

Cranking Fuel Multiplier

This table adjusts the amount of fuel delivered during cranking based on the engine's coolant temperature.

The multiplier values ensure that the engine receives the appropriate amount of fuel for starting in different temperature conditions.

Understanding the Graph

X-Axis (Coolant Temperature):

- Ranges from -20°C to 90°C in this example.
- Represents the engine's coolant temperature.

Y-Axis (Multiplier Ratio):

- Represents the scaling factor applied to the base fuel mass during cranking.

Typical Behavior

Cold Starts:

- At lower temperatures (e.g., -20°C), the multiplier is higher (e.g., 3.00).
- This delivers significantly more fuel to compensate for poor fuel atomization in cold conditions.

Warm Starts:

- As the temperature increases, the multiplier gradually decreases.
- Around ~60°C and above, the multiplier typically stabilizes at 1.00, indicating no additional fueling is required for starting.

Recommendations

- These values are preconfigured for most engines but may require fine-tuning for modified setups or extreme climates.
- For modified engines, particularly those with larger injectors, adjust the multiplier values proportionally to match the fuel system's characteristics.

