

Fuel Button Overview

Under the Fuel button, users can access various settings that control fuel injection, enrichment, correction factors, and fuel-related compensations. Here's a breakdown of each option shown:

1. Injection Configuration:

Configures the physical aspects of the fuel injectors, including flow rate and injector characterization.

2. Injector Small-Pulse Correction:

Adjusts for injector behavior at low pulse widths, ensuring smooth and consistent fuel delivery during light load or idle.

3. Rear Cylinder VE (Volumetric Efficiency) Table:

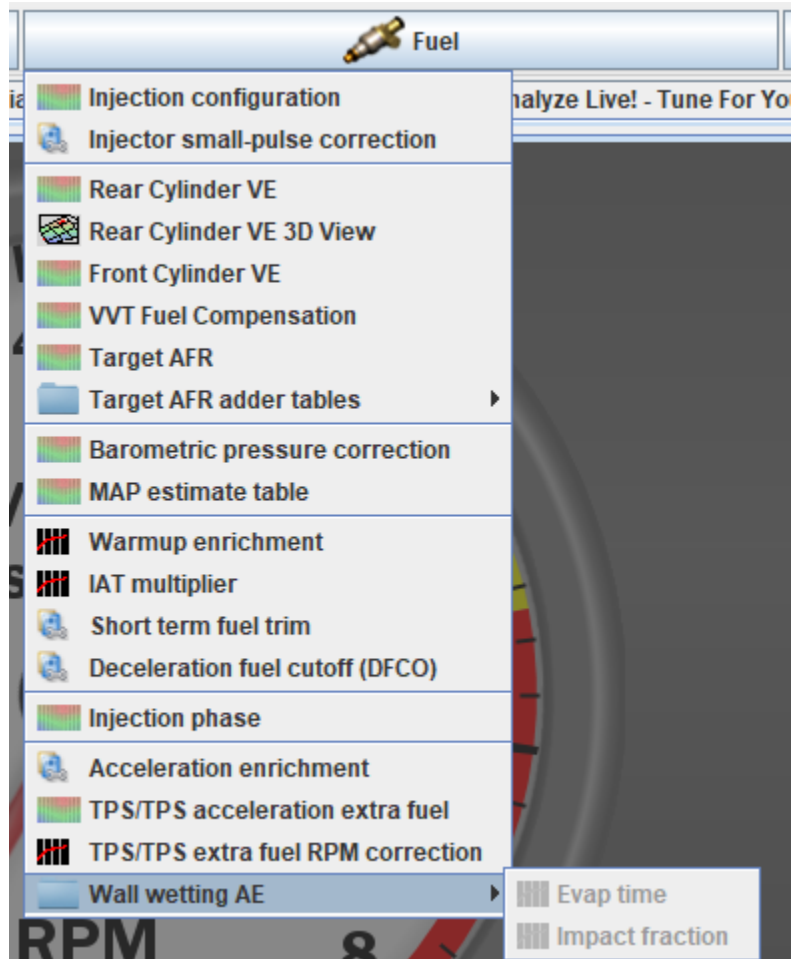
A fuel table where you adjust VE values for different RPM and load conditions to calibrate the rear cylinder's air-fuel mixture.

4. Rear Cylinder VE 3D View: A visual representation of the Rear Cylinder VE table in 3D, making it easier to spot irregularities or trends in fuel delivery.

5. Front Cylinder VE (Volumetric Efficiency) Table: A fuel table where you adjust VE values for different RPM and load conditions to calibrate the Front cylinder's air-fuel mixture.

6. VVT Fuel Compensation: Allows the setup of a secondary VE table for blending purposes, enabling smooth transitions between different fuel demands of different cam timing.

7. Target AFR: Defines the target air-fuel ratio (AFR) for various operating conditions, which the ECU uses to adjust fuel delivery.



8. Target AFR Adder Table: Allows a secondary target afr adder table for blending purposes.

9. Barometric Pressure Correction: Corrects fuel delivery based on ambient air pressure, useful for varying altitudes.

10. MAP Estimate Table: Calculates estimated MAP (manifold absolute pressure) values based on RPM and load, aiding in fuel adjustment in case of MAP Sensor Failure.

11. Warmup Enrichment: Adjusts fuel delivery based on coolant temperature, adding enrichment during warm-up or reducing it during high temperatures.

12. IAT (Intake Air Temperature) Multiplier: Compensates for intake air temperature, which affects air density and, consequently, the air-fuel mixture.

13. Short Term Fuel Trim: Enables closed-loop control using feedback from the oxygen sensor to maintain target AFR.

14. Deceleration Fuel Cutoff (DFCO): Cuts fuel during deceleration to save fuel and improve emissions, typically activated when throttle is closed and RPM is above a certain threshold.

15. Injection Phase: Adjusts the timing of the injection event relative to the intake stroke, enhancing fuel atomization and engine efficiency.

16. Acceleration Enrichment: Adds extra fuel when the throttle is opened quickly, compensating for the sudden influx of air.

17. TPS/TPS Acceleration Extra Fuel: Provides additional fuel enrichment based on current throttle position and target throttle position, helping to maintain AFR during rapid throttle changes.

18. TPS/TPS Extra Fuel RPM Correction: Further refines the amount of fuel added during acceleration based on RPM, providing smoother transitions.

19. Wall Wetting AE: Compensates for fuel that sticks to the intake manifold walls during sudden changes in throttle, ensuring accurate fuel delivery.

Each of these settings offers precise control over fuel delivery, allowing tuners to optimize engine performance, fuel economy, and emissions.