

# GEARWRENCH

User Manual | Manuel de l'utilisateur | Manual del usuario

## 7" WIRELESS BIDIRECTIONAL DIAGNOSTIC TABLET



Specifications   Caractéristiques   Especificaciones	
Operating System   Système d'exploitation   Sistema operativo	Android 10.0
Processor   Processeur   Procesador	Quad-core processor 1.5GHz
Memory   Mémoire   Memoria	2 GB RAM & 64 GB on-board memory
Display   Affichage   Pantalla	7-inch TFT - LCD with 1024 x 600 resolution
Battery   Batterie   Batería	2500 mAh / 7.3V
Input Voltage   Tension d'entrée   Tensión de entrada	5V / 3A
Operating Temp.   Température de fonctionnement.   Temperatura de trabajo.	0 °C to 50 °C (32 °F to 122 °F)
Storage Temp.   Température de stockage.   Temperatura de almacenamiento.	-10 °C to 60 °C (14 °F to 140 °F)
Dimensions   Dimensions   Tamaño (W x H x D)	218 mm x 150 mm x 29 mm

## **GWSMART07**

Thank you for choosing the GWSMART07 Wireless Bidirectional Diagnostic Tablet. Before using the GWSMART07 (hereafter referred to as "GWSMART07" or "Scan Tool"), please ensure that you read this user manual thoroughly. Be mindful of sections marked with "Note" or "Caution" as they provide important instructions for safe and correct operation. Safety Instructions for Proper Operation. To ensure safe operation of the GWSMART07, please follow the guidelines below:

- Keep the device away from heat sources or fumes during use.
- If the vehicle battery contains acid, avoid contact between your skin and the battery, and keep fire sources away during testing.
- Vehicle exhaust gases contain harmful chemicals. Always ensure proper ventilation in the work area.
- Avoid touching components of the vehicle's cooling system or exhaust manifolds while the engine is running, as these can reach high temperatures.
- Ensure the vehicle is securely parked with the transmission in Neutral or the selector in the P (Park) or N (Neutral) position to prevent accidental movement when starting the engine.
- Verify that the Diagnostic Link Connector (DLC) is functioning correctly before starting the test to prevent damage to the Diagnostic Computer.
- Do not turn off the power or disconnect the vehicle communication interface (VCI) during testing, as this may result in damage to the ECU (Electronic Control Unit) and/or the Diagnostic Computer.

### **CAUTIONS**

- Avoid shaking, dropping, or disassembling the scan tool, as this may damage its internal components.
- Use only your fingertips to interact with the LCD screen. Hard or sharp objects may cause damage.
- Refrain from applying excessive force to any part of the device.
- Do not expose the screen to direct sunlight for extended periods.
- Keep the scan tool away from water and moisture.
- Store and operate the scan tool only within the temperature ranges specified in the Technical Specifications section.
- Keep the device away from strong magnetic fields.

### **GEARWRENCH DIAGNOSTIC SUPPORT**

E-mail: [diagnosticsupport@GEARWRENCH.com](mailto:diagnosticsupport@GEARWRENCH.com)

Telephone: 1-877-626-3433

Website: [www.GEARWRENCH.com](http://www.GEARWRENCH.com)

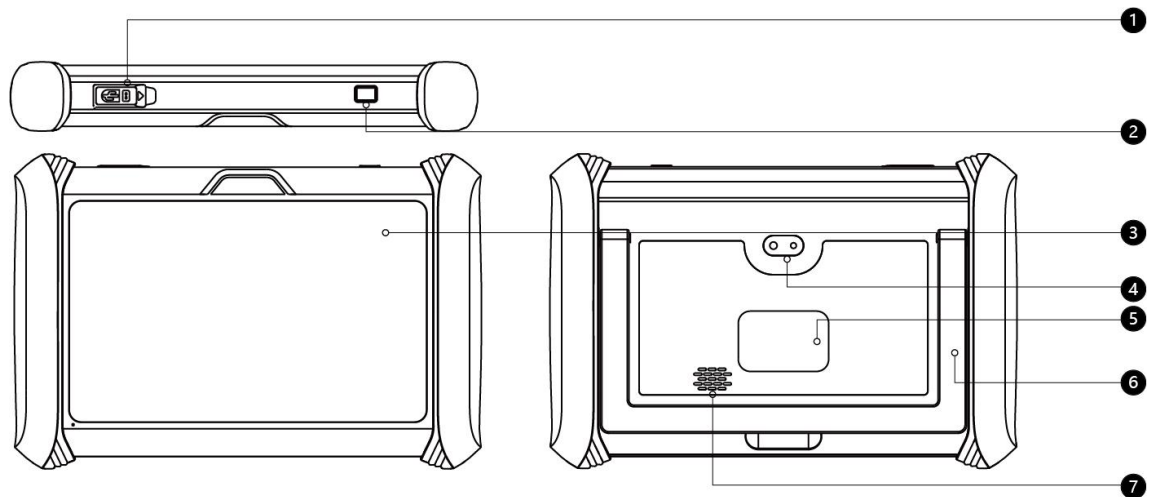
## GENERAL INTRODUCTION

The GWSMART07 is an advanced scanning tool powered by the Android operating system. It supports multiple languages, making it suitable for use in various countries and regions. This OBD-II (On-Board Diagnostics version 2) scanner offers a range of comprehensive functions, enabling users to quickly access accurate diagnostic information. Key diagnostic capabilities include:

- Full system diagnostics
- Complete OBD-II functionality
- Maintenance and reset functions, such as:
  - ABS (Anti-lock Braking System) bleed
  - Oil light reset
  - EPB (Electronic Parking Brake) reset
  - SAS (Steering Angle Sensor) reset
  - BMS (Battery Management System) matching
  - Injector coding
  - DPF (Diesel Particulate Filter) regeneration
  - TPMS (Tire Pressure Monitoring System) reset, and more.

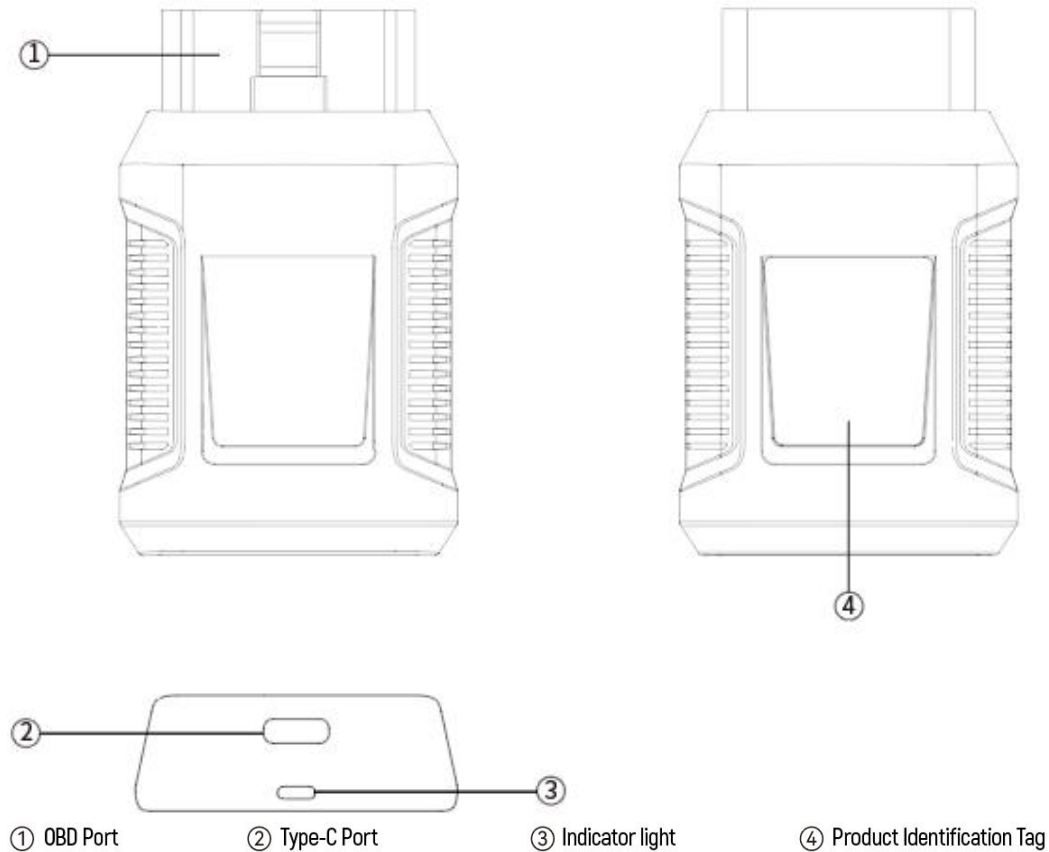
## MAIN UNITS

### ●Tablet



1. USB C Port
2. Power Button
3. 7-inch LCD
4. Rear Camera
5. Product Identification Tag
6. Metal Kickstand
7. Speaker

● **VCI (Vehicle Communication Interface) BOX**

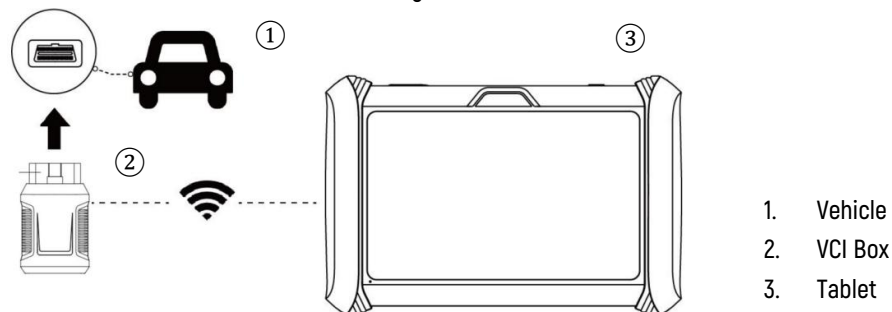


## CONNECTING THE SCAN TOOL TO THE VEHICLE

To ensure proper communication between the tablet and the vehicle, the scan tool must be connected to the vehicle's OBD-II port. Follow these steps:

1. Power on the tablet.
2. Insert the VCI box into the vehicle's OBD-II port and verify that the power indicator is illuminated.
3. Turn on the vehicle's ignition and open the Diagnostic Application, on the tablet, to begin the diagnostic process.

The connection method is shown in the figure below:



## Note

Ensure that the VCI is securely connected. The vehicle's OBD-II port may not always be located under the dashboard. For the exact location of the OBD-II port, please consult the vehicle's user manual.

## PRECAUTIONS FOR DIAGNOSIS

- Ensure the vehicle's voltage is within the range of +9V to +18V DC.
- When performing special diagnostic functions, follow the on-screen prompts and meet the necessary test conditions. For some vehicle models, required conditions may include: engine coolant temperature between 175°F and 220°F, headlights and air conditioning turned off, and accelerator pedal in the released position.
- The electronic control systems of different vehicles are complex. If testing cannot be completed or if abnormal data is detected, locate the vehicle's ECU and select the appropriate menu for the model based on the ECU nameplate.
- If the vehicle type or electronic control system is not available in the diagnostic menu, update the diagnostic software to the latest version using the "Updates" menu or consult the GEARWRENCH technical service department.
- Only use wiring harnesses provided by GEARWRENCH and specifically designed for the GWSMART07 to avoid damage to the vehicle or the scan tool.
- When running diagnostic functions, do not shut down the scan tool directly. Always cancel the current task, return to the main interface, and then proceed with powering down the tool.

## CONNECTING POWER

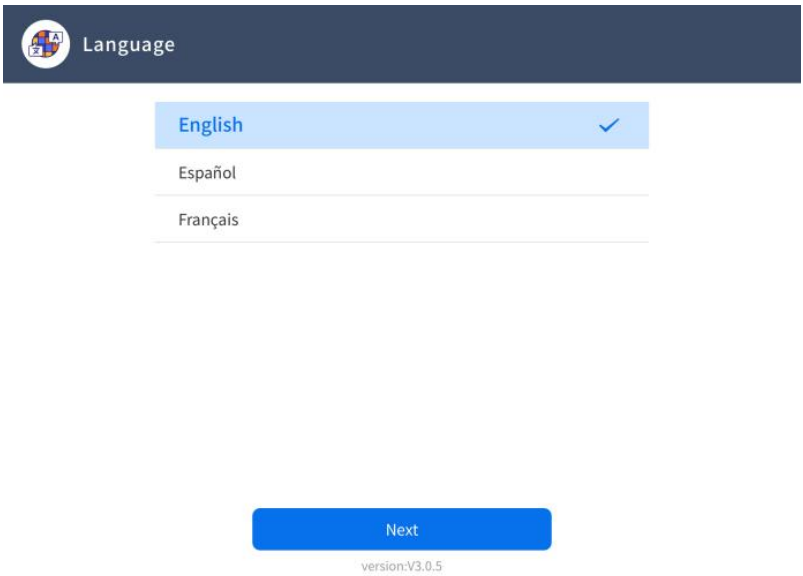
Before using the GWSMART07 for the first time, it may require charging. Follow these steps to connect the power correctly:

1. Ensure that the proper power adapter is connected to the Charger Adapter.
2. Plug the Charger Adapter into a wall outlet.
3. Connect the USB Type-C cable to the Charger Adapter and to the scan tool's USB Type-C charging port.

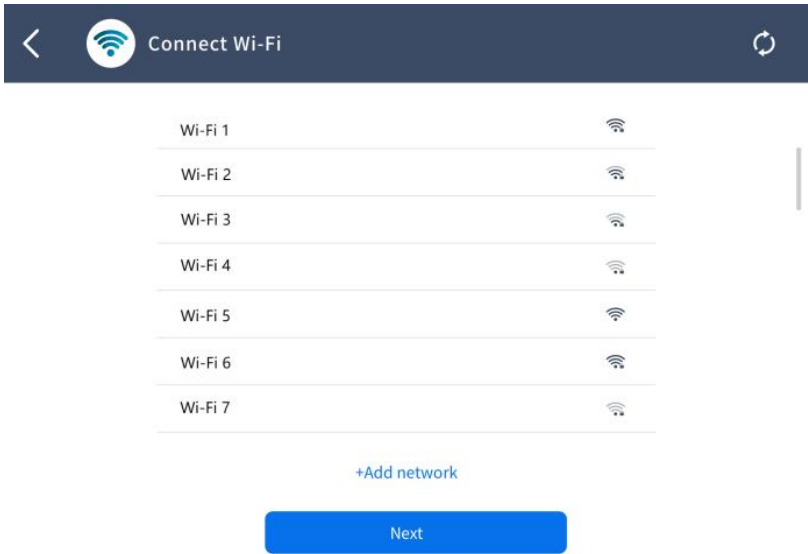
**Note:** A fully discharged battery will take approximately 6 hours to charge fully. The scan tool can be used during charging.

ACTIVATION

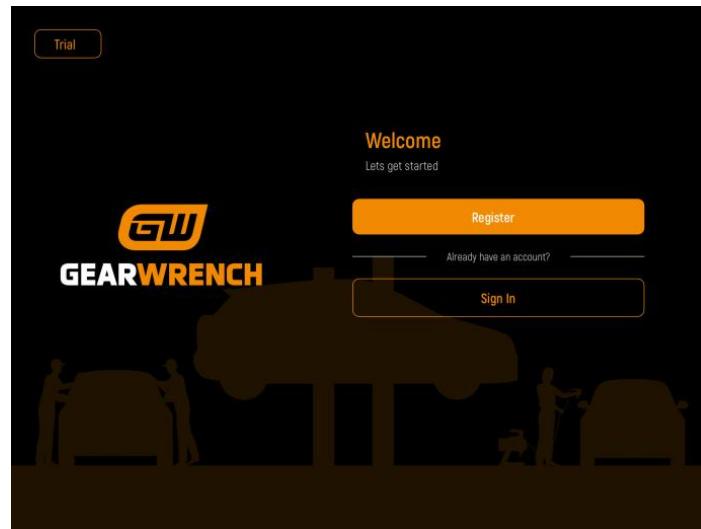
For first-time users, after pressing and holding the power button to turn on the system, it will automatically initiate a guided setup process. The system will prompt the user to select the preferred language for the operating system.



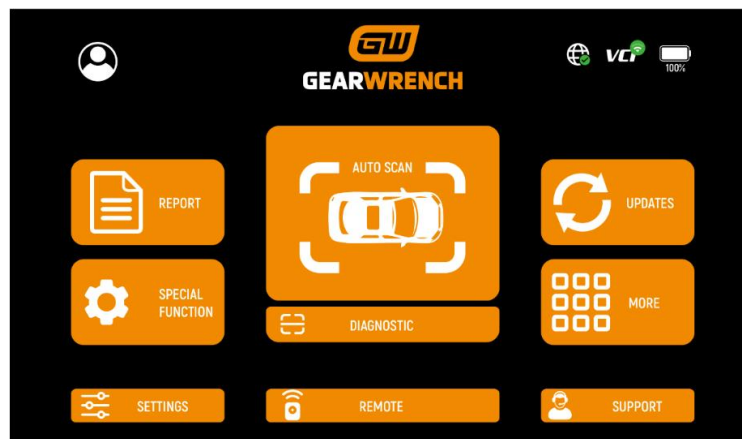
Once you have selected the system language, click '**Next**' to proceed to the Wi-Fi connection page, as displayed below:



On the Wi-Fi connection page, select a network to connect to. If the network is secured, enter the Wi-Fi password to establish connectivity and proceed to the activation page, as shown below.



In the next step, you can either register for a new account or sign in with your existing GEARWRENCH Diagnostics account. If you'd like to skip this step, you may click 'Trial' in the top-left corner; however, please note that the trial period offers limited functionality.



After registering, signing in, or selecting 'Trial,' you will be directed to the home page and are now ready to start diagnostics.

## DIAGNOSTIC

The diagnostic application can retrieve Electronic Control Unit (ECU) information, read and clear Diagnostic Trouble Codes (DTC), and view live data as well as freeze frame data. It provides access to the ECU of various vehicle control systems, including the Engine, Transmission, Anti-lock Braking System (ABS), Airbag Safety Restraint System (SRS), Electronic Parking Brake (EPB), and supports a wide range of actuation tests.

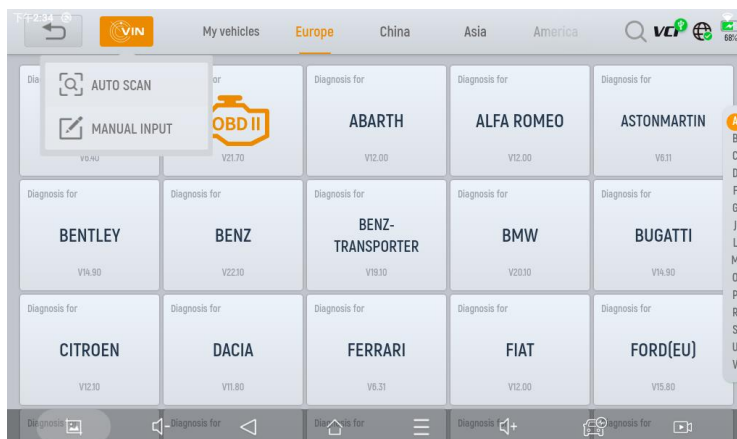
## BEGINNING DIAGNOSTIC TESTING

Once the tablet device is properly connected to the vehicle, you can begin the vehicle diagnosis.

## VEHICLE SELECTION

The scan tool provides three methods to access the smart diagnostics system.

- AUTO SCAN
- MANUAL INPUT
- SELECT VEHICLE BY AREA



Click the VIN button in the upper left corner, then select either AUTO SCAN or MANUAL INPUT to enter the vehicle diagnosis.

**AUTO SCAN:** This feature automatically reads the vehicle's VIN code. You can also tap the 'AUTO SCAN' button on the diagnostic system's main screen to use this function. Ensure that the vehicle and VCI device are properly connected before proceeding.

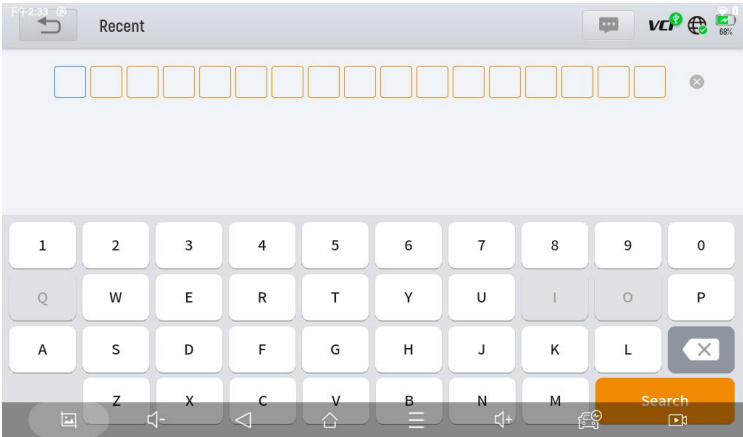
### Note

If your vehicle model is not recognized, please try the following steps:

1. **UPDATE** all software and check if the app is up to date from the home screen
2. Click 'Diagnosis' on the main menu to access the selection menu, then manually select the engine system to read the ECU information and confirm if the VIN can be detected.
3. Contact the GEARWRENCH technical team and provide the VIN code to verify if the model supports automatic VIN identification.

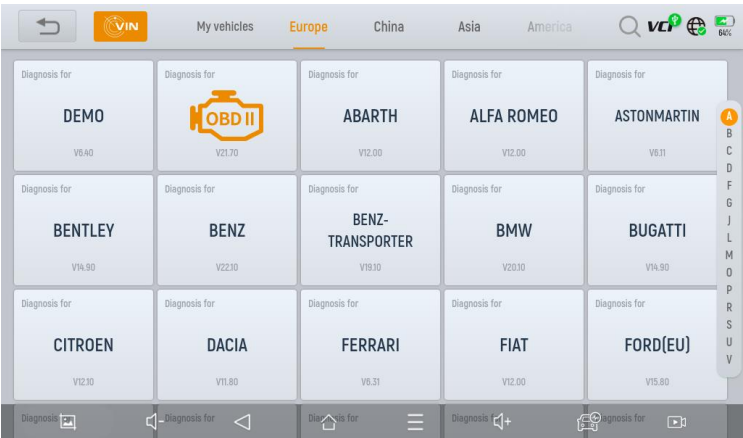
**MANUAL INPUT:** This option allows you to manually enter the vehicle's VIN code. Ensure that the 17 characters are entered correctly to guarantee accurate test results.





• SELECT VEHICLE BY GLOBAL REGION

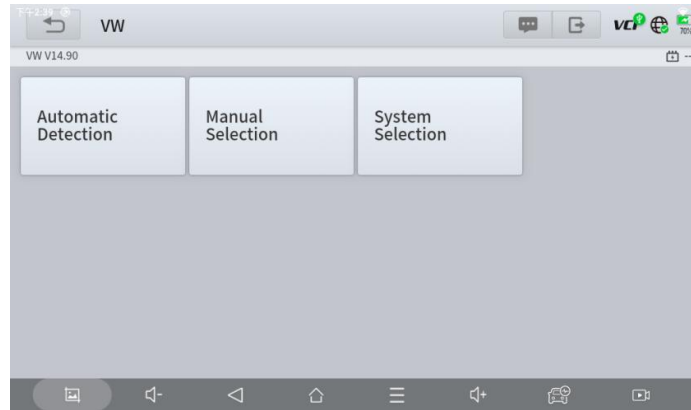
In addition to the three methods mentioned above, you can also select a car brand by choosing the appropriate region at the top of the screen. Based on the region, you can then select the vehicle model for diagnosis, as illustrated below:



**OBD-II:** Supports reading fault codes related to the Powertrain Control Module (PCM). **DEMO mode:** A demonstration program. Click this button to explore and familiarize yourself with the operation processes of the diagnostic functions.

Some models offer multiple entry methods in the sub-menu, including:

- Automatic Detection
- Manual Selection
- System Selection



- **Automatic Detection:** Automatically identifies the vehicle's VIN code and retrieves information for the target diagnostic object.
- **Manual Selection:** Allows you to manually select the vehicle's brand, year, and model from the sub-menu to begin diagnosis.
- **System Selection:** Enables you to diagnose the vehicle based on specific systems after selecting the vehicle model, providing a more focused diagnostic approach.

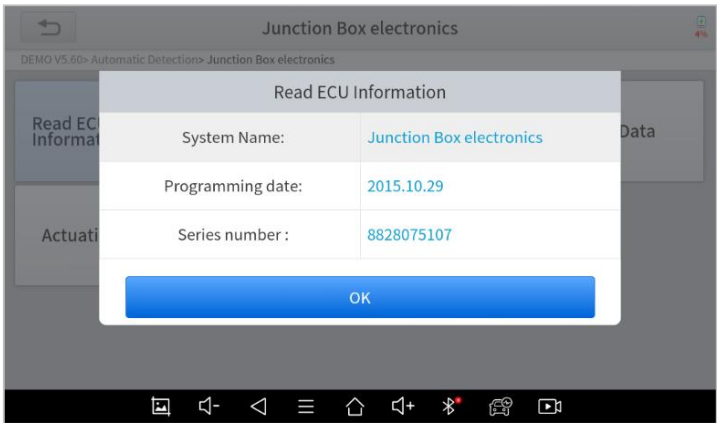
## DIAGNOSTIC FUNCTIONS

Diagnostic functions supported by the scan tool are listed below:

- Read ECU Information
- Read/Clear Trouble Code
- Read Live Data
- Freeze Frame
- Actuation Test (Bi-Directional Control)
- Special functions

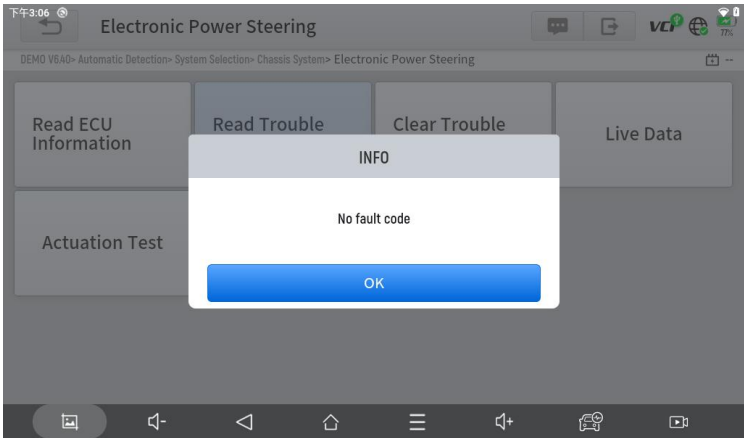


● **READ ECU INFORMATION**



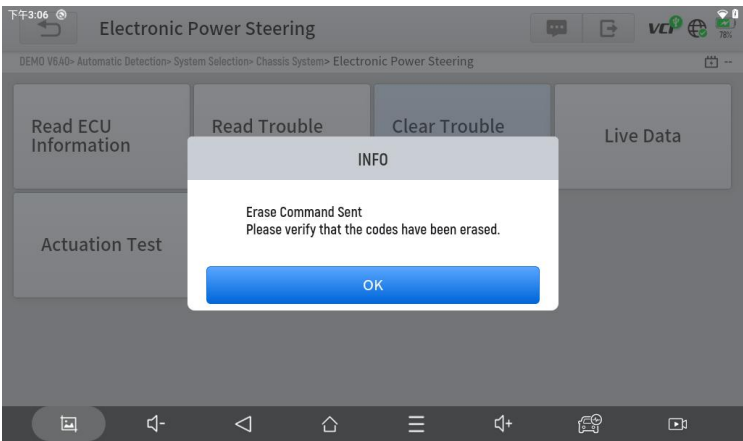
This function reads the ECU version information and is equivalent to 'System Identification' or 'System Information' in some electronic control systems. These terms refer to retrieving ECU-related software and hardware versions, models, production dates of diesel engines, part numbers, and more. This information is useful for maintaining accurate service records and ordering replacement parts.

● **READ TROUBLE CODE**



During the diagnosis process, if the device displays 'System is OK' or 'No Trouble Code,' it indicates that no related trouble codes are stored in the ECU, or that some issues are not under the ECU's control. Most problems are likely to be mechanical system issues or executive circuit malfunctions. Additionally, a sensor's signal might be inaccurate but still within acceptable limits, which can be further analyzed using Live Data.

● CLEAR TROUBLE CODE



This function allows for clearing both current and historical trouble codes stored in the ECU memory, provided that all issues have been resolved.

Some issues are detected by the ECU immediately when the key is in the "run" position, even if the engine is not running. Other issues are only detected when specific test conditions are met, such as engine coolant temperature within a certain range, vehicle speed or throttle percentage within specific parameters for a period of time, etc.

If trouble codes are erased while the issue remains unresolved, the trouble code will reappear in the ECU the next time the ECU performs the specific diagnostic test for that issue.

If the issue is resolved but a trouble code remains stored, the ECU may automatically detect the resolution and either clear the trouble code or classify it as a "historical" trouble.

When the issue is resolved and the user clears the trouble codes, the trouble history will also be erased.

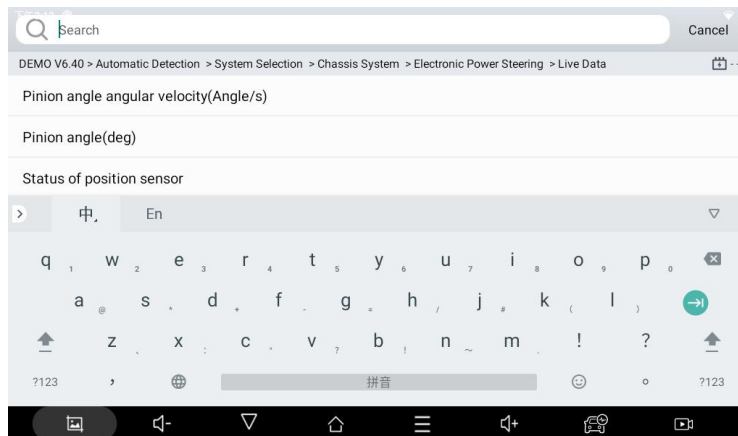
If the user plans to have another colleague or mechanic further investigate the issue, it is not recommended to clear the trouble code, as doing so may erase valuable information that could assist others in diagnosing the problem.

● READ LIVE DATA

A screenshot of a diagnostic tool interface for 'EPS pinion angle'. The top bar shows the time '下午3:07' and various status icons. Below the title bar, there's a breadcrumb trail: 'DEMO V6.40 > Automatic Detection > System Selection > Chassis System > Electronic Power Steering > Live Data'. The main area displays a table with three columns: 'Name', 'Value', and 'Unit'. There are three rows of data, each with a checkbox on the left. The bottom of the screen shows a navigation bar with buttons: '0/3', 'Cancel Selected', 'Custom', 'Record', and 'Pause'.

Name	Value	Unit
<input type="checkbox"/> 1. Pinion angle angular velocity	0	Angle/s
<input type="checkbox"/> 2. Pinion angle	4.18	deg
<input type="checkbox"/> 3. Status of position sensor	Directional stability deviation written and index position not stored	

Real-time information from various sensors is referred to as 'Live Data.' Live Data includes parameter identifications (PIDs) from the running engine, such as oil pressure, temperature, engine speed, fuel temperature, coolant temperature, intake air temperature, and more. By analyzing these parameters, it becomes easier to pinpoint the source of a problem, helping to narrow the scope of maintenance. For some vehicles, performance issues or sensitivity reductions during operation can also be assessed using Live Data.



Click the magnifying glass in the top right corner to search for related PIDs using keywords.

- **Pause**

Click this button to pause the recording timeline.

- **FREEZE FRAME**

When a sensor signal is abnormal, the ECU captures the data at the moment of failure, creating a freeze-frame. This data is often used to analyze the potential causes of component failures.

The live data items supported by different vehicle brands vary, so the freeze-frame data displayed when diagnosing vehicles may also differ. Some vehicles may not offer a freeze-frame option, indicating that the model does not support this feature.

For example, after selecting a system and entering the freeze-frame menu, the device will display all fault codes associated with that system. Users can click on a fault code, such as DF1068, to view the freeze-frame recorded by the vehicle when the fault occurred. This includes the conditions at the time of the fault, the current context, and additional relevant data.

- **ACTUATION TEST (BI-DIRECTIONAL CONTROL)**

An Actuation Test, also known as bidirectional control, refers to the exchange of information between a scan tool and a vehicle's control module. This function is primarily used to determine whether engine components are functioning properly.

Vehicle engineers design computer control systems to allow scan tools to request information or command modules to perform specific tests and functions. Different manufacturers may refer to bidirectional controls as functional tests, actuator tests, inspection tests, system tests, or similar terms. Reinitialization and reprogramming may also fall under bidirectional controls.

This function enables the scan tool to send and receive information from vehicle control modules. For example, in OBD II generic information Mode 1 (related to data parameters), the scan tool requests data from the Powertrain Control Module (PCM), and the PCM responds by sending the information back for display. Enhanced scan tools can also actuate relays, injectors, coils, and perform system tests. Users can perform actuation tests to verify whether individual parts are working properly.

- **SPECIAL FUNCTIONS**

Special functions typically offer a variety of reset or re-learning function menus for most vehicle systems, allowing you to quickly and easily resolve certain issues. After successfully executing some functions, fault codes may be generated, which will need to be cleared manually after the vehicle has run for a short time, such as after a single engine start or multiple warm-up cycles.

For each system, you can view the special functions supported. The available special functions may vary depending on the vehicle model and system. Even within the same system of the same model, the year and ECU type may affect the special functions available.

## SPECIAL FUNCTIONS

The GWSMART07 offers a variety of commonly used special reset functions, allowing quick access to the vehicle's systems for scheduled services, maintenance, and reset tasks. These functions often eliminate the need for manual code resets after resolving common issues. As the tool is continuously updated, the manual may not reflect all the latest special functions available for download. This user manual provides a reference list of frequently used special reset services.

### ABS BLEEDING



The Anti-Lock Braking System (ABS) prevents tires from locking up during braking, ensuring better brake performance, shorter braking time and distance, and improved vehicle stability and steering control during emergency braking. Additionally, it reduces tire wear by avoiding excessive friction with the ground. When air is present in the ABS, the ABS bleeding function must be performed to restore brake sensitivity.

**ABS Bleeding** can be performed in the following situations:

- Replacing the rear or front brake distributor pump.
- Severe brake fluid shortage.
- Changing the brake fluid.

#### **ABS Bleeding Operation Guidelines:**

1. Carefully read the instructions and precautions displayed on the screen to ensure both the equipment and vehicle are in the correct condition for the procedure.
2. Attach a bleeder bottle to the left rear bleeder screw.
3. Open the left rear bleeder screw.
4. When ready, click "OK" to start the bleed procedure, and pump the brake pedal steadily every 2 seconds throughout the process.
5. Continue pumping the brake pedal until no more air bubbles are visible, then select "OK" to proceed to the next bleed procedure for the left front wheel.
6. Repeat the procedure for the left front wheel, right front wheel, and right rear wheel.
7. Stop pumping the brake pedal and close the right rear bleeder screw.
8. Click "OK" to complete the entire bleed procedure.

**Caution**

- The ABS pump screw needs to be unscrewed
- Brake fluid will be under pressure during this process. Secure the bleed hose and open bleeder screws slowly

Some vehicles do not support automatic bleeding and require manual bleeding instead.

**OIL RESET**

The scan tool can be used to reset the engine oil life system, which calculates the optimal oil change interval based on driving conditions and climate. The oil life reminder must be reset each time the oil is changed so the system can calculate when the next oil change is due.

This function can be performed in the following cases:

- If the service lamp is on, indicating service is required, the driving mileage or time must be reset after service to turn off the lamp and start a new service cycle.
- After changing the engine oil or replacing any electric components that monitor oil life, the service lamp must be reset.

**Oil Reset Operation Guidelines:**

1. Enter the Oil Reset menu and select the appropriate model based on the vehicle being tested.
2. Follow the vehicle-specific instructions displayed on the screen and press OK after completing them.
3. Access the Maintenance Mileage Reset menu.
4. Click INPUT and enter a reasonable value for the remaining oil life, then press OK.
5. Confirm the [New Value] you entered, and click OK at the bottom right to complete the procedure.
6. A message stating 'Write successfully' will appear once the Oil Reset function is successfully performed.



## Electronic Parking Brake (EPB) Reset



The Electronic Parking Brake (EPB) System reset is a popular special function that allows you to reset the electronic parking brake system, brake pads (retraction and release of the brake pump), G-sensor, and body angle calibration. This function is versatile and can safely and effectively maintain the electronic brake system. Key applications include deactivating and activating brake control systems, managing brake fluid, applying and releasing brake pads, and setting brakes after replacing brake discs or pads.

### EPB reset should be performed in the following cases:

1. After replacing the brake pads or the brake pad wear sensor, the onboard system will signal the need for replacement. After replacing the brake pad, resetting the system is necessary to clear the trouble code; otherwise, the car may continue to issue false notifications about brake pad replacement.
2. A reset must also be performed in the following scenarios:
  - The brake pad and brake pad wear sensor are replaced.
  - The brake pad indicator lamp is on.
  - The brake pad sensor circuit is shorted.
  - The servo motor is replaced.

### EPB Function Operation Guidelines:

1. Enter the EPB menu and select the relevant model based on the vehicle being tested.
2. Follow the displayed instructions and press "YES" after completing each step.
3. Enter the Maintenance Mode menu, release the handbrake, and press OK after following the instructions.
4. Wait for the message "Successful operation" to appear, then press OK to exit the menu.
5. Enter the Exit Maintenance Mode menu and wait for the message "Successful operation" to confirm the process is complete.

## Steering Angle Sensor (SAS)



The SAS calibration process permanently stores the current steering wheel position as the straight-ahead position in the SAS EEPROM. Therefore, both the front wheels and the steering wheel must be aligned precisely to the straight-ahead position before calibration begins. During this process, the vehicle's VIN is also read from the instrument cluster and permanently saved in the SAS EEPROM. Upon successful calibration, any SAS fault codes will be automatically cleared.

To reset the steering angle, it is first necessary to identify the relative zero-point position where the vehicle drives in a straight line. This position serves as a reference for the ECU to accurately calculate the steering angle for both left and right turns.

A steering angle reset is required after performing any of the following:

- Replacing the steering angle position sensor
- Replacing mechanical steering components (e.g., steering gearbox, column, tie rods, or knuckles)
- Performing a four-wheel alignment
- Conducting car body repairs

### Steps to Reset the Steering Angle:

1. Navigate to the SAS menu and select the appropriate vehicle model.
2. Enter the "Set Steering Angle Sensor" menu and follow the on-screen instructions.
3. Once prompted, press **Yes** to proceed after completing the instructions.
4. Continue following the instructions, and press **OK** as directed.
5. Wait for the next prompt and press **OK** after completing the tasks shown.
6. The message "Function execution is completed" will appear when the SAS reset is successfully finished.

## Battery Management System (BMS) Reset



The Battery Management System (BMS) enables the scan tool to assess the battery's charge status, monitor closed-circuit current, register battery replacements, and activate the vehicle's rest state.

This function allows you to reset the battery monitoring unit, clearing any previous low battery fault information and performing battery matching.

Battery matching is required in the following situations:

- **Main battery replacement:** After replacing the battery, matching is necessary to clear old battery data and prevent the control module from receiving incorrect information. If incorrect data is detected, certain electric functions (e.g., auto start/stop, sunroof one-touch operation, or automatic power windows) may be disabled.
- **Control module and sensor re-matching:** Battery matching ensures accurate detection of battery power usage by the control module and monitoring sensor, preventing error messages from appearing on the instrument cluster.

### Steps to Perform a BMS Reset:

1. Access the BMS Reset menu and select the appropriate vehicle model.
2. Turn on the ignition.
3. Press **OK** to continue the BMS process.
4. Enter the battery capacity (within the specified range) and press **OK** to confirm.
5. Input the battery manufacturer and press **OK** after entry.
6. Enter the 10-digit battery serial number and press **OK** to complete the input.

## Diesel Particle Filter (DPF) Regeneration



The DPF function manages the regeneration process, teaches in new DPF components, and calibrates the DPF system after replacing the Engine Control Module (ECM). The ECM monitors the driving style to determine the best time for regeneration. Vehicles frequently driven at idle or under low load will regenerate earlier than those driven at higher speeds and loads. For successful regeneration, the exhaust temperature must remain high for an extended period.

If the vehicle is driven in ways that hinder regeneration, such as during frequent short trips, a diagnostic trouble code may be triggered, along with the DPF light and "Check Engine" indicator. In such cases, a service regeneration can be initiated in the workshop using a diagnostic tool.

DPF regeneration helps clear particulate matter (PM) from the filter through continuous combustion, which can be achieved via high-temperature heating, fuel additives, or catalytic reactions to ensure the filter performs optimally.

### DPF Regeneration is required in the following cases:

- Replacement of the exhaust back pressure sensor.
- Removal or replacement of the PM trap.
- Removal or replacement of the fuel additive nozzle.
- Removal or replacement of the catalytic oxidizer.

- When the DPF regeneration MIL light is on, and maintenance has been performed.
- Replacement of the DPF regeneration control module.

**Steps to Perform DPF Regeneration:**

1. Access the **DPF** menu and select the appropriate vehicle model.
2. Enter the **DPF Regeneration** menu.
3. Carefully read and complete the prerequisites listed before starting the regeneration process. Press **OK** once the steps are completed.
4. Verify the fuel tank level and ensure it meets the required threshold displayed on the screen.
5. Check the carbon deposit load.
6. Select the **Drive to Warm Up** option and follow the instructions provided. Press **OK** after completing the steps.
7. Read the on-screen instructions carefully and press **OK** once done.
8. Continue following the on-screen prompts and press **OK** as needed. **Important:** Pay close attention to any notes displayed.
9. Finally, press **OK** to initiate the regeneration process.
10. Wait for the carbon deposit value to decrease until the message 'Emergency regeneration has been completed' appears. This process may take up to 40 minutes.
11. Allow the particulate filter to cool down for 2 minutes.
12. Press Exit to leave the DPF function.

## Tire Pressure Monitoring System (TPMS) Reset



This function allows for the learning, matching, and resetting of the tire pressure sensor.

**TPMS Reset** may be necessary in the following cases:

- After tire replacement.
- After resolving tire pressure-related issues.
- When the tire pressure sensor signal is lost for any reason.

1. For some vehicle models, a TPMS Activation Tool may be required for tire pressure sensor matching.
2. After completing the learning process, you may need to drive the vehicle for a while before the fault light turns off.
3. Tire pressure imbalances can also trigger the tire pressure warning light.
4. This function only works with activated tire pressure sensors. For new sensors, please use a professional tire pressure device for activation.

Since tire pressure systems may vary by the region in which the vehicle is manufactured, the TPMS Reset function provides six region-specific menus for the major automotive markets: Korea, Japan, USA, China, Australia, and Europe.

To perform the reset, select the appropriate sub-menu based on the vehicle's region of origin, then choose the specific vehicle model.

**TPMS reset methods include:**

- **Automatic Relearn**
- **Static Relearn**

- **Copy ID**
- **OBD Relearn**

Even if the same relearn method is used, the procedure may differ by vehicle model.

- **Automatic Relearn**

1. Install the tire pressure sensor correctly.
2. Set all TPMS sensors to the standard pressure.
3. Keep the vehicle stationary for more than 20 minutes with the engine off and power off.
4. Drive the vehicle at 30-100 km/h for more than 15 minutes.
5. The vehicle will automatically relearn the sensor values, and the tire pressure warning light will turn off.
6. If the relearn process fails, repeat steps 2-5.

- **Static Relearn**

1. Install all tire pressure sensors properly.
2. Engage the parking brake.
3. Turn the ignition to ON/RUN with the engine off.
4. Enter the tire pressure learning mode via the vehicle's instrument panel (refer to the vehicle manual or consult a professional as this process varies by make and model).
5. Starting with the left front wheel (some models will flash the corresponding turn signal), use the TPMS Activation Tool to activate the sensor. The vehicle will confirm activation by sounding the horn or flashing the turn signal.

- **Note:** The first sensor must be learned within 2 minutes, otherwise repeat step 4.

- Repeat the process for the right front, right rear, and left rear wheels in that order. Follow the same activation procedure as in step 5.

- **Note:** All remaining sensors must be learned within 3 minutes, otherwise repeat the entire relearn procedure from step 4.

- Turn the ignition and vehicle power off. Adjust all sensors to the standard value.

- The tire pressure warning light will turn off once the relearn is successful. If the procedure fails, repeat steps 4-7.

- **OBD Relearn**

1. Use a TPMS Activation Tool.
2. Install the tire pressure sensor correctly.
3. Set all TPMS sensors to the standard pressure.
4. Activate the sensors in the order: left front, right front, right rear, left rear.
5. Connect the TPMS Activation Tool to the vehicle's OBD port and perform the OBD relearn function to write the sensor ID.
6. Turn the ignition to ON/RUN and re-trigger all sensors in the same order.
7. Keep the vehicle powered off for more than 25 minutes.
8. Drive the vehicle at 30-100 km/h for more than 15 minutes. If successful, the tire pressure warning light will turn off. If not, repeat steps 4-7.

- **Copy ID Relearn**

- **Note:** This method copies the ID from the original sensor to the new sensor. If the new sensor cannot change its own ID, replacement with OEM equipment is required.

- **Method 1:**

1. Use the TPMS Activation Tool to activate the original sensor and copy the sensor ID.

2. Program the copied ID into the new sensor using the TPMS Activation Tool (ensure the ID format is the same as the original sensor).

3. Remove the original sensor, install the new sensor, and reinstall the tire.

● **Method 2:**

1. Connect the TPMS Activation Tool to the vehicle's OBD port, enter the tire pressure system, and copy the ID of the sensor to be replaced.

2. Program the copied ID into the new sensor using the TPMS Activation Tool (ensure the ID format is the same as the original sensor).

3. Remove the original sensor, install the new sensor, and reinstall the tire.

● **Method 3:**

1. Remove the original sensor.

2. Manually copy the original sensor ID to the new sensor using the TPMS Activation Tool (ensure the ID format is the same as the original sensor).

3. Install the new sensor, set the tire pressure to the standard value, and reinstall the tire.

● **Notes:**

The tire pressure standard is usually found in:

- The vehicle owner's manual.
- A label near the driver's door (on the B-pillar).
- The glove box near the driver's seat.
- The fuel tank cap.

## INJECTOR CODING



This function allows the scan tool to write the fuel injector identification code into the ECU, enabling the ECU to recognize and work with the new injector.

When either the ECU or fuel injector is replaced, the injector code for each cylinder must be verified or re-coded. This ensures the ECU can accurately identify the injectors and control fuel injection more precisely.

① In most cases, coding or matching is not required after cleaning the fuel injectors.

① The fuel injector's identification includes its working accuracy and type values. When replacing an injector, ensure you select the correct model for proper replacement.

### Injector Coding Operation Guidelines:

1. Access the **Injector Coding** menu and select the relevant chassis model for the vehicle being tested.
2. Navigate to the **Fuel Injector Volume Adjustment** menu.
3. Carefully read the displayed instructions and press **OK** once done.
4. Review and confirm the current values stored for each cylinder.

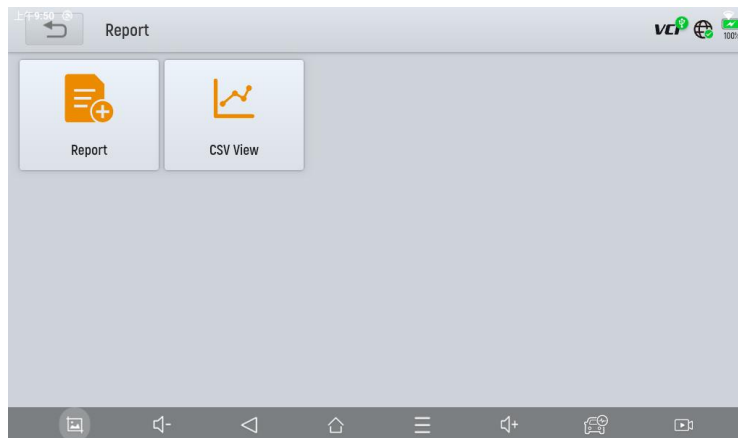
## GWSMART07

5. For the replaced injector(s), enter the **Change Cylinder Value** menu, input the new 5-digit value for the injector, and press **OK**. Wait for the message '**Write successfully**' to appear.
6. Turn off the ignition switch.
7. Wait for the prompt instructing you to turn the ignition switch back on.
8. Return to the **Fuel Injector Volume Adjustment** menu to verify that the new value(s) are displayed correctly.

## DIAGNOSTIC REPORT

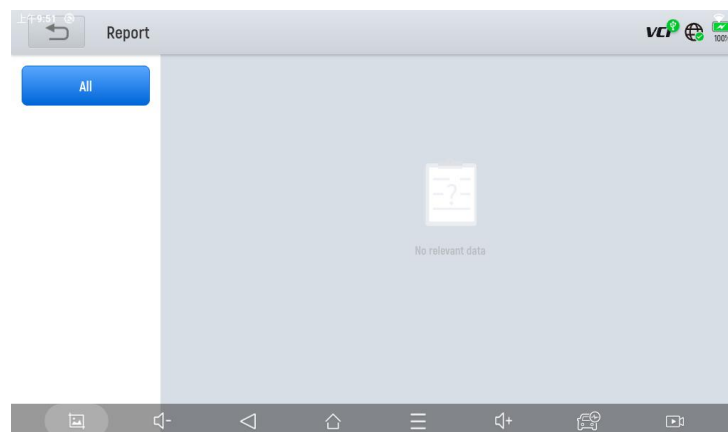
The **Diagnostic Report** function allows users to view and print saved diagnostic files, such as Live Data, Trouble Codes, and images generated during the diagnostic process. It also provides a record of previously tested vehicles. This function consists of 2 sections:

- **Diagnosis Report**
- **CSV View**



## REPORT

This function allows you to replay the live data recorded during the diagnostic process. Before replaying, ensure that the live data was recorded during the diagnostic session.





# UPDATE & FACTORY RESET

After activating the device, please update the software modules listed on the "Updates" screen. The device will automatically identify all available software packages, allowing you to download them as needed. All software updates are performed directly via the Internet. To access the update function, open the Diagnostic application and click **Updates** to enter the screen shown below.



**Caution:**

When your subscription expires, the software already installed on your device will remain functional, but you will no longer receive updates. If you delete any software through personal actions, GEARWRENCH is not responsible for restoring the software after the subscription has expired.

To renew your subscription, please contact the GEARWRENCH technical support team directly.

## WARRANTY & SERVICES

Apex Tool Group (the Company) warrants to the original retail purchaser that, if this product or any part of it is found to be defective in material or workmanship during normal use and under normal conditions, resulting in product failure within **TWO YEARS** from the date of purchase, the defect will be repaired or replaced (with new or rebuilt parts) at the Company's discretion, free of charge for parts and labor directly related to the defect, upon presentation of proof of purchase.

The Company is not liable for any incidental or consequential damages arising from the use, misuse, or installation of the device.

This warranty does not cover:

1. Products subjected to abnormal use, accidents, mishandling, neglect, unauthorized modifications, misuse, improper installation or repair, or improper storage.
2. Products whose mechanical or electronic serial numbers have been removed, altered, or defaced.
3. Damage due to exposure to extreme temperatures or environmental conditions.
4. Damage caused by the connection or use of unauthorized accessories or products.
5. Cosmetic or non-operational defects, such as appearance, decoration, or structural components.
6. Damage resulting from external causes, including fire, dirt, sand, battery leakage, blown fuses, theft, or improper use of an electrical source.

## REMOTE ASSISTANCE

Tap on **"Remote"** to launch the TeamViewer QuickSupport program, which provides a simple, fast, and secure way to enable remote control of your tablet. This application allows someone with TeamViewer software on their computer to control your tablet over the Internet. This feature is used by GEARWRENCH technical support centers to assist customers remotely.

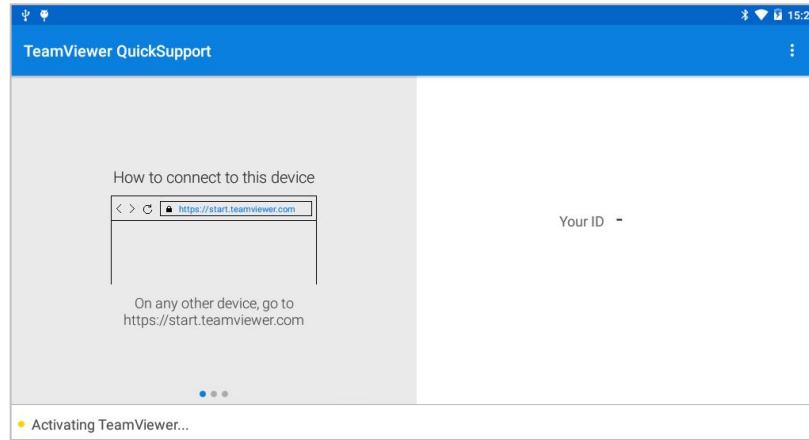
Each device running TeamViewer is identified by a globally unique ID. When you start the remote application for the first time, an ID is automatically generated based on the hardware characteristics of the device and remains unchanged. This TeamViewer ID allows access to all TeamViewer clients.

Before using the remote desktop application, ensure your tablet is connected to the Internet to receive remote support from a third party. If you encounter any issues that you cannot resolve, you can open this application and request remote assistance.

### Steps to enable remote support:

1. Power on the tablet.
2. Click **Remote** in the Diagnostic application. The TeamViewer screen will appear, and a unique device ID will be generated.
3. Your support partner must install the full version of the TeamViewer program on their computer by downloading it from <http://www.teamviewer.com>. Once installed, they should start the software to provide support and control of the tablet.

4. Provide your TeamViewer ID to your partner or the GEARWRENCH technician, and wait for them to send a remote-control request.
5. A pop-up window will appear on your tablet, asking for permission to allow remote control.
6. Click **Allow** to grant access or **Reject** to decline.



## COMPLIANCE INFORMATION

### FCC COMPLIANCE

FCC ID: 2BG6LP720

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference
- 2) This device must accept any interference received, including interference that may cause undesired operation.

#### Warning

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

#### Note

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 can generate, use and 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 the receiver.
- Connect the equipment to 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.

#### Specific Absorption Rate (SAR) information

This device meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluations of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. FCC RF Exposure Information and Statement the SAR limit of the USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types: This device has also been tested against this SAR limit. This device was tested for typical body-worn operations with the back of the tablet kept 0mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain an 0mm separation distance between the user's body and the back of the tablet. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

### **ISED STATEMENT**

IC: 32428-P720

HVIN: P720

PMN: GWSMART07

English: This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

#### **(1)**

This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for

harmful interference to co-channel mobile satellite systems.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed with the maximum permissible gain indicated. Antenna types not included in this list, having again greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Specific Absorption Rate (SAR) information:

This device meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. ISED RF Exposure Information and Statement the SAR limit of Canada(ISED) is 1.6 W/kg averaged over one gram of tissue. Device types: Device has also been tested against this SAR limit. This device was tested for typical body-worn operations with the back of the phone kept 0mm from the body. To maintain compliance with ISED RF exposure requirements, use accessories that maintain an 0mm separation distance between the user's body and the back of the phone. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with ISED RF exposure requirements, and should be avoided.