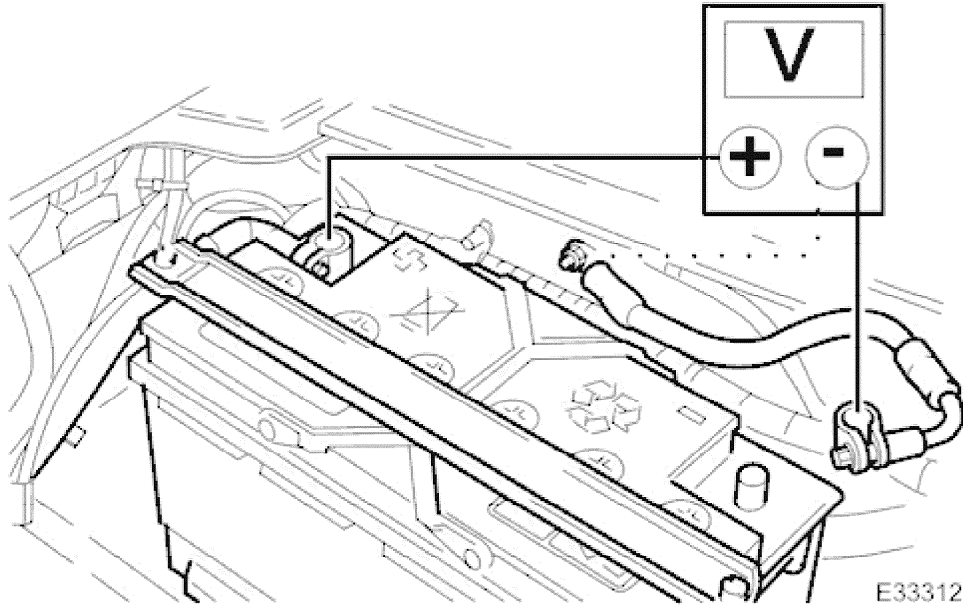


Testing the Battery Circuit

Using the Vehicle Battery



Remove the battery cover.

Ensure that all electrical loads are switched OFF and that the engine is cool.

Start the engine and allow to IDLE.

Whilst the engine is idling, disconnect the battery negative terminal and, using a digital multimeter (DMM), measure the voltage between the terminal on the battery negative cable and the battery positive terminal. If the generator is working, the measured voltage should be within the range 13V to 15V.

This indicates the system voltage without the battery in circuit. If the generator is inoperative, the engine will stall when the ground lead is disconnected.

Repeat the test, using the ground bolt, as indicated (shown dotted on the illustration). There should be hardly any detectable difference in the voltage reading (due to minimal current flow); if there is a detectable difference, clean the cable terminal and the adjacent area of the body.

When the voltage has been measured, STOP THE ENGINE.

Reconnect the battery or fit a new battery if it was established that the battery was at fault (Refer to <<414-01>>).

If the cooling fans operate during the above test, the large demand of current will overload the generator and cause the engine to stall.

If the battery is in a low state of charge the voltage will rise momentarily when the battery is disconnected. However, the maximum that the voltage can increase to with this new generator is 25V and then only for a maximum time of 200 mS.