

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:

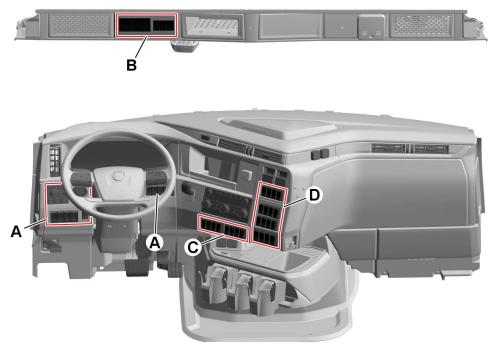
- Steady Blue high-beam headlights
- Flashing Green turn signals
- Flashing Red hazard condition involving the safety of personnel
- Steady Green system in operation
- Steady Red warning, immediate action required
- Amber early warning, such as low fuel or Anti-Lock Brake System (ABS) malfunction

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.

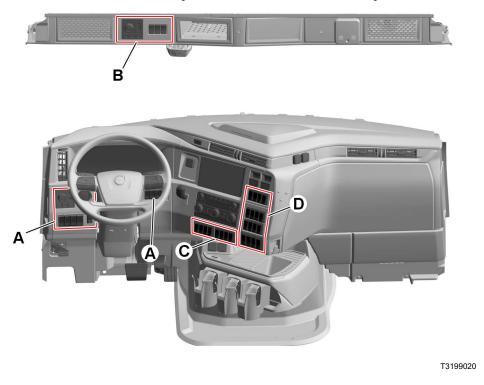
Note: This section shows the instruments and controls available for this vehicle at the time of publication. However, depending on options, your vehicle may not have all the instruments and controls shown here, and they may not be in the same position.

Instrument Panel Layout - without Secondary Information Display (SID)



T3198995

Instrument Panel Layout - with Secondary Information Display (SID)



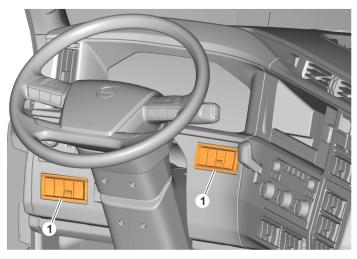
A = Panel A

B = Panel B

C = Panel C

D = Panel D

Panel A

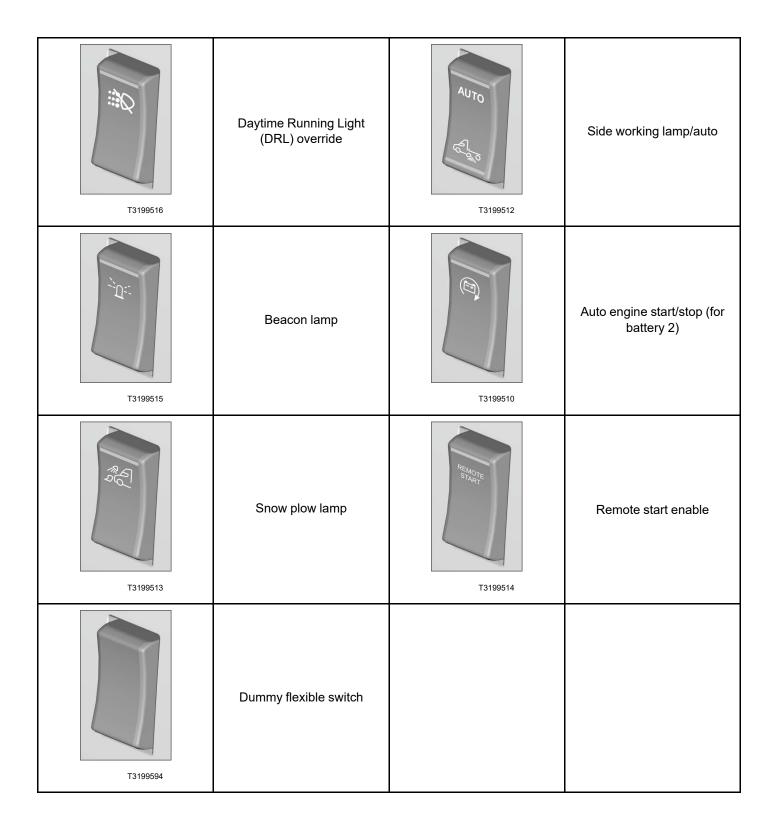


T3198996

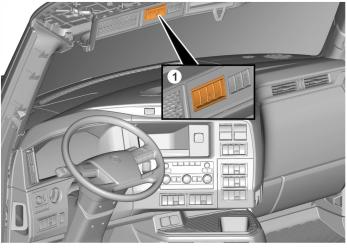
• 1: Flexible switches

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
FINGINE STOP FINGINE STOP FINGINE T3199509	Engine stop-runway protection	TRANS TRANS T3199508	Transmission PTO 1
T3199511	Heated windscreen	TRANS T3199507	Transmission PTO 2



Panel B



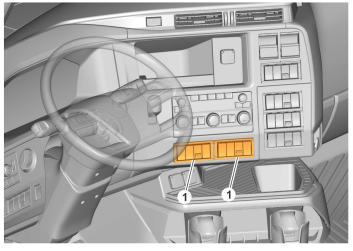
T3198999

• 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
تابىلەرمەر مەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرم مەرمەرلى مەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەر مەرمەرلەرمەر مەرمەرلەرمە مەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرمەرمەرمەرمەرمەرلەرمەرلەرمەرلەرمەرلەرمەرلەرمەرمەرمەرمەرمەرمەرمەرمەرمەرمەرمەرمەرمە	Cab dome and floor	T3199559	Sleeper dome
T3199558	Door enable		<u>.</u>

Panel C



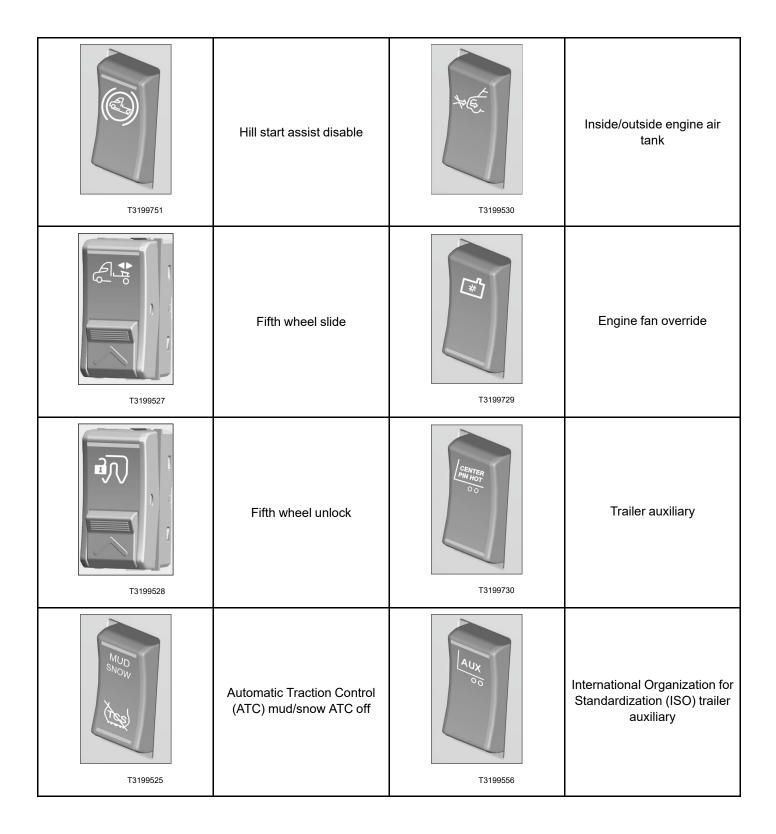
T3198997

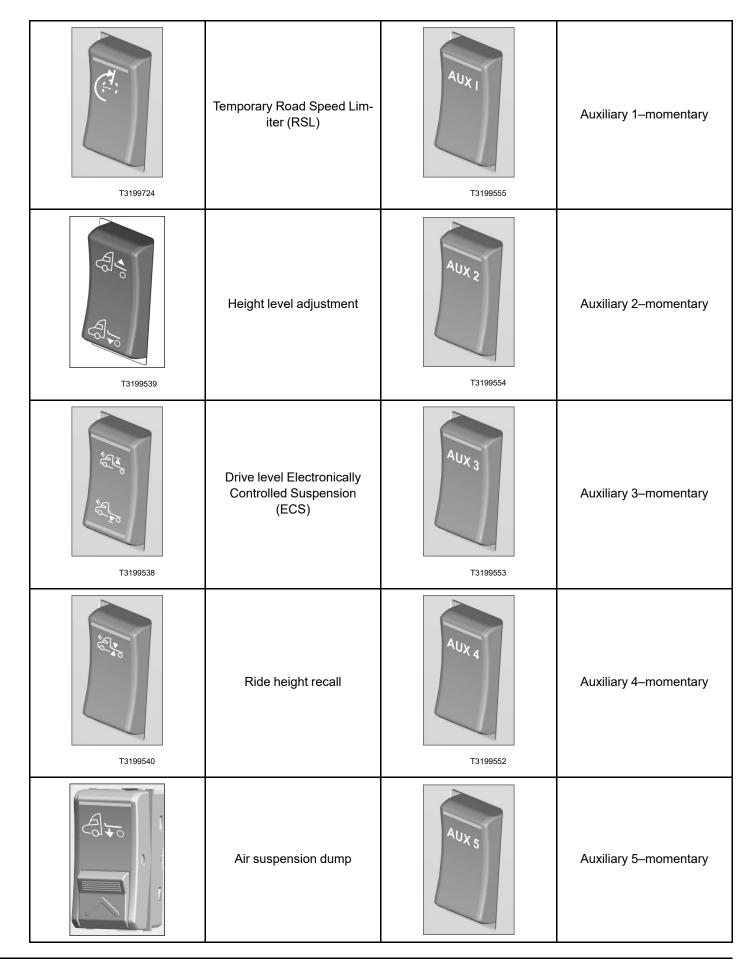
• 1: Flexible switches

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
Tailabarta	Driver Alert Support, warning	F3199728	Tridem ratio, double drive
T3199722	ECO-ROLL disable	T3199543	Lift axle and maximum TR push





T3199725		T3199551	
T3199720	Forward lift axle	F 1199550	Auxiliary 6–momentary
T3199718	Tridem pusher axle	T3199549	Auxiliary 7–momentary
T3199719	Rear lift axle	AUX 8 T3199610	Auxiliary 8–momentary

Panel D



T3198998

• 1: Flexible switches

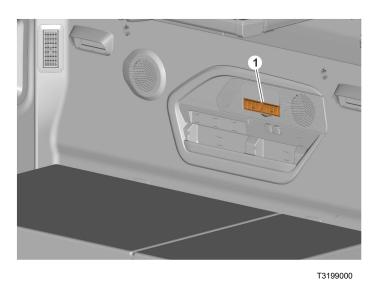
Flexible switches	Switch name	Flexible switches	Switch name
T3199531	Vision cameras	FRONT FRONT T3199548	Deferential lock interwheel, front
T3199545	Deferential lock inter-axle	T3199547	Deferential lock interwheel, rear
FX	Deferential lock interwheel	FA-F FA-F <t< td=""><td>Deferential lock interwheel, automatic</td></t<>	Deferential lock interwheel, automatic

Volvo Body Builder Instructions USA174953734

Date 5.2024

VNL, Section 8 Cab, Instrument Panel

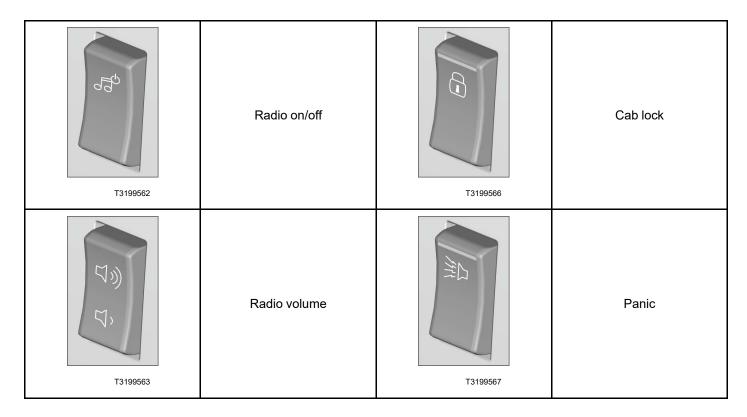
Panel E



• 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
آنان ۲3199560	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.

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 Repair 2 Repair GND 1 VCC 1 VCC 1 VCC 1 VCC 1 VCC	I: NO - Momentary II: NO - Latching 2x 1–pole
Rear Lift Axle	23702096		7 B Minetional 2 Repair GND 1 VCC 1 VCC 1 I	I: NO - Momentary II: NO - Latching 2x 1–pole
Tridem Pusher Axle Lift	23702099		7 3 Mintelonal 1 Repi 040 VVC 1 VVC 1 I 1 I 1 I 1 I 1 I 1 VVC 1 VVC	I: NO - Momentary II: NO - Latching 2x 1–pole
Tridem Tag Axle Lift	23702100		7 8 Minterional 8 Minterional 9 M	I: NO - Momentary II: NO - Latching 2x 1–pole
Lift Axle and Maxi- mum Tridem Push	23702102		13 6 7 8 5 4 Input Houd Debut Oxton 10 0 1 10 1 10 1 10 1 10 1 10 1 10 1 1	I: NO - Momentary II: NO - Latching 2x 1–pole
PTO1	23702104		3 bidivedimai 2 appart 0 deput 0 dep	NO - Latching 1–pole
PTO2	23702106		2 bidivelimal 2 april 2 apri	NO - Latching 1–pole

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Description	Part number	Symbol	Circuit diagram	Comment
Fifth Wheel Unlock	23702112		3 bidiretibul 2 april 0 april 640 1 april 1000 0 i 0 i 1 EEP BL	NO - Momentary 1–pole
Fifth Wheel Slide	23702113		3 Mélectional 2 Repair 0 arbot GRO legat 1 VCC 1 0 1 0 FF BL	NO - Latching 1–pole
Remote Start Enable	23702114		3 Midretional 2 Appl 0 Appl	NO - Latching 1–pole
Temporary RSL	23702115		3 bidiretional 2 loger 0 cliput GRD is 5 til loger 1 VOC 0 l 1 FF BL	NO - Momentary 1–pole
Gearbox PTO1	23702116		3 Midrotional 2 Appl 0 Appl	NO - Latching 1–pole
Inside/Outside En- gine Air Intake	23702118		3 Midretional 2 Appl 0 Appl	NO - Latching 1–pole
Cross Country Cruise Control	23702119		3 bidiretional 2 loper 0 diput GRD Boy 0 diput GRD Boy 0 loper 0 loper FF BL	NO - Momentary 1–pole
PTO1	23702121		Bidiretional 2 logar 0 vitput GND B 5 logar 1 V/C C 0 l 0 l FF BL	NO - Momentary 1–pole

Description	Part number	Symbol	Circuit diagram	Comment
PTO2	23702122		3 bidirectional 2 loger 0 clipst GND Hepst IVCC 0 l EEP FF BL	NO - Momentary 1–pole
РТОЗ	23702123		3 bidiretional 2 logic 0 clput 6/0 8 5 1 logic 0 clput 6/0 8 5 1 logic 1 VC C 0 1 EEP FF BL	NO - Momentary 1–pole
PTO4	23702124		3 bidirettoral 2 logic Octour GND Boy 0 ctour GND Boy 0 ctour GND Boy 0 ctour GND Boy 0 ctour GND Boy 1 VCC 0 ctour GND Boy FF BL	NO - Momentary 1–pole
Gearbox PTO1	23702125		S bidiretional 2 logic 0 diput 0 diput	NO - Momentary 1–pole
Gearbox PTO2	23702126		S bidiretional 2 logic 2 logic 0 diput BBD 0 logic 1 logic 0 logic 1 l	NO - Momentary 1–pole
Gearbox PTO2	23702129		3 bidirectional 2 aport 2 aport 0 debrat GRD input legit 0 debrat GRD EEP EEP FF BL	NO - Latching 1–pole
DRL Override	23702132		3 bilinetional 2 logic 0 diput 0 diput	NO - Momentary 1–pole
Plow Lamps	23702134		3 Midretlowi 2 epid Output GND Bippet Jopet 0 typet FF BL	NO - Latching 1–pole

Description	Part number	Symbol	Circuit diagram	Comment
Beacon Light	23702135		3 bidirectional 2 linger 0 diput 0 dip	NO - Momentary 1–pole
Spot Light Front	23702140		3 bilivelinal 2 bili	NO - Latching 1–pole
Side Working Light/ Auto	23702144		10 6 7 8 5 5 1 Point Input Octput OND Input Inp	NO - Latching 1–pole
Trailer Body Light	23702145		3 bidirectional 2 linger 0 diput 0 dip	NO - Momentary 1–pole
ISO Trailer AUX	23702151		3 billivelinal 2 billivelinal	NO - Latching 1–pole
Trailer AUX	23702152		3 Millertinal 2 Mill	NO - Latching 1–pole
AUX1	23702153		P Miduretional 2 Appet 0 App	NO - Latching 1–pole
AUX1-Momentary	23702154		3 Miduetional 2 Ioper Octobel GND Hoper 0 I VCC 0 I EEP FF BL	NO - Momentary 1–pole

Description	Part number	Symbol	Circuit diagram	Comment
AUX2	23702155		3 bidirectional 2 aport 2 aport 0 atpart GND imput lapert 0 i 0 i FF BL	NO - Latching 1–pole
AUX2-Momentary	23702156		3 bidiretional 2 logic 0 deput 670 8 5 1 logic 1 VOC 0 1 EEP FF BL	NO - Momentary 1–pole
AUX3	23702157		3 Miduelinal 2 Adduelinal 2	NO - Latching 1–pole
AUX3-Momentary	23702158		S bidiretional 2 logic 0 diput 0 diput	NO - Momentary 1–pole
AUX4	23702159		3 bidirectional 2 apart 2 apart 0 debrat 0 debra	NO - Latching 1–pole
AUX4-Momentary	23702160		S bidiretional 2 bidiretionale 2 bidiretional 2 bidiretional 2 bidiretional 2 bidiretional 2 bid	NO - Momentary 1–pole
AUX5	23702161		3 bidiretional 2 exercise 2 exercise 3 bidiretional 2 exercise 3 bidiretional 3 exercise 3 exercis	NO - Latching 1–pole
AUX5-Momentary	23702162		3 bidirudioral 2 logic Quiput ChD Byter 0 logic 0 l EEP FF BL	NO - Momentary 1–pole

Description	Part number	Symbol	Circuit diagram	Comment
AUX6	23702163		3 bidirectional 2 logic 0 depet GND ispect iVCC 0 l l l l l l l l l l l l l l l l l l l	NO - Latching 1–pole
AUX6-Momentary	23702164		1 Miluetional 2 Indivetional 2 Indivetional	NO - Momentary 1–pole
AUX7-Momentary	23702165		3 Midvedinel 2 experi- 2 experi- 2 experi- 2 experi- 2 experi- 2 experi- 2 experi- 2 experi- 2 experi- 1 experi- 1 vvc 1 vvcc 1 vvcc 1 vvcc 1 vvcc 1 vvccc 1 vvccc 1 vvcccc 1 vvcccccccccc	NO - Momentary 1–pole
AUX8-Momentary	23702324		3 Midvedinal 2 expri- 2 expri- 2 expri- 10pd GRB GRB input input i VCC I VCC II 0 I II 0 I II 0 I FF FF BL	NO - Momentary 1–pole
Crane	23702816		3 bilinetional 2 logi 0 diput GND B 5 to 1 0 diput GND B 5 to 1 1 VCC 0 to 1 0 to 1 FF BL	NO - Momentary 1–pole
Engine Runaway Protection	24041730		3 hidivetional 2 loger 0 diput 6 k9 Higher 1 VC C 0 1 EEP FF BL	NO - Momentary 1–pole
Sander Device	23702377			Cap Lock Switch
Flap Release	23702380			Cap Lock Switch
Flap Release	23702381			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			Dummy

Hardwire Rocker Switch

Description	Part number	Symbol	Circuit diagram	Comment
AUX	23702242		Position 1 BL FF 1 9 8 1 0 4	NO - Latching 1–pole
AUX	23702244		Position 1 BL FF 1 9 8 1 9 4 1 0 4	NO - Momentary 1–pole
AUX	23702245		Position 1 BL FF 1 9 8 1 0 4	NO - Latching 1–pole
AUX	23702246		Position 1 BL FF 1 9 5 3 8 6 1 9 7 4 1 0 7 4 1 0 7 4	NO - Latching 2x1–pole
AUX	23702247		Position 1 BL FF 9 5 3 8 6 1 9 5 7 6 1 0 7 7 6 1 0 7 7 6 1 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	I: NO - Latching II: NO - Momentary 2x1–pole
AUX	23702248		Position 1 BL FF 1 9 5 3 8 6 1 9 7 4 10 7 4 10 7 4 10 7 4	NO - Momentary 2x1–pole
AUX-12V	24085736		Position 1 BL FF 1 9 8 1 9 4 1 0 4	NO - Latching 1–pole
AUX-12V	24085739		Position 1 BL FF 1 9 8 1 0 4	NO - Momentary 1–pole

AUX-12V	24085750	Position 1 BL FF 1 9 8 2 2 2 2 3 3 4 10 $4Position 0BL FF1$ 9 8 2 2 2 3 4 10 4	NO - Latching 1–pole
AUX-12V	24085756	Position 1 BL FF 1 95 3 8 6 1 95 3 8 6	NO - Latching 2x1–pole
AUX-12V	24085761	Position 1 BL FF 1 9 5 3 8 6 1 9 5 7 6 1 9 5 7 7 6 1 9 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	I: NO - Latching II: NO - Momentary 2x1–pole
AUX-12V	24085763	Position 1 BL FF 1 9 5 3 8 6 1 9 5 7 6 1 9 5 7 6 1 9 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	NO - Momentary 2x1–pole
Blinder Cover (HW Switch Dummy)	24575772		Dummy
Bendix / LYTX Camera	24571871	Position 1 BL BL 1 1 1 10 4 Position 0 BL 1 1 1 1 1 1 1 1	NO - Momentary 1–pole

Switch Functionality Legend

Refer the following table to identify switch functionality.

1 0 W3007476	On/Off Maintained
1 0 ₩3007477	On/Off (Momentary On)

1 0 w3007704	On/Off (Momentary Off)
1 0 W3007479	On/Off Locking
1 0 ₩3007480	On/Off Locking (Momentary On)
1 0 2 * /* W3007478	On/Off/On (Momentary, With Center Off Position)



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