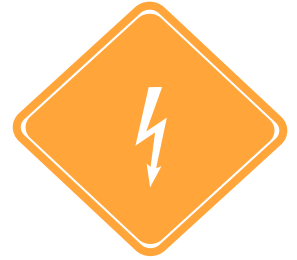


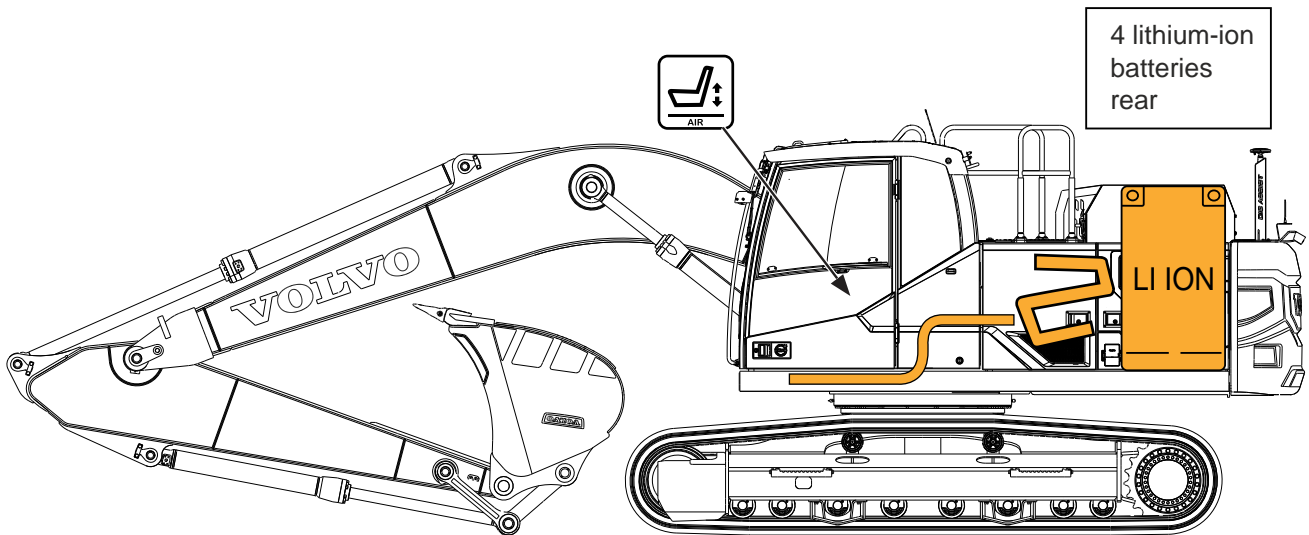
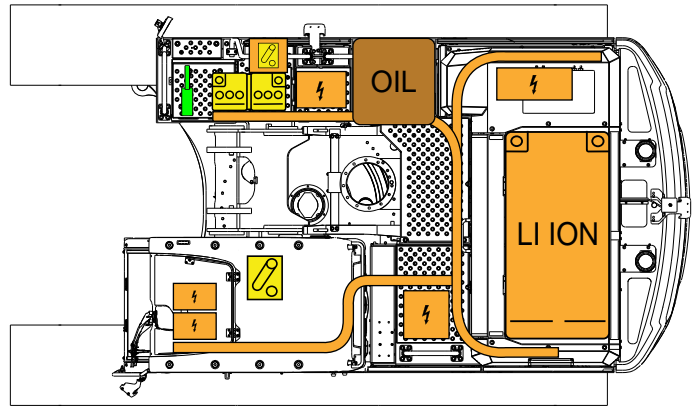




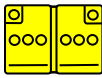





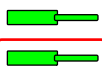
VOLVO Crawler excavator

EC230 ELECTRIC

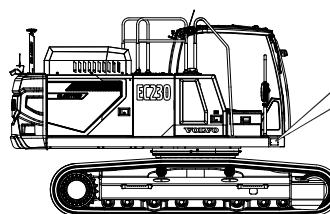
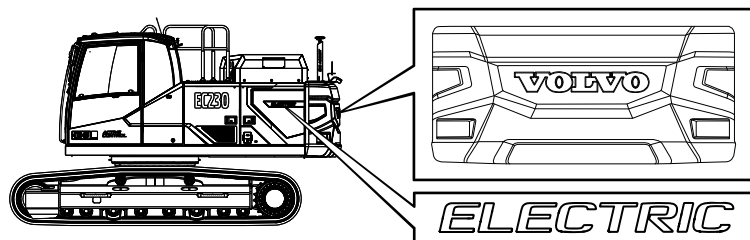


- ≥ 20 ton vehicle
- 4 lithium-ion batteries
- 1 door left side
- 1 window to open left side
- 1 windshield to open front side
- 1 seat



 Traction voltage lithium-ion battery	 Low voltage device that disconnects the traction voltage	 Low voltage battery	 Oil tank	 Seat adjustment	 Traction voltage component
 Traction voltage cable	 Start key	 Gas strut, pre-loaded gas cylinder			

1. Identification/recognition



Volvo Construction Equipment	
Volvo Group Korea Co. Ltd. 180, Seongsang-gu, Changwon-si, Gyeongsangnam-do Korea 51564	
Type / Model	EXCAVATOR/JEC230E
Product Name	EC230 electric
Product Identification Number	**VCEJEC230E*****
Machine mass kg	
Motor rated net power kW	
Motor peak power kW	
Manufacturing year	
Made in	Assembled in
VOLVO	

2. Immobilisation/stabilization/lifting

Place the attachment on the ground.

- Even when the machine is turned off, it is possible to lower the attachment of the machine to the ground by operating control levers in the cab.

Always approach the vehicle from the sides to stay out of the potential travel path. It may be difficult to determine, if the vehicle is running due to lack of noise.

Track motor and swing motor include hydraulically released parking brake assembly.

Manual release of travel brake

- If it is impossible to operate the machine due to the failure of the components in the track motor, the travel brake should be released. Contact a qualified service technician for detailed information

3. Disable direct hazardous/safety regulations



1 Turn off the start key and remove it.

2 Open the front right side door of the machine.



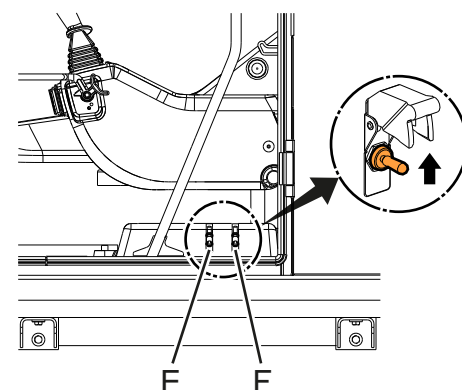
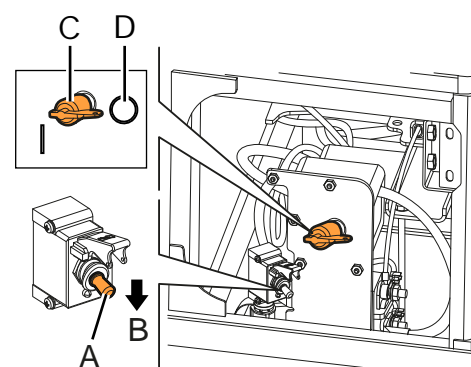
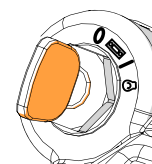
3 Put the main switch (A) down to the off position (B).

4 Turn the battery disconnect switch (C) to the off position (D).

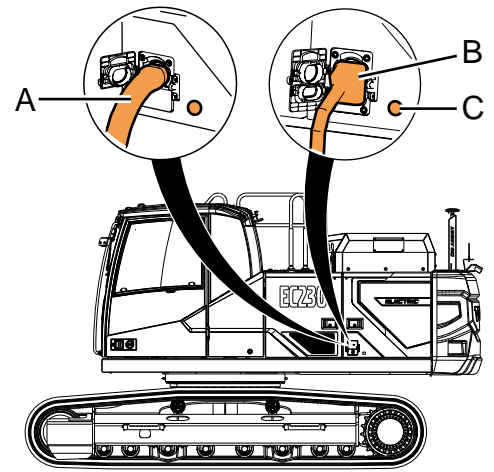
5 In case it cannot be reached to main switch (A) and battery disconnect switch (C), push the emergency switches (E: for traction voltage emergency, F: for machine emergency), which is located under the left console in the cab upward at the same time to stop the machine.

NOTE!

These switches turn off the machine as well as the battery disconnect switch at the same time.



➔ If the machine is charging and connected with a **standard (A) or fast charging connector (B)**



- 1 Disconnect the connector from the charging source, if possible.
- 2 Press the charging stop button (C) next to the charging port to interrupt the charging procedure.
- 3 Disconnect the connector (A or B) from the machine.

4. Stored energy / liquid / gases / solid

600 V traction voltage lithium-ion battery



5. In case of fire



Use large sustained volume of water for lithium-ion battery related fire. Efforts should be made to control and collect run off water.



Do not use water for hydraulic fluid related fire.



Class ABC fire extinguisher can be used if other materials are involved.



In case of thermal runaway, hydrogen fluoride can be released by the lithium-ion batteries.

6. In case of water submersion

The damage level of a submerged vehicle may not be visible.

Submersion in water can damage 24 V and 600 V components.



Handling a submerged vehicle without appropriate Personal Protective Equipment (PPE) will result in serious injury or death from electric shock.

Avoid any contact with 600 V cables and electric components.

If possible disable direct hazards (See chapter 3).

7. Towing / transportation / storage



If the traction batteries are damaged, there can be a risk of thermal or chemical reaction.

The electric vehicle met with an accident must be parked in a suitable place by maintaining a safe distance from other vehicles, buildings and combustible objects.



Risk of late fire can happen, after the fire suppression or in case the lithium-ion batteries are damaged.

Observe the vehicle for a minimum period of 48 hours using a thermal infrared camera.

8. Important additional information



Do not cut any orange cables.

Do not touch any traction voltage cables and electric components.

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