

## Using the MAFia with Tuning Software

The best way to use the MAFia is to tune the vehicle for idle and cruise and lower RPM ranges at wide open throttle rpm before you install the MAFia.

Once you have the car running properly install the mafia and set it to 0.

Start the vehicle and make sure that it runs just like it did before the installation of the mafia. (check fuel trims and load)

Once you have checked to make sure the vehicle runs the same, you can set the mafia to the desired setting to support the horsepower you intend to make.

**Make sure the key is off whenever you change the setting on the MAFia.**

You will now apply the necessary changes to your tune to accommodate for the new setting on the MAFia. This can be accomplished two ways.

Method One – works for all tuning software

Using the settings chart, reduce the following parameters in your software by the correction factor.

Fuel Injector Low Slope

Fuel Injector High Slope

Air Mass Displacement of one cylinder

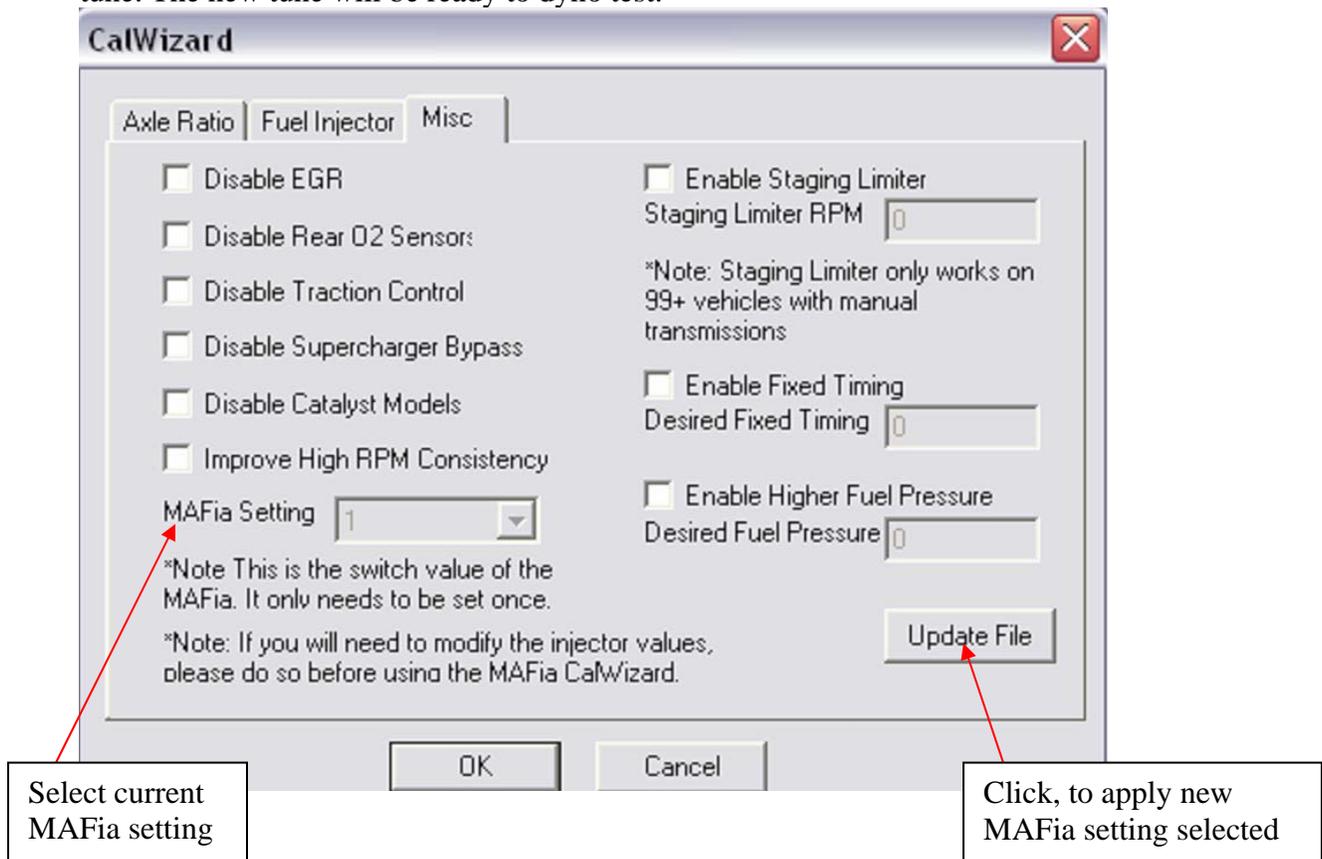
Setting	Correction Factor	Range	Notes
0	No tuning required	Stock	Stock/No Change
1	No tuning required	Stock minus 5%	Leans Signal
2	24% or multiply by .76	5.5v – 5v or .90	Tuning Required
3	41% or multiply by .59	6v-5v or .83	Tuning Required
4	53% or multiply by .47	6.5v-5v or .77	Tuning Required
5	62% or multiply by .38	7v -5v or .71	Tuning Required
6	70% or multiply by .30	7.5v – 5v or .67	Tuning Required
7	No tuning required	Stock plus 5%	Richens Signal

For example

Original tune has a value of 40 for the Fuel Injector Low Slope. You install the MAFia on setting 2. Your new setting for Fuel Injector Low Slope will be  $40 \times .76 = 30.4$

## Method Two

Use the Calibration Wizard in Chipmaster Revolution software and enter the setting you have on the MAFia into the MAFia box in the Calibration Wizard. Then click Update file and save your tune. The new tune will be ready to dyno test.



## Tuning Notes

There are many factors that may affect your tuning. If you apply the correction ratio and the car does not run properly, you may have to modify the correction factor to get the desired results. Here are a few things to keep in mind.

1/When you do the original tune without the MAFia, reset the keep alive memory. Tune the car just like you normally would. Tune Wide Open Throttle as well, once you see 4.9 volts on your mass air flow meter, stop the pull. Your long terms will stay 0 until you turn the adaptive back on.

2/ Load should be between 15-20 %.

3/ Check your fuel trims and loads before the installation of the MAFia. Write them down. Install the MAFia (apply correction factor to tune) and check them again

If your fuel trims are more negative and the load is larger, then try reducing the correction factor and reapply the new correction factor to your original tune.

If your fuel trims are more positive and the load is smaller, then try increasing the correction factor and reapply the new correction factor to your original tune.

4/ Some vehicles may develop a high or erratic idle when the mafia is used on it's higher settings. Lowering the target mass air voltages in the functions can be useful when trying to eliminate idle problems. Reduce the right hand side of the Target Mass Air Functions by the same correction factor as the MAFia setting you are using.