BODY BUILDER INSTRUCTIONS



Volvo Trucks North America

Cab, Instrument Panel VNL Section 8

Introduction

This document contains information about the cab, instrument panel in Volvo vehicles.

Note: We have attempted to cover as much information as possible. However, this information does not cover all the unique variations that a vehicle may present. Note that illustrations are typical but may not reflect all the variations of assembly.

All data provided is based on information that was current at time of release. However, this information is subject to change without notice.

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Instrument Panel

Tell-tales

A tell-tale is a display that indicates the actuation of a device, a correct or defective condition, or a failure to function. The operator should become familiar with these symbols in order to recognize and react (if necessary) to the indicated condition. Tell-tale symbols are shown in the instrument panel illustrations on the following pages.

Colors

To promote visual recognition internationally, specific colors for tell-tales have been established. Unless governmental regulations (in the area where the vehicle is to be used) or engineering directives specify otherwise, the standard colors are:

- Steady Blue high-beam headlights
- Flashing Green turn signals
- Flashing Red hazard condition involving the safety of personnel
- Steady Green system in operation
- Steady Red warning, immediate action required

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Amber — early warning, such as low fuel or Anti-Lock Brake System (ABS) malfunction

Panel Arrangement

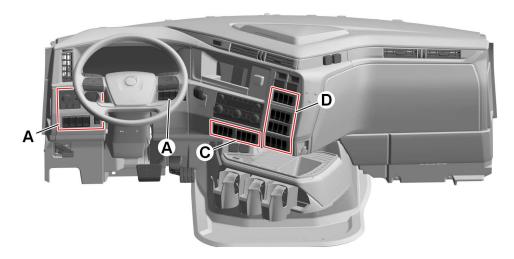
Your view from the driver seat should look something like the illustrations shown on the next page. The layout is designed to provide the operator with a good view of the gauges and controls (which are placed so they are within easy reach). The instrument panel, as shown in the following drawing, is broken down into several main sections. For easy identification we refer to them as Panels A, B, C and D.

Note: This section shows the instruments and controls available for this vehicle at the time of publication. However, depending on options, your vehicle may not have all the instruments and controls shown here, and they may not be in the same position.

Notes			

Instrument Panel Layout - without Secondary Information Display (SID)

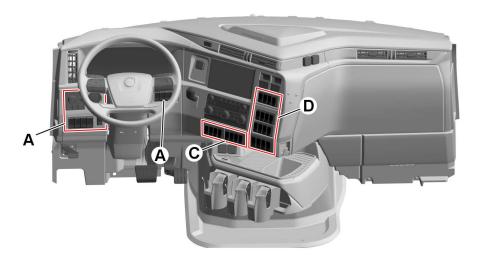




T3198995

Instrument Panel Layout - with Secondary Information Display (SID)





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T3199020

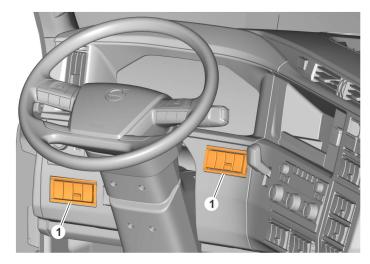
A = Panel A

B = Panel B

C = Panel C

D = Panel D

Panel A



T3198996

• 1: Flexible switches

Note: If the switches on the panel A is filled, the remaining switches are moved to the panel D based on the priority.

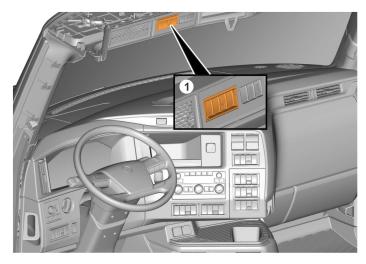
Flexible switches	Switch name	Flexible switches	Switch name
ENGINE STOP	Engine stop-runway protection	T3199508	Transmission PTO 1
T3199511	Heated windscreen	T3199507	Transmission PTO 2

T3199516	Daytime Running Light (DRL) override	T3199512	Side working lamp/auto
T3199515	Beacon lamp	T3199510	Auto engine start/stop (for battery 2)
T3199513	Snow plow lamp	T3199514	Remote start enable
T3199594	Dummy flexible switch		

Notes



Panel B



T3198999

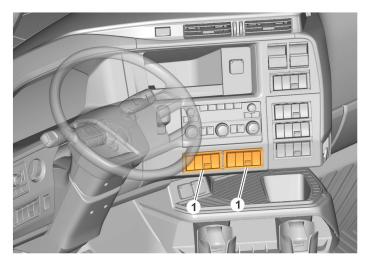
1: Flexible switches

Note: If the vehicle does not have an Interior Light Control Panel (ILCP), one FSP is available.

Flexible switches	Switch name	Flexible switches	Switch name
T3199557	Cab dome and floor	T3199559	Sleeper dome
T3199558	Door enable		

Notes			

Panel C



T3198997

• 1: Flexible switches

Note: If the switches on the panel C is filled, the remaining switches are moved to the panel D based on the priority.

Flexible switches	Switch name	Flexible switches	Switch name
T3199517	Lane Change Support (LCS) system, departure warning	T3199721	Tridem tag axle lift
T3199518	LCS departure warning con- tinuous steering	T3199726	Ratio ALD

T3199544	Lane Change Support (LCS)	T3199727	Tridem ALD
T3199521	Forward Collision Warning (FCW)	T3199542	Ratio, double drive axle
T3199717	Driver Alert Support, warning	T3199728	Tridem ratio, double drive
T3199722	ECO-ROLL disable	T3199543	Lift axle and maximum TR push

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T3199751	Hill start assist disable	T3199530	Inside/outside engine air tank
T3199527	Fifth wheel slide	T3199729	Engine fan override
T3199528	Fifth wheel unlock	T3199730	Trailer auxiliary
T3199525	Automatic Traction Control (ATC) mud/snow ATC off	T3199556	International Organization for Standardization (ISO) trailer auxiliary

T3199724	Temporary Road Speed Limiter (RSL)	T3199555	Auxiliary 1–momentary
T3199539	Height level adjustment	T3199554	Auxiliary 2–momentary
T3199538	Drive level Electronically Controlled Suspension (ECS)	T3199553	Auxiliary 3–momentary
T3199540	Ride height recall	T3199552	Auxiliary 4–momentary
	Air suspension dump	AUX 5	Auxiliary 5–momentary

T3199725		T3199551	
T3199720	Forward lift axle	T3199550	Auxiliary 6–momentary
T3199718	Tridem pusher axle	T3199549	Auxiliary 7–momentary
T3199719	Rear lift axle	T3199610	Auxiliary 8–momentary

Notes

Panel D



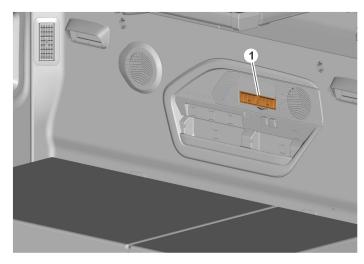
T3198998

• 1: Flexible switches

Flexible switches	Switch name	Flexible switches	Switch name
T3199531	Vision cameras	T3199548	Deferential lock interwheel, front
T3199545	Deferential lock inter-axle	T3199547	Deferential lock interwheel, rear
T3199546	Deferential lock interwheel	T3199617	Deferential lock interwheel, automatic

Notes			

Panel E

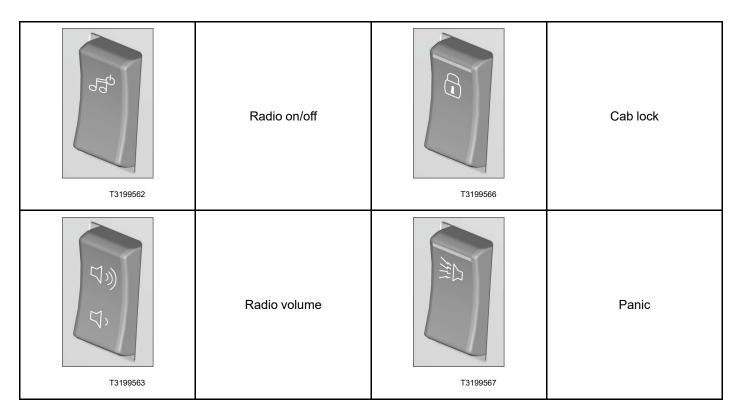


T3199000

• 1: Flexible switches

Note: If the vehicle does not have a Living Environment Control Module (LECM), two FSP are available.

Flexible switches	Switch name	Flexible switches	Switch name
T3199560	Sleeper doom and floor	T3199564	Sleeper fan speed
T3199561	Inverter	T3199565	Sleeper temperature



Before driving this vehicle, locate the instruments and controls and become thoroughly familiar with their operation. After starting and when driving, ensure that the instrument readings are normal.

Note: The instruments and controls shown were available for this vehicle at the time of publication. Depending on the options selected, all gauges and tell-tales may not be used in all vehicles.

Note: The dashboard layout is the same for all Volvo vehicles. However, the switches and certain switch positions are different depending on vehicle options.

Dashboard switches

General

Switches that may be fitted in the truck are in the above pages. The available switches in the truck are dependent on the truck's equipment.

Movable switches

The location of most the switches can be easily adapted to the driver's requirements. A few switches cannot be moved for safety reasons.

Notes		

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Instrument Cluster

Note: Refer to owners manual for instrument cluster and Driver Information Display (DID)

Switches and Controls

Flexible Rocker Switches

Description	Part number	Symbol	Circuit diagram	Comment
Forward Lift Axle	23702095		7 3 Mighterional 2 trapt 4 tra	I: NO - Momentary II: NO - Latching 2x 1-pole
Rear Lift Axle	23702096	000	7 3 Millinetional 2 trips 4 tr	I: NO - Momentary II: NO - Latching 2x 1–pole
Tridem Pusher Axle Lift	23702099		7 3 bidirectional 3 tripot 1 t	I: NO - Momentary II: NO - Latching 2x 1-pole
Tridem Tag Axle Lift	23702100		7 3 Melinetional 2 trips 1 tri	I: NO - Momentary II: NO - Latching 2x 1–pole
Lift Axle and Maxi- mum Tridem Push	23702102		3 bidirectional 2 layer layer 1 layer 1 logs 1 layer 1 logs 1 logs 1 layer 1 logs 1 lo	I: NO - Momentary II: NO - Latching 2x 1–pole
PTO1	23702104		3 bidirectional 2 insport 3 house control of the co	NO - Latching 1–pole
PTO2	23702106	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 Midwellonal 2 poul 1	NO - Latching 1–pole

Description	Part number	Symbol	Circuit diagram	Comment
Fifth Wheel Unlock	23702112		S 3 bidinectional 2 hopes 1 hopes 1 to C 1 to C 2 hopes 1 to C 2 h	NO - Momentary 1–pole
Fifth Wheel Slide	23702113		\$ 7 8 5 4 listed Output GNO legal legal 1906 FF BL	NO - Latching 1–pole
Remote Start Enable	23702114	TTAKTZ BTOWEN	3 bidirectional 2 not a second	NO - Latching 1–pole
Temporary RSL	23702115		3 bidirectional 2 input 2 input 4 input 5 input 5 input 5 input 5 input 6 inpu	NO - Momentary 1–pole
Gearbox PTO1	23702116		3 bidirectional 2 input 2 input Output CMO input input 1 VC C	NO - Latching 1–pole
Inside/Outside Engine Air Intake	23702118	TOSLINCO BY BY BHENES	3 bidirectional 2 input 2 input Output GNO input input 1 VC C	NO - Latching 1–pole
Cross Country Cruise Control	23702119		3 bidirectional 2 input 2 input 4 input 5 input 5 input 5 input 5 input 6 inpu	NO - Momentary 1–pole
PTO1	23702121		3 bidirectional 2 input 2 input 4 input 5 input 5 input 5 input 5 input 6 inpu	NO - Momentary 1–pole

Description	Part number	Symbol	Circuit diagram	Comment
PTO2	23702122	22	3 bidirectional 2 longer of the position of th	NO - Momentary 1–pole
РТО3	23702123	P70 3	3 bidirectional 2 inper 1 inpe	NO - Momentary 1–pole
PTO4	23702124	40TA	3 bidirectional 2 larger Section 1 larger 1 larg	NO - Momentary 1–pole
Gearbox PTO1	23702125		3 bidirectional 2 inper 1 inpe	NO - Momentary 1–pole
Gearbox PTO2	23702126		3 bidirectional 2 inper 1 inpe	NO - Momentary 1–pole
Gearbox PTO2	23702129		3 Midirectional 2 appoint 2 appoint 1 VC C	NO - Latching 1–pole
DRL Override	23702132		3 bidirectional 2 inper 1 local 2 inper 1 loca	NO - Momentary 1–pole
Plow Lamps	23702134		3 Midirectional 2 langut appear of the property of the propert	NO - Latching 1–pole

Description	Part number	Symbol	Circuit diagram	Comment
Beacon Light	23702135		3 bidirectional 2 input 2 input 0 input 1 ivo 0 input 1 iv	NO - Momentary 1–pole
Spot Light Front	23702140		3 bidirectional 2 layout State of the State of S	NO - Latching 1–pole
Side Working Light/ Auto	23702144	Auto	10 6 7 9 8 5 2 logic lines 1 10 10 10 logic lines 1	NO - Latching 1–pole
Trailer Body Light	23702145		3 bidirectional 2 input 2 input 1 input 1 ivo 2 input 1 input 1 ivo 2 input 1 input 1 ivo 2 input 1 in	NO - Momentary 1–pole
ISO Trailer AUX	23702151	Aux	3 bidirectional 2 popular 3 bidirectional 2	NO - Latching 1–pole
Trailer AUX	23702152	G G G G G G G G G G G G G G G G G G G	9 Midwellona 2 minut 1 vic c c c c c c c c c c c c c c c c c c	NO - Latching 1–pole
AUX1	23702153	I XNV	3 bidivectional 2 point 3 to 10 point 3 point 10	NO - Latching 1–pole
AUX1-Momentary	23702154	YOR	3 bidirectional 2 larger and 1	NO - Momentary 1–pole

Description	Part number	Symbol	Circuit diagram	Comment
AUX2	23702155	YOR	3 bidirectional 2 hoped 2 hoped 1 VVC C	NO - Latching 1–pole
AUX2-Momentary	23702156	Aux a	3 bidirectional 2 Inspec	NO - Momentary 1–pole
AUX3	23702157	Aux 3	3 bidivectional 2 payd 1 payd	NO - Latching 1–pole
AUX3-Momentary	23702158	Aux 3	3 bidirectional 2 inport 1 inp	NO - Momentary 1–pole
AUX4	23702159	AUX 4	3 bidivectional 2 payd 4 input 5 to CP Output GMO	NO - Latching 1–pole
AUX4-Momentary	23702160	AUX 4	3 bidirectional 2 Inspect 2 Inspect 1 VCC	NO - Momentary 1–pole
AUX5	23702161	AUXS	3 bidivectional 2 name	NO - Latching 1–pole
AUX5-Momentary	23702162	Auxs	3 bidirectional 2 inport 1 inp	NO - Momentary 1–pole

Description	Part number	Symbol	Circuit diagram	Comment
AUX6	23702163	York e	3 bidirectional 2 house 4 house 5 thouse 5 the control of the cont	NO - Latching 1–pole
AUX6-Momentary	23702164	Auxe	3 bidirectional 2 inport 1 inp	NO - Momentary 1–pole
AUX7-Momentary	23702165	AUX7	3 Midwellora 2 2 super 1994 GND Input Input 1 1VC C	NO - Momentary 1–pole
AUX8-Momentary	23702324	Aux a	3 Mid-ectional 2 most 1	NO - Momentary 1–pole
Crane	23702816		3 bidirectional 2 input 1 VC C C C C C C C C C C C C C C C C C	NO - Momentary 1–pole
Engine Runaway Protection	24041730	ENGINE CONTROL OF THE PARTY OF	3 bidirectional 2 inper 1 inpe	NO - Momentary 1–pole
Sander Device	23702377			Cap Lock Switch
Flap Release	23702380			Cap Lock Switch
Flap Release	23702381	Ži ^o		Сар

Description	Part number	Symbol	Circuit diagram	Comment
Automatic Snow Chain	23702382			Cap Lock Switch
Giloutine	23702383	₩		Сар
Strobe	23905006			Сар
Blind Cover (Dummy switch)	23664626	WOLD AND AND AND AND AND AND AND AND AND AN		Dummy

Hardwire Rocker Switch

Description	Part number	Symbol	Circuit diagram	Comment
AUX	23702242	n de la companya de l	Position 1 BL FF 1 9 8 1 9 8 1 10 4	NO - Latching 1–pole
AUX	23702244	T AUX	Position 1 BL FF 9 8 1 9 8 1 9 8 1 10 4	NO - Momentary 1–pole
AUX	23702245	W N	Position 1 BL FF 1 9 8 1 9 8 1 10 4	NO - Latching 1–pole
AUX	23702246	AUX	Position 1	NO - Latching 2x1–pole
AUX	23702247	Y/NY	Position 1	I: NO - Latching II: NO - Momentary 2x1–pole
AUX	23702248	XMV	Position 1	NO - Momentary 2x1–pole
AUX-12V	24085736	XMV	Position 1 BL FF 1 9 8 1 9 8 1 10 4	NO - Latching 1–pole
AUX-12V	24085739	X/NV	Position 1 BL FF 1 9 8 1 9 8 1 10 4 10 4	NO - Momentary 1–pole

AUX-12V	24085750	A A A	Position 1 BL FF 1 9 8 1 9 8 1 10 4	NO - Latching 1–pole
AUX-12V	24085756	Y/NY	Position 1 BL FF DE D	NO - Latching 2x1–pole
AUX-12V	24085761	AWX	Position 1	I: NO - Latching II: NO - Momentary 2x1–pole
AUX-12V	24085763	A WX	Position 1 BL FF B	NO - Momentary 2x1–pole
Blinder Cover (HW Switch Dummy)	24575772	2/53/77/2 MM ROMANA 219.707.021		Dummy
Bendix / LYTX Camera	24571871		Position 1 BL BL BL 10 4 Position 0 BL 10 4	NO - Momentary 1–pole

Switch Functionality Legend

Refer the following table to identify switch functionality.

Date 5.2024

1 0 W3007476	On/Off Maintained
1 0 W3007477	On/Off (Momentary On)

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1 0 W3007704	On/Off (Momentary Off)
1 0 W3007479	On/Off Locking
1 0 W3007480	On/Off Locking (Momentary On)
1 0 2 • • • • • • • • • • • • • • • • • • •	On/Off/On (Momentary, With Center Off Position)



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