

Reference Sheet



4328789R1

Date: November 2020

SUBJECT: Recommended IC Bus® School Bus Maintenance Intervals

DESCRIPTION

Following recommended maintenance intervals including oil changes is crucial to ensure the performance and longevity of any vehicle.

Recommended service intervals for most commercial and passenger vehicles are based primarily on mileage increments. Typical driving conditions, idle time, distance, and nature of vehicle use contribute to the calculation of the service interval.

Certain factors can compromise performance of the vehicle's engine oil and Diesel Particulate Filter (DPF). These factors include the following:

- Shorter travel distances
- Frequent stop and go conditions
- Lower average speed travel conditions
- Extended periods of high engine idling
- Environment / Terrain
- Weather

These factors can influence the need to increase the frequency of scheduled maintenance intervals for school buses.

To increase uptime and to provide a safe traveling experience, Navistar recommends adjusted scheduled maintenance intervals for oil changes and DPF cleaning for school buses.

If you do not have access to the International® Service PortalSM, please contact 1(800) 44 TRUCK (87835) or your local dealer.

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ADJUSTED OIL CHANGE INTERVALS:

To determine adjusted oil change interval schedules, you will need to define the average speed of the school bus via health report or equivalent. After the average speed is defined, use one of the following formulas to determine an adjusted schedule:

MaxxForce DT: Average Calculated Speed X 550 = Adjusted Mileage

Example: 16.9 mph (avg speed) X 550 (scheduled hour interval) = 9,295 (adjusted mileage)

MaxxForce 7: Average Calculated Speed X 250 = Adjusted Mileage

Example: 16.9 mph (avg speed) X 250 (Navistar recommended hour interval based on oil capacity) = 4,225 (adjusted mileage)

Cummins: Average Calculated Speed X 500 = Adjusted Mileage

Example: 16.9 mph (avg speed) X 500 (scheduled hour interval) = 8,450 (adjusted mileage)

DPF CLEANING INTERVALS:

A diesel particulate filter has its limitations. It must be baked and maintained. FSX is the approved cleaning machine. Excess idle can impact the life of the filter. Whenever possible, limit unnecessary idle time. Navistar recommends the following published maintenance intervals:

MaxxForce DT: 30 months or 6,000 hours

MaxxForce 7: 30 months or 6,000 hours

Cummins: 30 months or 6,500 hours

EXHAUST GAS RECIRCULATION (EGR) COOLER:

The EGR cooler is located within the intake air stream for combustion. An internal leak can allow coolant into the cylinders, affecting combustion and potentially carrying coolant through the engine into the DPF affecting its performance. Pockets of super-heated air can prematurely damage an EGR cooler when coolant level is low. Coolant evacuation and fill machines use shop air to create regulated pressure and a powerful vacuum to assist in preventing low coolant when filling the system. Navistar recommends daily checks / inspections to report low coolant and the use of approved coolant evacuation and fill machines whenever applicable.

ADDITIONAL RECOMMENDATIONS:

In addition, Navistar also recommends the following:

- A policy limiting extended idling
- Add idle shutdown if possible
- Set oil change lights on Maxxforce 7 equipped vehicles to 250 hours
- Drive daily inspection response - especially low levels or loss of coolant and engine oil level
- During preventative maintenance service complete additional inspections for air filler, turbo actuator, and Charge Air Cooler (CAC) for air leaks and excessive oil passage

ADDITIONAL EXTERNAL RESOURCES:

<https://www.fsxinc.com>

<https://www.schoolbusfleet.com/10009652/franklin-tackles-critical-transportation-issues>

<https://www.ccdigital.com/ccj-innovators-penske-in-house-dpf-cleaning/>