# Vehicle battery

# REMOVING THE VEHICLE BATTERY

Special tools are required to refit the battery after removal, therefore battery removal and refit should be carried out only by qualified personnel. Consult your Dealer/Authorised Repairer.

## CHARGING THE VEHICLE BATTERY

If the vehicle battery should require charging, the battery must be removed from the vehicle. Consult your Dealer/Authorised Repairer.



Battery disconnection, removal and renewal should be carried out only by qualified personnel. Consult your Dealer/ Authorised Repairer.



Used batteries must be disposed of correctly as they contain a number of harmful substances. Seek advice on disposal from your Dealer/ Authorised Repairer and/or your local authority.

#### REPLACING THE VEHICLE BATTERY

If the vehicle battery should require replacing, the battery must be removed from the vehicle. Consult your Dealer/Authorised Repairer.



Battery disconnection, removal and renewal should be carried out only by qualified personnel. Consult your Dealer/ Authorised Repairer.



Used batteries must be disposed of correctly as they contain a number of harmful substances. Seek advice on disposal from your Dealer/ Authorised Repairer and/or your local authority.

### EFFECTS OF DISCONNECTING

Disconnecting the battery can affect a number of vehicle systems, especially if there is insufficient battery power prior to disconnection. For example, the alarm may trigger depending on its state when the battery was disconnected. If the alarm does sound, use the Smart key in the normal way to disarm the security system. The windows may need recalibrating to operate correctly.

### BATTERY MONITORING SYSTEM

The Intelligent Power System Management (IPSM) continuously monitors the condition of the main vehicle battery. If excessive battery discharge occurs, the system will begin to shut down non-essential electrical systems in order to protect the battery.

If the IPSM calculates that battery condition is not within set parameters, there are 2 levels of action which can be taken. Both levels have an accompanying message on the Touch screen, and in the case of the low battery warning, in the Message centre.

- Energy Management: Will be displayed on the Touch screen if the engine is not running, and system features are causing excessive battery discharge. After 3 minutes the IPSM will begin shutting down vehicle systems. Normal system operation will resume when the engine is started.
- Low Battery Please Start Engine: Will be displayed on the Touch screen and Message centre if the engine is not running. After 3 minutes the IPSM will begin shutting down vehicle systems. Normal system operation will resume when the engine is started.



Only start the engine if it is safe to do so.

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Note: If the message Low Battery - Please Start Engine is displayed, drive the vehicle for at least 30 minutes in temperatures above 0°C (32°F) or at least 60 minutes if temperatures are below 0°C (32°F). This will allow the battery to recover to an acceptable level. If normal system operation is not resumed when the engine is switched back off, the battery may not have been sufficiently charged. If safe to do so, re-start the engine. If problems still exist, contact your Dealer/Authorised Repairer.