



## STAR ONLINE PUBLICATION





**Case Number:** S2509000007

**Release Date:** July 2025

**Symptom/Vehicle Issue:** 6.7L Cummins Comprehensive List Of Elevated Idle Speed Modes

**Discussion:** Some customers may experience an elevated idle with or without accompanying message in the IPC. Reference the chart below and compare against vehicle data to identify reasons why different elevated idle modes may be activated.

	Operating Mode	Vehicle Response	Conditions	Explanation
Common Conditions (Pickup and Chassis Cab)	Cab heat warmup	Idle speed increased to 1000 rpm Message on cluster "Cabin heating in process..." 	Ambient temperature less than 4.4 °C (40 °F) Coolant temperature less than 82.2 °C (180 °F) Pickup Coolant temperature less than 76.6 °C (180 °F) Chassis Cab	The engine goes to an elevated idle speed in order to increase coolant temperature to assist in warming up the cab heater faster.
	Hydrocarbon desorption mode	Idle speed increased to 1000 rpm No message on cluster	Extended idle or light duty operation for 2+ hours accumulated, consecutive time.	The engine goes to an elevated idle speed in order to assist in raising aftertreatment to remove excess hydrocarbons which may accumulate in extended low temperature operation.
	High engine temperatures	Idle speed increased to 1000 rpm Warning on cluster doesn't illuminate immediately at 110 °C, but will if temperature continues to climb. 	Coolant temperature greater than 110 °C (230 °F)	The engine goes to an elevated idle speed in order to increase cooling fan speed to improve radiator and charge air cooler effectiveness.
	Air conditioner idle increase	Idle speed increase to 800 rpm No message on cluster	Ambient temperature greater than 32 °C (90 °F) AC pressure greater than 1379 kPa (200 psi) Vehicle speed exceeded 20 kph (12 mph) during drive cycle	The engine goes to an elevated idle speed in order to improve AC compressor performance.
	Power inverter	Idle speed increases in the range of 700-1500 rpm No message on cluster Screen on radio will display status if selected	AC power inverter draw is high and customer has enabled the feature	The engine goes to an elevated idle speed in order to increase alternator output to support electrical loads on the vehicle's power inverter.
Chassis Cab specific	DeSOx - Highest Sulfation Level	Idle speed increase to 1100 rpm No message on cluster	Internal modeled SCR sulfation level exceeds a threshold	The engine goes to an elevated idle speed in order to assist in raising aftertreatment temperatures to remove sulfur oxides which may accumulate on the SCR.

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

**Contact STAR Center, or your Technical Assistance Center Via TechConnect, eCONTACT or Service Library entry if no solution is found.**