



DREW TECHNOLOGIES
AN OPUS COMPANY



Drive **CRASH**

User Guide
v1.2

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Copyright Information

Copyright

- * All material herein is copyrighted:
 - © 1996–2019 Drew Technologies, Inc.
 - **DriveCRASH**® software, hardware, and firmware are also copyrighted.
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 - “**DrewTech**” is synonymous with “**Drew Technologies, Inc.**” and is used in this manual.



is a registered trademark of **Drew Technologies, Inc.**

Notices

- * The information contained in this document is subject to change without prior notice. **DrewTech** shall not be held liable for any technical/editorial errors, or omissions herein.
 - Warranties for **DrewTech** products and services are set forth in the express written warranty statements accompanying the product. Nothing herein should be construed as constituting any additional warranty.
 - **DrewTech** assumes no responsibility for any damage resulting from the use, misuse, or negligent use of the **DriveCRASH**® hardware or any software application used with the **DriveCRASH**® device.

Acknowledgments

- Microsoft™ and the various versions of Windows™ are U.S. registered trademarks of Microsoft Corporation.
- Most OEM software applications are registered trademarks of their respective corporations and also carry copyright notices.

Safety Information

- * **DriveCRASH**® is designed to be used by those trained in the diagnostics and reprogramming of vehicles and equipment. The user is assumed to have a good understanding of vehicle electronic systems and the potential hazards involved while working in a shop environment. There are numerous safety situations that cannot be enumerated or foreseen, so **DrewTech** recommends that the user read and follow all safety messages in this manual, on all shop equipment, from vehicle manuals, as well as internal shop documents and operating procedures.
 - ❑ Always block/chock all wheels (front and back) when testing.
 - ❑ Use caution when working around electricity. There is the risk of shock from vehicle and building-level voltages.
 - ❑ Do not smoke or allow sparks/flame near any part of the vehicle fuel system or vehicle batteries.
 - ❑ Always work in an adequately-ventilated area. Route vehicle exhaust fumes to the outdoors.
 - ❑ Do not use this product where fuel, fuel vapors, or other combustibles could ignite.

Introduction

Drive is a brand-new diagnostic platform designed to support today's modern, intelligent vehicle technologies. **Drive** combines the OEM experience and **RAP**® service from **Drew Technologies** with the advanced after-market diagnostic and technical support from **Autologic** into a single expandable product line.



IMPORTANT! Enclosed in the **DriveCRASH**® storage case, you will find the card below with the **User Name** and **Password** to access the **DriveCRASH**® unit. Please keep in a safe place!

PLEASE KEEP IN A SAFE PLACE!

Drive
CRASH

Congratulations on your DriveCRASH purchase!
This card contains information required for signing into your **DriveCRASH** device, **RAP**® service, and **Autologic's** website for retrieving Scan Reports.

Carefully review the enclosed **DriveCRASH** Quick Start Guide to get started!

For additional information, call or email DrewTech, and one of our sales representatives can assist you further.

Your unique User Name and Password are:

User Name:

Password:

OFFICE HOURS:
8:30am – 5:30pm ET
Monday – Friday

DREW TECHNOLOGIES
844.RAPSCAN (727-7229) sales@drewtech.com DrewTech.com

DT-121218-1 DriveCRASH Special Instruction Card_v19

DriveCRASH® Support: 844-RAPSCAN

Getting to Know the Drive**CRASH**®



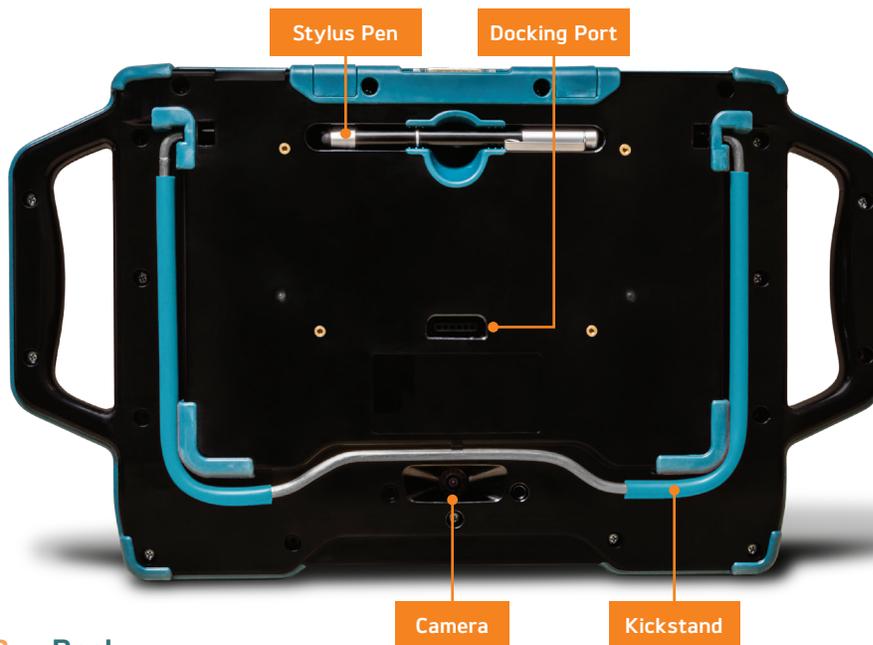
1. Top:

- **Power port:** for power adapter connection
 - i. **26-pin male serial port:** for connection of 26-pin female serial port / J1962 or OBDII cable
 - ii. **USB port:** Not to be used for powering or charging other devices. This port is to be used to connect the USB to Ethernet Adapter (provided) if a WiFi signal is neither available nor strong enough to connect the **Drive** device to the Internet.



2. Front:

- **Tablet:** built-in Windows 10 tablet with capacitive touch screen and dual core Intel processor
- **Camera:** 2MP Camera
- **Speaker/Microphone**
- **Power Button:** turn on/off device
- **Power LED**
 - Red:** tablet charging
 - Green:** tablet on



3. Back:

- **Stylus pen:** for use with touchscreen
- **Kickstand:** for propping the device or hanging on the vehicle steering wheel
- **Docking port:** for optional docking station that power device and connect a keyboard, mouse, and printer
- **Camera:** 5MP Camera with flash and lights for remote support

Installation & Software Updates

1. Upon delivery, the **Drive** product is pre-configured and installed with the appropriate versions of software and hardware.
2. If at any time software updates are required, those updates will be done in the background without user intervention.
3. If hardware modifications are ever required, the user will be contacted.

Setting up DriveCRASH®

(Device does not need to be connected to the vehicle)

DriveCRASH® device icons

-  **HOME:** Touch the **HOME** button and get to the Home Page
-  **LOG IN:** Indicates tablet is ready to be logged into **DriveCRASH®**. Enter information and touch **LOG IN**.
-  **LOG OUT:** Touching **LOG OUT** will log you out of **DriveCRASH®**.
-  **BATTERY:** Battery health is displayed as percentage
-  **WI-FI:** See **INTERNET CONNECTION (Page 2)**
-  **VOLUME:** Adjust volume of the tablet
-  **POWER:** Turn off the tablet
-  *** CLOSE:** This button will appear as new screens are displayed while maneuvering thru the tablet. Touching it will close that current screen

1. **Device Battery:** Using only the power cables provided, ensure the **DriveCRASH®** device is always plugged into an outlet when not in use. This will ensure the **DriveCRASH®** device is always ready when you are! The red LED in the lower right corner will illuminate when plugged in and charging. The battery icon on the tablet will also indicate state of charge when powered on.
2. **Turn On Device:** To turn on the **DriveCRASH®** device, hold down the green power button (**bottom-right corner**) until the green LED illuminates.



The software may require one (1) to three (3) minutes to fully load.

3. **Internet Connection:** Connection to the Internet is **REQUIRED** to use the **DriveCRASH**® device. Locate the network / Wi-Fi connection icon.
 - a. **Wi-Fi:** connect to Wi-Fi by touching the icon and a Wi-Fi Networks connection dialog box will open. Select the network desired. Touch **Connection**, enter the **network password** as required, then **Go**.
 - b. **Ethernet Connection:** if Wi-Fi is not available or strong/stable enough, the Drive device will need to be connected directly to the router at the location. A 100' Ethernet cable and USB to Ethernet adapter are provided with the Drive device. Connect the 100' Ethernet cable to the router, then to the USB to Ethernet adapter. Plug the USB end into the USB port on the Drive device.



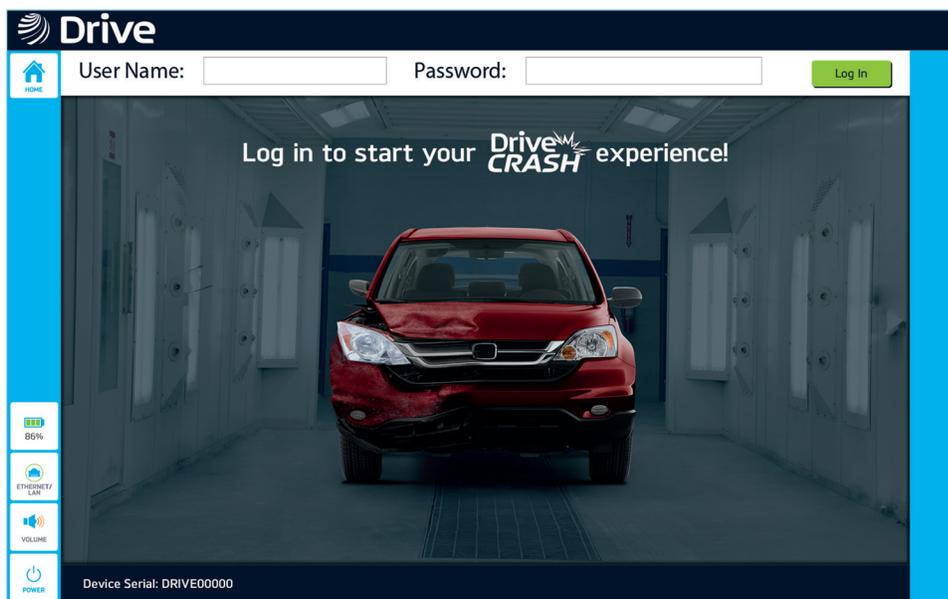
The **RAP**® Technician may indicate that this type of connection is required for the vehicle/module being worked on and will indicate so. Please keep these connectors in a safe, available location.

Getting Started



Connection to the Internet should have been successful at this point. For the best experience, **connect to a vehicle with key on, engine off (KOE0)** as the software will automatically start searching for the VIN of the vehicle once **Log In** is complete.

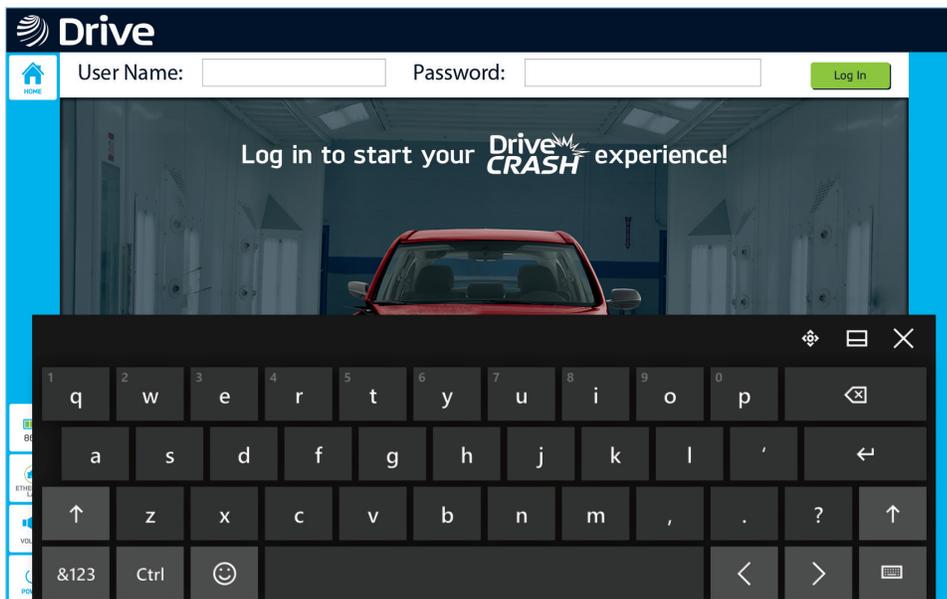
1. Log In



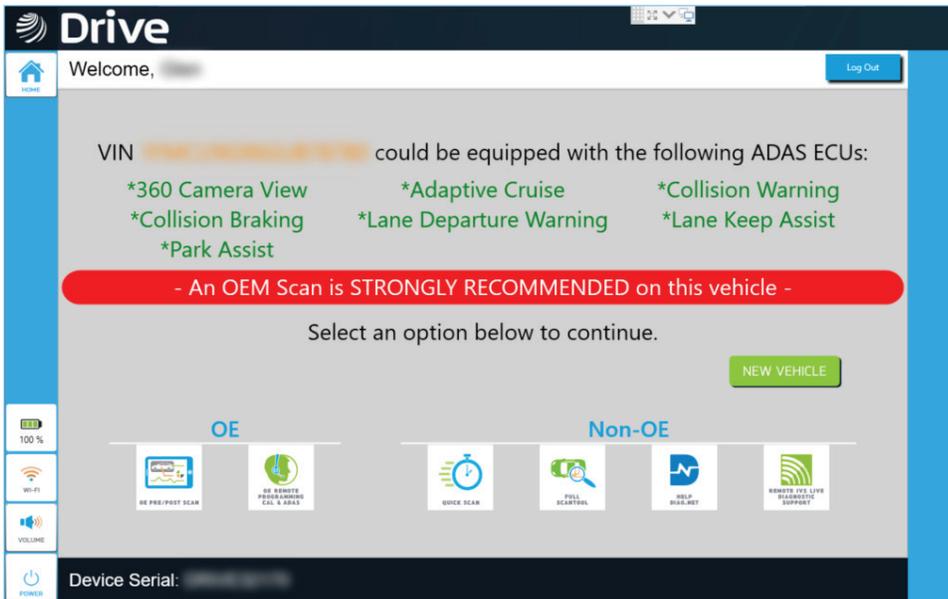
2. This is the HOME page.
Touch the box next to **User Name**
 - Using the displayed keypad, enter the **User Name** with your finger or stylus, followed by your **Password**
 - Touch **Log In**



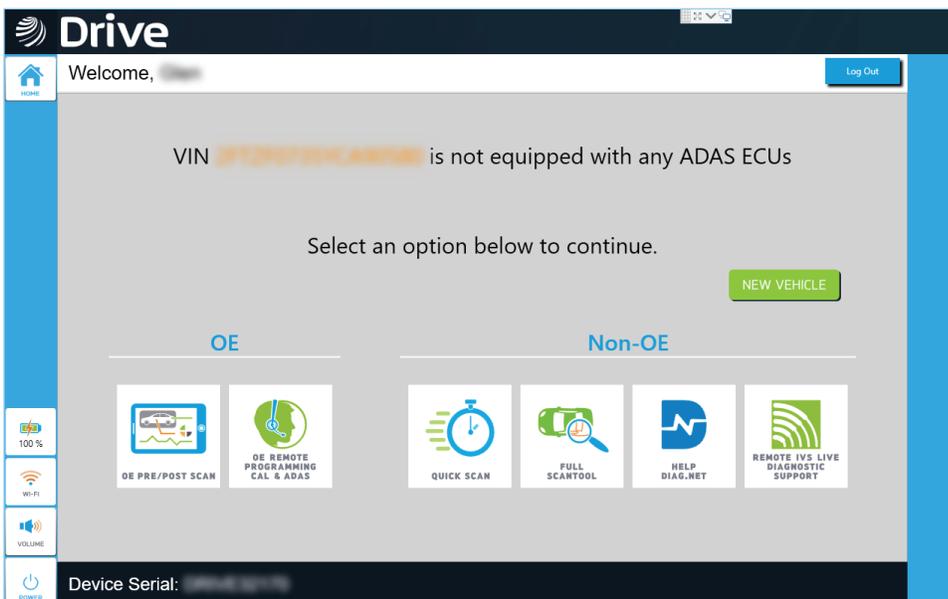
The device will remember and keep the user logged in, even after powering down the unit. To log out, touch the **Log Out** button.



3. Logged in successfully and vehicle information displayed



The above example shows a connected vehicle that **could be equipped** with the ADAS ECUs shown in green.



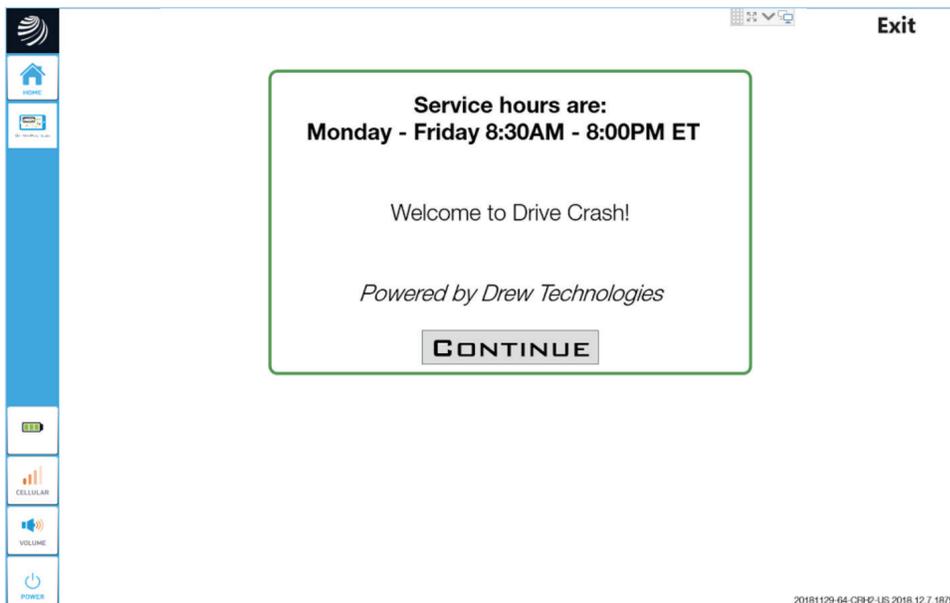
The above example shows a connected vehicle that is **not equipped** with any ADAS ECUs.

DriveCRASH® OE Pre/Post Scan (Remote Service)



The **OE scan** that will provide a complete scan using the OE dealer software, and is approved by automaker position statements. This is a remote service provided by **Drew Technologies**.

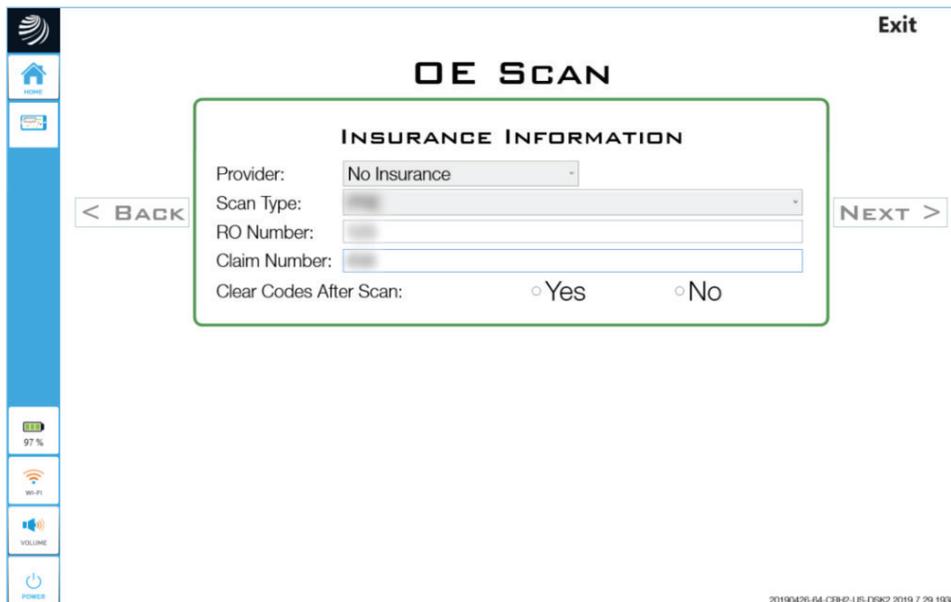
Touch the  icon.



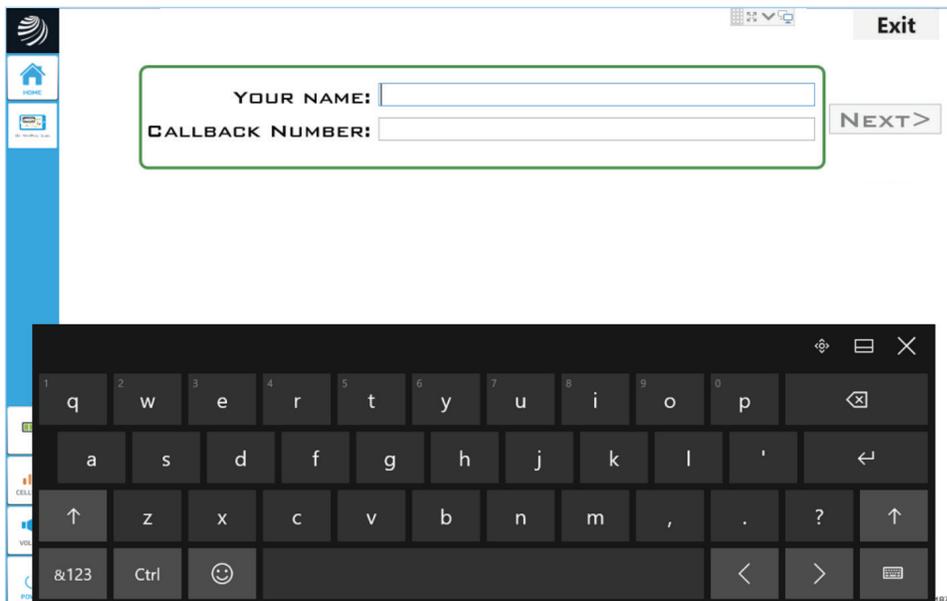
1. Touch **CONTINUE**.



2. Verify and touch **NEXT**.



3. Select drop-down areas and boxes to enter pertinent information and touch **NEXT**.



- Using keypad, fill in **Your Name** and **Call-back Number** and touch **NEXT**.

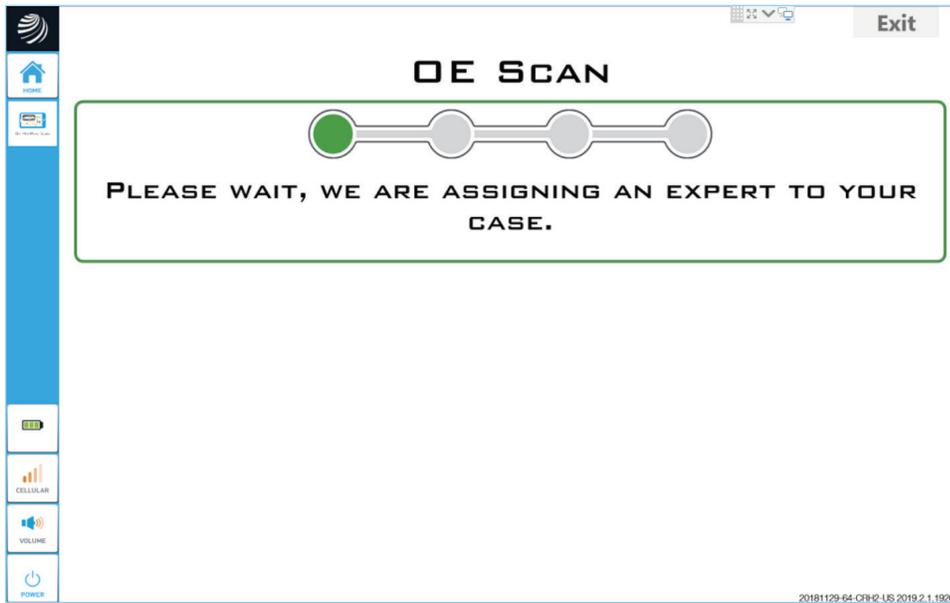


- Review information. If correct and approved, using finger or stylus, sign box and touch **OK**.

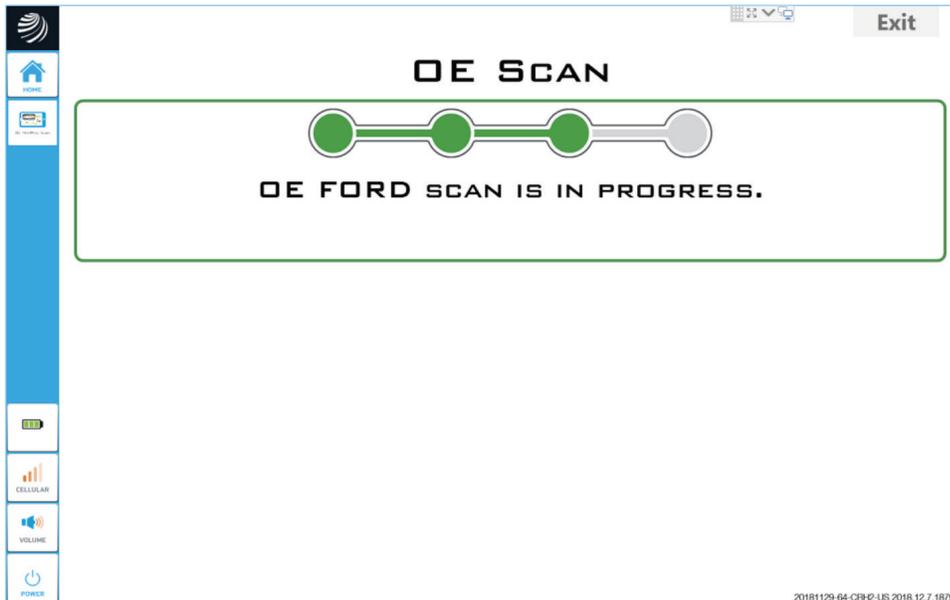


Initial scan is billed at **\$119.50**.
Subsequent scans of the same VIN are billed at **\$50 each.***

* Within 60 days of initial scan.



6. Assigning case to expert.



7. OE Scan in progress. Please wait...



8. Scan Completed. Touch **FINISH**. For additional instructions, reference the [Retrieving a Scan Report / Invoice](#) section.

Drive**CRASH**® OE Remote Programming CAL & ADAS (Remote Service) –Please read carefully

Touch the  icon.

1. **RAP**® Capabilities

- **RAP**® vehicle capabilities can be found at:
<http://drewtech.com/RAP/capabilities.html>
- It is important to know what can be done before you call.

2. **RAP**® Process: (also described on tablet screens)

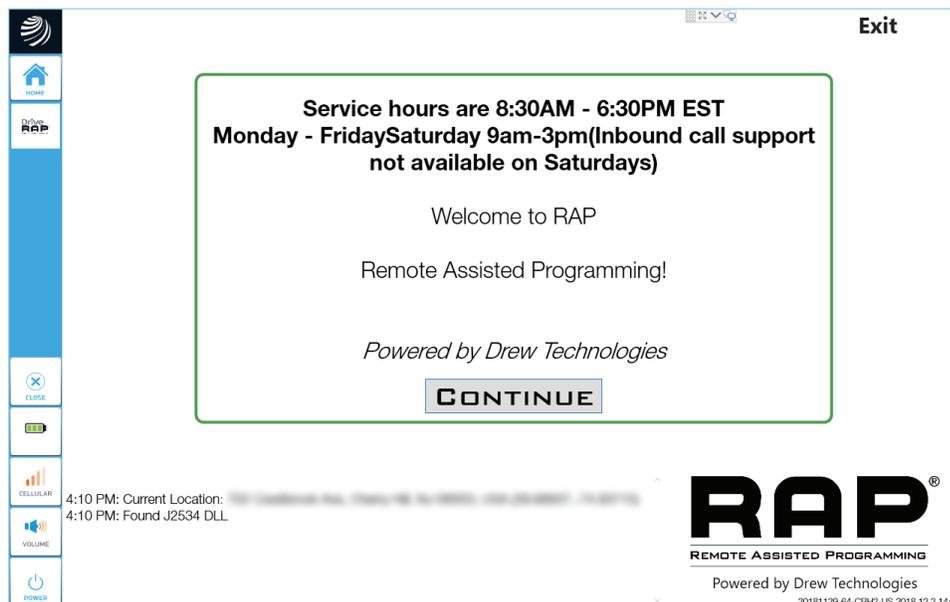
- Give us a call to be scheduled
 - i. Schedule for the next available appointment
 - ii. Or choose a later time that works best for you
 - Our **RAP**® Service Technicians will call you at the time of your scheduled appointment.
- Plug in the **Drive** device
 - i. Thirty (30) minutes prior to your scheduled appointment time, securely plug the power cord into a wall outlet or an extension cord, and check to make sure the green LED is illuminated.
- Power up the **Drive** device
 - i. Select the  button and complete all on-screen instructions.

3. A separate **Battery Maintainer** is required!

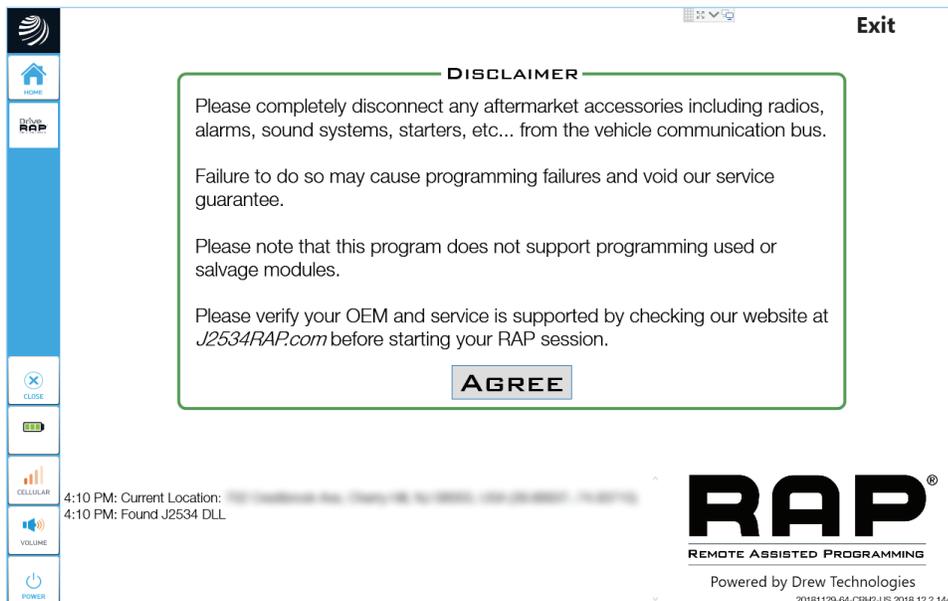
- Programming modules may require a significant amount of time while placing additional strain on the vehicle's battery. **Drew Technologies** recommends using the **100amp PowerMax PMBC-ADJ Series** battery maintainer to cover all vehicle makes—especially European vehicles—which is available for on-line purchase at <http://drewtech.com>.
- A minimum **75amp Battery Maintainer** is required to program most vehicles.

4. Saturday appointments

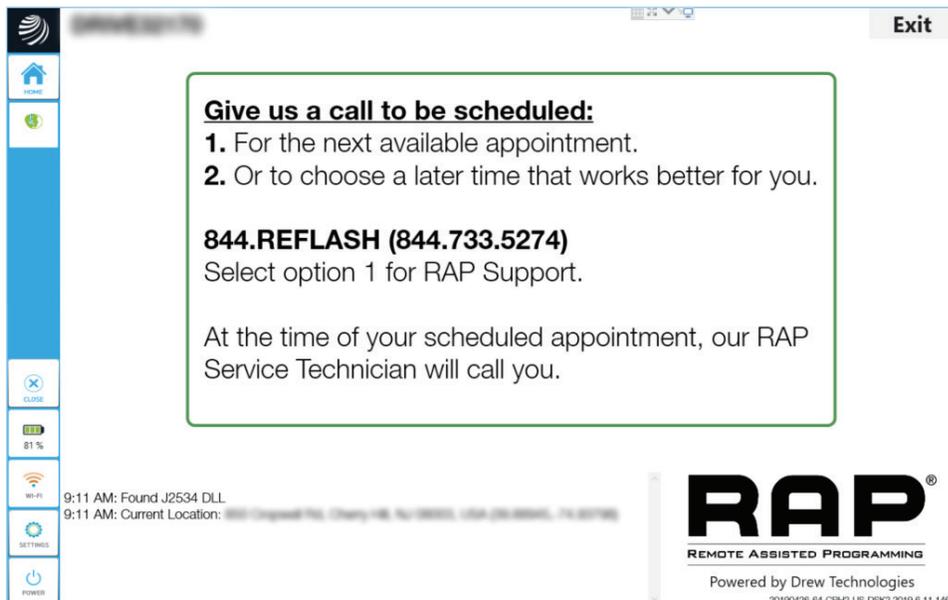
- Appointments must be scheduled **Monday – Friday**.
- Outbound calls are only made to those with scheduled appointments. Inbound calls will not be received during Saturday business hours.
- Appointments are available **beginning at 9:00am ET**, with the last appointments **being scheduled at 2:00pm ET**.
- **Nissan Valve Body/Transmission Programming** appointments will be scheduled **no later than 1:00pm ET**.
- **All currently-supported OEM makes will be supported**.
- Level 2 Tech Support issues **will be pushed to the following Monday** for processing.



5. Read the screen and touch **CONTINUE**.



6. Read and touch **AGREE**.



7. Follow Instructions on screen.
Remaining instructions will be provided on the phone.

DriveCRASH® Quick Scan (Do It Yourself)

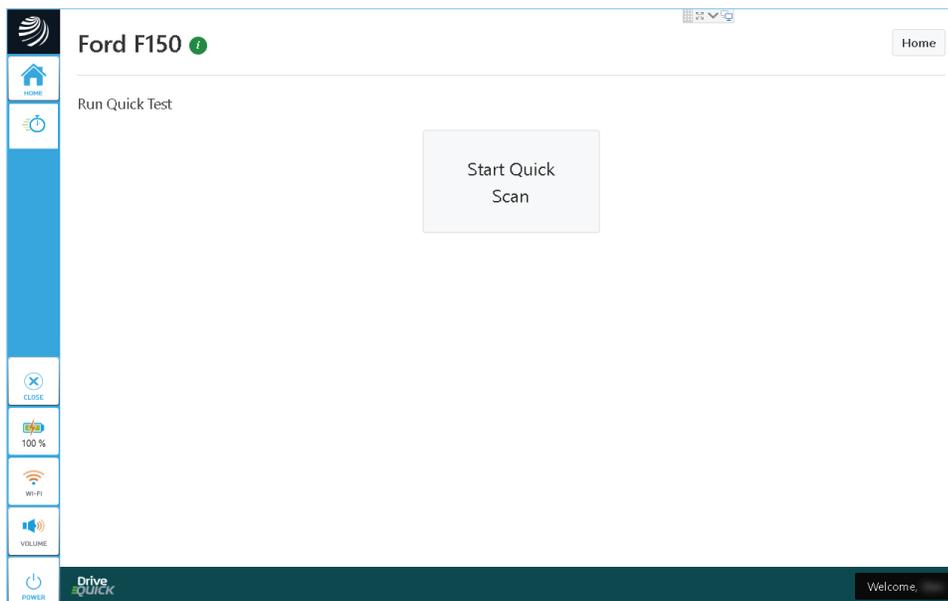


Quick Scan performed using after-market diagnostic software and is not an OE-approved scan of the vehicle. Therefore, the results may misreport information because after-market scans do not always know which modules are present in a vehicle. In some cases, it may under-report or over-report trouble codes. This is only intended as a **Quick Scan**. Only **OE Pre/Post Scans** report accurate information from the vehicle.

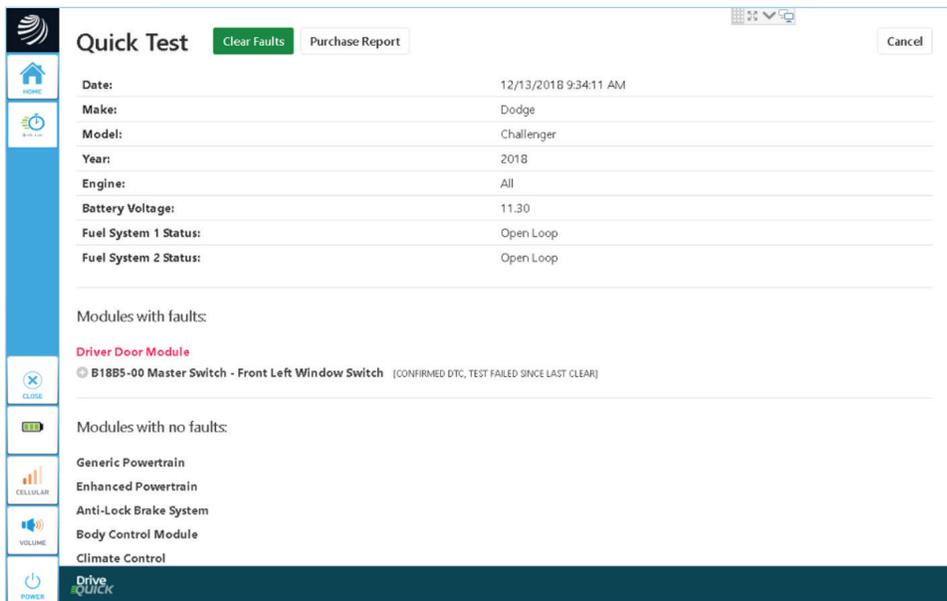


This is a self-driven scan that can happen at any time, and as many times as the customer wants. The scan is free, but generating an insurance invoice and saving the results to the portal costs \$5.

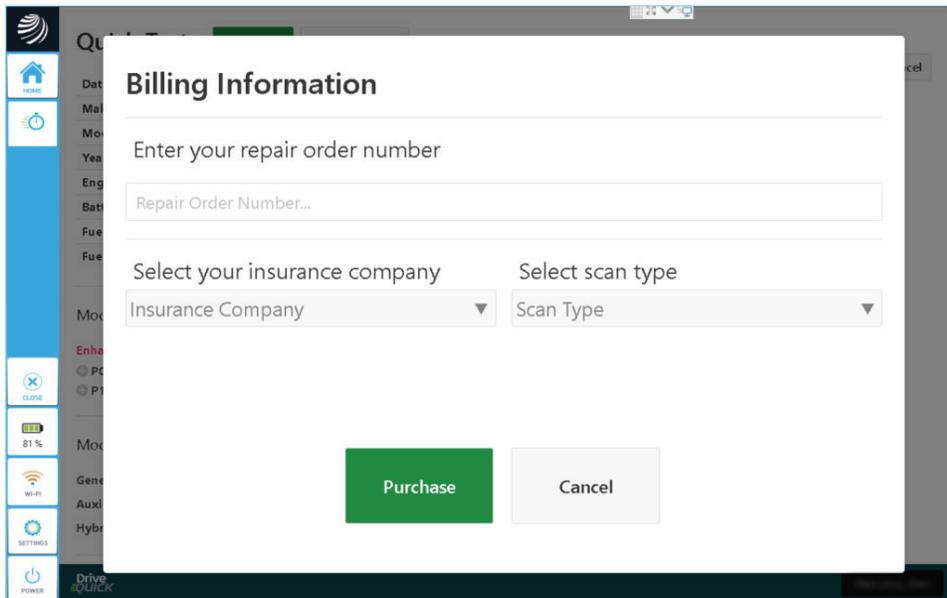
Touch the  icon.



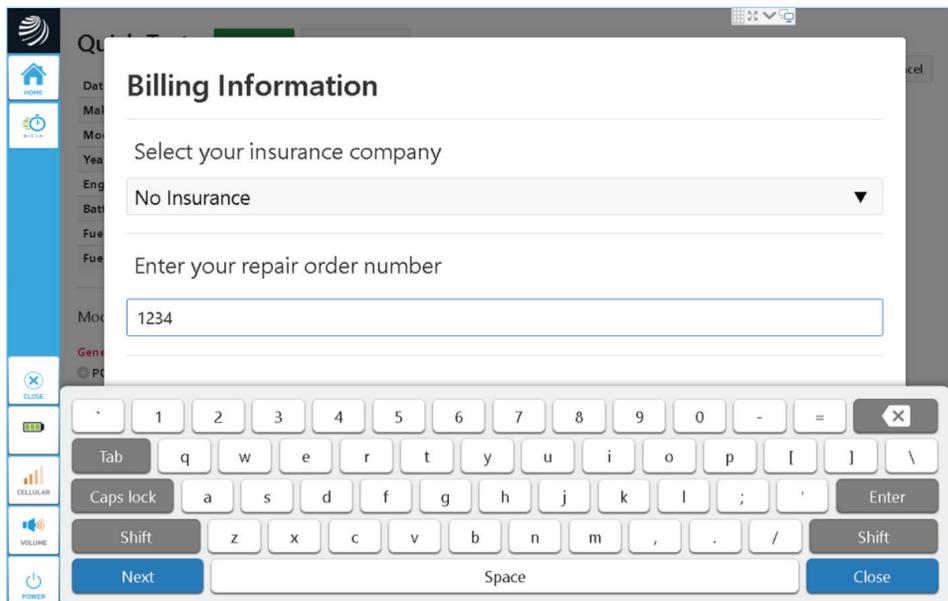
1. Touch **Start Quick Scan**



2. Quick Test Completed.



3. **Purchase Report:** To save the **Quick Scan report** into the **Portal**, touch **Purchase Report**.



4. Using the drop-down arrow, select your **Insurance Company**.
5. Enter your **Repair Order Number**, then touch **Close**.
6. Touch **Purchase**.



This saves the Scan Report / Invoice and can now be retrieved. (a green box will appear in lower, right-hand corner to indicate the report was saved.)



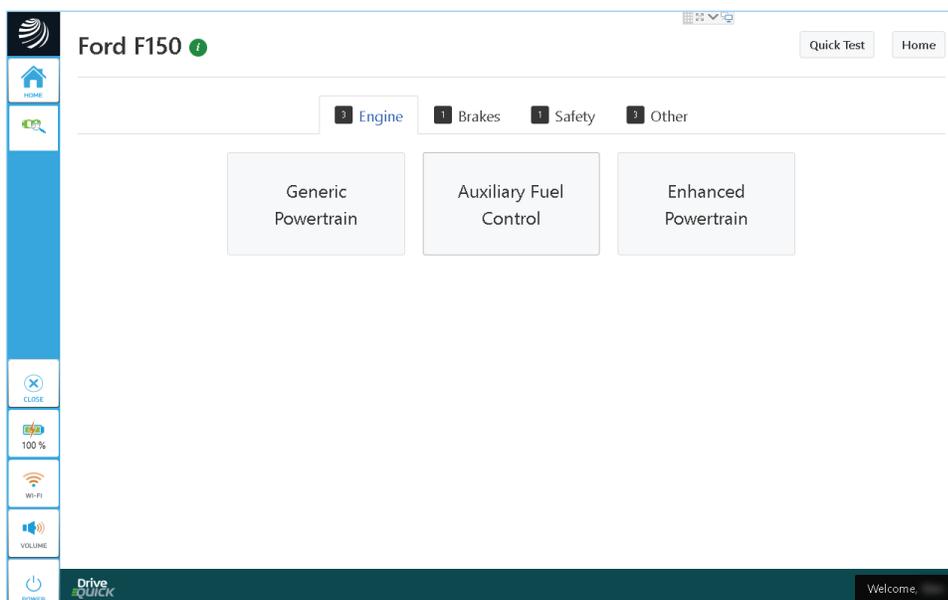
To retrieve report, see **Retrieving Scan Report / Invoice** section for additional instructions.

- a. **Clear Faults:** Touch **Clear Faults** to remove DTCs.
 - Upon clearing, you will be given the option to re-scan ECUs. Select this option if desired, or touch **Complete** to continue.
 - b. **View report only:** Touch **Cancel** to return to **Start Quick Scan**.
7. Touch the **✕ Close** icon on the left side of the tablet screen to go to the Home Page.

Full ScanTool

The **Full ScanTool** function is a robust and quick after-market tool to quickly diagnose, test, read, and display information from various vehicle systems. This includes: **Engine, Brakes, Safety,** and **Other, Read / Clear Codes**, observe live data streaming and actual bi-directional controls.

Touch the  icon.



Navigation

Depending on the vehicle connected, available icons may change.

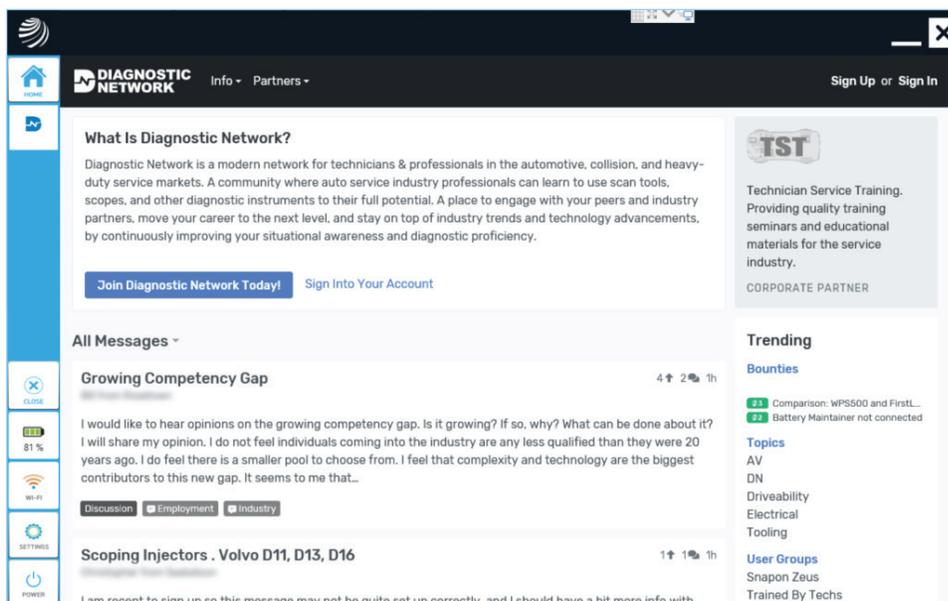
 Note the tabs across the top: Engine, Brakes, Safety, & Other. Use this powerful tool by navigating thru the tabs and available icons.

- **Back** icon will take you to the previous screen.
- **Cancel** icon will take you to the previous screen.
- **Quick Test** icon will provide a general, after-market scan of the vehicle.
- **Home** icon will exit **Full ScanTool**.

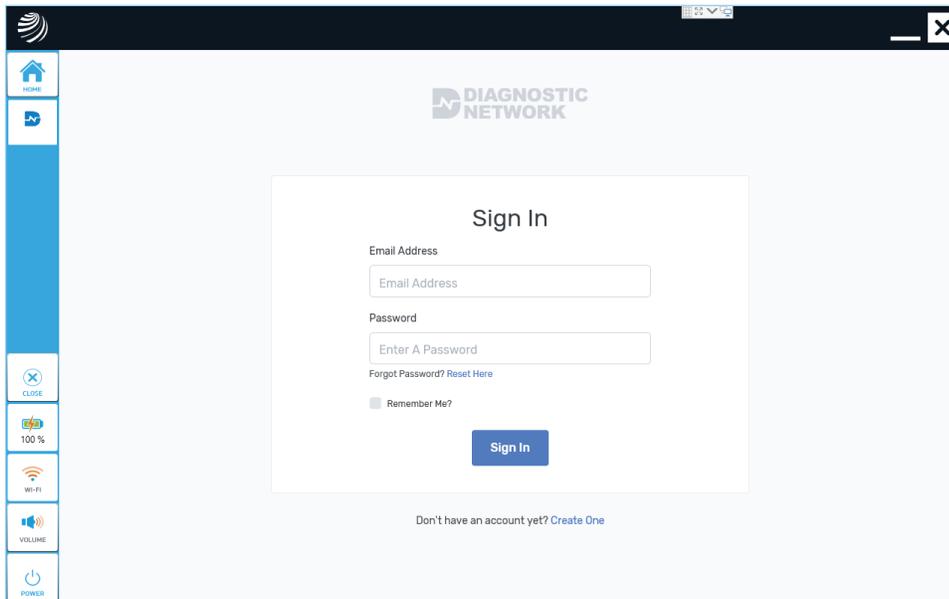
Diagnostic Network

Diagnostic Network is an on-line community designed to provide a collaborative space to share knowledge between automotive technicians and access repair assistance from industry-leading diagnosticians. A **Diagnostic Network** subscription is included with an active **DriveCRASH**® lease.

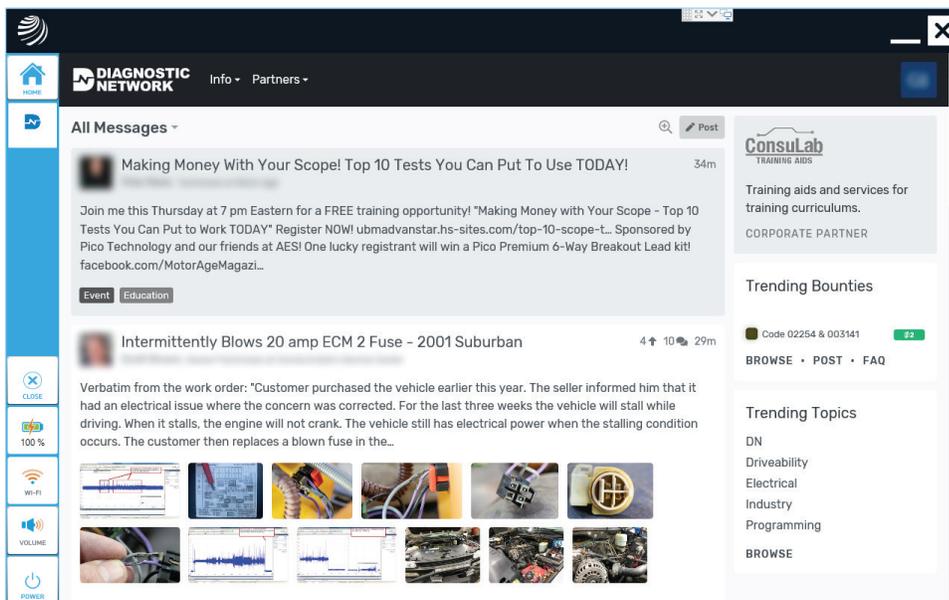
Touch the  icon.



- Touch **Sign In**



- Log in using **User Name** and **Password** provided

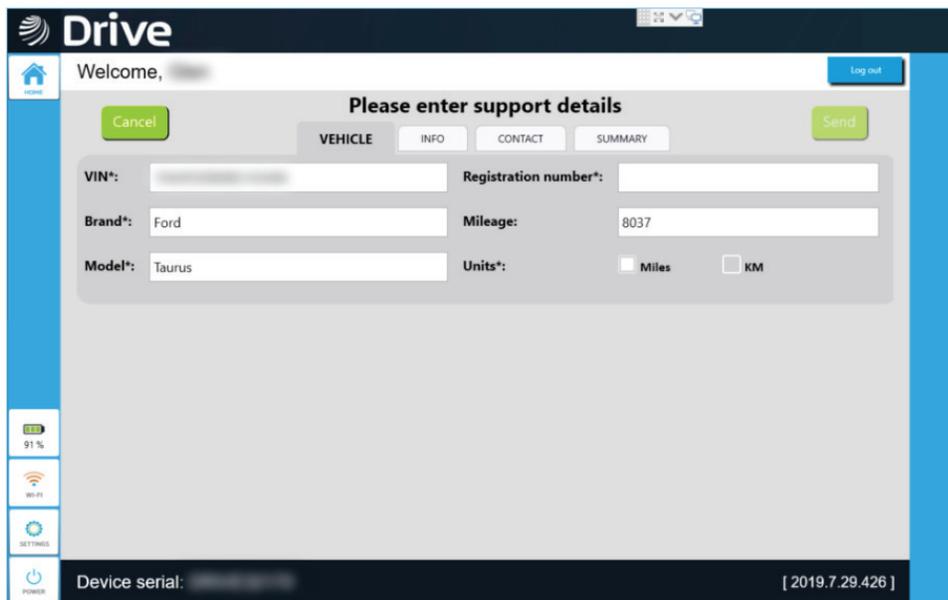


- To further navigate and explore, scroll down on the screen or touch the **All Messages** field and make applicable selections to your needs.
- To Exit, touch the **✕** in the upper, right-hand corner of the screen.

Remote IVS Live Diagnostic Support

Complete complex repairs confidently with the support of our team of **OEM-trained Master Technicians**. Receive brand-specific expert guidance from initial diagnosis to the successful repair.

Touch the  icon.



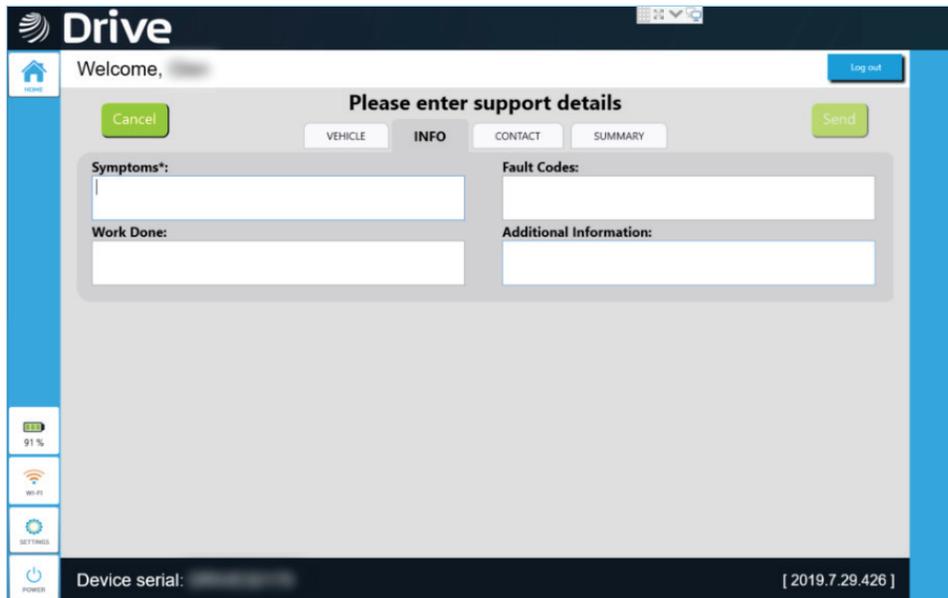
The screenshot shows the Drive app interface. At the top, it says "Welcome, [user name]" with a "Log out" button. Below that is a "Please enter support details" form with a "Cancel" button on the left and a "Send" button on the right. The form has four tabs: "VEHICLE", "INFO", "CONTACT", and "SUMMARY". The "VEHICLE" tab is selected. The form fields are: VIN* (empty), Registration number* (empty), Brand* (Ford), Mileage (8037), Model* (Taurus), and Units* (Miles and KM checkboxes). At the bottom, there is a "Device serial:" field and a timestamp "[2019.7.29.426]".

Navigation

- There are 4 tabs: **Vehicle**, **Info**, **Contact** and **Summary**. Each tab has information required so our technicians can gain as much information as possible to review the case prior to making the call-back. The more information, the better, as to give our technicians the most information to work with; and to potentially determine the root cause of the issue.
- Touch each tab, and likewise, touch each field to enter the appropriate information.
- To cancel request, touch **CANCEL** on any of the screens.

VEHICLE Tab (shown on previous page)

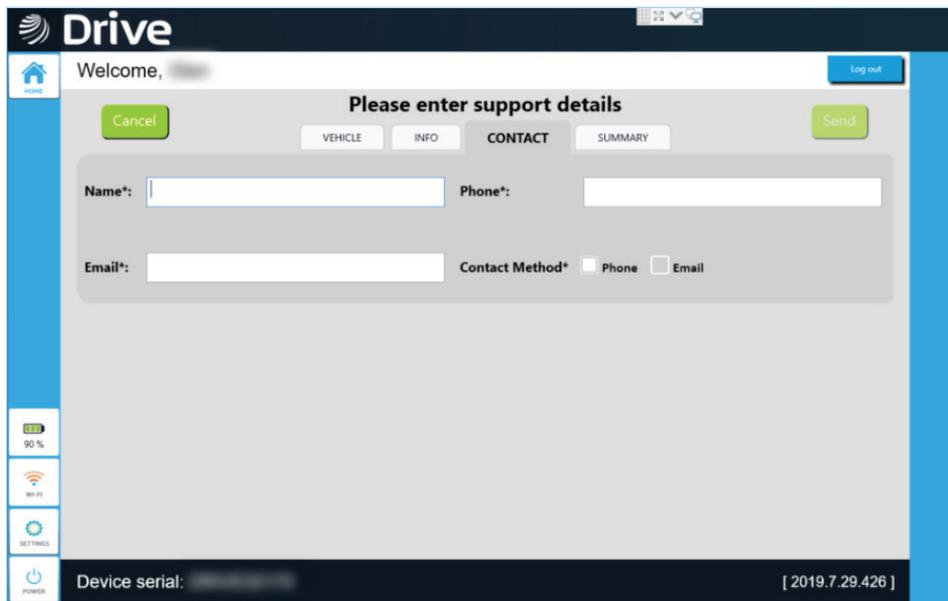
- Some information was likely pulled from the vehicle and populated accordingly.
- Fill out the remaining required information and touch the **Info** tab.



The screenshot shows the 'Drive' app interface. At the top, it says 'Welcome, [user]' and has a 'Log out' button. Below that is a form titled 'Please enter support details' with a 'Cancel' button on the left and a 'Send' button on the right. The form has four tabs: 'VEHICLE', 'INFO', 'CONTACT', and 'SUMMARY'. The 'INFO' tab is currently selected. Under the 'INFO' tab, there are four input fields: 'Symptoms:', 'Work Done:', 'Fault Codes:', and 'Additional Information:'. At the bottom of the screen, there is a 'Device serial:' field with the value '[2019.7.29.426]'. On the left side of the screen, there is a vertical menu with icons for Home, Settings, and Power.

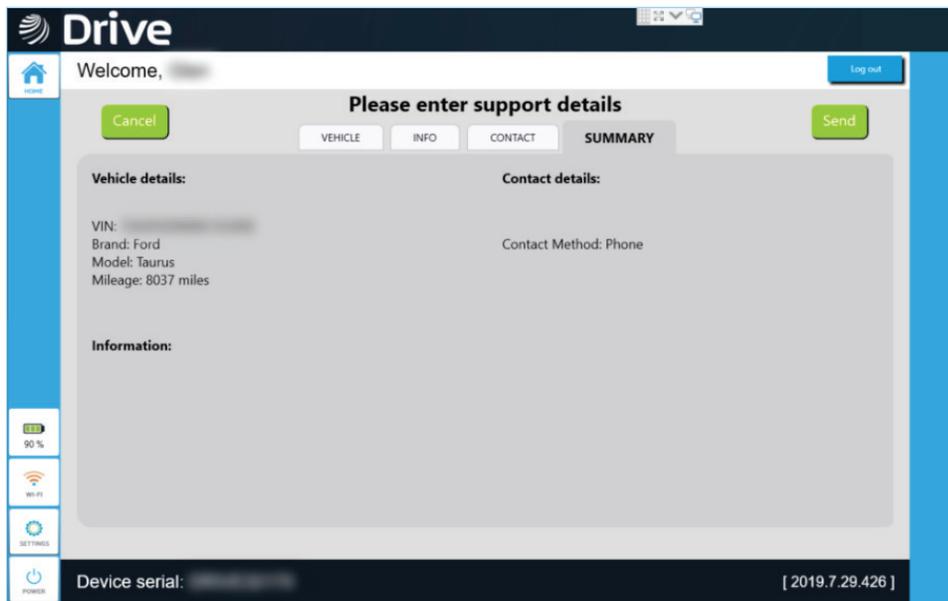
Info Tab

- To resolve the problem faster, fill out all required fields and with as much information and detail as possible concerning the issue, including steps already taken to resolve the issue.
- When done, touch the **Contact** tab.



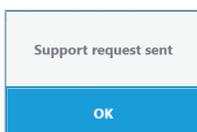
Contact Tab

- Fill out information as required. Double-check that entries are accurate.
- Touch **Summary** tab.



Summary Tab

- Verify all information. To make any corrections, touch the related tabs, make the changes, and come back to the **Summary** tab.
- Touch **SEND** when done.
- Within thirty **(30)** minutes or less, a technician will contact you to walk through the issue.



- Confirmation of request sent.

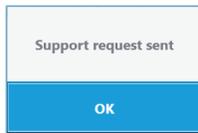
Retrieving a Scan Report / Invoice

1. Using a PC, go to: <https://autologic.com>
2. Log in using **User Name** and **Password** provided
3. Look for **DriveCRASH® Reports** on the left side of the web page and click on it
 - If more than one **DriveCRASH®** device has been assigned under a single account, the **Scan Report / Invoice** will be grouped by **Unit Serial Number**
 - An invoice is included and displayed below the report
 - **OEM Scan Reports** provided will be the **Drew** summarized report with Invoice attached, as well as the complete OE report generated by the OE application. Both are available for your records and review.
 - Example of OEM scan vehicle record in portal:

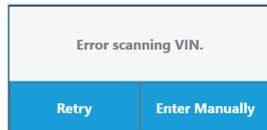
🔍 2011 FORD Taurus VIN: 1FAHP2EWXBG103496 [Original OE Report](#) 📅 13 Feb 2019 10:56:45 AM

4. **Drew** summary report with **Invoice**, select the applicable vehicle (**e.g. 2011 Ford Taurus**)
5. Full OE report, select **Original OE Report**
6. Select the applicable vehicle
7. To **Print**, right-click on opened report and select **PRINT**, then make other selections as required.
8. To Email, right-click on opened report and select **Save as PDF**, then select the directory where you can retrieve it easily. Using your email client, attach the file and send.

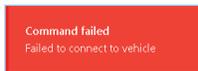
Troubleshooting / Error Codes



- Check cable connections
- Not connected to a vehicle
- Ignition key not turned to the **ON** position



- Check cable connections
- Ignition key not turned to the **ON** position
- Vehicle does not support VIN read. Use manual entry option



- Full ScanTool
- Not able to connect to module/system
- Vehicle not equipped with module/system

Product Specifications

CPU	Atom x5-Z8350 1.44 GHz
Memory	4 GB
Disk	SSD – Variable Size
Vehicle Connectivity	Integrated Vehicle Communication Interface compliant with SAE J2534-1, SAE 2534-2 and RP1210
Power	8 to 26 V from either external DC Power supply or through the SAE J1962 diagnostic connection
Dimensions (h x w x d)	230 x 396 x 40 mm
Weight	1.56 Kg
Connectivity	Blue-tooth, Wi-Fi and Optional 4G modem
Display	1280 x 800
Touchscreen	Capacitive
USB Ports	1 x USB 2.0 Type A
Operating System	Windows 10 Enterprise LTSB
IP Rating	IP65
Cameras	Front: 2MP; Rear: 5MP
Sound	Amplified speakers and omni-directional microphone
Charger Port	17.5 Volts DC, 2.2 amps
Vehicle Connector Port	26V DC, 2.5 amps charging, 1.5 amps not charging
Temp Range, Operational	-5C to 55C
Temp Range, Storage	-20C to 80C
Bar-code Scanner	Optional 2D / 3D Bar-code scanner
Fingerprint Scanner	Optional
Docking Station	Optional – includes Ethernet, 2 x USB, and DC power



DrewTech Support

Our knowledgeable representatives are eager to provide solutions to your support needs. Email us at sales@drewtech.com or call us toll-free at **(844) RAPSCAN (727-7226)**.

Support Hours

8:30am–6:30pm ET | Monday–Friday
(EXCLUDES HOLIDAYS)



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