

Operating Instructions

Display



T0031748

VOLVO

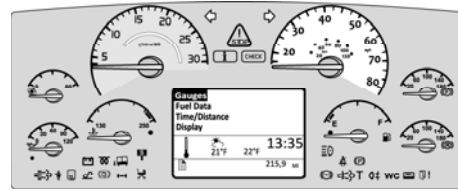
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General, about the display 1

Display and control lever

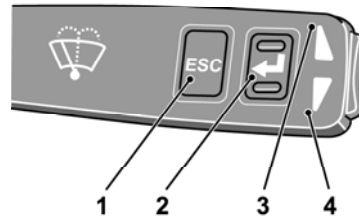
The display is located in the middle of the instrument cluster. The display shows vehicle messages and information about the bus, and from it you can control some of the bus functions.



T0031648

The display is controlled via the control lever to the right of the steering wheel. The control lever has four buttons:

- 1 **ESC**: Abort or return to previous menu.
- 2 **SELECT**: Select or confirm marked choice.
- 3 **▲**: To move the cursor up or set a symbol.
- 4 **▼**: Move the cursor down or set a symbol.



T0014701

2 General, about the display

Getting started

Display fields

The display is divided into three fields:

1 **Menu and message field**

Here, menus and stop, warning and information messages are shown.

2 **Favourite display/Clock**

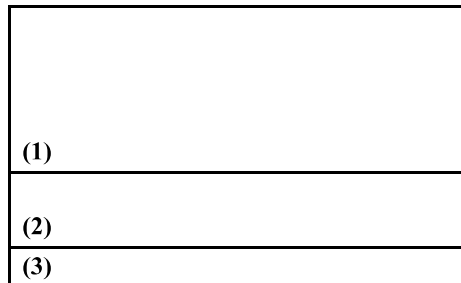
In the left area, information is shown which the driver has selected using the “Favourite display” menu. For buses with automatic gearboxes, the selected gear is shown.

To the right, the clock is shown.

Note: Some variants do not have an adaptable Favourite Display.

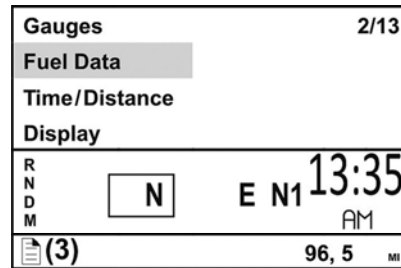
3 **Status line/Odometer**

To the left, current status symbols are shown. To the right, the odometer is shown.



Navigating in the display

The display lights up when the starter key is turned. If there are any vehicles messages, they will be shown in the top field. The most important message is shown first. The message order number is shown in the top right corner. For example, 2/13 indicates that the message now being displayed is the second of thirteen active messages. For more information on messages see “General information on vehicle messages” page 4.



T0031649

Step between the various vehicle messages using the ▲ and ▼ button. Take suitable actions and then acknowledge them with **ESC**.

When the vehicle messages have been acknowledge the menus are shown. To navigate between the menus:

- 1 ▲/▼ move the cursor between the menus, which are then marked. The hierarchical order for menus is shown in the top right corner (for example 2/13).
- 2 Pressing **SELECT** confirms the choice.
- 3 Pressing **ESC** exits the chosen menu. Repeated pressing on **ESC** moves the cursor back to the main menu.

For more information on menus, see “General information on menus” page 7.

4 Vehicle Messages and symbols

General information on vehicle messages

There are three lamps above the display:

- Lamp for stop messages
- Lamp for warning messages
- Lamp for information messages

When there is a fault in the bus or an incident occurs which requires attention one of these three lamps is lit. Associated messages and symbols are shown in the driver's display at the same time. Several messages may be active at the same time. The message with the highest priority is shown first in the display. Previously shown messages can be retrieved in the display; "Vehicle Messages" page 30. For more detailed technical information about vehicle messages, see "Fault Diagnostics" page 40.

Note: For explanation of the symbols used in vehicle messages, see driver's handbook.

Vehicle Messages and symbols 5


Stop messages

When this lamp lights, the vehicle must be stopped immediately and the engine switched off.

A buzzer sounds at the same time as a stop message is displayed. The buzzer and stop message can be acknowledged with **ESC**, but will be repeated after 10 seconds. The symbol is lit continuously.



T3014364

 WARNING
If the vehicle is not stopped and the engine switched off, there could be serious repercussions for the vehicle, driver or passengers.

Warning messages

Note: This lamp lights when something must be rectified. If there is a fault in the bus, the bus shall be driven to a workshop for repair. The bus will not be damaged immediately and can, in certain circumstances, complete its assignment first.



T3014365

Acknowledge the message with **ESC**. If the fault is still active, it will be shown again next time the starter key is turned to the starting position.

6 Vehicle Messages and symbols

Information messages

When this light comes on a new information message is displayed. The lamp is used to inform the driver. The lamp lighting does not indicate a fault in the vehicle.







T3014366

Acknowledge the message with **ESC**. If the information message is still activate, it will be shown again next time the starter key is turned to the starting position.

Status symbols

Status symbols are shown in the lowest row of the display.

Symbol	Meaning
	Pre-Heat active
	Alarm clock activated
	Message active
MI	Odometer, miles
KM	Odometer, kilometres
CC	Cruise control active
AC	Climate control active
(A)	Auxiliary brake position A
(1)	Auxiliary brake position 1
(2)	Auxiliary brake position 2
(3)	Auxiliary brake position 3
(B)	Auxiliary brake position B
	Auxiliary brake in operation

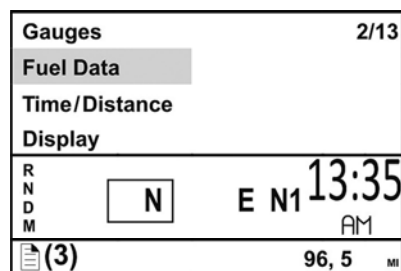
Use the display menus 7

General information on menus

Using the menus you can see the status and control some of the bus functions. For reasons of safety, not all menus are available when driving. To see certain menus and to make certain settings, the bus must be stationary. A password is required for some menus.

Step between the menus

- 1 Move the cursor between menus using ▲ and ▼. The order number of the marked menu is shown in the top right corner. 2/13 indicates that there are 13 menus and that the current menu is number 2.
- 2 Go from a menu to a sub-menu using **SELECT**.
- 3 Exit a sub-menu using **ESC**.

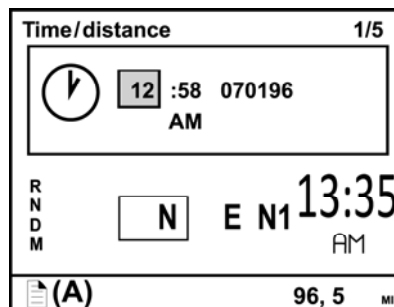


T0031649

8 Use the display menus

Changing settings

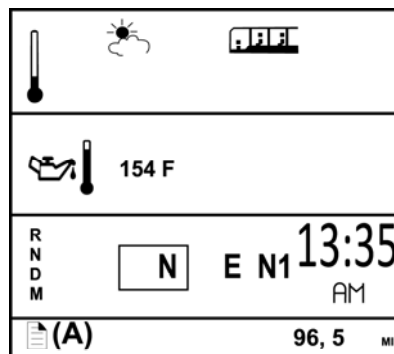
- 1 Use ▲/▼ to change set values (for example, number of hours).
- 2 Pressing **SELECT** confirms the choice.
- 3 Use **ESC** to move the cursor to the previous digit or abort the setting process.



T0031652

Example: Change a setting

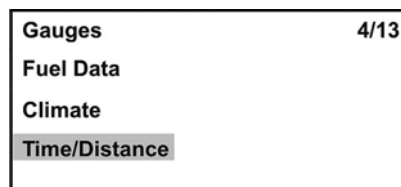
The Favourite Display is shown. You want to set the alarm clock to go off at 02:33. Proceed as follows:



T0031653

1

Go to the menus using **SELECT**. Place the cursor on Time/Distance using ▲ and ▼.

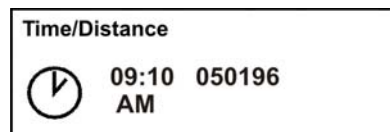


T0031654

Use the display menus 9

2

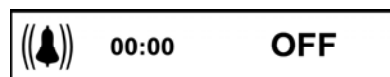
Press **SELECT**. The current time and date are shown.



T8056484

3

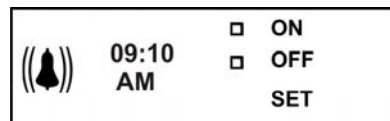
Step to the alarm clock using **▲** and **▼**.



T0031656

4

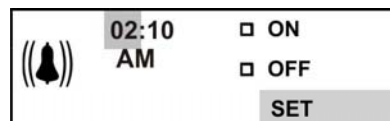
Press **SELECT**. Step down to **SET** using **▲** and **▼**.



T8056483

5

Press **SELECT**. The hours are marked. Step to the required hour using **▲** and **▼**.



T8056482

6

Press **SELECT**. The first digit for minutes is marked. Step to the required digit using **▲** and **▼**.

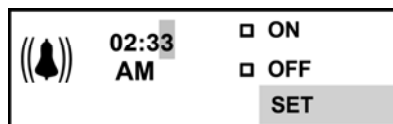


T8056481

10 Use the display menus

7

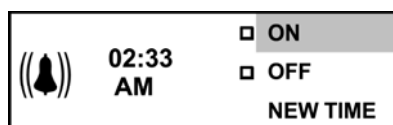
Press **SELECT**. The second digit for minutes is marked. Step to the required digit using **▲** and **▼**.



T0031660

8

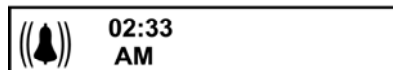
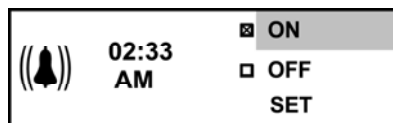
Press **SELECT**. "ON" is marked.



T0031661

9

Press **SELECT**. A cross is placed in the box in front of "ON" and the symbol for activated alarm clock is shown in the status bar. The alarm clock setting is then automatically displayed.



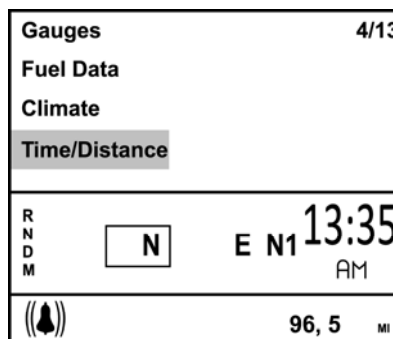
T0031662

10

Return to Favourite Display using ESC. The symbol for activated alarm clock is shown in the status bar.

To deactivate the alarm clock:

- Go into menu "Time/Distance" using **SELECT**.
- Step to the alarm clock using **▲** and **▼**.
- Press **SELECT**.
- Step to "OFF" with **▲** and **▼**.
- Press **SELECT**.



T0031663

Main menus and sub menus

The overview shows how the menus are structured.

- **Gauges**

Gear engaged

Temperature outside/inside

Temperature, engine oil

Temperature, gearbox/ retarder

Voltmeter

Pressure, primary tank

AdBlue tank, level

Brake pressure, 3rd circuit

- **Fuel Data**

Fuel consumption

Leg data

Remaining fuel

- **Climate**

Climate/Pause heating, passenger

Temperature/Roof Fan, passenger

Roof Heat/Floor Fan, passenger

Extra Heat, passenger

Floor Fan, driver

Note: Not all buses have all the menus that are shown in the overview.

- **Time/distance**

Clock and Date

Alarm clock

Trip meter

Average speed

Estimated time of arrival

Driving and resting time

ATS Aftertreatment

- **Display**

Black Panel

Favourite Display

Backlight

Favourite Display, setting

Night/Day

- **Vehicle messages**

- **Display settings**

Language

Units

Time/Date

Display lighting

Change password

12 Menu Overview

- **Vehicle settings**

Traction Control

Kneeling guard

Fleet limits

Fleet ID

Day Running Light

- **Diagnosis**

Fault diagnosis

Instrument panel cluster self test

Part number

Status test

Calibration number

- **Vehicle Data**

Oil level

Brake linings, status

Coolant level

- **Data log**

Vehicle ID

Total data

Journey Data

Reset journey data

- **Password**

Enter password

Gear engaged

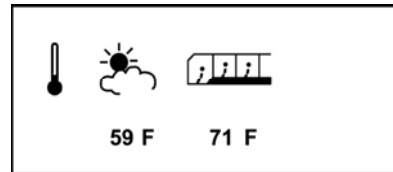
(This gauge is extra equipment. Only buses equipped with an I-shift gearbox.)
Information about the engaged gear, gear lever position, available gears and such like.
For further information, see separate driver instructions for "I-shift".



T0031664

Temperature outside/inside

(This gauge is extra equipment).
Outside temperature shown to the left. Bus inside temperature shown to the right.



T0031665

Temperature engine oil

Temperature of the engine oil.



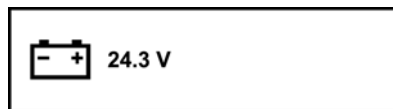
T0031666

14 Menu Gauge

Voltmeter

Battery voltage.

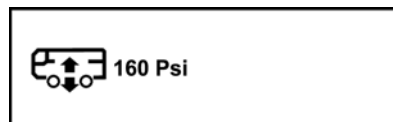
If the engine is running and the voltage drops below 20V, a fault message is displayed together with the information/warning symbol.



T0031667

Pressure, primary tank

If the pressure in the primary tank drops **below 100 PSI**, a fault message is displayed together with the information/warning symbol.

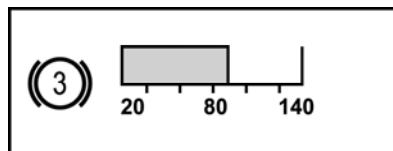


T0031668

Brake pressure, 3rd circuit

(only on buses with min. three axles).

If the pressure drops **below 80 PSI** a fault message is displayed together with the stop symbol and red light.



T0031669

Fuel used

For setting the units, see "Units" page 31.

1 **Average fuel consumption:**

The value is presented as a figure and an arrow pointing down. For a time after resetting the display "— —" is shown while average fuel consumption is being calculated.

2 **Instantaneous fuel consumption:**

The value is presented numerically.

3 **Target fuel consumption:**

The value is presented with the symbol \perp below the bar. For information on setting this value, see "Fuel Target" page 38.

Note: At idle, no bar is shown and the fuel consumption is displayed in litre/hr (alternatively gallons/hr).

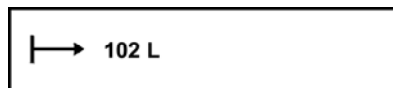
Resetting, fuel consumption

Press **SELECT**. To reset all fuel data, press **SELECT** for 1 second. Leg data is also reset .

16 Menu Fuel Data

Stage information

The amount of fuel consumed since the last reset.



T0031670

Resetting, leg data

Press **SELECT**. To reset leg data, hold **SELECT** depressed for 1 second.

Remaining Fuel

- The first value shows the distance that can be driven before the tank is empty with current fuel consumption.
- The second value shows the amount of fuel currently in the tank.



T0031671

Climate system/Pause heating, passenger

Shows whether the passenger climate system or pause heating is switched on or off. Press **SELECT** once to come to "Climate system". Press **SELECT** twice to come to "Pause heating". Activate/deactivate the respective unit using the control lever buttons (**SELECT**, **ESC**, **▲** and **▼**).

Passenger:	
Climate system	ON
Pause heating	OFF

T0031673

Temperature/Roof Fan, passenger

Shows the required temperature level or roof fan speed in the passenger compartment.

Press **SELECT** once to come to "Temperature". Press **SELECT** twice to come to "Roof Fan". Set the required temperature (between 59 and 82°F) using the control lever buttons (**SELECT**, **ESC**, **▲** and **▼**). Set the required roof fan speed (manually between -5 and +5, alt. automatic) using the control lever buttons (**SELECT**, **ESC**, **▲** and **▼**).

Passenger:	
Temperature	62 F
Roof Fan	+1

T0031673

18 Menu Climate

Roof Heat/Floor Fan, passenger

Shows the selected level for roof heat or status for floor fan in the passenger compartment. Press **SELECT** once to come to "Roof Heat". Press **SELECT** twice to come to "Floor Fan". Set the required level for Roof Heat (manually between -5 and +5, alt. automatic) using the control lever buttons (**SELECT**, **ESC**, **▲** and **▼**). Activate/deactivate the floor fan (switched off, alt. automatic) using the control lever buttons (**SELECT**, **ESC**, **▲** and **▼**).

Passenger:	
Roof Heat	AUTO
Floor Fan	N/A

T0031684

Extra Heat, passenger

Shows whether the extra heating in the passenger compartment is switched on or off. Activate/deactivate the extra heat using the control lever buttons (**SELECT**, **ESC**, **▲** and **▼**).

Passenger:	
Extra Heating	N/A

T0031685

Floor Fan, driver

Shows whether the floor fan in the driver compartment is in automatic position or switched off.

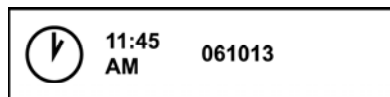
Activate/deactivate the floor fan using the control lever buttons (**SELECT**, **ESC**, **▲** and **▼**).

Driver:	
Floor Fan	N/A

T0031686

Clock and Date

Shows current time and date. For setting the formats, 12hr alt. 24hr and date, see "Time/Date" page 32.



T0031687

Setting, time and date

Press **SELECT**. Set the time and date using the control lever buttons (**SELECT**, **ESC**, **▲** and **▼**). If the starter key is in stop position and it takes more than 30 seconds between button depressions, the setting process is aborted.

Note: The menu "Time and date" is available even when the starter key is in the stop position. The menu is activated by pressing any of the buttons on the control unit for at least 1 second. The menu remains active for 30 seconds after the last depression.

20 Menu Time/Distance

Alarm clock

Alarm clock, setting

Press "SELECT". Set the alarm time using the control lever buttons (SELECT, ESC, ▲ and ▼). Finish off by selecting "ON". The symbol for the alarm is shown on the status bar to indicate that the alarm clock is active.

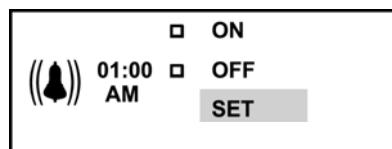
Note: The alarm clock cannot be set while driving. If the starter key is in stop position and it takes more than 30 seconds between button depressions, the setting process is aborted. The menu "Alarm clock" is available even when the starter key is in stop position. The menu is activated by pressing any of the buttons on the control unit for at least 1 second.

Activate alarm clock

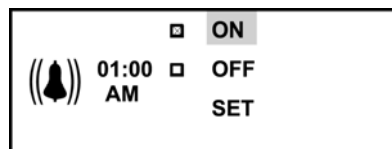
Here the alarm clock can be activated without changing the alarm time. Activate the alarm using the control lever buttons (SELECT, ESC, ▲ and ▼). When the clock has been activated, the symbol for activated alarm clock is shown on the display status bar.

Switch off the alarm clock

When the alarm clock goes off, the word "ALARM" lights up, the current time is displayed and a warning signal is sounded. The alarm shuts off after 60 seconds or if ESC is depressed.



T0031688



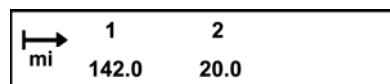
T0031689

Trip meter

Two independent distances can be saved, for leg 1 and leg 2.

Note: The trip values must be reset before each measurement.

Reset tripmeter Press "SELECT". Reset the trip meters 1 and 2 respectively using the control lever buttons (SELECT, ESC, ▲ and ▼).



	1	2
mi	142.0	20.0

T0031690

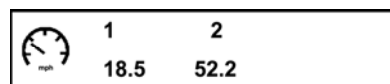
Average speed


The average speed is calculated as the distance driven divided by the time the engine has been running (since latest reset). Two different average speeds can be measured, average speed 1 and 2.

Note: The values must be reset before each measurement.

Reset average speed

Press "SELECT". Reset average speeds 1 and 2 respectively using the control lever buttons (SELECT, ESC, ▲ and ▼).



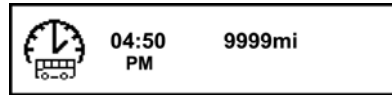
	1	2
	18.5	52.2

T0031691

22 Menu Time/Distance

Estimated time of arrival

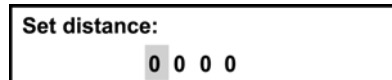
The estimated time of arrival is calculated as the remaining distance divided by the vehicle's average speed.



T0031692

Set Distance

Press "SELECT". Set the remaining distance in km (alt. miles) using the control lever buttons (SELECT, ESC, ▲ and ▼).

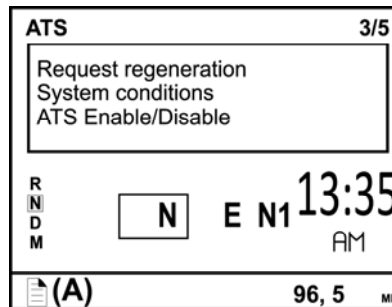


T0031693

ATS Aftertreatment

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.



T0031855

System conditions

The system conditions menus are used to help determine why a parked regeneration failed.

ATS		1/5
Inhibit switch	OK	
Clutch status	N/A	
Service brakes	N/A	
R N D M	N	E N1 13:35 AM
(A)		96, 5 MI

T0031869

ATS		2/5
PTO Status	OK	
Acc. pedal	OK	
Gear status	OK	
R N D M	N	E N1 13:35 AM
(A)		96, 5 MI

T0031870

ATS		3/5
Veh. Speed high	OK	
Park brake	OK	
Exh. gas temp	N/A	
R N D M	N	E N1 13:35 AM
(A)		96, 5 MI

T0031871

24 Menu Time/Distance

ATS		4/5	
System Fault		OK	
System timeout		N/A	
Sooth level low		Check	
R N D M	N	E N1	13:35 AM
(A)		96, 5 MI	

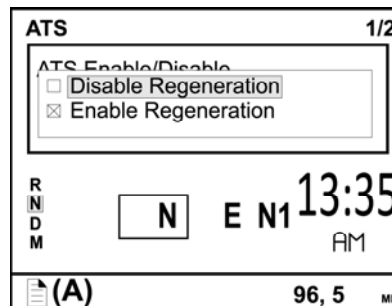
T0031872

ATS		5/5	
Sooth level high		OK	
Engine status		Check	
Veh. Speed low		N/A	
R N D M	N	E N1	13:35 AM
(A)		96, 5 MI	

T0031873

ATS Enable/Disable

To temporarily disable automatic regeneration, scroll to the Aftertreatment menu, select "ATS Enable/Disable". When automatic regeneration is disabled, the letters ATS with X through them will be displayed in the DID. Enable regeneration by scrolling to the Aftertreatment menu, selecting "ATS Enable/Disable" and selecting "Enable REGEN".



26 Menu Display

Black Panel

When "Black panel" is activated, only the speedometer, tachometer (except the coloured field) and the lowest line of the display light up. The following events light the backlighting:

- a message is activated
- a button is depressed
- the engine speed enters the red field on
- the tachometer

Favourite Display

This function is used to activate " Favourite Display".

Backlight

This menu can be used to alter the display lighting with respect to the lighting of the other instruments.









T0031695

Set backlight





- 1 Increase or decrease the backlight in the display using ▲/▼.
- 2 Confirm with **SELECT**.
- 3 **ESC** aborts the setting process.

Favourite display, set

Select the gauges and functions to show in "Favourite Display".

No display	
Gear engaged	
Outside temperature	
Temperature, engine oil	
Fuel used	
Stage information	
Remaining fuel	
Trip meter	




28 Menu Display

Pressure, primary tank	
Pressure, 3rd brake circuit	
Average speed	
Estimated time of arrival	

T0031745

To select favourite display:

- 1 Press **SELECT**.
- 2 Press **SELECT** once more and the upper field becomes active. Select gauge or function using ▲ and ▼. Confirm with **SELECT** when the desired gauge or function is shown.
- 3 Press **SELECT** once more to activate the next field. Select gauge or function using ▲ and ▼. Confirm with **SELECT** when the desired gauge or function is shown.
- 4 Press **SELECT** or **ESC** until all the fields are active and the clock is shown.

	
	59 F
	208 F
	11:45 AM
CC	4000.00 mi

T0031746

Night/Day

This function is used to switch between yellow text on a black background and black text on a yellow background.

Press **Select** to switch between alternatives.

30 Menu Vehicle Messages

Vehicle Messages

If a message is displayed and acknowledged, a symbol is shown in the status bar. Go into this menu to see which messages have been acknowledged without being rectified.

Switch between messages using ▲ and ▼.

Press **ESC** to return to the main menu.

An acknowledged message that is still active the next time the starter key is turned to drive position will be displayed as an unacknowledged message. The message symbol will stay on as long as there are unacknowledged messages present.

Language

Select the desired language using the control lever buttons (SELECT, ESC, ▲ and ▼).

Units

Distance

Select to show distances in km or miles using the control lever buttons (SELECT, ESC, ▲ and ▼).

Fuel used

Select, using the control lever buttons (SELECT, ESC, ▲ and ▼), to show fuel consumption in km/l, l/100 km, miles per gallon (mpg) for IMP gallons or as miles per gallon (mpg) for US gallons..

Temperature

Select, using the control lever buttons (SELECT, ESC, ▲ and ▼), to show temperatures in Celsius (C) or Fahrenheit (F).

Pressure

Select, using the control lever buttons (SELECT, ESC, ▲ and ▼), to show pressures in psi or bar.

32 Menu Vehicle Messages

Time/Date

Time

Set the time format (AM/PM or 24:00) using the control lever buttons (SELECT, ESC, ▲ and ▼).

Date display

Select, using the control lever buttons (SELECT, ESC, ▲ and ▼), from the various date formats.

- year, month, day (**yymmdd**)
- day, month, year (**ddmmyy**)
- month, day, year (**mmddyy**)

Display light

Contrast

Set the contrast using the control lever buttons (SELECT, ESC, ▲ and ▼).



T0031695

Backlight

In this menu the display lighting can be altered in relation to the other instrument lighting, using the control lever buttons (SELECT, ESC, ▲ and ▼).



T0031695

Night Mode

This function is used to switch between yellow text with black background and black text with yellow background, using the control lever buttons (SELECT, ESC, ▲ and ▼).

34 Menu Vehicle Messages

Change password (if password is required)

First enter the current password, see "Enter password" page 47.

- 1 Mark the password to be changed using ▲ and ▼.
- 2 Confirm with **SELECT**.
- 3 Enter the first digit using ▲ and ▼.
- 4 Step to the next digit using **SELECT**.
- 5 Move back in the menu using **ESC**.

Traction Control

Select On or Off using the control lever buttons (SELECT, ESC, ▲ and ▼). When traction control is turned off, a warning symbol is shown.



T0014612

Clamp guard kneeling

(Only for certain variants)

The following symbol lights when there is a fault in the clamp guard function. The kneeling function is deactivated then there is a fault in the clamp guard function. Should it be necessary to use the kneeling function nevertheless, the clamp guard can be deactivated in this menu. Activate/deactivate the clamp guard using the control lever buttons (SELECT, ESC, ▲ and ▼).



T0014566

36 Menu Vehicle settings

Fleet limits (password is required)

RPM Limit

Only accessible if correct password is entered.

This function makes it possible for the carrier to set an engine speed limit for the fleet. If the engine exceeds this limit, it will be registered, see "Trip data" page 46.

Select **RPM Limit (max)** and set the new engine speed limit in rpm using the control lever buttons (SELECT, ESC, ▲ and ▼).

If the setting fails:

- Press **ESC** and try to do the setting once again.
- If it still fails, perform a diagnosis of the display and engine control unit, see "Fault Diagnostics" page 40.
- Contact a authorized Volvo workshop if necessary or Prevest service center/provider.

Speed Limit

Only accessible if correct password is entered.

This function makes it possible to set a road speed limit for the fleet. If the bus exceeds this speed it is registered, see "Trip data" page 46. Go to "Speed Limit (max)" and set the new speed limit using the control lever buttons (SELECT, ESC, ▲ and ▼).

The message "Transfer complete" is shown

If the setting fails:

- Press **ESC** and try to do the setting once again.
- If it still fails, perform a diagnosis of the display and engine control unit, see "Fault Diagnostics" page 40.
- Contact a workshop if necessary.

38 Menu Vehicle settings

Fuel Target

Only accessible if correct password is entered.

This function makes it possible to set a fuel consumption target for the fleet. For information about fuel consumption for a journey, see "Trip data" page 46.

If the setting fails:

Select "On" or "Off" using the control lever buttons (SELECT, ESC, ▲ and ▼).

- Press **ESC** and try to do the setting once again.
- If this still fails, perform a diagnosis of the display and engine control unit, see "Fault Diagnostics" page 40.
- Contact a workshop if necessary.

Fleet ID (password required)

Only accessible if correct password is entered.

Using this menu the carrier can enter the vehicle ID within the fleet if required. Data registered in the engine control unit is then registered for that ID.

Set the fuel consumption target using the control lever buttons (SELECT, ESC, ▲ and ▼). 13 digits must be entered (a space is entered for unused positions).

If the setting fails:

- Press **ESC** and try to do the setting once again.
- If it still fails, perform a diagnosis of the display and engine control unit, see "Fault Diagnostics" page 40.
- Contact a workshop if necessary.

Day Running Light

Day running lights can be switched off in this menu. This means that if the day running lights have been set to the **OFF** position, the dipped beam must be turned on and off using the lights knob in the panel.

Select **ON** or **OFF** using the control lever buttons (SELECT, ESC, ▲ and ▼).

40 Menu Diagnosis

Fault Diagnostics

A list of the bus's control units is shown in the "Fault diagnostics" menu.

Switch between control units using ▲ and ▼. **SELECT** confirms choice of control unit. To abort press **ESC**.

- 1 During the time that the selected control unit is being called up, the display indicates that "Data transfer is taking place".
- 2 If the selected control unit has no faults "No faults" is displayed. Press **ESC** to return to the previous menu.
- 3 If the selected control unit does not reply within 5 seconds the following is shown "Operation failed" in the display.
 - Press **ESC** and try to do the setting one again, see point 1.
 - If it still fails, perform a diagnosis on the display and selected control unit, see "Fault Diagnostics" page 40.
 - Contact a workshop if necessary.
- 4 The following is shown if the selected control unit has a fault code:
 - Which control unit it applies to
 - Which parameter or component is faulty
 - Which type of fault it is
 - If the fault is active or inactive
 - How many times the fault has been registered since the last reset
- 5 If there are several fault codes or fault messages for the same control unit, you can scroll through the fault codes using ▲ and ▼. "Reset all" is shown last in the list. This resetting only clears the fault codes for the selected control unit.

- 6 A maximum of 20 fault codes/messages can be shown for a control unit. To see more than the first 20, one or more messages must be deleted.
- 7 Press **SELECT** to show more information on the fault code. Fault codes are shown numerically here. If the fault is inactive, among other things, the time and date when it occurred are shown.

MID: Identification of control unit

PID: Identification of parameters

PPID: Volvo unique Identification of parameters

SID: Identification of components

PSID: Volvo unique Identification of components

FMI: Identification of fault IDs To reset the fault code, hold **SELECT** depressed for 1 second.

42 Menu Diagnosis

Instrument panel cluster self test

Indicator lamps test

- 1 Select "Control lamp test, LEDs".
- 2 The control lamps light for approx. 5 seconds.
- 3 Abort the test using **ESC**.

Gauges test

Gauges test

- 1 Select "Gauge test".
- 2 Gauge function is checked through the entire of the gauge. The pointers move back and forth a couple of times between the end positions. The pointers should not show a particular value; this is only a function check.
- 3 Stop the test using **ESC**.

Display test

- 1 Select "Display test".
- 2 The whole display lights up for 3 seconds after which it blacks out for 3 seconds. After this a chequered pattern is displayed for 3 seconds. The chequered pattern is then displayed inverted for 3 seconds.
- 3 Stop the test using **ESC**.

Loudspeaker test

- 1 Select "Loudspeaker test".
- 2 The ticking sound of the direction indicators is heard from the instrument panel load speakers.
- 3 Cancel the test using **ESC**.

Part number

A list of the bus control units is shown in the menu "Part number".

- 1 Select a part using ▲ and ▼.
- 2 Confirm with **SELECT**.
- 3 Return using **ESC**.

Status test

Note: This menu is only for use by workshops.

MENU: Diagnostics, Status test

Messages on the bus data link are shown in the menu "Status test". The workshop manual shows which messages exist and how they should be interpreted.

Status test	
MID:	128
PID:	091
Data:	000

Calibration ID

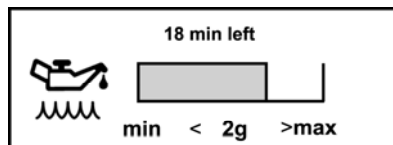
A number used to identify which software the electronic engine control unit is equipped with.

44 Menu Vehicle data

Oil level

The bus has an electronic oil level sensor.

The bar marked "min" and "max" shows the engine oil level. The figure in the centre shows how many gallons there are between min and max levels.



10031743

The engine oil level is also shown when the key is turned to the ignition position. This is shown for 5 seconds or until the engine is started.

In order to show the correct value, the engine must have been turned off for at least 70 minutes. If the engine has not been turned off sufficiently long, the display shows how many minutes remain until a correct value can be shown.

If the oil level is below "min" a warning symbol is shown.

Note: There is no warning for low oil level while driving.

Brake linings, status

See operating instructions EBS for more information about brake lining, status.

Vehicle ID

The bus chassis id and the vehicle number that were entered into the menu are displayed here "Fleet ID (password required)" page 39.

Total data

The total values show the engine's total values to date, logged during the lifetime of the engine control unit. The values that are saved are:

- Total distance
- Total fuel used
- Total number of hours the engine has run (not shown if the bus has extra time meter TIME-C)
- Total PTO hours
- Total engine revolutions

If the transfer should fail, then "No data" is shown when data is missing.

46 Menu Data log

Trip data

There are 14 different trip data stored.

- Trip distance
- Trip fuel avg
- Trip fuel acc
- Trip over revolutions
- Uneconomical engine speed during the trip
- Fuel consumption for uneconomical engine speed for the trip
- Trip average speed
- Trip overspeed:
- Trip engine hours
- Trip idle time
- Trip idle fuel
- Trip PTO hours
- Trip PTO fuel
- Trip cruise

Switch between values using ▲ and ▼.
Return to previous menu using ESC. If the transfer should fail, then "No data" is shown when data is missing.

Note: In the menu "Trip data" you can find information saved since the last reset.

Reset trip data (password required)

Only accessible if correct password has been entered.

Reset all information in menu "Trip data".
Follow the instructions on the display.

Enter password

Certain functions in the display are protected by a password. There are three passwords for the display. The factory set passwords are:

Workshop Password 1	0000
Owner Password	1234
Workshop Password 2	5678

When "Workshop, password 1" is entered, it is possible to reset values (applies to a number of functions). With both the other passwords the following menus are accessible:

- Fleet limit: engine speed
- Fleet limit: speed
- Fleet limit: fuel
- Fleet ID

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

It is not possible to remove the password protection for certain functions. This can only be done at a authorized Volvo workshop or PrevoSt service center/provider.

- 1 Set the first digit using ▲ and ▼
- 2 Step to the next digit using **SELECT**
- 3 Move back using **ESC**

Note: Change password to prevent unauthorized access to menus, see "Change password (if password is required)" page 34.

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