.*

   - The computer is now in Cylinder Balance Test mode and will start cutting fuel to each cylinder in sequence to determine if all the cylinders are contributing equally. **It may take up to five minutes before the test results are transmitted to the tablet**.
10. If the vehicle's computer fails to enter Cylinder Balance Test mode, do the following:
    - Lightly press the accelerator pedal again as described in **step 7**.
11. After the Cylinder Balance Test is completed, the test results are sent to the tablet.
12. If all cylinders are contributing equally, a "System Pass" message displays.

    ***NOTE:*** *If the computer detects a problem with a cylinder(s) when performing the initial Cylinder Balance Test, it needs to repeat the test two more times to properly determine which cylinder(s) are malfunctioning.*

13. If a cylinder is not contributing at the same level as the other cylinders, the computer prompts you to repeat the test two more times by displaying the "Lightly press the accelerator halfway and release" message again. Each time the message displays, perform the procedures as instructed.
14. After the Cylinder Balance tests have completed, the computer will identify and display which cylinder (or cylinders) are not contributing equally.
    - If any weak cylinders are identified, consult the vehicle's service repair manual to perform further testing and/or repairs.

# RELAY AND SOLENOID TEST (OUTPUT STATE CHECK)

The "Output State Check" lets you energize (turn ON) and de-energize (turn OFF), on command, most of the actuators (relays and solenoids) that are controlled by the vehicle's computer.

Use this test to check computer output voltages and relay/solenoid operation.

***NOTE:*** *The fuel injectors and fuel pump are not energized during this test.*

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

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

1. Locate the vehicle's Data Link Connector (DLC).

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

2. Connect the tablet (with the Ford Connector Cable Adaptor attached) to the vehicle's DLC. Connect the tablet to **BOTH** connectors. Press the **POWER** button to turn the tablet On, then press **OK** to continue.
3. From the Home screen, select **OBD I Diagnostics** then press **OK**.
   - The Select Make menu displays.
4. Select the desired Make of Ford manufacturer then press **OK** to continue.
   - The Ford OBD I System Menu displays.
5. Highlight **Output State Test**, then press **OK**.
6. The message "Warm up engine to operating temperature" displays. Start and warm the engine to normal operating temperature. Press the **OK** button to continue.
7. When prompted, turn the ignition key OFF and wait for the on-screen prompt. If you wish to exit the Output State Check at this time, press the **OK** button.
8. When prompted, turn the ignition ON. DO NOT start the engine. If your vehicle is equipped with one of the following engine types, perform the added procedures described below:
   - **For 4.9L engines with standard transmission:** Press and hold the clutch until the "Output State Check Active" screen displays.
   - **For 7.3L diesel engines:** Press and hold the accelerator until the "Output State Check Active" screen displays.
   - **For 2L turbo engines with octane switch:** Put switch in premium position.
9. Press the **OK** button to continue.
10. A "One moment please test is in progress..." message displays.

    ***NOTE:*** *When the ignition is turned "on", the vehicle's computer enters the Self-Test mode. Clicking sounds will be heard. This is normal.*

***WARNING:*** *On some vehicles equipped with an Electric Cooling Fan, the computer activates the cooling fan to check its operation. To avoid injury, keep your hands or any part of your body a safe distance from the engine during this test.*

- If the tablet fails to link to the vehicle's computer, a "Vehicle is not responding" message displays.
  - — Verify the ignition is ON.
  - — Check the cable connections at the tablet and at the vehicle's DLC.
  - — Turn the ignition OFF, wait 10 seconds, then turn back ON to reset the computer.

***NOTE:*** *BE SURE to perform the added procedures in* ***step 6****, if appropriate, BEFORE turning the ignition ON.*

  - — Press the **OK** button to continue.
- If the tablet cannot link to the vehicle's computer after three attempts, the message "Contact Technical Support" displays.

**11.** If the tablet was able to link to the vehicle successfully an "Output State Check active..." message displays temporarily, followed by a display that instructs you on how to perform the test.

**12.** When prompted, press the accelerator pedal once, then release. This activates the Output State Check and energizes most of the actuators (relays and solenoids) that are controlled by the vehicle's computer.

***NOTE:*** *If your vehicle is equipped with an Integrated Vehicle Speed Control, disconnect the vacuum supply hose from the speed control servo before pressing the accelerator. Reconnect the vacuum hose after the test.*

**13.** To de-energize the actuators, press the accelerator pedal again and release.

**14.** The procedure can be repeated as many times as desired by pressing and releasing the accelerator pedal.

**15.** Consult the vehicle's service repair manual for a list of actuators (solenoids and relays) controlled by the computer that apply to the vehicle under test, and which actuators should energize and de- energize when performing the Output State Check. All applicable actuators should be on when energized and off when de-energized.

**16.** If an actuator is not responding to the Output State Check, follow the procedures described in the vehicle's service manual to check computer actuator output circuit voltages and/or grounds.

**17.** To exit the Output State Check, turn the ignition OFF and disconnect the tablet from the vehicle.

## WIGGLE TEST

***NOTE:*** *Since any DTCs from Wiggle Test results are saved in Continuous Memory, it is suggested that you clear any DTCs in Continuous Memory before performing the Wiggle Test.*

Use this test to check for intermittent faults in some circuits.

**Circuits Tested:**

**1984 & Newer** - Air Charge Temp Sensor (ACT), Barometer Pressure Sensor (BP), Engine Coolant Temp Sensor (ECT), Exhaust Gas Oxygen Sensor (EGO), EGR Valve Position Sensor (EVP), Manifold Absolute Pressure Sensor (MAP), Throttle Position Sensor (TP), Vane Air Temp Sensor (VAT).

**1985 & Newer** - Vane Air Flow Sensor (VAF).

**1986 & Newer** - Pressure Feedback EGR Sensor (PFE).

**1990 & Newer** - Exhaust Gas Oxygen Sensor (EGO), Ignition Diagnostic Monitor (IDM) (DIS or Dual Plug DIS only), Idle Tracking Switch (ITS), Mass Air Flow Sensor (MAF).

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

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

1. Locate the vehicle's Data Link Connector (DLC).

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

2. Connect the tablet (with the Ford Connector Cable Adaptor attached) to the vehicle's DLC. Connect the tablet to **BOTH** connectors. Press the **POWER** button to turn the tablet ON, then press the **OK** button to continue.
3. From the Home screen, select **OBD I Diagnostics** then press **OK**.
   - The Select Make menu displays.
4. Select the desired Make of Ford manufacturer then press **OK** to continue.
   - The Ford OBD I System Menu displays.
5. Highlight **Wiggle Test**, then press **OK**.
6. The message "Warm up engine to operating temperature" displays. Start and warm the engine to normal operating temperature. Press **OK** to continue.
7. When prompted, turn the ignition key OFF and wait for the on-screen prompt. If you wish to exit the Wiggle Test at this time, press the **OK** button.
8. Select the desired Wiggle Test from the menu displayed.
   - To perform the KOEO Wiggle Test:
     - Highlight **KOEO Wiggle Test**.
     - Turn the ignition ON. DO NOT start the engine.
     - Press the **OK** button to continue.
   - To perform the KOEO Wiggle Test:
     - Highlight **KOEO Wiggle Test**.
     - Turn the ignition ON and start the engine.
     - Press the **OK** button to continue.

9. A “One moment please test is in progress” message displays temporarily.
   - If the tablet fails to link to the vehicle’s computer, a “Vehicle is not responding” message displays.

**For KOER Wiggle Test:**

   — Verify the ignition is ON.

   — Turn the ignition OFF, wait 10 seconds, then turn back ON to reset the computer. Press the **OK** button to continue.

**For KOER Wiggle Test:**

   — Turn the ignition OFF, wait 10 seconds, then turn back ON to reset the computer. Press the **OK** button to continue.

   - If the tablet **cannot** link to the vehicle’s computer after three attempts, the message “Contact Technical Support” displays.

10. If the tablet was able to link to the vehicle successfully, a “Wiggle test is active...” message displays temporarily, followed by a message instructing you on how to perform the test.
    - Press the **Back** button if you wish to exit the Wiggle Test at this time.
11. Wiggle, tap and move the suspected sensor or wiring.
    - If no faults are detected, a “System Pass” message displays.
    - If a fault is detected, a “Circuit Fault detected” message displays.

***NOTE:*** *If the Wiggle Test detects any problems, the related DTC will be stored by the computer in “Continuous Memory”. To view any Wiggle Test DTCs you must perform the KOEO Test.*

12. Follow the procedures in the vehicle’s service repair manual to perform troubleshooting and repairs for Wiggle Test results.
13. The Wiggle Test will stay active as long as desired. To exit the Wiggle Test, turn the ignition OFF and disconnect the tablet.

## GM OBD I SYSTEMS

This tablet may be used to retrieve engine service codes from most General Motors (GM) domestic cars and trucks (EXCEPT Geo, Nova, Saturn, and Sprint).

***NOTE:*** *Please ensure that the tablet has AAA batteries inserted before performing diagnostics on GM OBD I vehicles.*

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

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

1. Locate the vehicle's Data Link Connector (DLC).

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

2. Connect the tablet (with the GM Connector Cable Adaptor attached) to the vehicle's DLC. Press the **POWER** button to turn the tablet ON, then press the **OK** button to continue.
3. From Home screen, select **OBD I Diagnostics** then press **OK**.
   - The Select Make menu displays.
4. Select the desired Make of GM manufacturer then press **OK** to continue.
   - An "instructional" message displays.
5. Turn the ignition ON. Turn all vehicle accessories OFF. Select the **Continue** button, then press **OK**.
   - The Select Vehicle Year screen displays.
     - Highlight the desired year, then press **OK**; the Enter 8th VIN menu displays.
6. Highlight the 8th digit of the vehicle's VIN, then press **OK**.

   ***NOTE:*** *If the "Enter 4th VIN Digit" screen displays (not applicable to all vehicles), highlight the 4th digit of the vehicle's VIN, then press* ***OK****.*

   ***NOTE:*** *If the "Truck" screen displays (not applicable to all vehicles), press* **Yes** *or* **No***, as appropriate.*

7. When the tablet is in the process of retrieving codes, a "One moment please..." message displays.
   - If the tablet fails to link to the vehicle's computer, a "Communication Error" screen displays.
     - Verify the ignition is ON.
     - Check the cable connections at the tablet and at the vehicle's DLC.
     - Turn the ignition OFF, wait 10-12 seconds, then turn back ON to reset the computer.
     - Press the **POWER** button.
8. If the tablet was able to link to the vehicle successfully, the tablet displays the retrieved DTCs.
   - The tablet will display a code only if codes are present in the vehicle's computer memory. If no codes are present, a "No DTCs are presently stored in the vehicle's computer" message displays.
9. Code 12 will always be present, and it has one of the following meanings:
   - If code 12 is the only DTC retrieved and your vehicle "STARTS OK" then code 12 indicates system "PASS", and all computer control systems are functioning properly.
   - If code 12 is present and your vehicle "DOES NOT START", then it may indicate a problem with the ignition control system.
10. Select **Erase DTCs** to erase ALL retrieved Diagnostic Trouble Codes (DTCs).

# HONDA OBD I SYSTEMS

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

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

1. Locate the vehicle's Data Link Connector (DLC).

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

2. Connect the tablet (with the Honda Connector Cable Adaptor attached) to the vehicle's DLC. Press the **POWER** button to turn the tablet ON, then press the **OK** button to continue.
3. From Home screen, select **OBD I Diagnostics** then press OK.
   - The Select Make menu displays.
4. Select the desired Make of Honda manufacturer then press **OK** to continue
   - An "instructional" message displays.
     - Turn the ignition key ON.
     - Make sure the throttle is fully closed.
     - Make sure the emergency brake is applied.
     - Place the transmission in neutral.
     - Turn all vehicle accessories "OFF."
5. Highlight the **Read DTCs** button and press **OK**.
6. When the tablet is in the process of retrieving codes, a "One moment please..." message displays.
   - If the tablet fails to link to the vehicle's computer, a "Communication Error" screen displays.
     - Verify the ignition is ON.
     - Check the cable connections at the tablet and at the vehicle's DLC.
     - Turn the ignition OFF, wait 10-12 seconds, then turn back ON to reset the computer.
     - Press the **POWER** button and repeat **step 3** as necessary.
7. If the tablet was able to link to the vehicle successfully, the tablet displays the retrieved DTCs.
   - The tablet will display a code only if codes are present in the vehicle's computer memory. If no codes are present, a "No DTCs are presently stored in the vehicle's computer" message displays.
8. Select the **Erase DTCs** button to erase ALL retrieved Diagnostic Trouble Codes (DTCs).

# TOYOTA OBD I SYSTEMS

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

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

1. Locate the vehicle's Data Link Connector (DLC).

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

2. Connect the tablet (with the Toyota Connector Cable Adaptor attached) to the vehicle's DLC.
3. From Home screen, select **OBD I Diagnostics** then press **OK**.
   - The Select Make menu displays.
4. Select the desired Make of Toyota manufacturer then press **OK** to continue
   - An "instructional" message displays.
     - Turn the Ignition key "ON" and start the engine. Warm engine to operating temperature. (Shut engine off after warming up, then turn the ignition back ON).
     - Make sure the throttle is fully closed.
     - Set the gear lever in "park" (for automatic transmissions) or "neutral" for manual transmissions.
     - Turn all vehicle accessories "OFF."
5. Highlight the **Read DTCs** button and press **OK**.
6. When the tablet is in the process of retrieving codes, a "One moment please..." message displays.
   - If the tablet fails to link to the vehicle's computer, a "Vehicle is not responding" message displays.
     - Verify the ignition is ON.
     - Check the cable connections at the tablet and at the vehicle's DLC.
     - Turn the ignition OFF, wait 10-12 seconds, then turn back ON to reset the computer.
     - Press the **POWER** button and repeat **step 3** as necessary.
7. If the tablet was able to link to the vehicle successfully, the tablet displays the retrieved DTCs.
   - The tablet will display a code only if codes are present in the vehicle's computer memory. If no codes are present, a "No DTCs are presently stored in the vehicle's computer" message displays.
8. Select the **Erase DTCs** button to erase ALL retrieved Diagnostic Trouble Codes (DTCs).

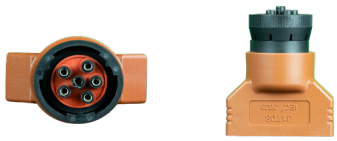
# HEAVY-DUTY (HD) OBD DIAGNOSTICS

## GETTING THE CONNECTION

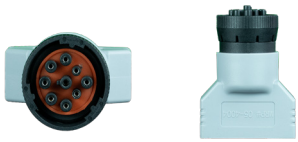
The tablet provides diagnostic capabilities for the commercial vehicles manufactured from 1985 to present, including: **International, Freightliner, Volvo, Dodge, MACK, Kenworth, Peterbilt, Western Star, Mitsubishi Fuso, Isuzu,** etc.

There are 4 types of the HD OBD connector including the 6-Pin connector, 9-Pin Black connector, 9-Pin Green connector, and 16-Pin connector (same as the diagnostic connector for cars).

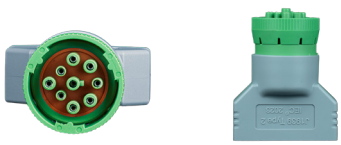
**6-Pin Connector: supports SAE J1587/J1708 standard only**



**9-Pin Black connector: supports both SAE J1587/J1708 standard and SAE J1939 standard (with baud rate up to 250 kbps)**



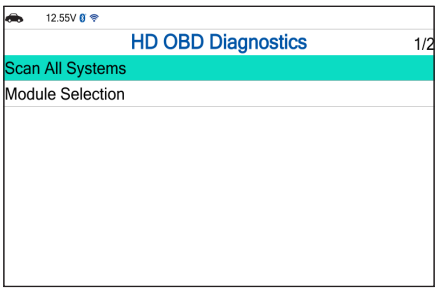
**9-Pin Green connector: supports both SAE J1587/J1708 standard and SAE J1939 standard (with baud rate up to 500 kbps)**



**16-Pin connector: supports J1979 standard**

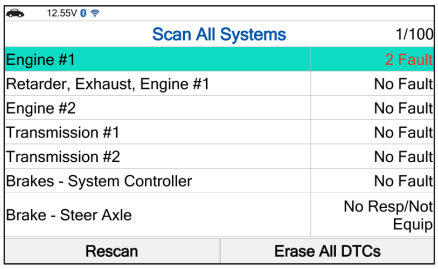


1. Locate the vehicle's Data Link Connector (DLC).
2. Connect the tablet to the vehicle's DLC.
3. Turn the ignition on. **DO NOT** start the engine.
4. When the tablet is properly connected to the vehicle's DLC, the unit automatic turns ON.
   - The tablet will detect automatically and display the HD OBD Diagnostics screen.




## SCAN ALL SYSTEMS

1. Select **Scan All Systems** from the HD OBD Diagnostics screen, then press **OK**.
   - A "One moment please..." message displays while the tablet scans all available modules.
   - If the tablet fails to link to the vehicle's computer, a "Communication Error" message displays.
2. When the scan is completed, the Scan All Systems screen displays. The screen shows the number of DTCs recorded for each available module.



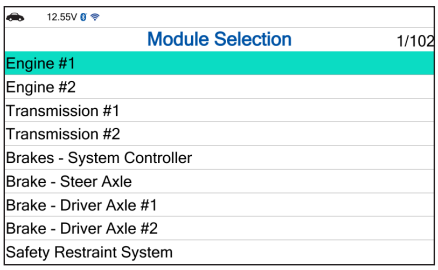

3. Select **Erase All DTCs**, then press **OK** to erase DTCs from all modules.
4. A "confirmation" message displays.
   - If you are sure you want to proceed, select **Erase DTCs** for a second time.
5. A "One moment please…" message displays while the erase function is in progress.

***NOTE:*** *Turn the ignition key ON.* ***DO NOT*** *start the engine.*

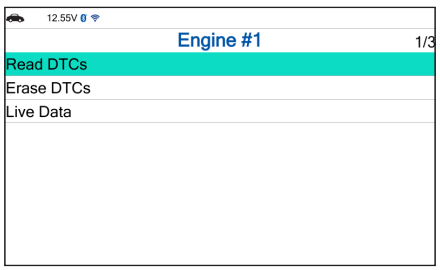
   - If the **erase was successful**, a "confirmation" message displays. The tablet automatically relinks to the vehicle's computer after 3 seconds.
   - If the erase **was not successful**, an "advisory" message displays indicating the erase request was sent to the vehicle's computer. The tablet automatically relinks to the vehicle's computer after 3 seconds.

# MODULE SELECTION

1. Select **Module Selection** from the HD OBD Diagnostics screen, then press **OK**.
   - The Available Systems screen displays.



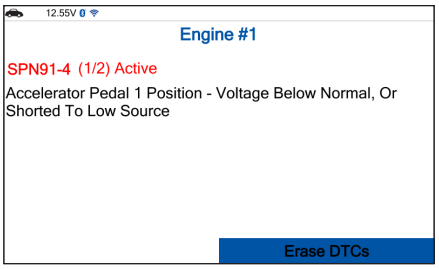

2. Select the desired module, then press **OK**.
   - The individual module screen displays.




3. Depending on the selected module, you can Read DTCs, Erase DTCs or view Live Data. Choose the function you would like to perform.
   - **Read DTCs** - [See page 84]
   - **Erase DTCs** - [See page 85]
   - **Live Data** - [See page 86]

## READING DTCS FOR A SELECTED MODULE

1. From the individual module screen, select **Read DTCs** then press **OK**.
   - A “One moment please...” message displays while the requested DTCs are retrieved.
   - If the tablet fails to link to the selected module, a “Communication Error” message displays.
     - 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.
     - Press **Relink** to continue.
2. When the scan is completed, the screen displays the number of DTCs recorded for the selected module.




***NOTE:*** *If the definition for the currently displayed code is not available, an "advisory" message displays.*

***NOTE:*** *In the case of long code definitions, a small arrow is shown in the upper/lower right-hand corner of the code display area to indicate the presence of additional information.*

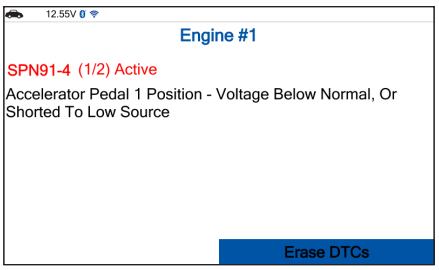
- If no codes are present, the message "No (system name) DTCs is presently stored in the vehicle's computer" shows.

## ERASING DTCS FOR A SELECTED MODULE

1. After scanning DTCs, select **Erase DTCs**, then press **OK**.
   - If you want to erase DTCs without scanning, from the individual module screen, select the **Erase DTCs** option, then press **OK**. Proceed to **step 2**.
2. A "confirmation" message displays.
   - If you are sure you want to proceed, select **Erase DTCs** for a second time.
   - If you do not want to proceed, choose **Back** to cancel the erase procedure.
3. A "One moment please…" message displays while the erase function is in progress.

***NOTE:*** *Turn the ignition key ON.* ***DO NOT*** *start the engine.*

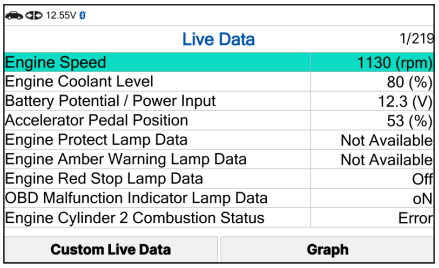
- If the **erase was successful**, a "confirmation" message displays. The tablet automatically relinks to the vehicle's computer after 3 seconds.



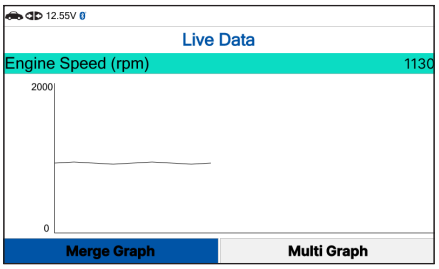

- If the erase **was not successful**, an "advisory" message displays indicating the erase request was sent to the vehicle's computer. The tablet automatically relinks to the vehicle's computer after 3 seconds.

## VIEWING LIVE DATA FOR A SELECTED MODULE

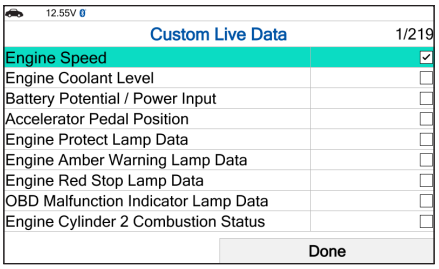
1. From the individual module screen, select **Live Data** then press **OK**.
2. A “One moment please . . .” message displays while the tablet establishes communication with the vehicle.
   - If the tablet fails to establish communication with the vehicle, a “Communication Error” message displays.
     - 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.
     - Press **Relink** to continue.
3. Real-time Live Data (PID) information supported by the vehicle under test displays.



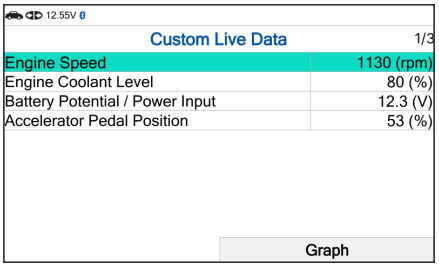

   - If Live Data is not supported by the vehicle under test, an “advisory” message displays. Choose **Relink** to try again.
4. Select **Graph** and press **OK** to view the currently selected PID in graph mode.




   - Choose **Merge Graph** to view more PID results on one graph.
   - Choose **Multi Graph** to view more Graphs on one screen.
5. Select **Custom Live Data** to choose only the PIDs that you wish to display.
   - The Custom Live Data screen displays.




6. Press ▲ **UP** and ▼ **DOWN** to scroll through the available PIDs. When you wish to display is highlighted, press **OK** (a "check-mark" shows to confirm your selection). Repeat until only the PIDs you want to display are selected.
   - To deselect a PID, highlight the PID, then press **OK**. The check-mark is removed.
7. When you are finished making your selection (s), choose **Done** to continue.
   - The tablet is now in "Custom Live Data" mode. Only the PIDs you selected are shown.




8. To view the currently selected PID in graph mode, select **Graph** then press **OK**.
9. To exit the Custom Live Data mode, press ⮌ **Back** to return to the Live Data screen.

# FAQ

## COMMON QUESTIONS

**What can the tablet do for my vehicle?**

Please check the coverage on our Coverage Checker website. https://pro.repairsolutions.com/Support/CoverageChecker

**What should I do if a communication error occurs?**

Please follow these steps to troubleshoot the issue:

1. Check if the tablet DLC cable is securely plugged into the vehicle's DLC port.
2. Turn the ignition off, then turn it on again after 10 seconds. DO NOT start the engine and proceed with the operation.
3. Check if the vehicle's control module is defective.

**Can the tablet be used in other countries?**

The tablet only supports diagnostics for vehicles sold in the U.S. and Canada. For vehicles manufactured in other countries, the tablet only supports the Check Engine Light function.

**Can the tablet operate without internet connectivity?**

Yes, the tablet still functions normally without needing an internet connection.

**Why do I need to connect to the RSPRO app?**

The RSPRO app provides a wide range of valuable information for your repair process, including the most likely component/system causing the DTC, predicted repairs, TSBs & Recalls, vehicle health reports, upcoming maintenance, and more.

# WARRANTY & CUSTOMER SERVICE

## LIMITED WARRANTY

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

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 Pacific Time*

**All others:** (714) 241-6802
*Monday through Friday: 6:00 AM to 6:00 PM Pacific Time*

**Web:** https://pro.repairsolutions.com

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