Mack Chassis - Idle Shutdown Parameter Configuration; Information For Enabling And Setting Parameters For Idle Shutdown Operation - US07 And Newer Emissions

👍 👎

› **Internal Content**

Definitions

Driver inputs	The driver can press the brake pedal, accelerator pedal or optionally, an override switch to delay or stop idle shutdown in most configurations.
Engine speed control	Engine speed control can be started by the cruise control buttons or by PTO inputs to hold the engine at speed independent of the accelerator pedal.
Permanent Override	Idle shutdown will not occur until vehicle moves and stops again or engine is restarted.
Temporary Suspension	Idle shutdown will not occur while the respective condition is active, e.g. while PTO is active.
Driver alert period	Before the engine is shut down a variable time warning occurs. Some options allow permanent idle shutdown override during this period.

NOTE: The brake and accelerator pedal are driver inputs which can be left applied to indefinitely prevent idle shutdown in previous versions. Later versions have some time and tolerance for change and will otherwise allow idle shutdown even when applied. Parameters governing these functions are only visible to Mack internal operations.

Parameter Information

⌨ Live UI

VECU45Parameter	VECU5Parameter	Title	Description
AL	P1TPI	Idling Automatic Shut-off	Specifies whether the Idle Shutdown feature is to be enabled. When set to YES, also specify the parameters below.
AM	P1BVS	Idling Time, Maximum	Specifies the maximum idle time before automatic idle shutdown.
FMT	P1BVR	Idle Shutdown Warning Time	Specifies the time that an alarm will sound before idle shutdown.
FNC	P1BX8	Idle Shutdown Warm-Up Delay	Enables function of FMY and FNA.

F M Y	P 1 S O V	Idle Shutdown Warm-up Temperature	If the coolant temperature is below this value idle shutdown will be delayed by parameter FNA.
F N A	P 1 S O P	Idle Shutdown Warm-up Timer	If the coolant temperature is below FMY, idle shutdown will be delayed by this time.
C M P	P 1 S O S	Max Engine Temp to Allow Idle Shutdown	Idle shutdown will not start if engine coolant is above this temperature to allow heat dispersion.

⬚ Live UI

C MB Q	P 1 B V V	Enable Permanent Override for Idle Shutdown	If set to YES, any driver input during the 90 seconds immediately before idle shutdown (the "driver alert" period FMT) will prevent Idle Shutdown from occurring during the current cycle (until the vehicle is moved or the ignition switch is turned OFF and back ON again).
			If set to NO, the driver must continuously provide control inputs during the idle period to interrupt the idle shutdown timer and prevent the engine from shutting down.
F N B	P 1 S O J	Idle Shutdown Override with Override Switch	Enables a dash switch as a "driver input". (Mack Truck option).

F P I	P S I O L	1	Idle shutdown Override: Ambient Temp Mode Activation	If set to YES, Idle shutdown can be suspended if the driver activates a driver input during the "driver alert" period, and the ambient temperature is outside a comfort zone established by CMN and CMO. Idle shutdown will be suspended until ambient temperature is in the "comfort zone" at which time the "driver alert" period will be reentered. FND also needs to be set to 1 or 2.
M X B	P B V T	1	Enable Ambient Air Temperature as Entry Condition	If set to YES, Idle shutdown will not start if the ambient temperature is outside a comfort zone established by CMN and CMO.

C MS NO	P 1 O	Min Ambient Temperature to Allow Idle Shutdown	If FPI is set to yes Ambient (outside) temperatures below the set value will allow idle shutdown to be suspended by driver inputs during the warning period. OR If MXB is set to yes Ambient temperatures below the set value will prevent Idle Shutdown from occurring without driver interaction.

⌟ Live UI

C MS OO	P 1 O O	Max Ambient Temperature to Allow Idle Shutdown	If FPI is set to yes Ambient (outside) temperatures above the set value will allow idle shutdown to be suspended by driver inputs during the warning period. OR If MXB is set to yes Ambient temperatures above the set value will prevent Idle Shutdown from occurring without driver interaction.

Live UI

C M L	P 1 B X Z	Disable Park Brake Condition for Idle Shutdown	Specifies whether the parking brake must be set or not in order for the Idle Shutdown to occur. YES means that the status of the parking brake will be ignored. NO means that the parking brake must be set before idle shutdown can occur.

| C MS P | P 1 S O S | Max Engine Temp to Allow Shutdown | Engine coolant temperatures above the set value will prevent Idle Shutdown from occurring, in order to prevent "hot soak" of the engine after shutdown.

The default value of 93 °C (200 °F) was selected by Volvo Powertrain and <u>should not be changed unless specifically instructed</u>. |
| F N D | P 1 S O M | Idle Shutdown Override Sleeper Mode | This parameter is used to modify override options.

If set to 0, the driver need only activate a driver input to override idle shutdown if CMQ is also set to On. "Ambient Conditions" (FPI) will not function and "Engine Speed Control" options e.g. P |

TO and/or engine load will permanently override idle shutdown if activated during the warning period if their respective enable parameter is On.

If set to 1, "Ambient Conditions" (FPI) will function and "Engine Speed Control" options e.g. PTO and/or engine load will permanently override idle shutdown if activated during the warning period if their respective enable parameter is On.

If set to 2, "Ambient Conditions" (FPI) will function. "Engine Speed Control" options remain temporary suspension methods when enabled.

F P P J	P 1 B X 0	Idle shutdown Override with PTO1		While the respective PTO input is active, idle shutdown will be suspended.
F P P K	P 1 B X 1	Idle shutdown Override with PTO2		While the respective PTO input is active, idle shutdown will be suspended.
F P P L	P 1 B X 2	Idle shutdown Override with PTO3		While the respective PTO input is active, idle shutdown will be suspended.
F P P M	P 1 B X 3	Idle shutdown Override with PTO4		While the respective PTO input is active, idle shutdown will be suspended.
F M S W	P 1 S O J	Idle Shutdown Override With Electronic Hand Throttle (PTO 0)		While engine speed control (also called PTO 0 or high idle control) is active Idle shutdown will be suspended.

⌞ Live UI

		The specified engine load (default 20%) is used by the system to decide whether to allow Idle Shutdown to occur while engine speed control is active. This includes "hand throttle" and PTO, as well as wired (remote) PTO.
PCMBMYA 1	Engine Load Limit in PTO to Allow Idle Shutdown	Engine loads greater than the specified value will prevent Idle Shutdown. Engine loads less than the specified load will allow Idle Shutdown to occur, despite being in PTO mode.

Tags

idle shutdown   shutdown parameters   k56645314

Related links and attachments

No links or attachments available

Feedback

Give feedback

to help improve the content of this article

Live UI