## Installation guide

## 1. Checking the electrical system:

Please check the following points before deciding to replace the electric motor:

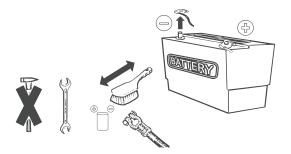
- Is the power supply/battery charged and in good condition?
- Are the power supply cables/battery leads correctly connected and not damaged?
- Are all electrical connections tightly fitted and free of corrosion?
- Is the wire harness in proper working order and not damaged?

## 2. Disconnecting the vehicle battery—warning!

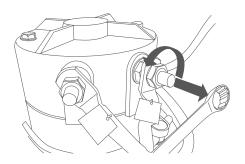
- Disconnecting the vehicle battery may result in the loss of codes in certain vehicle systems. In this case the systems must be reprogrammed or the codes re-entered.
- Before disconnecting the battery, follow the vehicle manufacturer's recommended guidelines.

## 3. Installation steps:

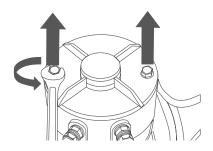
**3.1** Make sure that all power-transmitting components and connections (electric, pneumatic, and hydraulic) are shut off according to the vehicle manufacturer's instructions and cannot readily be switched back on. Remove main fuse for the machine or system if possible. Disconnect the negative battery lead to prevent an earth fault.



**3.2** Remove the electrical connecting cables from the currently installed electric motor. Carefully mark the connecting cables according to the associated output terminals on the electric motor.

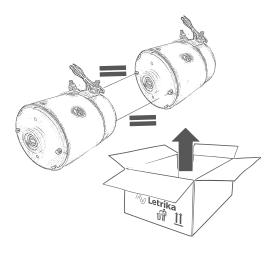


**3.3** The electric motor can be used as a pump or traction motor, depending on the application. In either case, undo the fixing bolts and remove the electric motor from the pump or transmission. Follow the machine or system manufacturer's instructions.





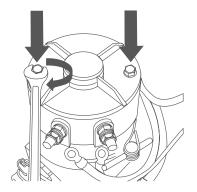
**3.4** Make sure that the motor you are about to install matches the motor you just removed. Using the catalogue, check the electrical part number, the direction of rotation, the rated voltage, the rated current, the fitting dimensions, the electrical connections, etc.



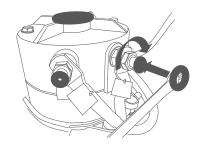
3.5 Also check the following points:

- Make sure that the motor cannot be switched on.
- Remove the protective cover and plastic plug using a suitable tool.
- The sealing surfaces must not be damaged.
- When working with hydraulic fluids, adhere strictly to the hydraulic fluid manufacturer's instructions.
- Also follow the machine or system manufacturer's instructions.
- **3.6** Tighten the fixing bolts on the electric motor evenly and to the correct tightening torque. An incorrect tightening torque may result in malfunctions, leaks, or increased wear.

**3.7** Secure the motor in the installation position. Information about the required tools and the tightening torque for the bolts can be obtained from the machine or system manufacturer if necessary.



**3.8** Connect the electrical cables to the electric motor. Take care to route the cables properly, making sure that the cables do not come into contact with hot or abrasive surfaces.



**3.9** Connect the power supply/negative battery lead to the battery. Before starting the system, make sure that the battery is fully charged. Check that the entire electrical system is working properly according to the machine or system manufacturer's instructions.



