

# **MD-200** User Manual

# Mitchell **Diagnostics**



en User Manual

# Technical Support 1-800-533-6127

For technical questions on your product, contact (800) 533-6127, and select the option for technical support.

For assistance with internet or wireless connectivity, contact (800) 533-6127, and select the option for connectivity.

or email tech@otctools.com.

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# **Table of Contents**

Safety Definitions2
General Information4Introduction4Handset4Handset Ports5Software Descriptions6Battery Charging6Using the Handset6
Registration7
30 Day Trial9Demo9Provide Power to Scan Tool10Test Startup and Vehicle Connection11
Settings11Application Settings11Software Information12Software Update12Printer setup12Subscription12User Details13Language13
Selecting Vehicle
OBDII18Overview18Diagnostic Functions18Data Stream18DTCs Modes20Oxygen (O2) Sensors21Non-Continuous Tests22Special Tests22Vehicle Info23
Saved Diagnostic Data
Browser 25
Heavy Duty
Read DTCs All Systems

Read DTCs Select Systems	28
Ford/Lincoln/Mercury	30
Data Stream	32
Special Tests	36
Diagnostic Information	38
Automated System Test	42
Maintenance Tests	46
Enhanced OBDII	47
Saved Diagnostic Data	47
Browser	48
Settings	48
Customer Support	49

# **Safety Definitions**

Follow all DANGER, WARNING, and IMPORTANT messages. These safety messages are defined as follows:



**DANGER or WARNING:** Risk of bodily harm and/or possible loss of life.

**IMPORTANT:** The information demands special attention or risks damage to the vehicle or tool.

The safety messages cover situations of which Bosch Automotive Service Solutions is aware. Bosch Automotive Service Solutions cannot know, evaluate, or advise as to all of the possible hazards. You must be certain that any conditions or service procedures encountered do not jeopardize personal safety.

# **Safety Precautions**

**DANGER:**When an engine is operating, keep the service area well ventilated or attach a building exhaust removal system to the engine exhaust system. Engines produce carbon monoxide, an odorless, poisonous gas that causes slower reaction time and can lead to serious personal injury or loss of life.

**WARNING:** When working with hydraulic or fuel lines, be careful that liquids under pressure do not escape and create a dangerous condition. Use adequate ventilation and make sure there are no sparks or possibility of sparks that may ignite any vapor.

Wear an American National Standards Institute (ANSI) approved eye shield when testing or repairing vehicles.

Objects propelled by whirling engine components or pressurized liquids escaping may cause personal injury.

Set the parking brake and block the wheels before testing or repairing a vehicle. It is especially important to block the wheels on front-wheel drive vehicles because the parking brake does not hold the drive wheels.

Do not drive the vehicle and operate the software at the same time.

Maintain adequate clearance around moving components or belts during testing.

Moving components and belts can catch loose clothing, body parts, or test equipment and cause serious damage or personal injury.

Automotive batteries contain sulfuric acid and produce explosive gases that can result in serious injury ignition of gases, keep lit cigarettes, sparks, flames, and other ignition sources away from the battery at all times.

Refer to the service manual for the vehicle being serviced. Adhere to all diagnostic procedures and precautions Failure to do so could result in personal injury or otherwise unneeded repairs.

Use only specially designed replacement parts (brake hoses and lines) for ABS equipped vehicles.

After bleeding the brake system, check the brake pedal for excessive travel or a spongy feel. Bleed again if either condition is present.

When installing transmitting devices (Citizen Band radio, telephone, etc) on ABS-equipped vehicles, do not locate the antenna near the ABS control unit or any other control unit.

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 and radiates radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

To reduce risk of injury, charge only Bosch Automotive Service Solutions rechargeable batteries for the handset product with the supplied charger. Other types of batteries may burst causing injury to persons and peoperty damage.

Use of an attachment not recommended or sold by the battery charger manufacturer may result in fire, electric shock, or personal injury.

Do not operate the tool with a damaged cord or connector. Replace damaged cords and connectors immediately.

Do not operate the charger if it has received a sharp blow, been dropped, or otherwise damaged in any way. Take the charger to a qualified service person.

Do not disassemble the charger. Take the charger to a qualified service person if service or repair is necessary. Incorrect reassembly may result in electric shock or fire. Unplug charger before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.

To prevent possible hearing damage, avoid using the tool at high volume levels for long periods.

Do not expose tool or charger to rain, moisture, or snow.

Verify that cords are located where they will not be stepped on, tripped over, or otherwise become a safety hazard or subjected to damage or stress.

Use only batteries that are approved for use with this tool. Use of other types may increase the risk of fire or explosion.

Do not carry a battery in your pocket, purse, or other container where metal objects (such as car keys or paper clips) could short-circuit the battery terminals. The resulting excessive current flow can cause extremely high temperatures and may result in damage to the battery pack or cause fire or burns.

The battery poses a burn hazard if you handle it improperly. Do not disassemble it. Handle a damaged or leaking battery with extreme care. If the battery is damaged, electrolyte may leak from the cells and may cause personal injury. Keep the battery away from children.

Do not store or leave your tool or battery near a heat source such as a radiator, fireplace, stove, electric heater, or other heatgenerating appliance or otherwise expose it to temperatures in excess of 140 °F (60°C). When heated to excessive temperatures, battery cells could explode or vent, posing a risk of fire.

Do not dispose of your tool's battery in a fire or with normal household waste. Battery cells may explode. Discard a used battery according to the manufacturer's instructions or contact your local waste disposal agency for disposal instructions. Dispose of a spent or damaged battery promptly.

IMPORTANT: To avoid damage or generation of false data, make sure the vehicle battery is fully charged and the connection to the vehicle Data Link Connector (DLC) is clean and secure.

Do not place the tool on the distributor of a vehicle. Strong electromagnetic interference can damage the tool.

Never disconnect or reconnect any electrical connector while the ignition is on. Powertrain Control Module (PCM) damage may result.

# **General Information**

# Introduction



# 1. Vehicle Identification Window

- Where vehicle information is displayed.
- 2. Navigation Help button

# 3. Main Menu Functions

- Select Vehicle allows you to manually choose the vehicle, AutoID to automatically identify the vehicle or enter the VIN.
- OBDII (also referred to as Generic OBDII) Provides limited engine control and monitors the diagnostic control network of the vehicle.
- Saved Diagnostic Data allows the user to view previously run and saved DTC reads, All System DTC scan, and Automated System Test scans and data stream recordings.
- Browser Fast Touch<sup>™</sup> sites and internet.
- Heavy Duty allows the user to read Heavy Duty
- Diagnostic information.
- Settings change settings of the tool.

# 4. Android Applications Button

• Displays the Apps screen.

# 5. Power Button

• Press to power ON handset or if running press to access menu to: Power Down.

# 6. Recent apps button

• Opens a list of thumbnail images of currently running apps.

# 7. Page indicator

- Displays the page currently being displayed.
- 8. Home Button
  - Displays the Main Menu screen.

# 9. Back Button

• Returns to the previous screen or option.

# Handset

The handset is a ruggedized touchscreen tablet equipped with the Android operating system. The power button is located on the lower center front of the Handset.



Handset Power Button

# **Power Button Functions**

The power button has four functions

- a. ON: Press the power button to turn the handset on.
- b.OFF: Press and release the power button. A pop up window will appear to shut down the handset.
- c. ON: If the screen times out or is in standby mode, press and release the power button to wake up the handset. Turn ON: With tool off, press to turn ON
- d.OFF: Press the power button and hold for 5 seconds to turn the handset off completely (not recommended).



1. Power port

**Handset Ports** 

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- 2. DLC cable Port
- 3. SD card slot
- 4. Audio out port (3.5mm)
- 5. USB Type "A" port
  - Print to or store data as needed
  - Connect add-on hardware
  - USB Drive (optional) USB Type "A" port
- 6. USB Type "B" port

# **Software Descriptions**

# Handset Software

The handset comes with the diagnostic software pre-loaded.

The first time the handset is powered up, the user needs to accept the license agreement. Then, the user will have three choices:

- Register Now: Unlocks all functions of handset.
- Trial mode: Unlocks all functions for 30 days.
- Demo Mode: Displays what functions may look like.

Periodically, updates will become available and the user will be notified by an icon on the screen. To update the handset, there must be Wi-Fi connection available.

# **Software Applications**

# **Overview**

The handset allows users to diagnose problems on a wide variety of vehicles (from electric to heavy duty vehicles). Users are able to perform common service procedures, maintenance tests, and special tests to find deficiencies with vehicle systems or components.

The handset will display DTCs from OBDI or OBDII systems. Real-time sensor data can be viewed in data stream mode. The user can also obtain diagnostic information regarding repairs.

Browser mode allows the user to connect to the internet to find websites that may help with the repair of the vehicle. The handset comes with wireless communication for ease of use and onscreen help when desired.

# **Battery Charging**

Connect the handset to AC power and fully charge the battery.

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# 1. Handset

# 2. AC Power cord

When the handset is turned on, the level of battery charge is indicated in the upper right corner of the screen. *NOTE: The tool can be used while charging. The battery can also be charged using the 15 volt power supply provided with the kit.* 

**Power Port** 

# Using the handset

There are three options for use.

- Register Now: It is recommended to register for full functionality of tool and tech support.
- Trial Mode: This allows use of the handset for 30 days before it must be registered. If the 30 day trial period is over before it is registered, the handset functions will be locked out. At that time, register now or demo mode will need to be entered.
- Demo Mode: This mode demonstrates the functions by displaying random data.



**1. Press the power button to turn on the handset.** ss01719



2. Select a language.

# Registration

It is important to register the handset right away. To register, it will need a Wi-Fi internet connection. To connect to Wi-Fi, refer to steps 2 through 6. Register now enables the unit. Register later causes the device to go into a 30-day trial mode. Demo Mode is for training and demonstration purposes only, it cannot communicate with a vehicle. Demo Mode will use sample data.

- 1. Select Register my Device Now.
- 2. Read and accept the user agreement.

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### You've got the right tool! End User License Agreement Quick Setup Register my Device Now Software Product License Agreement Register my Device Later 1) Read & agree to the EULA. Copyright (c) 2014-2017, Bosch Automotive Service Solutions Inc. All Rights Reserved Demo Mode 2) Setup Wi-Fi. SOFTWARE PRODUCT LICENSE AGREEMENT 3) Activate your warranty. IMPORTANT: Do not continue until you have read this Software Product License Agreement ("Agreement"). By clicking the I Agree button (or authorizing any other person to do so), you accept this Agreement and are bound bv its terms. If you I Agree

3. Select the correct Time Zone.

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4. Enable Wi-Fi and select Next

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0		
Register my Device Now	Setup WI-FI	
	Add Wi-Fi Network	
Register my Device Later	This is needed for networks that do not broadcast their SSID	
Demo Mode		
	Wi-Fi is not enabled	
	Please enable Wi-Fi	
	ок	
	Wi-Fi OFF	Next: Your Name

Note: Wi-Fi Must be ON. If Wi-Fi is OFF slide the Wi-Fi switch to the ON position and follow the prompts on the screen.

0002000		
You've got the	e right tool!	
Register my Device Now	Setup Wi-Fi	
	Add Wi-Fi Network	
Register my Device Later	This is needed for networks that do not broadcast their SSID	
Demo Mode		
	Wi-Fi OFF	Next: Your Name

5. Select a network and select Next

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You've got the right tool!				
Register my Device Now	Setup Wi-Fi			
Register my Device Later	Shop Secured with WPA2			
Demo Mode	Office			
	Add WiFi Network This is needed for networks that do not broadcast their SSID			
	Wi-Fi ON Next: Your Name			

6. If a Network password is required the Android

Wi-Fi screen will be displayed. Follow the prompts on the screen.

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	Select Wi-Fi	8	
On		Ø	
	℅ Shop Connected		
В	ack	Next	

7. If an internet connection could not be established, follow the prompts on the screen and try again.

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8. Enter your Name. Follow the prompts on the screen to activate warranty.

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You've got the right tool!				
Register my Device Now	Activate Warranty			
Register my Device Later	John			
Demo Mode	Smith			
	City Service Center			
	City Service Center			
	Set Clock Next: Contact Info			

9. Enter contact information. Follow the prompts on the screen.

Register my Device Now	Activate Warra	nty		
egister my Device Later	cityshop@gmail.co	m		
emo Mode	3135551212			
	1234 Main St			
	Address 2 (optiona	I)		
	Detroit	МІ	48123	
	United States			

10. Confirm information. Follow the prompts on the screen and activate warranty. ss01727

. .



**11.** Setup Printer. This can be completed later by going to Settings



# 12. Follow the prompts on the screen.



### 13. MD-200 is ready to use.

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# **30 Day Trial**

 Select Register my Device Later for 30 days of full use of the tool before registration is required. If the handset is not registered within the 30 day trial period, after 30 days it will only function in Demo Mode.

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## 1. MD-200 is ready to use.

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# Demo

1. Select Demo mode

ss01825				
You've got the I	ou've got the right tool!			
Register my Device Now	Enter Demo Mode	End User License Agreement		
Register my Device Later	1) Read & agree to the EULA.	Software Product License Agreement		
Demo Mode	Demo Mode can be used for	Copyright (c) 2014-2017, Bosch Automotive Service Solutions Inc. All Rights Reserved		
	familiarization. Yo can select various vehicles and	SOFTWARE PRODUCT LICENSE AGGREEMENT		
	review the tool's features and functions. Demo Mode does not allow communication to a car.	IMPORTANT: Do not continue until you have read this Software Product license Agreement ("AGreement").		
		By clicking the I Agree button (or authorizing any other person to do so) you accept this		
		I Agree		

2. MD-200 is ready to use.

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**Scan Tool Cable Connections** 

- 1. OBD II / DLC cable
- 2. 12 volt power cable (Use with vehicles that do not supply power through DLC)

# 3. Scan tool

- **Power via vehicle DLC**
- 1. Connect the OBD II / DLC cable to the scan tool.
- Connect the OBD II / DLC cable to the DLC on vehicle. Located within 18 inches (45.7 cm) of steering wheel. Typically located on the driver's side, under dash.

3. Turn ignition ON.

# Non-powered vehicle DLC setup

Some vehicles do not supply power through DLC. In this case use the following procedure.

- 1. Connect OBD II / DLC cable to scan tool.
- 2. Connect OBD II / DLC cable to DLC on vehicle. Typically located on the driver's side under the dash.
- 3. Connect the 12 volt power cable to the scan tool power port.
- 4. Connect the 12 volt power connector to the vehicle power outlet
- 5. Turn ignition ON.



Scan Tool Connected to Vehicle

- 1. OBDII/DLC Cable
- 2. DLC
- 3. Scan Tool

# **Turning off handset:**



1. Press and release the power button.

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2. Select OK. The tool will now shutdown.

# Test Startup and Vehicle Connection

- 1. Turn ON the handset.
- 2. Connect the OBDII/DLC cable to the scan tool.
- 3. Connect the OBDII/DLC cable to the DLC on the vehicle.
- 4. Turn the ignition ON, but keep the engine OFF (KOEO).
- 5. Select vehicle from the Main Menu screen.
- 6. Enter the vehicle information one of two ways:
  - AutoID
  - Manual entry
- 7. From the Vehicle selected screen, select any diagnostic function.

# **Settings**

Settings allow the user to make adjustments to the following:

- Applications
- Software information
- Software update
- Printer Setup
- Subscriptions
- User Detail
- Language
- Direct-Hit
- Service
- Report Options

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1. Select Settings from the Main Menu.

# **Application Settings**

From the Settings screen select Application Settings. Follow the prompts on the screen to make changes to the following:

- Demo Mode
  - Turn Demo mode ON or OFF
- Units of measure
  - Switch between Standard or Metric
- Use TPR
  - Enable TRP
- Data Steam Scroll Options
  - Select scrolling options

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Settings		Menu
Application Settings	Demo Mode	OFF
Software Information	Units of Measure	Standard
Software Update	Use TPR	Ask during test 👻
Printer Setup	Data Stream Scroll Ontions	Always Ask -
Subscriptions		Always Ask •
User Details		
Contact Us		
Language		

# **Software Information**

From the Settings screen select Software Information. The current software versions will be displayed.

Select View Open Source Software Details to view more in-depth information.



### **Software Update**

From the Settings screen select Software Update.

- Manually check for updates.
- Automatic download.

NOTE: Active internet connection is required for this function.

If an update is available follow the prompts on the screen to update the handset.

Downloading the software will occur in the background and varies with Wi-Fi connection speed and quality. Installing the software can take up to 45 minutes. Please be sure to have your handset fully charged and allow sufficient time for the installation.

Settings		Menu
Application Settings	Please ensure the tool is connected to the internet	
Software Information	Check for Updates Install Update	
Software Update		٦
Printer Setup		
Subscriptions	Updates Ready to Install	
User Details	L Current Revision: 3.0.0.1	1
Contact Us		
Language		

### **Printer setup**

- Ensure device is connected to internet and that network has unrestricted access to Google services.
- 2. Follow the prompts on the screen.

|--|

Settings	Menu	
Application Settings	Printer Setup	
Software Information	Printer setup help	
Software Update		
Printer Setup		
Subscriptions	Print test page	
User Details		
Contact Us		
Language		

# **Subscription**

The tool must be registered to see this tab.

- 1. From the Settings screen select Subscription.
  - Heavy duty vehicle function is locked and must be unlocked.
  - Need to obtain subscription code.
  - After one year, the user will be required to renew the subscriptions to receive product updates.

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Settings		Menu
Application Settings	Heavy Duty	
Software Information	All Coverage Subscription: Expires 5/21/2017	
Software Update		
Printer Setup		
Subscriptions		
User Details		
Contact Us	Enter Subscription Code Reload Subscriptions	
Language		

## 2. Select Enter Subscription Code.



3. Enter Subscription Code and select OK.



### **User Details**

1. From the Settings screen select User Details. ss02677

Settings ©			Menu
Application Settings	Owner's First Name	John Doe	
Software Information	Owner's Last Name	Technician	_
	Distribution Name	City Service	_
Software Update	Email	JohnDoe@cityservice.com	
Printer Setup	Phone	3195551234	
Subscriptions	Address 1	123 Main Street	_
Subscriptions	Address 2 (optional)	۹	
User Details	City	Detroit	
Contact Us		Sa	ve
Language			

2. Select field to modify.

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Settings		Menu
Application Settings	Owner's First Name John Doe	
Software Information	Owner's Last Name Technician	_
	Distribution Name City Service	
q w e	r t y u i o p	Ø
a s d	f g h j k l	Vext
	<b>c v b n m ,</b> <sup>1</sup> . <sup>?</sup>	Ŷ
?123 <b>幸</b> / <sup>@</sup>	· · · · · · · · · · · · · · · · · · ·	:-)

Note: The information saved in User Details will also update registration information.

### Language

- 1. From the Settings screen select Language
- 2. Follow the prompts on the screen
- 3. English
- 4. Spanish
- 5. French

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# **Selecting Vehicle**

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WARNING: Before performing any diagnostic functions, refer to the Safety Precautions and Warnings provided by the vehicle manufacturer. In addition, follow any warnings and instructions provided on the handset.

💎 🖻 9:40 ? 🙈 🔘 💼 MAIN MENU - Tap Below To Begin Your Diagnostic Experience 8 ۲ **6** OBDI ed Diagnostic Dal 0 (:::) Today is Thu, 04 Jan 2018.

- to manually choose the vehicle, AutoID to automatically identify the vehicle or enter the VIN.
- 2. Select the vehicle specification options on each screen until the complete vehicle information is entered.

# **AutoID**

AutoID uses the vehicle's Mode 9 VIN information. when available. Most vehicles from 2004 and newer support AutoID, but some other older vehicles may support Mode 9 too.

# **AutoID Operation:**

1. Handset must be on and connected to the vehicle.

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2. Select AutoID.

1. Select Vehicle from the Main Menu screen

# communicating with the vehicle.

- 4. The vehicle must have the key on, engine off (KOEO).
- 5. Once the VIN is retrieved it is compared to the vehicle database.
- 6. If a match is found the vehicle selection information will be displayed on the screen.
- 7. Wait for AutoID to finish.

VIN Match Results (4)	1FTPW14V28FC5432
FORD 2008 Ford F - 150 King Ranch 5.4, FLEX -, Naturally Aspirated, SOHC	
FORD Ford F-150 XLT 5.4, FLEX, Naturally Aspirated, SOHC	

8. Select the desired vehicle from the list.

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--00710



9. At this point vehicle entry will disappear and the user will be able to begin using diagnostic functions on the vehicle.

3. Once selected the handset will begin ©Mitchell International, Inc.

# **Manual Entry**

The handset must be turned on, and connected to the vehicle. Once those conditions are met, complete the following:

### ss02826



1. Select Vehicle.

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2. Select Manual Selection.



3. Select the model year of the vehicle.



4. Select the make of vehicle.



5. Select the model.



6. Select the sub-model (trim level).

# User Manual | Mitchell Diagnostics | Scan Tool | 16 | en

YEAR	MAKE	MODEL	SUBMODEL	ENGINE	
3.5, GAS, Naturally SOHC v	J35Y4, Aspirated, <sub>N</sub> .	3.5, GAS Naturally SOHC	, J35Y5, / Aspirated, <sup>VIN-</sup>		
Selected	2015 Acura MDX Bas	No VIN			Cancel

### 7. Select the engine.

Note: Some vehicles may not require this selection.

### ss02836

🗢 🕰 🖉 2015 Acura ME	DX Base 3.5L					
Read DTCs	Read DTCs					
All Systems	Select Systems	Data Stream	Special Tests			
Ł	<b>\$</b> *	×				
Diagnostic information	Automated System Test	Maintenance Tests	Enhanced OBDII			
	Today is Tue, 09 Jan 2018.					

8. At this point vehicle entry will disappear and the user will be able to begin using diagnostic functions on the vehicle.

### Recent

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1. Select Vehicle.

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2. Select Recent Vehicles.

2004 Volkswagen         1999 Chevrolet         2007 Your Ford         2008 Ford         2007 Jeep           Passat         C2500 2WD         F-150         Wrangle           GLS 2.8         LS 5.7         King Ranch 5.4         Unlimited Rubico	MDX Base 3.5	335i Coupe/C Base 3.0	Mustang Shelby GT500 5.4	Unlimited X 3.8
GLS 2.8 LS 5.7 King Ranch 5.4 Unlimited Rubicon	2004 Volkswagen Passat	1999 Chevrolet C2500 2WD	2008 Ford F-150	2007 Jeep Wrangler
	GLS 2.8	LS 5.7	King Ranch 5.4	Unlimited Rubicon

- 3. Press and hold a recent vehicle tile and select one of two choices:
  - Set as current vehicle.
  - Delete from recents.
- 4. Or just tap on the recent vehicle tile.

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5. At this point vehicle entry will disappear and the user will be able to begin using diagnostic functions on the vehicle.

# Search by VIN

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1. Select Vehicle.

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2. Select Search By VIN.

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3. Enter 17-digit VIN then OK.

### ss02710

/IN Match Results (4)	1FTPW14V28FC5432
FORD 2008 Ford F-15 King Ranch 5.4, FLEX.	0 Naturally Aspirated. SOHC
FORD FORD	0 Naturally Aspirated, SOHC

4. Select the desired vehicle from the list.

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ë	\$			💎 🖻 4:09
	🚑 © 2008 Ford F-1	50 King Ranch 5.4L		
	Read DTCs All Systems	Read DTCs Select Systems	Data Stream	Special Tests
	1	<b>¢</b> *	★	
	Diagnostic information	Automated System Test	Maintenance Tests	Enhanced OBDII
		Today is Tue, 09	) Jan 2018.	

5. At this point vehicle entry will disappear and the user will be able to begin using diagnostic functions on the vehicle.

# **OBDII**

# Overview

OBDII (also referred to as Generic OBDII) provides limited engine control and monitors the diagnostic control network of the vehicle. When a fault in the control network occurs, a DTC is recorded in the vehicle computer. This system is not vehicle specific so it is NOT necessary to select the vehicle to run a generic test.

NOTE: Enhanced OBDII may be selected from the Diagnostics menu with a vehicle loaded for more specific Mode 6 test information.

## **Diagnostic Functions**

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- 1. Select OBD-II from the Main Menu screen.
- 2. Follow the prompts on the screen.

### **Readiness Monitors**

Mode 1 displays available monitor information.

The OBDII system has a series of systems that run self-tests. These systems or components have to be made ready by either turning on the ignition or manipulating the system in some other manner. This is called drive cycle.

Each system requires specific vehicle drive cycle and operating requirements to take place before the monitor self-check will run. OBDII systems require one monitor for current systems, or two monitors for older systems, are ready before testing can begin.

If the system is ready, no further action is required.

If the system is not ready, a drive cycle may need to be performed for that system.

Use the following procedure to verify the system is ready to be monitored.



- 1. View the readiness table to verify system status.
  - Ready: No further action is required.
  - Not ready: Further action is required. Drive

Cycle needs to be performed.

• Monitor not supported: Data is not supported on vehicle.

Read	liness Mode Button Definitions
	Menu Button Tapping the Menu button displays a pop-up link that takes the user to more buttons.
2	View Help Selecting View Help will open an online user manual.
	Use Metric Units Selecting Metric Units will switch from English/Standard Units to Metric Units
	Use English/Standard Units Selecting English/Standard Units will switch from Metric Units to English/Stan- dard Units.
0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.

# **Data Stream**

Mode 1 views live vehicle sensor data.

The data stream function shows live sensor and solenoid data streaming from the vehicle's electronic control unit (ECU).

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1. Select Data Stream Mode 1 from the Generic OBDII screen.



# 2. Select scrolling preference.

Data Stream ∣ for Global OBDII ⋑		Expand	Custom	<sup>A</sup> 2 Sort	Playback	Capture	Men
Evaporative Emissions System Vapor Pressure	0.12 inH2O	Distance MI	L Active			11	miles
Distance Since DTC Clear	16 miles	Catalyst Ter	nperature	Bank 1 S	ensor 1		39 °F
Catalyst Temperature Bank 1 Sensor 2	95 °F	Catalyst Ter	nperature	Bank 2 S	ensor 1		57 °F
Catalyst Temperature Bank 2 Sensor 2	124 °F	Ambient Air Temperature Degrees			95 °F		
Engine Coolant Temperature	163 °F	Intake Air Te	emperature	e			126 °F
Fuel Rail Pressure Gauge	4.0 psi	Fuel Rail Pr	essure Ga	uge			0.0 psi
Fuel Rail Pressure Relative To Manifold Vacuum	7.8 psi	Vehicle Spe	ed			3	2 mph
EGR Error	53 %	Calculated E	Engine Loa	ad			3.8 %

# 3. Follow the prompts on the screen.

Da	ata Stream Button Definitions			
×	Enlarge Screen View Function To view the data in the enlarge view, press the Enlarge button.			
Ø_  	<ol> <li>Select Function:</li> <li>1. Choose only the data you want to view by checking the box in front of each desired data item.</li> <li>2. Select the Sort button.</li> </ol>			
A z	<ul> <li>Sort Function:</li> <li>Select Sort to sort data items.</li> <li>Data may be sorted alphabetically, by graph, or by selection (checkbox checked).</li> <li>Sorting data items will reset the timeline frame counter, so sort these items before recording data. If sorting data while recording the recording will have a period of time where there is no data available.</li> </ul>			

Da	ta Stream Button Definitions
	Recording:
	<ul> <li>Select Recordings to view previously recorded data streams.</li> <li>Recordings are listed from newest to oldest. When the folder is full, the newest recording pushes the oldest one out of the list. Currently, there is no way to manually delete recordings.</li> <li>To view recordings, select the Recordings button near the top of the display.</li> <li>Select the desired recording.</li> </ul>
0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.
	Menu Button Tapping the Menu button displays a pop-up link that takes the user to more buttons.
	Erase All Recordings.
	Clear All Data Select Clear Data to clear displayed data stream. This function will reset the timeline frame counter and clear graphed data.
	Use Metric Units Selecting Metric Units will switch from English/Standard Units to Metric Units.
	Use English/Standard Units Selecting English/Standard Units will switch from Metric Units to English/Stan- dard Units.

# **Freeze Frame**

Mode 2 views data captured when a fault occurred. Freeze frame shows a data stream snapshot that was automatically recorded by the ECU when one or more DTCs occurred.



Freeze frame records each sensor's current information at the time a DTC sets. This feature could be used when diagnosing an intermittent condition that requires certain conditions are met before the fault is active.

NOTE: DTCs are not always stored in Mode 2 freeze frame.

Fre	eze Frame Button Definitions
	Menu Button Tapping the Menu button displays a pop-up link that takes the user to more buttons.
2	View Help Selecting View Help will open an online user manual.
	Use Metric Units Selecting Metric Units will switch from English/Standard Units to Metric Units.
	Use English/Standard Units Selecting English/Standard Units will switch from Metric Units to English/Stan- dard Units.
:0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.

# **DTCs Modes**

Modes 3, 4, 7, and A read and clear DTCs.

# SS02722 Ceneric OBDI Ceneric O

1. Select DTCs Modes from the Generic OBDII screen.

ss02723						
Diagnostic Trouble	Clear	Read	Share	<u>↓</u> Save	Menu	
B0001	Driver Frontal Stage 1 Deployment Control (Subfault)					
B0002	Driver Frontal Stage 2 Deployment Control (Subfault)					
B0003	Driver Frontal Stage 3 Deployment Control (Subfault)					
OBDII PENDI	NG CODES					
B0001	Driver Frontal Stage 1 Deployment Control (Subfault)					
B0002	Driver Frontal Stage 2 Deployment Control (Subfault)					
B0003	Driver Frontal Stage 3					

2. Use the buttons and follow the prompts on the screen.

# **OBDII DTC Nomenclature**



Example: P0102 Mass Air Flow Performance

# DTCs Modes 3, 4, 5, A Button Definitions

# Clear DTCs Button The Clear DTCs button is used to clear codes and remove all but permanent DTCs on the selected controller. To clear codes, complete the following: NOTE: • Clearing DTCs will erase current

•	Clearing DTCs will erase current
	Mode 1 Readiness monitor
	information and require the user go
	through necessary drive cycles over
	again. So, if Mode 1 information
	needs to be reviewed, be sure to view
	it before clearing codes.
•	If a code will not clear, turn the
	ignition off for at least 10 seconds;
	turn it back on to KOEO, then retry.
	Some controllers will go to sleep after
	a period of inactivity and prevent
	clearing DTCs. This key cycle may be
	needed when attempting to
	communicate with other controllers
	after a period of time on a different

# **Refresh DTCs Button** Tapping the Refresh button initiates a fresh scan of DTCs from the vehicle. Share DTCs Button Tapping the Share button opens the app and initiates options. Depending on what's available at the time. Share a list containing all the DTCs set by email or Bluetooth or USB. Menu Button Tapping the Menu button displays a popup link that takes the user to help content related to reading DTCs. Note: An active internet connection will be required. Use Metric Units Selecting Metric Units will switch from English/Standard Units to Metric Units. Use English/Standard Units Selecting English/Standard Units will switch from Metric Units to English/Standard Units. Take Screen Capture

controller.

# **Oxygen (O2) Sensors**

# Mode 5 views O2 sensor monitor test results.

ss02724					
Generic OBDII				Sh	are Menu
READINESS MODE 1	Oxygen Sensor Tests (	Mode 5	)		
DATA STREAM MODE 1	Description	Min	Value	Max	Linite
FREEZE FRAME MODE 2	Bank 1 Sensor 1	Will	Value	Wax	Onits
DTCs MODES 3, 4, 7, A	Maximum Sensor Voltage For Test Cycle	0.000	0.003	1.275	v
02 SENSORS MODE 5	eshold Voltage	0.000	0.003	1.275	v
NON-CONTINUOUS TESTS MODE 6	High Sensor Voltage ⊢or Switch Time Calculation	0.000	0.003	1.275	v
SPECIAL TESTS MODE 8	Minimum Sensor Voltage For Test Cycle	0.000	0.003	1.275	v
VEHICLE INFO MODE 9					

Mode 5 displays the average of the O2 sensor monitor test results measured over a period of time. The parameters of this measurement vary between manufacturers. It may be necessary to run the vehicle for a period of time to allow the O2 sensors to fully warm up and begin operating as intended.

Oxyge	n (O2) Sensors Button Definitions
	Menu Button
	Tapping the Menu button displays a pop-up link that takes the user to more buttons.
?	View Help Selecting View Help will open an online user manual.
	Use Metric Units Selecting Metric Units will switch from English/Standard Units to Metric Units.
	Use English/Standard Units Selecting English/Standard Units will switch from Metric Units to English/Stan- dard Units.
0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.

# **Non-Continuous Tests**

Mode 6 views onboard monitoring test results for noncontinuous monitor systems.

Generic OBDII			Share	Menu
READINESS MODE 1	Non-Continuous	y Monitored Tests		
DATA STREAM MODE 1	(Mode 6)			
FREEZE FRAME MODE 2	'Not Ready'.	e valid if Readiness Status is		
DTCs MODES 3, 4, 7, A	ок	Cancel		
O2 SENSORS MODE 5				
NON-CONTINUOUS TESTS MODE 6				
SPECIAL TESTS MODE 8				
VEHICLE INFO MODE 9				

- 1. Select Non-Continuous Tests from the Generic OBDII screen.
- 2. Follow the prompts on the screen.

5502720						
Generic OBDII					<b>¢</b> Share	Menu
READINESS MODE 1	Non-Continu	uously Mor	nitored Tests	i		
DATA STREAM MODE 1	(Mode 6)					
FREEZE FRAME MODE 2	ECU: ENGINE					
DTCs MODES 3, 4, 7, A	TID 1 TID 1			Failed		
O2 SENSORS MODE 5	CID 1 TID 1			Falleu		
NON-CONTINUOUS TESTS MODE 6	N/A	31744 VALUE	28832 MAX	N/A UNITS		
SPECIAL TESTS MODE 8	TID 2 CID 2 TID 2			Failed		
VEHICLE INFO MODE 9	N/A MIN	<b>31744</b> VALUE	28832 MAX	N/A UNITS		

Non-Continuous Monitor Tests (Mode 6) are a pass/ fail test. Some examples are certain EVAP tests, catalyst, and EGR. The following information is reported:

• ECU.

--00700

- TID (test identification) which indicates the system monitor.
- CID (component identification) which indicates the component tested and its test value.
- Minimum value, maximum value, and current value for each non-continuous monitor supported.
- Pass or fail test results.

Each vehicle manufacturer assigns a code number to their system monitors and components. Refer to the vehicle manufacturers Mode 6 code chart to determine the failure indicated by the TID and CID. If this chart is not available, run an automated system test (AST) from the DTC screen and select Mode 6. See Read DTCs section for more information regarding steps to complete that action.

Non-Co	ontinuous Tests Button Definitions
	Menu Button
	Tapping the Menu button displays a pop-up link that takes the user to more buttons.
8	View Help Selecting View Help will open an online user manual.
	Use Metric Units Selecting Metric Units will switch from English/Standard Units to Metric Units.
	Use English/Standard Units Selecting English/Standard Units will switch from Metric Units to English/Stan- dard Units.
0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.

# **Special Tests**

Mode 8 controls the operation of an onboard system, test, or component which is typically the EVAP system or diesel particulate filter (DPF) test.

ss02727	
Generic OBDII	Menu
0	
READINESS MODE 1	
DATA STREAM MODE 1	
FREEZE FRAME MODE 2	
DTCs MODES 3, 4, 7, A	TAP 'SPECIAL TESTS MODE 8' TO REOPEN
O2 SENSORS MODE 5	
NON-CONTINUOUS TESTS MODE 6	
SPECIAL TESTS MODE 8	
VEHICLE INFO MODE 9	

1. Select Special Tests from the Generic OBDII screen.

ss02728		
SPECIAL TESTS		Menu
ALL TESTS DPF TESTS EVAP TESTS	All Special Tests Search All Special Tests DPF Tests Diesel Particulate Filter Regeneration EVAP Tests Evaporative System Leak Check	Q

When available, this selection will automatically take the user to the special test screen where the test group menu will be displayed. Make a selection to enter the test, then follow the on-screen prompts. Mode 8 will not be supported on all vehicles. If you wish to run an EVAP test on a vehicle that does not support Mode 8, enter vehicle specific mode and refer to the Special Tests section on how to run a special test.

Sp	Special Tests Button Definitions				
	Menu Button				
	Tapping the Menu button displays a pop-up link that takes the user to more buttons.				
?	View Help Selecting View Help will open an online user manual.				
	Use Metric Units Selecting Metric Units will switch from English/Standard Units to Metric Units.				
	Use English/Standard Units Selecting English/Standard Units will switch from Metric Units to English/ Standard Units.				
0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.				

# **Vehicle Info**

Mode 9 views Vehicle Identification Numbers (VINs), calibration ID(s), and verification number(s).

ss02729

Generic OBDII	Meru
READINESS MODE 1	Vehicle Information (Mode 9)
DATA STREAM MODE 1	
FREEZE FRAME MODE 2	Make sure the key is ON and the Engine is OFF.
DTCs MODES 3, 4, 7, A	OK Cancel
O2 SENSORS MODE 5	
NON-CONTINUOUS TESTS MODE 6	
SPECIAL TESTS MODE 8	
VEHICLE INFO MODE 9	

- 1. Select Vehicle Info from the Generic OBDII screen.
- 2. Follow the prompts on the screen.

ss02730

Generic OBDII		Menu	
READINESS MODE 1	Vehicle Infor	mation (Mode 9)	
DATA STREAM MODE 1			-
FREEZE FRAME MODE 2	Vehicle identification Nu	nber	_
	Controller	Vehicle Identification Number	
DTCs MODES 3, 4, 7, A	ENGINE	1FTPW14V28FC54321	1
O2 SENSORS MODE 5	Calibration identification	Number	1
NON-CONTINUOUS TESTS MODE 6	Controller	Calibration Identification Number	]
SPECIAL TESTS MODE 8	ENGINE	BOSCHA1037366956	1
VEHICLE INFO MODE 9			-

The 17 digit VIN provides information on the vehicle including year of manufacture, engine and possibly transmission type, vehicle body style, and color.

Mode 9 is not supported on older vehicles, so a visual check of the VIN through the windshield or on the door sticker would be required to obtain that VIN. Mode 9 is used on the tool to AutoID the vehicle and for calibration verification to see if a newer calibration is available for re-flashing the ECU.

Vehicle Info Button Definitions				
	Menu Button Tapping the Menu button displays a pop-up link that takes the user to more buttons.			
?	View Help Selecting View Help will open an online user manual.			
	Use Metric Units Selecting Metric Units will switch from English/Standard Units to Metric Units.			
	Use English/Standard Units Selecting English/Standard Units will switch from Metric Units to English/Stan- dard Units.			
0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.			

# **Saved Diagnostic Data**

# **Overview**

The Saved Diagnostic Data functions allows the capability to recall previously run tests and Data Stream Records.

### ss02828

C 🚔 🚳 MAIN MENU - Tap Below To Begin Your Diagnostic Experience				
Select Vehicle	OBDII	Saved Diagnostic Data	Browser	
Heavy Duty	Settiny-			
Today is Thu, 04 Jan 2018.				

1. Select Saved Diagnostic Data from the Main Menu Screen.

ss02814

Saved Diagnostic Data	Delete	² ♠ Sort	Share	Menu
© 2004 Ford F-150 XL 5.4L	Selected			
O1/15/2018 OBDII				
09:27 Recorded Data Stream				
✓ 09:24 DTC Report				
⊙ 01/15/2018 2004 Ford F-150				
⊙ 01/12/2018 2003 Cadillac CTS				
🕤 01/10/2018 2008 Ford F-150				

- 2. Navigate down to the desired saved test.
- 3. Select Specific file.

ss02815



4. View the report. When finished tap the back button.

ss02816



- 5. Navigate down to the desired saved recording.
- 6. Select Specific file.

ss02817

Recorded Data Stream   Global OBDII		
© 2004 Ford F-150 XL 5.4L		p
Evaporative Emissions System Vapor Pressure	0.13 inH2O	Distance MIL Active 15 miles
Distance Since DTC Clear	21 miles	Catalyst Temperature Bank 1 Sensor 1 91 °F
Catalyst Temperature Bank 1 Sensor 2	77 °F	Catalyst Temperature Bank 2 Sensor 1 108 °F
Catalyst Temperature Bank 2 Sensor 2	108 °F	Ambient Air Temperature Degrees 154 °F
Engine Coolant Temperature	129 °F	Intake Air Temperature 131 °F
Fuel Rail Pressure Gauge	2.7 psi	Fuel Rail Pressure Gauge 2.5 psi
Fuel Rail Pressure Relative To Manifold Vacuum	10.8 psi	Vehicle Speed 25 mph
EGR Error	5 %	Calculated Engine Load 48.2 %
Recorded: 1 minutes ago		70/1 fames

# 7. View recording.

Saved Diagnostic Data Button Definitions			
d I	Clear All Data Select Clear Data to clear displayed data stream. This function will reset the timeline frame counter and clear graphed data.		
Azt	<ul> <li>Sort Function:</li> <li>Select Sort to sort data items.</li> <li>Data may be sorted alphabetically, by graph, or by selection (checkbox checked).</li> <li>Sorting data items will reset the timeline frame counter, so sort these items before recording data. If sorting data while recording the recording will have a period of time where there is no data available.</li> </ul>		
<	Share DTCs Button Tapping the Share button opens the app and initiates options. Depending on what's available at the time. Share a list containing all the DTCs set by email or Bluetooth or USB.		

### Saved Diagnostic Data Button Definitions Menu Button Tapping the Menu button displays a pop-up link that takes the user to help content related to reading DTCs. Note: an active internet connection will be required. View Help Selecting View Help will open an online user manual. Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.

# **Browser**

# Overview

An internet browser window is available for direct internet access.

ss02829



 Select Browser from the Main Menu Screen. The Handset will launch the internet browser. Links to common technical and repair websites are provided. Select the keyboard icon to input text.

Note: The handset will need to have a Wi-Fi connection.

# **CONNECTING TO WI-FI NETWORKS**

See Android Settings for more information on setting up and connecting to a wireless network.



2. Select Tech Communites brings up appropriate tech community web page.



3. Select Repair Information brings up appropriate repair information web page.

ss02734						
	Fast Touch Webs					\$ ♥ ∎ 10:38 +
Generation file:///data/info/fasttouch/oem.html				×	] ୯ ☆	•
Fast Touch Web	sites   O	EM				
CREPAIR INFORMATION	ACURA	ASTON MARTIN	AUDI	BENTLEY	BMW	В
	DODGE	EAGLE	FERRARI	FORD	GM	но
f ser You	JAGUAR	JEEP	KIA	LAND ROVER	LEXUS	
f ¥ ඎ						

4. Select OEM brings up the manufactures technical web page.

# **Heavy Duty**

ss02830



### 1. Select Heavy Duty.

Note: You need to have a Heavy Duty subscription in order for Heavy Duty to be selectable.

ss02371



2. Select a Cable.

ss02838



3. At this point vehicle entry will disappear and the user will be able to begin using diagnostic functions on the vehicle.

Note: Special Test, Diagnostic Information, Maintenance Tests, All System DTC Scan, Automated System Test are not available.

# J1587/1708 DTC Nomenclature

### **MID** - Message Identification

The MID Identifies the Component Example: MID 128 = Engine MID 130 = Transmission MID 136 = Brakes (ABS)

# **PID - Parameter Identification**

The PID Identifies the data from a components electrical parts

Example: PID 084 = Road Speed (MPH)

PID 100 = Engine Oil Pressure (PSI)

PID 177 = Transmission Oil Temperature (Degrees)

# SID - Subsystem or Status Identification

The SID identifies the status of a components electrical part.

Example: SID 001 = Injector Cylinder #1 (On/Off)

SID 034 = Reverse Switch (Open/Closed)

SID 163 = Transmission Range (HI/LO)

Note: MID related SID's start with Number 1 and sequentially increase. Common SID's start at Number 255 and sequentially increase.

# FMI - Failure Mode Identifier

The FMI describes the type of failure detected in the part identified by the PID or SID. The FMI, and either the PID or SID combined to form a given diagnostic Fault code.

Example: FMI 002 = Data erratic, Intermittent or incorrect

FMI 005 = Current below normal or Open circuit

FMI 007 = Mechanical System Not Responding

FMI 011 = Failure Mode not Identifiable

# Normal Message

MID-PID/SID-FMI or

128-084-002

- 128 = Engine
- 084 = Vehicle Speed Sensor

002 = Data erratic, Intermittent or incorrect

Example: The Vehicle speed sensor circuit is bad.

# J1939 DTC Nomenclature

# **SA - Source Address**

The SA field contains the ECU that is sending the message

Example: SA 0 = Engine

SA 3 = Transmission

SA 11 = Brakes System Controller

### SPN - Suspect Parameter Number

The SPN is used to identify the item for which diagnostics are being reported.

Example: SPN 156 = Injector Timing Rail 1 Pressure

SPN 031 = Transmission Range Position

SPN 639 = J1939 Network

# FMI - Failure Mode Identifier

The FMI describes the type of failure detected in the part identified by the SPN. The FMI, and either the SPN combined to form a given diagnostic Fault code.

Example: FMI 002 = Data erratic, Intermittent or incorrect

FMI 005 = Current below normal or Open circuit

FMI 007 = Mechanical System Not Responding

FMI 011 = Failure Mode not Identifiable

# **Normal Message**

SA/SPN/FMI or

3-639-02

03 = Transmission

639 = J1939

002 = Data erratic, Intermittent or incorrect

Example: The Transmission has detected the J1939 network has an error.

# **Read DTCs All Systems**

### **Overview**

The Read DTCs All Systems will scan all available controllers on the selected vehicle.

Depending on the vehicle, the handset may ask qualifying questions concerning particular controller types for the vehicle being scanned. If unsure what selection to pick find the manufacturer's Regular Production Option (RPO) Code list sticker on the vehicle, then find the corresponding code for the desired controller. Typical locations for the RPO are the trunk, glove box, or doorjamb area.

These questions may be skipped by selecting Skip Controller. Scan progress will be indicated by the progress bar near the top of the screen.

ss02845



1. Select Read DTCs All Systems from the Screen.

ss02739	
DTC Scan	Menu
© 2004 Volkswagen Passat GLS 2.8L	
Building controller list. Please Wait	
Finding ABS (03) controllers	
Select Controller Qualifer	
Skip controller	
ABS Bosch 5.3	
ABS Bosch 5.7	

# 2. Select all controller qualifiers.

Note: Not all vehicles will have qualifiers.

ss02740

DTC Scan © 2004 Volkswagen Passat	GLS 2.8L	Menu
	Reading DTCs from INSTRUMENTS (17)	
	18%	
ENGINE (01)		6 DTC(s) found
AUTO TRANSMISSION (02)		6 DTC(s) found
AIRBAG (15)		6 DTC(s) found
INSTRUMENTS (17)		$\frac{2^{1/2}}{\sqrt{1}}$ Reading DTC:
ABS (03)		
SUSPENSION ELECTRONICS	S (14)	

# 3. Scan progress will be indicated by the progress bar in the middle of the screen.

Note: If any of the controllers have DTC's go to step 6.

			•	<		:
DTC Scan		Clear	Refresh	Share	Save	Menu
2004 Volkswagen Passa	t GLS 2.8L					
	Report re	ady for viewing.			_	
		100%			View Repor	
RADIO (56)					6 DTC(s) f	ound 🔰
TV TUNER (57)					6 DTC(s) f	ound 🔰
AUX FUEL TANK (58)					6 DTC(s) f	ound 🔰
PARK ASSIST (76)					6 DTC(s) f	ound 🔰
TELEPHONE (77)					6 DTC(s) f	ound 🔰
TELEPHONE (77)						6 DTC(s) fi

# 4. Wait for scan to finish.

ss02742

DTC Scan   Report	KÖ) Clear	Refresh	Share	↓ Save	Menu
© 2004 Volkswagen Passat GLS 2.8L					
ENGINE (01)					
00001 (P0001) Fuel Delivery Control: Open Circuit				Rea	d Codes
00002 (P0002) Fuel Delivery Control: Outside Specified	d Range			Rea	d Codes
00003 (P0003) Fuel Delivery Control: Signal Too Large				Rea	d Codes
16394 Camshaft Position A Actuator Circuit (Bank 1)				Rea	d Codes
16395 Camshaft Position A - Timing Over-Advanced ( Performance (bank 1)	Or Syster	n		Rea	d Codes
16396 Camshaft Position A - Timing Over-Retarded (E	Bank 1)			Rea	d Codes
AUTO TRANSMISSION (02)					

Note: There is no arrow beside controller without a DTC and clicking on that line does nothing.

- 5. The controller without a DTC has no DTC line that is selectable and clicking on the line has no effect.
- 6. DTCs will be read from all available vehicle controllers.
  - Select a listed DTC for Related Diagnostic Information See Diagnostic Information

section

 If a DTC has Code Criteria available there will be an "\*" next to the DTC. Once completed the handset will display a list of all the DTCs found on the vehicle and group them by controller. If the handset was unable to communicate with a controller, it will be indicated under the specific controller. Communication problems on certain controllers may be attributed to the vehicle not having that controller. Controllers are sometimes listed for a particular vehicle that do not actually exist.

R	ead DTCs Button Definitions
3	Refresh DTCs Button Tapping the Refresh button initiates a fresh scan of DTCs from the vehicle.
<	Share DTCs Button Tapping the Share button opens the app and initiates options. Depending on what's available at the time. Share a list containing all the DTCs set by email or Bluetooth or USB.
	Menu Button Tapping the Menu button displays a pop- up link that takes the user to help content related to reading DTCs. Note: an active internet connection will be required.
?	View Help Selecting View Help will open an online user manual.
0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.

# **Read DTCs Select Systems**

# **Overview**

The Read DTCs Select Systems function allows reading, clearing, printing, and sharing (wireless or email) of vehicle DTCs. Onboard Code Assist information may also be available, for selection when DTCs are found. This information contains pertinent details regarding the selected DTC. For more detailed comprehensive information, go to Service and Settings, Direct-Hit<sup>®</sup> to subscribe.

Vehicle must be selected and the handset must now be displaying the Screen.

ss02839



1. Select Read Select Systems from the screen.

### ss02743

O 2007 Jeep Wrangler Unlimited X 3.8L     O	
Please select one or more controlle	rs and tap 'Continue' to start DTC scan.
ENGINE	Select All
TRANSMISSION	Deselect A
ABS	
WIRELESS CTRL MODULE(TPMS)	
OCCUPANT CLASSIFCATION	
	ntinue

2. Select the desired vehicle controller then select continue.

ss02744						
Diagnostic Trouble	Codes	Clear	<b>C</b> Read	Share	→ Save	Menu
O 2007 Jeep Wran	gler Unlimited X 3.8L   ENGINE					
<ul> <li>Active</li> </ul>						
B1000	Air Conditioning Switch Request Input Circuit/ Performance				[	OTC Info
B1001	Air/Conditioning Switch Request Input Circuit Low				1	DTC Info
B1002	Air Conditioning Switch Request Input Circuit High				[	OTC Info
Pending						
B1000	Air Conditioning Switch Request Input Circuit/				1	DTC Info

- 3. DTCs will be read from the selected vehicle controller.
  - Select a listed DTC for Related Diagnostic Information See Diagnostic Information section.
  - If a DTC has Code Criteria available there will be an "\*" next to the DTC.

R	ead DTCs Button Definitions
÷	Ford/Lincoln/Mercury Self Diagnostics button displays a pop up menu allowing the user to choose between specific special tests.
0	GM/GMC Status button displays a pop up menu allowing the user to view the status on DTCs.
μÕ	Clear DTCs Button The Clear DTCs button is used to clear codes and remove all but permanent DTCs on the selected controller. To clear codes, complete the following: <i>NOTE:</i>
	<ul> <li>Clearing DTCs will erase current Mode 1 Readiness monitor informa- tion and require the user go through necessary drive cycles over again. So, if Mode 1 information needs to be reviewed, be sure to view it before clearing codes.</li> <li>If a code will not clear, turn the ignition off for at least 10 seconds; turn it back on to KOEO, then retry. Some controllers will go to sleep after a period of inactivity and prevent clearing DTCs. This key cycle may be needed when attempting to communicate with other controllers after a period of time on a different controller.</li> </ul>
	Refresh DTCs Button Tapping the Refresh button initiates a fresh scan of DTCs from the vehicle.
<	Share DTCs Button Tapping the Share button opens the app and initiates options. Depending on what's available at the time. Share a list containing all the DTCs set by email or Bluetooth or USB.
	Menu Button Tapping the Menu button displays a pop- up link that takes the user to help content related to reading DTCs. Note: an active internet connection will be required.
?	View Help Selecting View Help will open an online user manual.
	Take Screen Capture Selecting Take Screen Capture will save a

copy of the current open screen.

# Ford/Lincoln/Mercury

When connected to a Ford/Lincoln/Mercury vehicle a pop up menu allowing the user to choose between specific special tests.

### ss02840



1. Select Read DTCs from the screen.

ss02745

Shelby GT500 5.4L	
Please select one or more controllers and tap 'Co	ntinue' to start DTC scan.
PCM	✓ Select All
ABS / TRACTION CONTROL	Deselect All
GEM MODULE / TPMS	
AIRBAG	
OCCUPANT CLASSIFCATION	
Continue	<u> </u>

2. Select the desired vehicle controller then select continue.

# ss02746 Diagnostic Trouble Codes Image: Menu 2012 Ford Mustang Shelby GT\$00 5.4L PCM Select Option Read DTCS KOEO KOER Reset KAM Reset KAM

3. Tapping an option in the menu takes the user to that test. Follow the prompts on the screen.

Diagnostic Trouble C	odes	Self-Diag	Clear	🚭 Read	Share	↓ Save	Menu
2012 Ford Mustan	g Shelby GT500 5.4L   PCM						
Current Codes	3						
B10A2-00	Crash Input					[	OTC Info
B1200-00	Crash Input Mismatch - CAI Inactive Hardwired Active	N				[	OTC Info
B1207-00	Crash Input Hardwired Signa	al				[	OTC Info

- 4. DTCs will be read from the selected vehicle controller.
  - Select a listed DTC for Related Diagnostic Information See Diagnostic Information section
  - If a DTC has Code Criteria available there will be an "\*" next to the DTC.

# **Manual DTCs**

Certain vehicles do not support standard DTC protocol and will require a manual process for retrieving and clearing codes.

ss02748



1. Follow the prompts on the screen for retrieving DTCs.

ss02749

Clear	🔁 Read	Share	↓ Save	iii\ Library	Menu
				▲	
ver's sea	t heater	unit.		- 8	
agnosis te	erminal.				
de and bli	inks to i	dentify tr	ouble co	des.	
stic troub naximum	le codes of 3 min	s (DTC) v iutes.	will be st	nown in	order
	Clear ver's sea agnosis t de and bl stic troub naximum	Clear Read	Clear Read Share ver's seat heater unit. agnosis terminal. de and blinks to identify tr stic trouble codes (DTC) v naximum of 3 minutes.	Clear Read Share Lave Clear Read Share Save ver's seat heater unit. agnosis terminal. de and blinks to identify trouble co stic trouble codes (DTC) will be sl naximum of 3 minutes.	Clear Read Share Save Library

### 2. Select Library button.

ss02750

Diagnostic Trouble Codes	Diagnostic 1	Frouble Codes		→ Save	iji) Library	Menu
2002 Subaru Forester     Manual Codes Pro	11	Start Code: Trouble Cod After Start Code Only St Shown In Norma	le Is Shown tart Code Is al Condition			
1) Take out diagno-	21	Abnormal ABS Sensor (O	pen Circuit			
2) Turn ignition swi		Or Input Voltage Too H Right A	igh) - Front ABS Sensor			
3) Connect diagno	22	Abnormal ABS Sensor	(Abnormal			
4) Turn ignition swi		ABS Sensor Signal) - A A	Front Right BS Sensor			
5) ABS warning lig	23	Abnormal ABS Sensor (O	pen Circuit	uble cod	es.	
<ol> <li>After the start co of the last informat</li> </ol>		Or Input Voltage Too H	ligh) - Front	ill be sho	own in o	order
7) NOTE: When the		Close		nly the st	art cod	e (11)

# 3. Follow the prompts on the screen.

ss02751

Diagnostic Trouble Codes	Clear	C Read	Share	↓ Save	iii) Library	Menu
2002 Subaru Forester Base 2.5L   ABS						
Manual Codes Procedure	/					
1) Take out diagnosis connector from side of drive	·T	₁t heater	unit.			
2) Turn ignition switch Off.						
3) Connect diagnosis connector terminal 6 to diag	nosis	terminal.				
4) Turn ignition switch On.						
5) ABS warning light is set in the diagnostic mode	and b	links to i	dentify tr	ouble co	des.	
6) After the start code (11) is shown, the diagnosti of the last information first. These repeat for a ma	c trou ximum	ole codes of 3 min	s (DTC) v iutes.	will be st	nown in (	order

# 4. Select Clear DTCs button.

ss02752

Diagnostic Trouble Codes	i Clear	<b>Q</b> Read	Share	→ Save	ii) Library	Menu
2002 Subaru Forester Base 2.5L   ABS						
Manual Codes Procedure						
1) After calling up a diagnostic trouble code (D from diagnosis terminal.	TC), disco	nnect di	agnosts	connect	or termir	nal 6
<ol> <li>Repeat 3 times within approx. 12 seconds; o diagnosis terminal for at least 10 seconds each</li> </ol>	connecting h time.	and dis	connecti	ng termi	nal 6 an	d
3) NOTE: After diagnostics is completed, make	e sure to cl	ear men	nory. Ma	ke sure o	only star	t code

5. Follow the prompts on the screen.

# **Code Criteria**

Codes will be read from the selected controller and displayed on the screen.

ss02753

Diagnostic Trouble	Diagnostic Trouble Codes		C Read	< Share	<u>↓</u> Save	Menu
© 2003 GMC Yuko	n XL 1500 SLT 5.3L   PCM					
Fail Since Cl	ear					
P0016	Crankshaft Position (CKP) - Camshaft Posiion (CMP) Correlation			DTC Sta	tus	DTC Info
P0101	Mass Air Flow Sensor Performance	Failure	Record	DTC Sta	tus	DTC Info
P0102	Mass Air Flow Sensor Circuit Low Frequency			DTC Sta	tus	24 DTC Info
MIL Codes						
P0016	Crankshaft Position (CKP) - Camshaft Posiion (CMP)			DTC Sta	tus	2 DTC Info

# If a DTC has code criteria available there will be an indication in the upper right corner of the listed DTC.

ss02754

B1213   Less Than Two Ko	eys Programmed To Pass Ranch 5.4L  PCM / PATS	sive Anti-Theft System		Menu
DESCRIPTION	Code Assist			Repair Hotline
Code Criteria	Description	Element	Action	DENTIFIX DIRECT-HIT
CODE ASSIST	Frequently Reported Fixes	Battery Cable(s)	Replaced	Google
PCM Pin	Frequently Reported Fixes	Ignition Key(s)	Replaced	Mitchell <u>i</u>
	Frequently Reported Fixes	Starter	Replaced	
SCAN TEST	Frequently Reported	Vehicle Theft	Performed	System Wiring Diagrams
IN// Discom		Detection (VID)	1	1 1

# **DTC Info**

DTC Info allows the technician to find details related to a given DTC.

# Description

Displays the description associated with the selected DTC.

# **Code Criteria**

Provides information regarding how the DTC is set.

# **Code Assist**

Provides information regarding the kind of action other technicians found successful when faced with the same DTC.

# **PCM Pin**

Provides detailed information related to the actual pins on the PCM that are associated with the selected DTC.

# Location

Aids the technician in determining where on the vehicle their attention should be directed.

# Scan Test

Provides the technician with detailed test steps.

### Diagram

Provides a circuit diagram related to the selected DTC.

# Waveform

Presents reference waveform information to help the technician understand and fix the problem.

# **TSB Reference**

Provides the technician with TSBs associated with the selected DTC.

# Connector

Presents information related to the connector to help the technician understand and fix the problem.

# **Data Stream**

The data stream function shows live sensor and solenoid data streaming from the vehicle ECU (electronic control unit). Connect the VCI with the vehicle at key on engine off or key on engine running to see live dynamic data, instead of static live data. Each data item has a selection checkbox and a display format menu.

# **Basic Data Stream Procedure**

ss02841



- 1. From the screen, select Data Stream.
- 2. If the vehicle is NOT a Volkswagen/Audi then go to step 7.

ss02755

🖨 💿 2008 Audi A4 Quattro Avant 3.2I	
Please select controller to proceed	
ENGINE (01)	0
AUTO TRANSMISSION (02)	0
ABS (03)	0
TIRE PRESSURE MONITOR (65)	0
AIRBAG (15)	6
Continue	

- 3. Select the desired vehicle controller then select continue.
- 4. Follow the prompts on the screen.

1 . Data Stream © 2008 Audi A4 Quattro Avant 3.2L | ENGINE (01) Volkswagen/Audi Group All Data Groups Ω All Data Groups Search all Data Streams Select System Specific Data Volkswagen/Audi Group Select Customize Syatem Specific Data Accelerator Pedal Angle
 Combustion Failure Detection onditioner Radiator Fan Requ oustion Failure Total Combustion Failure: Cylinder 1
 Combustion Failure: Cylinder 3 Combustion Failure: Cylinder 2
 Combustion Failure: Cylinder 4 Combustion Failure: Cylinder 5 Combustion Failure: Cylinder 6 nm. With Strng.Column Swit. Module nmun.With Steering Wh.Angle Sens m. With Suspension Control Unit munic. With Engine management

### Data Groups

ss02757

ss02756

- Data groups may be selected at any time within data stream.
- Select the data group menu button from the top of the screen.
- Scroll through the menu until the desired data group is found, then select it.
- 5. Follow the prompts on the screen. Select or customize a group.

Data Strea	am	_						Playback	Menu
© 2008 A	Audi A4 Quattro A Volkswagen/Audi Group								
Volkswage	gen/Audi Group							_	
All Data G	roups			ОК		Can	cel		
System S	pecific Dat	ta	Volks	vagen/Audi C	Group		[	Select	
	-	+		1		2	3	•	
	*	1	,	4		5	6	Done	
	(	)	=	7		8	9		
				*		0	#		

6. Enter the Volkswagen/Audi Group. When finished go to Step 10.

ss02758



- 7. Select the desired vehicle controller then select continue.
- 8. Follow the prompts on the screen.



- Data Groups
- Data groups may be selected at any time within data stream.
- Select the data group menu button from the top of the screen.
- Scroll through the menu until the desired data group is found, then select it.
- Follow the prompts on the screen. Select, Select or Customize a group.
- 9. The selected data will be displayed.

### ss02760

Data Stream   All Data Items		
2003 Cadillac CTS Luxury Sport 3.2L	ENGINE	
Calculated Converter Temperature	1719 °F	Startup Engine Coolant Temperature 48 °F
Fuel Level	16.70 gal	Fuel Tank Pressure -0.6 inH20
Del Torque PWM Duty	53 %	Generator F-Terminal Signal 82 %
Heated Oxygen Sensor Heater Bank 1 Sensor 1	61.0 %	Heated Oxygen Sensor Heater Bank 1 81.7 %
Left Front Bank 2 Cruise/Acceleration	-63 %	Short Term Fuel Trim Bank 1 -119 %
Short Term Fuel Trim Bank 2	28 %	Engine Oil Life Left 7 %
Volumetric Efficiency	552 %	Evaporative Emissions Purge Solenoid     87 %
Battery Voltage	10.20 V	Accelerator Pedal Position Sensor 2 1.1 V
BUFFERING DATA.		200 / 200 frames

10. The selected data will be displayed.

# **Enlarge Screen View Function**

### ss02761

Data Stream   All Data Items		Expand Custom Soft Playback Capture Mer
2003 Cadillac CTS Luxury Sport 3.2L	ENGINE	
Calculated Converter Temperature	1719 °F	ingine Coolant Temperature 48 °F
Fuel Level	16.70 gal	-0.6 inH2O
Del Torque PWM Duty	53 %	erator F-Terminal Signal 82 %
Heated Oxygen Sensor Heater Bank 1 Sensor 1	61.0 %	heated Oxygen Sensor Heater Bank 1 81.7 %
Left Front Bank 2 Cruise/Acceleration	-63 %	Short Term Fuel Trim Bank 1 -119 %
Short Term Fuel Trim Bank 2	28 %	Engine Oil Life Left 7 %
Volumetric Efficiency	552 %	Evaporative Emissions Purge Solenoid     B7 %
Battery Voltage	10.20 V	Accelerator Pedal Position Sensor 2 1.1 V
BUFFERING DATA.		200/ 200 frames

1. To view the data in the Enlarge view, press the Enlarge button.

ss02762			
Data Stream   All Data Item	<b>is</b> y Sport 3.2L   ENGINE	Shrink Expand Custom So	rt Playback Capture Menu
Converter Temperature 986 'r 72	Fuel Level 14.19 gai 1.19 9.31 21.14 Low Avg High	rque PWM 30 % 2 46 98 Low Avg High	Heated Oxygen Sensor Heater Bank 1 Sensor 1 64.2 % 7.8 48.2 95.8 Low Avg High
Colorn Co	Fuel Tank Pressure	Cenerator F- Terminal Signal	Heated Oxygen           Sensor Heater           Bank 1 Sensor 2           Bank 1 Sensor 2           9.5         53.6           Might           10/200 terms

1. Press the Enlarge button again.

ss02763



Note: The far left 2-data tiles will be enlarged to select the specific data tiles to be enlarged.

# To see more graphs use your finger to swipe the screen.

Note: Depending on your Scroll Options preference either horizontally or vertically.

Da	ta Stream View Button Definitions
	Reduce View Function
	To Zoom Out, press the Reduce View button.
×	Enlarge View Function To view the data in the enlarge view, press the Enlarge View button.
ж	Zoom Out Function To Zoom Out, press the Zoom Out button.
	Zoom In Function To view the data in the Full Screen Mode, press the Zoom In button.

# **Full Screen View Function**

To view the data full screen, press Full Screen button.

### ss02764



Note: The left graph will be shown full size.

ss02765



# To see more graphs use your finger to swipe the screen.

Note: Depending on your Scroll Options preference either horizontally or vertically.

# **Display Types**

To change data item display types, select the data item menu button located in upper right.

ss02766



Dis	splay Type Button Definitions
	Menu Button Tapping the Menu button displays a pop-up link that takes the user to more buttons.
##	Digital To change to digital form, select the ## Digital button.
$\mathcal{M}$	Line Graph To change to line graph, select the Line Graph button.
	Bar Graph To change to bar graph, select the Bar Graph button.
9	Change Color To change the color of a graph, select the Change Color button.
Î	Clear All Data Select Clear Data to clear displayed data stream. This function will reset the timeline frame counter and clear graphed data.
.0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.
	Use Metric Units Selecting Metric Units will switch from English/Standard Units to Metric Units.

<b>Display Type Button Definitions</b>				
	Use English/Standard Units			
	Selecting English/Standard Units will			
	switch from Metric Units to English/			
	Standard Units.			

NOTE: Not all display types are available for all data items.

# **Select Function**

ss02767

Data Stream   All Data Items	Shrink Expand Custom Sort Playback Capture Menu
2003 Cadillac CTS Luxury Sport 3.2L   ENGINE	/
Calculated Converter Temperature	Dut M Heated Oxygen Sensor Heater Bank 1 Sensor 1
*F 72 Low Avg High	2 46 98 7.8 48.2 95.8 Low Avg High Low Avg High
Coolant Fuel Tank Pressure	Generator F- Terminal Signal Early Sensor Heater Bank 1 Sensor 2
	34 % 52.7
1 1 · F -49 -12.6	5 47 94 9.5 53.6 98.4 Low Avg High Low Avg High
BUFFERING DATA.	1 of 3 100 / 200 frames

# 1. Select the Custom button.

ss02768



- Choose only the data you want to view by checking the box in front of each desired data item.
- 3. Select apply.

# **Sort Function**

ss02769



1. Select Sort to sort data items.

ss02770

ata Stream   All Data Items		Shrink	Expand	Custom	<sup>A</sup> ₂ ♠ Sort	Playback	Capture	Menu
2003 Cadillac CTS Luxury S	port 3.2L   ENGINE							
Greet Level         1           28.05         28.04           23.41         0.74           0.74         0.74	Heated Oxygen Sensor Heater Bank 1 Seesor 1 View Only Sele C View Only Sele C Sort By Alpha C Heated C Sort By Clipha	Eng	ine Oil Life	-33 % 47 High	_			
11.7 11.7 11.9 11.9 11.9 11.20 12.0	Bank 1 Sensor 2 53.6 % 0.8 42.2 92.2 Low Avg High			L				

# 2. Data may be sorted alphabetically or by graph.

NOTE: Some of the instruction text may not exactly match what is

NOTE: Sorting data items will reset the timeline frame counter, so sort these items before recording data.

Recording

ss02771

Data Stream   All	Data Item	S			Shrink	Expand	Custom	ZA Sort	Playback	Capture	Menu
© 2003 Cadillac C	TS Luxur	y Sport 3.2	L   ENG	INE							
Calculated Converter Temperature	I	Fuel Lo	evel	I		el Torque P uty	WM		Heater Senso Bank	d Oxygen r Heater I Sensor 1	I
	2178 986			14.19 gal			30				64.2 %
· /**	°F 72	1.19 Low	9.31 Avg	21.14 High	2 Low	46 Avg	98 High		7.8 Low	48.2 Avg	95.8 High
Startup Engine Coolant Temperati	_ <b>i</b>	Fuel Ta	ank Press	iure		enerator F- rminal Sigr	nal	_	Heater Senso Bank	d Oxygen r Heater I Sensor 2	i
	289 -4	1	W	11.2 -0.5			] <sup>34</sup> %				52.7 %
	°F -49		14.	inH2O -12.6	5 Low	47 Avg	94 High		9.5 Low	53.6 Avg	98.4 High
BUFFERING DATA.										100 /	200 frames

- 1. Select the red record button located at the bottom left of screen.
  - When recording the red record button will turn into a check mark.

ss02772

Data Stream   All Data Items	Shrink Expand Custom Sort Playback Capture Menu
O 2003 Cadillac CTS Luxury Sport 3.2L   ENGINE	
Calculated Converter Temperature ALLL MML 1 1177 Calculated Transfer at the second secon	Del Torque PWM         Image: Constraint of the constraintof the constraint of the constraint of the constraint of the const
	2 56 99 1.4 33.8 71.9 Low Avg High Low Avg High
Star Star Star Star Star Star Star Star	Generator F- Terminal Signal Bank 1 Sensor 4 Bank 1 Sensor 2
	80 41.7 %
	26 70 99 1.4 45.9 93.1 Low Avg High Low Avg High
RECORDING LIVE DATA.	1 ol 275 frames

2. To stop recording select the check mark.

# Recordings

ss02773



- 1. Select Playback to view previously recorded data streams.
  - Recordings are listed from newest to oldest. When the folder is full, the newest recording pushes the oldest one out of the list.
  - To view recordings, select the Recordings button near the top of the display.
- 2. Select the desired recording.

# **Playback Instructions**

ss02774

Recorded Data Stream   2003 Cadillac CTS Luxury Sport ENGINE					Shrink	Expand	Custom	ZA Sort	Playback	Capture	Menu
2003 Cadillac (     Calculated     Converter     Temperature	2233 1724	y Sport 3.2L	vel	1NE 7.98	Del Dut	Torque PV y	<sup>VM</sup>	-	Heated Senso Bank 1	I Oxygen Heater Sensor 1	27.6
Startup Engir Coolant	°F 1141	2.32 Low	8.08 Avg nk Press	14.06 High ure	12 Low Ger Terr	39 Avg nerator F- minal Signa	56 High		4.5 Low Heater Senso	29.2 Avg I Oxygen Heater	62.3 High
	289 225 °F 131		ť	3.8 0.6 inH20 -11.5	20 Low	45 Avg	33 % 74 High	-	45.1 Low	68.0 Avg	62.0 % 89.7 High
Recorded: 1 m	inutes ago								1 / 420 frames	•	•

To pause the display select Pause.

- To resume the recording, select Pause.
- To advance the recording frame-by-frame:
- Select ">".
- Select either "<" or ">".
- If replay is desired, click and drag the timeline marker back to the beginning of the timeline and release.

# **Special Tests**

# **Overview**

Depending on the vehicle and controller selected, special tests are available.

The special test function is a key component of the tool because it allows circuit testing without ever touching a circuit with a DVOM or other electrical testing equipment. This will also protect electrical circuits from being contaminated or damaged from manual testing with electrical troubleshooting equipment. It is also a quick and easy way to test vehicle controller operation which is difficult to test using traditional methods.

ss02842



1. Select Special Tests from the screen.

ss02775



2. Select the desired vehicle controller then select continue.

ss02776

ss02777

SPECIAL TESTS	Menu	
© 2007 Jeep Wrangler	Unlimited X 3.8L   ENGINE	
ALL TESTS	All Special Tests	
ACCESS VIN	Search All Special Tests	Q
DIESEL CONTROLS	Access VIN	
DPF TESTS	Read VIN	
EGR TESTS	Write VIN	
ENGINE TESTS	Diesel Controls	
FAN TESTS	DPF Tests	
	Diritola	

3. At the special test screen, select a special test group from the group selection menu, then select the desired special test within the desired test group.

SPECIAL TESTS		Menu
2007 Jeep Wrangler Un	nlimited X 3.8L   ENGINE	
ALL TESTS	Engine Tests	
ACCESS VIN	Idle Sped Setpoint	
DIESEL CONTROLS		
DPF TESTS		
EGR TESTS		
ENGINE TESTS		
FAN TESTS		

4. Only the tests meeting the search criteria are displayed. Select the desired test to be executed.

Note: Some tests may require a registration like Tire Pressure Sensor Test.

ss02778		
SPECIAL TESTS © 2007 Jeep Wrangler Unlimited X 3.8L   ENGINE	Capture	Menu
Idle Speed Setpoint Set RPM		
Idle Speed Setpoint 0.00		
Start Exit		

### 5. Follow the prompts on the screen.

NOTE: Some of the instruction text may not exactly match what is on the screen. This will be updated as product updates are released.

SPECIAL TESTS © 2007 Jeep Wrangler Unlimited X 3.8L   ENGINE	Capture Menu
Idle Speed Setpoint Set RPM	
Idle Speed Setpoint 0.00	

6. To terminate a test at any time, use the emergency stop button. To exit special tests normally, select the exit or abort button.

Note: Exit or abort will both stop the current special test and take you back to the start of Special Tests.

All features outside the special test are locked out until the test is terminated to protect the vehicle and the person running the special test. If a function outside the special test is desired, terminate the test and proceed to the desired function. Special tests are not available for all vehicles and controllers. The air bag controller will rarely provide special tests, as actuating the air bag would cause damage to the steering wheel or cabin components. It would also be necessary to replace air bag modules after running the test and clean the interior. Special tests will be continuously updated as more are added; in addition, tests which do not function may be removed during updates as well. There may be tests listed that do not function on the selected vehicle. This is likely due to the fact that many vehicles have different systems depending on sub-model types.

Sp	Special Tests Button Definitions					
	Menu Button Tapping the Menu button displays a pop- up link that takes the user to help content related to reading DTCs. Note: an active internet connection will be required.					
?	View Help Selecting View Help will open an online user manual.					
O.	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.					

# **Diagnostic Information**

### **Overview**

Diagnostic Information provides diagnostic, repair, and reset information for the selected vehicle.

ss02843



1. Select Diagnostic Information from the screen.

ss02858



2. Select the desired function from within the Diagnostic Information menu.

# **AutoDetect Results Number Indication**

Diagnostic Information provides diagnostic, repair, and reset information for the selected vehicle.

- Each vehicle and controller will have its own set of indications.
- The indication is displayed on top of the Diagnostic Information selection.
- When entering diagnostic information, the application will conduct a search in the background for the selected vehicle/controller combination to determine the number of items it will contain.

NOTE: If diagnostic information is desired for a different controller or vehicle, return to the Screen and change the controller or vehicle there, then re-select Diagnostic Information. Failure to follow this could lead to display errors or communication errors.

NOTE: Not all assets within the Diagnostic Information menu will utilize the AutoDetect Results Number indication feature.

# **Code Assist™ Library**

This function will allow a search for DTCs by letter/ number designation.

ss02792

Code-Assist Lib	Code-Assist Library   Press DTC for Repair information							
P Codes	angi							
B Codes (26)	- >							
C Codes (15)	- >							
U Codes (31)	>	Select DTC Type.						
	-							

1. Select Code-Assist library from the Diagnostic Information screen.

ss02793



- 2. The next selection divides the information into subcategories B, C, P and U codes. The next selection divides previous groups even more.
- 3. Remaining selections will eventually filter the list down to a shortened DTC list where the user is able to scroll and select the desired DTC.
- 4. Select the DTC to display the DTC information.
- 5. To return to previous menu screens, select the back arrows at the top of the screen.

# **Repair Trac** <sup>®</sup>

This function uses the AutoDetect Result Number Indication feature described on the previous page.

 Select Repair Trac<sup>®</sup> from the Diagnostic Information screen to view previously reported repairs for the selected vehicle/controller combination. ss02794

Repair-Trac®	Menu
© 2007 Jeep Wrangler Unlimited X 3.8L   ENGINE	
Systems	
Engine Performance	>
Starting and Charging	>

Select the desired system.

- Select the category.
- Select the deficiency.
- Select the symptom.
- Report is displayed describing the problem, how to test and fix, and related DTCs.

### Symptom Assist<sup>™</sup>

ss02795

This function assists in diagnosing a problem with a vehicle component by selecting apparent symptoms.

1. Select Symptom Assist from the Diagnostic Information screen.

Symptom Assist			Menu
© 2003 GMC Yukon XL 1500 SL	LT 5.3L   PCM		
A/C COMPRESSOR CLUTCH PROBLEM	A/C Compress	or Clutch Pr	oblem
A/C PERFORMANCE PROBLEM	Element Name	Action Name	Level Name
ABS PUMP RUNS CONTINUOUSLY	Air Conditioning (A/C) Compressor	Replaced	Top Reported Fix
ADJUSTABLE PEDAL PROBLEM	Heater Ventilation Air Conditioner (HVAC) Control Head	Replaced	Frequently Reported Fixes
MESSAGE PROBLEM	A/C Low Side Pressure Switch	Replaced	Frequently Reported Fixes
CONTROL - FALSE CYCLING/ FAULTY OPERATION	Air Conditioning (A/C)	Replaced	Frequently Reported Fixes

- 2. Select the desired component or component group.
- 3. Select the desired symptom within the component or component group.
- 4. To go back to previous screens use the back arrows near the top of the screen.

# **Symptom List**

Diagnostic Information provides diagnostic, repair, and reset information for the selected vehicle.

- 1. Select Symptom List from the Diagnostic Information screen.
  - Displays a list of symptoms associated with the selected vehicle/controller combination.

• Select Symptoms List from the Diagnostic Information menu.

ss02796

Symptoms List		Menu
© 2007 Jeep Wrangler Unlimite	U X3.8L   EINGINE	
ENGINE WILL NOT START	Engine Will Not Start	
ENGINE LOSS OF POWER		1
ENGINE MISSES ON ACCELERATION	Description Weak battery, corroded or loose battery connections, faulty starter, faulty coil(s) or	
ENGINE STALLS OR IDLES ROUGH	Control unit, incorrect spark plug gap, contamination in fuel system, faulty fuel pump, incorrect engine timing.	
ENGINE MISSES AT HIGH SPEED		
ENGINE WILL NOT START		
ENGINE LOSS OF POWER		

2. Select the symptom that is currently being exhibited by the vehicle on the vehicle.

# Video Library

When Video Library is selected the user will be taken to a list of videos. These videos will illustrate how to perform various functions on the handset.

1. Select Video Library from the Diagnostic Information screen.

ss02797				
ø			Ψŝ	2:44
Fast touch Websites	Video Search X C G Google +			
	https://scantool.service-solutions.com/VideoLibrary/VideoLibrary_ET.htm	☆	Q	
	Please enter search term(s) Please enter search term(s) 1997 GMC Camshaft Position Sensor 1997 GMC Catalyst Efficiency		<u>.</u>	
		191	Ō	

2. Search website for videos.

# **Drive Cycle**

The OBDII system has a series of systems that run self-tests. These systems or components have to be made ready either by simply turning on the ignition or by manipulating the system in some manner. This is called Drive Cycle. Drive cycle information is listed for continuous and non-continuous monitors.

1. Select Drive Cycle from the Diagnostic Information screen.

ss02798

Drive Cycle		Menu
2003 GMC Yukon XL 1500 SL <sup>*</sup>	T 5.3L   PCM	
A/C SYSTEM REFRIGERANT MONITOR	<ol> <li>Cold start engine coolant temperature &lt; 50 degrees Celsius, with air conditioning &amp; rear defrost on idle 2.5 minutes in drive. Before</li> </ol>	r
CATALYST MONITOR	procedding turn accessories off.	
COMPREHENSIVE COMPONENT MONITOR	2) Acceleration to 55 miles per hour, 1/2 throttle, air conditioning off.	
EGR SYSTEM MONITOR	3) 3 minutes steady state cruise 55 & 60 miles per hour.	
EVAP SYSTEM MONITOR	4) Deceleration to 20 miles per hour (clutch out) no brake.	
FUEL SYSTEM MONITOR	<ol> <li>Acceleration at 3/4 throttle to 55-60 miles per hour, then steady state cruise for 5 minutes.</li> </ol>	
FULL DRIVE CYCLE	6) Deceleration no brake, end of cycle.	

- 2. Scroll through the list until the desired monitor or drive cycle is found.
- 3. Select the desired drive cycle and follow the instructions.

# **Oil Light Reset**

On newer vehicles, the oil light reset procedure will indicate how the oil life information can be reset after an oil change.

1. Select Oil Light Reset from the Diagnostic Information screen.

ss02799



- 2. Select Oil Light Reset from the Diagnostic Information menu screen.
- 3. Follow the prompts on the screen to turn off the indicator lamp.

# **PCM Connector Pin Information**

Displays a list of which connector and pin a component or sensor is received through on the PCM.

1. Select PCM Pin Information from the Diagnostic Information screen.

ss02800

PCM Pin	Menu
© 2003 GMC Yulon XL 1500 SLT 5.3L   PCM	
PCM Pin	
Pin Number	Description
C1-1	Ground
C1-2	12 Volt Reference
C1-3	Fuel Injector 3 Control
C1-4	Fuel Injector 2 Control
C1-7	5 Volt Reference

2. Scroll through the list and select the desired sensor or component is listed.

ss02801

PCM Pin		
PCM Pin		
Connector:	C1	
Connector Col	or:Blue	
Pin Number:	1	
Wire Color:	Black/White	
Description:	Ground	
KOEO	N/A N/A N/A N/A	

# **Technical Service Bulletin (TSB) References**

Displays TSBs associated with the vehicle/controller combination.

1. Select TSB Reference from the Diagnostic Information screen.

ss02802

TSB Reference		Menu
TSB Number	TSB Description	
02-09-41-001	Computers & Controls - DTC's Set When Replacing Modules	
01-07-30-002C	Electrical - Malfunction Indicator Lamp ON / Automatic Transmission Stuck in 3rd Gear	
01-07-30-036C	Automatic Transmission - Diagnostic Trouble Code P0756 Dianostic Tips	
01-07-30-038B	Automatic Transmission - 4L60-E / 4L65-E Malfunction Indi Lamp ON / Diagnostic Trouble Code P0757 / Slipping	cator
02-06-05-004A	Emissions - Catalytic Converter Damage / Misfire Codes Set	

1. Scroll through the list until the desired TSB is found.

# **Trans Pan ID**

Displays a list of gasket images that correspond to specific transmissions.

1. Select Trans Pan ID from the Diagnostic Information screen.

ss02803



2. Scroll through the list of gasket images until the matching gasket is found. Corresponding information is listed below each image.

### Location

Used to find where specific components are located.

1. Select Location Info from the Diagnostic Information screen.

ss02804

Location		Menu	
© 2003 GMC Yukon XL 15	500 SLT	5.3L   PCM	
FUSE BOX LOCATION	K	Instrument panel fuse boxes are on the right and left side of the instrument panel - there are two boxes. Underwood fuse box is located on	
ECU LOCATION		the left side of engine near the battery.	_
DLC LOCATION			
COMPONENT LOCATION	_		

2. Scroll through the list and select the desired component.

# **Brake Bleed Procedure (ABS)**

Provides the procedure on how to bleed the brakes after replacing brake calipers or opening a brake line to atmosphere.

1. Select Brake Bleed Procedure from the Diagnostic Information screen.

### ss02805

Brake Bleed Procedure	Menu
© 2004 Ford F-150 XL 5.4L   ABS (4WABS)	
ABS Bleed Procedures	
Brake Bleed Sequence: RR, LR, RF, LF	
GRAVITY BLEED	
0) Refill the brake master cylinder reservoir as necessary.	
0) Warning: brake fluid contains polyglycol ethers and polyglycols. Avoid contact with eyes. Wash hands thoroughly after handling. If brake fluid contacts eyes, flush eyes with running water for 15 minutes.	
0) Fill the brake master cylinder reservoir with brake fluid.	
0) Get medical attention if irritation persists. If taken internally, drink water and induce vomiting. Get med	ical

2. It may be necessary to change controllers at the Screen, then re-enter diagnostic information for this selection to become available (ABS, ABS/VSES).

NOTE: The sequence may be contained within the previous brake bleed procedure section if it is not separately listed on the Diagnostic Information screen.

# **Tune Up Specifications**

Provides specifications for specific components when a tune up is performed.

1. Select Tune Up Specs from the Diagnostic Information screen.

ss02806

Tune Up Specs © 2004 Ford F-150 XL 5.4L   PCM / PATS		Menu
Injector	Specification: 11 to 18 Ohms	
Starter		
Regulator		
Timing		
Spark Plug		
Firing Order		
Battery		

- 2. Some of the tune up specifications contained in this section include the following:
  - Starter
  - Generator
  - Regulator
  - Spark plug
  - Idle speed
  - Fuel pressure
  - Compression
  - Firing order

# **Key Programming**

Displays instructions for the selected vehicle for programming a key.

1. Select Key Programming from the Diagnostic Information screen.

ss02807



2. Follow the prompts on the screen to program a key and or replace battery in key.

# **Battery Disconnect**

Displays procedures for disconnect the battery on the selected vehicle.

1. Select Battery Disconnect from the Diagnostic Information screen.

ss02808

Battery Disconnect		Menu
2004 Ford F-150 X	L 5.4L   ABS (4WABS)	
Battery Location	Battery Location	
General information	See image	
Before Battery Disconnection		
Before Battery Connection		

- 2. Follow the prompts on the screen to disconnect and connect the battery.
- 3. Follow procedures for updating vehicle systems after battery has been disconnected.

# **TMPS Quick Info**

Describes the operating procedures for the Tire Pressure Monitor System (TPMS) for the selected vehicle.

1. Select TMPS Quick Info from the Diagnostic Information screen.

ss02809

TPMS Quick Information	2.4L   TIRE PRESSURE MONITOR	Menu
DESCRIPTION	Description	
RESET PROCEDURES	System Description: When the vehicle speed exceeds 28 mph (45 km/l	h),
RESET TRIGGER	the Tire Pressure Monitor System (TPMS) Control Unit monitors the pressure in all four tires and the system itself. System Operation: The TPMS has two LED indicators that are part of the gauge module; a low- pressure indicator and a system indicator. When the TPMS Control Unit detects low pressure in a tire (or a problem in the system) it turns on the	_
TORQUE SPECS		t e
TPMS SENSOR PART NUMBER	appropriate indicator(s). If low time pressure is detected, the low pressu indicator comes on. If a problem in the system is detected, the TPMS indicator comes on. If low tire pressure and a problem in the system a detected, only the TPMS indicator comes on. With the system functioni properly, the low pressure indicator should come on when the ignition i turned ON. It should then go off 2 seconds later. If this is not the case, is a problem with the system. If the system detects low pressure in any	re e ng s there there

2. Follow the prompts on the screen to reset the tire pressure monitors.

Diagnos	Diagnostic Information Button Definitions	
X	Change Controller Button Tapping the Change Controller button displays the select controller screen.	
	Menu Button Tapping the Menu button displays a pop- up link that takes the user to help content related to reading DTCs. Note: an active internet connection will be required.	
8	View Help Selecting View Help will open an online user manual.	
0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.	

# **Automated System Test**

# **Overview**

The Automated System Test (AST) will scan all available controllers on the selected vehicle for Modes 1-7.

Depending on the vehicle, the handset may ask qualifying questions concerning particular controller

types for the vehicle being scanned. If unsure what selection to pick, find the manufacturer's Regular Production Option (RPO) code list sticker on the vehicle, and then find the corresponding code for the desired controller. Typical locations for RPO are trunk, glove box, or doorjamb. These questions may be skipped by selecting Skip Controller.

ss02846

<b>45</b>			🗢 🖻 4:09		
🖨 🔘 2007 Jeep Wr	angler Unlimited X 3.8L				
		101001			
Read DTCs All Systems	Read DTCs Select System	Data Stream	Special Tests		
1	¢°	×	$\bigcirc$		
Diagnostic information	Automated System Test	Maintenance Tests	Enhanced OBDII		
Today is Tue, 09 Jan 2018.					
	⊲ 0				

1. Select Automated System Test from the Screen.

ss02780		
Automated System Test		Menu
© 2007 Jeep Wrangler Unlimited Rubicon 3.8L		
Reading DTCs from TRANSMISSION		
3%		
TRANSMISSION	<u></u>	Reading DTCs
ENGINE		
WIRELESS CTRL MODULE (TPMS)		
TIPM CENTRAL GATEWAY		
STEERING ANGLE		
CABIN COMP NODE		

2. Wait for the list to be completed.

ss02781	
Automated System Test © 2007. Jeep Wrangler Unlimited X 3.81	Menu
Getting GLOBAL OBDI Mode 2 Freeze Frames	
58%	
AUTO SWAY BAR	9 DTC(s) found
AUDIO	9 DTC(s) found
Check supported OBDII modes	
OBDII DS Snapshot (Mode 1)	20 DTC(s) found
Readiness Monitor Tests (Mode 1)	11 DTC(s) found
Freeze Frame Data(Mode 2)	Reading

3. Scan progress will be indicated by the progress percentage bar on the screen.

ss02782	

Automated System Test	ا Clear	Refresh	Share	→ Save	Menu
© 2007 Jeep Wrangler Unlimited X 3.8L					
Report	ready for viewing.			-	_
	100%			Re	lew port
Freeze Frame Data (Mode 2)				1 item(s	) found
Oxygen Sensor Tests (Mode 5)			•	80 item(s	) found
Non Continuously Monitored Tests (Mode 6)				20 item/r	····· >
VIN (Mode 9)					, found
					-

- 4. Select Green Arrow to review summary report.
- 5. If available select arrow at end of line to view information on item.

ss02783

Automated	System Test		r <b>Ö</b> Clear	Refresh	Share	L Save	Menu
© 2007 Jee	ep Wrangler Unlimited	X 3.8L					
		Report ready	for viewing.				
	VIN (Mode 9) Res	ults				Vi Rej	ew port
Freeze Fran	ENGINE - 1FTPW14	/28FC54321				n(s	) found
Oxygen Sen		Clos	se			n(s	) found
Non Continu	uously Monitored Tests	(Mode 6)				20 item(s	) found
VIN (Mode 9	9)					1 item(s	) found
							-

6. Follow the prompts on the screen.

NOTE: Available items will vary from vehicle to vehicle.

### **Summary Report**

### ss02784

Automated System Test   I	Clear	<b>C</b> Refresh	Share	¥ Save	Menu	
SUMMARY	Summarv					
DTCs	VIN:1FTPW14V28FC54321 CONTROLLER: ENGINE					
DATA STREAM SNAPSHOT	CALIBRATION ID(S):BOSCHA1	037366956, 4EF7033C				
MODE 1	DTCs Found	Data Items	F	reeze Frame D	ata (Mode 2	)
FREEZE FRAME	108	20		19		
MODE 5	Oxygen Sensor Tests (Mode 5)	Non Continuously Monitored Tests (Mode 6)				
MODE 6	80	6 Passed 14 Failed				

AST summary reports items found on the vehicle, such as:

- Controllers found on vehicle.
- DTCs.
- Data Stream Snap Shot.
- Mode 1 (Readiness Monitor).
- Freeze frame.
- Mode 5 (O2 sensor).
- Mode 6 (Non-continuous monitor tests).

NOTE: Available selections will vary from vehicle to vehicle.

### **DTCs**

ss02785

Automated System Test   Report			Refresh	<b>k</b> Share	<u>↓</u> Save	Menu	
SUMMARY	Diagnostic Trouble	Codes					
DTCs							
DATA STREAM SNAPSHOT	P0078 Exhaust Valve Control Circuit (Bank 1)				Active		
MODE 1	P0560 Battery System Voltage				,	Active	
FREEZE FRAME	P0613 Internal Transmission Processor					Active	
MODE 5	P0078 Exhaust Valve Control Circuit (Bank 1)				Pending		
MODE 6	P0560 Battery System Voltage					ending	

DTCs recorded are displayed. When selecting DTCs, diagnostic information is also available (same information as the Read DTCs screen).

### **Data Stream Snapshot**

ss02786

Automated System Test   F	Report imited X 3.8L	Clear	Refresh	Share	<u>↓</u> Save	Menu
SUMMARY	Data Stream Sna	apshot				
DTCs	Global OBDII					
MODE 1	Evanarativa Emissions Sustam	Distance MIL Act	ive	Distance S	ince DTC C	lear
FREEZE FRAME	Vapor Pressure					
MODE 5	-23.84 inH20	18657	niles	1260	)1 miles	
MODE 6	Catalyst Temperature Bank 1	Catalyst Tempera	iture Bank 1	Catalyst Te	mperature E	Bank 2

Data stream Snapshot, is a current view of the onboard vehicle sensors.

# Mode 1 (Readiness Monitor)

ss02787

Automated System Test   Report			<b>Q</b> Refresh	<b>¢</b> Share	↓ Save	Menu
SUMMARY	Readiness (Mode 1)					
DTCs	Monitor Description			Status		
DATA STREAM SNAPSHOT	A/C System Refrigerant Monitor			Ready		
MODE 1	EGR System Monitor			Ready		
FREEZE FRAME	Catalyst Monitor			Ready		
MODE 5	Heated Catalyst Monitor			Ready		
MODE 6	Misfire Monitor			Ready		

Readiness Monitor Tests displays the results from the continuous monitors available on the selected vehicle. There are three states: ready, not ready, and not supported. If the monitor is not ready, a drive cycle must be completed prior to running this test. For more information regarding drive cycles, refer to diagnostic functions Mode 1 readiness.

### **Freeze Frame**

ss02788

Automated System Test   Report  © 2007 Jeep Wrangler Unlimited X 3.8L		Clear	Refresh	<b>¢</b> Share	<u>↓</u> Save	Menu
SUMMARY	Mode 2 Freeze Fram	es				
DTCs						
DATA STREAM SNAPSHOT	Freeze Frame 0 - P0123 - ENGIN	E				
MODE 1						
FREEZE FRAME						
MODE 5						
MODE 6						

1. Select a frame.

ss02789

Automated System Test   I	Report limited X 3.8L	Clear Refresh	≮ <u>↓</u> ∎ Share Save Menu
SUMMARY	Mode 2 Freeze	Frames	
DTCs			
DATA STREAM SNAPSHOT	Evaporative Emissions System Vapor Pressure	Distance MIL Active	Distance Since DTC Clear
MODE 1	16.06 inH20	13026 miles	3881 miles
FREEZE FRAME			
MODE 5	Catalyst Temperature Bank 1 Sensor 1	Catalyst Temperature Bank 1 Sensor 2	Catalyst Temperature Bank 2 Sensor 1
MODE 6	7065₅	4408	1265 ₅

Mode 2 displays recorded data in the form of a DS snapshot by the vehicle's computer when specific DTC are set and the MIL is illuminated.

# Mode 5 (Oxygen sensor tests)

Mode 5 views O2 sensor monitor test results.

ss02790

Automated System Test   F	teport imited X 3.8L	© Clear	<b>Q</b> Refresh	Share	<u>↓</u> Save	Menu
SUMMARY	Oxygen Sensor Tests	s (Mod	e 5)			
DTCs	Description					11-11-
DATA STREAM SNAPSHOT	Bank 1 Sensor 1	MII	n Va	lue	мах	Units
MODE 1	Maximum Sensor Voltage For Test Cycle	0.00	0.0	003	1.275	v
FREEZE FRAME	Lean To Rich Sensor Threshold Voltage	0.00	0.0	003	1.275	v
MODE 5	High Sensor Voltage For Switch Time Calculation	0.00	0.0	003	1.275	v
MODE 6	Minimum Sensor Voltage For Test Cycle	0.00	0.0	003	1.275	v

Mode 5 views O2 sensor monitor test results. Mode 5 displays the average of the O2 sensor monitor test results measured over a period of time. The parameters of this measurement vary between manufacturers. It may be necessary to run the vehicle for a period of time to allow the O2 sensors to fully warm up and begin operating.

Note: Mode 5 is not supported on all vehicles.

### Mode 6 (Non-continuous monitor tests)

Mode 6 views onboard monitoring test results for noncontinuous monitor systems.

ss02791

Automated System Test   F	Report		<b>O</b> Clear	Refresh	< Share	↓ Save	Menu
2007 Jeep Wrangler Un	imited X 3.8L						
SUMMARY	Non-Contin	uously Mo	nitor	ed Tes	sts		
DTCs	(Mode 6)						
DATA STREAM SNAPSHOT	ECU: ENGINE						
MODE 1	TID 1 TID 1				Pas	sed	
EREEZE ERAME	CID 1 TID 1						
MODE 6	N/A MIN	9667 VALUE	2	<b>5292</b> MAX	N/ UNI	A TS	
WODE 5	TID 2 TID 2				Fai	led	
MODE 6	CID 2 TID 2						

Non-Continuous Monitor Tests (Mode 6) are pass/ fail tests, including certain EVAP tests, catalyst, and EGR. The following information is reported:

- ECU.
- TID (test identification) indicates the system monitor.
- CID (component identification) indicates the component tested and its test value.
- Minimum value, maximum value, and current value for each non-continuous monitor.
- Pass or fail test result.

Each vehicle manufacturer assigns a code number to their system monitors and components. Refer to the vehicle manufacturers Mode 6 code chart to determine the failure indicated by the TID and CID. If this chart is not readily available, run an automated system test (AST) from the DTC screen and select Mode 6. See Read DTCs section for more information regarding steps to complete this action. This may provide a more detailed description of the Mode 6 test information.

Automated System Test (AST) Button Definitions			
2	Refresh DTCs Button Tapping the Refresh button initiates a fresh scan of DTCs from the vehicle.		
<	Share DTCs Button Tapping the Share button opens the app and initiates options. Depending on what's available at the time. Share a list containing all the DTCs set by email or Bluetooth or USB.		

Automated System Test (AST) Button Definitions				
	Menu Button Tapping the Menu button displays a pop- up link that takes the user to help content related to reading DTCs.			
	required.			
2	View Help Selecting View Help will open an online user manual.			
<b>.</b>	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.			

# **Maintenance Tests**

# **Overview**

ss02844

Maintenance Tests provide a way for specific systems to be recalibrated or reset after service. Maintenance test availability will vary from vehicle to vehicle, and will be updated over time.

Maintenance tests are the same as special tests, but this is a shortcut to most frequently used tests on the selected vehicle. These specific tests can also be found under special tests.

ss02810		
	Select a Maintenance Test Catagory	
	Battery/Charging	
	Brake Service	
	Cancel	
L		

# 2. Select the desired category for the component or system being worked on.

Note: If there are no sub-sections available for the selected category go to step 5.

ss02811		
		1
	Select a Maintenance Test	
	Battery Saver relay Control	
	Generator Lamp	
	Cancel	

3. Select the desired test to be performed.



1. Select Maintenance Test from the Screen.

ss02812		
SPECIAL TESTS	Ó	Manu
© 2004 Ford F-150 XL 5.4L   INSTRUMENT CLUSTER	Capture	Merid
Battery Saver Relay Control		
Engine Must Not be Running		
For this test		
Continue Abort		

4. Follow prompts on the screen.



### 5. Run the test.

Note: For more information refer to Special Tests section.

Maintenance Tests Button Definitions			
	Menu Button Tapping the Menu button displays a pop- up link that takes the user to help content related to reading DTCs. Note: an active internet connection will be required.		
0	Take Screen Capture Selecting Take Screen Capture will save a copy of the current open screen.		

# **Enhanced OBDII**

# **Overview**

Enhanced OBDII provides all of the same functions and features as Generic OBDII with the addition of OEM specific MID/TID and TID/CID descriptions for Non-Continuously Monitored Tests in Mode 6. This gives the user more insight as to what is actually being tested when viewing the Mode 6 data. ss02850



# 1. Select Enhanced OBDII from the screen.

Note: For more information refer to the OBDII section in the beginning of the manual.

# Saved Diagnostic Data

### **Overview**

The Saved Diagnostic Data functions allows the capability to recall previously run tests and Data Stream Records.

ss02847



1. Select View Saved Tests from the Screen.

Note: For more information refer to the Saved Diagnostic section in the beginning of the manual.

# **Browser**

# **Overview**

An internet browser window is available for direct internet access.

ss02849



# 1. Select Browser from the Screen.

Note: For more information refer to the Browser section in the beginning of the manual.Select the keyboard icon to input text.

# Settings

# Overview

Select the settings icon to view and change handset default settings.

ss02851



# 1. Select Settings from Screen

Note: For more information refer to Setting section in the begining of the manual.

# **Customer Support**

# **Order Information**

Replacement and optional parts can be ordered from www.otcparts.com or an OTC authorized tool supplier.

# **Repair Service**

Please contact Technical Support for troubleshooting and service options before sending any unit in for repair. To send a unit in for repair, go to https:// repairtrack.bosch-automotive.com and follow the online instructions.

This website will also have the latest service policies and service center locations. If you do not have internet access, please call (800) 344-4013.

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