International® S13 Integrated (2023)

Overview: *Trip Reporting*

TABLE OF CONTENTS

General Overview: Trip Reporting

The Trip Reporting feature monitors collects and stores engine related operational information. This information can be downloaded and organized into useful reports for the owner or operator.

This document will address the unique trip reporting functionality for the S13 engine.

Description and Operation

> *NOTE: Refer to the vehicle operation and maintenance manual, as well as the S13 engine operation and maintenance manual, for additional information on operation and indications.*

The trip reporting feature is designed to automatically record engine related operational information. This feature records operational data two ways; non-resettable cumulative trip data which consists of running totals, and resettable trip data which consists of data collected since the last trip reset.

The trip reporting data is stored within parameters noted as an accumulator. The accumulator feature monitors, collects and stores engine related operational information. This information can then be downloaded and organized into useful reports using the Navistar ® Engine Diagnostics tool.

Programmable Parameters

The following programmable parameters are available with the trip report feature.

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 cannot be changed without dealer authorization.

Parameter Value	Description	Possible Values	Cust Pgrm?	Recommended Settings
Hard Brake Incident Monitor Enable (HBDRT) (B109 000)	This parameter enables the hard brake monitor in the vehicle activity report	0 – Disabled 1 - Enabled	NO	1 - Enabled
Hard Brake Decel Rate Threshold (HBIME) (B109 001)	This parameter sets up the hard brake monitor sensitivity in the vehicle activity report.	0 – 260.98 MPH/S	YES	8.70 MPH/S

Accumulator Parameters

The following parameters are available for cumulative data with the trip reporting feature. These parameters, in the PIM, consist of non-resettable, running total (i.e. life of vehicle) data that may not be changed without dealer authorization.

Parameter Value	Description
Total Drive Fuel Used (TDFU) (B203 028)	This parameter indicates the total fuel consumed.
Total Engne Run Time (TERT) (B204 00C)	This parameter indicates the total time that the engine has been running.
Total Vehicle Distance (TVD) (B204 009)	This parameter indicates the total miles that the vehicle has traveled.
Total Time at Idle (TTI) (B203 024)	This parameter indicates the total engine run time at idle. **NOTE:** Idle time starts to accumulate when the vehicle begins to idle (engine speed is less than low idle speed plus some offset). Idle time stops accumulating when this condition is no longer met.
Total Idle Fuel Used (TIFU) (B203 025)	This parameter indicates the total fuel consumed while the engine has been at idle. **NOTE:** Idle fuel used value starts to accumulate when the engine speed is less than low idle plus some offset. Idle fuel used value stops accumulating when this condition is no longer met.
Total AESC Fuel Used (TAESCFU) (B201 00B)	This parameter indicates the total fuel consumed while AESC has been active.
Total Engine On Time in AESC (TEONAESC) (B201 000)	This parameter indicates the total time that the Power Take-Off (AESC) has been active.
Total Number of Requested Regenerations (B203 002)	This parameter indicates the total number of After Treatment Regeneration operator requests.
Total Average Vehicle Speed (B204 008)	This parameter indicates the total average vehicle speed.
Vehicle Overspeed - Level 1 Incidents (B204 012)	This parameter indicates the total number of occurrences when the vehicle has exceeded a programmed vehicle speed limit.
Vehicle Overspeed - Level 2 Incidents (B204 012)	This parameter indicates the total number of occurrences when the vehicle has exceeded a programmed vehicle speed limit.

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Parameter Value	Description
Total Hard Braking Incidents (B202 024)	This parameter indicates the total number of hard brake occurrences.

The following parameters, in the PIM, are available for trip data with the trip reporting feature. These parameters consist of data collected since the last trip. The values may only be reset using a service tool.

Parameter Value	Description
Trip Engine Run Time (TERT) (B200 01E)	This parameter indicates the time that the engine has been running since the last trip reset.
Trip Idle Engine Hours (B205 025)	This parameter indicates the time that the engine has been running at idle since the last trip reset.
Trip Fuel used in Idle. (B205 023)	This parameter indicates the fuel consumed at idle since the last trip reset.
Trip Percent At Idle (B205 024)	Percent of idle duration time during a trip.
Trip average vehicle speed (TAVS) (B200 01C)	This parameter indicates the average vehicle speed since the last trip reset.
Trip Distance (TD) (B200 01D)	This parameter indicates the distance the vehicle has traveled since the last trip reset.
Trip Fuel Used (TFU) (B200 00B)	This parameter indicates the fuel consumed since the last trip reset.
Trip Hard Braking Incidents (B201 024)	This parameter indicates the number of hard brake occurrences since the last trip reset.
Trip Maximum Engine Speed (B205 01B)	This parameter indicates the maximum engine control module (ECM) recorded engine speed since the last trip reset.
Trip Mobile AESC Fuel Used (B202 030)	This parameter indicates the fuel consumed during mobile power take-off (AESC) operation since the last trip reset.
AESC Trip Time (B202 024)	This parameter indicates the time that the engine has been running during AESC operation since the last trip reset.

Parameter Value	Description
AESC Mode 1 Trip Fuel Used (B200 010)	This parameter indicates the fuel consumed during AESC Mode#1 operation since the last trip reset.
AESC Mode 2 Trip Fuel Used (B200 011)	This parameter indicates the fuel consumed during AESC Mode#2 operation since the last trip reset.
AESC Mode 3 Trip Fuel Used (B200 012)	This parameter indicates the fuel consumed during AESC Mode#3 operation since the last trip reset.
AESC Mode 4 Trip Fuel Used (B200 013)	This parameter indicates the fuel consumed during AESC Mode#4 operation since the last trip reset.
AESC Mode 5 Trip Fuel Used (B200 014)	This parameter indicates the fuel consumed during AESC Mode#5 operation since the last trip reset.
AESC Mode 6 Trip Fuel Used (B200 015)	This parameter indicates the fuel consumed during AESC Mode#6 operation since the last trip reset.
Trip Engine On Time AESC Device 1 (B202 01D)	This parameter indicates the time that the engine has been running while AESC Device #1 has been active since the last trip reset.
Trip Engine On Time AESC Device 2 (B202 01E)	This parameter indicates the time that the engine has been running while AESC Device #2 has been active since the last trip reset.
Trip Engine On Time AESC Device 3 (B202 01F)	This parameter indicates the time that the engine has been running while AESC Device #3 has been active since the last trip reset.
Trip Engine On Time AESC Device 4 (B202 020)	This parameter indicates the time that the engine has been running while AESC Device #4 has been active since the last trip reset.
Trip Engine On Time AESC Device 5 (B202 021)	This parameter indicates the time that the engine has been running while AESC Device #5 has been active since the last trip reset.
Trip Engine On Time AESC Device 6 (B202 022)	This parameter indicates the time that the engine has been running while AESC Device #6 has been active since the last trip reset.
Trip Engine Brake Activations (TEBA) (B205 00C)	This parameter indicates the number of engine brake activations since the last trip reset.
Trip Engine Brake Distance (TEBD) (B205 00B)	This parameter indicates the distance traveled, with the engine brake active, since the last trip reset.

Parameter Value	Description
Trip Engine Brake Time (TEBT) (B205 00D)	This parameter indicates the time the engine brake was active since the last trip reset.
Trip Fan On Time in Engine Brake (TFOTEB) (B205 018)	This parameter indicates the time the fan was on, while the engine brake was active since the last trip reset.
Trip Service Brake Activations (TSBA) (B202 00B)	This parameter indicates the number of times the service brake was activated since the last trip reset.
Trip Service Brake Distance (TSBD) (B202 000)	This parameter indicates the distance traveled, with the service brake applied, since the last trip reset.
Trip Service Brake Time (TS) (B202 011)	This parameter indicates the time the service brake was applied since the last trip reset.

Frequently Asked Questions

The driver needs to know how to improve their driving in conjunction with printed trip reports. What do we have for trip information on the dash?

The following are capable of being displayed on most clusters: odometer, trip odometer, total engine hours, trip hours, PTO hours, instantaneous fuel economy, trip average fuel economy, front axle load and rear axle load.

Refer to the operator's manual for detailed information on what is shown with your model.

Is it possible to reset an individual trip accumulator value?

No, all trip values are cleared at the same time with a service tool.

Definitions/Acronyms

The following terms are referenced in this document:

Acronym	Definition
AESC	Auxiliary Engine Speed Control
CEM1	Engine Control Module
ECT	Engine Coolant Temperature
EOP	Engine Oil Pressure
EOT	Engine Oil Temperature
PTO	Power Take-Off

PIM	Powertrain Interface Module