

## Handles, Locks, Latches and Entry Systems -

### Torque Specifications

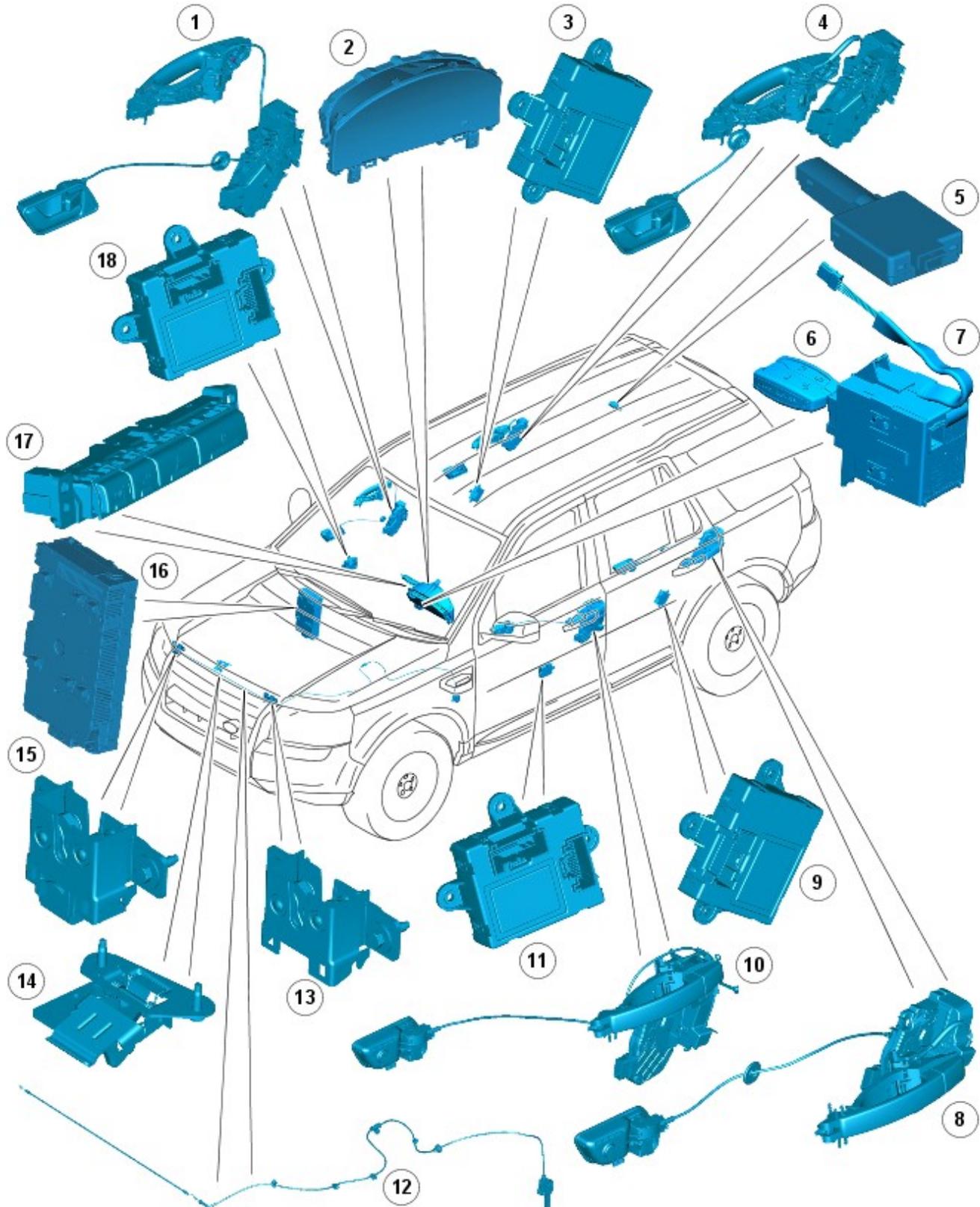
Description	Nm	lb-ft
Front door latch Torx screws	10	7
Hood latch interior release handle bolt	10	27
Hood latch to slam panel bolts	10	7
Hood safety hook bolts	10	7
Liftgate handle bolts	4	3
Liftgate latch Torx screws	20	15
Liftgate striker bolts	25	18
Rear door latch Torx screws	10	7

**Part Number**  
**Handles, Locks, Latches and Entry Systems - Handles, Locks, Latches and Entry Systems**

Description and Operation

**COMPONENT LOCATION (SHEET 1 OF 2)**

NOTE: Left-Hand Drive (LHD) shown; Right-Hand Drive (RHD) similar.



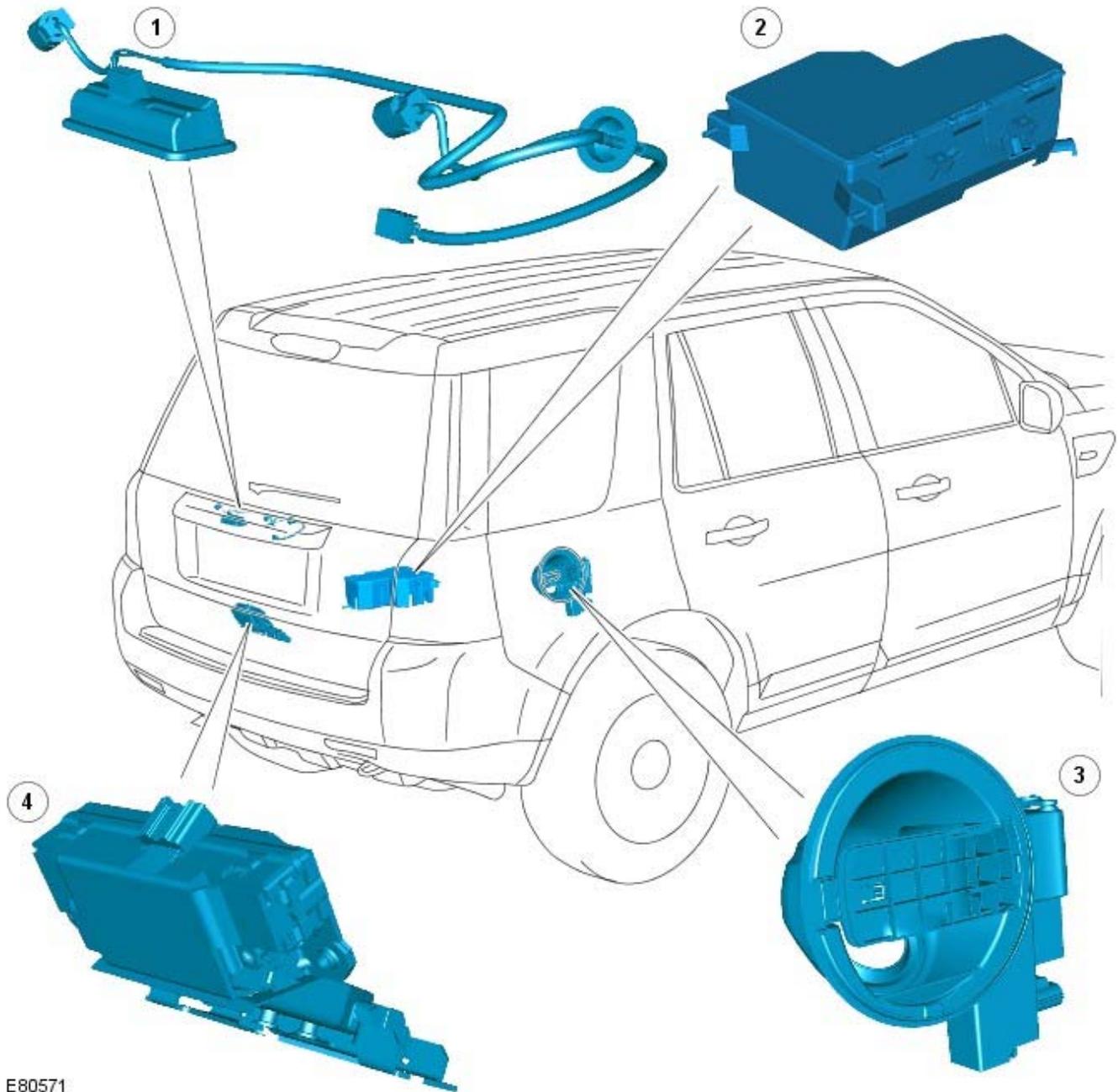
E80570

Item	Part Number	Description
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1	Right-Hand (RH) front door handle and latch
2	Instrument cluster
3	RH rear door control module
4	RH rear door handle and latch
5	Radio Frequency (RF) receiver
6	Remote handset
7	Start control module
8	Left-Hand (LH) rear door handle and latch
9	LH rear door control module
10	LH front door handle and latch
11	LH front door control module
12	Hood release cable
13	LH hood latch
14	Hood safety hook
15	RH hood latch and ajar switch
16	Central Junction Box (CJB)
17	Instrument panel central locking switches
18	RH front door control module

**COMPONENT LOCATION (SHEET 2 OF 2)**

NOTE: LHD shown; RHD similar.



E80571

Item	Description
1	Liftgate release switch
2	Auxiliary Junction Box (AJB)
3	Fuel filler door actuator
4	Liftgate latch and ajar switch

## OVERVIEW

All the vehicle hinged panels are secured by latches with mating strikers. The latches incorporate panel ajar switches that will inform the driver of an open access point.

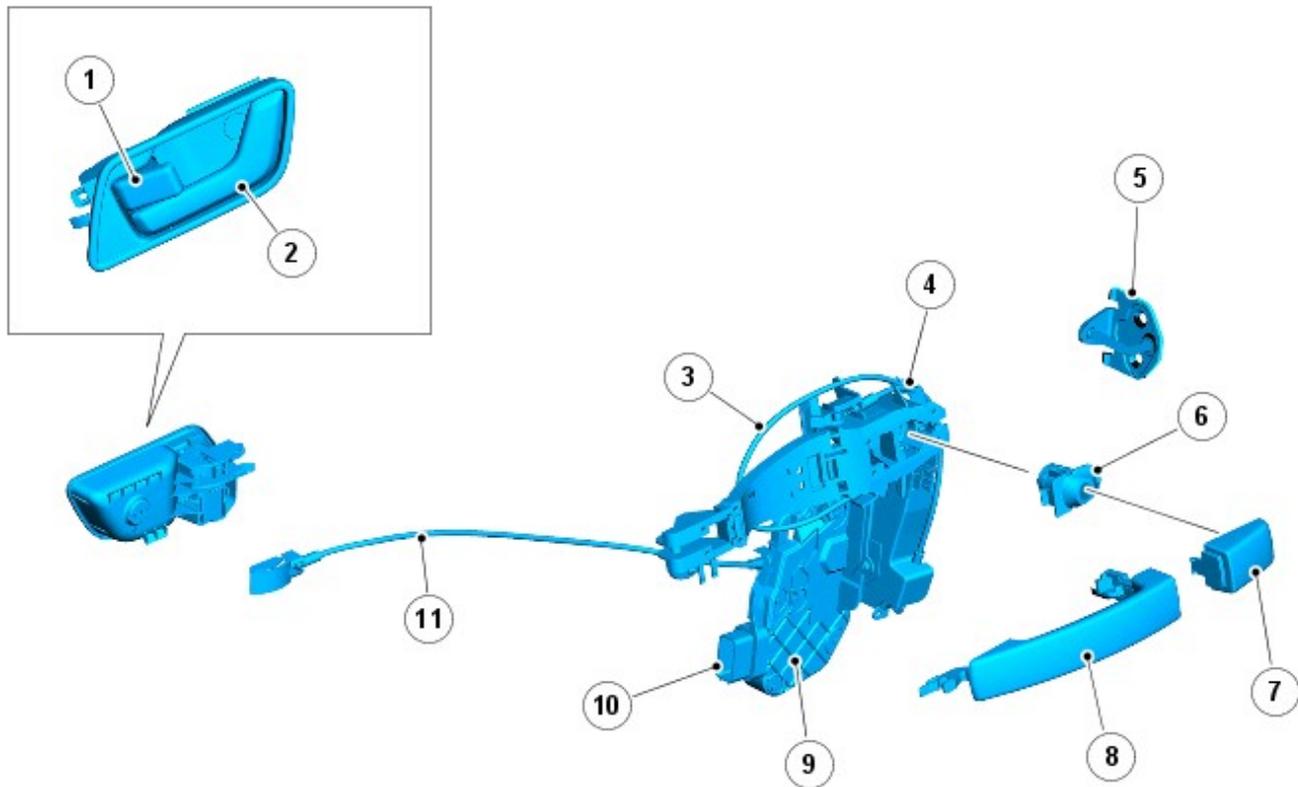
The central locking system is operated by either the remote handset, front door central locking buttons or the instrument panel central locking switches. The central locking system controls the automatic locking and unlocking of the vehicle entry points. The software used to control the central locking system is incorporated within the CJB.

The central locking system is also integrated with the interior lighting function. The interior lights and exterior mirror lamps are illuminated via the RF receiver and CJB following a valid unlock request from the remote handset. For additional information, refer to: [Interior Lighting](#) (417-02 Interior Lighting, Description and Operation).

If configured by the dealer, the exterior door mirror power fold function is also operated by the central locking system.

A concealed mechanical door lock is provided in the front LH door exterior handle, and is used to gain access to the vehicle if the battery is discharged or the central locking system fails.

## DOOR LATCHES



E83168

Item	Description
1	Door interior lock/unlock button
2	Door interior release handle
3	Mechanical door lock release cable (front LH door only)
4	Door lock exterior release cable
5	Door striker
6	Emergency mechanical door lock (front LH door only)
7	Exterior door handle lock cover
8	Exterior door handle
9	Door latch
10	Electrical connection to door control module
11	Door lock interior release cable

The door latches are installed at the rear edge of each door and engage with corresponding strikers mounted to the 'B' and 'C' pillars. Each interior and exterior door handle is connected with a release cable to the corresponding door latch. In the front LH door a third release cable is connected between the door latch and the concealed emergency mechanical door lock.

Each door latch is a sealed unit that comprises the following:

- Lock motor
- Double lock motor (all except North American Specification (NAS), Japan and Gulf vehicles)
- Door ajar switch.

An electrical connector is incorporated in each door latch and provides the interface with the door control module, CJB, and AJB. The front door control modules are connected to the CJB on the medium speed Controller Area Network (CAN) bus; the rear door control modules are connected via the Local Interconnect Network (LIN) bus to the front door control modules. Power supply for the door latch lock and double lock motors is provided from the AJB.

The lock and double lock motors control the engagement of the door latches with the release cables to lock and unlock the vehicle. When the vehicle is locked, the lock motors disengage the door latches from the exterior release cables. When the vehicle is double locked, the double lock motors also disengage the door latches from the interior release cables. When the vehicle is subsequently unlocked, the interior and exterior release cables are re-engaged with the door latches.

All the door interior release handles incorporate a locking button. When a front door central locking button is pressed/pulled, all the vehicle doors will centrally lock/unlock. When a rear door locking button is pressed/pulled, the locking button will only lock/unlock the activated rear door.

When the door locking button is pressed, the interior release cable is pushed and causes the exterior release cable to be disengaged from the door latch. On the rear doors, pressing the locking button will also disengage the interior handle from the interior release cable.

When the door locking button is pulled away from the door, the door interior release handle is re-engaged with the interior release cable. As the interior release cable is re-engaged it is pulled, causing the door latch to re-engage with the exterior release cable.

### Rear Door Child Locks

The rear door latches incorporate child locks that provide additional rear occupancy safety. The child locks are manually operated using the emergency key blade within the remote handset. Setting the child lock to the locked position will disengage the door latch interior release cable from the door latch, and prevent opening of the rear door using the interior release handle.

For further information on child locks, refer to the Owners Handbook.

### Door Ajar Switch

An ajar switch is installed in each door latch and is hardwired to the CJB. If the ignition is in power modes 4 (Accessory) or 6 (Ignition) and a door is opened or is not fully closed, the corresponding door ajar switch is opened to disconnect the ground from the CJB. A message is transmitted by the CJB via the medium speed CAN bus to the instrument cluster, to inform the driver that a door is ajar.

On vehicles with a low-line instrument cluster the door ajar symbol is illuminated.

For additional information, refer to: [Instrument Cluster](#) (413-01 Instrument Cluster, Description and Operation).

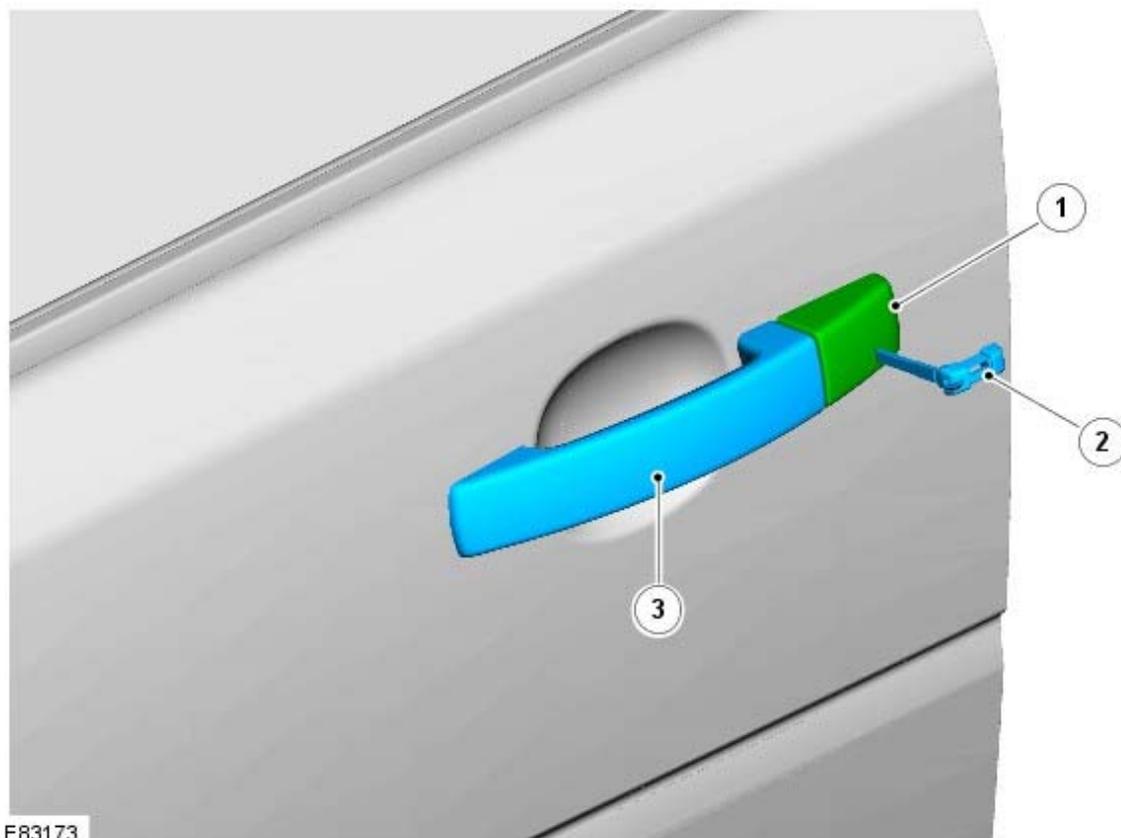
On vehicles with a high-line instrument cluster, the door ajar symbol is illuminated and a message is also displayed in the message center.

For additional information, refer to: [Information and Message Center](#) (413-08 Information and Message Center, Description and Operation).

The door ajar switch is also integrated with the vehicle security system and is used as the detection device for unauthorized vehicle entry.

For additional information, refer to: [Anti-Theft - Active](#) (419-01A Anti-Theft - Active, Description and Operation).

### Emergency Mechanical Door Lock



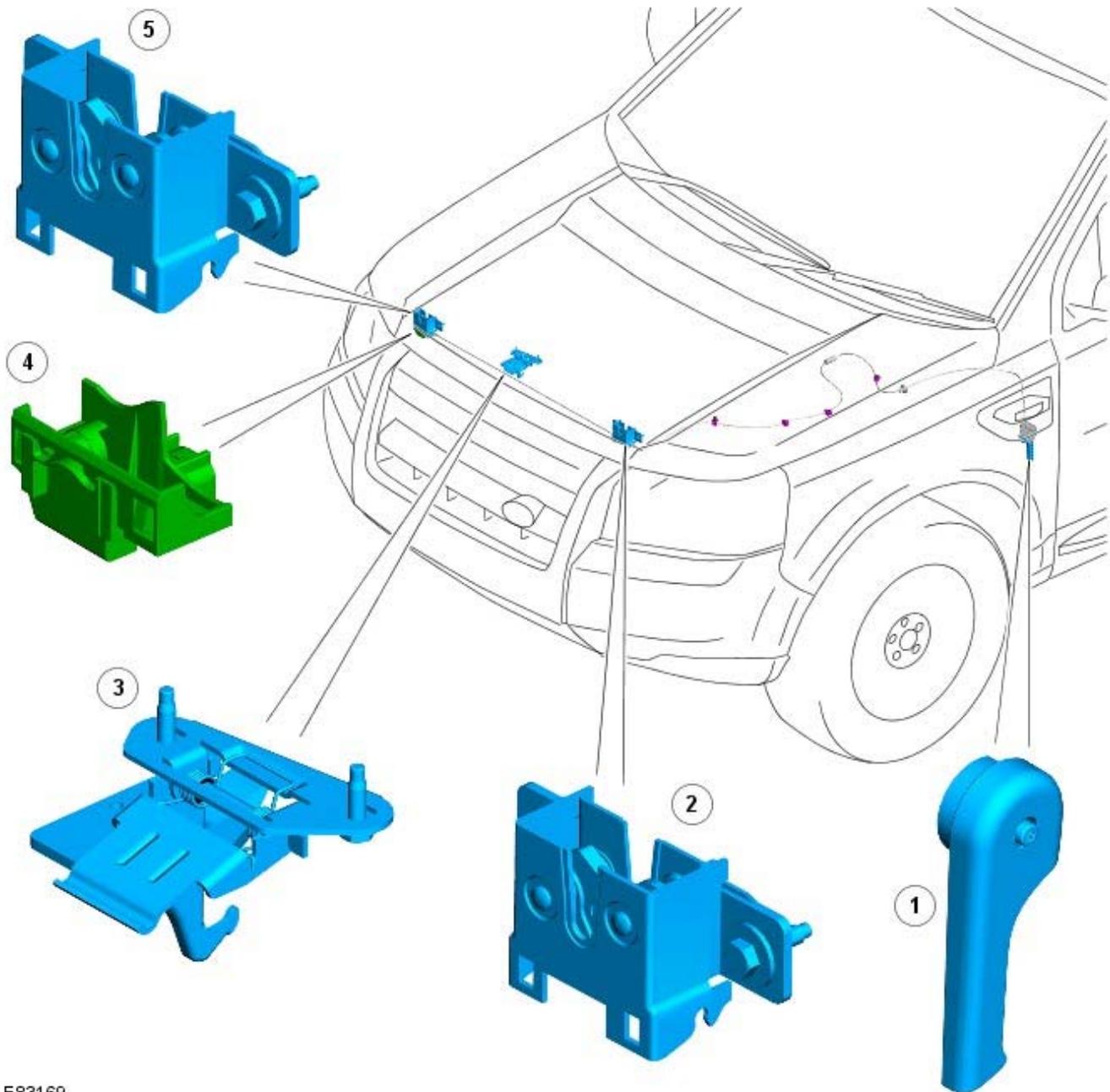
Item	Description
1	Concealed mechanical lock
2	Emergency key blade
3	LH front door handle

The remote handset contains an emergency key blade, concealed in the key fob. The front LH exterior door handle incorporates a mechanical operated door lock that is concealed behind a removable plastic cover. The door lock allows the front LH door to

be mechanically unlocked and locked using the emergency key blade in the event that the remote central locking operation fails, or a vehicle power failure occurs.

When the mechanical door lock is used the central locking system will not operate, and if already armed the vehicle alarm will sound when the door is opened. The vehicle is not able to be double locked, or the alarm system armed using the emergency key blade.

## HOOD LATCHES



E83169

Item	Description
1	Hood release handle
2	LH hood latch
3	Hood safety hook
4	Hood ajar switch
5	RH hood latch

The hood is secured in the closed position by 2 latches located on each side of the hood latch panel. The hood release lever is located below the instrument panel on the LH 'A' pillar and is connected with a cable to the hood latches. Operation of the hood release lever will open the 2 hood latches and release the hood.

A mechanically operated safety hook is installed at the front center of the hood. The safety hook prevents the hood from fully opening in the event that the hood latches are open, and the vehicle is in motion. The safety hook is spring operated to bias the hook to the latched position, and is formed with a lever plate. The lever must be pressed to release the safety hook from the mating latch plate when the hood is to be fully opened.

## Hood Ajar Switch

The RH hood latch incorporates the hood ajar switch that is hardwired to the CJB. If the ignition is in power modes 4 (Accessory) or 6 (Ignition) and the hood is opened or is not fully closed, the hood ajar switch is opened to disconnect the ground from the CJB. A message is transmitted by the CJB via the medium speed CAN bus to the instrument cluster, to inform the driver that the hood is ajar.

On vehicles with a low-line instrument cluster the hood ajar symbol is illuminated.

For additional information, refer to: [Instrument Cluster](#) (413-01 Instrument Cluster, Description and Operation).

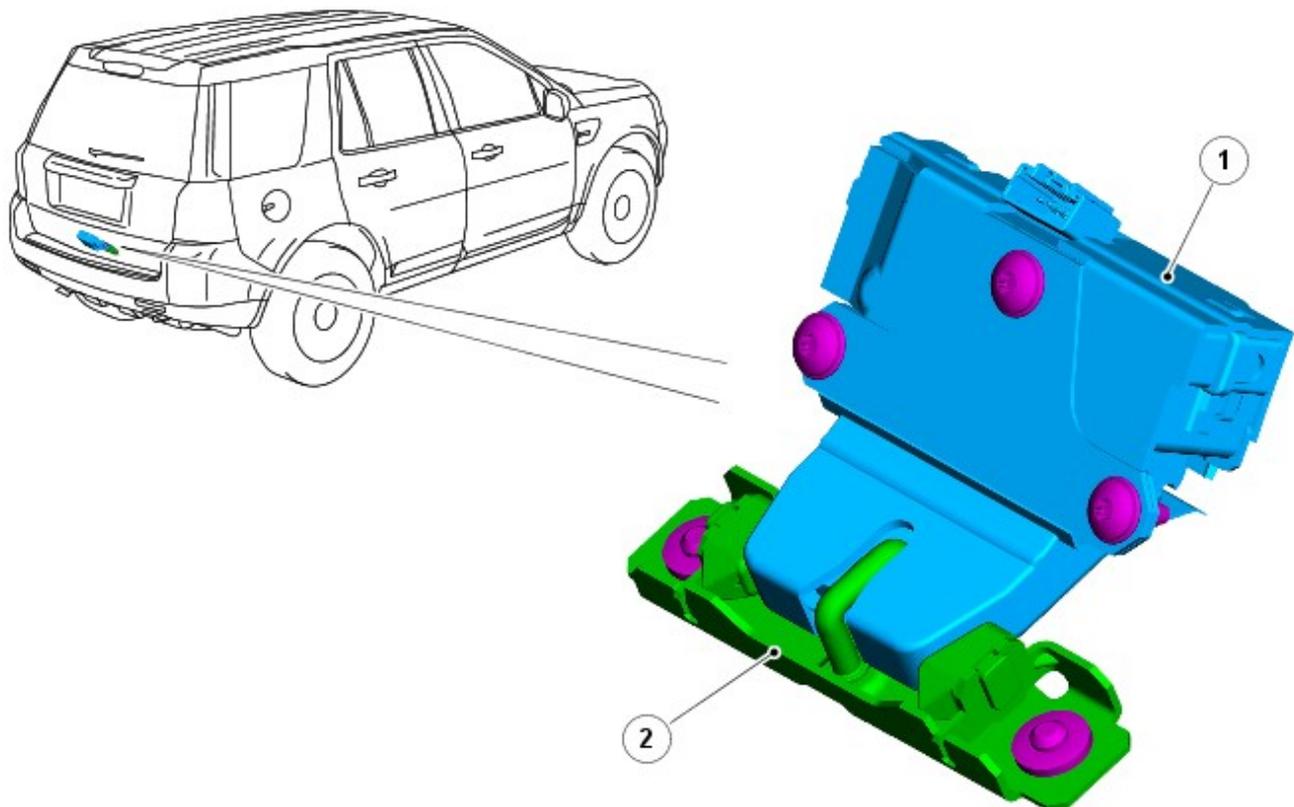
On vehicles with a high-line instrument cluster, the hood ajar symbol is illuminated and a message is also displayed in the message center.

For additional information, refer to: [Information and Message Center](#) (413-08 Information and Message Center, Description and Operation).

The hood ajar switch is also integrated with the vehicle security system and is used as the detection device for unauthorized vehicle entry.

For additional information, refer to: [Anti-Theft - Active](#) (419-01A Anti-Theft - Active, Description and Operation).

## LIFTGATE LATCH



E83170

Item	Description
1	Liftgate latch
2	Liftgate striker

The liftgate latch is mounted at the bottom center of the liftgate interior body panel and is a fully electrically operated unit. The liftgate latch incorporates the liftgate lock motor, and receives a power supply via a hardwired connection from the CJB. A release microswitch is housed within a touch-pad that is located on the underside of the liftgate exterior handle.

The liftgate latch is released by the CJB when the vehicle is stationary and either the remote handset button is pressed, or the exterior handle touch-pad is applied. The liftgate latch is also released when the instrument panel central locking switches are simultaneously pressed for 3 seconds, and the vehicle speed is less than 8 km/h (5 mph).

## Liftgate Ajar Switch

The liftgate latch also incorporates the liftgate ajar switch that is hardwired to the CJB. If the ignition is in power modes 4 (Accessory) or 6 (Ignition) and the liftgate is opened or is not fully closed, the liftgate ajar switch is opened to disconnect the ground from the CJB. A message is transmitted by the CJB via the medium speed CAN bus to the instrument cluster, to inform the driver that the liftgate is ajar.

On vehicles with a low-line instrument cluster the liftgate ajar symbol is illuminated.

For additional information, refer to: [Instrument Cluster](#) (413-01 Instrument Cluster, Description and Operation).

On vehicles with a high-line instrument cluster, the liftgate ajar symbol is illuminated and a message is also displayed in the

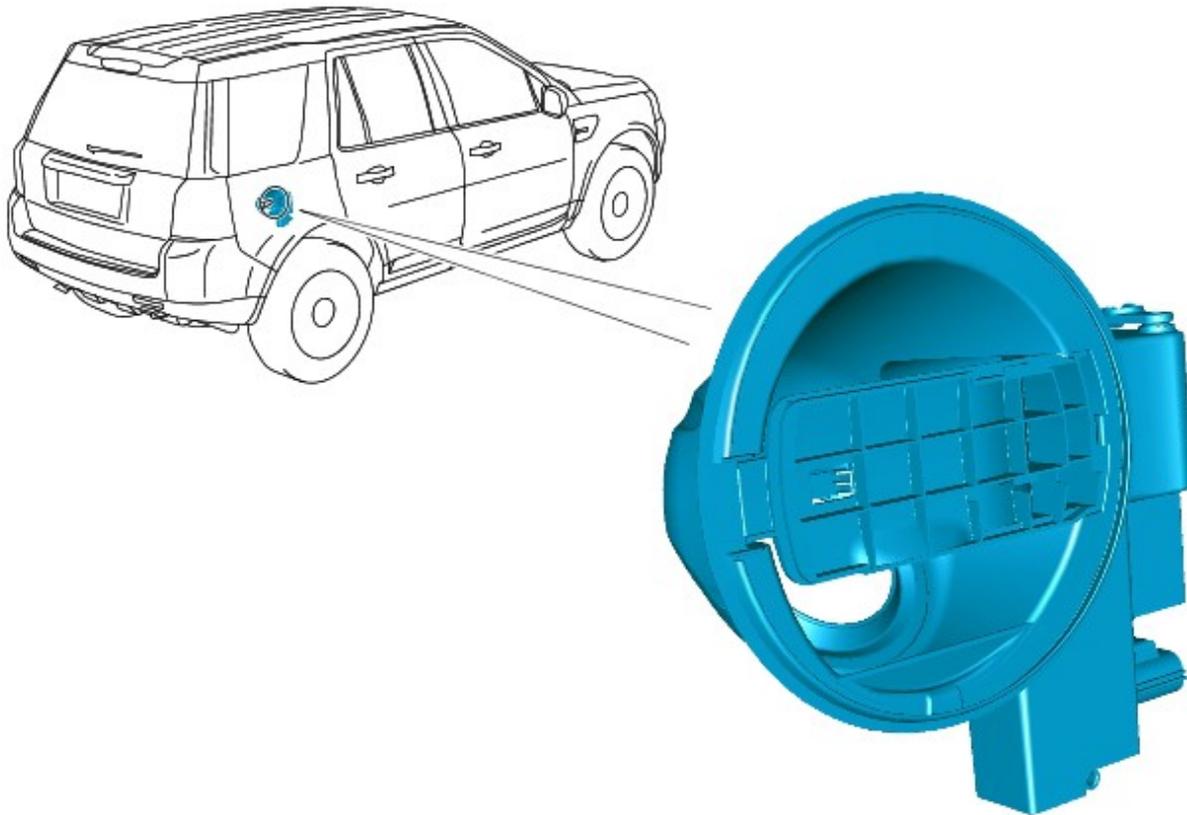
message center.

For additional information, refer to: [Information and Message Center](#) (413-08 Information and Message Center, Description and Operation).

The liftgate ajar switch is also integrated with the vehicle security system and is used as the detection device for unauthorized vehicle entry.

For additional information, refer to: [Anti-Theft - Active](#) (419-01A Anti-Theft - Active, Description and Operation).

## FUEL FILLER DOOR ACTUATOR



E83171

The fuel filler door is electrically locked and unlocked with an actuator and plastic pin. The actuator is located behind the fuel filler door housing, and operates the pin to engage or release a spigot on the door mounting hinge arm.

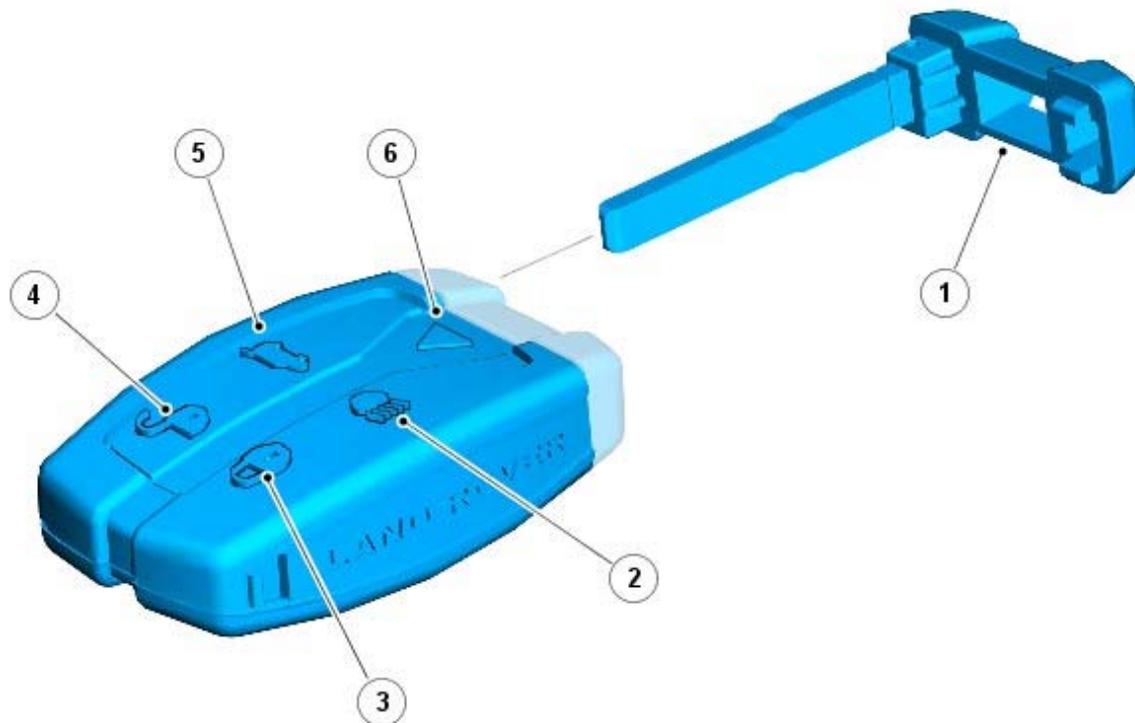
The fuel filler door actuator is hardwired to the CJB and is operated by the vehicle central locking system. The CJB reverses the polarity of the actuator power and ground connections, allowing the pin to move in both directions for locking and unlocking. When unlocked, the fuel filler door is manually opened to gain access to the fuel tank filler cap.

## CENTRAL LOCKING SYSTEM CONTROLS

The central locking system provides the driver with control over the locking and unlocking of the vehicle entry points, from inside or outside the vehicle. Manual operation of the central locking system is achieved using the following:

- Remote handset and RF receiver
- Front door central locking button
- Instrument panel central locking switches.

### Remote Handset



E83172

Item	Description
1	Emergency key blade
2	Headlamp delay function button
3	Vehicle lock button
4	Vehicle unlock button
5	Liftgate unlock button
6	Panic alarm button

The remote handset is a sealed waterproof unit that contains a Printed Circuit Board (PCB), transponder and a rechargeable battery. The remote handset battery is charged whenever the remote handset is located in the start control unit, and the engine is running.

The remote handset contains an emergency key blade, concealed in the key fob. The emergency key blade is used to access the vehicle through the LH front door if the central locking system fails. The emergency key blade is also used to enable or disable the rear door child locks, and to disable the passenger airbag.

For additional information, refer to: [Air Bag and Safety Belt Pretensioner Supplemental Restraint System \(SRS\)](#) (501-20B Supplemental Restraint System, Description and Operation).

The remote handset is identical for all vehicle specifications, but differs in the preset frequency and power that the remote handset operates. The remote handset for each vehicle specification is identified by a suffix change to the base part number as follows:

Part No. Suffix	Operating Frequency	Vehicle Specification
A#	433 MHz	Europe and ROW (Rest Of World)
B#	315 MHz	NAS
C#	315 MHz low power	Japan and Korea

Each remote handset features a unique identification code that is programmed within the integral transponder. The RF signal produced by the remote handset contains the unique identification code and also a rolling code. During vehicle production, the unique identification codes of the valid remote handsets are programmed into the CJB, and the rolling codes are also synchronized with the CJB.

When the remote handset is operated, the CJB checks the unique identification and rolling code. The CJB will only respond if the RF signal produced is from a valid remote handset for the vehicle.

For additional information, refer to: [Anti-Theft - Passive](#) (419-01 Anti-Theft - Passive, Description and Operation).

A total of 30 'slots' are available in the CJB software to allow for replacement, and the addition of remote handsets. In service, the Land Rover approved diagnostic system may be used to communicate with the CJB for the following:

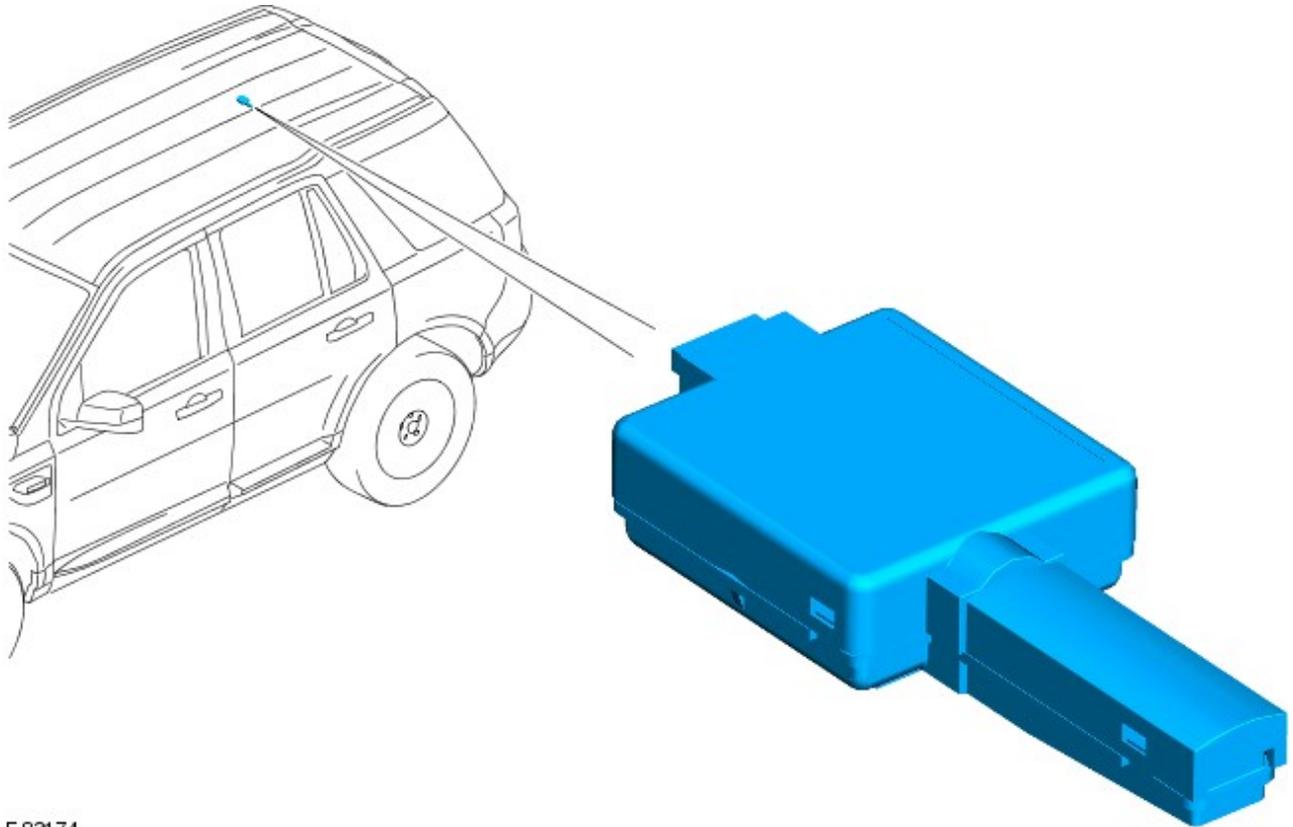
- Identification of remote handset allocation within the CJB.
- Enabling of new remote handsets.

- Disabling of existing remote handsets.
- Re-enabling a previously disabled remote handset.

If the remote handset rolling code loses synchronization with the CJB, the remote handset functions will not operate. Synchronization between the remote handset and CJB is restored by starting the engine with the affected remote handset, and allowing the engine to run for a minimum of 6 minutes.

Additional buttons are located on the remote handset to provide convenience operation of the liftgate release, headlamp delay and panic alarm functions.

## RF Receiver



E83174

The RF receiver is installed above the headlining, adjacent to the rear interior light. The receiver provides functionality for the remote central locking system, and is also used by the tire pressure monitoring system and interior lighting function.

For additional information, refer to:

- [Wheels and Tires](#) (204-04 Wheels and Tires, Description and Operation),
- [Interior Lighting](#) (417-02 Interior Lighting, Description and Operation).

The RF receiver is identical for all vehicle specifications, but differs in the preset frequency that the receiver operates. The RF receiver for each vehicle specification is identified by a suffix change to the base part number as follows:

Part No. Suffix	Operating Frequency	Vehicle Specification
A#	433 MHz	Europe and ROW
C#	315 MHz	NAS, Japan and Korea

The RF receiver converts the signals transmitted by the remote handset into digital messages, and then transmits the message via the LIN bus to the CJB.

A permanent power feed is supplied to the RF receiver by the CJB.

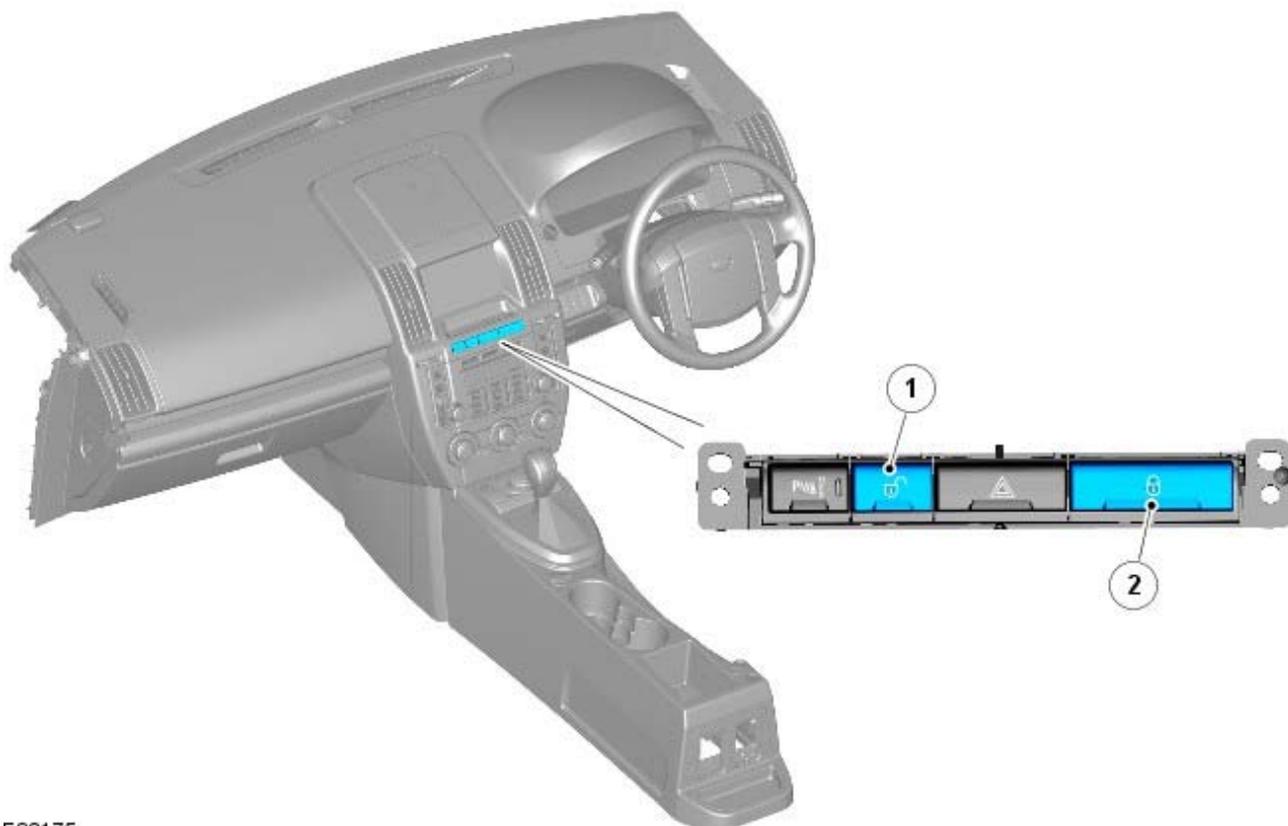
## Front Door Central Locking Button

Both the front door interior locking buttons will activate the central locking function. When a front door central locking button is pressed/pulled, all the vehicle doors will centrally lock/unlock.

When a front door central locking button is pressed/pulled, the door control module on the activated door transmits the central lock/unlock request to the CJB. The CJB then transmits the central lock/unlock command to all the vehicle door control modules to lock/unlock all the vehicle doors.

The central locking feature using the front door central locking button is inhibited if either of the front doors is ajar. If a front door is ajar when a front door central locking button is pressed to lock the doors, the doors will lock and then instantly unlock.

## Instrument Panel Central Locking Switches



E83175

Item	Description
1	Interior CLS vehicle unlock switch
2	Interior CLS vehicle lock switch

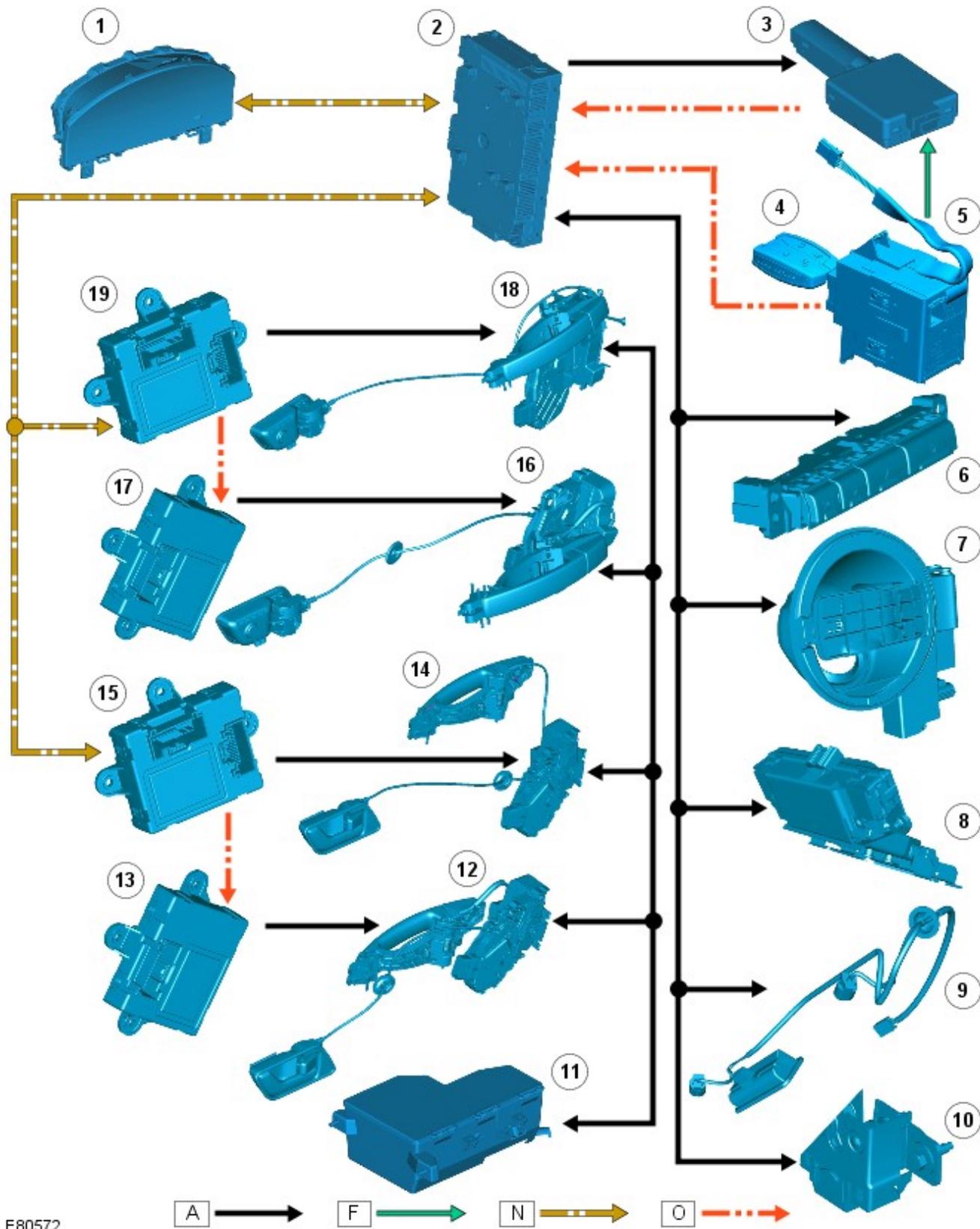
Interior lock and unlock switches are located in the instrument panel to provide manual control of the vehicle central locking system. The switches are non-latching and allow all the vehicle entry points to be centrally locked or unlocked from inside the vehicle.

When the instrument panel central lock or unlock switch is pressed, a ground is connected to the CJB that energizes the lock or unlock motor in the door latches, liftgate latch and the fuel filler door actuator. The doors will only respond to the central lock/unlock command when they are fully closed. If a door is ajar the central locking feature is inhibited.

The liftgate latch will release when the instrument panel central locking switches are simultaneously pressed for 3 seconds, and the vehicle speed is less than 8 km/h (5 mph).

### CONTROL DIAGRAM

NOTE: **A** = Hardwired; **F** = RF transmission; **N** = Medium speed CAN bus; **O** = LIN bus.



E80572



Item	Description
1	Instrument cluster
2	CJB
3	RF receiver
4	Remote handset
5	Start control module
6	Instrument panel central locking switches
7	Fuel filler door actuator
8	Liftgate latch and ajar switch

9	Liftgate release switch
10	RH hood latch and ajar switch
11	AJB
12	RH rear door handle and latch
13	RH rear door control module
14	RH front door handle and latch
15	RH front door control module
16	LH rear door handle and latch
17	LH rear door control module
18	LH front door handle and latch
19	LH front door control module

## PRINCIPLES OF OPERATION

### Central Locking System - Manual Operation

The central locking system provides the option of 2 or 3 manual locking modes, dependent on the vehicle specification. The locking modes are activated using the instrument panel central locking switches, front door central lock/unlock buttons, or the remote handset lock/unlock buttons:

- Internally locked mode
- Externally locked mode
- Double locked mode (all except NAS, Japan and Gulf vehicles).

When the vehicle is externally locked, the CJB flashes the direction indicators once for 250 milliseconds. When the vehicle is double locked, the CJB flashes the direction indicators twice for 250 milliseconds with a 250 millisecond pause between flashes. When the vehicle is unlocked with the remote handset, the CJB flashes the direction indicator lamps twice for 250 milliseconds with a 250 millisecond pause between flashes.

The remote handset may be configured by the driver for single point entry or global entry, by simultaneously pressing the remote handset lock and unlock buttons for 4 seconds. The vehicle must initially be in an unlocked state and the remote handset recently removed from the start control module prior to the mode change. The direction indicators will flash twice for 250 milliseconds with a 250 millisecond pause between flashes to confirm the mode change. The vehicle will also lock and then unlock in the selected mode.

When single point entry is enabled, an unlock command from the remote handset will only unlock the driver's door, liftgate and the fuel filler door. To unlock the remaining entry points, a second unlock command from the remote handset or the instrument panel central unlock switch is required.

Additional options for speed dependent locking and automatic relocking modes may be configured by the dealer. All vehicles incorporate an automatically operated crash unlocking mode.

#### Internally Locked Mode

The internally locked mode is activated by a single press of the instrument panel central lock switch, or a single press of a front door central lock/unlock button. When in the internally locked mode:

- The exterior door release handles are disengaged from the door latches to prevent opening of the doors from outside the vehicle.
- The CJB disregards an open request from the liftgate exterior handle to prevent opening of the liftgate from outside the vehicle.
- The vehicle may be unlocked by either a single press of the instrument panel central unlock switch, pulling a front door central lock/unlock button, or a single press of the remote handset unlock button. The vehicle will also unlock if the driver or front passenger door is opened.

#### Externally Locked Mode

The externally locked mode is activated by a single press of the remote handset lock button. When in the externally locked mode:

- The exterior door release handles are disengaged from the door latches to prevent opening of the doors from outside the vehicle.
- The CJB disregards an open request from the liftgate exterior handle or the instrument panel central locking switches to prevent exterior opening of the liftgate and doors.
- The fuel filler door actuator is energized to lock the fuel filler door.
- The vehicle may be unlocked by a single press of the remote handset unlock button.

#### Double Locked Mode

The double locked mode is activated by pressing the remote handset lock button twice within 3 seconds. When in the double locked mode:

- The interior and exterior door release handles are disengaged from the door latches to prevent opening of the doors

from inside or outside the vehicle.

- The fuel filler door actuator is energized to lock the fuel filler door.
- The CJB disregards an open request from the liftgate exterior handle and the instrument panel central locking switches, to prevent opening of the liftgate and doors.
- The vehicle may be unlocked with a single press of the remote handset unlock button.

For all UK, Europe and ROW specification vehicles, a single press of the remote handset lock button will externally lock the vehicle to disengage the exterior handles, and will arm the active anti-theft system.

For additional information, refer to: [Anti-Theft - Active](#) (419-01A Anti-Theft - Active, Description and Operation).

For NAS, Japan and Gulf specification vehicles, a single press of the remote handset lock button will externally lock the vehicle to disengage the exterior handles, and will arm the active and passive anti-theft system. For additional information, refer to:

[Anti-Theft - Active](#) (419-01A Anti-Theft - Active, Description and Operation),  
[Anti-Theft - Passive](#) (419-01 Anti-Theft - Passive, Description and Operation).

For all vehicles except NAS, Japan and Gulf specifications, pressing the remote handset lock button twice within 3 seconds will double lock the vehicle to disengage the interior and exterior handles, and will arm the active and passive anti-theft system. For additional information, refer to:

[Anti-Theft - Active](#) (419-01A Anti-Theft - Active, Description and Operation),  
[Anti-Theft - Passive](#) (419-01 Anti-Theft - Passive, Description and Operation).

## Central Locking System - Automatic Modes

The central locking system features automatic modes to control the vehicle entry points, and provide protection for the system components.

The central locking system incorporates the following automatic modes:

- Mislock mode
- Speed dependant locking mode (if programmed)
- Crash unlocking mode
- Repetition blocking mode
- Lockout protection mode
- Automatic relock mode (if programmed)
- Transport mode.

### Mislock Mode

A mislock occurs if the CJB receives an external lock or double lock request when a hinged panel is ajar. To indicate a mislock the CJB sounds the horns to produce a 100 millisecond 'chirp'.

If a mislock occurs due to an external lock request when a hinged panel is ajar, the CJB will not carry out a lock request on any access points.

### Speed Dependant Locking Mode

When speed dependant locking is enabled the CJB will internally lock all the doors when the vehicle speed exceeds 8 km/h (5 mph) with all the doors closed and the engine running. If the driver or front passenger door is opened and then closed, when the vehicle slows down or stops and then increases to more than 8 km/h (5 mph) again, the CJB will internally lock the doors.

Speed dependant locking may be enabled or disabled by the dealer using the Land Rover approved diagnostic system.

### Crash Unlocking Mode

With the ignition in power mode 6 (Ignition), if a crash occurs that triggers deployment of the air bags, then the CJB will unlock all of the doors. The CJB is informed of the crash by a status message from the Restraints Control Module (RCM) on the medium speed CAN bus that changes from 'no crash' to 'crash'.

The central locking system will also perform crash unlocking mode if a 'no crash' status message is not received from the RCM every 500 milliseconds.

For additional information, refer to: [Air Bag and Safety Belt Pretensioner Supplemental Restraint System \(SRS\)](#) (501-20B Supplemental Restraint System, Description and Operation).

### Repetition Blocking Mode

To protect the central locking system motors and actuators against system mis-use, the CJB incorporates repetition blocking to limit the maximum operating rate of each motor and actuator. The lock motor in each door latch also incorporates thermal protection.

#### Central Locking System Motor and Actuator Operating Parameters

Motor or Actuator	Current On Time (ms)	Maximum Operations (per minute)	Nominal Operating Current (A)	Stall Current (A)
Liftgate latch	600 ± 10	10	3.6 to 5.2	7.5
Fuel filler door	700 ± 10	5	2.7	8
Door double lock	100 to 110	10	0.28	1.14
Door lock	100 to 110	10	0.54	3.31

### **Lockout Protection Mode**

The vehicle is not able to be locked using a front door central locking button or instrument panel central locking switch if any door is open.

If an internal lock request is received from either of the front door central locking buttons, the CJB will centrally lock the vehicle and then centrally unlock the vehicle if any door is open.

If a front door is open and the open door central locking button is pressed and held in the locked position, the open front door may remain in the locked state. When the open door is subsequently closed, the CJB will centrally unlock all doors.

### **Automatic Relock Mode**

Automatic relock prevents accidental operation of the remote handset buttons that will unlock and disarm the vehicle.

When the central locking system is unlocked using the remote handset, and a door or liftgate is not opened or the remote handset is not placed in the start control unit within 1 minute, the CJB will automatically lock or double lock the vehicle again, depending on the previously locked mode.

### **Transport Mode**

All new vehicles are delivered from the factory in transport mode. Transport mode replaces the traditional transit relay and inhibits a number of electrical systems and features to reduce quiescent drain from the battery during delivery. When the vehicle is in transport mode 'transp' is displayed in the instrument cluster odometer. Single point entry is enabled and global locking and unlocking using the remote handset is disabled.

The speed locking mode is also disabled, but crash unlocking mode remains enabled.

To remove the vehicle from transport mode, the Land Rover approved diagnostic system must be connected during the Pre-Delivery Inspection (PDI). For further information, refer to the PDI manual.

# Handles, Locks, Latches and Entry Systems - Locks, Latches and Entry Systems

Diagnosis and Testing

## Principle of Operation

For a detailed description of the locks, latches and entry systems and operation, refer to the relevant Description and Operation section of the workshop manual. REFER to: Handles, Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Description and Operation).

## Inspection and Verification



**CAUTION:** Diagnosis by substitution from a donor vehicle is **NOT** acceptable. Substitution of control modules does not guarantee confirmation of a fault and may also cause additional faults in the vehicle being checked and/or the donor vehicle.

**NOTE:** Check and rectify basic faults before beginning diagnostic routines involving pinpoint tests.

1. Verify the customer concern.
2. Visually inspect for obvious signs of mechanical or electrical damage.

### Visual Inspection

Mechanical	Electrical
<ul style="list-style-type: none"> <li>● Incorrectly aligned door(s), hood or tailgate</li> <li>● Fuel filler door lock actuator</li> <li>● Hood release handle</li> <li>● Hood release cables</li> <li>● Hood latch(es)</li> <li>● Exterior door handle(s)</li> <li>● Interior door handle(s)</li> <li>● Cable(s)</li> <li>● Tailgate release switch</li> <li>● Rear window release switch</li> </ul>	<ul style="list-style-type: none"> <li>● Fuses</li> <li>● Wiring harness</li> <li>● Wiring connector(s)</li> <li>● Door lock actuator(s)</li> <li>● Remote transmitter (key-fob or smart key)</li> <li>● Central locking switches</li> <li>● Controller Area Network (CAN) circuits</li> <li>● Radio frequency (RF) receiver</li> <li>● Central junction box (CJB)</li> <li>● Loose or corroded connections</li> </ul>

3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step.
4. If the cause is not visually evident, verify the symptom and refer to the Symptom Chart, alternatively check for Diagnostic Trouble Codes (DTCs) and refer to the DTC Index.

## Symptom Chart

Symptom	Possible causes	Action
Door(s) will not open from outside	<ul style="list-style-type: none"> <li>● Exterior door handle condition/installation</li> <li>● Exterior release cable disconnected from exterior door handle or door latch</li> <li>● Door latch failure</li> </ul>	<ul style="list-style-type: none"> <li>● Check the exterior door handle condition and installation</li> <li>● Check the condition and security of the exterior release cable</li> <li>● Check the operation of the latch GO to Pinpoint Test <a href="#">A</a>.</li> </ul>
Door(s) will not open from inside	<ul style="list-style-type: none"> <li>● Child lock(s) engaged</li> <li>● Interior door handle condition/installation</li> <li>● Interior release cable disconnected from interior door handle or door latch</li> <li>● Door latch failure</li> </ul>	<ul style="list-style-type: none"> <li>● Check that the child locks are disengaged</li> <li>● Check the interior door handle condition and installation</li> <li>● Check the condition and security of the interior release cable</li> <li>● Check the operation of the latch. GO to Pinpoint Test <a href="#">A</a>.</li> </ul>
The message center indicates that the hood, the tailgate or a door is open when it appears to be closed	<ul style="list-style-type: none"> <li>● Incorrect striker alignment/adjustment</li> <li>● Ajar switch circuit short circuit to ground</li> <li>● Ajar switch failure</li> </ul>	<ul style="list-style-type: none"> <li>● Check/adjust the strikers as necessary</li> <li>● Check for DTCs indicating an ajar switch fault. Refer to the DTC index</li> </ul>
Vehicle indicates a miss-lock when the hood, tailgate and doors appear to be closed		

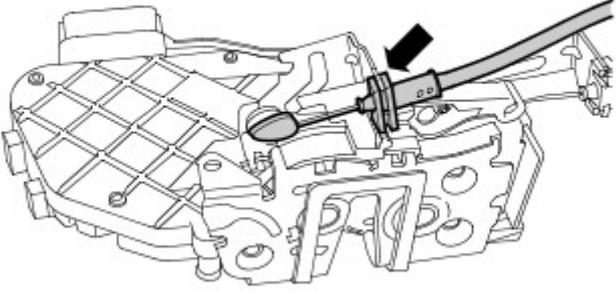
Symptom	Possible causes	Action
Fuel flap does not lock/unlock	<ul style="list-style-type: none"> <li>Fuel flap cable detached from body</li> <li>Fuel flap actuator detached from mounting bracket</li> <li>Fuel flap actuator disconnected</li> <li>Fuel flap actuator failure</li> </ul>	<ul style="list-style-type: none"> <li>Check the condition and installation of the fuel flap cable</li> <li>Check the security of the fuel flap actuator and bracket</li> <li>Check the security of the actuator electrical connector</li> <li>Check for DTCs indicating a fuel flap actuator fault. Refer to the DTC index</li> </ul>
Door latching and locking function test	<ul style="list-style-type: none"> <li>Door latch</li> <li>Cable fault</li> <li>Door handle</li> <li>Door lock switch</li> <li>Wiring harness</li> <li>Central junction box (CJB)</li> </ul>	<p><b>NOTE: Complete the diagnostic steps below to confirm any concern prior replacing the component</b></p> <ul style="list-style-type: none"> <li>Check for relevant stored DTCs</li> <li>Once any DTC related faults have been rectified continue with the diagnostic steps below</li> <li>The first component that should be checked when experiencing locking or latching issues are the door latch release cables, then the door latch. These can be tested as a discrete components to confirm if the specific component is working as designed or is demonstrating a fault</li> <li><b>Single door will not open from the outside (but opens from the inside)</b>GO to Pinpoint Test <a href="#">A.</a></li> <li><b>Single Door Will Not Open From The Inside (but opens from the outside)</b>GO to Pinpoint Test <a href="#">B.</a></li> <li><b>Door Latching and Locking Function Test</b>GO to Pinpoint Test <a href="#">C.</a></li> <li><b>No lock / unlock function from key-fob</b>GO to Pinpoint Test <a href="#">E.</a></li> </ul>
Latch mounted door ajar switch test	<ul style="list-style-type: none"> <li>Door latch</li> <li>Wiring harness</li> <li>Instrument cluster</li> </ul>	<ul style="list-style-type: none"> <li><b>Latch Mounted Door Ajar Switch Test</b>GO to Pinpoint Test <a href="#">D.</a></li> </ul>
Vehicle electrical system test	<ul style="list-style-type: none"> <li>Fuses</li> <li>Wiring harness</li> <li>Wiring connector(s)</li> </ul>	<ul style="list-style-type: none"> <li><b>Vehicle Electrical System Test</b>GO to Pinpoint Test <a href="#">E.</a></li> <li>Check for relevant stored DTCs</li> <li>Refer to the electrical circuit diagrams to locate the fault</li> <li>Carry out continuity test to confirm circuit integrity</li> </ul>

### DTC Index

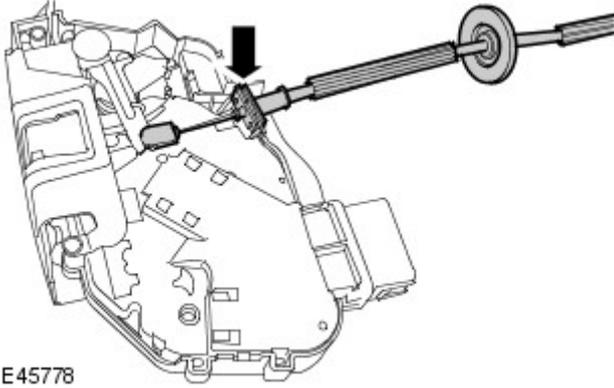
For a list of Diagnostic Trouble Codes (DTCs) that could be logged on this vehicle, please refer to Section 100-00. REFER to: [Diagnostic Trouble Code \(DTC\) Index - DTC: Body Control Module \(BCM\)](#) (100-00 General Information, Description and Operation) / [Diagnostic Trouble Code \(DTC\) Index - DTC: Driver/Passenger Door Module \(DDM/PDM\)](#) (100-00 General Information, Description and Operation).

### Pinpoint Test

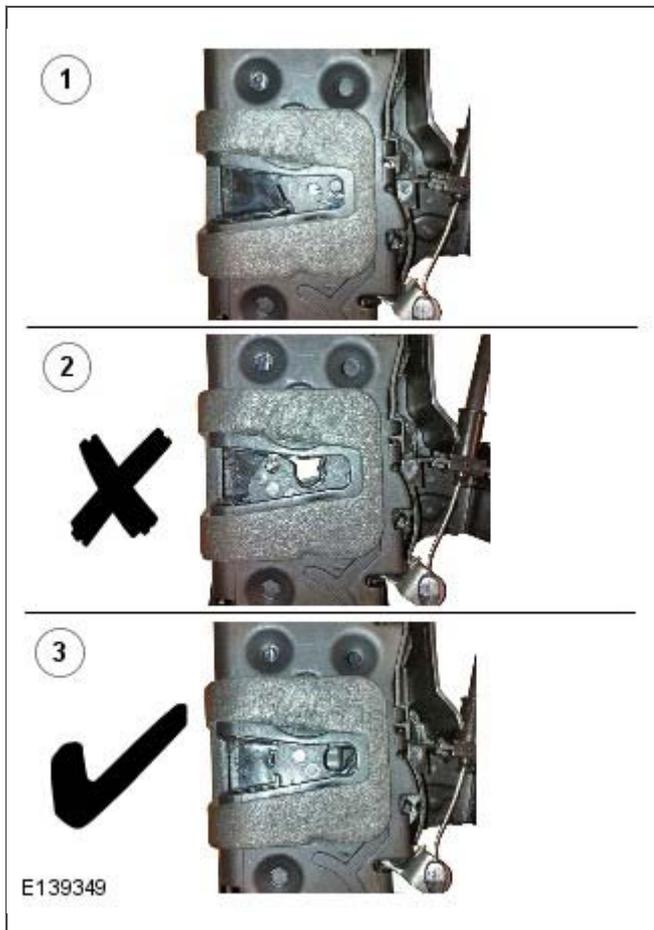
PINPOINT TEST A : SINGLE DOOR WILL NOT OPEN FROM THE OUTSIDE (BUT OPENS FROM THE INSIDE)	
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
<b>A1: CHECK THE EXTERIOR DOOR RELEASE CABLE TO EXTERIOR DOOR HANDLE IS INSTALLED CORRECTLY</b>	
	<ol style="list-style-type: none"> <li>Remove the door trim panel as necessary. REFER to: <a href="#">Front Door Trim Panel</a> (501-05 Interior Trim and Ornamentation, Removal and Installation) / <a href="#">Rear Door Trim Panel</a> (501-05 Interior Trim and Ornamentation, Removal and Installation).</li> <li>Confirm the exterior door release cable is correctly installed to the exterior door handle</li> </ol>
	Is the cable correctly installed? <b>Yes</b> <a href="#">GO to A2.</a> <b>No</b> Connect the door release cable correctly. <b>If the cable is damaged, install a new door release cable.</b> Test the system for normal operation.
<b>A2: CHECK THE EXTERIOR DOOR HANDLE RELEASE CONNECTION TO THE DOOR LATCH</b>	

 <p>E45779</p>	<p><b>1</b> Confirm the exterior door handle release connection to the door latch is installed correctly</p>
	<p>Is the exterior door handle release cable installed correctly?  <b>Yes</b>                  GO to Pinpoint Test <a href="#">C</a>.  <b>No</b>                  Connect the door release cable correctly. <b>If the cable is damaged, install a new door release cable.</b> Test the system for normal operation.</p>

<b>PINPOINT TEST B : SINGLE DOOR WILL NOT OPEN FROM THE INSIDE (BUT OPENS FROM THE OUTSIDE)</b>	
<b>TEST CONDITIONS</b>	<b>DETAILS/RESULTS/ACTIONS</b>
<b>B1: CHECK THE INTERIOR DOOR RELEASE CABLE TO INTERIOR DOOR HANDLE IS INSTALLED CORRECTLY</b>	
 <p>E139354</p>	<p><b>NOTE:</b> <a href="#">Figure A - Child lock off position shown</a></p> <p><b>1</b> Make sure the child lock is disengaged (rear door only)</p>
	<p><b>2</b> Remove the door trim panel as necessary                  REFER to: <a href="#">Front Door Trim Panel</a> (501-05 Interior Trim and Ornamentation, Removal and Installation) / <a href="#">Rear Door Trim Panel</a> (501-05 Interior Trim and Ornamentation, Removal and Installation).</p> <p><b>3</b> Confirm the interior door release cable is correctly installed to the interior door handle</p>
	<p>Is the cable correctly installed?  <b>Yes</b>  <a href="#">GO to B2</a>.  <b>No</b>                  Connect the door release cable correctly. <b>If the cable is damaged, install a new door release cable.</b> Test the system for normal operation</p>
<b>B2: CHECK THE INTERIOR DOOR HANDLE RELEASE CONNECTION TO THE DOOR LATCH</b>	

 <p>E45778</p>	<p><b>1</b> Confirm the interior door handle release connection to the door latch is installed correctly</p>
	<p>Is the interior door handle release cable installed correctly?  <b>Yes</b>                  GO to Pinpoint Test <a href="#">C</a>.  <b>No</b>                  Connect the door release cable correctly. <b>If the cable is damaged, install a new door release cable.</b> Test the system for normal operation.</p>

<b>PINPOINT TEST C : DOOR LATCHING AND LOCKING FUNCTION TEST</b>	
<b>TEST CONDITIONS</b>	<b>DETAILS/RESULTS/ACTIONS</b>
<b>C1: DOOR LATCH TEST</b>	
<p><b>NOTE:</b> Test as a single component to ensure that the door latch is not replaced unnecessarily, when another component may be at fault</p>	
	<p><b>1</b> Remove door trim from door                  REFER to: <a href="#">Front Door Trim Panel</a> (501-05 Interior Trim and Ornamentation, Removal and Installation) / <a href="#">Rear Door Trim Panel</a> (501-05 Interior Trim and Ornamentation, Removal and Installation).</p> <p><b>2</b> Remove module plate / closing panel from door</p> <p><b>3</b> Remove latch module from door REFER to: (501-14 Handles, Locks, Latches and Entry Systems)  <a href="#">Front Door Latch</a> (Removal and Installation),  <a href="#">Rear Door Latch</a> (Removal and Installation).</p> <p><b>4</b> Inspect latch module for any visual damage</p> <p><b>5</b> <b>Disconnect</b> interior release bowden cable at door latch</p> <p><b>6</b> <b>Disconnect</b> exterior release bowden cable at door latch</p> <p><b>7</b> With the latch in hand, connect the electrical connector(s) to connect door latch to door harness</p> <p><b>NOTE: THE LATCH IS NOW READY TO TEST</b></p> <p><b>8</b> Close all vehicle doors except the door being investigated</p>



NOTE: Figure 1 - Unlatched position shown

NOTE: Figure 2 - First safety latched position shown

NOTE: Figure 3 - Fully latched position shown

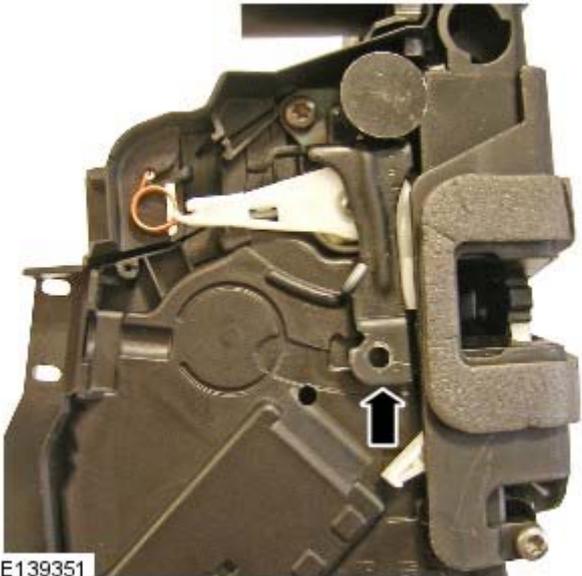
NOTE: **Test will not work if latch is only in first safety latch position**

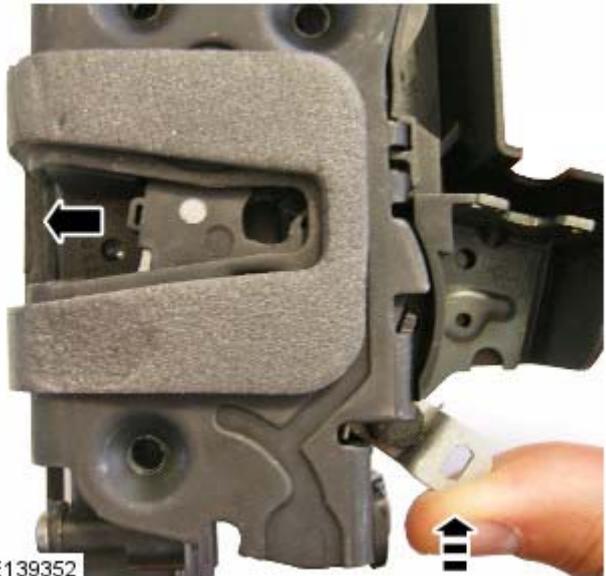
9 Rotate latch claw (using a small screw driver or similar) to the fully latched position (Figure 3)

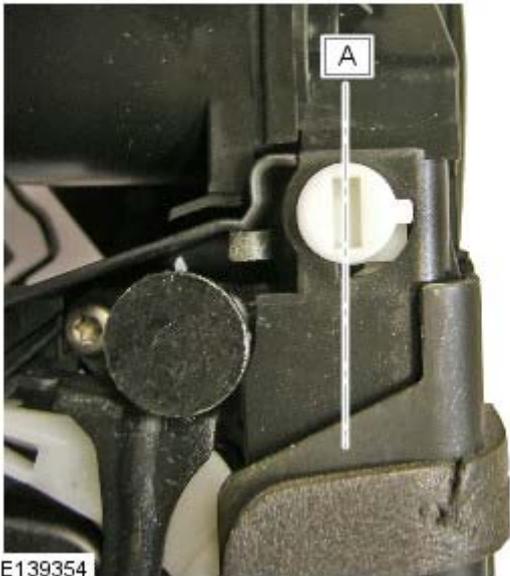


NOTE: Unlocked position shown

10 Confirm that the latch interior release lever is in the unlocked position as shown

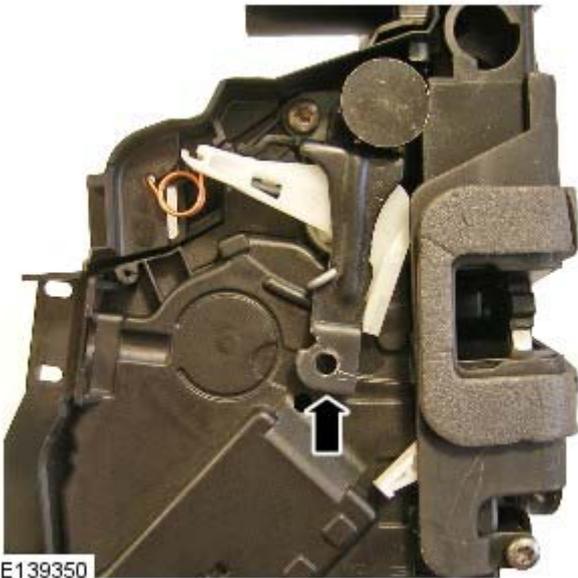
 <p>E139351</p>	<p><b>NOTE:</b> Locked position shown</p> <p><b>1</b> Press the <b>lock</b> button on the key-fob or smart key</p>
	<p>Does the latch interior release lever move from the unlocked position to the locked position?</p> <p><b>Yes</b> <a href="#">GO to C2.</a></p> <p><b>No</b> If this is a repeat test and the vehicle electrical test section has been completed and confirmed that vehicle is working correctly, then replace the door latch. If replacing latch as part of a warranty claim, please quote reference code <b>LKINOP</b> in the technician comments section of the warranty claim</p>
<p><b>C2: TEST 1 DOOR LATCH</b></p>	
 <p>E139351</p>	<p><b>NOTE:</b> Locked position shown</p> <p><b>1</b> With the latch in the locked state (i.e. the latch interior release lever is in the locked position), press the key-fob or smart key <b>unlock</b> button</p>
	<p>Does the latch interior release lever move from the locked position to the unlocked position?</p> <p><b>Yes</b> <a href="#">GO to C3.</a></p> <p><b>No</b> GO to Pinpoint Test <a href="#">E</a>. If pinpoint test E has been completed and confirmed that vehicle is correctly supplying signals to latch, then replace the door latch. If replacing latch as part of a warranty claim, please quote reference code <b>UNLKINOP</b> in the technician comments section of the warranty claim</p>
<p><b>C3: TEST 2 DOOR LATCH</b></p>	

 <p>E139352</p>	<p><b>NOTE:</b> Fully latched position shown</p> <p><b>1</b> With the latch in its unlocked state, push the latch exterior release lever against its return spring, whilst simultaneously applying a light pressure to release the latch claw using a small screw driver or similar</p>
	<p>Does the latch claw release?</p> <p><b>Yes</b> <a href="#">GO to C4.</a></p> <p><b>No</b> Repeat tests <b>C2</b> and <b>C3</b> to confirm the fault. <a href="#">GO to C2.</a> If the repeat test has confirmed that the exterior release lever will not release the claw on an unlocked latch replace the door latch. If replacing latch as part of a warranty claim, please quote reference code <b>EXTINOP</b> in the technician comments section of the warranty claim</p>
<p><b>C4: TEST 3 DOOR LATCH</b></p>	
 <p>E139353</p>	<p><b>NOTE:</b> Fully latched position shown</p> <p><b>1</b> Using a small screw driver or similar, rotate latch claw to the second fully latched position</p>



NOTE: Figure A - Child lock off position shown

- 2 If testing a rear door latch, ensure that the child lock is turned to the off position



- 3 Confirm that the latch interior release lever is in the unlocked position as shown



- 4 Whilst the latch is still in its unlocked state, push the latch interior release lever against its return spring, whilst simultaneously applying a light pressure to release the latch claw using a small screw driver or similar

	<p>Does the latch claw release</p> <p><b>Yes</b></p> <p>Latch has passed all tests to confirm its correct function. <b>DO NOT REPLACE LATCH</b> as part of any attempts to resolve any locking functionality issues. GO to Pinpoint Test <a href="#">E</a>. To confirm vehicle electrical signal is received by the latch</p> <p><b>No</b></p> <p>Repeat this test <a href="#">GO to C4</a>. If repeat test has confirmed that the interior release lever will not release the claw when the latch is in the unlocked state, then replace the latch. If replacing latch as part of a warranty claim, please quote reference code <b>INTINOP</b> in the technician comments section of the warranty claim</p>
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**PINPOINT TEST D : LATCH MOUNTED DOOR AJAR SWITCH TEST**

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
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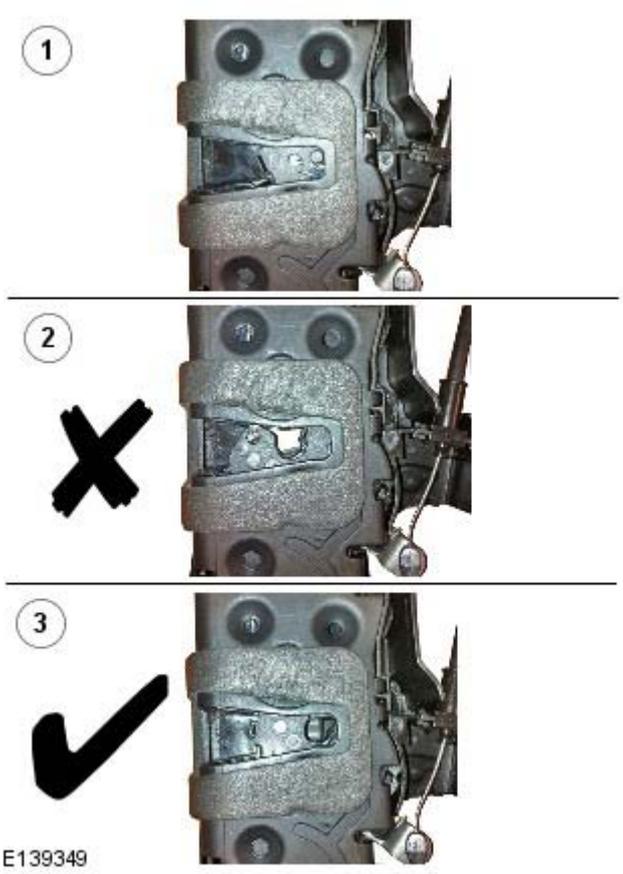
**D1: TEST 4 DOOR LATCH**

NOTE: If a customer is complaining of issues relating to a door ajar signal e.g. door latch won't lock, or alarm system triggering (indicated via DTC's), there may be several components that generate the fault, including

- Door Latch ajar switch
- Alarm control module
- Central junction box
- Body wiring harness / connectors
- Door wiring harness / connectors

NOTE: To investigate the functioning of the door ajar switch contained within the door latch, to prove or eliminate the door latch mounted door ajar switch as the root cause, follow the process below. This will prevent the unnecessary replacement of a correctly functioning door latch

- 1** Remove door trim from door  
REFER to: [Front Door Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation) / [Rear Door Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).
- 2** Remove module plate / closing panel from door
- 3** Remove latch module from door REFER to: (501-14 Handles, Locks, Latches and Entry Systems)  
[Front Door Latch](#) (Removal and Installation),  
[Rear Door Latch](#) (Removal and Installation).
- 4** Inspect latch module for any visual damage



NOTE: Figure 1 - Unlatched position shown

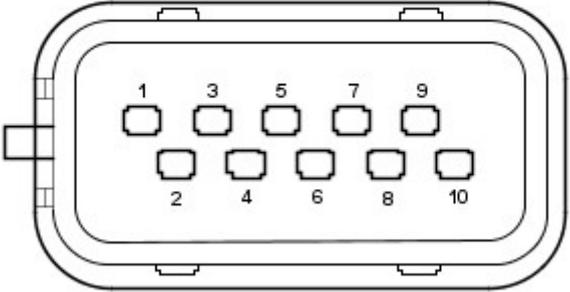
NOTE: Figure 2 - First safety latched position shown

NOTE: Figure 3 - Fully latched position shown

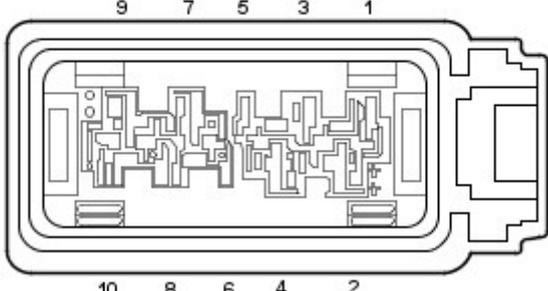
NOTE: Test will not work if latch is only in first safety latch position

- 5** Using a small screw driver or similar, rotate latch claw to the second fully latched position (figure 3)

E139349

 <p>E139356</p>	<p><b>6</b> Carry out continuity test between terminals <b>1 and 4 (left side)</b> or <b>8 and 4 (right side)</b> with claw closed</p>
	<p>Does the continuity test pass?  <b>Yes</b>                  The latch ajar switch is working correctly. <b>Do not replace latch.</b> Investigate for fault elsewhere in vehicle system  <b>No</b>                  Release latch claw and repeat test from step 5 to confirm result. If this is a repeat test and you are sure that the ajar switch does not provide continuity when fully latched. Replace the latch. If replacing latch as part of a warranty claim, please quote reference code <b>AJARINOP</b> in the technician comments section of the warranty claim</p>

**PINPOINT TEST E : VEHICLE ELECTRICAL SYSTEM TEST**

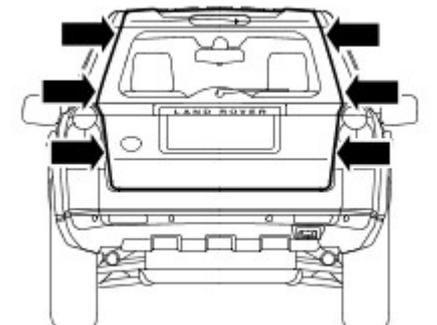
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
<p><b>E1: TEST 5 LOCK COMMAND</b></p>	
 <p>E139357</p>	<p><b>1</b> Disconnect electrical connector from latch</p>
	<p><b>2</b> Close all vehicle doors apart from door being investigated, please note which door, left side or right side is under investigation</p> <p><b>3</b> Monitor the circuit for momentary power when locking the vehicle via the key-fob or smart key between terminals <b>1 and 10 left side</b> or <b>8 and 10 right side</b></p>
	<p>Is there momentary power (for approx 8 seconds) between terminals <b>1 and 10 left side</b> or <b>8 and 10 right side</b> when locking the vehicle via the key-fob or smart key  <b>Yes</b>                  The vehicle electrical system is locking correctly, providing the signal to the latch. <a href="#">GO to E2.</a>  <b>No</b>                  Refer to the electrical circuit diagrams and investigate why vehicle electrical system is not providing signals to the latch. Using the manufacturer approved diagnostic system check for logged DTCs to localize the fault</p>
<p><b>E2: TEST 6 UNLOCK COMMAND</b></p>	
	<p><b>1</b> Monitor the circuit for momentary power when unlocking the vehicle via the key-fob or smart key between terminals <b>1 and 9 left side</b> or <b>8 and 9 right side</b></p>

	<p>Is there momentary power (for approx 8 seconds) between terminals <b>1 and 9 left side</b> and <b>8 and 9 right side</b> when unlocking the vehicle via the key-fob or smart key</p> <p><b>Yes</b> The vehicle electrical system is unlocking correctly, providing the signal to the latch. Plug electrical connector back in to latch. Rebuild vehicle and check for correct operation</p> <p><b>No</b> Refer to the electrical circuit diagrams and investigate why vehicle electrical system is not providing signals to the latch. Using the manufacturer approved diagnostic system check for logged DTCs to localize the fault</p>
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## Handles, Locks, Latches and Entry Systems - Liftgate Striker Adjustment

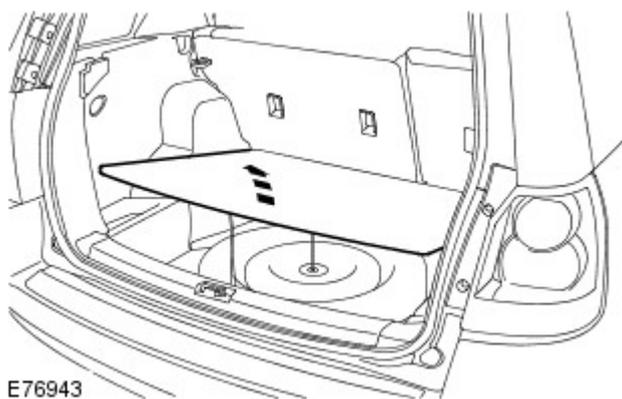
General Procedures

1. Check for an equal gap and alignment to the adjacent panels. If incorrect, follow the adjust procedure below.



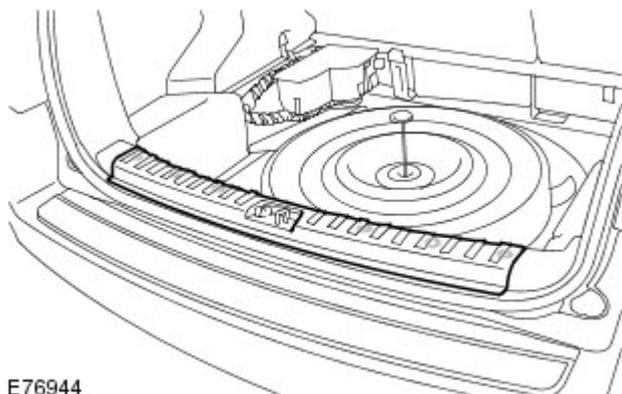
E77113

2. Remove the spare wheel cover.



E76943

3. Remove the loadspace scuff plate.



E76944

4. Loosen the 2 liftgate striker bolts.



E77114

5. Close the liftgate and check for an equal gap and alignment to the adjacent panels.
6. Open the liftgate and tighten the liftgate striker bolts.

*Torque: 25 Nm*

7. Install the loadspace scuff plate.
8. Install the spare wheel cover.

## Handles, Locks, Latches and Entry Systems - Front Door Latch

Removal and Installation

### Removal

1. Disconnect the battery ground cable.

Refer to: [Specifications](#) (414-00 Battery and Charging System - General Information, Specifications).

2. Remove the window motor and regulator assembly.

Refer to: [Front Door Window Regulator and Motor](#) (501-11 Glass, Frames and Mechanisms, Removal and Installation).

3.  **CAUTION:** Release the exterior door handle and screw cover clips from inside the door.

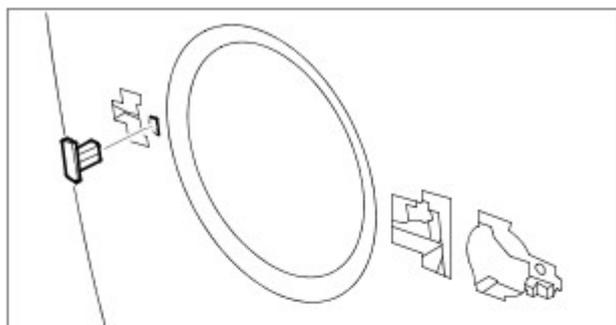
Remove the front door exterior handle.

Refer to: [Exterior Front Door Handle](#) (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

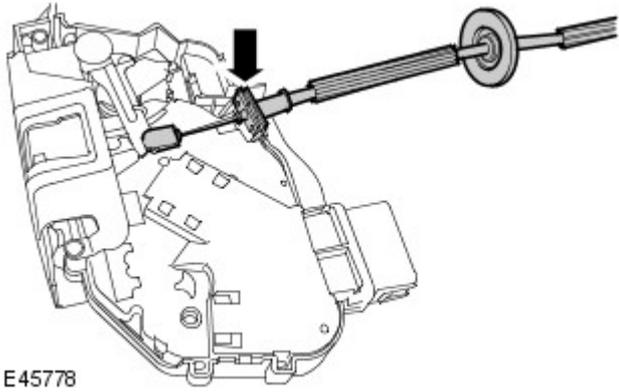
4. Release the remote control cable.

5. Release the door exterior handle mechanism.

6. Remove the front door latch assembly.

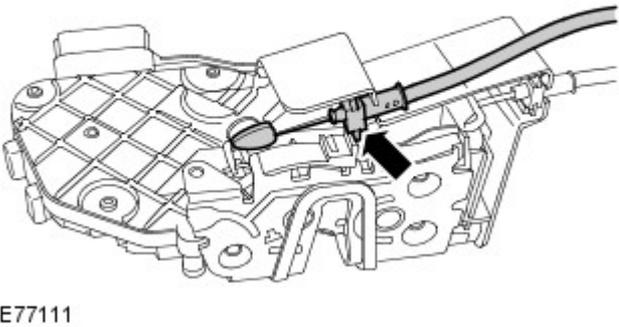


E77110

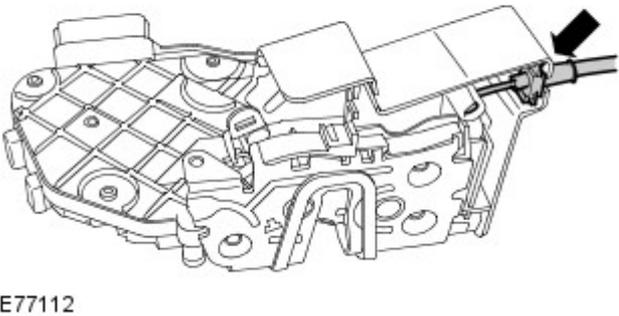


7. **NOTE:** Do not disassemble further if the component is removed for access only.

Remove the door latch remote control cable.



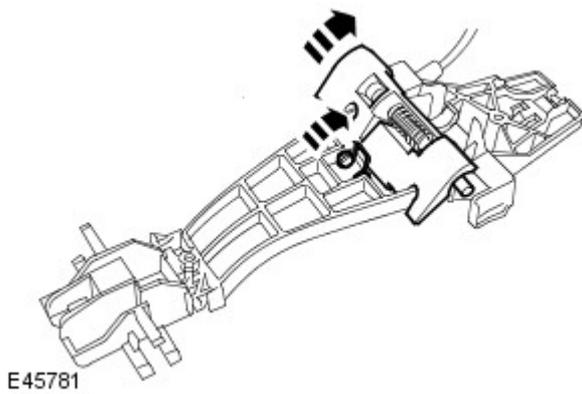
8. Release the exterior door handle mechanism cable from the door latch.



9. LH side: Release the door lock cylinder cable from the door latch.

## Installation

1. LH side: Connect the door lock cylinder cable to the door latch.
2. Connect the door exterior handle mechanism cable to the door latch.
3. Install the remote control cable to the door latch.



4.
  - Set the exterior handle mechanism.
  - Rotate the lever.
  - Engage the retaining tang.

5. Install the door latch and tighten the screws.

*Torque:* 10 Nm

6. Install the door exterior handle mechanism.
7. Position the remote control cable to the door.
8. Install the front door exterior handle.

Refer to: [Exterior Front Door Handle](#) (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

9. Install the window motor and regulator assembly.

Refer to: [Front Door Window Regulator and Motor](#) (501-11 Glass, Frames and Mechanisms, Removal and Installation).

10. Connect the battery ground cable.

Refer to: [Specifications](#) (414-00 Battery and Charging System - General Information, Specifications).

## Handles, Locks, Latches and Entry Systems - Rear Door Latch

Removal and Installation

### Removal

1. Disconnect the battery ground cable.

Refer to: [Specifications](#) (414-00 Battery and Charging System - General Information, Specifications).

2. Remove the window motor and regulator assembly.

Refer to: [Rear Door Window Regulator and Motor](#) (501-11 Glass, Frames and Mechanisms, Removal and Installation).

3.  **CAUTION:** Release the exterior door handle and screw cover clips from inside the door.

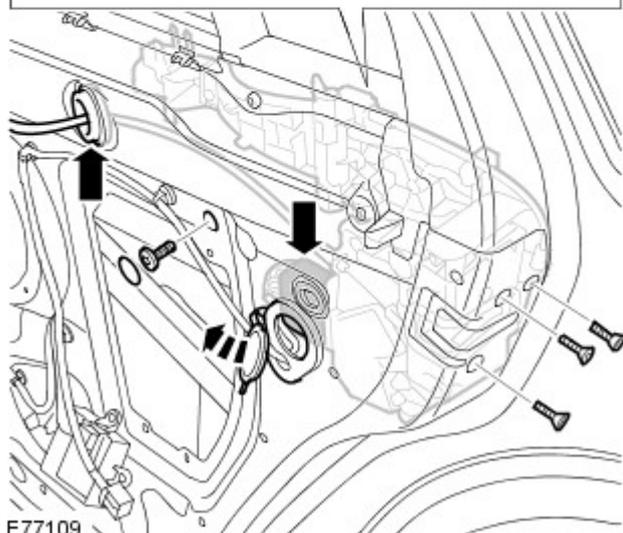
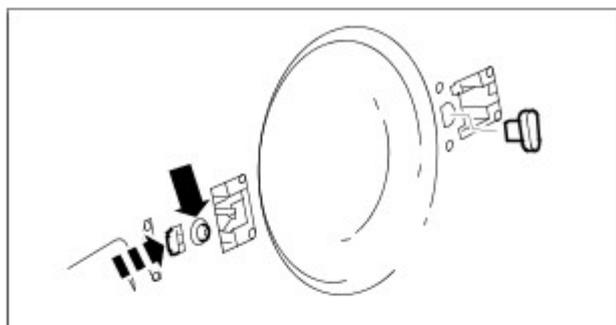
Remove the rear door exterior handle.

Refer to: [Exterior Rear Door Handle](#) (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

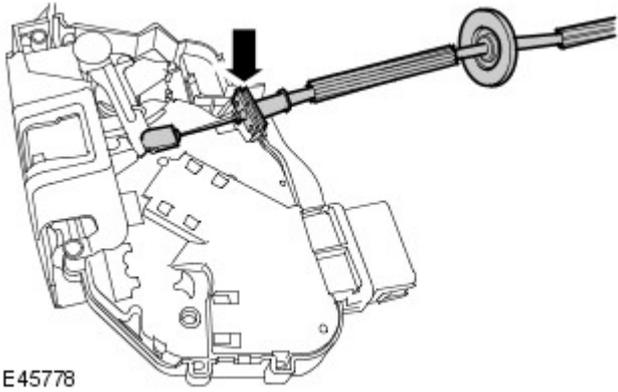
4. Release the remote control cable.

5. Release the door exterior handle mechanism.

6. Remove the rear door latch assembly.

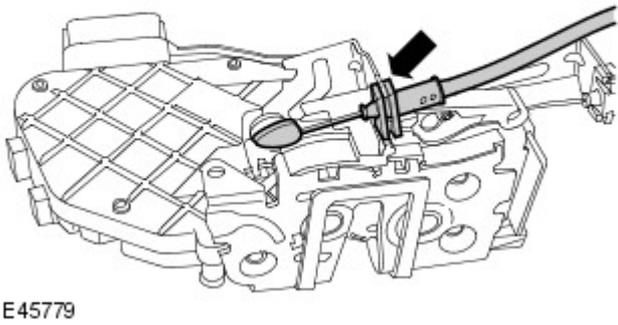


E77109



7. NOTE: Do not disassemble further if the component is removed for access only.

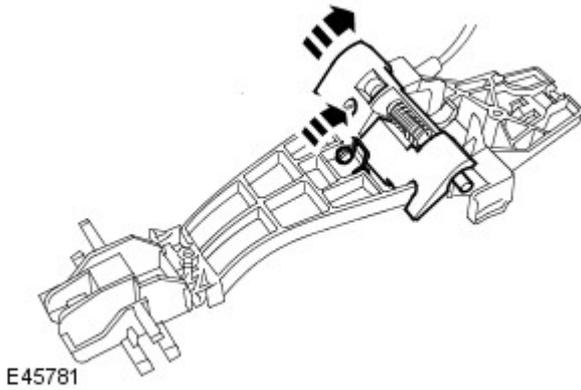
Remove the door latch remote control cable.



8. Release the exterior door handle mechanism cable from the door latch.

## Installation

1. Connect the door exterior handle mechanism cable to the door latch.
2. Install the remote control cable to the door latch.



3.
  - Set the exterior handle mechanism.
  - Rotate the lever.
  - Engage the retaining tang.

4. Install the door latch and tighten the screws.

*Torque: 10 Nm*

5. Install the door exterior handle mechanism.
6. Position the remote control cable to the door.
7. Install the rear door exterior handle.

Refer to: [Exterior Rear Door Handle](#) (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

8. Install the window motor and regulator assembly.

Refer to: [Rear Door Window Regulator and Motor](#) (501-11 Glass, Frames and Mechanisms, Removal and Installation).

9. Connect the battery ground cable.

Refer to: [Specifications](#) (414-00 Battery and Charging System - General Information, Specifications).

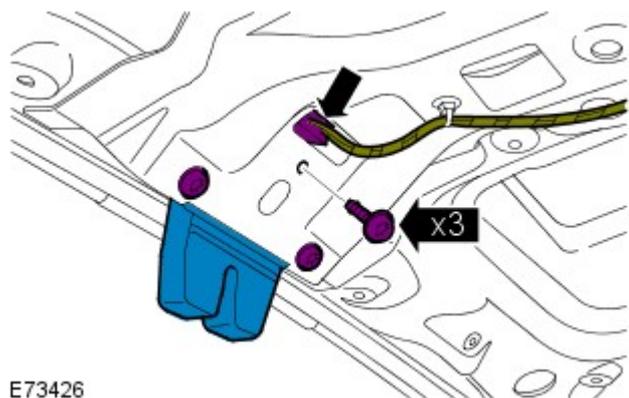
## Handles, Locks, Latches and Entry Systems - Liftgate Latch

Removal and Installation

### Removal

1. Remove the liftgate trim panel.

Refer to: [Liftgate Trim Panel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).



E73426

2.
  - Torque: 25 Nm (18 lb.ft).

### Installation

1. To install, reverse the removal procedure.

## Handles, Locks, Latches and Entry Systems - Exterior Front Door Handle

Removal and Installation

### Removal

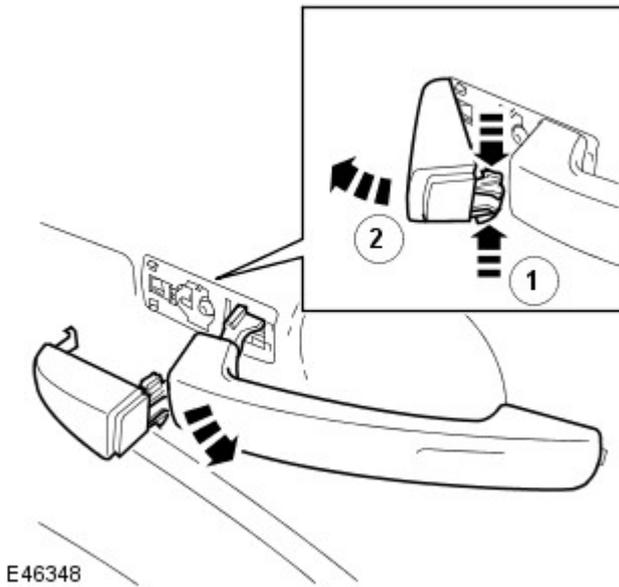
NOTE: This procedure details removal and installation of both the LH and RH exterior front door handles.

NOTE: If the exterior handle is to be removed in conjunction with additional door internal items, then it is recommended that the screw cover and exterior handle be released from the inside of the door.

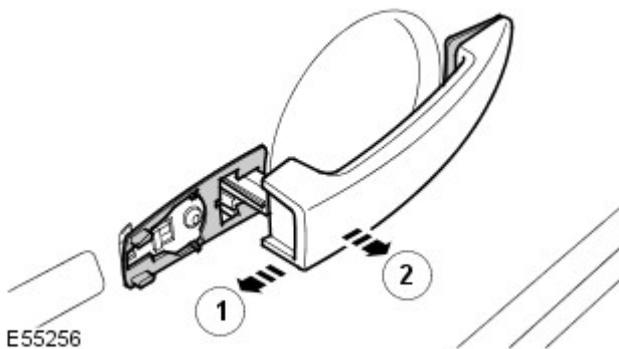
1. LH side: Remove the private lock.

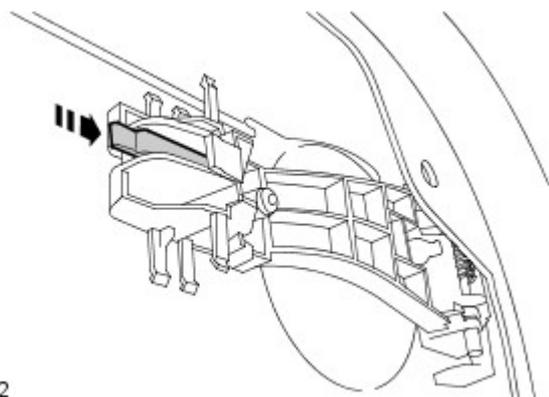
Refer to: [Door Lock Cylinder](#) (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

2. RH side: Release the 2 clips.



3. To remove the exterior front door handle, without removal of the door trim pad.





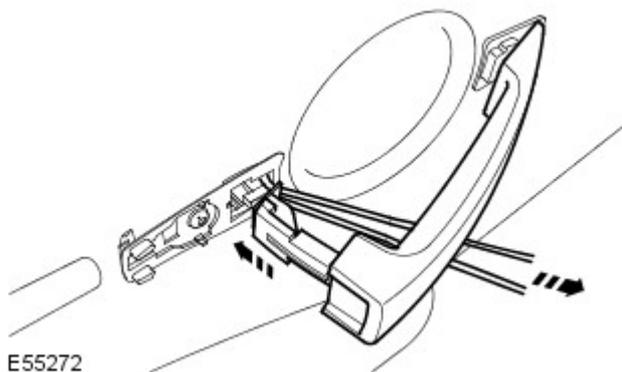
E66202

4. To remove the exterior front door handle, after removal of the door trim pad and regulator.

## Installation

1. To install, reverse the removal procedure.

2. Use a length of cord to hold the lock lever against spring pressure, while engaging the outside handle.



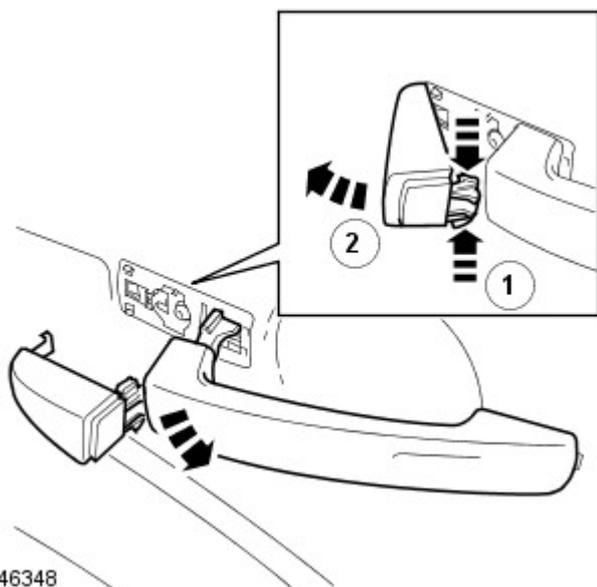
E55272

# Handles, Locks, Latches and Entry Systems - Exterior Rear Door Handle

Removal and Installation

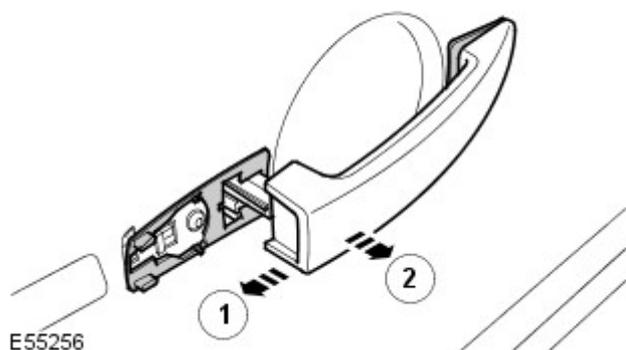
## Removal

NOTE: If the exterior handle is to be removed in conjunction with additional door internal items, then it is recommended that the screw cover and exterior handle be released from the inside of the door, after removal of the door trim pad, regulator and motor.



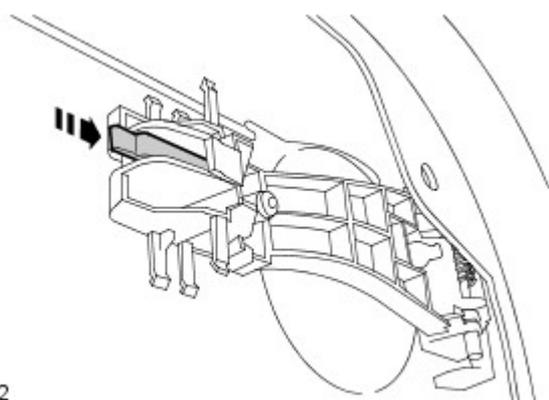
E46348

1.
  - Release the 2 clips.



E55256

2. To remove the exterior rear door handle, without removal of the door trim pad.



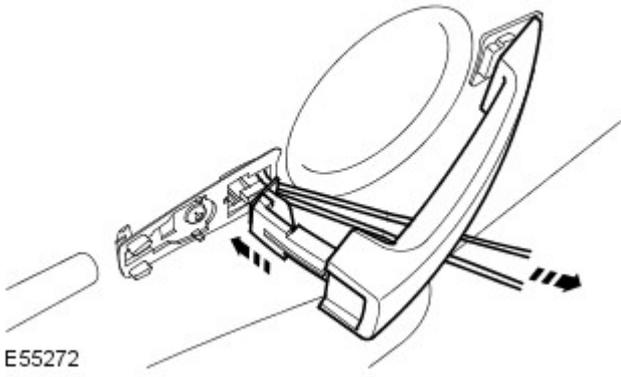
E66202

3. To remove the exterior rear door handle, after removal of the door trim pad and regulator.

## Installation

1. To install, reverse the removal procedure.

2. Use a length of cord to hold the lock lever against spring pressure, while engaging the outside handle.



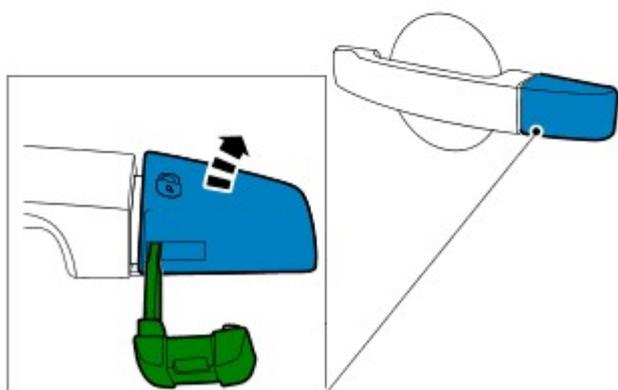
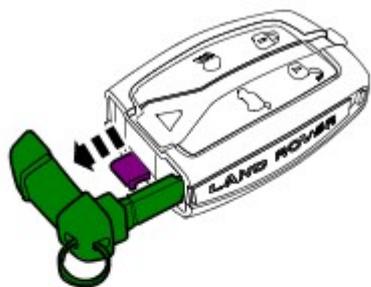
## Handles, Locks, Latches and Entry Systems - Door Lock Cylinder

Removal and Installation

### Removal

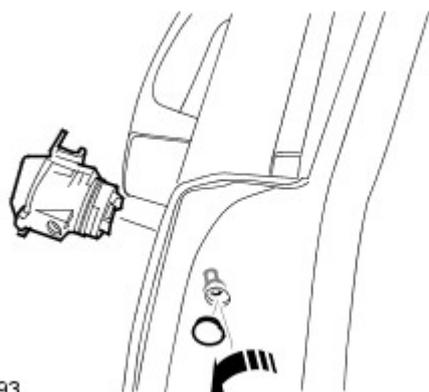
NOTE: This procedure is for removal and installation of the door lock cylinder only. The ignition lock and door lock cylinders are replaced in sets.

1.



E76991

2. NOTE: Remove the screw sufficiently, only to release the component.



E56293

### Installation

1. To install, reverse the removal procedure.