

MaxxForce[®] DT, 9, 10 (2007-2009)

Overview: Vehicle Speed Governor

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General Overview: Vehicle Speed Limiter

The Vehicle Speed Limiter (VSL) feature limits the maximum speed that the vehicle can travel on a level road. This feature could be set to a blend of fuel economy or performance.

The document will address unique VSL functionality for MaxxForce® DT, 9, 10.

Description and Operation

This feature limits the maximum vehicle speed controlled by the accelerator pedal. If your engine reaches a certain speed and feels like it should have more power to travel faster, you are probably traveling at the governed maximum speed limit.

Feature Interaction

• Cruise Control - Maximum cruise control speed cannot exceed VSL.

Programmable Parameters

The following programmable parameters are required for VSL operation. These parameters should be programmed to the operation which will best suit the vehicle conditions expected.

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 authorization.

VSL Parameters

| Parameter Value | Description | Possible Values | Cust Pgrm | Recommended Settings |
|---|---|-------------------------|-----------|---|
| Road Speed Limiting Control Mode (7900) | This parameter is required to be set to 1. | 0: Disable 1: Enable | NO | Must be set to 1 |
| Engine Speed Limit with VSS Fault (7901) | This parameter sets the maximum engine speed allowed when an active vehicle speed sensor (VSS) fault exits and PTO engine speed control is not active. This parameter might be useful in preventing the operator from exceeding the Max Vehicle Speed with Road Speed Limiting On (7902) parameter setting by tampering with the vehicle speed sensor. | 700 to 5,000 RPM | YES | This parameter should be set to match the Max Vehicle Speed with Road Speed Limiting On (7902) parameter setting. |
| Max Vehicle Speed with Road Speed Limiting On (7902) | This parameter sets the maximum accelerator controlled vehicle speed. The engine will not power the vehicle faster than this value. This parameter can be used to encourage driver behavior. | 1 – 99 MPH | YES | Customer Chosen |

Parameter Setup

This example is a basic setup for the VSL parameters.

EXAMPLE A - VSL Configuration

In this example, the customer requires vehicle speed limiter operation with a blend of fuel economy and performance.

Adjust parameters as follows:

| Parameter Name | Action Required |
|--|---|
| Road Speed Limiting Control Mode (7900) | Set to "1" |
| Engine Speed Limiting with VSS Fault (7901) | Set to Engine RPM that will match Max Vehicle Speed in parameter (7902). When setting this parameter take into account Rear Axle Ratio, Tire Revs and Top Gear Ratio. |
| Max Vehicle Speed with Road Speed Limiting On (7902) | Set to "65" mph |

Frequently Asked Questions

N/A

Definitions/Acronyms

The following terms are referenced in this document:

| Acronym | Definition |
|---------|-----------------------|
| ECM | Engine Control Module |
| VSL | Vehicle Speed Limiter |
| VSS | Vehicle Speed Sensor |