


# LAB - Snap-On MODIS

Students: 1. \_\_\_\_\_ Date: \_\_\_\_\_  
2. \_\_\_\_\_ Block: \_\_\_\_\_

**ATTENTION:** This equipment is VERY expensive - Please take good care of it  
👉 👉 👉 **CLEAN HANDS ARE A MUST** 👉 👉 👉

Fill in each box with the appropriate information. Place checks (✓) where applicable.  
Be sure to have Instructor's initials before moving on to the next step.

VEHICLE IDENTIFICATION	
Year/Make/Model:	
VIN:	
SYSTEM INVESTIGATION	
1	<p>MODIS stands for Modular Diagnostic Information System. It is an amazingly powerful device that includes:</p> <ul style="list-style-type: none"><li>Scan Tool for OBD and OBD II vehicles</li><li>Fast-Track Troubleshooter</li><li>Component Tests in step-by-step format</li><li>Lab and Ignition scope</li><li>Digital Volt-Ohm Meter</li><li>Record activity during the test drive</li></ul>  <p>The MODIS can do far more than this lab covers. By all means - PLAY with it! See what it can do! See what you can check out on your car. You cannot hurt anything on your car by playing with this machine - it only "reads" things, so PLAY!</p> <p>If you are in doubt about anything in this lab, ask your instructor for help.</p>
SAFETY & PREPARATION	
2	<p><b>Safe work practices are vital working around a running engine</b></p> <p><b>Keep fingers and tools AWAY from moving parts</b></p> <p><b>Keep the hoses and cords and connectors of the scope AWAY from moving parts</b></p> <p><b>Always use a fender cover to protect paint when working under the hood</b></p>

**SCANNER**

3 Turn on the MODIS. Use the [THUMBWHEEL], [Y] and [N] pads to select:

**[SCANNER]**

Select your vehicle from the flyout list and pay careful attention to the VIN codes:

10<sup>th</sup> Digit: Vehicle Year  
5<sup>th</sup> Digit: Vehicle Model  
4<sup>th</sup> Digit: Engine

You may be asked to connect a certain adapter to the MODIS for your vehicle - make a note of where the adapter came from so it goes right back when you are done.

Because of the wide range of vehicles and no real diagnostic standards prior to 1996, parts of this lab are not specifically detailed in every way. You will need to see what I'm after, and based on YOUR vehicle, find out how to complete the lab. The things I ask for are pretty standard tests and CAN be done by all vehicles.

4 Once you have entered the data on your vehicle, you should be in the Main Menu.

You should find a section that allows you to Check Codes. If your vehicle cannot communicate its codes to the MODIS, describe below How to Get Codes:

What codes, if any, are shown in your vehicle?

**STOP!**

INSTRUCTOR'S INITIALS:

**DATA DISPLAY**

5 On most OBD and OBDII systems, the following values can be retrieved by the MODIS. Record what you find, with the Key On Engine Running (KOER):

TPS (V): \_\_\_\_\_ (Throttle Position Sensor)

O2 (Mv): \_\_\_\_\_ (Oxygen Sensor (Pre-Cat if more than one))

INJ PW (mS): \_\_\_\_\_ (Injector Pulse-Width)

ECT (°C): \_\_\_\_\_ (Engine Coolant Temperature)

If your vehicle is too old to use this wonderful feature, you may only skip this step AFTER your instructor's signature

**STOP!**

INSTRUCTOR'S INITIALS:

## FUNCTIONAL TESTS

6 You will be testing FOUR (4) components. Two of my choice, and two of your choice.

Go through the testing procedure. Briefly describe below HOW the component is tested, and GIVE the results you found. Expect to DEMONSTRATE how you checked each component. MODIS leads you through the procedure very well - ask your instructor if you need help.

Throttle Position Sensor:

Oxygen Sensor:

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\_\_\_\_\_:

**STOP!**

INSTRUCTOR'S INITIALS:

**TROUBLESHOOTER**

7

**Troubleshooter** is a great tool - it lists test procedures as well as the most likely cause of the problem for that vehicle! If your vehicle is experiencing a specific problem, use the **Troubleshooter** to help find and solve the problem. Tell your instructor what you are hunting for. Otherwise,

Briefly describe the step-by-step MODIS procedures for troubleshooting EITHER (circle):

1) Missfire

or

2) No Start, Cranks OK

**STOP!**

INSTRUCTOR'S INITIALS:

This lab will continue to grow as I learn how to use more of the MODIS features.....