Who can use VehicleMRI?

VehicleMRI can be used by:
- Automotive repair shops
- Automotive remarketers
- Automotive auctions
- Automotive warranty or claims inspectors
- Automotive fleet maintenance service advisor
- Automotive parts store
- Automotive insurance services
- Mobile vehicle inspectors
- New and used car dealerships

What are the requirements to use VehicleMRI?

Android tablet or smartphone
• Android 5.1 or newer
WiFi Internet Access

What vehicles does VehicleMRI work on?

VehicleMRI works on all 1996 to Present Domestic, Asian, and European Light and Medium Duty Vehicles that are sold in the USA (OBD2 compliant), including:

Acura	GEO	Lexus	Porsche
Audi	GM	Lincoln	Ram
BMW	GMC	Maserati	Saab
Buick	Honda	Mazda	Saturn
Cadillac	Hummer	Mercedes-Benz	Scion
Chevrolet	Hyundai	Mercury	Smart
Chrysler	Infiniti	Mini	Subaru
Daewoo	Isuzu	Mitsubishi	Suzuki
Dodge	Jaguar	Nissan	Toyota
Eagle	Jeep	Oldsmobile	Volkswagen
Fiat	Kia	Plymouth	Volvo
Ford	Land Rover	Pontiac	

Are there any vehicles VehicleMRI does not work on?

Yes, the following vehicles are not compatible with VehicleMRI:

- **Pre-OBD2 Compliant Vehicles**
  VehicleMRI currently only supports USA OBD2 compliant vehicles.
- **Heavy Duty Vehicles**
  VehicleMRI currently only supports USA OBD2 compliant vehicles (light and medium duty).
- **International EOBD and JOBD Compliant Vehicles**
  Although they may be similar to USA OBD2 compliance, OBD legislation varies by country and VehicleMRI has not currently been tested for these.

How does VehicleMRI work?

VehicleMRI is easy to set up and within minutes it can perform hundreds of tests/checks on a vehicle. Here are the steps involved in a VehicleMRI inspection (DTC Scan or Health Check).

- Download and install the latest VehicleMRI application
- Pair your vehicle interface device to your tablet or smartphone
- Launch the application and connect the vehicle interface device into the vehicle's OBD2 connector
- Choose the desired test profile
- Follow the on screen instructions
- Data is collected from the vehicle and analyzed
- Results displayed can be shared by print, email or, SMS
- Report is stored on the server

Are there any vehicle pre-conditions required to run a VehicleMRI inspection?

Yes, to begin with, the vehicle must be USA OBD2 compliant.

To start a test, the ignition must be in the ON position with the engine in the OFF position (KOEO). Depending on which test is selected, the user will be prompted to start the vehicle to continue running tests. To ensure the vehicle is in the proper state, the following vehicle pre-conditions must be met before the test will continue:

- Engine RPM
- Coolant temperature
- Loop Status

What Vehicle Interfaces are supported by VehicleMRI?

Currently, we only support the VehicleMRI MBT vehicle interface device.

What are the different VehicleMRI inspections, do they retrieve and analyze more than just Generic OBD2 data?

There are three test profiles in VehicleMRI (listed below). Basic inspections only collect and analyze Generic OBD2 data while Advanced inspections collect and analyze both Generic and Enhanced Data.

VehicleMRI does use Generic OBD2 data on all vehicles but, also analyzes Enhanced Data on many vehicle computers such as Engine, Transmissions, ABS, Airbag, Body, etc. The type of VehicleMRI inspection you select will determine the type of data collected and analyzed.

Inspection Type	Generic DTCs	Generic Data	Enhanced DTCs	Enhanced Data
Basic Health Check	Yes	Yes		
Advanced DTC Scan	Yes	Yes	Yes	
Advanced Health Check	Yes	Yes	Yes	Yes

What is the difference between a VehicleMRI Basic Health Check and an Advanced Health Check?

A **Basic Health Check** only collects and analyzes Generic Data.

An **Advanced Health Check** collects and analyzes all information in a Basic test and also Enhanced Data (such as Engine, Transmissions, ABS, Airbag, Body, etc.) if supported (Supported by VehicleMRI, Supported by the Vehicle, Supported by the Vehicle Interface).

What systems does VehicleMRI test and what data is collected and analyzed?

The VehicleMRI database consists of thousands of test and data parameters. All tests are not supported by all vehicles and are dependent upon the vehicle being tested. Once the desired inspection test and vehicle to be inspected are known, VehicleMRI will automatically select the correct items to test for you. Here is a sampling of some of the systems and data items that VehicleMRI will collect and analyze.

Vehicle Information
- VIN
- CALID(s)
- ECU Name(s)
- Ignition Cycle Counter
- EVAP Completion Data

MIL, DTC, IM
- Stored, Pending, Permanent DTCs
- Critical DTCs
- Gas Cap Codes
- EVAP DTCs
- Enhanced DTCs
- Misfire
- Mode 6
- Emissions Readiness
- IM, Continuous Monitoring Tests
- IM, Non-Continuing Monitoring Tests

Dash Lights
- Check Engine Light / MIL
- ABS Light
- Airbag Lamp
- Change Oil Lamp
- Low Fuel Lamp
- Oil Level Lamp
- Check Gauges Lamp
- Traction Control Lamp

Misfire, Injectors
- Engine Misfire
- Misfire Count, History, Current
- Fuel Injector Circuits/Faults

Transmission
- Shift Solenoids
- Shift Times, Shift Errors
- Transmission Oil Life
- Torque Converter Clutch
- TAP Cells

ABS, Airbag
- Anti-Lock Brake System (ABS)
- Air Bag Systems; Driver, Passenger, Side
- Occupant Detection Systems
- Wheel Speed Sensor Values

Battery
- Battery Voltage
- Control Module Voltage
- Lowest Voltage During Cranking
- Highest Voltage During Test
- Battery w/Load Analysis; KOEO and Running

Misc Sensors
- Manifold Absolute Pressure Sensor (MAP)
- Engine Vacuum, Leak Detection
- Baro Sensor
- Mass Air Flow Sensor (MAF)
- Engine Speed, RPM
- Vehicle Speed Sensor (VSS)
- Ignition Timing
- Exhaust Gas Recirculation Valve (EGR) System
- Oil Life, Oil Pressure, Level
- Idle Air Control System
- Turbocharger and Supercharger System

Oxygen Sensors
- O2 Locations
- O2 Configuration
- Loop Status
- O2 Sensor Voltages
- O2 Bank Balance
- In addition to the standard analysis parameters; Cross Count, Lean to Rich switch time, and Rich to Lean switch time
- Wide Range O2 Voltage and Current
- Equivalence Ratio

EVAP
- EVAP System Vapor Pressure
- Commanded EVAP Purge

Temperatures
- Engine Coolant Temperature Sensor (ECT)
- Intake Air Temperature Sensor (IAT)
- Ambient Air Temp
- CAT Temps
- Engine Oil Temp
- Time to Warm Up

Fuel/Pressure & Rates
- Fuel Rail Pressure
- Fuel Type
- Fuel Level
- Fuel Sending Unit System
- Fuel Injection Timing
- Engine Fuel Rate

Fuel Trim
- Short and Long Term Fuel Trim
- Fuel Metering System

Load/Torque
- Calculated Load, Absolute Load
- Actual Engine % torque

Throttle/Accelerator
- Absolute, Relative and Commanded Throttle Position Sensors
- Full Throttle/APP Test
- Throttle/APP Cutout Test

What determines which items are supported in a Health Check or DTC Scan?

There are three main variables that determine what items will be listed in a VehicleMRI report:

Supported by the Vehicle:
VehicleMRI contains 1000's of test items; however, a test must be supported by a vehicle in order for it to be included in the VehicleMRI report. For example, regarding Generic Data; older vehicles will tend to have fewer test supported than new vehicles because those parameters were not supported by the vehicle when it was built. For example, vehicles older than 2003 will not support Mode 9 VIN. Another example is VehicleMRI contains many ABS & Airbag tests, however, if a vehicle does not have ABS and/or Airbags, those tests will not be supported.

Supported by VehicleMRI:
VehicleMRI supports Generic OBD2 data and DTCs on all USA compliant vehicles; however, when it comes to Enhanced Data & DTCs, VehicleMRI must implement specific tests for each OEM, their various ECUs & protocols over a wide range of years. And as each model year of vehicles are introduced, additional tests may be added.

Supported by the Vehicle Interface:
VehicleMRI supports a wide variety of vehicle interfaces; however, not all vehicle interfaces contain the same vehicle protocol support that is required to communicate with various ECUs. Because of this, we are only supporting the VehicleMRI MBT interface device.

Does VehicleMRI collect data with the Ignition ON, Engine Running, or both?

Both the Basic and Advanced DTC Scan collect data only with the Ignition ON.

Both the Basic and Advanced Health Checks collect one set of data with the Ignition ON and additional data while the engine is running. After the initial data is collected with the Key ON, the user will be prompted to start the engine to complete the test.

What do the VehicleMRI test result terms mean?

CHECKED OK: the test value was within the acceptable range or value

POSSIBLE ISSUES: the test was outside the acceptable range or value

CONDITIONAL: means the test was slightly out of range but, not quite enough for a "CHECKED OK" or "POSSIBLE ISSUE" or, not enough information was known to fail it for certain, further investigation or diagnostic tests are required.

NOT SUPPORTED: the test item is not supported by the vehicle or vehicle interface

NOT GRADED: data was collected for the test item, but no determination was made

UNDETERMINED: The value/result of the test item could not be determined, either not enough information was known, information was missing or test item was skipped.

CRITICAL: The test was outside the acceptable range or value and is of higher importance than a normal POSSIBLE ISSUE condition. There are three categories: A parameter is at a critical value, a CALID was identified as needing an update, or a DTC was identified as high importance

N/A: the test item was not defined in the procedure being runVehicleMRI can be used by:

What car computers and data does VehicleMRI test?

VehicleMRI will test the Powertrain Controller for Generic Data and Generic DTCs on all OBD2 Compliant vehicles 1996 to present.

VehicleMRI will scan for Enhanced DTCs for all controllers on supported DLC pins and protocols for supported car manufacturers. The number and type of car computers you have access to depend on; the test profile selected, the vehicle (year, make, model, engine, options) you are connecting to, and the protocols supported by the vehicle interface device.

VehicleMRI will also collect and analyze Enhanced Data for all controllers that have a test supported by the selected test profile.

Can I use VehicleMRI to turn OFF the Check Engine Light?

Yes, however, turning off the check engine light also clears other important diagnostic information used by technicians to assist in diagnosing the vehicle. This information could also be used by many states that have emissions inspections. If the tool is used to turn off the vehicle's Check Engine Light (CEL), the vehicle will have to be driven to get it ready for an emissions test. Turning off the CEL will not cause the issue that caused the light to come on to go away. The CEL should be cleared only by a qualified technician.