



Workshop Manual e-up! 2014 ➤

Electric drive

Edition 10.2018



List of Workshop Manual Repair Groups

Repair Group

00 - Technical data

93 - Electric drive systems



Technical information should always be available to the foremen and mechanics, because their careful and constant adherence to the instructions is essential to ensure vehicle road-worthiness and safety. In addition, the normal basic safety precautions for working on motor vehicles must, as a matter of course, be observed.



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00 – Technical data

1 Safety information

(VRL012328; Edition 10.2018)

**Safety instructions available via following link ⇒ Electric motor
(210, LS1); Rep. gr. 00 ; Safety instructions**





2 Repair notes

Repair instructions available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 00 ; Repair instructions](#)



3 Classification of dangers of the high-voltage system

DANGER

The high-voltage network of the vehicle and the high voltage battery are dangerous and may cause burns, other injuries and fatal electric shocks.

- Only suitably qualified professionals may carry out work on the high-voltage system and other systems indirectly influenced by it.
- In case of queries or uncertainties in relation to the terms “High-voltage Technician”, “High Voltage Experts”, or in relation to the high-voltage system, the importer responsible must be consulted before any work is undertaken.
- Repair tasks are always to be carried out in compliance with the applicable statutory regulations, other legal requirements, the recognised technical rules, any applicable accident prevention regulations (in Germany including, but not limited to BGI/GUV-I 8686 - Qualification for Working on Vehicles with High-voltage Systems), as well as this repair manual.

Hazard rating of high-voltage system available via following link
⇒ [Electric motor \(210, LS1\); Rep. gr. 00](#) ; Hazard rating of high-voltage system

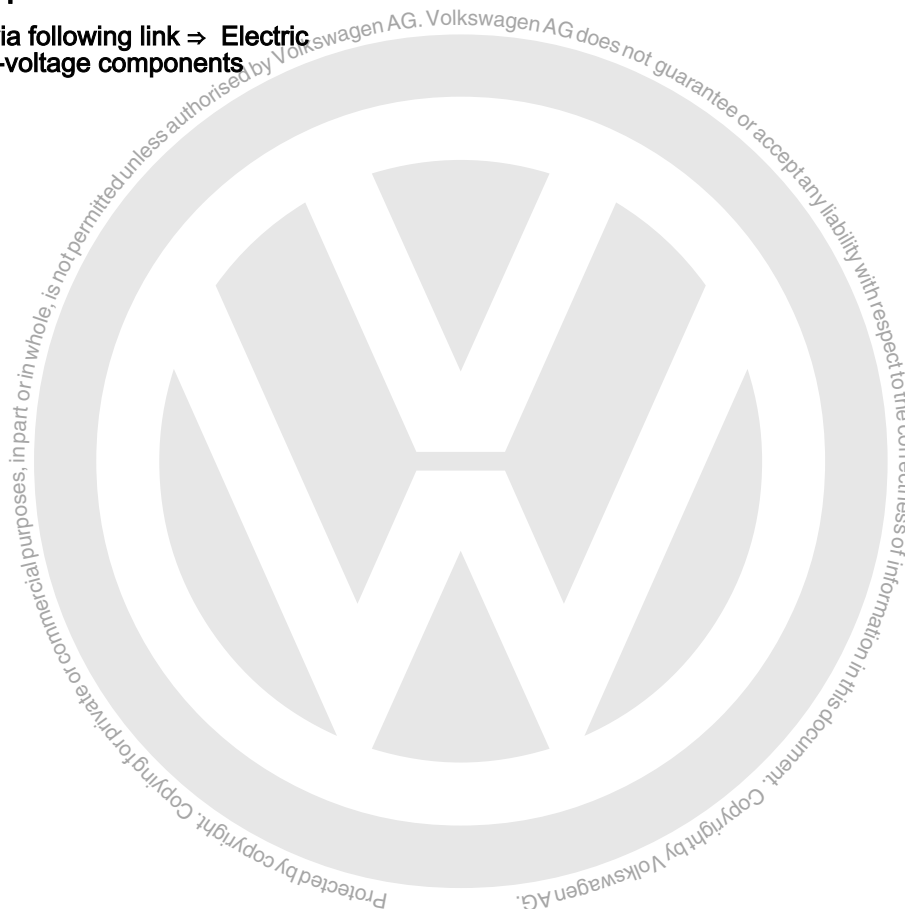




93 – Electric drive systems

1 High-voltage components

High-voltage components available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; High-voltage components](#)





2 Warning stickers

Warning stickers available via following link ➔ [Electric motor \(210, LS1\); Rep. gr. 93 ; Warning stickers](#)





3 High-voltage battery unit

High-voltage battery unit available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; High-voltage battery unit](#)





4 Power and control electronics for electric drive

Power and control electronics for electric drive available via following link ➔ [Electric motor \(210, LS1\); Rep. gr. 93 ; Power and control electronics for electric drive](#)





5 Electric drive motor

Electric drive motor available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; Electric drive motor](#)





6 Motor control unit

Motor control unit available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; Motor control unit](#)





7 High-voltage cables

High-voltage cables available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; High-voltage cables](#)





8 Cooling system for high-voltage system

Cooling system for high-voltage system available via following link ➔ [Electric motor \(210, LS1\); Rep. gr. 93](#) ; Cooling system for high-voltage system



9 Coolant pump/coolant regulation system

Coolant pump/coolant regulation system available via following link ➔ [Electric motor \(210, LS1\); Rep. gr. 93 ; Coolant pump/coolant regulation system](#)





10 Radiator/radiator fan

Radiator/radiator fan available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; Radiator/radiator fan](#)





11 High-voltage heater (PTC)

Overview of fitting locations ⇒ Heating, air conditioning; Rep. gr.
87 ; Coolant circuit; Overview of fitting locations - coolant circuit





12 Electrical air conditioner compressor

The electrical air conditioner compressor - V470- is installed on the right in the front in the engine compartment.

**Removing and installing ⇒ Heating, air conditioning; Rep. gr. 87 ;
Air conditioner compressor; Removing and installing Electrical air
conditioner compressor - V470-**





13 De-energising high-voltage system

De-energising high-voltage system available via following link ⇒
Electric motor (210, LS1); Rep. gr. 93 ; De-energising high-voltage system





14 Recommissioning high-voltage system

Recommissioning high-voltage system available via following link
⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; Recommissioning high-voltage system](#)



15 Potential equalisation lines

Potential equalisation lines available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; Potential equalisation lines](#)



16 Charging socket

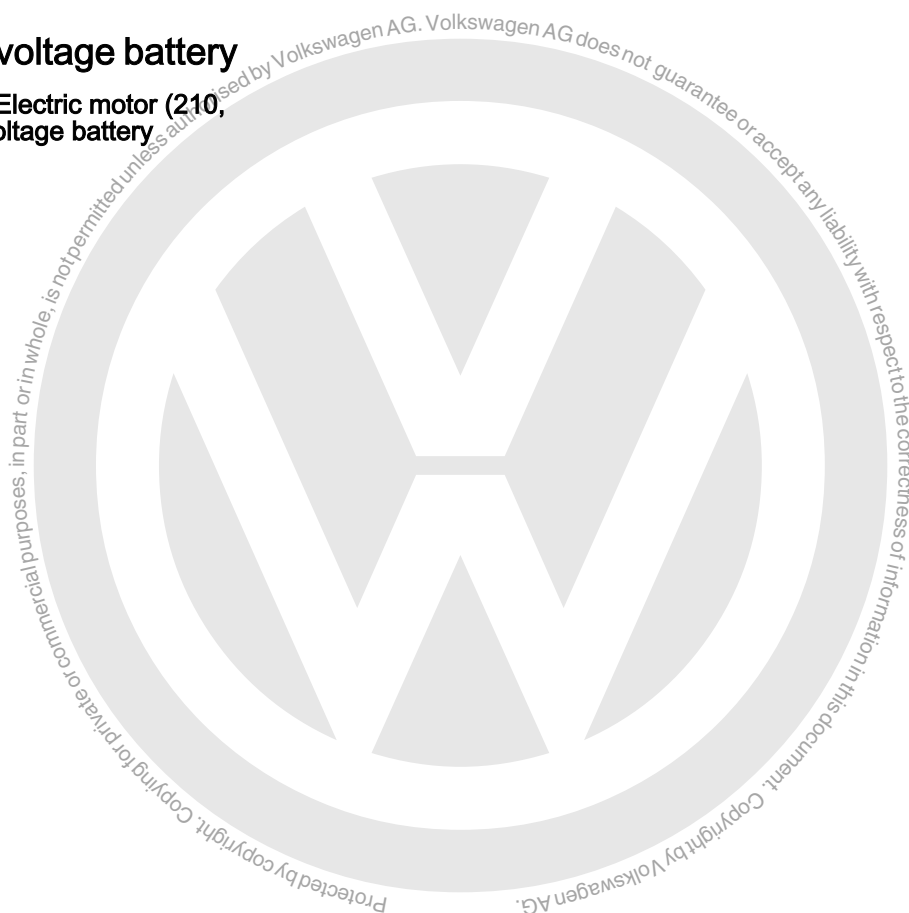
Charging socket available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; Charging socket](#)





17 Charging unit for high-voltage battery

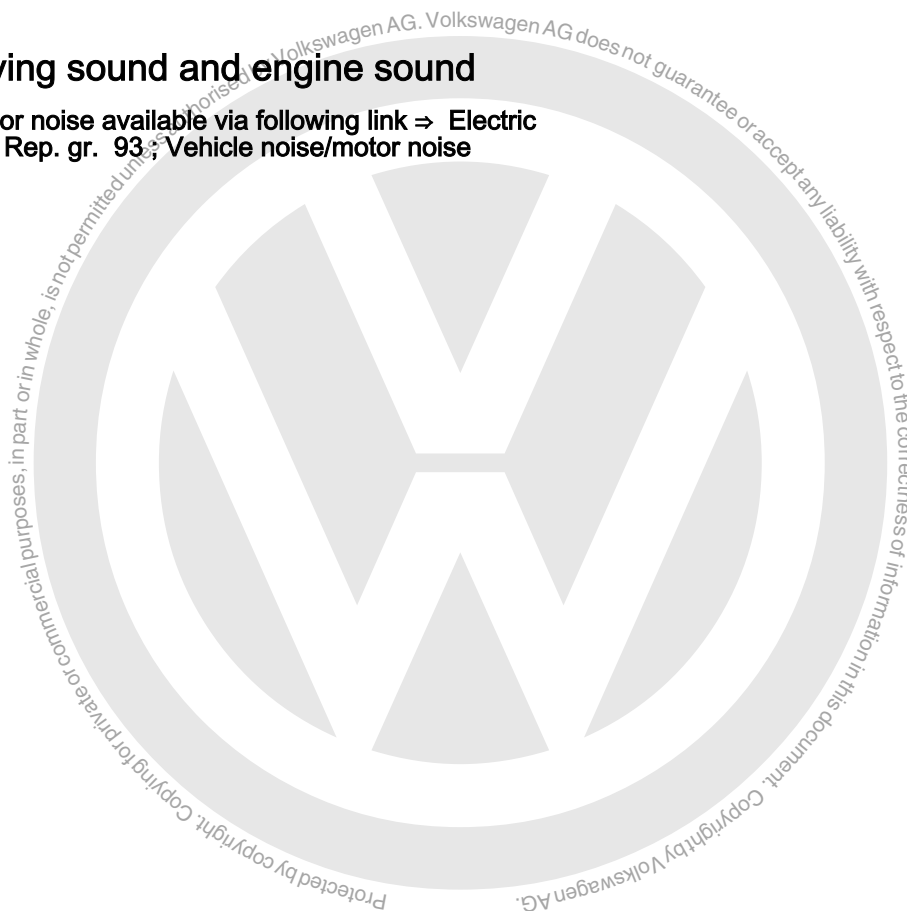
Charging unit available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; Charging unit for high-voltage battery](#)





18 Driving sound and engine sound

Vehicle noise/motor noise available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93; Vehicle noise/motor noise](#)





19 Accelerator pedal

Accelerator pedal available via following link ⇒ [Electric motor \(210, LS1\); Rep. gr. 93 ; Accelerator pedal](#)

