

# Gas Guide

To aid you in adjusting your fuel mixture and monitoring these changes as you drive your vehicle.

## ***WORKS ON...***

Gasoline (unleaded fuel), alcohol, propane, natural gas, nitrous oxide assisted, super-charged, turbo-charged or naturally aspirated engines, by monitoring the oxygen sensor on the engine.

## ***WHAT IT DOES...***

Gas Guide will allow you to view whether your engine is operating at optimum performance (stoichiometric) with the least amount of pollutants being produced and also avoid damaging your engine by running too lean under heavy loads or hard acceleration.

It is generally considered that 14.7% to 1 (first green light) on air/fuel mixture on gasoline, 6.5 to 1 on alcohol, 15.5 to 1 on propane or natural gas are stoichiometric. Stoichiometric defines a chemical reaction that is without side reactions (unwanted). In the case of automotive fuels.

Stoichiometric is where your engine is running cleanest, doing least damage to your catalytic converter and the environment by having complete combustion take place. (Hard acceleration requires a richer mixture and prolonged running under hard acceleration or heavy loads in a lean condition will result in damage to the engine. This happens quicker on propane and natural gas engines.

## ***WHY IT IS IMPORTANT...***

Avoid damaging your engine by running too lean under heavy loads or hard acceleration. This is particularly important on propane and natural gas powered engines as excessive heat caused by lean operation can quickly damage the piston and rings resulting in expensive repairs.

## ***PERFORMANCE...***

A ratio of 13 to 1 will give optimum power output from your engine on gas, which means when tuning, you will run to the last amber light being lit under full acceleration. Gas Guide gives you a window to see the jetting changes you make right away.

