



Engine idling refers to leaving an engine running while the vehicle is not moving, which often occurs while parked or waiting. Engine idling increases the amount of emissions and fuel consumption and deterrents are in place to try and reduce the occurrences.

The Forman Engine Shutdown Unit is designed to reduce vehicle emissions, excess fuel consumption and engine running time by monitoring and limiting vehicle idle time.

The V-ESU monitors the vehicle state to automatically shut down the vehicle engine after a defined period of inactivity. A warning signal is delivered to the driver prior to engine shutdown which allows the driver to cancel the process if required.



Three monitoring inputs

The Engine Shutdown Unit monitors three critical inputs to determine vehicle state and measure periods of inactivity: handbrake, vehicle speed and gearbox position.



Configurable switch settings

The system offers configurable settings for the engine shutdown time delay period. Customers can choose from a 5, 8 or 10 minute delay.



Compatible with VMMS

A pre-warning audio message can be delivered to the driver via the Forman Vehicle Multi-Message System - "Warning, vehicle will shut down in 30 seconds."

How Does V-ESU Work?

The Forman V-ESU monitors the running state of a vehicle through three critical vehicle signals. The recommended signals are:

- Vehicle handbrake applied
- Vehicle not moving (speed below 5 km/h)
- Gearbox in neutral position

When all critical inputs are active for the selected time period, the engine shutdown timer will start. If all inputs remain active for the set time period (5, 8 or 10 minutes), then the unit provides a switch output which can be used to break the ignition switch circuit.

VMMS Integration

The Forman V-ESU can be linked to the VMMS Vehicle Multi-Message System if both systems are installed, allowing audio messages to be delivered to the driver. The system can deliver messages to indicate that the shutdown timer has begun, 'All critical inputs active. Engine shutdown in 5 minutes.' The system can also deliver engine shutdown warnings, such as 'Engine shutting down in 30 seconds.'

V-ESU Key Technical Specification

Power Supply Voltage	16 V to 32 V
Nominal Current Consumption	50 mA
Critical Inputs	3; low-side switched
Auxiliary Inputs	1; low-side switched
Cut Output	Used to energise external relay coil; high-side switched; not short-circuit protected; max. current 150mA.
Warn Output	Low-side switched; max. current 150mA; overcurrent / short circuit protected.

For the complete technical specification and operating instructions, please contact Forman Vehicle Services.

**To find out how we can help you enhance
the safety of your vehicles, call us on
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