

MARS

Intercity Bus

Built on VOLVO B8R chassis



Driver Manual

01/2021

Dear customer,

We would like to congratulate you on purchasing a
Merkavim Mars body.

We wish you a pleasant journey.

To be familiar with the chassis, we recommend that you
read the operating instructions.

The instructions provide information about the body.

For further information contact a representative
from Merkavim, who will be pleased to answer any
questions.

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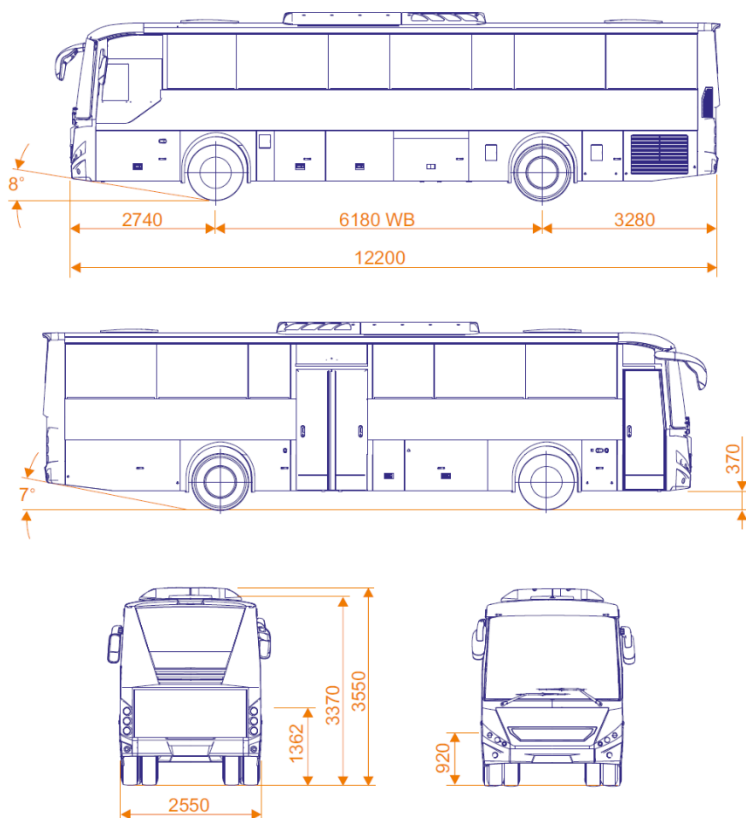
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External dimensions

Vehicle length	12200 mm
Wheel base	6180 mm
Rear overhang	3280 mm
Front overhang	2740 mm
Vehicle width	2550 mm
Vehicle height	3550 mm



Internal dimensions and data

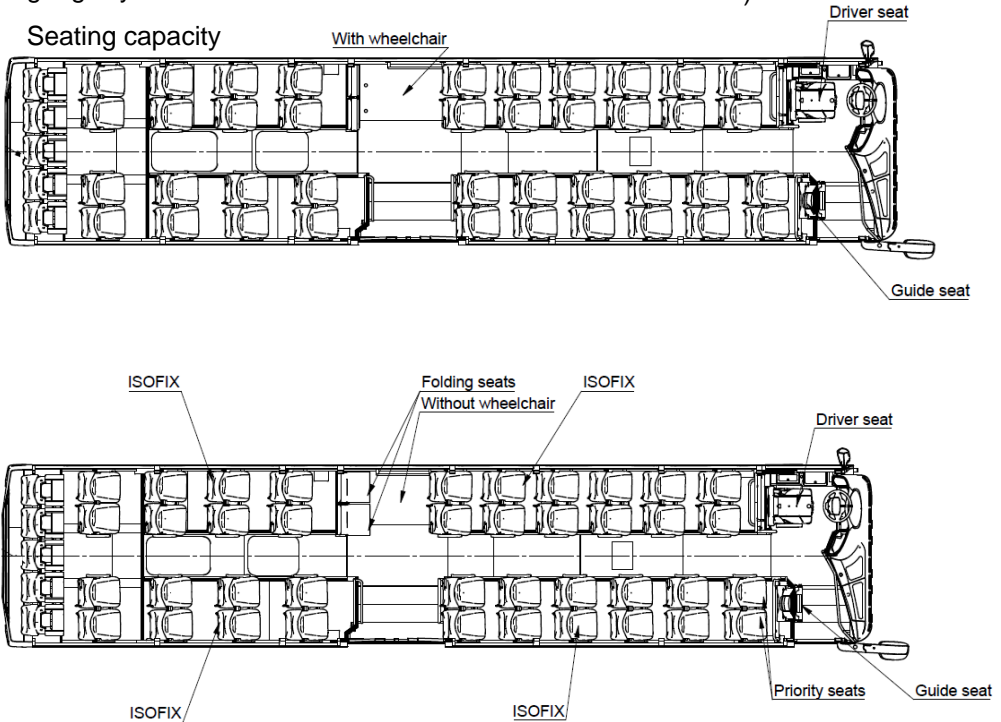
Height of passenger 2040 mm

gangway 450 mm

Width of passenger 45+2+Driver+Guide (ISOFIX

gangway x4)

Seating capacity

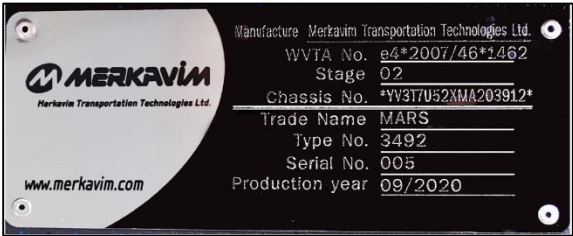


Identification plates

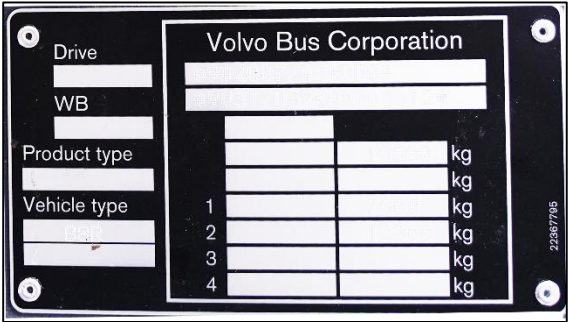
Identification plates



Vehicle identification plate



Chassis identification plate



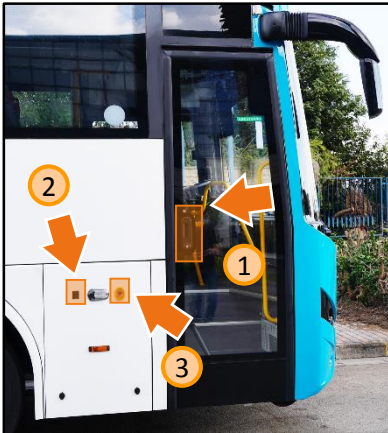
Front entrance - door opening/closing external control



- ① Door opening/closing handle with mechanical lock. ①a



PS200 door lock



- ② Electric button for opening/closing the front door from pneumatic system.

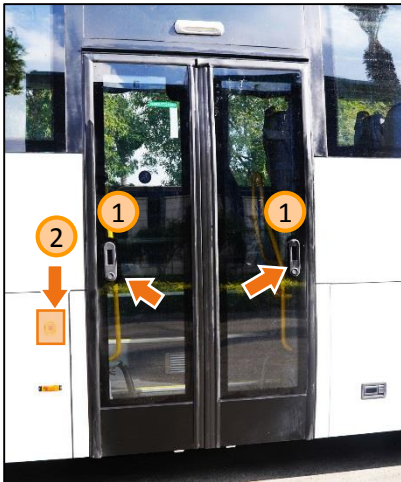


- ③ Emergency door open button (button is active when a bus is in parking mode or speed is less than 3 km/h).

Rear entrance - door opening external control



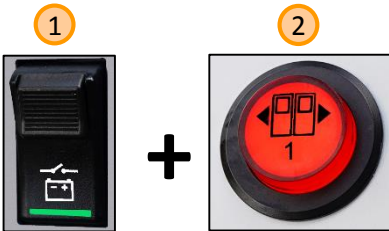
- ① Door opening/closing handle
(In case of emergency opening).



- ② Emergency door open button (button is active when the bus is in parking mode or speed is less than 3 km/h).



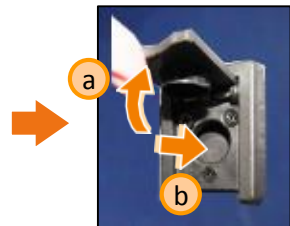
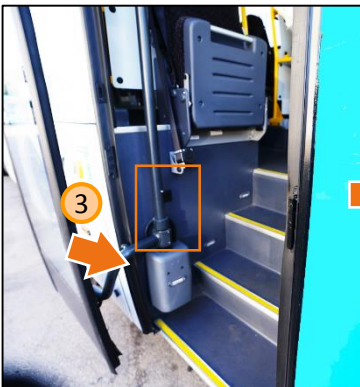
Front entrance - door opening/closing internal control



1 Main switch

2 Front door button

3 Pneumatic button for opening/closing the door (recommended for maintenance use).



Rear entrance - door opening/closing internal control



1 Main switch

4 Rear door button

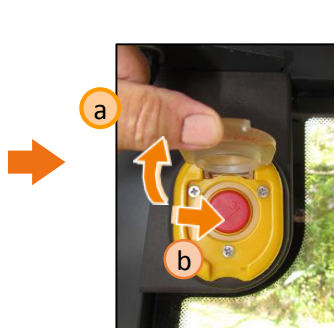


Front and rear entrance - internal emergency opening



1 Internal emergency front door opening button.

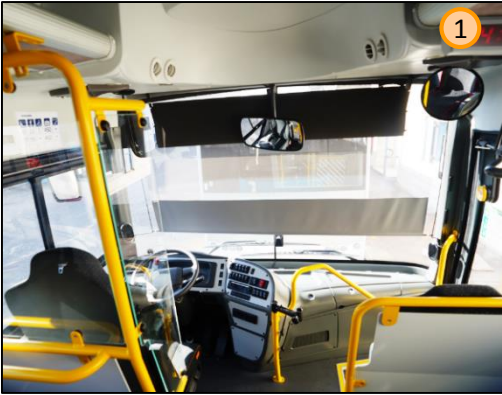
2 Internal emergency rear door opening button.



Emergency opening buttons are available when the bus is parked or speed is less than 3 km/h.

After pressing the buttons, doors must be opened manually outwards.

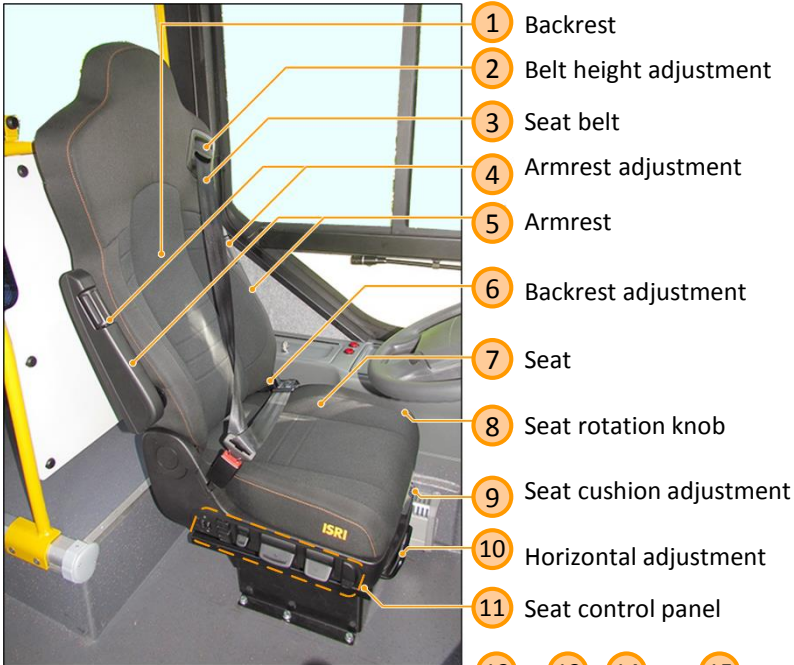
Driver area - general view



- 1 Driver area
- 2 Driver side window 38
- 3 Main instrument panel 19
- 4 Driver seat 17
- 5 Side instrument panel 35
- 6 Front entrance area
- 7 Upper area 39



Driver seat



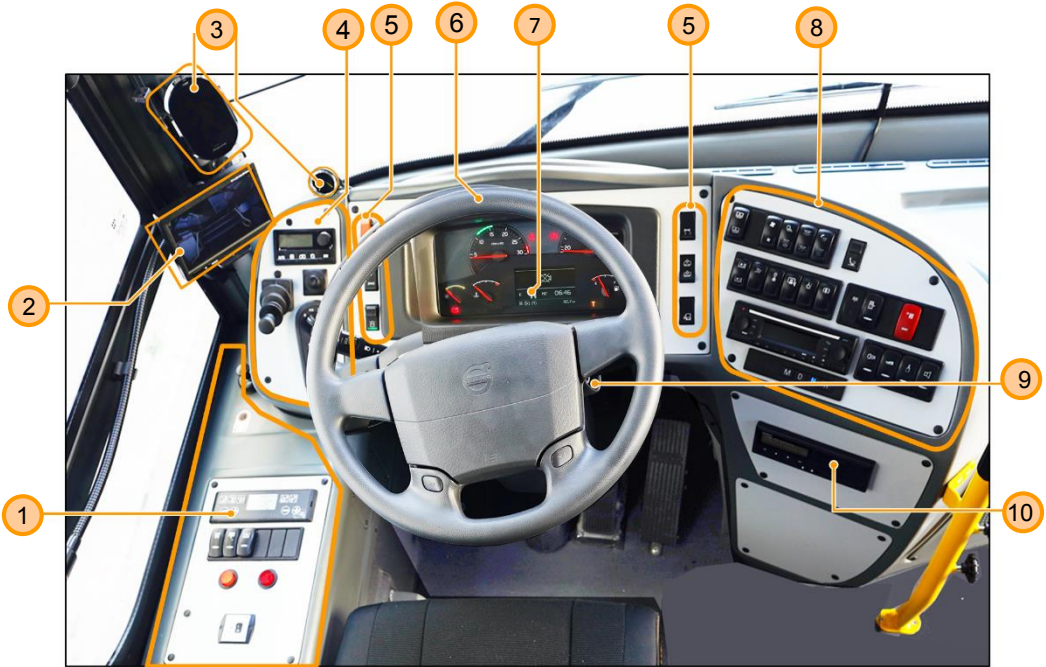
Driver seat



- ④ Armrest adjustment
- ⑥ Backrest adjustment
- ⑨ Seat cushion adjustment
- ⑩ Horizontal adjustment
- ⑮ Height adjustment with memory function
- ⑯ Tilt adjustment



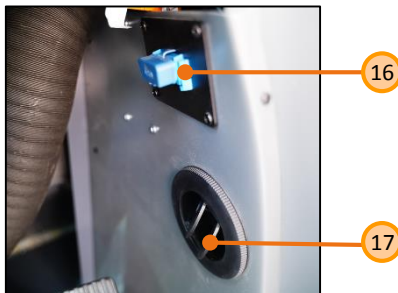
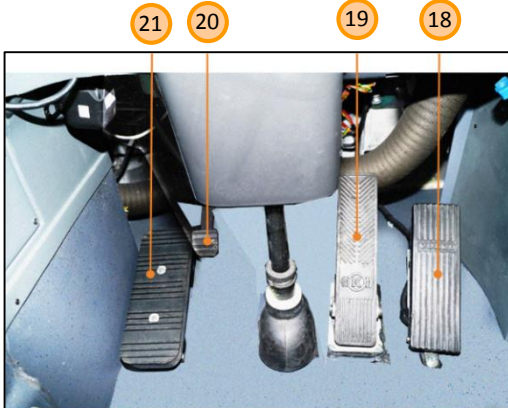
Instrument panel



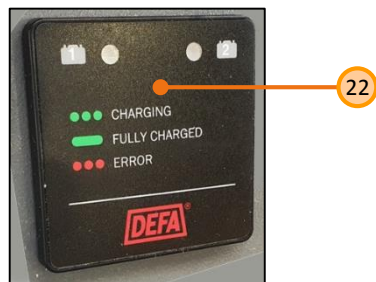
- 0 Stop position
- I Intermediate position
- II Ignition position
- III Start position
(spring-return position)

- 1 Left instrument panel
- 2 Monitor - reverse/rear door
- 3 Mobileye + Mobileye shield
- 4 Front instrument panel
- 5 Central switches group
- 6 Steering wheel
- 7 Gauges and indicators lights panel
- 8 Right instrument panel
- 9 Starter switch
- 10 Tachograph

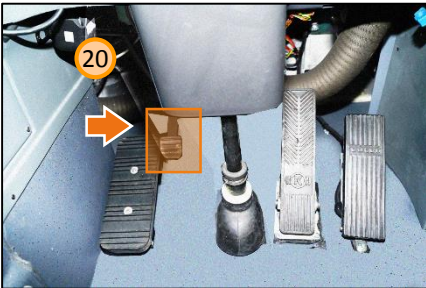
Instrument panel



- 16 Chassis systems diagnostic plug
- 17 Driver heater air jet
- 18 Accelerator pedal
- 19 Break pedal
- 20 Steering wheel adjustment pedal
- 21 Foot step
- 22 Remote panel

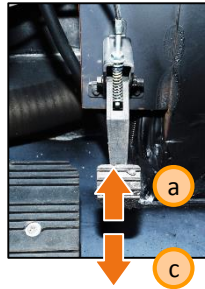


Instrument panel

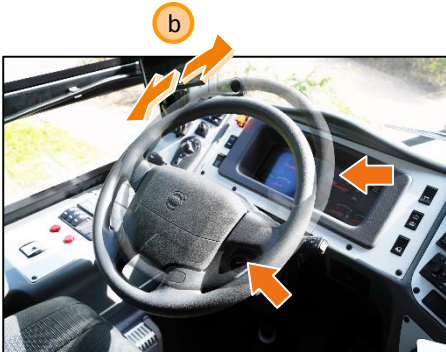


20 Steering wheel adjustment pedal

- a Push adjustment pedal
- b Adjust steering wheel to comfortable position
- c Release the pedal



Tilt adjustment



Height adjustment

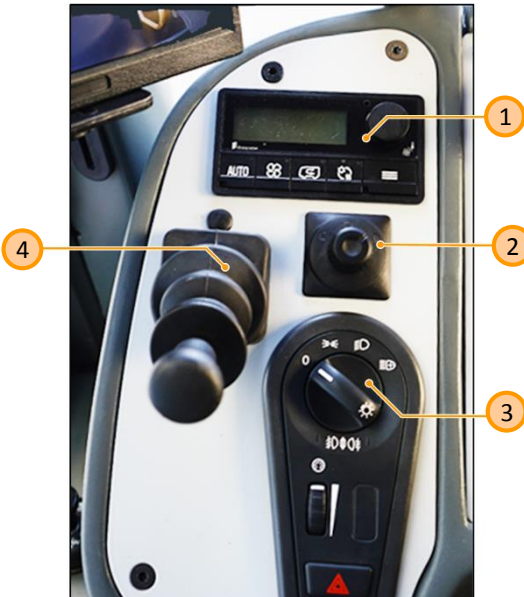


Left switches group



- 1 A/C EBERSPACHER control panel
- 2 Driver mirror selector
- 3 Light selector
- 4 Parking brake

Manually release parking brake

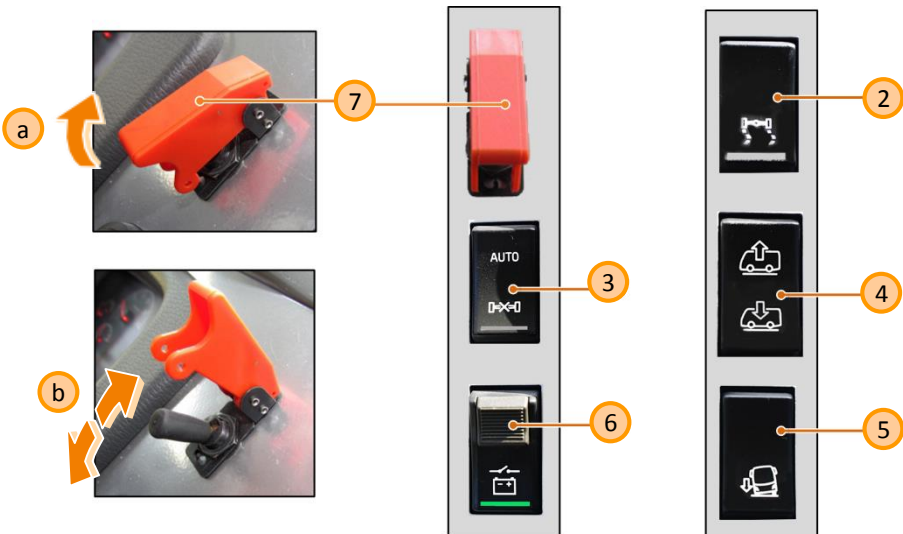


NO.	Switch Description	Prerequisites for operation
1	A/C EBERSPACHER control panel	Running engine
2	Driver mirror selector	
3	Light selector	Open main circuit breaker
4	Parking brake	Open main circuit breaker

Gauges panel and central switches group



- 1 Gauges and indicator lights panel
- 2 Traction control switch
- 3 Difflock switch
- 4 Level up/down switch
- 5 Kneeling switch
- 6 Main switch
- 7 Emergency switch

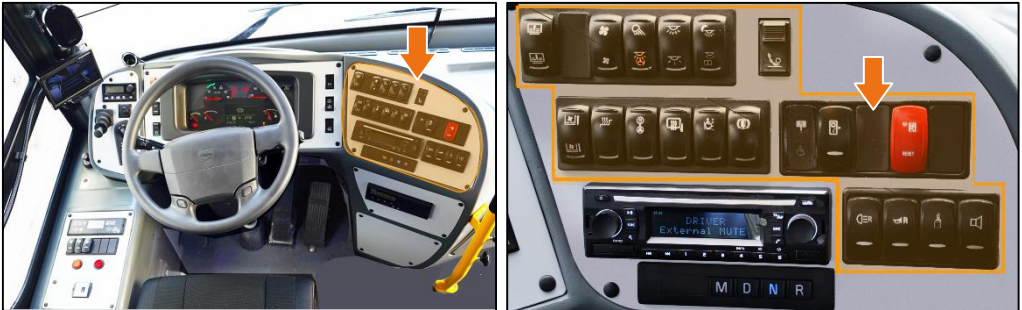


Right switches group - control switches



NO.	Switch Description	Prerequisites for operation
1	Sun roll button	Open main circuit breaker
2	Driver fan button	Running engine
3	Ticket light/ button light	Open main circuit breaker
4	2 stage interior light button	Open main circuit breaker
5	Night/reading light button	Open main circuit breaker
6	Snow chains activation	Running engine
7	Additional reversing lamps	Gear in reverse

Right switches group - control switches



NO.	Switch Description	Prerequisites for operation
8	reverse buzzer cancelling	Gear in reverse
9	External public address switch	
10	External load speaker	Open main circuit breaker
11	Driver heater button	Running engine + driver heating activated
12	Stairs heating button	Running engine
13	Rear camera sprinkler button	Open main circuit breaker
14	Mirrors defroster button	Running engine

Right switches group - control switches



NO.	Switch Description	Prerequisites for operation
15	Wheelchair lift button	Open main circuit breaker + open rear door + parking brake activated
16	Parking brake button	Running engine
17	Stop request / disabled stop request indicator	Open main circuit breaker
18	Release doors from emergency	Open main circuit breaker
19	Emergency lighting system operation/reset	

Right switches group - CD/MP3/RADIO/MIC player



Driver zone (DRV)



Passenger zone (PSG)



- | | |
|----------------------------------|------------------------------------|
| ① Power | ⑨ USB slot |
| ② USB/SD card content play/pause | ⑩ Phone operations (DRV zone only) |
| ③ DRV source selector | ⑪ Memorized radio stations |
| ④ LCD screen | ⑫ Auto/manual tuning |
| ⑤ PSG source selector | ⑬ Radio stations scan |
| ⑥ TA/AF functions control | ⑭ SD card slot |
| ⑦ Speakers control | ⑮ Reset control |
| ⑧ PSG volume knob | ⑯ DRV volume knob |

Right switches group - CD/MP3/RADIO/MIC player



- ① Manual gear position lock
- ② Drive gear position
- ③ Neutral gear position
- ④ Reverse gear position

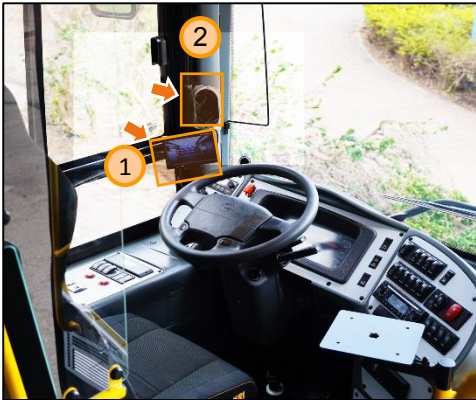
Fire system test button



To test depress the test button:

- Red lamp flashes red.
- Alarm siren sounds a repeating (continuous) acoustic signal.

Reversing and rear door cameras system



- 1 Monitor - reverse/rear door
- 2 Monitor – MOBILEYE shield
- 3 Rear entrance camera

Rear door closed



Rear door open



6



When the main switch 6 opens, rear entrance camera is automatically activated.

Reversing and rear door cameras system

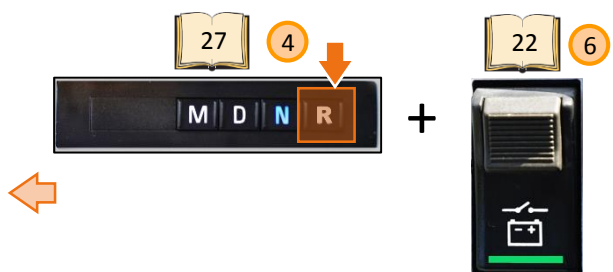


- 1 Monitor - reverse/rear door
- 2 Rear view camera
- 3 Water sprinkler
- 4 Gear selector switch 27

Clear the rear view camera with the water sprinkler by pressing the button



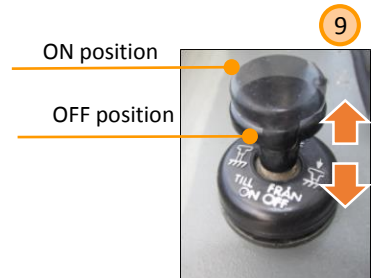
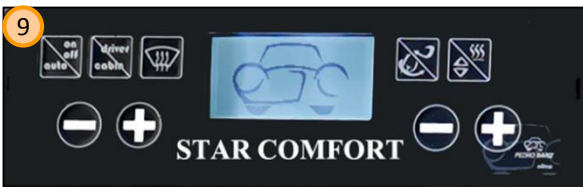
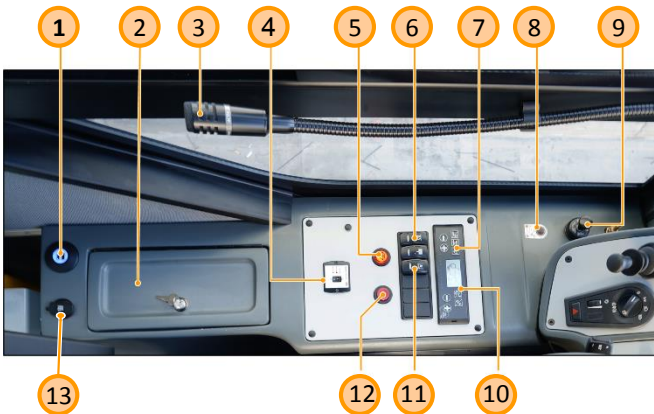
When the main switch is opened and the gear shift is in reverse, the monitor switches to rear view camera (2) automatically.



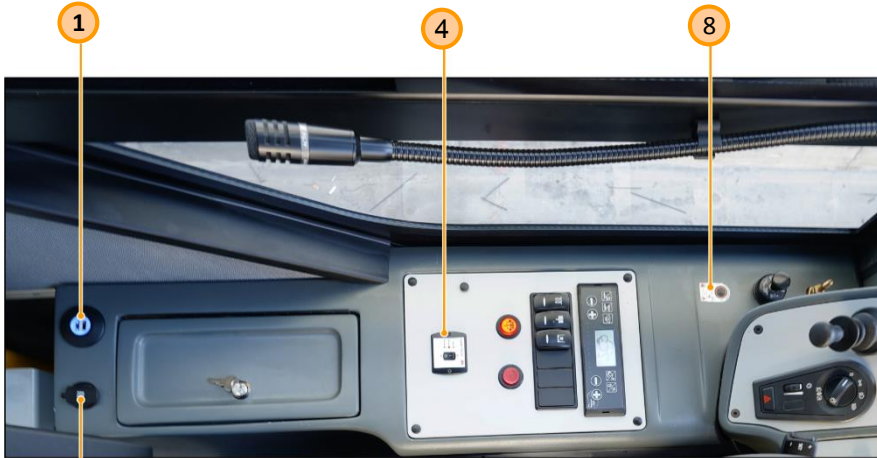
Side instrument panel



- 1 USB power socket
- 2 Glove compartment
- 3 Driver microphone
- 4 220 volt converter
- 5 Front door button
- 6 Preheater button
- 7 Stop request cancelling
- 8 Fire system test button
- 9 Blocking brake valve
- 10 Control panel bus Star Comfort heating system
- 11 Passenger heating blowers control button
- 12 Rear door button
- 13 power socket

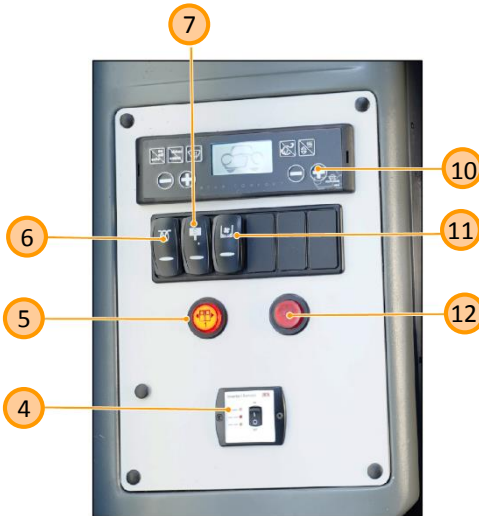


Side instrument panel



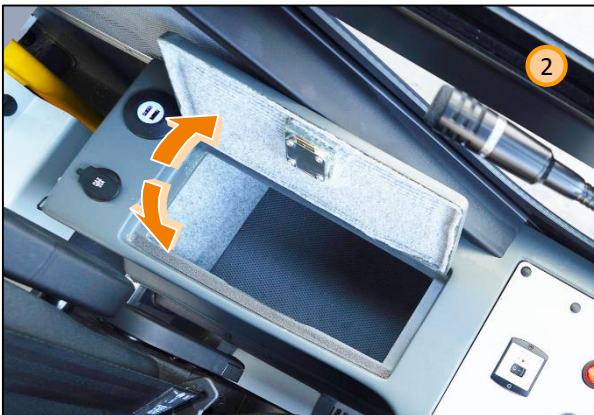
- 1 USB power socket
- 4 230 volt converter
- 8 Fire system test button
- 13 power socket

Side instrument panel



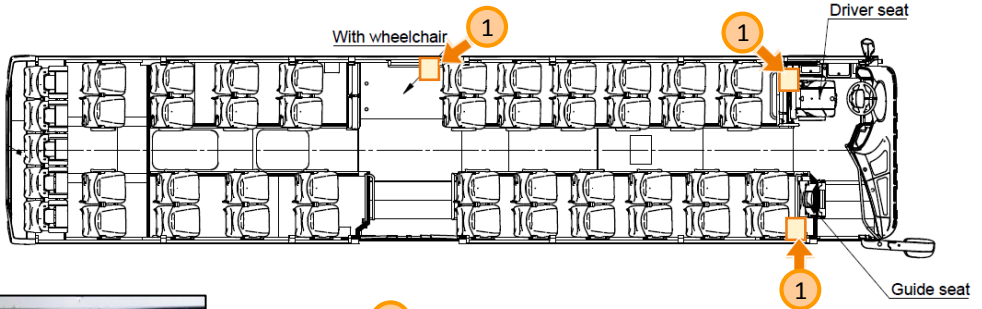
NO.	Switch Description	Prerequisites for operation
4	Remote control	Running engine + Switches in ON mode
5	Front door button	Open main circuit breaker + battery door closed
6	Preheater button	Running engine + heat activation
7	Canceling a passenger bell	Bell switch is pressed closed doors
10	Driver/passenger heating control	Running engine engine in operational temperature
11	Passenger heating blowers control button	Running engine/passenger heating activated
12	Rear door button	Open main circuit breaker + trunk door before door 2 is closed + lift is stowed

Side instrument panel



- ① Driver microphone
- ② Glove compartment

230V system



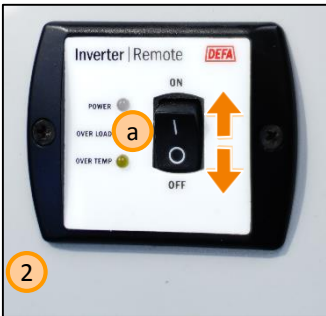
1 Wall outlet signal (230V)

2 Remote control

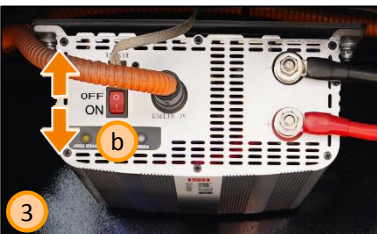
3 Inverter - PlugIn 24V/230V

a switch - Remote control

b switch - Inverter - PlugIn 24V/230V



2



Conditions for operating power converting system from 24 to 230

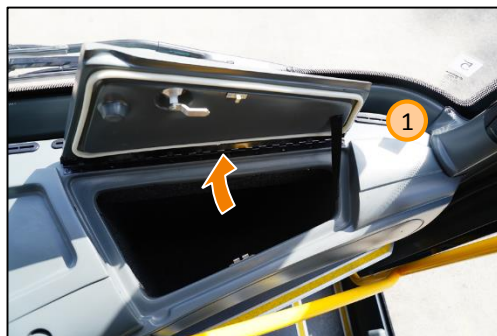
- Turned on engine
- Converter control panel switch ON **a**
- Power converter switch ON **b**

Driver luggage compartment



① Driver compartment with lock

② Grip handles of front entrance

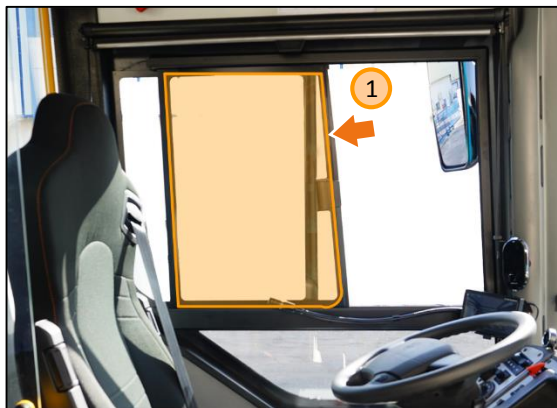


Driver side window



1 Driver sliding window

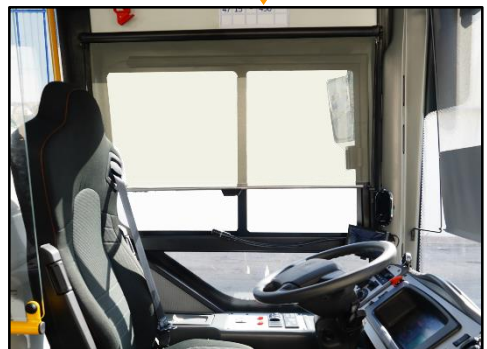
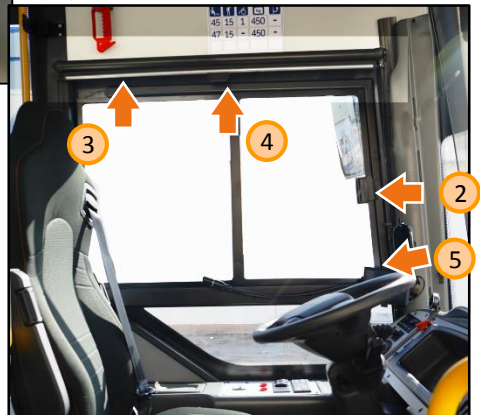
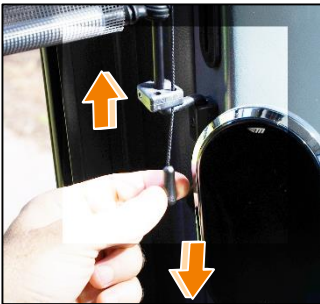
2 Window handle



Driver side window



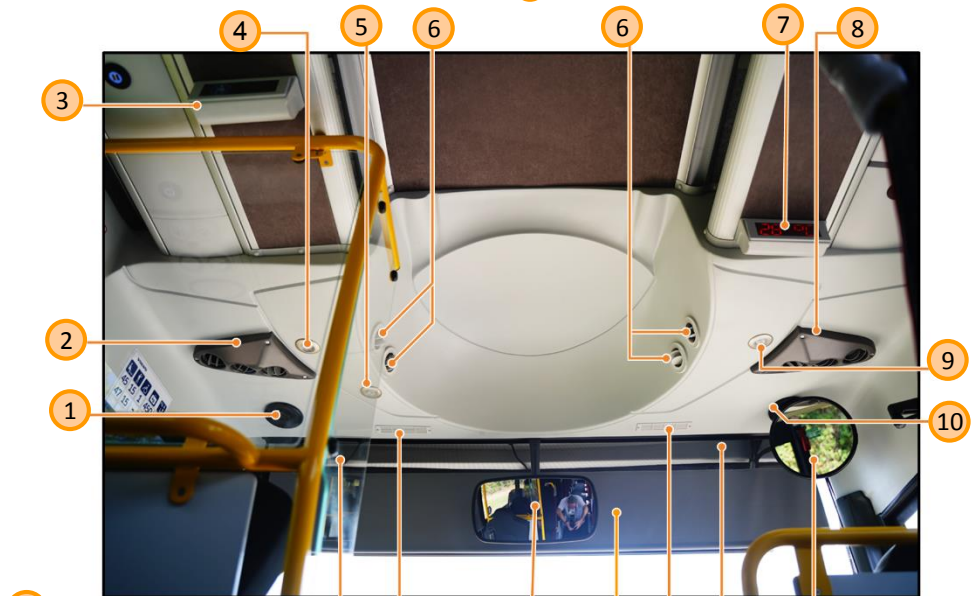
- ① Driver sliding window
- ② Window handle
- ③ Driver sliding window
- ④ Driver side curtain handle
- ⑤ Driver side curtain release



Upper area



- ① Driver speaker
- ② Driver air jet panel
- ③ Belt reminder and stop request sign
- ④ Tickets device lighting lamp
- ⑤ Driver lighting lamp
- ⑥ Round air jets
- ⑦ Digital bus clock/temperature/stop
- ⑧ Front entrance air jet panel
- ⑨ Front entrance lighting lamp



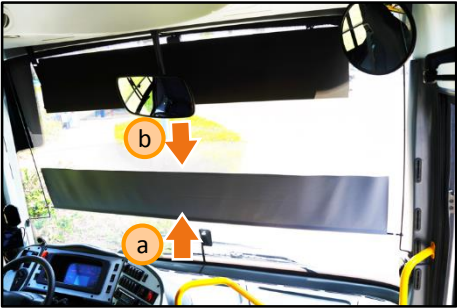
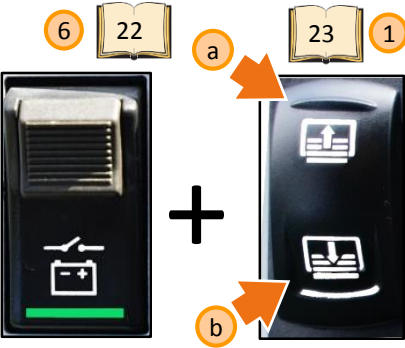
- ⑩ Passenger speaker
- ⑪ Rear entrance mirror
- ⑫ Right front window curtain
- ⑬ Air jets
- ⑭ Front destination sign
- ⑮ Driver rear view mirror
- ⑯ Left front window curtain



Front window curtains



- 1 Front window curtain
- 2 Main switch





General view




Front view



Rear view



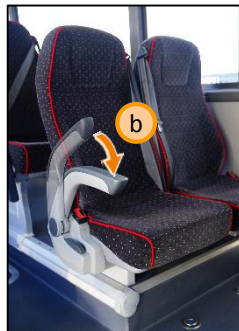
- 1 Wheelchair belts
- 2 First aid set box  44
- 3 Passenger hand luggage racks
- 4 Front emergency hatch  48
- 5 Driver luggage box
- 6 Driver luggage box

- 7 Rear entrance
- 8 Passenger seats  42
- 9 Wheelchair area  52
- 10 Driver area partition
- 11 Rear emergency hatch  48

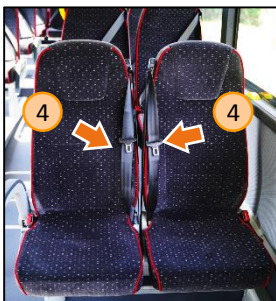
Passenger seats



- 1 Passenger seats
- 2 Passenger folding seats
- 3 Seat armrest



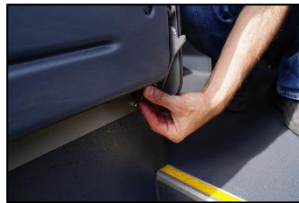
- 4 Seat safety belts



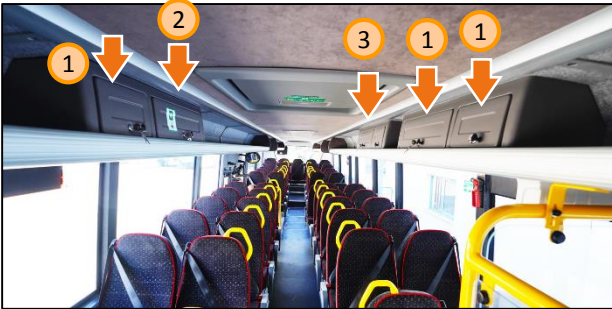
Passenger seats



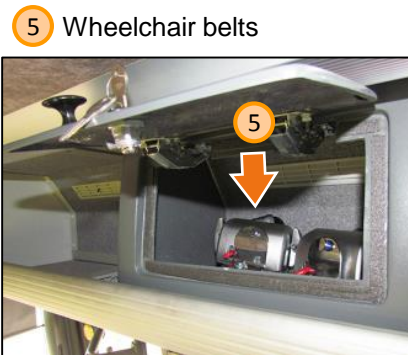
- ① Passenger folding seats
- ② Guide seat
- ③ Guide microphone socket



Hand luggage racks and accessories



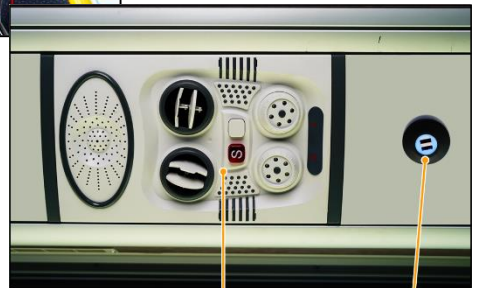
- 1 Driver boxes
- 2 First aid box
- 3 Wheelchair belts box



Passenger personal multiset

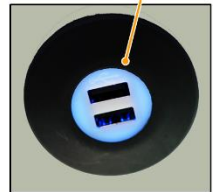
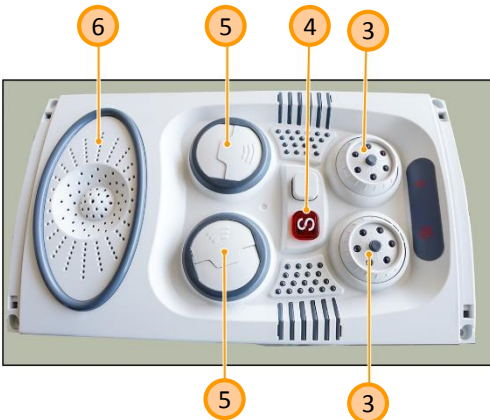


- 1 Passenger personal multiset
- 2 USB power socket
- 3 Personal reading lamp
- 4 Stop request button
- 5 Air jets
- 6 Speaker



1

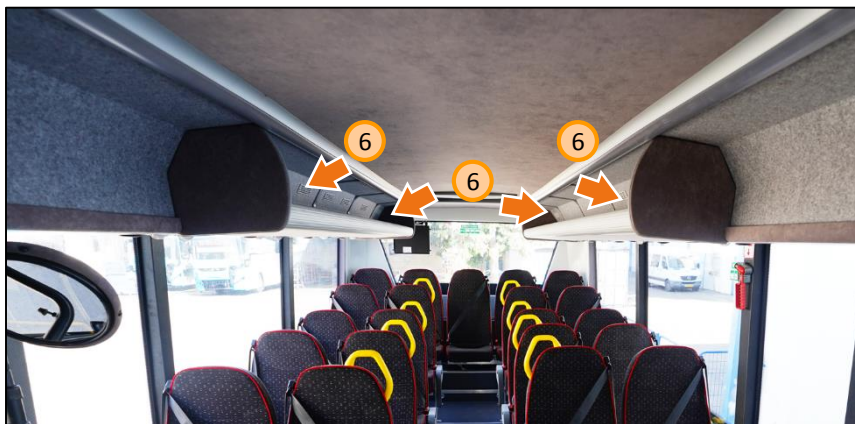
2



Hand luggage racks and accessories



6 Passenger hand luggage racks



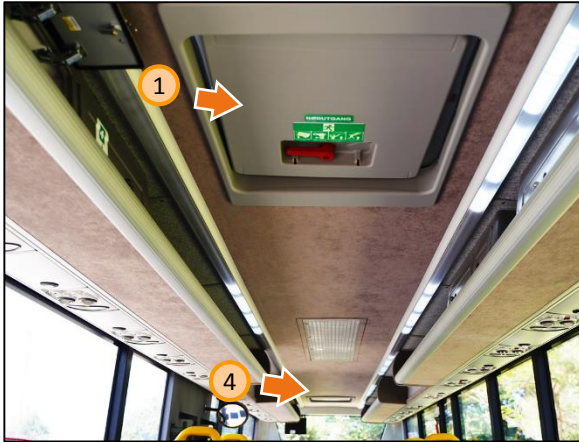
Roof accessories



- ① Front roof emergency hatch
- ② Passenger compartment lighting lamps
- ③ A/C return air opening
- ④ Rear roof emergency hatch



Roof emergency hatch - ventilation state



① Front roof emergency hatch

④ Rear roof emergency hatch

ⓐ Emergency hatch – closed position



ⓑ Front direction open position



ⓒ Rear direction open position



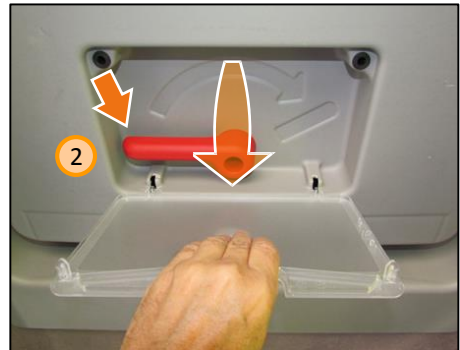
ⓓ Hatch fully open - ventilation position



Roof emergency hatch - emergency state - inside actuation



- 1 Emergency hatch handle cover
- 2 Emergency hatch handle

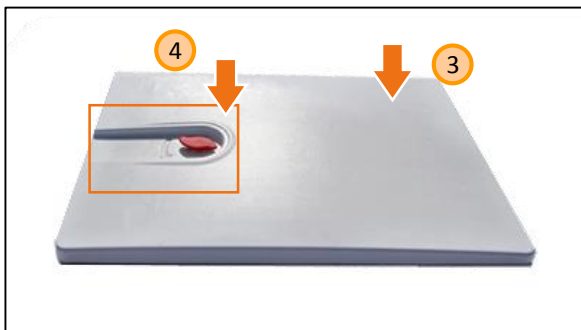


Within action :

- a Release the emergency handle cover
- c Turn handle towards arrow
- b Raise the emergency hatch up



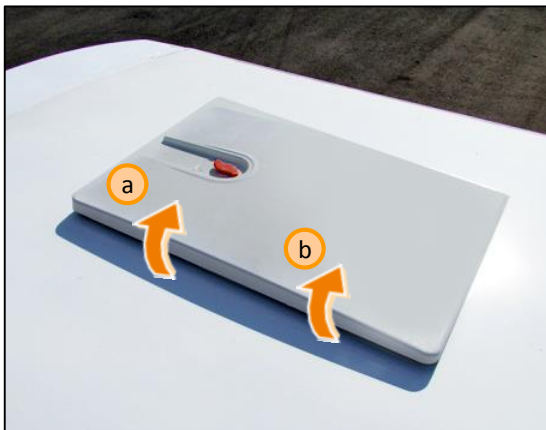
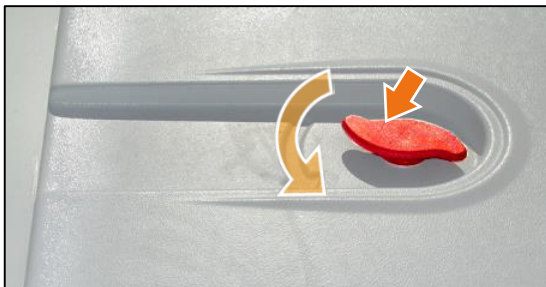
Roof emergency hatch - emergency state - external actuation



- 3 Emergency hatch
- 4 Emergency hatch external handle

Within action :

- a Turn external handle towards arrow
- b Raise the emergency hatch up

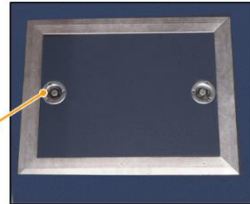


Floor service covers

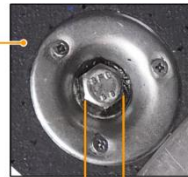


2 3 4

1



5



13mm

4

3

2

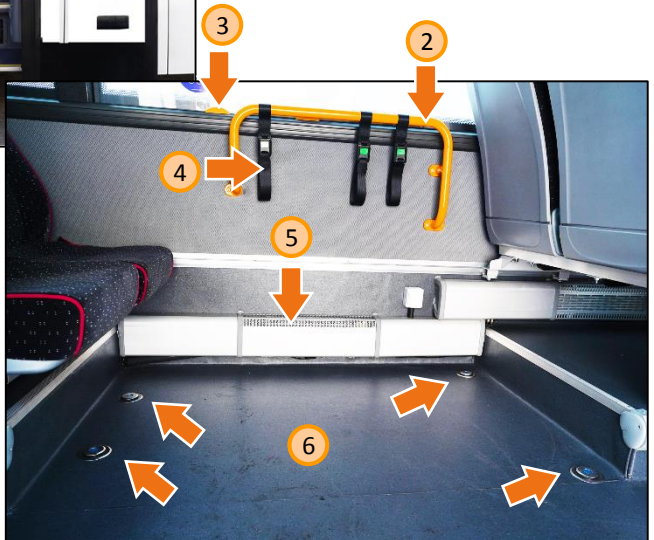
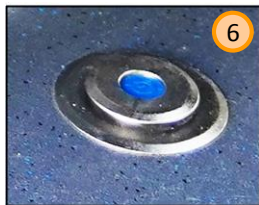


- 1 Front axle service hatch cover
- 2 Rear axle service hatch cover
- 3 Gear service hatch cover
- 4 Engine service hatch cover
- 5 Tightening screw

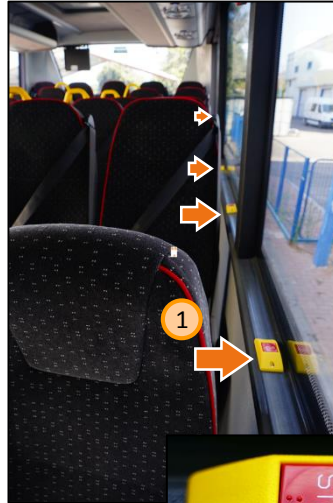
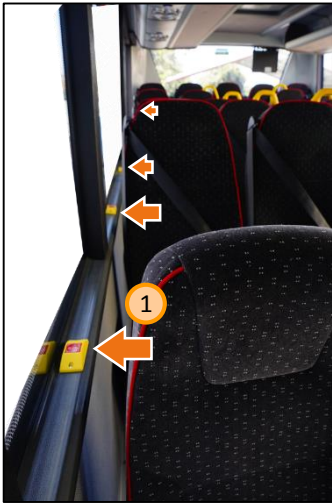
Wheelchair area



- 1 Wheelchair area
- 2 Passenger handrail
- 3 Stop disabled request button
- 4 Pram connecting straps
- 5 Wheelchair area heater
- 6 Wheel chair anchors



Stop request system

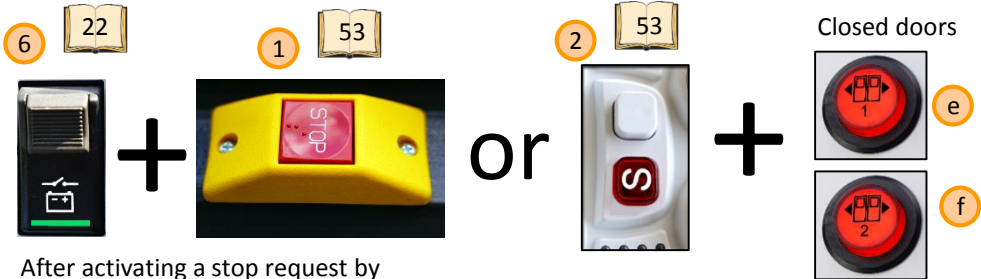


- 1 Stop request buttons on the side windows
- 2 Multiple-seat stop button above each pair of passenger seats



Stop request system

Driver area lighting



After activating a stop request by

Closing doors (e) or (f) buttons

- a A digital signal stop and a gong rings once in the driver and in the passenger compartment



- b An S control lamp is light on the keyboard

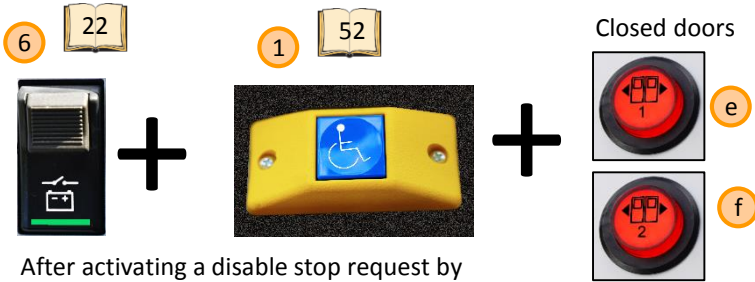
- c A review lamp is light on the watch panel



- d A red light turns on over the back door



Stop request system



After activating a disable stop request by

Buttons:

- a A digital signal stop and a gong rings once in the driver area



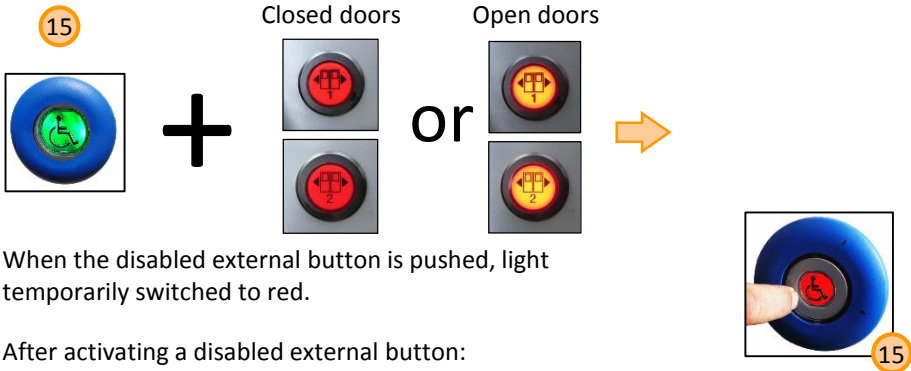
- b An S control lamp and a disabled control lamp are light on the keyboard



- c A red light turns on over the back door



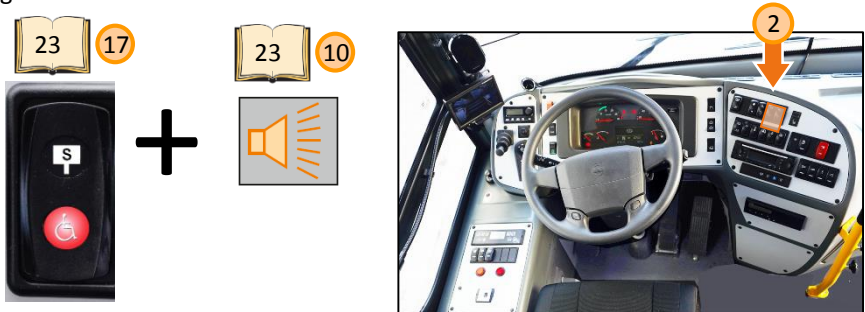
Stop request system



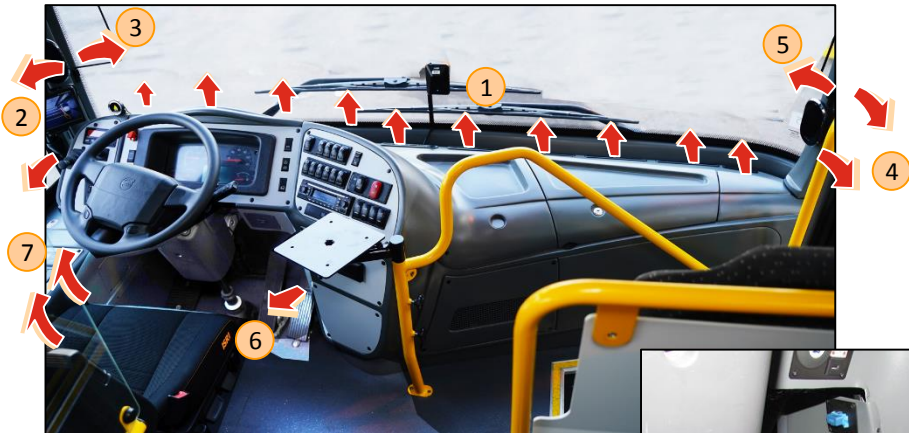
When the disabled external button is pushed, light temporarily switched to red.

After activating a disabled external button:

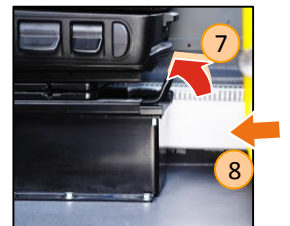
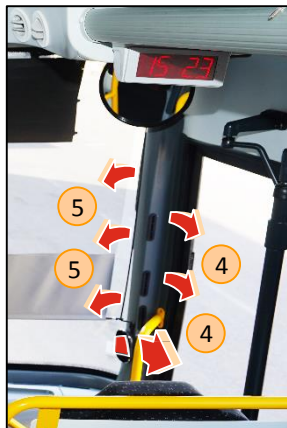
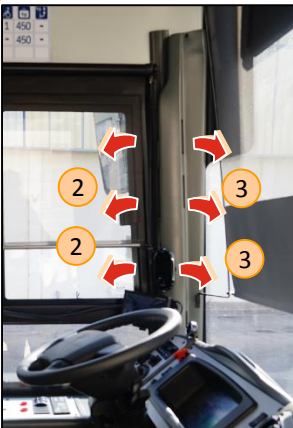
A disabled control lamp on the keyboard lights up and the gong rings once in the driver area.



Driver area heating (Sans clima)



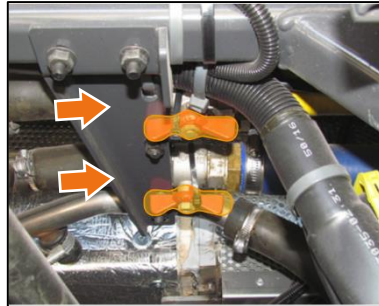
- 1 Front window direction air jets
- 2 Front window direction air jets
- 3 Front window direction air jets
- 4 Front entrance side air jets
- 5 Driver side window air jets
- 6 Driver air jet
- 7 Driver side jet
- 8 Driver side floor heater



Driver area heating (Sans clima)

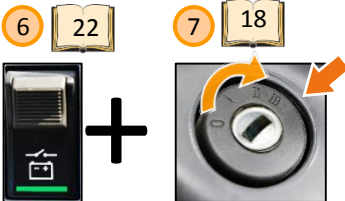


- a Heating system water valves must be open



Order of starting driver area heating:

- b Start the engine



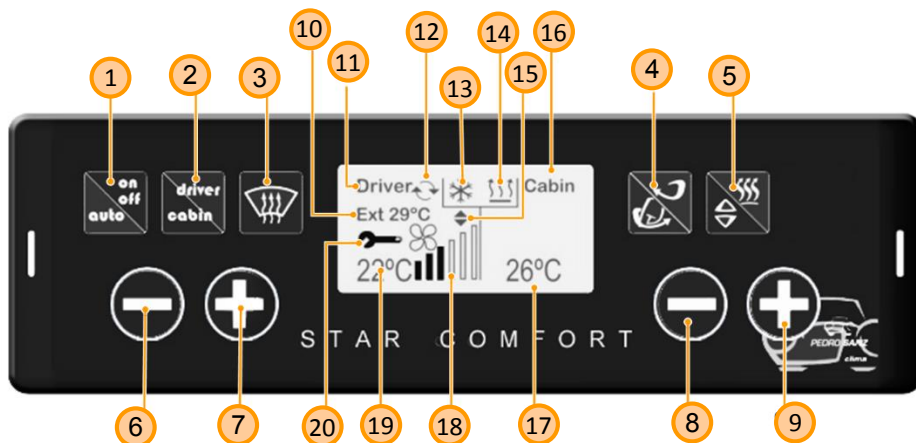
- c Start heating system Star comfort in the driver area by Control panel
For the full briefing, see details in Technical Information Start Comfort.



The key on the keyboard can set
The driver heater's blower speed.



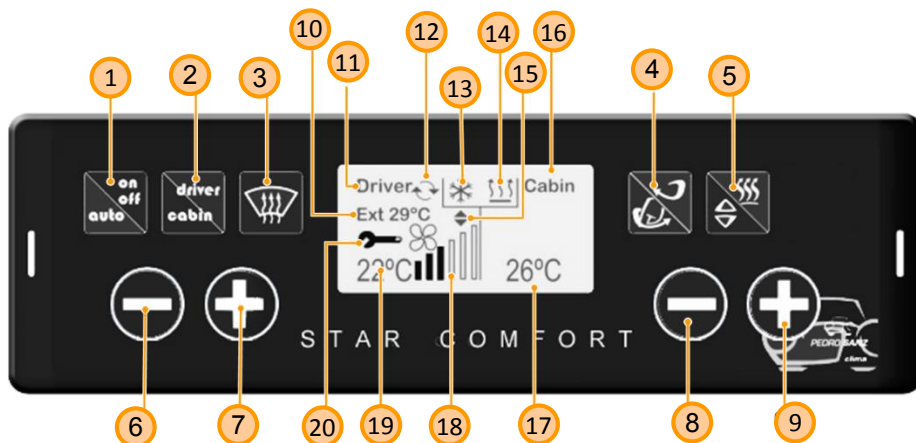
Driver area heating (Sans clima)



Control Panel buttons:

- ① On/Off switching (pressed more then 2 sec) or switching off Automatic mode.
- ② Active zone selection: driver/ cabin (passengers).
- ③ Fast windscreen demisting operation.
- ④ Outside/inside air entrance.
- ⑤ Preheater switching on/off (pressed more 2 sec) or changing an air distribution flow (less then 2 sec).
- ⑥ Decrease fan speed of the defroster/temperature in passenger zone.
- ⑦ Increase fan speed of the defroster/ temperature in passenger zone.
- ⑧ Decrease temperature in driver zone.
- ⑨ Increase temperature in driver zone.

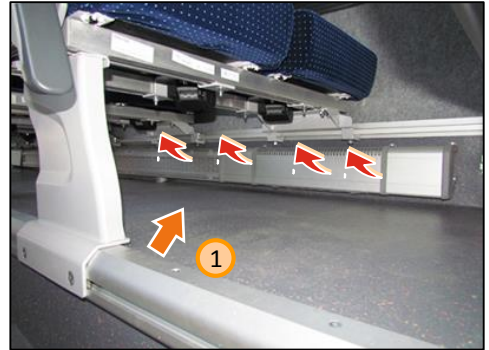
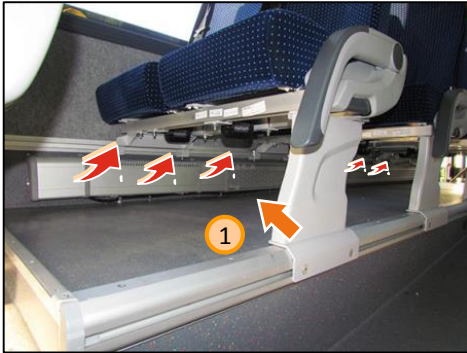
Driver area heating (Sans clima)




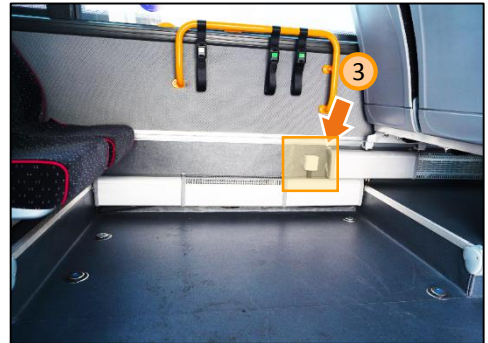
Control Panel screen indicators:

- 10 Outside temperature/ automatic operation on.
- 11 Active driver zone.
- 12 Active air recirculation function.
- 13 Front A/C unit is ready to be switched on.
- 14 Preheater is connected.
- 15 Air flow distribution.
- 16 Active cabin (passenger) zone
- 17 Inside temperature in passenger zone.
- 18 Defroster fans speed.
- 19 Inside temperature in driver zone.
- 20 System error.


Passenger compartment heating (Sans clima)

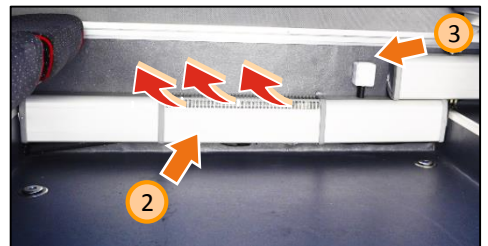
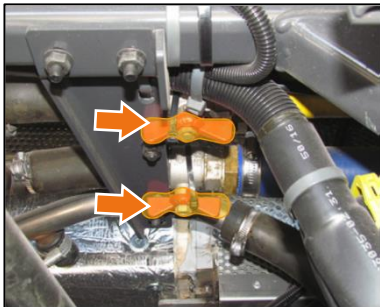


- 1 Passenger compartment heaters
- 2 Wheelchair area heater
- 3 230 Wall outlet single 



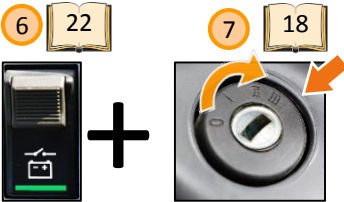
Order of starting passenger compartment heating.

- a Heating system water valves must be open 



Driver area heating (Sans clima)

b Start the engine



c Start heating system Star Comfort in the drive area from Control panel.
For the full details, see Technical Information Star comfort.

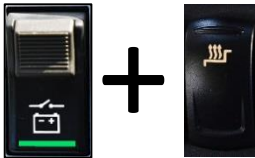


The **11** key on the keyboard
Set heater blower speed.



Passenger compartment heating (Sans clima)

Heating entrances area



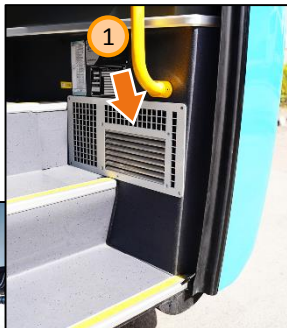
1 Front entrance heater air jet

2 Rear entrance heater air jet

When the button 12 is activated under conditions a, b, c 59 heaters 1 and 2 will be activated.

When any of the doors is opened the speed of the heater blower is increased.

Front entrance



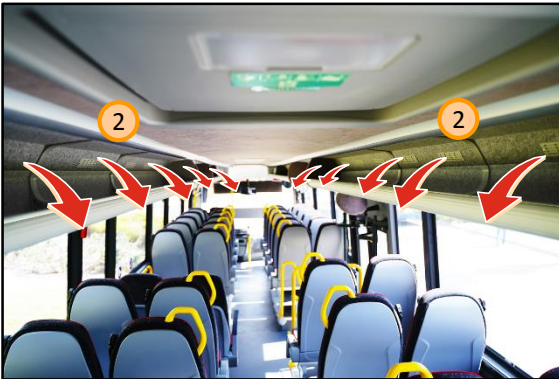
Rear entrance



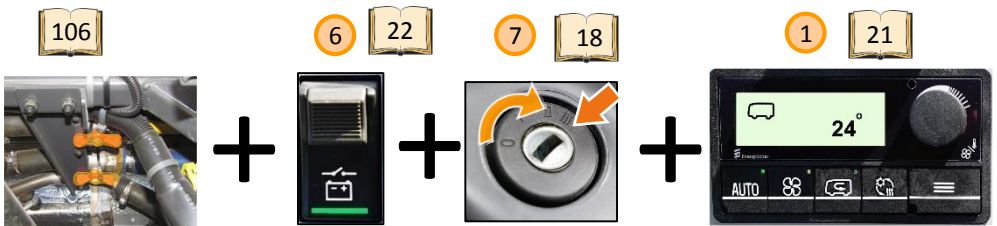
Passenger compartment heating (AC system heater)



- 1 Personal multisets air jets
- 2 Hand luggage air jets



Order of starting the heating in passenger compartment from air conditioner.

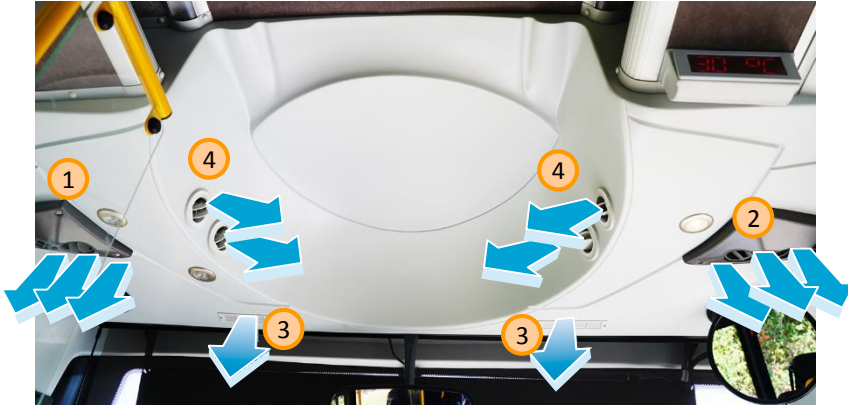


Passenger compartment heating (AC system heater)



- 1 Description knob
- 2 Display
- 3 Auto function key
- 4 Fan strength key
- 5 Function key SMOG
- 6 Function key REHEAT/DEFROST
- 7 Menu key

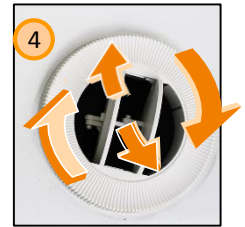
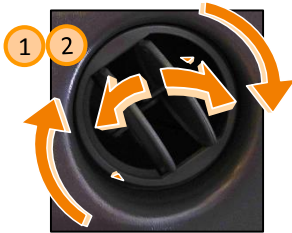
Driver area heating (AC system heater)



1 Driver area air jets panel

3 4 Front area air jets

2 Front entrance area air jets panel



Order of starting the heating in driver area air conditioner.

106



+

6 22



+

7 18



+

1 21



+

2 24

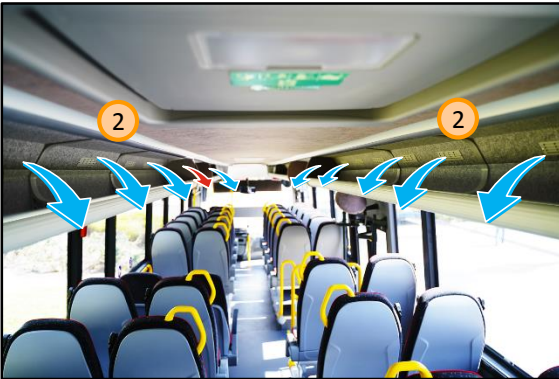


Operating and increasing speeds
(speed 6-10 Blower Control Lamp)
Shutdown (long press) and lowering speeds
(speed 1-5 Blower Control Lamp)

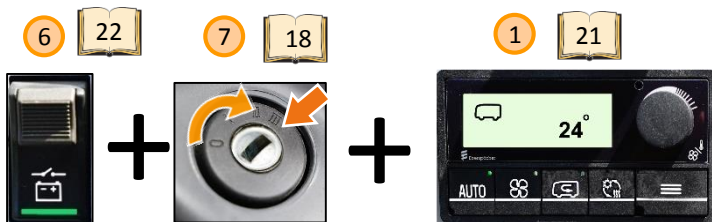
Passenger compartment heating (AC system heater)



- 1 Personal multisets air jets
- 2 Hand luggage air jets



Order of starting air conditioning in passenger compartment



Driver area and front entrance lighting



① Entrance lighting lamp

When the door is opened from the outside button, the headlight ① comes on for about 20 seconds.

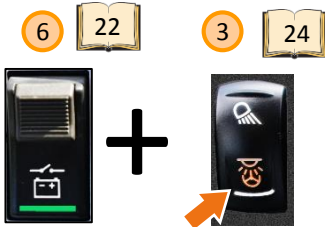


Level 1 interior light can be switched on without operation of the main switch.

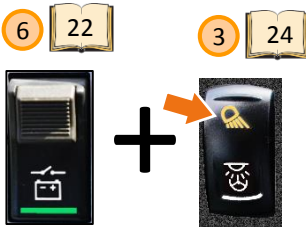


Driver area and front entrance lighting

Driver area lighting

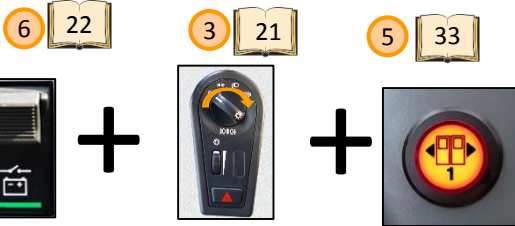


Ticket device lighting

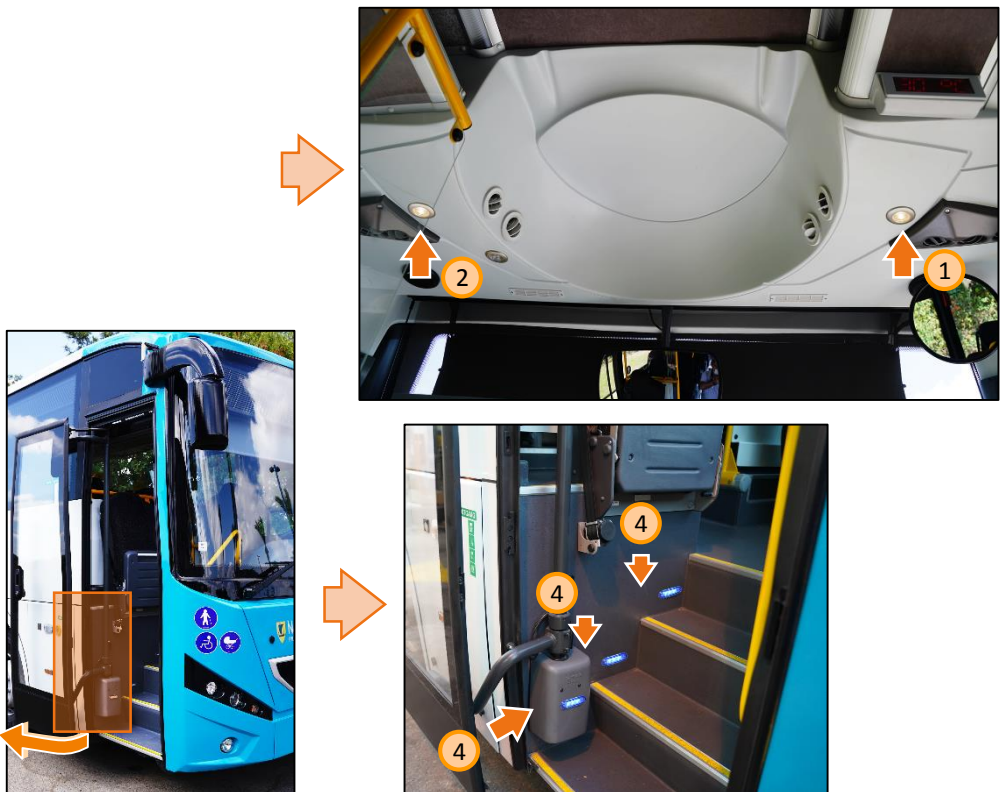


Driver area and front entrance lighting

Driver area lighting



When parking light is turned on and front door open, driver headlight, entry light **2** and stair light **4** are turned on.



Passenger compartment - floor and rear entrance lighting

Floor and rear entrance lighting

6 22

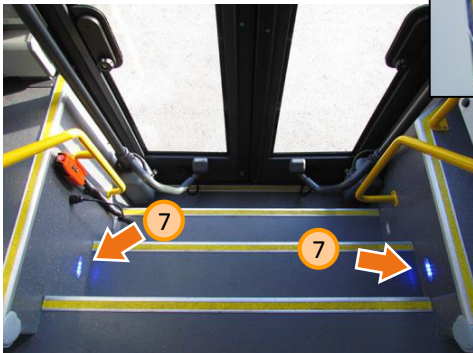
3 21



5 Transition light

6 Rear door lighting (closed door)

7 Rear door stairs lighting
(when rear door is closed)



Passenger compartment - floor and rear entrance lighting

Floor and rear entrance lighting

6 22

3 21

5 33



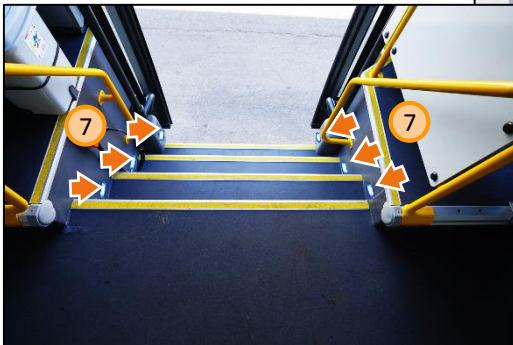
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+

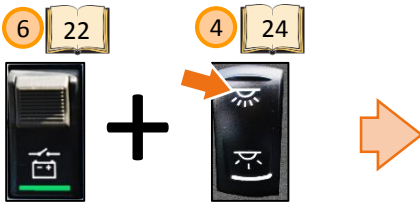


When a parking light is turned on and a rear door opens, the rear entrance Light, 6 stairs light 7 and exterior headlight 8 turn on above the door.

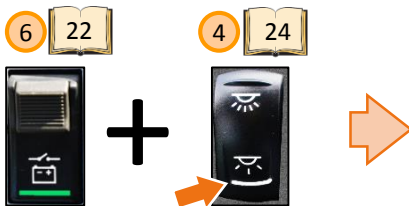


Passenger compartment - roof lighting

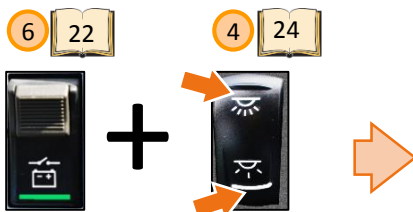
Passenger compartment lighting 1



Passenger compartment lighting 2



Passenger compartment full lighting

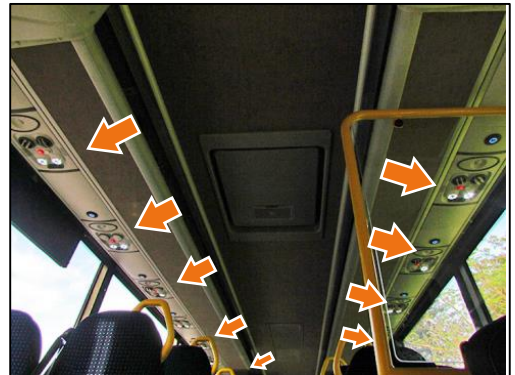


Passenger compartment - roof lighting

Passenger compartment night lighting



Passenger compartment reading light



Light up the lamp knob



Light up the lamp knob



Passenger compartment - roof lighting

19 24



or

Front door



Rear door



Emergency lighting (indoor and outdoor) is light by the 19 or when the door (doors) are opened by emergency key.

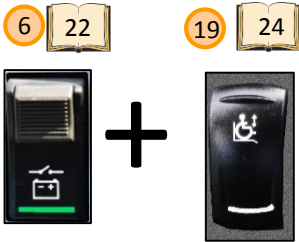
Lighting is turned off by the RESET button 19 or automatically after 30 minutes.



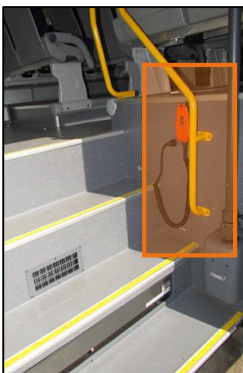
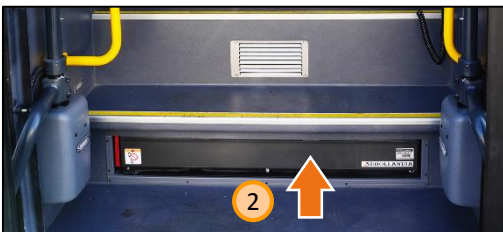
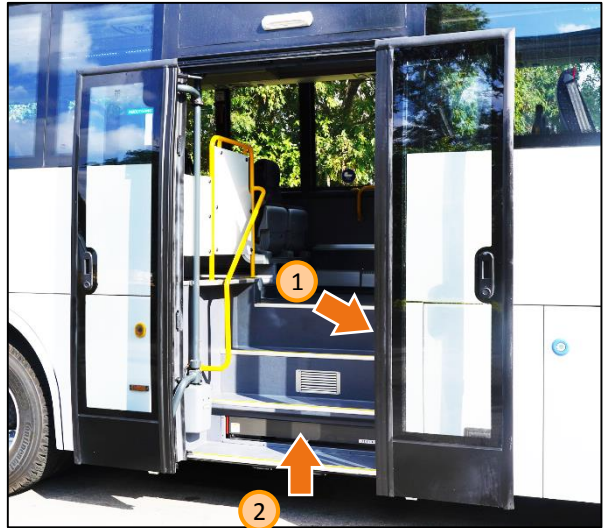
+



Wheelchair lift operating - lifting



- 1 Wheelchair lift remote control
- 2 Wheelchair lift platform
- 3 Up button
- 4 Down button
- 5 Remote control socket
- 6 Remote control plug



Wheelchair lift operating - lifting



- a** Press the Up button to fully extend the platform outside the cassette.



- b** Lift the bridge platform



- c** Lift the rails to the upright position



- d** Press the Down button to fully lower the platform to the ground



Wheelchair lift operating - lifting



- e** Press the Up button and hold it pressed.
At the highest position, the bridge of the platform automatically rises.

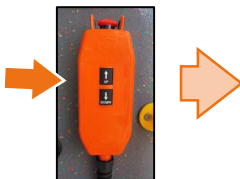


- f** Put the wheelchair in the designated place and secure it.

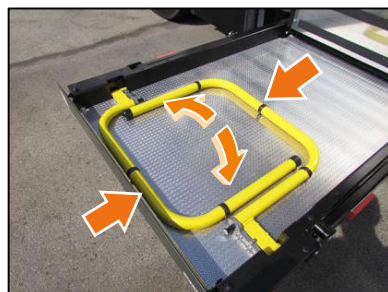
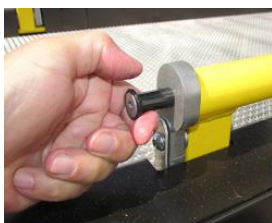


Wheelchair lift operating - folding

- g** Press the Down button



- h** Fold the handrails



- i** Fold the bridge platform



- j** Press the Down button until the platform stops automatically at the cassette level



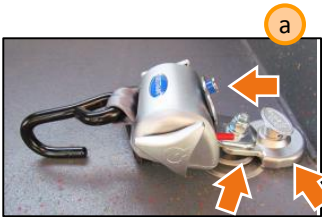
- k** Press the Down button to fully retract the platform to the cassette



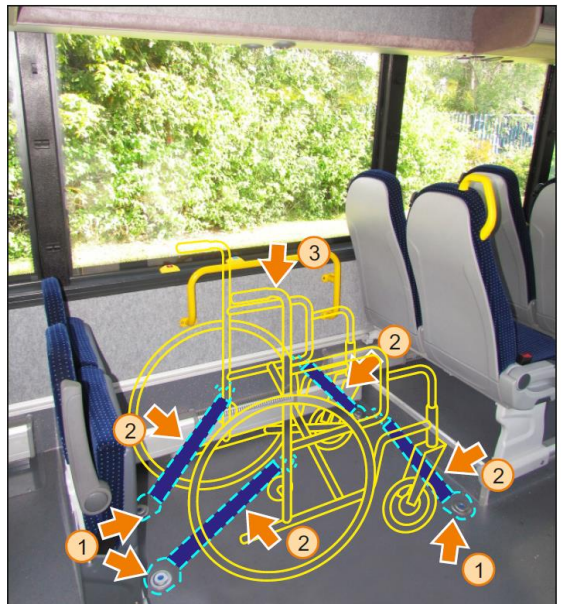
Wheelchair fixing



- 1 Click retractors set
 - 2 Retractors holding belt
 - 3 Wheelchair
- 5 42



Retractors dismantling



First aid kit and safety equipment



- 1 First aid set box
- 2 First aid box
- 3 Fire extinguisher

First aid set



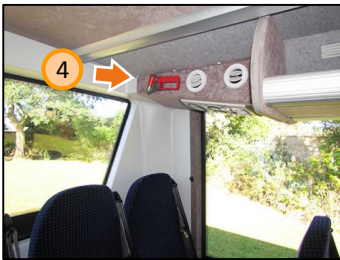
- 3 Fire extinguisher



First aid kit and safety equipment



1 2 3 4 Emergency hammers



Emergency doors opening

External actuation



After air exits, the doors must be manually pulled out.



After an air exits, the doors must be manually pushed out.

Front and engine service compartments

Front service compartment

86



Engine service compartment

103



Side service compartments

Right side service compartments



- 1 Battery compartment 89
- 2 Right luggage compartment I 91
- 3 Right luggage compartment II 91
- 4 E6 exhaust system/preheater compartment 92

Left side service compartments



- 5 Main electrical board 94
- 6 Fuel filler door 99
- 7 Left luggage compartment I 100
- 8 Left luggage compartment II 100
- 9 Wheelchair lift compartment 101
- 10 Service door 99
- 11 Ad Blue tank service compartment 102
- 12 Ad Blue filler door 99
- 13 Engine radiator service compartment 102

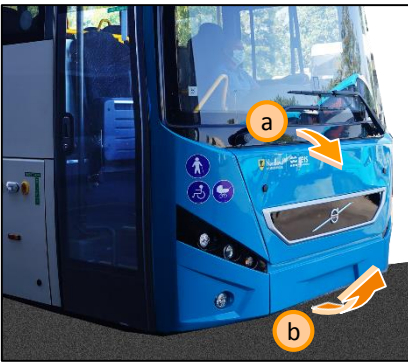
Side service compartments



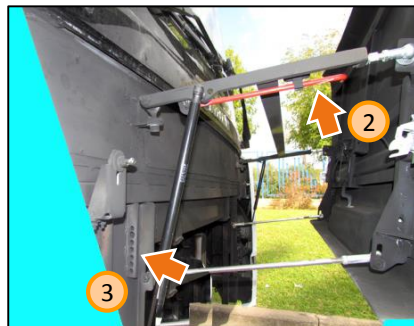
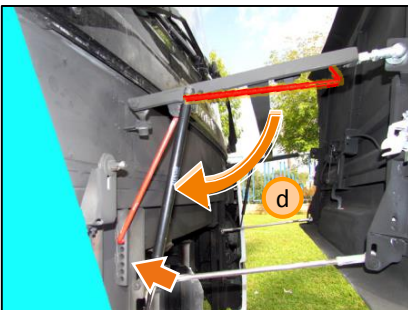
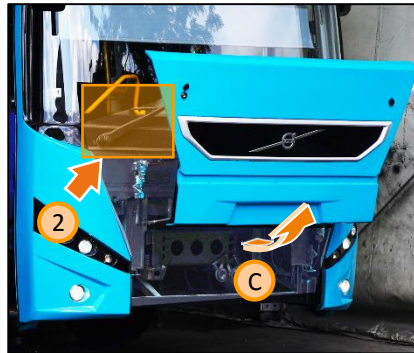
- 1 Front door locking mechanism
- 2 Manual safety stopper
- 3 Catcher



Right lock rotates clockwise left lock rotates counterclockwise



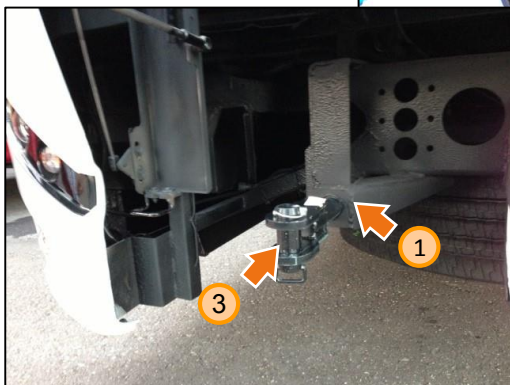
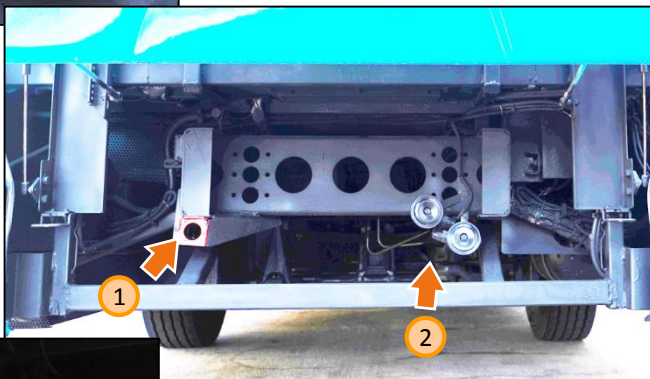
- a Release the door lock
- b Release the door spring stoppers
- c Lifting door up
- d Position safety stopper, as illustrated



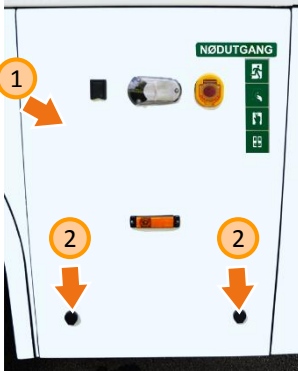
Front service compartment - accessories



- ① Towing hook threaded port
- ② Horn
- ③ Pin extraction



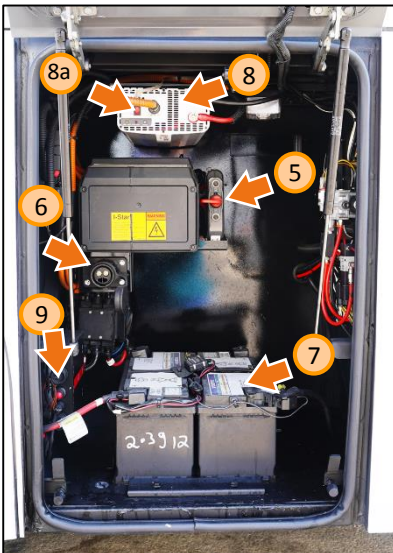
Battery compartment




- ① Battery compartment door
- ② Locking/Unlocking door
- ③ Service light with switch
- ④ Door safety switch
(when the in open – parking brake is on)



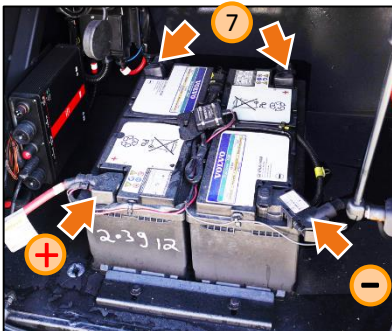
Battery compartment



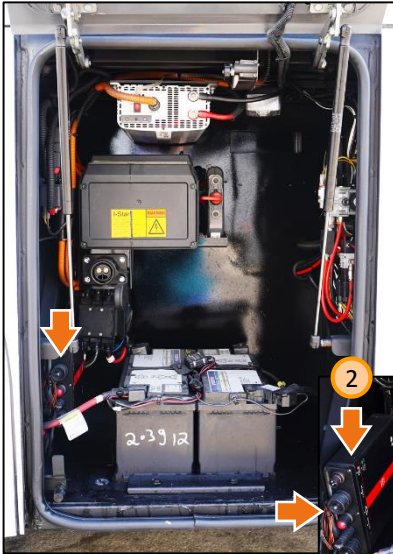
- 5 Main manual switch
- 6 Nato socket - connecting an external source for charging the batteries
- 7 Batteries
- 8 Inverter - PlugIn 24V/230V 1500W
- 8a Power Converter Power Button
- 9 MultiCharger 2x35A 



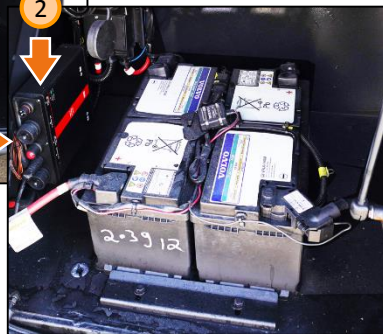
- a Detached mode
- b Active mode



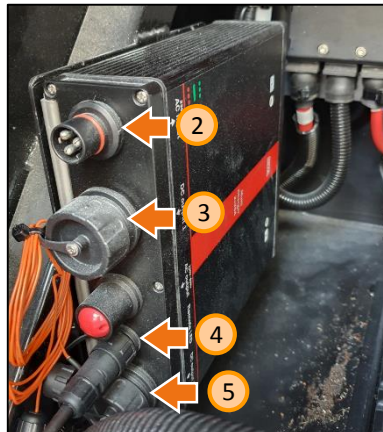
Battery compartment – MultiCharger 2x35A



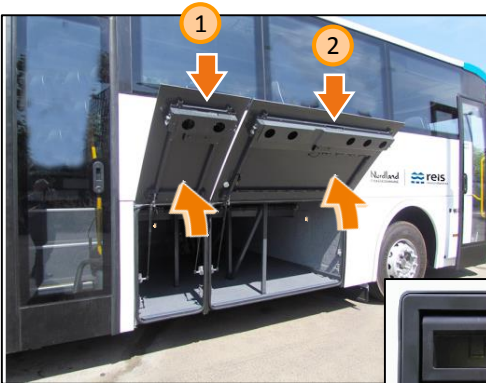
- ① Remote panel
- ② MultiCharger 2x35A



- ② AC input 230V-50Hz
- ③ DC output 1
- ④ Control cable
- ⑤ DC output 2

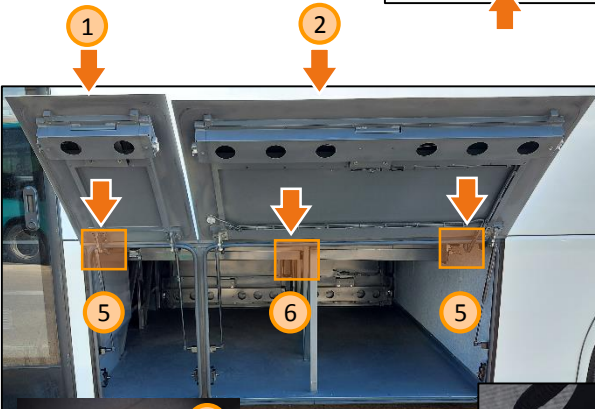


Right luggage compartment



- 1 Right luggage compartment door I
- 2 Right luggage compartment door II
- 3 Door opening handle
- 4 Door opening handle lock

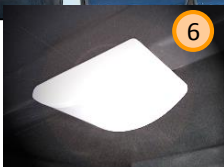
Key – PS220



- 5 Door safety switch
- 6 Luggage compartment light

When a door is opened, the bus hold brake and the trunk light are activated.

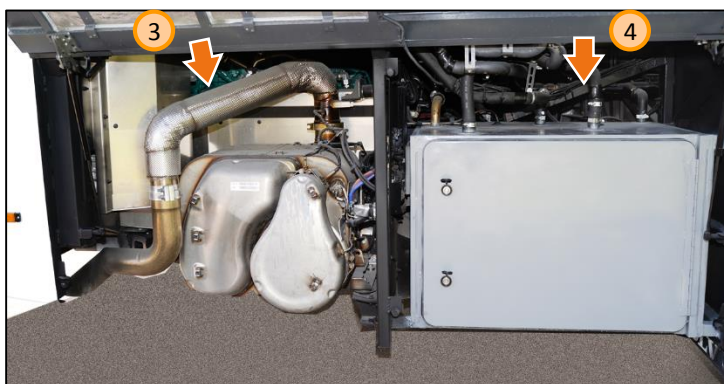
If the right door II is open, rear entrance door, opening will be blocked.



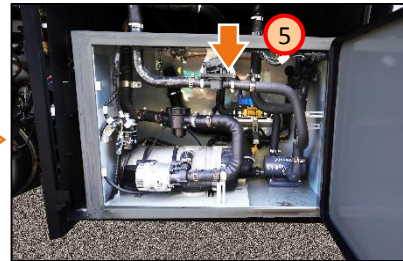
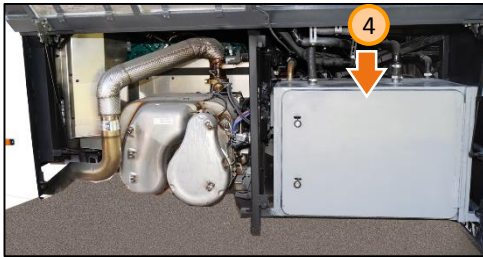
E6 exhaust system / Preheater compartment



- 1 Exhaust system/preheater compartment door
- 2 Door lock
- 3 E6 exhaust system
- 4 Preheater box

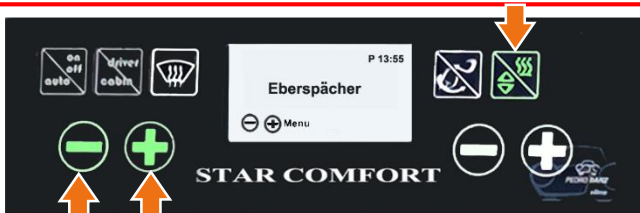


E6 exhaust system / Preheater compartment

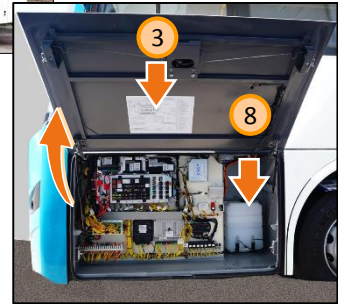
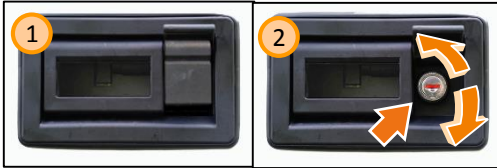


5 Preheater system

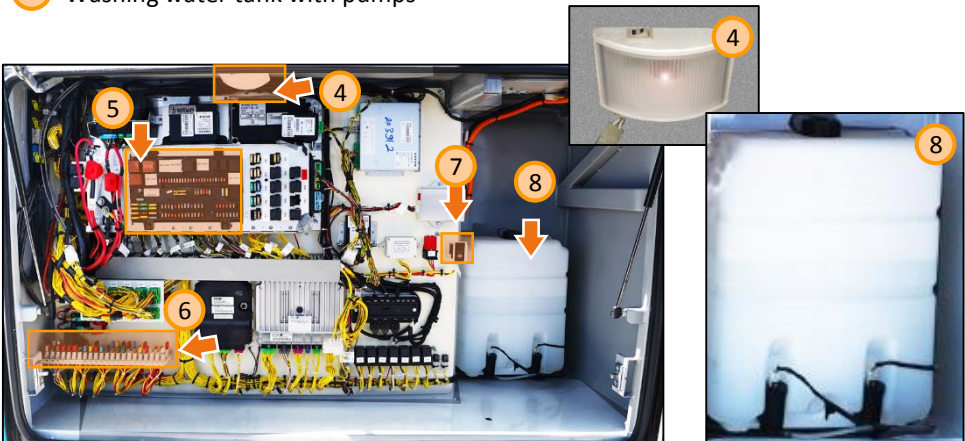
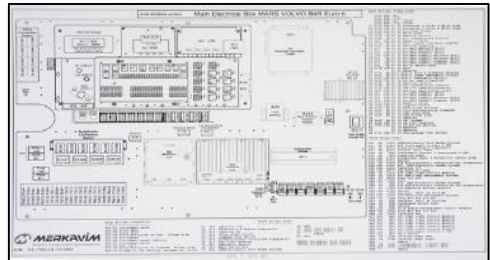
The preheater can be activated manually by the Star Comfort control panel or operated automatically (see Technical Information Star Comfort).



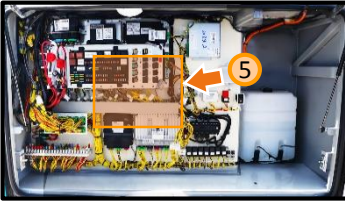
Main electrical board compartment



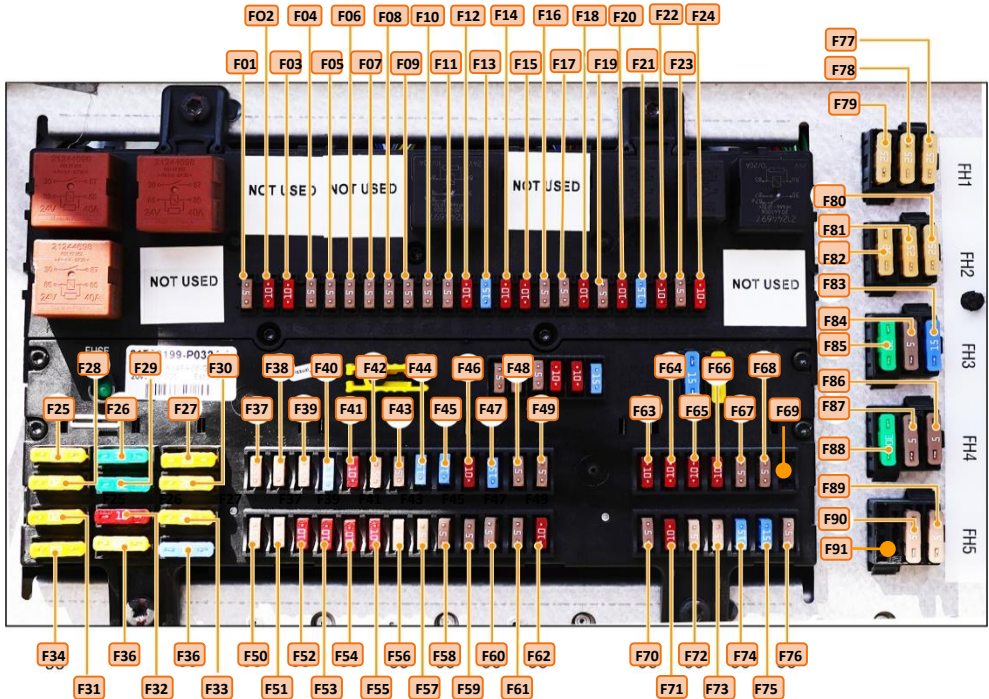
- 1 Door handle
- 2 Door handle lock
- 3 Main electrical board scheme
- 4 Service lamp
- 5 Merkavim electrical fuse board
- 6 Door brake Cancel SW
- 7 Chassis (VOLVO) electrical fuse board
- 8 Washing water tank with pumps



Main electrical board compartment



Fuses in VOLVO circuit board

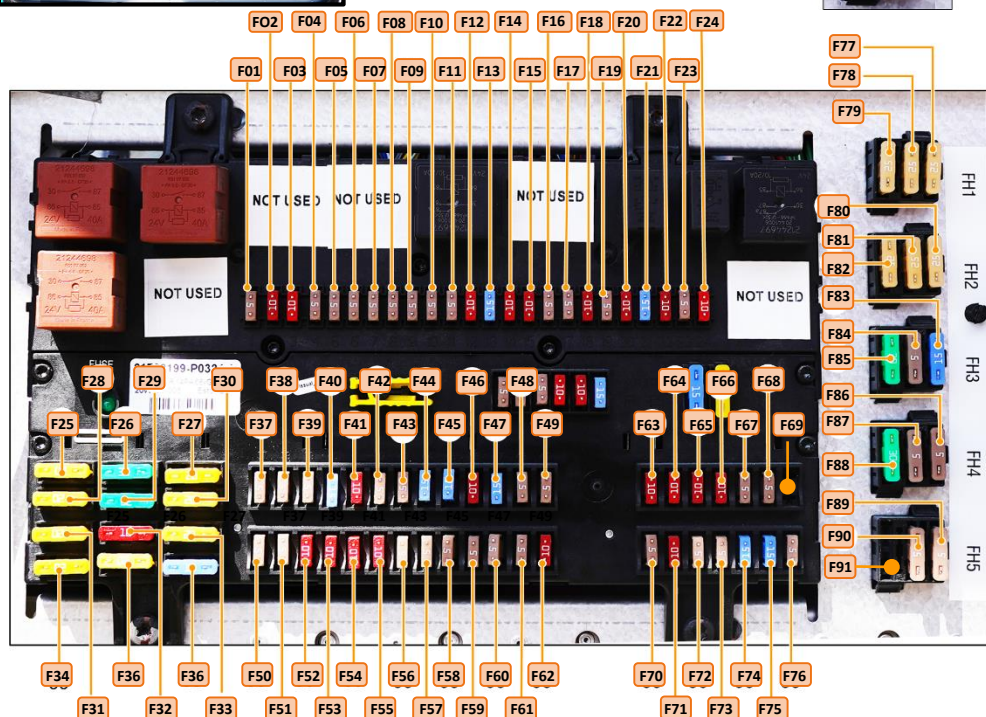
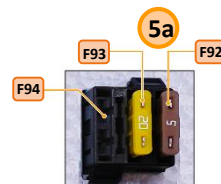


F01	5A	APBE (Automatic Park Brake Engine)	F30	20A	Ignition +15
F02	5A	A03 Instrument cluster/OBD	F36	15A	Day running light
F06	5A	Alternator/Engine components	F38	5A	A27 LCM
F07	5A	Control unit, VECU	F39	5A	A22 FMS
F08	5A	Instrument cluster/Tachograph/OBD	F43	5A	Fuel cut off
F10	5A	Steering wheel	F46	10A	Horn
F13	15A	Windscreen waper/Wiper pump	F48	5A	A21 EBS
F14	10A	Option	F49	5A	A16 ECS
F23	5A	A16 ECS	F51	5A	A36 BBM
F28	20A	A21 EBS	F52	10A	Option

Main electrical board compartment



Fuses in VOLVO circuit board



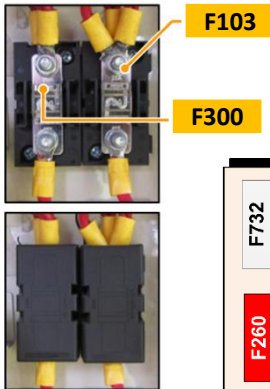
F53	10A	Gearbox, TECU, ZF Ecolife	F78	25A	A27 LCM
F54	10A	A22 FMS	F79	25A	A27 LCM
F55	5A	A191 BIO bus I/O ECU	F80	25A	A27 LCM
F57	5A	Gearbox, TECU, ZF Ecolife	F81	25A	A27 LCM
F59	5A	Dashboard switch feed	F82	25A	A27 LCM
F60	5A	Option	F86	5A	A03 Instrument cluster/OBD
F62	10A	A174 ACM	F87	30A	Main switch
F63	10A	195 BIO bus I/O ECU	F89	5A	Parking lamps left
F68	5A	Ignition key	F90	5A	Parking lamps right
F77	25A	A27 LCM (Light Control Module)			

Main electrical board compartment



- 6 Merkavim body builder fuses
- 7 Door brake cancel switch

Fuses in Merkavim circuit board



F732	F733	F192	F292	F193	F195	F95	F370	F310	F30	F31	F32	F34	F35	F36	F37	F38	F178	Res	F101	F102	F103
F260	F191	F155	F115	F457	F21	F22	F23	F24	F159	F320	F319	F451	F511	F510	Res	F458	F660	F355	Res	Res	F762

F732 25A Preheater & Valeo & Water pump
 F733 25A Preheater & Valeo & Water pump
 F192 20A Frontbox blower
 F292 10A Water pump
 F193 2A Heating control
 F195 3A Air conditioning control
 F95 10A Radio & Clock
 F370 3A Rear lights indicator adapter
 F310 6A Service lighting
 F30 3A ActiMUX MASTER25(A100)
 F31 5A ActiMUX MASTER25(A100)

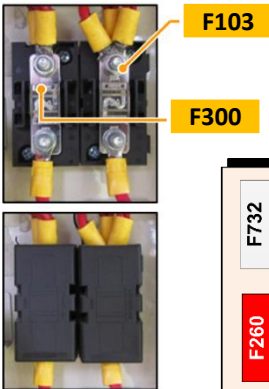
F32 15A ActiMUX POWER66 (A102)
 F34 20A ActiMUX POWER33 AirCanal(A101)
 F35 6A ActiMUX POWER33 AirCanal(A101)
 F36 8A ActiMUX POWER33 Luggage (A103)
 F37 15A ActiMUX POWER33 Luggage (A103)
 F38 3A Actia Switch Pack
 F178 10A Horn
 Reserve
 F101 5A Door's pressure sensors
 F102 5A Timer emergency circuit
 F103 10A Emergency circuit

Main electrical board compartment



- 6 Merkavim body builder fuses
- 7 Door brake cancel switch

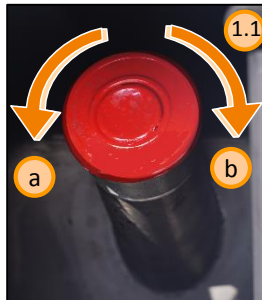
Fuses in MERKAVIM circuit board



F732	F733	F192	F292	F193	F195	F95	F370	F310	F30	F31	F32	F34	F35	F36	F37	F38	F178	Res	F101	F102	F103
F260	F191	F155	F115	F457	F21	F22	F23	F24	F159	F320	F319	F451	F511	F510	Res	F458	F660	F355	Res	Res	F762

F260	10A	Driver seat heating	F319	6A	Electrical mirrors
F191	2A	Heating control	F451	5A	Fire extinguishing FOGMAKER
F155	3A	Air conditioning control	F511	6A	USB Doors side
F115	10A	24V/12V cameras converter	F510	6A	USB Driver side
F457	10A	Mobitec destination signs	Reserve		
F21	10A	ActiMUX POWER66 (A102)	F458	5A	29" screen
F22	10A	ActiMUX POWER66 (A102)	F660	20A	24/230V Inverter
F23	15A	ActiMUX POWER33 AirCanal(A101)	F355	10A	Ticketing machine
F24	20A	ActiMUX POWER33 Luggage (A103)	Reserve		
F159	10A	Radio & Clock	Reserve		
F320	15A	Lighter socket	F762	25A	Pre-heater fuel filter

Filler doors



1 Fuel filler door

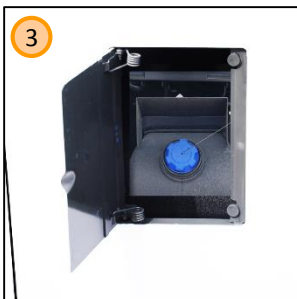
1.1 Fuel filler

a Opening direction

b Closing direction

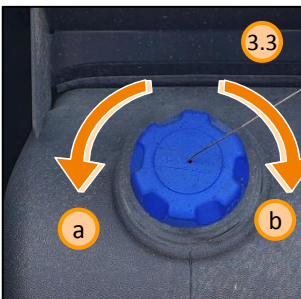


2 Open Service

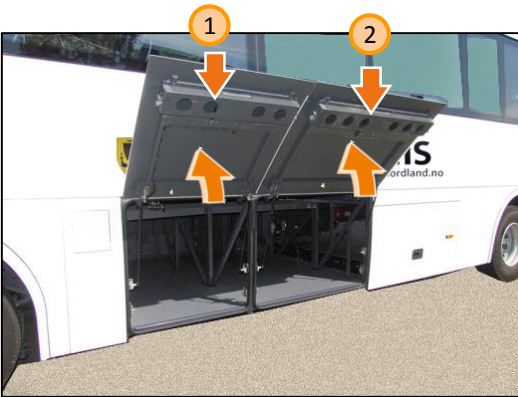


3 Ad Blue filler door

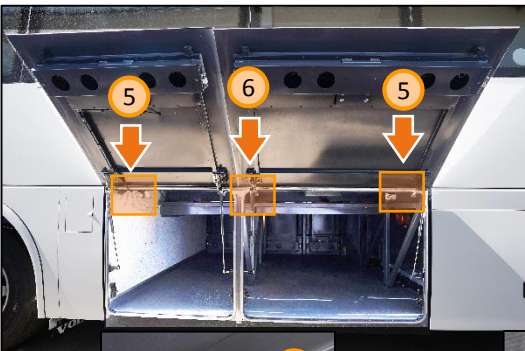
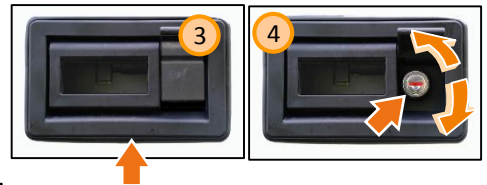
3.3 Ad Blue filler



Filler doors



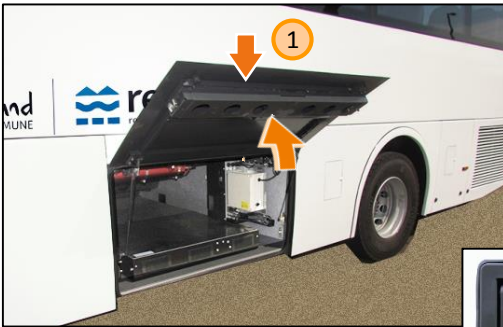
- 1 Left luggage compartment door I
- 2 Left luggage compartment door II
- 3 Door opening handle
- 4 Door opening handle lock



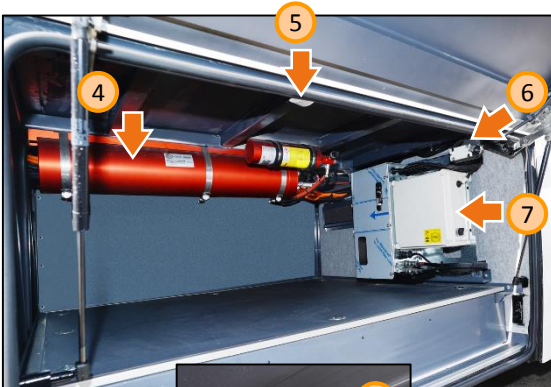
- 5 Door safety switch
- 6 Luggage compartment light (activated with luggage door opening)



Wheelchair cassette/Fire automatic system compartment



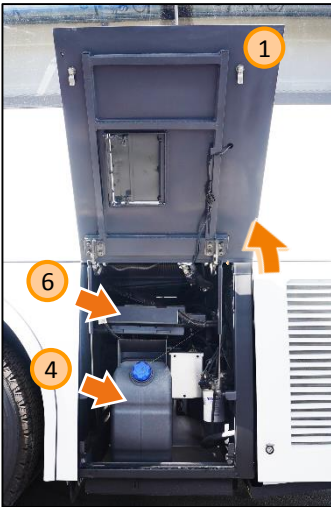
- 1 Compartment door
- 2 Door handle
- 3 Door handle lock



- 4 Fire automatic system
- 5 Compartment light lamp
- 6 Safety switch
- 7 Disable lift Control block



Wheelchair cassette/Fire automatic system compartment



- 1 Ad Blue tank compartment
- 2 Radiator compartment
- 3 Door lock
- 4 Ad Blue tank
- 5 Radiator
- 6 Ignition auxiliary batteries

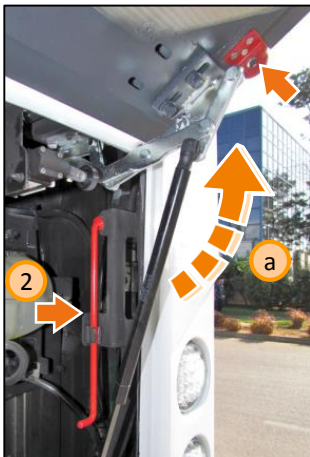


Engine compartment

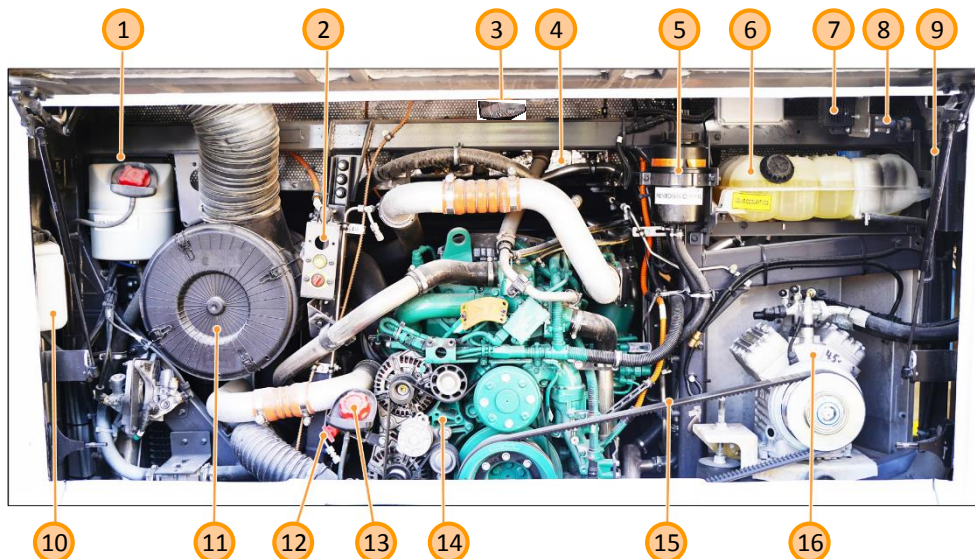


- ① Engine compartment door
- ② Manual safety stopper

① ② Place manual safety stopper after opening engine compartment door

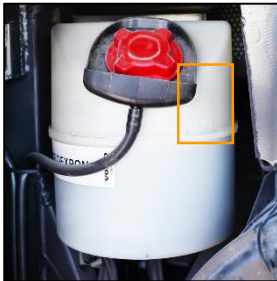
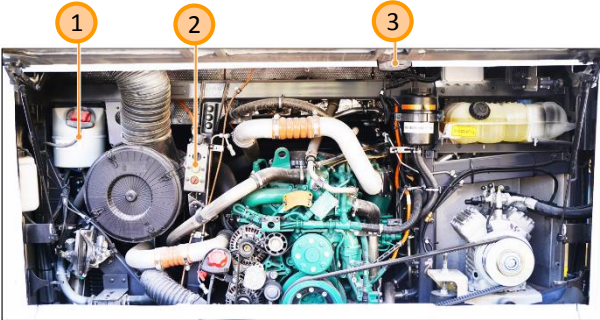


Engine compartment



- | | |
|---|---|
| 1 Hydraulic fan motor fluid tank | 9 Manual safety stopper |
| 2 Engine start rear control panel | 10 Rear camera cleaner water tank with pump |
| 3 Service lamp | 11 Engine air filter |
| 4 Manual heating system water valves | 12 Engine oil level dipstick |
| 5 Steering hydraulic system tank | 13 Engine oil filler |
| 6 Expansion water tank of engine coolant system | 14 Engine |
| 7 Revers buzzer | 15 A/C compressor belt |
| 8 Door safety switch | 16 A/C compressor |

Engine compartment



1 Hydraulic fan motor fluid tank



MAX level

MIN level



2 Engine start rear control panel

Start button

Selector breaker

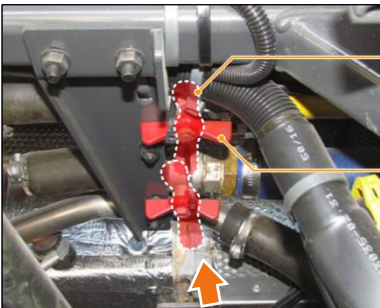


3 Service lamp

Engine compartment



4 Manual heating system water valves



Open valve position

Close valve position



5 Steering hydraulic system tank

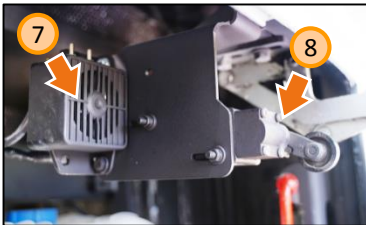
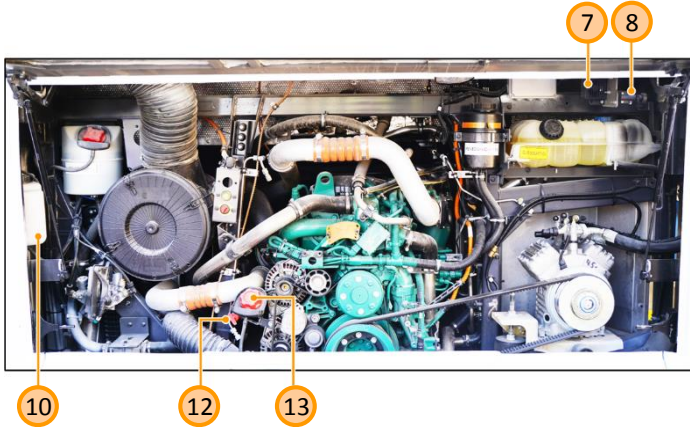
6 Expansion coolant tank of engine coolant system



MAX coolant level

MIN coolant level

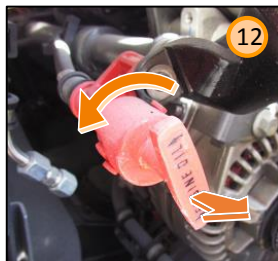
Engine compartment



- 7 Reverse buzzer
- 8 Door's safety switch

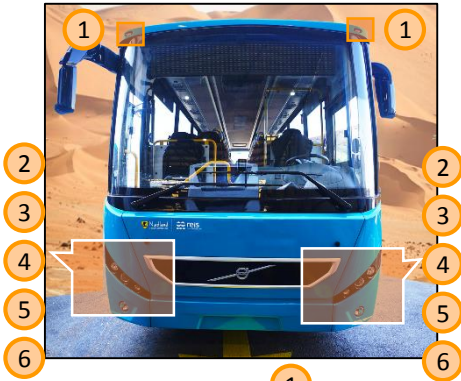


- 10 Rear camera water tank

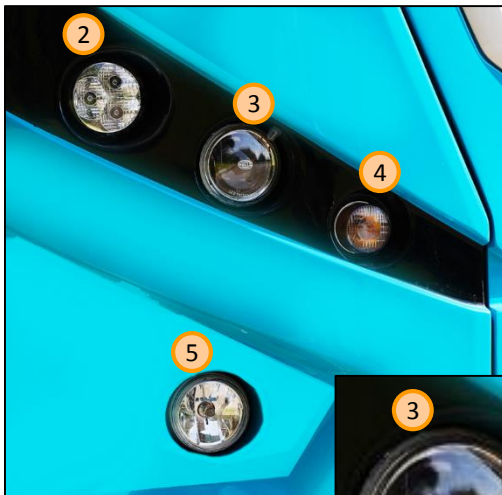


- 12 Engine oil level dipstick
- 13 Engine oil filler

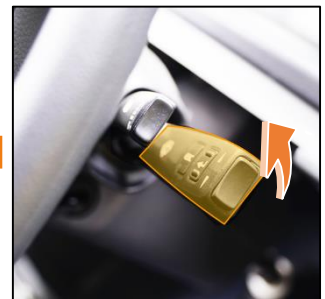
Front light



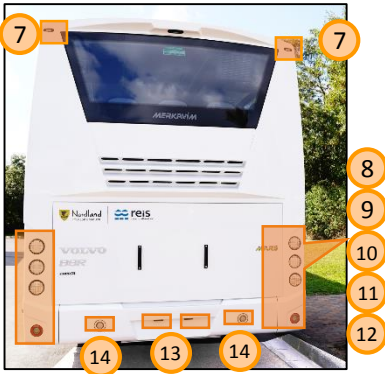
1 Front clearance light lamps



- 2 Combination lamp - day time running light/parking light
- 3 Bi LED main light/dipped beam light
- 4 Direction indicator
- 5 Front fog light lamp
- 6 Main light lamp water sprinkler



Back light



7 Rear clearance light lamps



8 Combination lamp - day time running

9 Rear direction indicator

10 Reversing light

11 Rear fog light

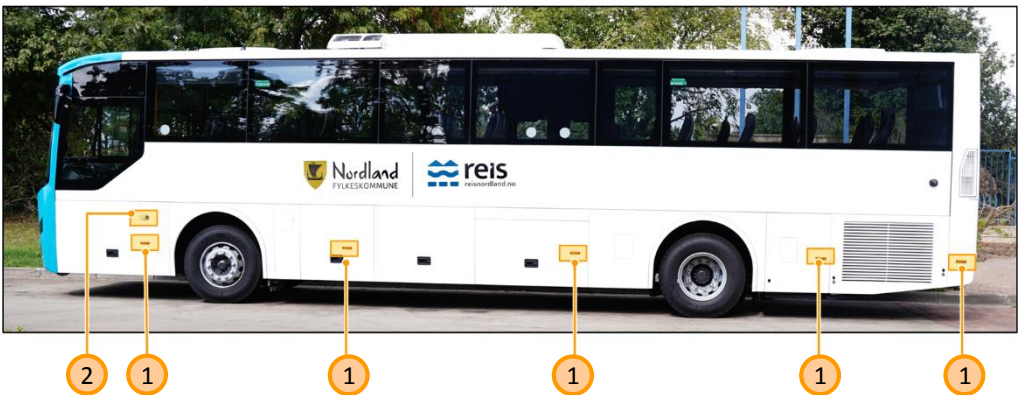
12 Fog light reflector

13 License plate light

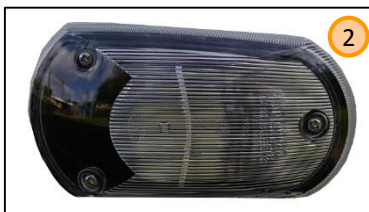
14 Reflector



Side light



1 Side position light with reflector



2 Side direction indicator

Side cameras



1 Left SerDes Camera Kit S+2



2 Right SerDes Camera S+2



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