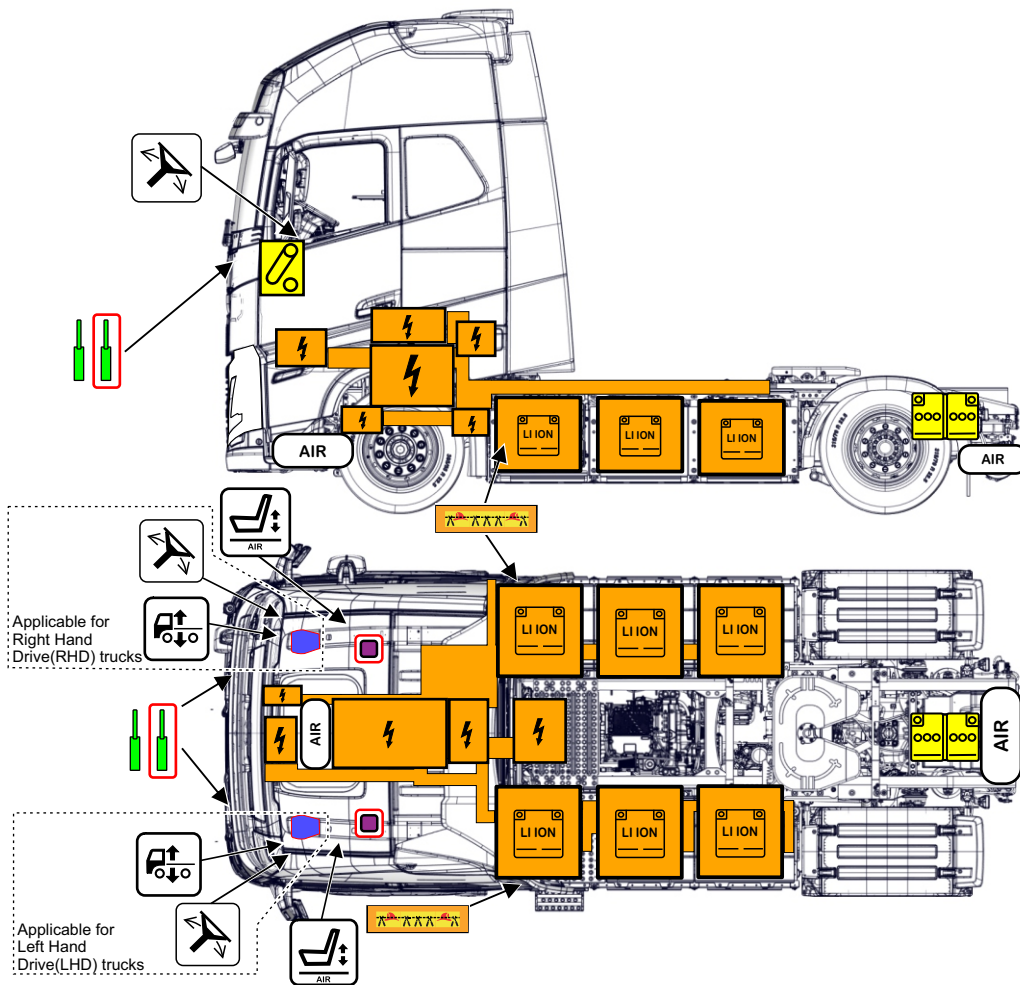




# VOLVO TRUCKS

## FH / FM / FMX ELECTRIC (TRACTOR)

PRODUCTION START: 2022



<b>LI ION</b> High-voltage lithium-ion battery	<b>Emergency cut-off loop:</b> Cutting this cable disconnects the high voltage.	<b>Low-voltage battery</b>	<b>AIR</b> Air tank	<b>Seat adjustment</b>	<b>Height control</b>	<b>Steering wheel tilt control</b>
<b>High-voltage component</b>	<b>High-voltage cable</b>	<b>Gas strut, pre-loaded spring</b>	<b>Starter switch</b>	<b>Seat belt pretensioner</b>	<b>Airbag</b>	

**NOTE**

- (a) The above image shows information for one variant of this product. Number of axles, cab structure and number of traction batteries can vary depend on the variant of the product.  
 (b) These instructions do not cover the safety aspects of the components and equipments mounted by a third party (example: body builders).

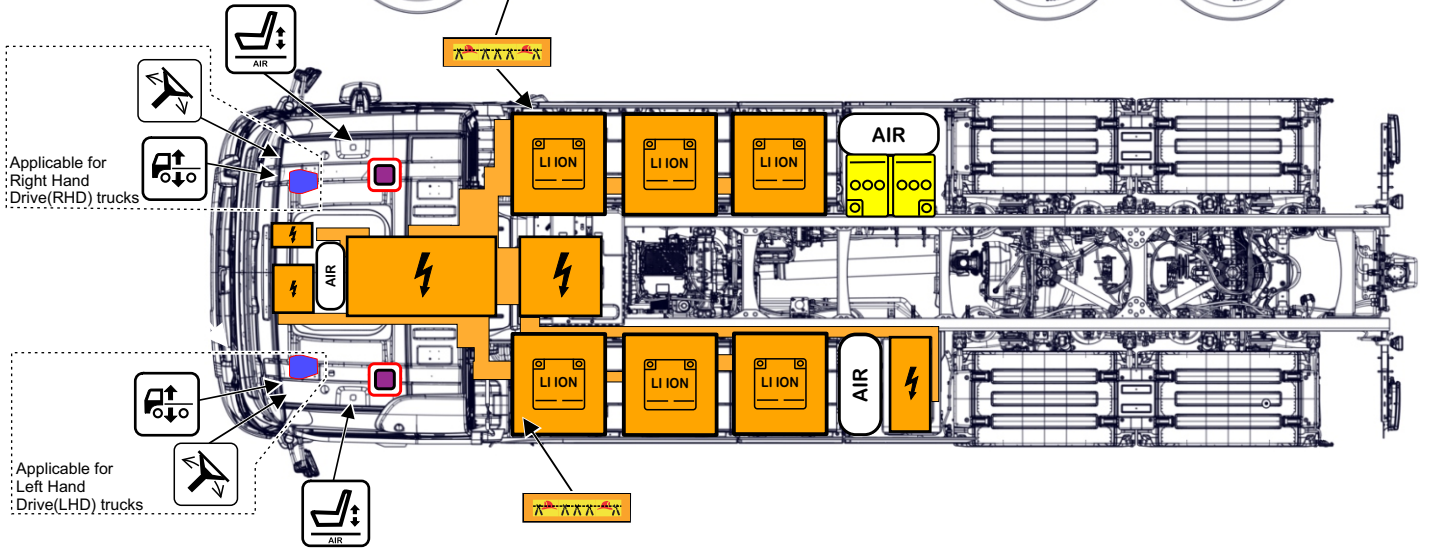
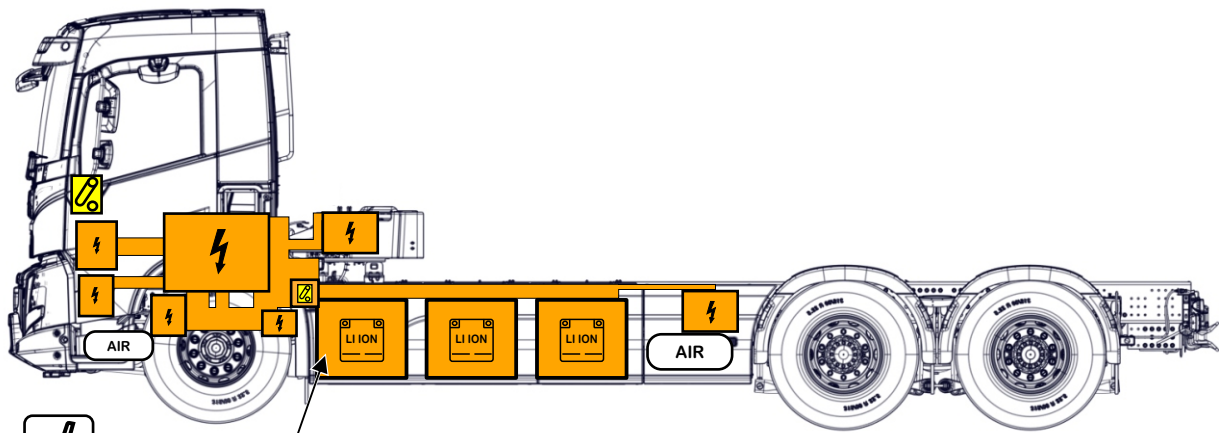
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# VOLVO TRUCKS

## FH / FM / FMX ELECTRIC (RIGID)

PRODUCTION START: 2023

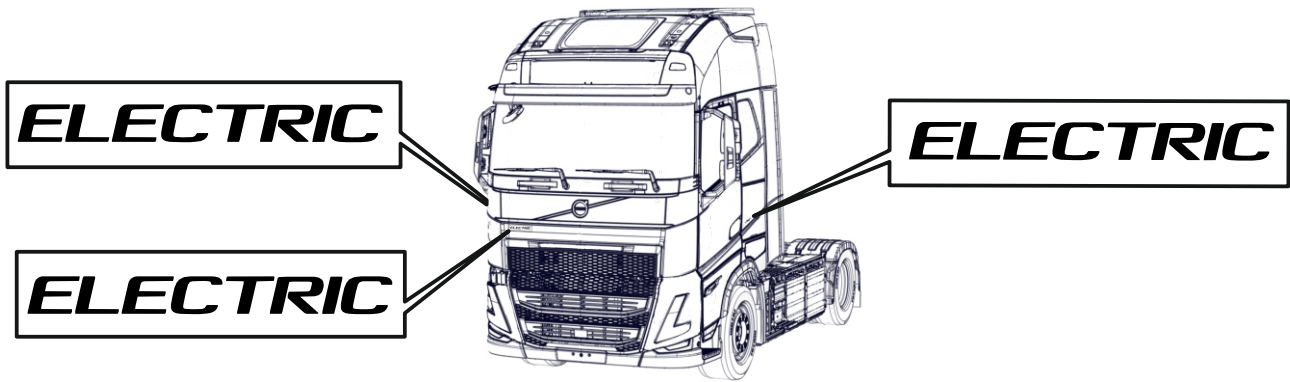


High-voltage lithium-ion battery	Emergency cut-off loop: Cutting this cable disconnects the high voltage.	Low-voltage battery	AIR Air tank	Seat adjustment	Height control
Steering wheel tilt control	High-voltage component	High-voltage cable	Starter switch	Seat belt pretensioner	Airbag

**NOTE**  
 (a) The above image shows information for one variant of this product. Number of axles, cab structure and number of traction batteries can vary depend on the variant of the product.  
 (b) These instructions do not cover the safety aspects of the components and equipments mounted by a third party (example: body builders).

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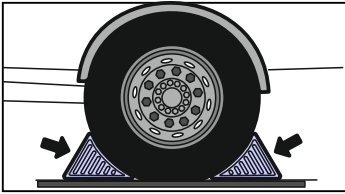
## 1. Identification/recognition



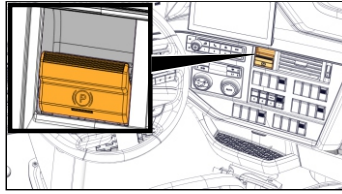
## 2. Immobilisation/stabilization/lifting

Always approach the electric truck from the sides to stay out of the potential travel path. Due to lack of noise it can be difficult to determine if the truck is running.

1 Chock the wheels



2 Apply the handbrake



## 3. Disable direct hazards/safety regulations



1 If possible turn off the starter switch and remove the key.

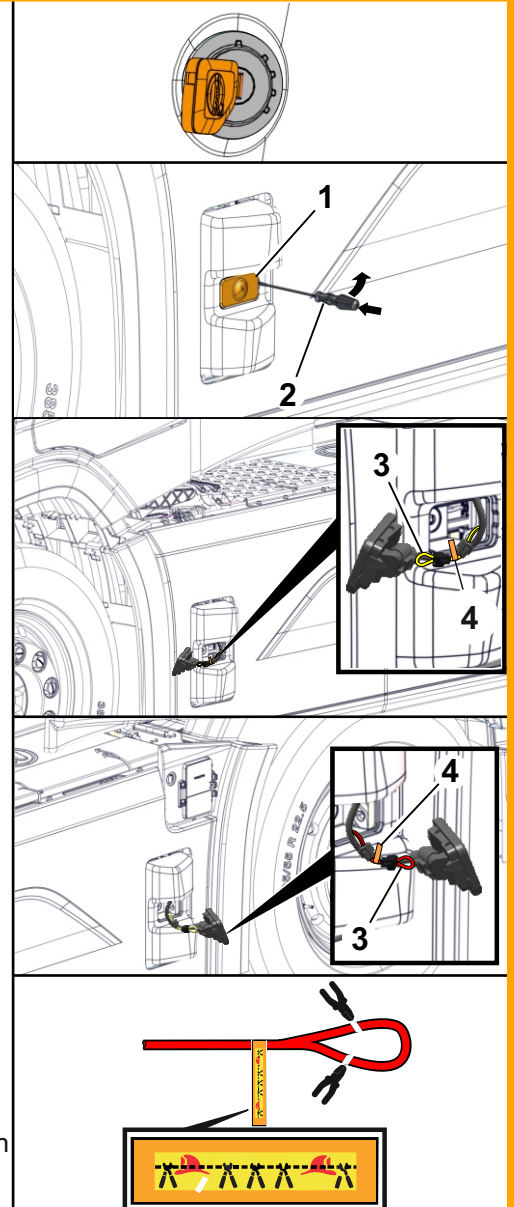
2 Remove the side marking lamp (1) using a screw driver (2).

3 Locate the emergency cut-off loop (low voltage) (3) with the label (4).

4 Cut the emergency cut-off loop on each side of the loop to disconnect the traction voltage supply from the traction batteries.

### Note

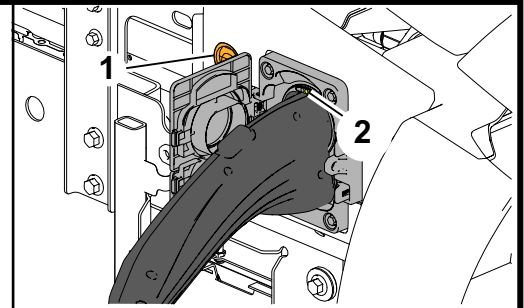
Cutting at any of the locations shown will disable the traction voltage in the traction battery and all the high-voltage components and discharge their own capacitance within five seconds. 24 V systems like seat position adjustment and steering system will still function after cutting the cable.





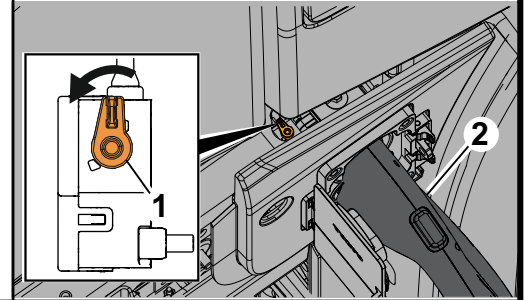
### ➔ If the truck is charging

- 1 Unlock the cab using key fob.
- 2 Press the stop button (1) and wait for the steady yellow light (2) on the charging inlet.
- 3 Pull the charging plug from the charging inlet, once the yellow light (2) turns off.



### ➔ If the charging plug cannot be pulled out: retract the pin manually

- 1 Rotate the lever (1) and remove the charging plug (2).



## 4. Stored energy/liquid/gases/solid

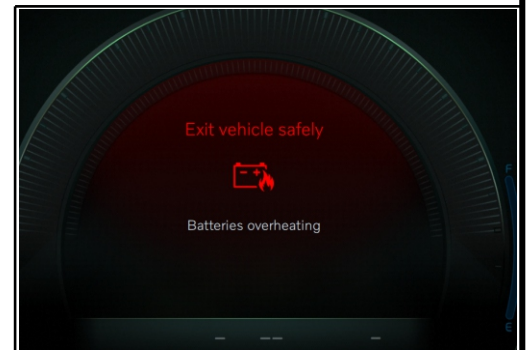
### 600 V high-voltage lithium-ion battery



It is not recommended to approach the electric truck during or immediately after a thermal event. Be aware before approaching the electric truck that a delayed thermal event in the lithium-ion batteries can occur.



If "Batteries overheating" warning is displayed in the instrument cluster, exit the vehicle safely.



## 5. In case of fire



Use a large, sustained volume of water to extinguish a lithium-ion battery-related fire.



### Note

Extinguishing a lithium-ion battery-related fire with water can produce hydrofluoric acid.



If other materials are involved, use class ABC fire extinguisher.



In case of thermal runaway, the lithium-ion batteries can release hydrogen fluoride gas.

## 6. In case of water submersion



The degree of damage of a submerged electric truck may not be visible. Submersion in water can damage 24 V and 600 V components.

Handling an electric truck that have been submerged without an appropriate Personal Protective Equipment (PPE) may result in serious injury or death due to electric shock.

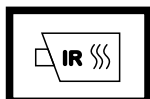
Avoid any contact with 600 V cables and electric components. If possible, disable direct hazards (Refer to “3. Disable direct hazards/safety regulations”).

## 7. Towing/transportation/storage



Check the condition of the lithium-ion batteries before towing. If the traction batteries are damaged, there is a risk of thermal or chemical reaction. It is recommended to take guidance from emergency response personnel before towing.

Delayed thermal event in the lithium-ion batteries can occur after they are damaged or after battery fire / heat suppression. A heat camera may be used to identify the thermal event.



To ensure the battery safety, it is recommended to:

- Park the electric truck involved in an accident in a suitable place maintaining a safe distance from other vehicles, buildings and combustible objects.
- Perform risk analysis based on the local situation. Observe the electric truck for the amount of time decided during the risk analysis.

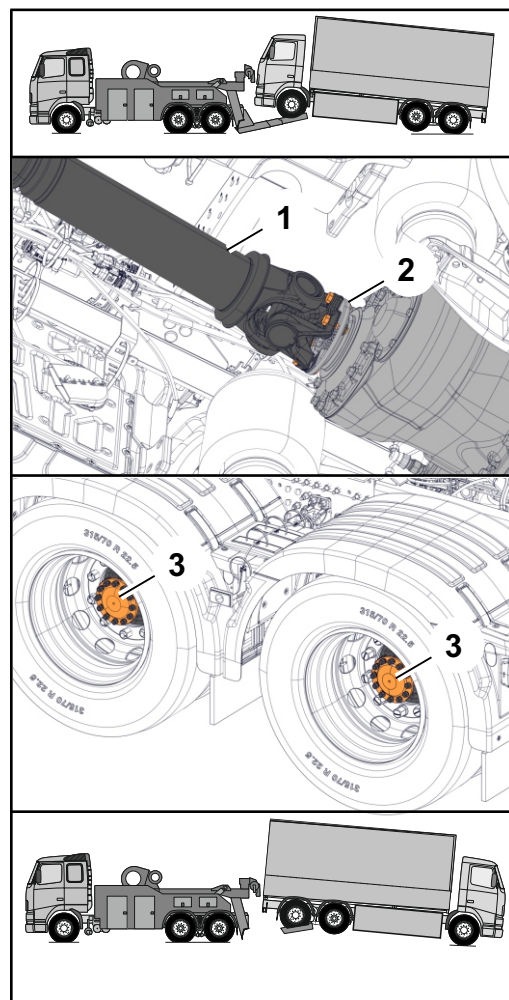


Before towing an electric truck with rear wheels on the ground, it is mandatory to disconnect the drive to the wheels.

The drive to the wheels is disabled by either uncoupling the propeller shaft (1) from the driven axle (2) or by removing the drive shafts (3).

### Note

Moving an electric truck with the rear wheels on the ground without disabling the drive may cause damage to the electric motor and the gearbox.



In case of a physical damage or a thermal event on the lithium-ion batteries It is recommended to tow an electric truck with the rear wheels lifted.

When an electric truck is towed with the rear wheels lifted, lock the steering wheel.



Towing an electric truck through tunnels is prohibited due to deflagration from the flammable vent gas and fire hazard due to thermal runaway propagation between cells.

## 8. Important additional information



All cables carrying high voltage are in orange colour. Do not cut any high-voltage cables.

Do not touch any high-voltage cables or electric components.

Do not perform any operation on a damaged vehicle without an appropriate Personal Protective Equipment (PPE).

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