# Common Problems

**1. I can only see some controllers, but not all on the web site's list.**

Each model has a specific coverage list that enumerates to the *ScanTool*. If you don't see the system in the *Vehicle Selection* | *System* list, then the controller is not equipped or optional on your vehicle. For this reason, you can't "fake" a model or model year to get coverage.

**2. I am connected to a DDL1 Nissan with the ProLine VCI and the 14pin adaptor but I can get Airbag, ABS, but limited Enhanced Powertrain.**

Our intent with the DDL1 support was to give trouble code retrieval for engine, transmission, body, and chassis controllers. We do have live data and bi-directional controls for ABS, transmission, and powertrain. However, we have three of the four live data tables for the powertrain. In case that the Enhanced Powertrain is listed and no live data or bi-directional controls are reported with the system selection, we do not have the table for that model.

**3. My vehicle doesn't show Ignition Timing Advance in the Work Support tab. Does my vehicle support this feature?**

Sorry, no. When the connection is established with your vehicle, the feature support is transmitted from your vehicle. If you don't see specific support in the *ScanTool's* feature lists, then your vehicle doesn't support it.

**4. I am connected to a Nissan Quest '04 - '09 and the *ScanTool* software warns me about electrical incompatibilities?**

The Nissan Quest ('04 - '09) puts power on a pin that is designated by the SAE 1969 specification as part of the OBD-II interface. The placing of power on that pin causes the ProLine VCI to trigger a thermal overload and disconnect from the vehicle. If not unplugged from the vehicle within a minute, the ProLine VCI will eventually burn the fuse and require repair.

**5. Attempting the Idle Air Volume Learn, but it continues to fail. What am I doing wrong?**

In some cases this test fails on the vehicle-side regardless of proper operation. Nissan does have a bulletin on resolving this. Here is a quick and effective work-around. Leave the vehicle running, disconnect the MAF until the MIL illuminates, and reconnect the MAF. Then subsequently clear the trouble codes reported as a result of the MAF disconnect. At this point, retry your Idle Air Volume Learn. If this doesn't work, please refer to the Nissan bulletin for complete details.



# Enhanced Nissan User Guide

**READ ME FIRST!**

## Check Your Package Contents

### Your AutoEnginuity Nissan package should contain:

- 1 x 1ft 16pin - 14pin Nissan / Infiniti DDL1 adaptor cable

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

## Before Getting Started

Enhanced Nissan will allow you to access Nissan and Infiniti systems not available with generic OBD-II. The enhanced Nissan option is an add-on to the AutoEnginuity *ScanTool*. To offer this support for the older pre-'00 models, the enhanced Nissan option utilizes a proprietary adaptor cable. 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. Locate the Data Link Connector (DLC) in your vehicle:
   - For vehicles '96 - '99, locate the rectangular 14pin adaptor. Place the 14pin adaptor cable between the vehicle's DDL1 connector and the ProLine VCI. The *ScanTool* software by default tests the vehicle for OBD-II protocols. This will need to be disabled for a DDL1 connection to complete. To do this, select *Vehicle* | *Communication Configuration*. Then change the Vehicle Interface Type to ISO9141-2 and the Initialization Type to Non-OBD-II Only.
   - For all other vehicles, attach to the OBD-II connector.

2. Connect the "USB" end of the AutoEnginuity ProLine VCI connector to your computing device with the USB cable. Look for the Power (red) and middle LEDs to be lit.
3. Start the *ScanTool* software.
4. The *ScanTool* software will now connect to the vehicle. If you do not see the connection screen, press F2 or select *Vehicle | Connect.*
5. Once connected to the vehicle, the *ScanTool* software 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 option on model years 2004+.
6. Finally, select your system. By default the system selected is Enhanced Powertrain.
7. Click *OK* once all the vehicle model information and the system are selected.
8. The connection phase will finalize by allowing you to retrieve the trouble codes from the vehicle systems present. This can take up to 60 seconds.
9. Congratulations, you are now connected to your Nissan!

# Operation Instructions

Enhanced Nissan vehicles operate similarly to other makes in the *ScanTool* software except for a few notable differences. The following will try and explain these differences and how they work.

**System Selection**

Nissan vehicles enumerate supported systems differently then other makes. When you complete a connection to a pre-'05 Nissan-family vehicle, they will enumerate the coverage supported by the vehicle. Most car makers provide this in tables that scan tools can select from during the connection. A network test is then performed to verify the controller is equipped on the vehicle before completing the connection. With Nissan, this is done each time a connection is started. This will account for a delay in the vehicle model, year, and system selection. However, '05+ vehicles will have those tables in the *ScanTool* software, so the connection will follow traditional methods.

**Actuations**

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. Nissan actuations typically are only toggle states; meaning once you select them, they will actuate and the check box will be deselected. Most actuations require the vehicle to be in a certain state to operate. You may see instructions for an actuation on the far right.

In some cases, your vehicle will require at least one sensor to be viewed for an actuation to function properly. The *ScanTool* software will typically report this error condition by stating:

*"Actuation requires a live data sensor to be selected to operate. ..."*

Do not confuse the above requirement with operational conditions of the vehicle to properly operate an actuation. In this latter case, the software will display a different message.

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

**Work Support Functions**

The Work Support Functions of Nissan can be found under the *Work Support* of the *ScanTool* tabs. Work Support functions are both system tests and permanent configuration functions.

Work Support functions are selectively supported by different vehicle models. When your vehicle connects, it enumerates its coverage to the *ScanTool*. Each function will have its own operating instructions so it's important that you follow the detailed descriptions from both your vehicle service guide and the software before proceeding.

**Ignition Timing Adjustment**

You can advance or retard your vehicle's ignition by as much as 2 degrees with this function. Each time this function begins your ignition is set to zero. This function requires that the vehicle be in a correct operating state before beginning. Nissan has set these guidelines up in their service guides specifically for each vehicle model. Generally, you only require the vehicle in a closed fuel loop and no trouble codes reporting.

To begin, select the function from the drop-down list of Tests on the *Work Support* tab. On the right, buttons will appear that you will be required to operate the test. After reading the instructions and verifying the vehicle requirements are met, select Initiate to begin the process.

As stated above the vehicle will report zero degrees. By selecting the (>>) and (<<) arrow buttons we can advance or retard the timing. Once the proper timing correction is achieved, click Done. The *ScanTool* will now write the value into the ECM as the new permanent ignition correction value.