



DISCOVERY 4

OWNER'S HANDBOOK

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About this handbook

This handbook forms part of the Owner literature supplied with your new vehicle. Left hand drive and right hand drive conditions may be shown in the graphics and where information is specific to a particular country, it is indicated as such.

Please take the time to study the operating instructions with your vehicle as soon as you can.

Important

The information contained in this handbook covers all vehicle derivatives and optional equipment. Some of the options may not be fitted to your vehicle unless they formed part of the original vehicle specification. Therefore some parts of this handbook may not apply to your vehicle. Furthermore, due to printing cycles, it may include descriptions of options before they become generally available.

The options, hardware and software in your vehicle are from the available specifications for the market in which the vehicle was intended for sale. If your vehicle is to be used in another geographical area you may have to modify the vehicle specification to suit local conditions. Land Rover is not responsible for the cost of any modifications.

The information contained in this publication was correct when it went to print. Vehicle design changes may have been made after this handbook was printed. When this occurs a handbook supplement is added to the literature pack. Subsequent updates can be viewed on the Land Rover Internet site at; **www.ownerinfo.landrover.com**.

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Introduction

SYMBOLS GLOSSARY

Warnings

WARNING



Safety warnings in this format are included in this handbook. They indicate either a procedure which must be followed precisely, or information that should be considered with great care in order to avoid the possibility of personal injury.

Cautions

CAUTION



Cautions in this format are included in this handbook. They indicate either a procedure which must be followed precisely, or information that should be considered with great care in order to avoid the possibility of damage to your vehicle.

Symbols



This recycling symbol identifies those items that must be disposed of safely in order to prevent unnecessary damage to the environment.



This symbol identifies those features that can be adjusted, disabled or enabled by your Dealer/Authorised Repairer.

LABEL LOCATIONS



Warning labels attached to your vehicle bearing this symbol mean: Do not touch or adjust components until you have read the relevant

instructions in the handbook.



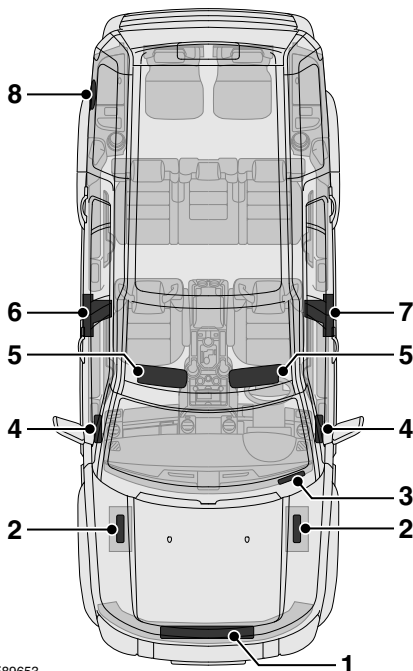
Labels showing this symbol indicate that the ignition system utilises very high voltages. Do not touch any ignition components

while the starter switch is turned on.

Warning labels

Labels are attached to your vehicle at several positions. These are applied to draw your attention to important subjects, e.g. tyre pressures, tow bar use, airbags, roll-over risk, engine compartment hazards, etc.

Additional information labels may also be found at these locations:



E89653

1. Bonnet locking platform - Air conditioning label, Vehicle Identification Number label (China).
2. Top face of battery - Battery warning symbols.
3. Windscreen lower left side - Vehicle identification number.
4. End of facia (passenger side) - Passenger airbag label.

Introduction

5. Sun visor - Airbag label. Vehicle handling warning label.
6. Right hand B pillar or door edge - Tyre pressure/loading label. Airbag warning label. Disposal information.
7. Left hand B pillar - Airbag warning label, Vehicle Identification Number label.
8. Rear of fuel filler cap - Fuel specification label.

It is important that you are familiar with these subjects to ensure that your vehicle and its features are used safely. Using the index at the back of this handbook, refer to the relevant topic for more information.

HEALTH AND SAFETY

WARNINGS



Your vehicle has a higher ground clearance and hence, a higher centre of gravity than ordinary passenger cars, to enable the vehicle to perform in a wide variety of off-road applications. An advantage of the higher ground clearance is a better view of the road allowing you to anticipate problems.



The vehicle is not designed for cornering at the same speed as conventional passenger cars any more than a low-slung sports car is designed to perform satisfactorily under off-road conditions. If at all possible, avoid sharp turns or abrupt manoeuvres. As with other vehicles of this type, failure to operate the vehicle correctly may result in loss of control or vehicle roll-over.

WARNINGS



The vehicle should not be parked over long dry grass or other combustible material, particularly during dry weather. Heat generated by the exhaust and emission control system may be sufficient to start a fire.



Before exiting the vehicle ensure that **P** (park) is selected and the park brake applied. When exiting the vehicle ensure that the remote control is removed from the vehicle.

Vehicle stability

WARNINGS



Utility vehicles have a significant higher roll-over rate than other types of vehicle. Since these vehicles are designed to be operated off-road, they have a higher ground clearance and hence a higher centre of gravity. Such a feature has been associated with an increased risk of vehicle roll-over.



Another factor shown to significantly increase roll-over risk is unauthorised vehicle modifications such as fitting incorrect specification tyres, oversized tyres, body lifting, incorrect springs/dampers, incorrect vehicle loading/trailer towing.

Introduction

WARNINGS



However, on-road crash data also indicates that driver behaviour is a greater factor than a high centre of gravity in determining a vehicle's overall roll-over rate. The single most effective driver behaviour that can reduce the risk of injury or death in all crashes including roll-over is to **ALWAYS WEAR YOUR SEAT BELT** and to properly restrain all child passengers in the rear seat in an appropriate child safety seat. In a roll-over crash, an unbelted person is significantly more likely to die than a person wearing a seat belt.



Many vehicle roll-overs occur when a driver attempts to bring a vehicle back onto the road after some or all of the wheels drift onto the shoulder of the road, especially when the shoulder is unpaved. If you find yourself in such a situation, do not initiate any sharp or abrupt steering and/or braking manoeuvres to re-enter the roadway. Instead, let the vehicle slow down as much as is safely possible before attempting to re-enter the roadway and keep your wheels as straight as possible while re-entering the roadway.



In a roll-over crash, an unbelted person is significantly more likely to die than a person wearing a seat belt.

DATA RECORDING

Service data recording

Service data recorders in your vehicle are capable of collecting and storing diagnostic information about your vehicle. This potentially includes information about the performance or status of various systems and modules in the vehicle such as engine, throttle, steering or brakes. In order to properly diagnose and service your vehicle, Land Rover and service and repair facilities may access vehicle diagnostic information through a direct connection to your vehicle.

Event data recording

This vehicle is equipped with an Event Data Recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- How fast the vehicle was travelling.
- Where the driver was positioning the steering wheel.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur.

Introduction

Note: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

Land Rover do not access event data recorder information without obtaining consent, unless pursuant to court order or where required by law enforcement, other government authorities or third parties acting with lawful authority.

Other parties may seek to access the information independently of Land Rover.

DISABILITY MODIFICATIONS

Occupants with disabilities which may require modification of the vehicle must contact a Land Rover Dealer/Authorised Repairer before any modifications are made.

PARTS AND ACCESSORIES

WARNINGS



Do not fit non-approved parts and accessories or carry out non-approved alterations or conversions. It may be dangerous and could affect the safety of the vehicle and occupants. Also, the terms and conditions of the vehicle warranty may be invalidated.



Land Rover will not accept any liability for death, personal injury or damage to property which may occur as a direct result of fitment on non-approved accessories or the carrying out of non-approved conversions to Land Rover vehicles.



Land Rover strongly advise against making any modifications to the suspension or steering system. This could seriously affect the handling and stability of the vehicle leading to loss of control or roll-over.

The vehicle has been designed, built and tested to cope with a variety of off-road driving conditions, some of which can place the severest possible demands on control systems and components. As such, fitting replacement parts and accessories that have been developed and tested to the same stringent standards as the original components will safeguard the continued reliability, safety and performance of your vehicle.

To augment the vehicle's already impressive performance, a comprehensive range of Land Rover approved spare parts and accessories is available, enabling the vehicle to fulfil a wide variety of roles, and enhancing and protecting the vehicle in the many tasks to which it can be applied.

Introduction

Land Rover parts are the only parts built to original equipment specifications and approved by Land Rover designers; this means that every single part and accessory has been rigorously tested by the same engineering team that designed and built the vehicle and can therefore be guaranteed for twelve months with unlimited mileage.

A full list and description of all accessories is available from your Land Rover Dealer/Authorised Repairer.

Electrical equipment

WARNING



It is extremely hazardous to fit or replace parts or accessories, the installation of which requires the dismantling of, or addition to, either the electrical or fuel systems.

Always consult your Dealer/ Authorised Repairer before fitting any accessory.

Fitting inferior quality parts or accessories, may be dangerous and could invalidate the vehicle warranty.

Always consult your Dealer/Authorised Repairer for advice regarding the approval, suitability, installation and use of any parts or accessories before fitting.

Airbag system

WARNING



The components that make up the airbag system are sensitive to electrical or physical interference, either of which could easily damage the system and cause inadvertent operation or a malfunction of the airbag module.

To prevent malfunction of the airbag system always consult your Dealer/Authorised Repairer before fitting any of the following:

- Electronic equipment such as a mobile phone, two-way radio or in-car entertainment system.
- Accessories attached to the front of the vehicle.
- Any modification to the front of the vehicle.
- Any modification involving the removal or repair of any wiring or component in the vicinity of any of the airbag system components, including the steering wheel, steering column, instrument or facia panels.
- Any modification to the facia panels or steering wheel.

After-sales service

After Sales Parts service is of paramount importance to us. With worldwide franchised representation, Land Rover is able to support your vehicle wherever you go.

Travelling abroad

In certain countries, it is a legal requirement to fit parts made to the vehicle manufacturers' specification.

Owners should ensure that any parts or accessories fitted to the vehicle while travelling abroad will also conform to the legal requirements of their own country when they return home.

Keys and remote controls

PRINCIPLE OF OPERATION

CAUTION

- ❗ Remove all Smart Keys from the vehicle when it is left unattended. This will ensure the vehicle is left in a secure condition.
- ❗ If a Smart Key is lost, a replacement can be obtained and programmed to the vehicle by your Dealer. Notify your Dealer as soon as a Smart Key is lost or stolen and have the remaining Smart Key(s) reprogrammed.



LAN2199

The security system and entry to the vehicle are controlled by the Smart Key remote control. All doors and the luggage compartment can be locked and unlocked using the remote control buttons.

The Smart Key also allows the vehicle to be started without the use of a conventional starter key. See **KEYLESS STARTING** (page 124).

Two Smart Keys, incorporating an emergency key blade, are supplied. Separate emergency key blades are available from Dealers.

The emergency key blade number is recorded on an attached label. Peel off the label and attach it to the designated area on the Security Card, supplied in the literature pack. Keep the Security Card safe, but not in the vehicle.

Keyless Entry

Keyless Entry is an enhancement of the Smart Key and allows entry to the vehicle, without the need to press a button. Full security integrity of the vehicle is still maintained. See **KEYLESS ENTRY** (page 23).

GENERAL INFORMATION ON RADIO FREQUENCIES

Note: *The radio frequency used by your Smart Key may be used by other devices. For example: amateur radios, medical equipment, wireless headphones, or other remote control devices. This may cause the frequency to be jammed, and prevent your remote control from operating correctly.*

Environmental conditions can affect the operation of Smart Keys and the operating range may vary considerably depending on the vehicle's location.

Keys and remote controls

USING THE SMART KEY

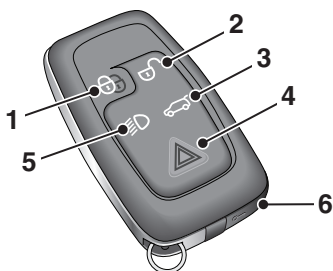
WARNING



Never leave the Smart Key in the vehicle if children or animals are also left in the vehicle. The vehicle's systems and remote control functions could be operated, which may result in injury.

Note: The operational range of the Smart Key will vary considerably depending on atmospheric conditions and interference from other transmitting devices.

Note: Some features of the security system are market dependent or are options, so may not be present on your vehicle.



LAN1913

1. Lock.
2. Unlock.
3. Tailgate release.
4. Panic alarm.
5. Approach lamps.
6. Emergency key blade.

Note: Operation of the Smart Key buttons is inhibited when the ignition is switched on. If the vehicle is stationary two warning tones will sound when a button is pressed.

Locking



Press to lock. See **LOCKING AND ARMING THE VEHICLE** (page 16).

Unlocking



Press to unlock. See **UNLOCKING AND DISARMING THE VEHICLE** (page 15).

Tailgate release



Press to unlock, disarm and open the tailgate. The vehicle security system will remain active, but for the period the tailgate is open, the intrusion and inclination sensing systems will be inhibited. Door and bonnet security will remain active.

When the tailgate is subsequently closed, the hazard warning lamps will flash after a few seconds, to confirm that the vehicle has rearmed the full alarm system (if previously armed).

Approach lamps



When approaching the vehicle in the dark, press to switch on the approach illumination. Pressing the button again or operating the START/STOP button, will turn the approach lamps off.

Note: The duration the headlamps will illuminate for can be set via the **Vehicle Set-up menu**. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Keys and remote controls

Panic alarm



Press and hold for three seconds, or press three times within three seconds, to activate the emergency alarm. The horn, siren and the hazard lamps will operate.

If the emergency alarm has been active for more than five seconds, it can be cancelled by either pressing and holding the button for three seconds, or pressing the button three times within three seconds.

The emergency alarm will also be cancelled if the vehicle detects a valid Smart Key when the START/STOP button is pressed.

Care of the Smart Key

Do not expose to extremes of heat, dust, humidity or allow contact with fluids. Do not leave the transmitter exposed to direct sunlight.

Irregular operation

If difficulty is experienced with remote keyless entry, keyless starting or Smart Key operation, it may be caused by:

- Internal battery low voltage. Replace the battery. See **CHANGING THE SMART KEY BATTERY** (page 17).
- High levels of localised external electrical interference, e.g. a radio transmitter.

Until the battery can be replaced, or until the vehicle is outside the area of electrical interference, the emergency key blade will need to be used to unlock the vehicle. Although this will allow you to access the vehicle, it will not disarm the alarm or allow you to start the engine. See **USING THE EMERGENCY KEY BLADE** (page 21).

UNLOCKING AND DISARMING THE VEHICLE



Your vehicle can be unlocked using either Single or Multi-point entry. Single-point entry is a security feature that only unlocks the driver's door when the unlock button is pressed.

To change from Single to Multi-point entry (or vice versa), press both the lock and unlock buttons simultaneously for three seconds. The hazard warning lamps will flash twice to confirm the change.

This change can also be set via the **Vehicle Set-up** menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Single-point entry

First press: Unlocks the driver's door and fuel filler flap. All other doors can be opened from the inside (unless the child safety locks have been activated on the rear doors). The hazard warning lamps will flash twice, to indicate that the vehicle is unlocked and the alarm has been disarmed. The interior lamps will illuminate to assist entry to the vehicle.

Note: *In some markets, an audible warning will sound.*

Second press: Unlocks the passenger doors and the luggage compartment.

Multi-point entry

Press briefly to unlock all the doors, fuel filler flap and luggage compartment. The hazard warning lamps will flash twice to indicate that the vehicle is unlocked and the alarm has been disarmed. The interior lamps will illuminate to assist entry to the vehicle.

Note: *In some markets, an audible warning will sound.*

Keys and remote controls

LOCKING AND ARMING THE VEHICLE

WARNING



The vehicle will only lock, if all door, tailgate and bonnet apertures are closed. If a lock attempt is made when an aperture is open, the vehicle will not lock and two audible error warnings will sound.



Press the lock button to secure the vehicle. The vehicle can be Single or Double locked, as follows:

Single locking

Press the lock button briefly. Single locking secures the vehicle and prevents the doors being opened from outside of the vehicle, however, they can still be unlocked and opened from inside the vehicle. The perimeter (exterior) alarm is turned on. The hazard warning lamps will flash once as confirmation. See **ARMING THE ALARM** (page 26).

Note: In some markets, an audible warning will sound.

Double locking

WARNING



Never double lock the vehicle with people, children, or pets inside. In the event of an emergency they would be unable to escape, and the emergency services would be unable to release them quickly.

Press the lock button twice within three seconds. Double locking secures the vehicle and prevents the doors being unlocked or opened from inside or outside of the vehicle, except with a recognised Smart Key. The perimeter (exterior) alarm and interior space

protection is turned on. The hazard warning lamps will flash twice (with a long second flash) and an audible warning will sound as confirmation (if enabled). See **ARMING THE ALARM** (page 26).

Double locking provides additional security if the vehicle is left unattended. The vehicle cannot be opened by breaking a window and operating the door locks from inside the vehicle.

Mislock warning

If one of the doors, the tailgate, or the bonnet are not shut fully when the vehicle is locked using the Smart Key, the vehicle will not lock and two warning tones will sound. Check that all doors, the bonnet and the luggage compartment are closed properly and lock the vehicle again.

Lock confirmation

If you are uncertain whether the vehicle is locked and armed (either by single or double locking), press the lock button again. The hazard warning lights will flash to indicate and confirm the current lock status.

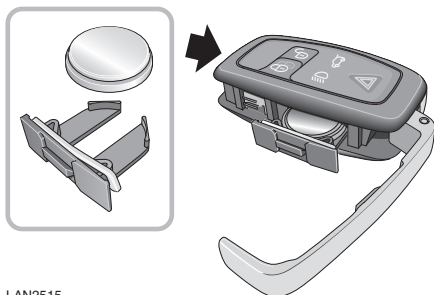
Note: If the vehicle is not already locked and armed, pressing the lock button will single lock the vehicle. Press again to double lock, if required.

Automatic relocking

If a door, or the tailgate, are not opened within one minute of unlocking the vehicle using the Smart Key, the vehicle will relock and the alarm will re-arm.

Keys and remote controls

CHANGING THE SMART KEY BATTERY



LAN2515

When the battery needs renewing, there will be a significant decrease in the effective range of the Smart Key transmitter and the message **SMART KEY BATTERY LOW** is displayed in the message centre.

To renew the battery, follow the procedure below:

1. Open the side cover on the Smart Key by pressing and holding the release button.
2. Swing out the arm to expose the battery drawer.
3. Remove the battery drawer and remove the battery.
4. Fit a new battery, type CR2032 (available from your Dealer/Authorised Repairer), with the positive (+) upwards, in the battery drawer. Avoid touching the new battery, as moisture/oil from the fingers can reduce battery life and corrode the contacts.

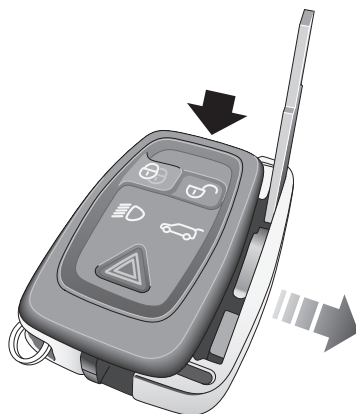
Refit the parts in the reverse order, ensuring that they click securely into place.

Battery disposal



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.

EMERGENCY KEY BLADE



LAN2731

To extract: Press and hold the release button, pull out the key blade compartment to expose the key.

To insert: Position the key in the compartment. Press and hold the release button and push the compartment closed.

The key blade operates the left-hand front door lock, the passenger airbag disabling switch and the child safety locks fitted to the rear doors.

Keys and remote controls

GLOBAL OPENING AND CLOSING OF WINDOWS

Global opening

Press and hold the unlock button for three seconds. The vehicle will unlock (either single or multi-point), the alarm will be disarmed and all of the windows will open.

Global closing

WARNING



Ensure that no children, pets, or obstructions are in any open aperture before operating global closing.

Safety mechanisms are in place to prevent serious injury, however, injuries can still occur.

Press and hold the lock button for three seconds. The vehicle will single lock and the alarm will be fully armed immediately. After three seconds any open windows will be closed.

Locks

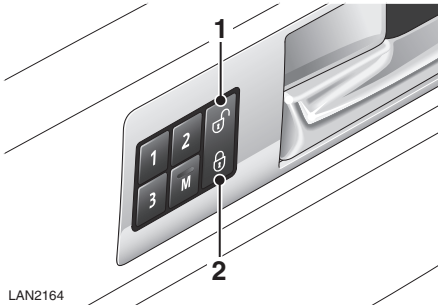
LOCKING AND UNLOCKING

Locking and unlocking the vehicle using the Smart Key, is explained earlier in this handbook. See **USING THE SMART KEY** (page 14).

Locking and unlocking the vehicle using the Keyless Entry system is explained later in this handbook. See **KEYLESS ENTRY** (page 23).

Note: If any door or the tailgate is unlocked 10 times within a short period, the latch is disabled for approximately one minute.

Master lock and unlock switches



1. Press the unlock switch to unlock all the doors.
Note: The switch is inhibited when the vehicle is locked with Smart Key.
2. Press the lock switch to lock all the doors.

Drive-away locking

Drive-away locking automatically locks all the doors when the vehicle speed exceeds 8 km/h (5 mph).

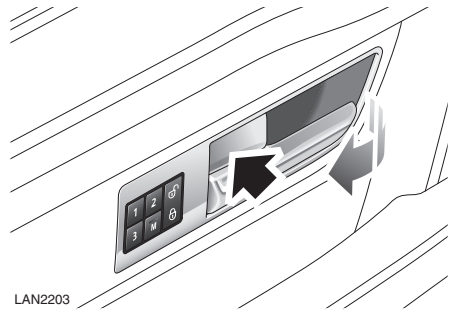
This feature can be disabled via the **Vehicle Set-up** menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Note: Pressing the master lock or unlock switch will override the speed locking function for the journey.

Automatic unlocking

If the vehicle is involved in a collision which causes a restraints device to deploy, all door locks will automatically be unlocked, the hazard warning lamps will flash and the interior lamps will illuminate.

Interior door handles and door locking levers



From inside the vehicle, all the doors can be locked by pressing either the driver or passenger lock lever (arrowed).

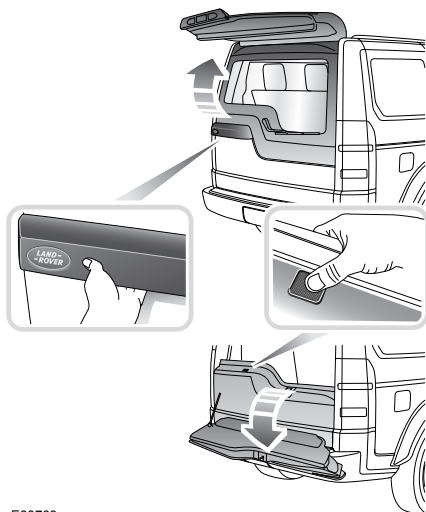
Each rear door can be individually locked by pressing the appropriate lever.

To open and unlock a front door, pull the door handle.

To open a rear door, first return the locking lever to its unlocked position, then pull the door handle.

Locks

Opening the tailgate



E80763

Upper tailgate

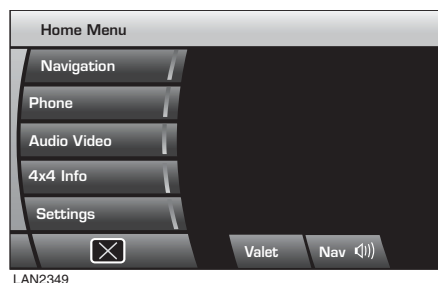
Unlock the vehicle and press the touch pad on the underside of the exterior handle and then pull up.

Lower tailgate

With the upper tailgate open, press the touch pad on the lower tailgate waist moulding.

VALET MODE

Dependent upon specification, your vehicle may have a valet mode parking feature. Once activated, valet mode allows the vehicle to be driven by a parking attendant, but prevents access to the luggage compartment and use of the touch-screen.



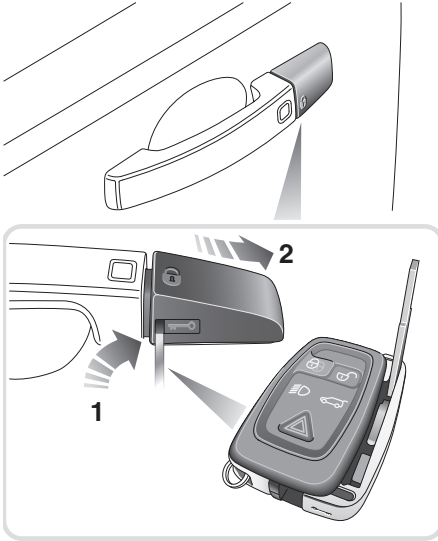
Valet mode can be selected by touching the **Valet** icon on the touch screen **Home Menu**. See **VEHICLE SETTINGS** (page 285).

Locks

USING THE EMERGENCY KEY BLADE

The emergency key blade will be needed to unlock the vehicle, if the Smart Key has a discharged battery or is damaged. Withdraw the key from the Smart Key for use.

Locking and unlocking the doors



LAN2246

Remove the front left-hand door lock cover as follows:

1. Insert the emergency key blade into the slot on the underside of the cover.
2. Gently lever the key blade upwards.

3. Carefully twist the key blade, to lever the cover off the retaining clips.

Insert the key blade into the exposed lock to operate.

Note: To refit the door lock cover, push it firmly back into place until it clicks into position.

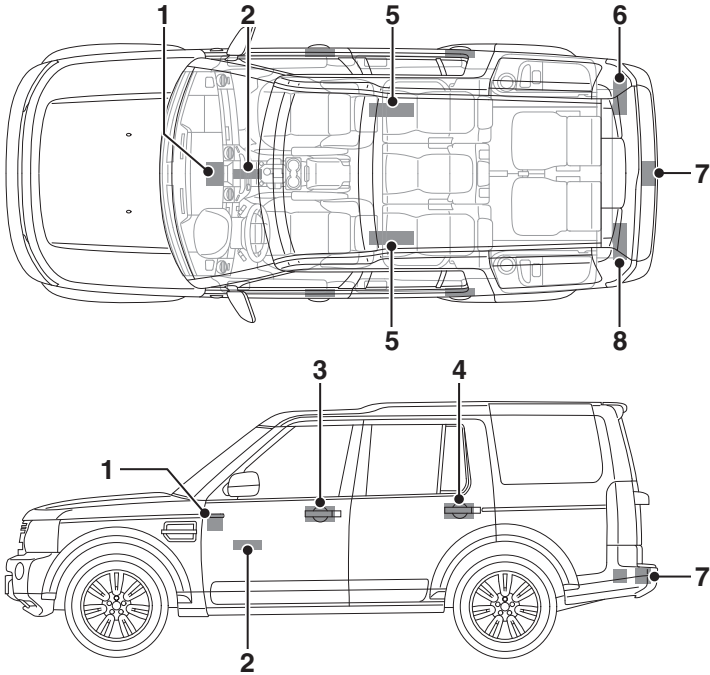
To unlock: Turn the key blade towards the rear of the vehicle and release. If the security system is disarmed, all doors and the luggage compartment will be unlocked. If the security system is armed, only the front left-hand door will unlock.

If the vehicle is unlocked using the emergency key blade with the security system armed, the alarm will sound when the door is unlocked. To deactivate the alarm, press the unlock button on the Smart Key or press the engine START/STOP button with the Smart Key inside the vehicle.

To lock: Ensure all the doors are closed, then turn the key blade towards the front of the vehicle and release. This will lock all doors but will not arm the alarm.

Locks

SMART KEY SYSTEM TRANSMITTERS



LAN2381

1. Cabin front transmitter
2. Keyless start module
3. Front exterior door handle transmitters
4. Rear exterior door handle transmitters
5. Cabin headlining transmitter
6. Right-hand side loadspace transmitter
7. Luggage compartment exterior transmitter
8. Left-hand side loadspace transmitter

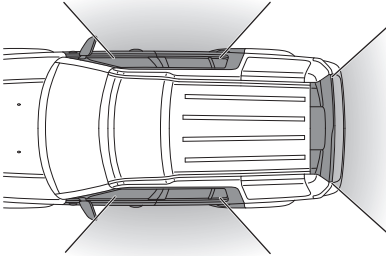
WARNING



Any person fitted with an implanted medical device should ensure that the device is kept at a distance of at least 22 cm (8.7 inches) away from any transmitter mounted in the vehicle. This is to avoid any possibility of interference between the system and device.

Locks

KEYLESS ENTRY



LAN2380

Keyless entry allows the driver to unlock and disarm the vehicle by simply operating any door handle. The Keyless Entry function operates in the following manner:

- As a door handle is operated, the vehicle emits a search signal.
- If the Smart Key is within approximately 1.0 m (3 feet) of the operated door handle, the signal will be acknowledged.
- The vehicle recognises the Smart Key and disarms the alarm and unlocks the vehicle according to the current security setting (either Single-point or Multi-point entry).

The hazard warning lamps flash twice as confirmation (in some markets an audible warning will sound twice).

Note: The Smart Key needs only to be on the driver's person or in a non-metallic bag or briefcase. It does not need to be exposed or handled.

Note: If Single-point entry is the current security setting and a door other than the driver's door is opened first, then all doors will be unlocked. If the driver's door is opened, only the driver's door will be unlocked. All other doors and the luggage compartment will remain locked.

Smart Key check

When the last open door is closed, the vehicle will perform a search of the vehicle interior for the Smart Key. If one is not found, **Smart Key Not Found Place As Shown** will be displayed for four seconds in the message centre. This is to alert the driver that the Smart Key may have been inadvertently removed from the vehicle.

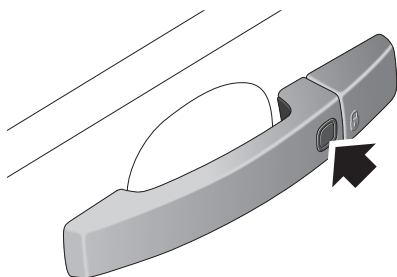
Locks

KEYLESS LOCKING

WARNING



Never double-lock the vehicle with people, children or pets inside. In the event of an emergency they would be unable to escape and the emergency services would be unable to release them quickly.



LAN2290

The vehicle will not lock automatically.

The vehicle will only lock if all doors, luggage compartment and bonnet are closed. If a lock attempt is made with an open aperture, the vehicle will not lock and two audible error warnings will sound.

- To single-lock the vehicle, press the button on the door handle once. The hazard warning lamps will flash once as confirmation (in some markets, an audible warning will sound).
- To double-lock the vehicle, press the button twice within three seconds. The hazard warning lamps will flash twice (with a long second flash). In some markets, a double audible warning will sound.

Note: Keyless locking will only activate when the Smart Key is detected outside the vehicle. If no Smart Key is present when the button is pressed, two warning tones will sound.

Window global closing

Press and hold the button on the door handle for three seconds, to lock the vehicle, arm the alarm and also close all open windows. The windows will stop closing when the button is released.

STEERING COLUMN LOCK

CAUTION



During vehicle recovery, the Smart Key must remain inside the vehicle, so that the steering column remains unlocked.

Your vehicle is fitted with an electronic steering column lock. The column unlocks when it detects a Smart Key inside the vehicle.


Any malfunction of the steering column lock will be indicated by the message **STEERING COLUMN LOCKED** displaying in the message centre. If this occurs:

1. Lock and then unlock the vehicle using the Smart Key.
2. Try again to unlock the steering column lock, by turning the steering wheel gently to the left and right.
3. If the malfunction still persists, seek qualified assistance immediately.

Engine immobiliser

PRINCIPLE OF OPERATION

CAUTION

 The immobiliser may suffer interference from other legal users of this frequency band.

Engine immobilisation is an important aspect of the security system. It is designed to safeguard the vehicle from theft, should the driver forget to lock the doors. The system prevents the engine from being started unless a genuine Smart Key is detected within the vehicle.

Engine immobilisation occurs automatically five seconds after the Smart Key is removed from the vehicle.

Note: *The engine will be re-mobilised automatically whenever a recognised Smart Key is detected within the vehicle. When this happens, the anti-theft alarm indicator illuminates briefly.*

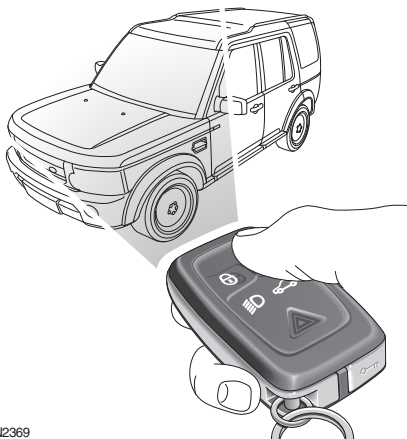
CODED KEYS

Note: *A replacement Smart Key can only be obtained from your Land Rover Dealer/ Authorised Repairer. The Dealer will require proof of ownership.*

Notify your Dealer immediately if a Smart Key is lost or stolen.

Alarm

PRINCIPLE OF OPERATION



LAN2369

The anti-theft alarm system has a number of additional security features, some of which are selectable options and some are standard features of the vehicle.

To ensure maximum security and convenience, you are strongly advised to read this section and gain a full understanding of the features available.

Alarm indicator lamp

An indicator in the instrument panel will flash whenever the alarm is active.

Vehicle security

The security system fitted to your vehicle is Thatcham category one approved and meets European regulation 97/116 and directive 95/56 EC.

Battery-backed sounder

In some markets a separate, battery-backed sounder is fitted. This device will sound if the alarm is activated, or if the vehicle battery or the sounder are disconnected.

ARMING THE ALARM

Perimetric alarm

This feature is activated whenever the vehicle is locked using the Smart Key or door handle and protects the doors, bonnet and tailgate.

If any of these apertures are opened the alarm will be triggered.

When the perimetric alarm is activated, the direction indicators will flash once, and the anti-theft alarm indicator will flash.

Interior space protection

Interior space protection is activated whenever the vehicle is double locked.



E90808

Roof-mounted intrusion sensors monitor the interior space and activate the alarm if movement of air is detected in the passenger compartment.

You can temporarily disable the vehicle's interior space protection the next time the vehicle is locked with Smart Key, via the **Vehicle Set-up** menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Note: This setting is automatically enabled the next time the vehicle is unlocked with the Smart Key.

Alarm

SWITCHING OFF THE ALARM

If the alarm is triggered, the siren will sound and the hazard warning lamps flash.

Note: *When the event that triggered the alarm is no longer present, the alarm system will return to the same protection status that existed before.*

To silence the alarm, press the unlock button on the Smart Key then press the lock button to either single or double lock the vehicle and reset the alarm.

TILT SENSOR

Your vehicle may be fitted with a tilt sensor which activates the alarm if the vehicle is tilted fore and aft, or side to side, after it has been double locked.

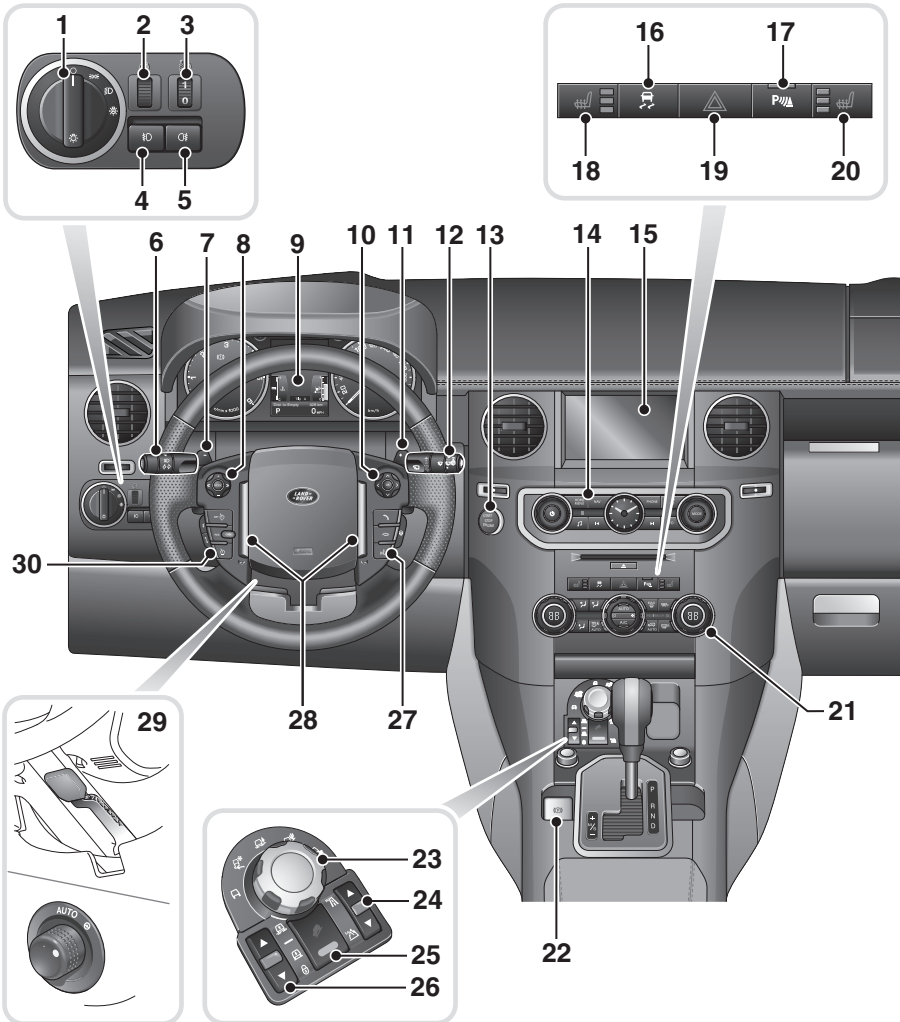
The alarm will sound if theft is attempted by hoisting onto another vehicle or if a side is lifted to attempt wheel removal.

If required (e.g. when aboard a ferry or having the vehicle transported on a recovery truck), you can temporarily disable the vehicle's tilt sensor the next time the vehicle is locked with Smart Key, via the **Vehicle Set-up** menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Note: *This setting is automatically enabled the next time the vehicle is unlocked with the Smart Key.*

Facia

FACIA OVERVIEW



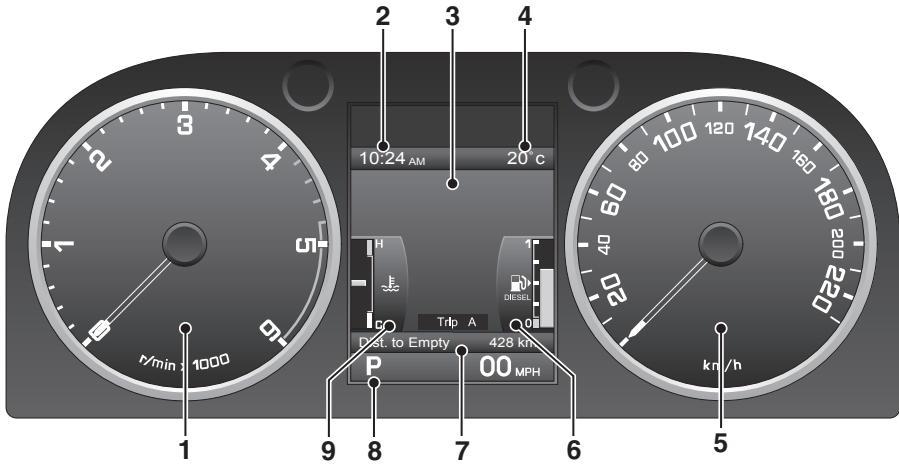
LAN2953

Facia

1. Lamps master switch
2. Instrument dimmer control
3. Halogen lamps height adjuster
4. Front fog lamps
5. Rear fog lamps
6. High beam/Direction indicators/Trip computer
7. Downshift gear paddle
8. Audio system control
9. Instrument pack and message centre
10. Vehicle information control
11. Upshift gear paddle
12. Wiper/washer controls
13. START/STOP button
14. Audio controls
15. Display/Touch screen
16. Traction control switch
17. Parking aid switch
18. Heated passenger seat control
19. Hazard warning lights switch
20. Heated driver seat control
21. Heater/Air conditioning controls
22. Electric park brake (EPB)
23. Terrain Response control
24. Transfer gearbox switch
25. Hill Descent Control (HDC) switch
26. Air suspension control
27. Telephone and voice recognition switches
28. Horn buttons
29. Steering column adjustment - manual and electric
30. Cruise control switches

Instruments

INSTRUMENT PANEL OVERVIEW



LAN2168

1. Tachometer
2. Clock
3. Message centre
4. External temperature
5. Speedometer
6. Fuel gauge
7. Total distance (odometer) and trip recorder
8. Gear selector position display
9. Temperature gauge

Instruments

GAUGES

Tachometer

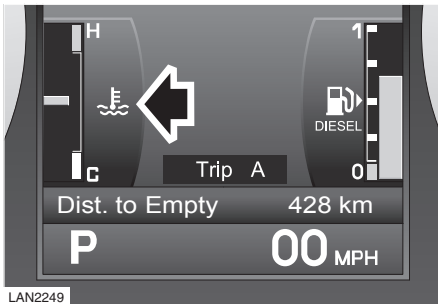
Indicates engine speed in revolutions per minute (x 1 000). In normal driving conditions the engine is most fuel efficient between 2 000 and 3 000 rev per min.

Temperature gauge

CAUTION

- ⚠ Serious damage can occur if the vehicle is driven while the engine is overheating.

At normal operating temperature, the indicator is positioned midway between the **H** and **C** segments of the gauge (the precise position will vary according to climatic conditions).



LAN2249

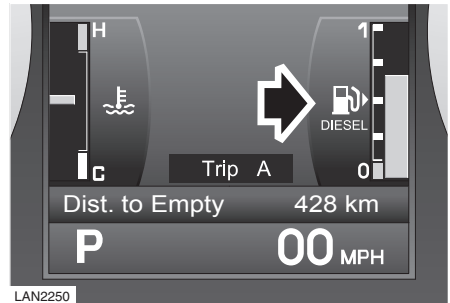
If the indicator moves above the mid point, the engine coolant is becoming too hot. If the indicator moves into the **H** segment at the top of the gauge severe engine damage could occur (under these circumstances the air conditioning may switch off and engine performance may reduce to minimise engine load).

Stop the vehicle as soon as safety permits. Allow the engine to idle until the pointer moves back to its normal position. If the problem persists, seek qualified assistance immediately.

Fuel gauge

CAUTION

- ⚠ Never allow vehicles to run out of fuel. The resulting misfire may cause serious damage to the catalytic converter.



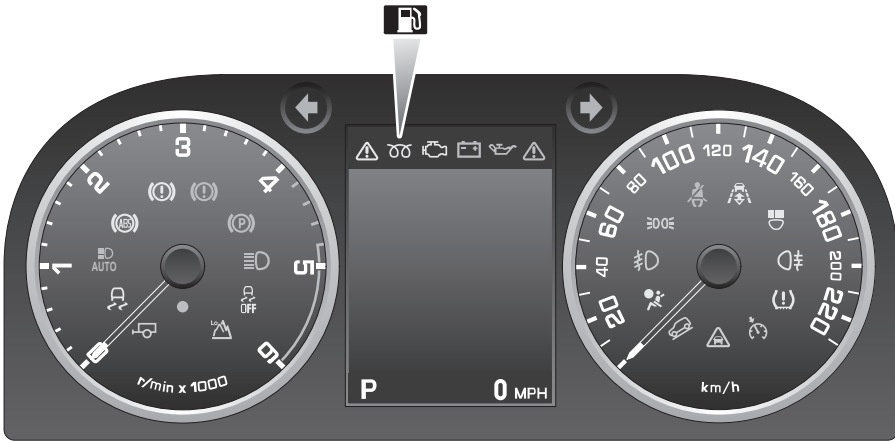
LAN2250

When the ignition is switched on, the gauge quickly rises to show the level of fuel in the tank.

- ⚠ When the remaining fuel reaches a minimum of 12 litres (3 gallons), the amber low fuel warning indicator lamp illuminates. This should give a range of approximately 80 km (50 miles). See **RUNNING OUT OF FUEL** (page 178).

Instruments

WARNING INDICATORS



LAN2167

Attention warning indicators

If any of the following illuminates whilst driving a fault has been detected. Refer to the individual pages given below for further information.



Battery charge indicator. See **CHARGING THE VEHICLE BATTERY** (page 218).



Low oil pressure. See **ENGINE OIL** (page 204).



Electric Parking brake. See **ELECTRIC PARKING BRAKE (EPB)** (page 137).



Brake systems. See **PRINCIPLE OF OPERATION** (page 134).



Anti-lock braking system. See **HINTS ON DRIVING WITH ABS** (page 136).



Airbag system. See **AIRBAG WARNING LAMP** (page 64).



Engine. See **ENGINE RELATED PROBLEMS** (page 149).



Dynamic Stability Control (DSC). See **USING STABILITY CONTROL** (page 154).



Dynamic Stability Control (DSC) off. See **USING STABILITY CONTROL** (page 154).



Adaptive front lighting system. See **ADAPTIVE FRONT LIGHTING SYSTEM** (page 81).



Tyre Pressure Monitoring system. See **TYRE PRESSURE MONITORING SYSTEM** (page 243).



Low fuel. See **RUNNING OUT OF FUEL** (page 178).

Instruments

Information warning indicators

The following will illuminate during normal driving to indicate that a particular system or feature is operating.



Seat belt reminder. See **SEAT BELT REMINDER** (page 55).



Diesel glow plugs active. See **KEYLESS STARTING** (page 124).



Low gear range selected. See **TRANSFER GEARBOX** (page 131).



Hill Descent Control (HDC) active. See **USING HDC** (page 157).



Cruise control active. See **USING CRUISE CONTROL** (page 152).



Direction indicator. See **DIRECTION INDICATORS** (page 82).



Trailer direction indicator. See **TOWING A TRAILER** (page 184).



Headlamp high beam on. See **LIGHTING CONTROL** (page 77).



Automatic headlamp high beam on. See **LIGHTING CONTROL** (page 77).



Side lamps on. See **LIGHTING CONTROL** (page 77).



Rear fog lamps on. See **REAR FOG LAMPS** (page 80).



Front fog lamps on. See **FRONT FOG LAMPS** (page 79).

Driver information module

INFORMATION MESSAGES

CAUTION

⚠ Never ignore warning messages and always take the appropriate action immediately. Failure to do so may result in damage to the vehicle. If you are uncertain about any message, stop the vehicle and seek qualified assistance.



LAN2258

Warning and information messages are displayed in the main message centre when a fault is detected or an alert state is triggered.

There are three categories of messages that may be displayed in the message centre:

- Critical - accompanied by a red warning icon and an audible alert.
- Warning - accompanied by an amber warning icon.
- Information.

Note: Messages are displayed in order of importance with critical messages taking priority.

Critical and warning messages

Critical and warning messages are displayed in the message centre until either the fault condition that caused the message has been rectified or the message is suppressed by pressing the **OK** button on the steering wheel.

If display of a message has been suppressed, the red or amber warning icon will remain illuminated to indicate that a problem exists.

You can redisplay any active messages that have been suppressed by selecting **Show Warnings** on the vehicle information menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

If more than one message is active, display of the messages will alternate at two second intervals.

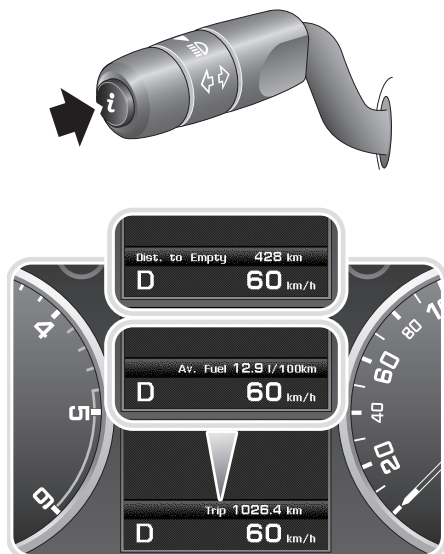
Information messages

Information messages are displayed when the ignition is switched on/off or an alert state is triggered when driving the vehicle. For example, cancelling cruise control will display the message **CRUISE CANCELLED**.

Information messages are displayed for four seconds before being cleared.

Driver information module

TRIP COMPUTER



LAN2217

Short presses of the **i** button (less than one second) will scroll through the following statistics:

- Date and Odometer
- Trip distance
- Trip average speed
- Trip average fuel consumption
- Instantaneous (short term average) fuel consumption
- Range available from remaining fuel
- Blank display

Trip settings

There are three trip memories available, A, B, and Auto. You can specify which trip memory is viewable using the **i** button, and the units displayed for the statistics, via the **Trip Computer** menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Trip Auto

The Auto trip is always available and resets each time the engine is started and the vehicle begins to move.

If you wish to add trips together to form a continuous recording. To do this press and release the **i** button when the trip Auto information is displayed. The message centre will display **Adding previous journey**. While this message is shown press and hold the **i** button for one second. The previous trip information will be added and the cumulative total displayed. This may be used to give a total journey reading following a fuelling stop for example.

If you wish to delete a previously added trip press and release the **i** button when the trip Auto information is displayed. The message centre will display **Deleting previous journey**. While this message is shown press and hold the **i** button for one second. The previous trip information will be deleted and the previous trip total displayed.

Resetting Trip A or B

The statistics stored for trips A and B can be reset by the driver as required. Press and hold the **i** button for more than one second to display the message **Resetting Trip A or B**. Continue to hold the button for another two seconds to reset the trip statistics. Release the button to cancel the reset.

Note: *Resetting trip A will not affect the information stored for trip B and vice versa.*

Driver information module

SERVICE INTERVAL INDICATOR



LAN2238

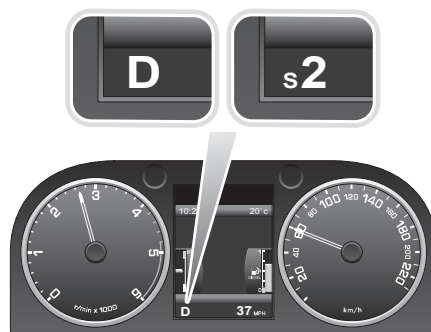
The service interval message will appear when a pre-determined distance or time before service is reached.

The mileage countdown is controlled by the engine management system and is adjusted to allow for driving style and conditions, to gauge when the appropriate service becomes necessary.

Note: After the completion of each service, the Land Rover Dealer/Authorised Repairer will reset the distance display to commence the countdown to the next service.

If the service/inspection date is passed without the service being carried out, or the service indicator being reset, the message **SERVICE REQUIRED** will be displayed.

GEAR SELECTOR DISPLAY



LAN2237

The display shows the current gear selector position (**P**, **R**, **N**, **D** or **S**). In addition, the display indicates which gear has been selected when the gearbox is in CommandShift mode.

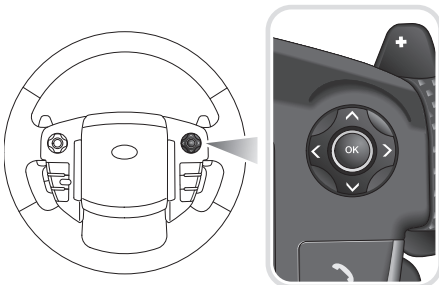
Driver information module

VEHICLE INFORMATION AND SETTINGS MENU



LAN2260

You can configure a number of vehicle features and display settings to suit your personal requirements via the vehicle information and settings menu.



LAN2202

To display the menu on the message centre, operate the menu control on the steering wheel.

Navigating the menu

Menu selections are made using the menu control to highlight the required menu option. Once the required option has been highlighted press the **OK** button to select that option.

The screen will then display a sub-menu, or activate the selected item where applicable.

Scroll arrows to the left of the menu indicate that there are further menu items either above or below the currently viewed menu items.

Closing the menu

To close the main menu press the left button on the menu control. To close sub-menus press and hold the left button on the menu control.

The menu will close automatically if:

- no action is taken with the main menu within 10 seconds
- action is taken with the main menu and it is then left for 4 minutes

Note: *If a further action is taken within the four minute period, the timer will reset and a further four minutes will elapse before the menu closes automatically.*

Driver information module

Overview of menu

The following is an overview of the information and settings menu and what each option does.

Close Menu	-	Close the vehicle settings and information menu.
Show Warnings	-	Display all active warning messages.
Vehicle Set-up	Speed Warning	Enable/disable over speed warning and set the monitored speed.
	High Beam Assist	Enable/disable the operation of the automatic headlamp high beam feature. Configure system for driving on the alternate side of road. <i>Note: Headlamps still need to manually adjusted. See HEADLAMPS - DRIVING ABROAD (page 80).</i>
	Alarm Sensors	This setting allows you to temporarily disable the vehicle's interior space protection and tilt sensor the next time the vehicle is locked with Smart Key. This setting is automatically enabled when the vehicle is unlocked with the Smart Key.
	Reverse-dip Mirror	Enable/disable automatic dipping of exterior mirrors when reverse gear is selected.
	Drive-away Locking	Enable/disable automatic locking off the doors when the vehicle speed exceeds 8 km/h (5 mph).
	2-Stage Unlocking	Enable/disable the single-point entry door unlocking feature.
	Headlamp Delay	Enable/disable the headlamp delay feature. Configure the amount of time the headlamps will remain on: 30, 60, 120 or 240 seconds.
	Trip Computer	Trip A
Trip B		Enable/disable display of Trip B readings
Trip Auto		Enable/disable display of Trip Auto readings
Units		Select the units to be displayed by the trip computer: Miles, MPH, MPG Miles, MPH, MPL Km, km/h, l/100 km

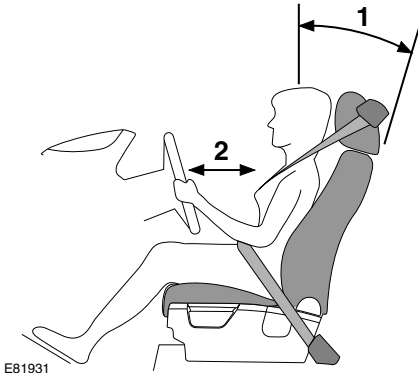
Driver information module

Display Settings	Language	Select the language for text displayed in the message centre.
	Temperature	Select the units for the external temperature reading: Celsius Fahrenheit
Service Menu	VIN Display	Displays the Vehicle Identification Number.

Note: *The Service Menu is displayed only when the ignition is on and the engine is off.*

Seats

SITTING IN THE CORRECT POSITION



WARNING



Do not adjust the seat while the vehicle is moving. Doing so could cause loss of vehicle control and personal injury.



An inflating airbag can cause facial abrasions and other injuries. Injuries caused by airbag inflation can be minimised by ensuring that the driver and front passenger are seated correctly (seat back upright, seat positioned as far back as practical, and seat belt worn correctly).

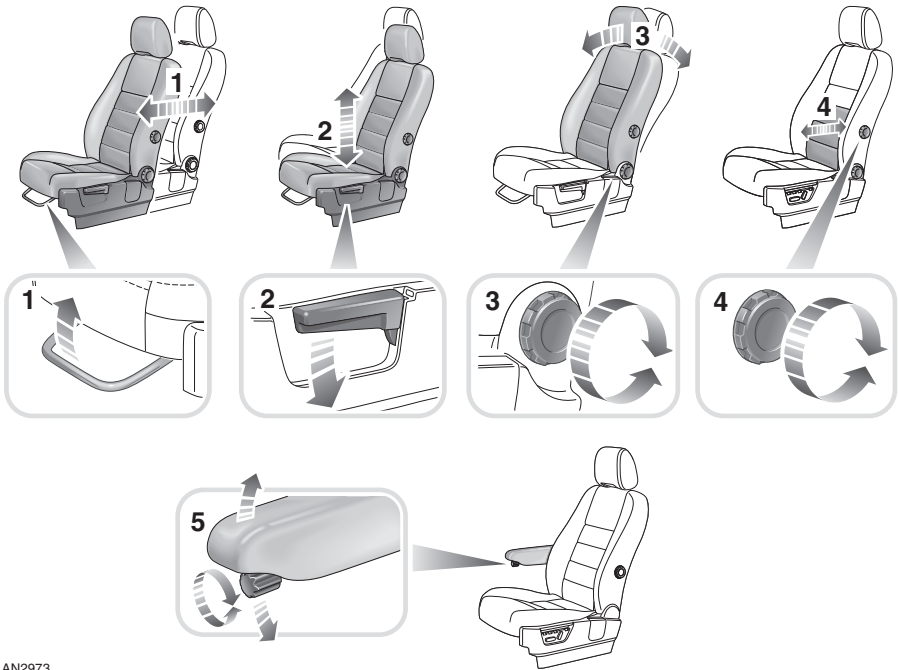
The seat, head restraint, seat belt and airbags, all contribute to the protection of the user. Correct use of these components will give you greater protection, therefore observe the following points:

1. Sit in an upright position with the base of your spine as far back as possible and the seat back reclined no more than 30 degrees.

2. Do not move the driver's seat too close to the steering wheel. Ideally, a minimum distance of 254 mm (10 inches) is recommended between the breastbone and the steering wheel airbag cover. Hold the steering wheel in the correct position with your arms slightly bent. Bend your legs slightly so that the pedals can be pressed fully to the floor.
 - Adjust the head restraint so that its highest point is level with the top of your head.
 - Position the seat belt so that it is mid-way between your neck and your shoulder. Fit the strap tightly across your hips, not across your stomach.
 - Ensure that your driving position is comfortable and enables you to maintain full control of the vehicle.

Seats

MANUAL SEATS

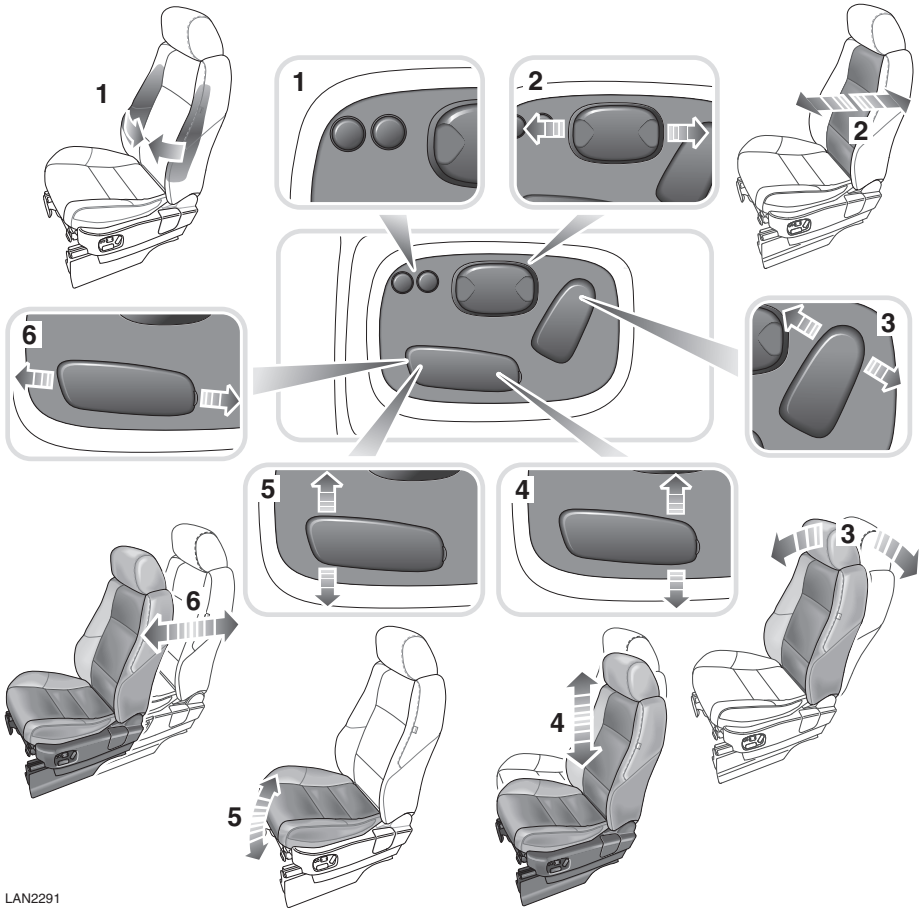


LAN2973

1. Forward/backward adjustment.
2. Height adjustment.
3. Seat back angle adjustment.
4. Lumbar support adjustment.
5. Folding armrest adjustment.

Seats

ELECTRIC SEATS



LAN2291

1. Bolster inflate/deflate
2. Lumbar support adjustment
3. Backrest adjustment
4. Height adjustment
5. Cushion tilt adjustment
6. Forward/backward adjustment

To adjust the seats, the Smart Key must be in the vehicle and the ignition switched on.

WARNING



Do not adjust any part of a seat while the vehicle is in motion. Vehicle movement may cause the seat to suddenly shift, potentially causing injury or loss of control.

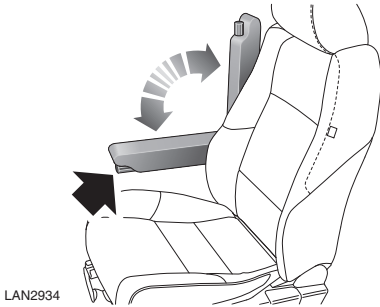
Seats

Restricted seat travel

On those vehicles with seat memory, if an obstruction is encountered while the seat is in motion, the seat will stop moving and further seat movement will be restricted until reset.

To reset the seat to gain the full range of motion, remove the obstacle, adjust the seat to its restricted position then press and hold the switch for longer than two seconds to override the limited travel.

Folding armrest



Some vehicles are fitted with adjustable front seat armrests. These are used in the horizontal position or can be stowed vertically alongside the seat backrest.

Use the adjuster wheel to set the required height.

Seats

DRIVER'S SEAT MEMORY FUNCTION

WARNING



Before activating the seat memory, ensure that the area immediately surrounding the seat is clear of obstructions and that all occupants are clear of moving parts.



LAN2211

The vehicle can memorise up to three different driver seat, exterior mirrors and steering column positions. This enables three different drivers to achieve optimum comfort at the touch of a button.

Saving a memory position

1. Switch the ignition on.
2. Adjust the seat, exterior mirrors and steering column to the desired position.
3. Press the memory store button **M** to activate the memory function. The indicator will illuminate.
4. Within five seconds, press the desired pre-set button (**1**, **2** or **3**).
5. **Memory (1,2 or 3) settings saved** will be displayed on the message centre and a single chime will sound to confirm.

Recalling a stored memory position

Press the pre-set button associated with the desired driving position. The seat, exterior mirrors and steering column will move to the position stored on that pre-set. **Memory (1, 2 or 3) settings recalled** will be displayed on the message centre.

Note: To stop memory movement at any time, press any seat adjustment control.

Entry and exit mode

Entry and exit mode provides automatic movement of the steering column and driver's seat making it easier to enter or exit the vehicle.

This feature can be enabled by setting the steering column adjustment switch to the AUTO position. See **ADJUSTING THE STEERING COLUMN** (page 73).

Exit

If the driver's door is opened, the steering column will move to the uppermost tilt position unless already in or close to that position. The driver's seat height will move down unless already at or below the exit position.

Entry

When the driver's door is closed and the ignition is switched on, the steering column and driver's seat will return to the previous position.

Note: If the steering column or driver's seat is adjusted during entry or exit operation, automatic movement will stop.

Seats

HEAD RESTRAINTS

WARNINGS



Head restraints are designed to support the head not the back of the neck). The restraint must be positioned correctly to restrain rearward movement of the head in a collision. An incorrectly adjusted head restraint increases the risk of death or serious injury in the event of a collision.



Adjust the head restraint so that the top of the head restraint is above the centre line of the head. An incorrectly adjusted head restraint increases the risk of death or serious injury in the event of a collision. See **SITTING IN THE CORRECT POSITION** (page 40).

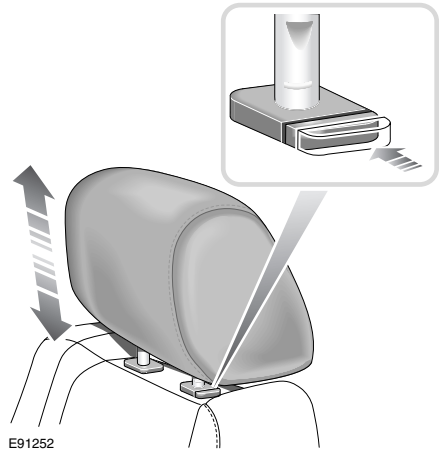


Do not drive, or carry passengers with the head restraints removed from occupied seats. The absence of a correctly adjusted head restraint increases the risk of death or serious injury in the event of a collision



Never adjust the head restraint while the vehicle is in motion. An incorrectly adjusted head restraint increases the risk of death or serious injury in the event of a collision.

Front head restraints



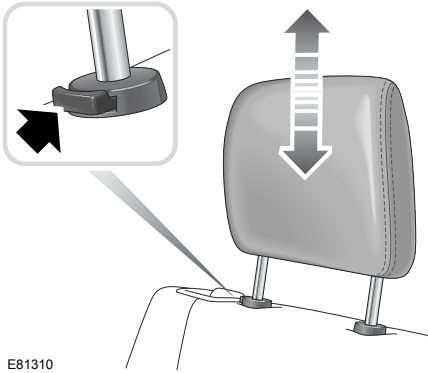
E91252

Adjust the head restraint correctly, up or down by pressing the collar button as indicated. The top of the head restraint should be level with the top of the head.

Seats

Rear head restraints

Adjustment



E81310

1. Press the collar button.
2. Raise or lower the head restraint until the top of the head restraint is level with the top of the passenger's head.


Removal


If removal is essential, press the collar button whilst lifting the restraint clear of the seat.

To replace the head restraint, engage the guide posts into the collars and press the restraint downwards until a click is heard.

REAR SEATS

WARNING

 Always ensure that objects carried within the vehicle are secured properly. Unsecured items can cause death or serious injury in the event of an impact or sudden manoeuvre.

 Never allow passengers to travel in the load space under any circumstances. All vehicle occupants should be seated correctly, and wear a seat belt at all times when the vehicle is in motion. Failure to do so will greatly increase the risk of death and serious injury in the event of an accident or heavy braking.

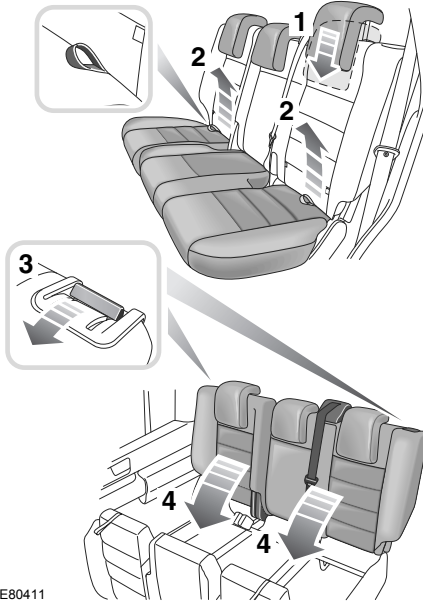
Seats

Second-row seats - 5-seat vehicle

Note: Some 5-seat models are fitted with the same type of seat as the 7-seat model.

Folding the seats

One or both parts of the seat can be folded. Move the front seats forward and remove any items from the seats and the rear footwell.



E80411

1. Fully lower the head restraints.
2. Pull the strap on the required cushion(s), to raise the cushion to the vertical position.
3. Pull the seat backrest release lever(s) forward.
4. Lower the backrest until it locks into place.

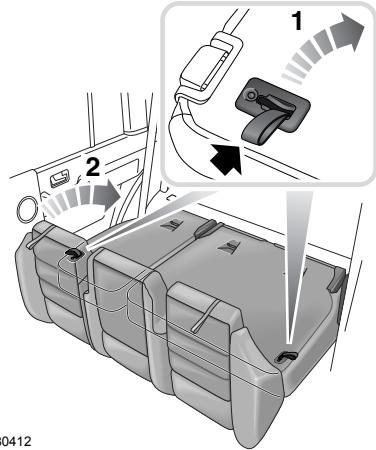
Note: Only Land Rover-approved seat covers and accessories should be used on these seats.

Raising the seats

WARNING



Ensure that when the seat back is raised the locking mechanism is fully engaged. Failure to do so will greatly increase the risk of death and serious injury in the event of an accident or heavy braking.



E80412

1. Pull the strap vertically on the back of the seat to unlock the seat. Continue to pull to raise the backrest(s) until they click into position.
2. Push the seat cushion(s) firmly back into position.
3. If the lever has not returned to its locked position, red flags will be visible around the lever.
4. Pull the headrest up into the correct position.

Seats

Second row seats - 7-seat vehicle

The seats can be used in a variety of configurations:

- As a standard row of three seats.
- A backrest can be folded forwards to form a table.
- One or all seats can be folded flat.
- An outer seat can be folded forwards for access to the third row of seats.

If the front seats are in their rearmost position, move them forward prior to folding down the seats.

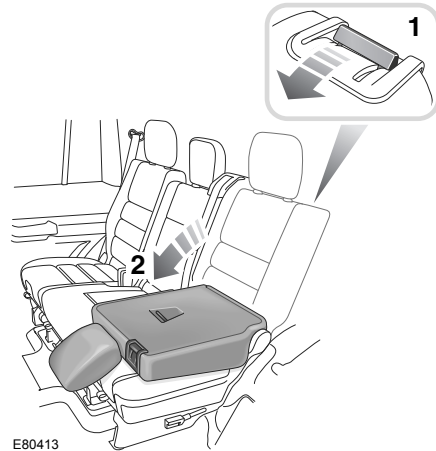
Table fold position

WARNING



The latching mechanism should be checked and physically tested to ensure that both the cushion and backrest are secure before driving.

Remove any items from the seats and rear footwell. Fully lower the head restraint on the seat(s) to be folded.



E80413

1. Pull the backrest release lever forwards.
2. Lower the backrest forwards into the table-fold position.

Note: Only Land Rover-approved seat covers and accessories should be used on these seats.

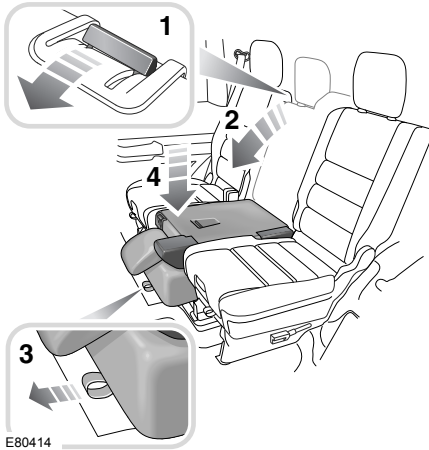
To return the seat-back to its upright position, push the release lever forwards and pull the backrest up until it clicks into place.

If it has not returned to its locked position, red flags will be visible around the lever.

Pull the head restraint up to its correct position.

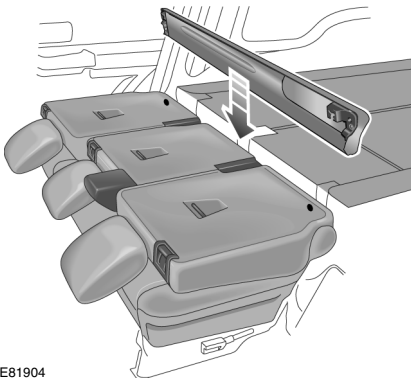
Seats

Extending the loadspace



1. Pull the backrest release lever forwards.
2. Lower the backrest forwards into the table-fold position.
3. Pull the strap at the front of the seat.
4. Press down on the seat.

Note: The centre seat must always be folded first.

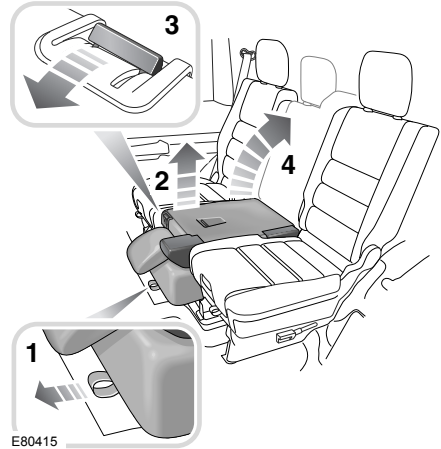


Remove the luggage cover and stow it between the folded seat rows.

Raising the seat

CAUTION

! Do not attempt to raise the seats from the loadspace position while the loadspace cover unit is stowed behind it, as damage will result.



1. To raise the seat, pull the strap at the front of the cushion.
2. Grasp the top and bottom of the backrest, lift the seat and return it to the table-fold position.
3. Push the release lever forward.
4. Pull the backrest up and push until the latching mechanism clicks into place. If the lever has not returned to its locked position, red flags will be visible around the lever.

Note: If a combination of backrests, including the centre backrest, is to be erected, the centre backrest should be erected last.

Seats

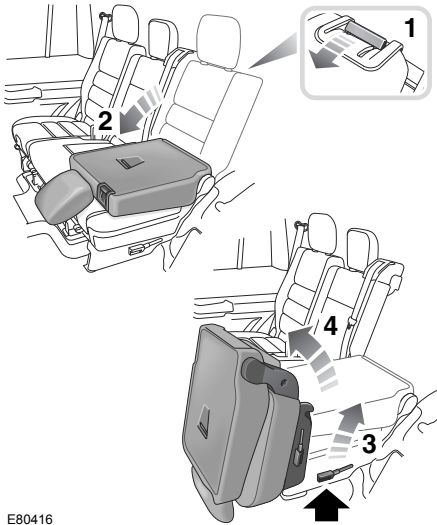
Access position

WARNING



The outer seat(s) must not be left in the access position while the vehicle is being driven. Motion of the vehicle could cause the seat to drop back into its table-fold position.

To enter the third-row seats, first ensure that the head restraint on the second-row seat is fully lowered.



E80416

1. Pull the backrest release lever forwards.
2. Lower the backrest forwards into the table-fold position.
3. Pull the access lever on the side of the seat.
4. Tilt the seat forwards.

When you have gained access to the third-row seat, return the second-row seat to its fully upright position.

Note: A second-row seat cannot be moved from the loadspace position, to the access position. Return the seat to the table-fold position before attempting to move it to the access position.

Raising the seat

WARNINGS



When lowering the seats from the access position, ensure that nothing is trapped by the returning seat.



The latching mechanism should be checked and physically tested to ensure that the cushion and backrest are secure before driving.

Pull the seat down into the table-fold position and the access lever will click into place.

Check around the lever, a red flag will be visible behind the lever if the backrest is not correctly located.

Third-row seats

WARNINGS



Ensure that nothing has been left under the seat or in the footwell when folding down the seat as this could cause damage.



Beware of trapping your fingers when operating the seats.

CAUTION

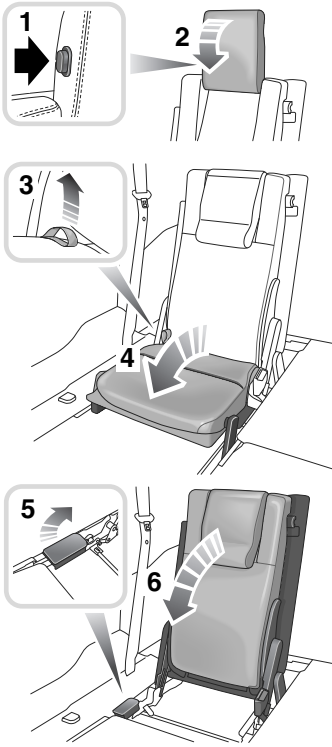


Do not attempt to raise the seats from the loadspace position while the loadspace cover is in its floor level stowage position as this may damage either the cover or the seats.

Third row seats can be folded flat.

Seats

Folding the seat



E80417

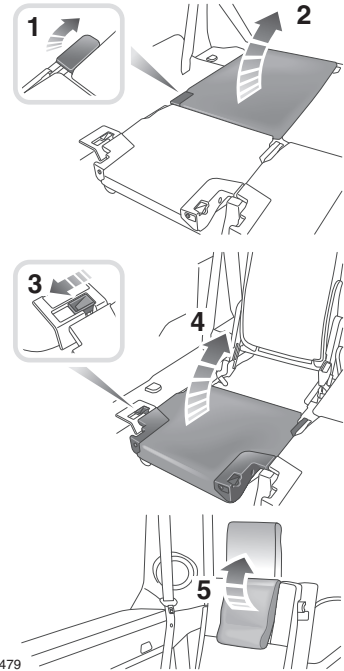
1. Press the head restraint release button.
2. Fold the head restraint fully downwards.
3. Pull up the release strap at the rear corner of the cushion; this lifts under spring pressure.
4. Fold the cushion fully forwards until it latches into position.
5. Pull up the backrest release lever.
6. Fold the backrest fully forwards until it latches into position in the loadspace floor.

Raising the seat

WARNINGS



The head restraint must always be raised when using the third-row seat.



LAN2479

1. Pull lever to release backrest.
2. Raise the backrest into its upright position, ensuring that it is fully latched into place.
3. Release catch and raise cushion.
4. Push the cushion into place, ensuring that the cushion is latched to the backrest.
5. Raise the head restraint until it latches into position.

Note: When not in use, fold the head restraints to improve rear vision.

Seats

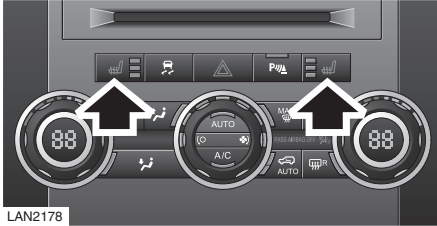
HEATED SEATS

The seat heaters can only be operated when the engine is running. The seat heaters will maintain a pre-determined temperature according to the level selected on the switch.

Switching off the engine will automatically turn off the seat heaters.

When the engine is next started, any seat heater previously in use will be automatically turned on.

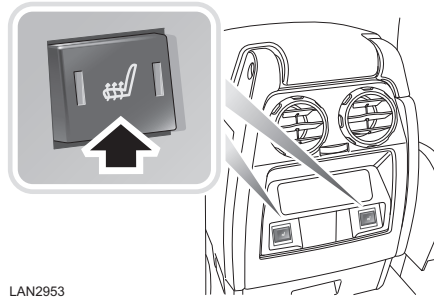
Front seat heaters



The front seats can be heated at three different heat levels.

- Press once to operate at the highest heat level. Three indicators will illuminate on the switch.
- Press twice to operate at the medium heat level. Two indicators will illuminate on the switch.
- Press a third time to operate at the lowest heat level. A single indicator will illuminate on the switch.
- Press a fourth time to turn off the heaters.

Rear seat heaters



The rear seats can be heated at two different heat levels.

- Press once to operate at the higher heat level. The indicators will illuminate. As cabin temperature rises, the seat heaters automatically adjust to the lower heat level.
- Press twice to operate at the lower heat level.
- Press a third time to turn off the heaters.

Seat belts

GENERAL INFORMATION

WARNINGS



Seat belts are designed to bear upon the bony structure of the body and should be worn low across the pelvis or pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.



Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.



Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals and particularly battery acid. Cleaning may safely be carried out using mild soap and water.



The belt should be replaced if webbing becomes frayed, contaminated or damaged.



It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.



Belts should not be worn with the straps twisted.



Do not carry hard, fragile, or sharp items between your person and the seat belt. In an impact the pressure from the seat belt on such items can cause them to break, which in turn may cause death or serious injury.



Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

WARNINGS



The occupants of the front seat should not travel with the seat back at more than 30 degrees from the upright. Doing so will reduce the protection afforded by the seat belt.



Seat belts should be worn by all vehicle occupants, for every journey no matter how short. Failure to do so will greatly increase the risk of death or serious injury in the event of an accident.



Never wear just the lap belt or just the shoulder belt of a lap/shoulder diagonal seat belt. Both of these actions are extremely dangerous and may increase your risk of injury.



No modifications or additions should be made which prevent the seat belt mechanism from taking up the slack, or prevent the seat belt from being adjusted to remove slack. A slack seat belt offers a greatly reduced level of occupant protection in an impact.



If any damage, wear, cuts, defects, or impaired operation are noted with the seat belts, the vehicle should be taken to your Dealer/Authorised Repairer for immediate attention. Do not use the vehicle if the seat belts cannot be operated correctly.



When using seat belts to restrain items other than occupants, take care to ensure that the belts are not damaged or exposed to sharp edges.

Seat belts

WARNINGS



Care must be taken to avoid contaminating the seat belt webbing, and seat belt mechanisms with chemicals, liquids, grit, dirt or cleaning products. If the seat belts do become contaminated they should be replaced immediately. Contaminated seat belts may not operate correctly in an impact and cannot be relied upon.



The airbag supplemental restraint system (SRS) is designed to add to the overall effectiveness of the seat belts. It does not replace them. Seat belts must always be worn.



Should the seat belt not retract and remain at its static length, consult your Land Rover Dealer/Authorised Repairer.



Where possible, use the seat belts to secure large items of luggage that are to be carried on the seats. In the event of an accident, unsecured items become flying missiles, capable of causing serious injury.

Seat belts

Lap/shoulder inertia reel seat belts are provided for all seat positions.

The inertia reel operating mechanism of the seat belts, allows the wearers to move their upper bodies to reach various controls.

The seat belts include a buckle sensor, to detect when the buckle is latched.

Caring for seat belts

The seat belts should be inspected regularly to check for signs of fraying, cuts, wear to the webbing and the condition and security of the mechanism, buckles, adjusters and mounting points.

Do not bleach or dye the webbing and avoid contaminating the webbing with polish, oil or chemicals. See **FASTENING THE SEAT BELTS** (page 56).

Testing inertia reel belts

- With the seat belt fastened, give the webbing near the buckle a quick upward pull. The buckle must remain securely locked.
- With the seat belt unfastened, unreel the seat belt to the limit of its travel. Check that it unreels smoothly with no snatches or snags. Allow the belt to fully retract, again checking for smooth operation.
- Partially unreel the seat belt, then hold the tongue plate and give it a quick forward pull. The mechanism must lock and prevent any further unreeling.

If any of the seat belts fail to meet those criteria, immediately contact your Dealer/Authorised Repairer.

Note: *If the vehicle is parked on an incline, the seat belt mechanism may lock. This is not a fault and the belt should be gently eased out from the upper anchorage.*

Seat belts

Seat belt pre-tensioners

WARNINGS



The seat belt pre-tensioners will only be activated once and then must be replaced by a Land Rover

Dealer/Authorised Repairer. Failure to replace the pre-tensioners will reduce the efficiency of the vehicle's front restraint systems.



After any impact, always have the seat belts and pre-tensioners checked and, if necessary, replaced by a Land Rover

Dealer/ Authorised Repairer.



In the interests of safety, it is recommended that removal or replacement of the front seats and

seat belts should only be carried out by a Land Rover Dealer/Authorised Repairer.

The seat belt pre-tensioners activate in conjunction with the airbag SRS and provide additional protection in the event of a severe frontal impact. The pre-tensioners automatically retract the seat belts fitted to the front seats. This reduces any slack in both the lap and diagonal portions of the belts, thereby reducing forward movement of the belt wearer.

The airbag SRS warning indicator on the instrument pack, will alert you to any malfunction of the seat belt pre-tensioners.

If the pre-tensioners have been activated, the seat belts will still function as restraints and must be worn in the event that the vehicle remains in a driveable condition.

Note: *The seat belt pre-tensioners will be activated in major side and frontal impacts and in rollovers.*

SEAT BELT REMINDER



Beltminder commences when the vehicle is in motion and the driver's belt is unbuckled. Dependent on market, the warning indicator in the instrument pack illuminates, the message **FASTEN SEAT BELTS** appears in the message centre and an audible chime sounds.

The visual and audible warnings applicable to the Beltminder feature are market dependent to meet individual market requirements. The warning signals given may also change depending on whether the vehicle is stationary or when the vehicle speed exceeds a pre-determined threshold.

In certain markets, the Beltminder feature also applies to the front passenger seat.

Note: *Objects placed on the front passenger seat may activate the seat belt reminder warning chime and indicator. It is recommended that any objects placed on the front passenger seat are secured using the seat belt.*

Seat belts

FASTENING THE SEAT BELTS



LAN1113

1. Draw the belt out smoothly, ensuring that the belt height, the seat position and your position on the seat are correct. The belt should lay flat across the pelvis, chest and mid-point of the collar bone between the neck and shoulder.
2. With the belt correctly positioned, place the metal tongue into the buckle nearest to you. Press until a click is heard.

The buckles on third row seats are spring-loaded allowing them to be stowed within the seat. This is to prevent damage when the seats are folded flat. To fasten the belt, pull the buckle up from the seat before inserting the tongue plate.

Adjust the seat belt to eliminate any slack in the webbing.

Releasing the belt

Note: When releasing the belt it is advisable to hold it near the buckle before pressing the release button. This will prevent the belt from retracting too quickly.

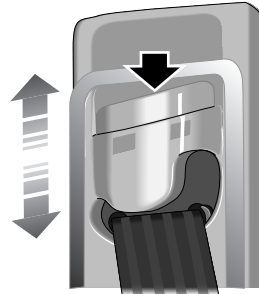
To release the seat belt, press the red button.

SEAT BELT HEIGHT ADJUSTMENT

WARNING



Correct seat belt adjustment is essential for safety and comfort. Ensure that the height is correctly adjusted and the mechanism is locked in place before driving the vehicle. Do not attempt to adjust the seat belt height once the vehicle is in motion. Doing so may cause you to lose control of the vehicle, or incorrectly adjust the seat belt.



E80375

Press down (solid arrow) to release the catch, then lift or push down to adjust the height of the anchorage.

Ensure the anchorage has clicked into one of the locked positions before driving.

Where possible passengers should adjust their position on the seat to enable the seat belt webbing to cross the shoulder without pressing on the neck.

Seat belts

USING SEAT BELTS DURING PREGNANCY

WARNINGS



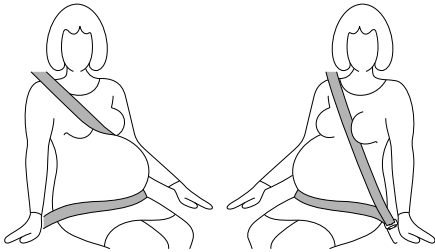
Position the seat belt correctly for the safety of the mother and unborn child.

Never wear just the lap strap and never sit on the lap strap while using just the shoulder strap. Both of these actions are extremely dangerous and may increase your risk of serious injury in the event of an accident or during emergency braking.



Never place anything between you and the seat belt in an attempt to cushion the impact in the event of an accident.

It can be dangerous and reduce the effectiveness of the seat belt in preventing injury.



E80374

Position the lap strap comfortably across the hips beneath the abdomen. Place the diagonal part of the seat belt between the breasts and to the side of abdomen. Ensure that the seat belt is not slack or twisted.

Supplementary restraints system

PRINCIPLE OF OPERATION

In the event of a collision, the airbag control unit monitors the rate of deceleration induced by the collision, to determine whether the airbags should be deployed.

Operation of the airbag SRS is dependent on the rate at which the vehicle's passenger compartment changes speed as a result of a collision. The circumstances affecting different collisions (vehicle speed, angle of impact, type and size of object hit, for example), vary considerably and will affect the rate of deceleration accordingly.

When deployed, inflation of the airbag is virtually instantaneous and occurs with considerable force, accompanied by a loud noise. The inflated bag, together with the seat belt restraint system, limit the movement of an occupant, thereby reducing the risk of injury to the head and upper torso.

Provided the occupants are correctly seated, with the seat belts properly worn; in the event of a severe frontal impact, the airbags will provide additional protection to the chest and face of the front seat occupants.

In the event of a severe side collision, airbags provide additional protection to the side of the head and body facing the impact for front seat occupants and to the side of the head facing the impact for outer rear seat occupants.

Note: *Inflation and deflation of the front and seat mounted side airbags takes place very quickly and will not protect against the effects of secondary impacts that may occur. Head airbags deflate at a slower rate and therefore do offer some additional protection in the event of a secondary impact.*

The Supplementary Restraint System (SRS) components include:

- SRS warning indicator.
- Rotary coupler.
- Airbag modules.
- Airbag diagnostic control unit.
- Crash sensors.
- Airbag wiring harness.
- Seat occupancy sensor.

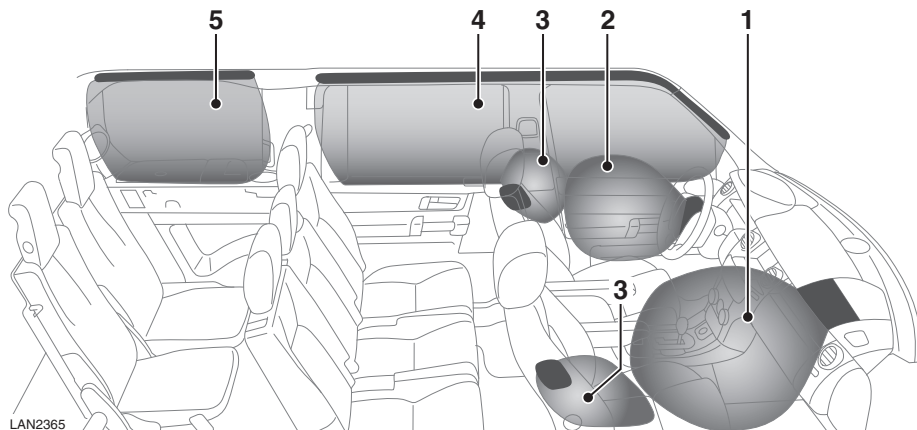
The airbag SRS is not designed to operate as a result of:

- Rear collisions.
- Minor front impacts.
- Minor side impacts.
- Heavy braking.
- Driving over bumps or potholes.

It follows, therefore, that significant superficial damage can occur without the airbags deploying or, conversely, that a relatively small amount of structural damage may cause the airbags to be deployed.

Supplementary restraints system

Airbags



1. Front passenger's airbag.
2. Driver's airbag.
3. Side airbags.
4. Front curtain airbags.
5. Rear curtain airbags.

WARNINGS



High speed impacts may cause serious injury or death irrespective of safety features fitted to a vehicle.

Always drive with caution and consideration for the vehicle's characteristics, road and weather conditions, and do not exceed any speed limits in force.



Seat belts should be worn at all times, by the driver and passengers in all seating positions. The airbag supplementary restraint system (SRS) cannot provide protection in some types of impact. Under these circumstances the only protection will be provided by a correctly worn seat belt.

WARNINGS



Airbags inflate at high speeds, and can cause injuries. To minimise the risk of injury, ensure that all vehicle occupants wear correctly positioned seat belts, sit correctly in the seats, and position the seats as far back as practical.



Ensure that a gap is maintained between the side of the vehicle and the head and torso. This will enable unobstructed inflation of the curtain, and seat mounted side airbags.



Airbag inflation takes place instantaneously and cannot protect against the effects of secondary impacts. Under these circumstances the only protection will be provided by a correctly worn seat belt.



Phone systems should only be installed by qualified persons familiar with the operation of, and requirements for, vehicles fitted with SRS. If you are in any doubt, seek advice from your Dealer/Authorised Repairer.

Supplementary restraints system

Obstruction of airbags

WARNINGS



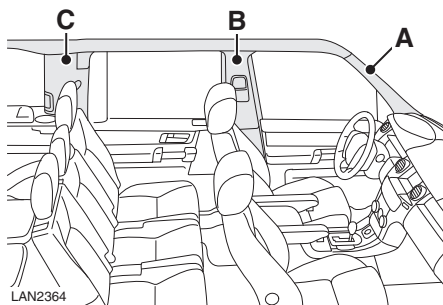
For the airbags to operate correctly the roof lining and door posts must be in good condition, correctly fitted, and free from obstruction. Any damage, wear or incorrect fitment should be referred to your Dealer/Authorised Repairer as soon as possible for examination and repair.



Do not allow passengers to obstruct the operation of the airbags by placing any part of their person, or any objects in contact with, or close to, an airbag module.



Do not attach or position items on, or close to the roof lining, **A**, **B** and **C** post finishers, front seat backrests or to an airbag cover, which could interfere with the inflation of the airbag or be propelled inside the vehicle causing injury to the occupants.



Do not use non-approved seat covers/accessory seat covers over a front seat; in particular, seat covers that have not been designed for use with side airbags. If in doubt, consult your Land Rover Dealer/Authorised Repairer.

Note: *Unauthorised modification of the vehicle or parts may invalidate the vehicle's warranty.*

Deployment effects

WARNINGS



After inflation some airbag SRS components are hot. To prevent injury, do not touch the components until they have cooled.



In order to react with sufficient speed, airbags are deployed by an explosive charge. Consequently airbag deployment is accompanied by a very loud noise which may cause discomfort and temporary loss of hearing.



An airbag will only provide additional protection in certain types of frontal collisions. No protection is afforded against the effects of rear impacts, or minor frontal impacts.



Inflation and deflation take place instantaneously and will not provide protection against the effects of secondary impacts that can occur during multiple vehicle collisions.



When an airbag inflates a fine powder is released. This is normal and not an indication of a malfunction. However, the powder may cause irritation to the skin and should be thoroughly flushed from eyes and any cuts or abrasions.



Activation of an airbag creates dust, causing possible breathing difficulties for asthma sufferers or other people with respiratory problems. If an airbag is activated, any occupant who suffers from breathing difficulties should either leave the vehicle as quickly as possible, or obtain fresh air by fully opening the windows and doors.

Supplementary restraints system

After inflation, the front and seat mounted side airbags deflate immediately (curtain airbags deflate slowly). This provides a gradual cushioning effect for the occupants and also ensures that the driver's forward vision is not obscured.

Disability modifications

Occupants with disabilities that may require the vehicle to be modified must contact a Land Rover Dealer/Authorised Repairer before any modifications are made.

SIDE AIRBAGS

WARNING



Ensure that a gap is maintained between the side of the vehicle and the torso, to enable unobstructed inflation of the seat-mounted side airbags.

Side airbags are designed to protect the thorax region of the torso and will only deploy in the event of a severe side impact. They will not inflate as a result of frontal or rear impacts only. The airbags on the non-impacted side of the vehicle will not be deployed.

CURTAIN AIRBAGS

WARNING



For the curtain airbags to deploy correctly, the roof lining and A post trim must be undamaged and fitted correctly. Any damage or suspect fitting should be referred to a Land Rover Dealer/Authorised Repairer for examination.

Curtain airbags are designed to protect the head in the event of a severe side impact or rollover event. They will not inflate as a result of frontal or rear impacts alone.

Supplementary restraints system

DISABLING THE PASSENGER AIRBAG

WARNING



Crash test data and statistics show that the safest place for a child to be restrained is in a child seat correctly fitted to the vehicle's rear seat.



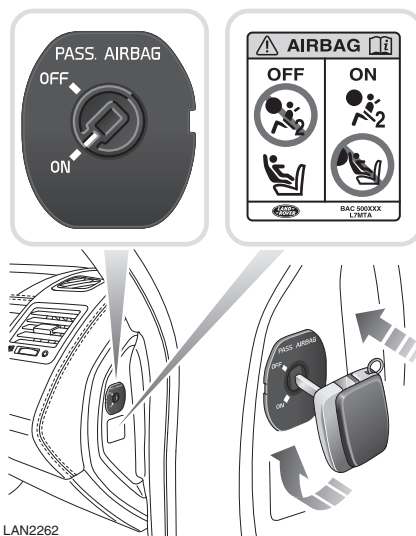
Do not use a child restraint on a seat protected by an operational airbag in front of it. Doing so presents a high risk of death or serious injury to the child in the event of an accident.



Do not fit a child restraint to the front passenger seat if the SRS warning lamp illuminates continuously with the ignition on.



As soon as a child seat is removed from the front passenger seat the airbag must be turned on. Failure to do so will put a front seat passenger at greater risk of death or serious injury in the event of a frontal impact.



Note: The passenger airbag should be disabled only when a rearward facing child restraint is fitted to the front passenger seat.

Prior to fitting a child restraint on the front passenger seat, open the passenger door and using the starter key, turn the airbag disabling switch to the **OFF** position.

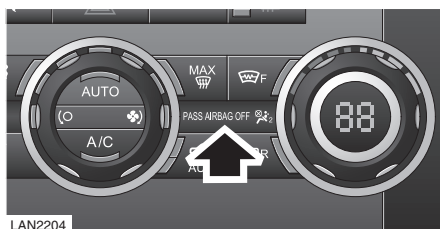
Supplementary restraints system

Passenger airbag status indicator

WARNING



When checking the operational status of the front passenger airbag, ensure that the ignition is switched on.



When the airbag disabling switch is turned to the **OFF** position, the passenger airbag status indicator (arrowed) will illuminate (yellow) whenever the ignition is switched on.

When switching the passenger airbag on or off, check that the status lamp shows the correct condition.

Note: The indicator will only illuminate when the ignition is turned on or the engine is running.

Airbag switched OFF

WARNING



To avoid the risk of injury, never use a child restraint in the front of the vehicle unless the passenger airbag has been switched OFF.



In order to fit a child restraint to the front passenger seat, use the emergency key to turn the passenger airbag disabling switch to the **OFF** position.

Check that when the ignition is switched on, the status indicator on the fascia is illuminated confirming that the passenger airbag is not operational.

If the airbag SRS warning indicator in the instrument pack illuminates continuously, remove the child restraint from the front seat and consult your Land Rover Dealer/ Authorised Repairer.

Supplementary restraints system

Airbag switched ON

WARNING



To ensure that the adult restraint system performs as intended, make sure that the passenger airbag is switched **ON**.



E82246

When an adult is seated in the front passenger seat of your vehicle, ensure that the passenger airbag disabling switch is turned to the **ON** position.

This will ensure that the airbag will perform as intended in the event of a crash.

Check that when the ignition is switched on, the operational status lamp on the facia is not illuminated, confirming that the passenger airbag is operational.

AIRBAG WARNING LAMP

WARNING



If the warning indicator signals that a fault is present in the system, do not use a child restraint on the front passenger seat. Doing so will increase the risk of death or serious injury to the child.



An amber warning indicator in the instrument pack will alert you to any malfunction of the airbag SRS. On vehicles with a message centre, this will be accompanied by the message **AIRBAG FAULT**. Seek qualified assistance urgently if any of the following symptoms occurs:

- The warning indicator fails to illuminate when the ignition is switched on.
- The warning indicator fails to extinguish within approximately six seconds after the ignition is switched on.
- The warning indicator illuminates after the engine is started, or while the vehicle is being driven.

Supplementary restraints system

AIRBAG SERVICE INFORMATION

WARNING



For your safety a Land Rover Dealer/Authorised Repairer must carry out any of the following tasks:

Removal, replacement, repair, or modification, of any wiring or component in the vicinity of the SRS components, including the steering wheel, steering column, door trim, roof lining, instrument pack and instrument panel.

Installation of electronic equipment such as a mobile phone, two-way radio or in-car entertainment system.

Modification to the front or side of the vehicle, including the bumper and chassis.

Attachment of accessories to the front or side of the vehicle.



Do not attempt to service, repair, replace modify, or tamper with, any part of the SRS. This includes wiring or components in the vicinity of SRS components. Doing so may cause the system to trigger, or render the system inoperative, either of which may result in death or serious injury.



Do not use any electrical test equipment or devices in the vicinity of SRS components or wiring. Doing so may cause the system to trigger, or render the system inoperative, either of which may result in death or serious injury.

In addition, always contact your Land Rover Dealer/Authorised Repairer if:

- An airbag inflates.
- A seat belt pre-tensioner activates.
- The front or side of the vehicle is damaged, even if the airbag has not inflated.
- Any part of the airbag trim, module cover shows signs of cracking or damage.

Child safety

CHILD SEATS

WARNINGS



Do not use a child restraint on a seat with an operational airbag in front of it. There is a risk of death or serious injury when the airbag deploys.



Crash statistics show that children are safest when properly restrained in a child or infant restraint system that is secured in a rear seating position.



Do not use a forward facing child seat, until a child is above the minimum weight of 9 kg (20 lb.) and able to sit up unaided. Up to the age of two, a child's spine and neck are not sufficiently developed to avoid injury in a frontal impact.



Do not allow a baby or infant to be held or carried on the lap. The force of a crash can increase effective body weight by as much as thirty times, making it impossible to hold on to the child. Children typically require the use of a booster seat appropriate to their age and size, thereby enabling the seat belts to be properly fitted, reducing the risk of injury in a crash. Children could be endangered in a crash, if their child restraints are not properly secured in the vehicle.



Do not use a child seat that hooks over the seat back. This type of seat cannot be satisfactorily secured and is unlikely to be safe for your child.

It is very important for all infants and children under 12 years of age to be restrained in a suitable child safety seat appropriate to their age and size. See **CHILD SEAT POSITIONING** (page 68).

Note: In some countries legislation prohibits children travelling in the front of a vehicle. Ensure that you are familiar with the legislation in force where the vehicle is being used and are in full compliance.

If a child must travel in the front passenger seat, Land Rover recommends the following:

1. Position the seat fully rearward.
2. Adjust the lumbar to its minimum.
3. Adjust the cushion to its highest position.
4. Set cushion rake to its lowest position.
5. Set seat belt upper anchorage to its lowest position.
6. For markets other than Australia, disable the airbag. See **DISABLING THE PASSENGER AIRBAG** (page 62).

WARNING



Original text according to EEC R94.01. Extreme Hazard! Do not use a rearward facing child restraint on a seat protected by an airbag in front of it.



E79258

This symbol is affixed to the end of the fascia on the passenger side. Its purpose is to warn against the use of a rear facing child seat when the front passenger airbag is fitted and operational.

Child safety

Seat belt automatic locking mechanism

The second and third row outer seat belts have a special locking mechanism which aids the retention of child seats.

The procedure to install a child seat is as follows:

1. Place the child seat in the vehicle, attach the seat belt and secure the buckle in accordance with the manufacturer's fitting instructions.
2. Pull on the shoulder section of the belt to reel out all of the remaining webbing to the limit of its travel. This will engage the automatic locking feature, which then acts as a ratchet, allowing the webbing only to retract.
3. Allow the seat belt to retract onto the child seat (a clicking sound will confirm that the ratchet has engaged), while firmly pushing the child seat into the vehicle seat.
4. Ensure that there is no slack in the seat belt by pulling upwards on the shoulder belt immediately above the child restraint. The seat belt should now be locked and the child seat held firmly in position.

When the child seat is removed and all of the seat belt webbing is allowed to retract, the seat belt locking mechanism reverts to normal operation.

Note:

Where possible, use the seat belt automatic locking mechanism to secure large items of luggage that are to be carried on the seats. In the event of an accident, unsecured items become missiles capable of causing serious injury.

Child restraint checklist


Every time a child travels in the vehicle observe the following:

- Always use the appropriate child restraints and adjust harnesses for every child, every trip.
- Make sure that a child falls into the correct weight range for the seat.
- Carefully follow the instructions provided by the manufacturer of the restraint system.
- Ensure that all slack is removed from the adult seat belt.
- When installing an ISOFIX seat, always attach the top tether. Always give the ISOFIX seat a final pull to ensure that the lower anchors are secure.
- Regularly check the fit of a child seat and replace seats or harnesses that show signs of wear.
- Avoid dressing a child in bulky clothing and do not place any objects between the child and the restraint system.
- No child seat is completely child-proof. Encourage a child not to play with the buckle or harness.
- Never leave a child unsupervised in the vehicle.
- Activate the rear door child safety locks. See **CHILD SAFETY LOCKS** (page 72).
- Ensure that a child does not exit the vehicle from the side where there is traffic.
- Set children a good example - always wear your seat belt.

Child safety

CHILD SEAT POSITIONING

CAUTION

 Information given in the table was correct at the time of going to press. However, availability of child restraints may change. Please refer to your Land Rover Dealer/Authorised Repairer for the latest recommendation.

The following table shows the suitability of each passenger seat position for carrying children up to 12 years of age or 1.5 m (5 feet) tall and the installation of suitable child restraints systems.

Note: *The information contained in the following tables may not be applicable to all countries. If you are in any doubt regarding the type and fitment of child seats seek advice from your Land Rover Dealer/Authorised Repairer.*

Seating position	Mass group (with approximate age) As shown on child restraint			
	0 = Up to 10 kg (22 lb) (0-10 months)	0+ = Up to 13 kg (29 lb) (0-18 months)	I = 9 to 18 kg (20 to 40 lb) (9 months - 5 years)	II and III = 15 to 36 kg (33 to 80 lb) (4-12 years)
Front passenger	U	U	U	U
Rear seats - 5-seat vehicle	L	L	L	L
Second row seats - 7-seat vehicles	U	U	U	U
Third row seats	X	X	UF	UF

- U = Suitable for universal category restraints approved for this mass group.
- UF = Suitable for forward-facing universal category restraints approved for this mass group.
- X = Not suitable for children in this mass group.
- L = Suitable for particular child restraints as listed in the Child seat usage table.

Recommended child seats

Child size/age	Recommended seat
Groups 0 and 0+	Britax Cosy-Tot/Römer Baby Safe
Group I	Britax/Römer Duo
Group II and III	Britax Evolva 23 Ultra

Note: *The legislation which governs how and where children should be carried when travelling in a vehicle is subject to change. It is the responsibility of the driver to comply with all regulations in force.*

Child safety

ISOFIX child seat positions

Note:

ISOFIX anchorages are provided for second row outer seating positions. ISOFIX child restraints should be securely attached following the manufacturers instructions at these locations only.

Mass group as shown on child restraint.	Size Classes	Fixtures	Vehicle ISOFIX positions
Carrycot	F/ G	ISO L1/L2	X
0 = Up to 10kg (22lb)	E	ISO R1	IL
0+ Up to 13kg (29lb)	C/ D/ E	ISO R1/R2/R3	IL
I = 9 to 18 kg (20 to 40 lb)	C/D A/ B1/ B	ISO R2/R3 ISO F2/ F2X/ F3	X IUF
II = 15 to 25 kg (33 to 55 lb)	-	-	-
III - 22 TO 36 kg (48 to 79 lb)	-	-	-

- IUF = Suitable for ISOFIX forward child restraint systems of universal category approved for use in the mass group.
- IL = Suitable for particular ISOFIX child restraint systems (CRS) in the table below. These ISOFIX CRS are those of the "specific vehicle", "restricted" or "semi-universal" categories.
- X = ISOFIX position not suitable for ISOFIX child restraint systems in this mass group and or this size class.

Recommended ISOFIX child seats

ISOFIX position	Recommended seat
I	Britax Duo Plus ISOFIX
IL	Britax Cosy-Tot ISOFIX

Child safety

ISOFIX ANCHOR POINTS

WARNINGS



Do not attempt to fit an ISOFIX child seat to the centre seating position. The anchor bars are not designed to hold an ISOFIX restraint in this position. If the restraint is not correctly anchored, there is a significant risk of injury to the child in the event of a collision or emergency braking.

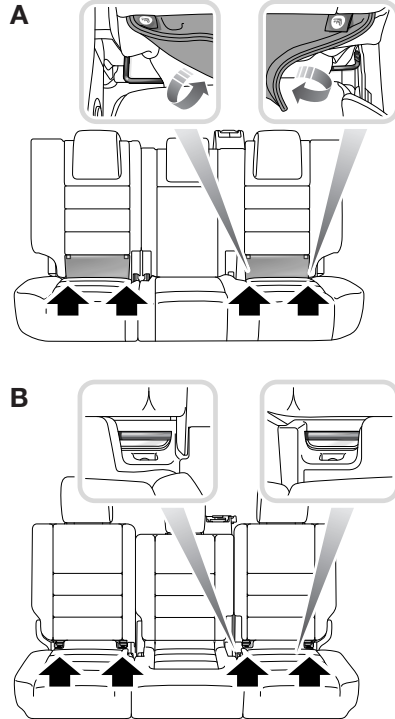


Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.



If removing a head restraint in order to fit a child restraint, always secure the head restraint when storing it. If left loose in the vehicle it may cause death or serious injury during sudden braking or an impact.

Note: ISOFIX child restraints are only fitted to the second row seats.



E80614

A. 5-seat vehicles

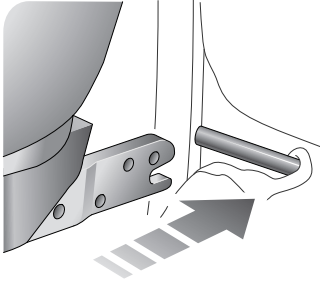
B. 7-seat vehicles

Both second row outer seating positions, are equipped to accept ISOFIX restraints.



This symbol is shown on a label sewn into the seats to indicate the position of the ISOFIX lower anchorages.

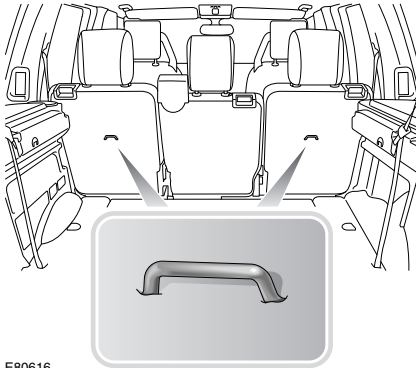
Child safety



E80615

To install your child seat with an ISOFIX restraint system:

1. Raise or remove the head restraint.
2. Lift the velcro strap, exposing the ISOFIX locking mechanism.
3. Slide the child seat into the locking mechanism.



E80616

Upper tether anchorages are provided at each seating position equipped to accept ISOFIX child restraints (shown in the illustrations).

Note: Always ensure that if an upper tether is provided, it is secured and tightened properly, as this provides maximum protection for a child.

Once the ISOFIX child seat is installed, test the security of the installation, before seating a child. Attempt to twist the child seat from side to side and to pull it away from the vehicle seat, then check that the anchors are still securely in place.

Tether strap anchorages (Australia only)

WARNINGS



Child restraint anchorages are designed to withstand only those load imposed by correctly fitting child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.



Always follow the child seat or restraint system manufacturer's instructions when fitting tether straps.



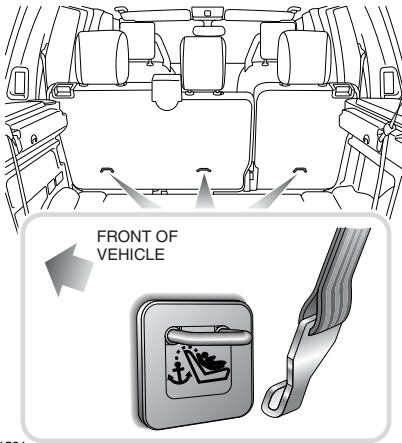
When fitting a child seat or restraint system, always pass the tether strap over the top of the seat back and beneath the underside of the head restraint.

Attaching tether straps

1. Install the child restraint securely in one of the rear seating positions.
2. Pass the tether strap over the back of the seat and under the head restraint.
3. Attach the tether strap hook to the tether anchor on the back of the vehicle seat. Ensure that the tether strap hook is facing the correct direction. See illustration.
4. Tighten the tether strap according to the manufacturer's instructions to remove any slack in the webbing.

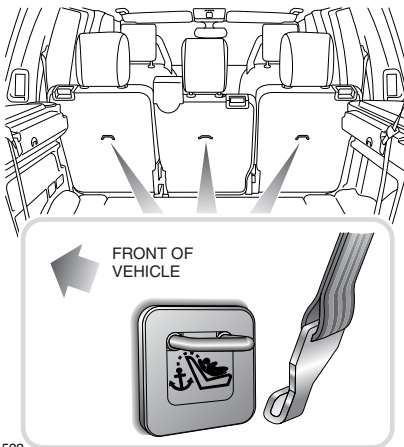
Child safety

Child seat upper tether anchorage (5-seat vehicles)



E81521

Child seat upper tether anchorage (7-seat vehicles)



E81522

Provision is made in the second row seats for the fitting of up to three child seats of the type that requires tether strap anchorage points.

Your vehicle is equipped with anchorage points on the back of the second row seat frames. These should be used to attach straps from child seats or restraint systems.

BOOSTER CUSHIONS

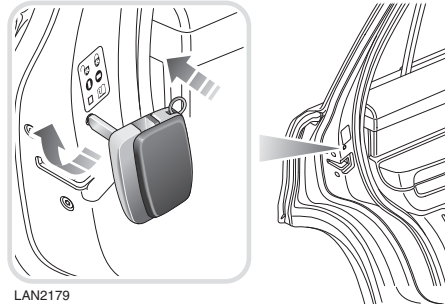
In a situation where a child is too large to fit into a child safety seat but is still too small to safely use just the three point belt, a booster seat is recommended for maximum safety. Follow the manufacturer's instructions for fitting and use, and then adjust the seat belt to suit.

CHILD SAFETY LOCKS

WARNING



Never leave children unsupervised in the vehicle. Doing so increases the risk of death or serious injury.



Child safety locks are fitted to the rear doors. Insert the starter key into the keyhole and turn outwards to activate the child safety lock. With the child safety locks engaged, the rear doors cannot be opened from inside the vehicle.

Turn the key inwards to disengage the child safety lock.

Steering wheel

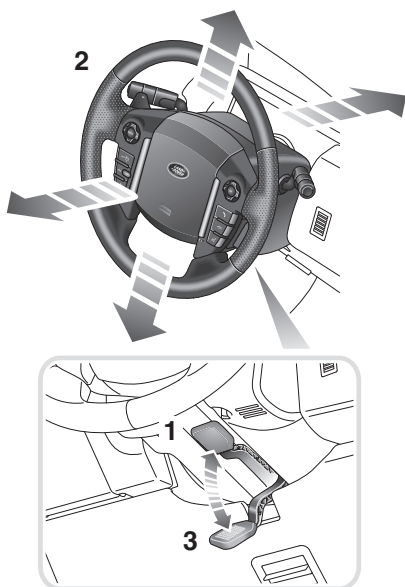
ADJUSTING THE STEERING COLUMN

WARNINGS



Never adjust the steering column position while the vehicle is in motion. Doing so will reduce control of the vehicle, and may cause unpredictable steering movements.

Manual adjustment

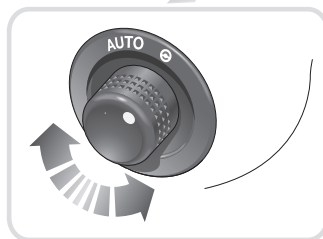


LAN2395

The steering column position can be adjusted in two directions.

1. Move the lever under the steering column, fully downwards.
2. Adjust the steering column up or down, in or out.
3. Move the lever fully up to lock.

Electric adjustment



LAN2966

The steering column can be adjusted in four directions, corresponding with the movement of the adjustment control, to suit your driving position.

Move the control up or down to adjust the height of the steering column.

Move the control forwards or rearwards to move the steering column further away or closer to your body.

Steering wheel

Entry and Exit mode

Entry and exit mode provides automatic movement of the steering column and drivers seat making it easier to enter or exit the vehicle.

This feature can be enabled by setting the steering column adjustment switch to the **AUTO** position.

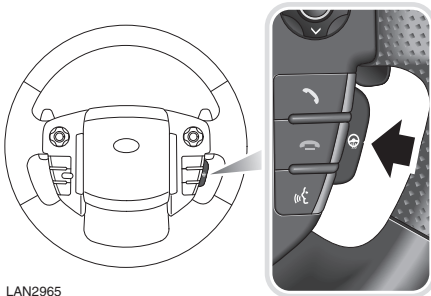
To prevent automatic movement of the driver's seat and steering column, turn the switch clockwise to the manual position.

Note: If the steering column switch is moved away from **AUTO** when the driver's seat and steering column is in the exit position, the driver's seat and steering column will move back to their previous positions when the driver's door is closed and the ignition is switched on.

Steering column position memory

Three different steering column positions can be saved and recalled. See **DRIVER'S SEAT MEMORY FUNCTION** (page 44).

HEATED STEERING WHEEL



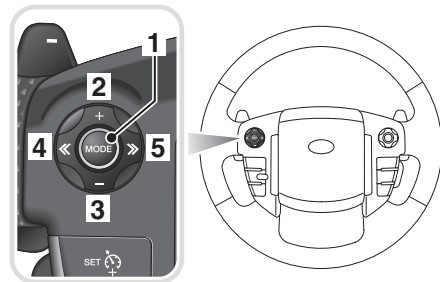
LAN2965

Press the switch to turn the heating on or off. The heated steering wheel icon will illuminate as follows:-
If the steering wheel heating is on, the icon will show amber.

If the steering wheel heating is off and headlamps are on, the icon will show green.

If the steering wheel heating and headlamps are off, the icon will not illuminate.

AUDIO CONTROL



LAN2964

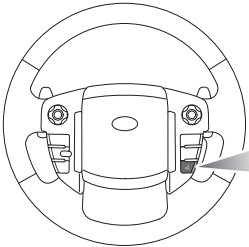
1. Mode select.
2. Volume up.
3. Volume down.
4. Search down.
5. Search up.

Note:

When using the steering wheel controls to operate the audio system information will only be displayed if the touch screen is in audio mode. Audio messages may be displayed as 'pop-ups' when other screens are displayed.

Steering wheel

VOICE CONTROL



LAN2963



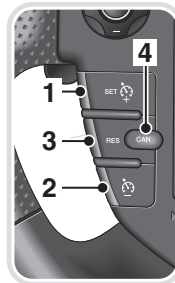
To activate voice control:

- Briefly press the control. An audible alert will be heard, and **LISTENING** will be displayed on the main message centre. The system is now waiting for a voice command.

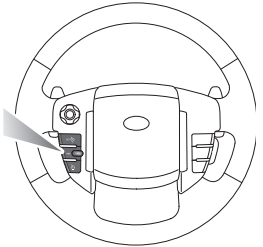
For general information about voice control. See **USING VOICE CONTROL** (page 328).

CRUISE CONTROL

Cruise control is operated via the switches on the steering wheel. See **PRINCIPLE OF OPERATION** (page 152).



LAN2183



1. Set or increase the speed
2. Decrease the speed
3. Resume set speed
4. Cancels without erasing the memorised speed

HORN



LAN2962

To operate, press either of the horn switches.

Lighting

GENERAL INFORMATION

There are three types of headlamp systems:

- Halogen high/low beam main lamp with a fill-in high beam halogen lamp alongside.
- Xenon high/low beam main lamps with fill-in high beam halogen lamp alongside.
- An Adaptive Front Lighting System (AFS). See **ADAPTIVE FRONT LIGHTING SYSTEM** (page 81).

Condensation

Misting of lamp lenses can occur under some atmospheric conditions. This will not affect the performance of the lamps, and will clear during normal operation.

Xenon headlamps

Xenon low/high beam headlamp units are fitted to the vehicle. Xenon lamps provide significantly improved visibility, especially during adverse weather and driving conditions.

Xenon units use a Xenon bulb for both high beam and low beam, whilst a halogen bulb is used for high beam fill-in. A shutter, operated by a solenoid, changes the direction of the Xenon light beam, to give either low or high beam.

The operational life of a Xenon light is significantly longer than that of a conventional or halogen bulb.

Daytime running lamps

In certain markets, the side lamps, licence plate lamps and headlamp low beams will illuminate with the engine running and the lamps master switch turned off. The instrument pack illumination remains off.



Unless they are required or prohibited by law, daytime running lamps can be disabled or enabled by a Land Rover Dealer/Authorised Repairer.

Stop lamps

The stop lamps will illuminate while the brake pedal is pressed.

The stop lamps also illuminate when Hill Descent Control is braking the vehicle or during Electric parking brake dynamic operation. See **ELECTRIC PARKING BRAKE (EPB)** (page 137).

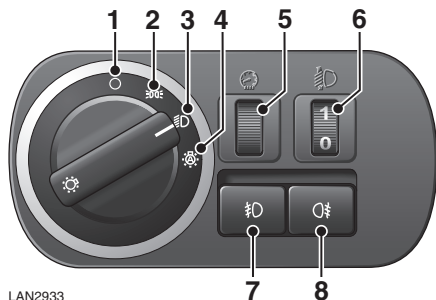
Reversing lamps

Selection of reverse gear will operate the reversing lamps.

Lighting

LIGHTING CONTROL

Lamps master switch



LAN2933

1. Side lamps and headlamps off
2. Side lamps and licence plate on
3. Low beam headlamps on
4. Automatic control lamps on
5. Dimmer control
6. Halogen lamps height adjuster
7. Rear fog lamps on/off.
8. Front fog lamps on/off.

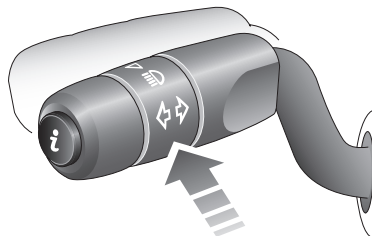
Side lamps

The side lamps and licence plate lamps, illuminate when the lamps master switch is turned to positions **2** or **3**.



A green warning indicator in the instrument pack will illuminate when side lamps are on.

High and low beam headlamps



LAN2205

With the lamps master switch in position **3** and the ignition switched on, push the column lever away from the steering wheel to select high beam.



The blue warning indicator in the instrument pack will illuminate when high beam is selected.

To switch to low beam, pull the lever towards the steering wheel.

To flash the headlamps on high beam, pull the lever fully towards the steering wheel and release it.

Note: Do not use high beam where it may dazzle other road users.

Auto high beam

This function automatically selects high beam, if ambient light levels are sufficiently low and no oncoming or preceding vehicles are within operational range.

Note: It is recommended that auto high beam is not used while driving off-road.

This function is active only when selected via the vehicle settings menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

To switch on auto high beam, the lamps master switch must be in the AUTO position and the column lever is in the low beam position.

Lighting

The system will activate when vehicle speed reaches 25 mph (40 km/h). The system will deactivate when the vehicle's speed drops below 15 mph (24 km/h).

Note: *Auto high beam does not operate when reverse gear is selected.*

Auto high beam can be considered only as a convenience feature and in certain circumstances the driver must intervene.

To manually override the feature, move the column lever to the high beam position as normal.

To override the feature to low beam (from high beam only) pull the column lever to the 'flash' position and the feature will be cancelled.

To re-enable the feature push the column lever to high beam and back to the central position.



A green indicator in the instrument pack illuminates when auto high beam is enabled.

Note: *The following circumstances could affect the auto high beam function:*

- *Highly reflective road signs.*
- *Vehicles with dim lamps. e.g. bicycles, etc.*
- *Adverse weather conditions.*
- *Dirty sensor.*
- *Dirty, damaged or misted windscreen.*

It remains the driver's responsibility to ensure correct use of the headlamps at all times.

To turn off the auto high beam feature, move the lamps master switch from the AUTO position to the headlamps on position.

Note: *The auto high beam feature is controlled by a sensor in the rear-view mirror. Ensure that the sensor is not blocked by objects or stickers placed on the windscreen.*

Automatic control lamps

With the lamps master switch in position **4** and the ignition on, the side lamps, low beam headlamps and licence plate lamps will illuminate automatically when the ambient light falls below a pre-defined level.

All of the lamps will go out when the ambient light rises above that level.

Headlamp courtesy delay

The headlamp courtesy delay operates whenever the ignition is switched off with the lamps master switch in position **4**. The headlamps will remain illuminated for up to 240 seconds.

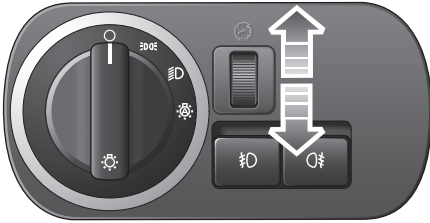
Note: *This time delay can be changed via the **Vehicle Set-up** menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).*

The courtesy delay may be cancelled at any time by either switching the ignition on, turning the lamps master switch to positions **1** or pressing the headlamp button on the Smart Key.

Note: *If Automatic Control Lamps are switched on, the headlamp courtesy delay will operate automatically.*

Lighting

INSTRUMENT DIMMER CONTROL



LAN2187

Move up or down to adjust the level of instrument pack illumination.

Note: The instrument pack dimmer is operational only when ambient light is below a pre-determined level.

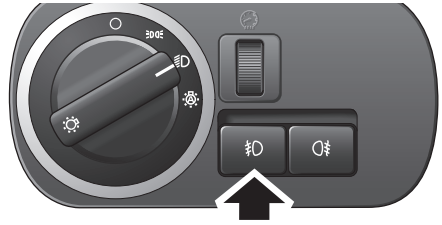
HALOGEN HEADLAMPS HEIGHT ADJUSTER



LAN2932


Move up or down to adjust the height of the headlamps beam.

FRONT FOG LAMPS



LAN2206

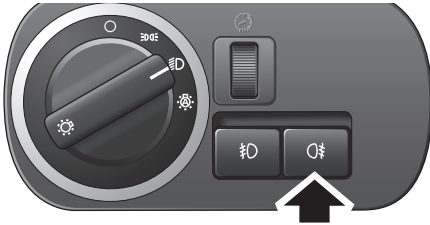
With either the side lamps or low beam headlamps switched on, press the button to switch on the front fog lamps.

 A green warning indicator will illuminate in the instrument pack when the front fog lamps are switched on.

Press the button again to switch off the fog lamps.

Lighting

REAR FOG LAMPS



LAN2207

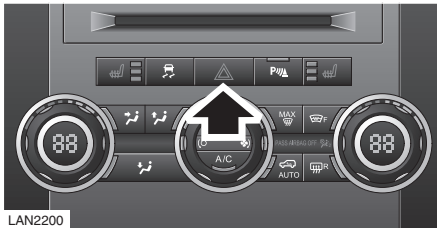
With either the front fog lamps or low beam headlamps switched on, press the button to switch on the rear fog lamps.



An amber warning indicator will illuminate in the instrument pack when the rear fog lamps are switched on.

Press the button again to switch off the fog lamps.

HAZARD WARNING FLASHERS



LAN2200

Press the switch to operate the hazard warning lamps. All of the direction indicator lamps will flash together.

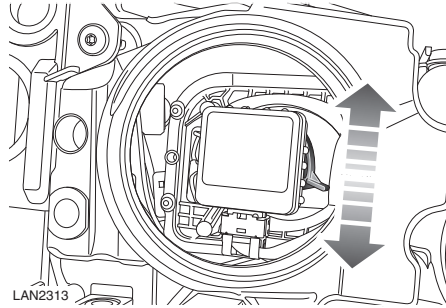
Use only in an emergency to warn other road users when the stationary vehicle is causing an obstruction, or is in a hazardous situation. Remember to switch off before moving away.

HEADLAMPS - DRIVING ABROAD

Headlamp beam adjustment

When travelling in countries which drive on the opposite side of the road, a lever within each headlamp unit can be used to alter the beam pattern.

To access the levers you will need to remove the headlamp units. See **REMOVING A HEADLAMP** (page 83).



LAN2313

Note: On LHD vehicles fitted with halogen headlamps, the lever is on the left-hand side of the bulb aperture.

Move the lever to the down position when driving in countries where they drive on the alternative side of the road.

Remember to return the lever to the up position when driving on your usual side of the road.

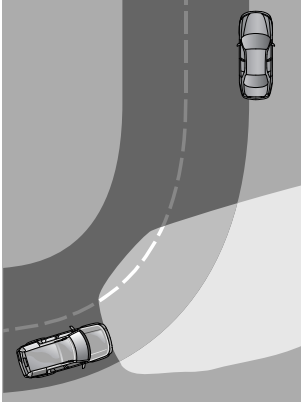
Note: If the auto high beam feature is enabled, you should configure the system for the side of the road you are driving on. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Lighting

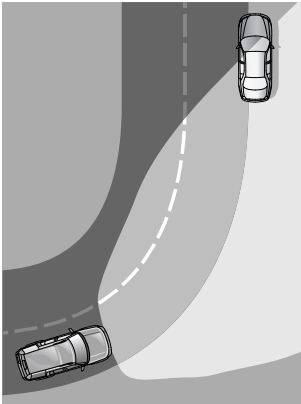
ADAPTIVE FRONT LIGHTING SYSTEM

The Adaptive Front lighting System (AFS) is a lighting system, designed to give the driver improved visibility. It has two main components: a swivelling headlamps unit and a cornering lamp, with a beam set to 45 degrees from the centre line of the vehicle.

1



2



E80820

1. Light spread of a vehicle not fitted with AFS.
2. Light spread of a vehicle fitted with AFS.

The headlamp units can swivel left or right to improve light spread on bends in the road and they operate throughout the vehicle speed range.

The system takes inputs from the vehicle's road speed and steering angles to determine the amount of horizontal swivel. The amount of swivel is highest at low manoeuvring speeds and reduces as speed increases.

If reverse gear is selected, the headlamp units return to the central position and the unit's swivelling capability is disabled.

These units operate when the engine is running and the lamps master switch is in position **3**. They will also operate with the lamps master switch in position **4** (Auto), if the ambient light has fallen below a preset level.

Cornering lamps

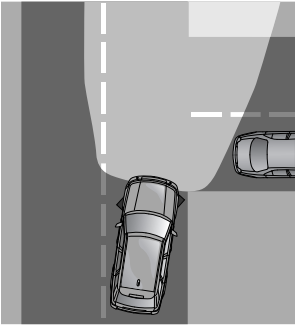
These lamps broaden the beam of the headlamps when cornering during normal night driving.

With the ignition on and the headlamps operating, the system will switch on the static bending lamp, when it receives an input from the vehicle's direction indicator.

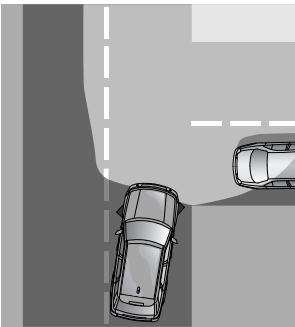
Note: Only the lamp on the same side as the operating direction indicator will come on.

Lighting

1



2



E91464

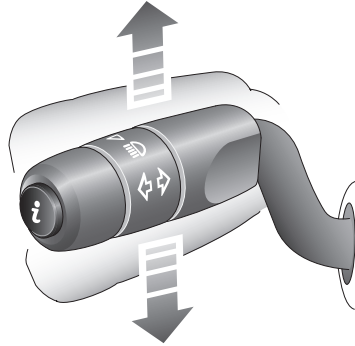
1. Shows the light spread of a vehicle not fitted with cornering lamps.
2. Shows the light spread of a vehicle fitted with cornering lamps.

Warning indicator



An amber warning indicator will illuminate in the instrument pack if a fault is detected with the AFS. Seek qualified assistance.

DIRECTION INDICATORS



LAN2208

With the ignition switched on, move the lever up or down to operate the direction indicators.



A green left or right warning indicator in the instrument pack will flash when the direction indicator lamps are operating.

When the lever is held momentarily up or down against spring pressure and then released, the indicators will flash three times to indicate a lane change.

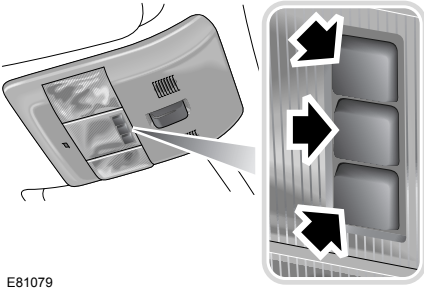


This feature can be enabled or disabled by a Land Rover Dealer/ Authorised Repairer.

Lighting

INTERIOR LAMPS

Front interior lamps



E81079

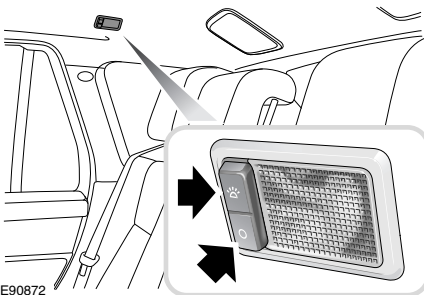
Each lamp can be switched on or off by pressing the switch adjacent to the lamp required.

In automatic mode, the lamps will illuminate automatically when a door is opened.

To enable automatic mode press the centre switch for more than three seconds. The message **INTERIOR LIGHTS AUTOMATIC** will flash in the message centre.

To de-activate the courtesy lamps automatic mode by press the centre switch. The message **INTERIOR LIGHTS MANUAL** will flash in the message centre.

Rear interior lamps



E90872

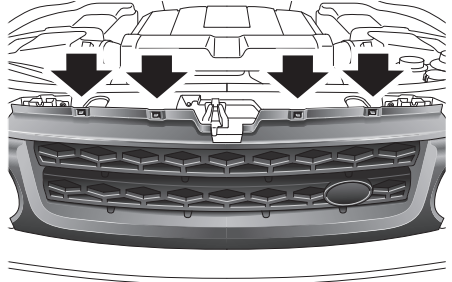
Press the switch on the lamp to operate.

REMOVING A HEADLAMP

CAUTION

- ! Do not place the removed lamp unit face down on hard or abrasive surfaces. Doing so may scratch the surface of the lens

Removing the grille

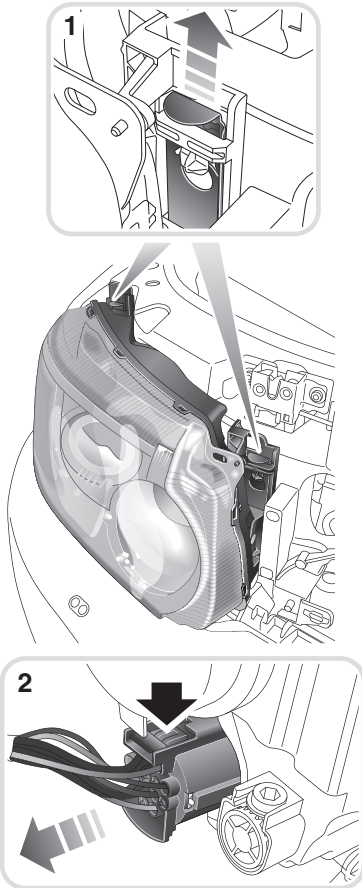


LAN2422

1. Press down on the four upper clips.
2. Lift the grille clear of the vehicle and place it where it will not become damaged.

Lighting

Removing the headlamp



LAN2423

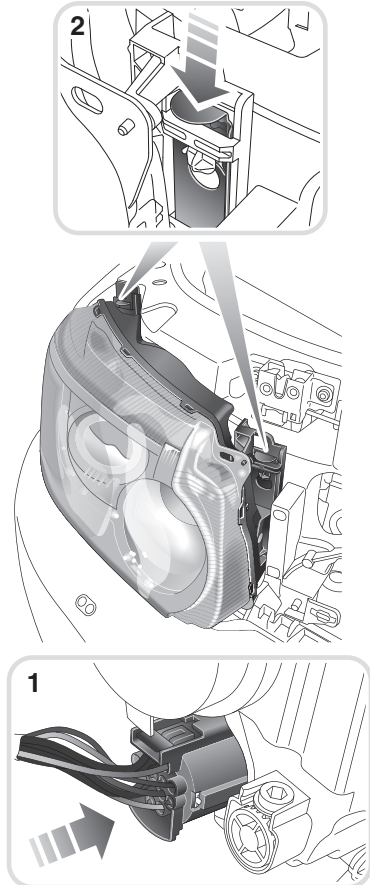
1. Carefully lever up the two locking bars.

Note: The locking bars can be pulled too far up which will prevent the headlamp unit being released. If this happens ease the bars down until the headlamp can be moved forward.

2. Disconnect the wiring plug from the back of the unit and remove the unit from the vehicle.

3. Place face down on a flat surface covered in a soft material to prevent damage to the unit's lenses.

Refitting the headlamp



LAN2424

1. Reconnect the wiring plug.
2. Offer up the unit into position.
3. Push down on the two locking bars.

Lighting

Refitting the grille

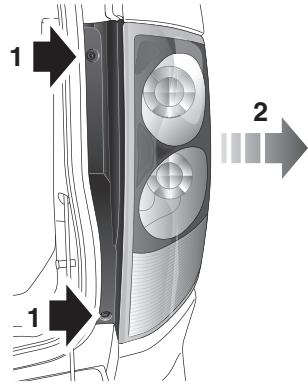
CAUTION

⚠ To prevent damage to the headlamps, make sure that the locating tags on the grille are correctly aligned to the slots in the headlamps.

1. Refit the grille, aligning the upper and lower clips with their respective slots, and press into place.
2. Ensure the clips have sprung into place securing the grille.

REMOVING A REAR LAMP

It is necessary to completely remove the unit from the vehicle in order to change any of the bulbs.



LAN2425

1. With the tailgate open, remove two screws from the edge of the unit nearer the tailgate aperture.
2. Pull the unit away from the vehicle.
3. Disconnect the wiring multi-plug and remove the unit from the vehicle. Place face down on a flat surface covered in a soft material to prevent damage.

Refitting the rear lamp unit

1. To refit the lamp, reverse the removal instructions.

Lighting

CHANGING A BULB

CAUTION

⚠ Always replace bulbs with the correct type and specification. If you are in any doubt contact your Dealer/Authorised Repairer for advice.

Note: In certain territories it is a legal requirement to carry spare bulbs. A replacement bulb kit is available as an approved accessory from your Dealer/Authorised Repairer.

Check the operation of all exterior lamps before you drive the vehicle.

Xenon lamps

WARNINGS

⚠ Xenon lamp units operate at very high temperature. Ensure that the lamp units have cooled before attempting to touch them.

⚠ High voltage is required to ignite the gas and metal vapour which are used to power Xenon lamps. Contact with this voltage can cause serious injury.

⚠ Replacement or maintenance of Xenon lamps should only be carried out by qualified personnel.

♻ Seek advice about the correct disposal of Xenon lamp units from your Dealer/Authorised Repairer, or your local authority.

HEADLAMP UNIT BULBS

WARNING

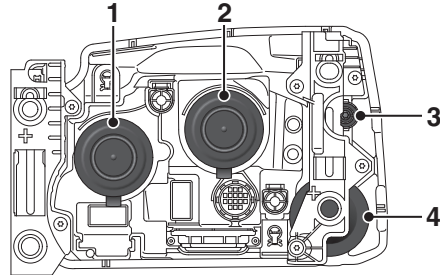
⚠ Do not attempt to change any bulb with the lighting switched on. If the lighting has just been switched off, give the bulbs time to cool down. Handling them in a hot condition may cause personal injury.

Note: The side lamps within Xenon headlamp units are LED and are non-serviceable.

Bulb access

To change a bulb within the headlamp unit it is necessary to completely remove the unit from the vehicle. See **REMOVING A HEADLAMP** (page 83).

Xenon headlamp

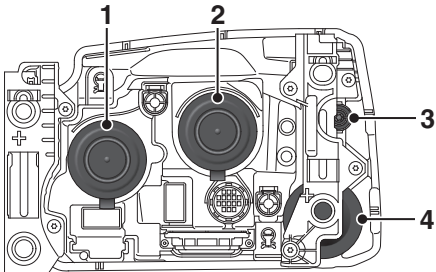


LAN2426

1. Halogen - High beam fill in.
2. Xenon - High and low beam.
3. Direction indicator
4. Static bending/cornering lamp

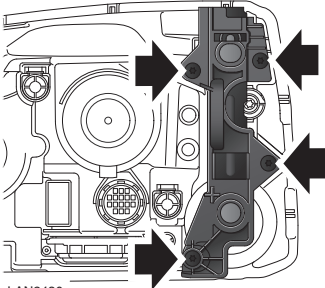
Lighting

Halogen headlamp



LAN2426

1. Halogen - High beam
2. Halogen - Low beam
3. Direction indicator
4. Side lamp

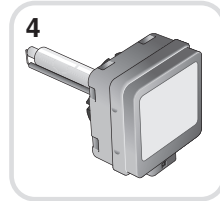
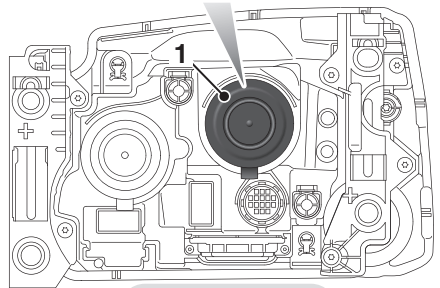
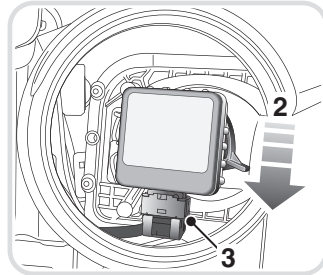


LAN2430

To access the direction indicator, static bending lamp and side lamp, the headlamp unit locking slide assembly must be completely removed from the unit.

To remove the slide assembly, remove the four screws (arrowed). When refitting the slide assembly, do not overtighten the screws.

Headlamp bulb (Xenon)



LAN2428

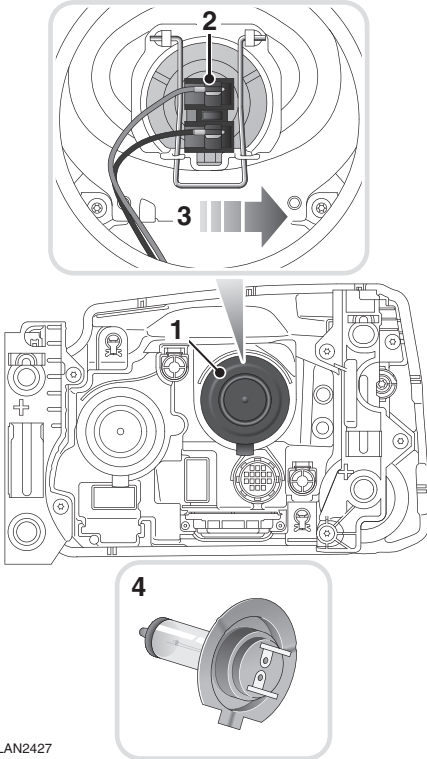
1. Twist and lift off the domed cap.
2. Rotate the collar securing the bulb to lamp and release the bulb.
3. Pull off the electrical connection.
4. Remove bulb.
5. Insert the new bulb and reverse the above procedure. Ensure that the lugs on the cap are in contact with the bulb base.

Lighting

Headlamp bulb (Halogen) - low beam

CAUTION

⚠ Take care not to touch this type of bulb with your fingers; always use a cloth to handle them. If necessary, clean the bulb with methylated spirits to remove fingerprints.



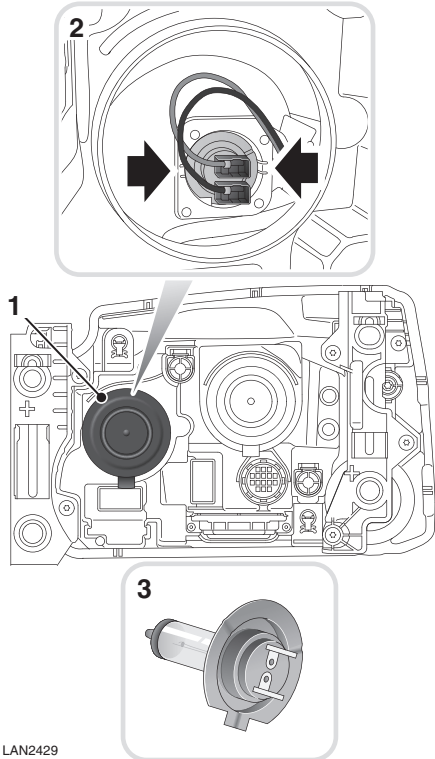
LAN2427

1. Twist and lift off the domed cap.
2. Pull off the electrical connector.
3. Release the spring clip securing bulb to lamp.
4. Remove bulb.
5. Insert the new bulb and repeat the above procedure in reverse order.

Headlamp bulb (Halogen) - high beam

CAUTION

⚠ Take care not to touch this type of bulb with your fingers; always use a cloth to handle them. If necessary, clean the bulb with methylated spirits to remove fingerprints.

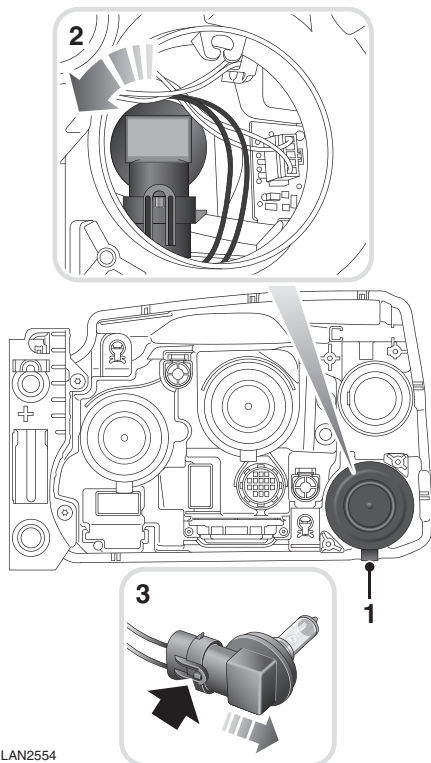


LAN2429

1. Twist and lift off the domed cap.
2. Pull off the electrical connector.
3. Release bulb from retaining tags and remove bulb.
4. Insert the new bulb and reverse the above procedure.

Lighting

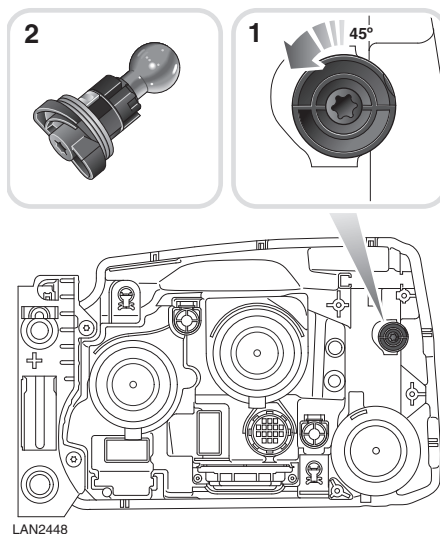
Static bending bulb



LAN2554

1. Twist and lift off the domed cap.
2. Rotate bulb and release from lamp.
3. To remove the bulb, lift the catch and disconnect the electrical connector.
4. Insert the new bulb and reverse the above procedure.

Direction indicator bulb

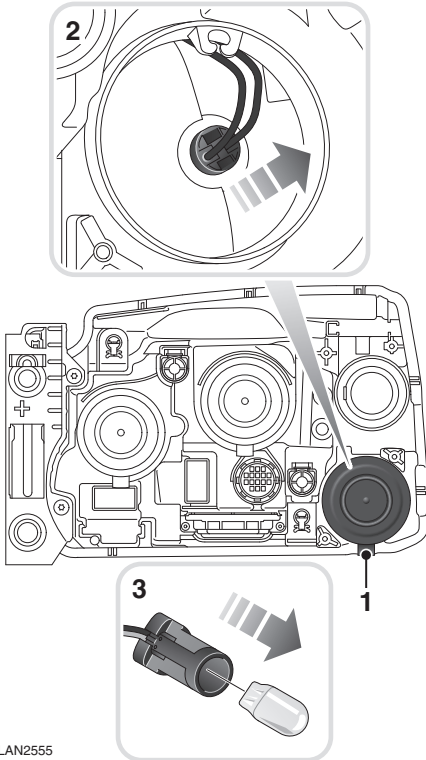


LAN2448

1. Rotate the bulb holder 45 degrees counterclockwise.
2. Remove the bulb assembly from lamp.
3. Replace the bulb assembly and reverse the above procedure.

Lighting

Side lamp bulb

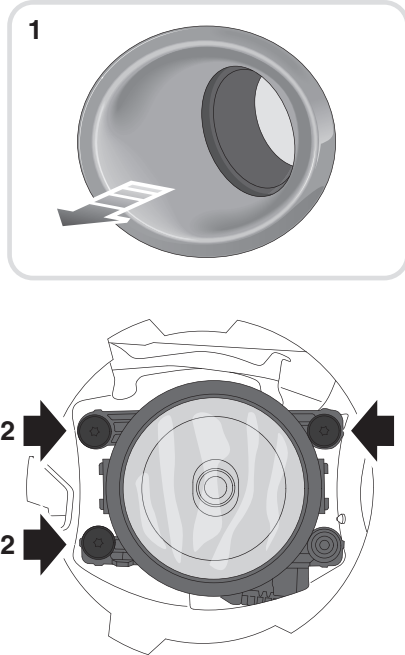


LAN2555

1. Twist and lift off the domed cap.
2. Depress the two tags and pull bulb holder from lamp.
3. Pull bulb from holder.
4. Insert the new bulb and reverse the above procedure.

FRONT FOG LAMP BULB

Removing the fog lamp

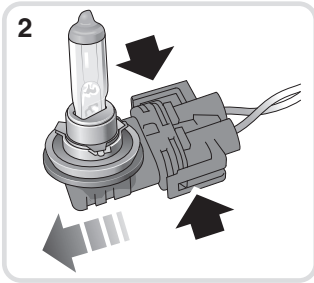
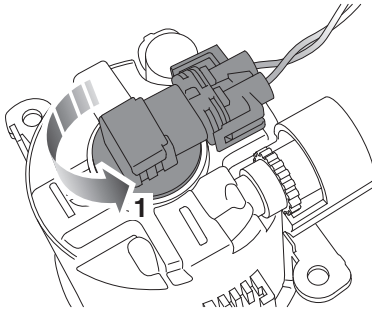


LAN2432

1. Using the finger slot at the top of the fog lamp surround, pull to remove.
2. Remove the three securing screws to release the lamp unit. Ease the unit out of the front bumper.

Lighting

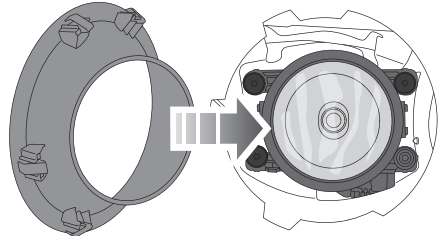
Replacing the bulb



LAN2433

1. Twist the bulb holder counterclockwise to unlock, then pull out the bulb, complete with electrical connector.
2. To release the bulb, depress the two catches (solid arrows in inset), then pull to remove the bulb from the holder.
3. Insert the new bulb and reverse the above procedure.

Refitting the fog lamp



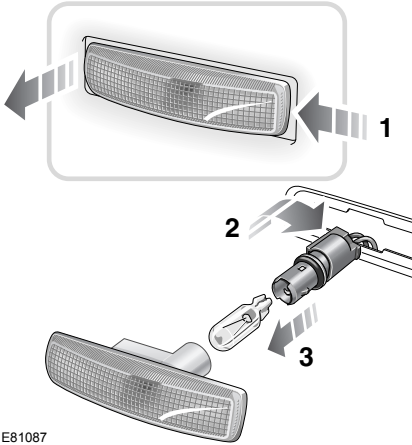
LAN2434

1. Align fog lamp to front bumper and secure with screws.
2. Align the spring clip above the finger slot with the upper receiver shape in the bumper and push into place.
3. Push the lower part of fog lamp surround into place, applying some upward pressure.

Note: The fog lamp surround is uniquely shaped and will only fit in one position.

Lighting

SIDE REPEATER LAMP BULB



E81087

Follow the steps illustrated. Insert a new bulb and refit the components.

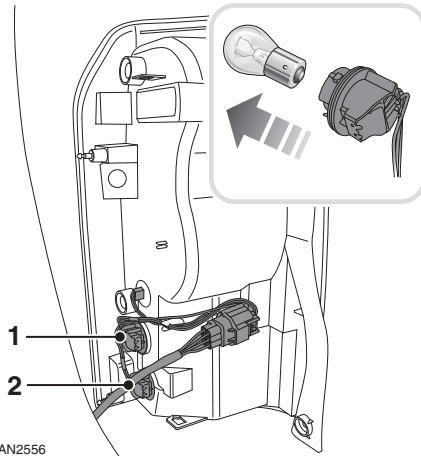
REAR LAMP BULBS

Note: The direction indicator lamp, stop lamp and tail lamp within the rear lamp units are LED and are non-serviceable.

To change a bulb within the rear lamp unit it is necessary to completely remove the unit from the vehicle. See **REMOVING A REAR LAMP** (page 85).

Rear lamp bulb

After the rear lamp unit has been removed, each bulb is accessible by twisting off its electrical connection cap.

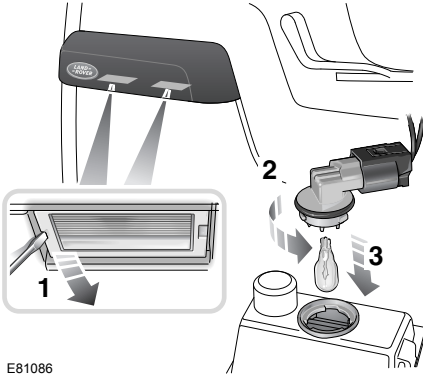


LAN2556

1. Reversing lamp
2. Rear fog lamp

Lighting

Licence plate lamp bulb

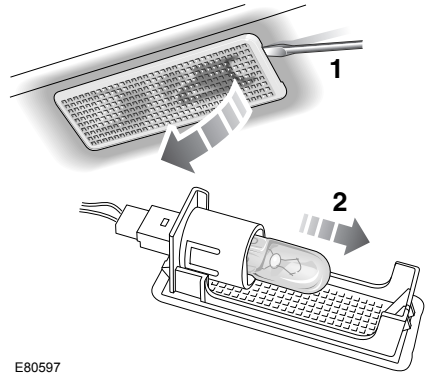


E81086

Follow the steps illustrated. Insert a new bulb and refit the components.

INTERIOR LAMP BULBS

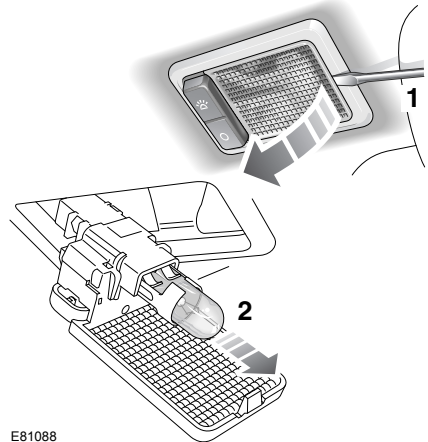
Door/puddle/footwell lamp bulb



E80597

Follow the steps illustrated. Insert a new bulb and refit the components.

Courtesy lamp bulb

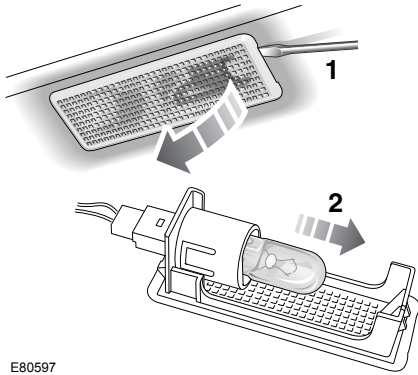


E81088

Follow the steps illustrated. Insert a new bulb and refit the components.

Lighting

Tailgate lamp bulb



E80597

Follow the steps illustrated. Insert a new bulb and refit the components.

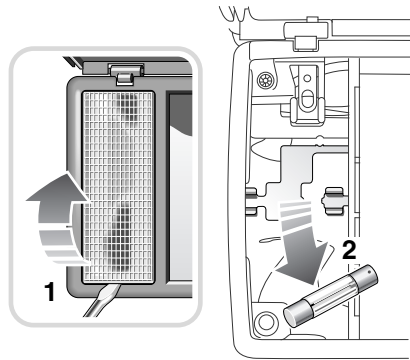
Map lamp bulb



E81089

Follow the steps illustrated. Insert a new bulb and refit the components.

Vanity mirror lamp bulb




E81090

Follow the steps illustrated. Insert a new bulb and refit the components.

Lighting

BULB SPECIFICATION CHART

CAUTION

 Before replacing a bulb, ensure that both the affected lamp and the vehicle's ignition system are turned off. If the circuit remains live a short circuit can occur which may damage the vehicle's electrical system.

Note: All bulbs must be rated at 12 volts.

Bulb	Watts
Headlamps (Halogen)	55 (H7)
Headlamps (Xenon)	55 (D3S)
Cornering lamps	35 (H8)
Front fog lamps	55 (H11)
Front direction indicators	PY 24W
Side lamps	W5W
Side repeater lamps	WY5W
Reverse lamps	P21
Rear fog guard lamps	P21
Number plate lamps	W5W
Door or puddle lamps	W5W
Interior, luggage, footwell or tailgate lamps	W5W
Glove box lamp	W5W
Vanity mirror lamp	1.2

Note: The following lamps are LED units and are non-serviceable.

- Side lamps (Xenon headlamp units)
- Tail lamps
- Rear direction indicator lamps
- Stop lamps
- High mounted stop lamp

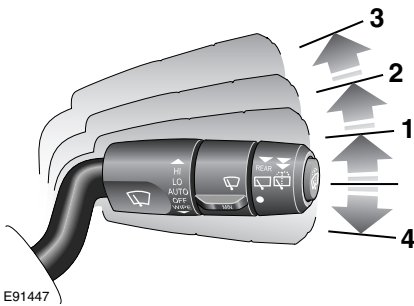
If any of these lamps should fail, they should be investigated by qualified personnel. Consult your Dealer/Authorised Repairer.

Wipers and washers

WINDSCREEN WIPERS

CAUTIONS

- ❗ Do not operate the wipers on a dry screen. The drag on the wiper mechanism may cause damage.
- ❗ Before operating in freezing or very hot conditions, ensure that the wipers have not stuck to the glass. The drag on the wiper mechanism may cause damage.
- ❗ Remove any snow, ice or frost, from the screen, around the wiper arms, the wiper blades and from the screen scuttle before operating the wipers. Snow and ice can cause damage to the wiper mechanism if left unclear.



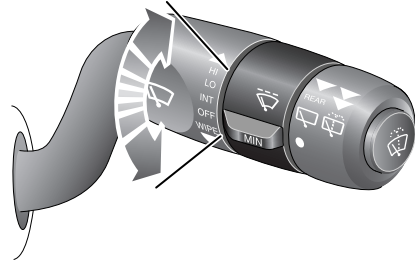
E91447

1. Rain sensor or intermittent variable delay.
2. Normal speed wipe.
3. Pull down and release to operate single wipe.
4. Pull down and hold to operate at fast speed until released.

The wipers and washers will only operate when the ignition is switched on.

Note: If the wiper blades become stuck, or jammed, an electronic cut out may temporarily halt the operation of the wipers. If this happens, switch off the wipers and the ignition. Clear any obstructions, and free the wiper blades before switching on the ignition.

Intermittent variable delay



E91448

Move the lever to position 1, rotate the collar clockwise to decrease the interval between wipes. Rotate the collar counterclockwise to increase the interval between wipes.

Speed dependent mode

When speed dependent mode is configured, the operation of all wiper modes will be affected by the vehicle's speed.

If the vehicle's speed drops below 8 km/h (5 mph) with the wipers operating, the wipers will switch to the next lowest speed. When the vehicle's speed increases to over 8 km/h (5 mph), the original wiper speed setting is restored.



This feature can be enabled or disabled by a Land Rover Dealer/ Authorised Repairer.

Wipers and washers

Speed dependent intermittent mode

The frequency of intermittent variable delay is adjusted automatically according to road speed on vehicles not equipped with a rain sensor.

The intermittent period can be adjusted for each of the speed dependent modes by rotating the collar clockwise or counterclockwise.



This feature can be enabled or disabled by a Land Rover Dealer/ Authorised Repairer.

Wiper lock-back

Vehicles in some markets (LHD) have a facility to lock the wipers away from the windscreen. This prevents the wipers freezing to the windscreen during frosty conditions.

Lift the wiper from the windscreen and pull back until the arm is at right angles to the windscreen.

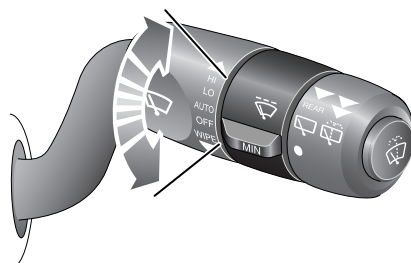
RAIN SENSOR

CAUTION



Ensure that the wipers are switched off before entering an automatic car wash.

If the rain sensitive wipers operate during the car washing process damage may occur to the wiper mechanism.



E91449

Move the wiper switch to position **1**. The wipers will operate for a single wipe and then the interval between subsequent wipes is controlled by the rain sensor.

The rain sensor detects the presence and amount of rain/dirt/snow on the windscreen and operates the wipers as required.

Rotate the collar clockwise to increase or counterclockwise to decrease the sensitivity of the rain sensor and therefore the frequency of wiper operation.

Note: Increasing the wiper sensitivity will operate the front wipers for a single wipe.

Wipers and washers

WINDSCREEN WASHERS

WARNING



In temperatures below 41°F (5°C), use a washer fluid with antifreeze protection. In cold weather, failure to use washer fluid with antifreeze protection could result in impaired vision and increase the risk of an accident.



Some screen wash products are flammable: do not allow screen wash to come into contact with sources of ignition.

CAUTION



Only screen wash products which are approved for automotive use should be used and then only in accordance with the manufacturer's instructions.

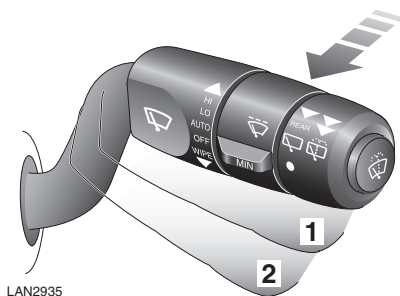
Note: National or local regulations may restrict the use of Volatile Organic Compounds (VOCs), which are commonly used as antifreeze agents in washer fluid. A washer fluid with limited VOC content should be used only if it provides adequate freeze resistance for all climates in which the vehicle will be operated.



E91450

A momentary press of the button will briefly operate the windscreen washer. A prolonged press will operate both the windscreen washer and the front wipers. When the button is released, the wipers will complete two further strokes before parking automatically.

REAR WINDOW WIPER AND WASHERS



LAN2935

Wiper - intermittent operation

Pull the lever to position **1**. The intermittent delay period will vary according to vehicle speed.

Wiper - continuous operation

The rear wiper can be configured to operate continuously.



This setting can be configured by a Land Rover Dealer/Authorised Repairer.

Washer

Pull the lever to position **2** and hold it. The wiper and washer will operate until the lever is released. When the lever is released, the washer will stop and the wiper will complete a further two wipe cycles and then return to intermittent operation.

Wipers and washers

Reversing

If reverse gear is selected while the front wipers are operating, the rear wiper will operate automatically.

Tailgate open disable

If the tailgate is opened while the rear wiper is operating, the wiper will:

- Stop immediately.
- Not start to move if it is already stationary.

If the tailgate is then closed, the wiper will start after three seconds.

If the tailgate is open and the vehicle's speed is above 3 km/h (2 mph), then the wiper will operate normally.

HEADLAMP POWER WASH

If the headlamps are on, and there is sufficient liquid in the washer reservoir, operating the screen washer will also power-wash the headlamps.

The headlamp power wash will operate on every fifth operation of the screen washer, provided the headlamps are still switched on and 10 minutes (5 minutes in some markets) have elapsed since the last headlamp wash.

Switching the headlamps or ignition off and back on again will reset the cycle.

Note: If the fluid level sensor in the screen washer reservoir detects a low level, the headlamp power wash is inhibited.

ADJUSTING THE WINDSCREEN WASHER JETS

WARNING

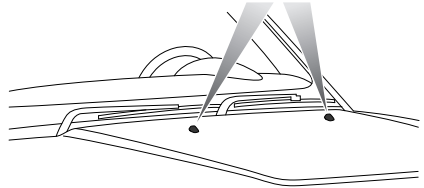
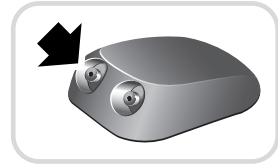


Do not operate the washer jets during adjustment. Washer fluid may cause irritation to the eyes and skin.



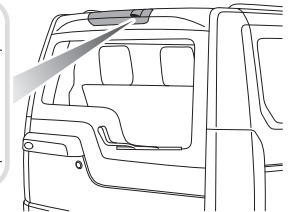
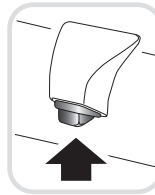
Always read and observe the washer fluid manufacturer's instructions.

Front



E80473

Rear



LAN2386

If jet adjustment is necessary, insert a needle into the opening and gently lever it to the correct position. The jet spray should hit the centre of the windscreen.

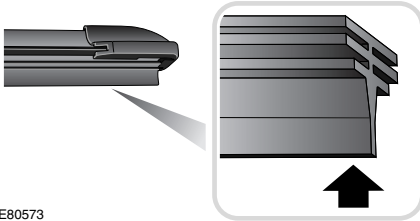
If a jet becomes obstructed, insert a needle into the opening to clear the blockage.

Wipers and washers

CHECKING THE WIPER BLADES

CAUTION

! Only use cleaning products which have been approved for use on automotive glass and rubber. Inappropriate products may cause damage.



E80573

The wiping edge of the blades should be cleaned periodically. Clean the blade edge by wiping with a soft cloth or sponge, using warm soapy water.

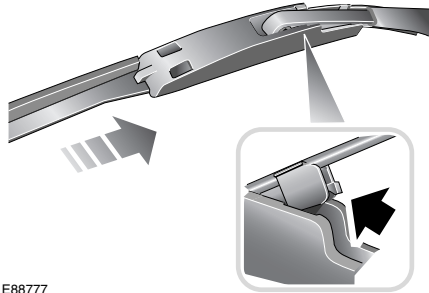
Also, check the blade rubber for cracks, splits and roughness. If any damage is found, replace the blade immediately to prevent damage to the glass.

CHANGING THE WIPER BLADES

CAUTION

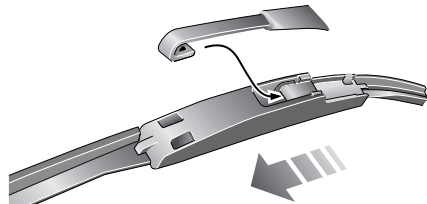
! Only fit correct length and type of wiper blade. Failure to do so may cause damage to the wiper system; it may also affect the operation of the rain sensor.

Front



E88777

1. Lift the wiper arm away from the screen and pivot the blade assembly away from the arm.
2. Press the tab (arrowed in inset), to release the blade assembly.
3. Slide the blade assembly off the end of the wiper arm.
4. Carefully replace the arm to its stowed position.

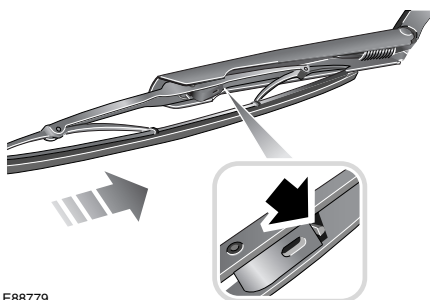


E88778

5. To replace, position the wiper arm into the aperture in the middle of the blade assembly and push firmly into position until the blade clips into place.

Wipers and washers

Rear



E88779

1. Lift the wiper arm away from the rear window.
2. Press the tab (arrowed in inset), to release the blade assembly.
3. Slide the blade assembly off the end of the wiper arm.
4. Carefully replace the arm to its stowed position.



E88780

5. To replace, position the blade assembly onto the inside of the wiper arm and push firmly into position until the blade clips into place.

Windows and mirrors

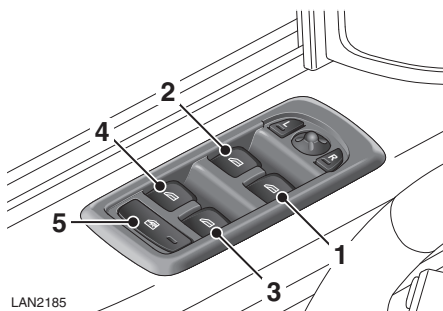
ELECTRIC WINDOWS

WARNING



The windows have an anti-trap protection system. However, before closing a window care must be taken to ensure that none of the occupants have any part of their body in a position where it could be trapped. Even with an anti-trap system death or serious injury can occur.

Operating the windows



LAN2185

1. Right-hand front window
2. Left-hand front window
3. Right-hand rear window
4. Left-hand rear window
5. Rear window isolation switch

With the ignition on or engine running, press the front of the respective switch to lower the window. Pull the front of the switch up to raise the window. Release the switch at any point to stop window movement.

The windows will operate for five minutes after the ignition is switched off, as long as none of the doors are opened.

One touch operation

WARNING



Ensure you take the Smart Key with you when leaving occupants in the vehicle. This will prevent accidental operation of the windows, which may result in injury.

All the windows can be fully opened or closed with a single press of the switch. Firmly press or lift (and then release) the front of the switch, to open or close the window. Window movement can be stopped by pressing the switch again.

Anti-trap protection

The windows have anti-trap sensors that will stop window movement if an obstruction or resistance is detected during closure. If an obstruction is detected, the window will stop and then lower. Check the window and its aperture and remove any obstructions, ice, etc.

If it is still necessary to raise the window, the anti-trap protection can be overridden by attempting to close the window at intervals of less than 10 seconds. On the third attempt the window will move up with increased force to try and move the obstruction.

Note: *If the obstruction cannot be overcome, one touch operation will be disabled.*

Resetting one touch operation

If the battery is disconnected, becomes discharged or the power supply is interrupted, the one touch up window operation is disabled until the window position is reset.

To reset the window position:

1. Close the window fully
2. Release the switch, then pull up and hold the switch for one second.
3. Repeat the procedure on each window.

Windows and mirrors

Rear window isolation switch

WARNING



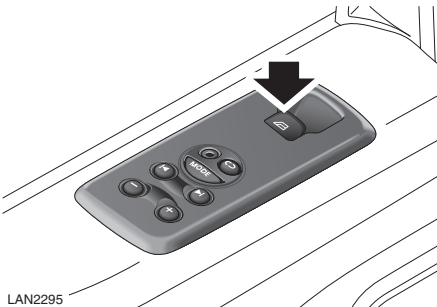
If children are carried in the rear seats, the isolator switch should be used to prevent operation of the windows. If the windows are operated by young children there is a risk of death or serious injury.



LAN2186

To prevent operation of the rear window switches, press the isolator switch. Press the switch again to restore independent control.

Rear window operation



LAN2295

The rear windows can be operated from the switches on the rear doors if the rear window isolation switch has not been activated.

EXTERIOR MIRRORS

CAUTION



Depending on the type of mirror lens used, distances may be difficult to judge accurately. Objects viewed in the mirror may be closer than they appear.

The mirrors can be adjusted or folded when the ignition is on, and for up to five minutes after the ignition is switched off, provided the driver's door is not opened.

Mirror glass adjustment



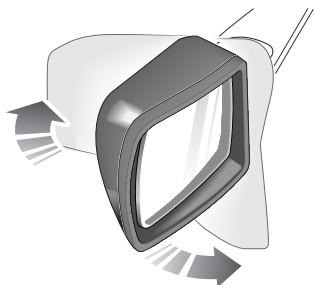
LAN2213

Press the **L** or **R** switch to select the required mirror. The tell-tale light in the switch will illuminate to indicate that it has been selected. Move the control to adjust the mirror as required.

Note: On vehicles with driver's seat memory, up to three exterior mirror positions can be stored. See **DRIVER'S SEAT MEMORY FUNCTION** (page 44).

Windows and mirrors

Folding the mirrors

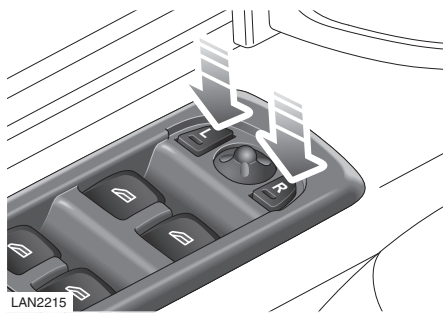


E81039

The door mirrors fold forwards or rearwards on impact.

On those vehicles without power fold mirrors, the mirrors can be folded into a park position by pushing the mirror housing towards the side window.

Power fold mirrors



LAN2215

To fold the mirrors, press both the **L** and **R** mirror switches at the same time. To unfold the mirrors, press both of the switches again.

Note: Operation of the power fold mirrors is inhibited at speeds over 110 km/h (70 mph).

If the mirrors are accidentally knocked out of position (i.e. with one mirror folded and the other in the normal position), press both the switches again to re-synchronise them.

Automatic power fold

If automatic power fold is enabled, the exterior mirrors will automatically fold and unfold when the vehicle is locked or unlocked using the Smart Key.

Note: If the mirrors were folded using the mirror switches they will not unfold when the vehicle is unlocked.



This feature can be enabled or disabled by a Land Rover Dealer/ Authorised Repairer.

Mirror dip when reversing

The door mirrors can be set to dip automatically when reverse gear is selected to provide an improved viewing angle for reversing.

When enabled in Vehicle Set-up, select reverse gear to dip the mirrors. While the mirrors are in the dipped position they can be adjusted to your required position using the mirror adjuster in the normal way.

The next time reverse gear is selected the mirrors will return to the positions you have selected.

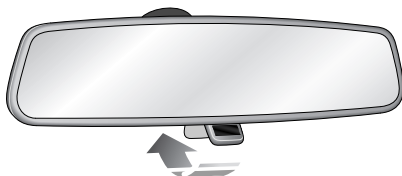
When the gear selector is moved out of reverse, or the vehicle speed exceeds 12 km/h (7.5mph) in reverse, the mirrors will return to their normal driving positions.

This feature can be enabled or disabled via the **Vehicle Set-up** menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Windows and mirrors

INTERIOR MIRROR

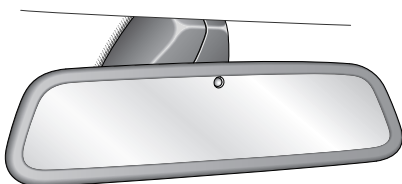
Manual mirror



E80447

Move the lever (forwards or backwards) to counteract the glare from a following vehicle's headlamps.

Automatic dimming mirror



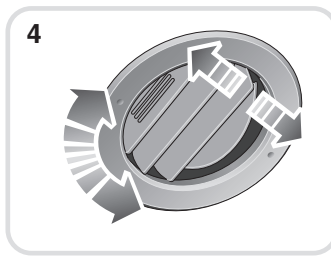
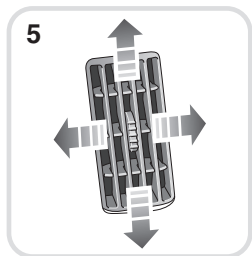
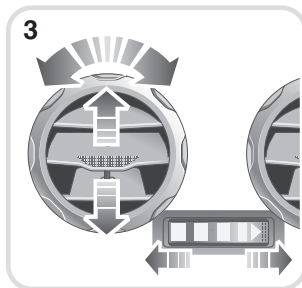
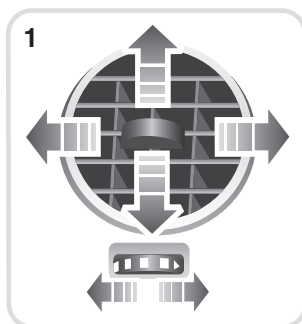
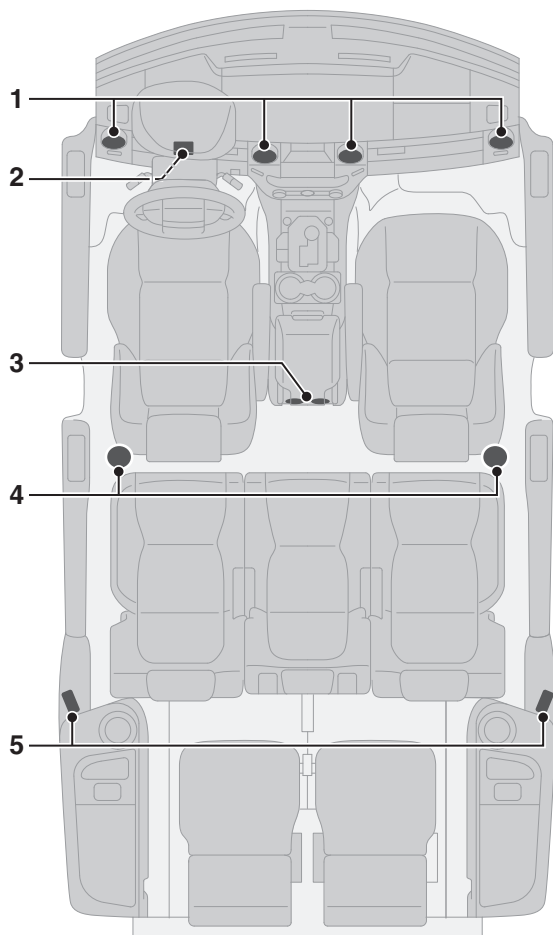
E81427

Some rear-view mirrors will automatically darken to counteract the glare from the headlamps of a following vehicle. This feature is temporarily switched off when reverse gear is selected.

Note: *If the rear screen is obscured, or the light falling on the mirror is otherwise obstructed, the automatic dimming may not operate correctly.*

Climate control

AIR VENTS



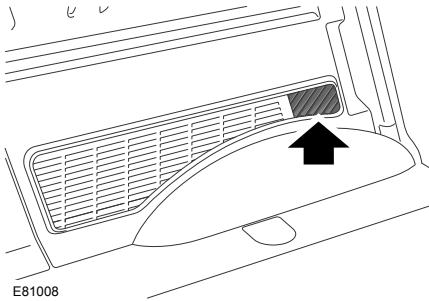
LAN2389

Climate control

- 1 Face level vents
- 2 Driver's lap vent
- 3 Centre console rear vent controls
- 4 Rear upper vent controls
- 5 Rear pillar vent controls

Note: To ensure best ventilation and minimum noise, the vents should be fully open when the air distribution control is set.

Third row seats vent



A fixed vent on the left-hand side rear quarter panel provides airflow to the third-row seat lower area.

Intake air

The ventilation system takes air from the intake grille in front of the windscreen. Always keep the air intake grille clear of obstructions such as leaves, snow or ice.

Particulate air filter

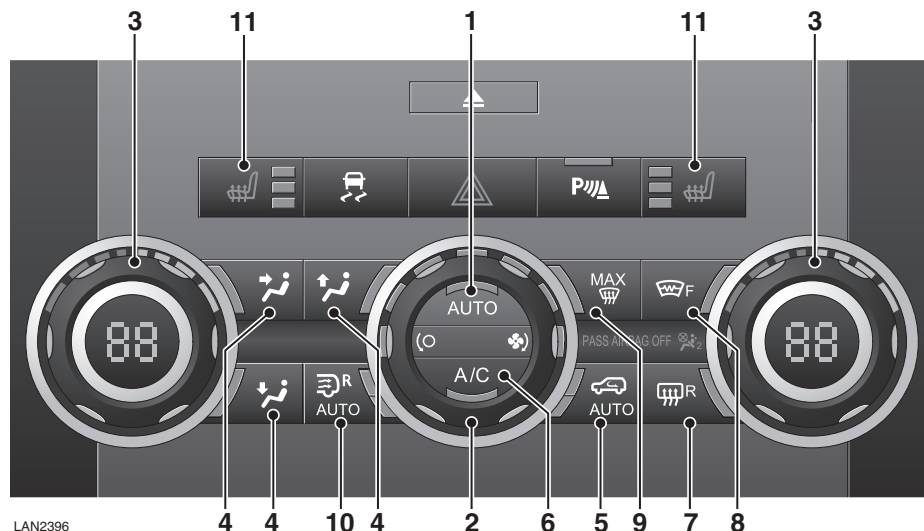
The particulate air filter prevents pollen, industrial fall-out, road dust and other particles from entering the vehicle via the vents.

Combined filter

Vehicles fitted with automatic temperature control have a combined carbon and particulate air filter, which reduces the level of odours coming into the vehicle through the heater system.

Climate control

AUTOMATIC CLIMATE CONTROL



LAN2396

1. Auto mode.
2. Blower control.
3. Temperature controls.
4. Air distribution buttons.
5. Air recirculation control.
6. Economy mode.
7. Heated rear screen.
8. Heated windscreen.
9. Defrost mode.
10. Rear environment.
11. Front seat heaters.

Note: Switches illuminate when switched on.

Note: The system may include windscreen heating.

Climate control

Auto mode

The climate control system features automatic temperature and air distribution control and is programmed to maintain optimum levels of comfort within the vehicle in all but the most severe climatic conditions.

It is recommended that automatic control (AUTO) is selected as the normal operating mode.

- Press **AUTO** to switch on.
- Rotate the temperature controls **3** to select the required temperature.

In Auto mode, air conditioning, air distribution, blower speeds and air recirculation are adjusted automatically to maintain a comfortable environment irrespective of prevailing conditions.

The air distribution and blower controls can be operated independently to override Auto mode. If you do this, the indicator lamp on the **AUTO** switch turns off. Press **AUTO** again to return to Auto mode.

Note: *If you use the air distribution and blower controls independently, the system may not be able to maintain the temperature.*

Blower control

Rotate the blower control **2** to adjust airflow through the vents. Indicators around the control illuminate to show the speed level the blower is operating at.

System off

Rotate the blower control **2** counterclockwise until the blower is operating at speed level one. Rotate the blower control counterclockwise again to turn off the climate control system.

Temperature controls

For maximum air conditioning, rotate the temperature controls **3** fully counterclockwise. This mode activates the air conditioning and air recirculation. It also sets maximum blower speed and selects the face-level vents.

Note: *The system will not achieve a temperature differential from left to right of more than 4°C (7°F).*

Note: *When in stationary traffic, select **P** or **N** in an automatic transmission vehicle to maximise air conditioning efficiency.*

Air distribution control

Press to select the desired distribution setting:



Windscreen and side window vents



Face level vents



Foot level vents

Note: *More than one setting can be selected to achieve the desired distribution.*

Air conditioning

A/C Press for cool and dehumidified air. It is recommended that air conditioning is used throughout a journey, to control window misting and odours. Press again to switch off air conditioning, the indicator lamp in the switch will extinguish.

Switching off will reduce cooling performance, the amount of cooling determined by the outside air temperature. However, the reduced load on the engine may improve fuel consumption.

Climate control

Note: Using the system for prolonged periods with the air conditioning off can cause the windows to mist.

Air recirculation - manual



Press the button once to activate air recirculation. Press the button a second time to deactivate air recirculation.

Air recirculation prevents air entering from outside, and recirculates the air inside the vehicle.

This prevents the entry of traffic fumes. Air recirculation also significantly influences the dehumidifying and cooling performance of the air-conditioning system.

Note: The windows can mist up if air is recirculated for a prolonged period.

Air recirculation - with pollution sensor



Press the button once to activate air recirculation. Press the button a second time to activate automatic air recirculation. Press the button a third time to switch the system off.

In Auto mode, air recirculation is regulated automatically to enable the air-conditioning system to achieve its optimum performance.

Air recirculation prohibits the entry of air from outside the vehicle, recirculating the air inside the vehicle instead. This is useful to prevent the entry of traffic fumes.

Air recirculation also significantly influences the dehumidifying and cooling performance of the air-conditioning system.

Note: The windows can mist up if air is recirculated for a prolonged period.

Defrost mode



If the windscreen is misting or covered in ice, press button, the system will immediately direct its output to achieve maximum screen clearing by:

- Setting the blower speed to an appropriate level.
- Distributing air flow to the screen only.
- Deactivating air recirculation (in certain circumstances).
- Activating the windscreen and rear screen heaters (or their timed operating cycle will recommence if they are already switched on).

Press the button a second time (or select **AUTO** or any air distribution control) to switch off the defrost mode. Heated screens will remain on until their time-out period has expired.

Rear environment



The rear environment unit provides climate control to the rear passengers.

- Press the button once to control the rear heating and air conditioning using the front controls only. The lower amber lamp is illuminated.
- Press the button a second time to allow the rear passengers to have manual control. The upper amber light is illuminated.
- Off: press the button a third time to switch off.

Note: Do not obstruct the vent on the side of the rear quarter panel.

Climate control

General notes

- For the automatic temperature control system to function efficiently, all windows and the sunroof should be closed, and the air intake vents free from ice, snow, leaves or other debris.
- In very humid conditions, slight screen misting may be experienced when the air conditioning system is turned on. This is a natural occurrence and will clear after a few seconds.
- The air conditioning compressor will not work when the engine is off.
- Surplus water produced by the dehumidifying process is expelled beneath the vehicle. This may result in a small pool of water forming when the vehicle is stationary.

HEATED SCREENS AND MIRRORS



Heated windscreen



Heated rear screen

Press button to operate the required screen heater. The screen heater(s) will operate for a timed period before automatically switching off.

The screen heaters will be automatically switched on if defrost mode is activated or if the external air temperature is low.

Note: *The screen heaters only operate when the engine is running.*

CAUTION



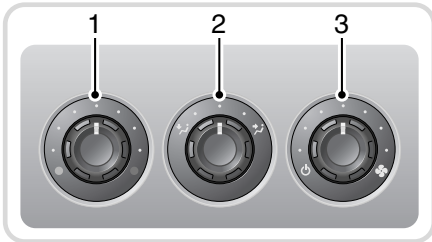
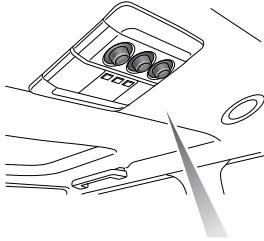
To avoid damage to the heating elements, do not attach labels to the rear screen. Also, do not scrape or use abrasive materials to clean the inside of the rear screen.

Exterior mirrors

The exterior mirrors automatically disperse ice or mist. The mirror heaters are controlled according to the external temperature and wiper status.

Climate control

REAR PASSENGER CLIMATE CONTROLS







B81009

- 1 Temperature control: rotate clockwise (red dot) to increase the temperature of the incoming air.
- 2 Distribution control: rotate fully counterclockwise to direct air to the third row seats vent, rotate fully clockwise to direct air to the rear seat upper vents and the rear pillar vents.
- 3 Blower control: rotate clockwise to increase airflow.

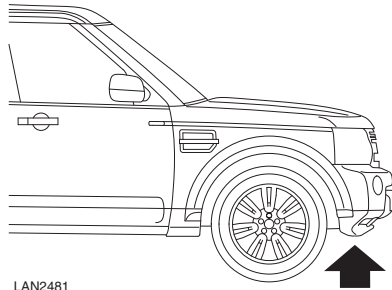
Note: The panel is only active when the rear environment button on the front control panel is set to manual mode.

AUXILIARY HEATER

WARNINGS

-  Petroleum gases are highly inflammable and, in confined spaces are also extremely explosive
-  Operating the auxiliary heater when the vehicle in an enclosed space can cause a build-up of highly toxic fumes which may cause unconsciousness or death.
-  If the fuel-burning heater has been used recently, do not touch the unit's exhaust when working in the engine compartment.
-  When refuelling the vehicle, switch off the ignition to ensure that the fuel-burning heater is switched off.

Your vehicle may be fitted with an auxiliary heater which is powered by fuel drawn from the vehicle's fuel tank. The heater operates at low temperatures and is fully automatic.



LAN2481

When the heater is operating, exhaust fumes from the heater may be seen coming from underside the vehicle. This is normal and is not a cause for concern.

Climate control

TIMED CLIMATE CONTROL

The timed climate system utilises the auxiliary heater to pre-heat the engine to aid starting and also to heat the cabin interior when the engine is off.

The timed climate system provides a way of obtaining a more comfortable temperature in the passenger compartment at a pre-set time. If the external temperature is between +15°C (59°F) and -20°C (-4°F), then the passenger compartment is heated using the engine's auxiliary heater. If the external temperature is below -20°C (-4°F), the heat is automatically directed to the engine to assist engine starting. Once the engine has been heated sufficiently heat will be directed to enable cabin heating providing battery state of charge is sufficient. If the temperature is greater than 15°C (59°F), then the cabin is ventilated by drawing in air from outside the vehicle to purge warm air and improve cabin comfort. The timed climate system operates without the engine running.

The timed climate system can be operated by either the touch screen or the remote handset.

Note: *The timed climate system will not operate if the low fuel warning indicator is illuminated or the vehicle battery has a low charge.*

Using the touch screen

The touch screen can be used to either program preset activation times or to operate the climate system manually.

Note: *When activated, the heating program will operate for 30 minutes before being automatically switched off to prevent the vehicle battery from discharging.*

The system can be programmed to activate once or twice in any 24 hour period. If the vehicle is driven every day, this cycle will be repeated daily until cancelled. If the vehicle is not driven for more than 24 hours then the operation of timed climate will be suspended.

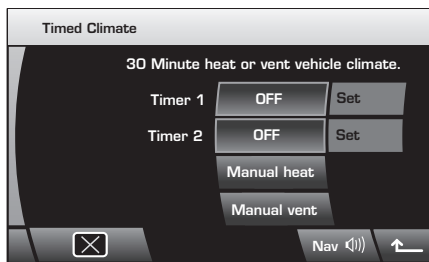
Note: *Operation of timed climate will resume next time the ignition is switched on.*

When the timed climate system is operating, the LED in the AUTO button will flash.

Note: *Timed climate is automatically switched off/inhibited when the engine is started.*

Setting a time for timed climate operation

To preset a time for timed climate operation, touch the **Timed Climate** icon on the touch screen Home Menu. Alternatively this menu can be accessed from the Vehicle Settings menu.



LAN2743

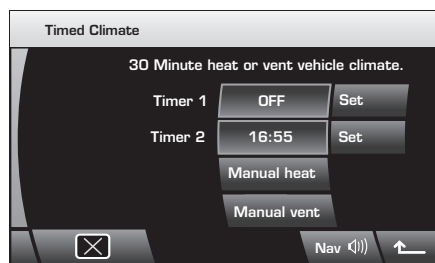
Touch the **Set** icon next to the timer you want to program for climate control operation.

Climate control



LAN2744

Touch the up or down arrows to select the time you want the timed climate operation to start and then touch **OK**.



LAN2742

The screen will now show the time the timer is set to activate the timed climate system. If required, set the time for the other timer using the same process.

Note: The format of the time shown on the Timed Climate screen is determined by the time settings currently selected in the System Settings menu. See **SYSTEM SETTINGS** (page 283).

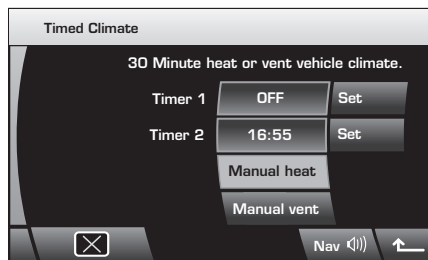
Canceling a time for timed climate operation

To cancel a time for timed climate operation, touch the **Set** icon next to the timer you want to cancel and then touch the **Cancel timer** icon.

The Timed Climate screen will update to show OFF next to the respective timer.

Manually activating timed climate operation

Timed climate can be manually selected at any time via touch screen.



LAN2741

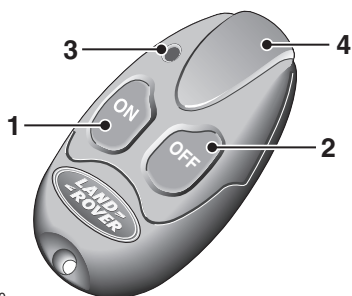
Touch the required icon for **Manual heat** or **Manual vent**. The system will operate for 30 minutes before being automatically switched off. To cancel the timed operation touch the icon again.

Climate control

Using the remote handset

The remote handset has an operating range of approximately 100 m (328 ft). For optimum performance it should be held vertically when being operated. There is no need to point the antenna at the vehicle, but you should avoid touching the antenna when operating the **ON** or **OFF** button.

Note: The distance at which the handset can operate the heater can be considerably more than 100 m (328 ft), provided that there are no obstacles (e.g. buildings) between the antenna and the vehicle.



LAN1390

1. **ON** button
2. **OFF** button
3. Operation indicator LED
4. Antenna

Press and hold the **ON** button for two seconds to turn on the automatic heating program. The LED will illuminate green for two seconds to confirm that an automatic heating program has started. The LED will then flash once every 2 seconds to indicate that the heater is active.

If the system fails to operate, the indicator LED will flash rapidly for two seconds.

To turn off the automatic heating program, press the **OFF** button (2). The LED will illuminate red for two seconds to indicate that the heater has been turned off.

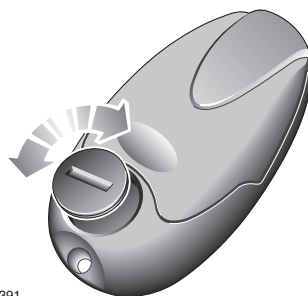
Note: The heating program will only operate for 30 minutes before being automatically switched off to prevent the vehicle battery from discharging.

Replacing the handset batteries

CAUTION

! If the handset is left unused for any long period (e.g. during summer months), the battery should be removed and stored separately.

When the battery needs renewing the LED will illuminate orange for two seconds when a button is operated.



LAN1391

Using a coin or similar implement to rotate the battery cover 90 degrees and remove cover. Remove the old battery and, ensuring that the correct polarity is maintained, insert a replacement 3.3 volt, CR1/3N battery. Replace the cover and rotate it to lock it closed.

Additional handsets

If required, up to three handsets can be programmed to operate the heater. Contact your Land Rover Dealer/Authorised Repairer to purchase additional handsets.

Climate control

ELECTRIC SUNROOF

WARNINGS



Extreme care must be taken to ensure that none of the occupants have any part of their body in a position where it could be trapped by the closing sunroof. Although an anti-trap mechanism is fitted, serious injuries can occur.

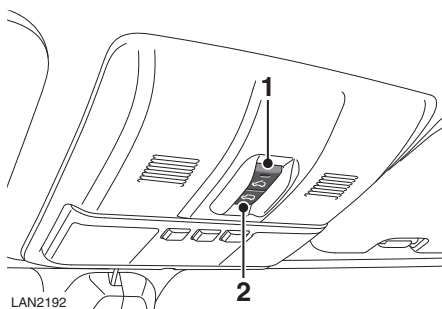


For their safety, when leaving children unattended in the vehicle always remove the Smart Key.

CAUTION



Wherever possible, remove any snow, ice, dirt and leaves etc. from the sunroof before closing. Failure to do so may damage the sunroof mechanism.



The sunroof can be operated whenever the ignition is switched on and for 30 seconds after the ignition is switched off, provided that a front door is not opened.

- To open the sunroof to the tilted position, briefly press switch **1**. The roof will move to its tilted position.
- To fully open the sunroof from the tilted position, briefly press switch **1** again.

- To close the sunroof to the tilted position, briefly press switch **2**.
- To close the sunroof fully, press and hold the switch **2**. Releasing the switch before the roof is fully closed will stop movement.

Note: While the sunroof is moving, a further press of the switch will stop the movement.

Note: If the ignition is not switched on, the switch has to be pressed and held to operate the sunroof.

Anti-trap mechanism

WARNING



The anti-trap mechanism does not operate when closing the roof from the tilted position. The sunroof can cause serious injury should a body part become trapped. Always ensure that the sunroof is free from obstructions before closing.

If the sunroof encounters resistance while closing, the operation is interrupted and the roof opens slightly, to prevent the sunroof trapping vulnerable parts of the body or other obstructions.

It is possible to override the anti-trap mechanism when movement is restricted by ice or dirt, by pressing and holding the front of the switch whilst the roof is closing.

Climate control

Sunroof calibration

If the battery is disconnected when the sunroof is open, the sunroof may need to be re-calibrated, as follows:

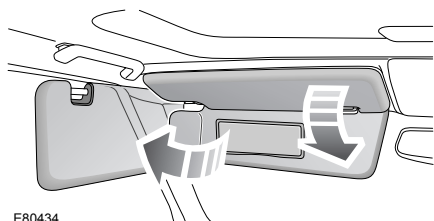
1. With the battery connected, switch the ignition on.
2. Press and hold the front of the switch for 20 seconds. The sunroof will start to move. Continue to hold the switch until the sunroof completes one full open and closing cycle. When the sunroof stops moving, release the switch.

The sunroof can then be operated as normal.

Note: Calibration will not function if the battery voltage is too low.

Convenience features

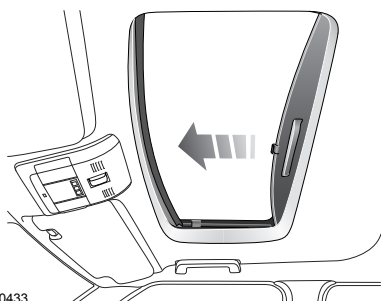
SUN VISORS



E80434

The sun visor can be pivoted downwards, or to the side as required to reduce glare.

SUN BLINDS

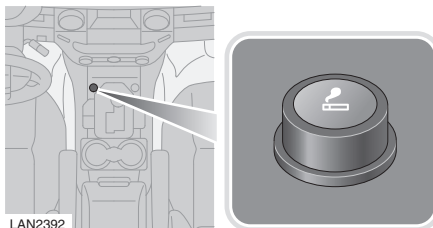


E80433

Pull the sunroof blind, across the sunroof aperture, until it locks in place.

To open, push vertically on the textured part of the blind handle. The blind will retract into the panel between the sunroofs.

CIGAR LIGHTER



LAN2392

With the starter switch turned on, press the lighter in to heat up. When it has reached the correct temperature it will partially eject.

- Only hold the cigar lighter by the handle.
- Do not plug accessories into the cigar lighter socket. Use the auxiliary power sockets provided.

ASHTRAY



LAN2394

Push the bottom edge of the ashtray cover to open.

To remove the ashtray, open fully, then pull the ashtray forwards.

Convenience features

AUXILIARY POWER SOCKETS

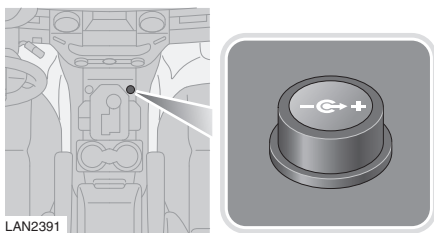
CAUTIONS

⚠ Only Land Rover approved accessories should be plugged into a power sockets. Using any other equipment may damage the vehicle's electrical systems. If you are in any doubt contact your Dealer.

⚠ The engine should be running when using accessories for long periods. Failure to do so can discharge the battery.

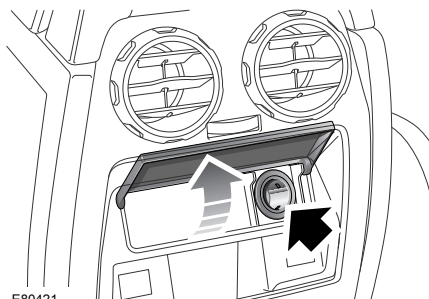
Note: Power sockets can be used to power approved accessories that use a maximum of 180 Watts.

Front auxiliary power sockets

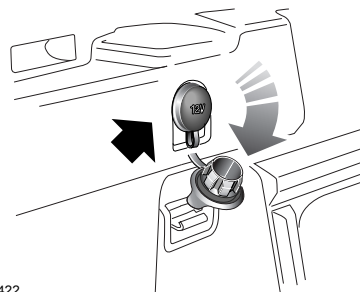


Note: Dependant upon vehicle specification, you may have a second power socket in place of the cigar lighter.

Rear auxiliary power sockets



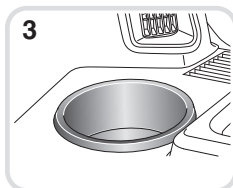
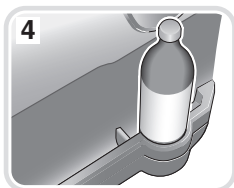
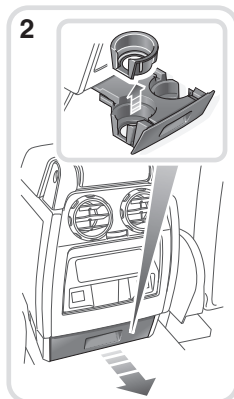
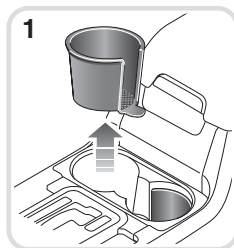
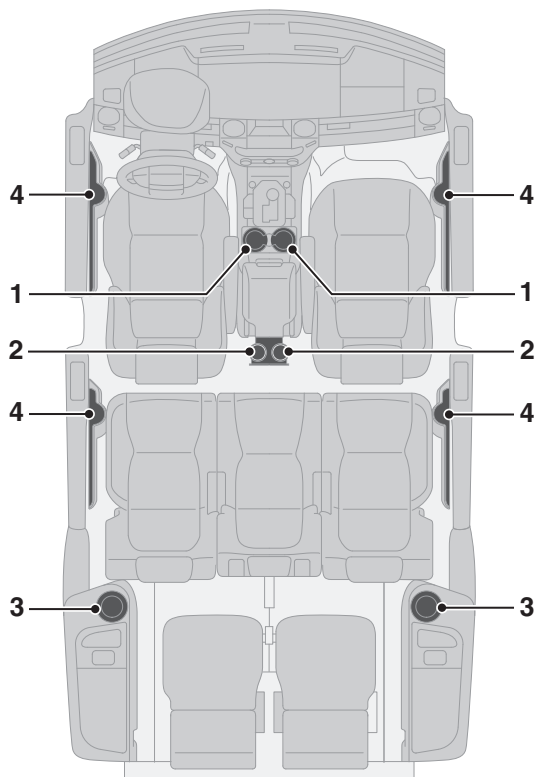
Raise cover to access the auxiliary power socket.



On 7-seat vehicles, a third power socket is fitted in the left-hand side trim in the loadspace area.

Convenience features

CUP HOLDERS



LAN2393

1. Front seat cup holders
2. Second-row seats cup holders
3. Rear compartment cup holders
4. Door bottle holders

Convenience features

WARNINGS



The cup and bottle holders should only be used for soft containers. Containers which are hard (cans, metal, ceramic, hard plastic etc.) can cause serious injury or death if the vehicle is involved in an accident, or subject to sudden braking or direction change.



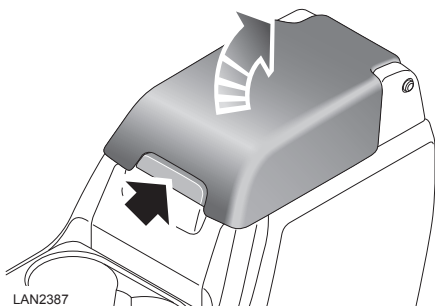
Do not drink or use the cup holders when driving. Doing so can affect concentration, which may result in loss of control.



Do not carry open drinks containers. Hot liquids can cause serious injury when spilled and may damage the vehicle.

Note: The inner cores of the cup holders can be removed for cleaning or to make a holder for a larger drinks container.

CENTRE CONSOLE



Lift the catch at the front of the lid to access the storage area.

CD storage

A rubber mat in the bottom of the centre console is designed to hold CD cases.

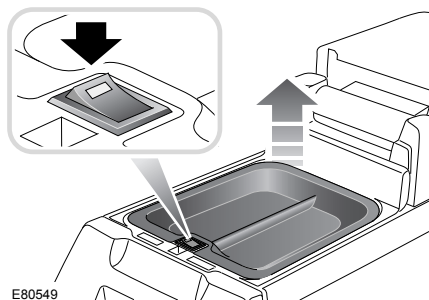
COOL BOX

CAUTION



The cool box should be switched off when it is not needed to preserve battery charge.

When fitted, the cool box replaces the centre console storage area.



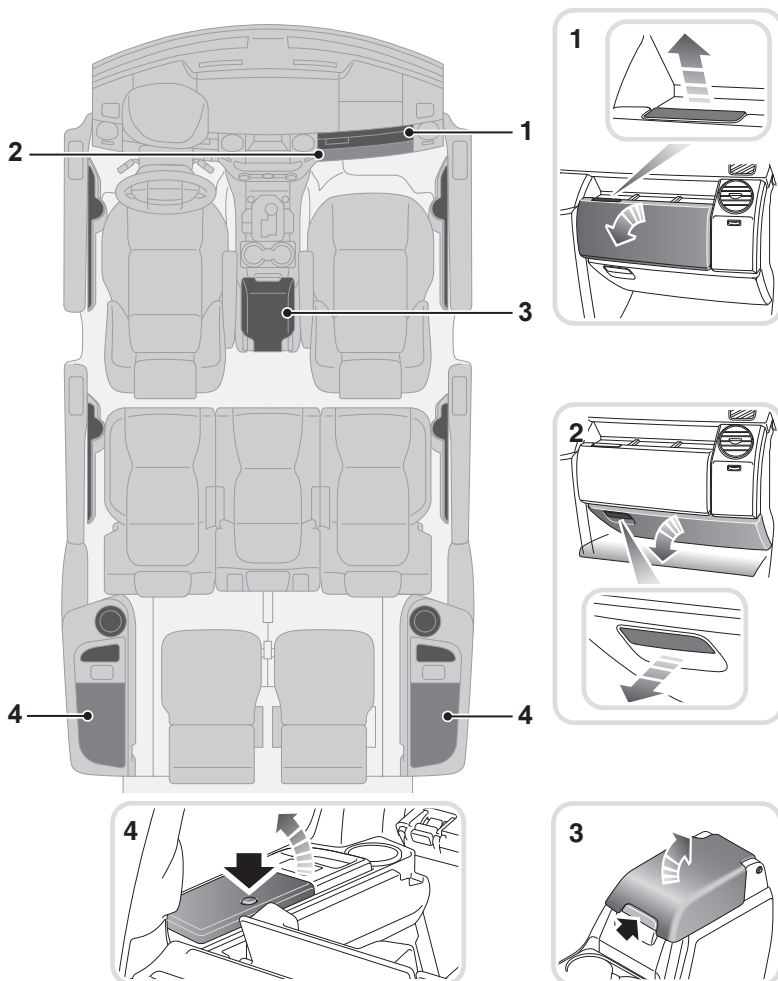
The cool box is switched on/off using the switch on the inside front lip of the cool box. There is a short delay between pressing the switch and illumination of the indicator.

Note: The cool box works only with the ignition turned on.

Cooling performance is maximised when the cooling tray is used.

Convenience features

STORAGE COMPARTMENTS



LAN2397

1. Glovebox
2. Lower glovebox
3. Centre console
4. Rear storage bins

WARNING



Ensure that any items stored in the vehicle are secure and cannot move. If the vehicle is involved in an accident, subject to sudden braking or direction change, loose items can cause serious injury.

Starting the engine

GENERAL INFORMATION

WARNING



Never start the engine or leave it running, when the vehicle is in an enclosed space. Exhaust gases are poisonous and can cause unconsciousness and death if inhaled.

CAUTION



Do not run the diesel engine above idle speed until the oil pressure warning light extinguishes. This will ensure that the engine and turbo-charger bearings are properly lubricated before being run at speed. Similarly, always allow the engine to idle for 10 seconds before switching off.

Steering column lock

CAUTION



During vehicle recovery, the Smart Key must remain inside the vehicle, so that the steering column remains unlocked.

Your vehicle is fitted with an electronic steering column lock. The column unlocks when it detects a Smart Key inside the vehicle.

The steering column automatically locks when the Smart Key is not detected inside the vehicle.

If the steering column remains locked, even with a valid Smart Key in the vehicle,

STEERING COLUMN LOCKED is displayed in the message centre. If this occurs:

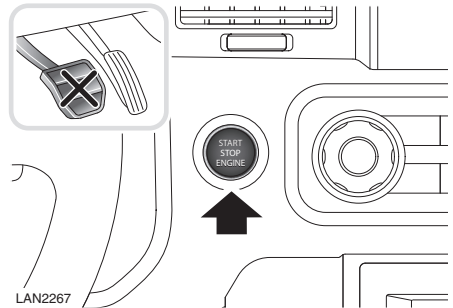
1. Press the starter button to return to the convenience mode.
2. Try again to unlock the steering column lock, by turning the steering wheel gently to the left and right.
3. If the malfunction still persists, seek qualified assistance as soon as possible.

START/STOP button

The START/STOP button is used to start or stop the engine, or to turn on the ignition without starting the engine.

Note: The START/STOP button will only be operational if a valid Smart key is detected within the vehicle.

SWITCHING ON THE IGNITION



To turn on the ignition without starting the engine, make sure the brake or clutch pedal is not applied and that there is a valid Smart Key in the vehicle, then press and release the START/STOP button. The warning indicators illuminate and most electrical systems will be operational.

Note: If the brake pedal is pressed when the START/STOP button is pressed, the engine will start.

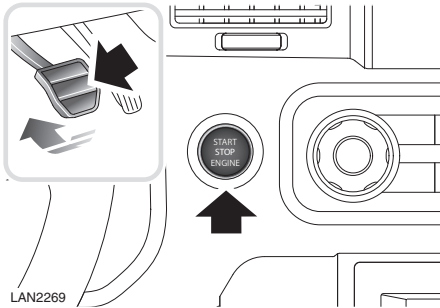
Starting the engine

KEYLESS STARTING

WARNING



Never start the engine or leave it running, when the vehicle is in an enclosed space. Exhaust gases are poisonous and can cause unconsciousness and death if inhaled.



Automatic transmission vehicles: With the Smart Key inside the vehicle, the transmission in **P** or **N** and the brake pedal depressed, press and release the START/STOP button to start the engine.

Manual transmission vehicles: With the Smart Key inside the vehicle and the brake or clutch pedal depressed, press and release the START/STOP button to start the engine.

On diesel models, dependent upon the engine coolant temperature, there may be a delay of up to 12 seconds between pressing the START/STOP button and the engine cranking. Keep the brake pedal applied and do not press the START/STOP button again, as this will switch off the ignition.

Once the engine has started the brake pedal can be released.

Note: In very cold conditions it is normal for the engine cranking time to increase.

Warming-up

In the interests of fuel economy and reduced engine wear, drive the vehicle straight away. Harsh acceleration or labouring the engine before normal operating temperature has been reached can damage the engine.

Note: Naturally aspirated petrol engines are limited to a maximum of 5 000 rpm until the engine oil temperature reaches 20°C (68°F).

IF THE ENGINE FAILS TO START

Note: If the engine fails to crank when the button is pressed, the fuel system inertia switch may have been tripped. See **DRIVING AFTER A COLLISION** (page 256).

Petrol engines

If the engine persistently fails to start, make sure the transmission is in **P** or **N** (neutral for manual transmission vehicles) and press the START/STOP button (without applying the brake pedal) to switch on the ignition. Slowly depress the accelerator pedal fully, then hold it in this position and press the START/STOP button with the brake pedal applied, the engine will start to crank. Release the accelerator pedal when the engine starts.

If the engine still fails to start, consult your Dealer/Authorised Repairer.

Diesel engines

If the engine persistently fails to start, make sure the transmission is in **P** or **N** (neutral for manual transmission vehicles) then press and hold the START/STOP button (with the brake pedal applied). Keep the START/STOP button and the brake pedal pressed until the engine starts, then release.

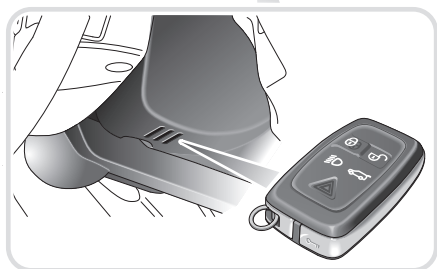
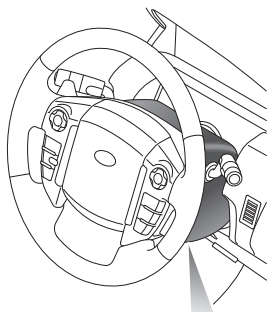
If the engine still fails to start, consult your Dealer/Authorised Repairer.

Starting the engine

KEYLESS START BACKUP

If the vehicle has been unlocked using the emergency key blade or the Smart Key is not detected by the vehicle, it will be necessary to use the keyless start backup to disarm the alarm and start the engine.

The keyless start backup can only be used when the message **Smart Key Not Found Place As Shown** is displayed in the message centre.



LAN2938

Position the Smart Key against the underside of the steering column cover with the buttons facing downwards.

Note: *There are markings on the cover to help locate the correct position.*

When the Smart Key is positioned in this area it will be recognised by the vehicle and the message **Smart Key Recognised** will be displayed in the message centre.

Holding the Smart Key in position and the brake or clutch pedal depressed, press and release the START/STOP button to start the engine.

Once the engine has been started you no longer need to hold the Smart Key against the steering column cover.

Note: *If the Smart Key is not recognised, or the engine still fails to start, consult your Dealer/ Authorised Repairer*

STOPPING THE ENGINE

WARNING



Never switch off the engine when the vehicle is in motion.

Before stopping the engine, ensure that the vehicle is parked safely with the park brake applied. On automatic transmission vehicles the gear selector will also need to be in Park **P**.

Press and release the engine START/STOP button to stop the engine. The audio, telephone and touch screen systems will revert to stand-by mode.

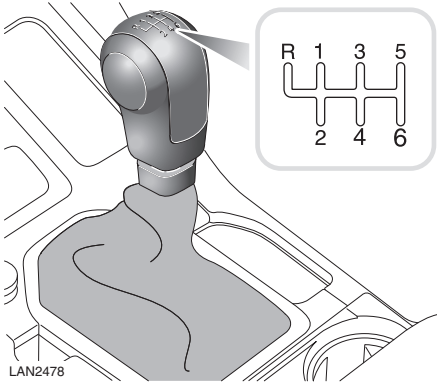
Pressing the START/STOP button again (without pressing the brake or clutch pedal) will activate the systems.

Transmission

MANUAL TRANSMISSION

CAUTION

- ⚠ Selection of reverse gear is prevented when the vehicle is travelling in excess of 24 km/h (15 mph). Never attempt to engage gear while the vehicle is in forward motion. This may result in serious transmission damage and costly repairs.



When the gearbox is in neutral, the gear lever is spring-loaded to lie naturally between **3** and **4** gear positions. Extra pressure will be needed to move across to engage reverse gear.

AUTOMATIC TRANSMISSION

WARNINGS

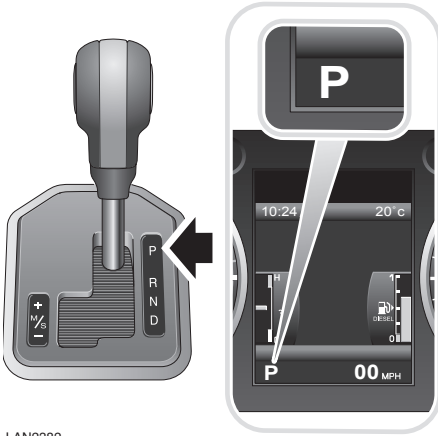
- ⚠ Do not leave children unattended in the vehicle, especially if the Smart Key is in the vehicle.
- ⚠ Park **P** should be engaged and the park brake applied when the vehicle is stationary. The vehicle can move unexpectedly with any other gear position selected, which may result in death or serious injuries to people or animals outside of the vehicle.
- ⚠ Always select **P** and switch the ignition off before leaving the vehicle.

Selector lever positions

CAUTIONS

- ⚠ Never select Park **P** position while the vehicle is in motion. Doing so may cause serious damage to the transmission.
- ⚠ Never select Reverse **R** position while the vehicle is in forward motion. Doing so may cause serious damage to the transmission.
- ⚠ Never select a forward gear while the vehicle is reversing. Doing so may cause serious damage to the transmission.
- ⚠ Do not rev the engine or allow it to run above normal idle speed while selecting **D** or **R**, or while the vehicle is stationary with any gear selected.
- ⚠ Do not allow the vehicle to remain stationary for any length of time with a gear selected and the engine running. Always select **P** or **N** if the engine is to idle for a prolonged period.

Transmission



LAN2382

An illuminated indicator on the selector panel and a number or letter in the instrument pack display identify the selected gear.

P - Park

This position locks the transmission and should be selected before switching the engine off. Ensure that the vehicle is stationary, with the electric parking brake applied, before selecting **P**.

The selector release button must be pressed before moving the selector lever into **P**.

With the ignition on, press the selector release button and the foot brake to move the selector lever out of **P**.

Note: The selector lever cannot be moved out of **P** unless the ignition is on.

R - Reverse

Before selecting **R** ensure that the vehicle is stationary, with the brakes applied. The selector release button must be pressed before moving the selector lever into Reverse.

N - Neutral

Select **N** when the vehicle is stationary and the engine is required to idle for a period. The electric parking brake must be applied.

If the vehicle remains stationary, the selector lever becomes locked in **N** and it is necessary to depress the brake pedal and press the selector release button in order to move the selector lever.

Press the selector release button and foot brake to move from **N** to **R** or **D**.

D - Drive

Before selecting drive ensure that the brakes are applied. Select **D** for all normal driving; automatic gear changing occurs on all forward gears, according to road speed and accelerator position.

Kick-down in automatic mode

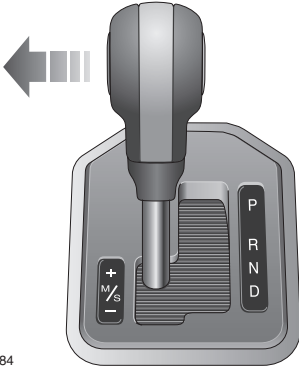
Press the accelerator pedal to the full extent of its travel, a click will be felt through the accelerator pedal. Up to a certain speed, this will cause an immediate downshift to the lowest appropriate gear, followed by rapid acceleration. Once the pedal is relaxed, normal gear change speeds will resume, dependent upon road speed and accelerator pedal position.

Note: Moderate accelerator pressure may also result in a downshift in the transmission, depending on vehicle speed.

Transmission

Sport mode

In Sport mode, full automatic progression through the gear ratios is retained and the transmission will stay in the lower gears for longer. This improves mid-range performance with downshifts occurring more readily.



LAN2384

To select Sport mode, move the gear lever from the **D** position towards the left hand side of the vehicle. **S** will appear in the gear selector display and the LED to the side of the selector lever illuminates.

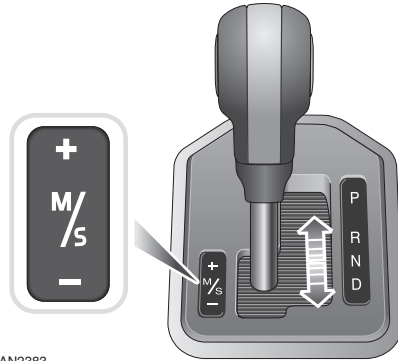
Sport mode can be deselected at any time, by returning the lever to the **D** position.

To return to Sport mode after CommandShift has been selected move the selector into the **D** position. Then move it back into Sport mode.

Note: On vehicles fitted with the terrain response system, Sport mode is only available when the Terrain Response General program is selected.

CommandShift™ GEAR SELECTION

CommandShift gear selection can be used as an alternative to fully automatic transmission and is particularly effective when rapid acceleration or engine braking are required.



LAN2383

1. With **D** selected, move the gear selector from the **D** position towards the left-hand side of the vehicle (this is exactly the same as selecting Sport mode).
2. The transmission will automatically select the ratio most appropriate to the vehicle's road speed and accelerator position.

Note: The transmission may downshift to achieve the correct ratio.

3. Move the selector forward (+) or backward (-) to manually select a higher or lower gear. **TRANSMISSION COMMANDSHIFT SELECTED** appears in the message centre.
4. Each forward (+) movement of the selector lever will change the transmission to a higher gear, while rearward (-) movement will change to a lower gear. The selected gear will be indicated in the instrument pack display.

Note: The transmission will automatically change to a higher gear if engine speed is increased beyond a certain level.

Transmission

5. To deselect CommandShift, move the selector lever back to the **D** position.

Note: In CommandShift, kick-down is still available for increased acceleration.

Note: If a Terrain Response special program is active, the automatic transmission will go straight into CommandShift when the lever is moved to the Sport/CommandShift position.

CommandShift in High range

If CommandShift is selected in high range, gear **1** must be selected to move off from stationary. Normal sequential gear changing can be utilised once the vehicle is moving.

CommandShift in Low range

If CommandShift is selected in low range, the vehicle can move off from stationary in gears **1**, **2** or **3**.

Kick-down in CommandShift

When in CommandShift, kick-down overrides the manual gear selection, to provide increased acceleration.

In high range, with CommandShift selected, kick-down will cause a downshift to the lowest gear possible for the current speed.

ELECTRONICALLY SELECTED AUTOMATIC MODES

In automatic mode or Sport mode (not available in CommandShift), the gear change points will adjust to suit a variety of driving conditions.

Hill ascent, trailer and high altitude

The lower gears are engaged for longer, to minimise gear changing during hill ascents or towing. This also helps reduce the impact of reduced engine torque at high altitudes.

Hill descent

When in manual CommandShift™ mode, with the optimum gear for engine braking selected, the selector lever can then be moved across to the **D** position. The transmission will retain the previously selected manual gear until the descent is completed, then the transmission will automatically change to **D**.

High coolant temperature mode

In high ambient temperatures or during extreme load conditions, the transmission will select a gear change pattern designed to aid cooling.

Note: On vehicles fitted with the Terrain Response system, automatic transmission change points/patterns will change depending on which mode has been selected.

Transmission

Messages

If the transmission develops a fault, one of the following messages could appear on the message centre and only limited gears may be available. Seek immediate assistance from your Land Rover Dealer/ Authorised Repairer

Message	Meaning	What to do?
TRANSMISSION FAULT	Advises driver that a fault with the transmission has been detected.	Reduce speed and seek qualified assistance as soon as possible.
TRANSMISSION FAULT AND OVERHEAT	Advises driver that a fault with the transmission has been detected and the temperature is too high.	Reduce speed and seek qualified assistance as soon as possible.
TRANSMISSION FAULT LIMITED GEARS AVAILABLE	Advises driver that a fault with the transmission has been detected and performance may be affected.	Reduce speed and seek qualified assistance as soon as possible.

Transmission

TRANSFER GEARBOX

CAUTION

⚠ Do not use auxiliary equipment, such as roller generators that are driven by only one or two wheels of the vehicle as they will cause failure of the transfer gearbox.



The transfer gearbox allows selection of high or low range gears.

HIGH range (Hi)

Hi should be used for all normal road driving and also for off-road driving across dry, level terrain.

LOW range (Lo)

Lo should only be used in situations where low speed manoeuvring is necessary.

Also use **Lo** for more extreme off-road conditions. Do not attempt to use the **Lo** for normal road driving.

Range changing

The recommended method of changing range is with the vehicle stationary. For experienced off-road drivers, messages displayed in the message centre will assist in carrying out a range change on-the-move.

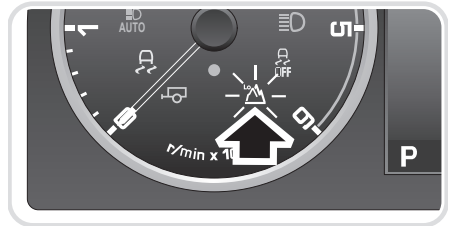
Range change indicators

In **Hi**, the **Hi** range indicator lamp at the switch is illuminated.



In **Lo**, the green warning indicator in the instrument pack and the **Lo** range indicator lamp at the switch are illuminated.

Hi to Lo change illustrated



While a range change is in progress, the range indicator lamps will flash as follows:

Hi to Lo change

- The **Lo** range lamp and indicator flash during the change and then illuminate constantly.
- The **Hi** range lamp extinguishes when the change is complete.
- The message **LOW RANGE SELECTED** is briefly displayed in the message centre.

Transmission

Lo to Hi change

- The **Hi** range lamp and the **Lo** range indicator both flash during the change.
- The **Hi** range lamp illuminates constantly when the change is complete.
- **Lo** range indicator extinguishes when the change is complete.
- The message **HIGH RANGE SELECTED** is briefly displayed in the message centre.

Stationary range changing

With the vehicle stationary, select **N**.

Move the transfer gear switch towards the range required and release. The switch returns to the default position and range change status will be confirmed after several seconds.

Range changing on the move

***Note:** If the vehicle speed is too high when a range change is requested, a warning chime sounds and **SPEED TOO HIGH FOR RANGE CHANGE** appears in the message centre.*

Automatic Transmission - High to Low

1. With the vehicle slowing down and travelling at between 40 km/h (24 mph) and 3 km/h (2 mph) select **N**.
2. If **N** is not selected before using the transfer gear switch, the message **SELECT NEUTRAL FOR RANGE CHANGE** is displayed and a warning chime sounds.
3. Press the rear of the transfer gear switch to the **Lo** position and release.
4. The switch returns to the default position and range change status will be confirmed after several seconds. A drive gear cannot be selected until the range change is complete.

Manual transmission - High to Low

1. With the vehicle slowing down and travelling at between 20 km/h (12 mph) and 3 km/h (2 mph) depress the clutch and select neutral.
2. If neutral is not selected before using the transfer gear switch, the message **SELECT NEUTRAL FOR RANGE CHANGE** is displayed and a warning chime sounds.
3. Press the rear of the transfer gear switch to the **Lo** position and release.
4. The switch returns to the default position and range change status will be confirmed after several seconds. If a gear is selected before the range change is complete, the change will cancel and may leave the transfer box in neutral. An audible warning will be given.
5. After a failed range change, it will be necessary to reselect neutral in the gearbox and repeat the range change procedure.

Changing from Low to High

With the vehicle travelling no faster than 60 km/h (38 mph), select **N** or neutral. Press the front of the transfer gear switch to the **Hi** position and release it.

Indication of the range change status is the same as for the stationary method.

Now select **D** or the most appropriate manual gear for the vehicle speed.

Transmission

Messages

The following messages could appear in the message centre. Market criteria mean that some messages will not apply to your vehicle and will therefore not appear.

Message	Meaning	What to do?
TRANSMISSION FAULT	Advises driver that a fault with the transmission has been detected.	Reduce speed and seek qualified assistance as soon as possible.
SPEED TOO HIGH FOR RANGE CHANGE	Driver has requested range change when vehicle speed is too high.	Reduce speed to 40 km/h (25mph).
SELECT NEUTRAL FOR RANGE CHANGE	Alerts driver that range change will not occur until neutral is selected on the transmission.	Select neutral.
REAR AXLE FAULT	Advises driver that a fault has occurred with the electronic rear differential.	Seek qualified assistance as soon as possible.
REAR AXLE OVERHEAT	The temperature of the rear differential has reached its overheat threshold.	Reduce speed and seek qualified assistance as soon as possible.

Brakes

PRINCIPLE OF OPERATION

Foot brake

WARNINGS



Do not rest your foot on the brake pedal while travelling as this may overheat the brakes, reduce their efficiency and cause excessive wear.



Never allow the vehicle to coast (freewheel) with the engine turned off. The engine must be running to

provide full braking assistance. The brakes will still function with the engine off, but far more pressure will be required to operate them.



If the red brake warning indicator illuminates while the vehicle is in motion, bring the vehicle to a halt as quickly as traffic conditions and safety allow and seek qualified assistance before continuing.



Never place non-approved floor matting or any other obstructions under the brake pedal. This restricts pedal travel and braking efficiency.

The hydraulic braking system operates through dual circuits. If one circuit should fail, the other will continue to function.

Warning indicators



There are two brake system warning indicators in the instrument back (one red and one amber) which will illuminate briefly when the ignition is switched on. These warning indicators monitor five separate brake functions.

- Electric parking brake (EPB)
- Brake fluid level
- Electronic Brake Distribution (EBD)
- Emergency Brake Assist (EBA)
- Brake pad wear

If the amber indicator illuminates after starting, or whilst driving, suspect a fault with the EBA system or worn brake pads. Drive with care and seek qualified assistance urgently.

If the red indicator illuminates while the vehicle is being driven, suspect low brake fluid level or a fault with the EBD system. Stop the vehicle as soon as safety permits and check and top up brake fluid if necessary. If the indicator remains illuminated, seek qualified assistance before continuing.

Servo assistance

The braking system is servo assisted when the engine is running. Without this assistance greater braking effort is necessary, resulting in longer stopping distances. Always observe the following precautions:

- Take care when being towed with the engine turned off.
- If the engine stops while the vehicle is in motion, bring the vehicle to a halt as quickly as traffic conditions allow, and do not pump the brake pedal. The braking system may lose any remaining assistance.

Brake pads

Brake pads require a period of bedding in. For the first 800 km (500 miles), you should avoid situations where heavy braking is required.

Remember, regular servicing is vital to ensure that the brake pads are examined for wear and changed periodically to ensure long term safety and optimum performance.

Wet conditions

Driving through water or even very heavy rain may adversely affect braking efficiency. Always dry the braking surfaces by intermittent light application of the brakes.

Brakes

Messages

The following messages could appear in the message centre.

Message	Meaning	What to do?
CHECK BRAKE FLUID	Brake fluid in reservoir below recommended level.	Seek qualified assistance immediately.
CHECK BRAKE PADS	Brake pads worn beyond the service limit.	Seek qualified assistance immediately.
PRESS FOOTBRAKE AND PARKBRAKE SWITCH TO RELEASE	A switch release has been detected without brake pedal contact.	Follow the instructions to achieve a manual release. See ELECTRIC PARKING BRAKE (EPB) (page 137).

Brakes

HINTS ON DRIVING WITH ABS

WARNINGS



Anti-lock Braking System (ABS) cannot overcome the physical limitations of braking distance. Nor can it overcome the lack of grip on a road surface, aquaplaning on water for example.



Braking distance is increased on slippery surfaces. This applies to all vehicles, even those with ABS.



The driver should not be tempted to take risks when driving, in the hope that ABS will correct errors of judgement. In all cases, it remains the driver's responsibility to drive with due care and attention, paying particular attention to the effects of speed, weather, road conditions etc.

ABS allows maximum brake pressure, and thus maximum braking efficiency, to be applied. This prevents the road wheels locking and enables the driver to retain steering control during heavy braking under most road conditions.

During emergency braking conditions, ABS constantly monitors the speed of each wheel and varies the brake pressure to each, according to the grip available. The constant alteration of brake pressure can be felt as a pulsing sensation through the brake pedal. This is not a cause for concern.

- Do not pump the brake pedal at any time; this will interrupt operation of the system and may increase the stopping distance.
- Never place additional floor matting or any other obstruction under the brake pedal. This restricts pedal travel and may impair brake efficiency.

ABS warning indicator



If the ABS warning indicator remains on or illuminates whilst driving, a fault with the ABS system is indicated. Drive with care, avoiding heavy brake application, and seek qualified assistance urgently.

ABS and off-road driving

Anti-lock braking will operate in off-road driving conditions, but on certain surfaces reliance on the system is unwise. ABS cannot compensate for driver error or inexperience on difficult off-road surfaces.

Soft surfaces

On soft, deep surfaces such as powdery snow, sand or gravel the braking distance will be increased. This is because the natural action of a locked wheel (which cannot happen with ABS operating) is to build a wedge of surface material in front of the wheels which reduces the stopping distance.

Steep slopes

If the vehicle is stopped on a steep, slippery slope, it may begin to slide even with the brakes applied. This is because without wheel rotation signal for the ABS. Briefly release the brakes to permit some wheel movement, then re-apply the brakes to allow ABS to gain control.

Brakes

Emergency Brake Assist (EBA)

If rapid full brake application is made, Emergency Brake Assist (EBA) automatically boosts the braking force to the maximum and helps to stop the vehicle. Also, if the driver brakes more slowly, but with sufficient brake pressure to activate Anti-lock Braking System (ABS) on both front wheels, the system automatically increases the braking force so that all four wheels are in ABS control, optimising the performance of the ABS system.

If the brake pedal is released, EBA will cease operation.

A fault with the EBA system is indicated by illumination of the amber brake warning indicator.

Electronic Brake Distribution (EBD)

Electronic Brake Distribution (EBD), balances braking forces between front and rear axles to maintain maximum braking efficiency.

For example, under light loads EBD applies less effort to the rear brakes to maintain vehicle stability; conversely allowing full braking effort to the rear wheels when the vehicle is towing or is heavily laden.

A fault with the EBD system is indicated by illumination of the red brake warning indicator.

Cornering Brake Control (CBC)

Cornering Brake Control (CBC) is an advanced form of ABS, which maintains vehicle stability and steering control during braking whilst cornering or changing lanes at speed.

ELECTRIC PARKING BRAKE (EPB)

WARNING



Do not rely on the Electric Parking Brake (EPB) to hold the vehicle stationary if the brake system warning indicator is illuminated or the EPB warning indicator is flashing. Seek qualified assistance urgently.

Note: *If the vehicle is used in severe off-road conditions such as wading, deep mud, etc., additional maintenance and adjustment of the parking brake will be required. Consult your Land Rover Dealer/Authorised Repairer.*

Applying the EPB manually

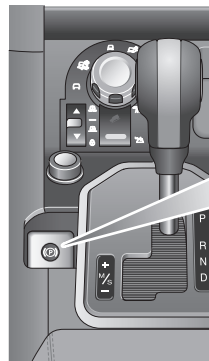
CAUTIONS



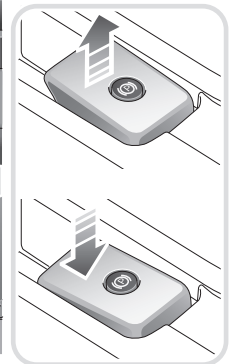
The electric parking brake operates on the rear wheels of the vehicle and hence secure parking of the vehicle is dependent on being on a hard and stable surface.



Do not rely on the electric parking brake to operate effectively if the wheels have been immersed in mud and water.



LAN2368



With the vehicle stationary, pull up the lever (arrowed) and release it.

Brakes



The red brake warning indicator in the instrument pack will illuminate. It is important to confirm that the red warning indicator is continuously illuminated (not flashing). This indicates that the EPB has been correctly applied.

If the lever is operated while the vehicle is travelling at less than 3 km/h (2 mph), the vehicle will be brought to a stop abruptly. The stop lamps will not illuminate.

Applying the EPB automatically

EPB will be applied automatically if the ignition is switched off and the vehicle speed is below 3 km/h (2 mph).

To prevent an automatic application, when the vehicle is stationary press and hold the EPB switch in the release position. Within 5 seconds switch off the ignition and hold the EPB switch for a further 2 seconds.

Dynamic operation

CAUTION



Driving the vehicle with the electric parking brake applied or repeated use of the parking brake to decelerate the vehicle may cause serious damage to the brake system.

In an emergency, with the vehicle travelling at more than 3 km/h (2 mph), pulling up on the lever and holding it gives a gradual reduction in speed. The brake warning indicator will illuminate accompanied by a harsh sound and **CAUTION PARKBRAKE APPLIED** appears in the message centre. The stop lamps will illuminate.

Releasing or depressing the lever will cancel the electric parking brake application.

Releasing the EPB manually

To disengage the EPB, the ignition must be on. Apply pressure to the foot brake while pressing down on the EPB lever.

Releasing the EPB automatically - manual transmission vehicles

If the vehicle is stationary with the EPB applied, pressing the accelerator and releasing the clutch will release the EPB and allow the vehicle to move off

Automatic release will operate in first, second and reverse in high range and first, second, third and reverse in low range.

To delay automatic release, hold the EPB lever in the applied position, and release at the desired point.

The parking brake system gradually reduces the system load to assist a smooth drive away. If the reduction in system load causes the vehicle to move after a valid gear is selected, full load will be automatically re-applied to the parking brake.

To override the load reducing feature of the EPB, manually apply the parking brake after selecting a gear.

In the event of a failure, the message **PARKBRAKE FAULT AUTO RELEASE UNAVAILABLE** will be displayed in the message centre.

Brakes

Releasing the EPB automatically - automatic transmission vehicles

If the vehicle is stationary with the EPB applied and the transmission in **D** or **R**, pressing the accelerator will release the EPB and allow the vehicle to move off.

Note: *Automatic release of the EPB is only possible when the driver's door is closed or the driver's seat belt is buckled.*

To delay automatic release, hold the EPB lever in the applied position, and release at the desired point.

The parking brake system gradually reduces the system load to assist a smooth drive away. If the reduction in system load causes the vehicle to move after a valid gear is selected, full load will be automatically re-applied to the parking brake.

To override the load reducing feature of the EPB, manually apply the parking brake after selecting a gear.

In the event of a failure, the message **PARKBRAKE AUTO RELEASE UNAVAILABLE** will be displayed in the message centre.

At the start of a journey, EPB release times may be extended when changing from **P** or **N**. This is to allow for increased gear engagement times.

EPB warning indicators

If the system detects a fault with the EPB, the amber brake warning indicator will illuminate accompanied by a message on the message centre.

If the system detects a fault while EPB is operating, the red brake warning indicator will flash and the message **PARKBRAKE FAULT** will appear in the message centre.

Note: *The red brake warning indicator will continue to be illuminated for at least ten seconds after the ignition has been turned off.*

Fault management

Under certain fault conditions it may be possible to apply the EPB. Switch off the ignition, pull up the EPB lever and hold in the up position for 10 seconds. The red brake warning indicator will come on continuously to indicate that the EPB has been applied.

Note: *Under some transmission fault conditions, the parking brake may not function or may not operate automatically.*

Brakes

Messages

The following messages could appear in the message centre.

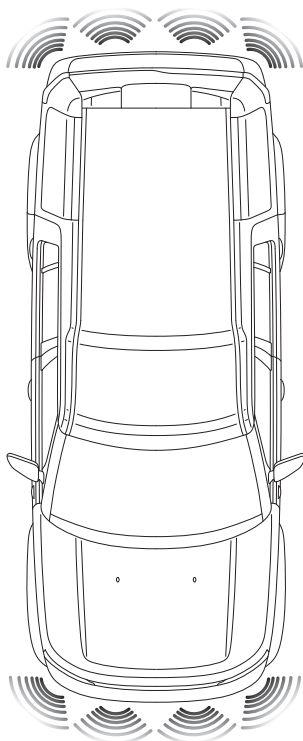
Message	Meaning	What to do?
PRESS FOOTBRAKE AND PARKBRAKE SWITCH TO RELEASE	A switch release has been detected without brake pedal contact.	Follow the instructions to achieve a manual release.
PARKBRAKE BEDDING CYCLE ACTIVE	A garage technician has requested a bedding cycle.	If not required, an ignition reset will cancel the function.
PARKBRAKE AUTO RELEASE UNAVAILABLE	Drive-away release function is not available.	Use manual release.
PARKBRAKE FAULT	Supports the red warning indicator - electric parking brake functions are not available.	Seek qualified assistance immediately.
PARKBRAKE OFF LIFT SWITCH TO APPLY	An emergency release operation is detected.	Once original faults have been corrected, apply the switch to reinstate electric park brake.
CAUTION PARKBRAKE APPLIED	Electric parking brake has been applied while the vehicle is moving.	Only use this function in an emergency.

Parking aid

PRINCIPLE OF OPERATION

CAUTIONS

- ! The front parking aid may emit tones if it detects a frequency tone using the same band as the sensors.
- ! When washing the vehicle do not aim high pressure water jets directly at the sensors. Do not use abrasive materials or hard/sharp objects to clean the sensors. Only use approved vehicle shampoo.



LAN2377

The parking aid alerts the driver to any obstructions that need to be avoided whilst manoeuvring. When the parking aid is active, an indicator lamp in the switch illuminates.

You are made aware of any obstruction, within range, by an intermittent tone. As the vehicle moves closer to the obstruction, the frequency of the intermittent tone increases.

The vehicle is fitted with four ultrasonic sensors on each of the bumpers. Some vehicles are fitted only with rear sensors.

The range of the front sensors, and the two sensors on the corner of the rear bumper is approximately 60 cm (2 feet). The sensors in the centre of the rear bumper have a range of approximately 1.5 metres (5 feet).

USING THE PARKING AID

WARNING



Parking aids may not detect moving objects such as children and animals, until they are dangerously close.

Always manoeuvre with caution and always use your mirrors.

CAUTION



Parking aids are for guidance only and are not intended to replace the driver's visual checks for obstructions when manoeuvring. The parking sensors may not detect some obstructions. Obstructions such as narrow posts, small objects close to the ground and some objects with dark, non-reflective surfaces for example.



Systems which use the same frequency band as the front parking sensors may cause irregular tones to be emitted.

The front and rear parking aids are activated whenever the ignition is on and Reverse gear is selected. If Neutral is selected from Reverse, both sets of sensors will remain active. An audible tone will sound after one second.

Parking aid

If an obstruction is detected by the sensors, an intermittent tone will sound. As the vehicle moves closer to the obstruction, the intermittent tone increases in frequency. When the distance between the sensor and the obstruction is less than approximately 30 cm (1 foot), the tone becomes continuous.

The parking aid is automatically switched off when the vehicle's forward speed exceeds 16 km/h (10 mph). If you select **P**, or activate the electric parking brake while the vehicle is stationary, the parking aid will switch off.

Front parking aid - manual operation



If you are driving into a limited space, you can manually activate the front parking aid by pressing the switch on the centre console (arrowed).

The switch indicator lamp will illuminate and a short confirmation tone will sound. Press the switch again to deactivate the parking aid.

Towing

The rear sensors are automatically switched off when a trailer is attached to the vehicle.

System fault

If a system fault is detected, a long high-pitched tone will sound and the switch indicator light will flash. If the sensors are obscured by dirt, ice or snow, clean them. If the problem persists, seek qualified assistance.

Camera systems

REAR VIEW CAMERA SYSTEM

WARNINGS

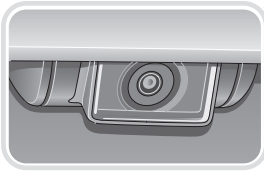


It remains the driver's responsibility to detect obstacles and estimate the vehicle's distance from them when reversing. Some overhanging objects or barriers, which could possibly cause damage to the vehicle, may not be detected by the camera.



Always be vigilant when reversing.

The camera is located beneath the rear door handle and when reverse gear is selected, automatically displays a wide angle, colour image on the touch screen.



LAN2751

The rear view camera system provides a rear view image to assist in reversing the vehicle. Overlaid on the image are reversing guidelines.



LAN2939

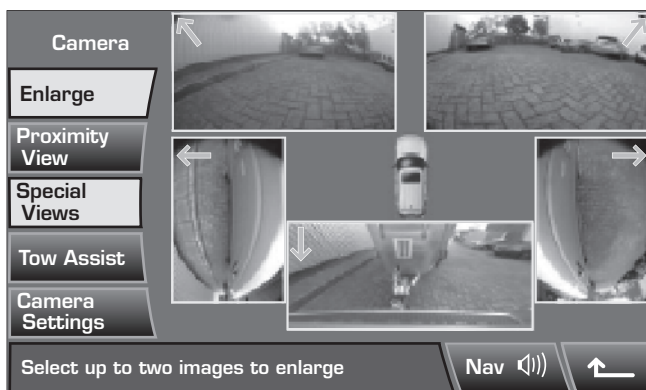
Note: A return icon is displayed in the bottom right hand corner of the touch screen. Touch this to revert to the previously viewed screen.

Rear View Camera display on the touch screen will discontinue when either of the following apply:

- Drive is selected for longer than 15 seconds.
- Drive is selected and vehicle speed is greater than 11 mph (18 km/h)

Camera systems

SURROUND CAMERA SYSTEM



LAN2035

WARNINGS



It remains the driver's responsibility to detect obstacles and estimate the vehicle's distance from them when reversing. Some overhanging objects or barriers, which could possibly cause damage to the vehicle, may not be detected by the camera.



Always be vigilant when reversing.

The camera home page is accessed by touching **Camera** on the **Home Menu** screen.

With the engine running and either Park or Neutral selected, the surround camera system provides views of the area surrounding the vehicle. It uses five discretely placed cameras, to assist in manoeuvring the vehicle.

Selecting views

Displayed on the **Camera** home page are real-time images from each of the five cameras fitted to the vehicle. Any two of the images can

be selected and enlarged to view side-by-side on the screen. Highlight the image then touch the **Enlarge** soft key.

When viewing two images, one of them can be selected to view as a full screen image. It can then be zoomed into and panned around using the magnifier and arrow icons.

Proximity view - automatic operation

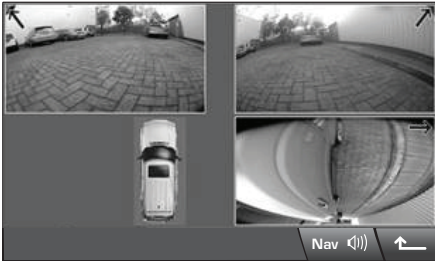
Japan only

When Drive or Reverse are selected, the relevant camera view will be selected for the direction of travel. Once the vehicle speed exceeds 18 km/h (11 mph) or the return icon is pressed, the camera screen will disappear.

Note: *The Proximity View will be disabled for the rest of that ignition cycle. To use the screen again, touch **Proximity View** on the **Camera** home page.*

Camera systems

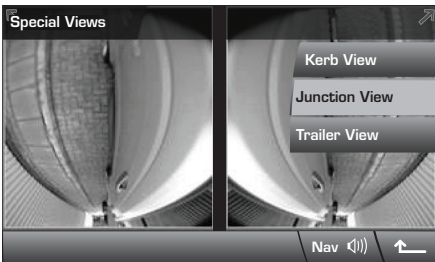
Proximity view - manual operation



LAN2931

Selecting **Proximity View** will display a combination of three images from the front and passenger side cameras. These views give the driver an enhanced view of the area forward and opposite the driver.

Special views



LAN2894

A selection of pre-set views can be displayed by selecting **Special Views**. They are provided to assist with difficult manoeuvres and are:

- Kerb view, shows views from the two front cameras.
- Junction view, shows views from the two side cameras.
- Trailer view, shows the rear camera view.

Reversing



LAN2447

When Reverse is selected, the touch screen automatically displays the view from the rear of the vehicle.

Overlaid on the rear view image are coloured dashed lines representing the perimeter of the vehicle, solid lines predicted the path of the vehicle (based on the position of the steering wheel) and the distance information from the Parking Aid system.

Note: A return icon is displayed in the bottom right hand corner to take the driver back to the previously viewed screen.

Camera settings - Japan only

Touch the **Camera Settings** soft key to access the camera options page. To deactivate the Semi-Auto Camera Functionality select Off. The Proximity View is now only accessible by manual activation using the **Proximity View** soft key.

Camera cleanliness

The camera system constantly monitors the cleanliness of the cameras and will alert the driver if the level of dirt on any camera exceeds a predetermined level by changing the colour of the camera position arrow from blue to red.

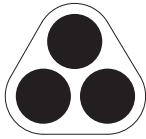
Camera systems

TOW ASSIST

Note: Tow Assist requires a connected trailer to be fitted with a tracking target sticker. The sticker **MUST** be attached according to specific instructions. Ask your Land Rover Dealer for details.

Note: This feature may not operate with all trailer designs.

Not to scale.



LAN2473

Tow Assist aids trailer reversing by displaying information on the touch screen. The information is calculated by the Tow Assist feature and is based on the relationship of angles between the vehicle and trailer and the current steering wheel position. The tracking target sticker must be attached to the trailer.

Trailer Assist becomes active when a trailer is attached to the vehicle and the trailer electrical plug is attached to the vehicle socket. The screen will display a choice for connection. Select YES to move to the setup screen. Select NO to return to the previous screen.

Note: If the connection is not detected, setup can be manually prompted by touching the **Tow Assist** icon on the **Camera** menu.

Trailer setup

On first use the setup screens take the user through a series of configuration options for the connected trailer.

Information such as trailer length, number of axles and camera preference is required to finalise setup.

Once completed, the details are stored for future use.

Operation

When a new or existing trailer configuration is selected, Tow Assist will automatically display on the touch screen when reverse gear is selected.

Coloured lines are displayed to indicate the predicted path of both trailer and vehicle. After a little practice to become familiar with the system, reversing the trailer in the required direction will result in the trailer following the predicted path.

Driving hints

GENERAL DRIVING POINTS

Extreme driving conditions

Vehicles which operate in extreme conditions, particularly on dusty, muddy, or wet terrain, and vehicles which undergo frequent, or deep wading conditions will require more frequent servicing. Contact a Land Rover Dealer/ Authorised Repairer for advice.

Breakdown safety

If a breakdown occurs:

- Wherever possible, consistent with road safety and traffic conditions, move the vehicle off the main highway.
- Switch on the hazard warning lamps.
- If possible, position a warning triangle or a flashing amber light at an appropriate distance behind the vehicle to warn other traffic of the breakdown, (note that this is a legal requirement in some countries).
- Your vehicle may be struck by another one. Consider evacuating passengers through the doors facing away from traffic, to a safe area away from the vehicle and highway.

GENERAL DRIVING POINTS

Vehicle stability

WARNING



Many vehicle roll-overs occur when a driver attempts to bring a vehicle back onto the road after some or all of the wheels drift onto the verge or shoulder of the road. If this happens, do not steer or steer sharply or abruptly to re-enter the roadway. Let the vehicle slow down as much as possible before attempting to re-enter the roadway and keep your wheels as straight as possible.

Measures that reduce the risk of injury and death from vehicle crashes and roll-over are:

- Limit your speed. Never exceed speed limits.
- Take bends at a reasonable speed. Avoid unnecessary braking on bends.
- Drive defensively. Be aware of road and weather conditions. Avoid risk-taking behaviour such as following too close, rapid lane-changing or abrupt manoeuvring.
- Assume that pedestrians and other drivers are going to make mistakes and be ready for them.
- Avoid distractions.
- Before changing lanes, check your mirrors and use the direction indicators.
- Never operate your vehicle when you have consumed alcohol, are sleepy or fatigued or have taken any medication that affects judgement, reflexes or alertness.

Driving hints

Wading

CAUTIONS

- ⚠ The maximum advisable wading depth is normally 600 mm (24 in). This can be increased to 700 mm (27 in) if the air suspension is set to off-road height. Wading at greater depths may cause damage.
- ⚠ If the vehicle remains stationary for any length of time in water above the level of the door sills, severe electrical damage will occur.
- ⚠ Do not switch off the engine during wading. If the engine stalls during wading re-start immediately. Should the engine stall have it checked by a qualified technician as soon as possible.
- ⚠ If water enters the engine air intake during wading, switch off immediately. The vehicle should be towed from the water and recovered to a Land Rover Dealer/ Authorised Repairer.
- ⚠ After wading in salt water, or driving on sandy beaches, wash the underbody components and exposed panels with fresh water.

Extreme driving conditions

Vehicles which operate in extreme conditions, particularly on dusty, muddy, or wet terrain, and vehicles which undergo frequent, or deep wading conditions will require more frequent servicing. Contact a Land Rover Dealer/ Authorised Repairer for advice.

Breakdown safety

If a breakdown occurs:

- Wherever possible, consistent with road safety and traffic conditions, move the vehicle off the main highway.
- Switch on the hazard warning lamps.
- If possible, position a warning triangle or a flashing amber light at an appropriate distance behind the vehicle to warn other traffic of the breakdown, (note that this is a legal requirement in some countries).
- Your vehicle may be struck by another one. Consider evacuating passengers through the doors facing away from traffic, to a safe area away from the vehicle and highway.

Driving hints

RUNNING-IN

The engine, gearbox, tyres and brakes need time to bed-in. During the first 800 km (500 miles) it is essential that the vehicle is driven with consideration for the running-in process. During this period adhere to the following advice:

- Limit the engine speed to a maximum of 3 000 rpm and the road speed to a maximum of 110 km/h (68 mph).
- Do not use full accelerator pedal travel and use the gears to avoid over-revving or labouring the engine.
- Do not use sport mode during the running-in period.
- Avoid rapid acceleration and heavy braking wherever possible.
- Ensure that servicing is carried out on time and follow any advice regarding use in arduous conditions.

Note: *The advice given for running-in will aid fuel economy and should be adopted as general driving practice even after the running-in period.*

ENGINE RELATED PROBLEMS

Restricted performance

If the message RESTRICTED PERFORMANCE with a warning icon appears in the message centre an engine management fault has been registered.

If the warning icon is RED, reduced engine performance will be experienced. Stop the vehicle as soon as safety permits and seek qualified assistance.

If the warning icon is AMBER, reduced engine performance may be experienced. Consult a Land Rover Dealer/Authorised Repairer at the earliest opportunity.

Engine systems fault

If the message ENGINE SYSTEMS FAULT appears in the message centre, a serious engine problem has been detected. Stop the vehicle as soon as safety permits and seek qualified assistance. Continuing to drive the vehicle may cause serious damage to the engine.

Check engine



This warning indicator illuminates when the ignition is on and extinguishes as soon as the engine is started. Illumination at any other time indicates an engine fault - if the indicator illuminates or flashes while driving, avoid high speeds and seek qualified assistance as soon as possible.

Driving hints

ECONOMICAL DRIVING

There are two main factors which influence fuel economy, the way the vehicle is driven, and maintenance.

Driving tips for economy

- Avoid unnecessary journeys, especially short start-stop trips.
- Accelerate gently and smoothly from a stand still.
- Use the gears to avoid labouring, or over-revving the engine.
- Allow time to brake gently and smoothly.
- Be aware of traffic and road conditions ahead, and take action in time to avoid hard braking and acceleration.
- When stationary apply the park brake and select neutral.
- Turn off the air conditioning when not needed.

Maintenance and fuel economy

Regular servicing by your Dealer/Authorised Repairer, along with regular checking by the driver is essential for vehicle longevity and fuel economy. The condition of the engine (oils, filters, spark plugs, settings etc.) tyre pressures and wheel alignment will all have a bearing on fuel economy. For this reason it is essential that the vehicle is checked regularly by the driver and serviced at the correct intervals by an approved Dealer/Authorised Repairer.

Note: *If you are in any doubt about the maintenance requirements, intervals or checks required, contact your Dealer/Authorised Repairer for advice.*

DIESEL PARTICULATE FILTER (DPF)

The Diesel Particulate Filter (DPF) forms part of the emissions reduction system fitted to your vehicle. The DPF will remove a high proportion of the harmful carbon microspheres (soot) before they leave the exhaust. It achieves this by filtering out the particles, which are then stored until they are burnt away and the filter is emptied.

Unlike a normal filter which requires periodic replacement, the DPF has been designed to regenerate, or clean itself to maintain operating efficiency. The regeneration process takes place automatically in most cases. However, some unfavourable driving conditions mean that the regeneration process must be initiated deliberately by the driver.

Warning messages

CAUTION



Failure to take appropriate action when a warning message appears may result in damage to the engine, DPF system, increased vehicle emissions, and costly repairs.

If regeneration cannot be achieved automatically by the system, due to short journeys for example, the driver will be notified by a warning message.


DPF FULL SEE HANDBOOK - If this message appears the driver should carry out the DPF regeneration procedure as soon as possible.

DPF FULL VISIT DEALER - If this message appears the vehicle should be taken to your Dealer/Authorised Repairer as soon as possible.

Driving hints

Regeneration procedure

CAUTION

 The regeneration procedure produces high temperatures in the DPF. Heat can be felt radiating from beneath the vehicle, which is normal and not a cause for concern. However, the vehicle should not be parked over combustible material, particularly during dry weather. The heat generated could be sufficient to start a fire when in close proximity to combustible material such as long dry grass, paper etc.

If **DPF FULL SEE HANDBOOK** appears in the message centre, carry out the following procedure.

Note: *At all times during this procedure you should observe all relevant speed limits, laws, and regulations.*

1. Drive the vehicle until the engine reaches normal operating temperature. The engine should not be left idling to achieve working temperature.
2. Drive the vehicle for a further twenty minutes, keeping the vehicle at a constant speed between 75 km/h (45 mph) and 120 km/h (75 mph).

Note: *Keeping a constant speed enables the DPF to regenerate more efficiently. It is therefore recommended that cruise control is used to achieve this, if possible.*

3. If regeneration is successful the warning message will disappear. If the message remains repeat the process.

Note: *When driving off-road during the regeneration process, greater accelerator pedal use may be required.*

Note: *If the warning message remains after following the regeneration process three times, contact your Dealer/Authorised Repairer for assistance.*

Cruise control

PRINCIPLE OF OPERATION

Cruise control enables you to maintain a constant road speed without using the accelerator pedal. This is particularly useful for motorway cruising or for any journey where a constant speed can be maintained for a lengthy periods.

CAUTION

⚠ Do not use cruise control in traffic conditions where a constant speed cannot easily be maintained or on winding or slippery road surfaces.

Note: Cruise control is not available when you are driving in low range gears or if a Terrain Response special program has been selected.

USING CRUISE CONTROL

WARNINGS

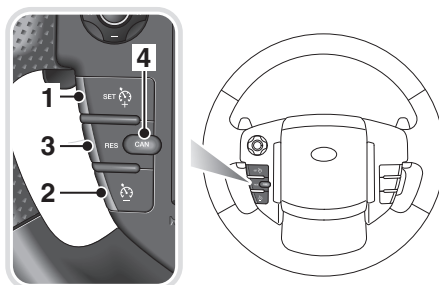
⚠ The driver must always ensure that a safe speed is maintained within the speed limit, taking account of traffic and road conditions.

CAUTIONS

⚠ When setting the cruise control to the speed limit it is important to remember that it is possible for the vehicle to increase speed when travelling downhill. This may result in the vehicle speed exceeding the speed limit.

⚠ Do not use cruise control in off-road conditions such as rough tracks or on sand.

⚠ Do not use Sports mode when cruise control is selected.



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1. Set or increase the speed
2. Decrease the speed
3. Resume set speed
4. Cancels without erasing the memorised speed

Accelerate until your desired cruising speed is reached. The speed must be above 30 km/h (18 mph). Press button **1** to maintain that speed. The set speed will be displayed in the message centre.



A warning lamp on the instrument pack illuminates when cruise control is operating.

If required, vehicle speed can be increased through normal use of the accelerator, the message **CRUISE OVERRIDE** will be displayed in the message centre. When the accelerator pedal is released, road speed will return to the previously set cruising speed.

Note: If the accelerator pedal is pressed for more than 5 minutes, cruise control will be cancelled.

Cruise control

Suspending cruise control

Cruise control can be suspended temporarily by a single press of button **4**. The warning lamp on the instrument pack turns off and **CRUISE CANCELLED** is displayed in the message centre

Cruise control is also suspended when the brake or clutch pedal is pressed, when the gear selector is moved into neutral, or if HDC or DSC becomes active. To resume cruise control at the previously set speed, press button **3**.

***Note:** The set cruise speed will not be erased by pressing button **4**. The set speed will only be erased when the ignition is switched off.*

Reducing cruising speed

Press and hold button **2**; the set speed displayed in the message centre will decrease and the vehicle will decelerate. Release the button when the desired speed is displayed, this will become the new cruising speed.

Tap button **2** to decrease the cruising speed step-by-step. Each tap will decrease the speed by 2 km/h (1 mph).

Increasing cruising speed

Increase the vehicle's speed by normal use of the accelerator. When the desired speed is reached, press button **1** to reset the cruise control.

Alternatively, press and hold button **1**; the set speed displayed in the message centre will increase and the vehicle will accelerate.

Release the button when the desired speed is displayed, this will become the new cruising speed.

Tap button **1** to increase the cruising speed step-by-step. Each tap will increase the speed by 2 km/h (1 mph).

Stability control

PRINCIPLE OF OPERATION

WARNING



Dynamic Stability Control (DSC) is unable to compensate for driver misjudgment. It remains the driver's responsibility to drive with due care and attention, in a manner which is safe for the vehicle, its occupants and the other road users.

Dynamic Stability Control (DSC) optimises vehicle stability, even in critical driving situations. The system controls dynamic stability when accelerating and when starting from a standstill. Additionally, it identifies unstable driving behaviour, such as understeer and oversteer and helps to keep the vehicle under control by manipulating the engine output and applying the brakes at individual wheels. Some noise may be generated when the brakes are applied.

USING STABILITY CONTROL

Dynamic Stability Control (DSC) is activated automatically each time the engine is started, and is automatically selected by some of the Terrain Response programs.

Note: *In the majority of driving situations, and particularly on-road, it is recommended that you do not switch DSC off.*

Warning indicator



The warning indicator in the instrument pack illuminates briefly when the ignition is switched on.

If the warning indicator flashes rapidly during driving, the system has activated and is regulating the engine output and brake forces.

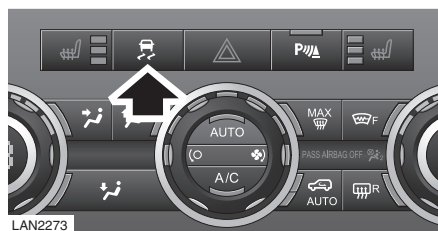
If a fault occurs the warning indicator will illuminate and remain on continuously. The vehicle can still be driven with care, but be

aware that the driving characteristics of the vehicle may have changed. Seek qualified assistance as soon as possible

Deactivating DSC

In some driving conditions, where forward traction should be maximised, it may be beneficial to deactivate DSC. Such conditions include:

- Rocking the vehicle out of a hole or deep rut.
- Starting on a loose surface, such as snow.
- Driving in deep sand or mud.
- Driving on tracks with deep longitudinal ruts.



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To deactivate DSC, press and briefly hold the DSC switch (arrowed) on the fascia (the DSC off warning indicator will illuminate continuously). Deactivating DSC also reduces the level of Electronic Traction Control intervention and may lead to an increase in wheel spin.

Reactivating DSC

To reactivate DSC, press and briefly hold the DSC switch on the instrument panel. DSC will automatically reactivate after an ignition cycle, if it was previously deactivated.

DSC is reactivated automatically when the program is changed on vehicles fitted with the Terrain Response system.

Stability control

ROLL STABILITY CONTROL (RSC)

WARNING



No electronic system can remove the need for safe driving practice. RSC can help to maintain control of the vehicle. It cannot regain control of the vehicle if it has been lost, or overcome driver errors. Always drive with due consideration for the prevailing road and weather conditions.

RSC works in conjunction with DSC to try and prevent vehicle roll-over. If the system senses that the vehicle is approaching roll-over it will reduce engine power and use the ABS system to reduce the chance of roll-over.

TRAILER STABILITY ASSIST (TSA)

CAUTIONS



Trailer Stability Assist (TSA) will not operate in the event of the trailer jack-knifing.



The ability of the system may be reduced when travelling on slippery surfaces

When the trailer electrical socket is in use trailer stability assist monitors the vehicle's motion when a speed of 60 km/h (37 mph) or above is reached. If vehicle behaviour associated with the trailer swaying is noted engine and braking management systems will operate to stabilise the vehicle and trailer.

Note: *Trailer stability assist will not operate when DSC is switched off.*

Note: *The system may still operate without a trailer connected, but the socket is in use. Using a cycle rack and light board for example.*

Traction control

PRINCIPLE OF OPERATION

In conditions where one or more wheels has a tendency to spin, Electronic Traction Control (ETC) works with the Dynamic Stability Control (DSC) system to improve mobility.

If a wheel is spinning, ETC automatically brakes that wheel until it regains grip. This braking activity causes the engine power to be transferred to the remaining wheels. Some noise may be generated when the brakes are applied.

Note: *Deactivating DSC will also change the level of ETC intervention. When a wheel starts to spin, ETC will still brake that wheel, however, the engine torque output will not be limited by the system. This may improve vehicle mobility in certain situations, but will also increase levels of ground damage and load upon brakes.*

Warning indicator



The warning indicator in the instrument pack illuminates briefly when the ignition is switched on.

The warning lamp flashes if ETC or DSC is activated and continues to flash until the vehicle regains traction and stability.

A fault with the ETC system is indicated by the DSC warning indicator illuminating continuously. Any such fault will deactivate both ETC and DSC, so drive with care and seek qualified assistance as soon as possible.

SAND LAUNCH CONTROL

Sand launch control is automatically enabled when the Sand special program is selected on the Terrain Response system.

When pulling away from stationary on sand and other dry, yielding ground, excessive wheel spin can cause the wheels to dig downwards preventing forward movement. Sand launch control limits the amount of wheel spin allowing a gradual controlled pull away even if full throttle is applied.

ROCK CRAWL PRECHARGE

Rock crawl precharge is automatically enabled when the Rock Crawl special program is selected on the Terrain Response system.

Rock crawl precharge applies a small amount of brake pressure to each brake calliper during low speed driving. This improves brake and traction control response times helping to reduce forward/backward vehicle roll when cresting an obstacle or releasing the accelerator pedal.

Hill descent control (HDC)

PRINCIPLE OF OPERATION

Hill Descent Control (HDC) operates in conjunction with the anti-lock braking system to provide greater control in off-road situations particularly when descending severe gradients.

During a hill descent, if engine braking is insufficient to control the vehicle speed, HDC automatically operates the brakes to slow the vehicle and maintain a speed relative to the selected gear range and the accelerator pedal position.

Note: Some of the Terrain Response program and range combinations will activate or deactivate HDC automatically.

Gradient release control (GRC)

With HDC activated, if the vehicle is stopped on a slope using the footbrake, GRC will become active (except in the Terrain Response Sand program). During a hill ascent when the footbrake is released GRC will automatically delay the brake release to allow the driver to take up drive, and build up engine torque. The brakes will then gradually release to allow the vehicle to move smoothly away. When descending a hill, a similar brake hold and gradual release is employed to provide a smooth transition in to HDC control.

GRC operates in forward and reverse, and requires no driver intervention.

USING HDC

HDC information indicator



The HDC information indicator will illuminate continuously when HDC operating conditions are met; e.g. vehicle speed is below 50 km/h (30 mph) - and HDC is activated.

If the information indicator is flashing, HDC has been selected, but the system's operating conditions have not been met (e.g. the vehicle is travelling too fast), or HDC fade-out is occurring.

If HDC is already selected and vehicle speed rises above 50 km/h (30 mph), HDC is suspended and the information indicator will flash. A message will also appear in the main message centre.

To select HDC



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Press and release the switch (arrowed) to select HDC, the HDC information indicator will illuminate. To deselect, press and release the switch again (indicator extinguishes).

If HDC is deselected when HDC is operating, the system fades out, allowing the vehicle to gradually increase speed.

In low range, HDC controls the vehicle speed more aggressively. Use low range when descending steep slopes.

When driving off-road, you can select HDC permanently to ensure that control is maintained. ABS and traction control are still operational.

Note: HDC is automatically deselected if the ignition is switched off for more than six hours.

Hill descent control (HDC)

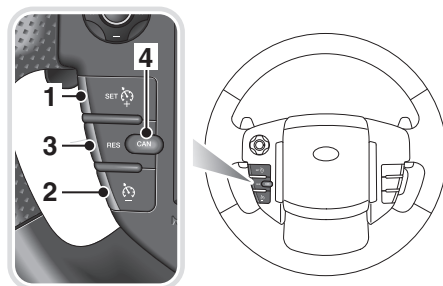
Hill Descent Control in action

HDC should be used in conjunction with an appropriate gear selection.

In vehicles with a manual transmission, HDC can be used in first and reverse gears in high range and all gears in low range. Once the vehicle is moving, the clutch pedal should be fully released.

In vehicles with an automatic transmission, HDC can be used in **D**, **R** and CommandShift **1** in high range and in **D**, **R** and all CommandShift gears in low range. When in **D**, HDC will automatically select the most appropriate gear to enable a controlled descent.

During a descent, HDC will maintain a target speed of up to a maximum of 20 km/h (12 mph) in low range, and 30 km/h (19 mph) in high range. If engine braking is insufficient to control the vehicle speed, HDC automatically operates the brakes to slow the vehicle and maintain a speed relative to the selected gear range and the accelerator pedal position.



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While HDC is operating, descent speeds can be varied using the steering-wheel-mounted cruise control switches.

To reduce the descent speed, press and hold switch **2**. Release the switch when the desired speed is reached.

To increase the descent speed, press and hold switch **1**. Release the switch when the desired speed is reached.

Alternatively, you can adjust the descent speed by tapping switch **1** or **2**. Each tap of the switch will adjust the descent speed by approximately 0.5 km/h (0.3 mph).

If you depress the brake pedal when HDC is active, HDC is overridden and the brakes will perform as normal (a pulsation might be felt through the brake pedal). If the brake pedal is then released, HDC will start operating at the reduced speed.

Note: Each gear has a pre-defined minimum descent speed.

*The descent speed will only increase if the gradient is sufficiently steep to cause the vehicle to accelerate as the braking effect is reduced. On a shallow slope, pressing switch **1** may result in no speed increase.*

HDC fade-out

HDC fade-out regulates the vehicle's speed, by gradually reducing brake pressure, until the rate of hill descent is controlled by engine braking alone. HDC will then enter stand-by mode. During fade-out, the HDC information indicator will flash.

Hill descent control (HDC)

Hill Descent Control (HDC) faults

WARNING



Do not attempt a steep decent if HDC is inoperative or warning messages are displayed. If a slope must be traversed, use a very low gear and/or the foot brake

Faults in the HDC system are displayed via the message centre.

In extreme circumstances, the HDC system may cause brake temperatures to exceed their pre-set limits. If this occurs, **HDC TEMPORARILY UNAVAILABLE** will be displayed in the message centre. HDC will then fade out and become temporarily inactive.

HDC will not be available until the brakes reach an acceptable temperature, at which time the warning message will disappear from the message centre and HDC will, if required, resume operating.

If a fault is detected in the HDC system, **HDC FAULT SYSTEM NOT AVAILABLE** will appear in the message centre. If the fault is detected while the system is active, HDC will fade out.

If a fault has been detected, consult your Land Rover Dealer/Authorised Repairer at the earliest opportunity.

Messages

The following table lists the messages relating to Hill Descent Control (HDC) that could appear in the message centre.

Message	Meaning	What to do?
HDC FAULT SYSTEM NOT AVAILABLE	Hill Descent Control system fault.	Drive with care and do not attempt to descend steep slopes. Seek qualified assistance immediately.
HDC NOT AVAILABLE SELECT GEAR	HDC not operative because of incorrect gear selection. For manual transmission vehicles HDC is fully functional in 1st and Reverse gears. For automatic transmission vehicles HDC will only operate in 1 , R and D in High range. It operates in all gears in Low range.	Select correct gear if HDC is required. In Low range, HDC operates in all gears.
HDC NOT AVAILABLE SPEED TOO HIGH	HDC unavailable, speed threshold exceeded. Maximum HDC operating speed is 50 km/h (30 mph), maximum speed for HDC selection is 80 km/h (50 mph).	Reduce vehicle speed.
HDC TEMPORARILY UNAVAILABLE	HDC switched off while brake system is cooling.	Wait until message disappears before descending steep slopes.

Terrain response

PRINCIPLE OF OPERATION

The Terrain Response™ system is permanently active, continuously providing benefits in traction and driveability. Further benefits are available for specific driving conditions by the selection of one of the special programs.

Based on the selected special program, the system optimises the vehicle set-up for the prevailing conditions, providing the optimum in traction, driveability and vehicle composure.

The Terrain Response special programs automatically bring in changes in vehicle drive and suspension systems that have until now been only individually and manually controllable by the driver.

The systems comprising Terrain Response are:

- Engine management.
- Gearbox management.
- Intelligent differential control.
- Dynamic Stability Control.
- Traction Control and Hill Descent Control (HDC) systems.
- Air suspension.

The system will provide a variable accelerator response, ranging from very cautious for slippery conditions (large pedal movement has a minimum effect on engine power), to very responsive (engine power is allowed to rise more quickly) when driving over sand.

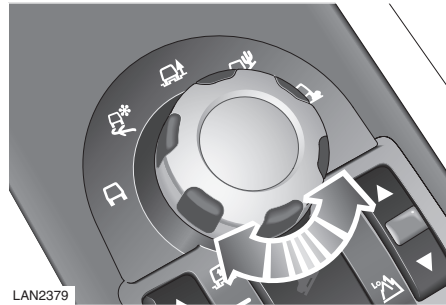
Note: *Changing from one special program to another will result in changes to the driving experience. For instance, the engine revs produced by the current throttle position might increase or decrease slightly in the new program, or the suspension could change height.*

To obtain the maximum benefit from the system, try experimenting with the different special programs in an environment that is safe and will not affect other road users.

USING TERRAIN RESPONSE

Terrain Response is designed to benefit the driver, regardless of their level of off-road driving experience. The enhanced traction system, with the control of many systems through one simple driver interface, coupled with specific advice from the message centre, will aid drivers with limited off-road experience.

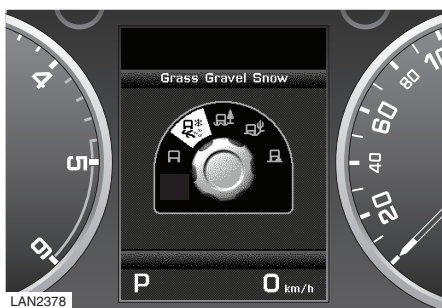
Additionally, the system can enhance the skills of experienced drivers, who will benefit from the greater performance available through the selection of one of the special programs.



With the ignition switched on, one of the indicators around the control will illuminate amber to indicate the currently selected active program. The special program indicator will also be displayed on the message centre.

Rotate the control to select the required special program.

Terrain response



The temperature and fuel gauges will be temporarily replaced on the message centre with a representation of the Terrain Response control. The current active program is shown as a white icon on a black background.

As you rotate the control, the icons are highlighted to show the currently selected special program. If a special program is highlighted for more than two seconds, the system will implement the program change and the message **Program selected** will be displayed.

The following special programs are available:

- Grass-gravel-snow (also includes ice)
- Mud-ruts
- Sand
- Rock Crawl

If there is no further interaction with the Terrain Response control within two seconds, the message centre will revert back to displaying the temperature and fuel gauges.

If the ignition is switched off when a special program is selected, the program will remain in the system memory for six hours and resume when the ignition is switched back on (with the exception of Grass-Gravel-Snow program which remains selected indefinitely).

The message centre will confirm that the previously selected special program is still selected.

Note: *It is possible to have the Terrain Response system configured so that if the Grass-Gravel-Snow program is selected, and the ignition is switched off, the system will default back to the General program after six hours period as per the other special programs. Consult your Dealer/Authorised Repairer.*

General program (Special programs off)



The General setting is suitable for surfaces that match typical road surfaces, including dry cobbles, tarmac or wooden planks.

All systems, except Hill Descent Control (HDC), will adopt settings based on the conditions. HDC will remain active if it was manually selected. The suspension will also change from raised to normal ride height when the vehicle starts moving.

Grass-Gravel-Snow



Choose this special program for icy surfaces and surfaces which are firm but have a coating of loose material, for example, grass, snow, gravel, pebbles or sand.

HDC will engage automatically in low range, but can be manually de-selected. See **USING HDC** (page 157).

Using the vehicle with snow chains fitted may affect operation of Terrain Response. See **USING SNOW CHAINS** (page 242).

Note: *If the vehicle cannot obtain forward traction in deep, soft snow try switching off Dynamic Stability Control (DSC). DSC must be switched on as soon as the difficulty has been overcome. See **USING STABILITY CONTROL** (page 154).*

Terrain response

Mud-Ruts



Choose this special program for muddy, or deeply rutted, ground that is soft and uneven. Unevenness of the ground could be caused by roots, brushwood or small logs.

Low range is recommended for this program. If low range is not selected, the message centre will prompt you.

If the Mud-Ruts program and low range are selected together, the vehicle ride height will be raised automatically.

HDC is automatically engaged in both high and low range whenever the Mud-Ruts program is selected, but can be manually de-selected. See **USING HDC** (page 157).

Sand



Choose this special program for sand and other dry, yielding ground. Also use for deep gravel.

The characteristics of the traction control system are modified to provide greater mobility in this program. See **SAND LAUNCH CONTROL** (page 156).

Note: *Where the sand is damp or wet, the Mud-Ruts special program may be more appropriate.*

Note: *If the sand is extremely soft and dry causing the wheels to sink and hindering forward traction, try switching off Dynamic Stability Control (DSC). DSC must be switched on as soon as conditions permit. See **USING STABILITY CONTROL** (page 154).*

Rock Crawl



Choose this special program on rocky terrain and other solid ground, which demands high levels of wheel displacement and careful vehicle control. This program can be used for crossing river beds strewn with submerged rocks.

HDC is automatically engaged when the Rock Crawl program is selected.

You can only select Rock Crawl in low range. If you try to select it in high range, you are prompted to select low range. This program will optimise the vehicle suspension and traction system to provide good low-speed control.

The characteristics of the traction control system are modified in this program. See **ROCK CRAWL PRECHARGE** (page 156).

On screen surface advice

Information relating to the type of surface that each special program is suited to can be found on the touch screen via the **4 x 4 Info** soft key. From the **4 x 4 Info** screen, select the Terrain Response icon then the information icon. The displayed text is relevant to the currently selected Terrain Response program.

To view other descriptions, select another program.

Wading

When driving through water less than 600 mm (24 inches) deep, select the Terrain Response program suitable for the surface beneath the water.

Increased suspension height

When a special program requires increased suspension height, the system will automatically raise the suspension, unless there is a trailer attached plugged into the trailer socket.

Terrain response

Driver override options

The following two systems controlled by Terrain Response can also be operated by the driver.

- Air Suspension
- Hill Descent Control


In some special programs, the Terrain Response system will switch on HDC and, in low range, the system will automatically raise the suspension to off-road height.

You can cancel both the HDC and ride height selections at any time. If HDC or a specific ride height has not been selected by the system, you can select them at any time. HDC and ride height selections will be confirmed through the message centre and by the individual system information indicators, irrespective of whether the system or driver selected them. Use of special programs may prompt warnings and other information to be displayed on the message centre.

Note: Use the CommandShift function on the gearbox to lock the vehicle in a particular gear when in a special program.

Inappropriate program selection

CAUTION

 Selecting an inappropriate special program will impair the vehicle's response to the conditions and reduce the life of the suspension and drive systems.

If you try to select an inappropriate special program, such as choosing Rock Crawl while in high range, the relevant indicator lamp will flash amber. The message centre will provide further information. If the appropriate action is not taken within 60 seconds, the warnings will cease and the message centre will show the active program

If the system becomes totally inoperable, all of the special program indicators will be switched off and the message centre will display a relevant message.

Terrain response

Messages

The following table lists the messages relating to Terrain Response that could appear in the message centre.

Message	Meaning	What to do?
CAUTION! RISK OF GROUNDING WITH SUSPENSION AT NORMAL HEIGHT	Terrain Response system selected off-road height but you have manually lowered the vehicle (or the system cannot raise the vehicle).	Raise suspension manually to off-road height if possible and appropriate.
PROGRAM CHANGE IN PROGRESS	Temporarily impossible to select a new program. Due to ABS or DSC activity or the overheating of the electronic differentials.	If conditions change within 60 seconds, the chosen program is selected. If differentials are overheated, wait for further information. When differentials have cooled, try to reselect the special program.
RECOMMEND LOW RANGE IS SELECTED FOR MUD-RUTS PROGRAM	Low range is recommended for Mud-Ruts special program.	Select low range.
RECOMMEND RAISING SUSPENSION TO OFF ROAD HEIGHT IN DEEP MUD-RUTS	Mud-Ruts program is being used in high range. Suspension raised automatically in low range.	Raise suspension manually to off-road height or select low range.
RECOMMEND STARTING IN 2ND/3RD GEAR FOR SLIPPERY CONDITIONS	In slippery conditions start off in a higher gear than usual.	Select second/third gear.
SELECT LOW RANGE TO ACTIVATE ROCK CRAWL	Vehicle is not in low range, so Rock Crawl cannot be used.	Select low range.
TERRAIN RESPONSE SPECIAL PROGRAMS NOT AVAILABLE	There is a fault on the Terrain Response system or one of the associated systems.	Full Terrain Response programs are not available, so drive with care. Seek qualified assistance immediately.
TRAILER CONNECTED OFF ROAD HEIGHT NOT SELECTED AUTOMATICALLY	Vehicle has not achieved off-road height as trailer is attached.	If a trailer is connected, do nothing. If something else is attached (e.g. bike rack), raise vehicle to off-road height manually. If nothing is connected, check trailer socket for faults.

Air suspension

PRINCIPLE OF OPERATION

WARNING



Ensure that the vehicle is clear of people and obstacles before lowering the suspension. The difference between Off-road height and Access height is 105 mm (4.1 in).

The air suspension system maintains the correct vehicle height by controlling the quantity of air in the vehicle's air springs.

Unless otherwise stated, height changes may only be made while the engine is running and the driver and passenger doors are closed.

When the air suspension system lifts the vehicle, it uses compressed air stored in its reservoir. The suspension will rise more slowly if this reservoir is depleted, usually due to repeated raising and lowering of the suspension.

Normal height

The normal height of the vehicle when being driven on the road at speeds between 10 km/h (6 mph) and 160 km/h (100 mph).

Off-road height



This is 55 mm (2.2 in.) higher than the Normal height. It provides improved ground clearance and approach, departure and break-over angles. See **TECHNICAL SPECIFICATIONS** (page 263).

Off-road height can be selected at any speed up to 40 km/h (24 mph). When the system is at off-road height, the system will automatically select Normal height if the vehicle speed exceeds 50 km/h (30 mph).

Note: *If Terrain Response is in use, some of its programs/range combinations will adjust suspension height automatically.*

Note: *If the trailer socket is in use, automatic height changes are inhibited. Height changes can still be selected manually.*

Extended mode

If the vehicle becomes grounded and the traction control is activated, the system automatically uses Extended mode to provide additional height. Extended mode cannot be selected manually.

Access height



Access height is 50 mm (2.0 in.) lower than Normal height. It provides easier entry, exit and loading of the vehicle.

The suspension rises from Access height automatically when the vehicle speed exceeds 10 km/h (6 mph).

If you selected Access height directly from off-road height, the system will return to off-road height when the vehicle speed exceeds 10 km/h (6 mph). Otherwise, the system will lift the suspension to normal height.

Air suspension

High speed height

If the vehicle exceeds 160 km/h (100 mph) for longer than five seconds, the suspension ride height lowers by 20 mm (0.75 in). This action is automatic and cannot be over-ridden manually. Ride height will return to normal when vehicle speed remains below 130 km/h (80 mph) for at least 30 seconds.

Crawl mode

Crawl mode locks the vehicle at Access height and enables it to be driven at low speeds. This gives increased roof clearance, for example, in multi-storey car parks.

Crawl mode can only be selected when the vehicle speed is below 10 km/h (6 mph). When the vehicle is in this mode, Normal height will be selected automatically if the vehicle speed exceeds 40 km/h (24 mph).

Suspension warning indicator



The suspension warning lamp in the instrument pack illuminates both red and amber briefly as a bulb check when the starter is turned to position II.

If the lamp illuminates amber, a suspension fault has been detected, but the vehicle can still be driven normally.

If the lamp flashes red, a serious suspension fault has been detected and the vehicle should be driven carefully until qualified assistance can be obtained.

The warning lamp illumination is accompanied by a warning chime.

ADJUSTING THE SUSPENSION



1. Raise/lower switch
2. Raising indicator
3. Off-road indicator
4. On-road indicator
5. Access indicator
6. Lock indicator
7. Lowering indicator

Suspension height indicators

Indicator lamps **2** or **7** illuminate to show the direction of movement. They will extinguish when the height change is complete.

If a height change is requested but disallowed, such as attempting to raise the height of the vehicle with the engine not running, indicator lamps **2** and **7** will flash twice and a chime sounds. A message is displayed on the message centre.

A flashing indicator lamp **2** or **7** indicates that the system is in a waiting state or that it will override the driver's choice if the speed criteria are exceeded.

Air suspension

Access height

If access height is selected while vehicle speed is above 20 km/h (12 mph), indicator lamps **5** and **7** flash while the system waits for the vehicle to slow. The access height request is cancelled if the vehicle does not slow sufficiently within one minute.

When the vehicle slows down to 20 km/h (12 mph), indicator lamp **4** will extinguish as the system goes to the part-lowered height. Indicator **5** will be lit and indicator lamp **7** will continue to flash.

The vehicle must slow down to 8 km/h (5 mph), within one minute to prevent access cancellation. Indicator lamps **5** and **7** will be lit. When access height is reached, indicator lamp **7** will extinguish.

Access height may be selected up to 40 seconds after the ignition is turned off, if the driver's door has not been opened within this time.

Crawl mode (locked at Access height)



When the suspension is at on-road or access height and the vehicle speed is below 35 km/h (22 mph), press the raise/lower switch **1** in the down direction for one second. Indicator lamps **5** and **6** will illuminate to confirm the selection, and a chime will sound.

Locked at access height can be cancelled by pressing the raise/lower switch in the up direction for one second. Indicator **6** will extinguish.

Note: When locked at access height is cancelled, the suspension will rise to on-road height if the vehicle speed is greater than 10 km/h (6 mph).

Access height from off-road height

When the suspension is at off-road height, press switch **1** down, then press it again before indicator **7** goes out.

The system will return the suspension to off-road height automatically if the vehicle is driven above 10 km/h (6 mph).

Air suspension

Automatic height change warnings



When the suspension is at off-road height, access or locked at access (crawl) height, the suspension height will change automatically when vehicle speed exceeds predetermined levels.

When the suspension is at off-road height or locked at access height, it warns the driver that the vehicle is approaching a speed threshold. A chime will sound, a message will be displayed on the message centre and the on-road indicator **4** and either **3** or **7** will flash.

The off-road height speed warning is shown above. If the vehicle slows down, the warning will disappear.

Door open override

If a door is opened during a height change while the vehicle is at rest, the height change will be restricted.



The indicator lamp for the target height **3**, **4** or **5** will remain lit and the lifting indicator lamp **2** or the lowering indicator lamp **7** will flash.

The height change will resume if all of the doors are closed within 90 seconds.

If the doors are not closed within this time, the raising indicator **2** or the lowering indicator **7** will extinguish and the indicators showing the heights above and below the current position will be illuminated.

Selecting a new height using the raise/lower switch **1**, or driving off will reset the system.

Extended mode

If the vehicle is grounded and traction control is activated, Extended mode is activated automatically to raise the vehicle clear.

Air suspension



LAN2232

When extended mode is activated, indicator lamp **3** flashes. A message is displayed on the message centre. Indicators **3** and **4** will flash if the suspension is between Off-road and On-road heights.

To exit extended mode, either press the raise/lower switch **1** briefly up or down or drive the vehicle at a speed greater than 5 km/h (3 mph) for 30 seconds.

Note: *Extended mode cannot be selected manually.*

Additional lift while in extended mode

When extended mode is invoked and the automatic lifting of the vehicle has been completed, the driver can select an additional lift in order to clear the obstacle. This can be particularly useful when extended mode has been invoked on soft surfaces.

To request additional lifting, wait for the raising indicator **2** to extinguish then press and hold the switch **1** for three seconds while pressing the brake pedal. A chime will sound to confirm that the request has been accepted. Indicator **2** will be illuminated while the vehicle is being lifted.

To exit extended mode briefly press either the raise or lower switch. Alternatively, the vehicle will automatically lower if driven at a speed greater than 5 km/h (3 mph) for 30 seconds.

Suspension freeze

If the system is attempting to change the suspension height and it detects that the suspension is prevented from moving by an obstruction, all movements are frozen.

The indicators operate in the same way as described in extended mode and the same message will be displayed on the message centre. As in extended mode, to exit this freeze state, either press the switch **1** up or down, or drive the vehicle at a speed greater than 20 km/h (12 mph).

Air suspension

Air suspension messages

When a message centre is fitted to the vehicle, messages relating to the air suspension system may be displayed.

Message	Meaning	What to do?
CAUTION! RISK OF GROUNDING WITH SUSPENSION AT NORMAL HEIGHT	When the Terrain Response system would normally have provided off-road height, but you have manually lowered the vehicle (or the system cannot raise the vehicle).	Raise suspension manually to off-road height if possible and appropriate.
RECOMMEND RAISING SUSPENSION TO OFF ROAD HEIGHT IN DEEP MUD-RUTS	In deep ruts you should raise the vehicle to off-road height. In low range, this is automatic. If mud/ruts program is used in high range, it must be done manually	Raise suspension manually to off-road height.
RESET SUSPENSION HEIGHT IF CLEAR OF OBSTACLE	Suspension still in extended mode.	If the vehicle is clear, select the required suspension mode.
SLOW DOWN OR VEHICLE WILL LOWER/RAISE	Vehicle will automatically lower/raise if vehicle speed increases.	Choose to slow down or accept height change.
SUSPENSION CLOSE DOOR TO CHANGE HEIGHT	Air suspension height change is prevented because a door is open.	Close all doors.
SUSPENSION FAULT	A fault has been detected in the air suspension system. System operates normally.	Seek qualified assistance immediately.
SUSPENSION FAULT MAX SPEED 50 km/h (MAX SPEED 30 mph)	A major fault has been detected in the air suspension system and control lost.	Drive slowly until fault can be rectified.
SUSPENSION FAULT NORMAL HEIGHT ONLY	A fault has been detected in the air suspension system. Only normal height is available.	Seek qualified assistance immediately.
SUSPENSION FAULT STOP SAFELY STOP ENGINE	Major component failure.	Stop vehicle immediately and seek qualified assistance.
SUSPENSION SPEED TOO HIGH TO CHANGE HEIGHT	A height change has been requested but speed is too high to allow.	Reduce vehicle speed.

Air suspension

Message	Meaning	What to do?
SUSPENSION START ENGINE TO RAISE VEHICLE	Vehicle height can only be raised with the engine running.	Start the engine.
SUSPENSION WILL RAISE WHEN SYSTEM COOLED	Air suspension compressor is cooling and lifting will resume at the correct temperature.	Wait for suspension to carry out lifting sequence.

Air suspension

REMOTE OPERATION

WARNINGS



The Smart Key can be operated from either inside or outside the vehicle. It is therefore important that it is kept out of the reach of children at all times.



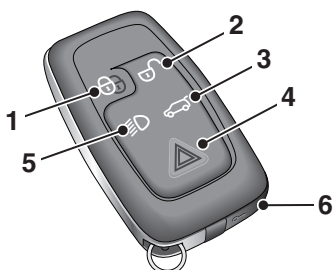
When operating the Smart Key from inside vehicle, make sure that an adult checks for obstructions under the vehicle and supervises the lowering process.



Care should be taken with all suspension height changes when a trailer is attached to the vehicle.

The buttons on the vehicle's Smart Key can be used to operate the air suspension, allowing remote adjustment of the suspension height to assist in loading the vehicle or attaching a trailer.

To change the suspension height using the Smart Key, the vehicle must be stationary, the hazard warning lamps switched on and all doors must be closed.



LAN1913

To raise the suspension, press and hold button **1** and button **2**.

To lower the suspension, press and hold button **1** and button **3**.

If any button is released during the raising or lowering, all movement will stop, until the buttons are pressed again.

Initially the height will change slowly, but will increase after three seconds.

While the height is changing, the indicator on the raise/lower switch will be lit, according to the direction of movement. See **ADJUSTING THE SUSPENSION** (page 166).

If the starting height for the suspension is above or below the Normal height, all movement will stop when Normal height is reached. Release the buttons and then press them again, to continue.

The suspension will automatically return to Normal height when the vehicle is driven and the road speed exceeds 10 km/h (6 mph)

Fuel and refuelling

SAFETY PRECAUTIONS

WARNINGS



Petroleum gases are highly flammable, have a low flash point and are explosive, especially in confined spaces. Avoid exposing the gases to any potential source of ignition as the resulting fire and explosion may cause serious injuries and/or death.



Only use containers specifically designed for carrying fuel and always remove them from the vehicle to fill them. Failure to do so may result in spillage and cause a fire.



Switch off the engine when refuelling, as it is both a source of extreme temperatures and electrical sparks. The resulting fire and explosion may cause serious injury and death.



If your vehicle is equipped with a fuel burning heater, ensure it is switched off when refuelling. The resulting fire and explosion may cause serious injury and death.



Switch off any personal electronic devices such as mobile phones, or music players. They have the potential to cause electrical sparks. The resulting fire and explosion may cause serious injury and death.



Do not smoke, use a naked flame, or cause sparks. The resulting fire and explosion may cause serious injury and death.



Do not overfill the fuel tank. Overfilling may cause spillage when the vehicle is driven. Spillage may also occur if the fuel expands in high ambient temperatures.

FUEL SPECIFICATION

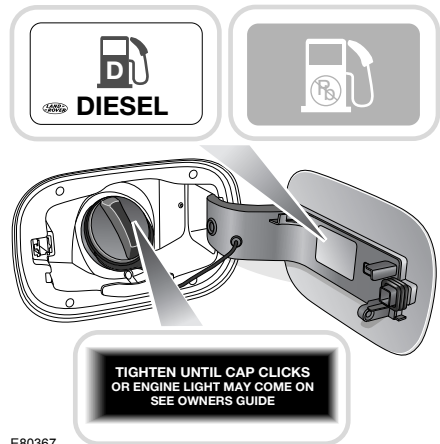
CAUTIONS



Only use high quality fuel as using a lower quality can cause damage to the engine, fuel and emission control systems.



Fuel system cleaning agents should not be used, unless approved by Land Rover. Unapproved products may be harmful to fuel system components on your vehicle.




E80367

The correct fuel specification for your vehicle is shown on the inside of the fuel filler flap.

Fuel and refuelling

FUEL FOR PETROL ENGINES

CAUTION

 Do not use leaded fuels, lead substitutes, or fuel additives. Doing so can cause damage to the engine, fuel, catalytic converter and emission control systems.

Unleaded fuel must be used for the emission control system to operate properly. Use of unleaded fuel will also reduce spark plug fouling, exhaust system corrosion and engine oil deterioration.

Octane rating

It is recommended that you use unleaded fuel conforming to specification EN 228 and having an octane rating of 95 RON (Research Octane Number) or higher. However, you may also use unleaded fuel with a lower RON, but performance will be reduced. The minimum octane rating for fuel to be used is 90 RON.

During manufacture, engines are tuned to suit the fuel supplies commonly available in the country for which the vehicle is destined. However, if a vehicle is later exported to a different country, or is used to travel between different territories, you should be aware that the octane rating (RON) and type of petroleum available may not be compatible with the engine specification. If in doubt seek advice from the territory concerned.

Using unleaded fuel with a lower octane rating than recommended, can cause persistent, heavy engine knock (a metallic rapping noise). If severe, this can lead to engine damage.


If a heavy knock is detected, even when using fuel to the recommended octane rating, or if you hear knock while holding a steady speed on level roads, consult your Dealer/Authorised Repairer to have the problem corrected. Failure to do so is misuse of the vehicle, for which Land Rover is not responsible.


Note: Occasional, light, engine knock experienced while accelerating or climbing hills is acceptable.

ALTERNATIVE FUELS FOR PETROL ENGINES

Ethanol fuels

CAUTIONS

 This vehicle is not suitable for use with fuels containing more than 10% Ethanol.

 Do not use E85 fuels (85% Ethanol content). Equipment necessary for the use of fuels containing more than 10% Ethanol is not fitted to this vehicle. If E85 fuels are used, serious engine and fuel system damage will occur.

Fuels containing up to 10% Ethanol (grain alcohol) may be used. Ensure the fuel has octane ratings no lower than those recommended for unleaded fuel. Most drivers will not notice any operating difference with fuel containing Ethanol. If a difference is detected, the use of conventional unleaded fuel should be resumed.

Methanol

Some fuels contain Methanol (Methyl or wood alcohol). If you use fuels containing Methanol the fuels must also contain co-solvents and corrosion inhibitors for Methanol. Also, do not use fuels that contain more than 3% Methanol even if they contain co-solvents and corrosion inhibitors. Fuel system damage or vehicle performance problems resulting from the use of such fuels is not the responsibility of Land Rover, and may not be covered under the warranty.

Fuel and refuelling

Methyl Tertiary Butyl Ether (MTBE)



Unleaded fuel containing an oxygenate known as MTBE can be used provided the ratio of MTBE to conventional fuel does not exceed 15%. MTBE is an Ether based compound, derived from Petroleum, which has been specified by several refiners as the substance to enhance the Octane rating of fuel.

Reformulated gasoline

Several petroleum companies have announced the availability of reformulated fuels. These fuels are specially designed to further reduce vehicle emissions. Land Rover fully supports all efforts to protect and maintain ambient air quality and encourages the use of reformulated gasoline where available.

FUEL FOR DIESEL ENGINES

CAUTIONS

-  The maximum allowable Bio-diesel mix is 5%, meeting EN 590 specification.
-  If the fuel tank is accidentally filled with petrol, do not attempt to start the engine. Seek qualified assistance immediately.


The quality of diesel fuel is variable depending on geographical location. Always use premium or the highest quality fuel available in your locality. High quality fuel ensures a longer life for your engine components. Lower grade fuel contains higher levels of Sulphur which is detrimental to engine components, If low quality fuel is used, light coloured smoke may be evident at the exhaust.

Only use Diesel or Automotive Gas Oil (AGO) to EN 590 specification.

***Note:** Land Rover vehicles are capable of running with up to a 5% blend of bio-diesel in accordance with European Standard EN590.*

Sulphur content

CAUTION

-  When a Diesel Particulate Filter (DPF) is fitted the maximum Sulphur content must not exceed 0.005%. Using an incorrect fuel will cause serious damage to the DPF. See **DIESEL PARTICULATE FILTER (DPF)** (page 150).

In some countries diesel will contain higher levels of Sulphur, and will require reduced service intervals to offset the effects on engine components. If in doubt contact a local Land Rover Dealer/Authorised Repairer for advice.


Vehicles without DPF


The Sulphur content of diesel used in Land Rover vehicles without DPF should not exceed 0.3%.

Fuel and refuelling


FUEL FILLER


WARNINGS

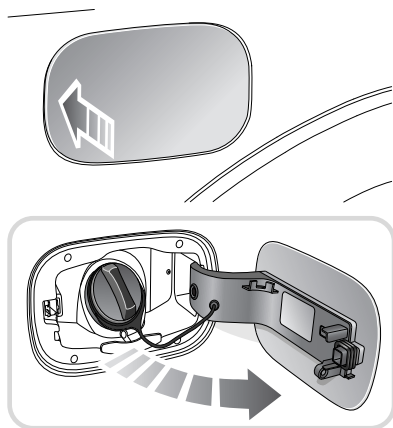
 Take careful note of all warnings and instructions given on the label affixed to the inside of the filler flap. Failure to do so may result in injury or death.

 Open the fuel filler cap slowly and allow the pressure to release before fully removing the cap to avoid fuel spillage due to rapid expansion.

CAUTION

 Do not force the fuel filler flap open, it may fail to close properly and you will need to seek qualified assistance.

 The fuel filler is located behind the rear right-hand wheel arch. An arrow on the fuel gauge points to that side of the vehicle.

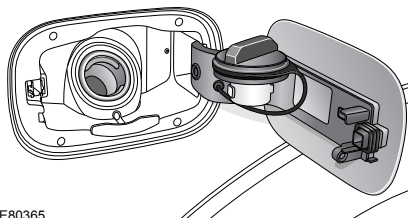


E80364

With the vehicle unlocked, press the left side of the fuel filler flap to open.

The fuel filler flap springs open revealing the filler cap.

Note: The vehicle must be unlocked using the Smart Key before you can open the fuel filler flap.



E80365

The filler cap is secured to the vehicle by a strap. For your convenience a holder is provided on the flap to store the cap whilst refuelling.

Note: When replacing the fuel filler cap, tighten it until it clicks three times. Failure to do so may cause the engine warning indicator to illuminate due to increased evaporative emission levels.

Fuel and refuelling

REFUELLING

WARNING



Do not attempt to fill the tank to its maximum capacity. If the vehicle is to be parked on a slope, in direct sunlight, or high ambient temperature, expansion of the fuel could cause spillage.

CAUTIONS



Do not leave the Smart Key in the vehicle while refuelling. Always lock the vehicle if it is to be left unattended.



Check the fuel pump information carefully to ensure that you are putting the correct fuel into the vehicle. Filling the vehicle with the incorrect fuel can cause serious engine and fuel system damage.



If the fuel tank is accidentally filled with the wrong type of fuel, do not start the engine. It is essential that you seek qualified assistance. Running the engine can cause serious engine and fuel system damage.

Filling station pumps are equipped with automatic cut-off sensing to avoid fuel spillage. Fill the tank slowly until the filler nozzle automatically cuts-off the supply. Do not attempt to fill the tank beyond this point.

Petrol engine vehicles

The fuel filler neck will accept only a narrow filler nozzle of the type found on pumps that deliver unleaded fuel.

Diesel engine vehicles

The diesel pumps on garage forecourts fill at a maximum of 55 litres (12 gallons) per minute. If the fuel cuts off as soon as the trigger on the pump is operated, check that the correct fuel has been selected. Immediate cut-off may have been caused by the misfuel protector.

DIESEL MISFUEL PROTECTOR

WARNING



When the misfuel protection device is activated, it could cause petrol to be discharged from the filler neck.

Diesel engine vehicles in some markets are equipped with a misfuelling protection device, incorporated into the fuel filler neck.

The protection device is designed to alert you that the wrong fuel type has been selected. If the narrow filler nozzle fitted to pumps delivering unleaded petrol is correctly inserted (i.e. fully inserted) into the filler neck, the misfuel protector will activate.

The misfuel protection device continually interrupts the fuel flow from the pump, until the mechanism in the filler neck is reset.

When activated, the yellow misfuel protector will be visible in the filler neck. The protection device will need to be reset before the tank can be correctly filled with diesel fuel. This is achieved using the reset tool, located in the luggage compartment.

Note: *It is the driver's responsibility to fill the vehicle with the correct fuel. The diesel misfuel protection device only reduces the risk of filling the vehicle with the incorrect fuel.*

CAUTIONS

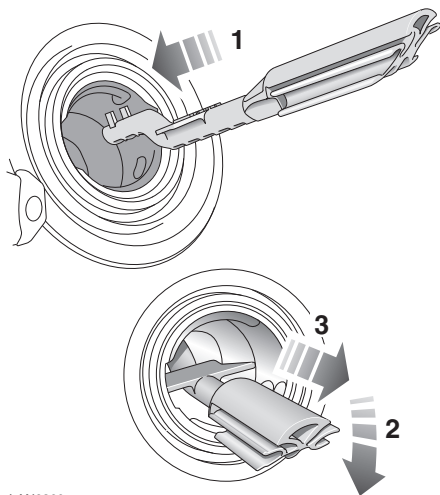


Using the incorrect fuel can result in major damage to your vehicle's engine and fuel system.

Note: *When refuelling the vehicle using a disposable fuel canister, use a canister designed for diesel fuel where possible. The spout on petrol canisters may activate the misfuel protection device. The protection device may also be activated by fuel pumps with a smaller nozzle than those fitted to standard diesel pumps.*

Fuel and refuelling

Resetting the misfuel protection device



LAN2360

Reset the misfuel protection device as follows:


1. Insert the reset tool (with the teeth uppermost) into the filler neck opening, as far as it will go. The triangular section on the reset tool stops on the misfuel protection device at the required insertion depth.
2. Pivot the reset tool handle downwards to engage the teeth into the protection device.
3. Keeping the reset tool handle held down, slowly pull the reset tool out of the filler neck to reset the protection device.

Note: To ensure that the protection device is correctly reset, check that the yellow misfuel protector is no longer visible in the filler neck before refuelling with diesel fuel.

After resetting the misfuel protection device, remove the tool from the filler neck and return it to the luggage compartment. If subsequent driveability difficulties are encountered, seek assistance from a Land Rover Dealer/ Authorised Repairer.

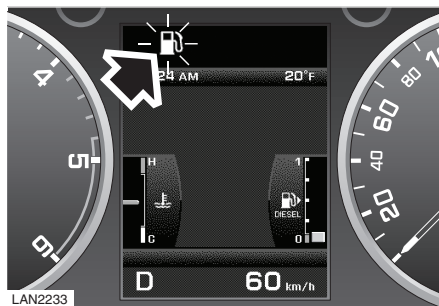
RUNNING OUT OF FUEL

CAUTION

 Avoid running out of fuel. Doing so can cause damage to the engine, fuel and emission control systems.

Note: If the vehicle does run out of fuel, seeking qualified assistance is advisable.

Note: If the vehicle runs out of fuel it will be necessary to add a minimum of 4 litres (0.8 gallons) of fuel in order to restart the engine. In some circumstances it will be necessary to drive a short distance, typically 1.6 - 5 km (1 - 3 miles) in order for the vehicles monitoring systems to register the additional fuel.



When the remaining fuel reaches a minimum of 12 litres (three gallons), the amber low fuel warning indicator illuminates. The remaining fuel should give a range of approximately 80 km (50 miles).

Fuel and refuelling

WATER IN DIESEL FUEL SENSOR

If the message **WATER IN FUEL SEE HANDBOOK** is displayed in the message centre, an excessive amount of water has collected in the fuel filter bowl. This excess water needs to be drained from the filter. Seek assistance from a Land Rover Dealer/ Authorised Repairer as soon as possible.

CATALYTIC CONVERTER

WARNING



Exhaust system temperatures can be extremely high - do not park on ground where combustible materials such as dry grass or leaves could come into contact with the exhaust system.

CAUTIONS



Severe damage to the catalytic converter could occur if the engine is stopped for any length of time when being driven through water, where the water level is above the exhaust pipe.



Catalytic converters can be easily damaged through improper use, particularly if the wrong fuel is used, or if an engine misfire occurs.

The exhaust system incorporates a catalytic converter, which converts poisonous exhaust emissions from the engine into environmentally less harmful gases. It cannot, however, remove all harmful exhaust emissions.

Fuel and refuelling

FUEL CONSUMPTION

Fuel consumption figures

The fuel consumption figures shown below have been calculated using a standard testing procedure (the new EC test procedure from Directive 99/100/EC), and produced in accordance with the Passenger Car Fuel Consumption (Amendment) Order 1996.

Under normal use, a vehicle's actual fuel consumption figures may differ from those achieved through the test procedure, depending on your driving technique, road and traffic conditions, environmental factors, vehicle load and vehicle condition.

Variant	Urban l/100km (mpg)	Extra urban l/100km (mpg)	Combined l/100km (mpg)	CO2 emissions g/km
2.7L Diesel (manual)	11.1 (25.4)	8.1 (34.9)	9.2 (30.7)	244
2.7L Diesel (automatic)	13.1 (21.6)	8.5 (33.2)	10.2 (27.7)	270
3.0L Diesel	11.2 (25.2)	8.3 (34.0)	9.3 (30.4)	244
V6 Petrol	21 (13.5)	11.9 (23.7)	15.2 (18.6)	359
V8 Petrol	19.8 (14.3)	10.7 (26.5)	14.1 (20.1)	328

Urban cycle

The urban test cycle is performed from a cold start and comprises a series of accelerations, decelerations and periods of steady speed driving and engine idling. The maximum speed during the test is 50 km/h (30 mph) with an average speed of 19 km/h (12 mph).

Extra-urban cycle

The extra-urban cycle test is performed immediately after the urban test. Approximately half of the test comprises steady-speed driving, while the remainder is a series of accelerations, decelerations and engine idling. The maximum test speed is 120 km/h (75 mph) and the average speed 63 km/h (40 mph). The test is performed over a distance of 7 km (4.4 miles).

Combined

The combined figure is an average of the urban and extra-urban test cycle results, which has been weighted to take account of the different distances covered during the two tests.

For additional information on fuel consumption figures and exhaust emissions, visit the Vehicle Certification Agency (VCA) website at <http://www.vcacarfueldata.org.uk/>.

Note:

These figures should not be compared with the figures produced using the ECE/EEC procedure previously required by The Passenger Car Fuel Consumption Order 1983. Because of the changes in the test procedure, even the urban figures would differ if the same car were subjected to both tests.

Load carrying

GENERAL INFORMATION

WARNING



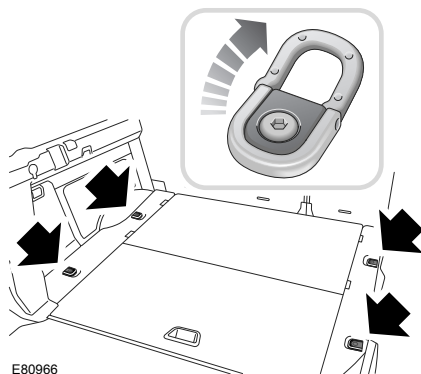
Ensure that any items stored in the vehicle are secure and cannot move. If the vehicle is involved in an accident, or subject to sudden braking or direction change, loose items can cause serious injury or death.

Weights and load capacities

Information and values for the maximum weights can be found in the Weights section. See **TECHNICAL SPECIFICATIONS** (page 263).

Note: *It is the driver's responsibility to ensure that the maximum weights are not exceeded, and that the load is distributed correctly within the vehicle.*

LUGGAGE ANCHOR POINTS

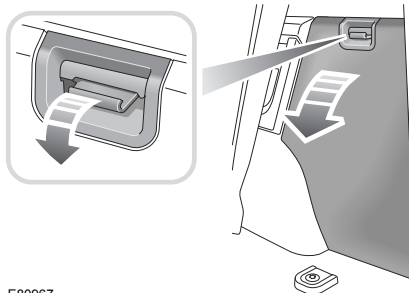


E80966

To assist in safely securing large items of luggage, four fixing points are located in the rear loadspace floor.

Note: *A range of approved luggage retention accessories are available from your Land Rover/Authorised Repairer.*

REAR LOADSPACE HATCHES



E80967

There are access hatches on both sides of the rear loadspace.

On 7-seater models the right-hand side hatch gives access to the toolkit and the left-hand hatch gives access to the tow bar.

Ensure that the hatch is securely fitted before driving.

Load carrying

LUGGAGE COVERS

WARNING



Never place objects on top of the luggage cover. During an accident or sudden manoeuvre loose objects can cause serious injury or death.

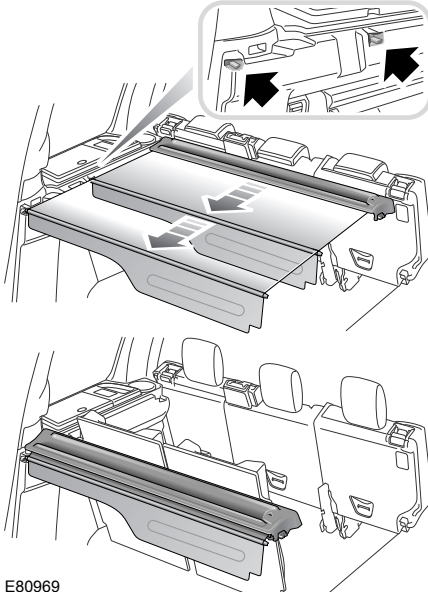
CAUTION



When retracting the cover make sure nothing is left on top. Some items, such as paper or fabrics, may become trapped and jam the mechanism.

If the cover is damaged, this may prevent the cover from operating correctly and cause further damage.

Operating the luggage cover



E80969

1. Pull the rigid portion of the blind to unroll the cover.

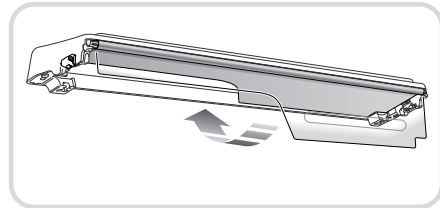
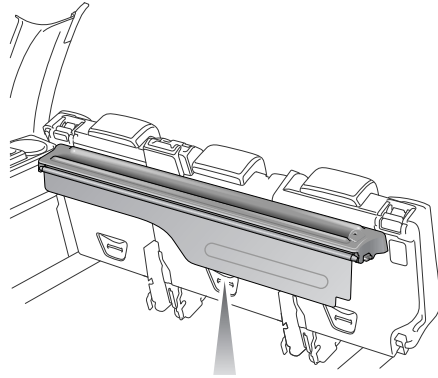
2. Engage the end pieces into the recessed features moulded into the loadspace sides.

Stowage of luggage cover

WARNING



When fitting the luggage cover in position ensure that the paddle returns to the flush (horizontal) position. Failure to do so may allow the luggage cover to move during an accident or sudden manoeuvre.



E80970

1. Disengage the ends from the recess and fully retract the cover into the tray unit.
2. Fold the rigid portion of the blind back under the unit and press until the edge engages and is retained.

Load carrying

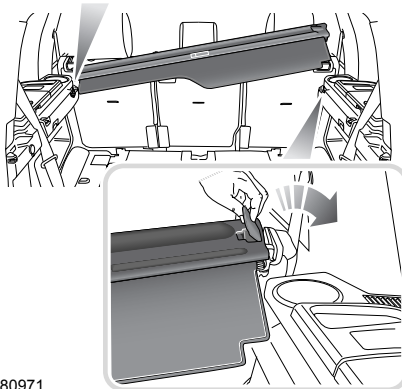
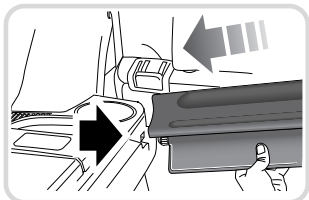
Removal and refitting of luggage cover

WARNING



Do not store the loadspace cover loose in the vehicle.

Note: It is easier to remove/refit if the second row seat backs have been tipped forward.



E80971

The luggage cover cartridge can be placed at either end of the loadspace. The foremost fitting is close behind the second row of seats; the rearmost is behind where the third row of seats are in a 7-seat vehicle.

1. Pull up the paddle at the right-hand end of the cartridge; this disengages the locking bolt. Lift the right-hand end of the unit and pull it away from the opposite loadspace side.
2. Installation of the cartridge is the reverse of the removal procedure above.

5-seat vehicle

When the luggage cover is removed, it must be stored away from the vehicle.

7-seat vehicle

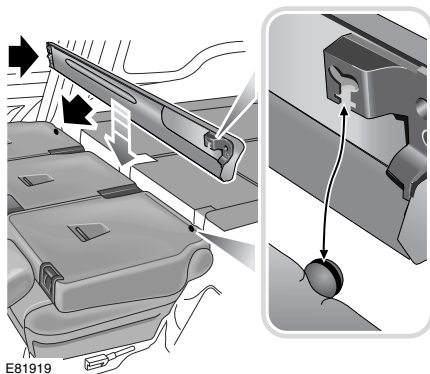
WARNING



Never fit the luggage cover behind the second row of seats if the third row is to be occupied.

CAUTIONS

- ! Remove the stowed unit before moving the seats.
- ! Do not attempt to raise the second-row seats into the upright position, or tip them forward for third-row access, while the luggage cover is in this stowed position as damage will result.



E81919

If the luggage cover is removed from a 7-seat vehicle and both the second and third rows of seats are down, the cover can be stowed in the gap between the second and third row seats.

Lower the cover into the gap and engage the receivers onto the studs protruding from the outboard portions of the outboard second-row seat-backs.

Towing

TOWING A TRAILER

WARNINGS



Never exceed the maximum weights for either the vehicle or trailer. Doing so can cause accelerated wear and damage to the vehicle. It can also adversely affect vehicle stability and braking, which in turn can lead to loss of control and increased braking distance resulting in a roll-over or crash.



To preserve vehicle handling and stability, only fit towing accessories that have been designed and approved by Land Rover.



Do not use lashing eyes or vehicle recovery towing eyes to tow a trailer. Use of the towing eyes for purposes other than their designed intention could result in damage or injury.



When towing, do not exceed 100 km/h (60 mph), or 80 km/h (50 mph) if the temporary spare wheel is in use.



The nose weight, plus the combined weight of the vehicle's load carrying area and rear seat passengers, must never exceed the specified maximum rear axle load. Exceeding allowable vehicle and axle loads will increase the risk of tyre and suspension failure, increase vehicle brake stopping distance and adversely affect vehicle handling and stability. This may result in a crash or roll-over.

CAUTIONS



An equalising or other form of weight distributing hitch should not be used with your vehicle.



To avoid excessive clutch wear at low speeds, use low range on manual transmission vehicles when manoeuvring heavy trailers or performing hill starts.



When preparing your vehicle for towing, pay attention to any instructions provided by the trailer manufacturer.

It is the driver's responsibility to ensure that the towing vehicle and trailer/caravan are loaded and balanced so that the combination is stable when in motion. When preparing your vehicle for towing, pay attention to any instructions provided by the trailer/caravan manufacturer as well as to the information that follows.

Balancing the combination

To ensure optimum stability, it is essential that the trailer adopts a level aspect. In other words, the trailer must be level with the ground, with the towing hitch and trailer drawbar set at the same height. This is particularly important when towing twin axle trailers! Adjust the height of the hitch point if necessary.

The air suspension system is designed to cope with a heavy trailer load without upsetting the balance or feel of the vehicle. To ensure that the vehicle is in the correct position when setting the towing hitch height, the engine should be running with the air suspension set to on-road height and all doors closed. See **Air suspension** (page 165).

Note: *The high speed height is disabled while the trailer electrics are connected.*

- The trailer should be level with the ground when loaded.

Towing

- The height of the draw bar hitch point should be set so that the trailer is level when connected to the loaded vehicle.

Points to remember:

- When calculating the laden weight of the trailer, remember to include the weight of both the trailer and its load.
- Where the luggage load can be divided between trailer and tow vehicle, loading more weight into the vehicle will generally improve the stability of the combination. However, ensure that the GVW and maximum rear axle load are not exceeded and that the combination remains level.
- For maximum stability, ensure that loads are properly secured and unable to shift position during transit. Also, position loads so that most of the weight is placed close to the floor and, where possible, immediately above or close to the trailer axle(s).
- Towing regulations vary from country to country. Always ensure national regulations governing towing weights and speed limits are observed (refer to the relevant national motoring organisation for information). The vehicle's maximum permissible towed weight refers to its design limitations and NOT to any specific territorial restriction.
- The trailer nose weight plus the combined weight of the rear seat passengers and the vehicle's load carrying area must never exceed the GVW or the individual maximum axle loads.

Note: When towing, European legislation allows for the GVW to be exceeded by 100 kg (220 lb). See **TECHNICAL SPECIFICATIONS** (page 263).

Note: When towing, do not exceed 97 km/h (60 mph). Additionally, if the temporary spare wheel is in use, do not exceed 80 km/h (50 mph).

Vehicle weights

When loading a vehicle to its maximum (GVW), take account of the load distribution to ensure that axle loads do not exceed the permitted maximum values. It is your responsibility to limit the vehicle load in such a way that neither the maximum axle loads nor the GVW are exceeded. The most accurate method of determining load distribution is by using a public weighbridge.

Nose weight must be the greater of 50 kg (110 lb) or 7% of the actual trailer laden weight, up to the maximum tow hitch load. Nose weight can be measured using a proprietary brand of nose weight indicator.

WARNING



In the interest of safety, the gross vehicle weight, maximum rear axle weight, maximum trailer weight and tow hitch load (nose weight) must not be exceeded.

Trailer socket

The vehicle connector provides a 5 amp output, which must **not** be exceeded. If it is required to exceed 5 amps, a 12S and a 13 pin accessory harness kit is available from your Land Rover Dealer/Authorised Repairer, increasing the output to 15 amps.



The trailer warning indicator lamp illuminates as a bulb check when the ignition is switched on and extinguishes when the engine is started.

If the lamp does not flash with the direction indicators, the trailer bulb may be faulty.

Towing

Diesel engine vehicles

The diesel engine management system incorporates sensors to determine optimum performance. It is also designed to protect the engine when arduous conditions are encountered during towing. When ambient temperature exceeds 40°C (104°F) the engine coolant temperature may increase above normal operating level. If this occurs, the management system will initiate a series of actions to restore normal operating conditions. The actions may include:

- A message centre message.
- Engine performance reduction.

- Air conditioning system cycling. The system temperature output will fluctuate between hot and cold in order to dissipate engine heat. If engine overheating persists, the air conditioning will move to continuous heat output.

It is advisable to bring the vehicle and trailer to a convenient stop to allow the engine to idle until normal temperature is restored. Do not switch off the engine.

Low speed towing

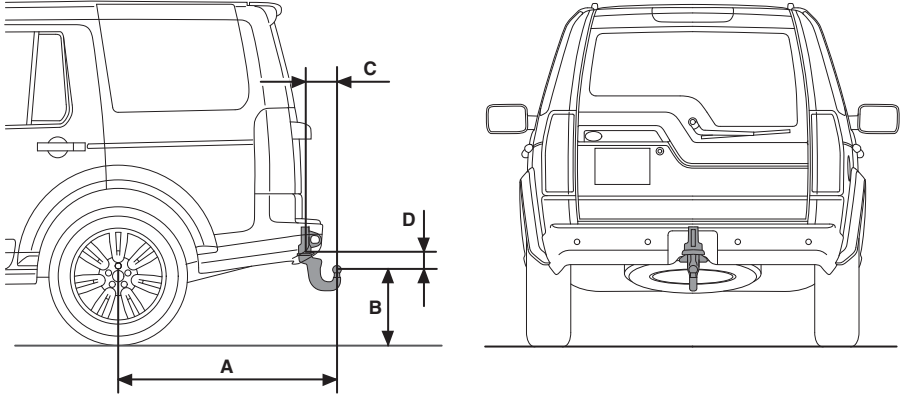
To avoid overheating the gearbox, it is not advisable to tow heavy trailer loads at speeds of less than 32 km/h (21 mph) using the main gearbox in high range. Select low range instead.

Essential Towing Checks

Tyre pressures:	Increase rear pressures of towing vehicle to those for Maximum Gross Vehicle Weight conditions. See TYRE PRESSURES (page 239). Ensure trailer/caravan tyres are at the pressures recommended by the trailer manufacturer.
Nose weight:	If the vehicle is loaded to the Gross Vehicle Weight (GVW), the nose weight is limited to 150 kg (330 lb). If a trailer with over-run brakes is used the nose weight can be increased up to 250 kg (550 lb) total nose weight. However, vehicle payload must be restricted by at least the same weight to ensure that the GVW and rear axle weights are not exceeded. See TECHNICAL SPECIFICATIONS (page 263).
Breakaway cable or secondary coupling	A breakaway cable or secondary coupling must be attached. If the trailer/caravan is fitted with brakes, it is usual for an attached breakaway cable to operate the brakes in the event of the coupling becoming detached. See your trailer manufacturers literature. If your trailer does not have a breakaway cable, a secondary coupling must be attached. Use a suitable point on the towing bracket to securely attach the coupling. It is not advisable to loop cables or couplings around the neck of the tow ball as they could slide off.

Towing

Fixed - tow ball



LAN2385

Tow ball dimensions

Ref.	Dimension	Metric	Imperial
A	Wheel centre to centre of tow ball	1,190 mm	46.9 in.
B	Ground to centre of tow ball	409 mm	16.1 in.
C	Centre of tow ball to tow bar attachment	170 mm	6.7 in.
D	Centre of tow ball to tow bar attachment	124 mm	4.9 in.

Note:

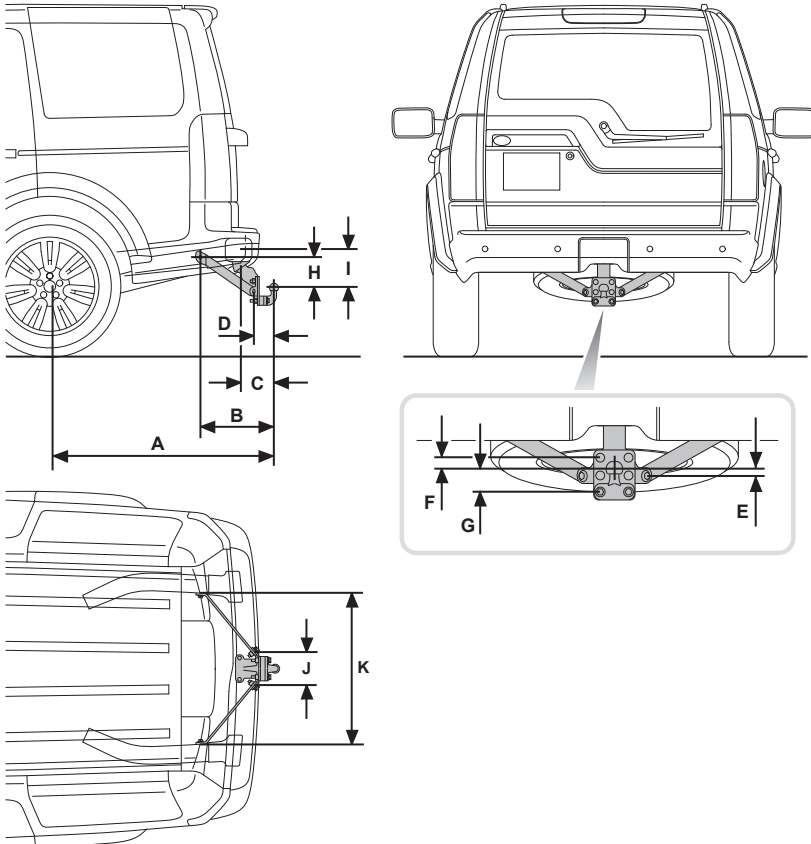
Dimensions refer to towing equipment officially released by Land Rover.

Note: *Australia only*

The optional draw bar has significantly different dimensions and is rated as a Class III.

Towing

Multi-height drop plate - tow bar



LAN2386

Tow ball dimensions

Ref.	Dimension	Metric	Imperial
A	Wheel centre to centre of tow ball (horizontal)	1,210 mm	47.64 in.
B	Centre of outer attachment points to centre of tow ball (horizontal)	403.6 mm	15.89 in.
C	Centre line of housing bayonet slot tip radius to centre of tow ball (horizontal)	192.4 mm	7.57 in.
D	Centre of inner attachment points to centre of tow ball (horizontal)	108 mm	4.25 in.

Towing

Ref.	Dimension	Metric	Imperial
E	Centre of inner attachment points to centre of tow ball (vertical)	20 mm	0.79 in.
F	Centre of upper tow ball plate bolt to centre of tow ball (vertical)	36 mm	1.42 in.
G	Centre of lower tow ball plate bolt to centre of tow ball (vertical)	70 mm	2.76 in.
H	Centre of outer attachment points to centre of tow ball (horizontal)	167.3 mm	6.59 in.
I	Centre line of housing bayonet slot tip radius to centre of tow ball (vertical)	174.3 mm	6.86 in.
J	Distance between inner attachment point centres	180.5 mm	7.10 in.
K	Distance between outer attachment point centres	822.5 mm	32.38 in.

Towing

RECOMMENDED TOWING WEIGHTS

Towing weights

Maximum permissible towed weights	On-road	Off-road
Unbraked trailers	750 kg (1 654 lb)	750 kg (1 654 lb)
Trailers with overrun brakes	3 500 kg (7 716 lb)	1 000 kg (2 205 lb)
Nose weight	150 kg (330 lb)	-
Nose weight - Australia only	350 kg (772 lb)	-

Maximum towing/load limits

Gross Train Weight (Weight of vehicle plus trailer with overrun brakes)		
4.0 Petrol engine vehicles	6 740 kg	14 859 lb
5.0 Petrol engine vehicles	6 740 kg	14 859 lb
2.7 Diesel engine vehicles (coil suspension)	6 680 kg	14 727 lb
2.7 Diesel engine vehicles (air suspension)	6 740 kg	14 859 lb
3.0 Diesel engine vehicles	6 740 kg	14 859 lb
Roof load (including the weight of roof rack)	75 kg	165 lb

WARNING



Do not exceed the Gross Vehicle Weight (GVW), maximum rear axle weight, maximum trailer weight, or nose weight. Exceeding any of these limits could cause instability and loss of control. See **TECHNICAL SPECIFICATIONS** (page 263).

Note: When towing the maximum permissible Gross Vehicle Weight can be increased by a maximum of 100 kg (220 lb) provided that the road speed is limited to 100 km/h (60 mph).

Note: When calculating rear axle loading, remember that the trailer nose weight, the load in the vehicle's luggage area, weight on the roof rack and the weight of the rear seat passengers must all be added together.

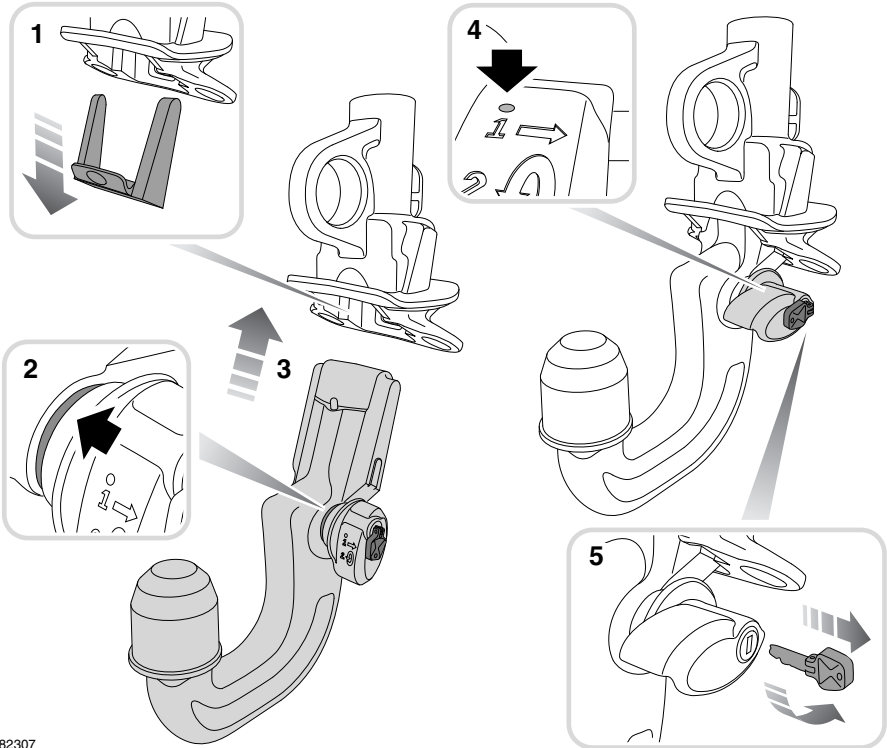
Towing weights - Australia only

Australian regulations specify that the weight of a trailer must not exceed 1.5 times the towing vehicle's weight.

Towing

DETACHABLE TOW BALL

Fitting the tow ball

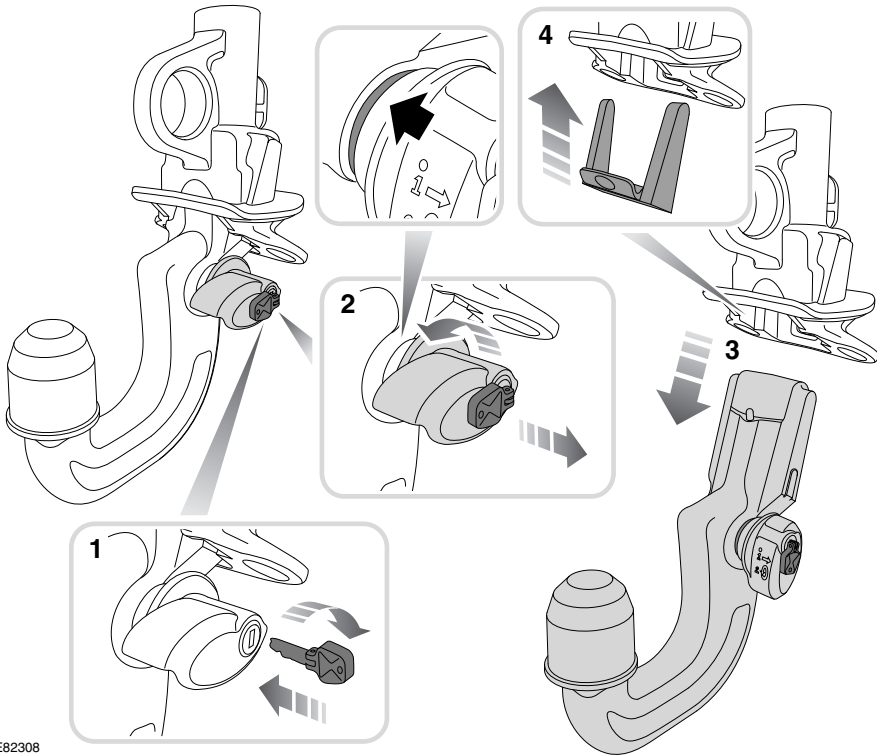


E82307

1. Remove the protective cover from the tow ball mounting and stow it in the tow ball storage area.
2. The tow ball can only be installed when the green locking lever is in the unlocked position.
3. Insert the tow ball into the mounting and push firmly upwards until the tow ball locks into position.
4. The red marker must be completely covered by the green locking lever.
5. Turn the key counterclockwise to lock the tow ball before towing. Remove the key and store in a safe place.

Towing

Removing the tow ball



E82308

1. Insert the key and turn it clockwise to unlock.
2. Pull the handle outwards and rotate counterclockwise until a click is heard. The marker on the handle must show red.
3. Carefully lower the tow ball and place it in its stowage area and fully secure it.
4. Replace the protective towing cover in the tow ball mounting. Press the bottom of the cover to fix it in position.

Note: The key can not be removed when the tow ball has been detached.

Towing

TOW BALL STORAGE

WARNING

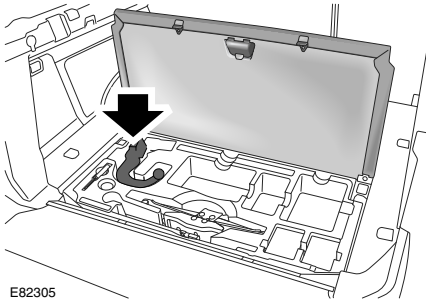


The tow ball is heavy, care must be taken when handling it. When handling the tow ball, hold the bottom of the component. Locking into position occurs automatically and causes the locking lever to rotate under spring pressure.

Your vehicle is fitted with a towing housing which will accept a detachable tow ball. The following illustrations show a UK and Rest of the World tow ball.

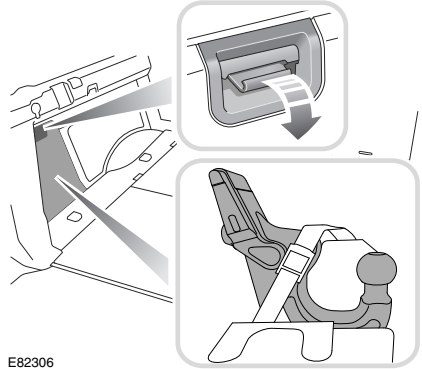
Note: An Australian tow ball is visually different, but is stowed in the same place.

5-seat models



E82305

7-seat models



E82306

The tow ball is stowed under an access cover in the loadspace floor (5-seat models) or behind an access cover on the left-hand side of the loadspace (7-seat models).

Vehicle care

CLEANING THE EXTERIOR

CAUTIONS

! Some high pressure cleaning systems are sufficiently powerful to penetrate door/window seals and damage trim and door locks.

Never aim the water jet directly at the engine air intake, heater air intakes, body seals (door, sunroof, windows etc.), or at any components which may be damaged (lights, mirrors, exterior trim etc.).

! Do not use a power wash system in the engine bay area as it may damage fragile components, electrical systems etc.

! Ensure that you read and comply with all warnings and product instructions supplied with any cleaning products.

! Never use cleaning products that are not approved for use on vehicles.

! Substances which are corrosive such as bird droppings, tree resin, dead insects, tar spots, road salt and industrial fall out can damage the vehicle's paintwork. Any such deposits should be removed as soon as possible to prevent damage to the vehicle's paintwork.

Washing the vehicle

Remove heavy deposits of mud and dirt with a hose before washing the vehicle.

Wash the vehicle frequently using a sponge and generous quantities of cold or lukewarm water containing a suitable car shampoo. Rinse thoroughly and dry with a chamois leather, or synthetic substitute.

Occasionally treat the paint surface with an approved polish, but do not apply it to the unpainted areas of the bumper mouldings.

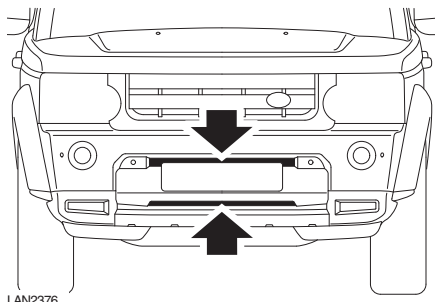
Note: In hot weather, do not wash the vehicle in direct sunlight.

Cleaning after off-road driving

CAUTION

! Ensure that the areas around air intakes and the front grille are clean and clear of debris. Pay particular attention to the lower grille and radiator. Failure to do so may cause the engine to overheat, leading to severe engine damage.

Ensure that the vehicle and underside is cleaned soon as possible after off-road driving. Further information on cleaning after off road use is available in the Off-Road Driving handbook. This can be found on-line at <http://www.ownerinfo.landrover.com>.



Using a hosepipe, direct clean water through the front bumper (where arrowed) to remove any build up of mud on the radiator and air conditioning condenser.

Removing tar spots

Use white spirit to remove tar spots and stubborn grease stains from paintwork. Ensure that after using white spirit, the area is washed immediately with soapy water to remove all traces of spirit.

Vehicle care

Underbody maintenance

Corrosive materials used on highways to control snow and ice, as well as accumulations from off-road driving or wading in salt water can collect on the vehicle's underbody. If these materials are not removed, accelerated corrosion can occur. Regularly flush the underbody with plain water, and pay particular attention to areas where mud and debris collect.

If damage or corrosion is detected, please have the vehicle checked by a Land Rover Dealer/Authorised Repairer as soon as possible.

Polishing


Occasionally treat the paint surface with an approved polish containing the following properties:

- Very mild abrasives to remove surface contamination without removing or damaging the paint.
- Filling compounds that will fill scratches and reduce their visibility.
- Wax to provide a protective coating between the paint and the elements.

Note: Do not apply car polish to the unpainted areas of the bumper mouldings - polish will become ingrained in the textured finish.

Glass and mirrors


CAUTION

 Never use abrasive cleaning products or metal ice scrapers on the mirrors or the front/rear screens.

The rear screens and mirror glass should only be cleaned using soapy water and a soft cloth. This will avoid damaging the reflective surface of the mirror and heating elements and antenna in the rear screen.

CLEANING THE ALLOY WHEELS

CAUTION

 Do not use non-approved or acid-based wheel cleaners. These can damage the wheel coating which may lead to corrosion of the wheel rims.

The alloy road wheels are covered with a protective anti-corrosion coating. To prevent corrosion it is essential that this coating is not damaged.


When removing or fitting tyres always advise the tyre fitter to treat the alloy wheels with great care. Tyre levers must not be used.

Wash the wheels with soap and water: This should be done more frequently when the wheels are exposed to heavy dirt deposits, salt, clay etc. If you are unsure how often to clean the wheels in particular conditions, seek advice from your Dealer/Authorised Repairer.


Land Rover approved wheel cleaner should be used to remove heavy soiling.

CLEANING THE INTERIOR

WARNING

 Ensure that you read all of the instructions and information provided with all cleaning products. Some products may be harmful to health if used incorrectly.

CAUTION

 Some products, if used incorrectly, can cause damage to the interior surfaces of the vehicle.

Vehicle care

Plastic and cloth

WARNING



Do not polish the instrument panel. Polished surfaces are reflective and may interfere with the driver's view.

Clean plastic or cloth-faced surfaces with warm water and a non-detergent soap, then wipe clean with a soft cloth.

Leather

CAUTIONS



Only use cleaning products specifically designed for use on leather. Do not use chemical, alcohol or abrasive materials, as they will cause rapid deterioration of the leather. The use of products which are not approved, will invalidate your warranty.



Some materials/fabrics are prone to dye-transfer which can cause unsightly discolouration of lighter coloured leathers. Affected areas should be cleaned and re-protected as soon as possible.

Leather should be cleaned and protected at least every six months.

Land Rover recommend the use of leather cleaning kit BAC500490. Use only in accordance with the instructions.

Note: *Some materials/fabrics are prone to dye transfer which can cause unsightly discolouration of lighter coloured leathers. Affected areas should be cleaned and re-protected as soon as possible.*

Carpet and fabrics

Clean with only a dilute solution of an approved upholstery cleaner. It is advisable to test all cleaners on a concealed area before use.

Instrument pack, clock and audio unit

Only use a soft dry cloth to clean the instrument pack, clock, and audio equipment. Do not use cleaning fluids or sprays.

Seat belts

WARNING



Do not allow any water, cleaners, or fabric from cloths to enter the seat belt mechanism. Any substance which enters the mechanism may affect the performance of the seat belt in an impact.

Extend the seat belts fully, then use warm water and a non-detergent soap to clean. Allow the seat belts to dry naturally whilst fully extended.

Note: *Whilst cleaning the seat belt, take the opportunity to examine the webbing for damage/wear. Any wear or damage should be rectified by a Land Rover Dealer/Approved Repairer.*

Airbag module covers

WARNING



Airbag covers should only be cleaned using a slightly dampened cloth, and a small amount of upholstery cleaner. Do not allow the airbag covers, or surrounding areas, to become contaminated with liquids. Any substance which enters the mechanism can prevent correct deployment of an airbag during an impact.

Vehicle care

REPAIRING MINOR PAINT DAMAGE

Regularly inspect the paintwork for damage. Any stone chips, fractures or deep scratches in the paint/bodywork should be repaired promptly. Bare metal will corrode quickly and, if left untreated can result in expensive repairs.

Minor chips and scratches can be touched up using materials and advice available from your Land Rover Dealer/Authorised Repairer. Larger areas of damage will require professional repair and you should consult your Land Rover Dealer/Authorised Repairer.

Maintenance

GENERAL INFORMATION

Regular systematic maintenance is the key to ensuring the reliability and efficiency of your vehicle.

Maintenance is the owner's responsibility and you must ensure that owner maintenance operations, oil services, inspections and brake fluid and coolant changes are carried out when required and according to the manufacturer's recommendations.

The routine maintenance requirements for your vehicle are shown in the Service Portfolio book. Most of this necessary maintenance requires specialised knowledge and equipment, and should be entrusted to a Land Rover Dealer/Authorised Repairer.


Service Portfolio

The Service Portfolio book includes a Service Record section, which allows for a recording of all the servicing and inspections that are carried out on the vehicle. This section of the book also has an area for brake fluid changes to be recorded.

Ensure your service provider signs and stamps the book after each service and inspection.

Owner Maintenance

CAUTION

 Any significant or sudden drop in fluid levels, or uneven tyre wear, should be reported to a qualified technician without delay.

In addition to the routine maintenance, a number of simple checks must be carried out more frequently. These checks are detailed in the following sections.

Daily checks

- Operation of lamps, horn, direction indicators, wipers, washers and warning indicators.
- Operation of seat belts and brakes.
- Look for fluid deposits underneath the vehicle that might indicate a leak.

Weekly checks

- Engine oil level. See **2.7L DIESEL AND V6 PETROL** (page 205).
- Engine coolant check. See **ENGINE COOLANT CHECK** (page 207).
- Brake fluid level. See **BRAKE FLUID CHECK** (page 209).
- Power steering fluid level. See **POWER STEERING FLUID CHECK** (page 210).
- Screen washer fluid level. See **WASHER FLUID CHECK** (page 212).
- Tyre pressures and condition.
- Operate air conditioning.

Note: *The engine oil level must be checked more frequently if the vehicle is driven for long periods at high speeds.*

Maintenance

Driving in arduous conditions

When a vehicle is operated in extremely arduous conditions, more frequent attention must be paid to servicing requirements.

For example: If your vehicle experiences deep wading conditions, even daily servicing could be necessary to ensure the continued safe and reliable operation of the vehicle.

Arduous driving conditions include:

- Frequent driving in dusty and/or sandy conditions.
- Frequent driving on rough and/or muddy roads.
- Frequent wading.
- Frequent driving at high speeds in high ambient temperatures above 50°C.
- Frequent driving in severe cold weather below -40°C.
- Frequent driving in mountainous conditions.
- Frequent trailer towing.
- Driving in areas using road salt or other corrosive materials on the driving surface.

Contact your Dealer for advice.

Emission control

Your vehicle is fitted with various items of emission and evaporative control equipment, designed to meet specific territorial requirements. You should be aware that unauthorised replacement, modification or tampering with this equipment by an owner or repair shop, may be unlawful and subject to legal penalties.

In addition, engine settings must not be tampered with. These have been established to ensure that your vehicle complies with stringent exhaust emission regulations.

Incorrect engine settings may adversely affect exhaust emissions, engine performance and fuel consumption. They may also cause high temperatures, which will result in damage to the catalytic converter and the vehicle.

Road testing dynamometers (rolling roads)

Because your vehicle is equipped with anti-lock brakes and four-wheel drive, it is essential that any dynamometer testing is carried out only by a qualified person, familiar with the dynamometer testing and safety procedures practised by Land Rover Dealers/Authorised Repairers.

Maintenance

SAFETY IN THE GARAGE

WARNINGS



If the vehicle has been driven recently, do not touch exhaust and cooling system components until the engine has cooled.



Never leave the engine running in an unventilated area - exhaust gases are poisonous and extremely dangerous.



Do not work beneath the vehicle with the wheel changing jack as the only means of support.



Keep your hands and clothing away from drive belts, pulleys and fans. Some fans may continue to operate after the engine has stopped.



Remove metal wrist bands and jewellery, before working in the engine compartment. Do not touch electrical leads or components while the engine is running, or with the starter switch turned on.



Do not allow tools or metal parts of the vehicle to make contact with the battery leads or terminals.

Fuel system

WARNINGS



Under no circumstances should any part of the fuel system be dismantled or replaced by anyone other than a suitably qualified vehicle technician. Failure to comply with this instruction, may result in fuel spillage with a consequent serious risk of fire.



Keep sparks and naked lights away from the engine compartment.



Wear protective clothing, including, where practicable, gloves made from an impervious material.

Poisonous fluids

Fluids used in motor vehicles are poisonous and should not be consumed or brought into contact with open wounds. These include; battery acid, antifreeze, brake, clutch and power steering fluid, petrol, diesel, engine oil and windscreen washer additives.

For your own safety, always read and obey all instructions printed on fluid container labels.

Used engine oil

Prolonged contact with engine oil may cause serious skin disorders, including dermatitis and cancer of the skin. Always wash thoroughly after contact.



It is illegal to pollute drains, water courses or soil. Use authorised waste disposal sites to dispose of used oil and other chemicals.

Maintenance

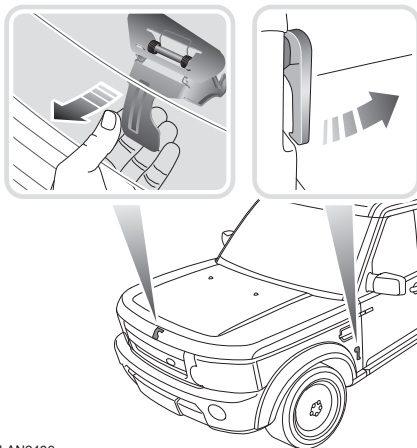
OPENING AND CLOSING THE BONNET

WARNING



Do not drive with the bonnet retained by the safety catch alone.

Opening the bonnet



LAN2406

1. Pull the bonnet release handle located on the left-hand side of the vehicle.
2. Lift the bonnet safety catch lever and raise the bonnet.

Closing the bonnet

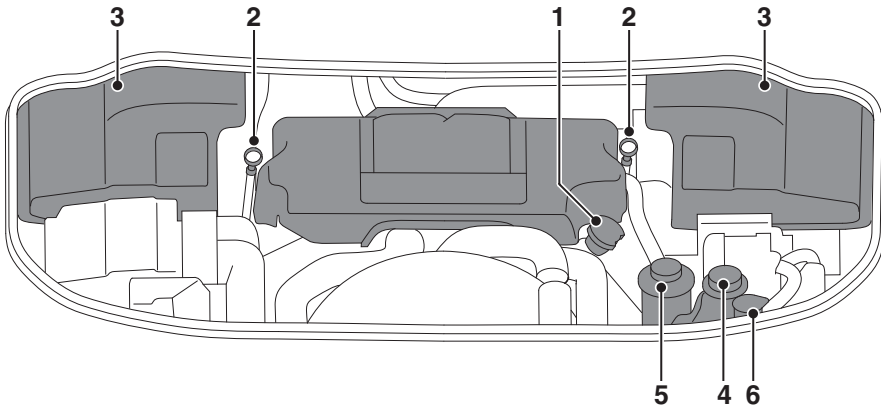
Lower the bonnet until the safety catch engages. Using both hands, press the bonnet down until the catches click.

Check that both catches are fully engaged by attempting to lift the front edge of the bonnet, which should be free from any movement.

Maintenance

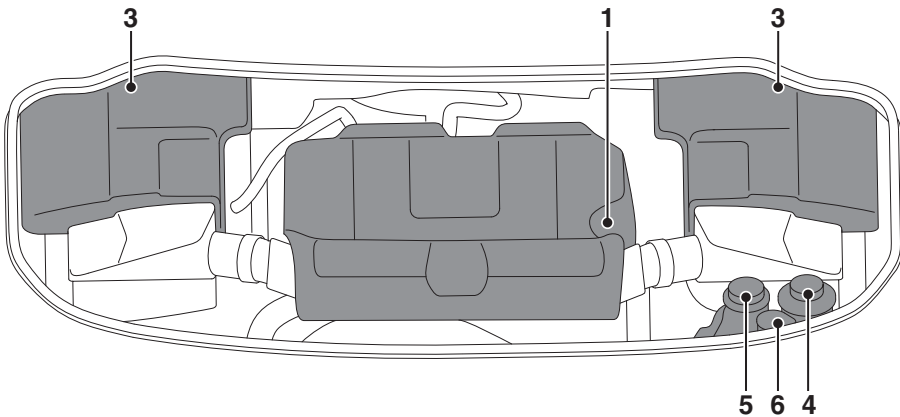
ENGINE COMPARTMENT OVERVIEW

2.7L Diesel and V6 Petrol



LAN2375

3.0L Diesel and V8 Petrol



LAN2374

Maintenance

WARNING



While working in the engine compartment, always observe the safety precautions listed under Safety in the garage. See **GENERAL INFORMATION** (page 198).

Do not drive the vehicle if there is a possibility that leaked fluid will come into contact with a hot surface, such as the exhaust. A resulting fire may cause death or serious injury.

1. Engine oil filler cap



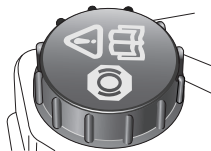
LAN2326

2. Engine oil dipstick



E89412

3. Brake fluid reservoir cap



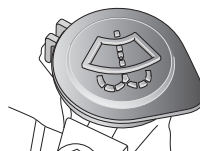
E83862

4. Coolant reservoir cap



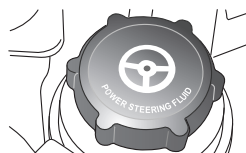
E83863

5. Washer fluid reservoir cap



E83864

6. Power steering fluid reservoir cap

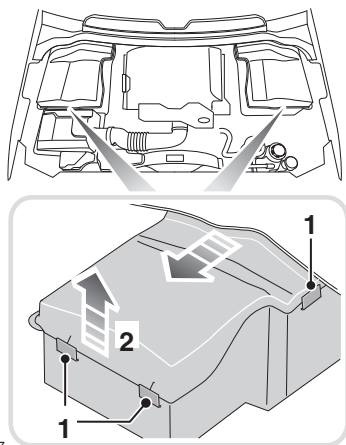


E83865

Maintenance

UNDER BONNET COVERS

Removal



LAN2327


1. Press the tabs to release the cover from the casing.

Note: Releasing the inboard tab on the front edge of the cover first will make it easier to release the other tabs.

2. Lift the front edge of the cover and slide forwards to remove.

Fitting

CAUTION

 Before refitting the underbonnet covers, ensure that no pipes, cables, or other items have been trapped between the cover and casing.

1. Slide the rear edge of the cover under the rubber trim fitted to the scuttle panel.
2. Make sure the front edge of the cover is flush to the casing and then press down until the tabs click into place.

ENGINE OIL

Low oil pressure warning indicator



Illuminates red as a bulb check when the ignition is switched on and extinguishes when the engine is started. If the indicator remains on, flashes on and off, or illuminates whilst driving, stop the vehicle as soon as safety permits and switch off the engine immediately. Check the oil level and seek qualified assistance if necessary.

Specification

Variant	Specification
Diesel vehicles	SAE 5W-30 meeting specification WSS-M2C934-B only ¹
V6 Petrol vehicles	SAE 5W-30 meeting specification WSS-M2C913-C only ²
V8 Petrol vehicles	SAE 5W-20 meeting specification WSS-M2C925-A only

¹ If you are unable to find an oil that meets the specification defined by WSS-M2C934-B, an SAE 5W-30 engine oil meeting specification ACEA:C2 can be used.

² If you are unable to find an oil that meets the specification defined by WSS-M2C913-C, an SAE 5W-30 engine oil meeting specification ACEA:A3/B3 can be used.

Land Rover recommends:



Maintenance

OIL TOP UP - ALL ENGINES

The following cautions apply during the top up procedure of all engines.

CAUTIONS

❗ If the warning **ENGINE OIL CRITICALLY LOW** is displayed in the message centre, stop the engine as soon as it is safe to do so and seek qualified assistance. Do not start the engine until the cause has been identified and rectified.

❗ Your vehicle's warranty may be invalidated if damage is caused by using oil that does not meet the required specification. Low quality or obsolete oils do not provide the protection required by modern, high performance engines.

❗ Do not use oil additives of any type as engine damage could occur. Use only specified lubricants.

❗ It is recommended that the oil level is checked weekly. If any significant or sudden drop in oil level is noted you should seek qualified assistance immediately.

Engine oil consumption

A certain amount of oil consumption is normal. The rate of consumption will depend on the following:

- The quality and viscosity of the oil.
- Climatic conditions.
- The speed at which the engine is being operated.
- Road conditions.

Drivers should expect above normal consumption when the engine is new.

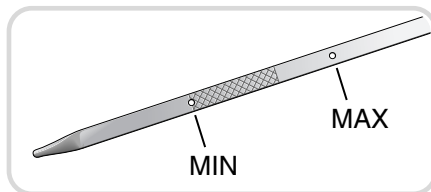
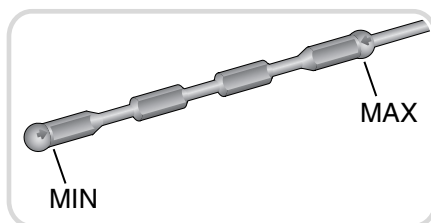
Diesel engines usually consume slightly more oil than petrol engines.

2.7L DIESEL AND V6 PETROL

Checking the oil level

Check the oil level weekly when the engine is hot and with the vehicle resting on level ground.

Note: Switch off the engine and let the vehicle stand for ten minutes to allow the oil to drain back into the sump. Do not start the engine.



LAN1169

1. Withdraw the dipstick and wipe the blade clean with a lint-free cloth.
2. Fully re-insert the dipstick and then withdraw again to check the oil level. Never allow the oil level to fall below the lower mark or hole on the dipstick.

As a general guide, if the level on the dipstick:

- Is nearer to the maximum than the minimum, add no oil.
- Is nearer to the minimum than the maximum, add half a litre (one pint) of oil.
- Is below the minimum, add one litre (two pints) of oil and, after five minutes, re-check the level.

Maintenance

Topping up the oil

1. Remove the oil filler cap.
2. Add oil to maintain the level between the **MIN** and **MAX** marks or holes on the dipstick. Clean up any oil spilled during topping-up.
3. Check the oil level again after five minutes.

It is essential to use the correct specification oil, and to ensure it is suitable for the climatic conditions in which the vehicle is to be operated.

Note: The approximate quantity of oil required to raise the level from **MIN** to **MAX** on the dipstick is 1.5 litres (2.64 pints).

3.0L DIESEL AND V8 PETROL

Checking the oil level

Check the oil level weekly when the engine is hot and with the vehicle resting on level ground.

Note: Switch off the engine and let the vehicle stand for ten minutes to allow the oil to drain back into the sump. Do not start the engine.

The oil level can be viewed in the message centre when the ignition is on, the engine stopped and the transmission in Park (**P**).

Note: The system will not give a reading until the oil level has stabilised.

Select **Service Menu** and then select **Oil Level Display**.



LAN2329

An indication of the oil level is displayed on the gauge. Messages to the right of the gauge advise you of any action you may need to take.

If the oil level is within the required operating range, the message **Level Ok** will be displayed. Do not add any additional oil to the engine.

Maintenance

If the oil level is below the required operating range, a message advising you how much oil to add will be displayed, e.g. **Add 0.5L**. Add the recommended quantity of oil then recheck the level.

If the message **Overfilled** is displayed, seek qualified assistance immediately. Do not drive the vehicle as this will cause serious damage to the engine.

Topping up the oil

1. With the ignition on, but the engine not running, unscrew the oil filler cap.
2. Add the appropriate quantity of oil (as indicated by the message centre oil level display). Wait 5 minutes to let the oil level stabilise and re-check the level.

Clean up any oil spilled during topping up.

3. Once the correct level is achieved, refit the filler cap and securely tighten by hand.

Note: *The ignition must be left on during the top-up, so that the electronic dipstick can register and display the new oil level. This enables an accurate level re-check.*

ENGINE COOLANT CHECK

CAUTIONS

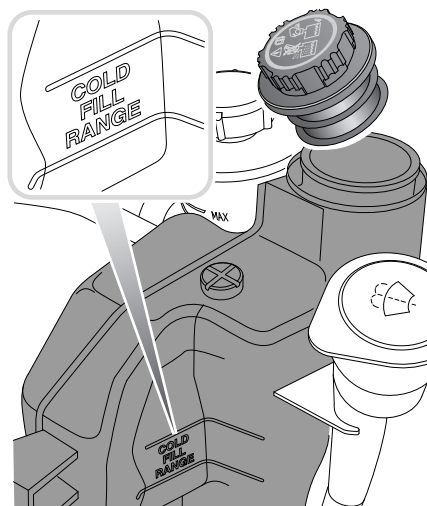
⚠ If the cooling system overheats to the point where coolant/steam is expelled from the pressure cap, ensure that the system is checked as soon as possible.

⚠ Running the engine with low coolant may cause serious engine damage.

If the message **LOW COOLANT LEVEL** or **COOLING SYSTEM FAULT MONITOR GAUGE** is displayed in the message centre. Stop the vehicle and check the coolant level as soon as possible.

Checking the coolant level

The coolant level in the expansion tank should be checked at least weekly (more frequently in high mileage or arduous operating conditions). Always check the level when the system is cold.



Ensure the coolant level is maintained between the level indicator marks located above and below **COLD FILL RANGE**, on the side of the

Maintenance

expansion tank. This should be viewed by standing in front of the vehicle. Ignore any coolant visible in the top section of the tank.

If the level has fallen appreciably, suspect leakage in the system, or overheating, and arrange for the vehicle to be examined by a qualified technician.

Topping up the coolant

WARNINGS



Never remove the filler cap when the engine is hot - escaping steam or scalding water could cause serious personal injury.



Avoid spilling antifreeze onto a hot engine - a fire may result.



Unscrew the filler cap slowly, allowing the pressure to escape before removing completely.

CAUTION



When travelling in territories where the water supply contains salt, always ensure you carry a supply of fresh (rain or distilled) water. Topping up with salt water will cause serious engine damage.

Top-up to the upper level indicator mark located above **COLD FILL RANGE**, on the side of the expansion tank. Use only a 50% mix of water and Castrol SF antifreeze.

Ensure the cap is tightened fully after top-up is completed by turning the cap until the ratchet cap clicks.

Note: *In an emergency - and only if the approved antifreeze is unavailable - top-up the cooling system with clean water, but be aware of the resultant reduction in frost protection. Do not top-up or refill with conventional antifreeze formulations. If in doubt consult a qualified technician.*

Antifreeze

WARNINGS



Antifreeze is poisonous and can be fatal if swallowed - keep containers sealed and out of the reach of children. If accidental consumption is suspected, seek medical attention immediately.



If the fluid comes into contact with the skin or eyes, rinse immediately with plenty of water.

CAUTIONS



The use of non-approved antifreeze will have an adverse effect on the engine cooling system and therefore engine durability.



Antifreeze will damage painted surfaces; soak up any spillage with an absorbent cloth immediately and wash the area with a mixture of car shampoo and water.

Antifreeze contains important corrosion inhibitors. The antifreeze content of the coolant must be maintained at 50% ± 5% all year round (not just in cold conditions). To ensure that the anti-corrosion properties of the coolant are retained, the antifreeze content should be checked once a year and completely renewed every ten years, regardless of distance travelled. Failure to do so may cause corrosion of the radiator and engine components.

The specific gravity of a 50% antifreeze solution at 20°C (68°F) is 1.068 and protects against frost down to -40°C (-40°F).

Maintenance

BRAKE FLUID CHECK

WARNINGS



Brake fluid is highly toxic - keep containers sealed and out of the reach of children. If accidental consumption of fluid is suspected, seek medical attention immediately.



If the fluid comes into contact with the skin or eyes, rinse immediately with plenty of water.



Take care not to spill the fluid onto a hot engine - a fire may result.



Do not drive the vehicle with the fluid level below the **MIN** mark.



If the quantity of fluid in the brake reservoir drops below the recommended level, a red warning indicator in the instrument pack will illuminate or the message **CHECK BRAKE FLUID** will be displayed in the message centre.

Note: *If the warning indicator illuminates, or the message is displayed while the vehicle is being driven, stop the vehicle as soon as safety permits by gently applying the brakes.*

Check and top-up the fluid level if necessary.

Checking the fluid level

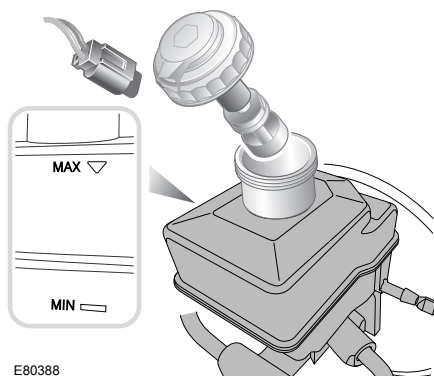
The left side under bonnet cover must be removed to access the brake fluid reservoir.

WARNING



If brake pedal travel is unusually long or if there is any significant loss of brake fluid, seek qualified assistance immediately. Driving under such conditions could result in extended stopping distances or complete brake failure.

With the vehicle on level ground, check the fluid level at least once per week (more frequently in high mileage or arduous operating conditions).



Look at the level through the side of the transparent reservoir without removing the filler cap.


The brake fluid level must be between the **MIN** and the **MAX** marks.


The fluid level may fall slightly during normal use as a result of brake pad wear but should never be allowed to fall below the **MIN** mark.

Maintenance

Topping up the fluid

CAUTIONS


 Brake fluid will damage painted surfaces. Soak up any spillage with an absorbent cloth immediately and wash the area with a mixture of car shampoo and water.


 Only use new fluid from an airtight container. Fluid from opened containers or fluid previously bled from the system will have absorbed moisture, which will adversely affect performance, and must not be used.


1. Clean the filler cap before removing to prevent dirt from entering the reservoir.
2. Disconnect the electrical lead.
3. Unscrew the cap (1/8 turn) and remove.
4. Top-up the reservoir to the **MAX** mark using Shell DOT4 ESL brake fluid. If Shell DOT4 ESL is not available, a low viscosity DOT4 brake fluid that meets ISO 4925 class 6 and Land Rover LRES22BF03 requirements may be used.
5. Replace the cap and reconnect the electrical lead, ensuring that the lead points to the centre-line of the vehicle.

POWER STEERING FLUID CHECK

WARNINGS


 Power steering fluid is highly toxic. Keep containers sealed and out of reach of children. If accidental consumption of fluid is suspected, seek medical attention immediately.


 If the fluid comes into contact with the skin or eyes, rinse immediately with plenty of water.

 Do not spill the fluid onto a hot engine - a fire may result.

Checking the fluid level

CAUTIONS

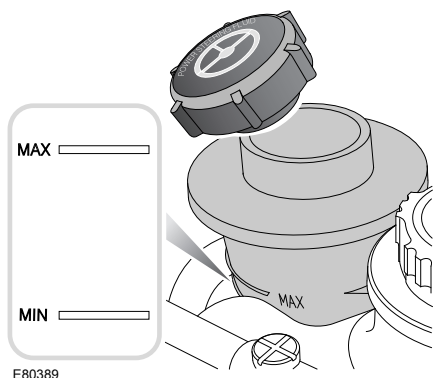
 Do not start the engine if the fluid level has dropped below the **MIN** mark. Severe damage to the steering pump could result.

 Seek qualified assistance immediately if there is a large or sudden drop in the fluid level.

If loss is slow, the reservoir may be topped-up to the upper level mark to enable the vehicle to be driven to a repair facility for examination. However, it is recommended that you seek qualified assistance before driving the vehicle.

Check and top-up the fluid with the vehicle on level ground, engine switched off and the system cold. Ensure that the steering wheel is not turned after stopping the engine.

Maintenance



Look at the level through the side of the transparent reservoir without removing the filler cap.

The fluid level should be between the **MIN** and the **MAX** marks.

Topping up the fluid

CAUTIONS

- ⚠ Power steering fluid will damage painted surfaces. Soak up any spillage with an absorbent cloth immediately and wash the area with a mixture of car shampoo and water.
- ⚠ Do not fill the reservoir above the **MAX** mark.

1. Clean the filler cap before removing to prevent dirt from entering the reservoir.
2. Remove filler cap.
3. Using Texaco Cold Climate PAS fluid, top-up the reservoir until the fluid level is between the **MIN** and **MAX** marks.
4. Replace the filler cap.

Maintenance

WASHER FLUID CHECK

WARNINGS



Some screen wash products are inflammable, particularly if high or undiluted concentrations are exposed to sparking. Do not allow screen wash fluid to come into contact with naked flames or sources of ignition.



If the vehicle is operated in temperatures below 4°C (40°F), use a washer fluid with frost protection. In cold weather, failure to use a washer fluid with frost protection, could result in impaired vision and increase the risk of a vehicle crash.

CAUTIONS

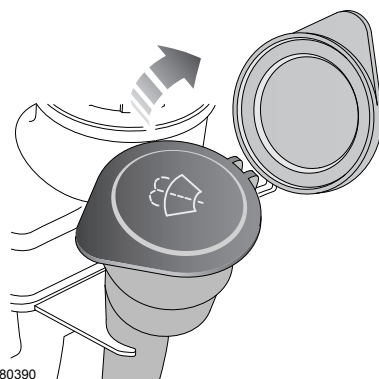


Do not use an antifreeze or vinegar/water solution in the washer reservoir - antifreeze will damage painted surfaces, while vinegar can damage the windscreen washer pump.



Body panels may suffer discolouration as a result of screen wash spillage. Take care to avoid spillage, particularly if an undiluted or high concentration is being used. If spillage occurs, wash the affected area immediately with water.

If the quantity of fluid remaining in the washer reservoir drops to less than one litre, the message **LOW WASHER FLUID** will be displayed in the message centre.



The washer reservoir supplies both front and rear screen washer jets and headlamp washer jets.

Check and top-up the reservoir level at least once per week. In cold climates, always top-up with screen washer fluid to prevent freezing. Operate the washers to check that the nozzles are clear and properly directed.

Maintenance

TECHNICAL SPECIFICATIONS

Lubricants and fluids

Part	Variant	Specification
Engine oil	Diesel vehicles	SAE 5W-30 meeting specification WSS-M2C934-B only ¹
Engine oil	V6 Petrol vehicles	SAE 5W-30 meeting specification WSS-M2C913-C only ²
Engine oil	V8 Petrol vehicles	SAE 5W-20 meeting specification WSS-M2C925-A only
Main gearbox oil	Manual transmission	Castrol MTF BOT338
Main gearbox oil	Automatic transmission	Shell ATF M1375.4
Transfer gearbox oil	All vehicles	Shell TF 0753
Front differential oil	All vehicles	SAF XO
Rear differential oil	Non-locking	SAF XO
Rear differential oil	Electronic locking	Castrol SAF Carbon Mod Plus
Power steering fluid	All vehicles	Texaco Cold Climate PAS fluid
Brake fluid	All vehicles	Shell DOT4 ESL ³
Screen washer	All vehicles	Screen wash with frost protection
Coolant	All vehicles	50% mixture of Castrol SF antifreeze and water.

¹ If you are unable to find an oil that meets the specification defined by WSS-M2C934-B, an SAE 5W-30 engine oil meeting specification ACEA:C2 can be used.


² If you are unable to find an oil that meets the specification defined by WSS-M2C913-C, an SAE 5W-30 engine oil meeting specification ACEA:A3/B3 can be used.

³ If Shell DOT4 ESL is not available, a low viscosity DOT4 brake fluid that meets ISO 4925 class 6 and Land Rover LRES22BF03 requirements may be used.

Maintenance

Capacities

CAUTION

 The quoted capacities are approximate and provided as a guide only. All oil levels must be checked using the dipstick or level plugs as applicable.

Item	Variant	Capacity
Fuel tank	Diesel vehicles	82 litres (18 gallons)
	Petrol vehicles	86 litres (19 gallons)
Engine oil refill and filter change	2.7L Diesel vehicles	5.7 litres (10 pints)
	3.0L Diesel vehicles	5.7 litres (10 pints)
	V8 Petrol vehicles	8.0 litres (14.0 pints)
	V6 Petrol vehicles	5.2 litres (9.1 pints)
Manual gearbox	All vehicles	1.6 litres (2.8 pints)
Automatic gearbox	All vehicles	Filled for life
Transfer box	All vehicles	1.5 litres (2.64 pints)
Front differential - wet fill	All vehicles	0.56 litres (1 pints)
Rear differential - non-locking	All vehicles	1.1 litres (2 pints)
Rear differential - electronic locking	All vehicles	1.6 litres (2.8 pints)
Washer reservoir	3.0L Diesel and V8 petrol	5.6 litres (9.8 pints)
	2.7L Diesel and V6 petrol	6.3 litres (11 pints)
Cooling system (refill)	2.7L Diesel vehicles	16.7 litres (29.4 pints)
	3.0L Diesel vehicles	11.5 litres (20.2 pints)
	V8 Petrol vehicles	17 litres (30 pints)
	V6 Petrol vehicles	10.8 litres (19 pints)

Adjustments

Item	Setting
Brake pedal free travel	Not adjustable
Clutch pedal free travel	Not adjustable

Vehicle battery

BATTERY WARNING SYMBOLS

On the battery label, the warning signs are as follows:



No smoking, no naked flames, no sparks. The battery may emit explosive gas.



Keep away from children to prevent the risk of injury.



Shield eyes with suitable eye protection to reduce the risk of injury from acid splashes.



Battery acid is extremely corrosive and toxic.



Explosive gas may cause explosion or fire.

BATTERY CARE

WARNINGS



Do not allow the battery electrolyte (fluid) come into contact with your skin or eyes. It is both corrosive and toxic, and the resulting injuries can be severe. If any electrolyte does come into contact with your skin or eyes, immediately rinse the affected area with clean, cold water. Immediate medical advice will be required.



If battery electrolyte comes into contact with your skin and/or clothes you should remove the affected clothing and flush the skin with copious amount of water. Seek medical assistance immediately.



If battery electrolyte comes into contact with your eyes, flush with copious amounts of clean cold water. Seek medical assistance immediately and continue to flush with water.

WARNINGS



If swallowed, battery electrolyte can be fatal. Seek medical assistance immediately.



Do not connect any 12 volt equipment directly to the battery terminals. Doing so may cause a spark, which can result in an explosion.



The cell plugs and vent pipe must be in place at all times when the battery is connected to the vehicle. Ensure that the vent pipe is clear of obstructions and not kinked. Failure to do so may cause a pressure build up in the battery, which can result in an explosion.



Do not expose the battery to a naked flame or spark as the battery produces explosive, flammable gas.



Never jump start (boost) or charge, a frozen battery. Doing so can result in an explosion.



Remove all metal jewellery before working on, or near the battery, and never allow metal objects or vehicle components to come into contact with the battery terminals. Metal objects can cause a spark and/or short circuit, which can result in an explosion.



Do not allow the battery posts or terminals to come into contact with your skin. They contain lead and lead compounds which are toxic. Always wash your hands thoroughly after handling the battery.

Vehicle battery

CAUTION

⚠ Do not allow battery electrolyte to come into contact with fabric or painted surfaces. Battery electrolyte is both corrosive and toxic and can damage a wide range of materials. If battery electrolyte comes into contact with any surface, wash it down immediately with copious amounts of clean water.

Your vehicle is fitted with a low maintenance battery.

In hot climates more frequent checks of the battery electrolyte level and condition are required. If necessary, the battery cells can be topped up using distilled water.

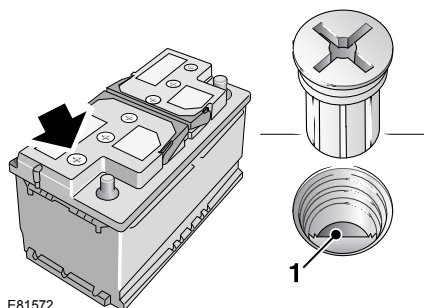
The exterior of the battery should be wiped clean occasionally to remove any dirt or grease.

If a new battery is to be fitted, it must be the same type as the original. The use of unapproved batteries is not recommended and could invalidate the vehicle warranty.

We recommend that the battery charge is checked frequently if the vehicle is used mostly for short distance trips or if it is not used for long periods of time.

Note: *The service life of the battery is dependent on its condition of charge. It must always be sufficiently charged for the battery to last an optimum length of time.*

Check and replenish battery electrolyte



Unscrew the six cell plugs and store carefully.

Check that the surface of the liquid (electrolyte) is level with the plastic level indicator **1**. If necessary, top up with distilled water, but never overfill. Refit the six cell plugs.

Note: *In normal climates this check must be carried out at least once a year.*

CAUTION

⚠ In hot climates, frequent checks of the battery electrolyte level are required.

High temperatures can cause battery fluids to evaporate rapidly. A drained battery may be damaged irretrievably.

Note: *If light is required to inspect the electrolyte level, use only a small electric flashlight, never a naked flame.*

USING BOOSTER CABLES

WARNINGS



During normal operation batteries emit explosive hydrogen gas - ensure sparks and naked flames are kept away from the engine compartment.

Vehicle battery

WARNINGS



Make sure both batteries are of the same voltage (12 volts), and that the booster cables have insulated clamps and are approved for use with 12 volt batteries.



Do not connect positive (+) terminals to negative (-) terminals.



Do not attempt to start the vehicle if the electrolyte in the battery is suspected of being frozen.



Do not disconnect the discharged battery.



Take care when working near rotating parts of the engine. Ensure cables are kept well clear.

CAUTIONS



Do not use a 24 volt booster start system. These produce excessive voltage and can damage the vehicles electrical system.



Do not push or tow start a vehicle with a discharged battery.

Boosting from another vehicle

If a donor vehicle is to be used, park it so that the battery location is adjacent, but make sure the two vehicles do not touch.

Apply the electric parking brake and ensure that the transmission of both vehicles is set in neutral (Park for vehicles with automatic transmission).

Switch off the ignition and all electrical equipment in both vehicles.

Note: Before connecting booster cables ensure that the battery connections on the disabled vehicle are correct and that all electrical equipment has been switched off.

Boosting procedure

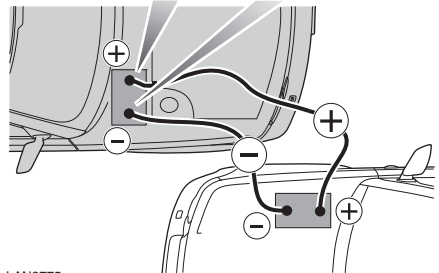
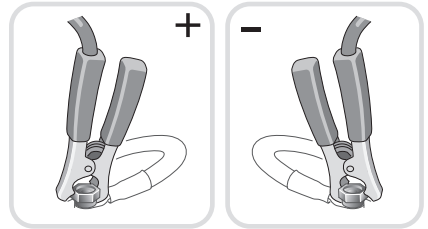
WARNINGS



Do not connect the black cable to the negative terminal of the discharged battery. If in doubt, seek qualified assistance.



Ensure that each connection is securely made and that there is no risk of the clips accidentally slipping or being pulled from the connection points/battery terminal - this could cause sparking, which could lead to fire or explosion.



LAN2775

The discharged battery is in the shaded vehicle in the illustration above.

Always make sure the cables are connected in the order shown below:

1. Connect one end of the RED booster cable to the positive (+) terminal on the donor vehicle's battery.

Vehicle battery

2. Connect the other end of the RED booster cable to the positive (+) terminal on the disabled vehicle's battery.
3. Connect one end of BLACK (-) booster cable to the negative (-) terminal on the donor vehicle's battery.
4. Connect the other end of the BLACK (-) booster cable to a suitable earth point on the disabled vehicle. The earth point should be at least 0.5m (20 in.) away from the battery and as far as possible from any fuel or brake pipes.
5. Check that the cables are clear of any moving components and that all four connections are secure.
6. Start the engine of the donor vehicle and allow it to idle for a few minutes.
7. Start the engine of the disabled vehicle.
8. Allow both vehicles to idle for two minutes.
9. Switch off the donor vehicle.

Disconnecting the cables

WARNING



To avoid serious injury, use extreme caution when removing the booster cables as the engine will be running on the previously disabled vehicle. This means that you will be working close to components which are moving at high speed, carry high voltage, or may be hot.

Note: Do not switch on any electrical circuits on the previously disabled vehicle until after the booster cables have been removed.

The engine should be running on the previously disabled vehicle and the engine switched off on the donor vehicle. Disconnect the booster cables in the exact reverse order to that used for connection.

CHARGING THE VEHICLE BATTERY

WARNINGS



Ensure that the correct type and rating of charger is used. Using an unsuitable charger may damage the battery and could cause the battery to explode.



Always charge the battery in a well ventilated area away from any naked flames, sparks or other ignition sources. During charging the battery can produce a highly explosive and flammable gas.

CAUTIONS



The battery must be disconnected and removed from the vehicle before charging. Failure to do so could result in damage to the vehicle's electrical system.



Always follow the instructions supplied with the battery charger. Failure to do so may result in damage to the battery.

Always heed the following precautions:

- Before charging, disconnect and remove the battery from the vehicle. Charging the battery with the cables connected may damage the vehicle's electrical system.
- The battery charger leads must be securely clamped to the battery terminals before switching on the battery charger. Do not move the leads after the charger is switched on.
- Switch off the battery charger before disconnecting the leads from the battery terminals.

After charging, leave the battery for one hour before reconnecting it. This will minimise the risk of fire or explosion.

Note: Be aware that a battery will take longer to charge in a cold environment.

Vehicle battery

1. Disconnect the battery and remove it from the vehicle.
2. Connect the battery charger in accordance with the charger manufacturer's instructions.
3. Once the charge is complete switch off the power to the charger.
4. Disconnect the charger leads from the battery.
5. Allow the battery to stand for an hour before connecting to the vehicle. This will allow any explosive gases to dissipate and reduce the risk of explosion.

Battery charge indicator



Illuminates red as a bulb check when the ignition is switched on and extinguishes when the engine is started. If it remains on, or illuminates whilst driving, there is a fault with the battery charging system. Seek qualified assistance urgently.

CHANGING THE VEHICLE BATTERY

WARNINGS



Always switch off the ignition before disconnecting the battery. Failure to do this may cause a failure of the airbag SRS.



Use caution when lifting the battery out of, or into, the vehicle. It is heavy and may cause injury when lifting or dropped.



Do not tilt the battery more than 45 degrees as it may cause damage and may cause the electrolyte to leak out.

Battery electrolyte is highly corrosive and toxic.



If the battery leads are connected to the wrong terminals, the electrical system may be damaged.

CAUTIONS



Do not rest the battery on any part of the vehicle as it may cause damage due to its weight.



Do not run the engine with the battery disconnected. Doing so may damage the charging system.

1. Ensure that all electrical circuits are switched off, all windows are closed and the alarm is disarmed.
2. Remove the Smart Key from the vehicle and wait two minutes to allow the systems to power do fully.
3. Undo the negative clamp and lift the cable and clamp clear of the battery terminal.
4. Undo the positive clamp and lift the cable and clamp clear of the battery terminal.
5. Undo the battery clamp and lift the battery clear of the vehicle.

Vehicle battery

Effects of battery disconnection

Disconnecting the battery can affect a number of vehicle systems, especially if there is insufficient battery power prior to disconnection. For example, the alarm system may trigger depending on its state when the battery was disconnected. If the alarm does sound, use the remote control in the normal way to disarm the security system. The windows may need resetting to enable the one-shot feature to operate correctly. See **ELECTRIC WINDOWS** (page 102).

Battery replacement

Ensure that the battery sits with its terminal posts towards the rear of the vehicle, and that the clamping plate is secure. Tighten the clamping plate nuts until the clamping plate is free from movement (do not over tighten).

Replacement batteries

WARNING



Fit only a battery of the same type and rating. Fitting an incorrect battery may result in a fire or damage to the electrical system. If you are in any doubt when fitting a battery, seek qualified assistance.

Petrol vehicles	H7 80 amp/hr
Diesel vehicles	H8 90 amp/hr

Battery disposal



Recycle used batteries. However, batteries are hazardous and must be disposed of correctly.

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

REFITTING THE VEHICLE BATTERY

WARNING



Remove all metal jewellery before working on, or near, the battery, and never allow metal objects or vehicle components to come into contact with battery terminals. Metal objects can cause a spark and/or short circuit, which can result in an explosion.

CAUTIONS



Ensure that when fitting a battery to the vehicle, the terminals and battery clamps are clean and lightly coated with petroleum jelly. This will ensure good electrical connections are made and help prevent corrosion.



Always follow the battery manufacturer's instructions. Failure to do so may result in damage to the vehicle and/or the electrical system.

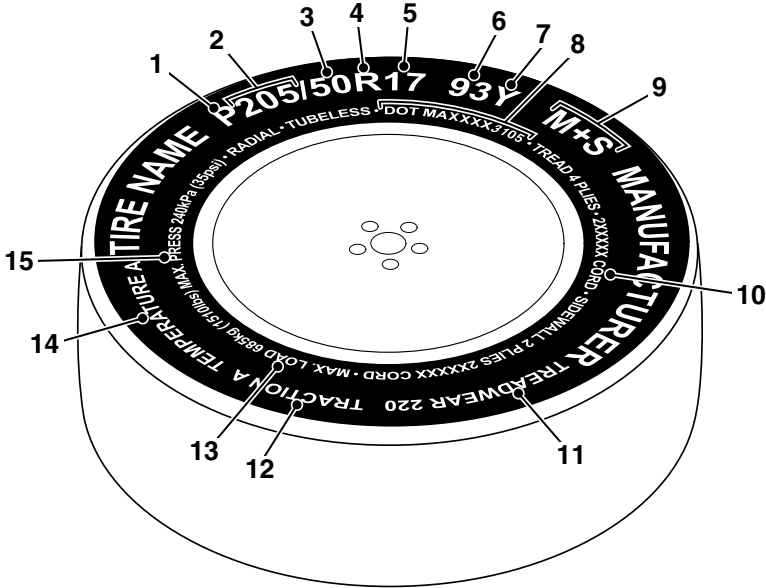
A new battery should be supplied with plastic terminal covers. Leave the covers in place when fitting the battery. Remove them one at a time to fit the battery cable clamps.

Refitting is an exact reversal of the removal procedure. If you are in any doubt about fitting a battery, seek qualified assistance before attempting to fit the battery.

Wheels and tyres

GENERAL INFORMATION

Tyre markings



E80640

1. **P** indicates that the tyre is for passenger use.
2. The width of the tyre from sidewall edge to sidewall edge in millimetres.
3. The aspect ratio, also known as profile, gives the sidewall height as a percentage of the tread width. If the tread width is 205 mm, and the aspect ratio is 50, the sidewall height is 102 mm.
4. **R** indicates that the tyre is of Radial ply construction.
5. The diameter of the wheel rim given in inches.
6. The load index for the tyre. This index is not always shown.
7. The speed rating denotes the maximum speed at which the tyre should be used for extended periods. †
8. Tyre manufacturing standard information, which can be used for tyre recalls and other checking processes. Most of this information relates to the manufacturer, place of manufacture etc. The last four numbers are the date of manufacture. For example, if the number was **3106**, the tyre was made in the 31st week of 2006.
9. **M+S** or **M/S** indicates that the tyre has been designed with some capability for mud and snow.

Wheels and tyres

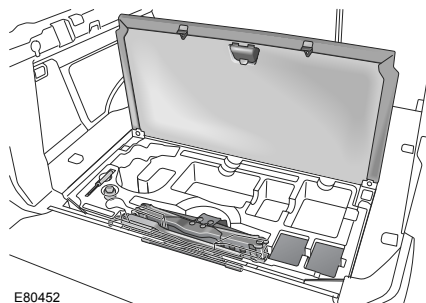
- The number of plies in both the tread area, and the sidewall area, indicates how many layers of rubber coated material make up the structure of the tyre. Information is also provided on the type of materials used.
- Wear rate indicator. A tyre rated at 400 for example, will last twice as long as a tyre rated at 200.
- The traction rating grades a tyre's performance when stopping on a wet road surface. The higher the grade the better the braking performance. The grades from highest to lowest are, AA, A, B, and C.
- The maximum load which can be carried by the tyre.
- Heat resistance grading. The tyres resistance to heat is grade A, B, or C, with A indicating the greatest resistance to heat. This grading is provided for a correctly inflated tyre, which is being used within its speed and loading limits.
- The maximum inflation pressure for the tyre. This pressure should not be used for normal driving.

† Speed ratings

Rating	Speed (mph)
Q	99
R	106
S	112
T	118
U	124
H	130
V	149
W	168
Y	186

TOOL KIT

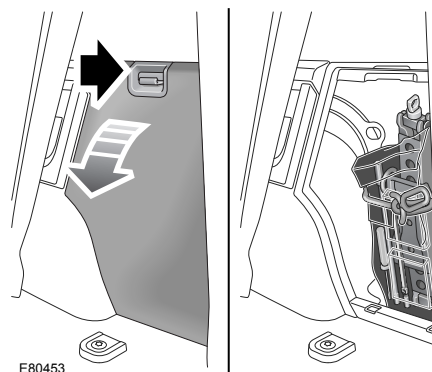
5-seat vehicles



On 5-seat vehicles, the tool kit is located under a panel set in the loadspace floor.

Note: Tool types and positions, may vary from the illustrations.

7-seat vehicles



On 7-seat vehicles, the tool kit is stowed behind an access cover in the loadspace area.

Note: Take careful note of the stowage position of each of the tools as it is important to return them to their correct position after use.

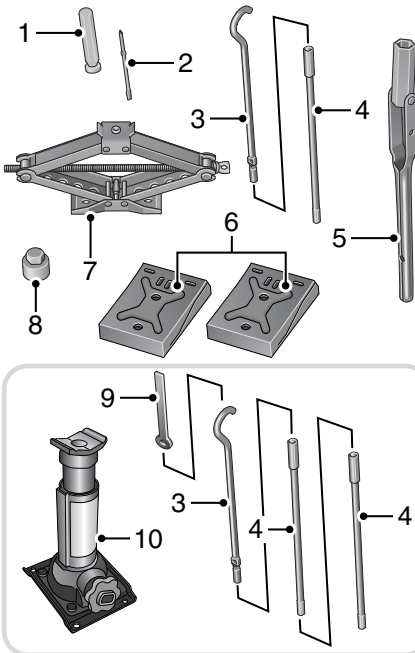
Wheels and tyres

Tool kit contents

WARNING



After use the tool kit should be returned to its storage area and correctly stowed. Do not leave the tool kit, or its components, loose in the storage area as they can prove hazardous during an impact or sudden manoeuvre.



E80454

1. Screwdriver handle
2. Screwdriver blade
3. Jack screw rotating hook
4. Extension piece
5. Wheel nut brace
6. Wheel chocks
7. Wheel change jack (air suspension)

8. Locking wheel nut adapter
9. Jack adapter (coil suspension)
10. Wheel change jack (coil suspension)

Care of the jack

The jack requires occasional maintenance. Examine the jack for wear, damage. Clean and grease the moving parts, particularly the screw thread, to prevent corrosion.

To avoid contamination, the jack should always be stowed in its fully closed position.

CHANGING A ROAD WHEEL

WARNINGS



The spare wheel is heavy and if handled incorrectly may cause injury. Use extreme caution when lifting or manoeuvring the wheels.



Always secure the spare wheel, or the removed wheel, in the correct position using the retaining bolt. Failure to do so may cause the spare wheel to move in the event of a sudden manoeuvre or accident, leading to death or serious injury.

Wheel changing safety

Before raising the vehicle or changing a wheel, ensure that you read and comply with the following warnings.

WARNINGS



Always find a safe place to stop, off of the highway and away from traffic.



Ensure that the vehicle is on firm level ground.



Disconnect any trailer/caravan from the vehicle.



Switch on the hazard warning lamps.

Wheels and tyres

WARNINGS



Ensure that all passengers and animals are out of the vehicle and in a safe place away from the highway.



Place a warning triangle at a suitable distance behind the vehicle, facing towards oncoming traffic.



Ensure that the suspension is set to off-road height.



Ensure that the front wheels are in the straight ahead position and engage the steering lock.



Apply the parking brake and engage **P** (Park) in vehicles fitted with an automatic transmission,



Apply the parking brake and engage 1st or reverse gear in vehicles fitted with a manual transmission.



Remove the spare wheel before using the jack to avoid destabilising the vehicle when raised.



Ensure that the jack is on firm level ground.



Never place anything between the jack and the ground, or the jack and the vehicle.



Always chock the wheels using suitable wheels chocks. Place the chocks on both sides of the wheel diagonally opposite the wheel to be changed.



If jacking the vehicle on a slight slope is unavoidable, place the chocks on the downhill side of the two opposite wheels.



Take care when lifting the spare wheel, and removing the punctured wheel. The wheels are heavy and can cause injuries if not handled correctly.

WARNINGS



Take care when loosening the wheel nuts. The wheel brace may slip off if not properly attached and the wheel nuts may give way suddenly. Either unexpected movement may cause injury.

Note: *Switch on the hazard warning lamps to alert other road users.*

Before changing a wheel, ensure the following:

- The suspension is set to off-road height.
- Front wheels are in the straight-ahead position.
- Electric parking brake is applied.
- **P** (Park) is selected on an automatic transmission vehicle or any gear on a manual transmission vehicle.
- Ignition is switched off.

Wheels and tyres

Spare wheel

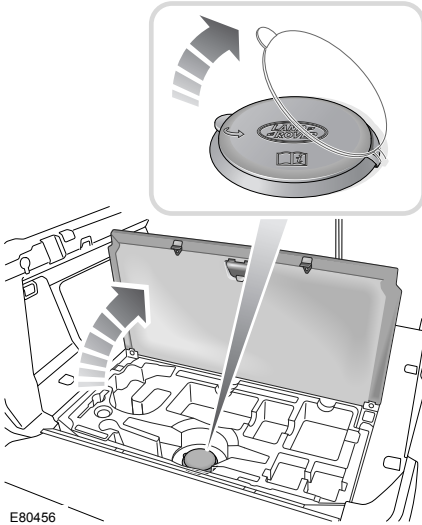
WARNING



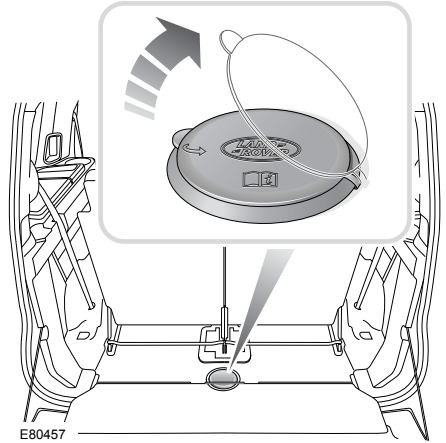
The wheels are extremely heavy. Take care when manoeuvring the spare wheel.

Always remove the spare wheel before jacking up the vehicle.

Spare wheel access - 5-seat vehicle



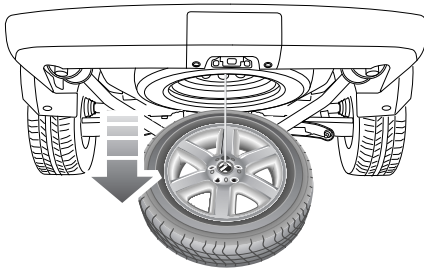
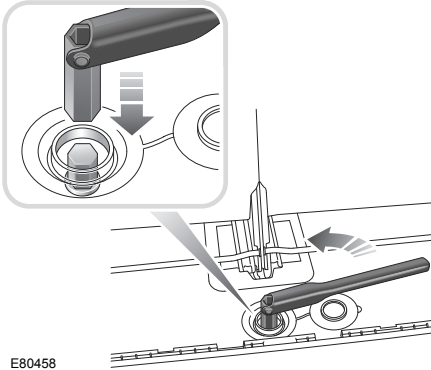
Spare wheel access - 7-seat vehicle



Note: Before removing the spare wheel, make a note of the position that it is stowed in. The wheel which is to be removed from the vehicle must be correctly stowed in its place.

Wheels and tyres

Lowering the spare wheel



CAUTION

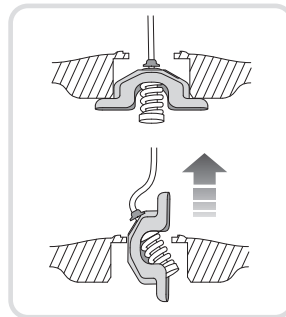
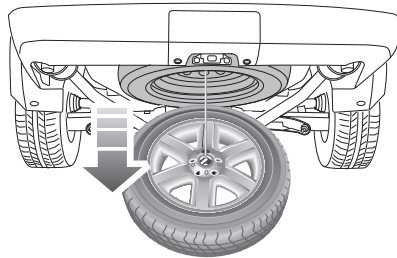
⚠ Do not use power tools to lower the spare wheel. Doing so may damage the mechanism.

1. Open the spare wheel access hatch in the loadspace area.
 - 5-seat vehicles, remove the jack from the tool tray.
2. Lift the cap covering the spare wheel-hoist winch nut.

3. Fit the wheel nut brace to the wheel-hoist winch nut and rotate counterclockwise to lower the spare wheel. The mechanism has been designed for use with the wheel nut brace.
4. Continue to turn the wheel-hoist winch nut until the wheel is on the ground and the cable is slack. Do not attempt to turn the winch nut beyond the physical stop.

Note: 7-seat vehicles: The wheel-hoist winch nut is close to the back of the rear seats. Turn the wheel nut brace as far as possible counterclockwise and then rotate the handle over the top of the nut and continue to turn it.

Releasing the wheel



- Hold the cable and tilt the lifting lug until it can be lifted through the hole in the wheel, as shown in the illustration.

Wheels and tyres

Using wheel chocks

WARNING

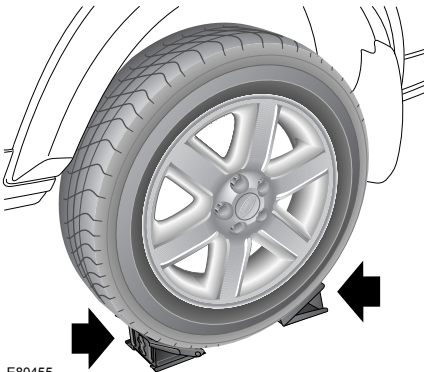


Before raising the vehicle the road wheel diagonally opposite the one to be removed must be chocked.



LAN2348

The wheel chocks are stowed in the tool kit.



E80455

Position the vehicle on level ground. Chock the road wheel diagonally opposite the one to be removed.

Both chocks must be used on opposite sides of the road wheel and must be fully pushed home against the tyre

Note: If jacking the vehicle on a slope is unavoidable, place the chocks on the downhill side of the two opposite wheels.

Raising the vehicle (Air suspension)

WARNINGS



Ensure that the air suspension is set to off-road height.



Always remove the spare wheel before jacking up the vehicle.



The jack is designed for wheel changing only. Never work beneath the vehicle with the jack as the only means of support. Always use the vehicle support stands before putting any portion of your body beneath the vehicle.



Always place the jack on firm, level ground.



Always position the jack from the side of the vehicle, in line with the appropriate jacking point.



Always use the complete, two-piece, jack lever throughout to minimise any chance of accidental damage or

injury.

CAUTION

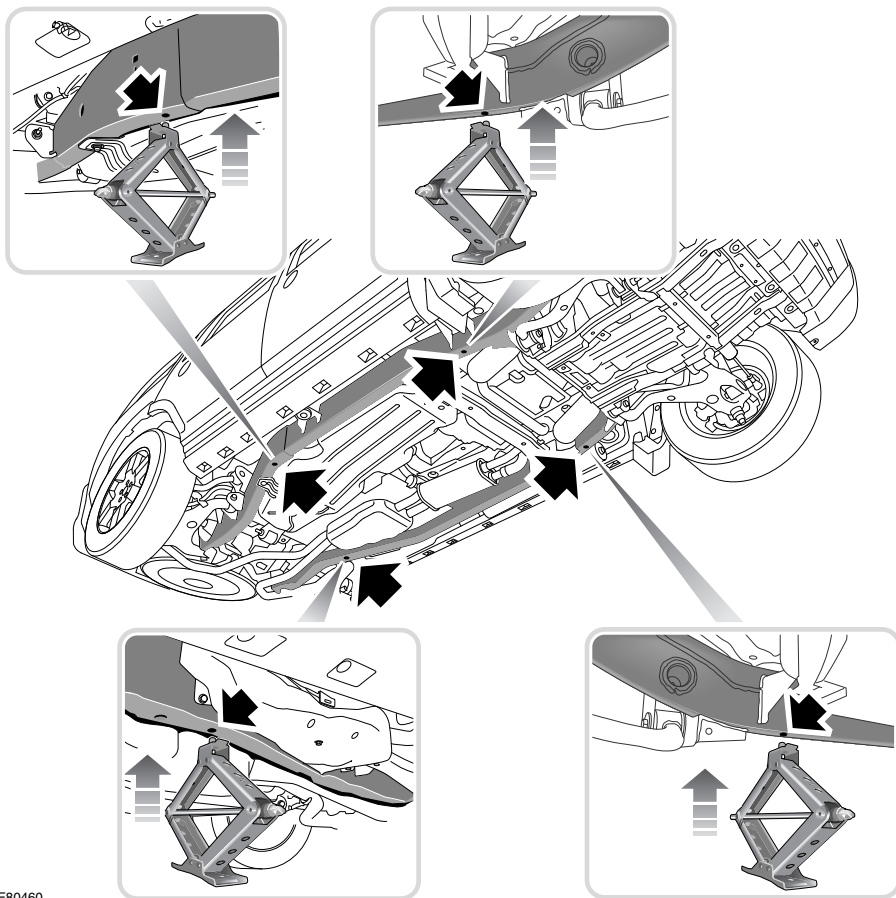


Only jack the vehicle using the jacking points described, or damage to the vehicle could occur.

Note: Your vehicle may be fitted with a tilt sensor which activates the alarm if the vehicle is tilted in any direction after it has been locked. If you wish to have the doors locked while jacking up the vehicle, turn off the alarm sensors via the vehicle information and settings menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Wheels and tyres

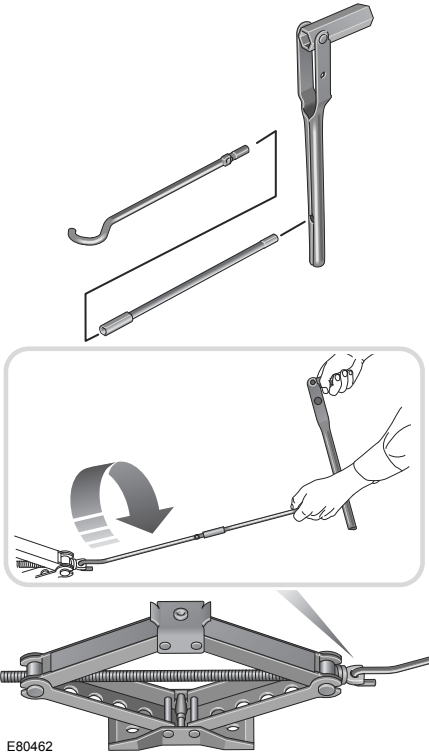
Jacking points



E80460

Wheels and tyres


Operating the jack




1. Attach the jack cranking lever to the jack. Fit the wheel nut brace onto the end of the cranking lever.

Positioning the jack

WARNINGS

 Never work beneath the vehicle, or place any part of your body beneath the vehicle with the jack as the only means of support. Always use suitable vehicle support stands which are approved for the weight of the vehicle.

 Ensure that the jack is correctly located onto the jacking points.

1. Before raising the vehicle, use the wheel nut brace to slacken the wheel nuts half a turn counterclockwise.
2. Position the jack beneath the jacking point, ensuring that the pin on the jack head aligns with the hole in the chassis.
3. Turn the jack lever clockwise to raise the jack cradle until it engages with the jacking point. Ensure that the base of the jack is in full contact with the road surface.

Wheels and tyres

Raising the vehicle (Coil suspension)

WARNINGS



Always remove the spare wheel before jacking up the vehicle.



Never work beneath the vehicle with the jack as the only means of support. Always use approved vehicle support stands before putting any portion of your body beneath the vehicle.



The jack is designed for wheel changing only.



Do not attempt to raise the vehicle using any position other than the jacking points illustrated.



Due to the nature of coil suspension systems, it is not possible to raise the wheel clear of the road surface by jacking under the chassis.



Always place the jack on firm, level ground.

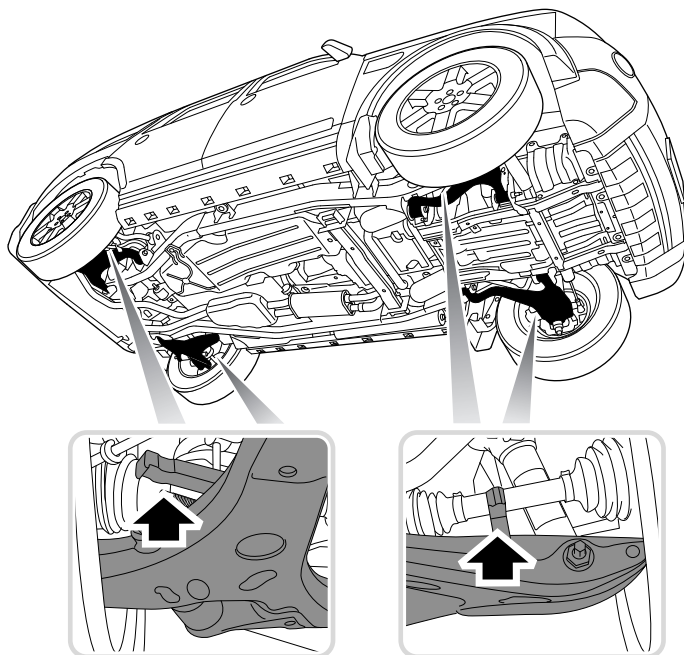


Always position the jack from the side of the vehicle, in line with the appropriate jacking point.

Note: Your vehicle may be fitted with a tilt sensor which activates the alarm if the vehicle is tilted in any direction after it has been locked. If you wish to have the doors locked while jacking up the vehicle, turn off the alarm sensors via the vehicle information and settings menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

Wheels and tyres

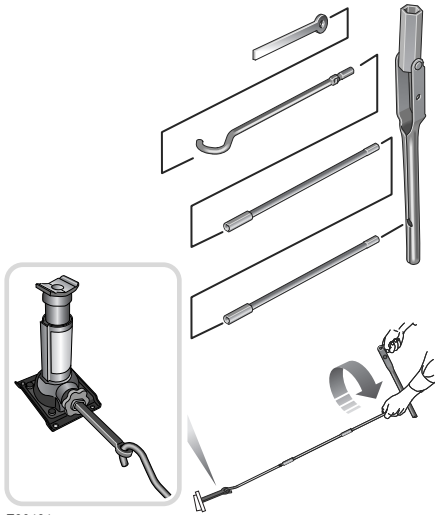
Jacking points



E80463

Wheels and tyres

Operating the jack



1. Attach the jack cranking lever to the jack using the adapter. Fit the wheel nut brace onto the end of the cranking lever.

Positioning the jack

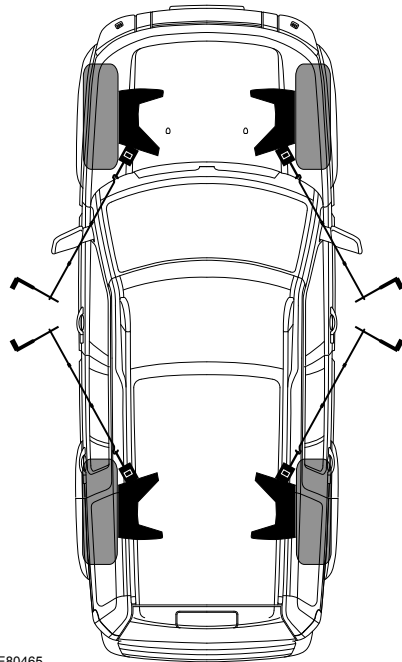
WARNINGS



Never work beneath the vehicle, or place any part of your body beneath the vehicle with the jack as the only means of support. Always use suitable vehicle support stands which are approved for the weight of the vehicle.



Ensure that the jack is correctly located onto the jacking points.



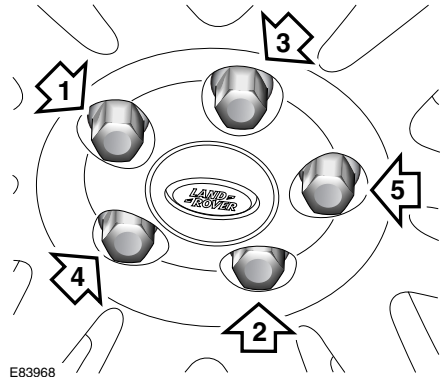
1. Before raising the vehicle, use the wheel nut brace to slacken the wheel nuts half a turn counterclockwise.
2. Position the jack beneath the relevant suspension arm.
3. Turn the jack lever clockwise to raise the jack cradle until it engages with the jacking point. Ensure that the base of the jack is in full contact with the road surface.

Wheels and tyres

Wheel changing

1. Read and observe the warnings in **Wheel changing safety**.
2. Loosen the wheel nuts half a turn (counterclockwise).
3. Position the jack under the relevant jacking point.
4. Raise the vehicle using the jack with a slow steady operation. Avoid rapid, jerky actions as they may cause the vehicle/jack to become unstable.
5. Remove the wheel nuts and place them together where they cannot roll away.
6. Remove the wheel and place to one side. Do not lay the wheel on its face as this may damage the finish.
7. Fit the spare wheel to the hub.
8. Re-fit the wheel nuts and lightly tighten them. Ensure that the wheel is making contact with the hub evenly.
9. Ensure that the space under the vehicle is clear of obstructions and lower the vehicle slowly and smoothly.
10. With all the wheel on the ground and the jack removed, fully tighten the wheel nuts.
11. If an alloy spare wheel is to be fitted, using a suitable blunt tool, knock the centre cap out of the removed wheel. Using hand pressure only, press the centre cap into the newly fitted spare wheel.
12. Check and adjust the tyre pressure as soon as possible.

Wheel nut tightening sequence



With all wheels on the ground and the jack removed, fully tighten the wheel nuts in the sequence shown to 140 Nm (103lb.ft)

Note: If it not possible to torque the wheel nuts when a wheel is replaced, the wheel nuts should be set to the correct torque as soon as possible.

Wheels and tyres

Temporary spare wheel

WARNINGS



You must comply with the instructions given on the warning label affixed to the temporary spare wheel. Failure to do so may result in incorrect use of the temporary spare wheel. This may cause vehicle instability and/or tyre failure.



Drive with caution while the temporary spare wheel is fitted and ensure that an original size wheel and tyre are fitted as soon as possible.



Do not drive the vehicle with more than one temporary spare wheel fitted.



Do not exceed 80 km/h (50 mph) while the temporary spare wheel is fitted.



The tyre pressure in the temporary spare wheel/tyre should be 420 kPa (4.2 bar/60 psi).



The use of snow chains is not permitted on a temporary spare wheel.



DSC must be switched on while the temporary spare wheel is in use.

Locking wheel nuts

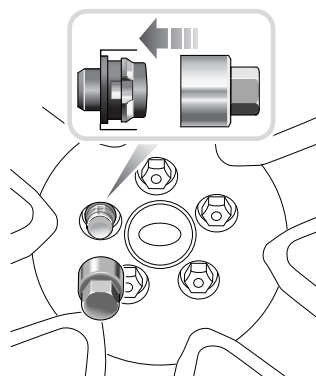
WARNING



Ensure that the locking wheel nut adapter is fully engaged onto the wheel nut before attempting to turn. Failure to do so may cause the key to slip resulting in injury.

Vehicles may be equipped with a locking wheel nut on each wheel. These can only be removed using the special adapter provided in the tool kit.

Note: A code number is stamped on the underside of the adapter. Ensure the number is recorded on the Security Information card supplied with the literature pack. Quote this number if a replacement is required. Do not keep the Security Information card in the vehicle.



E80466

Insert the adapter firmly onto the locking wheel nut.

Using the wheel nut brace, unscrew the wheel nut and adapter.

Be sure to return the locking wheel nut adapter to the correct storage position.

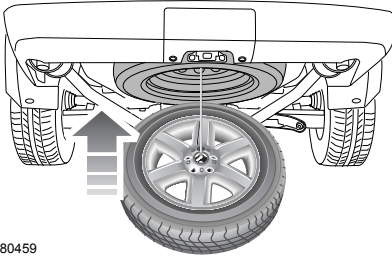
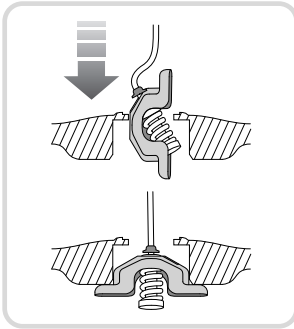
Wheels and tyres

Stowing the changed wheel

WARNING



Do not stow the wheel while the vehicle is still raised on the jack.



E80459

CAUTION



Do not use power tools to raise the spare wheel. Doing so may damage the mechanism.

1. Place the wheel under the rear of the vehicle with its style surface uppermost.
2. Place the lifting lug through the wheel aperture and locate it in position.
3. Winch up the wheel using the wheel-hoist mechanism.

4. Continue to wind up until the mechanism clutches out. This is confirmed by a clear physical indication from the wheel nut brace and an audible noise.
5. Check that the wheel has returned to the same position as the spare wheel as previously noted. If in any doubt, unwind the winch slightly and repeat the previous step.

The wheel must be securely retained in its correct position by the winch mechanism or it could become loose.

6. Replace the locking cap over the wheel-hoist nut. As the underside of this cap is exposed to the same conditions as the underside of the vehicle, ensure that it is firmly in place.

Note: If, for any reason, the spare wheel is not to be fitted back in its hoist, the wheel hoist should be rewound as follows.

Position the lifting lug level on the cable and wind up the wheel hoist mechanism until it clutches out.

Wheels and tyres

TYRE CARE

WARNINGS



Defective tyres are dangerous. Do not drive the vehicle if a tyre is damaged, excessively worn, or incorrectly inflated. Doing so may lead to premature tyre failure.



Avoid contaminating the tyres with vehicle fluids as they may cause damage to the tyre.



Avoid spinning the tyre. The forces released can damage the structure of the tyre and cause it to fail. Doing so may lead to premature tyre failure.



If wheel spin is unavoidable due to loss of traction (in deep snow for example) do not exceed the 50 km/h (30 mph) point on the speedometer. Doing so may lead to premature tyre failure.

Note: *Tyre condition should be checked after the vehicle has been used off-road. As soon as the vehicle returns to a normal, hard, road surface stop the vehicle and check for damage to the tyres.*

All of the tyres (including the spare) should be checked regularly for damage, wear and distortion. If you are in any doubt about the condition of a tyre, have it checked immediately by a tyre centre, or your Dealer/Authorised Repairer.

Tyre wear and fuel consumption

Good driving practise will reduce fuel consumption, and improve the mileage you obtain from your tyres and avoid unnecessary damage.

- Always ensure that the tyre pressures are correctly adjusted.
- Always observe the posted speed limits and advisory speeds for bends.
- Avoid pulling away quickly, or hard acceleration.
- Avoid making fast turns or braking sharply.
- Where ever possible, avoid potholes, or obstacles on the road.
- Do not drive up kerbs, or rub the tyres against them when parking.

Reduced fuel consumption

Fuel consumption can be reduced by raising the tyre pressures to the maximum pressure specified for all load conditions.

Note: *Operating the vehicle at the maximum specified tyre pressures may reduced comfort when the vehicle is lightly loaded.*

Wheels and tyres

Wear indicators

WARNING



Wear indicators show the minimum tread depth recommended by the manufacturers. Tyres which have worn to this point will have reduced grip and poor water displacement characteristics.

CAUTION



If tread wear is uneven across a tyre, or the tyre wears excessively, the vehicle should be checked by your Dealer/Authorised Repairer as soon as possible.



When the tread has worn down to approximately 2 mm, wear indicators start to appear at the surface of the tread pattern. This produces a continuous band of rubber across the tread as a visual indicator.

To maintain performance and grip the tyre must be replaced as soon as the wear indicator becomes visible. Sooner, if legislation requires replacement at a greater tread depth.

Note: Tread depth should be checked regularly, in some cases more frequently than the service intervals. For advice on checking tyres contact your Dealer/Authorised Repairer, or tyre dealer.

Age degradation

Tyres degrade over time due to the effects of ultraviolet light, extreme temperatures, high loads and environmental conditions. Tyres should be replaced at least every six years, but they may require replacement more frequently. Even if unused, the spare tyre should be replaced at the same time as the four road tyres.

Punctured tyres

WARNING



Do not drive the vehicle with a punctured tyre. Even if the punctured tyre has not deflated, it is unsafe to use as the tyre may deflate suddenly at any time.

Not all punctures result in the tyre deflating immediately. Therefore, it is important to check the tyres for damage and foreign objects, regularly.

When driving, if a sudden vibration or change to the vehicle's handling is noticed, reduce speed immediately. Do not brake hard or make any sudden manoeuvres or direction changes. Drive slowly to an area off the main highway and stop the vehicle.

Note: Driving the vehicle to a safe area may cause damage to the punctured tyre, but occupant safety is far more important.

Inspect the tyres for signs of punctures, damage or under inflation. If any damage or deformity is detected, the tyre should be replaced. If a spare tyre is not available, then the vehicle should be recovered to a tyre centre, or to your Dealer/Authorised Repairer.

Wheels and tyres

Replacement tyres

WARNINGS



Do not fit cross-ply tyres.



Do not fit tyres that require inner tubes.



Always fit replacement tyres of the same type and wherever possible of the same make and tread pattern.



Replacement wheels should be genuine Land Rover parts. This will maintain the designed driving

characteristics both on and off road.



If the use of tyres not recommended by Land Rover is unavoidable, ensure that you read and fully comply with the tyre manufacturer's instructions. Failure to do so may lead to tyre failure due to incorrect fitment or use.

Ideally, tyres should be replaced in sets of four. If this is not possible, replace the tyres in pairs (front and rear). When tyres are replaced, the wheels should always be re-balanced and alignment checked.

The correct tyre specification for your vehicle can be found on the tyre information label.

High performance wheel and tyre combinations

CAUTIONS



This vehicle may be fitted with a high performance wheel and low aspect ratio tyre combination designed to give enhanced dry road performance with consideration for aquaplaning resistance.



Low profile, high speed rated tyres have a softer tread compound. If driven aggressively they may suffer increased tread wear and a shorter life than can be expected from other tyre types.



This wheel and tyre combination is susceptible to damage if driven off road. This combination has less performance in snow or ice conditions than M and S tyres. High performance tyres must be replaced with winter tyres when weather conditions dictate.

Wheels and tyres

Directional tyres







E80378

Directional tyres must be fitted so that they rotate in the direction that the arrow is pointing when the vehicle is moving forward.

TYRE PRESSURES

WARNINGS

-  Never drive your vehicle if the tyre pressures are incorrect. Under-inflation causes increased excessive flexing and uneven wear to the tyre. This can lead to sudden tyre failure.
-  Over-inflation causes a harsh ride, uneven tyre wear and poor handling.
-  pressure checks should only be carried out when tyres are cold and the vehicle has been stationary for more than three hours. A hot tyre at or below the recommended cold inflation pressure is dangerously under-inflated.
-  If the vehicle has been parked in strong sunlight or used in high ambient temperatures, do not reduce tyre pressures. Move the vehicle into the shade and allow the tyres to cool before re-checking the pressures.

Tyre pressures (including the spare) should be checked at least once a week with normal on-road use, but should be checked daily if the vehicle is used off-road. Always check the tyre pressures before setting off on a long journey.

Use a reliable gauge to check the pressures when the tyres are cold. Driving as short a distance as 3 km (1 mile) can warm the tyres up sufficiently to affect the tyre pressures.

If it is necessary to check the tyres when they are warm, you should expect the pressures to have increased by up to 30 - 40 kPa (0.3-0.4 bar) (4 - 6 psi). Do not reduce the tyre to cold inflation pressures under these circumstances. Allow the tyres to cool fully before adjusting the pressures.

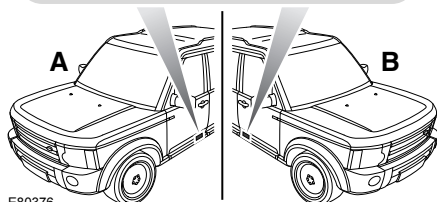
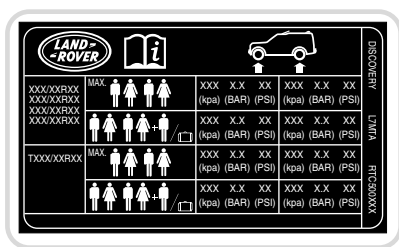
Wheels and tyres

Checking the tyre pressures

WARNING



Tyre pressures must be checked regularly using an accurate pressure gauge when the tyres are cold. Failure to properly maintain your tyre pressures could increase the risk of tyre failure resulting in loss of vehicle control and personal injury.



E80376

A Left-hand drive vehicle

B Right-hand drive vehicle

The correct tyre pressures are shown on the label attached to the driver's door sill or door edge.

Use this procedure to check and adjust tyre pressures:

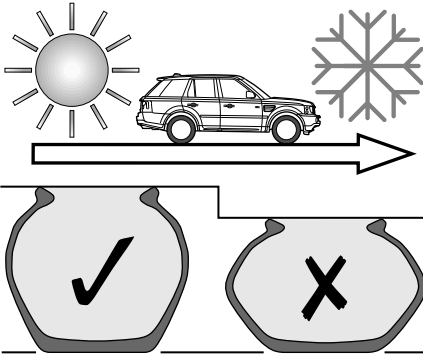
1. Remove the valve cap.
2. Firmly attach a tyre pressure gauge/inflator to the valve.
3. Read the tyre pressure from the gauge, and add air if required.
4. If air is added to the tyre, remove the gauge from the valve and re-attach it to check that the pressure is correct. Failure to remove and re-attach the gauge to the valve could cause the gauge to show an incorrect reading.
5. If too much air is added, remove the gauge from the valve and allow air out of the tyre by pressing the centre of the valve. Reconnect the gauge to the valve and check that the air pressure is correct.
6. If the pressure is still not correct, repeat this process and re-check.
7. Refit the valve cap. Ensure that the valve caps are firmly screwed down to prevent water or dirt entering the valve. Check the valves for leaks when checking the tyre pressures.

Note: It is an offence in certain countries to drive a vehicle with incorrect tyre pressures.

Note: It is the driver's responsibility to ensure that the tyre pressures are correct.

Wheels and tyres

Pressure compensation for ambient temperature changes



E80321

If the ambient temperature drops, the tyre pressures will decrease, which may cause under inflation. This may happen when travelling to, or through, areas of significantly lower temperature.

Under inflation causes the tyre sidewall height to reduce, which in turn results in uneven tyre wear, and a risk of tyre failure.

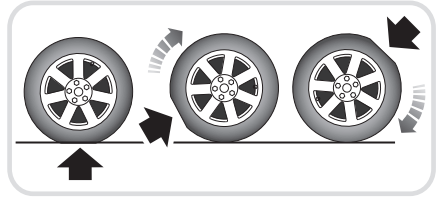
Tyre pressures may be adjusted before setting off on a journey to, or through, areas of low temperature. Alternatively, the tyre pressures can be adjusted when low temperature areas are reached.

Note: *If the tyre pressures are to be adjusted in the lower temperature area, the vehicle should be left standing for a least one hour prior to adjustment.*

Tyre pressures should be increased by 0.14 bar (14 kPa, 2 psi) for each 10°C (20°F) temperature decrease.

Flat spots

If the vehicle is stationary for a long period when the ambient temperature is high, the tyres may form flat spots. When the vehicle is driven these flat spots will cause a vibration which will steadily disappear as the tyres regain their original shape.



E80322

In order to minimise flat spotting, tyre pressures can be increased. Increase tyre pressures by 0.14 bar (14 kPa, 2 psi) for each 10°C (20°F) temperature increase above 20°C (68°F).

Long term storage

Flat spotting can be minimised during long term storage by increasing the tyre pressures to the maximum indicated on the tyre sidewall.

Note: *The tyre pressures must be reduced to the correct pressure before the vehicle is driven.*

Wheels and tyres

WINTER TYRES

If winter tyres are fitted to the vehicle, the tyre manufacturer's instructions must be followed. Pay particular attention to instructions regarding:

- the maximum speed that the vehicle can be driven at and
- the correct tyre pressures.

Approved winter tyres

18 inch wheels 235/65 R18 110H Dunlop Winter Sport M3.
19 inch wheels 255/55 R19 111H Goodyear Ultra Grip.
20 inch wheels 255/50 R20 109H Continental Cross Contact Winter

Winter tyre pressures

The cold tyre inflation pressures for winter tyres are the same as those for normal tyres of the same size.

USING SNOW CHAINS

WARNINGS



Only use traction devices in heavy snow conditions, on hard road surfaces.



Dynamic Stability Control (DSC) must be switched off when using traction devices. DSC limits wheel spin which is required to maintain traction in deep snow conditions.



Do not exceed 50 km/h (30 mph) when traction devices are fitted.



Do not fit traction devices to a temporary spare wheel.

Land Rover approved traction devices may be used to improve traction on a hard road surface in heavy snow conditions. They should not be used in off-road conditions.

If it is necessary to fit traction devices, the following points should be observed:

- Single sided Spike-spyder traction devices can only be fitted to the front wheels of vehicle fitted with 18 or 19 inch diameter wheels.
- The wheels and tyres fitted must conform to the specifications of the original equipment.
- No traction devices should be fitted to the rear wheels.
- Only Land Rover approved traction devices should be used on the vehicle. Only Land Rover approved traction devices have been tested to ensure that they do not cause damage to the vehicle. Contact your Dealer/Authorised Repairer for information.
- Always read, understand, and follow the snow chain manufacturer's instructions. Pay particular attention to the maximum speed and fitting instructions.
- Avoid tyre/vehicle damage by removing the traction devices as soon as the conditions allow.

Wheels and tyres

TYRE PRESSURE MONITORING SYSTEM

WARNINGS



The Tyre Pressure Monitoring (TPM system) is not a substitute for manually checking tyre pressures.

The TPM system only provides a low tyre pressure warning and does not re-inflate the tyres.



The TPM system cannot monitor damage to a tyre. Regularly check the condition of your tyres, especially if the vehicle is driven off-road.

CAUTION



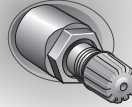
When inflating tyres, care must be taken to avoid bending or damaging the TPM system valves. Always ensure correct alignment of the inflation head to the valve stem.

Note: *Non-approved accessories may interfere with the system.*

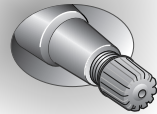
Note: *Different types of tyre may affect the performance of the TPM system. Always replace tyres in accordance with recommendations.*

Your vehicle may be equipped with a TPM system which monitors pressure in each tyre, including the full-size spare tyre. Temporary spare tyres are not fitted with sensors and are not monitored.

1



2



E82445

Wheels fitted with a TPM system can be identified by the appearance of the external metal lock nut and valve **1**. All Land Rover non-TPM system wheels have a rubber valve fitted **2**.

TPM system operation

The TPM system monitors the pressure of the tyres via sensors located in each wheel and a receiver located within the vehicle. Communication between sensor and receiver is via Radio Frequency (RF) signals.

Check each tyre regularly when cold, including the spare. If necessary, inflate tyres to the recommended pressure.



The tyre pressure warning indicator illuminates when one or more of your tyres is significantly under-inflated. You should stop and check your tyres as soon as possible, and inflate them to the recommended pressure for the vehicle loading condition.

Wheels and tyres

If low pressure warnings occur frequently, the cause must be found and rectified. Driving on an under-inflated tyre can cause the tyre to overheat and lead to tyre failure. Under-inflation reduces fuel efficiency and tyre tread life, and may also affect the vehicle's handling and stopping ability.

The TPM system also monitors the full size spare tyre pressure. If the pressure for the spare tyre is incorrect, the message **CHECK SPARE TYRE PRESSURE** is displayed, accompanied by illumination of the warning lamp.

Note: The TPM system warnings may be intermittent under variable climatic conditions.

Vehicle loading

It is possible to select different tyre pressure monitoring levels that correspond to the pressures on the tyre pressure label for a lightly laden or heavily laden vehicle.

The different tyre pressure monitoring levels can be set via the **Vehicle Set-up** menu. See **VEHICLE INFORMATION AND SETTINGS MENU** (page 37).

If the vehicle is to be used heavily-laden or for towing, the tyre pressures must be increased to cope with the additional load. Increase the tyre pressures and then change the menu setting to put the TPM system into heavy load mode. The message **TYRE PRESSURE MONITORING SET FOR HEAVY LOAD** will be displayed in the message centre to confirm the change.

When the vehicle load is returned to normal and the tyre pressures are reset, change the menu setting to put the TPM system back into light load mode. The message **TYRE PRESSURE MONITORING SET FOR LIGHT LOAD** will be displayed in the message centre.

TPM system fault

A TPM system fault is indicated by the illumination of the warning indicator and the message **TYRE PRESSURE MONITORING SYSTEM FAULT** being displayed. The warning indicator will initially flash before illuminating continuously. This sequence will occur every time the vehicle is started until the fault is rectified. When a fault occurs, the system may not be able to detect or signal low tyre pressure as intended.

TPM system faults may occur for a variety of other reasons, including: other radio frequency systems causing interference or the installation of incompatible replacement tyres on the vehicle.

Spare tyre pressure

The full size spare tyre must always be inflated to the highest pressure for the specified tyre size.

Full size spare wheel and tyre change

The system will automatically recognise any changes in wheel positions. The vehicle must be stationary for 15 minutes during the wheel and tyre change, to ensure that the system can detect the change. After driving above 25 km/h (18 mph) any deflation warning should clear within a few minutes.

Temporary spare wheel and tyre change

If the temporary spare wheel is fitted, the system will automatically recognise the change in wheel positions. After approximately ten minutes of driving above 18 mph (25 km/h), the message **FRONT (REAR) RIGHT(LEFT) TYRE PRESSURE NOT MONITORED** will be displayed, accompanied by illumination of the warning lamp.

Wheels and tyres

The warning lamp will first flash and then illuminate continuously. Extended use of the temporary spare wheel, will trigger the message **TYRE PRESSURE MONITORING SYSTEM FAULT**.

This TPM system display sequence will be activated at every ignition cycle until the temporary spare wheel is replaced by a full-size road wheel.

Note: *If in use, always replace the temporary spare wheel before having a TPM system fault investigated.*

If a tyre needs to be changed

CAUTION



Damage to the vehicle may result if the following precautions are not taken:

The valve stem seal, washer, nut, valve core and cap should be replaced at every tyre change.

The valve stem seal, washer and nut must be replaced if the valve retention nut is loosened.

Sensor units and nuts must be refitted using correct torque figures and associated profile.

Sensors can be removed from the wheel by unscrewing the valve retention nut.

Always have your tyres serviced by a dealer or qualified technician. If a TPM system is fitted, each wheel and tyre assembly, with the exception of a temporary spare, is equipped with a tyre pressure sensor connected to the tyre valve stem.

Avoid contact between the bead of the tyre and the sensor during removal and refitting of the tyre, otherwise the sensor may become damaged and/or inoperable.

Replacement sensor fitment procedure

Sensor replacement should be carried out by a Land Rover Dealer/Authorised Repairer.

A replacement sensor must be fitted to a running wheel in order to be recognised by the TPM system. Recognition only occurs when the vehicle is driven above 25 km/h (18 mph) for at least ten minutes.

Should the TPM system warning for any wheel not clear, even after ensuring correct inflation and driving for more than ten minutes above 25 km/h (18 mph), consult your Land Rover Dealer/Authorised Repairer.

Wheels and tyres

TPM system messages

The following table lists the TPM-related messages that may be displayed in the message centre. Market criteria mean that some messages will not apply to your vehicle and will therefore not appear.

Message	Meaning	What to do?
FRONT (REAR) LEFT (RIGHT) LOW CHECK ALL TYRE PRESSURES	The indicated tyre is significantly under-inflated.	Check tyre pressure as soon possible and inflate to recommended pressure.
CHECK ALL TYRE PRESSURES	One or more tyres is significantly under-inflated.	Check all tyre pressures as soon as possible and inflate to recommended pressure.
CHECK SPARE TYRE PRESSURE	Spare tyre is significantly under-inflated.	Check pressure of spare tyre and inflate to recommended pressure.
FRONT (REAR) LEFT (RIGHT) TYRE NOT MONITORED	You have a temporary spare wheel fitted at the indicated position.	Limit your vehicle speed to 80 km/h (50 mph) until the temporary spare can be replaced with the full size road wheel and correctly inflated tyre.
	A signal from the sensor at the indicated position is not being received.	Contact your Land Rover Dealer/Authorised Repair as soon as possible.
TYRE PRESSURE MONITORING SYSTEM FAULT	TPM system fault has occurred.	Check all tyre pressures and then contact your Land Rover Dealer/Authorised Repair as soon as possible.
TYRE PRESSURE MONITORING SET FOR HEAVY LOAD	Indicates the system is set to monitor the tyre pressures for a heavily-laden condition.	Ensure setting is correct for the current tyre pressures and loading conditions.
TYRE PRESSURE MONITORING SET FOR LIGHT LOAD	Indicates the system is set to monitor the tyre pressures for lightly-laden conditions.	Ensure setting is correct for the current tyre pressures and loading conditions.

Wheels and tyres

TYRE GLOSSARY

PSI

Pounds per square inch, an imperial unit of measure for pressure.

kPa

Kilo Pascal, a metric unit of measure for pressure.

Cold tyre pressure

The air pressure in a tyre which has been standing in excess of three hours, or driven for less than one mile.

Maximum inflation pressure

The maximum pressure to which the tyre should be inflated. This pressure is given on the tyre side wall in lbf/in² and kPa.

Note: *This pressure is the maximum allowed by the tyre manufacturer. It is not the pressure recommended for use. See **TECHNICAL SPECIFICATIONS** (page 263).*

Kerb weight

The weight of a standard vehicle, including a full tank of fuel, any optional equipment fitted, and with the correct coolant and oil levels.

Gross vehicle weight

The maximum permissible weight of a vehicle with driver, passengers, load, luggage, equipment, and tow ball load.

Accessory weight

The combined weight (in excess of those items replaced) of items available as factory installed equipment.

Production options weight

The combined weight of options installed which weigh in excess of 1.4 kg (3 lb) more than the standard items that they replaced, and are not already considered in kerb or accessory weights. Items such as heavy duty brakes, high capacity battery, special trim etc.

Vehicle capacity weight

The number of seats multiplied by 68 kg (150lb) plus the rated amount of load/luggage.

Maximum loaded vehicle weight

The sum of kerb weight, accessory weight, vehicle capacity weight, and production options weight.

Rim

The metal support for a tyre, or tyre and tube, upon which the tyre beads are seated.

Bead

The inner edge of a tyre that is shaped to fit to the rim and form an air tight seal. The bead is constructed of steel wires which are wrapped, or reinforced, by the ply cords.

Wheels and tyres

TECHNICAL SPECIFICATIONS

Original wheel and tyre combinations

Wheel size	Tyre size	Load index
7J x 17	235/70 R17 H	111
8J x 18	255/60 R18 V	112
8J x 19	255/50 R19 Y Durable spare	107
9J x 19	255/50 R19 Y	107
9J x 19	255/50 R19 V Gulf and Brazil only	107
8.5J x 20	255/50 R20 Y	109

WARNING



Contact your Land Rover Dealer/ Authorised Repairer before fitting any accessory wheels or tyres. Your Dealer will be able to offer guidance regarding the correct accessories. Fitting incorrect wheel/tyre combinations can seriously affect the ride and handling of your vehicle. In extreme cases this may lead to loss of control of the vehicle.

Accessory wheels and tyres



1 _____ 2 _____
3 _____

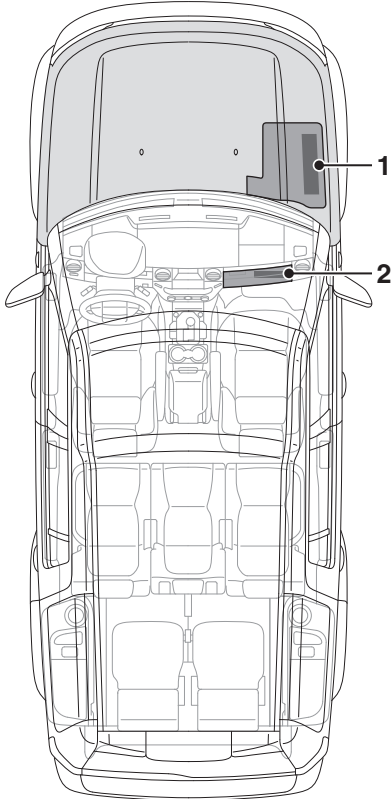
LAN2370

Note: Use the diagram above to record accessory wheel and tyre information.

1. Front tyre pressure.
2. Rear tyre pressure.
3. Accessory wheel and tyre specification.

Fuses

FUSE BOX LOCATIONS

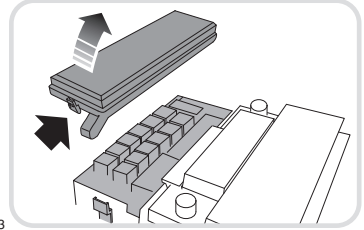
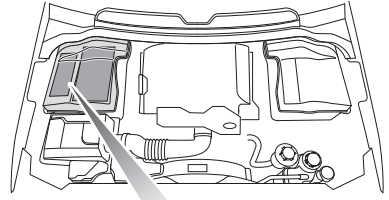


LAN2367

1. Engine compartment fuse box.
2. Passenger compartment fuse box.

Note: The engine and passenger compartment fuse boxes are always fitted on the passenger side of the vehicle.

Engine compartment fuse box

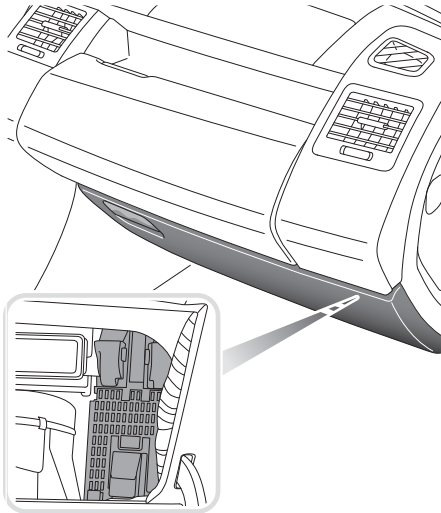


LAN2333

Remove the plastic cover by pressing the tabs. The fuse values and locations and the circuits protected are shown on the plastic cover.

Fuses

Passenger compartment fuse box



The passenger compartment fuse box is fitted behind the glove box. To access the fuses, open the glove box and then pinch the top of the support stays, and lower the glove box into the footwell.

A label on the rear of the glove box shows the circuits protected, the fuse values and their locations.

CHANGING A FUSE

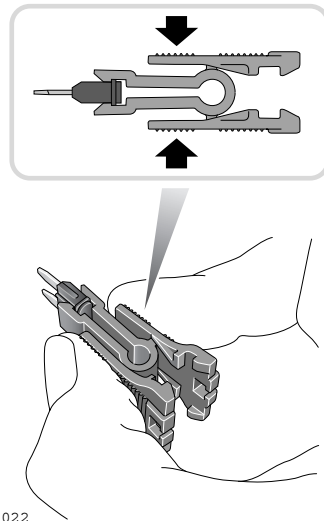
CAUTIONS

- ⚠ Always switch off the ignition, and the affected circuit, before replacing a fuse.
- ⚠ Fit Land Rover approved replacement fuses of the same rating and type, or fuses of matching specification. Using an incorrect fuse may result in damage to the vehicle's electrical system and can result in a fire.

CAUTIONS

- ⚠ If the replacement fuse blows after installation, the system should be checked by your Land Rover dealer.
- ⚠ No attempt should be made to repair a fuse which has blown.

A blown fuse is indicated when the electrical equipment it protects stops working.



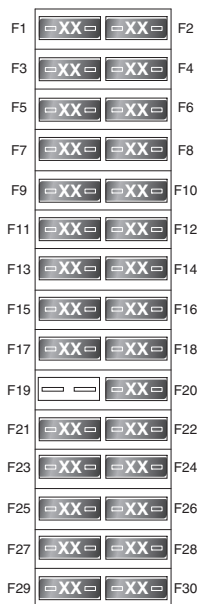
The fuse removal tweezers are located in the passenger compartment fuse box. Place the tweezers onto the head of the suspect fuse (as shown), squeeze the middle (arrowed) and pull to remove. A break in the wire inside the fuse indicates that the fuse has blown.

Note: Owners are advised against removing or replacing the relays (identified as **R1-R19** on the relays) and fusible links (identified as **FL1-FL20** on the fusible links) in the engine compartment fuse box. Failure of any of these items should be investigated by a qualified technician.

Fuses

FUSE SPECIFICATION CHART

Engine compartment fuse box



LAN2293

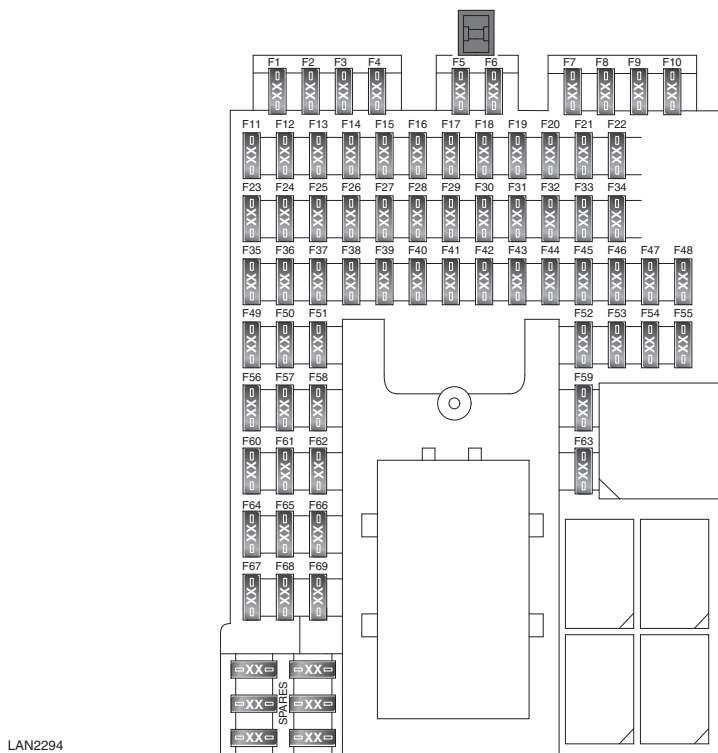
Fuse	Ampere rating	Colour	Circuits protected
1	25	White	Fuel pump
2	5	Tan	Petrol - EMS (MAF, oil sensor) Diesel - fuel burning heater
3	5	Tan	Air suspension ECU
4	25	White	EMS (ECM, fuel pump relay control)
5	15	Blue	EMS
6	15	Blue	Petrol - EMS (ignition coils) Diesel - EMS (sensors, glow plug relay control)
7	-	-	-
8	25	White	Rear seat heater
9	-	-	-
10	10	Red	Petrol - EMS (throttle motor) Diesel - EMS

Fuses

Fuse	Ampere rating	Colour	Circuits protected
11	15	Blue	Petrol - EMS (oxygen sensors) Diesel 3.0L - A/C compressor clutch
12	10	Red	Heated washer jets
13	15	Blue	EMS
14	15	Blue	Petrol - EMS (oxygen sensors)
15	30	Green	Heated front screen
16	15	Blue	Rear wiper
17	10	Red	Petrol V6 - EMS (EGR, purge valve), E-box fan Diesel 3.0L - EMS (MAF, EGR)
18	30	Green	Heated front screen
19	-	-	-
20	5	Tan	Alternator
21	5	Tan	Dynamic Stability Control (DSC), Anti-lock Braking System (ABS)
22	30	Green	Rear blower
23	25	White	Traction control
24	25	White	Front seat heaters
25	15	Blue	Horn
26	20	Yellow	Air suspension ECU
27	5	Tan	Engine Control Module (ECM)
28	20	Yellow	Petrol V8 SC - intercooler water pump Petrol V6 - Brake boost pump Diesel - auxiliary heater
29	30	Green	Front wipers
30	10	Red	Auto transmission ECU

Fuses

Passenger compartment fuse box



Fuse	Ampere rating	Colour	Circuits protected
1	5	Tan	Radio frequency receiver, TPM system
2	-	-	-
3	10	Red	Front fog lamps
4	5	Tan	Automatic dimming interior mirror, automatic head lamp high beam
5	5	Tan	Dynamic Stability Control (DSC), Anti-lock Braking System (ABS), steering angle sensor
6	-	-	-
7	-	-	-
8	-	-	-
9	5	Tan	Electric Parking Brake (EPB)

Fuses

Fuse	Ampere rating	Colour	Circuits protected
10	5	Tan	Air suspension ECU
11	10	Red	Trailer reverse lamps
12	5	Tan	Reverse lamps
13	-	-	-
14	5	Tan	Brake lamps, brake switch
15	30	Green	Heated rear window
16	10	Red	Cubby box cooler
17	5	Tan	Keyless entry/start, central door locking
18	-	-	-
19	5	Tan	Engine Control Module (ECM)
20	10	Red	Heated steering wheel
21	10	Red	Centre console switches (transfer box, HDC, DSC), headlamp levelling, rear climate control, smog sensor.
22	5	Tan	Automatic transmission, transfer box, rear differential
23	5	Tan	Headlamp levelling
24	10	Red	Right-hand side lamps & tail lamps
25	10	Red	Left-hand side lamps & tail lamps
26	-	-	-
27	10	Red	Trailer side lamps
28	-	-	-
29	-	-	-
30	25	White	Front passenger window, central door locking
31	5	Tan	Rain sensor, rear view camera
32	25	White	Driver's window, exterior mirrors, central door locking
33	-	-	-
34	10	Red	Electric fuel flap actuator
35	-	-	-
36	5	Tan	Battery back-up sounder
37	20	Yellow	Keyless entry, central door locking
38	15	Blue	Front screen washer

Fuses

Fuse	Ampere rating	Colour	Circuits protected
39	25	White	Rear left-hand window, central door locking
40	5	Tan	Seat memory, clock, driver's door switchpack (exterior mirrors, windows)
41	-	-	-
42	30	Green	Driver's electric seat
43	15	Blue	Rear screen washer
44	25	White	Rear right-hand window, central door locking
45	30	Green	Passenger electric seat
46	-	-	-
47	20	Yellow	Sunroof
48	30	Green	Trailer connector (battery feed)
49	5	Tan	Adaptive front lighting (right-hand unit)
50	5	Tan	Adaptive front lighting (left-hand unit)
51	5	Tan	Steering wheel switches
52	-	-	-
53	20	Yellow	Cigar lighter
54	15	Blue	Trailer connector (ignition feed)
55	20	Yellow	Auxiliary power socket - centre and rear
56	10	Red	Airbag SRS
57	10	Red	Interior lamps
58	-	-	-
59	-	-	-
60	-	-	-
61	10	Red	Instrument pack, message centre
62	10	Red	Climate control ECU
63	20	Yellow	Auxiliary power socket - front
64	15	Blue	Audio unit, DVD player
65	5	Tan	Surround camera system
66	5	Tan	Diagnostic socket
67	15	Blue	Rear seat entertainment module
68	10	Red	Touch screen display, multi-media module, radio, telephone
69	-	-	-

Status after a collision

DRIVING AFTER A COLLISION

Before starting or driving

WARNING



If the vehicle is involved in a collision it should be checked by your Land Rover Dealer/Authorised Repairer, or suitably qualified persons before starting or driving.

If the vehicle has been involved in an accident it should be checked thoroughly before attempting to start the engine or drive the vehicle.

Check for:-

- Fuel leaks.
- Fluid leaks.
- Battery damage.
- Damage to wiring.
- Damage to lights.
- Damage to steering, suspension, wheels or tyres.
- Sharp or protruding bodywork.
- Operation of doors and locks.
- Condition and operation of seat belts and SRS components.
- Condition of child seats and their mounting/attachment points.

Note: *This list is not exhaustive.*

Resetting the fuel cut-off system

WARNING



The fuel cut-off should never be reset if you can smell fuel, or a leak can be seen. Doing so can lead to a fire which may cause serious injury or death.

If no fuel leak is apparent, the system can be reset as follows:

1. Apply the EPB and on automatic transmission vehicles select **P** (Park).
2. Switch off the ignition and wait for 15 minutes.
3. Switch the ignition on and wait for 30 seconds.
4. Check the vehicle thoroughly for fuel leaks. If a leak is detected, switch the ignition off and seek qualified advice.
5. If no leaks are detected, start the engine as normal.

When driving

When driving a vehicle which has been involved in a collision use caution and pay extra attention to the operation of the vehicle. If any changes in vehicle operation after the collision are noted when compared to its operation before the collision, do not continue to drive the vehicle. Stop the vehicle as soon as it is safe to do so, and have the vehicle recovered.

Pay particular attention to changes in:-

- Steering.
- Braking.
- Unusual noises.
- Warning lights or messages displayed.
- Problems with electrical systems.

Status after a collision

INSPECTING SAFETY SYSTEM COMPONENTS

WARNING



Do not drive the vehicle until all of the occupant protection systems have been checked.

Following a collision the seat belt and Supplementary Restraint System components should be inspected for damage and/or deformity. The inspection and any subsequent repair work should only be carried out by a Land Rover Dealer/Authorised Repairer, or other suitably qualified persons.

Components which require inspection include:-

- Seat belt webbing and mechanisms.
- Seat belt pre-tensioners.
- Airbag covers and modules.
- Seat frames and mounting points.
- Child seats.
- Child seat anchor points.

Note: *This list is not exhaustive.*

In addition to the physical items checked the electronic control system and it's associated wiring should also be checked thoroughly. This process will include a diagnostic check which can only be carried out your Land Rover Dealer/Authorised Repairer or suitably qualified and equipped persons.

Vehicle recovery

TOWING POINTS

WARNING



The towing points at the front and rear of the vehicle are designed for on-road recovery only. If they are used for any other purpose it may result in vehicle damage or serious injury.



Never use towing points to tow a trailer, caravan etc. Doing so may result in vehicle damage or serious injury.

CAUTION



Remove the front towing eye cover before driving off-road. This will prevent damage to or loss of cover.

Off-Road Recovery

WARNING



Before using the towing eyes for off-road recovery, it is essential that off-road driver training covering recovery techniques is undertaken.

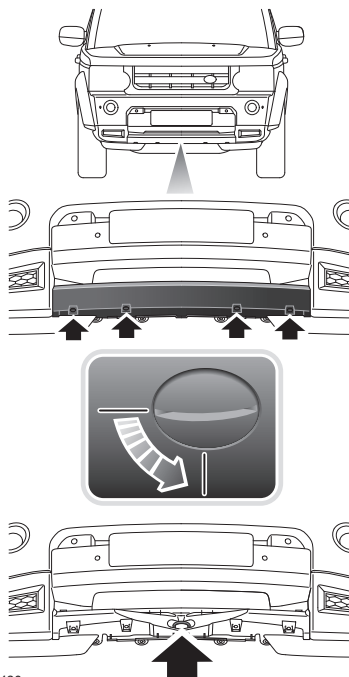
Further information on off-road driver training can be found at <http://www.landroverexperience.com>

Front towing point

The front towing point can be used to tow your vehicle.

The front towing point is behind a removable cover in the lower front bumper. Before driving off-road, remove the cover as a precaution against accidental loss.

Front towing point cover



LAN2480

1. Rotate each of the fasteners 90 degrees counterclockwise with a coin (or similar).
2. To remove the cover, lower the top edge and then pull the cover forward.
3. Offer up the cover and ensure that the two lugs on the bottom edge engage with the holes in the body panel.
4. To secure the cover, turn each fastener 90 degrees clockwise.

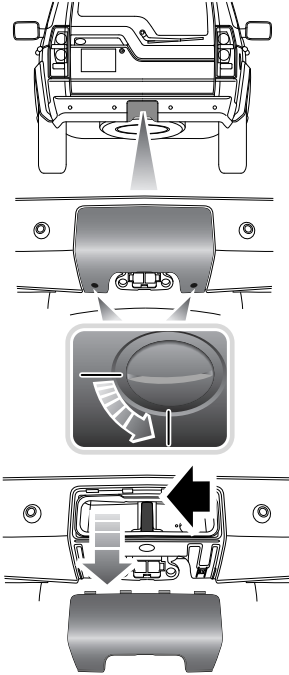
Vehicle recovery

Rear towing point

The rear towing point can be used to tow your vehicle, or another vehicle, in recovery situations.

Before driving off-road, remove the cover as a precaution against accidental loss.

Rear towing point cover



E80777

1. Rotate each of the fasteners 90 degrees counterclockwise with a coin (or something similar) to release the lower edge.
2. Rotate the cover to release the hooks at the top.
3. Remove the cover.
4. Position the cover and ensure that the four hooks on the top edge engage with the holes in the body panel.
5. To secure the cover, turn each fastener 90 degrees clockwise.

Vehicle recovery

LASHING POINTS

WARNING



The front and rear lashing points must be used only for securing the vehicle during transportation. If they are used for any other purpose it may result in vehicle damage and serious injury.

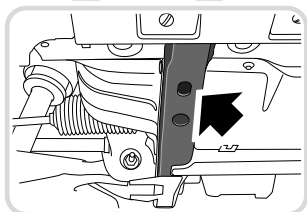
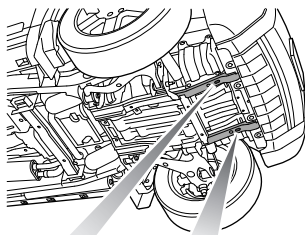
CAUTION



If the vehicle electronics are operational, the air suspension must be set to access height before securing the vehicle to a recovery vehicle or trailer. See **ADJUSTING THE SUSPENSION** (page 166).

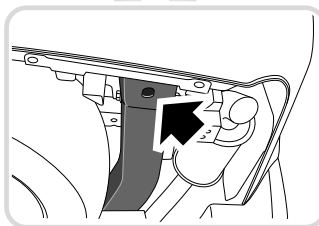
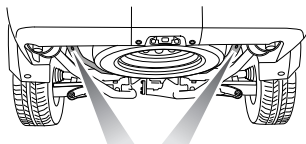
Note: The front and rear lashing points are for lashing only and must not be used for towing.

Front lashing points



E80779

Rear lashing points



E80780

The two pairs of lashing points on the underside of the vehicle are provided for the insertion of appropriate hooks. Do not secure lashing hooks to any other part of the vehicle.

TRANSPORTING THE VEHICLE

WARNING



Use extreme caution when moving or towing the vehicle. Death or serious injury may occur.

The recommended method for recovery or transportation of the vehicle is on a transporter or trailer designed for the purpose.

Ensure that transportation is carried out by suitably qualified persons and that the vehicle is secured correctly.

Vehicle recovery

TOWING THE VEHICLE ON FOUR WHEELS

WARNINGS



Do not remove the Smart Key from the vehicle as this will lock the steering column.



To ensure that the steering column is unlocked, the vehicle battery must only be disconnected after the vehicle has been unlocked with the Smart Key.



If the engine cannot be run while the vehicle is being towed, there will be no power assistance for the steering or brakes. This will result in greater effort being required to steer or slow the vehicle and greatly increased stopping distance.

CAUTIONS



Tow the vehicle only in a forward direction with four wheels on the ground. Towing in a reverse direction with two wheels on the ground will result in serious damage to the transmission.



The vehicle should only be towed for a maximum of 50 km (30 miles) at a maximum speed of 50 km/h (30 mph). Towing for a greater distance or at a higher speed may result in serious damage to the transmission.



Do not tow the vehicle if the gearbox cannot be set in neutral or the rear electronic differential has failed in the locked position.

Your vehicle has permanent four-wheel drive and is fitted with a steering lock. The following procedure must be carried out carefully to prevent damage to the vehicle:

1. Secure the towing attachment from the recovery vehicle to the front towing point.

2. With the parking brake applied, switch on the ignition.
3. Apply the foot brake and place the gear lever into neutral.
4. Switch off the ignition and leave the Smart Key in a secure place within the vehicle.
5. The ignition may be switched on, to allow the lamps and direction indicators to be operated.
Note: Leaving the ignition on for prolonged periods may drain the vehicle battery.
6. Release the parking brake before towing the vehicle.

CAUTION



Leaving the ignition switched on for extended periods will cause the battery to drain.

After towing on four wheels

1. Apply the parking brake.
2. Switch on the ignition and apply the foot brake.
3. Place the auto selector lever in the Park position.
4. Switch off the ignition and remove the Smart Key from the vehicle.
5. Remove the towing attachment and fit the cover to the front towing point.

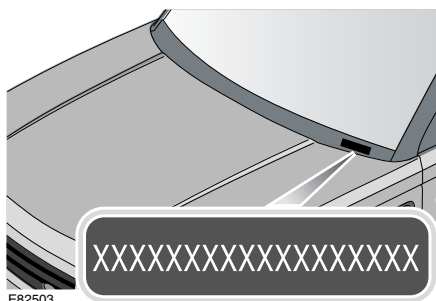
WARNING



Use extreme caution when detaching towing equipment. Vehicle movement is possible which can result in serious injury.

Vehicle identification

VEHICLE IDENTIFICATION NUMBER (VIN)



E82503

As a deterrent to thieves and to assist the Police, the VIN is stamped on a plate which is visible through the lowest part of the left side of the windscreen (this should match the VIN recorded in the Service Portfolio book). VIN information may also be found in areas such as: Bonnet locking platform, Suspension tower and Door shut faces.

Note: *If you need to communicate with your Dealer/Authorised Repairer, you may be asked to quote the VIN number.*

VEHICLE IDENTIFICATION PLATE

The Vehicle Identification Number (VIN) and recommended maximum vehicle weights, are stamped on a plate riveted to the lock side of the left-hand (right-hand in China) front door aperture at the bottom. This VIN should match the VIN recorded in the Service Portfolio and the VIN visible through the front windscreen.

VEHICLE BUILD DATE PLATE

(Australia only)

This is the calendar month and year in which the body and power train assemblies were conjoined and the vehicle was driven from the production line.

The vehicle build date is shown on the tyre pressure label to the right-hand 'B' post.

ENGINE NUMBER

Diesel vehicles

The engine number is stamped on the cylinder block on the right-hand side of the engine.

Petrol vehicles

V6 engines: The engine number is stamped on the cylinder block on the right-hand side of the engine.

V8 engines: The engine number is located on the front of the right-hand cam cover. To access the number, it is necessary to remove the engine covers. For further information contact your dealer/authorised repairer.

Technical specifications

TECHNICAL SPECIFICATIONS

V6 Diesel (2.7L)

Capacity	2 720 cm ³
Firing order	1-4-2-5-3-6
Bore	81.0 mm
Stroke	88.0 mm
Number of cylinders	6
Compression ratio	17.3:1

V6 Diesel (3.0L)

Capacity	2 993 cm ³
Firing order	1-4-2-5-3-6
Bore	84.0 mm
Stroke	90.0 mm
Number of cylinders	6
Compression ratio	16:1

V6 Petrol

Capacity	3999 cm ³
Firing order	1-4-2-5-3-6
Bore	100.4 mm
Stroke	84.4 mm
Number of cylinders	6
Compression ratio	9.7:1

Technical specifications

V8 Petrol

Capacity	5 000 cm ³
Firing order	1-5-4-2-6-3-7-8
Bore	92.5 mm
Stroke	93.0 mm
Number of cylinders	8
Compression ratio	11.5:1

Technical specifications

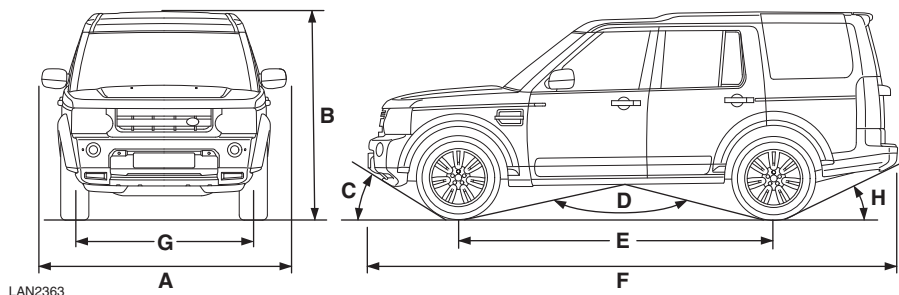
Weights

Weights	Metric (kg)	Imperial (lb)
EC kerb weights from (including full fuel tank)		
4.0 Petrol engine vehicles	2 396	5 282
5.0 Petrol engine vehicles	2 548	5 617
2.7 Diesel engine vehicles (5 seat)	2 476	5 459
2.7 Diesel engine vehicles (7 seat)	2 546	5 613
3.0 Diesel engine vehicles	2 583	5 695
Maximum gross vehicle weight (GVW)		
4.0 Petrol engine vehicles	3 240	7 143
5.0 Petrol engine vehicles	3 240	7 143
2.7 Diesel engine vehicles (5 seat, coil suspension)	3 180	7 011
2.7 Diesel engine vehicles (5 seat, air suspension)	3 240	7 143
2.7 Diesel engine vehicles (7 seat)	3 240	7 143
3.0 Diesel engine vehicles	3 240	7 143
Maximum front axle load		
All vehicles	1 450	3 197
Maximum rear axle load		
4.0 Petrol engine vehicles	1 855	4 090
5.0 Petrol engine vehicles	1 855	4 090
2.7 Diesel engine vehicles (5 seat, coil suspension)	1 840	4 057
2.7 Diesel engine vehicles (5 seat, air suspension)	1 855	4 090
2.7 Diesel engine vehicles (7 seat)	1 855	4 090
3.0 Diesel engine vehicles	1 855	4 090

Note: Axle weights are non-additive. The individual maximum axle weights and gross vehicle weight must not be exceeded.

Technical specifications

Dimensions - Air suspension vehicles



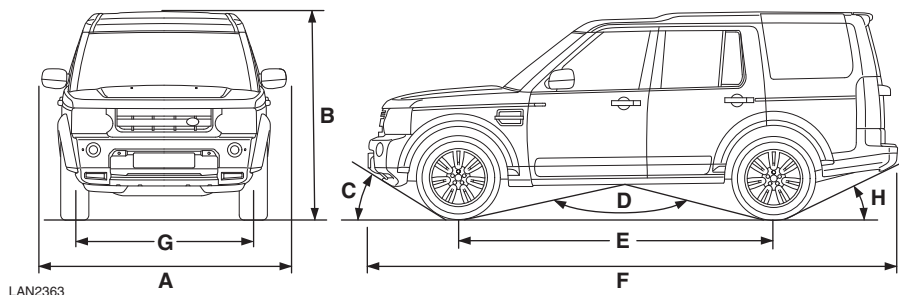
Ref.	Dimension	Metric	Imperial
A	Overall width (including mirrors)	2 176 mm	85.7 in.
B	Overall height		
	- Access height	1 837 mm	72.3 in.
	- Standard height	1 887 mm	74.3 in.
	- Standard height with roof rails	1 891 mm	74.4 in.
	- Off-road height	1 942 mm	76.45 in.
C	Approach angle (at EEC kerb weight and off-road height)	36.2°	
D	Ramp breakover angle (at EEC kerb weight and off-road height)	125.4°	
E	Wheelbase	2 885 mm	113.6 in.
F	Overall length	4 838 mm	190.5 in.
	Overall length	4 838 mm	190.5 in.
G	Track:		
	- Front	1 605 mm	63.2 in.
	- Rear	1 612.5 mm	63.5 in.
H	Departure angle without tow hitch (at EEC kerb weight plus full size spare and off-road height)	28.1°	
	Departure angle with fixed height tow hitch (at EEC kerb weight):		
	- Standard ride height	15.7°	
	- Off -road ride height	18.5°	

Technical specifications

Ref.	Dimension	Metric	Imperial
	Wading depth	600 mm	
	- Standard height	600 mm	24 in.
	- Off-road height	700 mm	28 in.
	Minimum ground clearance (standard height)	185 mm	7.3 in.
	Minimum ground clearance (off-road height)	240 mm	9.4 in.
	Maximum gradient, nose up/down		
	- Continuous operation	35°	
	- Drive-through	45°	
	Turning circle (kerb to kerb)	11.45 metres	37.5 ft
	Wheel alignment (Total)		
	- Front (Toe in)	+0.16° ±0.2°	+10' ± 12'
	- Rear (Toe in)	0.23° ±0.13°	+14' ± 8'
	Brake pedal free travel	Not adjustable	
	Clutch pedal free travel	Not adjustable	

Technical specifications

Dimensions - Coil spring suspension vehicles



Ref.	Dimension	Metric	Imperial
A	Overall width (including mirrors)	2 176 mm	85.7 in.
B	Overall height	1 887 mm	74.29 in.
C	Approach angle (at EEC kerb weight)	31.5°	
D	Ramp breakover angle (at EEC kerb weight)	135.4°	
E	Wheelbase	2 885 mm	113.6 in.
F	Overall length	4 838 mm	190.5 in.
	Overall length	4 838 mm	190.5 in.
G	Track:		
	- Front	1 605 mm	63.2 in.
	- Rear	1 612.5 mm	63.5 in.
H	Departure angle without tow hitch (at EEC kerb weight plus full size spare)	24.9°	
	Departure angle with fixed height tow hitch (at EEC kerb weight)	15.7°	
	Wading depth	600 mm	23.6 in.
	Minimum ground clearance (off-road height)	185 mm	7.3 in.
	Maximum gradient, nose up/down		
	- Continuous operation	35°	
	- Drive-through	45°	
	Turning circle	11.45 metres	37.5 ft

Technical specifications

Ref.	Dimension	Metric	Imperial
	Wheel alignment (Total)		
	- Front	-0.16° ±0.2°	-10' ± 12'
	- Rear	0.16° ±0.2°	10' ± 12'
	Brake pedal free travel	Not adjustable	
	Clutch pedal free travel	Not adjustable	

Type approvals

TYPE APPROVALS

Type approvals

The Declarations of Conformity are from manufacturers of RF (Radio Frequency) equipment, whose components are used in the manufacture of your Discovery 3.

These manufacturers state that their components comply with relevant rules of the R and TTE (Radio and Telecommunication Terminal Equipment) directive.

The directive requires the manufacturer of short range radio devices to self-certify that RF parts fitted to Land Rover vehicles are fit for use and that the declarations are supplied with the vehicle documentation. If at a future date a technical inspection is required, the declarations will provide all necessary information.

Note: *The Declarations of Conformity are published in the native language of the RF equipment manufacturer, in compliance with the R and TTE Directive.*

Type approvals

SIEMENS VDO
A u t o m o t i v e

SiemensVDO Automotive AG „P.O. Box 10 09 43 „D-93009 Regensburg

Name	Dagmar Kolar
Department	SV C TS RBG EMC-Laboratory
Tel.	+49(0)941/790-6699
Fax	+49(0)941/790-136699
E-Mail	dagmar.kolar@siemens.com
Internet	www.siemensvdo.de
Our Ref.	Doc_5WK49096.doc
Date.	03/08/2005

Declaration of Conformity in accordance with Directive 1999/5/EC (R&TTE Directive)

Manufacturer: Siemens VDO Automotive AG
Body & Chassis Electronics

Address: Dep. SV C BC P2 RF TG
Siemenstrasse 12
D-93049 Regensburg
Germany

Product type designation: 5WK4 9096

Intended use: Radio frequency receiver used in vehicle locking/unlocking systems

The product mentioned above complies with the essential requirements and other relevant provisions of Directive 1999/5/EC, when used for its intended purpose:

Health and safety pursuant to §3.1.a: *Applied standard(s):*
EN 60950:2000

Electromagnetic compatibility pursuant to § 3.1.b: *Applied standard(s):*
EN 301 489-1,-3: V1.4.1 (2002-08)

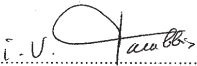
Efficient use of spectrum pursuant to § 3.2: *Applied standard(s):*
EN 300 220-1: V1.3.1 (2000-09)


The following marking applies to the above mentioned product:



Siemens VDO Automotive AG

Regensburg, 2005-08-03


.....
Jean-Francois Tarabbia
Executive Vice President
Body and Chassis Electronics Operations


.....
Dr. Martin Fischer
Vice President
Wireless Products and Modules

SiemensVDO Automotive AG

Body & Chassis Electronics

Postal Address:
SiemensVDO Automotive AG

Office Address:
Siemenstrasse 12
D-93055 Regensburg
Tel. +49(0)941/790-0

Helmut Matschi
Klaus Müller

P.O. Box 10 09 43
D-93009 Regensburg

SiemensVDO Automotive AG „Chairman of the Supervisory Board: Edward G. Knubasik „Managing Board: Franz Wessnig, Chairman „Members: Klaus Egger,
Günter Hauptmann, Johann Löttrier „Registered Office: München „Commercial Registry: München, HRB 132637

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LAN2732

Type approvals



Continental Automotive GmbH – Postfach 100 953 – 93009 Regensburg

Kolar Dagmar
AQL RBG 42
Phone +49 (941) 790-6699
Fax +49 (941) 790-136699
dagmar.kolar@continental-corporation.com

Date	Your message dated	Our Reference	Your reference
July 29, 2008			

Declaration of Conformity in accordance with Directive 1999/5/EC (R&TTE Directive)

Manufacturer: Continental Automotive GmbH
Address: Siemensstrasse 12
D-93055 Regensburg
Germany
Product type designation: S180 052 020 A
Intended use: Tire Pressure System


The product mentioned above complies with the essential requirements and other relevant provisions of Directive 1999/5/EC, when used for its intended purpose:

Health and safety pursuant to §3.1.a:	<i>Applied standard(s):</i> EN 60950-1: 2006
Electromagnetic compatibility pursuant to § 3.1.b:	<i>Applied standard(s):</i> EN 301 489 -1: V1.6.1 (2005-09) EN 301 489 -3: V1.4.1 (2002-08)
Efficient use of spectrum pursuant to § 3.2:	<i>Applied standard(s):</i> EN 300 220 -1: V2.1.1 (2006-04) EN 300 220 -2: V2.1.1 (2006-04)

The following marking applies to the above mentioned product:



Continental Automotive GmbH
Regensburg, 2008-07-29


.....
Andreas Wolf
Executive Vice President
Body & Security


.....
Norbert Müller
Director Product Group 3
Body & Security

Continental Automotive GmbH
Siemensstr. 12
93055 Regensburg
Postfach 100 953
93009 Regensburg

Phone +49 941 790-0
Fax +49 941 790-6999
www.continental-corporation.com

Registered Office:
Hanover
Registered Court:
Amtsgericht Hanover
HRB 59424

General Managers:
Gerard Condonner,
Helmut Marsch,
Harald Stuhlmann

LAN2733

Type approvals

SIEMENS VDO

A u t o m o t i v e

SiemensVDO Automotive AG »P.O. Box 10 09 43 »D-93009 Regensburg

Name	Dagmar Kolar
Department	SV C TS RBG EMC Laboratory
Tel.	+49(0)941/790-6699
Fax	+49(0)941/790-1366999
E-Mail	dagmar.kolar@siemens.com
Internet	www.siemensvdo.de
Our Ref.	Doc_S122780002.doc
Date.	09/11/2005

Declaration of Conformity in accordance with Directive 1999/5/EC (R&TTE Directive)

Manufacturer: Siemens VDO Automotive AG
Body & Chassis Electronics

Address: Siemensstrasse 12
D-93055 Regensburg
Germany

Product type designation: S122780002

Intended use: Radio frequency transmitter used Tire Pressure Monitoring system

The product mentioned above complies with the essential requirements and other relevant provisions of Directive 1999/5/EC, when used for its intended purpose:

Health and safety pursuant to §3.1.a: *Applied standard(s):*
EN 60950: 2000

Electromagnetic compatibility pursuant to § 3.1.b: *Applied standard(s):*
EN 301 489 -1,-3: V1.4.1 (2002-08)

Efficient use of spectrum pursuant to § 3.2: *Applied standard(s):*
EN 300 220 -1: V1.3.1 (2000-09)

The following marking applies to the above mentioned product:



Siemens VDO Automotive AG
Regensburg, 2005-11-09

J. Tarabba
.....
Jean-Francois Tarabba
Executive Vice President
Body and Chassis Electronics Operations

Dr. Martin Fischer
.....
Dr. Martin Fischer
Vice President
Wireless Products and Modules

SiemensVDO Automotive AG Body & Chassis Electronics

Helmut Matschi
Klaus Müller

Postal Address:
SiemensVDO Automotive AG

P.O. Box 10 09 43
D-93009 Regensburg

Office Address:
Siemensstraße 12
D-93055 Regensburg
Tel.: +49(0)941/790-0

SiemensVDO Automotive AG »Chairman of the Supervisory Board: Edward G. Knibb »Managing Board: Franz Wressnig, Chairman »Members: Klaus Egger,
Günter Hauptmann, Johann Lötner »Registered Office: München »Commercial Registry: München, HRB 132637

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LAN2734

Type approvals

EC Declaration of Conformity

EC Directive: 1999/5/EC

Manufacturer: Lear Corporation

Type Designation: 15K601

Model Numbers: 5E0B50127, 5E0B60127, 15K601-BB, AH42-15K601B, AH22-15K601B, AH42-15K601-BC, AH22-15K601-BC

Description / Intended Use: Passive Key (PK) / Customer Identification Device (CID), passive keyless entry system keyfob

Trademarks: Land Rover / Range Rover

Applied Standards: CEPT/ERC/REC 70-03
ETSI EN 60950
ETSI EN 300 220
ETSI EN 301 489
IEC EN 60950
AS/NZS 4268

Responsible Person: Kevin Cotton
Lear Corporation
21557 Telegraph Road
Southfield, Michigan 48033
United States of America

Hereby, **Lear Corporation** declares that the product referenced above is in compliance with the essential requirements of **Directive 1999/5/EC**, on the approximation of the laws of the member states relating to **Directive 1999/5/EC**.

Signed: *Kevin Cotton*
Kevin Cotton, Lear Corporation

Date: 26 March 2009

Type approvals

EC Declaration of Conformity

EC Directive:	1999/5/EC
Manufacturer:	Lear Corporation
Type Designation:	5E0760127
Model Numbers:	5E0760127, 15K602, AH42-15K602-B, AH42-15K602-BC
Description / Intended Use:	RF Receiver (RFR), used in passive entry and passive start, remote keyless entry, and tire pressure monitoring systems
Trademarks:	Land Rover / Range Rover / Jaguar
Applied Standards:	European Commission Directive 2006/28/EC ETSI EN 60950 ETSI EN 300 220 CEPT/ERC/REC 70-03 AS/NZS 4268
Responsible Person:	Kevin Cotton Lear Corporation 21557 Telegraph Road Southfield, Michigan 48033 United States of America

Hereby, **Lear Corporation** declares that the product referenced above is in compliance with the essential requirements of **Directive 1999/5/EC**, on the approximation of the laws of the member states relating to **Directive 1999/5/EC**.

Signed: Kevin Cotton
Kevin Cotton, Lear Corporation

Date: 27 March 2009

Type approvals

EC Declaration of Conformity

EC Directive: 1999/5/EC

Manufacturer: Lear Corporation

Type Designation / FCC ID: KOBJBG10A

Model Numbers: 5E0770237, 5E0770337, 19H440, AH22-19H440-AC, AH42-19H440-AD, AH22-19H440, AH42-19H440

Description / Intended Use: Remote Function Actuator (RFA), passive keyless entry and start system low frequency initiator

Trademarks: Land Rover / Range Rover / Jaguar

Applied Standards: European Commission Directive 2006/28/EC
ETSI EN 60950
ETSI EN 300 330
CEPT/ERC/REC 70-03
AS/NZS 4268
FCC Regulations 47 CFR Part 15

Responsible Person: Kevin Cotton
Lear Corporation
21557 Telegraph Road
Southfield, Michigan 48033
United States of America

Hereby, **Lear Corporation** declares that the product referenced above is in compliance with the essential requirements of **Directive 1999/5/EC**, on the approximation of the laws of the member states relating to **Directive 1999/5/EC**

Signed: 
Kevin Cotton, Lear Corporation

Date: 27 March 2009

Type approvals

EC Declaration of Conformity

EC Directive: 1999/5/EC

Manufacturer: Lear Corporation

Type Designation / FCC ID: KOBJBG10B

Model Numbers: 5E0770257, 5E0770357, 19H440, AH22-19H440, AH42-19H440, AH22-19H440-AD, AH42-19H440-AE

Description / Intended Use: Remote Function Actuator (RFA), passive keyless entry and start system low frequency initiator

Trademarks: Land Rover / Range Rover / Jaguar

Applied Standards: European Commission Directive 2006/28/EC
ETSI EN 60950
ETSI EN 300 330
CEPT/ERC/REC 70-03
AS/NZS 4268
FCC Regulations 47 CFR Part 15

Responsible Person: Kevin Cotton
Lear Corporation
21557 Telegraph Road
Southfield, Michigan 48033
United States of America

Hereby, **Lear Corporation** declares that the product referenced above is in compliance with the essential requirements of **Directive 1999/5/EC**, on the approximation of the laws of the member states relating to **Directive 1999/5/EC**.

Signed: 
Kevin Cotton, Lear Corporation

Date. 27 March 2009

Type approvals



Supplier's Declaration of Conformity

Declaration of Conformity with Electromagnetic Compatibility Standards as
Required under the Radiocommunications Act

We ALPINE ELECTRONICS, INC.
(REGISTERED NAME OF SUPPLIERS)

of 20-1 Yoshima-Kogyodanchi Iwaki-city Fukushima 970-1192 Japan
(ADDRESS OF REGISTERED PLACE OF BUSINESS)

ACN _____ Supplier Code(if applicable) N18

declare under our sole responsibility that the product:

CD Player with Radio Receiver

MODEL Number : 4H22-18C815-** (MFLV904A)

(NAME,TYPE OF MODEL,LOT,BATCH OR SERIAL NUMBER,SOURCES AND NUMBER OF ITEMS)

to witch this declaration relates is in conformity with the following standard(s) :

Title	Number	Date of issue
<u>Limits and methods of measurement</u>	<u>AS/NZS CISPR 13</u>	<u>2004</u>
<u>of radio interference characteristics</u>		
<u>of sound and television broadcast</u>		
<u>receivers and associated equipment</u>		

NAME OF THE AUTHORIZED PERSON Naomi Okabe

DATE OF ISSUE Oct. 07, 2008

SIGNATURE OF THE AUTHORIZED PERSON N. Okabe

Type approvals

We, the party responsible for compliance, declare under our sole responsibility that the Handset Integration product RX-1M is in conformity with the provisions of the following Council Directive: 1999/5/EC. A copy of the Declaration of Conformity can be found at:

http://www.nokia.com/phones/declaration_of_conformity/

The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Land Rover is under license. Other trademarks and trade names are those of their respective owners.

	Type: RX-1M	N49794 XVJ500042  YYDDSSSS000000
	Warranty void if seal is broken	This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.
 		Z276
FCC ID: OW3RX-1M IC : 661AA-RX1M		 0630773/93/123456 YWW

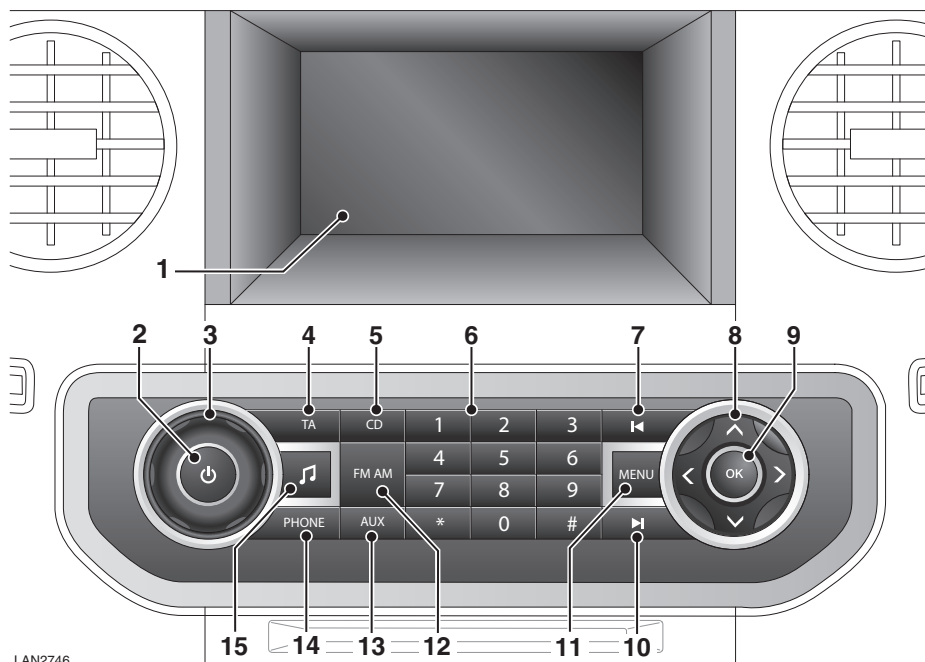
E91115

NOKIA [®] Made in Hungary	CE168
 020141	 PQ1234567
112233445566	Type: RX-1M

E91116

Audio system overview

AUDIO SYSTEM

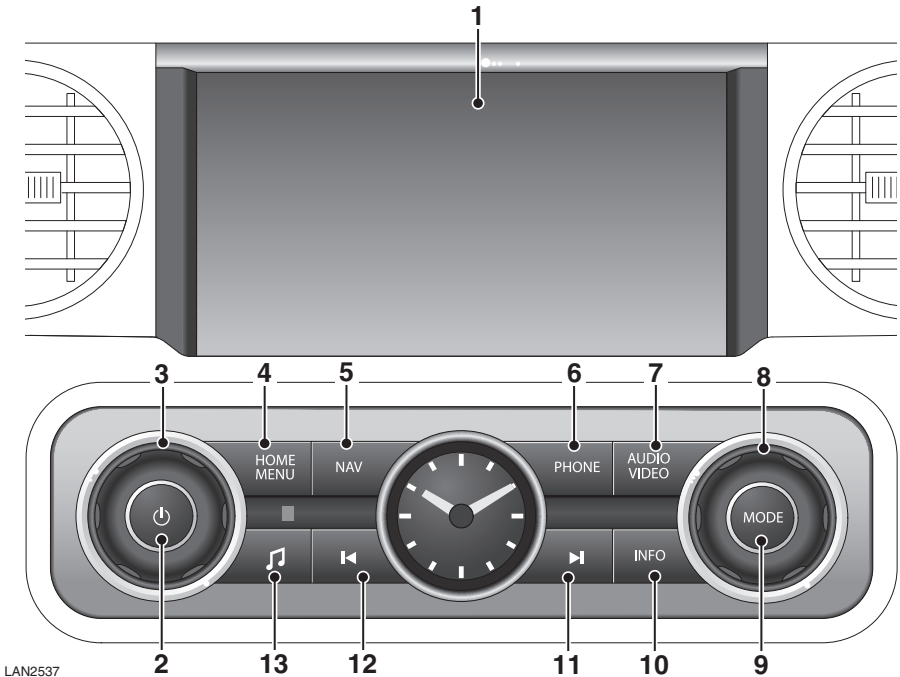


LAN2746

1. Audio information display
2. Audio on/off
3. Volume
4. Traffic announcement
5. Compact disc player
6. Presets
7. Seek down
8. Menu navigation control
9. OK
10. Seek up
11. Audio menu
12. AM/FM waveband select
13. Auxiliary input mode
14. Phone mode
15. Tone

Audio system overview

TOUCH SCREEN AUDIO SYSTEM



1. Touch screen display
2. Audio on/off
3. Volume
4. Access touch screen Home Menu
5. Access Navigation Menu
6. Access Phone Menu
7. Access Audio/Video Menu
8. Scroll up down (menu control)
9. Mode
10. Traffic/News information
11. Search up/increase
12. Search down/decrease
13. Tone

Note: The touch screen audio system is operated by a combination of physical buttons on the fascia and virtual buttons displayed on the touch screen. To avoid confusion when reading this handbook, the physical buttons are referred to as hard keys and the on screen buttons as soft keys.

Audio system overview

TOUCH SCREEN CARE

Care points

The touch screen allows control of all the Infotainment systems from a single point. To ensure that it continues to operate correctly, some basic care points are listed below.

- Clean only with a lightly moistened soft cloth.
- Do not use chemical agents, or domestic cleaners, to clean any part of the touch screen or its surround.
- Only use your finger to operate the touch screen. Ensure that only one finger at a time is in contact with the screen, to prevent incorrect entries.
- A short, light press is sufficient to operate functions. Do not use excessive pressure.
- Do not allow any sharp, hard or abrasive objects to come into contact with the screen.
- Where possible, avoid exposing the touch screen to direct sunlight for long periods.

Note: *None of the functions of the touch screen are operated by dragging icons.*

SWITCHING THE SYSTEM ON



To switch on the system, press the On/Off hard key.

The first time the touch screen audio system is switched on, the home menu will be displayed. Switching the system on subsequently, will display the screen or menu that was in use when the system was switched off.

TURNING OFF THE TOUCH SCREEN



The touch screen display can be turned off without turning off the audio system by touching the display off icon on the screen.

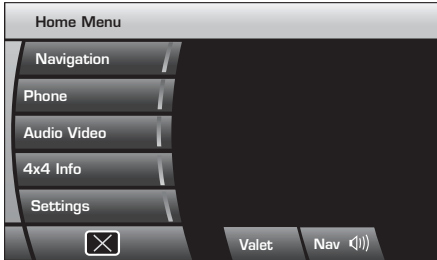
Touch the screen to turn the display back on.

Audio system settings (touch screen)

PERSONALISING THE SYSTEM SETTINGS

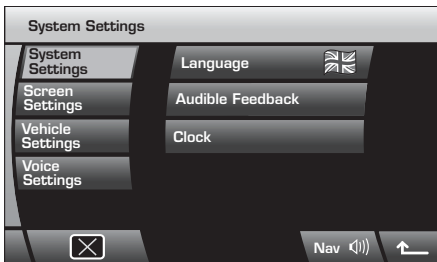
Your vehicle is delivered with the system settings (language etc.) tailored to the market for which the vehicle is intended.

These settings can be changed to suit your preferences.



LAN2349

To access the Settings menu, touch the **Settings** soft key on the Home Menu.



LAN2350

From the Settings menu, touch the soft key for the category of setting you want to change.

SYSTEM SETTINGS

Changing the language setting

To change the language used by the system, touch the **Language** soft key on the System Settings menu.

The language choices are displayed as a list. Scroll up or down through the list using the on-screen arrows. The currently selected language will be indicated as an orange soft key.

Touch the soft key for the language you wish to use.



LAN2351

A pop-up menu will appear indicating the current language, the new language and the option to cancel or accept the change.

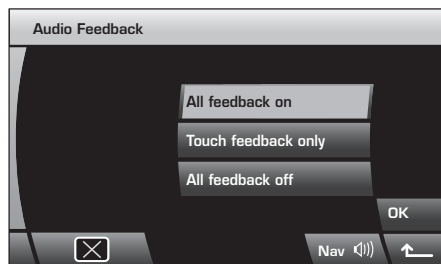
Once your language choice has been made and you have pressed the **OK** soft key, the main Settings menu will be displayed.

Note: The country of origin for the language is indicated by the national flag, useful if the display has been set to a language that you are unable to read.

Audio system settings (touch screen)

Audible feedback on/off

To change your audible feedback preferences (information messages etc.), touch the **Audible Feedback** soft key on the System Settings menu.

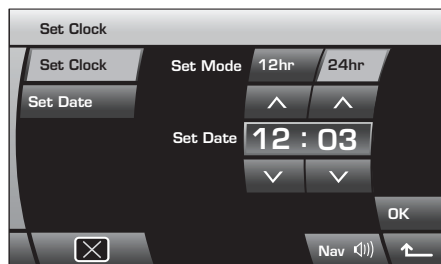


From the menu, touch the soft key for the level of audible feedback you prefer, followed by the **OK** soft key to confirm your choice.

Time and date settings

To set/change the time and date, touch the **Clock** soft key on the System Settings menu. Touch the **Set Clock** soft key to set the time or touch the **Set Date** soft key to set the date.

Time

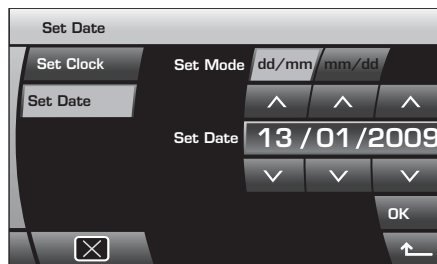


Select your preferred format (12 or 24 hour), then use the up and down arrow soft keys to increase or decrease the hours and minutes.

Once the correct time has been set, touch the **OK** soft key to save the changes.

Note: If 24 hour format is selected, the AM/PM indicator will not be shown.

Date

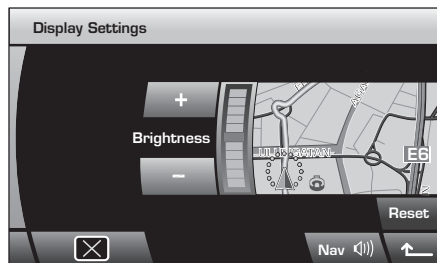


Select your preferred date format, then use the up and down arrows to increase or decrease the year, month and date as required.

Once the correct format and date have been set, touch the **OK** soft key to save the changes.

SCREEN SETTINGS

From the Screen Settings menu touch the Display Settings soft key.



Note: If Navigation is fitted and a map disc inserted, an example navigation screen will be displayed as a preview when adjusting the display settings. If Navigation is not fitted, the preview screen will display No Map Available.

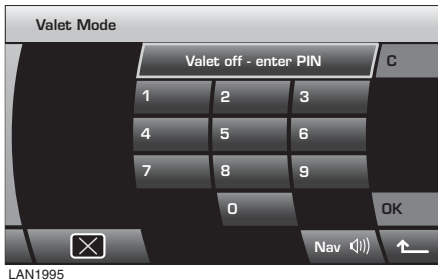
Audio system settings (touch screen)

Brightness is adjusted by touching the + or – soft keys. Touching the **Reset** soft key will return the brightness control to the centre position.

VEHICLE SETTINGS

Valet mode

From the Home Menu or the Vehicle Settings menu, select **Valet**:



Enter a four digit Personal identification Number (PIN) by touching the digit screen pad. On completion, touch the **OK** button.

If you wish to cancel the PIN, touch the **C** button at any time during entering the number.

After entering a PIN you will be prompted to enter the PIN again. Enter the same PIN and touch **OK** to confirm.

If the two PINs match, a pop-up screen is displayed, advising you that valet mode has been activated.

The luggage compartment is now securely locked and operation of the touch screen is restricted.

On exiting and securing the vehicle, hand the Smart Key to the attendant.

Deselecting valet mode

When you enter the vehicle, the **Valet Mode** screen will be displayed automatically. The screen indicates that valet mode is active by displaying **Valet on - enter PIN**.

Enter your four digit PIN and touch the **OK** button.

A pop-up screen is displayed, advising you that valet mode has been deactivated.

The screen will indicate that your PIN has been accepted by displaying **Valet off**.

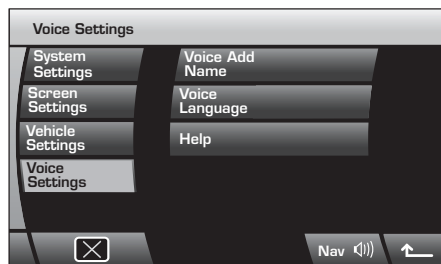
- The luggage compartment will return to the previously set security level.
- Full functionality of the touch screen can now be used.

Note: If the PIN number is lost or forgotten the vehicle should be taken to a dealer to have it reset.

Audio system settings (touch screen)

VOICE SETTINGS

From the main Settings menu, touch the Voice Settings soft key.



LAN2356

From the Voice settings menu, touch the soft key for the setting you want to change.

Voice language

From the Voice Settings menu, touch the **Voice Language** soft key.

The language choices are displayed as a list. Scroll up or down through the list using the on-screen arrows. The currently selected voice language will be indicated as an orange soft key.

Touch the soft key for the language you wish to use.



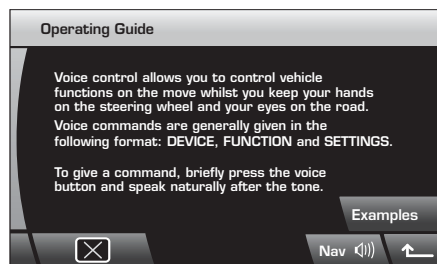
LAN2517

A pop-up menu will appear indicating the current language, the new language and the option to cancel or accept the change.

Once your language choice has been made and you have pressed the **OK** soft key, the voice settings screen will be displayed.

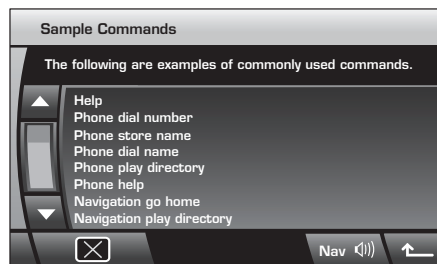
Help

From the Voice Settings menu, touch the **Voice Language** soft key.



LAN2518

A brief overview on how to operate the voice control system will be displayed. To display a list of the most commonly used commands, touch the **Examples** soft key.



LAN2519

Scroll up or down through the list using the on-screen arrows.

Voice add name

The voice system can be personalised with the addition of names for phone numbers. See **STORING A TELEPHONE NAME/ NUMBER WITH VOICE RECOGNITION** (page 346).

Audio level settings (touch screen)

VOLUME ADJUSTMENT

Sustained exposure to high sound levels can damage your hearing.



To access the volume set up menu, press and hold the Tone button until the volume set up menu is displayed. The soft keys to the left, allow you to choose a setting to adjust (**AVC**, **INFO**, **NAV**, **PHONE** and **VOICE**). The boxes to the right of the soft keys show the values currently set for each option. The bar graph and the +/- soft keys are used to change the settings and show the changes.

Note: *If no change is made within ten seconds, the volume set up menu will disappear.*

Automatic Volume Control (AVC)

Automatic Volume Control adjusts the volume level as the vehicle speed increases. This compensates for the increase in noise at increased speeds.

From the volume set up menu, touch the **AVC** soft key to display the settings for AVC.

The bar graph represents the amount by which the volume level may increase. If the smallest bar is selected, the AVC function will be turned off. In this state the volume will not increase with vehicle speed. The remaining bars (from 1 to 9) will increase the volume level up to the maximum level selected.

To increase the level of volume change, press the + soft key. Each press will select the next bar to the right, up to the maximum (9).

To decrease the level of volume change, press the – soft key. Each press will select the next bar to the left, down to the minimum (1). A subsequent press of the – soft key will switch AVC off.

Information announcements

Press the **INFO** soft key from the volume set up menu, to adjust the volume level for radio announcements, such as news broadcasts and traffic announcements on RDS.

To increase the volume level, press the + soft key. Each press will select the next bar to the right, up to the maximum (9).

To decrease the volume level, press the – soft key. Each press will select the next bar to the left, down to the minimum (1).

Navigation guidance

Press the **NAV** soft key from the volume set up menu, to adjust the volume level for navigation guidance messages.

To increase the volume level, press the + soft key. Each press will select the next bar to the right, up to the maximum (9).

To decrease the volume level, press the – soft key. Each press will select the next bar to the left, down to the minimum (1).

Telephone volume

Press the **PHONE** soft key from the volume set up menu, to adjust the volume level for the telephone.

To increase the volume level, press the + soft key. Each press will select the next bar to the right, up to the maximum (25).

To decrease the volume level, press the – soft key. Each press will select the next bar to the left, down to the minimum (5).

Voice volume

Press the **VOICE** soft key from the volume set up menu, to adjust the volume level for voice messages.

To increase the volume level, press the + soft key. Each press will select the next bar to the right, up to the maximum (25).

Audio level settings (touch screen)

To decrease the volume level, press the – soft key. Each press will select the next bar to the left, down to the minimum (5).

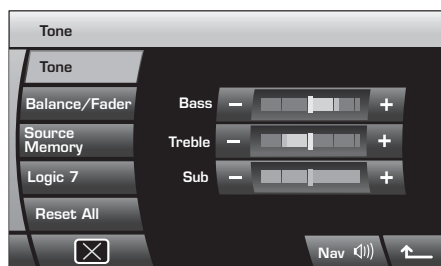
Manual volume adjustment

During normal audio/video playback, a news interrupt, navigation guidance, telephone interrupt or voice message, the volume level can be adjusted by turning the rotary control.

Resetting the volume settings

Press the **Reset All** soft key from the volume set up menu, to move to default settings position.

TONE ADJUSTMENT



LAN2465



Press the Tone hard key to display the Tone menu. From this menu, the settings for Bass, Treble,

Sub-woofer, Balance, Fade and Logic 7 can be adjusted/enabled.

Note: If no change is made within ten seconds, the screen will revert to that which was displayed prior to selecting the tone adjustment menu.

Bass, treble and sub-woofer

With the Tone menu displayed, press the **Tone** soft key in the bottom left hand corner. The adjustments for Bass, Treble and Sub-woofer are made, using the + and - soft keys to increase or decrease the settings, as required.

Balance and fade

To access the Balance and Fade adjustment screen, press the **Balance/Fader** soft key on the Tone menu screen.

The balance and fade adjustments are made by moving the position of the highlighted squares using the four arrow soft keys. The highlighted squares represent the bias direction for audio output.

To reset the balance and fade adjustments to the mid position, touch the Reset All soft key.

Source memory

Source memory allows settings to be adjusted and memorized for individual audio sources. Further explanation can be obtained by pressing the **Source Memory** soft key.

Logic 7

Logic 7 delivers audio source output using a seven channel feed. This provides a three dimensional audio effect, by controlling the vehicle speakers individually. This allows instruments, sound effects and dialogue within recorded or broadcast audio sources, to be clearly placed around the passenger cabin.

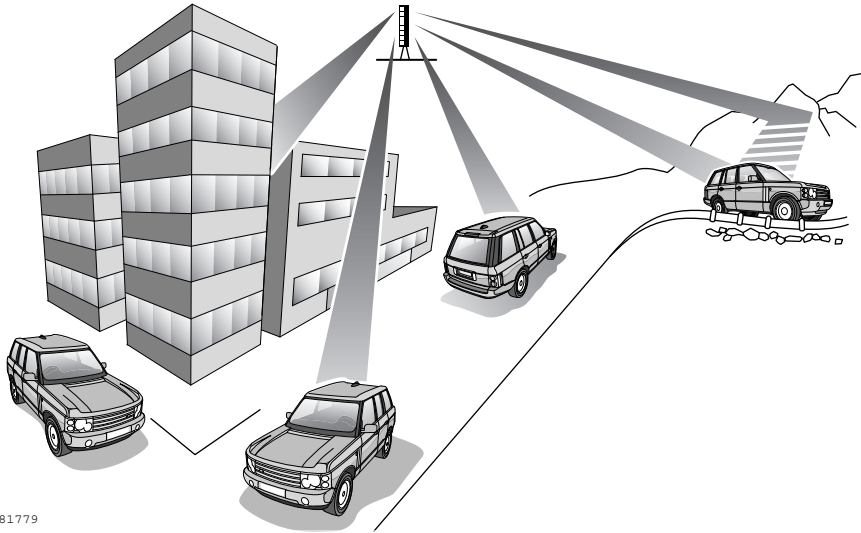
To turn Logic 7 on or off, press the **Logic 7** soft key.

Tone reset all

With the Tone menu displayed, press the **Reset All** soft key. The settings revert to the mid position.

Radio

RADIO RECEPTION



EB1779

Some interference is to be expected from time to time during a journey. Occasionally, it may be necessary to retune the audio unit, to offset the effects of moving from one transmitter area to another.

While Radio Data System (RDS) automatic retuning helps to reduce the effects of signal changes, some manual retuning may still be required (especially for local stations) in areas of weak reception.

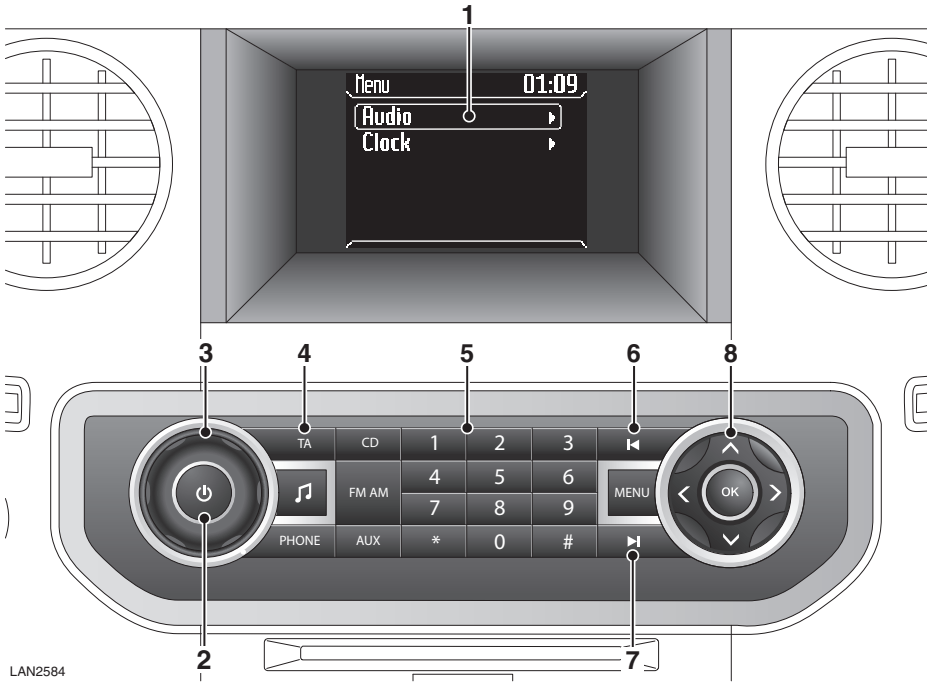
FM Signals travel in a straight line, so large obstacles, such as tall buildings, can shield the vehicle from the signal, causing distortion or loss of reception (known as dead spots).

Distortion can also occur if FM signals received directly from the transmitter, mix with signals deflected by obstructions such as mountains, hills and tall buildings. This is known as multi-path distortion.

Note: Although distortion, interference and lack of signal clarity are sometimes attributed to a fault in the radio, this is rarely the case.

Radio

RADIO CONTROLS



LAN2584

1. Audio settings display screen
2. Audio on/off
3. Volume
4. Traffic announcement
5. Presets
6. Seek down
7. Seek up
8. Scroll up/down (menu control)

Radio

VOLUME ADJUSTMENT

During normal audio/video playback, a news interrupt or telephone call, the volume level can be adjusted by turning the rotary control.

Adaptive volume

Adaptive volume adjusts the volume level as the vehicle speed increases. This compensates for the increase in noise at increased speeds.

Press the **MENU** button, select **Audio**, select **Adaptive Vol** and using the left or right arrow buttons, adjust the setting. Press **OK** to confirm the selection and the **MENU** button to return.

TONE ADJUSTMENT



Press the Tone button to display the Tone menu. From this menu, the settings for Bass, Treble and Balance and Fade can be adjusted.

Note: If no change is made within ten seconds, the screen will revert to that which was displayed prior to selecting the tone adjustment menu.

Press the Tone button. Using the navigation buttons, select the required setting and press **OK**. The adjustments are made, using the navigations icons to increase or decrease the settings, as required, press **OK** to accept the setting.

RADIO OPERATION

Press the **On/Off** control on the audio unit. This will also operate the unit for up to one hour with the ignition switched off.

Note: The radio will switch off automatically after 1 hour.

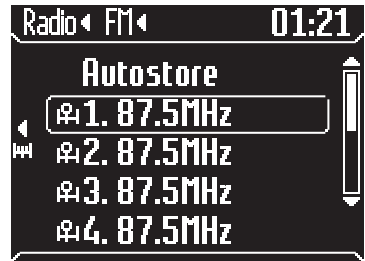
Band selection

Press the **FM/AM** button to select the required wavebands (FM, FMAST, AM, AMAST).

You can also press the button to return to radio mode after listening to another audio source.

Auto storing stations

AutoStore can be used to store the stations with the strongest signals available, either from the AM or the FM waveband.



LAN2587

Press the **MENU** button, select **Radio**, select **Preset** and select the **AutoStore** option. The audio unit then searches for stations with the strongest signals. When the search is in progress, the volume is muted. When the search is complete, volume is restored and the strongest signals are stored on the AutoStore presets.

Note: AutoStore will store up to a maximum of the 10 strongest signals available and overwrite the previously stored stations.

Note: The AutoStore waveband can also be used to store stations manually in the same way as other wavebands.

Radio

Seeking stations

Select a waveband and briefly press one of the seek buttons. The unit will stop at the first station it finds in the direction chosen.

Manual tuning

To manually input a frequency, press and hold the seek up/down button for more than 4 seconds.

Once the frequency has been set, the RDS station information (if available) will be displayed in the information display (FM and FMAST only)

To save the station frequency as a preset, touch and hold a numbered key for approximately three seconds. After a short delay the station name will be displayed at that preset location.

Manual tuning mode exits after a 10 second timeout period.

Station presets

This feature allows favourite stations to be stored so that they can be recalled by selecting the appropriate waveband and pressing one of the preset buttons.

Select a waveband and tune to the station required. Press and hold one of the numbered preset buttons. A progress bar and message will appear. When the progress bar completes, the station has been stored. The volume will mute momentarily as confirmation.

This can be repeated on each waveband and for each preset button.

When in radio mode, stored stations can also be selected by pressing the navigation buttons. Scroll to the desired preset station and press **OK**.

***Note:** When driving to another area of the country, FM stations that broadcast on alternative frequencies, and are stored on preset buttons, may be updated with the correct frequency for that area.*

Radio

RADIO DATA SYSTEM (RDS)

Your audio unit is equipped with RDS, which enables the audio unit to receive additional information with the normal radio signals.

On the FM waveband, RDS enables the audio to receive traffic and news information broadcasts. RDS also allows the audio to automatically re-tune to stations that are linked to the same network if that network allows this.

Note: Not all FM radio stations broadcast RDS. If a non-RDS station is selected, RDS features will not be available.

Regionalisation (REG)

As you drive into different radio reception areas, RDS automatically retunes the radio to the strongest signal. When REG is on, the tuner is locked to the current local radio station. With REG switched off, the tuner is allowed to switch to a stronger Enhanced Other Network (EON) when the current EON linked radio station signal becomes weak.

To enable/disable regionalisation, press the **MENU** button and select **Audio**, scroll to **RDS REGIONAL** and turn on or off with the **OK** button. Press the **MENU** button to return.

Alternative Frequency (AF)

Some radio stations broadcast on different frequencies in different parts of the country. If the selected station signal weakens, the radio will automatically re-tune to a stronger Alternative Frequency (AF), if one is available. This feature is particularly useful on long journeys where the vehicle travels through different transmitter areas serving the same radio station.

To enable/disable AF, press the **MENU** button, select **Audio**, scroll to **ALTERNAT. FREQ.** and turn AF on or off with the **OK** button. Press the **MENU** button to return.

TRAFFIC INFORMATION

Selecting traffic information



Normal reception can be interrupted to broadcast traffic information from stations on the FM waveband or Radio Data System (RDS) and Enhanced Other Network (EON) linked stations.

Briefly press the **TA** button on the audio unit, the indicator appears on the right of the display.

When a radio station capable of providing traffic information is selected, the **TP** indicator appears alongside.

As soon as a traffic announcement is received, normal radio reception (or CD play) is interrupted and the word **Traffic announcement** appears briefly in the main display area, followed by the name of the station providing the information.

If a non-traffic station is selected or recalled using a preset button, the audio unit will remain on that station unless **TA** is turned off, then on again.

Radio

Traffic information during CD play

When traffic information is switched on, CD play will be interrupted by information broadcasts automatically, as and when they occur and **Traffic announcement** will appear in the display.

At the end of the broadcast, CD play will resume from the point on the disc at which CD play was interrupted.

Traffic announcement volume

Traffic announcements interrupt normal broadcasts at a preset minimum level that is usually louder than normal listening volumes. To adjust the preset volume, use the volume control to make the necessary adjustment during an incoming TA broadcast. The display will show the level selected.

Cancelling an announcement

To cancel an announcement briefly press the **TA** button.

Note: If **TA** is pressed at any other time, all announcements will be switched off.

Switching off traffic information

Briefly press the **TA** button (the **TA** indicator will disappear from the right hand side of the display). This action will prevent traffic information broadcasts from being received until the feature is reselected.

NEWS INFORMATION

Selecting news information



LAN2586

Normal reception can be interrupted to broadcast news bulletins from stations on the FM waveband or Radio Data System (RDS) and Enhanced Other Network (EON) linked stations, in the same way that traffic information is provided.

Press the **MENU** button and select **Audio**, scroll to **NEWS** and turn on or off with the **OK** button. Press the **MENU** button to return.

Note: Both traffic and news information can be selected at the same time. However, the radio will always give priority to traffic information.

News information during CD play

When news information is switched on, CD play will be interrupted by information broadcasts automatically, as and when they occur and **NEWS** will alternately appear in the display.

At the end of the broadcast, CD play will resume from the point on the disc at which CD play was interrupted.

Radio

News announcement volume

News announcements interrupt normal broadcasts at a preset minimum level that is usually louder than normal listening volumes. To adjust the preset volume, use the volume control to make the necessary adjustment during an incoming news broadcast. The display will show the level selected.

TIME AND DATE SETTINGS

To set/change the time and date, navigate to **Clock** on the menu.

Navigate to **Set time** to set the time or navigate to **Set date** to set the date and press **OK**.

Time

Use the up and down arrow soft keys to increase or decrease the hours and minutes. Once the correct time has been set, press the **OK** button to confirm the changes.

Navigate to **24h mode** to select the time format, press the **OK** button to confirm the change.

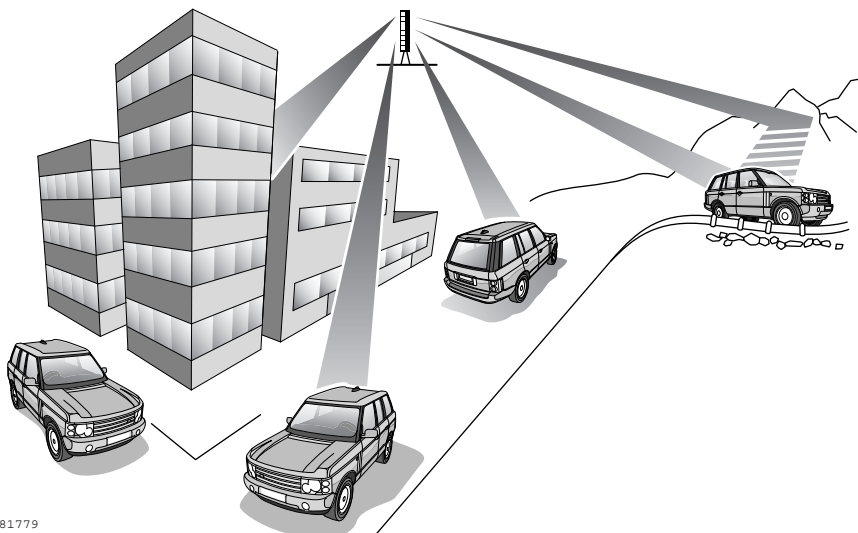
Date

Use the up and down arrows to increase or decrease the year, month and date as required. Once the correct format and date have been set, touch the **OK** soft key to confirm the changes.

Navigate to **Set date format** to select the date format, press the **OK** button to confirm the change.

Radio with touch screen

RADIO RECEPTION



B81779

Some interference is to be expected from time to time during a journey. Occasionally, it may be necessary to retune the audio unit, to offset the effects of moving from one transmitter area to another.

While Radio Data System (RDS) automatic retuning helps to reduce the effects of signal changes, some manual retuning may still be required (especially for local stations) in areas of weak reception.

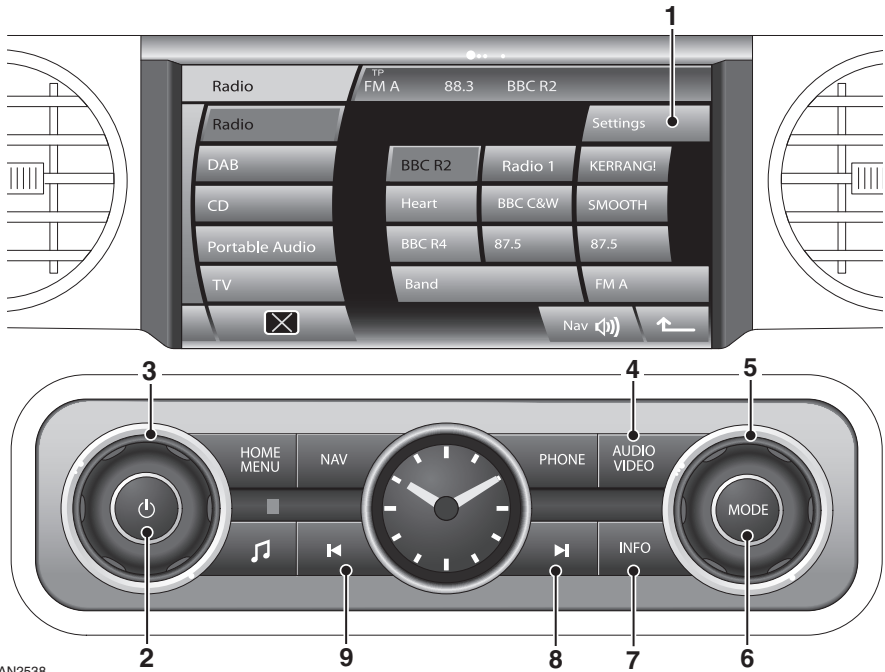
FM Signals travel in a straight line, so large obstacles, such as tall buildings, can shield the vehicle from the signal, causing distortion or loss of reception (known as dead spots).

Distortion can also occur if FM signals received directly from the transmitter, mix with signals deflected by obstructions such as mountains, hills and tall buildings. This is known as multi-path distortion.

Note: *Although distortion, interference and lack of signal clarity are sometimes attributed to a fault in the radio, this is rarely the case.*

Radio with touch screen

RADIO CONTROLS



LAN2538

1. Touch screen soft keys
2. Audio on/off
3. Volume
4. Access Audio/Video Menu
5. Scroll up down (menu control)

6. Mode
7. Traffic/News information
8. Search up/increase
9. Search down/decrease

Note: The audio system is operated by a combination of physical buttons on the fascia and virtual buttons displayed on the touch screen. To avoid confusion when reading this handbook, the physical buttons are referred to as hard keys and the on screen buttons as soft keys.

Radio with touch screen

RADIO OPERATION

To access the radio mode, either touch the **Audio Video** soft key on the home menu, or press the **MODE** button and turn the rotary control until **Radio** is highlighted.

Band selection

When in radio mode, touch the **Band** soft key repeatedly, until the required band is selected (FM, MW, AM).

Auto storing stations

When in radio mode, to auto store stations, touch the FM Settings soft key. Select the tuning screen by touching the **Tuning** soft key at the bottom left of the settings screen.

Touch the **Autostore** soft key to start storing stations. Repeat for all other wavebands.

The other auto store bands are FMA, MWA and LWA.

Alternatively, touch and hold the **FM A** soft key to start the auto store process.

To stop auto store at any time, irrespective of the method used, press either of the seek buttons. The auto store search will stop, the preset station positions will remain as shown prior to the search beginning and the last station played will resume.

Pressing the mode button, or touching the **Radio, DAB, CD, Portable Audio** or **Aux** soft keys, will also cancel the auto store search and move to the relevant display.

Selecting preset stations

Once the station frequencies have been auto stored, they can be selected by touching the soft key for the required station.

Alternatively, rotate the audio control. The first click displays the current station and each subsequent click moves to the next station. Clockwise rotation moves up, anti-clockwise moves down.

Seeking stations

Press the up or down seek button to skip to the next available station in that direction.

When seeking from the main radio screen, the station information will be displayed in the data display at the top of the screen.

When seek is enabled from any view other than audio/video, the station information is displayed briefly as a pop-up.

Manual tuning

To manually input a frequency, touch the FM Settings soft key, to display the settings screen. A new frequency may be selected by touching the soft keys indicated.

Touch the **Direct Frequency Input** soft key and a pop-up will be displayed to allow the frequency to be entered using the numeric key pad.

***Note:** Only some of the digits will be enabled on the pop-up screen. These are the only digits available to start the frequency. When the first digits have been input further available digits will be displayed.*

When the desired frequency has been entered, press the **OK** soft key to confirm.

Once the frequency has been set, the station information (if available) will be displayed in the information display.

To save the station frequency as a preset, touch and hold a location soft key for approximately three seconds. After a short delay the station name will be displayed at that preset location.

Radio with touch screen

RADIO DATA SYSTEM (RDS)

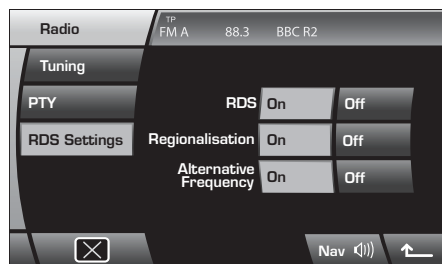
Your audio unit is equipped with RDS, which enables the audio unit to receive additional information with the normal radio signals.

On the FM waveband, RDS enables the audio to receive traffic and news information broadcasts. RDS also allows the audio to automatically re-tune to stations that are linked to the same network if that network allows this.

Note: Not all FM radio stations broadcast RDS. If a non-RDS station is selected, RDS features will not be available.

Selecting RDS

With an FM waveband selected, touch the **Settings** soft key located on the main Radio screen.



When the settings menu is displayed touch the **RDS settings** soft key.

RDS can be turned on or off as required by touching the **On** or **Off** soft keys.

Note: With RDS disabled, the Regionalisation and Alternative Frequency features are also disabled. If RDS is turned on, the Regionalisation and Alternative Frequency features can be turned on or off individually, as required.

Regionalisation (REG)

As you drive into different radio reception areas, RDS automatically retunes the radio to the strongest signal. The Regional (REG) option stops the system from tuning to another local radio station with a stronger signal.

From the RDS settings menu, you can switch the REG feature **On** or **Off**. With REG on, your selected local radio station will remain tuned even if reception levels drop.

Alternative frequency (AF)

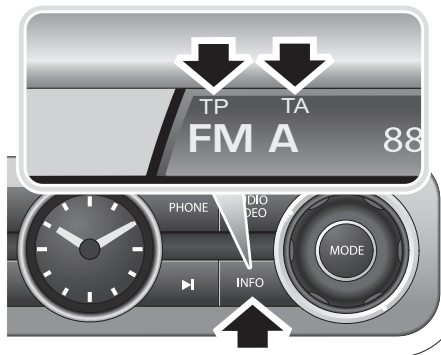
Some radio stations broadcast on different frequencies in different parts of the country. If the selected station signal weakens, the radio will automatically re-tune to a stronger alternative frequency (AF), if one is available (this feature is particularly useful on long journeys where the vehicle travels through different transmitter areas serving the same radio station).

From the RDS setting menu, you can switch AF feature **On** or **Off**.

Radio with touch screen

TRAFFIC INFORMATION

Selecting traffic information



LAN2946

Briefly press the **INFO** button, the **TA** indicator appears on the right of the display.

When a radio station capable of providing traffic information is selected, the **TP** indicator appears alongside.

If a traffic announcement is received, the current audio source will be interrupted by the information broadcast.

The station name and **TRAFFIC** will alternately appear in the display. At the end of the broadcast, the previously selected audio source will resume.

Cancelling an announcement

To cancel an announcement briefly press the **INFO** button.

Switching off traffic information

Briefly press the **INFO** button (the **TA** indicator will disappear from the left side of the display). This action will prevent traffic information broadcasts from being received until the feature is reselected.

Tuning difficulties

- If the radio is tuned to a weak FM signal (in remote areas, for example) or a radio station that cannot provide traffic information, when the **INFO** button is pressed, the tuner will search for a good traffic information signal. **TP SEEK** will be displayed for the duration of the search.
- If a traffic information station cannot be found, the words **Not Found** will be displayed. In this case the radio will return to the previously tuned frequency.
- If the signal from a traffic information station weakens, the **TP** indicator in the left side of the display will start to flash. In this case, press either of the Search controls to start searching for another radio station. If the traffic information signal weakens during CD play, the radio will automatically attempt to locate and re tune to a traffic information station with a stronger signal.

Note: *If a non-traffic information station has been stored on one of the pre-set buttons, and is selected while the traffic information facility is switched on, the radio will remain on the selected station unless Traffic Information is turned off and on again.*

Radio with touch screen

NEWS INFORMATION

Selecting news information



Press and hold the **INFO** button for more than 2 seconds, to select or de-select News Information - the word **NEWS** will appear in, or disappear from, the display accordingly.

If a news broadcast is received, the current audio source will be interrupted by the information broadcast.

The station name and **NEWS** will alternately appear in the display. At the end of the broadcast, the previously selected audio source will resume.

Note: Both traffic and news information can be selected at the same time. However, the radio will always give priority to traffic information.

Cancelling an announcement

To cancel an announcement briefly press the **INFO** button.

PRIORITY PROGRAMME TYPE (PTY)

The RDS (Radio Data System) allows programmes to be categorised by the broadcast type (rock music, current affairs, news etc.).

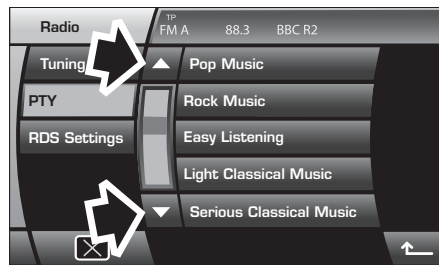
This in turn, allows you to search for a station by choosing the type of broadcast that you wish to listen to.

Note: The **PTY** menu is not available when the vehicle is moving.

Searching by PTY category

To use the PTY feature, touch the **Settings** soft key located on the main Radio screen.

When the settings menu is displayed touch **PTY** to display a list of available PTY categories.



Scroll up or down the list of available PTY categories using the on-screen arrows.

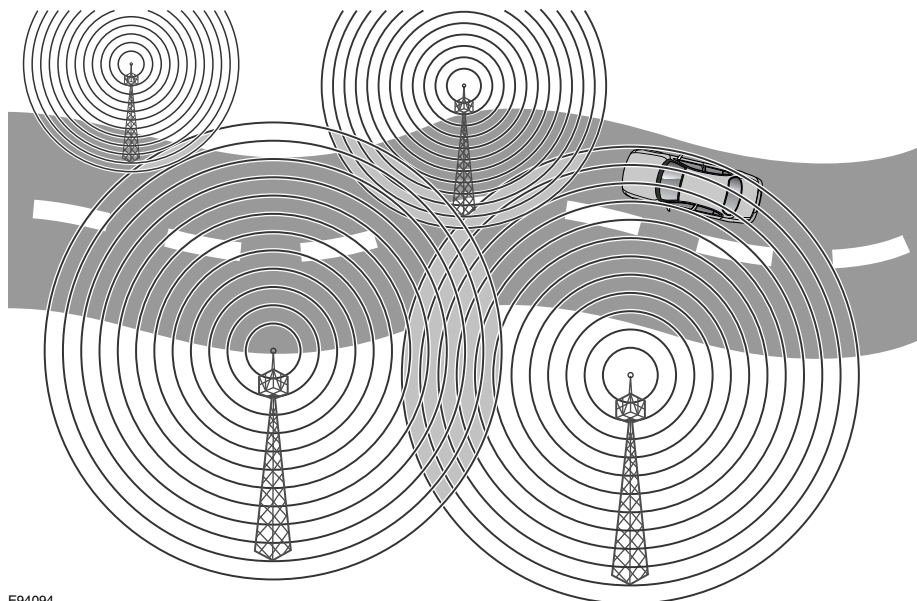
Touch a PTY category to select it, the audio unit will search for and then retune to an available station belonging to that category. **Searching** will be displayed in the information display.

If no station is found in that category, then **No PTY** is displayed and you will return to the current station.

Digital Audio Broadcasting (DAB)

GENERAL INFORMATION

Digital radio reception



E94094

DAB radio is very different from normal AM/FM radio in both operation and sound quality. The DAB network is designed to provide near CD quality from radio broadcasts. In most locations DAB signals are available without hiss, crackle, pop or interference, and no fading or overlap.

DAB radio can significantly increase the number of radio channels/stations available. The DAB signals are transmitted to most major cities, towns and motorway networks.

Radio signals travel in a straight line so large obstacles, such as tall buildings, can shield the vehicle from the signal, causing temporary loss of reception (known as dead spots).

Digital radio is transmitted from regional transmitters. Some local channels are not available outside the range of their transmitters. If you want to listen to local channels as you move around the country, use the auto-tune function (AUTO) to update the channel list. For more information on the auto-tune function. See **CHANNEL AUTOMATIC TUNING** (page 305).

Note: *If any auxiliary electrical equipment is connected to the vehicle, then this may reduce the DAB radio sound quality.*

Digital Audio Broadcasting (DAB)

Ensembles

Unlike AM/FM radio, DAB transmits several channels/stations on a single frequency. A group of channels is known as an ensemble. Ensembles may consist of six or more channels (national or local). Some may have sub-channels offering several listening options.

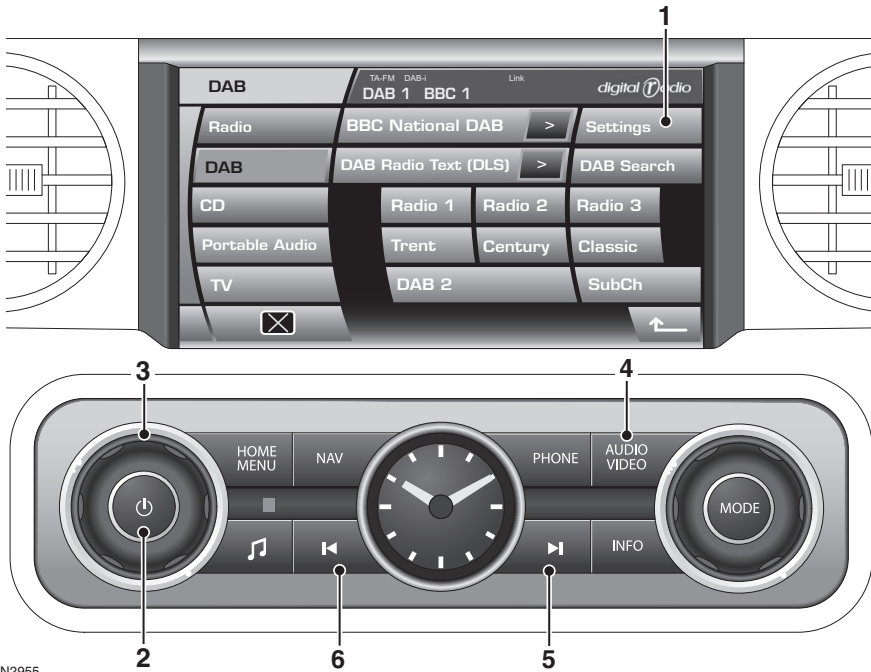
When scrolling through the channels the sub-channels will appear in order, and can be selected in the same way as the channels. If reception is lost when the vehicle is in motion select **AUTO** to build a new list of ensembles.

The table below provides an example of the ensembles, channels and sub-channels available in one location.

Ensemble	Channel/station	Sub-channel 1	Sub-channel 2
First ensemble	Channel/station 1		
	Channel/station 2	Sub-channel	
	Channel/station 3		
	Channel/station 4		
	Channel/station 5		
	Channel/station 6	Sub-channel	Sub-channel
	Channel/station 7		
	Channel/station 8		
	Channel/station 9		
Second ensemble	Channel/station 1		
	Channel/station 2		
	Channel/station 3		
	Channel/station 4		
	Channel/station 5		
	Channel/station 6		
Third ensemble	Channel/station 1		
	Channel/station 2		
	Channel/station 3		
	Channel/station 4		

Digital Audio Broadcasting (DAB)

AUDIO CONTROLS



LAN2955

1. Settings
2. Audio on/off
3. Volume
4. Access Audio/Video Menu
5. Seek up.
 - Short press to find the next channel.
 - Long press (two seconds) to find next available ensemble.
6. Seek down.
 - Short press to find previous channel.
 - Long press (two seconds) to find previous available ensemble.

Digital Audio Broadcasting (DAB)

USING DAB

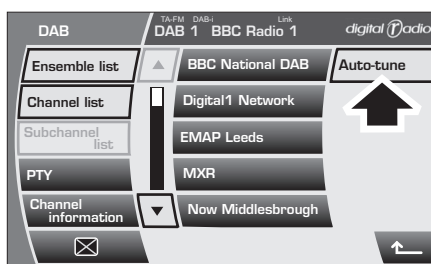
To receive digital broadcasts, briefly touch the **DAB** button on the touch-screen.

Choose **DAB1**, **DAB2** or **DAB3** to receive digital radio broadcasts. The three DAB sources enable you to preset up to 18 different channels.

The channel that was last played on your chosen digital source will be selected for playback automatically.

Note: *If this is the first time you have used DAB radio, you will be unable to listen to any digital broadcasts until you have searched for a list of available channels using the auto-tune function.*

CHANNEL AUTOMATIC TUNING



LAN2778

In DAB mode, select **DAB search**, then select **Auto-tune** to start automatic tuning and build a list of all the digital ensembles and channels that are available in your region.

While automatic tuning is running, the message **Auto-tuning** will be displayed on the touch-screen, along with a percentage complete. When tuning is complete, the first channel found will start playing.

Note: *The auto-tune process can take longer than one minute to complete.*

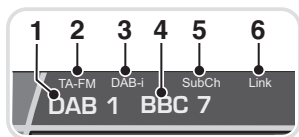
To update the list of local channels when you move to a different region, select **Auto-tune** again. You can also add local channels as presets to minimise the need for auto-tuning as you move location.

Note: *Store the channels you listen to frequently as presets. This will prevent them being lost when you use the auto-tune process.*

Digital Audio Broadcasting (DAB)

DISPLAY OPTIONS

Touch-screen information panel



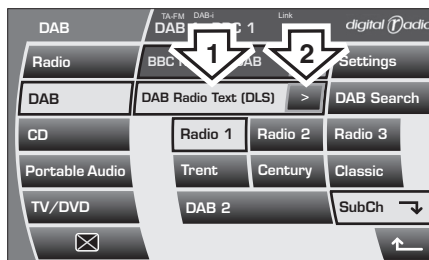
LAN2779

1. DAB band indicator.
2. **TA-FM** is displayed if the FM traffic option is enabled.
3. **DAB-i** indicates that DAB Announcements are enabled.
4. Channel name.
5. The arrow icon indicates that subchannels are available under the current channel. **SubCh** is displayed if a subchannel is tuned to.
6. **Link** is displayed if the Link DAB option is enabled.

Note: The display can also show **PTY** or **Ensemble** information if you have selected one of these options under **DAB text** on the Settings menu.

DAB radio text

Many digital channels transmit additional text (DLS, Dynamic Label Segment) to accompany a broadcast. For safety reasons, this text does not scroll across the screen.



LAN2780

The first 16 characters of text are displayed (1). If you want to read the full text, you must select the additional text icon (2).



LAN2781

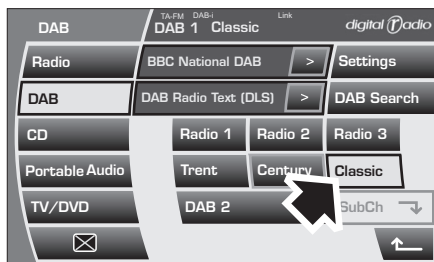
The **DAB radio text** pop-up screen displays all 128 characters of text. This text may change periodically, if the broadcaster chooses to do so.

To remove the pop-up screen, briefly touch it.

Digital Audio Broadcasting (DAB)

PRESET CHANNELS

Storing channels as presets



LAN2782

Store up to eighteen digital channels (six each on **DAB1**, **DAB2** and **DAB3**) using the named preset icons. Follow the procedure below to store channels as presets.

1. Search for and start playing the channel you want to preset.
2. Touch and hold (two seconds) the preset icon on which you want to store the current channel. Audio output is muted for a further two seconds while the channel is stored and a confirmation message is displayed.
3. Repeat steps 1 and 2 for each channel that you want to store as a preset.

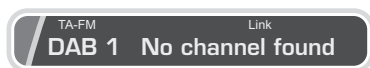
Note: You cannot store a subchannel as a preset. If you try to store a subchannel, you will store the channel to which the subchannel belongs.

Recalling a preset channel



LAN2782

Make sure that you have selected the appropriate digital source (**DAB1**, **DAB2** or **DAB3**) and then briefly touch the preset icon you require. The channel you have selected will start to play automatically.



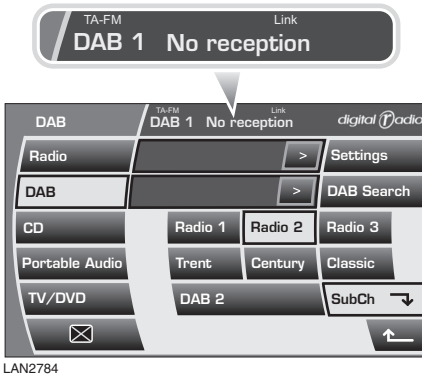
LAN2783

Note: If you try to recall a channel that has previously been stored as a preset, but is now unavailable or invalid, the message **No channel found** is displayed. You must choose another channel.

Digital Audio Broadcasting (DAB)

CHANNEL OPTIONS

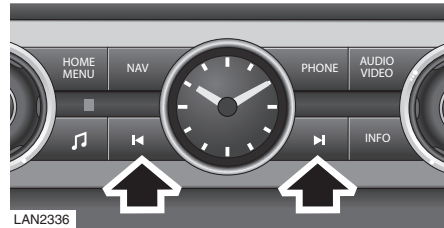
Digital radio channels are organised into groups called ensembles. Some channels may sometimes provide one or more subchannels.



If the digital radio signal is lost or the system takes time to tune in to a channel, then the display screen will show the message **No reception**.

The problem may be temporary, caused by buildings or trees blocking the signal, or it might be a problem with the broadcast service operator. Try tuning to an alternative channel and return later to see if the problem has been resolved.

Finding a channel

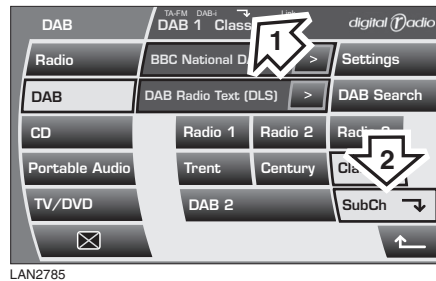


Briefly touch one of the channel seek buttons on the fascia or steering wheel to select the next available digital channel. The seek up button selects the next channel, the seek down button selects the previous channel.

Note: If the next or previous channel is in a different ensemble, then there will be a pause before the channel is located. The message **Searching...** is displayed on the screen.

If channels have been preset, select one of the six preset icons to start playing that channel.

Finding a subchannel



If subchannels are available under the current channel, the subchannel arrow icon (1) is displayed at the top of the touch-screen and the Subchannel icon is enabled.

To access the subchannels, select the downward-pointing arrow (2). Use the seek buttons to find the next/previous subchannel.

Digital Audio Broadcasting (DAB)

To return to the channel tier, select the return arrow.

Note: When you select and play a subchannel, the subchannel icon is replaced by **SubCh**.

Note: You cannot store a subchannel as a preset.

Note: If you select the preset icon for the channel containing the subchannel you are currently playing, you will be returned to the channel.

Finding an ensemble

Touch and hold (two seconds) the seek buttons to find the next or previous ensemble. After a few seconds pause, the first channel in the ensemble found will start playing.

DAB search

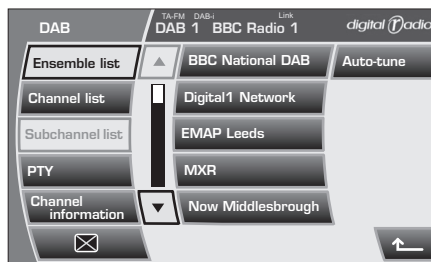
The DAB search menu enables you to view lists of available ensembles, channels and subchannels. You can also perform searches based on programme type (PTY).

Select **DAB search** to display the DAB search menu.

Auto-tune

Select **Auto-tune** to build a list of available ensembles and channels for your current location.

Ensemble list



Select **Ensemble list** to display a list of all available ensembles. Select an ensemble name in the list to display a list of channels in that ensemble. Select a channel name to tune that channel.

Channel list

Select **Channel list** to display a complete list of all channels in all available ensembles. Select a channel name to tune that channel.

Subchannel list

Select **Subchannel list** to display a list of any subchannels available for the currently tuned channel. If no subchannels are currently available, then the Subchannel list option is disabled. If the maximum five subchannels are available, then use the arrows to scroll through the list.

PTY

Channels are categorised by the broadcaster as belonging to a programme type (PTY) category. You can display a list of channels organised according to their PTY category.

Select **PTY** to display a list of PTY categories that contain channels. Select a PTY category to display a list of channels in that category. Select a channel name to play that channel.

Digital Audio Broadcasting (DAB)

Press one of the seek buttons repeatedly (during the first ten seconds of broadcast) to cycle through all of the channels contained in that PTY category.

Channel information

Select **Channel Information** to display technical data relating to the currently-tuned channel. The data listed is as follows: Channel name, Ensemble name, Programme type, Audio level and Bit rate (kbits/s).

SETTINGS



LAN2787

In DAB mode, select **Settings**.

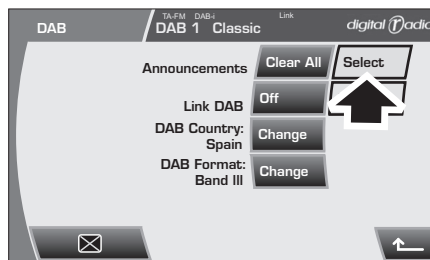
Note: If **Settings** is selected once, but no action is taken for a further ten seconds, the system will exit the menu automatically.

Announcements

You can select up to three types of announcement plus Alarm from a list of ten, for example, **Road Traffic Flash** and **News Flash**.

When a DAB announcement is broadcast, it will interrupt normal play for the duration of the announcement.

Note: The **Alarm** announcement type, broadcasts information concerning crises of national or international importance.



LAN2788

To display the full list of announcement types, touch **Select**.



LAN2789

Select an announcement type to enable it, select it again to disable it. If you want to clear all enabled types, select **Clear all**. To scroll through the list, select the arrow buttons.

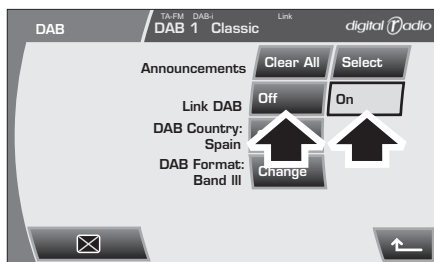
Note: If you have already selected four announcement types, you will be unable to select further types.

Link DAB

Regional ensembles containing a list of local digital channels are broadcast by a variety of regional providers. For example, the Leicester and Coventry regions in the UK are currently supplied by Now Digital, where as Birmingham is supplied by CE Digital.

Digital Audio Broadcasting (DAB)

A channel (for example, Chill) in two different regional ensembles will share an identification if broadcast by the same provider (for example, Chill Coventry and Chill Leicester). If channels are being broadcast by different suppliers, then they will not share the same identification (for example, Chill Coventry and Chill Birmingham).



LAN2790

If you move from one region to another and **Link DAB** is enabled, the DAB radio will attempt to retune to a channel with the same identification in a different ensemble.

If the signal strength for a local channel falls below an acceptable level, the audio unit will automatically search other available ensembles for another channel with the same identification.

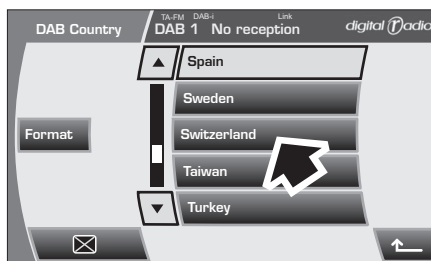
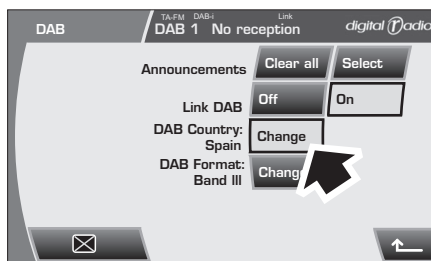
If an alternative channel is found in another ensemble that is also in your current channel list, then the new channel is tuned automatically after a few seconds. If a channel is not found after a few seconds, then **No reception** is displayed on the screen.

The word **Link** is displayed at the top of the touchscreen to indicate that Link DAB is enabled.

DAB country

If you move the vehicle to a different country, you can change DAB Country options to make sure that you receive the best possible reception and sound quality.

Note: If you have already selected a DAB format, then the DAB country option is disabled.



LAN2948

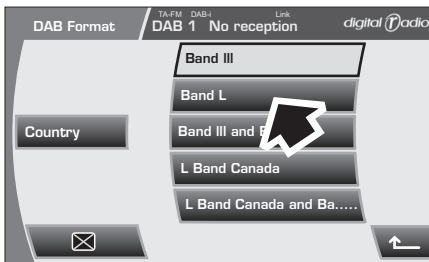
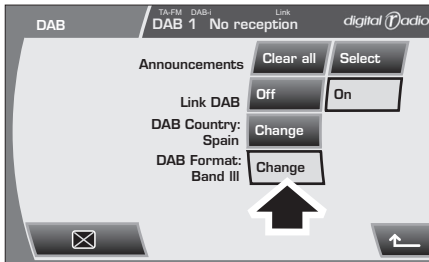
Select **Change** to display a list of countries where DAB services are available. Select the country name to enable it.

Note: When you change the DAB country, the audio unit will automatically start auto-tuning. If you **Cancel** the auto-tune, the country setting will remain changed but you may not have access to all available ensembles for that country.

Note: This option is disabled when the vehicle is moving

Digital Audio Broadcasting (DAB)

DAB format



LAN2949

Different regions or countries may use different digital bands to broadcast DAB channels. If you know the band(s) required, then you can choose from the **Band selection** list.

Select **Change** to display a list of formats. The available bands are:

- L Band
- Band III
- L Band & Band III
- L Band Canada
- L Band Can & Band III

Note: When you change the DAB format, the audio unit will automatically start auto-tuning. If you **Cancel** the auto-tune, the format setting will stay changed but you may not have access to all available ensembles for that format.

Note: This option is disabled when the vehicle is moving

Compact disc player (standard)

COMPACT DISC COMPATIBILITY

CAUTIONS

- ❗ Irregular shaped CDs and CDs with a scratch protection film should not be used.
- ❗ CDs with labels (or stickers) attached, should not be used. Labels may become warped and prevent the CD from being ejected, causing damage to the CD player. Such damage is not covered by the warranty agreement.
- ❗ The CD unit will play compact discs that conform to the international Red Book standard audio specification. Copy-protected CDs from some manufacturers do not conform to this standard and playback cannot be guaranteed.
- ❗ Due to technical incompatibility, recordable (CD-R) discs and re-writable (CD-RW) discs may not function correctly.
- ❗ Dual format, dual-sided discs (DVD Plus, CD-DVD format) are thicker than normal CDs and consequently playback cannot be guaranteed in Land Rover audio units, and jamming could occur. Warranty claims, where this type of disc is found to be inside an audio unit returned for repair, will not be accepted.

The following CD formats may cause the CD player to malfunction. It is recommended that the following types of CD are not used:

- 8 cm (3.1 in.) discs with or without an adaptor.
- CDs that are not circular.
- CDs with a paper label.
- CDs that are warped, dirty, scratched or have an abnormal edge.
- Dual format, dual-sided discs (DVD Plus, CD-DVD format).
- DVDs.

It is recommended that only high quality 12 cm (4.7 in.) circular discs, that show the Compact Disc Digital Audio logo, are used.

Compact disc player (standard)

PLAYING A COMPACT DISC

CAUTION

! Do not force the disc into the slot.

Note: Some privately recorded CD-R discs may not have been acceptably formatted to be able to be played on this CD player.

An in-dash single compact disc (CD) player is integrated into the audio unit.

Gently place a CD into the loading slot, the disc will be drawn into the player and loaded.

Press the **CD** button on the facia to select CD playback mode.

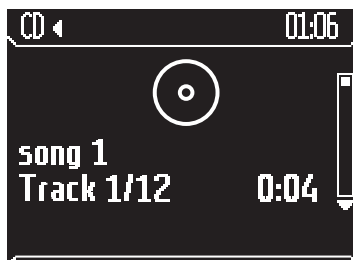
If a CD is loaded, playback will resume from the point of last play.

Ejecting a CD

Press the eject button.

Once the disc is ejected, remove it from the loading slot. If you fail to remove an ejected disc, it will be drawn back into the player after ten seconds.

TRACK SELECTION



LAN2583

Track 1/12 - Track number of the track being played.

00:04 - Track elapsed play time from start of track.

You can move to the next or previous CD track, using the seek buttons.

Briefly touch the seek buttons to move to the previous or next track.

Touch and hold (two seconds) to play rapidly back through one or more tracks (review) or rapidly forward through one or more tracks (cue).

Normal playback resumes when the seek button is released.

Shuffle

Selecting **Shuffle** alters the playback order for the current CD so that tracks are played in a random sequence.

Shuffle playback can be cancelled by deselecting the option under the **Track** menu.

Repeat

Selecting **Repeat** will play the current track repeatedly.

Repeat playback can be cancelled by deselecting the option under the **Track** menu.

Note: Repeat can be cancelled by pressing the track up or track down button.

Compact disc player (standard)

MP3 FILE PLAYBACK

MP3 discs have the potential to hold more music than a conventional CD, because each track can be compressed to a higher degree during recording.

If you record your own music, each session must be properly closed but the whole disc does not have to be finalised.

Some pre-recorded and personally-recorded discs, can contain additional information on the disc, e.g. CD titles, track titles and the artist's name (this information is contained in ID3 Tags).

CAUTION



Copyright laws vary in different countries; please check the laws in your country if you want to record from copyright source material.

***Note:** The CD player is not guaranteed to play every disc available because of variation in the quality of discs.*

Using MP3 discs

The normal playing sequence on CDs with multiple folders is to play the tracks within the root (top level) first, then the tracks in any folder(s) within the root, then move onto the second folder, and so forth.

***Note:** Folders that do not include any MP3 files are skipped.*

***Note:** The CD player may take a long time (one minute or more) to load an MP3 disc, owing to the number of tracks on it. To minimise the loading on the system, a rigid folder structure is recommended.*

- Use the menu control to scroll up and down the list of tracks or to navigate the folder structure on the disc.
- Press **OK** to open a folder or select a highlighted track.

Shuffle

When an MP3 CD is playing, playback options include **Shuffle** for the whole CD, or to play all the tracks in the folder in a random order. Repeatedly selecting **Shuffle** will toggle between these options.

Repeat

When an MP3 CD is playing, playback options include **Repeat** for the current track, or to repeat all the tracks in the folder. Repeatedly selecting **Repeat** will toggle these between these options.

Compact disc player with touch screen

COMPACT DISC COMPATIBILITY

CAUTIONS

- ❗ Irregular shaped CDs and CDs with a scratch protection film should not be used.
- ❗ CDs with labels (or stickers) attached, should not be used. Labels may become warped and prevent the CD from being ejected, causing damage to the CD player. Such damage is not covered by the warranty agreement.
- ❗ The CD unit will play compact discs that conform to the international Red Book standard audio specification. Copy-protected CDs from some manufacturers do not conform to this standard and playback cannot be guaranteed.
- ❗ Due to technical incompatibility, recordable (CD-R) discs and re-writable (CD-RW) discs may not function correctly.
- ❗ Dual format, dual-sided discs (DVD Plus, CD-DVD format) are thicker than normal CDs and consequently playback cannot be guaranteed in Land Rover audio units, and jamming could occur. Warranty claims, where this type of disc is found to be inside an audio unit returned for repair, will not be accepted.

The following CD formats may cause the CD player to malfunction. It is recommended that the following types of CD are not used:

- 8 cm (3.1 in.) discs with or without an adaptor.
- CDs that are not circular.
- CDs with a paper label.
- CDs that are warped, dirty, scratched or have an abnormal edge.
- Dual format, dual-sided discs (DVD Plus, CD-DVD format).
- DVDs.

It is recommended that only high quality 12 cm (4.7 in.) circular discs, that show the Compact Disc Digital Audio logo, are used.

Compact disc player with touch screen

LOADING A COMPACT DISC

CAUTION

! Do not force the disc into the slot.

Note: Some privately recorded CD-R discs may not have an acceptably format for play on this CD player.

An in-dash single compact disc (CD) player is integrated into the audio unit.

To access the CD player touch-screen menu:

1. From the touch screen Home menu, select **Audio/Video** or press the **AUDIO VIDEO** hardkey.

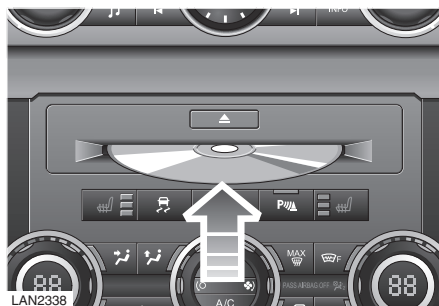


2. Select **CD**.

Alternatively, press the **MODE** button and then select **CD**.

If a CD is loaded, playback will resume from the point of last play. If no CD is present, a **No disc** information screen will be displayed.

Loading a CD



Gently place a CD into the loading slot. A CD loading message is displayed on the touch-screen, while the disc is drawn into the player and the disc is loaded.

Ejecting a CD



Press the eject button.

Once the disc is ejected, remove it from the loading slot. If you fail to remove an ejected disc, it will be drawn back into the player after ten seconds.

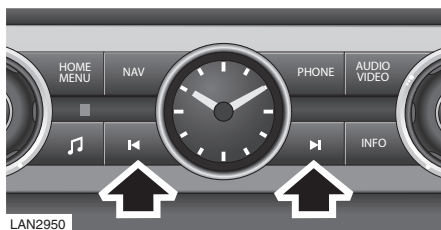
Compact disc player with touch screen

TRACK SELECTION

At the top of the screen is current CD information, e.g.:

Tr 12 - Track number of the track being played.

03:47 - Track elapsed play time from start of track.



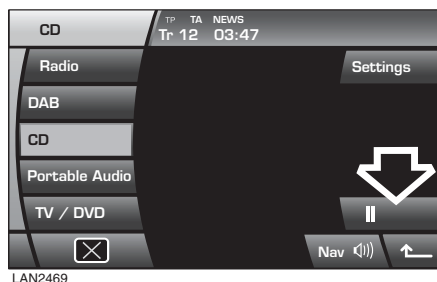
You can move to the next or previous CD track, using the seek buttons either on the fascia or on the steering wheel.

Briefly touch the seek buttons to move to the previous or next track.

Touch and hold (two seconds) to play rapidly back through one or more tracks (review) or rapidly forward through one or more tracks (cue).

Normal playback resumes when the seek button is released.

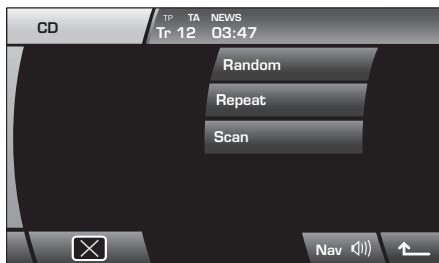
COMPACT DISC PAUSE



Select **II** to pause the current track. While play is paused, the icon will be highlighted, select it again to resume playback.

Compact disc player with touch screen

COMPACT DISC PLAY OPTIONS



The following compact disc play options are available from the **Settings** menu.

- Random
- Repeat
- CD scan

Touch the icon for the required compact disc play option.



Only one option can be active at a time with the currently selected option shown in the information area.

The currently selected disc play options are automatically cancelled when a different audio source is selected or when the audio unit is switched off.

Random

Selecting **Random** alters the playback order for the current CD so that tracks are played in a random sequence.

Random playback can be cancelled by deselecting the option under the **Settings** menu.

Repeat

Selecting **Repeat** will play the current track repeatedly. Deselect the option to cancel repeat and resume normal play.

Note: Repeat can be cancelled by pressing the track up or track down button.

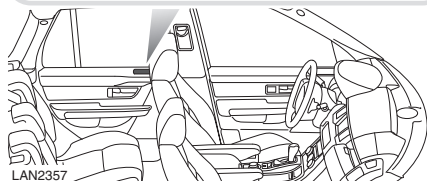
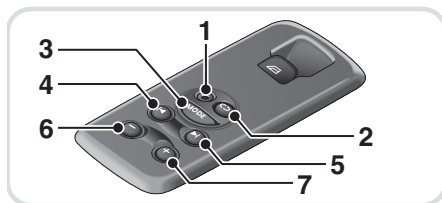
CD Scan

Selecting CD **Scan** allows you to sample the music on a compact disc. This option plays the first ten seconds of each track in numerical order. Play will then begin at the start of track one.

Note: CD scan can be cancelled by pressing the track up or track down button.

Rear passenger controls

REAR SEAT CONTROLS



1. 3.5 mm head phone jack
2. Preset/CD select
 - During radio play, a short press will select the next preset radio station.
 - During CD play, a short press will select the next CD.
3. Mode control
 - A long press will select **AUX**.
 - With **AUX** selected, press to return to the previous mode.
 - When rear seat entertainment is selected, all adjustments are made through the remote control.
4. Search down
 - During radio play, press to search down the frequency band for the next station with a good signal strength.
 - During CD play, a short press will start the current track again. A second press will start the previous track.
 - During CD play, a long press will search back through the track being played, until the button is released.

5. Search up
 - During radio play, press to search up the frequency band for the next station with a good signal strength.
 - During CD play, a short press will start the next track.
 - During CD play, a long press will search forward through the track being played, until the button is released.
6. Volume decrease
 - Press to decrease head phone volume
7. Volume increase
 - Press to increase head phone volume

With the ignition on, the rear seat controls can be operated regardless of whether the audio system is switched on or not. However, the output can only be heard through the headphones.

If rear seat passengers are listening to the same source as the front seat passengers, only the volume can be adjusted via the rear seat controls.

For example, if a music CD is playing on the audio unit, rear seat passengers can listen to that music and adjust the volume to suit their requirement. No other functions will be available.

If however, the audio unit is switched to another source, all CD related rear seat controls become operable. If the audio source is subsequently switched back to CD, the rear seat controls will again be limited to volume control only.

The same logic applies to radio functions.

Adjustments can be made to other functions of the audio system. For example, if a music CD is selected on the audio unit, radio can be selected and controlled using the rear seat controls. All radio related rear seat controls become operable.

Rear passenger controls

HEADPHONES

The maximum volume available to this type of headphones is limited to the volume set at the rear seat controls.

Note: Only headphones compatible with a 3.5 mm jack plug socket can be used. To obtain optimum sound quality, use headphones with an impedance of 32 ohms.

Note: When the headphones are not connected, the rear seat controls remain operational. It is still possible to select CD, whilst the radio is playing on the audio unit. CD play will remain operational until the mode control is pressed again.

Note: The mode in use when the ignition is switched off will resume when the ignition is switched on again within two minutes. If the ignition is switched off for longer than two minutes **AUX** mode will be selected when the ignition is next switched on.

Note: Adjusting the volume on the audio unit, does not alter the head phone volume. The volume of each controller can be adjusted independently.

Portable audio interface

PORTABLE AUDIO INTERFACE

Located in the centre console cubby box is an interface to allow the connection of a variety of portable audio devices, including iPods, to the vehicle's audio system.

Note: Most devices connected to the iPod and USB ports will be charged but devices that are fully discharged will not play.

If an iPod or mass storage device is connected to the interface, you can use the touch-screen to operate and search the device. Many of the controls are similar to those available for CD play.

The devices that you can connect to the portable audio interface include:

- USB mass storage devices, for example memory stick.
- iPod.

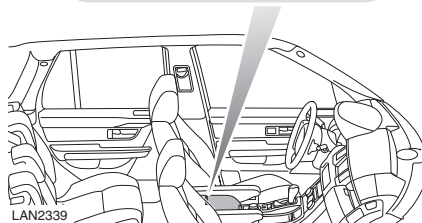
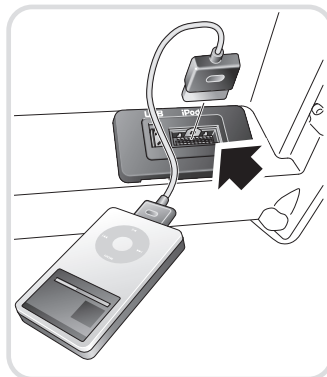
Note: The portable audio interface supports all iPod generations including iPod Photo and iPod Nano. However, iPod Shuffle is not supported via this interface. See **PORTABLE AUDIO INTERFACE** (page 322).

Note: The audio system will play MP3, WMA, WAV and AAC files.

Connecting an iPod

On the touch screen, select **Portable Audio**, then **iPod**.

Note: You can also press the **MODE** button and then select **Portable Audio**.



Note: An iPod cannot be connected via the USB socket using the lead supplied with the iPod.

A dedicated iPod lead is available as an option from your Land Rover dealer. Plug in your iPod with the usual care necessary to protect the connector pins from damage.

Play will start automatically from the point at which the iPod was last played.

CAUTION



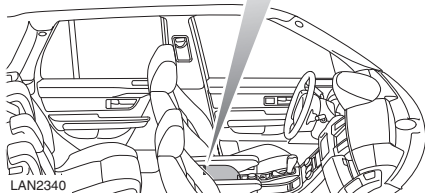
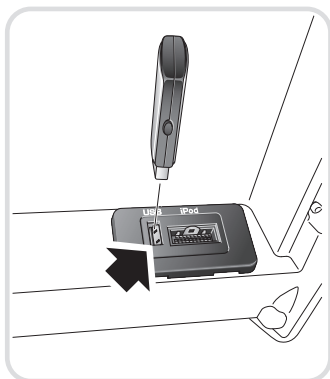
During extreme temperatures it is advisable to unplug and remove an iPod from the vehicle.

Portable audio interface

Connecting a USB device

On the touch screen, select **Portable Audio**, then **USB**.

Note: You can also press the **MODE** button and then select **Portable Audio**.



Insert the USB device into the socket.

Whenever the device is connected, the first track in the first available folder is played automatically.

Note: Some MP3 players have their own file system that is not supported by this system. To use your MP3 player, you must set it to **USB Removable Device** or **Mass Storage Device** mode (see manufacturer's information for further details). Only music that has been added to the device in this mode can be played via the vehicle's portable audio system.

Note: We recommend that only music files are loaded on the USB device. This will speed up the automatic indexing of files.

Connecting more than one device



You can connect an iPod and a USB device simultaneously to the portable audio interface and switch between them using the touch-screen. Select **iPod**, **USB** or **AUX**, to switch between modes.

Note: Selecting **AUX** will select an input connected to the auxiliary input socket. See **AUXILIARY INPUT (AUX IN) SOCKET** (page 326).

The device docked first will remain the active device until you choose to change.

If, after changing to the newly-docked device, you change back to the first device, play will resume at the point you left it (USB and iPod only).

Note: You cannot use a USB hub to connect more than one USB device to the audio unit.

Note: Options such as **Repeat** and **Mix** relate to the device currently playing, they will not apply to any subsequent device.

Portable audio interface

OPERATING A PORTABLE DEVICE



If you are using a USB mass storage device or iPod connected to the portable audio interface, you can control playback using the touch-screen controls.

***Note:** If you are using an audio device connected via the auxiliary input socket, then playback must be controlled from the device itself.*

Autoplay

Whenever a USB device is docked, play will start automatically at the first track in the first available folder.

For an iPod, play will always resume from the current track, whether previously docked or not.

Pause

Select **II** to pause playback, select the button again to resume playback.

Random

USB:

- Briefly touch **Random** to play tracks in the current folder in a random sequence.
- Touch and hold (two seconds) **Random** to play all tracks on the device in a random sequence.

iPod:

- Briefly touch **Random** to play tracks in the current playlist in a random sequence.
- Touch and hold (two seconds) **Random** to play all tracks on the iPod in a random sequence.

If the Mix option is active, select **Random** to cancel it and return to normal playback.

Repeat

USB:

- Briefly touch **Repeat** to repeat play the current track continuously.
- Touch and hold (two seconds) **Repeat** to repeat all tracks in the current folder on a loop.

iPod:

- Briefly touch **Repeat** to repeat play the current track continuously.
- Touch and hold (two seconds) **Repeat** to repeat all tracks on the iPod on a loop.

Select **Repeat** again to cancel it and return to normal playback.

Displaying track information

Many tracks will be saved with additional information contained in an id3 tag. You can choose to display some or all of this information on the screen. The default display provides track title information only.

Briefly touch the --> button repeatedly to toggle through the information, including track title, artist, album and genre.

Touch and hold (two seconds) the --> button to display the **Portable audio text** pop-up screen providing all the id3 tag information available for the track.

If no information is available, the screen will display the text **No entry**.

Touch the pop-up screen to close it.

Portable audio interface

SEARCHING A PORTABLE DEVICE

Next/previous track

Briefly touch the seek buttons to move to the previous or next track.

If the **Random** option is switched on, then the next track will be the next in the randomised playlist.

Fast forward/reverse

Touch and hold a seek button to fast forward or reverse through the current track. Release the seek button to resume normal play.

USB folders

The **Folders** option enables you to explore the folder structure on the USB device.

***Note:** Only compatible file types will be displayed on the touch-screen.*

***Note:** We recommend that only compatible files are loaded onto the device. This will speed up the automatic indexing of your files.*

***Note:** This feature is most useful when the files and folders on the USB device have been organised logically.*

Select **Folders** to display all folders on the device.

Select a folder name to display a list of tracks in that folder. Use the arrow icons (if displayed) to scroll through the list.

Select a track to start playback of that track. Play will continue as normal through the remainder of the tracks in that folder.

Select the open folder icon at the top of a menu to move back to the level of that folder.

iPod folders

Select **Browse** to display all search methods available on the iPod. Search methods include, **Playlist, Artist, Album, Genre, Composer, Podcast, Audio Book** and **Song**.

Select a search method from the list to display a list of items found.

If you select **Artist**, a list of artists will be displayed.

If you select an album title, a list of tracks is displayed. Select a track to start playback.

Select the open folder icon at the top of a menu to move back to the level of that folder.

Portable device settings

In Portable Audio mode, select **Settings**, then select **Options**.

Page jump

Only five items are displayed on screen from a list of many items. If you select a single arrow scroll button, then four items will scroll past.


The **Page jump** setting helps you to navigate a very long list of items by setting the number of items scrolled through when a double-arrow page scroll button is selected.


For example, if you select **10** under **Page jump**, then 10×4 (40) items will scroll past each time you select a page scroll button.


Auxiliary input (AUX IN) socket

AUXILIARY INPUT (AUX IN) SOCKET


WARNINGS

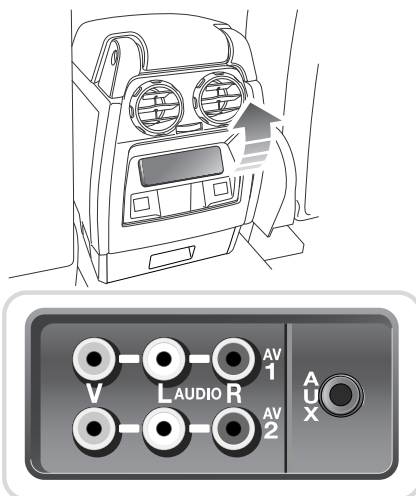
 Auxiliary devices cannot be controlled using the touch-screen. We strongly advise against controlling playback or altering settings on the auxiliary device while driving.

 Ensure that any auxiliary devices are stored securely whilst the vehicle is in motion. Any loose objects can present a serious hazard during sudden manoeuvres, emergency braking, or an accident.

 Do not place any item connected to the auxiliary input socket, or the auxiliary power socket, on the vehicle's seats, carpets, or other upholstery. The heat generated by these devices may cause damage to the upholstery, or in extreme cases, a vehicle fire.

CAUTION

 Read the manufacturer's instructions for any device before it is connected to the vehicle's audio system. Ensure that the device is suitable, and comply with any instructions regarding connection and operation. Failure to do so may result in damage to the vehicle's audio system or the auxiliary device.



E80550

AUX (Auxiliary Input) mode allows additional equipment to be connected to the vehicle's audio system. Items such as a personal stereo, MP3 player, hand-held navigation unit etc. can be plugged in to the vehicle's audio system.

The auxiliary connector is situated at the rear of the centre console. To gain access, lift the lower edge of the cover.

Auxiliary audio devices are connected via the 3.5 mm stereo jack plug marked **AUX**.

The auxiliary power socket, situated next to the auxiliary input connector, can be used to power or charge any suitable device.

Note: *iPod Shuffle is supported when connected via the Auxiliary Input connector.*

Auxiliary input (AUX IN) socket

Note: On vehicles fitted with rear seat entertainment, additional Audio Visual sockets (**AV1** and **AV2**) are provided. This allows auxiliary equipment (such as a video games console) to be linked up to the rear DVD screens. For information on the installation of such equipment, please refer to the installation guide supplied with the auxiliary equipment.

Auxiliary mode



LAN2104

To listen to an auxiliary input source, connect the device to the 3.5 mm stereo jack plug marked **AUX**.

On the touch screen, select **Portable Audio**, then select **AUX**.

Note: You can also press the **MODE** button repeatedly to select **Portable Audio**.

Play will start when you switch on and start play on the auxiliary device.

Volume is controlled using the left rotary control. Tone and balance can also be adjusted.

Note: The volume levels and sound quality available from devices connected to the auxiliary inputs may vary widely.

Voice control

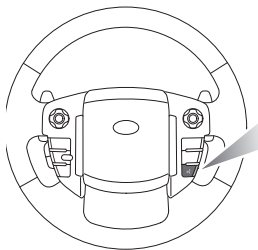
USING VOICE CONTROL

Voice control provides a safe and convenient way of operating certain vehicle systems, without the need to operate the controls manually. This enables you to concentrate fully on driving the vehicle and removes the need to divert your attention from the road ahead, in order to change settings or receive feedback from systems.

A number of voice commands are available and with a little experience, you will find them easy and convenient to use.

Voice control allows for activation of the phone and navigation systems, as well as providing a notepad facility, to allow voice notes to be recorded. Help and tutorial functions provide advice on operating the system. Information on voice control of the telephone system is detailed later in this handbook. See **TELEPHONE VOICE CONTROL** (page 344).

Information on voice control of the navigation system is detailed in the separate Navigation handbook.



LAN2182



The system is controlled using the voice button on the steering wheel (arrowed). Voice commands are picked up by a dedicated microphone and audible feedback will be heard through the audio system speakers.

Activating the system

To activate voice control, press and release the voice button on the steering wheel. A tone will sound to indicate that the system is waiting for a voice command. Any output from the audio system will be muted.

Note: *It is only necessary to press the voice button at the beginning of each voice session.*

Language and accent

Voice feedback is given in the same language as is set for Voice recognition. For example, if the Voice recognition language is set to UK English, the system will not recognise other languages (e.g. US English). The language for the system can be changed using the touch screen. See **VOICE SETTINGS** (page 286).

Note: *Changing the Voice recognition language will not affect the language settings for the touch screen.*

Giving a command

Note: *If background noise is excessive (e.g. driving with windows open), the voice system may not recognise a given voice command.*

Press and release the Voice button on the steering wheel and, after the tone, say one of the commands listed later in this section, or one of the commands for the Telephone or Navigation systems.

Note: *Always wait until the tone finishes sounding before giving a voice command.*

Give commands while facing forwards, in a natural speaking voice as if talking to a passenger or on the phone. Most accents are understood without difficulty, but if the system does not recognise the command, the system will respond with **SORRY** and allow two more attempts to say the command.

Voice control

The system will repeat the command (as understood by the system) back to you as confirmation. The command will then be acted on or the system will ask for further information - always wait until after the tone has sounded before speaking.

Once you are familiar with system requests, it is possible to skip to the end of the request (to when the tone sounds) to give your response. To achieve this, briefly press and release the voice button on the steering wheel during the system request.

Interrupting voice control

A command can be interrupted by speaking the word **Cancel** or by pressing the steering wheel voice control button until a double beep is heard.

It is only possible to interrupt dialogues where you say a name in the voice recognition phonebook, by pressing the voice control button.

A voice control dialogue will be automatically cancelled if you receive a telephone call (Traffic announcement or Navigation route guidance instruction).

Cancelling voice control

To cancel a voice command, press and hold the Voice button on the steering wheel until a double tone is heard.

Note: *If a phone call is received during a voice session, voice control is cancelled.*

Voice system tutorial

To listen to a tutorial on how to use voice control, press and release the voice button and, after the tone, say **VOICE TUTORIAL**.

The tutorial is divided into four lessons and has a total duration of approximately four minutes. The tutorial can only be undertaken with the vehicle stationary and parked.

To cancel the tutorial, press and release the Voice button and say **CANCEL**. To skip to the previous or next lesson of the tutorial, press and release the Voice button and say **PREVIOUS** or **NEXT**.

Command help

For a list of the most commonly used voice commands, press and release the Voice button and, after the tone, say the appropriate command from the following list:

- VOICE HELP
- NAVIGATION HELP
- PHONE HELP
- DISPLAY HELP
- NOTEPAD HELP

Command list

A list of available voice commands can be accessed on the touch screen. See **VOICE SETTINGS** (page 286).

Voice control

DISPLAY COMMANDS

This is a list and a description of the voice commands used to operate the touch screen.

Command	Description
DISPLAY ON	Turns the touch screen on.
DISPLAY OFF	Turns the touch screen off.
DISPLAY SHOW AUDIO	The Audio home screen is displayed.
DISPLAY SHOW PHONE	The Phone home screen is displayed.
DISPLAY SHOW NAVIGATION	The Navigation main menu is displayed. <i>Note: The navigation caution must be accepted before the menu is displayed.</i>

NOTEPAD COMMANDS

The notepad facility enables the user to record a note, up to a maximum of 30 seconds duration, which can be subsequently recalled.

*Note: To hear information on notepad commands, press the Voice button, wait for the tone to sound and then say **NOTEPAD HELP**.*

Recording a note

1. Press and release the Voice button, wait for the tone to sound, then say **RECORD NOTE**.
2. Say the words of the note to be recorded, then press and hold the Voice button to end and save the note.

Note: The maximum length of a note is 30 seconds, after which time the recording of the note will be ended automatically.

Playing a note

Press and release the Voice button, wait for the tone to sound, then say **PLAY NOTEPAD**. If multiple notes are stored on the system, press and release the Voice button during playback and say **NEXT**, to skip to the next note.

Deleting notes

To delete an individual note, press and release the Voice button during playback of the note to be deleted and say **DELETE**.

To delete all notes stored on the system, press and release the Voice button and say **CLEAR NOTEPAD**.

Telephone

GENERAL INFORMATION

WARNINGS



Use of your phone handset while you are driving is dangerous as it diverts attention from the traffic situation. If you wish to use your phone handset, stop at an appropriate place where you are not endangering or inconveniencing other vehicles.



Using the telephone near the car: do not telephone inside a garage or near an open car bonnet. The air may contain fuel vapours and the telephone could produce sparks and start a fire.



Unusual ambient conditions: Switch off the telephone in areas where high explosives are being used. High frequency remote controls could be interfered with and cause an explosion. Switch off your telephone in areas with a high explosion risk. This includes filling stations, fuel storage areas or chemical factories, as well as places where the air contains fuel vapour, chemicals or metal dust. The telephone might possibly produce sparks and cause a fire or explosion.



Medical equipment: The functioning of cardiac pacemakers or hearing aids may be impaired when the phone is in use. Check with a doctor or manufacturer whether any such devices you or your passengers are using are sufficiently protected against high-frequency energy.



Always stow your mobile phone securely. In an accident loose items can cause injury.

Note: *The vehicle telephone system is designed to function with a wide variety of Bluetooth telephones. As these telephones have a wide range of audio and echo performance characteristics, it may take a few seconds for the vehicle telephone system to adapt and deliver optimum audio performance. It may be necessary to reduce the in-vehicle volume slightly to fully optimise audio performance and reduce echo.*

Telephone networks

The Telephone network standard allows you to use your telephone in many countries, and to use a uniform emergency call number (112) irrespective of which country you are driving.

It is possible that telephone reception may be poor or unavailable in remote regions. This will usually be due to the inadequate power of the transmitter and, therefore, to incomplete coverage. Depending on your location, you may also be using the transmitters of a network operator with which your service provider has an agreement for handling your calls.

Telephone

MOBILE PHONE COMPATIBILITY

Not all phones are fully compatible with the Land Rover system. For the latest list of compatible phones and software versions, please refer to the Land Rover website. Alternatively consult your Land Rover Dealer/Authorised Repairer.

Bluetooth supported features

- Make a call.
- Receive a call.
- End an active call.
- Call stacking - display of missed calls, last number called, call waiting.
- Phone book - access to the phone book stored on the phone or SIM card.

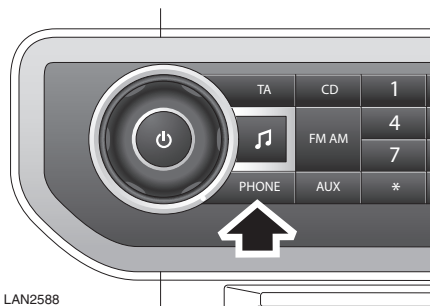
Unsupported features

- Phone charging.
- Hold/unhold an active call.
- Rejecting an incoming call.
- No display of network operator, signal strength or caller id.

Note: Functionality will depend on model/manufacture of your mobile phone.

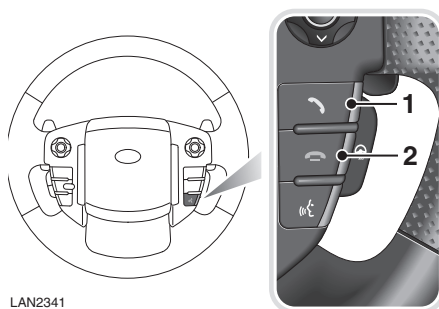
TELEPHONE CONTROLS

Facia



Press button on facia to enter or leave phone mode.

Steering wheel



1. Answer call/Dial switch

- Press the switch briefly to answer an incoming call or dial a displayed number. Press and hold the switch (for approximately two seconds) to redial the last number dialled.

2. End/Reject call switch

- Press the switch to end the current call or reject an incoming call.

Telephone

BLUETOOTH SETUP

If your mobile phone supports this wireless feature, it will need to be bonded to the vehicle. The bonding process will also be described in your mobile phone instructions.

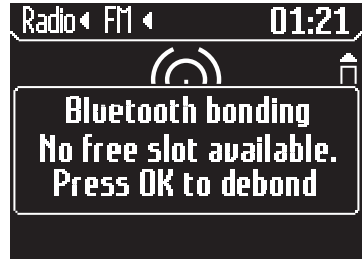
1. With the vehicle ignition on, select the Bluetooth feature on your mobile phone.
2. Start the Search function on your mobile phone. This search process may vary from one handset/manufacture to another (consult your mobile phone instructions for further details). Typically, when searching for other wireless devices the search range is 10 metres or less.
3. The text **LAND ROVER** will appear on your mobile phone device list. This should be selected. **LAND ROVER** can be personalised by the user (e.g. the vehicle registration number).
4. The screen will display a PIN depending on the model of phone being bonded. Enter the PIN displayed.
5. When the PIN is accepted, the system will allow you to use the Bluetooth mode.

Note: A maximum of five mobile phones can be bonded to the vehicle.

Note: If more than one paired Bluetooth phone is in range, then the system will automatically select the last phone used in Bluetooth mode (if present). If the last connected phone is not present the system will move through previously connected phones until a bonded phone is discovered.

Note: The searching/bonding process may take some time to complete, especially if more than one phone is bonded to the system.

Note: Priority can be given to other phones by de-selecting Bluetooth mode on your mobile phone.



LAN2589

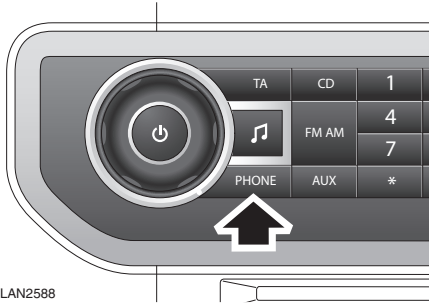
If Bluetooth bonding is attempted when there are no free slots available, a pop up message will appear stating that there are none available. Press **OK** to confirm and to return to the **Select phone to Debond** screen.

Selecting **Debond** opens the **Select phone to Debond** screen. Right navigation on the selected phone opens the **Select phone to Debond** screen. Selecting No returns to the **Select phone to Debond** screen. Selecting yes debonds the phone and then returns to the **Select phone to Debond** screen. Left navigation cancels back to the previous screen displayed.

Note: The debond option is not available if no phones are bonded.

Telephone

SELECTING PHONE MODE



Either press the **Phone** button on the audio unit or press the **Make/Answer** button on the steering wheel. Use the numeric keypad on the audio unit to dial the number.

DIALLING



Pressing the left navigation button when the number screen has no digits cancels the screen and returns to the previous screen displayed. A short press of the left navigation button when digits are present deletes each digit individually. A long press of the left navigation button when there are digits present deletes all digits.

When the full telephone number has been entered, press **OK** to dial number.

ANSWERING/REJECTING CALLS

Answer incoming call

Press the **Make/Answer** button on the steering wheel to answer the incoming call.

Reject incoming call

Press the **End** button on the steering wheel to reject the incoming call.

End call

Press the **End** button on the steering wheel to terminate the call.

Continuing a call with ignition off

If you need to turn off the ignition during a telephone conversation, there are two choices of how to continue the telephone call.

1. If you want to continue using the vehicle telephone system, ensure that the audio system is ON before turning off the ignition.

The vehicle telephone system will continue to be available while the current phone call is active. When the phone call is terminated the vehicle system will shut down.

2. If you want to continue the phone call using your mobile phone, ensure that the audio system is turned OFF before turning off the ignition.

Telephone with touch screen

GENERAL INFORMATION

WARNINGS



Use of your phone handset while you are driving is dangerous as it diverts attention from the traffic situation. If you wish to use your phone handset, stop at an appropriate place where you are not endangering or inconveniencing other vehicles.



Using the telephone near the car: do not telephone inside a garage or near an open car bonnet. The air may contain fuel vapours and the telephone could produce sparks and start a fire.



Unusual ambient conditions: Switch off the telephone in areas where high explosives are being used. High frequency remote controls could be interfered with and cause an explosion. Switch off your telephone in areas with a high explosion risk. This includes filling stations, fuel storage areas or chemical factories, as well as places where the air contains fuel vapour, chemicals or metal dust. The telephone might possibly produce sparks and cause a fire or explosion.



Medical equipment: The functioning of cardiac pacemakers or hearing aids may be impaired when the phone is in use. Check with a doctor or manufacturer whether any such devices you or your passengers are using are sufficiently protected against high-frequency energy.



Always stow your mobile phone securely. In an accident loose items can cause injury.

Note: *The vehicle telephone system is designed to function with a wide variety of Bluetooth telephones. As these telephones have a wide range of audio and echo performance characteristics, it may take a few seconds for the vehicle telephone system to adapt and deliver optimum audio performance. It may be necessary to reduce the in-vehicle volume slightly to fully optimise audio performance and reduce echo.*

Telephone with touch screen

Telephone networks

The Telephone network standard allows you to use your telephone in many countries, and to use a uniform emergency call number (112) irrespective of which country you are driving.

It is possible that telephone reception may be poor or unavailable in remote regions. This will usually be due to the inadequate power of the transmitter and, therefore, to incomplete coverage. Depending on your location, you may also be using the transmitters of a network operator with which your service provider has an agreement for handling your calls.

Mobile phone compatibility

Not all phones are fully compatible with the Land Rover system. For the latest list of compatible phones and software versions, please refer to the Land Rover website. Alternatively consult your Land Rover Dealer/Authorised Repairer.

Bluetooth supported features

- Make a call.
- Receive a call.
- End an active call.
- Call stacking - display of missed calls, last number called, call waiting.
- Phonebook - access to the phonebook stored on the phone or SIM card.

Unsupported features

- Phone charging.
- Hold/release an active call.
- Rejecting an incoming call.
- No display of network operator, signal strength or caller id.

Note: *Functionality will depend on model/manufacture of your mobile phone.*

Continuing a call with ignition off

If you need to turn off the ignition during a telephone conversation, there are two choices of how to continue the telephone call.

1. If you want to continue using the vehicle telephone system, ensure that the audio system is ON before turning off the ignition.

The vehicle telephone system will continue to be available while the current phone call is active. When the phone call is terminated the vehicle system will shut down.

2. If you want to continue the phone call using your mobile phone, ensure that the audio system is turned OFF before turning off the ignition.

Telephone with touch screen

TELEPHONE CONTROLS

Touch screen

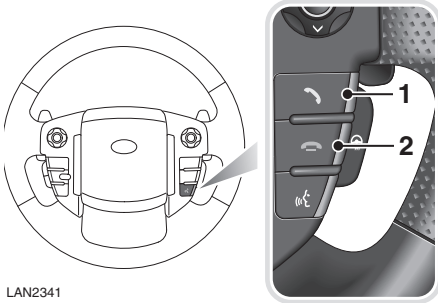


LAN2006

1. Network name (if none is available, Bluetooth is displayed)
2. Active call icon
3. Call information
4. Scratchpad line
5. Signal strength icon (if supported)
6. Make/Answer call
7. End call
8. Mute
9. Clear
10. Numeric keypad
11. Phonebook
12. Call register

Telephone with touch screen

Steering wheel



LAN2341

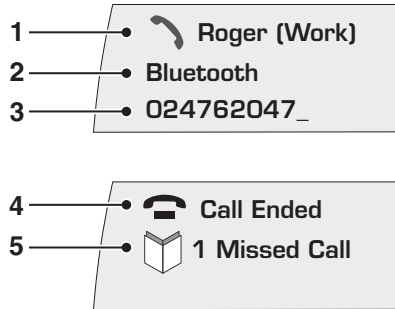
1. Answer call/Dial switch

- Press the switch briefly to answer an incoming call or dial a displayed number. Press and hold the switch (for approximately two seconds) to redial the last number dialled.

2. End/Reject call switch

- Press the switch to end the current call or reject an incoming call.

PHONE INFORMATION DISPLAY



LAN2009

1. Active call icon.
2. Network or Bluetooth.
3. Scratchpad line (Max. 17 characters).
4. Call state icon.
5. Missed call icon.

Note: The phone operator logo and signal strength indicators will also be displayed, if supported by the mobile phone.

Telephone with touch screen

BLUETOOTH SETUP

Bluetooth access code

The four digit access code required for Bluetooth pairing operation is 2121.

Pairing your phone to the vehicle

If your mobile phone supports this wireless feature, it will need to be paired to the vehicle. The pairing process will also be described in your mobile phone instructions.

1. With the vehicle ignition on, select the Bluetooth feature on your mobile phone.
2. Start the Search function on your mobile phone. This search process may vary from one handset/manufacturer to another (consult your mobile phone instructions for further details). Typically, when searching for other wireless devices the search range is 10 metres or less.
3. The text **LAND ROVER** will appear on your mobile phone device list. This should be selected. **LAND ROVER** can be personalised by the user (e.g. the vehicle registration number).
4. Your mobile phone display will now prompt you for the Bluetooth access code. Press the numeric keys 2121 on your phone.
5. When the code is accepted, the system will allow you to use the Bluetooth mode.

Note: A maximum of five mobile phones can be paired to the vehicle.

Note: If more than one paired Bluetooth phone is in range, then the system will automatically select the last phone used in Bluetooth mode (if present). If the last connected phone is not present the system will move through previously connected phones until a paired phone is discovered.

Note: The searching/pairing process may take some time to complete, especially if more than one phone is paired to the system.

Note: Priority can be given to other phones by de-selecting Bluetooth mode on your mobile phone.

Telephone with touch screen

SELECTING PHONE MODE

Either press the Phone button on the facia; or from the Home Menu on the touch screen, touch the Phone icon.

DIALLING

The process below should be used for making calls.

1. From the Phone main display, touch the required numeric keypad icons.
2. Touch the **Make/Answer** icon.
3. When the call is active, the phone icon flashes in the Phone information display. Phone ringing will be heard.

Correcting/clearing number entries

Use the process below to correct or clear incorrect number entries.

1. Touch the **C** icon to delete the last digit entry.
2. Continue to hold the **C** icon to delete the entire entry.

Last number redial

Note: This function will only be available if your phone is capable of sending the last number redial to the vehicle.

1. Touch the **Make/Answer** icon.
2. The last dialled number is displayed and redialled.

ANSWERING/REJECTING CALLS

Answer incoming call

1. If the Phone main display is shown when there is an incoming call, touch the **Make/Answer** icon to answer the call. The phonebook contact name will be shown if stored, the caller's phone number is displayed if available.
2. If another touch screen mode is active when an incoming call is received, an information pop-up will appear.
3. Touch the **Make/Answer** icon on the pop-up to answer the incoming call.

Reject incoming call

1. If the Phone main display is shown when there is an incoming call, touch the **End** softkey to reject the call.
2. If another touch screen mode is active when an incoming call is received, an information pop-up will appear.
3. Touch the **End** icon on the pop-up to reject the incoming call.

End call

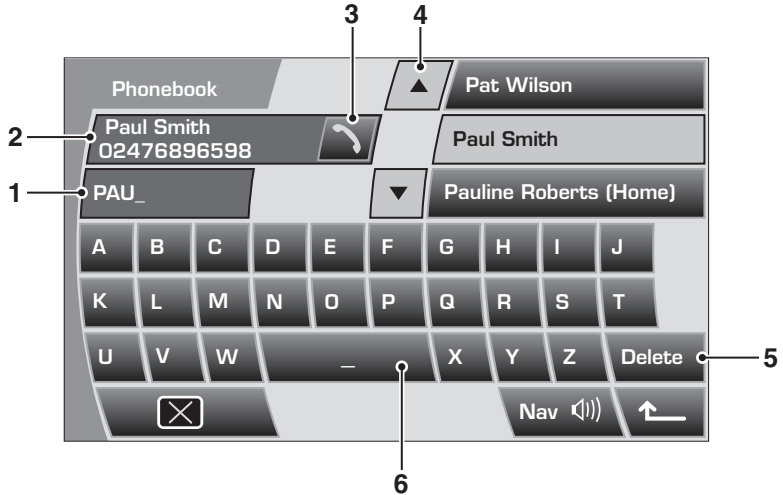
If the Phone main display is showing when you wish to end your call, touch the **End** icon to terminate the call.

If another touch screen mode is active (e.g. Navigation) when you wish to end your call, press the **Phone** button on the facia to access the Phone screen and then touch the **End** icon to terminate the call.

Telephone with touch screen

PHONEBOOK

Phonebook display



LAN2007

1. Search text input display
2. Name/number display
3. Make call
4. Scroll arrows (3 or more entries)
5. Delete (hold to delete entire entry)
6. Alpha character input softkeys

Telephone with touch screen

Accessing the phonebook

When your phone is paired to the vehicle, and dependent on the phone being used, your phone/address book will be accessible via the touch screen.

To confirm that your phone supports this feature and to check whether the phonebook is downloaded from the phone or the SIM card, consult the list of approved phones on the Land Rover website

Note: *Once the phone is disconnected from the vehicle, the phonebook will be deleted from the vehicle system.*

To access the phonebook:

1. From the Phone main display, touch the **Phonebook** icon.
2. The phonebook display is shown.

Note: *The displayed phonebook order may not match that in your mobile phone.*

Phonebook scroll

There are two methods of selecting a contact name from the phonebook. This method should be used when the contact name is not known.

1. To navigate through your contact list, touch either of the **Scroll** arrows.
2. Alternatively, use the **Search forwards/backwards** controls on the steering wheel.

Phonebook search by letter

This method should be used when you wish to reduce the search to letter or name specific contacts (the more letters entered, the fewer contacts need to be searched).

1. Touch the **Alpha character input** icon for the first search letter (shown in the Search text input display).
2. Further letters can be typed, if desired.

3. If an error is made, touch **Delete** to delete the last character. Hold to delete the entire entry.

Dialling from the phonebook

Where a contact is available via your Phonebook, this method of dialling may be used as an alternative to dialling via the numeric keypad.

1. Touch the **Phonebook entry** corresponding to the required contact name.
2. Touch the **Make** call icon.
3. The display reverts to the Phone main display. The name/number dialled is shown in the Phone information display.

SCRATCHPAD

This function enables you to note down a number while in an active call.

1. From the Phone main display, touch the required numeric keypad icons.
2. When the active call has been terminated, the noted phone number moves to the top of the Phone information display.
3. This number can now be dialled by touching the **Make/Answer** icon or deleted, by touching and holding **C**.

Telephone with touch screen

CALL REGISTER

Note: This function will only be available if your phone is capable of sending the call register list to the vehicle.

Call register menu

1. From the Phone main display, touch the **Call Register** icon.
2. The Phone Messages menu is displayed.

Last dialled numbers menu

1. From the Phone Messages menu, touch the **Dialled** icon.
2. The Last Dialled menu displays details of the last ten calls dialled.
3. If desired, calls can be made to any contacts shown by touching the icon corresponding to the required name/number.
4. If a call is made, the display reverts to the Phone main display. The name/number dialled is confirmed in the Phone display.

Missed calls menu

Note: This function will only be available if your phone is capable of sending the missed call list to the vehicle.

1. From the Phone messages menu, touch the **Missed** icon.
2. The Missed menu is displayed.
3. If desired, calls can be made to any contacts shown by touching the icon adjacent to the required name/number.
4. If a call is made, the display reverts to the Phone main display. The name/number dialled is confirmed in the Phone display.

Missed calls

There are two other methods that you can be informed of missed calls. The first method is as follows:

1. When informed via the Phone main menu that you have a missed call, touch the **Call Register** icon.

The second method is as follows:

1. If another touch screen mode is active (e.g. Navigation) and there is a missed call, an information pop-up will appear.
2. Touch the **View List** icon to display the missed call(s).

Received calls menu

Note: This function will only be available if your phone is capable of sending the received call list to the vehicle.

1. From the Phone Messages menu, touch the **Received** icon.
2. The Received menu is displayed.
3. If desired, calls can be made to any contacts shown, by touching the icon adjacent to the required name/number.
4. If a call is made, the display reverts to the Phone main display. The name/number dialled is confirmed in the Phone display.

Telephone with touch screen

TELEPHONE VOICE CONTROL

WARNING



Do not use the voice control for placing emergency calls. Your voice and tone could be affected by stressful situations as a result of which, the process of establishing the telephone connection could be unnecessarily delayed.

Voice control enables you to activate important functions of your telephone system, without the need to operate the controls manually. This enables you to concentrate fully on driving the vehicle.

A number of voice commands are available and, with a little experience, you will find them easy and convenient to use. You are guided through these dialogues by announcements or questions.

Please familiarise yourself with the functions of your telephone system, before using voice control.

Note: *The voice recognition directory is separate from your phone handset SIM card address book/phonebook.*

For general information about voice control. See **USING VOICE CONTROL** (page 328).

Defined voice commands

The voice control system understands predefined commands which need to be given word for word.

You can prompt the system to speak a selection of these commands by activating the system and giving the command **Phone help** or **Telephone help**.

Note: *For each command below, the term **Phone** or **Telephone** are equally acceptable.*

These commands are as follows:

Telephone commands

- **Phone help**
- **Phone dial number**
- **Phone redial**
- **Phone dial name**
- **Phone store name**
- **Phone play directory**
- **Phone delete directory**

Telephone sub-commands

These commands are used in response to a prompt or question within a dialogue.

- **Correction**
- **Delete**
- **Cancel**
- **Store**
- **Dial**
- **Yes**
- **No**
- **Replay**
- **Numbers 0-9**
- **Double**
- **Treble/Triple**
- **Edit**

General commands

Note: *Over the following pages, the voice control commands you should give for an action are shown in bold and the responses by the voice recognition system are shown inside chevrons >...<.*

Telephone with touch screen

DIALLING A PHONE NUMBER USING VOICE RECOGNITION

Starting a dialogue

Press and release the voice button on the steering wheel. A tone will be heard. Any output from the audio system will be muted.

The command **Phone dial number** starts the dialogue for entering a telephone number. You are guided through this process by a predefined dialogue.

Command	System response
Phone dial number	>Phone dial number, Number please<
Zero, one, six, one	>Zero, one, six, one, continue?<
Four, nine, six	>Four, nine, six, continue?<
Zero, nine, nine, eight	>Zero, nine, nine, eight, continue?<
Dial	>Dialling<

Saying numbers

The system understands single digits from zero to nine. You can choose to say either **Zero** or **Oh**.

Numbers such as ten, eleven, twelve etc. are not recognised.

To speed up input it is a good idea to group together between three and five digits into a continuous string. However, you can also say each digit individually, or all digits continuously.

Note: Telephone numbers of up to 20 digits are acknowledged. If a longer number is given, the following error message will be issued:

>Number too long<.

Correcting/Deleting and Cancelling inputs

When you are entering digits into the system, it will repeat back the numbers given, then asks you to continue. You may continue entering digits to complete your number or if you have made a mistake or if the voice control has misunderstood, you may say: **Correction**, **Delete** or **Cancel**.

Command	System response
Phone dial number	>Phone dial number, Number please<
Zero, one, six, one	>Zero, one, six, one, continue?<
Four, nine, six	>Four, nine, six, continue?<
Correction	>Zero, one, six, one, continue?<
Four, nine, five	>Four, nine, five, continue?<
Delete	>Number please<

Telephone with touch screen

Correcting inputs

Correction to delete the last block of digits. After the command **Correction**, the system repeats the digits that were entered correctly up to that point.

Deleting inputs

Delete, deletes all digits entered. It is then necessary to enter the digits again from the very beginning.

Cancelling voice session

Cancel terminates voice session.

Establishing a connection

The command **Dial** terminates input of the digits and a connection is established with the telephone number displayed.

Note: To make a foreign phone call say **Plus** followed by the country code.

Redialling

The command **Phone redial** dials the telephone number last used.

Command	System response
Phone redial	>Phone redial, Confirm Yes or No<
Yes	>Dialling<

STORING A TELEPHONE NAME/ NUMBER WITH VOICE RECOGNITION

Telephone numbers which you dial frequently can be stored in the Voice Recognition phone directory in conjunction with the contact name.

There are two methods of achieving this. The first is by entering the contact phone number via the touch screen. The second is initiated via a voice command.

Storing via touch screen

From the touch screen, select the **Settings** menu icon, followed by **voice settings**, then select **voice add name**.



Enter the telephone number using the touch screen keypad. Select **Add** to initiate the voice recognition **Phone store name** function. Follow the process in the table below.

Command	System response
Press Add icon on Voice Add Name screen	<Name please>
(Follow voice prompts)	

Telephone with touch screen

Storing via voice command

The command **Phone store name** calls up the dialogue for storing a name. The name is entered first, then the number. The same rules for saying numbers apply as for the **Phone dial number** command.

If possible, keep names acoustically distinct from one another, for example, **Andrew Royd** and **David Royle** instead of **Mr Royd** and **Mr Royle**. This will improve recognition when you make a call.

Depending on the spoken length of the names and numbers you have entered, it is possible to store approximately 50 entries.

Command	System response
Phone store name	>Phone store name< >Number please<
Zero, one, six, one	>Zero, one, six, one, continue?<
Four, nine, six	>Four, nine, six, continue?<
Zero, nine, nine, eight	>Zero, nine, nine, eight, continue?<
Store	>Name please<
Andrew Royd	>Please repeat name<
Andrew Royd	>Andrew Royd stored<

USING THE VOICE RECOGNITION PHONE DIRECTORY

Dialling a telephone number in the phone directory

The command **Phone dial name** activates the phone number in the directory corresponding to the name tag.

When prompted by the voice control system, speak the name under which you have stored the telephone number you want.

The voice control system will understand best the person who made the entries.

Command	System response
Phone dial name	>Dial name, Name please<
Andrew Royd	>Andrew Royd, Confirm Yes or No<
Yes	>Dialling<

Telephone with touch screen

Dialling/Editing and Deleting from the phone directory

The command **Phone play directory** enables you to have all entries in your voice recognition phone directory read out in order.

You may say one of the following after each name has been read out. Give the command **Dial, Replay, Delete, Edit, Cancel** or remain silent to advance to the next name.

Command	System response
Phone play directory You can say Dial, Replay, Delete, Edit or Cancel after each name. (Reads out the entries)	>Phone play directory<
Dial	>Phone dial name, Confirm Yes or No<
Yes	>Dialling<

Dialling

This function enables you to dial a telephone number stored in the phone directory. This is useful if you have forgotten a contact's voice/name tag or if the tag is not recognised.

Replaying

This function repeats the name again from the phone directory.

Deleting

This function enables deletion of a telephone number and name stored in the phone directory.

Editing

This function enables voice editing of a telephone number of an existing name stored in the phone directory.

Cancelling

Terminates the voice session.

Deleting/Clearing the entire phone directory

The command **Phone delete directory** deletes all entries in the Voice Recognition phone directory.

The names and telephone numbers entered in your Voice Recognition phone directory are independent of the telephone or SIM card memory of your phone. In other words, it is not possible to recall or delete the numbers stored in the telephone itself or on the SIM card by voice input, nor is it possible to store numbers there by voice input.

Command	System response
Phone delete directory	>Phone delete directory, Confirm Yes or No<
Yes	>Are you sure you want to delete the whole directory?<
Yes	>Directory deleted<

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