

Alternator Installation manual

1. Checking the electrical charging system:

Please check the following points before deciding to replace the alternator:

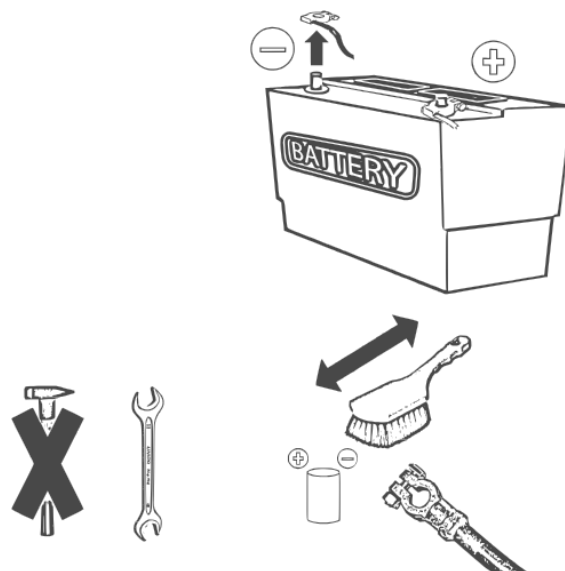
- Is the battery charged and in good condition?
- Are the battery leads correctly connected and not damaged?
- Are all electrical connections tightly fitted and free of corrosion?
- Is the wire harness in proper working order and not damaged?
- Are all bolts and nuts properly tightened and secured with spring washers?
- Is the drive belt free of damage and properly tensioned?

2. Disconnecting the vehicle battery - warning!

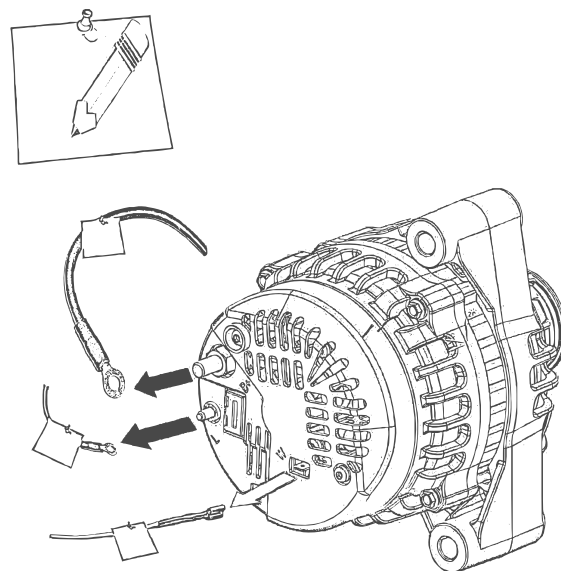
- Disconnecting the vehicle battery may result in the loss of codes in certain vehicle systems. In this case the systems must be reprogrammed or the codes re-entered.
- Before disconnecting the battery, follow the vehicle manufacturer's recommended guidelines.

3. Installation steps:

- 3.1** First disconnect the negative battery lead to prevent an earth fault.



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

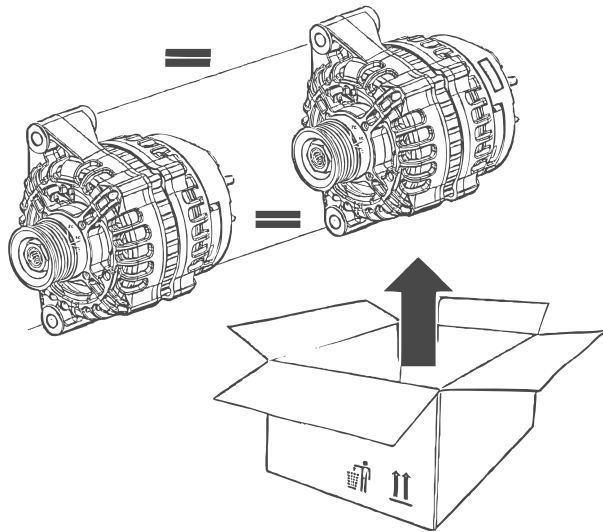


- 3.3** Depending on how the belt tension is achieved, disengage the automatic belt tensioner and/or loosen the mounting bolts and remove the alternator. Follow the vehicle manufacturer's instructions.

Terminal identification guide:

Marking	Function
B, B+, B2+, Bat, 30, A	Battery + (main output)
B-, E-, Neg, 31	Battery – (ground)
D+, L, WL, 15, 61	Charging Lamp
W, T, P, STA	Revcounter
I, IG	Ignition
S	Battery Sense

3.4 Make sure that the alternator you are about to install matches the alternator you just removed. Using the catalogue, check the part number for the alternator, the direction of rotation, the rated voltage, the rated output current, the mounting bracket design, the belt pulley type, the electrical connections, etc.



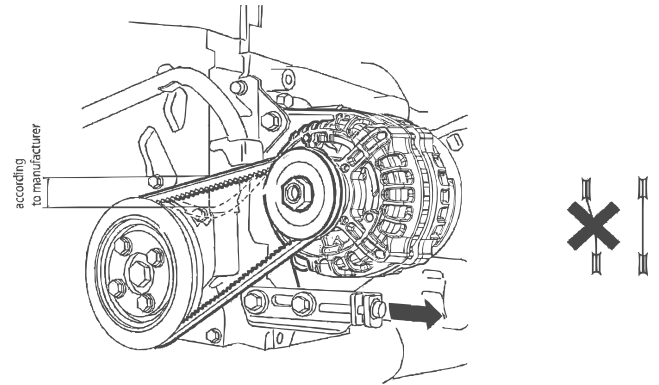
3.5 Also check the following points:

- Inspect the drive belt for damage, such as cracks, mechanical damage, and compromised performance due to fuel and lubricants.
- Check the belt pulley and the roller on which the belt pulley runs. These must not show signs of damage.
- Inspect the auxiliary components powered by the alternator drive belt for restricted range of motion or bearing damage.
- Check that the battery connections are properly attached to the terminals. The connections and terminals must not show any traces of oxidation.
- Follow the vehicle manufacturer's instructions.

3.6 Make sure that the vehicle body and engine are properly earthed.

3.7 Tighten the fixing bolts on the alternator evenly and to the correct tightening torque.

3.8 Tension the drive belt according to the manufacturer's instructions and check that the belt is properly aligned.



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

3.10 Connect the negative battery lead to the battery. Before starting the vehicle, make sure that the battery is fully charged. After starting the vehicle, use a voltmeter at the battery terminals to measure the charging voltage. Check that the entire electrical system is working properly.

