

DRIVER INFORMATION DISPLAY MANUAL



Volvo Trucks. Driving Success.®



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This manual contains information concerning the safe operation of your vehicle. It is extremely important that this information is read and understood before the vehicle is operated. Please keep this manual in the vehicle at all times.

NOTE

It is important that this manual stays with the vehicle when it is sold. Important safety information must be passed on to the new customer.

NOTE

Illustrations in this manual are used for reference only and may differ slightly from the actual vehicle, however, key components addressed in the manual are represented as accurately as possible.

All information, illustrations and specifications contained in this manual are based upon the latest product information available at the time of publication. Volvo Trucks North America reserves the right to make changes at any time or to change specifications or design without notice and without incurring obligation.

The National Highway Traffic Safety Administration (NHTSA) and Volvo Trucks North America should be informed immediately if you believe that the vehicle has a defect that could cause a vehicle accident, injury or death.

Contact NHTSA by calling the Auto Safety Hotline at 1 (888) 327-4236, by writing to NHTSA, U.S. Department of Transportation, Washington, DC 20590, by TTY at 1 (800) 424-9153, or visit their website at www.nhtsa.dot.gov.

Volvo Trucks North America

Greensboro, NC USA

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SAFETY INFORMATION

IMPORTANT: Before driving this vehicle, be certain that you have read and that you fully understand each and every step of the driving and handling information in this manual. Be certain that you fully understand and follow all safety warnings. It is extremely important that this information is read and understood before the vehicle is operated.

IT IS IMPORTANT THAT THE FOLLOWING INFORMATION BE READ, UNDERSTOOD AND ALWAYS FOLLOWED.

The following types of advisories are used throughout this manual:

DANGER

Danger indicates an unsafe practice that could result in death or serious personal injury. Serious personal injury is considered to be permanent injury from which full recovery is NOT expected, resulting in a change in life style.

WARNING

Warning indicates an unsafe practice that could result in personal injury. Personal injury means that the injury is of a temporary nature and that full recovery is expected.

CAUTION

Caution indicates an unsafe practice that could result in damage to the product.

NOTE

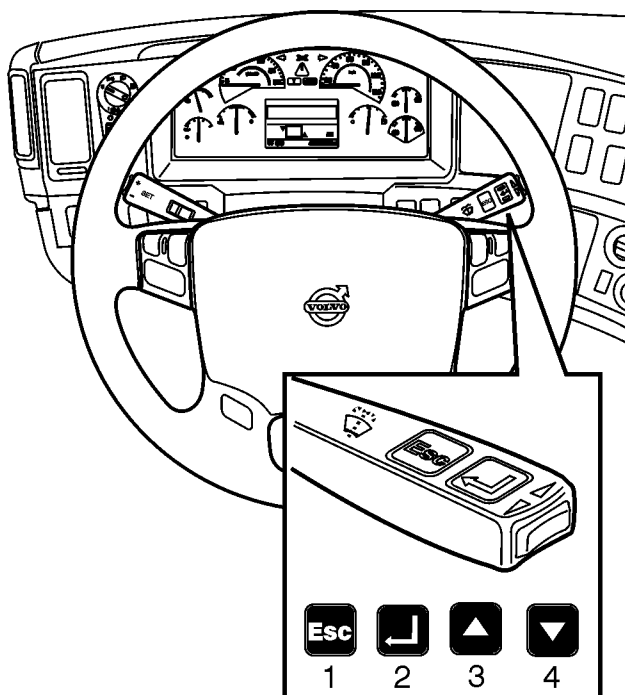
Note indicates a procedure, practice, or condition that must be followed in order for the vehicle or component to function in the manner intended.

Labels

Danger, Warning, Caution and Advisory labels are placed in various locations of the vehicle to alert drivers and service technicians about situations that may lead to personal injury or equipment damage. In the event that a label is damaged or missing the **label must be replaced**. Contact your authorized Volvo Truckdealer for assistance regarding labels.

STALK SWITCH CONTROL LEVER

The stalk switch control lever is used to interact with the DID. The lever is located on the right-hand side of the steering wheel.



4 Driver Information Display (DID)

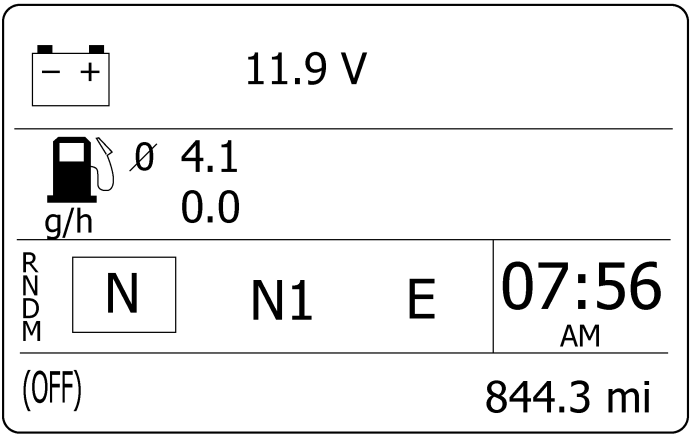
Stalk Switch Functions

- The Esc or Escape button is used to return to the previous menu or display, or to cancel a setting or operation.
- The Enter button is used to display a list of menus, open a menu, and select a chosen value.
- The Up arrow is used to scroll up through a menu and to increase numerical values.
- The Down arrow is used to scroll down through a menu and to decrease numerical values.

In key off mode, press Enter to display the time and odometer for 30 seconds.

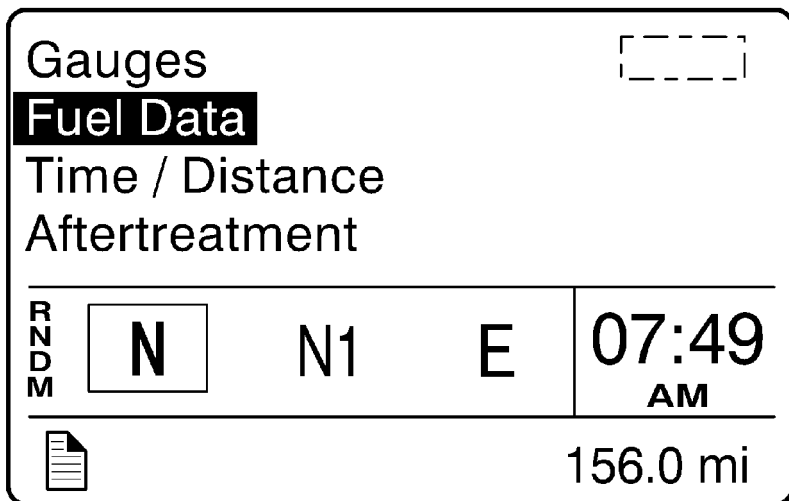
Selecting a Menu

The following drawing is the current condition screen. This is what is displayed when starting the truck and also while driving.



Current Conditions Screen

1. Press the Enter button to display the available menus.
2. Use the up and down arrows to scroll through the list of menus.
3. Press the Enter button to open the selected menu.
4. Press the Esc button to return to the previous menu or display, or to cancel a setting or operation.

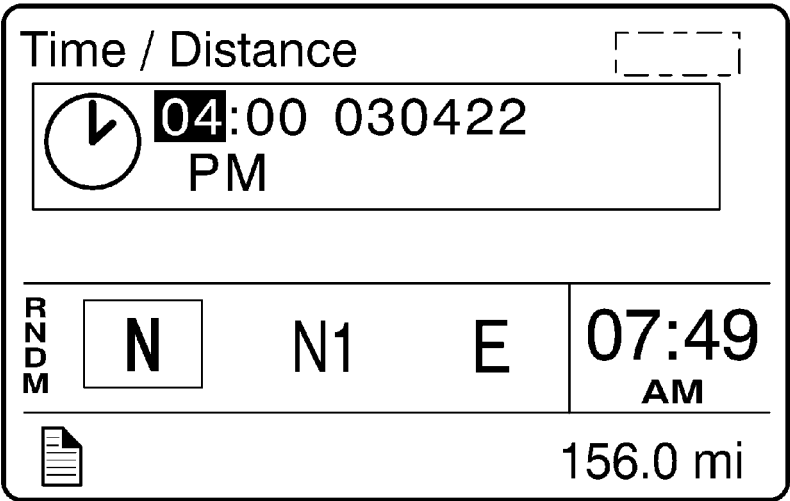


6

Driver Information Display (DID)

Changing Settings

- 1. The up and down arrows increase and decrease set values.
- 2. Press the Enter button to confirm the choice and move to the next position.
- 3. Press the Esc button to return to the previous position, or to cancel a setting or operation.



BASIC LEVEL INSTRUMENT CLUSTER DID

The basic Driver Information Display (DID) is located in the center of the basic level instrument cluster. The DID displays digital gauges, main menus and sub-menus that provide necessary and important information to the vehicle operator. The information available to the operator depends on vehicle configuration.

There are two sections of display information in the basic DID:

- Top — Menus and gauges
- Bottom — Odometer

The default display is clock and odometer. Press the Enter button to display the menu.



1. Menus and gauges

2. Odometer

Basic Menus

NOTE

Depending on vehicle configuration, some menus may not be available.

The following menus are available with the basic DID.

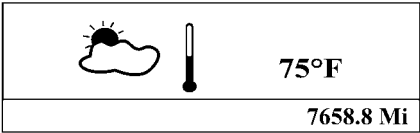
- Digital Gauges
 - Outside Temperature
 - Distance to Destination
- Display Settings
 - Contrast
 - Backlight
- Time/Date
- Aftertreatment
 - Initiate REGEN
 - ATS Status
 - Cancel REGEN
- Setup
 - Language
 - Distance
 - Temperature

8

Driver Information Display (DID)

Digital Gauges

1. Outside Temperature

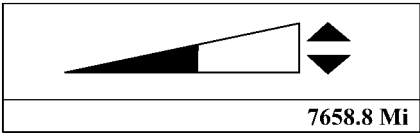


2. Distance to Destination

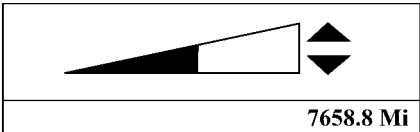


Display Settings

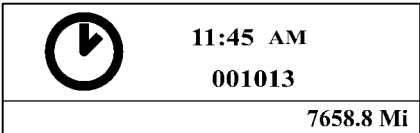
1. Contrast



2. Backlight



Time/Date



Aftertreatment Status

The Aftertreatment status submenus provide information about the conditions required for performing a regeneration. The status can be OK (regeneration allowed), CHECK (regeneration not allowed) or N/A (not applicable). When ATS Status is selected, the following submenus are available.

Clutch	OK	▲
Service Brake	OK	
PTO Status	OK	▼
<hr/>		
7721.4 mi		

To perform a parked regeneration, the clutch pedal must not be depressed, the service brake must not be engaged and a PTO must not be engaged or the PTO must be able to operate above the minimum engine speed required.

Acc Pedal	OK	▲
Neutral	OK	
Vehicle Speed Above	OK	▼
<hr/>		
7721.4 mi		

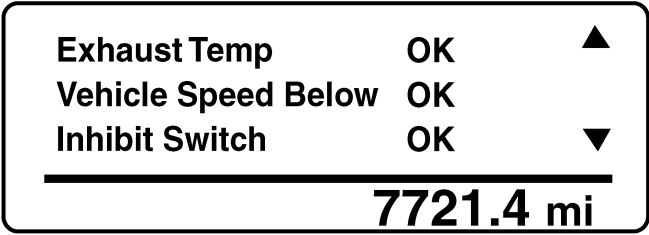
To perform a parked regeneration, the accelerator pedal must not be depressed, the transmission must be in the neutral position and the vehicle speed must not be above zero.

Park Brake	OK	▲
System Fault	OK	
System Timeout	OK	▼
<hr/>		
7721.4 mi		

To perform a parked regeneration, the park brake must be engaged and there can be no active fault codes. The system will time-out if the duty cycle is inadequate to support an automatic regeneration or if there is a problem that is preventing regeneration. Attempt to perform a parked regeneration or take the vehicle to a Volvo Truck dealer for a service regeneration.

Temporary Lockout	OK	▲
Permanent Lockout	OK	
Engine Temp	OK	▼
<hr/>		
7721.4 mi		

Temporary lockout prevents performing a regeneration when a regeneration is not needed. Permanent lockout prevents performing a regeneration when a condition exists that requires vehicle service. Take the vehicle to a Volvo Truck dealer. A minimum engine temperature of 35°C (95°F) is required for regeneration.



A minimum exhaust temperature of 250°C (482°F) is required for regeneration. The minimum vehicle speed for an automatic regeneration is 40 km/h (25 mph). When Disable REGEN is selected in the Cancel REGEN submenu, regeneration is inhibited. Select Enable REGEN to allow regeneration.

Setup

1. Language

<input checked="" type="checkbox"/> English <input type="checkbox"/> Espanol <input type="checkbox"/> Francais	7658.8 Mi
--	-----------

2. Distance

<input type="checkbox"/> km <input checked="" type="checkbox"/> Miles	7658.8 Mi
--	-----------

3. Temperature

<input checked="" type="checkbox"/> °C <input type="checkbox"/> °F	7658.8 Mi
---	-----------

MID-LEVEL AND HIGH-LEVEL INSTRUMENT CLUSTER
DID

NOTE

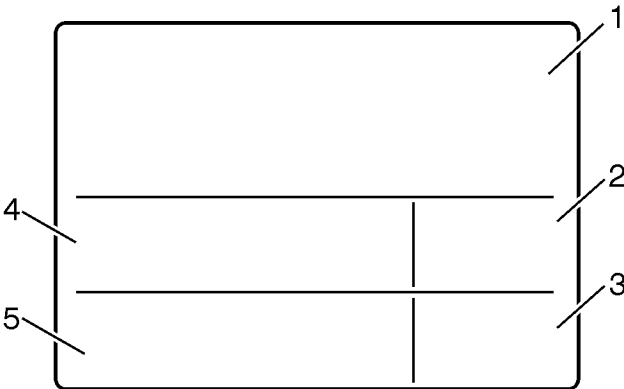
Depending on vehicle configuration, some menus may not be available.

The Driver Information Display (DID) is located in the center of the mid-level and high-level instrument clusters. It displays digital gauges, main menus and sub-menus that provide necessary and important information to the vehicle operator.

The information available to the operator depends on vehicle configuration, and whether the vehicle is in operation or parked. Certain functions are password-protected and are not shown until the correct password is entered. See “Password” on page 70.

There are three sections of display information in the DID:

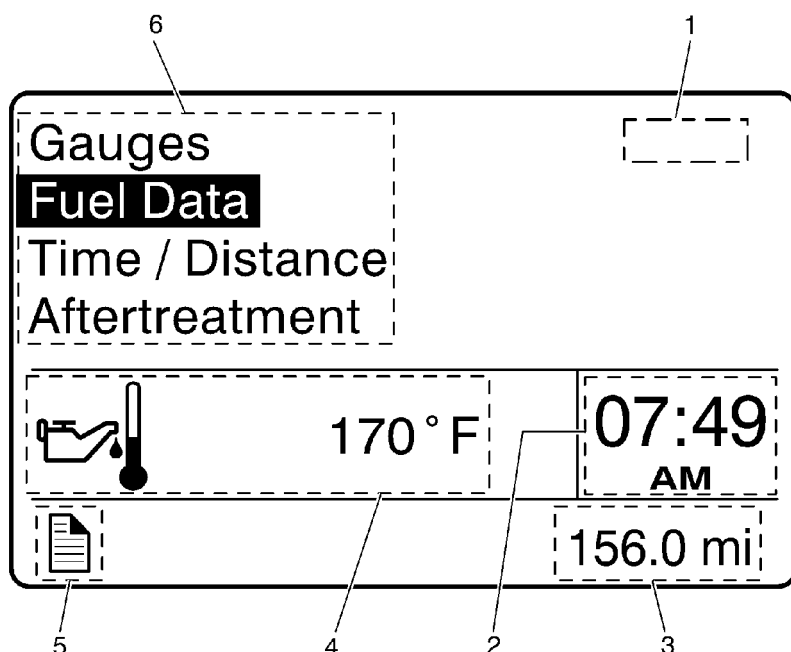
- Top — Messages and available menus
- Middle — Favorite display
- Bottom — Current status and odometer



1. Messages and Available Menus 2. Clock 3. Odometer	4. Favorite Display 5. Current Status
--	--

The top section displays messages, selected digital gauges, and the available DID menus. The favorite display, clock, odometer and current status are always visible. The current status section provides status information required at all times.

DID, example screen view:



1. Indicates First of Six Available Menus (varies by menu)
2. Clock
3. Odometer

4. Favorite Display
5. Current Status Icon(s)
6. Messages and Available Menus

Mid-Level and High-Level DID Menus

There are **Driving** and **Non-Driving** menus. Several sub-menus are password-protected while the vehicle is parked. The Non-Driving menu is accessible **only** when the vehicle is parked.

Driving Menus

- Gauges
 - Current Gear Position (Automated Transmission)
 - Outside Temperature
 - Temperature Engine Oil
 - Temperature Transmission
 - Battery Voltage
 - Axle Temperature (Front/Rear)
 - Air Suspension (Front/Rear)
 - Volvo Link Compass
- Fuel Data
 - Instantaneous Gallons per Hour
 - Trip Fuel Used
 - Distance to Empty
 - Fuel Economy
 - Idle Percent
 - Sweet Spot/Performance Bonus
 - Sweet Spot Percentage
 - Road Speed Limit
- Time/Distance
 - Time and Date
 - Alarm Clock
 - Distance to Destination
 - Average Trip Speed
 - Estimated Time of Arrival (ETA)
- Aftertreatment
 - Request Parked REGEN
 - ATS Status
 - Cancel REGEN

- Volvo Link
 - Read Message
 - Send Message
 - Other Info
- Display
 - Black Panel
 - Favorite Display
 - Backlight
 - Favorite Display Setting
 - Night/Day
- Vehicle Messages
- Reset

Digital Gauges in the DID (High and Mid Level Cluster Only)

There are several gauges in the Gauges menu. The number of gauges your vehicle is programmed with depends on the equipment level of the vehicle. The gauges are used to view current status of important functions in the vehicle.

All gauges are programmed into the instrument cluster and are therefore **visible only** in the DID.

- Current Gear Position (Automated Transmission)
- Outside Temperature
- Engine Oil Temperature
- Transmission Temperature
- Battery Voltage
- Front and Rear Axle Temperature
- Front and Rear Suspension Pressure
- Volvo Link Compass

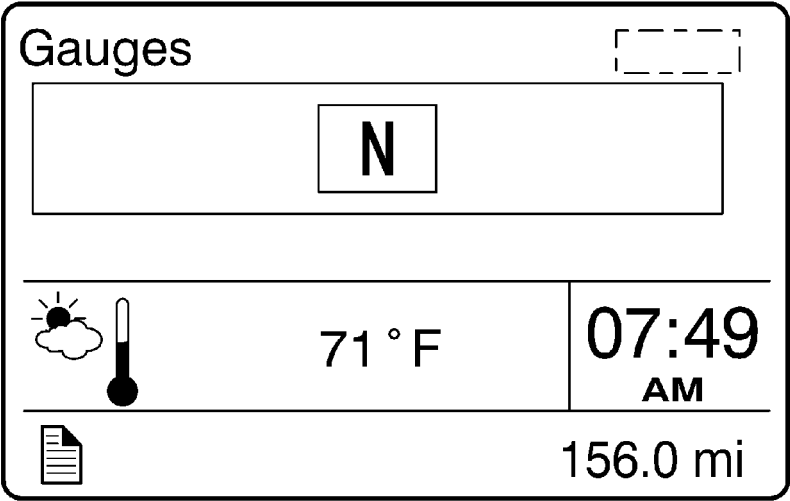
1. Current Gear Position (Automated Transmission)

NOTE

When the vehicle is equipped with an automated transmission, the current transmission gear position is always displayed in the favorites display section.

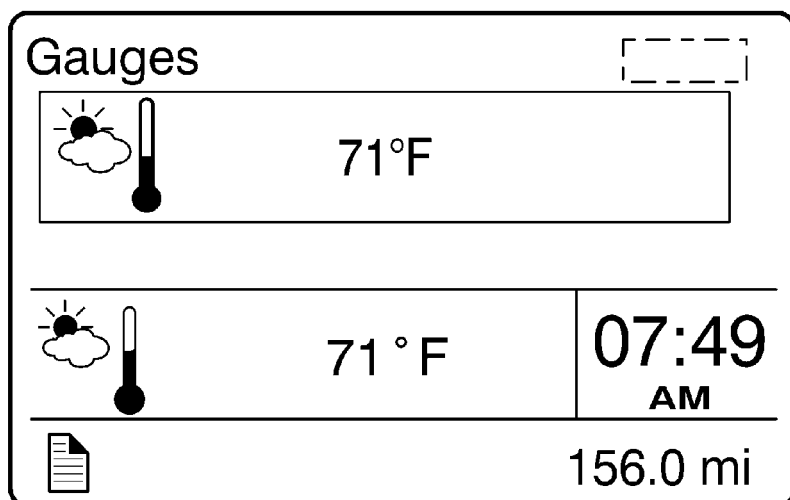
The current gear position gauge is standard with automated transmissions.

- N = Neutral
- R = Reverse
- Forward Gear = 1–18 (varies with type of transmission)



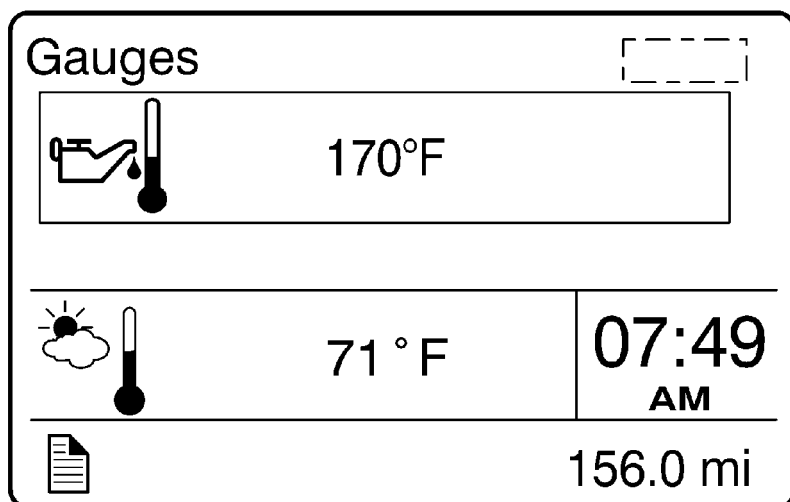
2. Outside Temperature

The outside temperature gauge is optional.

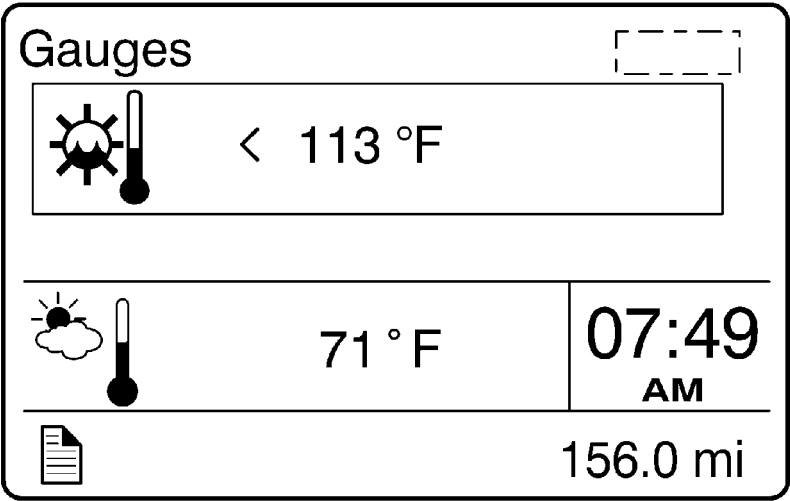


3. Engine Oil Temperature

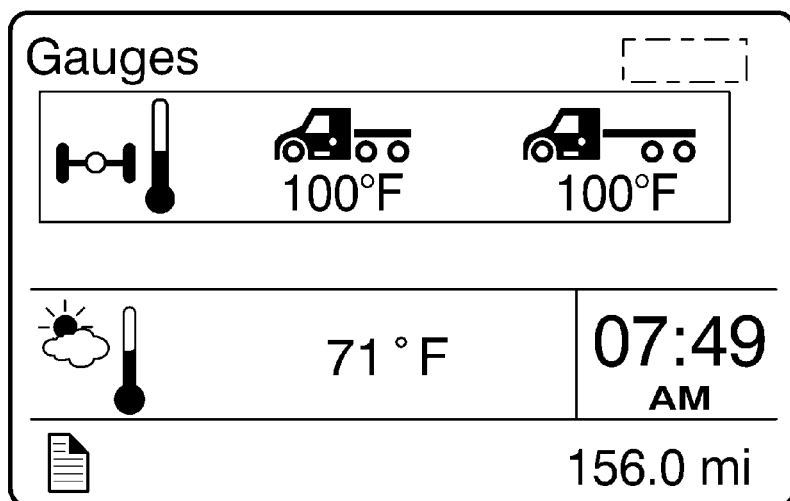
The engine oil temperature is displayed as illustrated.



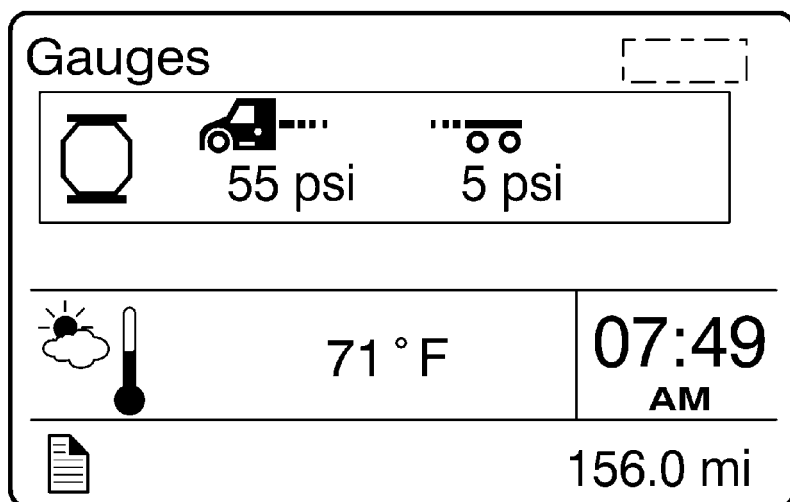
4. Transmission Oil Temperature



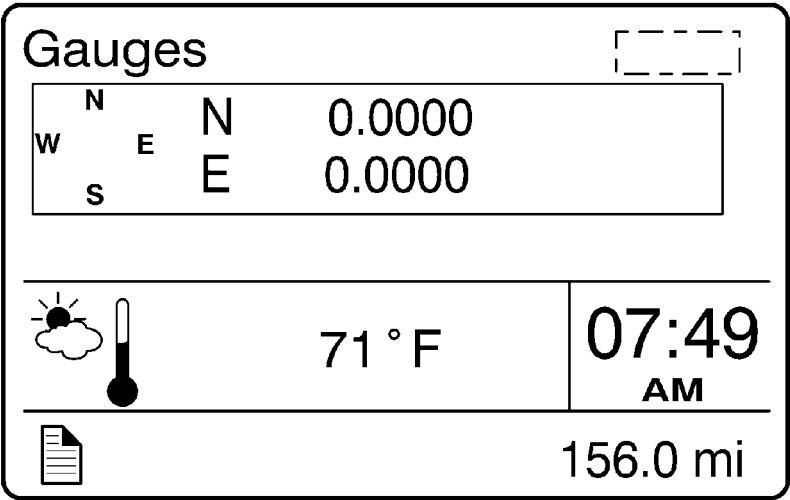
6. Front and Rear Axle Temperature



7. Front and Rear Suspension Pressure



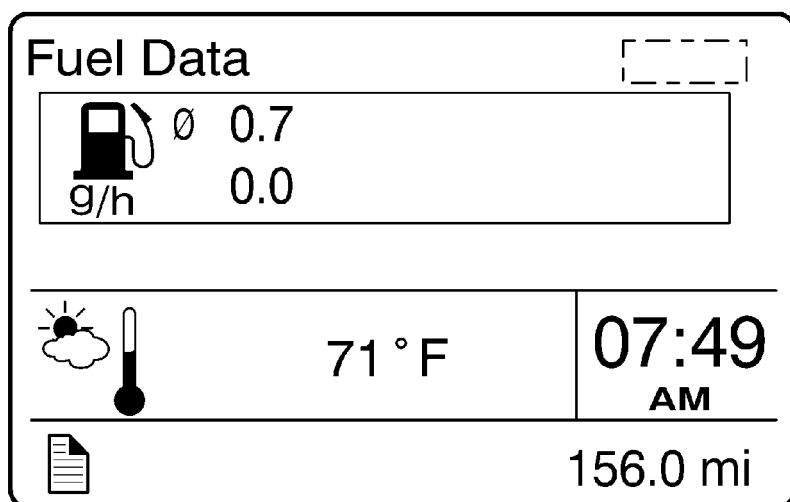
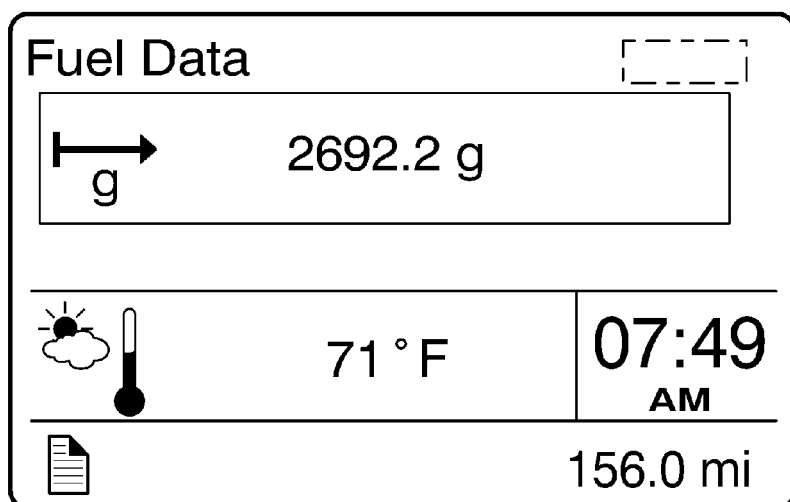
8. Volvo Link Compass



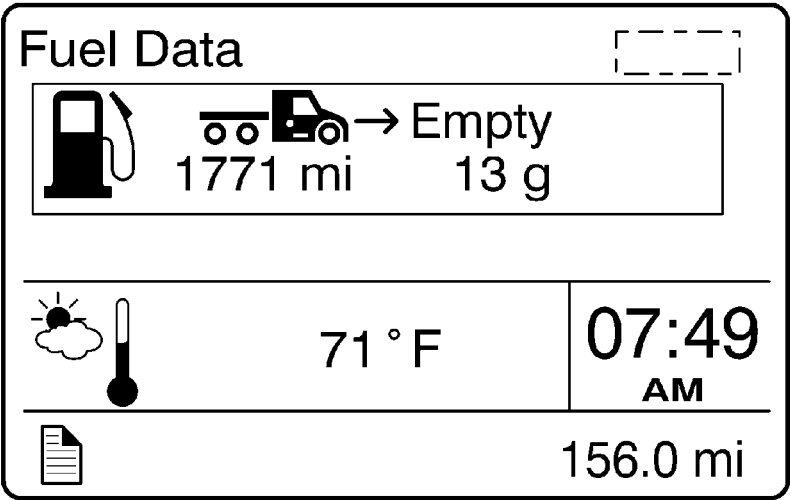
Fuel Data

The Fuel Data menu provides information on the fuel consumption of the vehicle in various situations. For example, how much fuel has been used, how much fuel is remaining, how much fuel is remaining before refueling the vehicle.

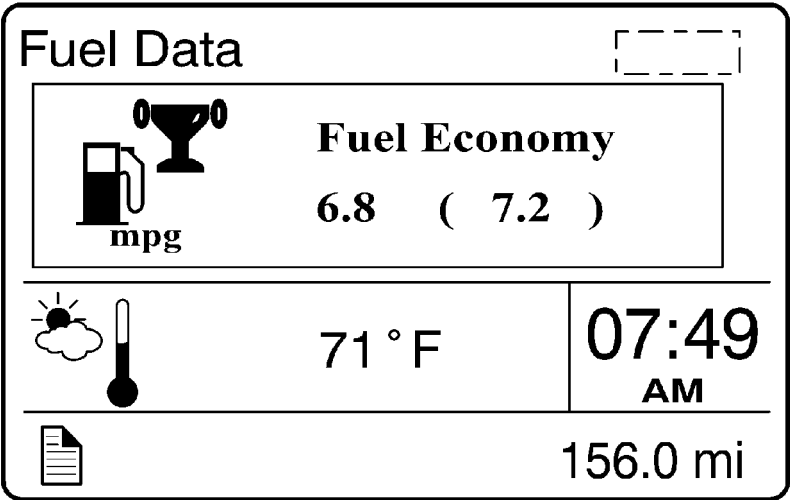
- Instantaneous Gallons Per Hour
- Trip Fuel Used
- Distance to Empty
- Fuel Economy
- Idle Percent
- Sweet Spot/Performance Bonus
- Sweet Spot Percentage
- Road Speed Limit

1. Instantaneous Gallons Per hour*2. Trip Fuel Used*

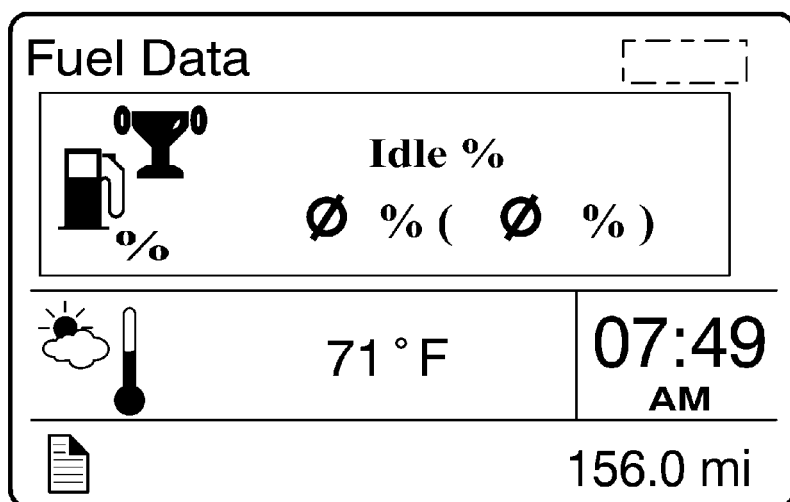
3. Distance to Empty



4. Fuel Economy



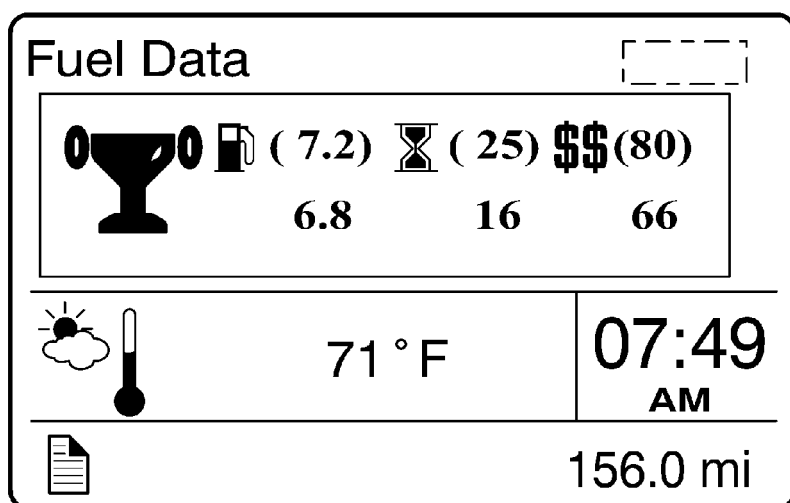
5. Idle Percent



6. Sweet Spot/Performance Bonus

NOTE

For information about sweet spot data, refer to Performance Bonus Guide in the vehicle operator's manual.



7. Sweet Spot Percentage

NOTE

For information about sweet spot data, refer to Performance Bonus Guide in the vehicle operator's manual.


Fuel Data


\$\$

%

Sweet Spot %

64%






71 °F

07:49


AM



156.0 mi

8. Road Speed Limit


Fuel Data




mph

Road Speed Limit

--






71 °F

07:49

AM



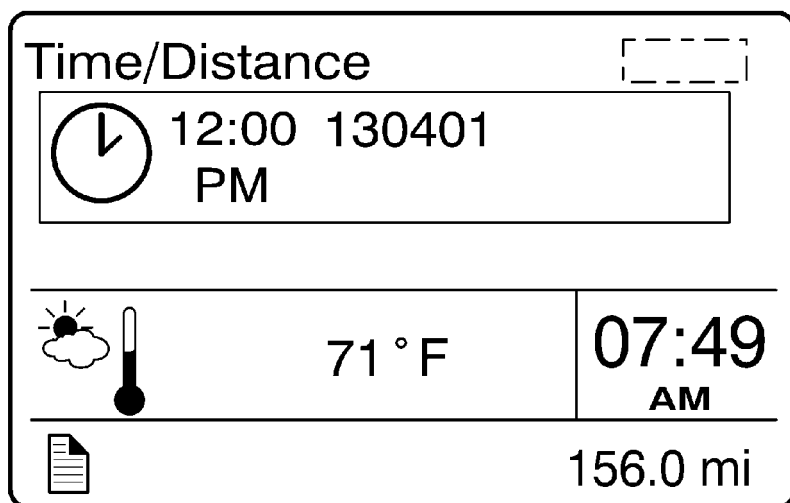
156.0 mi

Time/Distance

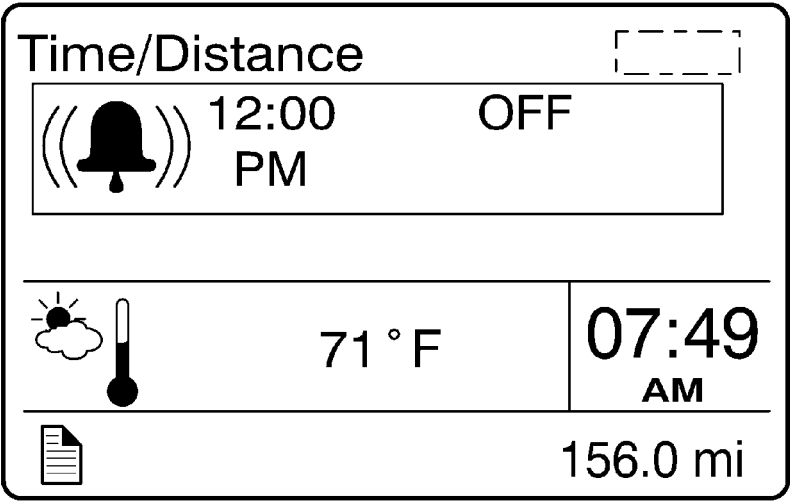
The time and date can be set in the Time/Distance menu. The alarm clock can also be set from this menu. Following the alarm clock menu is the Distance to Destination selection, which allows the operator see the distance since the last reset. Average trip speed is also shown. By specifying the distance to your destination, the vehicle can calculate the estimated time of arrival (ETA).

- Time and Date
- Alarm Clock
- Distance to Destination
- Average Trip Speed
- Estimated Time of Arrival (ETA)

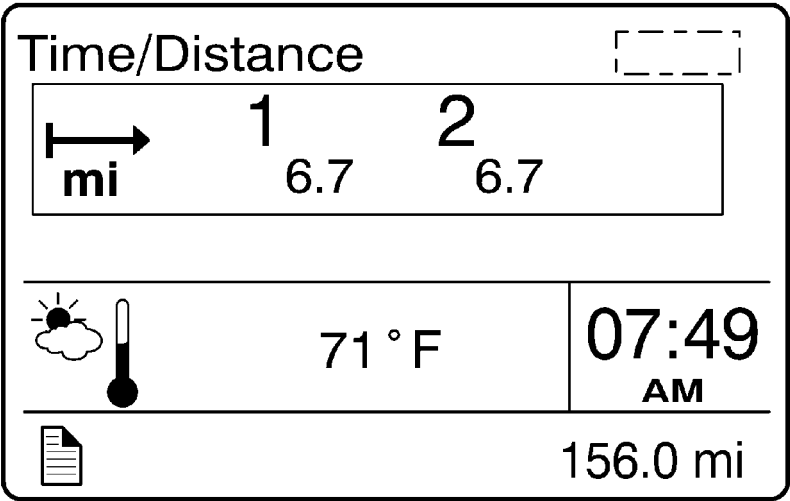
1. Time and Date

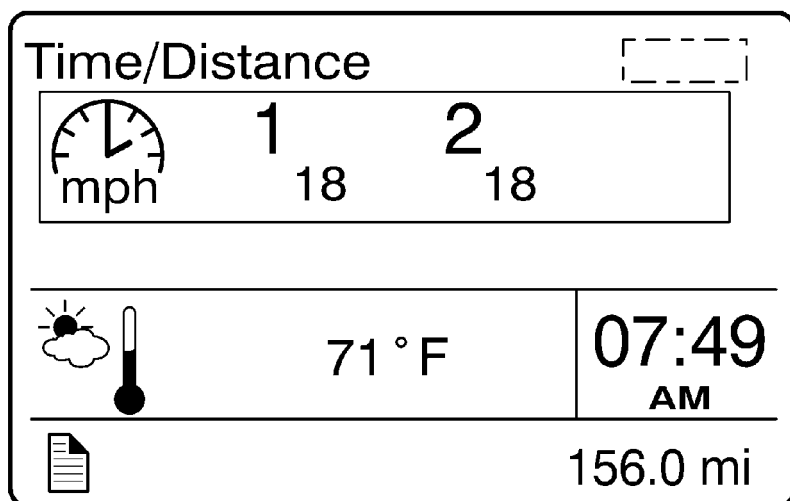
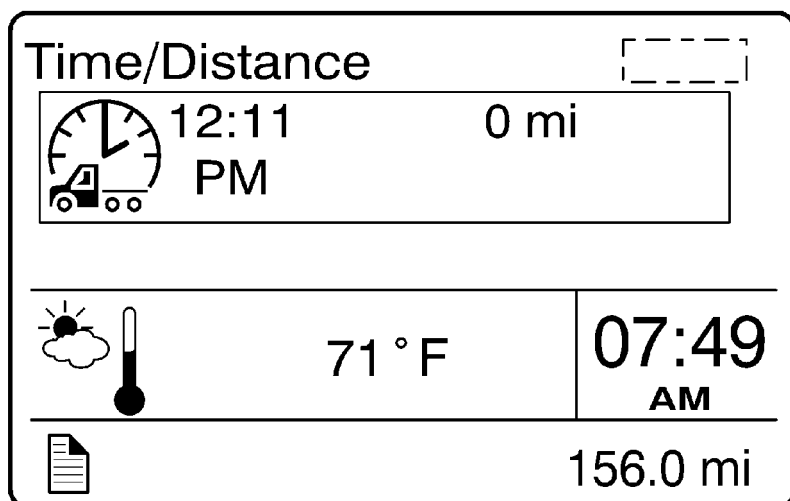


2. Alarm Clock



3. Distance to Destination



4. Trip Average Speed**5. Estimated Time of Arrival (ETA)**

Aftertreatment

NOTE

For additional information about the aftertreatment system, refer to the vehicle operator's manual.



The Aftertreatment menu allows the operator to request a parked regeneration, check the status of the aftertreatment system, and cancel a regeneration.

Aftertreatment

Request Parked REGEN

ATS Status


Cancel REGEN



71 °F

07:49

AM

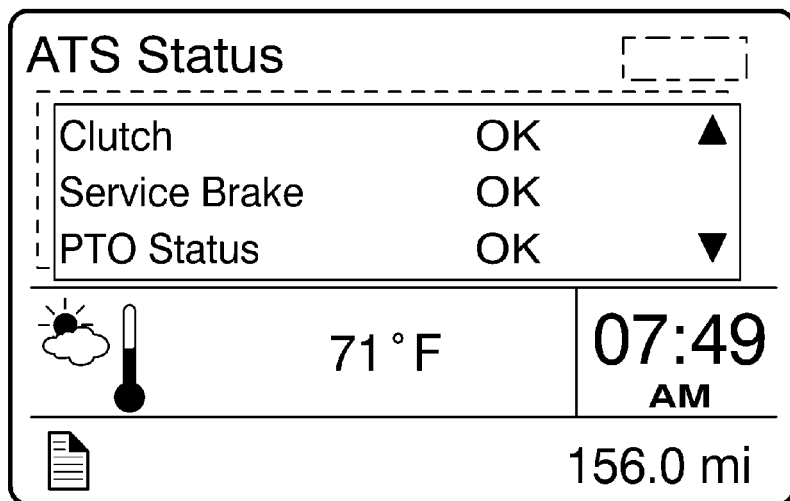


156.0 mi

Aftertreatment Menu

Aftertreatment Status

The Aftertreatment status submenus provide information about the conditions required for performing a regeneration. The status can be OK (regeneration allowed), CHECK (regeneration not allowed) or N/A (not applicable). When ATS Status is selected, the following submenus are available.



To perform a parked regeneration, the clutch pedal must not be depressed, the service brake must not be engaged and a PTO must not be engaged or the PTO must be able to operate above the minimum engine speed required.

ATS Status

ACC Pedal

OK

▲



Neutral

OK

Vehicle Speed Above


OK

▼



71 °F

07:49
AM



156.0 mi

To perform a parked regeneration, the accelerator pedal must not be depressed, the transmission must be in the neutral position and the vehicle speed must not be above zero.

ATS Status

Park Brake

OK

▲



System Fault

OK

System Timeout


OK

▼



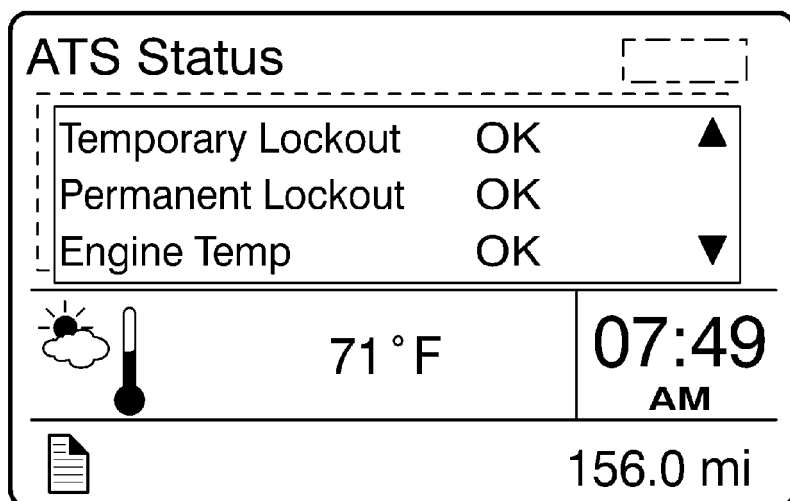
71 °F

07:49
AM

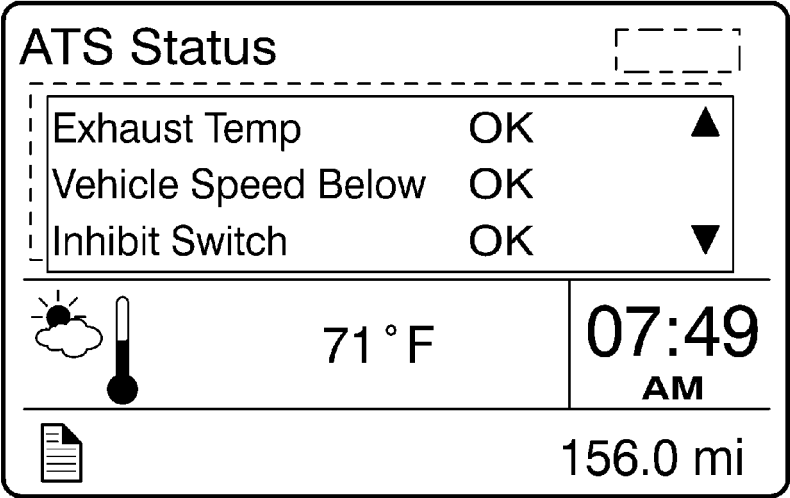


156.0 mi

To perform a parked regeneration, the park brake must be engaged and there can be no active fault codes. The system will time-out if the duty cycle is inadequate to support an automatic regeneration or if there is a problem that is preventing regeneration. Attempt to perform a parked regeneration or take the vehicle to a Volvo Truck dealer for a service regeneration.







Temporary lockout prevents performing a regeneration when a regeneration is not needed. Permanent lockout prevents performing a regeneration when a condition exists that requires vehicle service. Take the vehicle to a Volvo Truck dealer. A minimum engine temperature of 35°C (95°F) is required for regeneration.

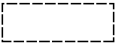





A minimum exhaust temperature of 250°C (482°F) is required for regeneration. The minimum vehicle speed for an automatic regeneration is 40 km/h (25 mph). When Disable REGEN is selected in the Cancel REGEN submenu, regeneration is inhibited. Select Enable REGEN to allow regeneration.

Volvo Link

Fuel Data		
Time/Distance		
Aftertreatment		
Volvo Link		
		71°F
		07:49 AM
	156.0 mi	

Main Menu

Volvo Link		
<div> Read Message Send Message Other Info </div>		
		71°F
		07:49 AM
	156.0 mi	

Start-Up Menu

For information about the Volvo Link System, refer to the Volvo Link System Operator's Manual.

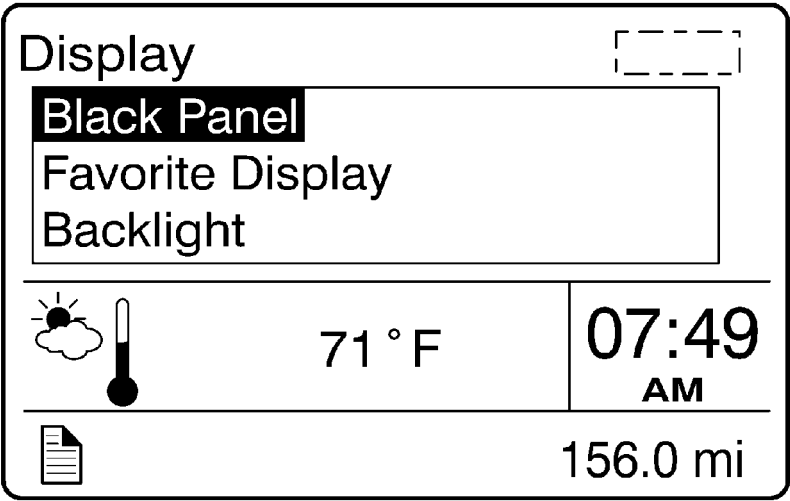
Display

The operator can adjust the display in the Display menu. The entire display can be blacked out for night driving. The display brightness level is adjustable. The Favorite Display function allows the operator to select up to three different gauges to be displayed at the same time. Night/Day can be selected to provide a light or dark background.

- Black Panel
- Favorite Display
- Backlight
- Favorite Display Setting
- Night/Day

1. **Black Panel**

The screen and the entire display is completely dark, except the speedometer and tachometer. The black panel mode can be exited by pressing the Esc button.

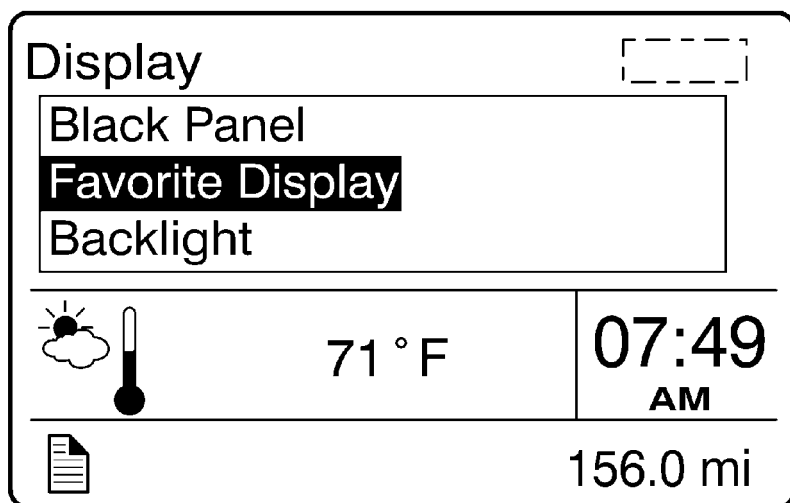


2. Favorite Display

NOTE

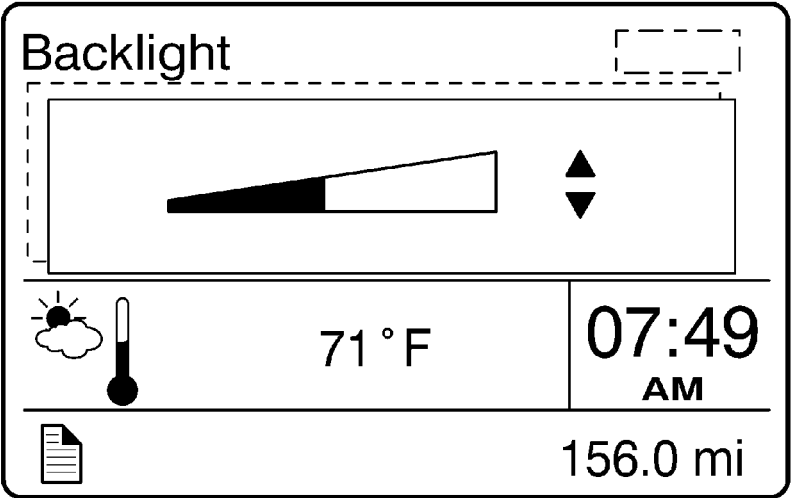
This section is for **viewing** your selection only. To choose your favorite selection, go to Favorite Display Setting (item #4 on page 39).

If Favorite Display is selected, the DID will always display the selected gauges.



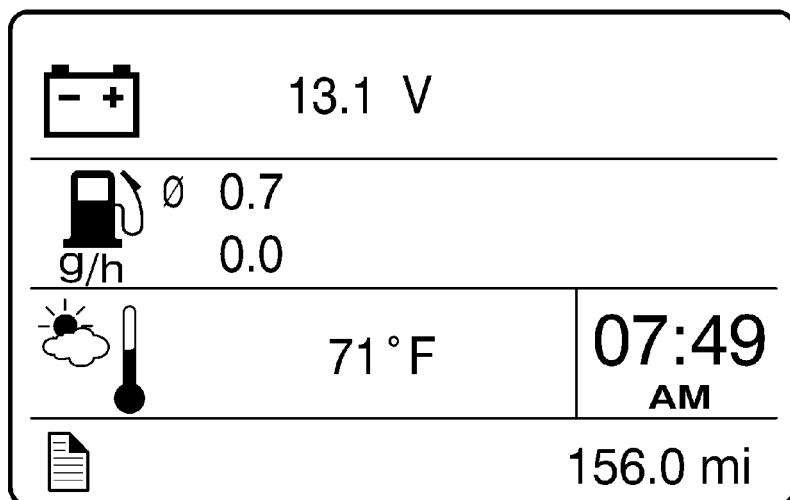
3. Backlight

To increase or decrease the backlight setting, press the up and down arrows on the stalk switch.



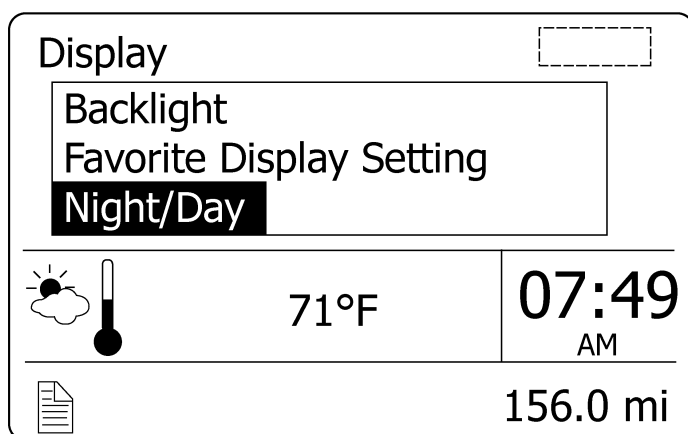
4. Favorite Display Setting

Select Favorite Display Setting to choose the gauges displayed on the DID.



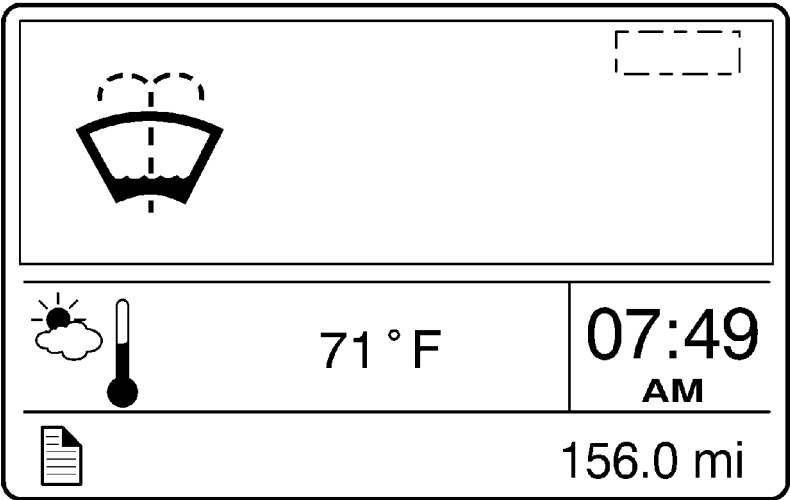
5. Night/Day

Use the Night/Day menu to choose a dark background with light text and images or a light background with dark text and images.



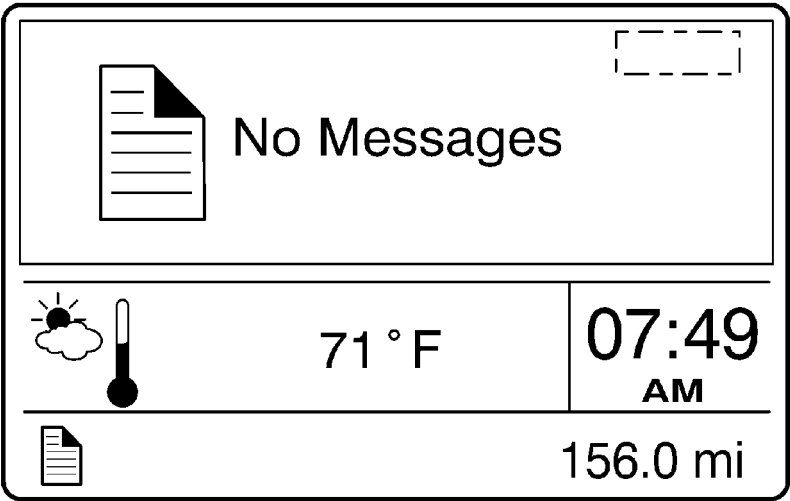
Vehicle Messages

Vehicle Messages appear in the DID depending on the number of faults the vehicle has at any given time.



Windshield Washer Fluid Low Message

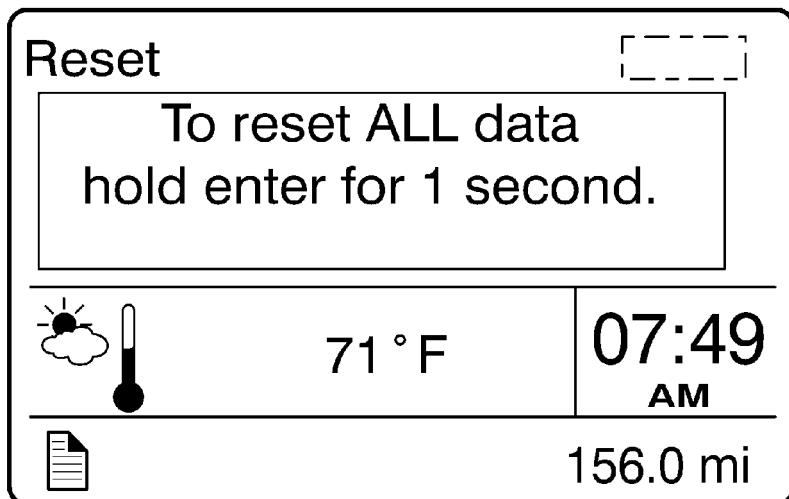
If there are no messages, the following screen is displayed.



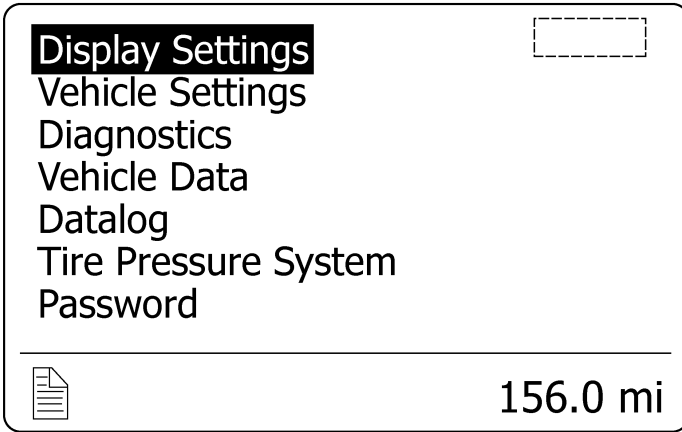
Reset

When the Reset menu is open, pressing and holding down the Enter button for more than 1 second resets the following functions:

- Instantaneous gallons per hour
- Trip fuel used
- Distance to empty



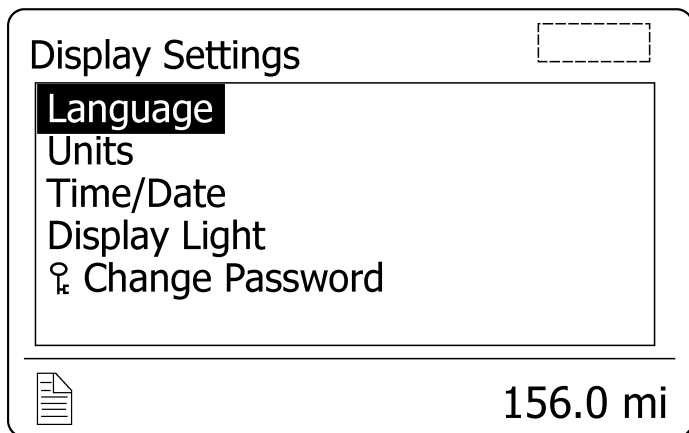
Non-Driving/Stationary Menu



- Display Setting
 - Language
 - Units
 - Time/Date
 - Display Light
 - Change Password
- Vehicle Settings (Volvo engines only)
 - Fleet Limits
 - Fleet ID
 - Water in Fuel (if equipped)
- Diagnostics
 - Fault Diagnostics
 - Cluster Self Test
 - Part Number

- Vehicle Data (Volvo Engines Only)
 - Oil Level
 - Maintenance Data
- Data Log
 - Vehicle ID
 - Sweet Spot Data
 - Total Data
 - Trip Data
 - Reset Trip Data
- Tire Pressure System
 - Tire Pressure
 - Tire Temperature
- Password
 - Enter Password

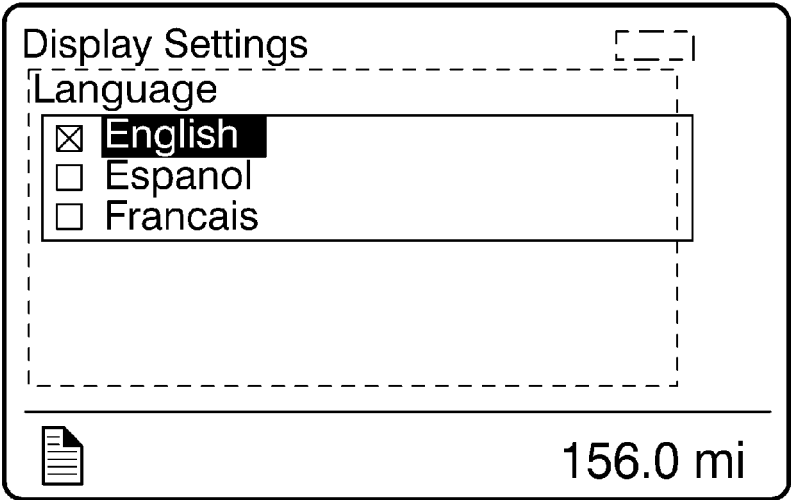
Display Setting



The Display Setting menu is used to change languages and units. The password, time and date can also be changed. The backlight and contrast of the display screen can be adjusted.

- Language
- Units
- Time/Date
- Display/Adjust
- Change Password

1. Language



2. Units

- Distance
- Fuel Consumption
- Temperature


Display Settings

Units

Distance

☒ km

☐ mi

156.0 mi

Distance

Display Settings

Units


Fuel Consumption

☒ L/100km

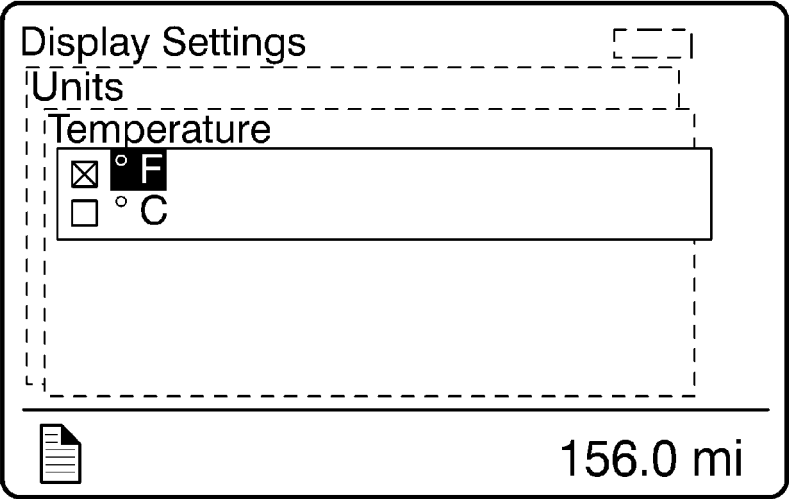
☐ Km/L

☐ mpg (IMP gallons)

☐ mpg (US gallons)

156.0 mi

Fuel Consumption

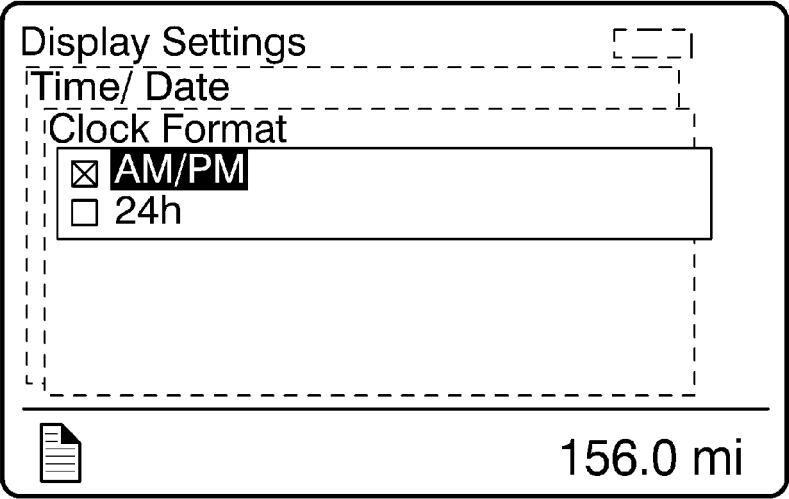


Temperature

3. Time/Date

The Time/Date menu has two sub-menus:

- Clock Format
- Date Format



Clock Format

Display Settings


Time/ Date

Date Format

☒ **yymmdd**

☐ ddmmyy

☐ mmddyy

 156.0 mi

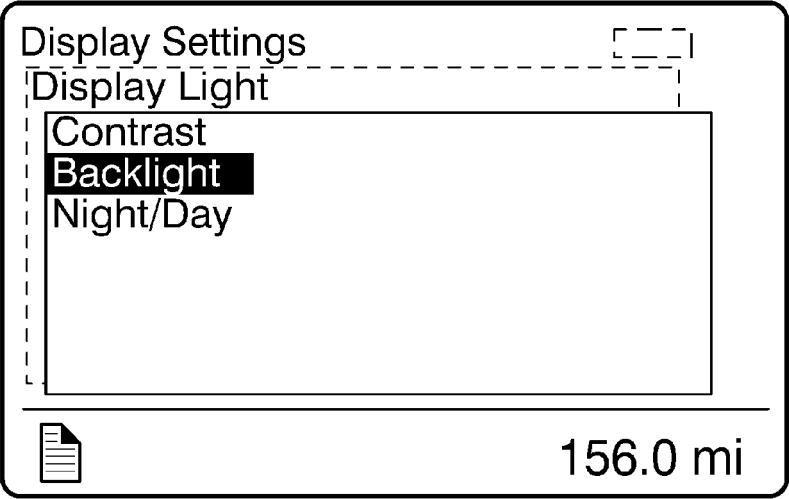
Date Format

4. Display Light

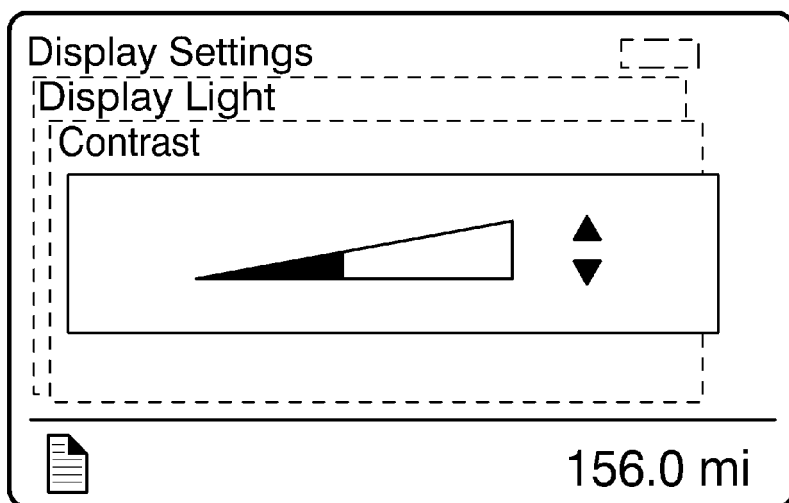
The Display Light menu has three sub-menus:

- Contrast
- Backlight
- Night/Day

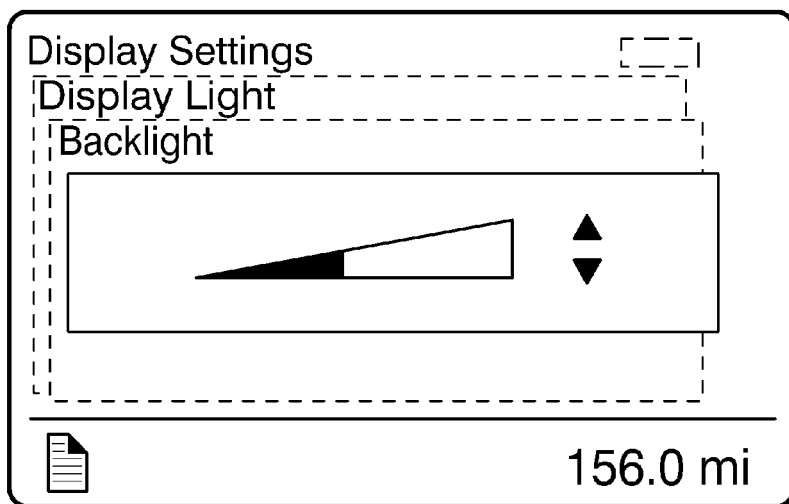
Use the Night/Day menu to choose a dark background with light text and images or a light background with dark text and images.



Display Light Menu



Contrast

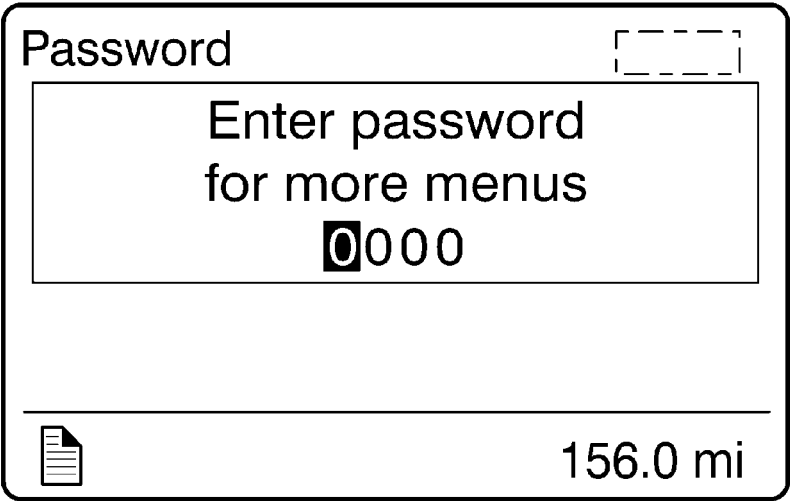


Backlight

5. Change Password

NOTE

This menu is only accessible if the correct password is entered. The default password from Volvo is 0000.



Vehicle Settings

The Vehicle Settings menu allows fleet owners to set targets for vehicle operation regarding maximum engine speed, maximum road speed, and fuel consumption.

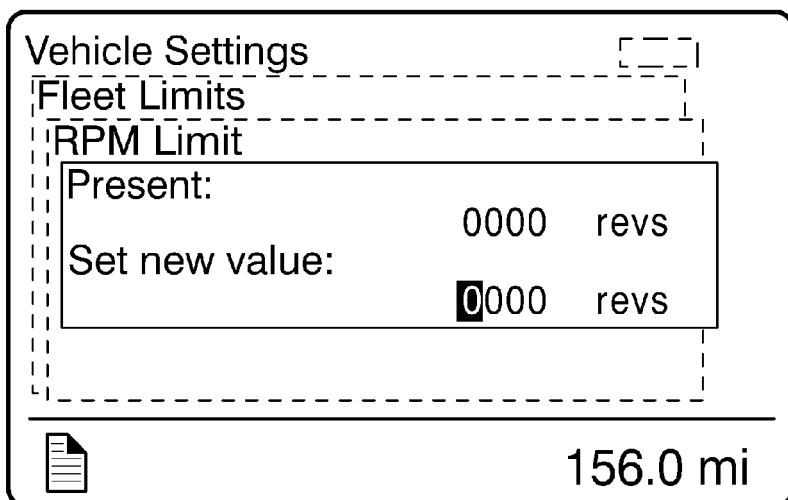
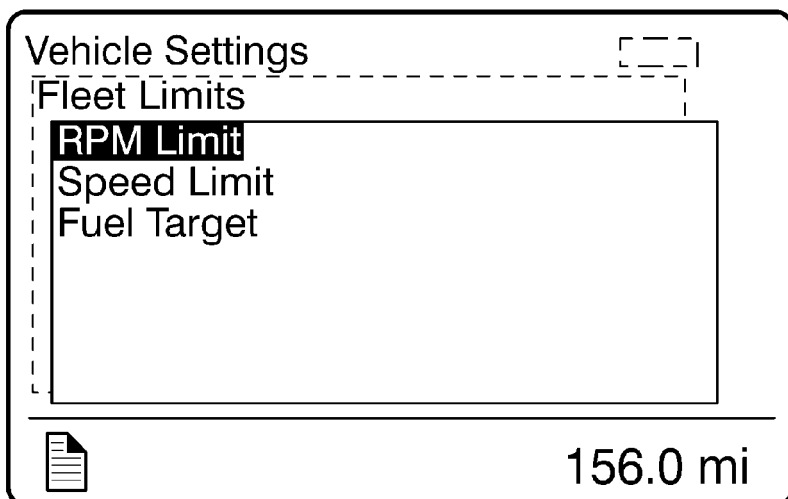
NOTE

This area is password protected.

1. Fleet Limits

The Fleet Limits menu has three sub-menus:

- RPM Limit
- Speed Limit
- Fuel Target



RPM Limit

Vehicle Settings

Fleet Limits


Speed Limit

Present:

0 . 0 mph

Set new value:

000 . 0 mph



156.0 mi

Speed Limit

Vehicle Settings

Fleet Limits


Fuel target

Present:

23 . 5 mpg

Set new value:

23 . 5 mpg



156.0 mi

Fuel Target

2. Fleet ID

NOTE

This menu can only be accessed if the correct password has been entered.


The owner can enter the Fleet ID of the vehicle in this menu if required. Data registered in the engine control unit is then registered for this ID. Enter the new Fleet ID using the up and down arrows. Enter one number at a time followed by pressing the Enter button. 13 characters must be entered, blank characters are entered in unused positions. The ignition key must be turned off and back on to update the fleet ID.

Vehicle Settings

Fleet ID

Present:

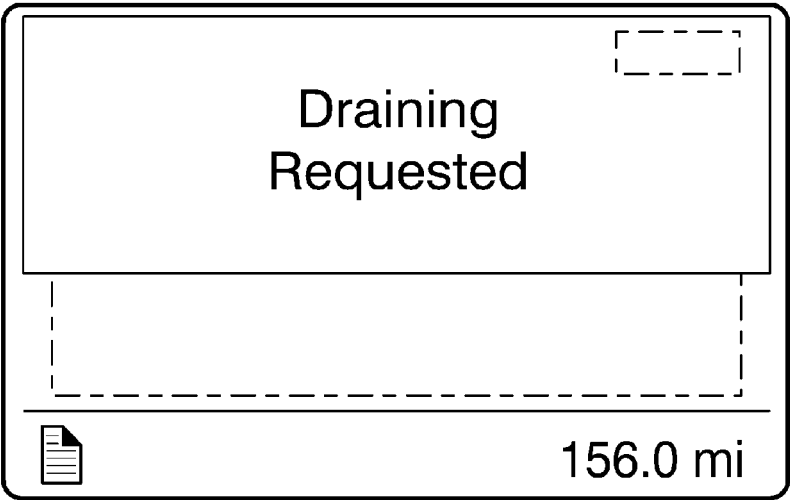
Set new value:



156.0 mi

3. *Drain Water in Fuel (if equipped)*

Press the Enter button to request drain the water in the fuel.

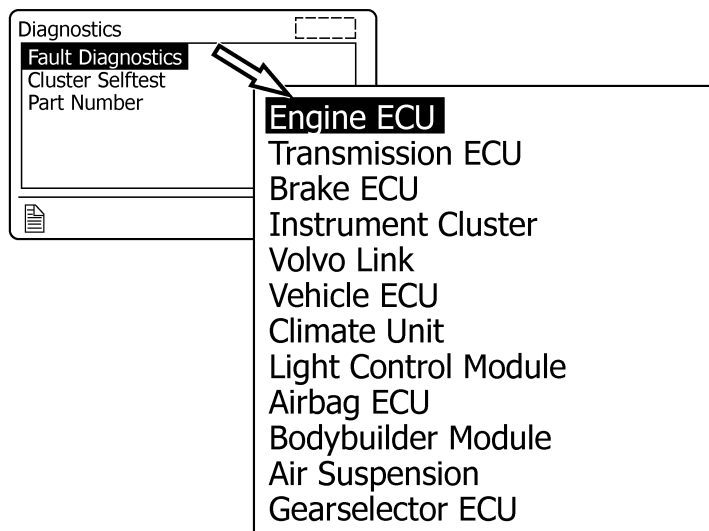


Diagnostics

The Diagnostics menu enables fault tracing on the control units in the vehicle to check for faults. Instrument tests are available to check the telltales, gauges, display and speaker. The part number of a control unit can be identified in the part number menu.

1. Fault Diagnostics

A list of the control units on the vehicle is displayed in the Fault Diagnostics menu.



2. Cluster Self Test

There are four sub-menus available:

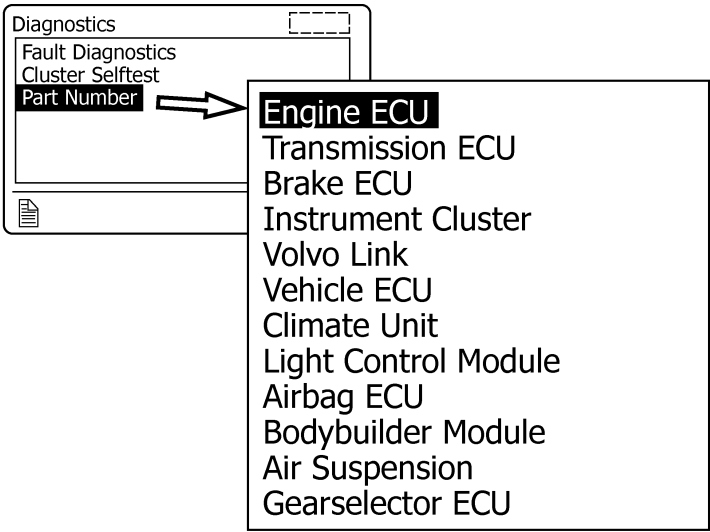
- Telltales test
- Gauge test
- Display test
- Speaker test

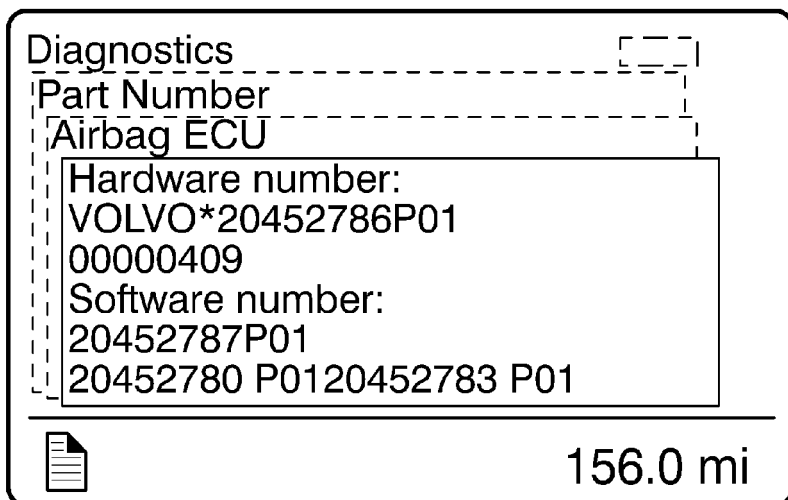
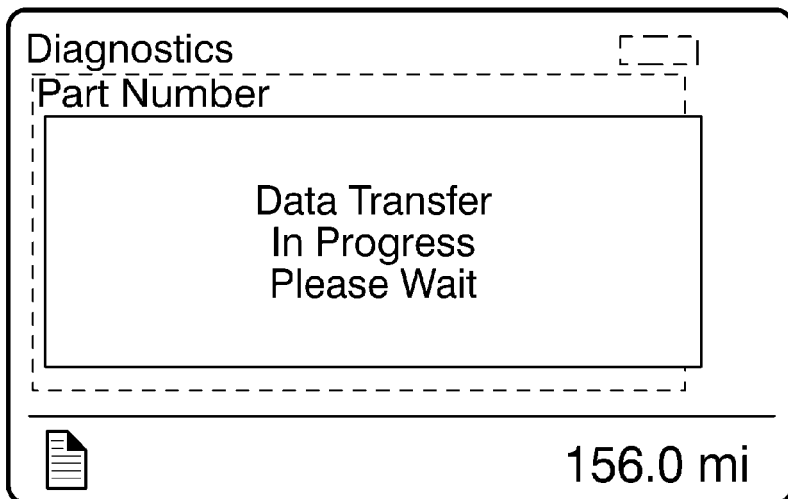
The following table describes the tests. To cancel a test, press the Esc button.

Telltale Test	Telltale illuminate for approximately five seconds.
Gauge Test	The indicators move forwards and backwards between the end positions. They do not show any particular value. This is just a check to confirm that the indicators move, and to make sure the operators are working.
Display Test	The entire display lights up until the Esc button is pressed.
Speaker Test	The sound is activated and at the same time, the name of the selected sound is shown in the DID screen.

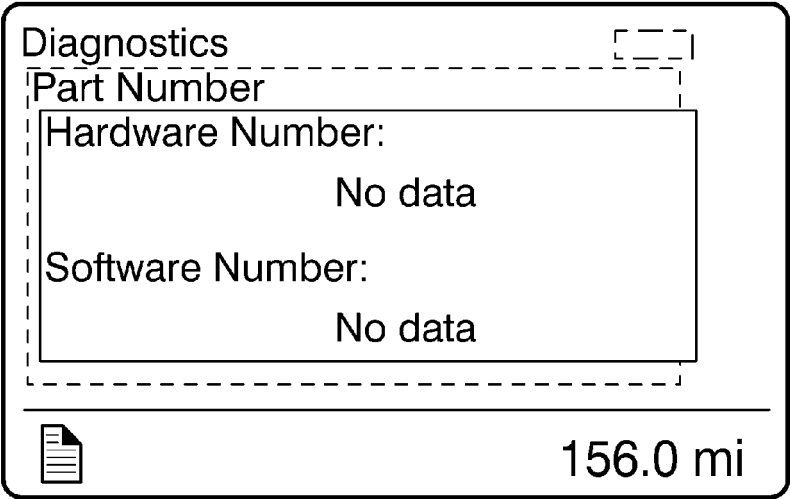
3. Part Number

A list of the control units on the vehicle is displayed in the Part Number menu.





Airbag ECU Used as an Example



General Diagnostic Communication Error

Vehicle Data

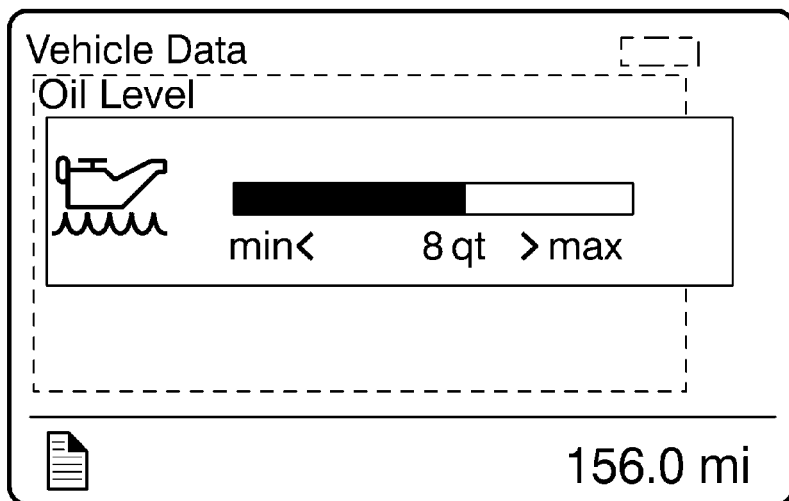
The engine oil level and Maintenance Data can be checked in the Vehicle Data menu.

1. Oil Level (Volvo engines only)

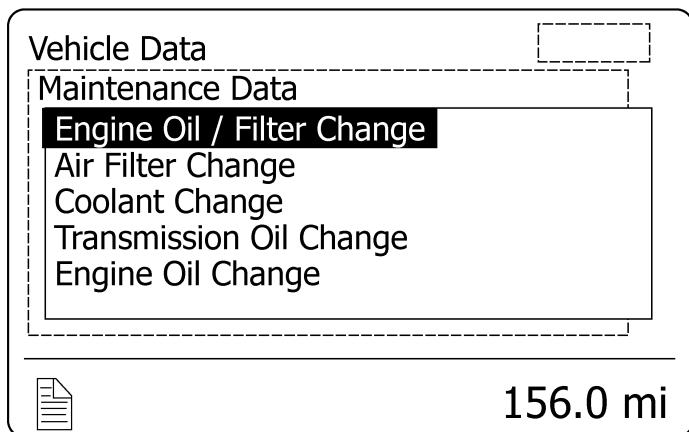
NOTE

For information about engine oil, refer to the Operator's Manual Vehicle Maintenance.

The vehicle is equipped with an electronic oil level sensor. The bar marked MIN and MAX shows the engine oil level. The number in the middle indicates the difference between the MIN and MAX level.



2. Maintenance Data



Datalog

1. Vehicle ID

Datalog


Vehicle ID

Fleet ID:

0000000

Chassis ID:


0000000

156.0 mi

Datalog

Vehicle ID

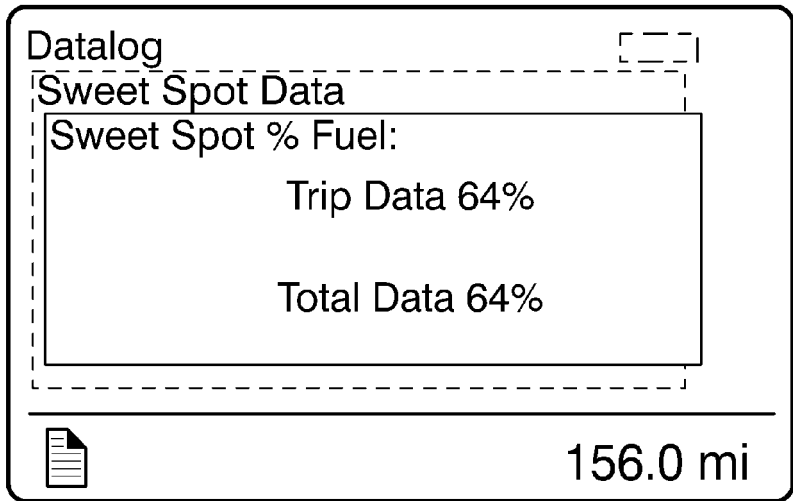
Operation Failed.

156.0 mi

Communication Error

2. Sweet Spot Data**NOTE**

For information about sweet spot data, refer to Performance Bonus Guide in the vehicle operator's manual.



3. Total Data


Totals indicate the accumulated engine values that have been logged during the lifetime of the engine ECU. Six different totals are stored.

Datalog

Total Data

Total distance:
136.3 mi

Total fuel used:
24.2 g


156.0 mi

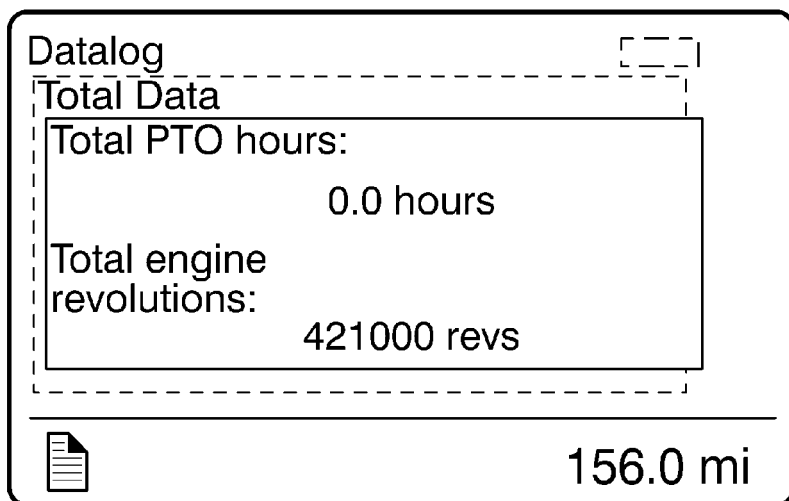
Datalog

Total Data

Total engine hours:
7.4 hours

Total idle time:
2.7 hours

156.0 mi



4. Trip Data

NOTE

Some menus are not available with the Cummins ISX engine.

There are 14 different trip data values stored.

NOTE

The trip data must be reset before each measurement, see “5. Reset Trip Data” on page 67.

Datalog

Trip Data

Trip distance:

136.3 mi

Trip fuel avg:

5.6 mpg



156.0 mi

Datalog

Trip Data

Trip fuel acc:

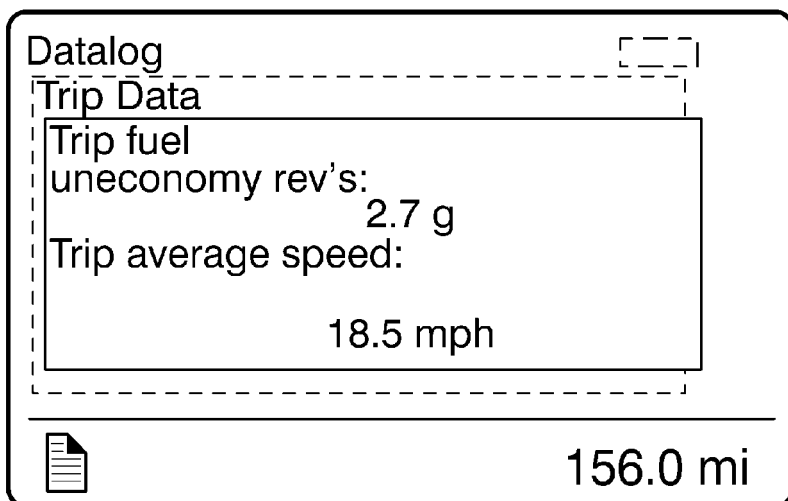
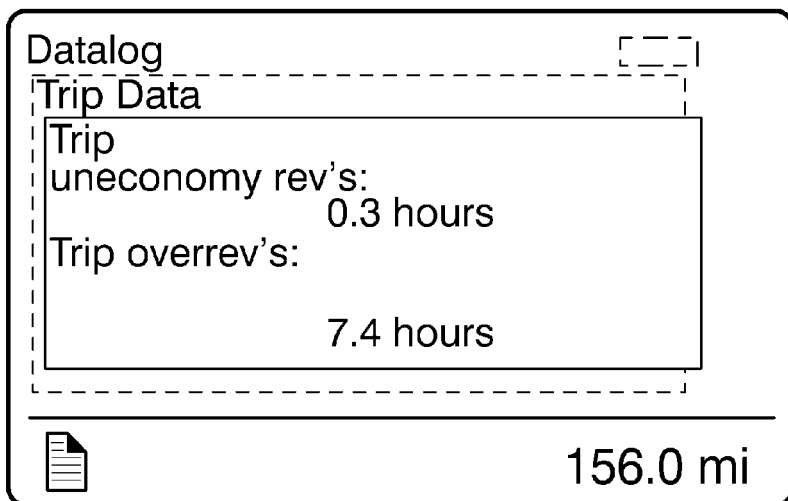
24.1 g

Trip cruise:

0.6 hours



156.0 mi



Datalog

Trip Data

Trip overspeed:

3.9 hours

Trip engine hours:

7.4 hours



156.0 mi

Datalog

Trip Data

Trip idle time:


2.7 hours

Trip idle fuel:

4.5 g




156.0 mi

Datalog	
Trip Data	
Trip PTO hours:	
0.0 hours	
Trip PTO fuel:	
0.0 g	
	156.0 mi

5. Reset Trip Data

NOTE


This menu can only be accessed if the correct password has been entered.

Datalog	
Reset Trip Data	
To reset hold enter for 1 second.	
	156.0 mi

Datalog

Reset Trip Data


Data Transfer
In Progress
Please Wait

156.0 mi

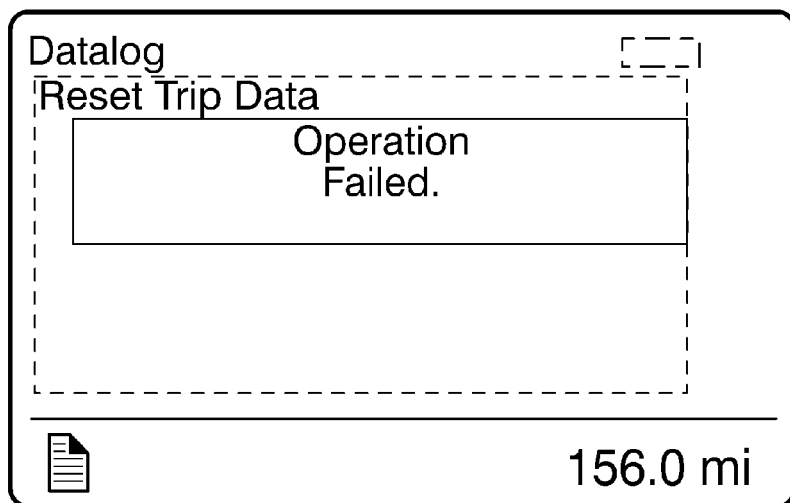
Datalog

Reset Trip Data

Operation
Complete.

156.0 mi

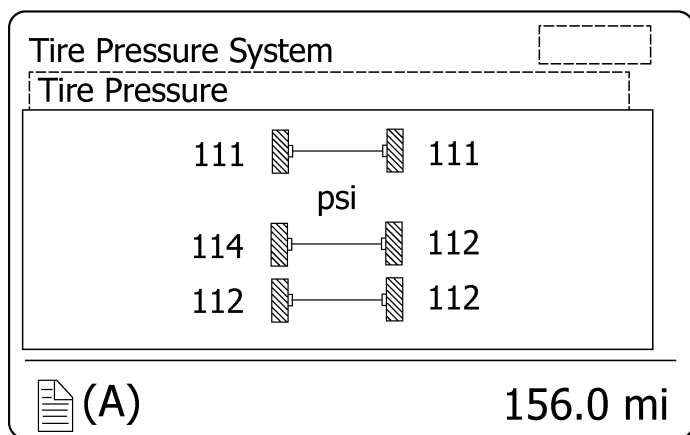
Successful Reset



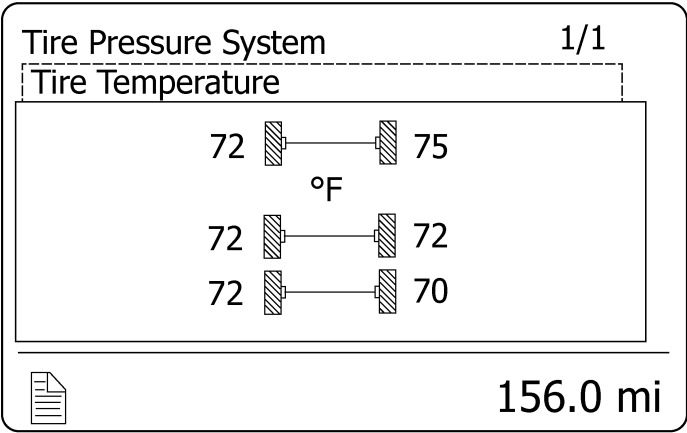
Unsuccessful Reset

Tire Pressure System

1. Tire Pressure



2. Tire Temperature



Password

Certain functions are password-protected and there are a number of passwords for the display. It is also possible to disable the password protection for functions, which is useful when the owner is the operator. Contact your local Volvo dealer to set this function.

1. Password

NOTE

This password must be changed to prevent unauthorized access to the menus.

These passwords give the user access to all password-protected functions. See “5. Change Password” on page 50 to change the password.

The following menus are password-protected and marked with a key symbol in the menus:

- Fleet Limits
- Fleet ID
- Reset (applies to a number of functions)

When the ignition key has been in the stop position for more than 60 seconds or the batteries have been disconnected, the password must be entered again in order to access all the functions.

No functions should be password-protected:

To make all menus available without password you must go to Password and press the Enter button.

You can also go to a password-protected menu and press the Enter button. A password entry box is displayed.

1. Select the Password menu.
2. The password consists of a four-digit number, 0000–9999, that is scrolled forward using the up and down arrows on the control lever, one number at a time, followed by pressing the Enter button. The display shows the following:

Press the Enter button when the correct password has been entered.

<h2>NOTE</h2>

If the ignition key has been in the stop position for more than 60 seconds or the batteries have been disconnected, the password must be entered again in order to access all the functions.

-
3. If an incorrect password is entered, the user is returned to point 2. Re-enter the password using the up and down arrows, followed by the Enter button on the control stalk as in point 2.

Display Settings

Vehicle Settings

Diagnostics


Vehicle Data

Pre-Trip Assistant

Datalog

Tire Pressure System

Password




156.0 mi

Password

Enter password
for more menus









0000





















156.0 mi









DISPLAY SYMBOLS










Alarm, Check and Information Symbols










Symbol	Meaning
	Coolant temperature
	Coolant level
	Engine oil pressure
	Engine Oil level
	Engine oil temperature
	High engine oil temperature
	Fault in preheating
	Engine temperature too low for engine brake (VEB)


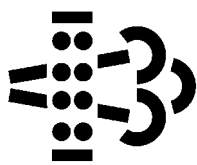

Symbol	Meaning
	Air filter restriction
	Engine idle shut down
	Transmission oil temperature
	High transmission oil temperature
	Transmission malfunction
	Low brake pressure or ABS
	Air dump
	Air suspension pressure
	Air suspension pressure warning

Symbol	Meaning
	Wheel spin
	Anti-spin temporarily disengaged
	5th wheel unlocked
	Stop
	Voltage meter
	Voltage warning
	SRS
	Low level washer fluid
	Fault in main beam

Symbol	Meaning
	Interaxle lock
	Differential lock
	Fault in brake light
	Fault in blinkers
	Caution, freezing conditions
	Fuel level
	Outside temperature
	Air application





Symbol	Meaning
	Parking Brake engaged
	Axle Temperature
	Engine speed
	Intake manifold pressure
	Instantaneous/average fuel economy (liters/100km)
	Instantaneous/average fuel economy (km/liter)
	Instantaneous/average fuel economy (mpg)
	Instantaneous/average fuel economy (liters/hour)
	Leg fuel (liter)







Symbol	Meaning
	Leg fuel (gallon)
	Trip data (km)
	Trip data (miles)
	Average speed (km/h)
	Average speed (mph)
	Estimated time of arrival
	Estimated time of arrival
	Safety Belts Reminder
	Performance Bonus Guide

Symbol	Meaning
	Water in fuel
	Aftertreatment Regeneration
	High Exhaust System Temperature

STATUS SYMBOLS

Status symbols are displayed at the bottom of the Mid Level and High Level instrument cluster DID screens.

Symbol	Meaning
	Preheating active or preheating fault
	Alarm clock activated
	Message active
MI	Odometer, miles
KM	Odometer, kilometers
PTO	Power take-off active
CC	Cruise Control active
(1)	Engine brake position 1
(2)	Engine brake position 2
(6)	Engine brake position 6
	Axle suspension pressure, front

Symbol	Meaning
	Axle suspension pressure, rear
	Distance to empty
	ABS malfunction trailer
	ABS malfunction tractor
	Water in fuel priming
	Water in fuel draining

Other Symbols

There are various other symbols for the other menus which are not explained here. Refer to the sections on the different menus for explanations of those symbols.

MESSAGES

General

There are three types of messages:

- Stop
- Warning
- Information

Stop, warning, and information messages are displayed automatically with their associated symbols. Above the display are three lamps (for stop warning, or information messages) used to draw the attention of the operator whenever necessary. If the engine is running when a stop message comes on, a buzzer is also activated.

More than one message can be active at the same time. A displayed message can be replaced by a new message provided the new message has a higher priority. i.e.: The displayed message is the highest priority.

Only fault codes that have a direct impact on vehicle operation are displayed. All fault codes are stored in the appropriate ECU for access by service technicians.

Stop Message



Failure to stop and take necessary action when the STOP message light is on can result in automatic engine shutdown and loss of power steering assist. This can result in vehicle accident, personal injury or death.

In the event of a serious fault, the red STOP light comes on; the buzzer will also activate if the engine is on. An illuminated STOP message light signifies a serious problem has been detected, and the operator must respond immediately to the problem.



This lamp ON means the vehicle must be safely pulled off the road and stopped. In some instances, the engine must be switched off immediately.

In some cases preventive action may be taken by the engine ECU to protect the engine.

Example 1: if oil pressure or coolant level drops too low, the engine is forced to low idle and when the vehicle speed is zero, the engine shuts down.

Example 2: with excessive coolant temperature, the engine will gradually reduce power output to 50%. This telltale always activates the buzzer.

The engine may be restarted after the key is turned off and then back on. However, it will only operate for 30 seconds unless the problem is resolved.

The engine could be forced to low idle within 30 seconds from when the light comes on. Pull off the road as soon as possible without creating a safety hazard.

CAUTION

If an engine problem is allowed to persist, serious damage to the engine may occur. Always repair the cause of the problem before operating the vehicle again.

See “Stop, Check, Info Symbols and Associated Icons” on page 85 for other telltales that trigger the STOP message light.

Warning Message

DANGER

The CHECK warning message lights up when there is a specified fault the operator should be aware of. Air pressure is low and remaining air volume may not be sufficient for repeated braking. The emergency brakes may engage, causing a wheel lockup, loss of vehicle control. This can cause the vehicle to become a hazard to vehicles behind it.

Bring the vehicle to a controlled stop. Failure to follow these precautions can result in loss of braking control, serious personal injury, vehicle accident or death.

NOTE

This lamp ON means that there is a specified fault that must be checked at the next stop.



If there is an electrical or mechanical problem, the **CHECK** warning light comes on and a default message appears in the DID.

See “Stop, Check, Info Symbols and Associated Icons” on page 85 for other telltales that trigger the **CHECK** warning light.

Information Message

NOTE

This indicator light ON means there is a new information message.



















The **INFO** indicator light comes on when there is a new information message or an abnormal status is detected by the electronic control unit. A telltale, text or both are shown in the DID in addition to the **INFO** light. For certain telltales, a reference value is also shown.









NOTE

Make sure the indicated fault is checked at the next stop once the **INFO** indicator come on.

See “Stop, Check, Info Symbols and Associated Icons” on page 85 for other telltales that trigger the **INFO** indicator.

Stop, Check, Info Symbols and Associated Icons

Symbols and Associated Icons		
		
Icons Displayed		
		
		
		
		
		
		

Acknowledging Messages

A fault message is acknowledged by pressing the Esc button after which the display returns to the same status that existed before the fault occurred. All messages can be acknowledged. Acknowledged but inactive messages are displayed again when the ignition key is turned to the START position or they can be read in the menu.

Information or Warning Messages: Information and warning messages can be acknowledged using the “Esc” button. This warning stays acknowledged until the next time the ignition key is turned to the START position.

Exceptions: The message can be displayed again if the fault is corrected and then becomes active again.

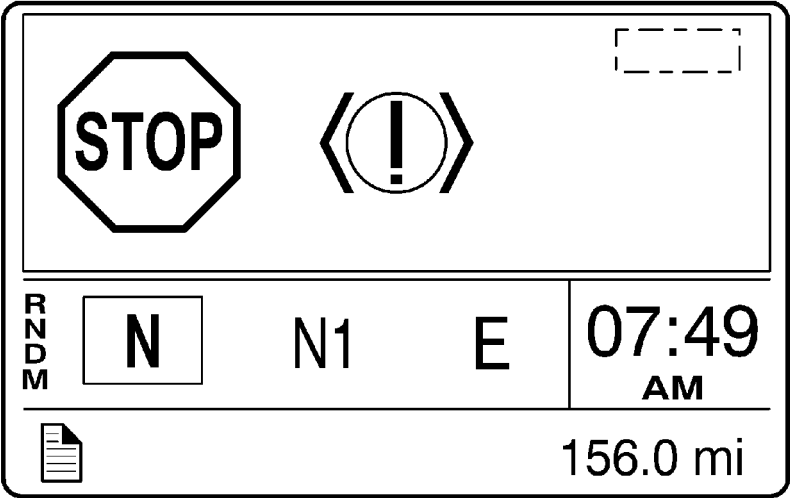
Example: If the transmission fluid temperature is too high, a message will be activated automatically. The operator acknowledges this message using the Esc button. If the temperature then drops to a normal level temporarily and then increases again to an excessive level, the warning will activate again.

Stop Message: The buzzer and a STOP message can be acknowledged using the Esc button, but may become active again 10 seconds after the last acknowledgment. The STOP symbol will be illuminated the whole time.

Examples of Fault Symbols and Text

Factory-Installed Equipment When Stationary

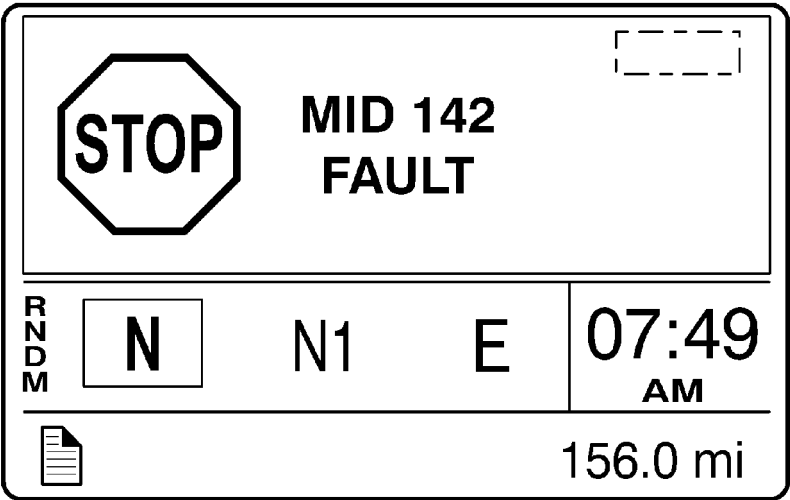
The stop, warning, or info symbol comes on and the information message is shown on the display (for more information on the fault, see “1. Fault Diagnostics” on page 55). A warning tone will be heard if the engine is running when a stop message is activated. The message contains information about the location of the fault where the fault has occurred:



Non-Factory-Installed Equipment

If a coach builder or customer has retrofitted equipment that is connected to the data link, the following symbols may be displayed:

MID (Message IDentifier) = control unit

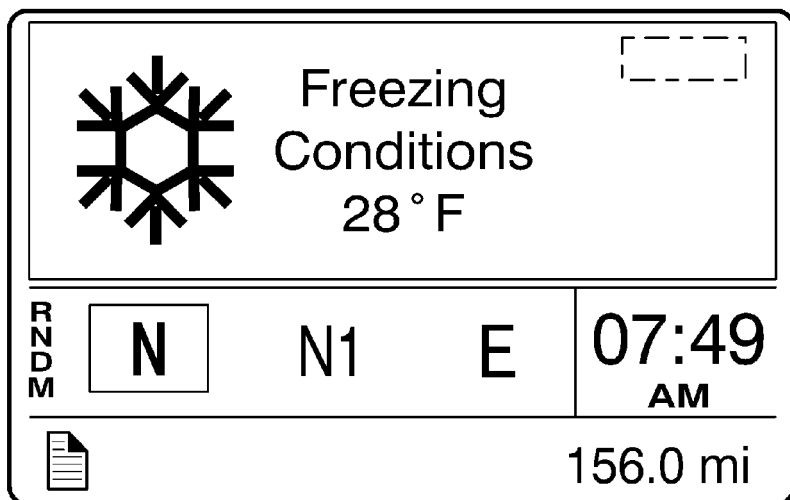


Examples of Symbol and Value

Information, warning or stop symbol comes on and another symbol and value is displayed. Example of warning message:

Warning, Freezing Conditions

The Freezing conditions message is activated when the outside temperature drops below 35°F or increases from a lower temperature to 28°F. Press the Esc button to acknowledge the warning. The warning is cancelled when the temperature drops below 26°F or rises to 37°F.



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