



MEFI QUICK START

MSD MEFI EFI and InGenius Tuning

Note: This start up guide will take you through a few quick steps to get your engine fired up for the first time with MSD's MEFI Controller and InGenius software.

Section 1: Create Communication between Laptop and Controller

1. Connect the harness to the engine, follow the Wiring Harness Installation Guide that was provided with the wire harness.
2. Load the InGenius software CD onto computer and follow the instructions as they appear on the screen.
3. Connect laptop to the ECU with the supplied RS-232 cable. Connect supplied cable into the harness.

Note: If you do not have an RS-232 Serial port on your computer, a port replicator will need to be purchased. The ONLY replicator that will work with the InGenius software is the Keyspan P/N: UPR-112. It is stocked at Best Buy, Comp USA and Office Depot.

Section 2:

1. **Open Active Module.** Make sure this is the correct program for your engine. If not, select File, Change Active Module and select your engine.

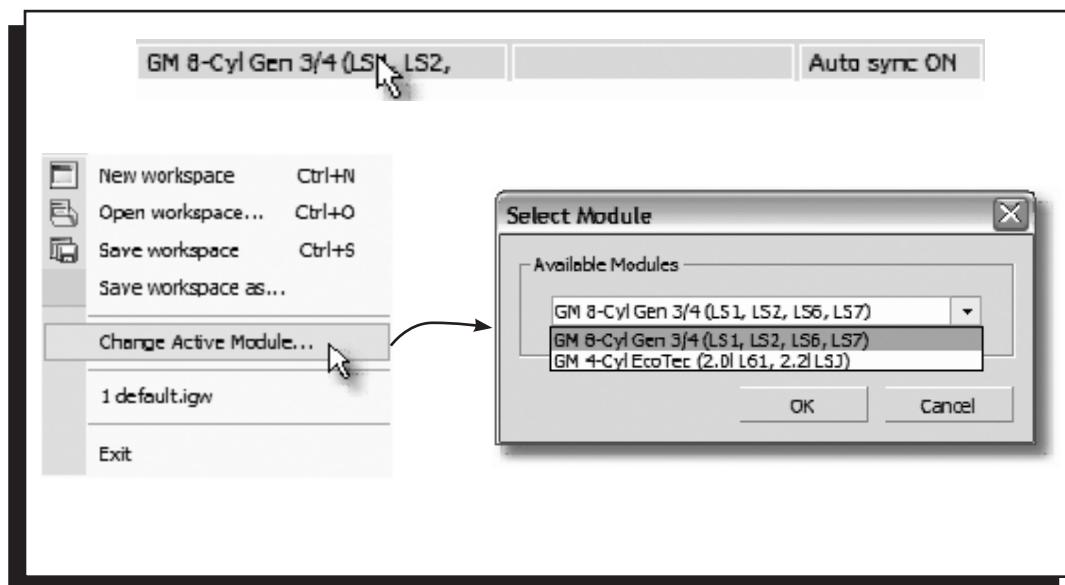


Figure 1 Engine Selection.

2. **Open Calibration.** Under Calibration on the main toolbar, select Open, then select the correct calibration for your engine. This will load the calibration into InGenius and is ready to be loaded into the ECU.

3. Turn the key On, select Send on the InGenius toolbar and wait for the calibration to load into the ECU.

4. Once the calibration is sent, cycle the ignition Off and On to burn the calibration into the controller.

5. **Verify the calibration** has been loaded into the controller. To do this, select Receive from the toolbar and watch the progress bar.

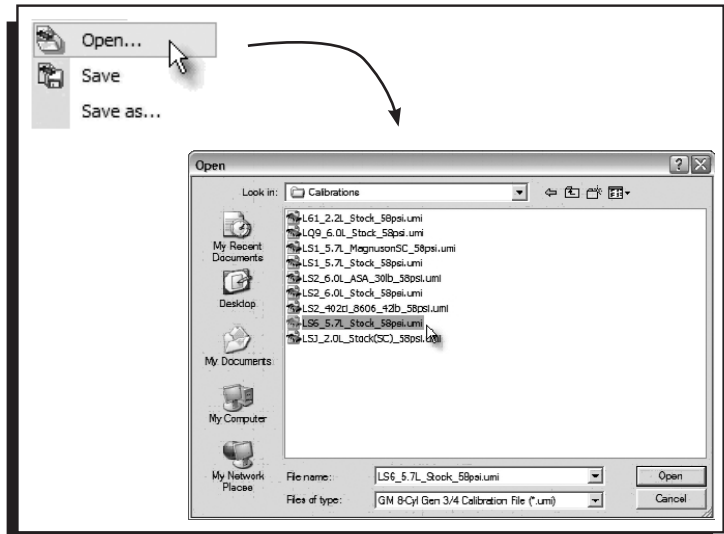


Figure 2 Calibration menu.

6. Once the calibration has been received, go to the Fuel Table in the mode bar to verify that there are values in the Base Fuel Tables. All the cells in the base tables should have values greater than zero. The other fuel tables are used for various other functions and are not critical for a running engine. These tables were all previously set up and unless the engine is not running properly, they should not be changed.

7. Repeat this process for the Spark Tables.

8. **Verify the correct setup is loaded.** Go to the setup tab and verify that each sensor is selected.

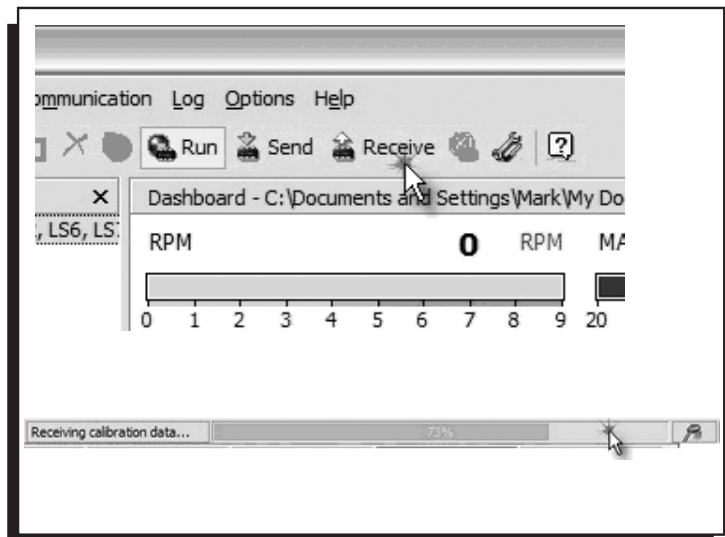


Figure 3 Verify the Calibration.

9. The other tab to check when in the setup screen would be the Rev Limit tab. The engine's rpm can be limited by the coolant temperature of the engine. This allows a sense of security by limiting the engine rpm prior to it reaching proper temperature.

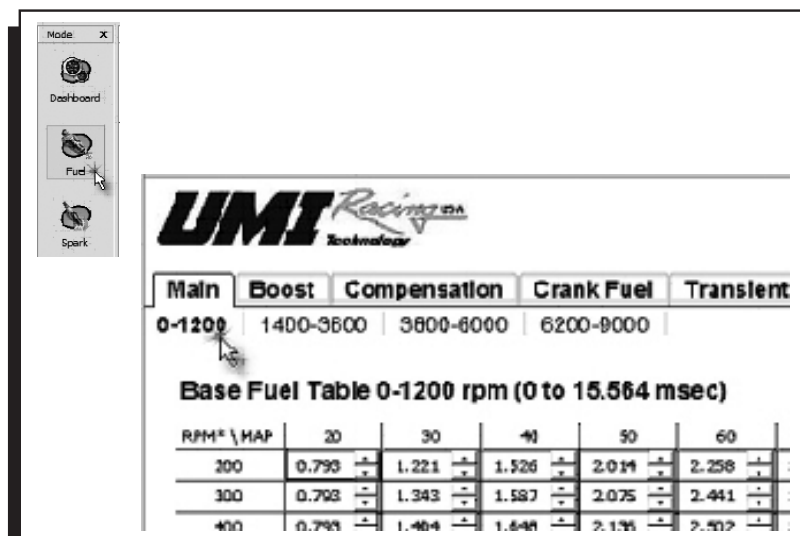


Figure 4 Base Fuel Table.

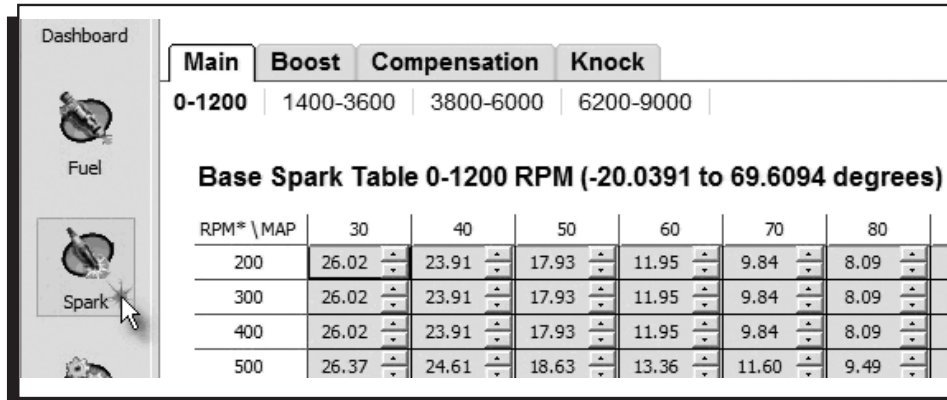


Figure 5 Base Spark Table.

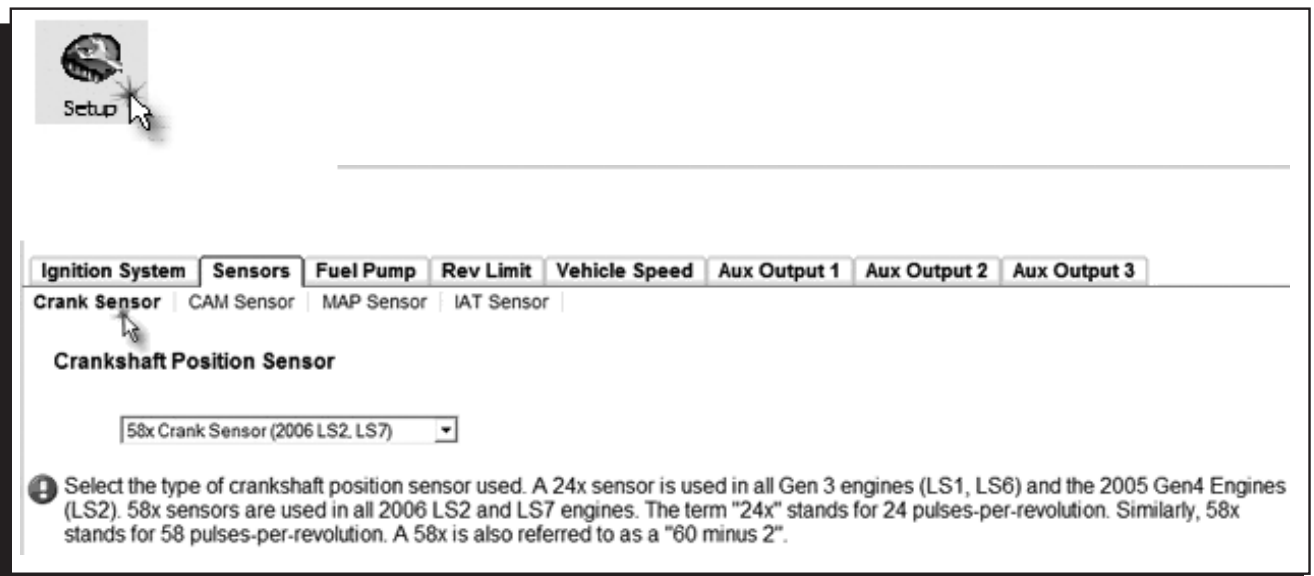


Figure 6 Confirming Sensor Connections.

Section 3: Start engine to Begin Calibration

If this is the first time that the engine is being started, follow the manufacturer’s procedure for start up.

1. With your laptop connected, start the engine and run it through the proper break-in procedure. Check for fault codes on the monitor.

You are now ready to run the engine or perform further tuning. Refer to the InGenius Help menu for assistance with tuning or contact MSD Fuel Injection at 800 275 1615 for assistance.

