

Enhanced BMW User Guide

READ ME FIRST!

Check Your Package Contents

Your AutoEnginuity BMW package should contain:

- 1 x 1ft 16pin - 20pin BMW adaptor cable
- 1 x 1ft 16pin - 16pin BMW adaptor cable (*ProLine ST06 will not require this*)

NOTE: If *any* of the above items are missing, please contact your reseller.

Before Getting Started

Enhanced BMW will allow you to access systems not available with generic OBD-II. The enhanced BMW option is an add-on to the AutoEnginuity ScanTool. To offer this support, the enhanced BMW option utilizes proprietary adaptor cables. Which one you will use depends on the vehicle's production date.

Check to make sure that your ScanTool is already properly installed and that the enhanced option(s) are activated. Please see your ScanTool User Guide for instructions if necessary.

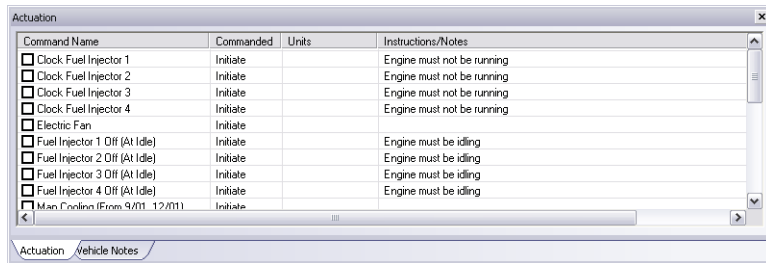
Connecting to the Vehicle

WARNING: DO NOT USE A POWER INVERTER WITHOUT AN "ISOLATED GROUND" WITH ANY USB PRODUCT CONNECTED TO YOUR VEHICLE. A GROUND LOOP MAY OCCUR.

1. Start the ScanTool software.
2. Connect the OBD-II connector to your computing device.
3. Connect the BMW adaptor to the OBD-II or ProLine connector and other end to the vehicle's DLC. (See your *ScanTool User Guide* if you need help finding the DLC location.)

Actuation

To reset adaptations or actuate a solenoid, use the Actuation window. This dockable window is normally available at the bottom of the ScanTool screen as a tab. This window's controls will only be enabled when you are on any of the live data tabs (Meter, Grid, or Graph). BMW's actuations typically are only toggle states; meaning once you select them, they will actuate and the check box will deselect. Most actuations require the vehicle to be in a certain state to operate. You may see instructions for an actuation on the far right.



WARNING: DO NOT ACTUATE ANY COMPONENT OR RUN ANY TEST WITHOUT FOLLOWING BMW'S DOCUMENTED PROCEDURES. AUTOENGINUITY IS NOT LIABLE FOR THE IMPROPER ACTUATION OF COMPONENTS OR TESTS.

Test OnBoard Systems

The Test OnBoard Systems tab is available to run those tests that can only be operated in isolation and require the complete control of the vehicle and the software.

NOTE: THE O2 SENSOR AND ONBOARD TEST RESULTS TAB DO NOT WORK WHEN CONNECTED WITH THE NON-OBDDII-ONLY SETTING.

Common Problems

1. I can only connect to the engine and transmission with 9/00 vehicles.

Please verify that you are using the 16pin to 16pin BMW adaptor cable. Without it, the BMW systems will not be visible to our enhanced BMW option.

2. I select a system, but I keep getting the error that the system is not present or operating.

The list of systems available in the Vehicle Selection drop-down is what your particular model of vehicle is capable of supporting; that does not mean your vehicle has that system present. If you would like to have the software determine the systems that are present and operating on your vehicle, select the Test OnBoard Systems tab. Select the test *Determine Systems Available or Operating*.

- For vehicles earlier than 9/00 (also E38 till '02 and Z3 till '02), lift the vehicle's hood and locate the circular 20pin connector. Remove the dust cover and attach the cable.



- For vehicles 9/00 and later, simply connect to the standard OBD-II interface in the driver's foot area.

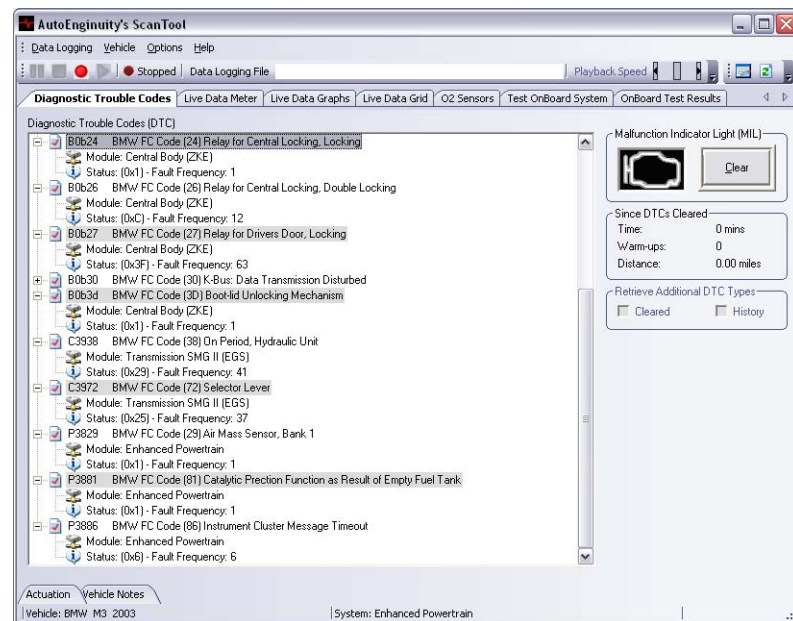
- The ScanTool will now connect to the vehicle. If you do not see the connection screen, press F2 or select *Vehicle / Connect*. (Exceptions will be the E46 M3 and E39 M5 which are non-OBD-II compliant. For these select *Vehicle / Communication Configuration*. Change the Vehicle Interface Type to ISO9141-2 and the Initialization Type to Non-OBDII Only.)
- Once connected to the vehicle, the ScanTool will require you to select the vehicle model information. Selecting this information correctly is very important to obtaining reliable data. You may use the GetVIN on model years 2002 and later if the vehicle supports VIN retrieval.
- Select your system at the bottom of the Vehicle Selection screen. By default the system selected is Enhanced Powertrain. If the system you select is not present or operating, the ScanTool software will display an alert and require you to select another system before continuing.
- Click *OK* once the vehicle model information and the system are selected.
- The connection phase will finalize by retrieving the trouble codes from all of the vehicle systems present. This can take up to 60 seconds.
- Congratulations, you are now connected to your BMW!

Operation Instructions

Trouble Codes

The ScanTool will default to showing you any trouble codes that may be present on the vehicle. The software will decode the engine, transmission, ABS, airbag, and central body controllers for you. Some systems may not have descriptions. Please refer to BMW's service site or another reference site for this information.

The trouble code number convention has been slightly modified. If you look at the example below you will see the B0b24 trouble code. The 'B' refers to the type of code. 'B' is for Body as you would expect. The first two alpha numerics are used for the system ID. In this example 0B is the Central Body controller (ZKE). The next two alpha numerics are the actual BMW FC code. If the software supports the decoding of the BMW FC, it will display the description on the top-most line of the trouble code entry. Like the OBD-II trouble codes, you can get more information by selecting the (+) plus sign to the left of the trouble code entry. This will display more detailed information such as the fault frequency or any Freeze Frame information.



Live Data

Watching live data from your vehicle is very important to servicing your vehicle so we offer three ways to view it. The live data Meters, Grid, and Graph tabs operate the same as the basic kit. One thing to note is that BMW sends multiple sensor responses in a single transmission, so you will see data update in "chunks".