

International® A26 (2022)

Overview: Engine Cold Weather Assist

TABLE OF CONTENTS

General Overview: Engine Cold Weather Assist	. 1
Description and Operation	. 1
Programmable Parameters	. 2
Frequently Asked Questions	. 2
Definitions/Acronyms	. 2

General Overview: Engine Cold Weather Assist

The Engine Cold Weather Assist feature provides ECM programming to enable the Inlet Air Heater to assist with cold weather starting.

This document will address the unique Inlet Air Heater Control functionality for the A26 engine.

Description and Operation

NOTE: Refer to the vehicle operation and maintenance manual, as well as the A26 engine operation and maintenance manual, for additional information on operation and indications.

The Engine Cold Weather Assist feature allows the owner/operator to select the customer programmable parameters for the desired vehicle configuration to include an Inlet Air Heater.

Operation

The intake air heater improves combustion in cold ambient conditions, assisting in cold weather starting and reducing hydrocarbons (white smoke) after starting the engine.

The intake air heater will activate when either the coolant temperature or oil temperature is less than 20 F. If the block heater is plugged in, then the intake air heater will be active when the charge air cooler outlet temperature (CACOT) is less than 20 F.

To activate the intake air heater, turn the ignition switch to ON. The wait-to-start lamp will turn on. This indicates that the glow plug is warming up. It takes 40 seconds for the glow plug to warm up. When the glow plug is ready, the lamp will begin to flash. Start the engine when the lamp is flashing. The lamp will continue to flash while the engine is running. The lamp will turn off when the intake air heater turns off.

The intake air heater will turn off prematurely when one of the following occurs.

- Cranking the engine while the glow plug is warming up.
- Pressing the accelerator pedal while the wait-to-start lamp is flashing.
- The intake manifold gauge pressure exceeds 7.2 psi (500 hPa).

Programmable Parameters

"Customer Programmable" parameters can be adjusted differently than the production assembly plant setting to meet customer's needs. If parameter is indicated as non - customer programmable, the parameter setting is preset from the factory and can't be changed without dealer authorization.

Parameter	Description	Possible	Customer	Recommended
Name		Values	Prgm?	Setting
Glow Plug / Air Inlet Heater Control Mode. (A805 007)	Set parameter to value of (Enable) to enable Glow Plug / Air Inlet Heater. Set parameter to value of (Disable) to disable Glow Plug / Air Inlet Heater	- Disable - Enable	YES	Customer Chosen

Frequently Asked Questions

Q. On trucks, with Body Controllers, do I need to add any programming with Diamond Logic Builder (DLB), to go along with the engine programming?

A. Yes add feature 597052 BCM PROG WAIT TO START IND

Definitions/Acronyms

Acronym	Definition
DLB	Diamond Logic Builder
ECM	Engine Control Module
CACOT	Charge Air Cooler Outlet Temperature