LucasElektrik

ALTERNATOR FITTING INSTRUCTION

ALTERNATOR FITTING

Before the replacement of the alternator, please check the followings;

* the battery is charged and in good conditions.

* the battery cables and the other electrical cables are correctly connected and not damaged.

* the electrical /mechanical connections such as plugs, screws, nuts are properly tightened, fastened and not corroded.

* the belt is properly tensioned not too high and too low.

ALTERNATOR REPLACEMENT

1- Disconnect the battery cables, negative first.

2- Disconnect the electrical cables from the current alternator.Mark the connection cables of alternator output terminals to prevent mistake during the reconnection.

3- Disengage belt tensioner and loose the mounting bolts, then remove the alternator.

4- Check if any liquids such as oil, fuel revisible on the current alternator.If this is the case, liquid leakages must be prevented on the engine before fitting the new alternator.

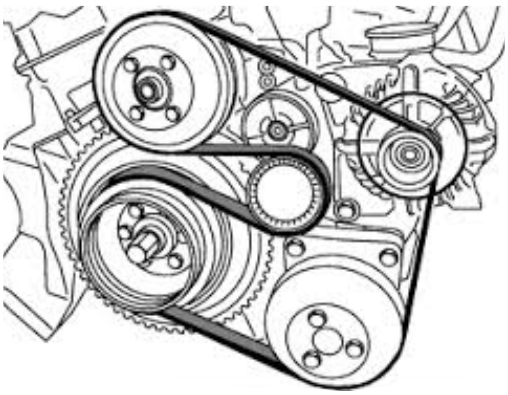
5- Check the rated voltage, output, terminals, fitting ears and their positions, rotation direction, pulley type etc. for the new alternator.

6- Ensure that there are no tear and damage on belt caused by oil, fuel.

7- Insert the alternator to the engine, tighten the mounting bolt with the correct torque according to the vehicle manufacturer specification.

8- Ensure that the belt tension is adjusted according to the vehicle manufacturer specification. If the belt tension is too high, bearings may be damaged. If tension is too low, the belt may slip thus preventing the alternator working properly.

9- Reconnect the electrical connection cables to the alternator.Ensure that the cables are correctly located and they are not in contact with the heated parts of the vehicle.



10- Reconnect first the positive battery cable and then negative cable.Battery terminals must be securely attached to the poles.Terminals and poles must be free of oxidation or corrosion.

11- After starting the vehicle, make sure that electrical system is functionally working.

LucasElektrik

STARTER MOTOR FITTING INSTRUCTION

STARTER MOTOR FITTING

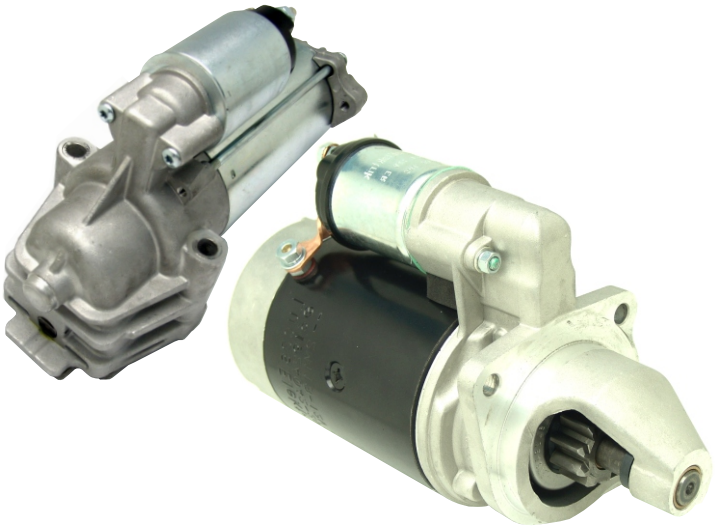
Before the replacement of the starter motor, please check the following;

* the battery is fully charged and in good conditions.

* the battery cables are correctly connected and not damaged.

* the electrical / mechanical connections such as plugs, screws, nuts are properly tightened,fastened and not corroded.

* the ignition switch is working properly.



STARTER MOTOR REPLACEMENT

1- Disconnect the battery cables, negative first.

2- Disconnect the electrical cables from the current starter

motor. Mark the connection cables of the starter motor terminals to prevent mistake during the reconnection and then remove the starter motor from the engine.

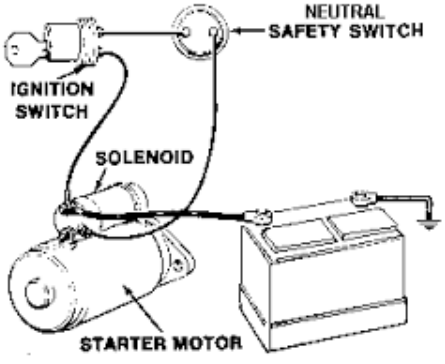
3- Check if any liquids such as oil, fuel are visible on the current starter motor. If this is the case,liquid leakages must be prevented on the engine before fitting the newstarter motor.

4- Check the rated voltage, output, terminals, flange, connection holes and their positions, number of teeth on drive, rotation direction of drive etc. for the new starter motor.

5- Ensure that the flywheel is not damaged or over-worn on tooth. Flywheel faults may cause drive and bush damaging.

6- If the flywheel is OK, and then insert the starter motor to the engine and tighten the mounting bolts with the correct torque according to the vehicle manufacturer specification.

7- Reconnect the electrical connection cables to the starter motor. Ensure that the cables are correctly located and not in contact with the heated parts of the vehicle.



8- Reconnect first the positive battery cable and then negative cable.Battery terminals must be securely attached to the poles. Terminals and poles must be free of oxidation or corrosion.

9- Make sure that starter motor is working properly by cranking.