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DID YOU KNOW

DEF Injector and Engine Check at Shut Down

Thank you for purchasing IC buses with the Cummins ISB Engine from Midwest Transit Equipment. Please share the information below with your drivers and technicians.

DEF (Diesel Exhaust Fluid) Injector Purge Cycle

The DEF injector must purge DEF (ammonia and water) each time the engine is shut down. The purge cycle begins once the ignition key is turn "off". This process will take approximately 60 seconds to cycle. This is extremely important in the winter to prevent the injector from freezing and cracking. The injector is approximately \$1,000.00 and Cummins will not cover the repair if damaged from freezing.

Important- Please share with all drivers.

BEFORE ROUTES #1: This option is for the driver that turns the ignition to the "ON" position, without starting the bus, to perform the walk around using the lamp check button on the dash before starting the bus. When the key is turned to the "ON" position, the DEF injector will be filled with DEF. When the driver has completed the inspection, the bus needs to be turned to the "OFF" position to: 1) reset the air intake grid heater 2) purge the injector of DEF. Driver needs to wait 60 seconds before starting the bus.

BEFORE ROUTES #2: This option is for drivers that start the bus to perform the walk around using the lamp check button on the dash. When the key is turned to the "ON" position and engine started the DEF injector will be filled with DEF. Nothing else needs to be completed before operating the bus.

AFTER ROUTES OR TURNING THE BUS "OFF". The DEF injector MUST COMPLETE the purge cycle. The purge will take 60 seconds when the key is turned "OFF". The driver WILL be able to turn the key to the accessory position to disable the "No Student Left Behind" system at shutdown. If the driver turns the key to the "ON" position or restarts the engine before the cycle is completed, a fault code may occur and/or electrical surge to the injector may damage it.

Cummins Computer Software Check

The Cummins ISB engine will go through a self-check once the ignition key is turned "off". The engine will be checking all systems for proper performance. This check will take approximately 90-120 seconds. If this process is not completed, a fault code may be activated.

What Does The Operator Need to Do

Nothing. When the ignition key is turned "off", the Cummins engine will start the process of purging the injector and self-check.

Very Important Note A

Many buses are equipped with a MASTER CUTOFF SWITCH located in the battery box. This switch shuts off all electricity to the engine, body, transmission, and brake computers to prevent battery drain during long weekends, holidays, or summer. If the switch is turned "off" before the DEF injector purge cycle or the Cummins self-check is completed, issues may occur.

THE OPERATOR MUST WAIT A MINIMUM OF 120 SECONDS AFTER TURNING THE IGNITION "OFF" BEFORE TURNING THE MASTER CUTOFF SWITCH "OFF".

Very Important Note B

When the driver/technician shuts the engine off, they must wait 120 seconds before starting the engine again. The purge system needs to complete the cycle before restarting. If the system is currently in the purge cycle and the driver starts the engine, a fault code will appear and will need to be cleared via a computer.

If you have any questions, please feel free to contact our service department at 800 933-2412.