MaxxForce® 11 and 13 (2007-2009)

Overview: *Service Interval*

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General Overview: Service Interval

The Service Interval feature provides a visual reminder to the operator that the oil change interval has expired and that routine maintenance should be performed.

This feature measures the distance, time, or fuel used from the last maintenance performed on the vehicle and calculates when the next maintenance is due.

The document will address the service interval functionality for the MaxxForce® 11 and 13.

Description and Operation

The operator interaction for the service interval feature works primarily by means of a visual indicator.

Change Engine Oil – Text Message

The "Change Engine Oil" text message in the gauge cluster indicates that the engine oil change interval has expired.

Service Interval Reset

This function turns off the "Change Engine Oil" indication. The service interval can be reset at your authorized dealer.

To reset the service interval using the cruise switches:

1. Set the parking brake.

2. Turn ON the ignition key switch.

3. Wait 4 seconds.

4. Press and release "CRUISE ON".

5. Press "CRUISE SET" 5 times and hold on the 5th time for 4 seconds.

6. Release "CRUISE SET".

7. "Change Engine Oil" message is reset.

> **IMPORTANT! –** *You only have 6 seconds to complete step 4 and 5.*

- Cycle the ignition key switch and go back to step 3 if the procedure above does not reset the service interval.

Programmable Parameters

The following programmable parameters are related to the service interval feature. These parameters should be programmed in a manner which meets the customer's needs.

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

Parameter Name	Description	Possible Values	Customer Prgm?	Recommended Setting
Service Interval Mode (9500)	This parameter enables or disables the service interval feature. • If set to (0): – The service interval feature is disabled. • If set to (1): – The feature will turn on the "Change Engine Oil" indication if the service interval has expired.	0: Disable 1: Enable	YES	Recommended to set to 1.
Fuel Used Service Interval (9501)	This parameter determines the fuel used between the last service interval reset and when the "Change Engine Oil" indication occurs. Set this parameter to the value recommended in the "MAINTENANCE SCHEDULE AND SERVICE PROCEDURES" section of the "Engine Operation and Maintenance Manual". NOTE: Set this parameter to (0) if a service interval based on fuel used is not desired.	0 to 65535 gallons	YES	Refer to the MaxxForce®11 and 13 Diesel Engines Engine Operation and Maintenance Manual.
Engine Hour Service Interval (9502)	This parameter determines the engine hours between the last service interval reset and when the "Change Engine Oil" indication occurs. Set this parameter to the value recommended in the "MAINTENANCE SCHEDULE AND SERVICE PROCEDURES" section of the "Engine Operation and Maintenance Manual". NOTE: Set this parameter to (0) if a service interval based on engine hours is not desired.	0 to 2000.0 (hr)	YES	Refer to the MaxxForce®11 and 13 Diesel Engines Engine Operation and Maintenance Manual.
Vehicle Distance Service Interval (9503)	This parameter determines the vehicle distance between the last service interval reset and when the "Change Engine Oil" indication occurs. Set this parameter to the value recommended in the "MAINTENANCE SCHEDULE AND SERVICE PROCEDURES" section of the "Engine Operation and Maintenance Manual". NOTE: Set this parameter to (0) if a service interval based on vehicle distance is not desired.	0 to 65535 miles	YES	Refer to the MaxxForce®11 and 13 Diesel Engines Engine Operation and Maintenance Manual.
Service Soon Percent (9507)	This parameter determines the functionality of the "Change Engine Oil" indication. If this parameter is set to 100%, the "Change Engine Oil" indication will occur when one or more intervals (hours, fuel, or distance) have fully expired. If the value is set to 50%, however; the "Change Engine Oil" indication occurs when half of the interval has accumulated. NOTE: Refer to the "calculations" section and the examples at the end of this document to understand how to set this parameter.	5 to 100 (%)	YES	Customer Chosen (See Note)
Service Interval Reset Request (9510)	Set this parameter to a value of (1) to reset the service interval and turn off the "Change Engine Oil" indication. NOTE: The service interval may be reset by means of the cruise control switches. Refer to the Service Interval Reset section in this document for more information.	0: No 1: Yes	YES	Customer Chosen

Calculations

Refer to the following equation before choosing the Service Soon Percent (9507) parameter value.

Equation

Service Soon Percent (9507) =

$$\frac{\text{Desired Service Interval} - \text{Desired Advanced Notice}}{\text{Desired Service Interval}}$$

The Service Soon Percent (9507) parameter determines when the "Change Engine Oil" indication will occur.

To find an appropriate value, input the desired service interval i.e. 25,000 miles (40,234 kilometers)] into the equation. Next, subtract the amount of notification desired prior to the expiration [(i.e. 2,000 miles (3,219 kilometers)]. Last, divide that entire result by the desired service interval.

NOTE: Move the resulting decimal (0.92) two places to the right to establish the percentage (92%) to be in put into the "Service Soon Percent" (9507) parameter.

Equation (Results)

$$0.92 = \frac{25{,}000 - 2000}{25{,}000}$$

Possible Service Interval Applications

This section describes only a few possible applications of the feature and how the programmable parameters can be effectively configured for each application. This is not a comprehensive list, and does not include all possible applications that an owner/operator might encounter.

Please review the description and operation section and the programmable parameters for a better understanding of how the various service interval parameters might be best configured for your vehicle.

(Example A) – Fuel/Hours/Distance Based Service Interval

In this example, let's assume that the customer desires the service interval to be based on fuel used, engine hours, or vehicle distance; whichever occurs first, and they would like to be notified prior to the expiration of the service interval.

Adjust parameters as follows:

Service Interval

Parameter Name	Action Required
Service Interval Mode (9500)	Set to "1"
Fuel Used Service Interval (9501)	Set to the values recommended in the "MAINTENANCE SCHEDULE AND SERVICE PROCEDURES" section of the "Engine Operation and Maintenance Manual". Refer to "Engine Oil and Filter – Service Interval" for details.
Engine Hour Service Interval (9502)	Set to the values recommended in the "MAINTENANCE SCHEDULE AND SERVICE PROCEDURES" section of the "Engine Operation and Maintenance Manual". Refer to "Engine Oil and Filter – Service Interval" for details.
Vehicle Distance Service Interval (9503)	Set to the values recommended in the "MAINTENANCE SCHEDULE AND SERVICE PROCEDURES" section of the "Engine Operation and Maintenance Manual". Refer to "Engine Oil and Filter – Service Interval" for details.
Service Soon Percent (9507)	Set to "90%"

(Example B) – Vehicle Distance Based Service Interval

In this example, let's assume that the customer desires a 25,000 mile (40,234 kilometer) service interval and they would like to be notified exactly 2,000 miles (3,219 kilometers) prior to the expiration of the service interval.

Adjust parameters as follows:

Parameter Name	Action Required
Service Interval Mode (9500)	Set to "1"
Fuel Used Service Interval (9501)	Set to "0"
Engine Hour Service Interval (9502)	Set to "0"
Vehicle Distance Service Interval (9503)	Set to "25,000 miles"
Service Soon Percent (9507)	Set to "92%"

Frequently Asked Questions

Q. I have an "over the road" driver and I want them to be notified 2,000 miles (3,219 kilometers) before the service interval has expired and using a 25,000 mile (40,234 kilometer) interval. How do I set this up?

A. Refer to "Example B" in this document for details.

Definitions/Acronyms

The following terms are referenced in this document:

Acronym	Definition
ECM	Engine Control Module