

1. Service Interval (General Overview)	1
1.1. Feature Codes.....	1
2. Definitions/Acronyms	1
3. Description and Operation	2
3.1. Operation.....	2
3.1.1. <i>Change Engine Oil – Text Message</i>	2
3.1.1. <i>Service Interval Reset</i>	2
3.2. Feature Interaction	2
4. Programmable Parameters	3
5. Parameter Setup	5
5.1. Calculations.....	5
5.2. Possible Service Interval Applications.....	5
6. Frequently Asked Questions	6

1. Service Interval (General Overview)

The service interval feature is designed to provide a visual reminder to the operator that the oil change interval has expired and that routine main procedures should be performed.

The term “interval” in this case is used to describe the distance, time, or fuel used between the last maintenance performed on the vehicle and the next maintenance which is due.

Programmable parameters within the engine control module (ECM) provide options that can be adjusted to suit the customer’s needs. For example, the engine hours, fuel used, and vehicle distance can be used individually or in combination to determine the service interval.

To set up this feature it is recommended that you use one of the example settings, referenced in the “Parameter Setup” section, and then modify only the specific parameters that will help meet your vehicle application.

It is essential that operators are trained to know the maintenance schedules and instructions regarding the operation and reset functionality of the service interval for the feature to be effective. Refer to “Oil Change Indicator” in the appropriate section of the MaxxForce® 11 and 13 Diesel Engines Engine Operation and Maintenance Manual for more information.

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

1.1. Feature Codes

N/A

2. Definitions/Acronyms

The following terms are referenced in this document:

- **ECM** – Engine Control Module

3. Description and Operation

3.1. Operation

The operator interaction for the service interval feature works primarily by means of a visual indication “Change Engine Oil” explained further in this section.

The service interval may be reset by means of the cruise switches or an electronic service tool at your authorized dealer. Refer to the [Service Interval Reset](#) section for more information.

3.1.1. Change Engine Oil – Text Message

The “Change Engine Oil” text message in the gauge cluster indicates that the engine oil change interval has expired. Refer to “Oil Change Indicator” in the MaxxForce® 11 and 13 Diesel Engines Operation and Maintenance Manual for maintenance schedules and recommendations.

3.1.1. Service Interval Reset

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

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.

To reset the service Interval using an electronic service tool:

- Set the “Service Interval Reset Request” (9510) parameter to a value of 1.

3.2. Feature Interaction

N/A

4. 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. This adjustment can be done before or after the original sale. 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 Programmable?	Recommended Setting
Service Interval Mode (9500)	<p>This parameter enables or disables the service interval feature.</p> <ul style="list-style-type: none"> 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. 	<p>0: Disable</p> <p>1: Enable</p>	YES	Recommended to set to 1.
Fuel Used Service Interval (9501)	<p>This parameter determines the fuel used between the last service interval reset and when the "Change Engine Oil" indication occurs.</p> <p>Set this parameter to the value recommended in the "MAINTENANCE SCHEDULE AND SERVICE PROCEDURES" section of the "Engine Operation and Maintenance Manual".</p> <p>Refer to "Engine Oil and Filter – Service Interval" for details.</p> <p>NOTE: Set this parameter to (0) if a service interval based on fuel used is not desired.</p>	0 to 65535 gallons (248077 liters)	YES	Refer to the MaxxForce®11 and 13 Diesel Engines Engine Operation and Maintenance Manual.
Engine Hour Service Interval (9502)	<p>This parameter determines the engine hours between the last service interval reset and when the "Change Engine Oil" indication occurs.</p> <p>Set this parameter to the value recommended in the "MAINTENANCE SCHEDULE AND SERVICE PROCEDURES" section of the "Engine Operation and Maintenance Manual".</p> <p>Refer to "Engine Oil and Filter – Service Interval" for details.</p> <p>NOTE: Set this parameter to (0) if a service interval based on engine hours is not desired.</p>	0 to 2000.0 (hr)	YES	Refer to the MaxxForce®11 and 13 Diesel Engines Engine Operation and Maintenance Manual.

Service Interval

<p>Vehicle Distance Service Interval (9503)</p>	<p>This parameter determines the vehicle distance between the last service interval reset and when the “Change Engine Oil” indication occurs.</p> <p>Set this parameter to the value recommended in the “MAINTENANCE SCHEDULE AND SERVICE PROCEDURES” section of the “Engine Operation and Maintenance Manual”.</p> <p>Refer to “Engine Oil and Filter – Service Interval” for details.</p> <p>NOTE: Set this parameter to (0) if a service interval based on vehicle distance is not desired.</p>	<p>0 to 65535 miles (105468 kilometers)</p>	<p>YES</p>	<p>Refer to the MaxxForce®11 and 13 Diesel Engines Engine Operation and Maintenance Manual.</p>
<p>Service Soon Percent (9507)</p>	<p>This parameter determines the functionality of the “Change Engine Oil” indication.</p> <p>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.</p> <p>If the value is set to 50%, however; the “Change Engine Oil” indication occurs when half of the interval has accumulated.</p> <p>NOTE: Refer to the “calculations” section and the examples at the end of this document to understand how to set this parameter.</p>	<p>5 to 100 (%)</p>	<p>YES</p>	<p>Customer Chosen (See Note)</p>
<p>Service Interval Reset Request (9510)</p>	<p>Set this parameter to a value of (1) to reset the service interval and turn off the “Change Engine Oil” indication.</p> <p>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.</p>	<p>0: No 1: Yes</p>	<p>YES</p>	<p>Customer Chosen</p>

5. Parameter Setup

5.1. Calculations

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

Equation

$$\text{Service Soon Percent}^{\text{®}} (9507) = \frac{\text{Desired Service Interval} - \text{Desired Advanced Notice}}{\text{Desired Service Interval}}$$

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 input into the “Service Soon Percent” (9507) parameter.

Equation (Results)

$$0.92 = \frac{25,000 - 2,000}{25,000}$$

5.2. 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".
Engine Hour Service Interval (9502)	
Vehicle Distance Service Interval (9503)	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 (40,234 kilometers)"
Service Soon Percent (9507)	Set to "92%"

6. 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.