

SECTION 501-14 Handles, Locks, Latches and Entry Systems

VEHICLE APPLICATION: 2011.00 Focus

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SPECIFICATIONS

Description	Nm	lb-ft	lb-in
Hood latch retaining bolts	9	-	80
Hood latch striker retaining bolts	11	8	-
Front door inner panel retaining bolts	8	-	71
Front door latch retaining bolts	8	-	71
Front door lock retaining bolt	1	-	9
Rear door inner panel retaining bolts	8	-	71
Rear door latch retaining bolts	8	-	71
Liftgate latch retaining bolts	20	15	-
Liftgate release handle retaining bolts	3	-	27
Front door window glass clamp retaining bolt	8	-	71
Front door hinge retaining bolts	15	11	-

DESCRIPTION AND OPERATION

Handles, Locks, Latches and Entry Systems

Vehicles with Central Locking

A base level locking system is available which has central locking function only.

This system consists of hard wired door latches, linked to the central junction box (CJB).

The key position signal is sent from the driver door lock cylinder to the CJB. The CJB operates the

lock or unlock relays, reversing the polarity of the door latch central locking motors.

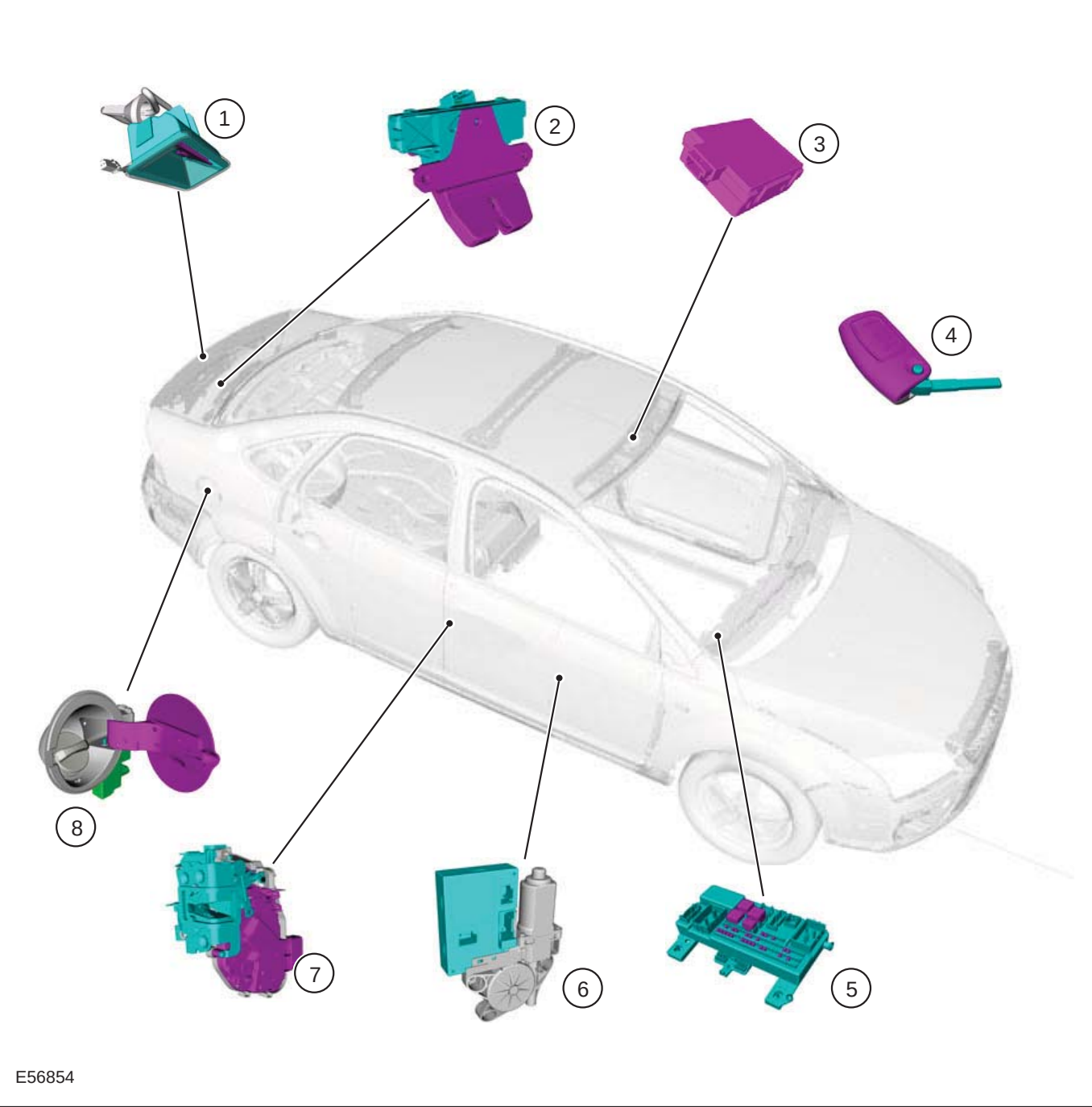
Liftgate/luggage compartment lid latch release operation is by a switch ground signal to the CJB and a pulsed output voltage from the CJB to the liftgate latch.

The fuel filler door lock is parallel wired to the driver door latch central locking motor.

DESCRIPTION AND OPERATION

Vehicles with Remote Keyless Entry (RKE) System

General

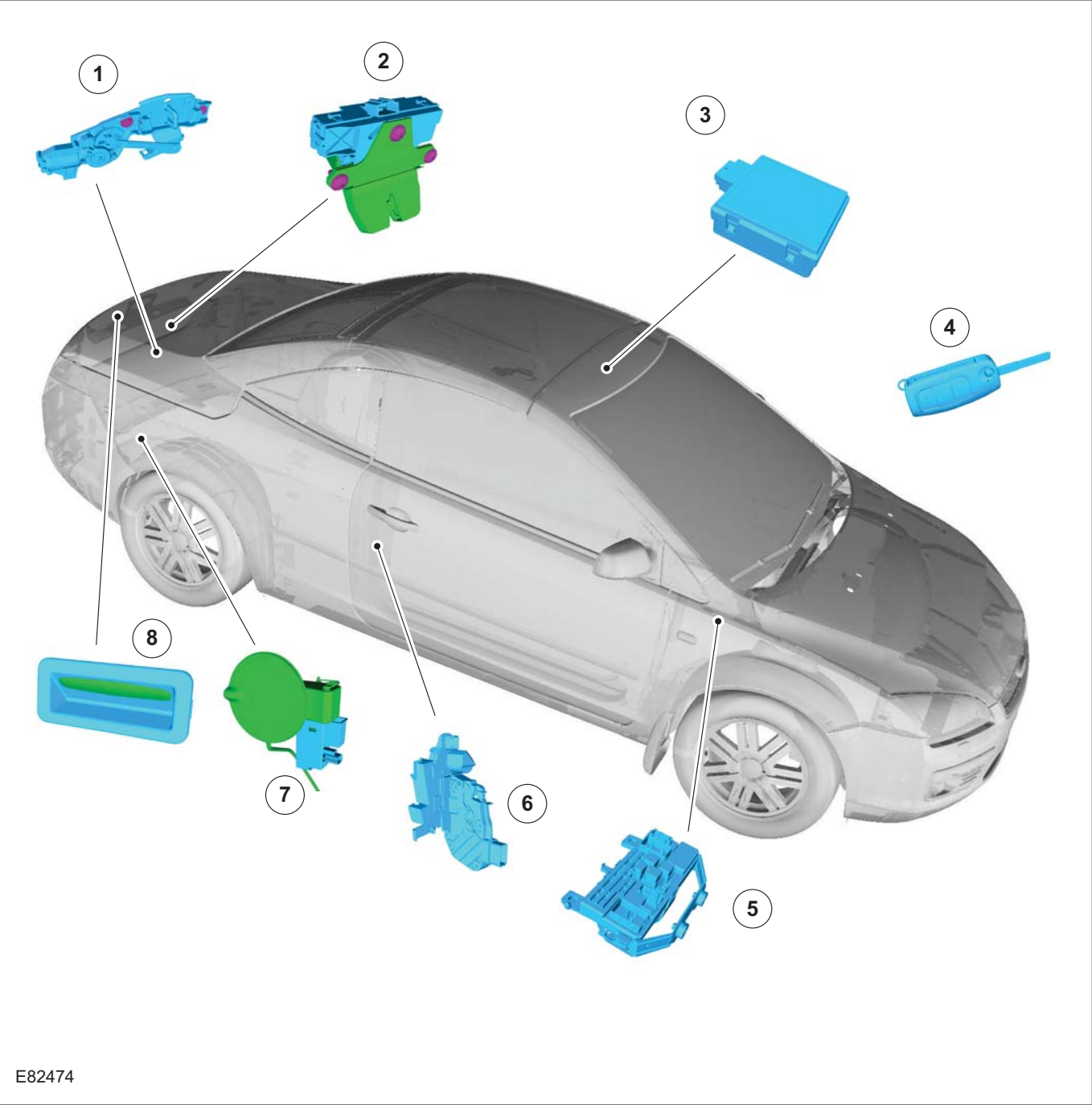


Item	Description
1	Liftgate/luggage compartment lid release switch
2	Liftgate/luggage compartment lid latch
3	Radio frequency (RF) receiver
4	RKE ignition key

Item	Description
5	Central junction box (CJB)
6	Door control module
7	Door latch
8	Fuel filler door lock

DESCRIPTION AND OPERATION

Convertible



E82474

Item	Description
1	Luggage compartment lid latch actuator
2	Luggage compartment lid latch
3	Radio frequency (RF) receiver
4	RKE ignition key
5	Central junction box (CJB)
6	Door latch

Item	Description
7	Fuel filler door lock
8	Luggage compartment lid release switch

RKE systems use mechanical/electrical door latches individually controlled by the corresponding door control module.

Door control modules send and receive commands between each other and the CJB using the central area network (CAN) bus.

DESCRIPTION AND OPERATION

When a key is turned in the door lock cylinder, a lock or unlock signal is sent to the associated door control module. The door control module sends a signal to the CJB. The CJB issues a signal to the remaining door control modules, which in turn command the latches to operate.

RKE is achieved by the transmission of a coded RF signal from a transmitter contained in the vehicle key. The signal is received by the RF receiver located above the headliner in the vicinity of the overhead console. The received signal is passed onto the CJB where it is decoded. If the coded signal is valid, the CJB will issue a command on the CAN bus circuit to operate the door latches or liftgate/luggage compartment lid release.

The signals received by the CJB from the RF antenna or the door control modules is also used to arm and disarm the vehicle security systems, illuminate the interior lights and operate the global closing functions.

Liftgate/Luggage Compartment Lid Latch



The liftgate/luggage compartment lid latch is a mechanical latch with a electric motor to drive the

latch release. The liftgate/luggage compartment lid latch has no remote mechanical release facility.

The command to open the liftgate/luggage compartment lid latch is sent by the CJB. But the input command to the CJB can be issued by the exterior liftgate/luggage compartment lid release switch, the interior liftgate/luggage compartment lid release switch or the RF receiver.

When the liftgate/luggage compartment lid is closed, the latch is automatically locked.

Door latch



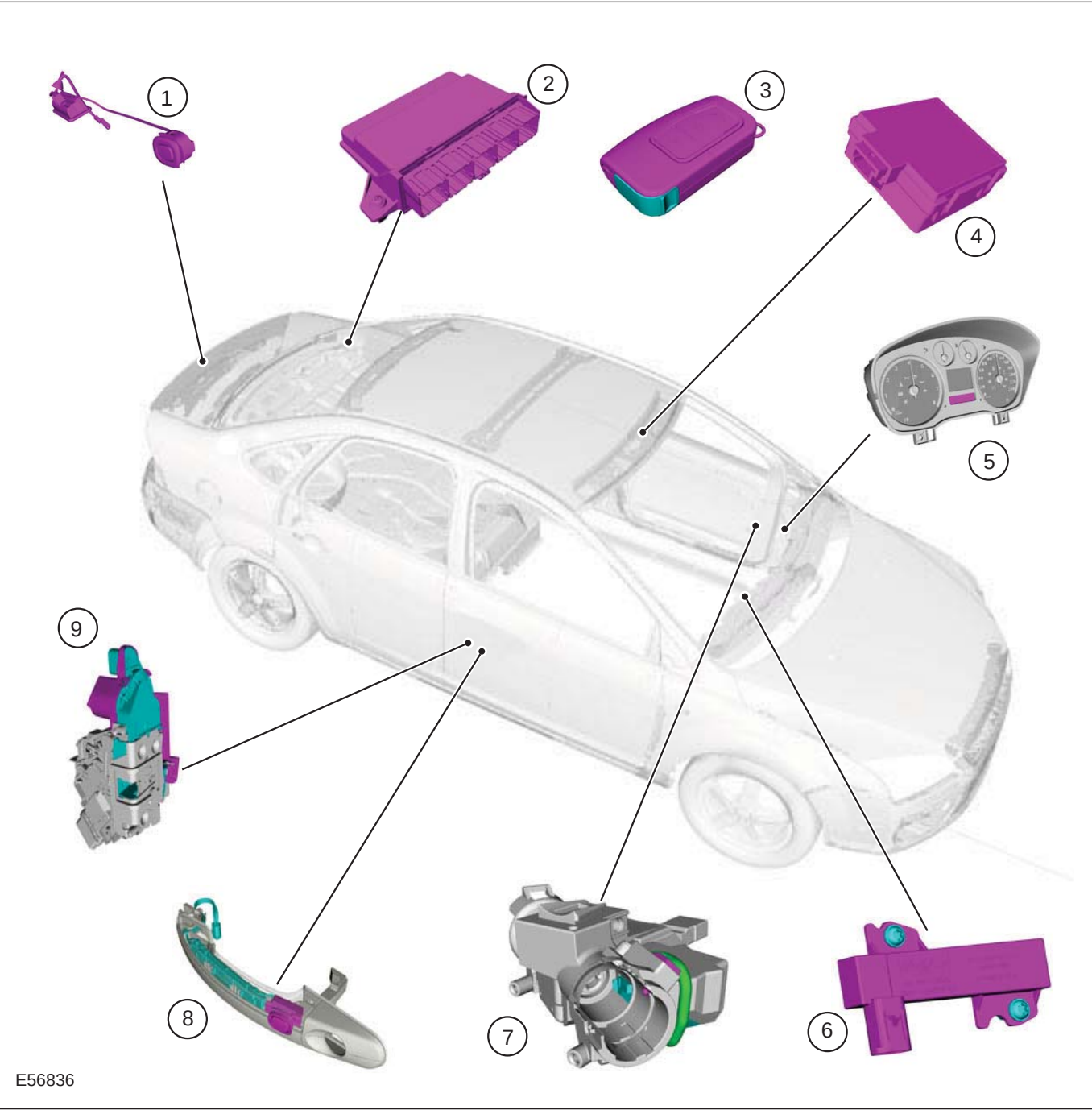
Door latches have mechanical latch release with electric motor operated locking and double locking function.

When the door latch is locked, the exterior door handle is disengaged from the door latch.

Incorporated within the door latch is a door ajar switch. The door ajar switch monitors the latch position and supplies information to the door control module. This information is sent to the CJB for use in warning systems, locking functions and alarm system.

DESCRIPTION AND OPERATION

Vehicles with Keyless Vehicle System



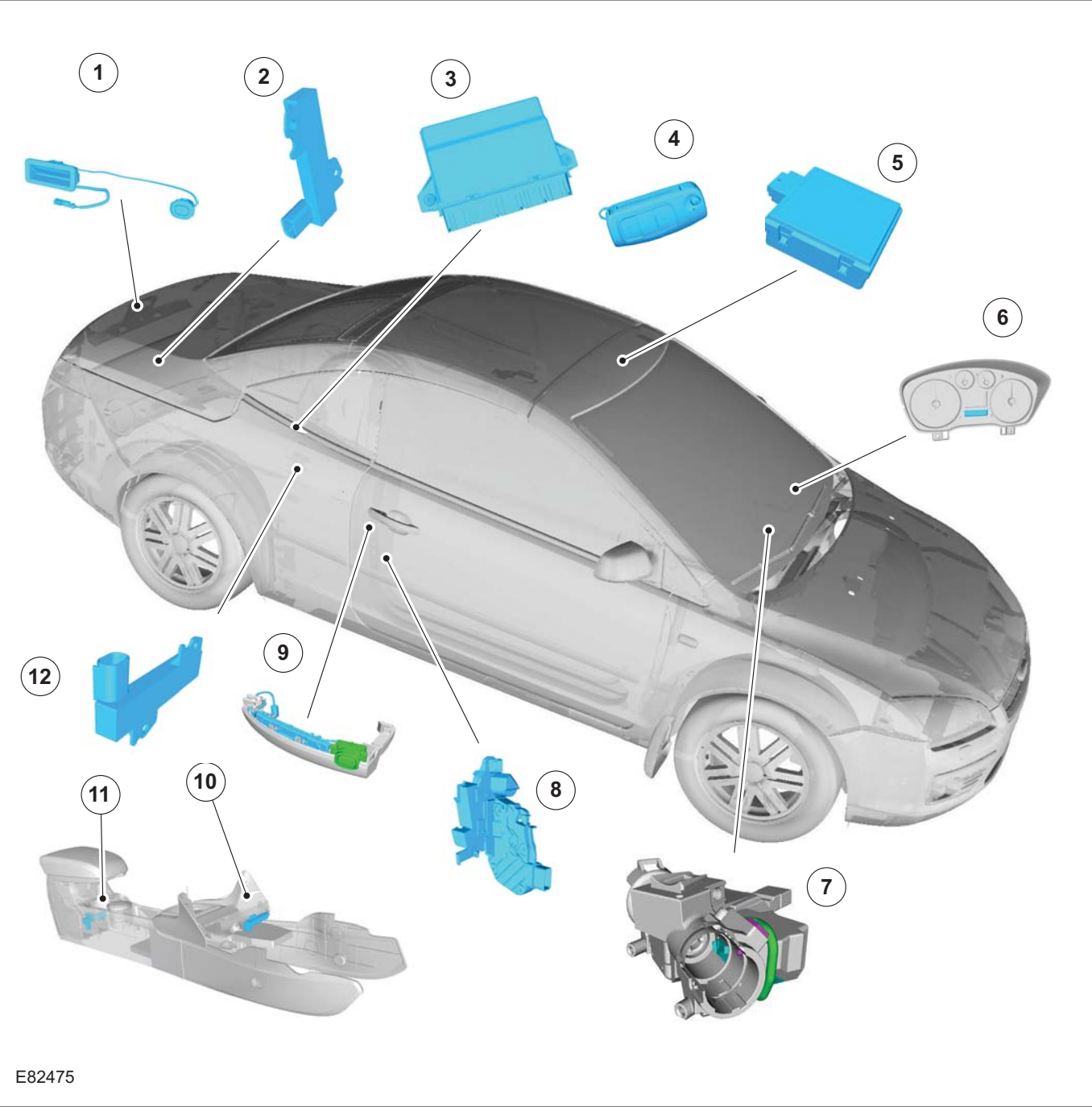
E56836

Item	Description
1	Liftgate/luggage compartment lid lock switch
2	Keyless vehicle module
3	Keyless vehicle passive key
4	Radio frequency (RF) receiver

Item	Description
5	Instrument cluster
6	Keyless vehicle antenna (interior)
7	Steering column lock control unit
8	Exterior door handle, keyless vehicle antenna and lock switch
9	Door latch

DESCRIPTION AND OPERATION

Convertible



E82475

Item	Description
1	Luggage compartment lid lock switch
2	Keyless vehicle luggage compartment antenna
3	Keyless vehicle module
4	Keyless vehicle passive key
5	Radio frequency (RF) receiver
6	Instrument cluster

Item	Description
7	Steering column lock control unit
8	Door latch
9	Exterior door handle, keyless vehicle antenna and lock switch
10	Keyless vehicle front antenna
11	Keyless vehicle center antenna
12	Keyless vehicle rear antenna

DESCRIPTION AND OPERATION

General

The system is designed to eliminate the need to use any form of key.

The basic function of the system is to allow the operator to gain entry to and operate the vehicle without the turning of keys or the pressing of buttons. This must be achieved without compromising the security or safety of the vehicle.

To gain access to the vehicle, a passive vehicle key must be about the person that is trying to gain access. At a distance of approximately 2 meters from the keyless antenna built into the exterior door handle or the rear exterior keyless antenna located behind the rear bumper cover, the passive vehicle key can receive a low frequency (LF) challenge to confirm its identity.

The vehicle system will not attempt to challenge the coded passive vehicle key, until a door handle is pulled or the liftgate/luggage compartment lid release switch is pressed. This reduces the current drain on the vehicle battery during the armed condition.

To lock the vehicle, all doors must be closed and a passive vehicle key coded to the vehicle must be in range of the exterior keyless vehicle antenna before the lock button on the exterior door handle or liftgate/luggage compartment lid is pressed.

To minimize the risk of scanning during the use of the passive key, the system is equipped with a rolling code. This means that the code received by the keyless vehicle module changes after each successful operation.

The start function is also controlled by the passive vehicle key. If the clutch pedal on manual vehicles or brake pedal for automatic vehicles is pressed, the keyless vehicle module will challenge the passive vehicle key using the interior keyless antenna and allow the steering column lock control unit to release. This allows the operator to rotate the ignition switch turning knob and start the engine.

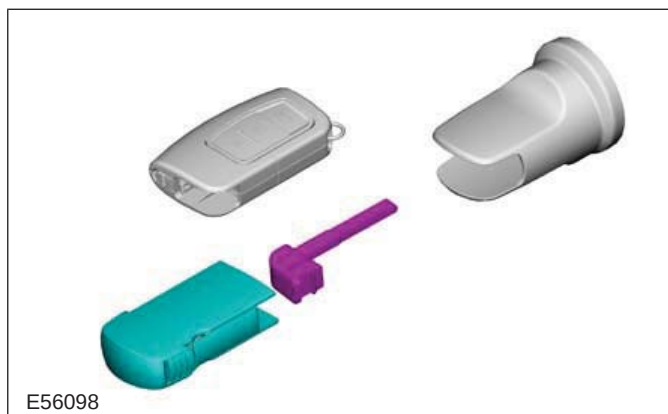
The passive anti theft system (PATS) is disarmed when the passive vehicle key emergency key transponder is read by the PATS transceiver during the starting function.

Passive vehicle Key



The passive vehicle key is designed to be unobtrusive and robust.

The primary function of the passive vehicle key is to receive requests from and transmit coded signal to the keyless vehicle module. Concealed within the passive vehicle key, is an emergency mechanical key.



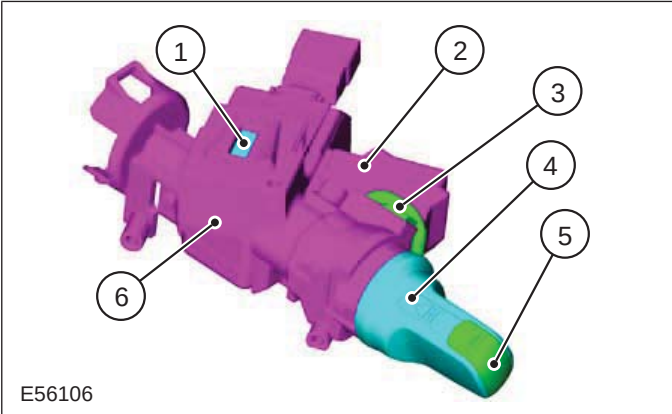
The mechanical key when removed from the passive vehicle key can be used to open the driver door to gain access to the vehicle. The mechanical key must be assembled to the ignition switch turning knob insert before it can then be used to release the steering lock and start the engine.

The passive vehicle key also has remote keyless entry (RKE) functionality.

RKE permits the operator to unlock and lock the vehicle and release the liftgate/luggage compartment lid from a location remote from the vehicle.

DESCRIPTION AND OPERATION

Steering Column Lock Control Unit



Item	Description
1	Steering column lock pin
2	Steering lock cylinder release solenoid
3	Mechanical key insertion detection switch
4	Ignition switch turning knob
5	Ignition switch turning knob insert
6	Steering column lock

The steering column lock control unit operates the same as the standard key operated steering lock but also has the added functionality of a solenoid operated ignition lock cylinder release.

Under the correct conditions, the ignition lock cylinder will be released and allowed to rotate to the accessory, run and start positions.

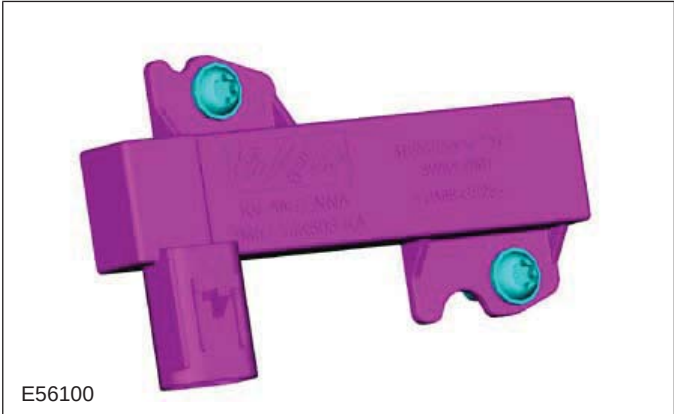
To achieve the correct conditions,

- A valid passive vehicle key must be detected by the keyless vehicle module within the vehicle
- The brake pedal in automatic transmission vehicles must be pressed and the clutch pedal in manual transmission vehicles must be pressed
- The ignition switch turning knob must be pressed in

Only when all of these conditions are met, can the ignition switch turning knob be rotated, so rotating the ignition lock cylinder and releasing the steering lock.

If the emergency key is inserted into the ignition switch turning knob, the steering column lock control unit detects the key and the keyless vehicle system is disabled.

Interior Keyless Antenna



The interior keyless vehicle antenna function is to transmit a LF signal to the passive vehicle key while it is inside the vehicle passenger compartment.

If at any time the passive vehicle key leaves the passenger compartment while the vehicle is unlocked or the ignition switch turning knob is in the accessory, run or start position, the interior keyless vehicle antenna will loose the signal from the passive vehicle key and the keyless vehicle module will indicate in the instrument cluster warning display, that no passive key is present in the vehicle.

There are 4 keyless vehicle antennas installed within the vehicle. They are located in the front and rear of the floor console, behind the rear seat backrest and in the loadspace rear panel.

Liftgate/Luggage Compartment Lid Lock Switch



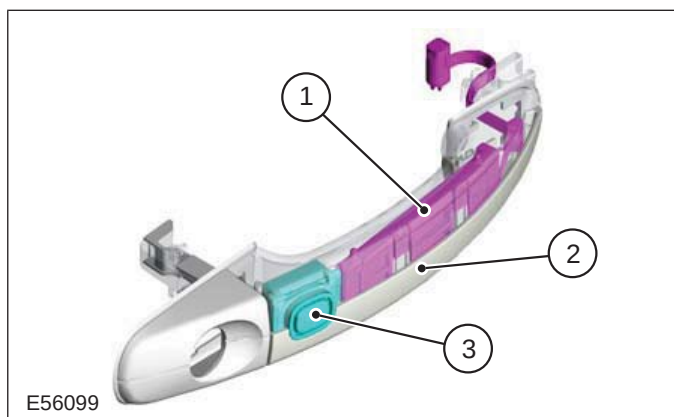
The liftgate/luggage compartment lid lock switch is located in the licence plate illumination panel and can be used to lock the entire vehicle.

When the liftgate/luggage compartment lid lock switch is pressed, a challenge is sent to the passive

DESCRIPTION AND OPERATION

vehicle key, if the passive vehicle key is valid, a signal triggers the keyless module to initiate the central locking.

Exterior Door Handle Keyless Vehicle Antenna and Lock Switch



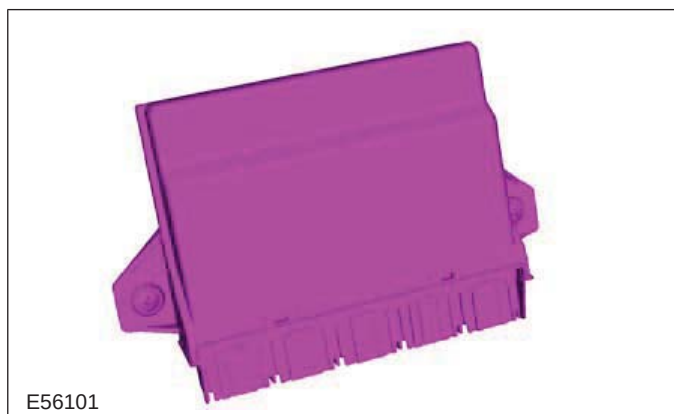
Item	Description
1	Exterior keyless vehicle antenna
2	Exterior front door handle
3	Exterior keyless vehicle system lock button

The exterior door handle keyless vehicle antenna and lock switch is a combined unit that is seen simply as the exterior door handle lock switch.

The function of the lock switch is to send a signal to the keyless vehicle module to indicate the intent to lock the vehicle.

The function of the exterior door handle keyless vehicle antenna is to challenge the passive vehicle key within a pre-defined area of the front exterior door handle.

Keyless Vehicle Module

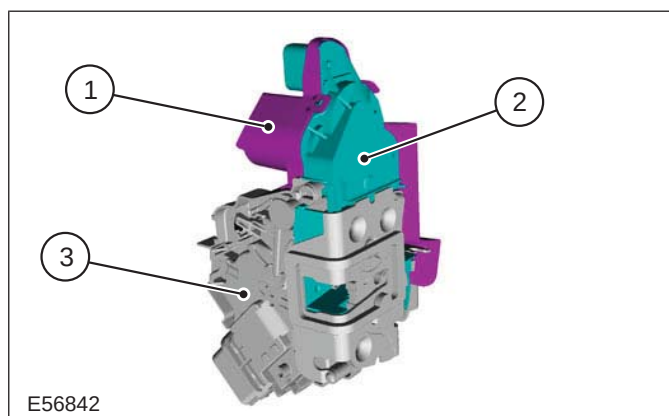


The keyless vehicle module is located in the loadspace trim panel area. Its function is to interface with the components that comprise the keyless vehicle system. These include:

- Door latches and integral motors
- Instrument cluster liquid crystal display (LCD)
- Exterior door handle keyless vehicle antenna
- Exterior door lock buttons
- Interior door lock button
- Liftgate/luggage compartment lid lock switch
- Interior keyless vehicle antennas
- Steering column lock control unit

Communication between the component and the keyless vehicle module is predominantly by hard wire as this reduces the delay in communication between components. But the medium speed central area network (CAN) bus is used where it is adequate.

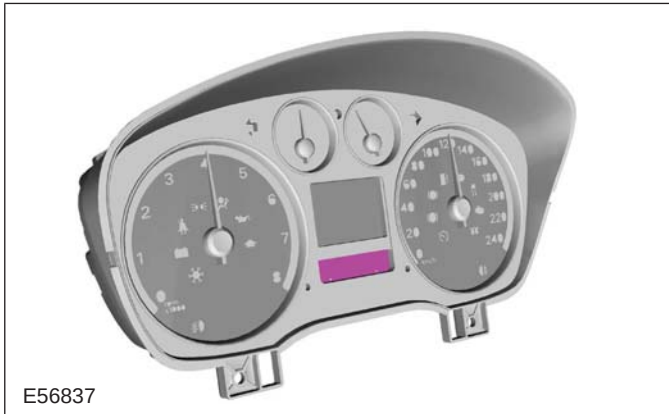
Door Latch



Item	Description
1	Door latch release electric motor
2	Door latch
3	Door latch central and double locking electric motors

Keyless vehicle door latches incorporate an extra electric motor to replace the exterior door handle mechanical latch release function during keyless vehicle system operation.

In the event of mechanical key operation, the normal latch exterior door handle linkage will be utilized.

DESCRIPTION AND OPERATION**Instrument Cluster**

The instrument cluster displays the keyless vehicle system state in the LCD warning display.

The instrument cluster also acts as the interface between the PATS transceiver, powertrain control module (PCM) and keyless vehicle module.

DIAGNOSIS AND TESTING**Locks, Latches and Entry Systems****General Equipment**

Worldwide Diagnostic System (WDS)

Principles of Operation (Vehicles with Central Locking)**Central locking system overview**

This system consists of mechanical/electrical operated latches. The latch motors are interlinked by solid wiring. Central locking is achieved with mechanical switching in the door latch by key or remote handle.

When a key is rotated in the door lock cylinder or an interior remote handle is operated, switching contacts within the door latch supply ground signals to the central junction box (CJB) electronic control, which in turn controls central locking relays. The relays supply battery voltage and ground to the door latch motors. By reversing the battery voltage and ground connections at the central locking relays, the door latches can be locked or unlocked.

The liftgate or luggage compartment lid is opened when the vehicle is in the unlocked mode by a ground signal from the liftgate/luggage compartment lid release switch to the CJB control. The CJB will then supply a voltage to the liftgate/luggage compartment lid latch motor.

If the vehicle is locked, the input from the liftgate/luggage compartment lid release switch to the CJB will be ignored.

Principles of Operation (Vehicles with Remote Keyless Entry (RKE))**RKE locking system overview**

This system consists of mechanical/electrical operated door latches driven by inputs from electronic door control modules. The system uses a radio frequency (RF) transmitter and receiver to operate the remote lock/unlock functions and normal key or remote door handle inputs for standard central and double locking functions.

When a key is rotated in the door lock cylinder or an interior remote handle is operated, switching contacts within the door latch supply a command signal to the door control module. The door control

module communicates with the CJB using the central area network (CAN) bus circuit. Dependant upon the current state of the locking system, commands are then sent to all of the door control modules, which in turn allow battery voltage to be applied to the door latch motors.

The fuel filler door lock function is controlled by the CJB. The CJB receives the lock command from the door control module. The CJB operates the lock relay which supplies a voltage to the fuel filler door lock motor. To unlock the fuel filler door, the supplied voltage is reversed using the driver door/fuel filler door unlock relay.

The liftgate or luggage compartment lid is opened when the vehicle is in the unlocked mode by a ground signal from the liftgate/luggage compartment lid release switch to the CJB. The CJB will supply a voltage to the liftgate or luggage compartment lid latch motor.

If the vehicle is locked, the input from the liftgate/luggage compartment lid release switch will be ignored.

The RKE functions are operated by sending a radio frequency (RF) signal from the key transmitter. The signal is received by the vehicle remote RF receiver. The signal received is transferred as a data signal to the CJB, where the transmitted signal is validated and control commands are sent to the door control modules on the CAN bus circuit and to the liftgate/luggage compartment lid latch motor by direct wiring.

Inspection and Verification (Vehicles with Remote Keyless Entry (RKE))

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

DIAGNOSIS AND TESTING

Visual Inspection Chart

Mechanical	Electrical
– Misaligned door(s), hood, liftgate, tailgate, luggage compartment and hood – Door latch(es) – Liftgate latch – Luggage compartment lid latch – Hood latch – Actuating Cable(s) – Exterior door handle(s) – Door latch remote control(s) – Door lock cylinder(s) – Liftgate lock cylinder	– Fuse(s) – Relay(s) – Wiring harness – Electrical connector(s) – Door latch(s) – Remote transmitter batteries – Vehicle battery – Remote transmitter – RF receiver – Liftgate exterior release switch – Luggage compartment lid release switch – Door control module(s) – CJB

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, connect WDS to the data link connector.
5. Select the **Generic Electronic Module** menu.
6. Retrieve the diagnostic trouble codes (DTCs) and refer to the Diagnostic Trouble Code (DTC) Index - CJB.

Principles of Operation (Vehicles with Keyless vehicle system)

Keyless Component Installation, Programing and Initialization

If new components for the keyless vehicle system have been installed, dependant upon which component is installed, programing using **WDS** will be required.

NOTE: Before any programing or initialization for the keyless vehicle system components can be carried out, an operational valid passive anti-theft system (PATS) emergency key must be present in the ignition switch turning knob.

Passive Key programing

Passive key programing can only be carried out using WDS. To program a new passive key, clear passive keys or count passive keys follow the WDS menu sequence:

- Vehicle communication
- Toolbox
- Body
- Security
- Remote Keyless Entry

From the Remote Keyless Entry screen you can choose to:

- Add Keys
- Clear Keys
- Count Keys

Steering column lock control unit initialization

If a new steering column lock control unit is installed, the only procedure required providing the original steering lock barrel has been installed and the original emergency key is used, is **Initialize System** using the following WDS menu sequence:

- Vehicle communication
- Toolbox
- Body
- Security
- Remote Keyless Entry
- Initialize System

Keyless vehicle module programing

If a new keyless vehicle module is installed, the following programing sequence must be followed using WDS.

- Keyless Vehicle Module (KVM) programing. (From the module programing menu)
- Initialize System
- Add Keys

Instrument cluster programing

If a new instrument cluster is installed, the following programing sequence must be followed using WDS.

- Instrument cluster module programing. (From the module programing menu).
- PATS key learning. (From the PATS menu)

DIAGNOSIS AND TESTING

- Initialize with the powertrain control module. (From the PATS menu)
- Initialize with the keyless vehicle module. (From the Remote Keyless Entry menu)

Keyless Vehicle System Overview

The keyless vehicle system also incorporates RKE functions, however the main purpose of the system is to allow the operator of the vehicle to gain access to and operate the vehicle without carrying out any actions with a key or remote buttons.

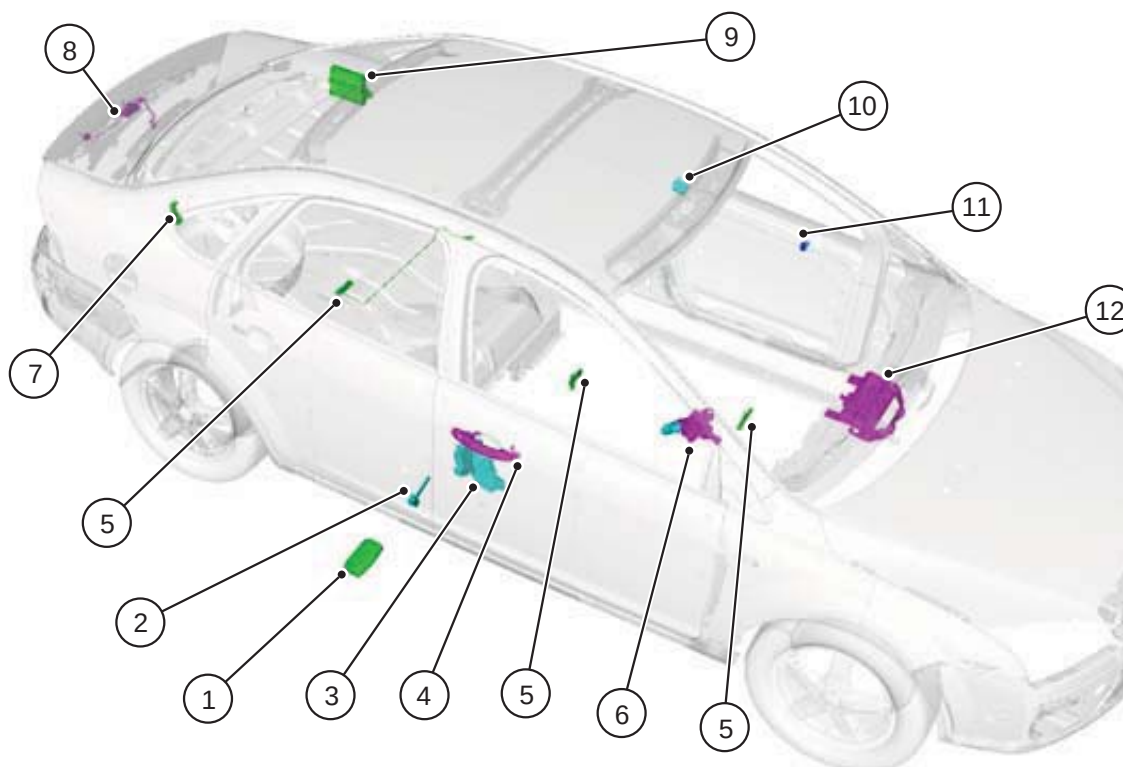
The keyless vehicle system can be turned off to give basic key operation if required.

To isolate the keyless vehicle system, the emergency key must be inserted into the ignition

switch turning knob and the ignition switch turning knob rotated to position II. It is now possible to select the KEY FREE ON or KEY FREE OFF from the instrument cluster liquid crystal display (LCD) using the remote steering column stalk control. In the OFF mode, the RKE functions still work.

Vehicles equipped with keyless vehicle systems, will be delivered from production in shipping mode. Shipping mode reduces the vehicle battery drain to a minimum to extend the period of time the vehicle can remain dormant without discharging the vehicle battery.

To exit the shipping mode, the emergency key must be inserted into the ignition switch turning knob and rotated to position II. The shipping mode can now be deselected from the instrument cluster LCD display using the steering column stalk control.



E56115

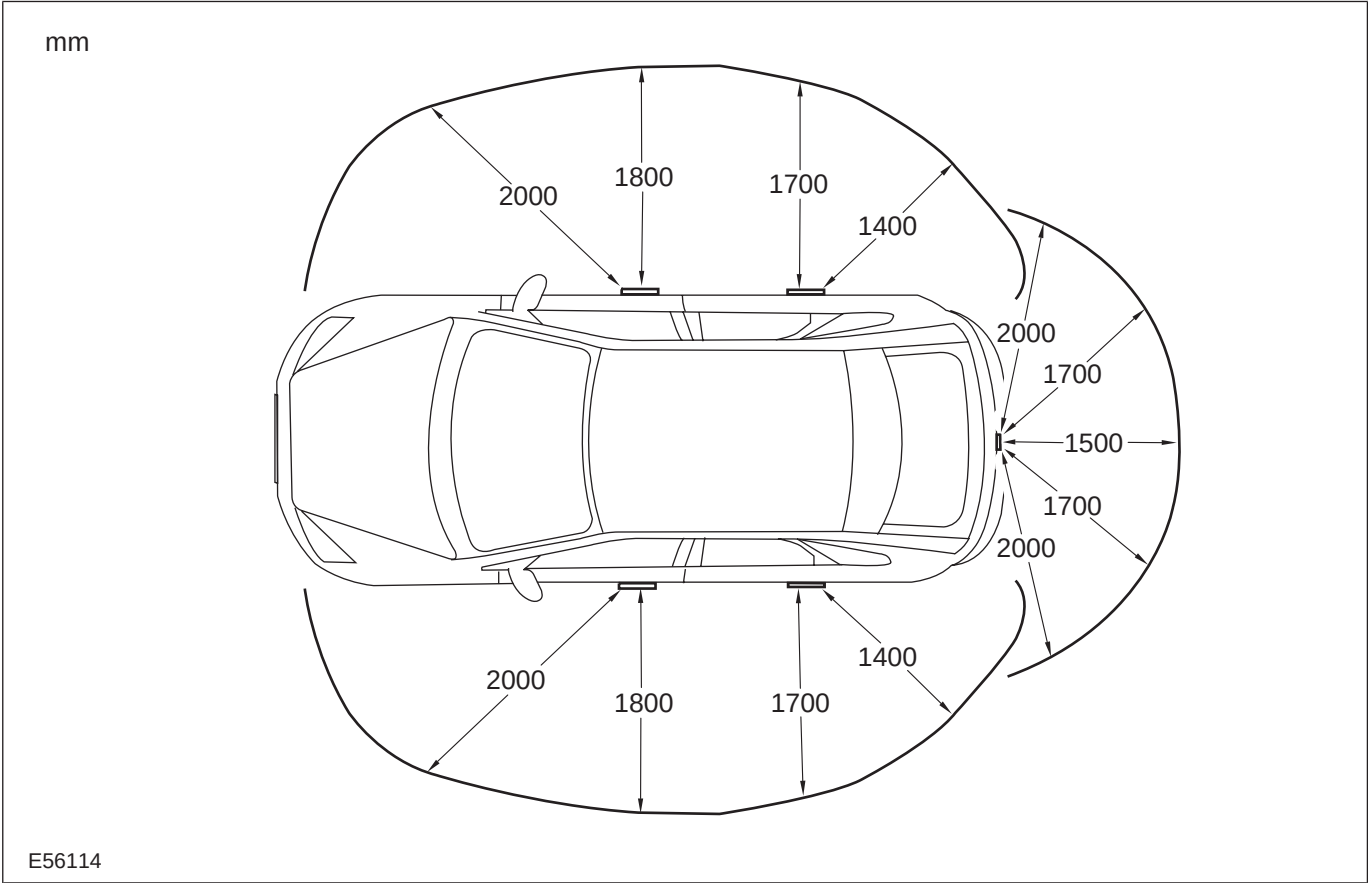
Item	Description
1	Passive vehicle key
2	Emergency key
3	Door latch
4	Door exterior handle keyless vehicle antenna and lock switch
5	Interior keyless vehicle antennas

Item	Description
6	Steering column lock control unit
7	Rear exterior keyless vehicle antenna
8	Liftgate/luggage compartment lid lock switch
9	Keyless vehicle module
10	RKE antenna

DIAGNOSIS AND TESTING

Item	Description	Item	Description
11	Interior unlock button	12	Central junction box

Passive Key



The passive vehicle key can receive an identification challenge from the vehicle door exterior handle keyless vehicle antennas within a range of approximately 1.5 meters to 2.0 meters. The challenge from the rear exterior keyless vehicle antenna will be received at up to 1.5 meters from the center rear of the vehicle. On receiving the identification challenge, the passive vehicle key will emit a coded radio frequency (RF) signal to the RF receiver. No RF signal will be emitted if the passive vehicle key does not recognize the coded low frequency challenge from the keyless vehicle module.

If the system is functioning correctly, the operator will be able to open the vehicle doors, liftgate or luggage compartment lid, as long as a valid passive key is within the defined areas.

If a valid passive vehicle key detects a low frequency challenge from the interior keyless antenna and emits a valid RF coded signal, the

keyless vehicle module will switch on the passive go functionality.

If a valid passive vehicle key is left in the vehicle and the vehicle is locked using a second valid passive vehicle key. The instrument cluster will indicate the presence of a valid key in the vehicle and the passive vehicle key left in the vehicle will be disabled. The disabled passive vehicle key can only be reactivated by starting the vehicle with the emergency key.

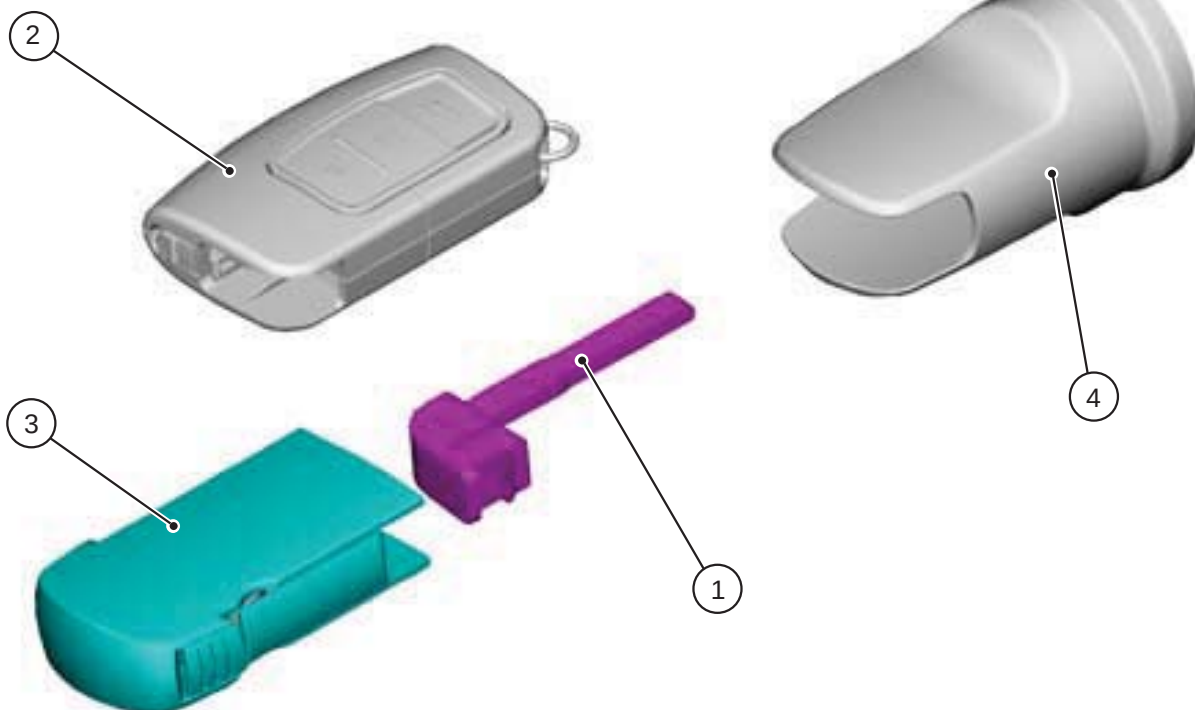
Up to 8 passive vehicle keys can be programmed to one keyless vehicle module. Passive vehicle keys can only be programmed using the **Teach Keys** menu in WDS.

DIAGNOSIS AND TESTING



E56103

The passive vehicle key is equipped with RKE function buttons. When an RKE function button is pressed, the RF signal emitted is received by the RF receiver within the vehicle. Data is sent from the RF receiver to the keyless vehicle module. The keyless vehicle module will validate the transmitted signal and if valid, operate the relevant function.



E56112

Item	Description
1	Emergency mechanical key
2	Passive vehicle key
3	Ignition switch turning knob insert
4	Ignition switch turning knob

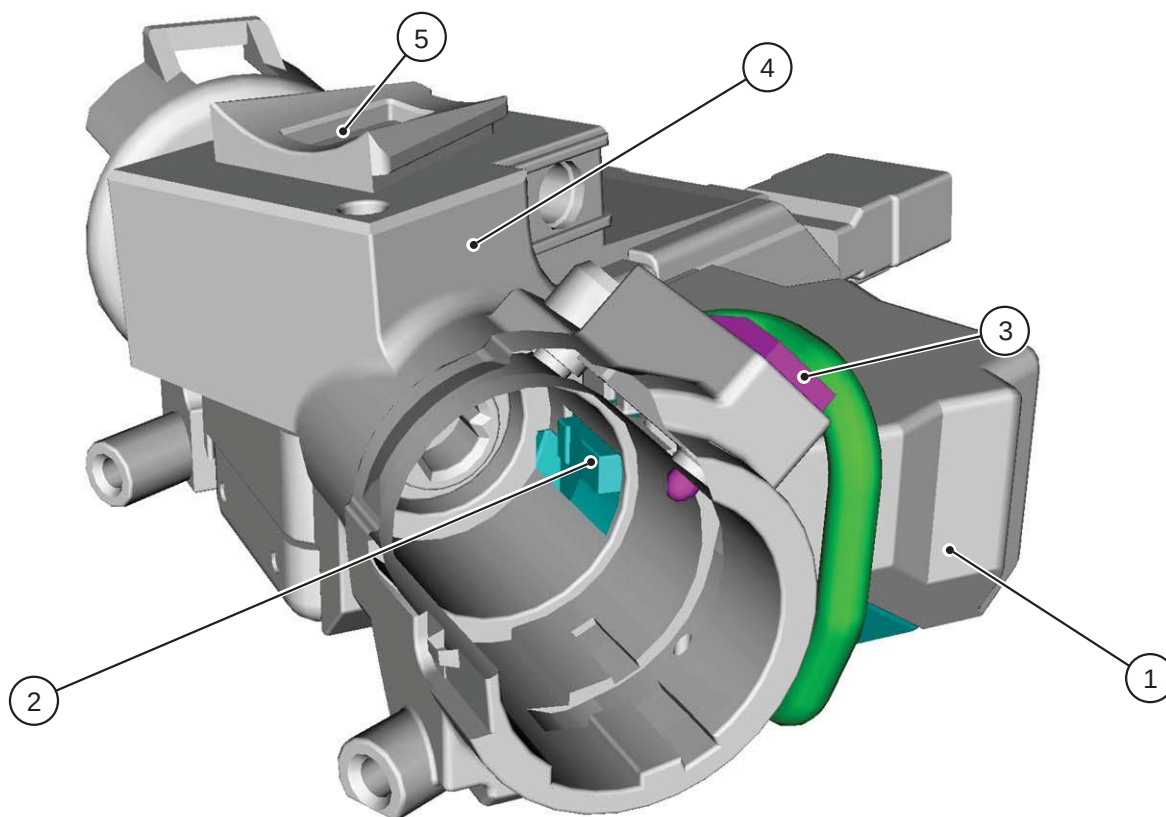
Within the passive vehicle key is concealed a emergency mechanical key. The mechanical key can be used to open the drivers door and start the vehicle. The mechanical key is equipped with a passive anti-theft system (PATS) transducer.

To start the vehicle with the emergency key, it must first be assembled to the ignition switch turning knob insert. When the assembled key is inserted into the ignition switch turning knob, the key insertion detection switch sends a signal to the keyless vehicle module indicating a key has been inserted. The keyless vehicle module will then switch off the passive go and revert to standard PATS functionality.

The emergency key will override the ignition lock cylinder electrical locking function.

DIAGNOSIS AND TESTING

Steering Column Lock Control Unit



E56113

Item	Description
1	Ignition lock cylinder release solenoid
2	Ignition lock cylinder rotation lock
3	Mechanical key insertion detection switch
4	Steering column lock
5	Steering column lock pin

The steering column lock control unit still carries out the same function as the standard steering column lock, but now it has the added functionality of a solenoid operated ignition lock cylinder release.

For the steering column lock to release in keyless vehicle mode, certain criteria must be fulfilled:

- vehicles with automatic transmissions must have the brake pedal pressed
- vehicles with manual transmissions must have the clutch pedal pressed
- a valid passive vehicle key must be within the detection range of the interior keyless vehicle antenna

When the brake or clutch pedal is pressed, the keyless vehicle module is triggered to search for a valid passive vehicle key. If a valid passive vehicle key is detected, the ignition lock cylinder solenoid releases and the ignition switch turning knob can be pressed in. This will release the steering lock and allow the ignition switch turning knob to be rotated to positions I, II and III.

To lock the steering column, the ignition switch turning knob must be turned to the 0 position and pulled out by approximately 5mm.

The PATS function is armed until the ignition switch turning knob has reached position II. When the ignition switch turning knob is in position II, the keyless vehicle module receives a request from the steering column lock control unit to identify the passive key PATS transducer. The keyless vehicle module then sends a command on the medium speed CAN bus to the instrument cluster. The instrument cluster verifies the validity of the passive vehicle key PATS transducer and in turn communicates with the powertrain control module (PCM) and allows the vehicle to start.

If a new steering column lock control unit is installed to a vehicle, before it will function, it must

DIAGNOSIS AND TESTING

be initialized using the **Initialize System** menu in WDS.

Liftgate/Luggage Compartment Lid Lock Button

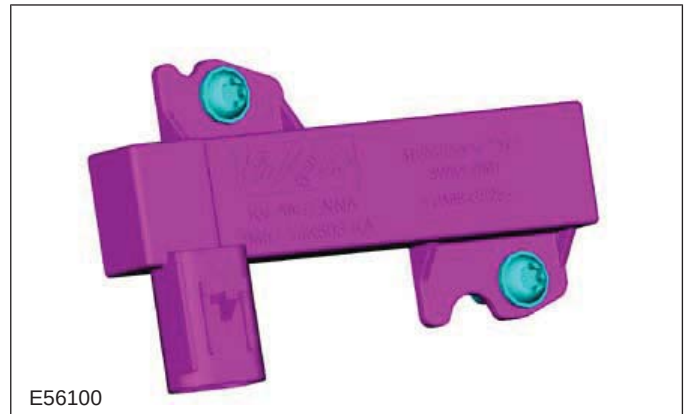


The liftgate/luggage compartment lid lock button is located in the licence plate illumination panel.

If the liftgate/luggage compartment lid is closed and the exterior lock button is pressed while a valid passive vehicle key in the loadspace area, the keyless vehicle module will request that the external keyless vehicle antennas issue a passive vehicle key challenge. If no valid passive vehicle key signal is detected by the RF receiver, the liftgate/luggage compartment lid will be automatically opened. If a valid passive vehicle key signal is detected by the exterior keyless vehicle antennas, the passive vehicle key in the

loadspace area will be deactivated and the vehicle allowed to lock in the normal way. The deactivated passive vehicle key will be reactivated after the ignition switch turning knob has been turned to position II with either a valid passive vehicle key or a mechanical emergency key.

Interior Keyless Vehicle Antenna



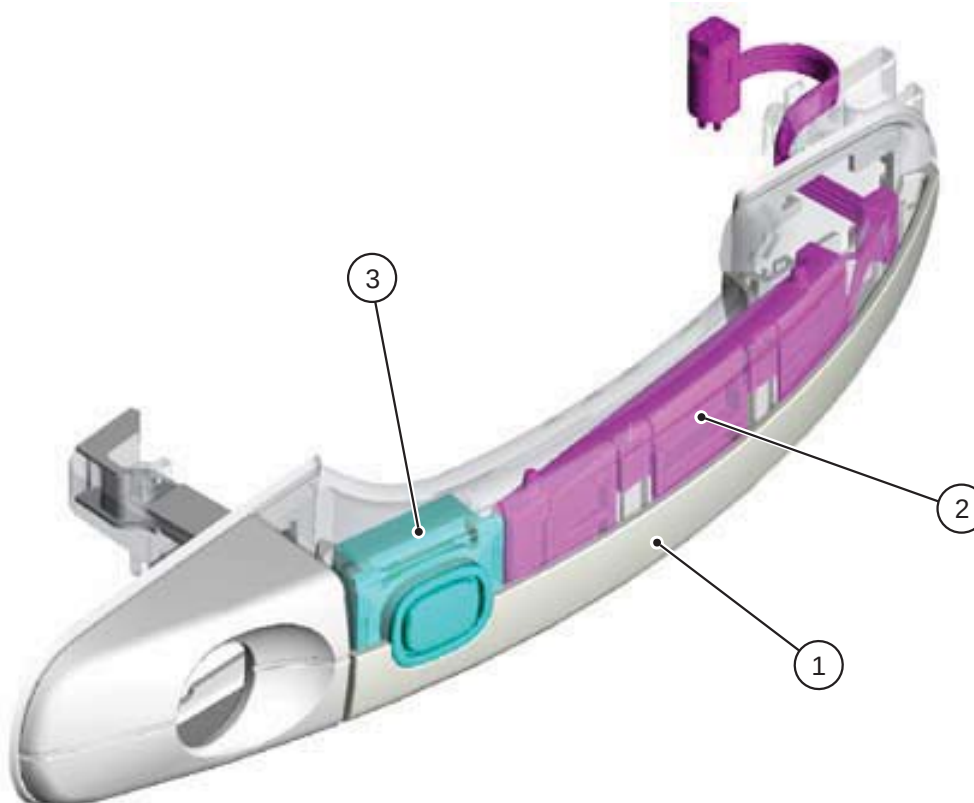
The interior keyless vehicle antenna function is to issue a low frequency challenge to the passive vehicle key while it is in the passenger compartment.

The vehicle is equipped with two interior keyless vehicle antennas in the passenger compartment area and one in the loadspace area.

The loadspace keyless vehicle antenna is fitted to prevent the possibility of accidentally locking the passive vehicle key in the loadspace area.

DIAGNOSIS AND TESTING

Exterior Door Handle Antenna and Lock Switch



E56134

Item	Description
1	Exterior door handle
2	Exterior keyless vehicle antenna
3	Exterior door lock switch

With the vehicle locked and the keyless vehicle system active, the exterior keyless vehicle antennas are dormant and do not scan for a valid passive vehicle key. The exterior keyless vehicle antenna will only wake up and issue a challenge for a valid passive vehicle key when the operator has begun to pull the exterior door handle.

In the time it takes to open a door, the signal determining handle movement is sent to the keyless vehicle module, a request of the exterior keyless vehicle antenna to detect a valid passive vehicle key, the receiving and validation of the passive vehicle key code and the command to the door latch to unlock has occurred. This whole process takes approximately 150 ms.

The only time this function will be impaired is if the vehicle has been left standing for at least 5 days. The keyless vehicle module will then enter a state of reduced energy consumption and when the

vehicle door handle is pulled, it will take a noticeably increased period for the keyless system to wake up and unlock the door(s).

When the operator exits the vehicle, the vehicle is locked by pressing the lock button fitted into the exterior door handle.

With all doors and liftgate/luggage compartment lid closed, the exterior door lock button will initiate a request from the keyless vehicle module to scan the interior and exterior of the vehicle around the pressed lock button for valid passive vehicle key. If a valid passive vehicle key is detected on the exterior of the vehicle only, the door latches will be locked. The door latches will remain locked for a period of 3 seconds to allow for the operator to pull the exterior door handle to check if the door is locked. After 3 seconds, if the exterior door handle is pulled, the door latch will release as in a normal keyless vehicle entry. If a valid passive vehicle key is detected in the interior of the vehicle and not on the exterior, the latches will not be locked. The vehicle will also not be locked if the ignition switch turning knob is in the II position. Passive vehicle locking will be confirmed by the operation of the vehicles turn signal lamps.

DIAGNOSIS AND TESTING

If the ignition turning knob is in position I or 0 and the steering column lock is not engaged, the keyless vehicle module will allow the locking to operate. A warning chime will sound and a warning **ENGAGE STEERING LOCK** will be displayed in the instrument cluster LCD area if driver's door is opened.

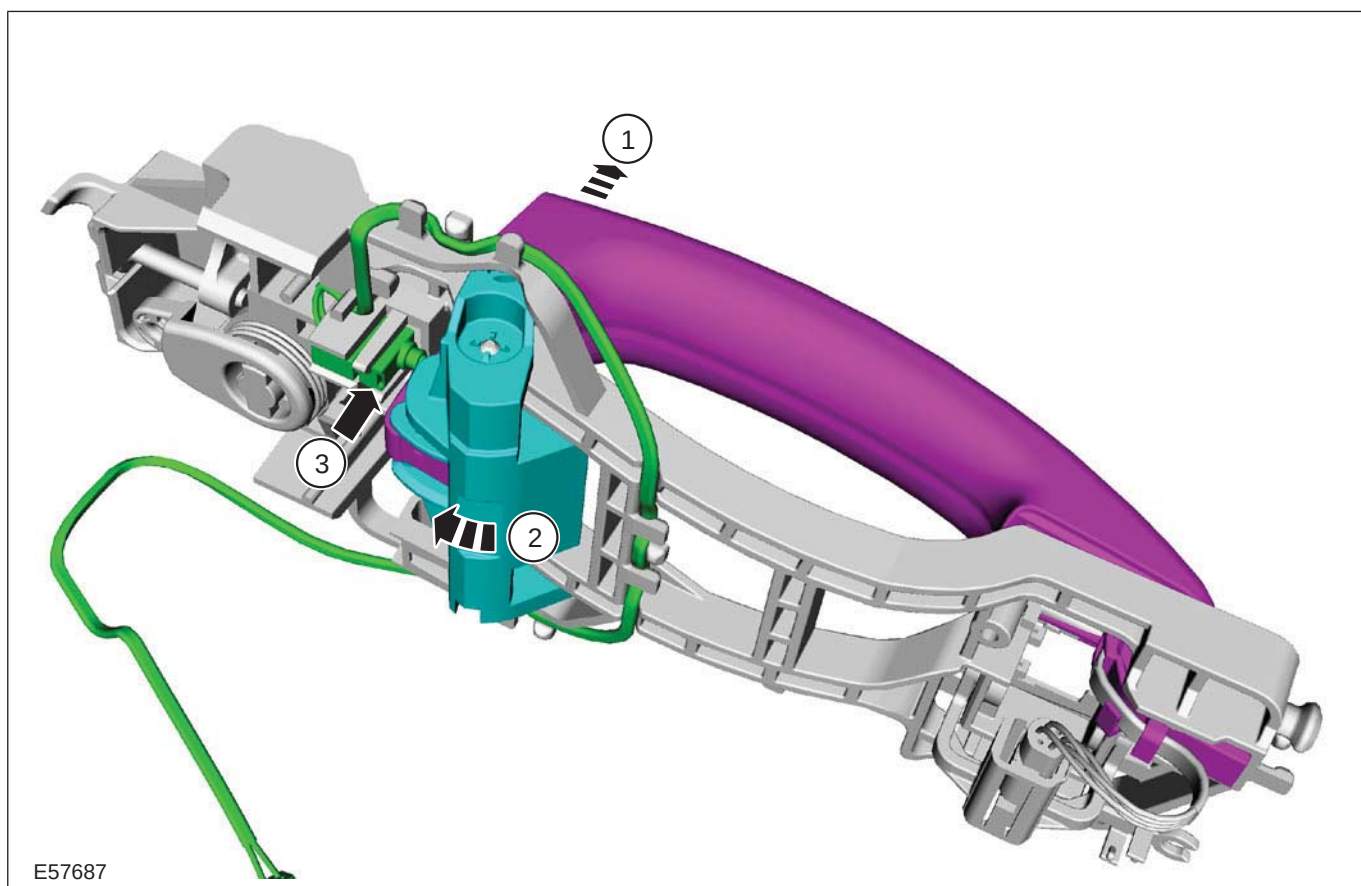
To double lock the vehicle, requires the exterior lock button to be pressed twice. The second pressing of the exterior lock button must occur within 3 seconds of it first being pressed.

To operate the global closing feature, requires the exterior lock button on the drivers door only, to be pressed and held pressed for a period of 2 seconds.

The keyless vehicle central unlocking function can be programed to operate the drivers door only or all the doors. To set the desired function, the lock and unlock button at the passive key has to be pressed in parallel for 4 seconds. If a rear exterior door handle or passenger exterior door handle is pulled when the keyless vehicle system is in driver door unlock mode, all doors will remain locked. If the driver exterior door handle is pulled when the keyless vehicle system is in driver door unlock mode, only the driver door will unlock and the door handle passive entry for the rear doors and passenger door will be inoperative.

In driver door unlock mode, the passenger doors can only be unlocked using the interior keyless vehicle system unlock button.

Exterior Door Handle Pull Switch



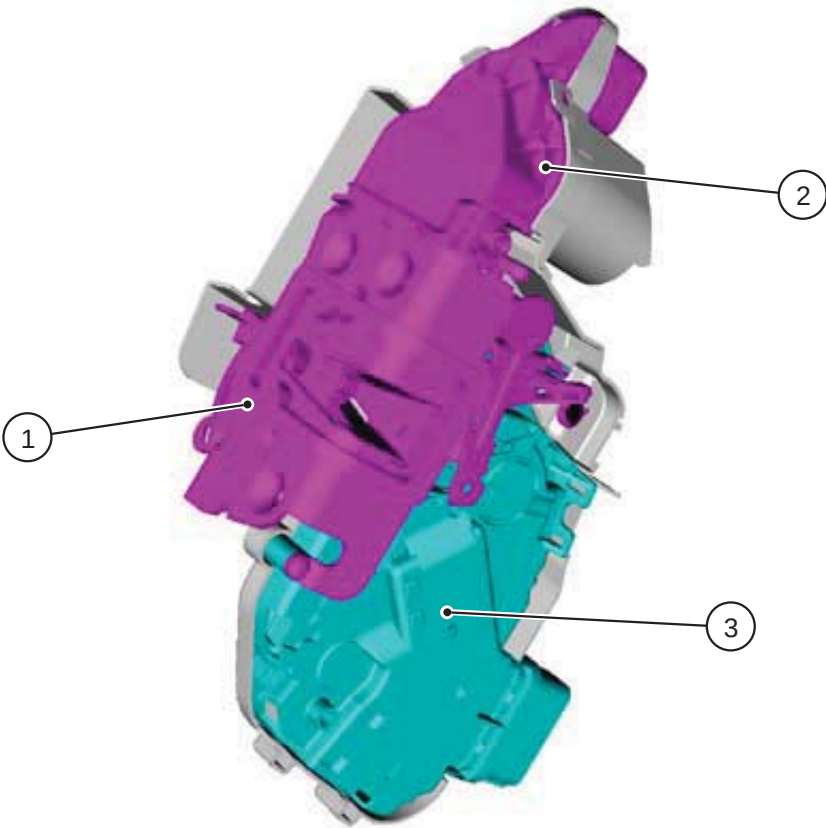
E57687

Item	Description
1	Exterior door handle
2	Door latch actuator
3	Exterior door handle pull switch

The exterior door handle switch is operated from a cam lobe attached to the door latch actuator. As the exterior door handle is pulled, the door latch actuator rotates and operates the exterior door handle pull switch.

DIAGNOSIS AND TESTING

Door Latch



E56150

Item	Description
1	Door latch
2	Door latch unlatch motor
3	Central/double locking motor

The keyless vehicle locking system requires unique door latches.

The door latches are equipped with electric motors that replace the mechanical unlatch function of the exterior door handle when the vehicle is in keyless vehicle system mode. This is because the exterior door handle is already in a semi pulled state before the latch unlatch command is received by the latch lock motors, the latch linkage is not in a position to engage with the exterior door handle.

If the emergency key is used to enter the vehicle, the standard mechanical latch linkage is utilized.

Central and double locking is still controlled by the door control modules, however the commands to lock and unlock are relayed through the keyless vehicle module on the high-speed CAN bus circuit.

Interior Unlock Switch



E56179

The interior unlock switches function, is to unlock the rear doors and passenger door locks when the vehicle has been entered using the passive entry system in drivers unlock mode.

DIAGNOSIS AND TESTING

Keyless Vehicle Module



The keyless vehicle module is at the heart of the keyless vehicle system. It communicates with the PJB and with the instrument cluster on the medium speed CAN bus circuit. The keyless vehicle module stores the passive vehicle key codes. If a new keyless vehicle module is installed in a vehicle, the following sequence must be followed before the system can function.

- Using WDS Program Module routine, program the keyless vehicle module.
- Using the Initialize System routine, initialize the keyless vehicle module to the CJB and to the steering column lock control unit.
- Using the Teach Key function, teach the minimum number of passive keys required.

Inspection and Verification (Vehicles with Keyless Entry)

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

Visual Inspection Chart

Mechanical	Electrical
– Misaligned door(s), hood, liftgate, tailgate, luggage compartment and hood – Door latch(es) – Liftgate latch – Luggage compartment lid latch – Hood latch – Actuating Cable(s) – Exterior door handle(s) – Door latch remote control(s) – Door lock cylinder	– Fuse(s) – Relay(s) – Wiring harness – Electrical connector(s) – Door latch motor(s) – Vehicle battery – Liftgate lock switch – Luggage compartment lid lock switch – Passive vehicle key – Keyless vehicle module – Keyless vehicle interior antenna(s) – Keyless vehicle exterior antenna(s) – RF receiver – Ignition lock cylinder key insert switch – Ignition lock cylinder release solenoid – Liftgate exterior release switch – Luggage compartment lid release switch

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, connect WDS to the data link connector.
5. Select the **Remote Keyless Entry** menu.
6. Retrieve the diagnostic trouble codes (DTC) and refer to the Diagnostic Trouble Code (DTC) Index - Keyless Vehicle Module.
7. If no DTC(s) are stored in the keyless vehicle module, retrieve the DTC(s) from the CJB and refer to the DTC index - CJB.

DIAGNOSIS AND TESTING

Diagnostic Trouble Code (DTC) Index - Keyless Vehicle Module

DTC	Description	Possible Source	Action
B2477	Keyless vehicle module configuration failure	- Keyless vehicle module programming - Keyless vehicle module	Using WDS, Program Module menu. PROGRAM the keyless vehicle module. TEST the system for normal operation. If the DTC is repeated, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). Using WDS, Remote Keyless Entry, Initialize System menu. INITIALIZE the keyless entry system. TEST the system for normal operation
B1342	Keyless vehicle module failure	Keyless vehicle module	INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). Using WDS, Remote Keyless Entry, Initialize System menu. INITIALIZE the keyless entry system. TEST the system for normal operation
B1096	Communication failure between keyless vehicle module and steering column lock control unit	- Wiring harness - Keyless vehicle module - Steering column lock control unit	GO to Pinpoint Test A.

DIAGNOSIS AND TESTING

DTC	Description	Possible Source	Action
B1095	Steering column lock control unit failure	Steering column lock control unit	INSTALL a new steering column lock control unit. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). Using WDS, Remote Keyless Entry, Initialize System menu. INITIALIZE the keyless entry system. TEST the system for normal operation
B1094	Steering column lock control unit identification not stored	Steering column lock control unit initialization	Using WDS, Remote Keyless Entry, Initialize System menu. INITIALIZE the keyless entry system. Test the system for normal operation
B1093	Steering column lock control unit identification does not match stored data	Steering column lock control unit initialization	Using WDS, Remote Keyless Entry, Initialize System menu. INITIALIZE the keyless entry system. TEST the system for normal operation
B1092	Steering column lock control unit to keyless vehicle module wiring harness short to battery positive	- Wiring harness - Steering column lock control unit - Keyless vehicle module	GO to Pinpoint Test B.
B1069	Keyless vehicle module secure identification missing	Keyless vehicle module initialization	Using WDS, Remote Keyless Entry, Initialize System menu. INITIALIZE the keyless entry system. TEST the system for normal operation
B2090	RF antenna data circuit, short to battery or short to ground	- RF antenna harness - RF antenna - Keyless vehicle module - Central junction box	GO to Pinpoint Test C.

DIAGNOSIS AND TESTING

DTC	Description	Possible Source	Action
B2091	RF antenna data circuit, open circuit	- RF antenna harness - RF antenna - Keyless vehicle module - Central junction box	GO to Pinpoint Test D.
B1087	Passenger side rear door latch clutch switch active without door handle unlock pull switch functioning	- Passenger side rear door latch wiring harness - Passenger side rear door latch - Passenger side rear door unlock switch	For LHD vehicles, GO to Pinpoint Test E.
B1088	Drivers side rear door latch clutch switch active without door handle unlock pull switch functioning	- Drivers side rear door latch wiring harness - Drivers side rear door latch - Drivers side rear door unlock switch	GO to Pinpoint Test F.
B1089	Passenger side front door latch clutch switch active without door handle unlock pull switch functioning	- Passenger side front door latch wiring harness - Passenger side front door latch - Passenger side front door unlock switch	GO to Pinpoint Test G.
B1090	Drivers side front door latch clutch switch active without door handle unlock pull switch functioning	- Drivers side front door latch wiring harness - Drivers side front door latch - Drivers side front door unlock switch	GO to Pinpoint Test H.
B1078	Drivers side door exterior keyless antenna circuit, short to battery positive	- Drivers side door exterior keyless vehicle antenna wiring harness - Drivers side door exterior keyless vehicle antenna - Key-free module	GO to Pinpoint Test I.

DIAGNOSIS AND TESTING

DTC	Description	Possible Source	Action
B1079	Passengers side door exterior keyless vehicle antenna circuit, short to battery positive	- Passengers side door exterior keyless vehicle antenna wiring harness - Passengers side door exterior keyless vehicle antenna - Keyless vehicle module	GO to Pinpoint Test J.
B1080	Liftgate/luggage compartment lid exterior keyless vehicle antenna circuit, short to battery positive	- Liftgate/luggage compartment lid exterior keyless vehicle antenna wiring harness - Liftgate/luggage compartment lid exterior keyless vehicle antenna - Keyless vehicle module	GO to Pinpoint Test K.
B1081	Interior passenger area keyless vehicle antenna circuit, short to battery positive	- Interior keyless vehicle antenna wiring harness - Interior keyless vehicle antenna(s) - Keyless vehicle module	- Using the Passive Key Detection Test, in this section, Identify the inoperative keyless vehicle interior antenna. - If the front interior keyless vehicle antenna is inoperative, GO to Pinpoint Test L. - If the center interior keyless vehicle antenna is inoperative, GO to Pinpoint Test M.
B1082	Interior loadspace keyless vehicle antenna circuit, short to battery positive	- Interior loadspace keyless vehicle antenna wiring harness - Interior loadspace keyless vehicle antenna - keyless vehicle module	GO to Pinpoint Test N.

DIAGNOSIS AND TESTING

DTC	Description	Possible Source	Action
B1077	Drivers side door exterior keyless vehicle antenna circuit, short to ground	- Drivers side door exterior keyless vehicle antenna wiring harness - Drivers side door exterior keyless vehicle antenna - Keyless vehicle module	GO to Pinpoint Test O.
B1083	Passenger side door exterior keyless vehicle antenna circuit, short to ground	- Passengers side door exterior keyless vehicle antenna wiring harness - Passengers side door exterior keyless vehicle antenna - Keyless vehicle module	GO to Pinpoint Test P.
B1086	Liftgate/luggage compartment lid exterior keyless vehicle antenna circuit, short to ground	- Liftgate/luggage compartment lid exterior keyless vehicle antenna wiring harness - Liftgate/luggage compartment exterior keyless vehicle antenna - Keyless vehicle module	GO to Pinpoint Test Q.
B1070	Interior passenger area keyless vehicle antenna circuit, short to ground	- Interior keyless vehicle antenna wiring harness - Interior keyless vehicle antenna(s) - Keyless vehicle module	- Using the Passive Key Detection Test, Identify the inoperative keyless vehicle interior antenna. - If the front interior keyless vehicle antenna is inoperative, GO to Pinpoint Test R. - If the center interior keyless vehicle antenna is inoperative, GO to Pinpoint Test S.

DIAGNOSIS AND TESTING

DTC	Description	Possible Source	Action
B1071	Interior loadspace keyless vehicle antenna circuit, short to ground	- Interior loadspace keyless vehicle antenna wiring harness - Interior loadspace keyless vehicle antenna - keyless vehicle module	GO to Pinpoint Test T.
B1072	Drivers side door exterior keyless vehicle antenna circuit, open circuit	- Drivers side door exterior keyless vehicle antenna wiring harness - Drivers side door exterior keyless vehicle antenna - keyless vehicle module	GO to Pinpoint Test U.
B1073	Passenger side door exterior keyless vehicle antenna circuit, open circuit	- Passengers side door exterior keyless vehicle antenna wiring harness - Passengers side door exterior keyless vehicle antenna - keyless vehicle module	GO to Pinpoint Test V.
B1074	Liftgate/luggage compartment lid exterior keyless vehicle antenna circuit, open circuit	- Liftgate/luggage compartment lid exterior keyless vehicle antenna wiring harness - Liftgate/luggage compartment lid exterior keyless vehicle antenna - keyless vehicle module	GO to Pinpoint Test W.

DIAGNOSIS AND TESTING

DTC	Description	Possible Source	Action
B1075	Interior passenger area keyless vehicle antenna circuit, open circuit	- Interior keyless vehicle antenna wiring harness - Interior keyless vehicle antenna(s) - keyless vehicle module	- Using the Passive Key Detection Test, Identify the inoperative keyless vehicle interior antenna. - If the front interior keyless vehicle antenna is inoperative, GO to Pinpoint Test X. - If the center interior keyless vehicle antenna is inoperative, GO to Pinpoint Test Y.
B1076	Interior loadspace keyless vehicle antenna circuit, open circuit	- Interior loadspace keyless vehicle antenna wiring harness - Interior loadspace keyless vehicle antenna - keyless vehicle module	GO to Pinpoint Test Z.
B1091	Passive vehicle key programming error	Less than minimum number of passive vehicle keys known to the keyless vehicle module	Using WDS, Remote Keyless Entry, Clear Keys menu, CLEAR all programmed passive keys. Using the Add Keys menu, PROGRAM the minimum required number of passive keys to the keyless vehicle module. TEST the system for normal operation.

Diagnostic Trouble Code (DTC) Index - CJB

DTC	Description	Possible Source	Action
B1311 - Vehicles with keyless vehicle system only.	Unlock switch circuit open circuit	- Unlock switch wiring harness - Unlock switch	GO to Pinpoint Test AE.
B1320 - All vehicles.	Drivers side front door ajar switch circuit open circuit	- Drivers side front door latch wiring harness - Drivers side front door latch	GO to Pinpoint Test AF.

DIAGNOSIS AND TESTING

DTC	Description	Possible Source	Action
B1331 - All vehicles.	Liftgate/luggage compartment lid latch ajar switch circuit short to ground	- Liftgate/luggage compartment lid latch ajar switch wiring harness - Liftgate/luggage compartment lid latch ajar switch	GO to Pinpoint Test AG.
B2090 - Vehicles without keyless vehicle system.	- RF receiver data circuit, short circuit - RF receiver data circuit, short to battery positive	- RF receiver wiring harness - RF receiver - CJB	GO to Pinpoint Test AA.
B2091 - Vehicles without keyless vehicle system.	- RF receiver data circuit, open circuit - No communication between RF receiver and CJB	- RF receiver wiring harness - RF receiver - CJB	GO to Pinpoint Test AB.
B2094 - Vehicles without keyless vehicle system.	RKE transmitter low battery	RKE transmitter battery	INSTALL a new RKE transmitter battery. Refer to the owners handbook. TEST the system for normal operation
B2425 - Vehicles without keyless vehicle system.	RKE transmitter out of synchronization	RKE transmitter	CHECK that all known RKE keys function correctly. CLEAR the DTC. TEST the system for normal operation.
B2894 - All vehicles.	- Liftgate/luggage compartment lid release output circuit, short to ground - Liftgate/luggage compartment lid release output circuit, open circuit	- Liftgate/luggage compartment lid latch wiring harness - liftgate/luggage compartment lid latch motor - CJB	GO to Pinpoint Test AC.
B2970 - All vehicles.	liftgate/luggage compartment lid exterior release switch circuit, short to ground	- liftgate/luggage compartment lid exterior release switch wiring harness - liftgate/luggage compartment lid exterior release switch - CJB	GO to Pinpoint Test AD.

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DTC	Description	Possible Source	Action
U1900	CAN bus communication error	- Instrument cluster - CJB - Keyless vehicle module - CAN bus circuit	If this code is related to the keyless vehicle system, the RKE functions and central door locking functions will not operate. To continue the diagnostic,

Keyless Vehicle Service Test Procedure(s)

To carry out a passive key detection test or keyless vehicle actuator test, the keyless vehicle module diagnosis entry procedure must be carried out first.

Keyless Vehicle Module Passive key Diagnosis Entry**1. NOTE: Test mode entry possible on drivers door only (No entry if drivers door lock button is defect.**

Insert the emergency mechanical key into the ignition lock cylinder.

2. Rotate the emergency key to position II.
3. Pull, and hold the driver-side front exterior door handle.
4. Press the driver-side front exterior door handle lock button 10 times.
5. Rotate the emergency mechanical key to position 0.
6. Remove the emergency mechanical key from the ignition lock cylinder.

The keyless vehicle module is now in passive key diagnosis mode. The module will remain in diagnosis mode for 30 seconds or until the ignition lock cylinder is rotated to position II.

Passive Key Detection Test

After each activation of a keyless vehicle system function, the 30 second time out will be restarted.

1. Press the driver-side front exterior door handle lock button.

2. Position the passive vehicle key in the defined reception area of the driver-side front exterior door handle keyless vehicle antenna. For every successful detection of the passive vehicle key, the vehicle indicator lights will flash once.
3. Press the passenger-side front exterior door handle lock button.
4. Position the passive vehicle key in the defined reception area of the passenger side front exterior door handle keyless vehicle antenna. For every successful detection of the passive vehicle key, the vehicle indicator lights will flash once.
5. Press the liftgate or luggage compartment lid lock button.
6. Position the passive vehicle key in the defined reception area of the rear bumper keyless vehicle antenna. For every successful detection of the passive vehicle key, the vehicle indicator lights will flash once.
7. Push in the ignition switch turning knob.
8. Position the passive vehicle key in the front of the passenger compartment. For every successful detection of the passive vehicle key by the front interior keyless vehicle antenna, the vehicle indicator lights will flash once.
9. Position the passive vehicle key towards the center rear of the passenger compartment. For every successful detection of the passive vehicle key by the center interior keyless vehicle antenna, the vehicle indicator lights will flash once.
10. Position the passive vehicle key in the luggage compartment area of the vehicle. For every successful detection of the passive vehicle key by the luggage compartment keyless vehicle

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antenna, the vehicle indicator lights will flash once.

The interior keyless vehicle antenna can also be activated for testing by pressing the clutch pedal once, if equipped.

If the vehicle indicator lights do not flash, a fault is indicated with the antenna or antenna circuit(s).

Keyless Vehicle Module Actuator test Diagnosis Entry

NOTE: To carry out a keyless vehicle actuator test, the keyless vehicle module diagnosis entry procedure must be carried out first.

NOTE: Test mode entry possible on drivers door only (No entry if drivers door lock button is defect).

1. Insert the emergency mechanical key into the ignition lock cylinder.
2. Rotate the emergency key to position II and back to position I.
3. Pull, and hold the driver-side front exterior door handle.
4. Press the driver-side front exterior door handle lock button 10 times.
5. Rotate the emergency mechanical key to position 0.
6. Remove the emergency mechanical key from the ignition lock cylinder.

The keyless vehicle module is now in Actuator test diagnosis mode. The module will remain in diagnosis mode for 30 seconds.

Keyless Vehicle Actuator Test

After each activation of a keyless vehicle system function, the 30 second time out will be restarted.

1. Press the driver-side front exterior door handle lock button. The vehicle indicator lights will flash once.
2. Press the passenger-side front exterior door handle lock button. The vehicle indicator lights will flash once.
3. Pull the driver-side front exterior door handle. The vehicle indicator lights will flash once.
4. Pull the passenger-side front exterior door handle. The vehicle indicator lights will flash once.
5. Pull the passenger-side rear exterior door handle. The vehicle indicator lights will flash once.
6. Pull the driver-side rear exterior door handle. The vehicle indicator lights will flash once.
7. Press the liftgate or luggage compartment lid exterior release switch. The vehicle indicator lights will flash once.
8. Press the liftgate or luggage compartment lid lock switch. The vehicle indicator lights will flash once.
9. Press the clutch pedal (if equipped). The vehicle indicator lights will flash once.
10. Press the brake pedal. The vehicle indicator lights will flash once.
11. Push in the ignition switch turning knob. The vehicle indicator lights will flash once.
12. Pull out the ignition switch turning knob. The vehicle indicator lights will flash once.
13. Insert the emergency key into the ignition lock cylinder. The vehicle indicator lights will flash once.
14. Press the interior unlock switch. The vehicle indicator lights will flash once.

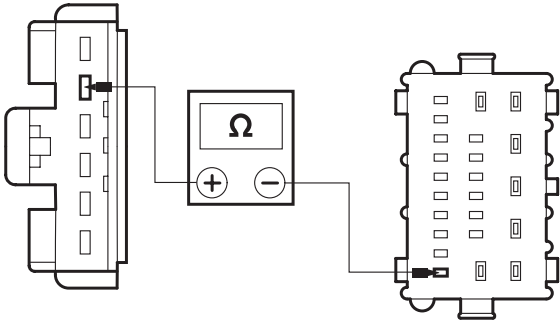
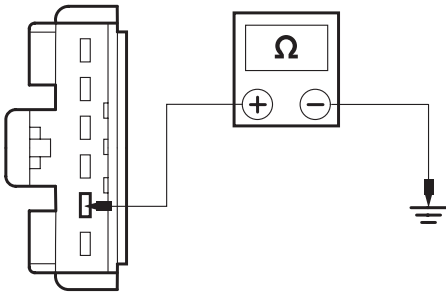
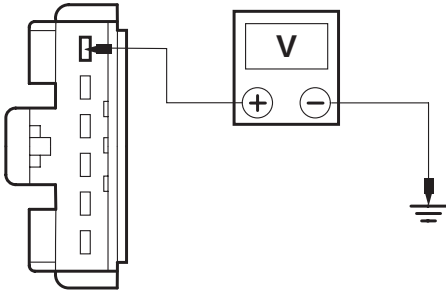
If the vehicle indicator lights do not flash, a fault is indicated with the the component or circuit(s) of the operated component.

Pinpoint Test (Vehicles with Keyless Vehicle System)

PINPOINT TEST A : DTC: B1096

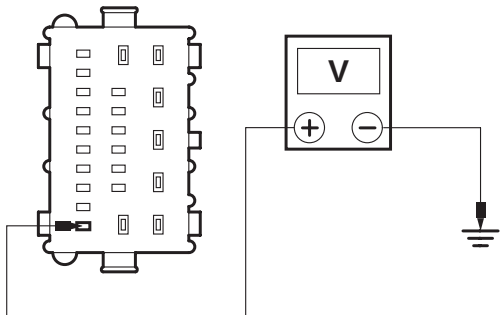
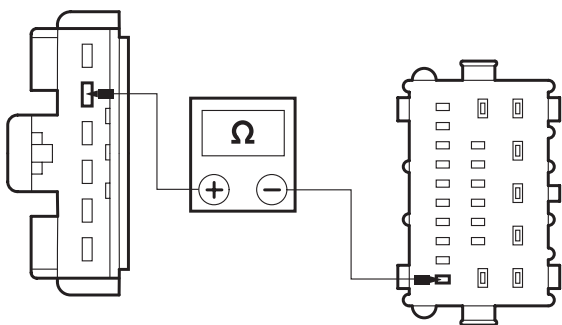
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
A1: CHECK CIRCUIT 8-AB33 (WH/BK) FOR OPEN CIRCUIT	
	1 Disconnect Steering Column Lock Control Unit C233.
	2 Disconnect Keyless Vehicle Module C216.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57183	3 Measure the resistance between the steering column lock control unit C233 pin 5, circuit 8-AB33 (WH/BK), harness side and the keyless vehicle module C216 pin 14, circuit 8-AB33 (WH/BK), harness side. - Is the resistance less than 5 ohms? → Yes GO to A2. → No REPAIR circuit 8-AB33 (WH/BK). TEST the system for normal operation.
A2: CHECK CIRCUIT 91-AB33 (BK/RD) FOR OPEN CIRCUIT	
 E57184	1 Measure the resistance between the steering column lock control unit C233 pin 2, circuit 91-AB33 (BK/RD), harness side and ground. - Is the resistance less than 5 ohms? → Yes GO to A3. → No REPAIR circuit 91-AB33 (BK/RD). TEST the system for normal operation.
A3: CHECK CIRCUIT 30-AB33 (RD) FOR VOLTAGE	
	1 Insert the vehicle emergency mechanical key into the ignition switch turning knob. 2 Ignition switch in position II.
 E57185	3 Measure the voltage between the steering column lock control unit C233 pin 6, circuit 30-AB33 (RD), harness side and ground. - Is the voltage greater than 10 volts? → Yes INSTALL a new steering column lock control unit. TEST the system for normal operation. If the concern is still evident, INSTALL a new keyless vehicle module.
	REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No REPAIR circuit 30-AB33 (RD). TEST the system for normal operation.

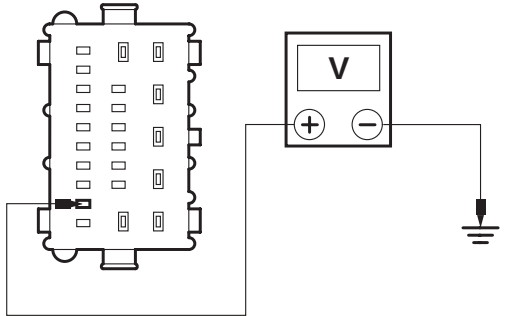
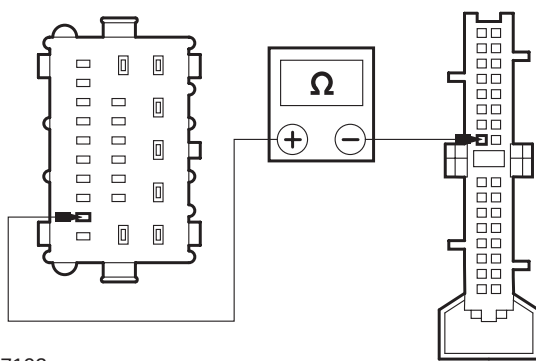
DIAGNOSIS AND TESTING

PINPOINT TEST B : DTC: B1092

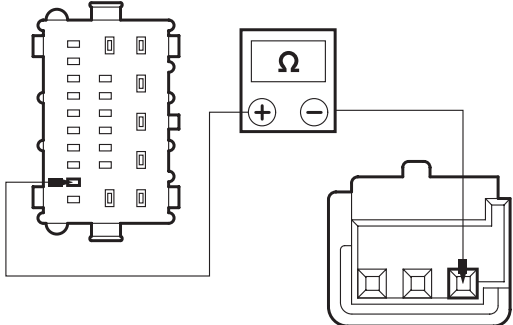
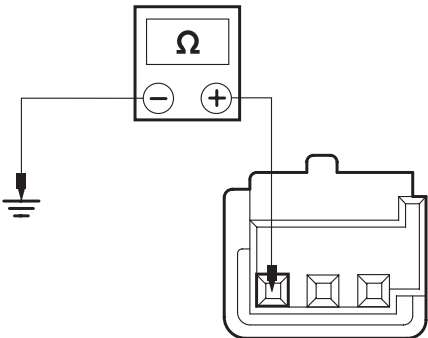
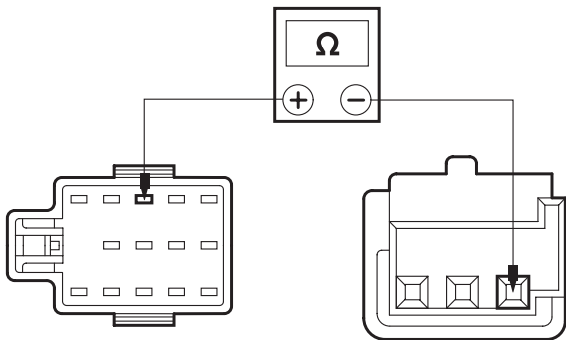
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
B1: CHECK CIRCUIT 8-AB33 (WH/BK) FOR SHORT TO BATTERY VOLTAGE	
 E57186	1 Disconnect Keyless Vehicle Module C216. 2 Insert the vehicle emergency mechanical key into the ignition switch turning knob. 3 Ignition switch in position II.
	4 Measure the voltage between the keyless vehicle module C216 pin 14, circuit 8-AB33 (WH/BK), harness side and ground. - Is the voltage greater than 10 volts? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No GO to B2.
B2: CHECK THE STEERING COLUMN LOCK CONTROL UNIT FOR SHORT TO BATTERY VOLTAGE	
 E57183	1 Ignition switch in position 0. 2 Disconnect Steering Column Lock Control Unit C233. 3 Ignition switch in position II.
	4 Measure the resistance between the keyless vehicle module C216 pin 14, circuit 8-AB33 (WH/BK), and Steering Column Lock Control Unit C233 pin 5. - Is the resistance less than 5 ohms? → Yes INSTALL a new steering column lock control unit. TEST the system for normal operation. → No REPAIR circuit 8-AB33 (WH/BK). TEST the system for normal operation.

DIAGNOSIS AND TESTING

PINPOINT TEST C : DTC: B2090

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
C1: DETERMINE THE EQUIPMENT LEVEL OF THE CENTRAL JUNCTION BOX (CJB).	
	- Unfasten the CJB and fold it down. - Is the location for connector C100 on the top of the CJB? → Yes GO to C7. → No GO to C8.
C2: CHECK CIRCUIT 8-AB22 (WH/GN) FOR SHORT TO GROUND	
	- Disconnect Keyless Vehicle Module C216. - Insert the vehicle emergency mechanical key into the ignition switch turning knob. - Ignition switch in position II.
 E57188	- Measure the voltage between the keyless vehicle module C216 pin 15, circuit 8-AB22 (WH/GN), harness side and ground. - Is the voltage greater than 10 volts? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No GO to C3.
C3: CHECK CIRCUIT 8-AB22 (WH/GN) FOR SHORT TO GROUND	
	Disconnect CJB C99.
 E57192	- Measure the resistance between the keyless vehicle module C216 pin 15, circuit 8-AB22 (WH/GN), harness side and CJB C99 pin 25, circuit 8-AB22 (WH/GN), harness side. - Is the resistance less than 5 ohms? → Yes GO to C4. → No REPAIR circuit 8-AB22 (WH/GN). TEST the system for normal operation.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
C4: CHECK THE RF RECEIVER DATA LINE TO KEYLESS VEHICLE MODULE	
 E74068	1 Disconnect RF Receiver C390.
	2 Measure the resistance between the RF Receiver C390 pin 1, circuit 8-AA57 (WH), and keyless vehicle module C216 pin 15, circuit 8-AB22 (WH/GN). • Is the resistance less than 5 ohms? → Yes GO to C5. → No GO to C6.
C5: CHECK CIRCUIT 8-AA57 (WH) FOR POWER	
 E74069	1 Disconnect RF Receiver C390.
	2 Measure the voltage between the RF Receiver C390 pin 3, circuit 29-AA57 (OG/YE), harness side and ground. • Is the voltage greater than 10 volts? → Yes INSTALL a new RF receiver. TEST the system for normal operation. → No GO to C8.
C6: CHECK CIRCUIT 8-AA57 FOR RESISTANCE	
 E57473	1 Disconnect CJB C98.
	2 Measure the resistance between the CJB C98 pin 6, circuit 8-AA57 (WH), and RF Receiver C390 pin 1, circuit 8-AA57 (WH). • Is the resistance less than 5 ohms? → Yes INSTALL a new CJB. TEST the system for normal operation. → No REPAIR circuit 8-AA57 (WH). TEST the system for normal operation.

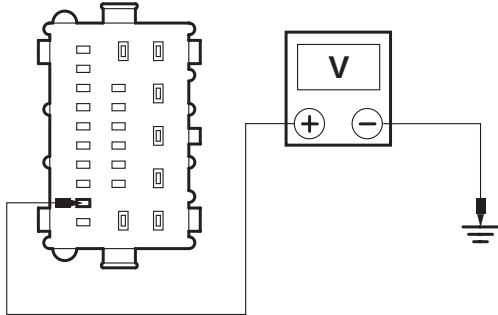
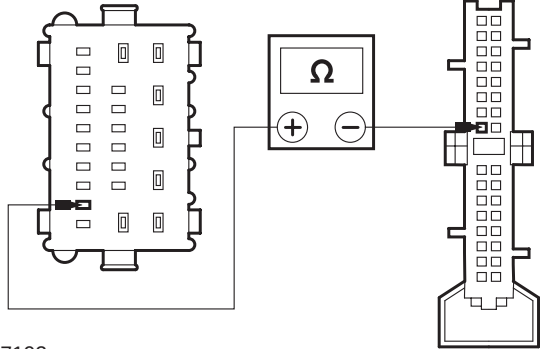
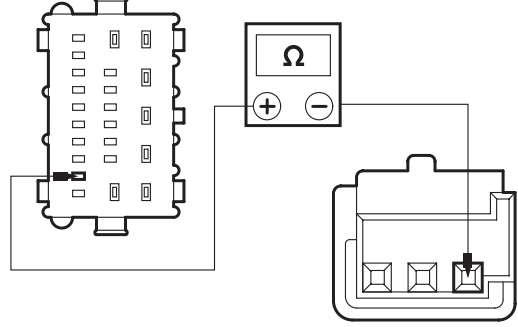
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
C7: CHECK CJB FUSE F102(10A)	
	1 Check Fuse F102(10A) at CJB. • Is the fuse OK? → Yes INSTALL a new CJB. - TEST the system for normal operation. → No INSTALL a new Fuse. TEST the System for normal operation.
C8: CHECK CJB FUSE F43 (10A)	
	1 Check Fuse F43 (10A) at CJB. • Is the Fuse OK? → Yes INSTALL a new CJB. → No INSTALL a new Fuse. TEST the System for normal operation.

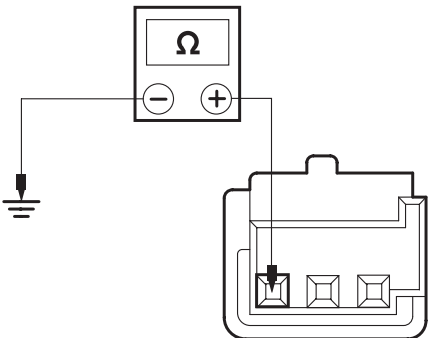
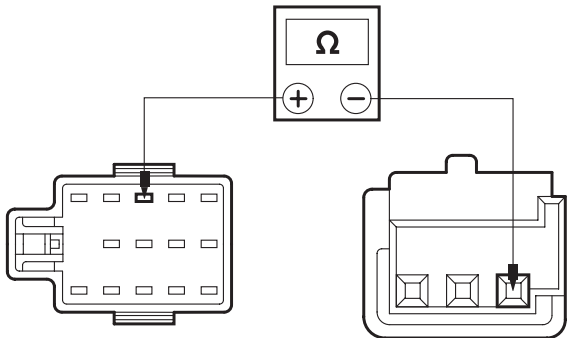
PINPOINT TEST D : DTC: B2091

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
D1: CHECK CIRCUIT 8-AB22 (WH/GN) FOR OPEN CIRCUIT	
	1 Disconnect Keyless Vehicle Module C216. 2 Ignition switch in position II.

DIAGNOSIS AND TESTING

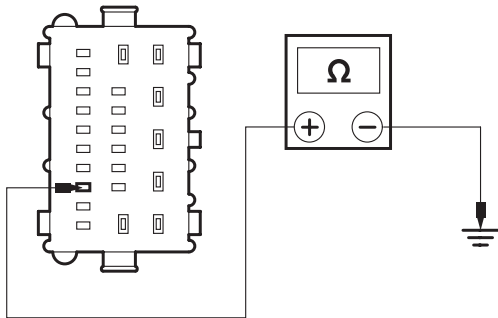
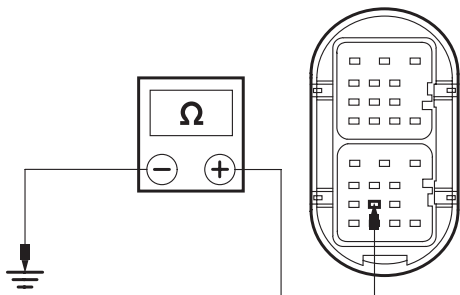
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57188	3 Measure the voltage between the keyless vehicle module C216 pin 15, circuit 8-AB22 (WH/GN), harness side and ground. Is the voltage greater than 10 volts? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No GO to D2.
D2: CHECK CIRCUIT 8-AB22 (WH/GN) FOR SHORT TO GROUND	
 E57192	1 Disconnect CJB C99. 2 Measure the resistance between the keyless vehicle module C216 pin 15, circuit 8-AB22 (WH/GN), harness side and CJB C99 pin 25, circuit 8-AB22 (WH/GN), harness side. Is the resistance less than 5 ohms? → Yes GO to D3. → No REPAIR circuit 8-AB22 (WH/GN). TEST the system for normal operation.
D3: CHECK CIRCUIT 8-AA57 (WH) FOR OPEN CIRCUIT	
 E74068	1 Disconnect RF Receiver C390. 2 Measure the resistance between the RF Receiver C390 pin 1, circuit 8-AA57 (WH), and keyless vehicle module C216 pin 15, circuit 8-AB22 (WH/GN). Is the resistance less than 5 ohms? → Yes GO to D4. → No GO to D5.

DIAGNOSIS AND TESTING

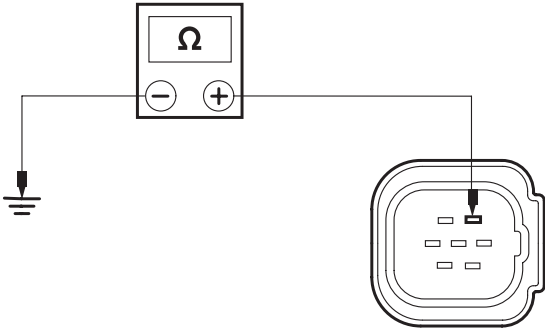
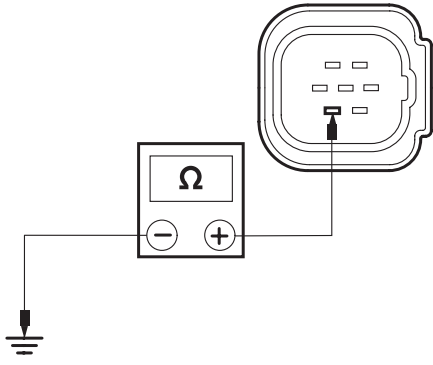
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
D4: CHECK RF RECEIVER POWER SUPPLY 8-AA57  E74069	1 Measure the voltage between the RF Receiver C390 pin 3, circuit 29-AA57 (OG/YE), harness side and ground. Is the voltage greater than 10 volts? → Yes INSTALL a new RF receiver. TEST the system for normal operation. → No GO to D6.
D5: CHECK CIRCUIT 8-AA57 FOR RESISTANCE  E57473	1 Disconnect CJB C98.. 2 Measure the resistance between the CJB C98 pin 6, circuit 8-AA57 (WH), and RF Receiver C390 pin 1, circuit 8-AA57 (WH). Is the resistance less than 5 ohms? → Yes INSTALL a new CJB. TEST the system for normal operation. → No REPAIR circuit 8-AA57 (WH). TEST the system for normal operation.
D6: CHECK CJB FUSEF43 (10A)	1 Check Fuse F43 (10A) at CJB Is the Fuse OK? → Yes INSTALL a new CJB. TEST the system for normal operation. → No INSTALL a new Fuse. TEST the System for normal operation.

DIAGNOSIS AND TESTING

PINPOINT TEST E : DTC: B1087

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
E1: CHECK FUNCTIONALITY OF SUB-SYSTEM	
 E57475	1 Disconnect Keyless Vehicle Module C218.
	2 Measure the resistance between the keyless vehicle module C218 pin 16, circuit 91S-AB29 (BK/GN), harness side and ground during the passengers rear door handle is pulled. • Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. TEST the system for normal operation. → No GO to E2.
E2: CHECK THE WIRING TO RR-UNLOCK SWITCH	
 E74070	1 Disconnect Passenger door connector C55 .
	2 Measure the resistance between C45 pin 21, circuit 91S-AB18 (BK/GN), component side and ground, during the passengers rear door handle is pulled. • Is the resistance less than 5 ohms? → Yes REPAIR circuit 91S-AB29 (BK/GN). TEST the system for normal operation. → No GO to E3.
E3: CHECK DOOR WIRING TO RR UNLOCK PULL SWITCH	
	1 Disconnect Right Hand Rear Door Latch C208.

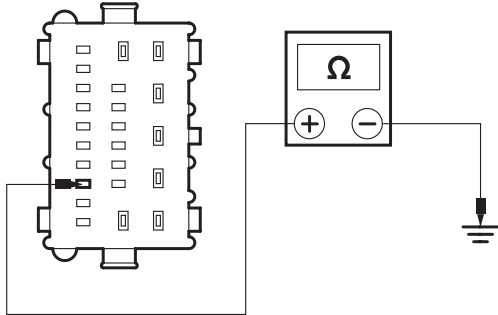
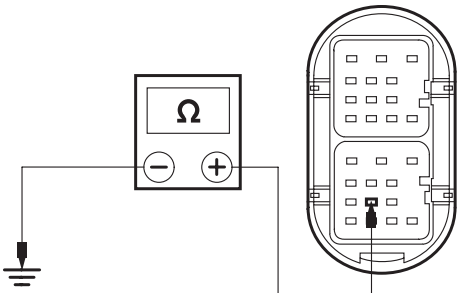
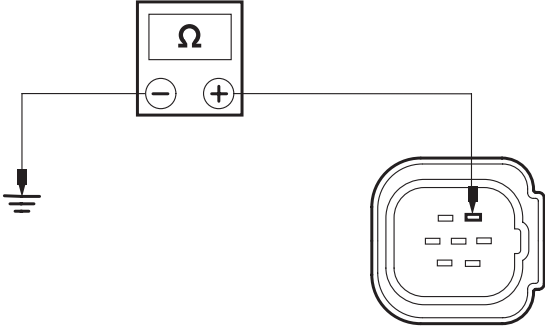
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E74072	2 Measure the resistance between the right-hand rear exterior door handle switch C208 pin 3, circuit 91S-AB18 (BK/GN), component side and ground during the right rear door handle is pulled. Is the resistance less than 5 ohms? → Yes REPAIR circuit 91S-AB18 (BK/GN). TEST the system for normal operation. → No GO to E4.
E4: CHECK DOOR WIRING TO GROUND	
 E74071	1 Measure the resistance between the right-hand rear exterior door handle switch C208 pin 5, circuit 91S-AB18 (BK/GN), component side and ground. Is the resistance less than 5 ohms? → Yes INSTALL a new right-hand rear exterior door handle. REFER to: Exterior Rear Door Handle (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No REPAIR circuit 91-AB18 (BK/GN). TEST the system for normal operation.

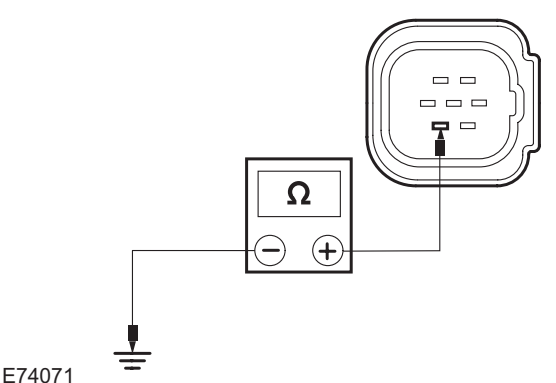
PINPOINT TEST F : DTC: B1088

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
F1: CHECK FUNCTIONALITY OF SUB-SYSTEM	
	1 Disconnect Keyless Vehicle Module C215.

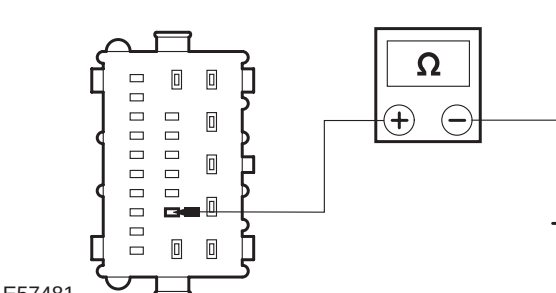
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57475	2 Measure the resistance between the keyless vehicle module C215 pin 16, circuit 91S-AB18 (BK/GN), harness side and ground during the passengers rear door handle is pulled. Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No GO to F2.
F2: CHECK THE WIRING TO RR-UNLOCK SWITCH	
 E74070	1 Disconnect Door connector C53 for LHD vehicles or C55 for RHD vehicles.. 2 Measure the resistance between C45 pin 21, circuit 91S-AB18 (BK/GN), component side and ground, during the passengers rear door handle is pulled. Is the resistance less than 5 ohms? → Yes REPAIR circuit 91S-AB18 (BK/GN). TEST the system for normal operation. → No GO to F3.
F3: CHECK DOOR WIRING TO RR UNLOCK PULL SWITCH	
 E74072	1 Disconnect Left-Hand Rear Door Latch C208. 2 Measure the resistance between the left-hand rear exterior door handle switch C208 pin 3, circuit 91S-AB18 (BK/GN), component side and ground during the right rear door handle is pulled. Is the resistance less than 5 ohms? → Yes REPAIR circuit 91S-AB18 (BK/GN). TEST the system for normal operation. → No GO to F4.

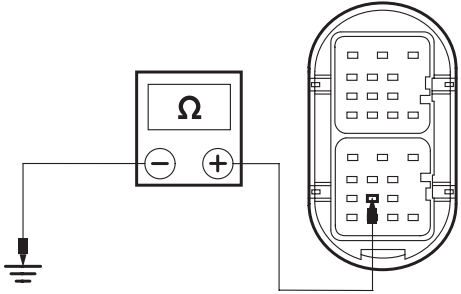
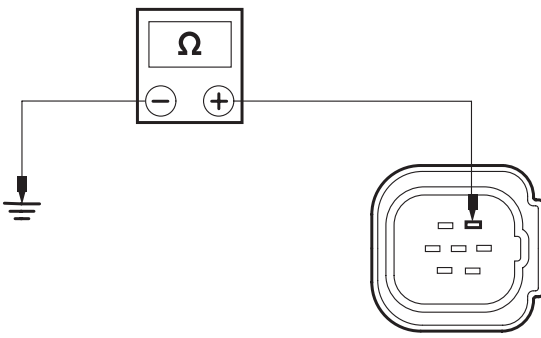
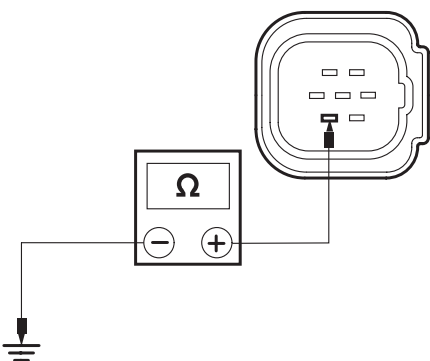
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
F4: CHECK DOOR WIRING TO GROUND	
 E74071	1 Disconnect Left-Hand Rear Exterior Door Handle Switch C208.
	2 Measure the resistance between the left hand rear exterior door handle switch C208 pin 5, circuit 91-AB18 (BK/GN), component side and ground. • Is the resistance less than 5 ohms? → Yes INSTALL a new left-hand rear exterior door handle. REFER to: Exterior Rear Door Handle (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No REPAIR circuit 91-AB18 (BK/GN). TEST the system for normal operation.

PINPOINT TEST G : DTC: B1089

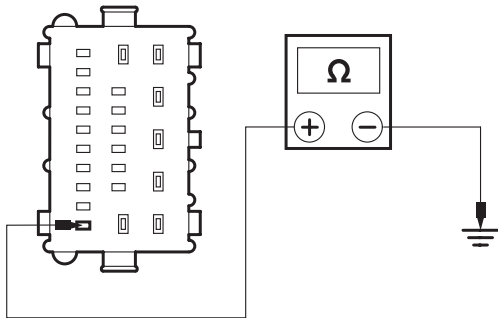
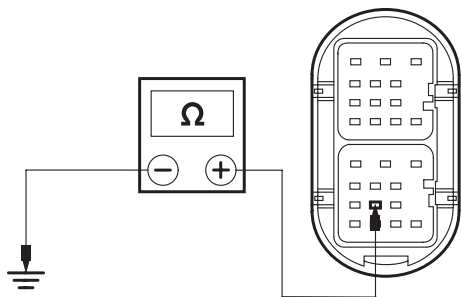
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
G1: CHECK FUNCTIONALITY OF SUB-SYSTEM	
 E57481	1 Disconnect Keyless Vehicle Module C218.
	2 Measure the resistance between the keyless vehicle module C218 pin 8, circuit 91S-AB24 (BK/GN), harness side and ground during the passengers front door handle is pulled. • Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Exterior Rear Door Handle (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No GO to G2.
G2: CHECK THE WIRING TO RR-UNLOCK SWITCH	
	1 Disconnect Door connector C51 for LHD vehicles or C47 for RHD vehicles..

DIAGNOSIS AND TESTING

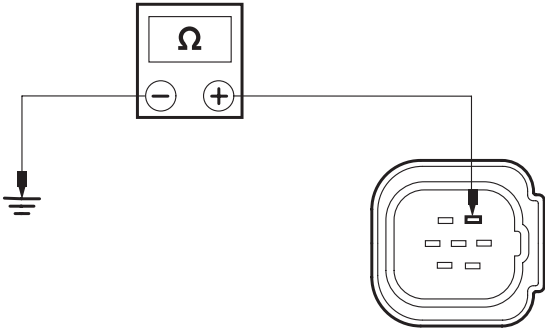
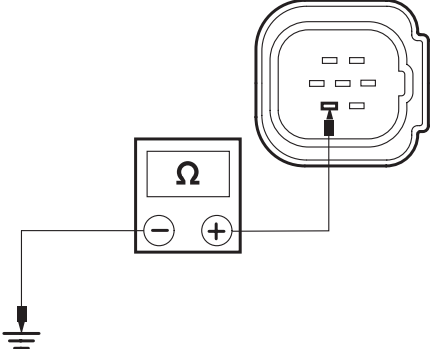
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E74070	2 Measure the resistance between C43 pin 21, circuit 91S-AB24 (BK/GN), component side and ground, during the passengers front door handle is pulled. Is the resistance less than 5 ohms? → Yes REPAIR circuit 91S-AB24 (BK/GN). TEST the system for normal operation. → No GO to G3.
G3: CHECK DOOR WIRING TO RR UNLOCK PULL SWITCH	
 E74072	1 Disconnect Right-Hand Front Door Latch C204. 2 Measure the resistance between the right-hand front exterior door handle switch C204 pin 3, circuit 91S-AB24(BK/GN), component side and ground during the right front door handle is pulled. Is the resistance less than 5 ohms? → Yes REPAIR circuit 91S-AB24 (BK/GN). TEST the system for normal operation. → No GO to G4.
G4: CHECK DOOR WIRING TO GROUND	
 E74071	1 Disconnect Right Hand Front Door Latch C204. 2 Measure the resistance between the right-hand front exterior door handle switch C204 pin 5, circuit 91-AB24 (BK/GN), component side and ground. Is the resistance less than 5 ohms? → Yes INSTALL a new right-hand front exterior door handle. REFER to: Exterior Front Door Handle - Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No REPAIR circuit 91-AB24 (BK/GN). TEST the system for normal operation.

DIAGNOSIS AND TESTING

PINPOINT TEST H : DTC: B1090

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
H1: CHECK CIRCUIT 91S-AB14 (BK/RD) FOR SHORT CIRCUIT TO GROUND	
 E57508	1 Disconnect Keyless Vehicle Module C215.
	2 Measure the resistance between the keyless vehicle module C215 pin 14, circuit 91S-AB13 (BK/GN), harness side and ground during the driver front door handle is pulled. • Is the resistance less than 5 ohms? → Yes INSTALL a new right-hand front exterior door handle. REFER to: Exterior Front Door Handle - Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No GO to H2.
H2: CHECK THE WIRING TO RR-UNLOCK SWITCH	
 E74070	1 Disconnect Door connector C47 for LHD vehicles or C51 for RHD vehicles..
	2 Measure the resistance between C41 pin 21, circuit 91S-AB13 (BK/GN), component side and ground, during the driver front door handle is pulled. • Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No REPAIR circuit 91S-AB13 (BK/GN). TEST the system for normal operation. GO to H3.
H3: CHECK DOOR WIRING TO RR UNLOCK PULL SWITCH	
	1 Disconnect Left-Hand Front Door Latch C212.

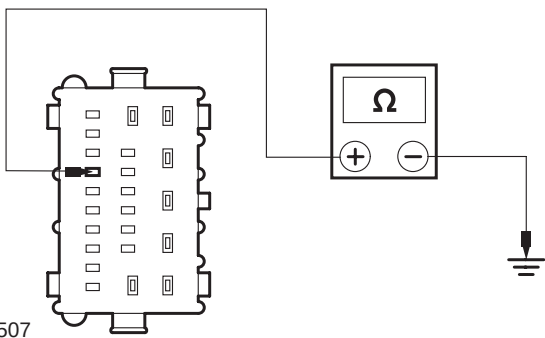
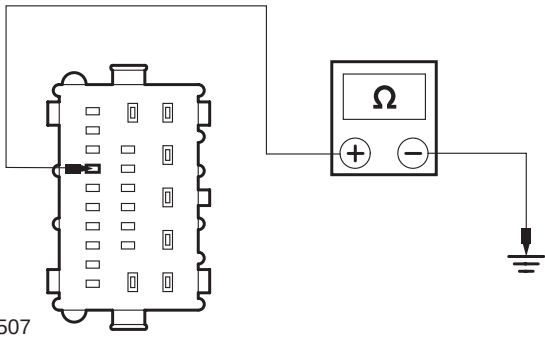
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E74072	2 Measure the resistance between the left-hand front exterior door handle switch C212 pin 3, circuit 91S-AB13 (BK/GN), component side and ground during the left front door handle is pulled. Is the resistance less than 5 ohms? → Yes REPAIR circuit 91S-AB13 (BK/GN). TEST the system for normal operation. → No GO to H4.
H4: CHECK DOOR WIRING TO GROUND	
 E74071	1 Disconnect Left-Hand Front Exterior Door Handle Switch C212. 2 Measure the resistance between the left hand front exterior door handle switch C212 pin 5, circuit 91-AB13 (BK/GN), component side and ground. Is the resistance less than 5 ohms? → Yes INSTALL a new left-hand front exterior door handle. REFER to: Exterior Front Door Handle - Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No REPAIR circuit 91-AB13 (BK/GN). TEST the system for normal operation.

PINPOINT TEST I : DTC: B1078

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
I1: CHECK CIRCUIT 1/2-AB16 (WH/RD) FOR SHORT TO GROUND	
	1 Disconnect keyless Vehicle Module C218.

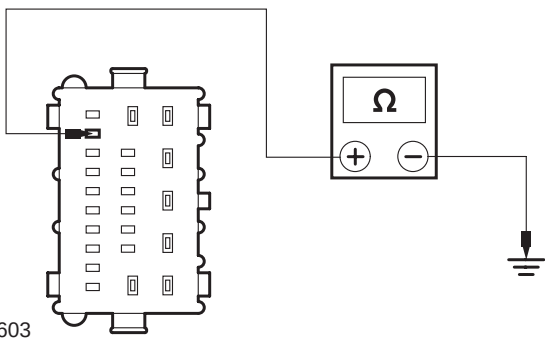
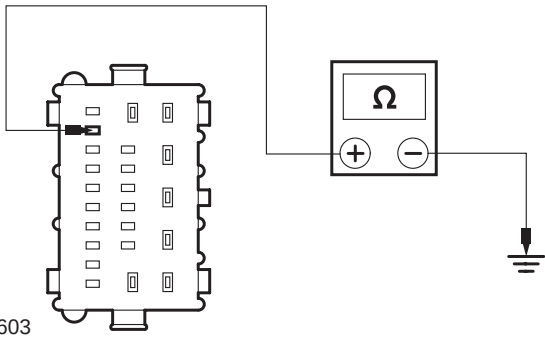
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57507	2 Measure the resistance between the keyless vehicle module C218 pin 20, circuit 1-AB16 (WH/RD), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB16 (BK/RD) or 2-AB16 (GY/RD). TEST the system for normal operation. → No GO to I2.
I2: CHECK CIRCUIT 2-AB16 (GY/RD) FOR SHORT TO BATTERY POSITIVE	
 E57507	1 Measure the resistance between the keyless vehicle module C218 pin 20, circuit 1-AB16 (WH/RD), harness side and battery positive. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB16 (BK/RD) or 2-AB16 (GY/RD). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

PINPOINT TEST J : DTC: B1079

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
J1: CHECK CIRCUIT 1/2-AB16 (WH/RD) FOR SHORT TO GROUND	
	1 Disconnect Keyless Vehicle Module C218.

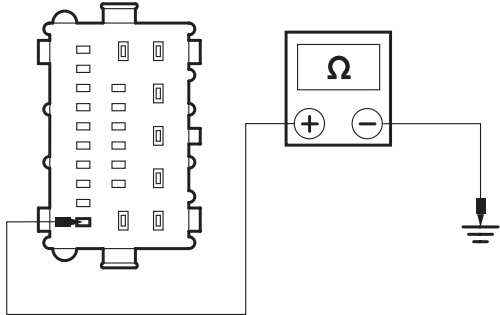
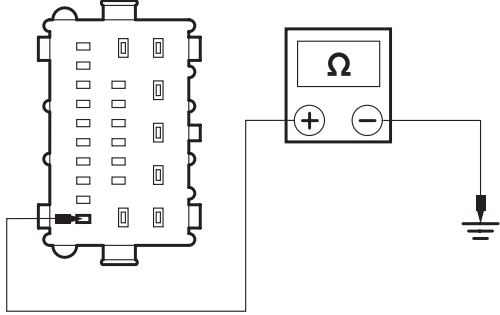
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57603	2 Measure the resistance between the keyless vehicle module C218 pin 22, circuit 1-AB27 (WH/RD), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB27 (BK/RD) or 2-AB27 (GY/RD). TEST the system for normal operation. → No GO to J2.
J2: CHECK CIRCUIT 2-AB27 (GY/RD) FOR SHORT TO BATTERY POSITIVE	
 E57603	1 Measure the resistance between the keyless vehicle module C218 pin 22, circuit 1-AB16 (WH/RD), harness side and battery positive. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB27 (BK/RD) or 2-AB27 (GY/RD). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

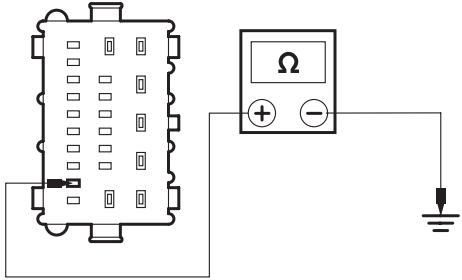
PINPOINT TEST K : DTC: B1080

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
K1: CHECK CIRCUIT 1/2-AB10 (WH) FOR SHORT TO GROUND	
	1 Disconnect Keyless Vehicle Module C219.

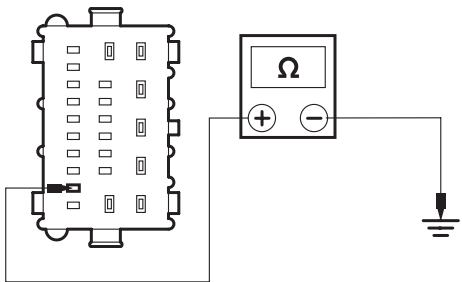
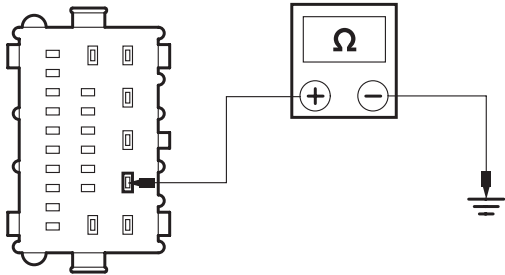
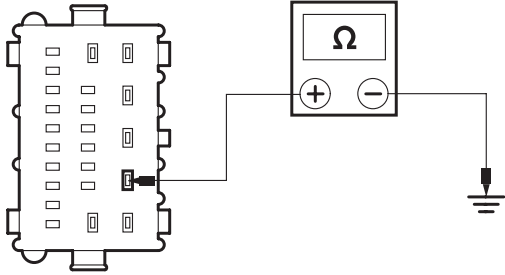
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57508	2 Measure the resistance between the keyless vehicle module C219 pin 14, circuit 1-AB10 (WH), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB10 (WH) or 2-AB10 (GY). TEST the system for normal operation. → No GO to K2.
K2: CHECK CIRCUIT 1/2-AB16 (GY/RD) FOR SHORT TO BATTERY POSITIVE	
 E57508	1 Measure the resistance between the keyless vehicle module C219 pin 14, circuit 1-AB10 (WH), harness side and battery positive. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB10 (WH) or 2-AB10 (GY). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

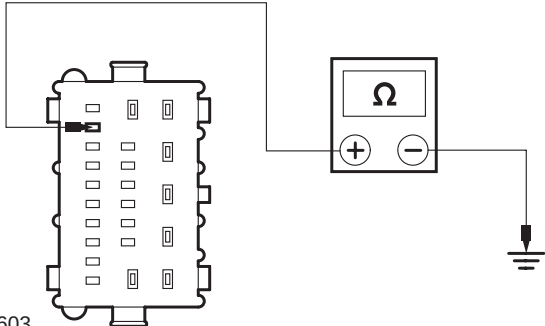
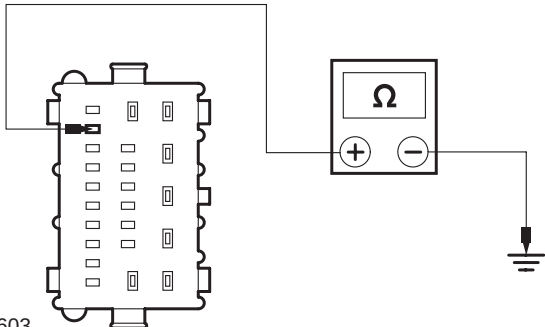
PINPOINT TEST L : DTC: B1081

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
L1: CHECK CIRCUIT 1/2-AB35 (WH/BU) FOR SHORT TO GROUND	
 E74073	1 Disconnect Keyless Vehicle Module C219. 2 Measure the resistance between the keyless vehicle module C219 pin 18, circuit 1-AB35 (WH/BU), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB35 (WH/BU) or 2-AB35 (GY/VT). TEST the system for normal operation. → No GO to L2.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
L2: CHECK CIRCUIT 1/2-AB35 (GY/RD) FOR SHORT TO BATTERY POSITIVE	
 E74073	1 Measure the resistance between the keyless vehicle module C219 pin 18, circuit 1-AB35 (WH/BU), harness side and battery positive. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB35 (WH/BU) or 2-AB35 (GY/VT). TEST the system for normal operation. → No GO to L3.
L3: CHECK CIRCUIT 1/2-AB35 (WH/BU) FOR SHORT TO GROUND	
 E57502	1 Measure the resistance between the keyless vehicle module C219 pin 2, circuit 1-AB35A (WH/BU), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB35A (WH/BU) or 2-AB35A (GY/VT). TEST the system for normal operation. → No GO to L4.
L4: CHECK CIRCUIT 1/2-AB35 (GY/RD) FOR SHORT TO BATTERY POSITIVE	
 E57502	1 Measure the resistance between the keyless vehicle module C219 pin 2, circuit 1-AB35A (WH/BU), harness side and battery positive. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB35A (WH/BU) or 2-AB35A (GY/VT). TEST the system for normal operation. → No GO to L5.

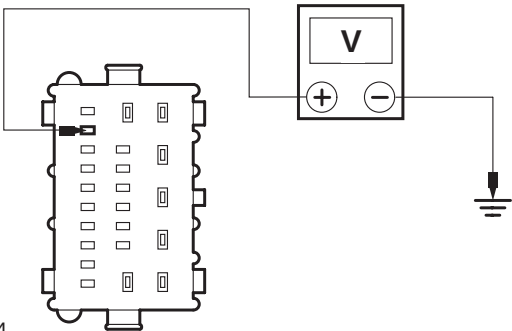
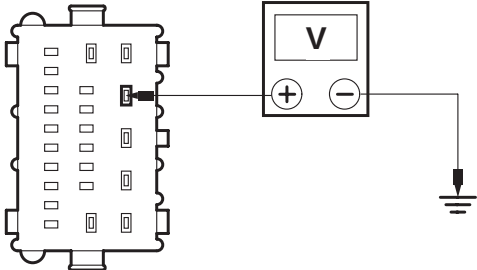
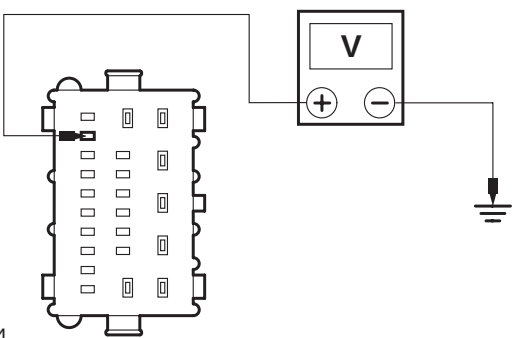
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
L5: CHECK CIRCUIT 1/2-AB36B (GY/OG) FOR SHORT TO GROUND	
 E57603	1 Measure the resistance between the keyless vehicle module C219 pin 22, circuit 1-AB36A (GY/OG), harness side and ground. • Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB36A (GY/OG) or 2-AB36A (WH/GN). TEST the system for normal operation. → No GO to L6.
L6: CHECK CIRCUIT 1/2-AB35 (GY/RD) FOR SHORT TO BATTERY POSITIVE	
 E57603	1 Measure the resistance between the keyless vehicle module C219 pin 22, circuit 1-AB36A (WH/GN), harness side and battery positive. • Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB36A (GY/OG) or 2-AB36A (WH/GN). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

PINPOINT TEST M : DTC: 1081

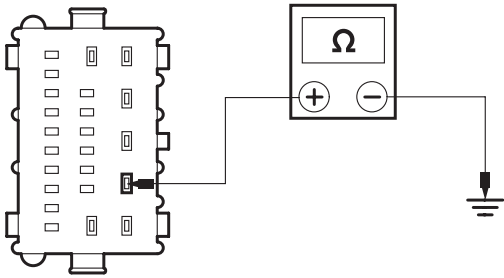
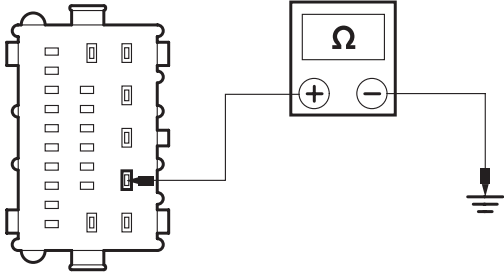
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
M1: CHECK CIRCUIT 1-AB36B (WH/GN) FOR SHORT TO BATTERY POSITIVE	
	1 Disconnect Keyless Vehicle Module C219. 2 Ignition switch in position II.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57504	3 Measure the voltage between the keyless vehicle module C219 pin 22, circuit 1-AB36B (WH/GN), harness side and ground. Is the voltage greater than 10 volts? → Yes GO to M2. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.
M2: CHECK CIRCUIT 2-AB36B (GY/OG) FOR SHORT TO BATTERY POSITIVE	
	1 Ignition switch in position 0. 2 Disconnect Passenger Compartment Center Keyless Vehicle Antenna C226. 3 Ignition switch in position II.
 E57503	4 Measure the voltage between the keyless vehicle module C219 pin 4, circuit 2-AB36B (GY/OG), harness side and ground. Is the voltage greater than 10 volts? → Yes REPAIR circuit 2-AB36B (GY/OG). TEST the system for normal operation. → No GO to M3.
M3: CHECK CIRCUIT 1-AB36B (WH/BU) FOR SHORT TO BATTERY POSITIVE	
 E57504	1 Measure the voltage between the keyless vehicle module C219 pin 22, circuit 1-AB36B (WH/BU), harness side and ground. Is the voltage greater than 0 volts? → Yes REPAIR circuit 1-AB36B (WH/BU). TEST the system for normal operation. → No INSTALL a new passenger compartment center keyless vehicle antenna. TEST the system for normal operation.

DIAGNOSIS AND TESTING

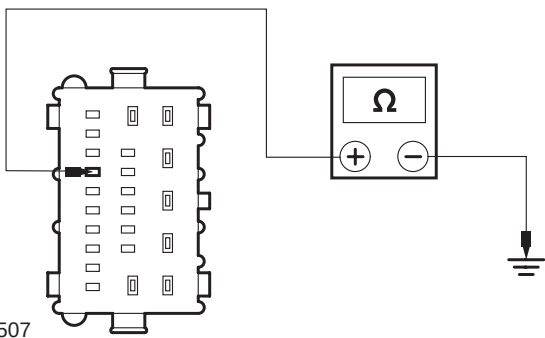
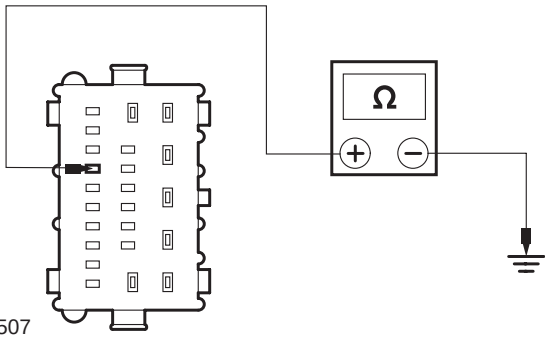
PINPOINT TEST N : DTC: B1082

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
N1: CHECK CIRCUIT 1/2-AB34 (WH/RD) FOR SHORT TO GROUND	
 E57502	1 Disconnect Keyless Vehicle Module C219.
	2 Measure the resistance between the keyless vehicle module C219 pin 2, circuit 1-AB34 (WH/RD), harness side and ground. • Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB34 (WH/RD) or 2-AB34 (GY/RD). TEST the system for normal operation. → No GO to N2.
N2: CHECK CIRCUIT 2-AB34 (GY/RD) FOR SHORT TO BATTERY POSITIVE	
 E57502	1 Measure the resistance between the keyless vehicle module C219 pin 2, circuit 1-AB34 (WH/RD), harness side and battery positive. • Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB34 (WH/RD) or 2-AB34 (GY/RD). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module.
	REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

PINPOINT TEST O : DTC: B1077

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
O1: CHECK CIRCUIT 1/2-AB16 (WH/RD) FOR SHORT TO GROUND	
	1 Disconnect Keyless Vehicle Module C218.

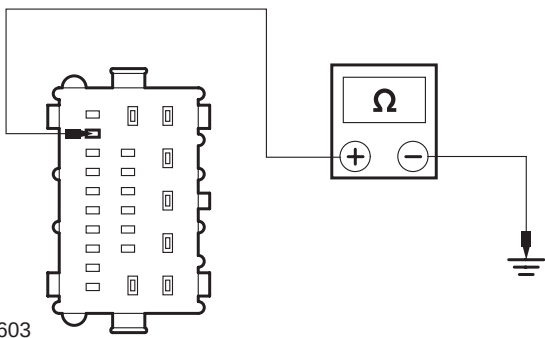
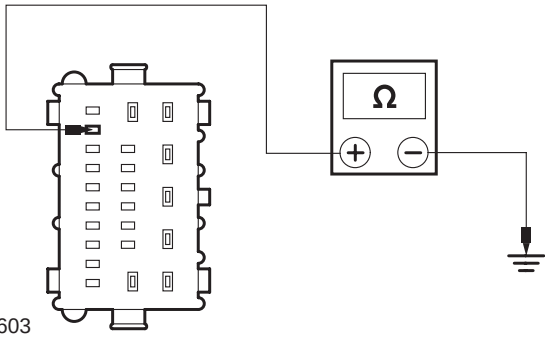
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57507	2 Measure the resistance between the keyless vehicle module C218 pin 20, circuit 1-AB16 (WH/RD), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB16 (WH/RD) or 2-AB16 (GY/RD). TEST the system for normal operation. → No GO to O2.
O2: CHECK CIRCUIT 1/2-AB16 (WH/RD) FOR SHORT TO BATTERY POSITIVE	
 E57507	1 Measure the resistance between the keyless vehicle module C218 pin 20, circuit 1-AB16 (WH/RD), harness side and battery positive. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB16 (WH/RD) or 2-AB16 (GY/RD). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

PINPOINT TEST P : DTC: B1083

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
P1: CHECK CIRCUIT 1-AB27 (WH/RD) FOR SHORT CIRCUIT TO GROUND	
	1 Disconnect Keyless Vehicle Module C218.

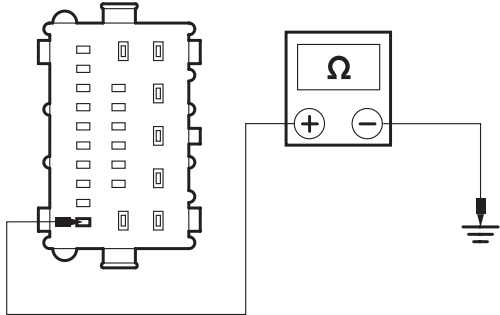
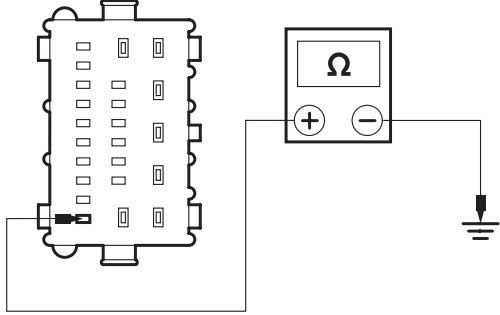
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57603	2 Measure the resistance between the keyless vehicle module C218 pin 22, circuit 1-AB27 (WH/RD), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB27 (WH/RD) or 2-AB27 (GY/RD). TEST the system for normal operation. → No GO to P2.
P2: CHECK CIRCUIT 2-AB27 (GY/RD) FOR SHORT CIRCUIT TO GROUND	
 E57603	1 Disconnect Passenger Side Exterior Front Door Handle C203. 2 Measure the resistance between the keyless vehicle module C218 pin 22, circuit 1-AB27 (WH/RD), harness side and battery positive. Is the resistance greater than 10,000 ohms? → Yes REPAIR circuit 1-AB27 (WH/RD) or 2-AB27 (GY/RD). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

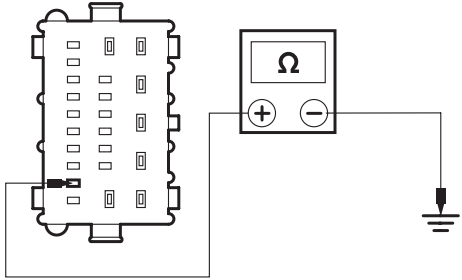
PINPOINT TEST Q : DTC: B1086

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
Q1: CHECK CIRCUIT 1/2-AB10 (WH) FOR SHORT TO GROUND	
	1 Disconnect Keyless Vehicle Module C219.

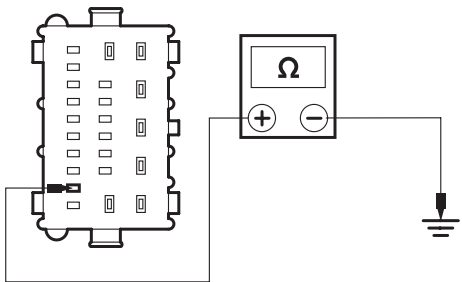
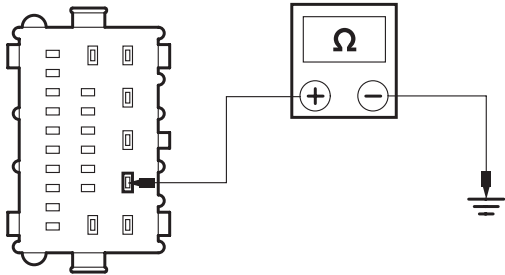
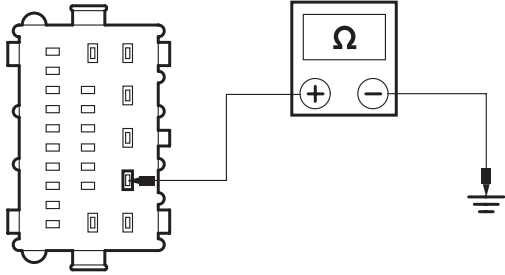
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57508	2 Measure the resistance between the keyless vehicle module C219 pin 14, circuit 1-AB10 (WH), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB10 (WH) or 2-AB10 (GY). TEST the system for normal operation. → No GO to Q2.
Q2: CHECK CIRCUIT 1/2-AB16 (GY/RD) FOR SHORT TO BATTERY POSITIVE	
 E57508	1 Measure the resistance between the keyless vehicle module C219 pin 14, circuit 1-AB10 (WH), harness side and battery positive. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB10 (WH) or 2-AB10 (GY). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

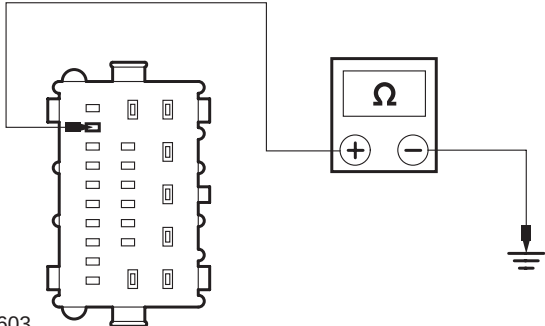
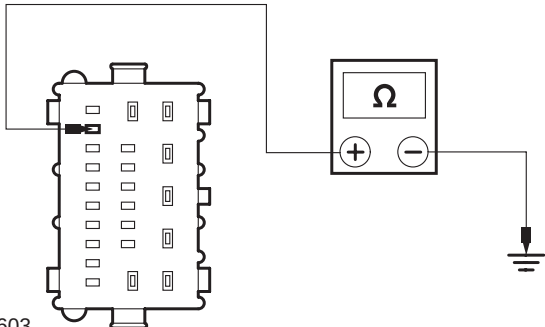
PINPOINT TEST R : DTC: B1070

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
R1: CHECK CIRCUIT 1/2-AB35 (WH/BU) FOR SHORT TO GROUND	
 E74073	1 Disconnect Keyless Vehicle Module C219. 2 Measure the resistance between the keyless vehicle module C219 pin 18, circuit 1-AB35 (WH/BU), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB35 (WH/BU) or 2-AB35 (GY/VT). TEST the system for normal operation. → No GO to R2.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
R2: CHECK CIRCUIT 1/2-AB35 (GY/RD) FOR SHORT TO BATTERY POSITIVE  E74073	1 Measure the resistance between the keyless vehicle module C219 pin 18, circuit 1-AB35 (WH/BU), harness side and battery positive. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB35 (WH/BU) or 2-AB35 (GY/VT). TEST the system for normal operation. → No GO to R3.
R3: CHECK CIRCUIT 1/2-AB35 (WH/BU) FOR SHORT TO GROUND  E57502	1 Measure the resistance between the keyless vehicle module C219 pin 2, circuit 1-AB35A (WH/BU), harness side and ground. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB35A (WH/BU) or 2-AB35A (GY/VT). TEST the system for normal operation. → No GO to R4.
R4: CHECK CIRCUIT 1/2-AB35 (GY/RD) FOR SHORT TO BATTERY POSITIVE  E57502	1 Measure the resistance between the keyless vehicle module C219 pin 2, circuit 1-AB35A (WH/BU), harness side and battery positive. Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB35A (WH/BU) or 2-AB35A (GY/VT). TEST the system for normal operation. → No GO to R5.

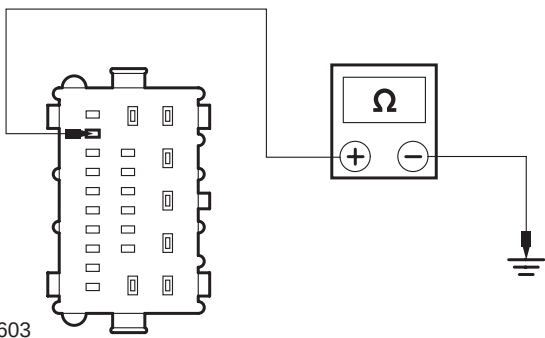
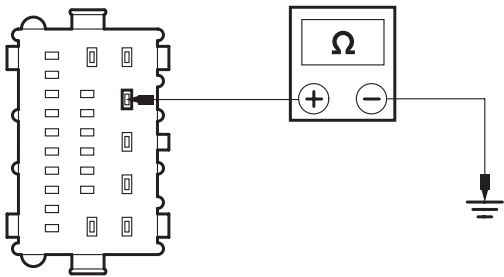
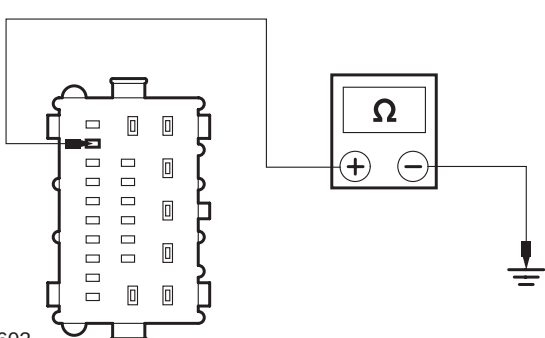
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
R5: CHECK CIRCUIT 1/2-AB36B (GY/OG) FOR SHORT TO GROUND	
 E57603	1 Measure the resistance between the keyless vehicle module C219 pin 22, circuit 1-AB36A (GY/OG), harness side and ground. • Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB36A (GY/OG) or 2-AB36A (WH/GN). TEST the system for normal operation. → No GO to R6.
R6: CHECK CIRCUIT 1/2-AB35 (GY/RD) FOR SHORT TO BATTERY POSITIVE	
 E57603	1 Measure the resistance between the keyless vehicle module C219 pin 22, circuit 1-AB36A (WH/GN), harness side and battery positive. • Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB36A (GY/OG) or 2-AB36A (WH/GN). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

PINPOINT TEST S : DTC: B1070

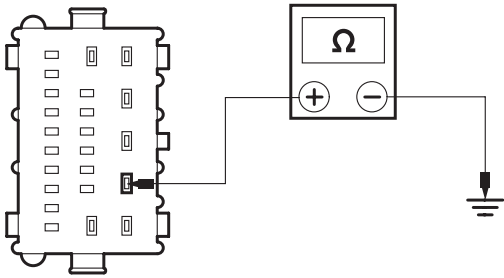
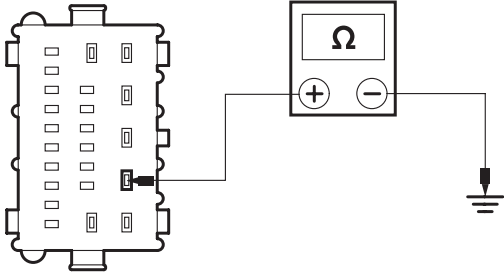
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
S1: CHECK CIRCUIT 1-AB36B (WH/GN) FOR SHORT CIRCUIT TO GROUND	
	1 Disconnect Keyless Vehicle Module C219.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57603	2 Measure the resistance between the keyless vehicle module C219 pin 22, circuit 1-AB36B (WH/GN), harness side and ground. - Is the resistance greater than 10,000 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No GO to S2.
S2: CHECK CIRCUIT 2-AB36B (GY/OG) FOR SHORT CIRCUIT TO GROUND	
 E57602	1 Disconnect Passenger Compartment Center Keyless Vehicle Antenna C226. 2 Measure the resistance between the keyless vehicle module C219 pin 4, circuit 2-AB36B (GY/OG), harness side and ground. - Is the resistance greater than 10,000 ohms? → Yes GO to S3. → No REPAIR circuit 2-AB36B (GY/OG). TEST the system for normal operation.
S3: CHECK CIRCUIT 1-AB36B (WH/GN) FOR SHORT CIRCUIT TO GROUND	
 E57603	1 Measure the resistance between the keyless vehicle module C219 pin 22, circuit 1-AB36B (WH/GN), harness side and ground. - Is the resistance greater than 10,000 ohms? → Yes INSTALL a new passenger compartment center keyless vehicle antenna. TEST the system for normal operation. → No REPAIR circuit 1-AB36B (WH/GN). TEST the system for normal operation.

DIAGNOSIS AND TESTING

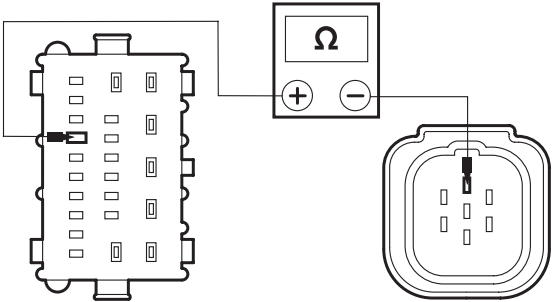
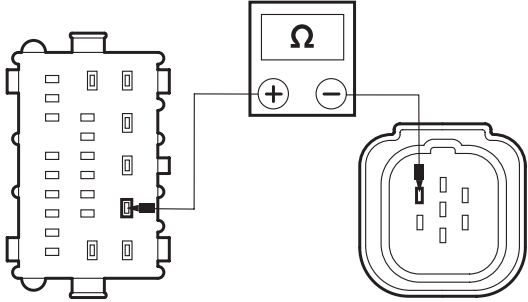
PINPOINT TEST T : DTC: B1071

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
T1: CHECK CIRCUIT 1-AB34 (WH/RD) FOR SHORT CIRCUIT TO GROUND	
 E57502	1 Disconnect Keyless Vehicle Module C219.
	2 Measure the resistance between the keyless vehicle module C219 pin 2, circuit 1-AB34 (WH/RD), harness side and ground. • Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB34 (WH/RD) or 2-AB34 (GY/RD). TEST the system for normal operation. → No GO to T2.
T2: CHECK CIRCUIT 1/2-AB34 (WH/RD) FOR SHORT TO BATTERY POSITIVE	
 E57502	1 Measure the resistance between the keyless vehicle module C219 pin 2, circuit 1-AB34 (WH/RD), harness side and battery positive. • Is the resistance less than 5 ohms? → Yes REPAIR circuit 1-AB34 (WH/RD) or 2-AB34 (GY/RD). TEST the system for normal operation. → No Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new keyless vehicle module. REFER to: Keyless Vehicle Module (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation.

PINPOINT TEST U : DTC: B1072

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
U1: CHECK CIRCUIT 1-AB16 FOR OPEN CIRCUIT	
	1 Disconnect Keyless Vehicle Module C218.
	2 Disconnect Driver Side Exterior Front Door Handle Keyless Vehicle Antenna C211.

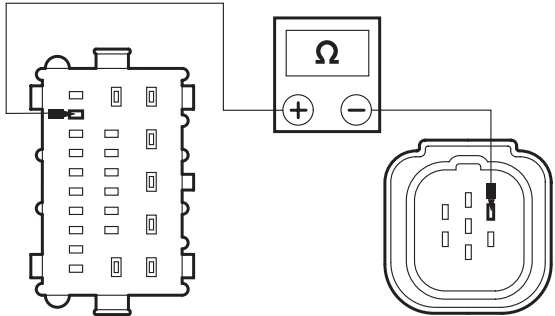
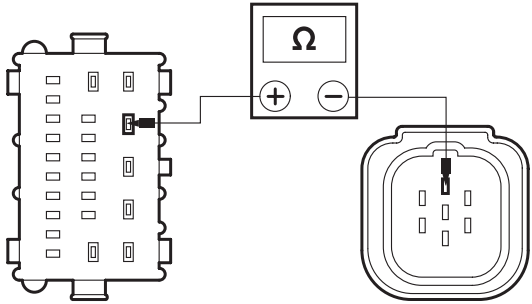
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E74074	3 Measure the resistance between the keyless vehicle module C218 pin 20, circuit 1-AB16 (WH/RD), harness side and the driver side exterior front door handle keyless vehicle antenna C211 pin 1, circuit 1-AB16 (WH/RD), harness side. Is the resistance less than 5 ohms? → Yes GO to U2. → No REPAIR circuit 1-AB16 (WH/RD). TEST the system for normal operation.
U2: CHECK CIRCUIT 2-AB16 (GY/RD) FOR OPEN CIRCUIT	
 E74075	1 Measure the resistance between the keyless vehicle module C218 pin 2, circuit 2-AB16 (GY/RD), harness side and the driver side exterior front door handle keyless vehicle antenna C211 pin 2, circuit 2-AB16 (GY/RD), harness side. Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new driver side exterior front door handle. REFER to: Exterior Front Door Handle - Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). → No REPAIR circuit 2-AB16 (GY/RD). TEST the system for normal operation.

PINPOINT TEST V : DTC: B1073

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
V1: CHECK CIRCUIT 1-AB27 (WH/RD) FOR OPEN CIRCUIT	
	1 Disconnect Keyless Vehicle Module C218. 2 Disconnect Passenger Side Exterior Front Door Handle Keyless Vehicle Antenna C203.

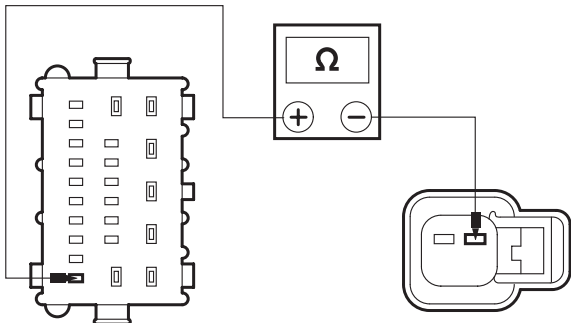
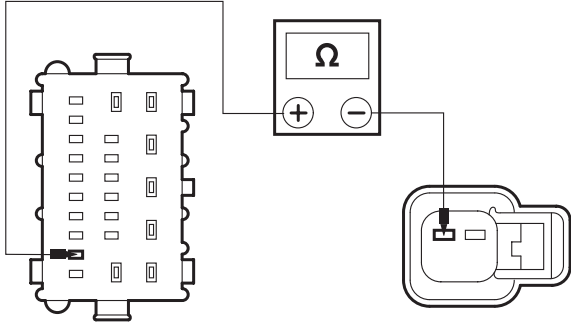
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57597	3 Measure the resistance between the keyless vehicle module C218 pin 22, circuit 1-AB27 (WH/RD), harness side and the passenger side exterior front door handle keyless vehicle antenna C203 pin 1, circuit 1-AB27 (WH/RD), harness side. Is the resistance less than 5 ohms? → Yes GO to V2. → No REPAIR circuit 1-AB27 (WH/RD). TEST the system for normal operation.
V2: CHECK CIRCUIT 2-AB27 (GY/RD) FOR OPEN CIRCUIT	
 E57596	1 Measure the resistance between the keyless vehicle module C218 pin 4, circuit 2-AB27 (GY/RD), harness side and the passenger side exterior front door handle keyless vehicle antenna C203 pin 2, circuit 2-AB27 (GY/RD), harness side. Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new passenger side exterior front door handle. REFER to: Exterior Front Door Handle - Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). → No REPAIR circuit 2-AB27 (GY/RD). TEST the system for normal operation.

PINPOINT TEST W : DTC: B1074

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
W1: CHECK CIRCUIT 1-AB10 (WH) FOR OPEN CIRCUIT	
	1 Disconnect Keyless Vehicle Module C219. 2 Disconnect Rear Bumper Keyless Vehicle Antenna C227.

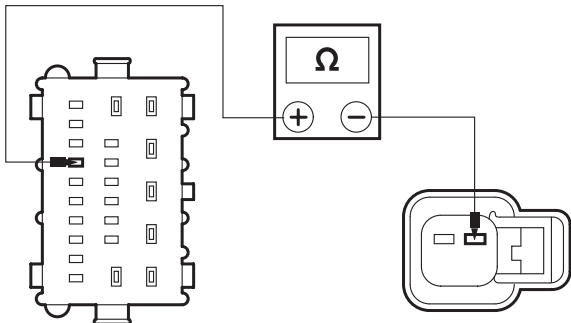
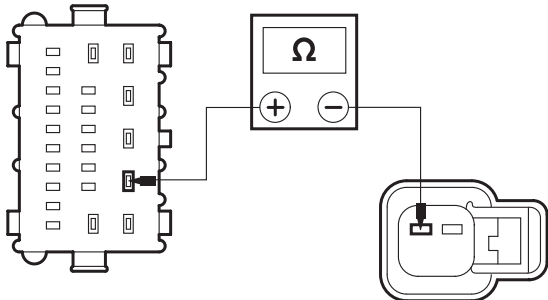
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57595	3 Measure the resistance between the keyless vehicle module C219 pin 14, circuit 1-AB10 (WH), harness side and the rear bumper keyless vehicle antenna C227 pin 1, circuit 1-AB10 (WH), harness side. Is the resistance less than 5 ohms? → Yes GO to W2. → No REPAIR circuit 1-AB10 (WH). TEST the system for normal operation.
W2: CHECK CIRCUIT 2-AB10 (GY) FOR OPEN CIRCUIT	
 E57594	1 Measure the resistance between the keyless vehicle module C219 pin 15, circuit 2-AB10 (GY), harness side and the rear bumper keyless vehicle antenna C227 pin 2, circuit 2-AB10 (GY), harness side. Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new rear bumper keyless vehicle antenna. TEST the system for normal operation. → No REPAIR circuit 2-AB10 (GY). TEST the system for normal operation.

PINPOINT TEST X : DTC: B1075

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
X1: CHECK CIRCUIT 1-AB35 (WH/BU) FOR OPEN CIRCUIT	
	1 Disconnect Keyless Vehicle Module C219. 2 Disconnect Passenger Compartment Front Keyless Vehicle Antenna C226.

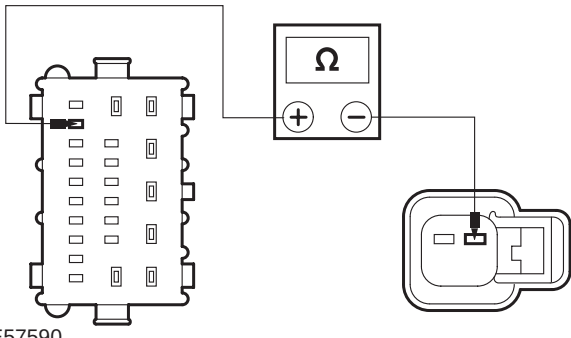
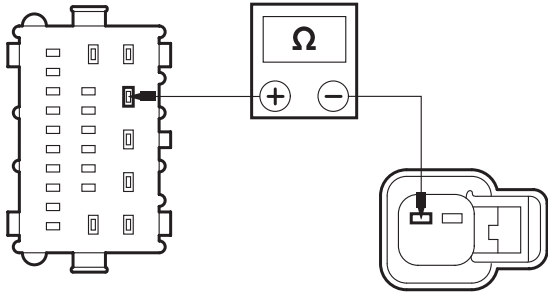
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57593	3 Measure the resistance between the keyless vehicle module C219 pin 20, circuit 1-AB35 (WH/BU), harness side and the passenger compartment front keyless vehicle antenna C226 pin 2, circuit 1-AB35 (WH/BU), harness side. Is the resistance less than 5 ohms? → Yes GO to X2. → No REPAIR circuit 1-AB35 (WH/BU). TEST the system for normal operation.
X2: CHECK CIRCUIT 2-AB35 (GY/VT) FOR OPEN CIRCUIT	
 E57592	1 Measure the resistance between the keyless vehicle module C219 pin 2, circuit 2-AB35 (GY/VT), harness side and the passenger compartment front keyless vehicle antenna C226 pin 1, circuit 2-AB35 (GY/VT), harness side. Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new passenger compartment front keyless vehicle antenna. TEST the system for normal operation. → No REPAIR circuit 2-AB35 (GY/VT). TEST the system for normal operation.

PINPOINT TEST Y : DTC: B1075

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
Y1: CHECK CIRCUIT 1-AB36B (WH/GN) FOR OPEN CIRCUIT	
	1 Disconnect Keyless Vehicle Module C219. 2 Disconnect Passenger Compartment Center Keyless Vehicle Antenna C221.

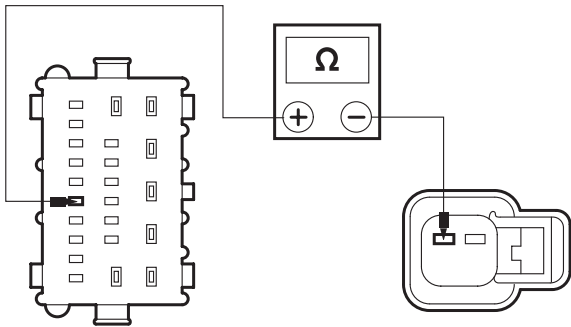
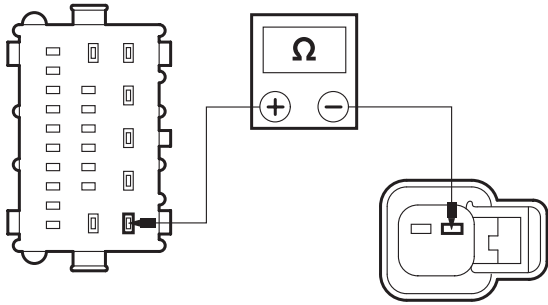
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57590	3 Measure the resistance between the keyless vehicle module C219 pin 22, circuit 1-AB36B (WH/GN), harness side and the passenger compartment center keyless vehicle antenna C221 pin 2, circuit 1-AB36B (WH/GN), harness side. Is the resistance less than 5 ohms? → Yes GO to Y2. → No REPAIR circuit 1-AB36B (WH/GN). TEST the system for normal operation.
Y2: CHECK CIRCUIT 2-AB36B (GY/OG) FOR OPEN CIRCUIT	
 E57591	1 Measure the resistance between the keyless vehicle module C219 pin 4, circuit 2-AB36B (GY/OG), harness side and the passenger compartment center keyless vehicle antenna C221 pin 1, circuit 2-AB36B (GY/OG), harness side. Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new passenger compartment center keyless vehicle antenna. TEST the system for normal operation. → No REPAIR circuit 2-AB36B (GY/OG). TEST the system for normal operation.

PINPOINT TEST Z : DTC: B1076

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
Z1: CHECK CIRCUIT 1-AB34 (WH-RD) FOR OPEN CIRCUIT	
	1 Disconnect Keyless Vehicle Module C219. 2 Disconnect Luggage Compartment Keyless Vehicle Antenna C224.

DIAGNOSIS AND TESTING

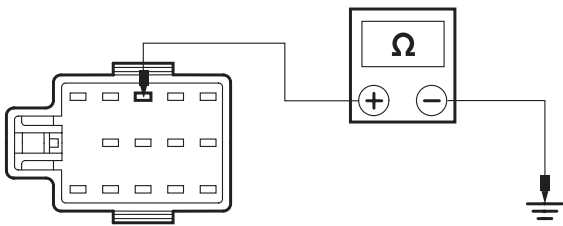
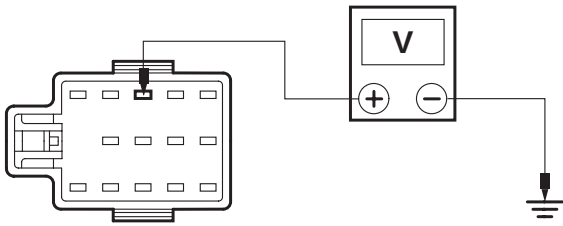
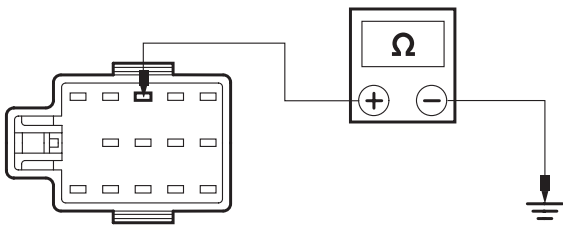
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57685	3 Measure the resistance between the keyless vehicle module C219 pin 18, circuit 1-AB34 (WH/RD), harness side and the luggage compartment keyless vehicle antenna C224 pin 1, circuit 1-AB34 (WH/RD), harness side. Is the resistance less than 5 ohms? → Yes GO to Z2. → No REPAIR circuit 1-AB34 (WH/RD). TEST the system for normal operation.
Z2: CHECK CIRCUIT 2-AB34 (GY/RD) FOR OPEN CIRCUIT	
 E57686	1 Measure the resistance between the keyless vehicle module C219 pin 1, circuit 2-AB34 (GY/RD), harness side and the luggage compartment keyless vehicle antenna C224 pin 2, circuit 2-AB34 (GY/RD), harness side. Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new luggage compartment keyless vehicle antenna. REFER. TEST the system for normal operation. → No REPAIR circuit 2-AB34 (GY/RD). TEST the system for normal operation.

Pinpoint Test (vehicles with RKE)

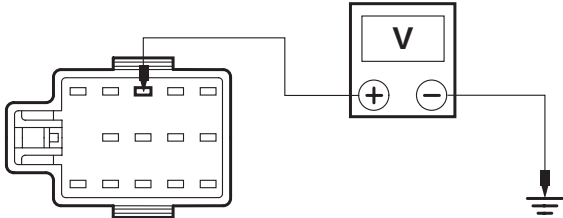
PINPOINT TEST AA : DTC: B2090

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AA1: CHECK CIRCUIT 8-AA57 (WH) FOR SHORT CIRCUIT TO GROUND	
	1 Disconnect CJB C98.

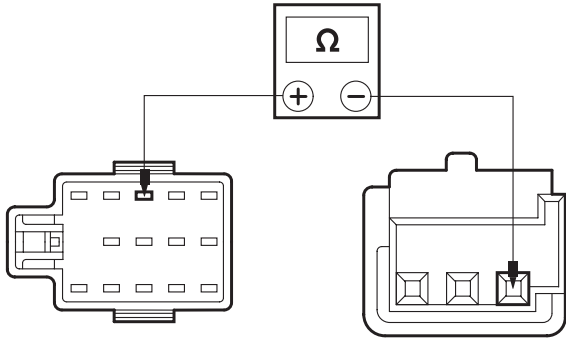
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57189	2 Measure the resistance between the CJB C98 pin 6, circuit 8-AA57 (WH), harness side and ground. Is the resistance greater than 10,000 ohms? → Yes GO to AA2. → No GO to AA3.
AA2: CHECK CIRCUIT 8-AA57 (WH) FOR SHORT CIRCUIT TO BATTERY POSITIVE	
 E57190	1 Ignition switch in position II. 2 Measure the voltage between the CJB C98 pin 6, circuit 8-AA57 (WH), harness side and ground. Is the voltage 0 volts? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new CJB. REFER to: Generic Electronic Module (GEM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing). TEST the system for normal operation. → No GO to AA4.
AA3: CHECK THE RF RECEIVER FOR SHORT CIRCUIT TO GROUND	
 E57189	1 Disconnect RF Receiver C390. 2 Measure the resistance between the CJB C98 pin 6, circuit 8-AA57 (WH), harness side and ground. Is the resistance greater than 10,000 ohms? → Yes INSTALL a new RF receiver. TEST the system for normal operation. → No REPAIR circuit 8-AA57 (WH). TEST the system for normal operation.
AA4: CHECK THE RF RECEIVER FOR SHORT TO BATTERY POSITIVE	
1 Ignition switch in position 0.	

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57190	2 Disconnect RF Receiver C390. 3 Ignition switch in position II.
	4 Measure the voltage between the CJB C98 pin 6, circuit 8-AA57 (WH), harness side and ground. • Is the voltage 0 volts? → Yes INSTALL a new RF receiver. TEST the system for normal operation. → No REPAIR circuit 8-AA57 (WH). TEST the system for normal operation.

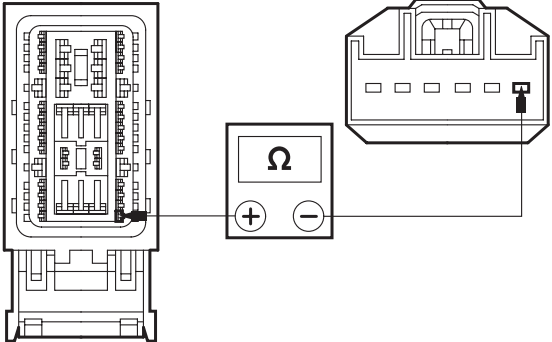
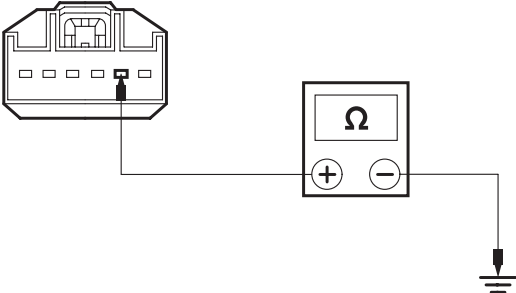
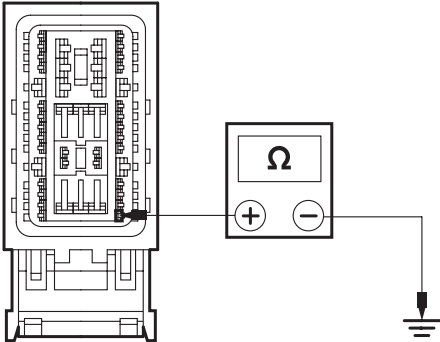
PINPOINT TEST AB : DTC: B2091

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AB1: CHECK CIRCUIT 8-AA57 (WH) FOR OPEN CIRCUIT	
 E57473	1 Disconnect CJB C98. 2 Disconnect RF Receiver C390.
	3 Measure the resistance between the CJB C98 pin 6, circuit 8-AA57 (WH), harness side and the RF receiver C390 pin 1, circuit 8-AA57 (WH), harness side. • Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new RF receiver. TEST the system for normal operation. If the DTC is repeated, INSTALL a new CJB. REFER to: Generic Electronic Module (GEM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing). TEST the system for normal operation. → No REPAIR circuit 8-AA57 (WH). TEST the system for normal operation.

PINPOINT TEST AC : DTC: B2894

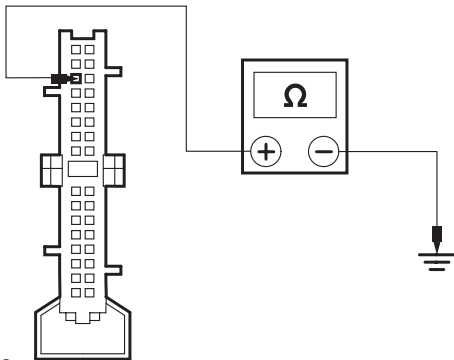
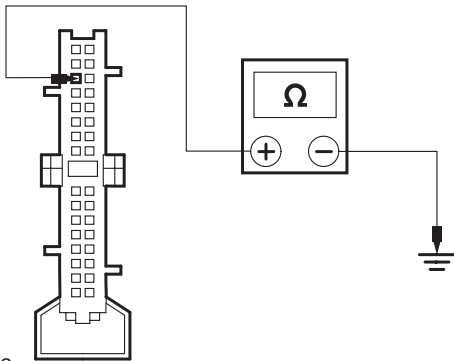
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AC1: CHECK CIRCUIT 32-AA27 (WH/GN) FOR OPEN CIRCUIT	
	1 Disconnect CJB C100.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57856	2 Disconnect Liftgate/Luggage Compartment Lid Latch C798. 3 Measure the resistance between the CJB C100 pin 46, circuit 32-AA27 (WH/GN), harness side and the liftgate/luggage compartment lid latch C798 pin 1, circuit 32-AA27 (BK), harness side. - Is the resistance less than 5 ohms? → Yes GO to AC2. → No REPAIR circuit 32-AA27 (WH/GN) or circuit 32-AA27 (BK). TEST the system for normal operation.
AC2: CHECK CIRCUIT 31-GL20 (BK) FOR OPEN CIRCUIT	
 E57855	1 Measure the resistance between the liftgate/luggage compartment lid latch C798 pin 2, circuit 31-GL20 (BK), harness side and ground. - Is the resistance less than 5 ohms? → Yes GO to AC3. → No REPAIR circuit 31-GL20 (BK). TEST the system for normal operation.
AC3: CHECK CIRCUIT 32-AA27 (WH/GN) FOR SHORT CIRCUIT TO GROUND	
 E57854	1 Measure the resistance between the CJB C100 pin 46, circuit 32-AA27 (WH/GN), harness side and ground. - Is the resistance greater than 10,000 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new liftgate/luggage compartment lid latch. REFER to: Liftgate Latch - 3-Door/5-Door (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) TEST the system for normal operation. → No REPAIR circuit 32-AA27 (WH/GN) or circuit 32-AA27 (BK). TEST the system for normal operation.

DIAGNOSIS AND TESTING

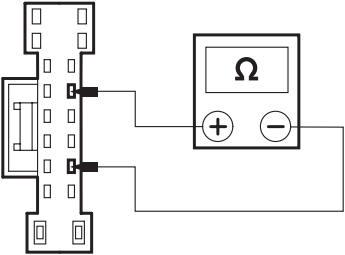
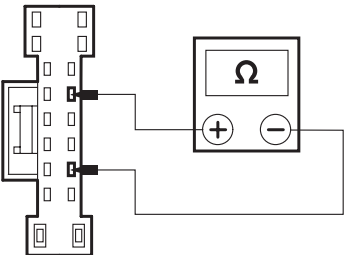
PINPOINT TEST AD : DTC: B2970

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AD1: CHECK CIRCUIT 31S-AA30 (BK/YE) FOR SHORT CIRCUIT TO GROUND	
 E57853	1 Disconnect CJB C99.
	2 Measure the resistance between the CJB C99 pin 30, circuit 31S-AA30 (BK/YE), harness side and ground. • With the liftgate or luggage compartment lid closed, is the resistance greater than 10,000 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new CJB. REFER to: Generic Electronic Module (GEM) (419-10 Multifunction Electronic Modules, Removal and Installation). TEST the system for normal operation. → No GO to AD2.
AD2: CHECK THE LIFTGATE/LUGGAGE COMPARTMENT LID EXTERIOR RELEASE SWITCH FOR CLOSED CIRCUIT	
 E57853	1 Disconnect Liftgate/Luggage Compartment Lid Exterior Release Switch C799.
	2 Measure the resistance between the CJB C99 pin 30, circuit 31S-AA30 (BK/YE), harness side and ground. • Is the resistance greater than 10,000 ohms? → Yes INSTALL a new liftgate/luggage compartment lid exterior release switch. TEST the system for normal operation. → No REPAIR circuit circuit 31S-AA30 (BK/YE). TEST the system for normal operation.

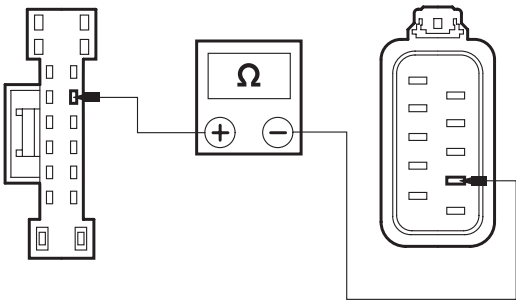
PINPOINT TEST AE : DTC: B1311

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
NOTE: The door latches must be in the locked mode to conduct this test.	
AE1: CHECK CIRCUIT 91S-AA64 (BK/GN) FOR OPEN CIRCUIT	
	1 Disconnect Right-Hand Side Front Door Control Module C722.

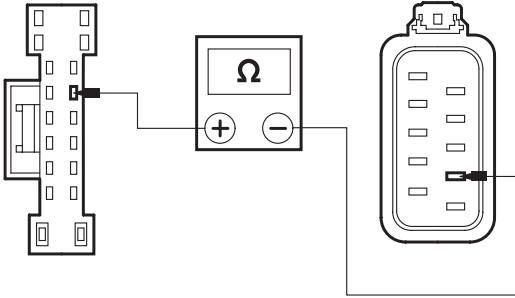
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57852	2 Measure the resistance between the right-hand front door control module C722 pin 13, circuit 91S-AA64 (BK/GN), harness side and the right-hand front door control module C722 pin 16, circuit 91-AA58 (BK/YE), harness side. - Is the resistance less than 5 ohms? → Yes GO to AE2. → No GO to AE3.
AE2: CHECK CIRCUIT 91S-AA64A (BK/GN) FOR OPEN CIRCUIT	
 E57852	1 Disconnect Left-Hand Side Front Door Control Module C729. 2 Measure the resistance between the left-hand side front door control module C729 pin 13, circuit 91S-AA64A (BK/GN), harness side and the left-hand side front door control module C729 pin 16, circuit 91-AA58A (BK/YE), harness side. - Is the resistance less than 5 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new left-hand side front door control module. CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new right-hand side front door control module. CLEAR the DTC. TEST the system for normal operation. → No GO to AE4.
AE3: CHECK THE RIGHT-HAND FRONT DOOR LATCH UNLOCK SWITCH FOR OPEN CIRCUIT	
	1 Disconnect Right-Hand Side Front Door Latch C149.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57851	2 Measure the resistance between the right-hand side front door control module C722 pin 13, circuit 91S-AA64 (BK/GN), harness side and the right-hand side front door latch C149 pin 9, circuit 91S-AA64 (BK/GN), harness side. Is the resistance less than 5 ohms? → Yes INSTALL a new right-hand side front door latch. REFER to: Front Door Latch - 3-Door (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) / Front Door Latch - 3-Door, Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) / Front Door Latch - 4-Door/5-Door/Wagon (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) / Front Door Latch - 4-Door/5-Door/Wagon, Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No REPAIR circuit 91S-AA64 (BK/GN). TEST the system for normal operation.

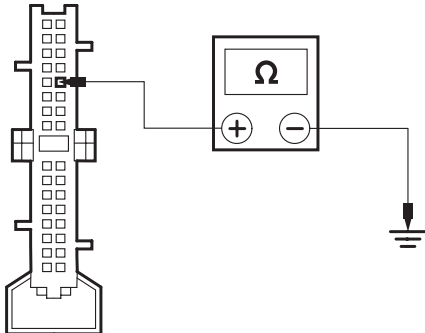
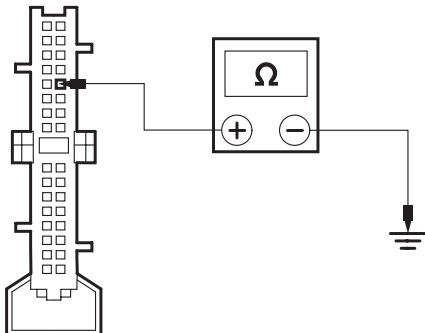
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AE4: CHECK THE LEFT-HAND FRONT DOOR LATCH UNLOCK SWITCH FOR OPEN CIRCUIT	
 E57851	1 Measure the resistance between the left-hand side front door control module C729 pin 13, circuit 91S-AA64A (BK/GN), harness side and the left-hand side front door latch C148 pin 9, circuit 91S-AA64A (BK/GN), harness side. Is the resistance less than 5 ohms? → Yes INSTALL a new left-hand side front door latch. REFER to: Front Door Latch - 3-Door (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) / Front Door Latch - 3-Door, Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) / Front Door Latch - 4-Door/5-Door/Wagon (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) / Front Door Latch - 4-Door/5-Door/Wagon, Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No REPAIR circuit 91S-AA64A (BK/GN). TEST the system for normal operation.

PINPOINT TEST AF : DTC: B1320

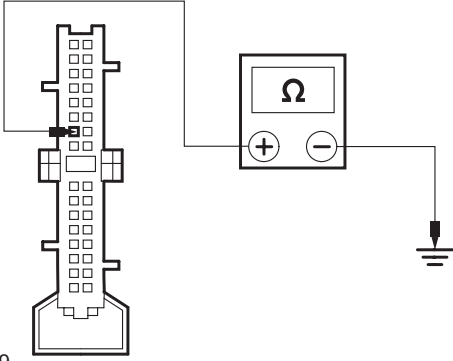
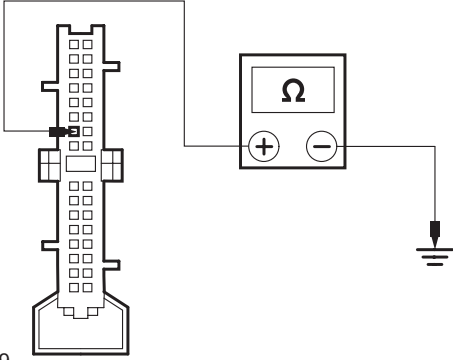
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
NOTE: The door latch must be in the open position to conduct this test.	
AF1: CHECK CIRCUIT 31S-GL9A (BK/YE) FOR OPEN CIRCUIT	
	1 Disconnect CJB C99.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E57850	2 Measure the resistance between the CJB C99 pin 12, circuit 31S-GL9A (BK/YE), harness side and ground. Is the resistance greater than 10,000 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new CJB. REFER to: Generic Electronic Module (GEM) (419-10 Multifunction Electronic Modules, Removal and Installation). TEST the system for normal operation. → No GO to AF2.
AF2: CHECK CIRCUIT 31S-GL9A (BK/YE) FOR SHORT CIRCUIT TO GROUND	
 E57850	1 Disconnect Driver Side Front Door Latch C148. 2 Measure the resistance between the CJB C99 pin 12, circuit 31S-GL9A (BK/YE), harness side and ground. Is the resistance greater than 10,000 ohms? → Yes INSTALL a new driver side front door latch. REFER to: Front Door Latch - 3-Door (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) / Front Door Latch - 3-Door, Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) / Front Door Latch - 4-Door/5-Door/Wagon (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) / Front Door Latch - 4-Door/5-Door/Wagon, Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation). TEST the system for normal operation. → No REPAIR circuit 31S-GL9A (BK/YE). TEST the system for normal operation.

DIAGNOSIS AND TESTING

PINPOINT TEST AG : DTC: B1331

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
NOTE: The door latch must be in the open position to conduct this test.	
AG1: CHECK CIRCUIT 31S-GL20 (BK/RD) FOR OPEN CIRCUIT	
 E57849	1 Disconnect CJB C99. 2 Measure the resistance between the CJB C99 pin 26, circuit 31S-GL20 (BK/RD), harness side and ground. • Is the resistance greater than 10,000 ohms? → Yes Using WDS, CLEAR the DTC. TEST the system for normal operation. If the DTC is still present, INSTALL a new CJB. REFER to: Generic Electronic Module (GEM) (419-10 Multifunction Electronic Modules, Removal and Installation). TEST the system for normal operation. → No GO to AG2.
AG2: CHECK CIRCUIT 31S-GL20 (BK/RD) FOR SHORT TO GROUND	
 E57849	1 Disconnect Liftgate/Luggage Compartment Lid C58. 2 Measure the resistance between the CJB C99 pin 26, circuit 31S-GL20 (BK/RD), harness side and ground. • Is the resistance greater than 10,000 ohms? → Yes INSTALL a new liftgate/luggage compartment lid latch. REFER to: Liftgate Latch - 3-Door/5-Door (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation) TEST the system for normal operation. → No Repair circuit 31S-GL20 (BK/RD). TEST the system for normal operation.

GENERAL PROCEDURES**Remote Transmitter Programming(41 004 0)**

- 1. NOTE:** A maximum of eight keyless entry remote transmitters can be programmed to the Central Junction Box (CJB).
Programming must be done at the same time for all the transmitters.

NOTE: To enter programming mode, first make sure that the vehicle battery is fully charged and the anti-theft system is not armed or triggered (if equipped).

NOTE: Make sure the turn signal indicators are in the OFF position.

Fasten the safety belts and close all doors to make sure conflicting chimes do not sound during programming.

- 2. NOTE:** The ignition must be turned to position II exactly four times during remote transmitter programming.

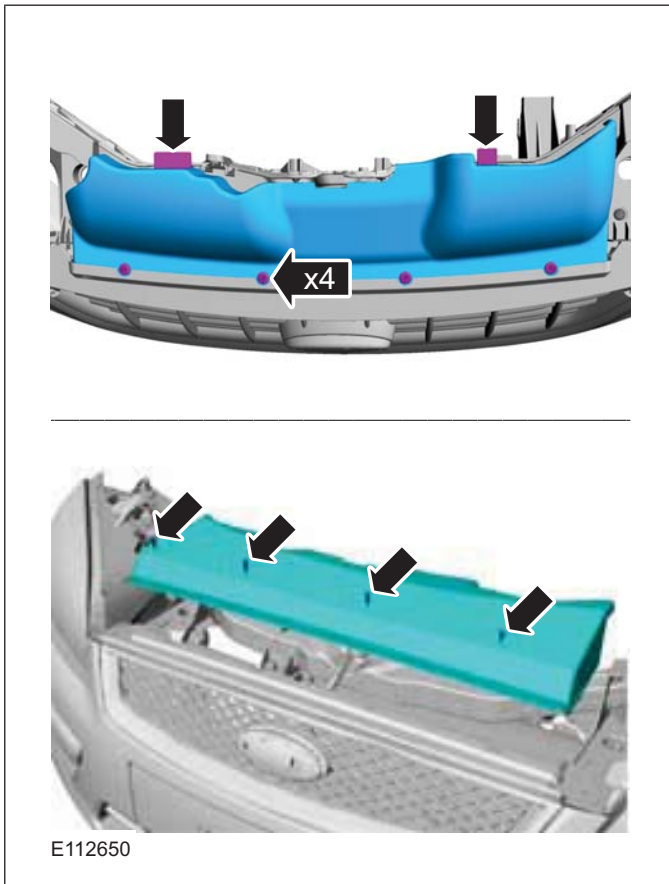
Turn the ignition switch from position I to position II four times exactly within six seconds.

- 3. Turn the ignition switch to position 0.**
- 4. An audible chime will be heard (only in vehicles built before 2008 model year) to indicate that it is now possible to programme the keys for ten seconds.**
- 5. Press and hold one of the buttons on the remote transmitter until a chime sounds. This indicates a new transmitter code has been successfully received.**
- 6. To program additional transmitters, repeat step 5.**
- 7. The system will leave the learning mode after the ignition switch is turned to either position II, or if no new transmitter is programmed during the 10 seconds, or if eight remote transmitters have been programmed.**

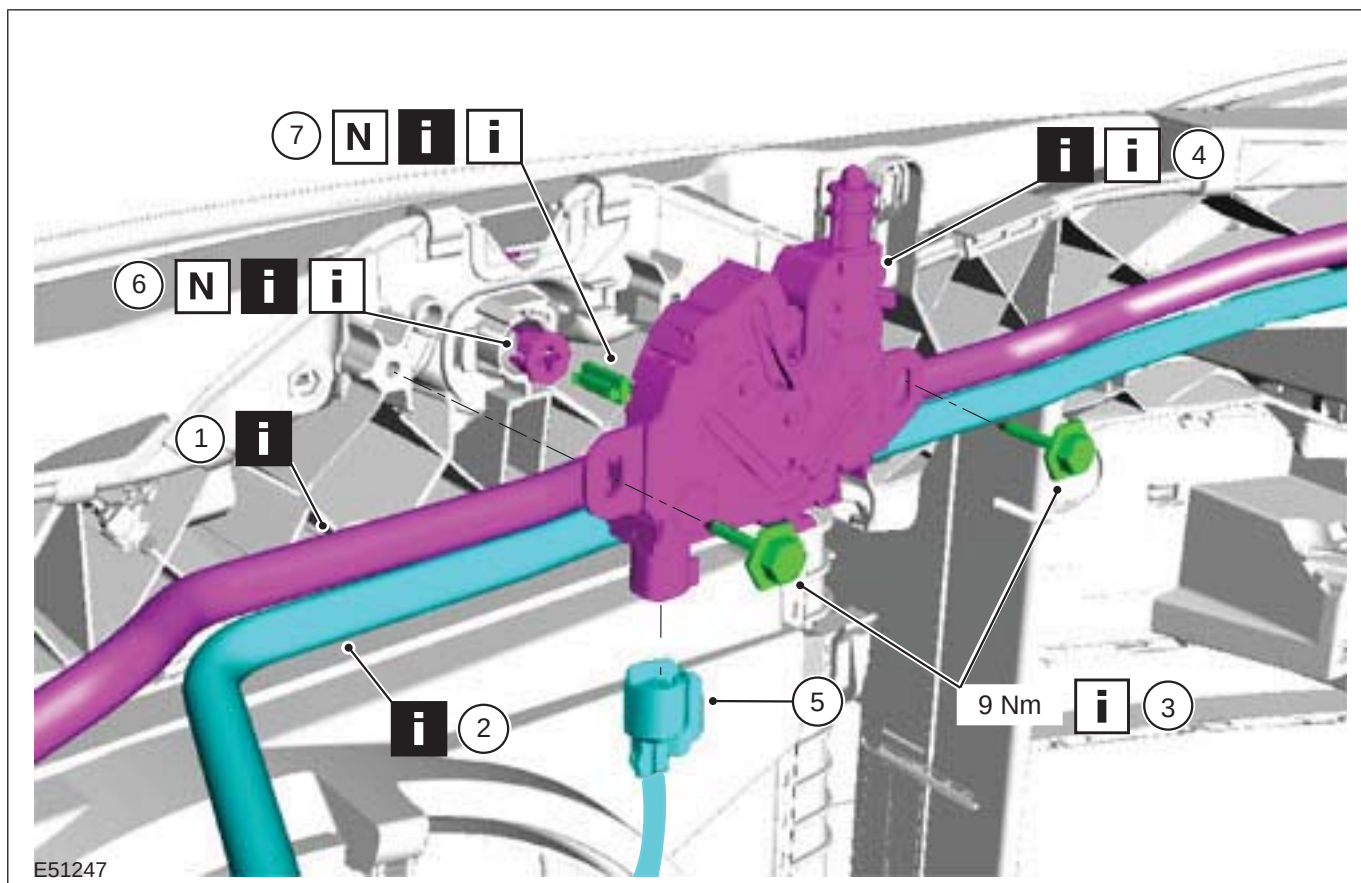
REMOVAL AND INSTALLATION**Hood Latch**

1. Remove the air deflector.

2. Remove the components in the order indicated in the following illustration(s) and table(s).



REMOVAL AND INSTALLATION



Item	Description
1	Coolant expansion tank to radiator hose See Removal Detail
2	Coolant expansion tank to coolant outlet connector hose See Removal Detail
3	Hood latch retaining bolts See Installation Detail
4	Hood latch See Removal Detail See Installation Detail

Item	Description
5	Hood latch electrical connector
6	Hood lock cylinder connecting clip See Removal Detail See Installation Detail
7	Hood lock cylinder connecting shaft See Removal Detail See Installation Detail

3. To install, reverse the removal procedure.

Removal Details

Item 1 Coolant expansion tank to radiator hose

1. Detach the coolant expansion tank to radiator hose from the coolant hose retaining clamp.

Item 2 Coolant expansion tank to coolant outlet connector hose

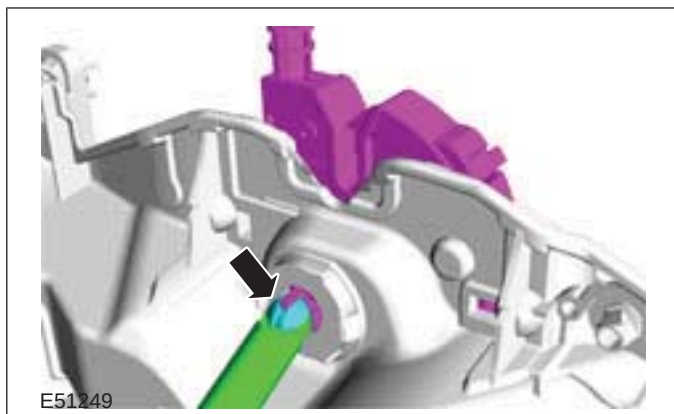
1. Detach the coolant expansion tank to coolant outlet connector hose from the hose retaining clamp.

Item 4 Hood latch

1. NOTE: Make a note of the position and orientation of the hood lock cylinder connecting clip.

REMOVAL AND INSTALLATION

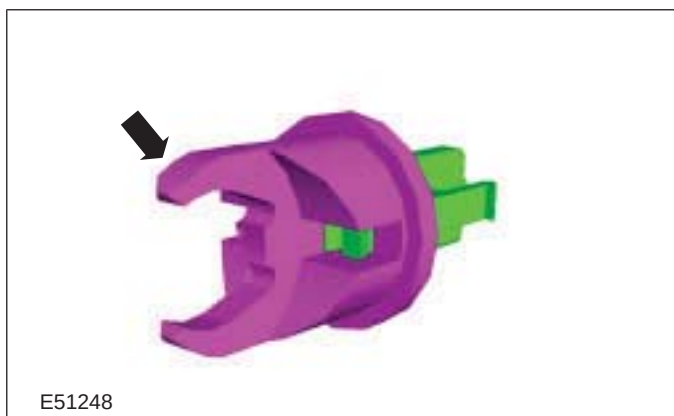
Detach the hood lock cylinder to hood latch rod swivel joint from the hood latch connecting clip.



Item 6 Hood lock cylinder connecting clip

- NOTE:** Make a note of the position and orientation of the hood lock cylinder connecting shaft.

Remove the hood lock cylinder connecting clip from the hood lock cylinder connecting shaft (hood latch shown removed for clarity).

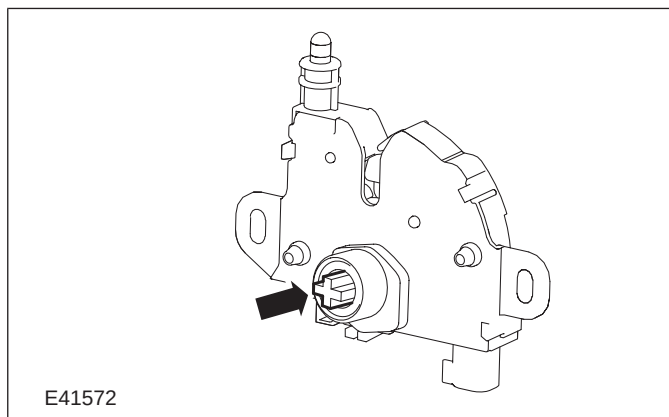


Item 7 Hood lock cylinder connecting shaft

- NOTE:** Make a note of the position and orientation of the hood lock cylinder connecting shaft.

Remove the hood lock cylinder connecting shaft from the hood latch.

- Discard the hood lock cylinder connecting shaft.



Installation Details

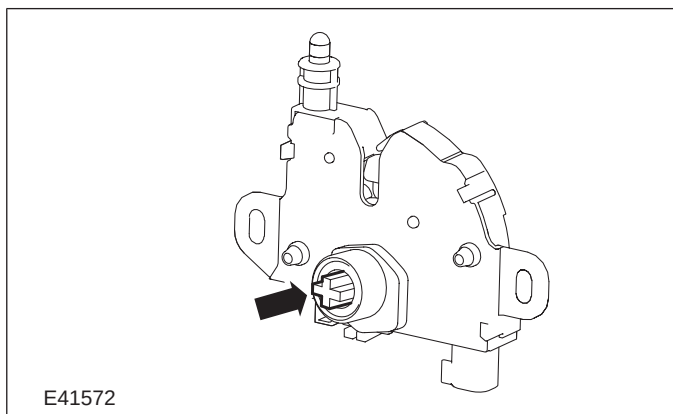
Item 7 Hood lock cylinder connecting shaft

- NOTE:** Make sure that the hood lock cylinder connecting shaft is installed in the same position and alignment as removed.

NOTE: Make sure that the hood lock cylinder connecting shaft clips are facing the correct way. The long clips of the hood lock cylinder connecting shaft should be installed into the hood latch.

REMOVAL AND INSTALLATION

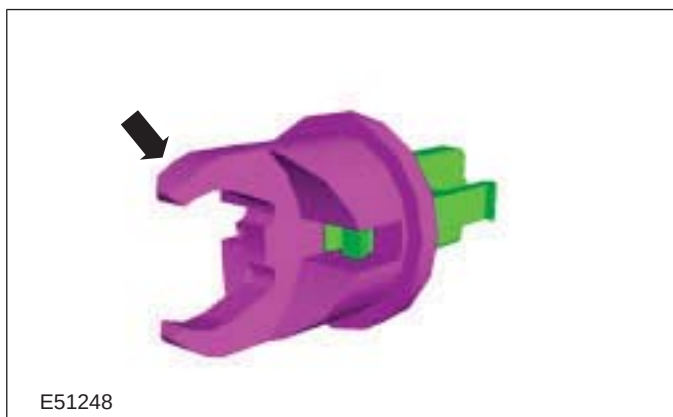
Install the hood lock cylinder connecting shaft to the hood latch.

**Item 6 Hood lock cylinder connecting clip**

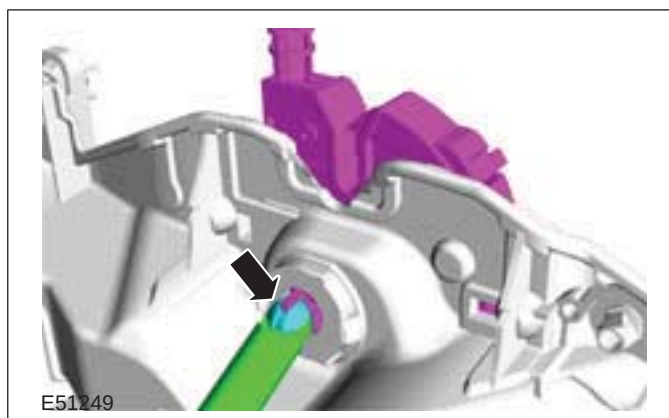
1. **NOTE:** Make sure that the hood lock cylinder connecting shaft clips are facing the correct way. The short clips of the hood lock cylinder connecting shaft should be installed into the hood lock cylinder connecting clip.

NOTE: The hood lock cylinder connecting shaft clips must be compressed before being installed into the hood lock cylinder connecting clip.

Using a suitable flat bladed screwdriver, install the hood lock cylinder connecting clip to the hood lock cylinder connecting shaft (hood latch shown removed for clarity).

**Item 4 Hood latch**

1. Connect the hood lock cylinder shaft swivel joint to the hood latch connecting clip.

**Item 3 Hood latch retaining bolts**

1. Tighten the hood latch retaining bolts.

- Adjust the hood latch so that the hood alignment is correct.

For additional information, refer to: **Hood Alignment** (501-02 Front End Body Panels, General Procedures).

REMOVAL AND INSTALLATION

Front Door Latch — 3-Door

General Equipment

Electric hand drill

Rivet gun

Materials

Name	Specification
Adhesive - Loctite 243	WSK-M2G349-A7

1. Remove the front door trim panel.

For additional information, refer to: **Front Door Trim Panel - 3-Door** (501-05 Interior Trim and Ornamentation, Removal and Installation).

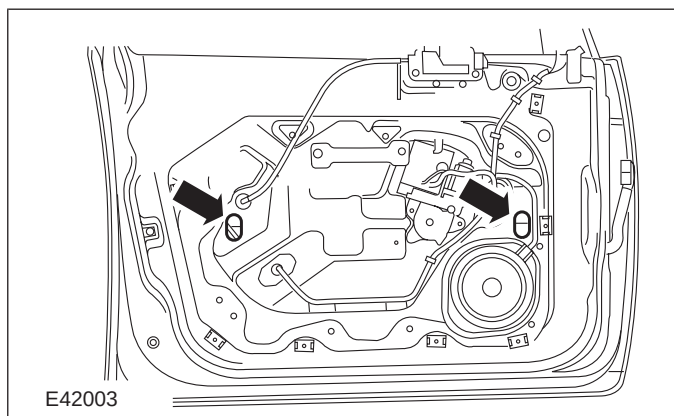
2. Remove the exterior front door handle.

For additional information, refer to: **Exterior Front Door Handle** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

3. Connect the battery ground cable.

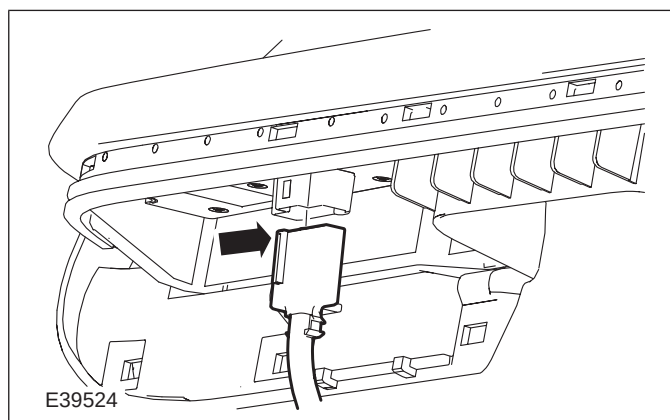
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

4. Remove the front door window regulator grommets.

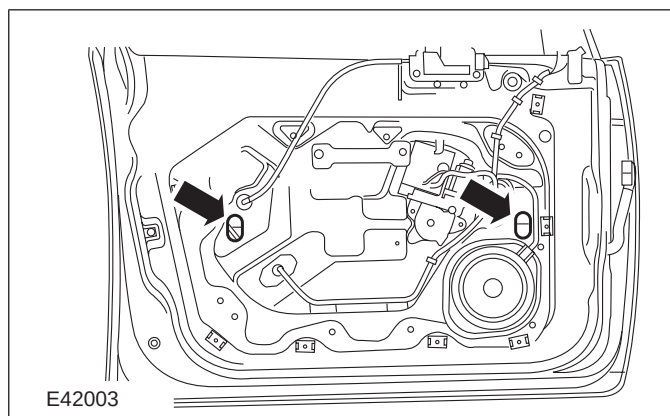


5. NOTE: Support the front door power window control unit.

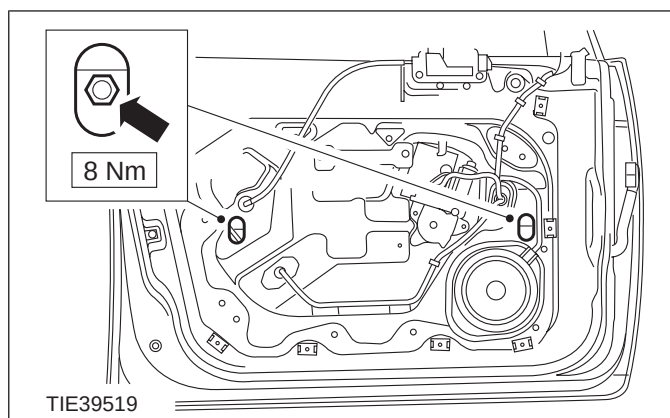
Connect the front door power window control switch electrical connector.



6. Using the front door power window control switch, align the window glass clamp retaining bolts with the access holes.



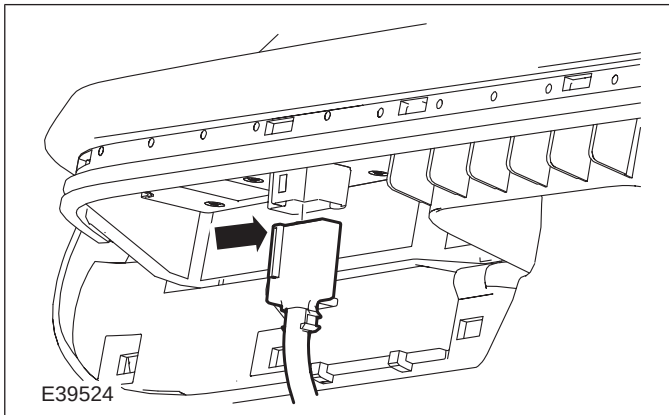
7. Loosen the front door window glass clamp retaining bolts.



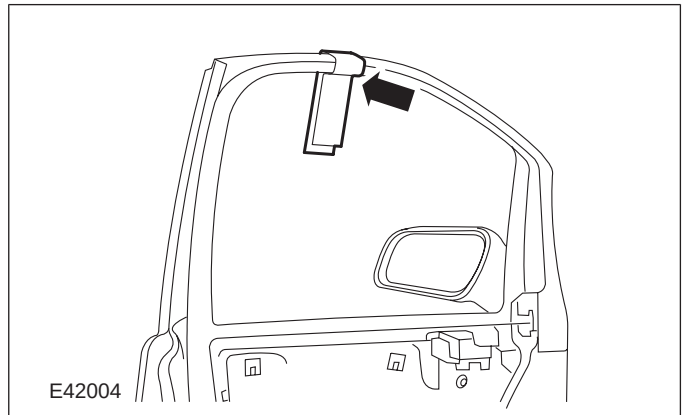
8. Raise the front door window glass.

REMOVAL AND INSTALLATION

9. Disconnect the front door power window control switch electrical connector.



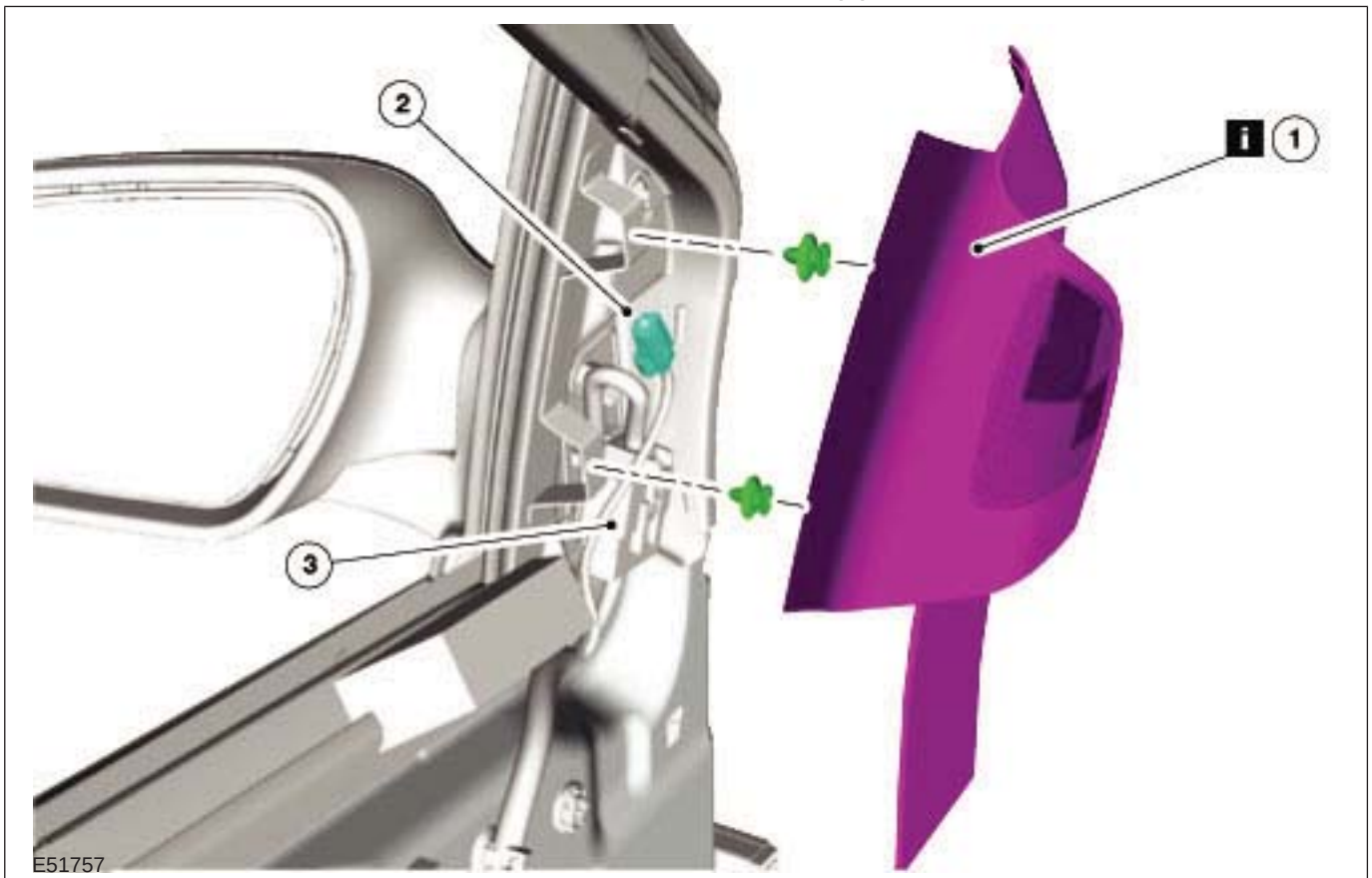
10. Using suitable tape, secure the front door window glass to the front door.



11. Disconnect the battery ground cable.

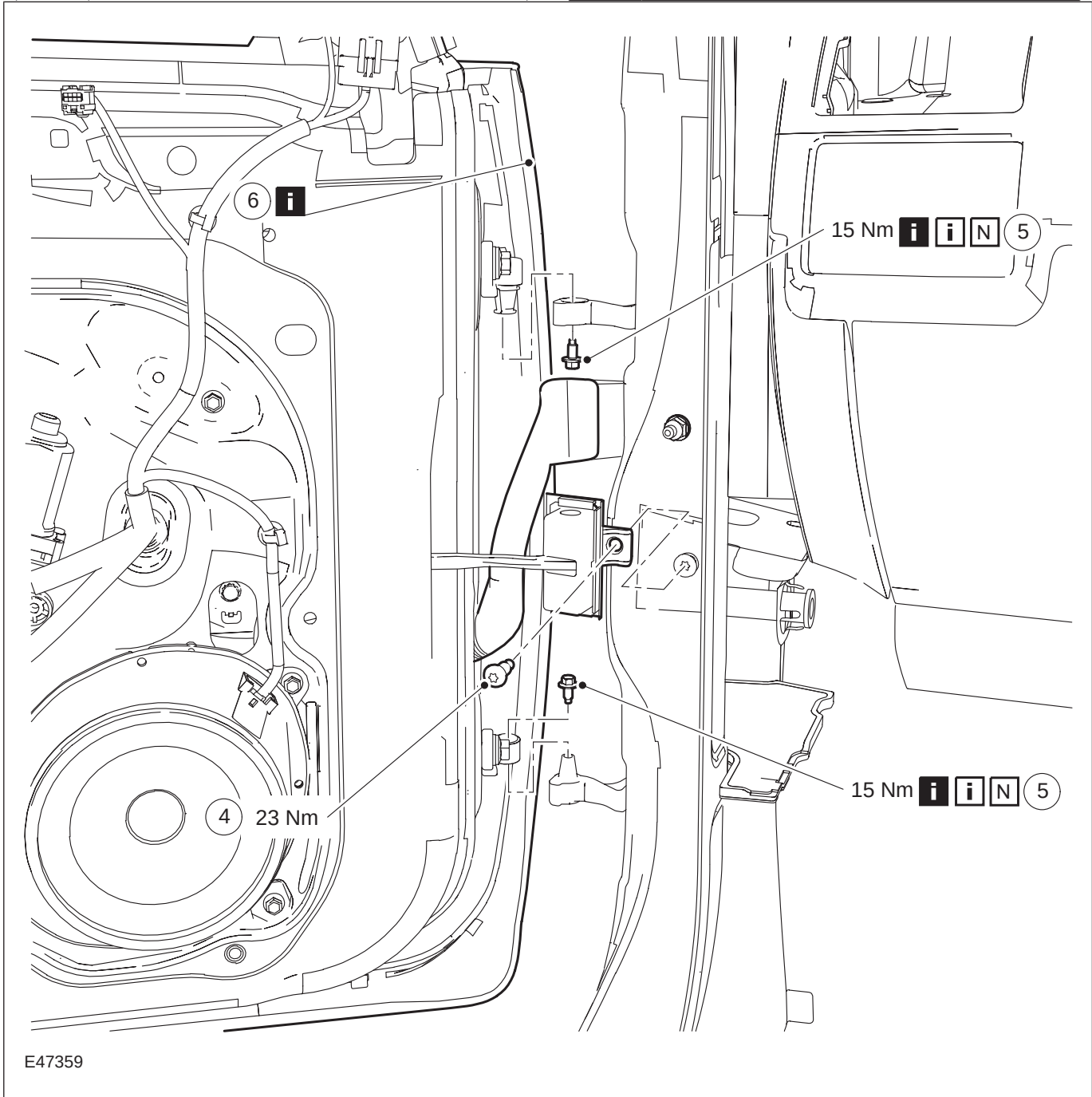
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

12. Remove the components in the order indicated in the following illustration(s) and table(s).



REMOVAL AND INSTALLATION

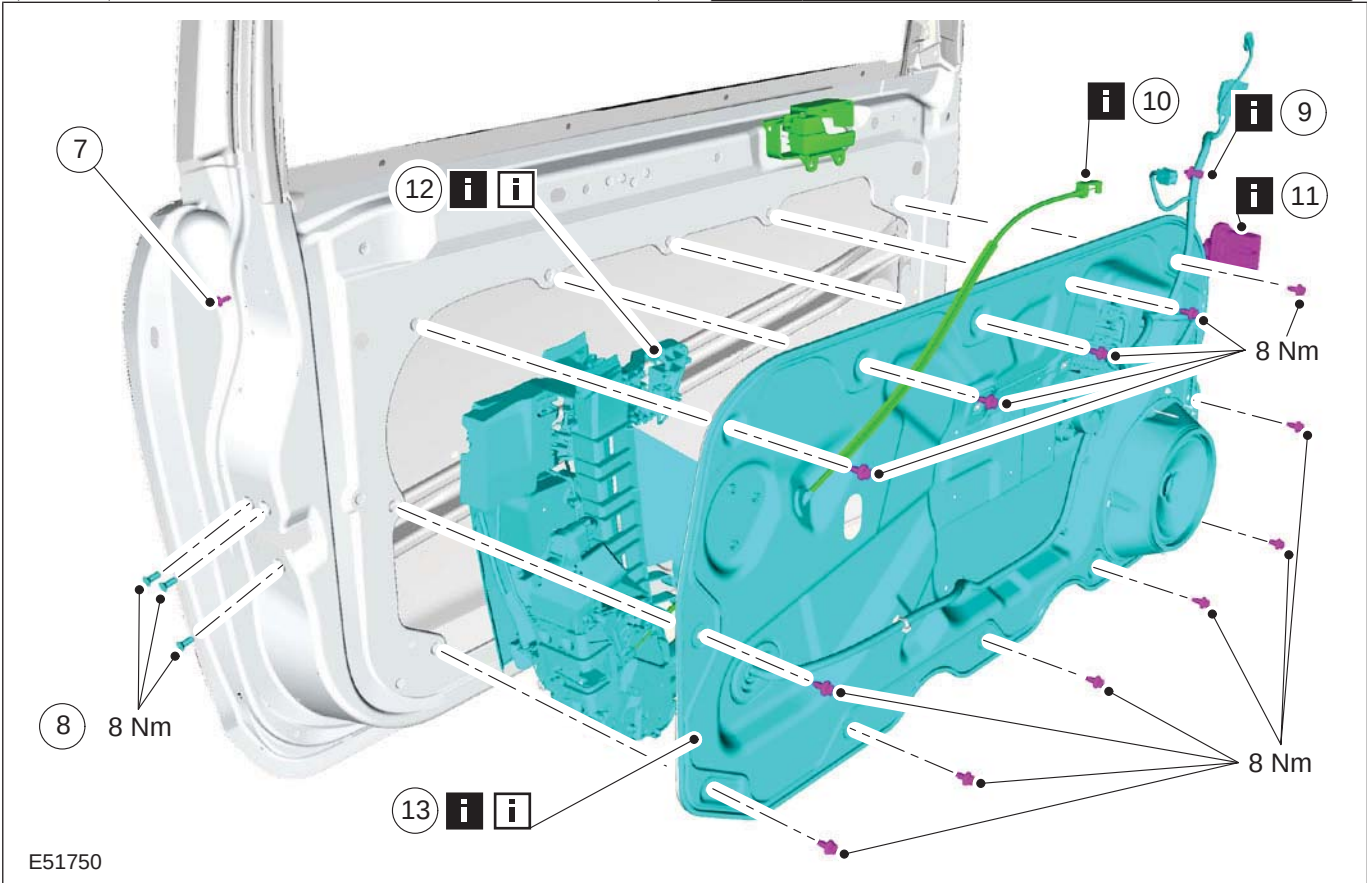
Item	Description	Item	Description
1	Exterior mirror interior trim panel See Removal Detail		connector
2	Front door tweeter speaker electrical	3	Exterior mirror electrical connector (if equipped)



REMOVAL AND INSTALLATION

Item	Description
4	Door check strap retaining bolt
5	Door hinge retaining bolts See Removal Detail

Item	Description
	See Installation Detail
6	Door (left-hand door shown) See Removal Detail

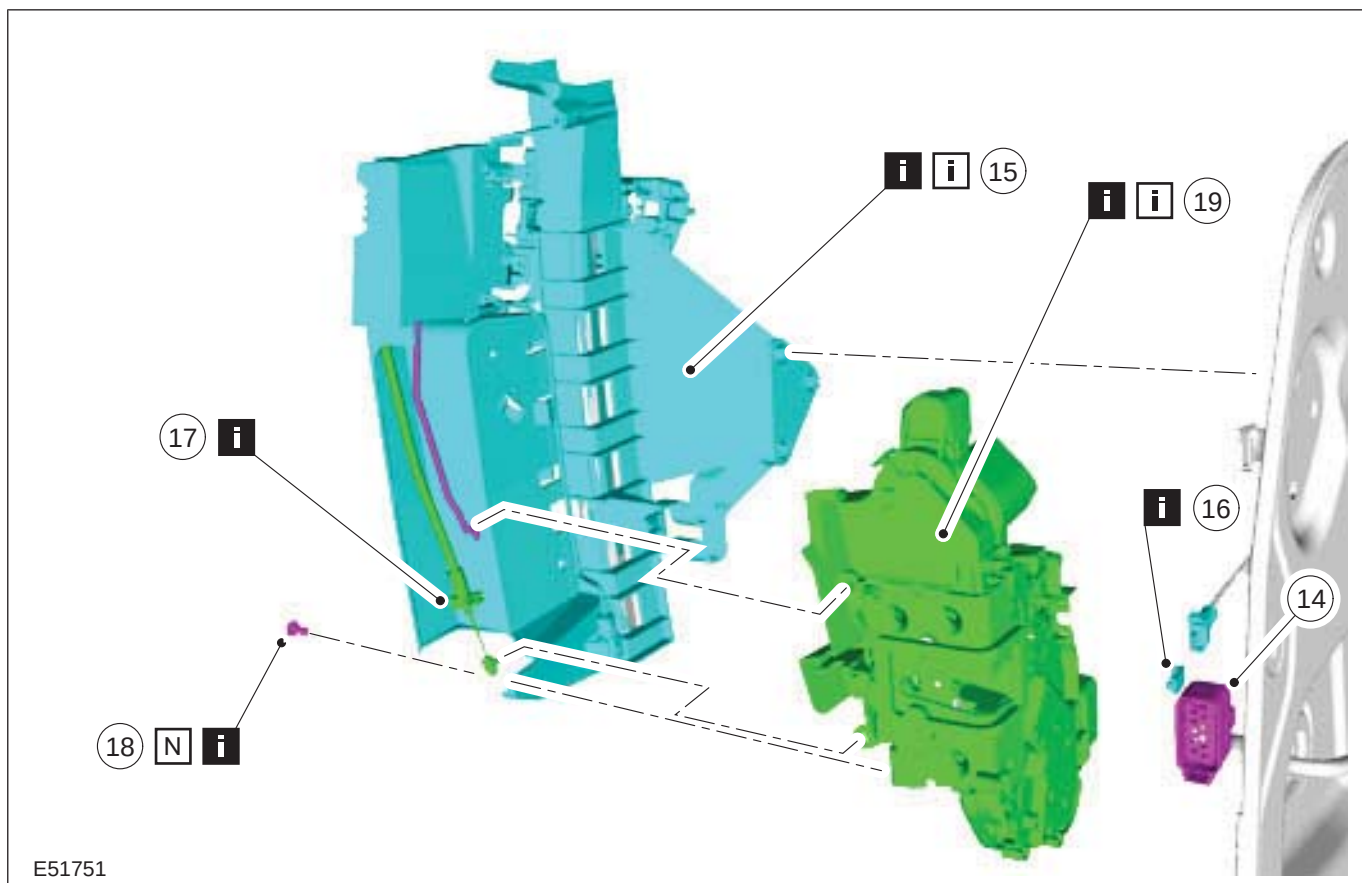


E51750

Item	Description
7	Front door handle, lock and latch retaining bracket retaining screw
8	Front door latch retaining bolts
9	Front door wiring harness retaining clip See Removal Detail
10	Front door latch remote control cable See Removal Detail

Item	Description
11	Front door wiring harness See Removal Detail
12	Front door lock actuator retaining screw See Removal Detail See Installation Detail
13	Front door inner panel See Removal Detail See Installation Detail

REMOVAL AND INSTALLATION



E51751

Item	Description
14	Front door latch electrical connector
15	Front door handle, lock and latch retaining bracket See Removal Detail See Installation Detail
16	Front door latch remote control cable See Removal Detail
17	Front exterior door handle remote control cable See Removal Detail

Item	Description
18	Front door latch retaining bracket retaining rivet See Removal Detail
19	Front door latch See Removal Detail See Installation Detail

13. To install, reverse the removal procedure.

14. Vehicles with global closing, initialize the door window motors.

For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

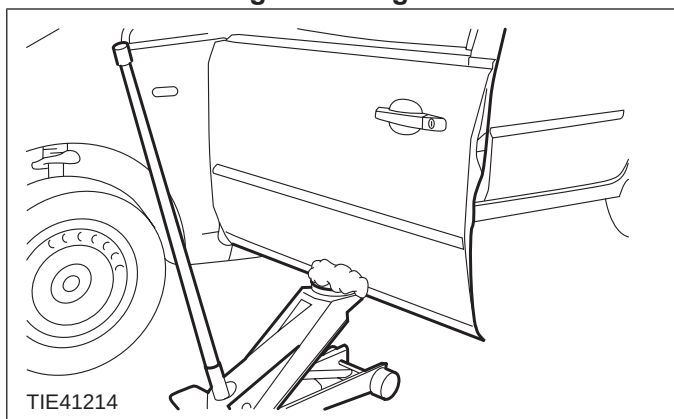
Removal Details

Item 1 Exterior mirror interior trim panel



CAUTION: Do not place excessive strain on the exterior mirror and front door tweeter speaker wiring harness.

REMOVAL AND INSTALLATION

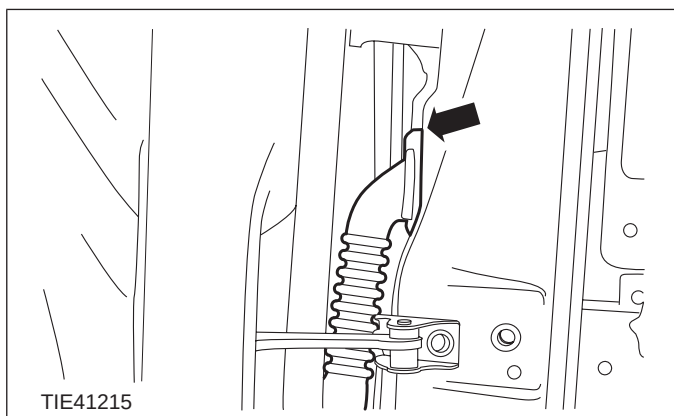
Item 5 Door hinge retaining bolts

1. **⚠ CAUTION:** Protect the door using a soft cloth to prevent damage to the front door.

With the aid of another technician and a suitable trolley jack, support and detach the front door from the front door hinges.

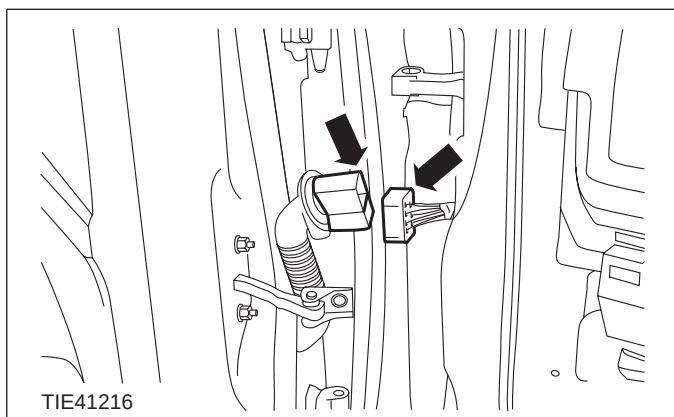
Item 6 Door (left-hand door shown)

1. Detach the electrical connector from the A-pillar.



2. Remove the front door.

- Disconnect the electrical connector.

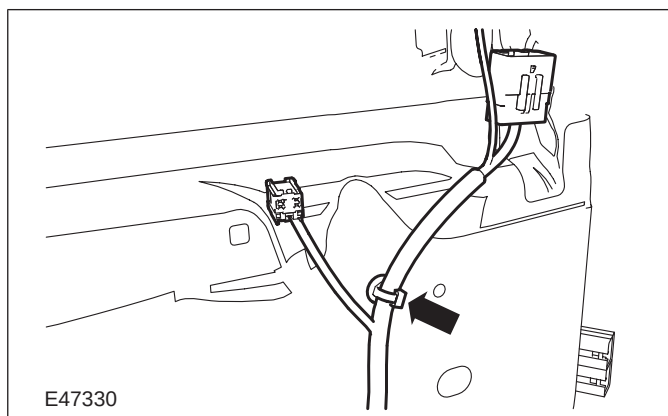


3. **⚠ CAUTION:** After the front door wiring harness electrical connector has been disconnected, position the front door back onto the front door hinges. Failure to follow this instruction may cause damage to the front door.

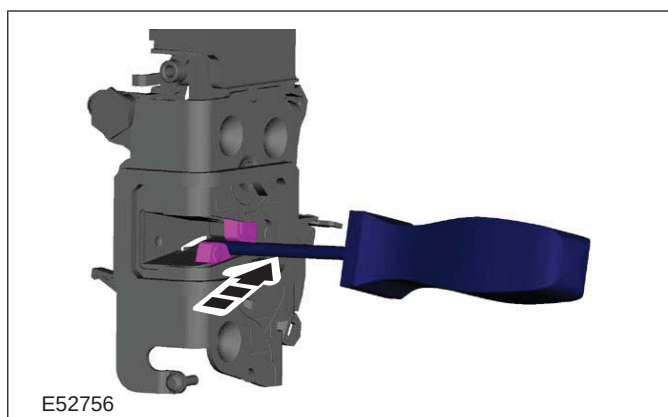
Position the front door onto the front door hinges.

Item 9 Front door wiring harness retaining clip

1. Detach the front door wiring harness retaining clip from the front door.

**Item 10 Front door latch remote control cable**

1. Using a suitable screwdriver, latch the front door lock into the closed position.

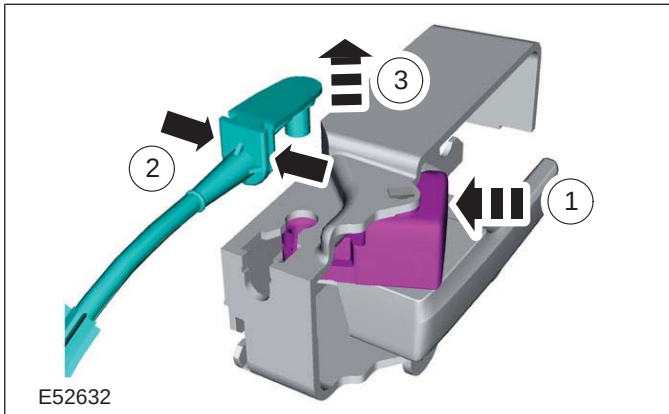


2. Detach the front door latch remote control cable from the front door latch remote control handle.

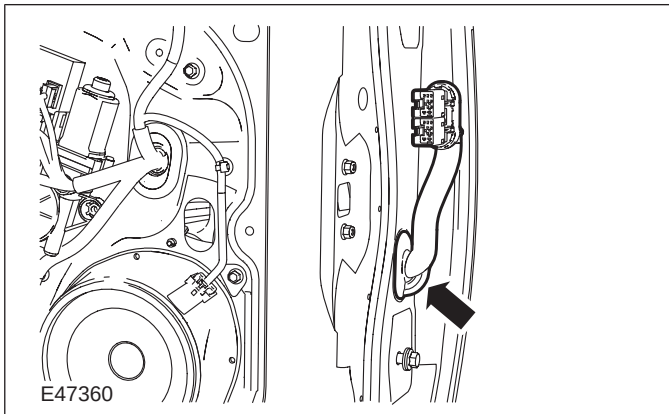
1. Operate the door latch remote control handle lock to the lock position.
2. Release the remote control cable retaining clips.

REMOVAL AND INSTALLATION

3. Detach the inner remote control cable from the remote control handle lock lever.

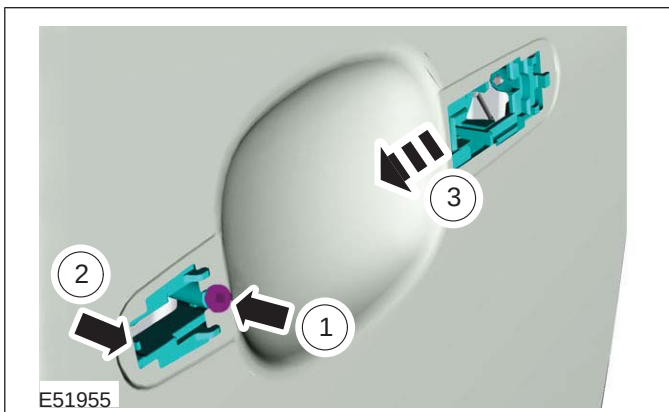
**Item 11 Front door wiring harness**

1. Detach and push the front door wiring harness into the front door.

**Item 12 Front door lock actuator retaining screw**

1. Detach the front door lock actuator.

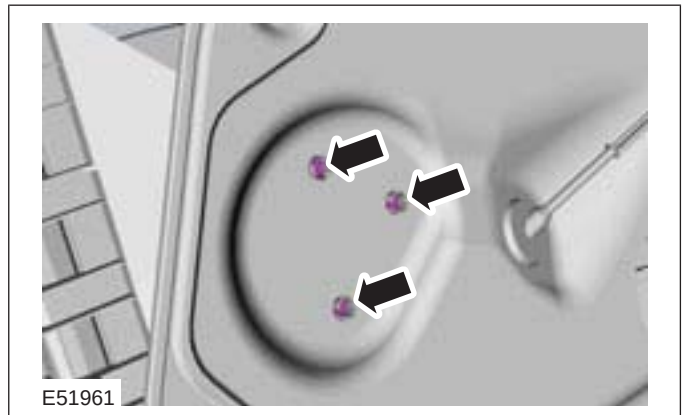
1. Loosen the door lock actuator retaining screw.
2. Release the door lock actuator retaining clip.
3. Slide the door lock actuator towards the front of the vehicle.

**Item 13 Front door inner panel**

CAUTION: When removing the front door inner panel, care must be taken that the door wiring harness is not trapped or placed under excessive strain.

Item 15 Front door handle, lock and latch retaining bracket

1. Press in the centers of the front door handle, lock and latch retaining bracket retaining clip locking pins.

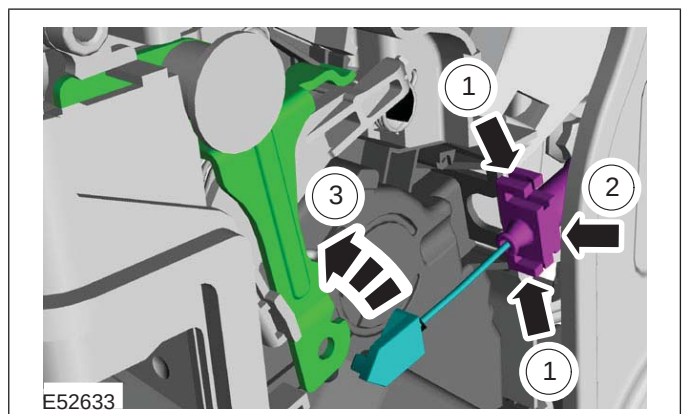
**Item 16 Front door latch remote control cable**

1. **NOTE:** Do not kink the front door latch remote control cable.

NOTE: In order to remove the front door latch remote control cable from the front door latch lever the cable must be rotated.

Disconnect the front door latch remote control cable from the front door latch.

1. Using a suitable screwdriver, release the front door latch remote control cable locking tangs from the front door latch.
2. Detach the front door latch remote control outer cable from the front door latch.
3. Rotate the front door latch remote control cable.



REMOVAL AND INSTALLATION

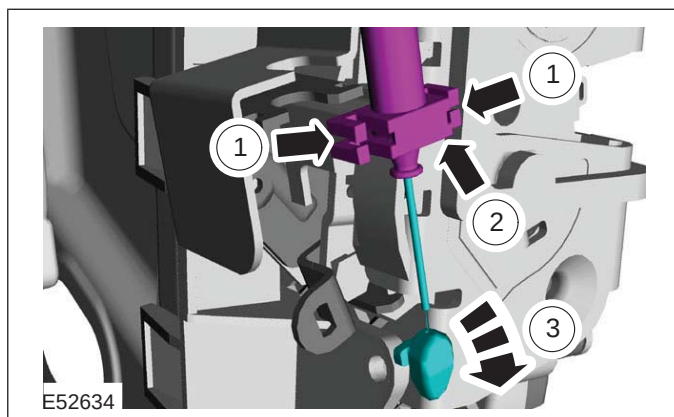
Item 17 Front exterior door handle remote control cable

1. **NOTE: Do not kink the front exterior door handle remote control cable.**

NOTE: In order to remove the front exterior door handle remote control cable from the front door latch lever the cable must be rotated.

Disconnect the front exterior door handle remote control cable from the front door latch.

1. Using a suitable screwdriver, release the front exterior door handle remote control outer cable locking tangs from the front door latch.
2. Detach the front exterior door handle remote control cable from the front door latch.
3. Rotate the front exterior door handle remote control cable.



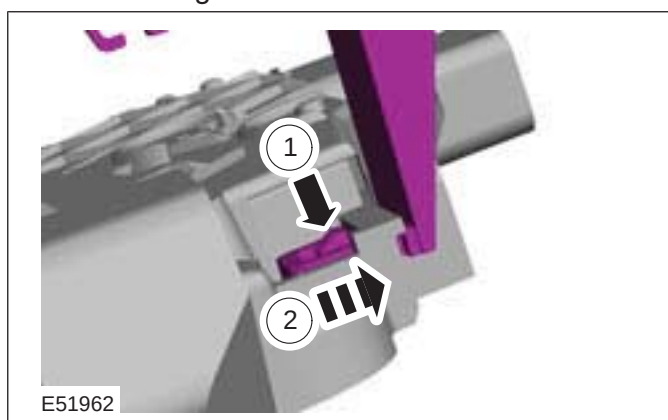
Item 18 Front door latch retaining bracket retaining rivet

1. Using a suitable Electric hand drill remove and discard the door latch retaining bracket retaining rivet.

Item 19 Front door latch

1. Detach the front door latch actuator from the front door handle, lock and latch retaining bracket.

1. Press the front door handle, lock and latch retaining bracket release clip.
2. Slide the front door handle, lock and latch retaining bracket out of the front door latch.



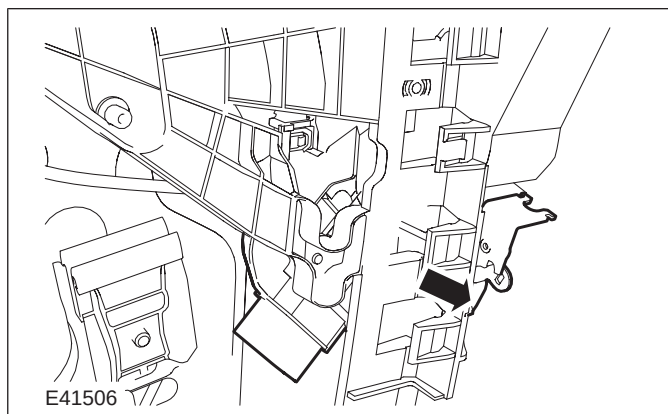
2. Detach the front door lock cylinder actuator rod from the front door latch.

Installation Details

Item 19 Front door latch

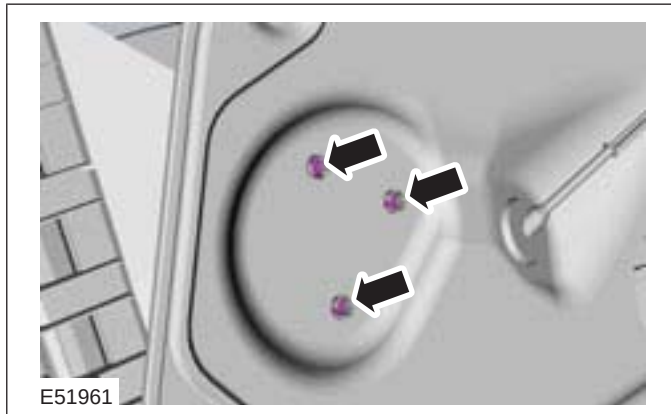
1. Connect the front door lock cylinder actuator rod to the front door latch.
2. Install the front door latch.

- Using a suitable Rivet gun install a new front door latch rivet.



REMOVAL AND INSTALLATION**Item 15** Front door handle, lock and latch retaining bracket

1. Install the front door handle, lock and latch retaining bracket to the door inner panel.
2. From the back of the front door handle, lock and latch retaining bracket press in the retaining clip locking pins.

**Item 13** Front door inner panel

1. Before installing the front door inner panel retaining bolts, feed the door wiring harness electrical connector through the front door wiring harness hole.

Item 12 Front door lock actuator retaining screw

1. Install the front door lock actuator to the front door.
2. Tighten the front door lock actuator retaining screw.

Item 5 Door hinge retaining bolts

1. Apply a coating of adhesive to the door hinge center retaining bolts.

REMOVAL AND INSTALLATION

Front Door Latch — 3-Door, Vehicles With: Keyless Vehicle System

General Equipment

Electric hand drill

Rivet gun

Materials

Name	Specification
Adhesive - Loctite 243	WSK-M2G349-A7

1. Remove the front door trim panel.

For additional information, **refer to: Front Door Trim Panel - 3-Door** (501-05 Interior Trim and Ornamentation, Removal and Installation).

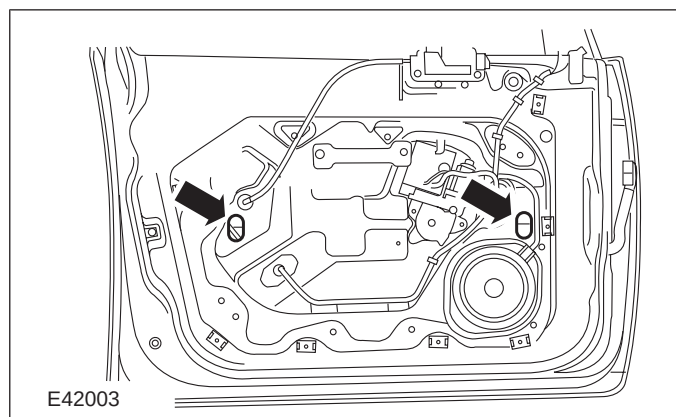
2. Remove the exterior front door handle.

For additional information, **refer to: Exterior Front Door Handle - Vehicles With: Keyless Vehicle System** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

3. Connect the battery ground cable.

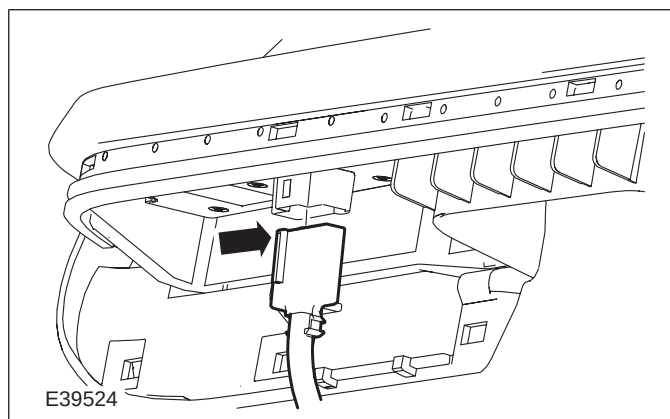
For additional information, **refer to: Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

4. Remove the front door window regulator grommets.

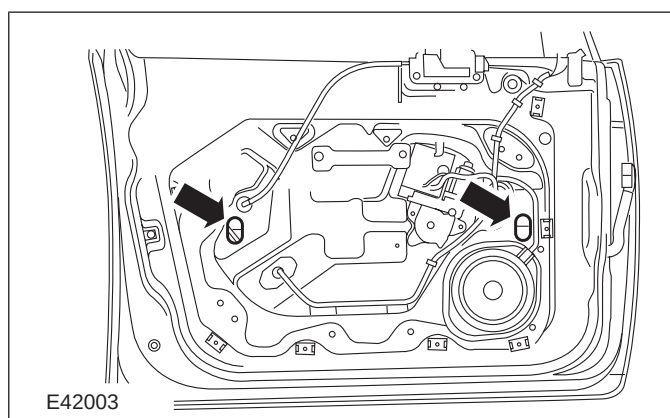


5. NOTE: Support the front door power window control unit.

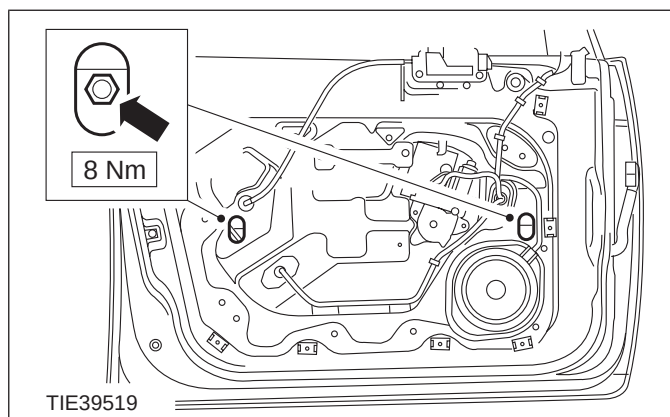
Connect the front door power window control switch electrical connector.



6. Using the front door power window control switch, align the window glass clamp retaining bolts with the access holes.



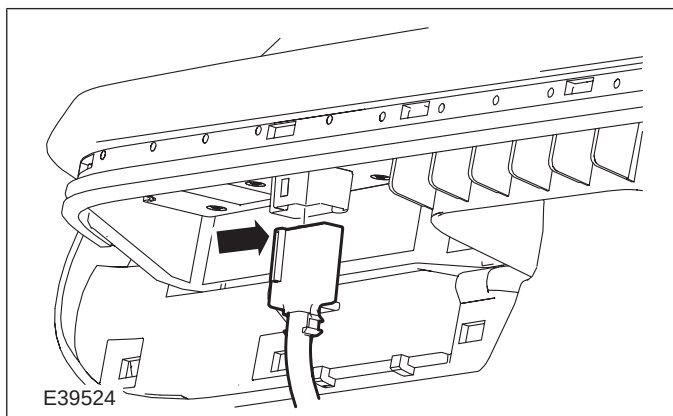
7. Loosen the front door window glass clamp retaining bolts.



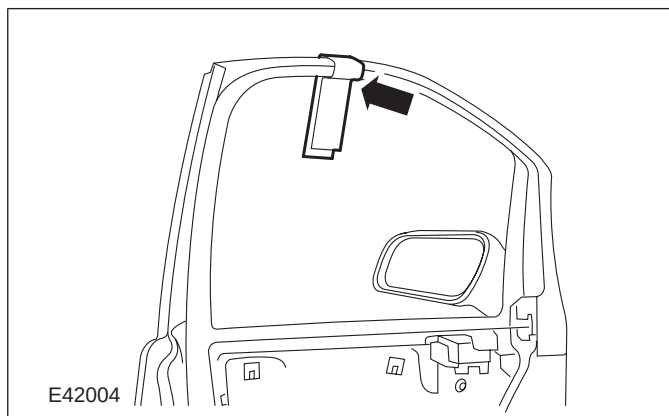
8. Raise the front door window glass.

REMOVAL AND INSTALLATION

9. Disconnect the front door power window control switch electrical connector.



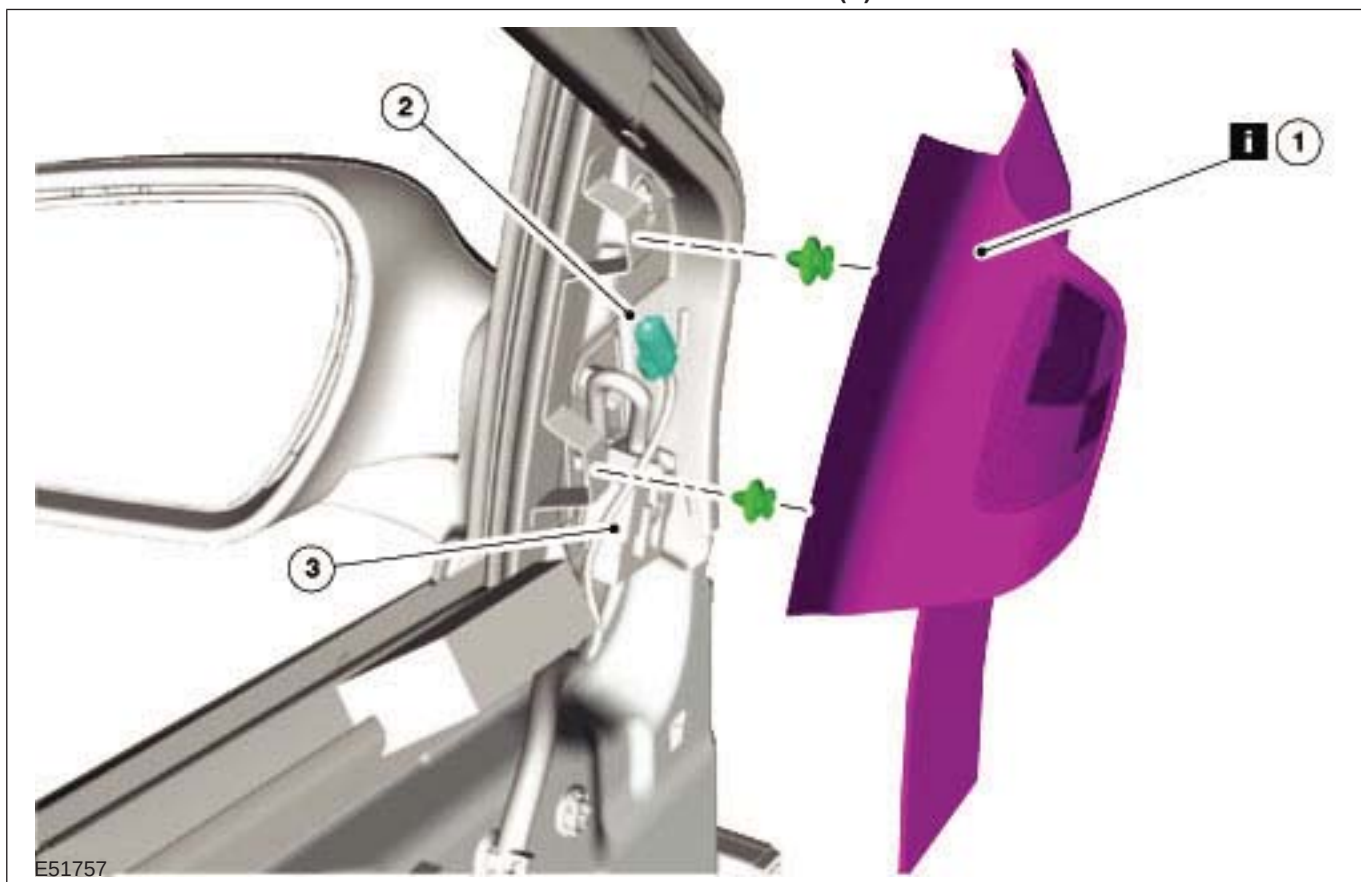
10. Using suitable tape, secure the front door window glass to the front door.



11. Disconnect the battery ground cable.

For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

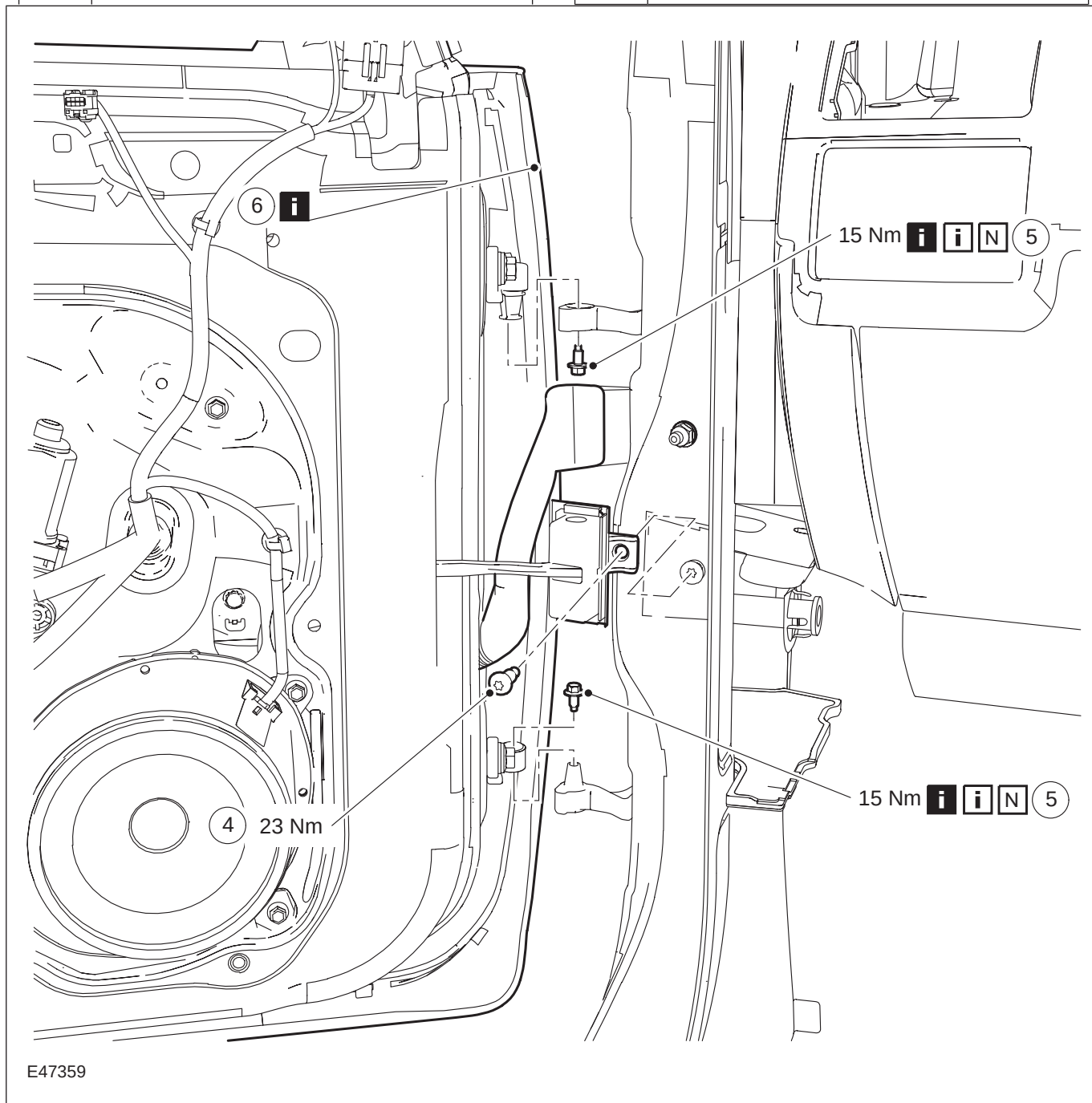
12. Remove the components in the order indicated in the following illustration(s) and table(s).



REMOVAL AND INSTALLATION

Item	Description
1	Exterior mirror interior trim panel See Removal Detail
2	Front door tweeter speaker electrical

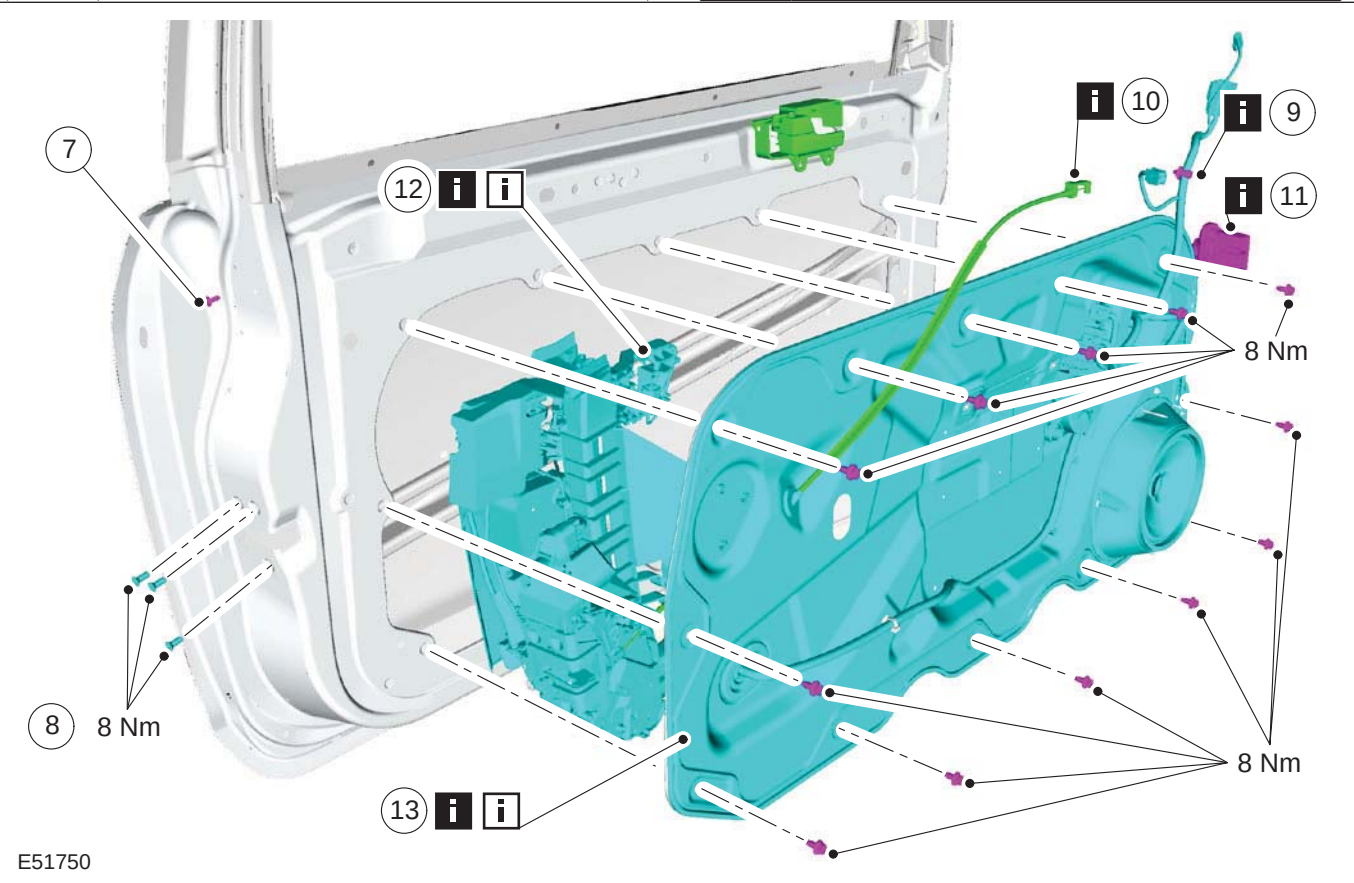
Item	Description
	connector
3	Exterior mirror electrical connector (if equipped)



REMOVAL AND INSTALLATION

Item	Description
4	Door check strap retaining bolt
5	Door hinge retaining bolts See Removal Detail

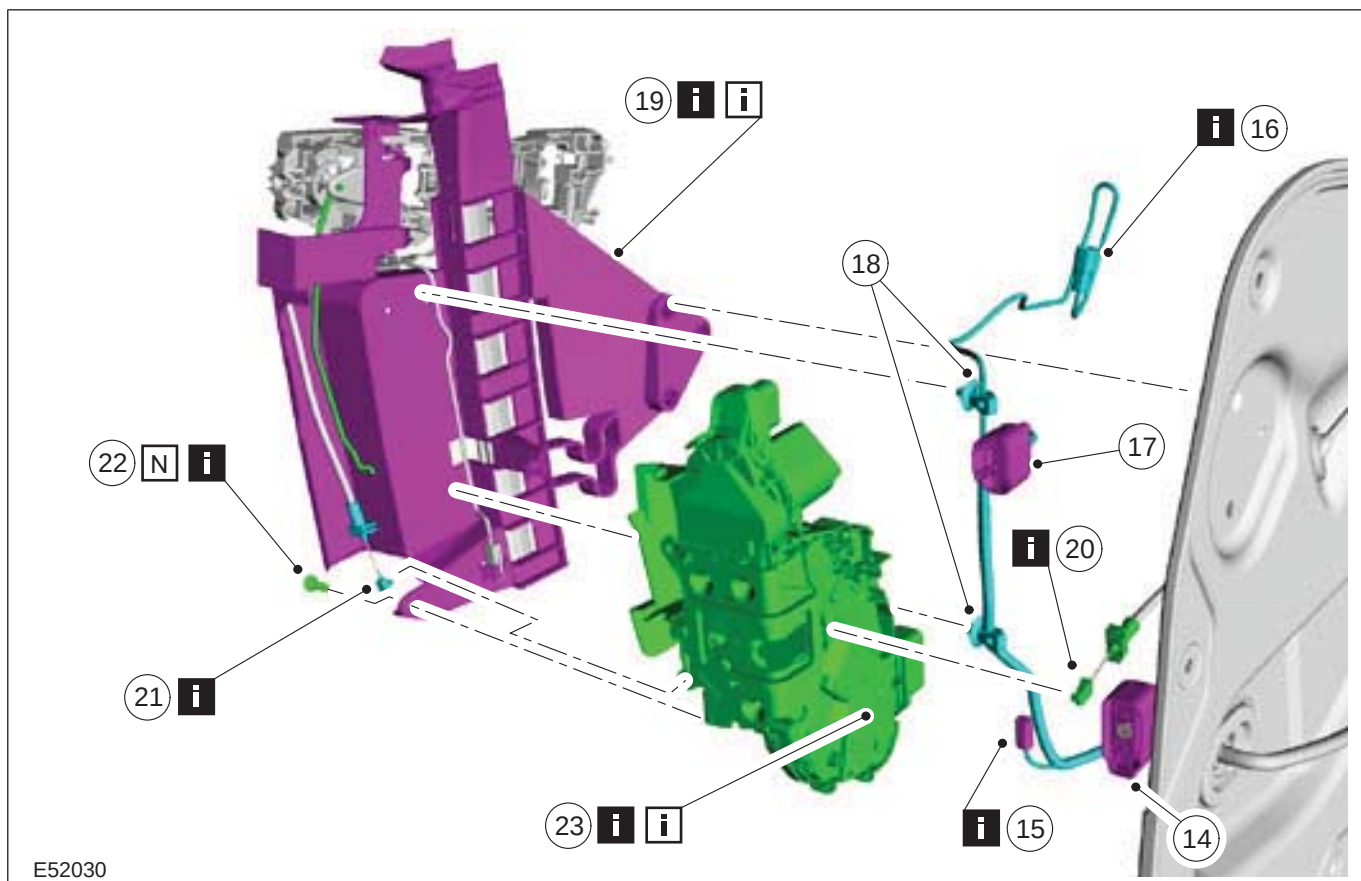
Item	Description
	See Installation Detail
6	Door (left-hand door shown) See Removal Detail



Item	Description
7	Front door handle, lock and latch retaining bracket retaining screw
8	Front door latch retaining bolts
9	Front door wiring harness retaining clip See Removal Detail
10	Front door latch remote control cable See Removal Detail

Item	Description
11	Front door wiring harness See Removal Detail
12	Front door lock actuator retaining screw See Removal Detail See Installation Detail
13	Front door inner panel See Removal Detail See Installation Detail

REMOVAL AND INSTALLATION



E52030

Item	Description
14	Front door latch electrical connector
15	Front door lock cylinder position sensor electrical connector See Removal Detail
16	Exterior front door handle RKE electrical connector See Removal Detail
17	Front door latch RKE electrical connector
18	Exterior front door handle RKE wiring harness retaining clips
19	Front door handle, lock and latch retaining bracket See Removal Detail See Installation Detail
20	Front door latch remote control cable See Removal Detail

Item	Description
21	Front exterior door handle remote control cable See Removal Detail
22	Front door latch retaining bracket retaining rivet See Removal Detail
23	Front door latch See Removal Detail See Installation Detail

13. To install, reverse the removal procedure.

14. Vehicles with global closing, initialize the door window motors.

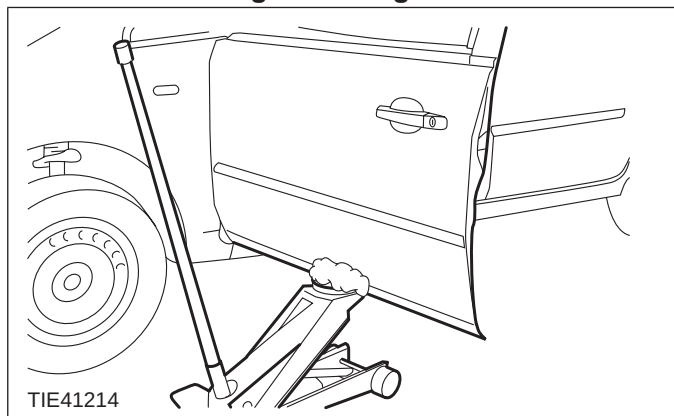
For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

Removal Details

REMOVAL AND INSTALLATION

Item 1 Exterior mirror interior trim panel

⚠ CAUTION: Do not place excessive strain on the exterior mirror and front door tweeter speaker wiring harness.

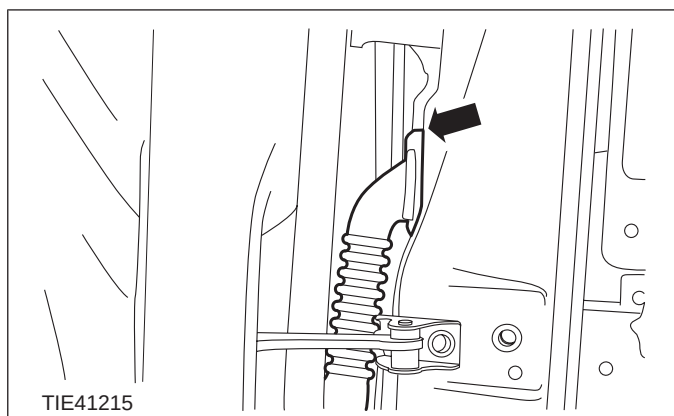
Item 5 Door hinge retaining bolts

- ⚠ CAUTION:** Protect the door using a soft cloth to prevent damage to the front door.

With the aid of another technician and a suitable trolley jack, support and detach the front door from the front door hinges.

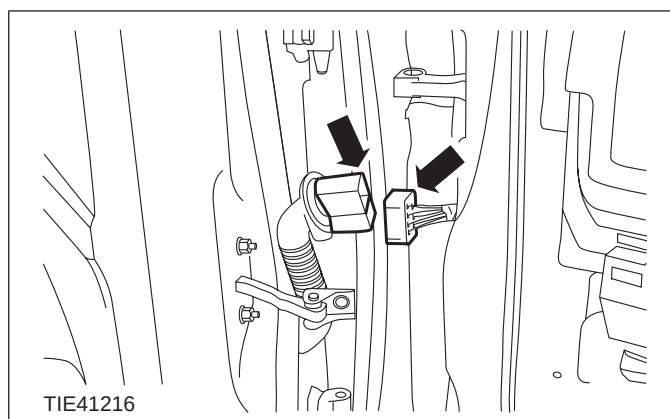
Item 6 Door (left-hand door shown)

- Detach the electrical connector from the A-pillar.



- Remove the front door.

- Disconnect the electrical connector.

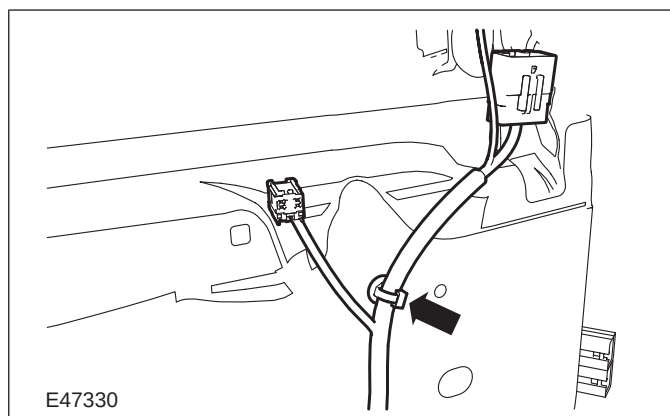


- ⚠ CAUTION:** After the front door wiring harness electrical connector has been disconnected, position the front door back onto the front door hinges. Failure to follow this instruction may cause damage to the front door.

Position the front door onto the front door hinges.

Item 9 Front door wiring harness retaining clip

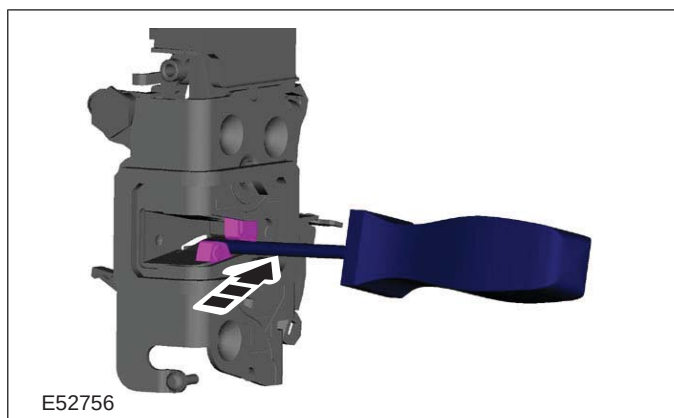
- Detach the front door wiring harness retaining clip from the front door.



REMOVAL AND INSTALLATION

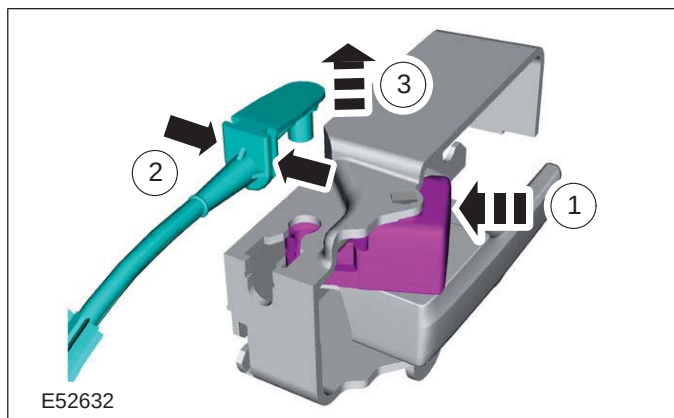
Item 10 Front door latch remote control cable

1. Using a suitable screwdriver, latch the front door lock into the closed position.

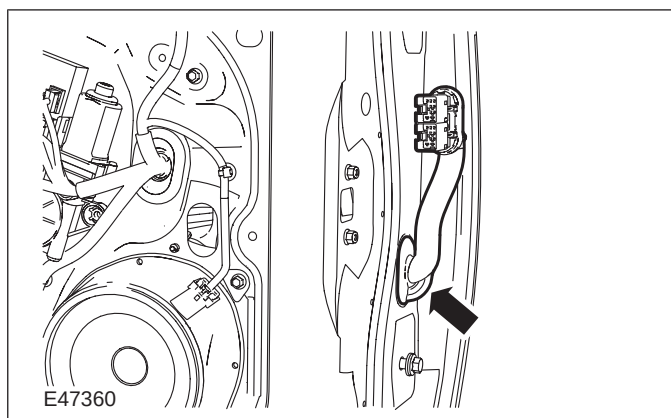


2. Detach the front door latch remote control cable from the front door latch remote control handle.

1. Operate the door latch remote control handle lock to the lock position.
2. Release the remote control cable retaining clips.
3. Detach the inner remote control cable from the remote control handle lock lever.

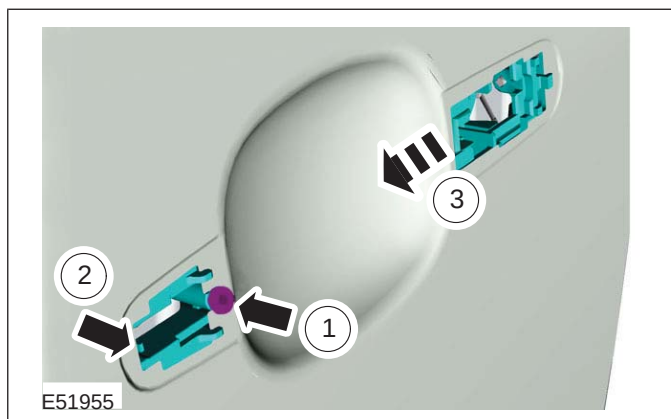
**Item 11** Front door wiring harness

1. Detach and push the front door wiring harness into the front door.

**Item 12** Front door lock actuator retaining screw

1. Detach the front door lock actuator.

1. Loosen the front door lock actuator retaining screw.
2. Release the front door lock actuator retaining clip.
3. Slide the front door lock actuator towards the front of the vehicle.

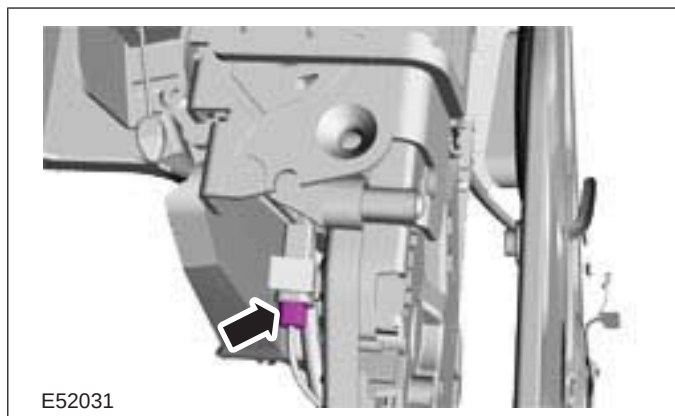
**Item 13** Front door inner panel

- CAUTION:** When removing the front door inner panel, care must be taken that the door wiring harness is not trapped or placed under excessive strain.

REMOVAL AND INSTALLATION

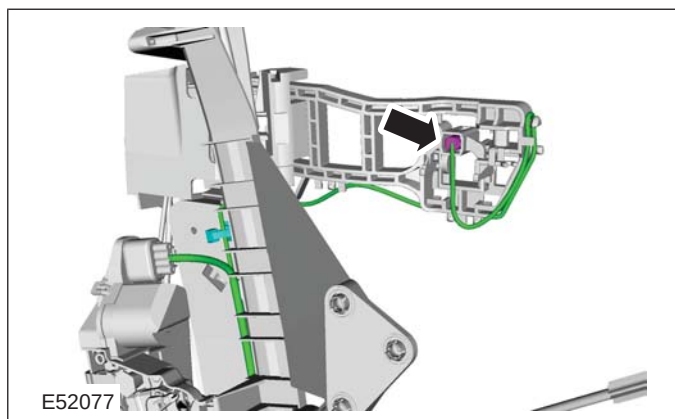
Item 15 Front door lock cylinder position sensor electrical connector

1. Disconnect the front door lock cylinder position sensor electrical connector.

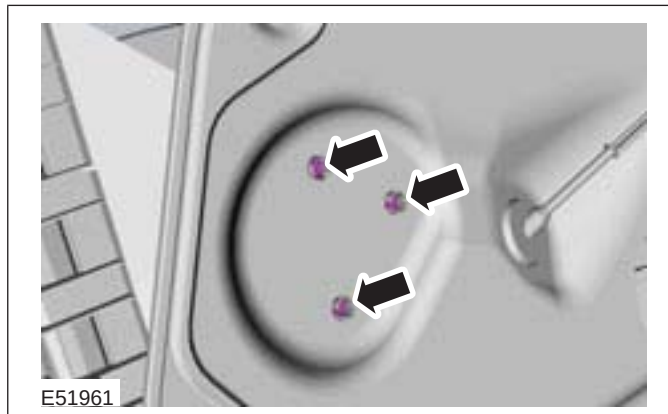
**Item 16** Exterior front door handle RKE electrical connector

NOTE: Make a note of the clipping position of the exterior front door handle RKE harness.

1. Detach the exterior front door handle RKE electrical connector and harness from the front door handle reinforcement.

**Item 19** Front door handle, lock and latch retaining bracket

1. Press in the centers of the front door handle, lock and latch retaining bracket retaining clip locking pins.

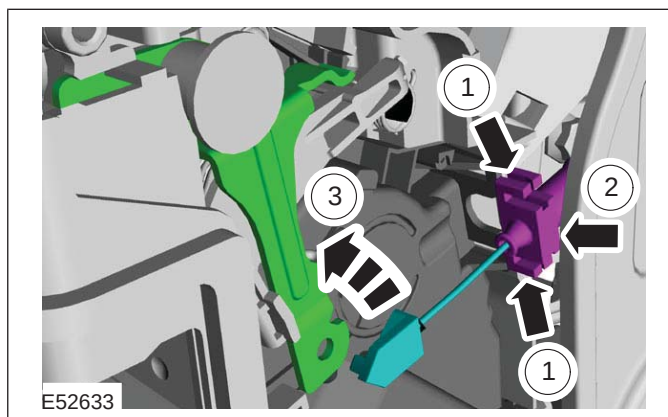
**Item 20** Front door latch remote control cable

1. **NOTE:** Do not kink the front door latch remote control cable.

NOTE: In order to remove the front door latch remote control cable from the front door latch lever the cable must be rotated.

Disconnect the front door latch remote control cable from the front door latch.

1. Using a suitable screwdriver, release the front door latch remote control cable locking tangs from the front door latch.
2. Detach the front door latch remote control outer cable from the front door latch.
3. Rotate the front door latch remote control cable.

**Item 21** Front exterior door handle remote control cable

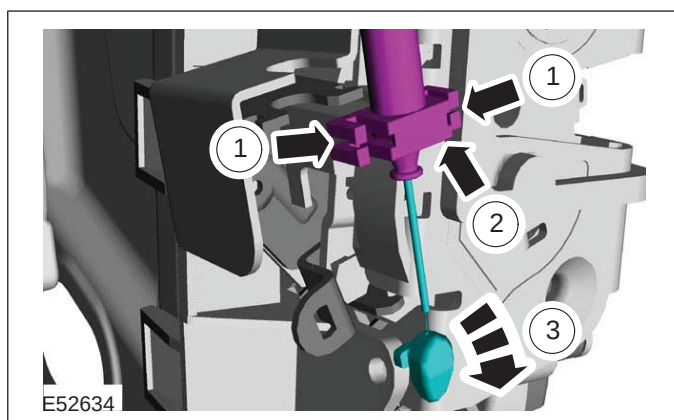
1. **NOTE:** Do not kink the front exterior door handle remote control cable.

REMOVAL AND INSTALLATION

NOTE: In order to remove the front exterior door handle remote control cable from the front door latch lever the cable must be rotated.

Disconnect the front exterior door handle remote control cable from the front door latch.

1. Using a suitable screwdriver, release the front exterior door handle remote control outer cable locking tangs from the front door latch.
2. Detach the front exterior door handle remote control cable from the front door latch.
3. Rotate the front exterior door handle remote control cable.



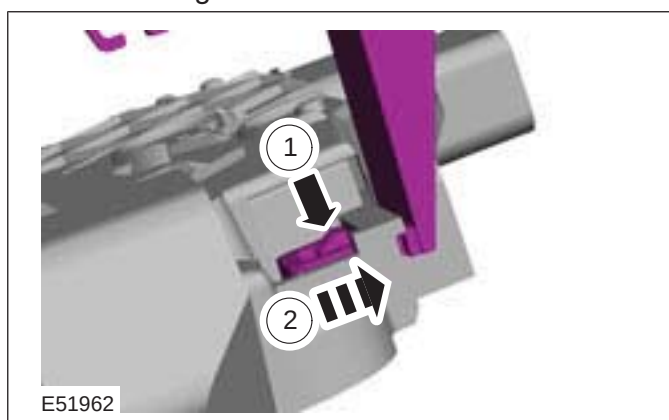
Item 22 Front door latch retaining bracket retaining rivet

1. Using a suitable Electric hand drill remove and discard the door latch retaining bracket retaining rivet.

Item 23 Front door latch

1. Detach the front door latch actuator from the front door handle, lock and latch retaining bracket.

1. Press the front door handle, lock and latch retaining bracket release clip.
2. Slide the front door handle, lock and latch retaining bracket out of the front door latch.

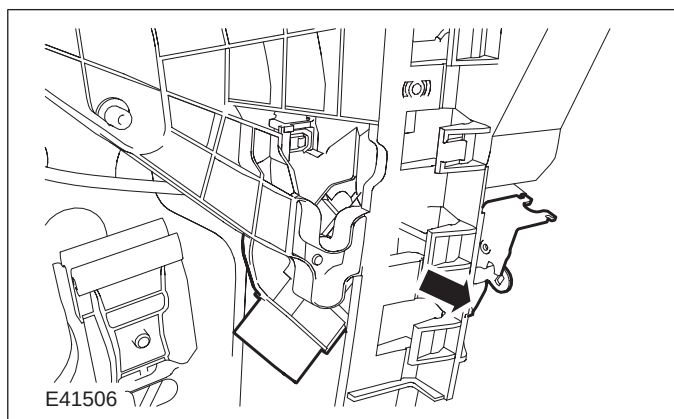


2. Detach the front door lock cylinder actuator rod from the front door latch.

Installation Details

Item 23 Front door latch

1. Connect the front door lock cylinder actuator rod to the front door latch.
2. Install the front door latch.
 - Using a suitable Rivet gun install a new front door latch rivet.

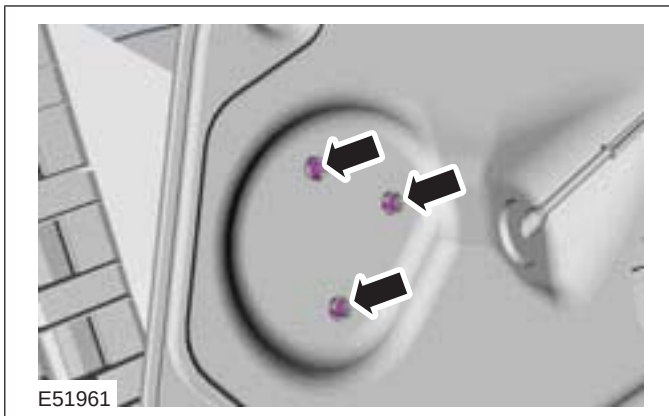


Item 19 Front door handle, lock and latch retaining bracket

1. Install the front door handle, lock and latch retaining bracket to the door inner panel.

REMOVAL AND INSTALLATION

2. From the back of the front door handle, lock and latch retaining bracket press in the retaining clip locking pins.

**Item 13 Front door inner panel**

1. Before installing the front door inner panel retaining bolts, feed the door wiring harness electrical connector through the front door wiring harness hole.

Item 12 Front door lock actuator retaining screw

1. Install the front door lock actuator to the front door.
2. Tighten the front door lock actuator retaining screw.

Item 5 Door hinge retaining bolts

1. Apply a coating of adhesive to the door hinge center retaining bolts.

REMOVAL AND INSTALLATION

Front Door Latch — 4-Door/5-Door/Wagon

General Equipment

Hand drill
Rivet gun
Trolley jack

Materials

Name	Specification
Adhesive - Loctite 243	WSK-M2G349-A7

1. Remove the front door trim panel.

For additional information, refer to: **Front Door Trim Panel - 4-Door/5-Door/Wagon** (501-05 Interior Trim and Ornamentation, Removal and Installation).

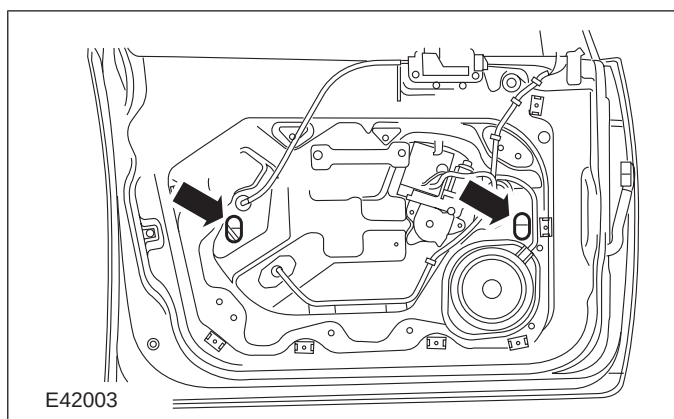
2. Remove the exterior front door handle.

For additional information, refer to: **Exterior Front Door Handle** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

3. Connect the battery ground cable.

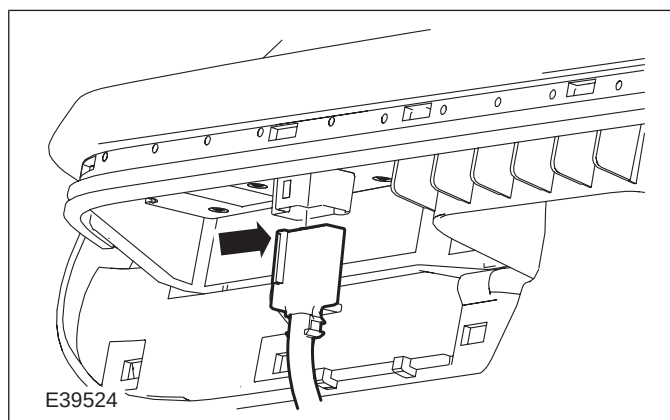
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

4. Remove the front door window regulator grommets.

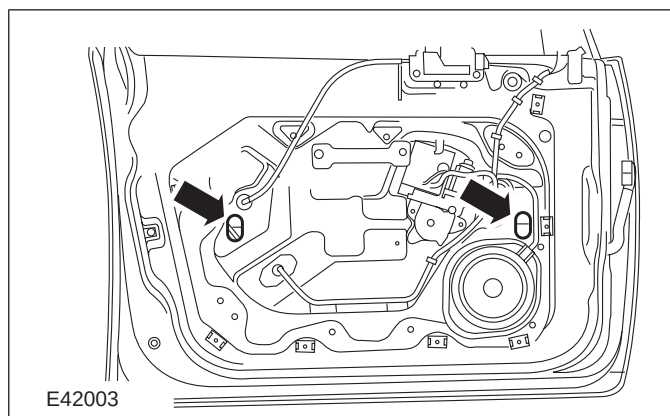


5. NOTE: Support the front door power window control unit.

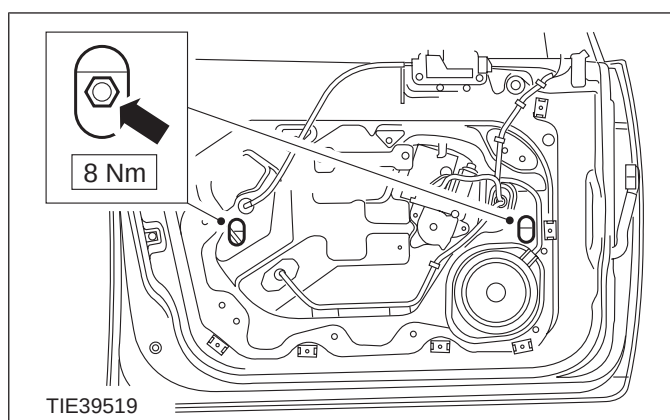
Connect the front door power window control unit electrical connector.



6. Using the front door power window control unit, align the front door window glass clamp retaining bolts with the access holes.

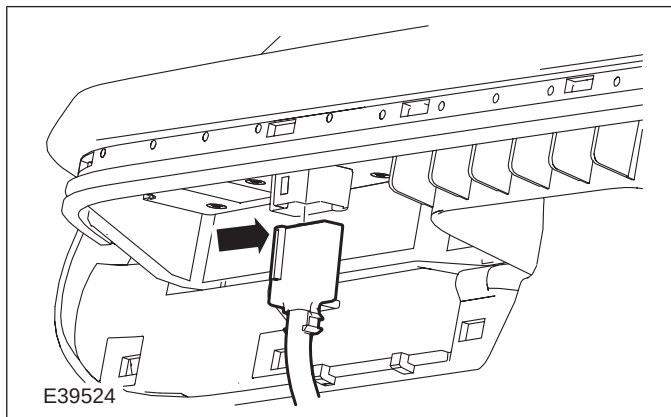


7. Loosen the front door window glass clamp retaining bolts.

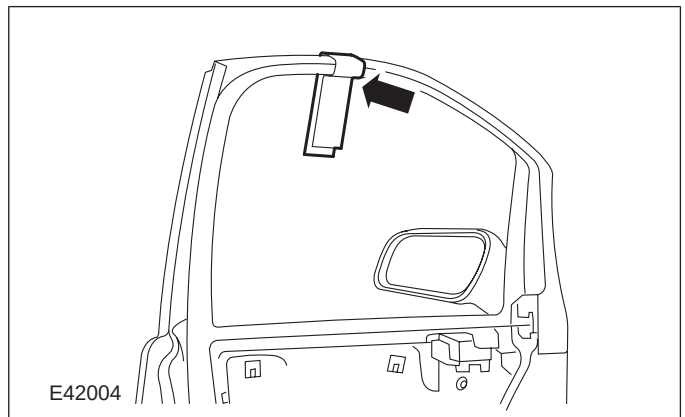


REMOVAL AND INSTALLATION

8. Disconnect the front door power window control unit electrical connector.



10. Using suitable tape, secure the front door window glass to the front door.

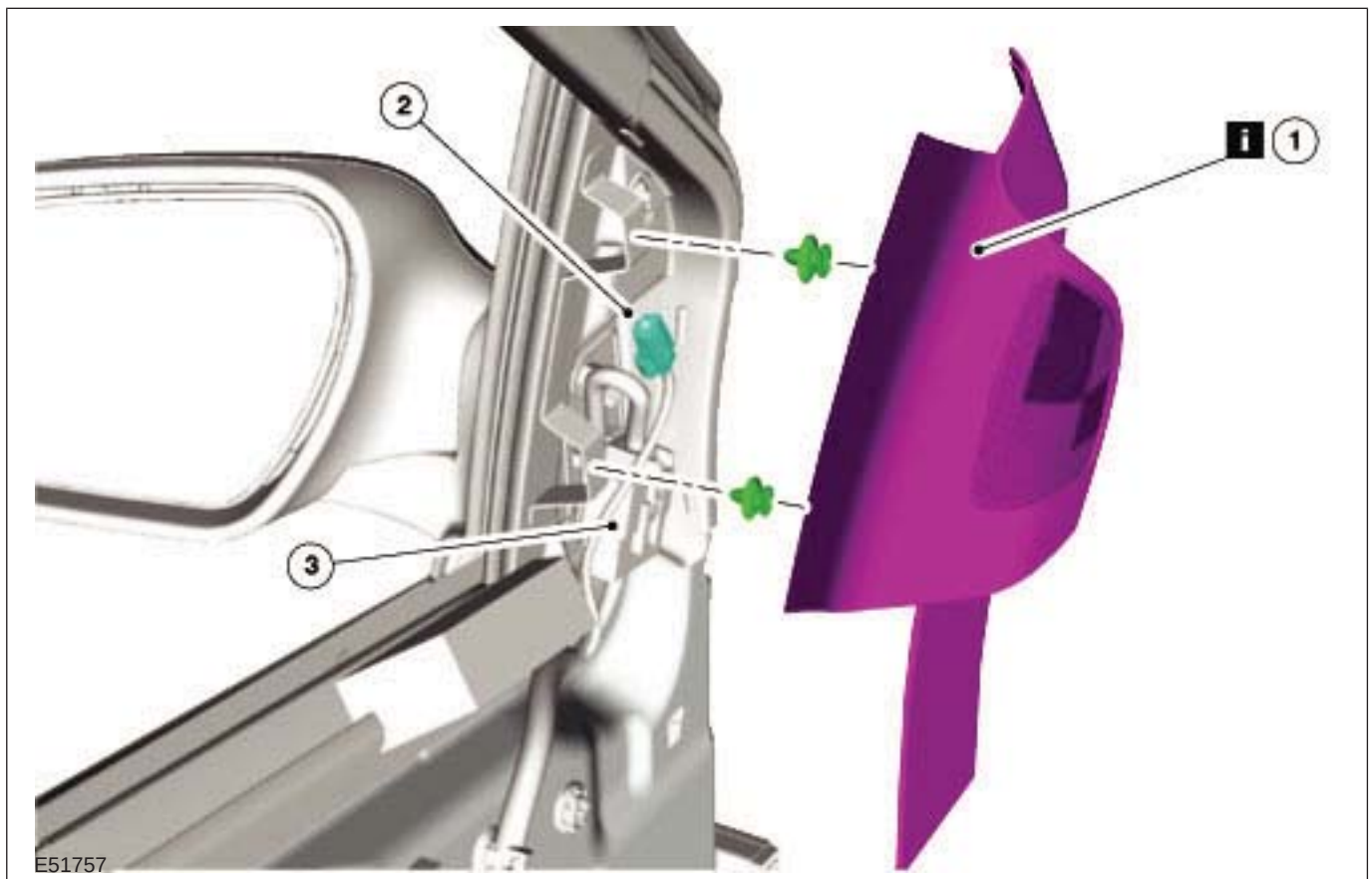


9. Raise the front door window glass.

11. Disconnect the battery ground cable.

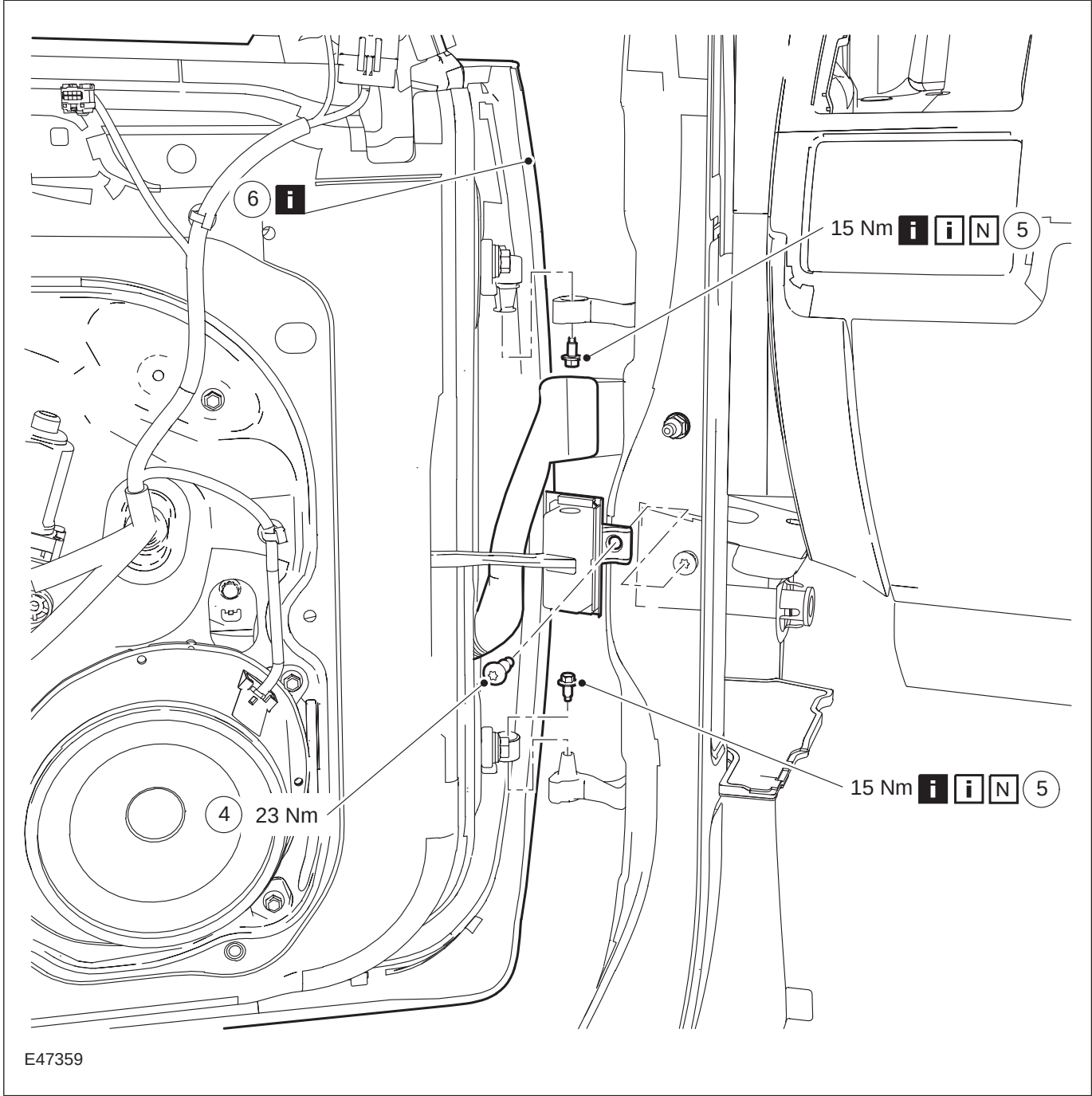
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

12. Remove the components in the order indicated in the following illustration(s) and table(s).



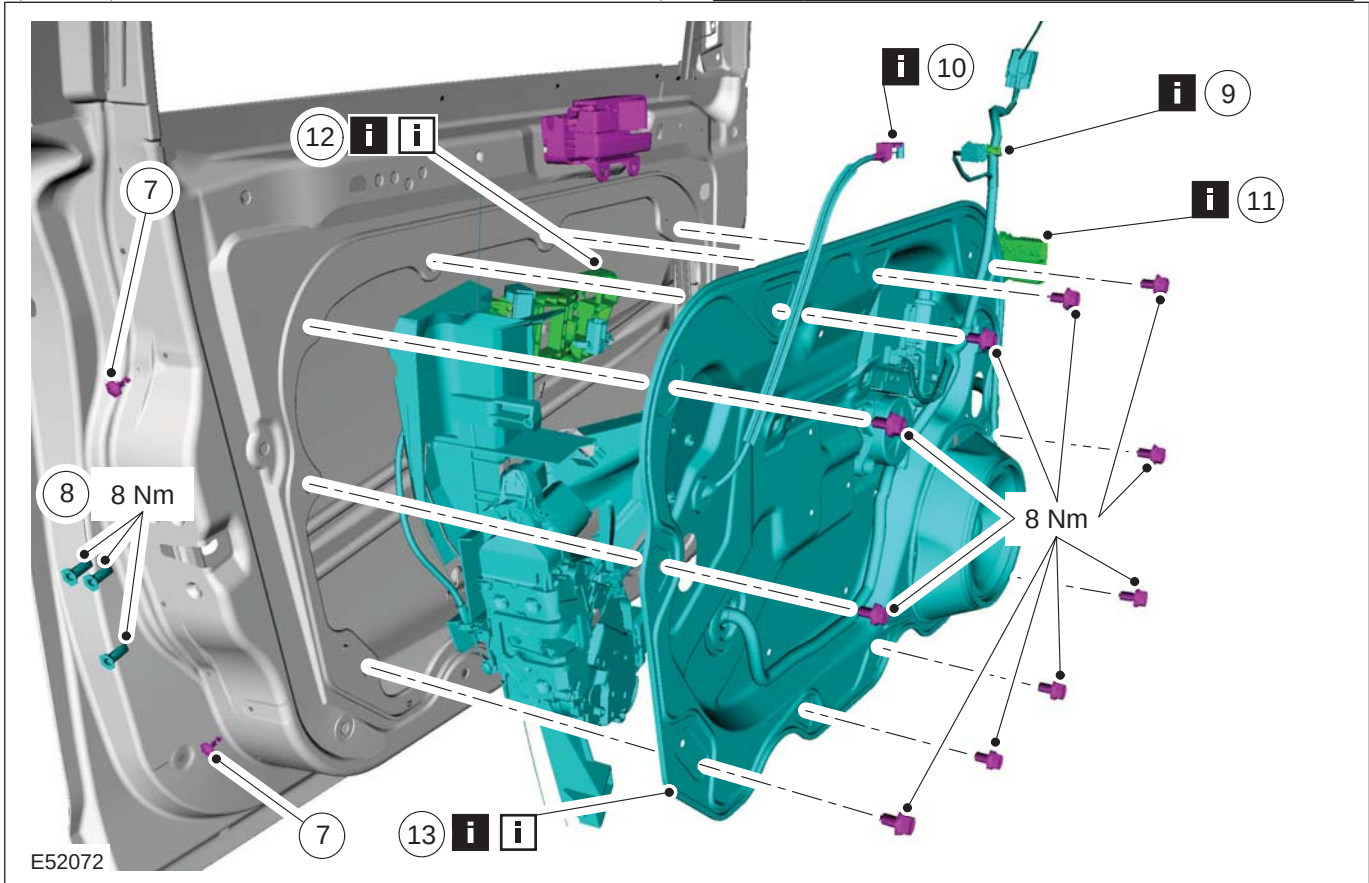
REMOVAL AND INSTALLATION

Item	Description	Item	Description
1	Exterior mirror interior trim panel See Removal Detail		connector
2	Front door tweeter speaker electrical	3	Exterior mirror electrical connector (if equipped)



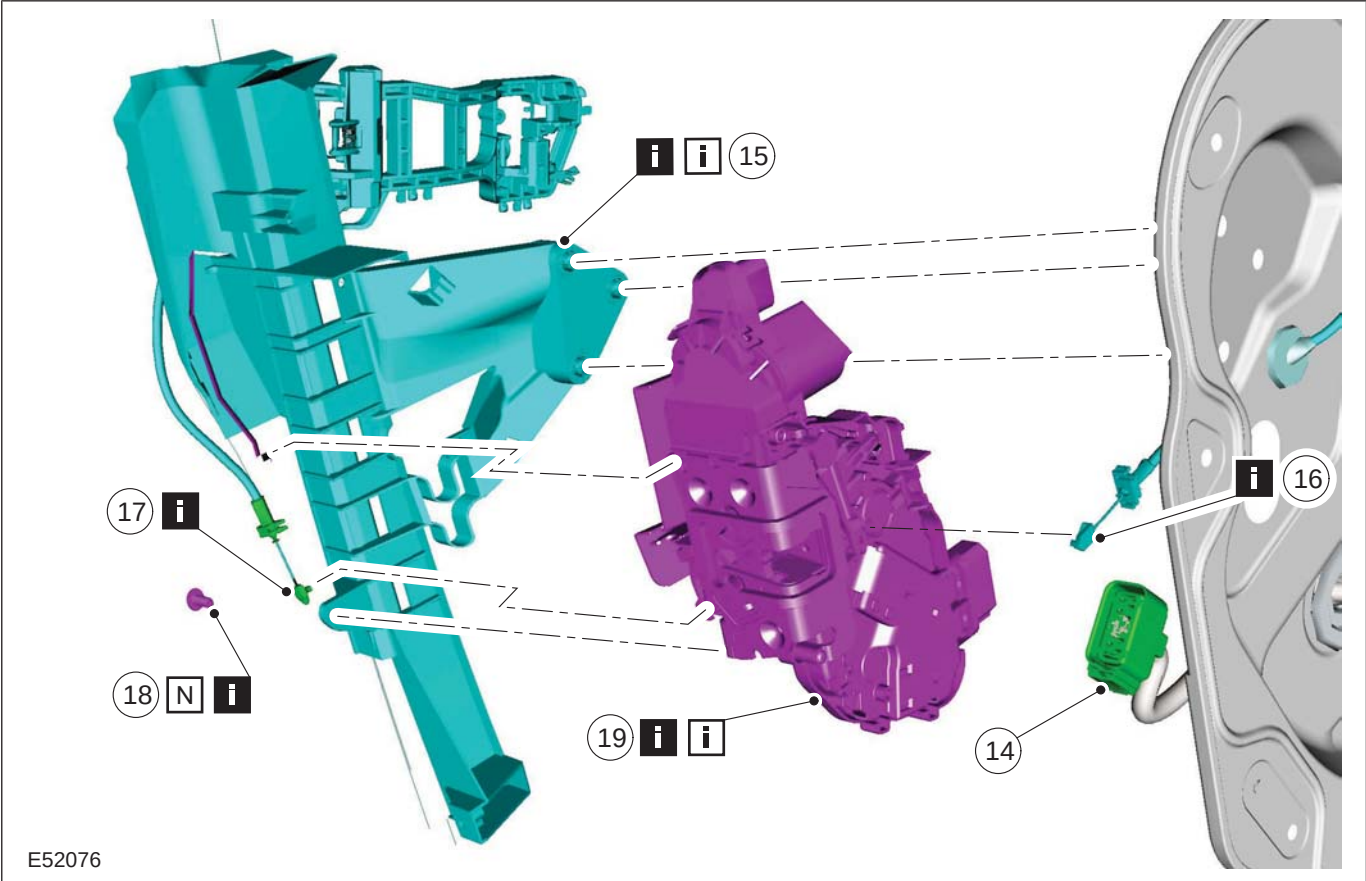
REMOVAL AND INSTALLATION

Item	Description	Item	Description
4	Door check strap		See Installation Detail
5	Door hinge retaining bolts See Removal Detail	6	Door See Removal Detail



Item	Description	Item	Description
7	Front door handle, lock and latch retaining bracket retaining screws	11	Front door wiring harness See Removal Detail
8	Front door latch retaining bolts	12	Door lock actuator retaining screw See Removal Detail See Installation Detail
9	Front door wiring harness retaining clip See Removal Detail	13	Front door inner panel See Removal Detail See Installation Detail
10	Front door latch remote control cable See Removal Detail		

REMOVAL AND INSTALLATION



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Item	Description
14	Exterior front door latch electrical connector
15	Front door handle, lock and latch retaining bracket See Removal Detail See Installation Detail
16	Front door latch remote control cable See Removal Detail
17	Exterior front door handle remote control cable See Removal Detail

Item	Description
18	Front door latch retaining bracket retaining rivet See Removal Detail
19	Front door latch See Removal Detail See Installation Detail

13. To install, reverse the removal procedure.

14. Vehicles with global closing, initialize the door window motors.

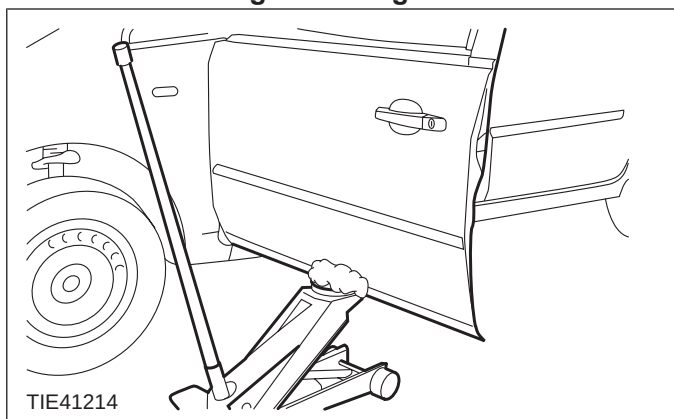
For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

Removal Details

Item 1 Exterior mirror interior trim panel

CAUTION: Do not place excessive strain on the exterior mirror and front door tweeter speaker wiring harness.

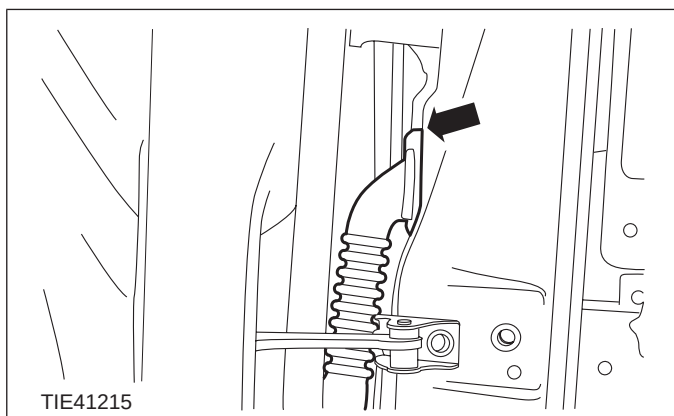
REMOVAL AND INSTALLATION

Item 5 Door hinge retaining bolts

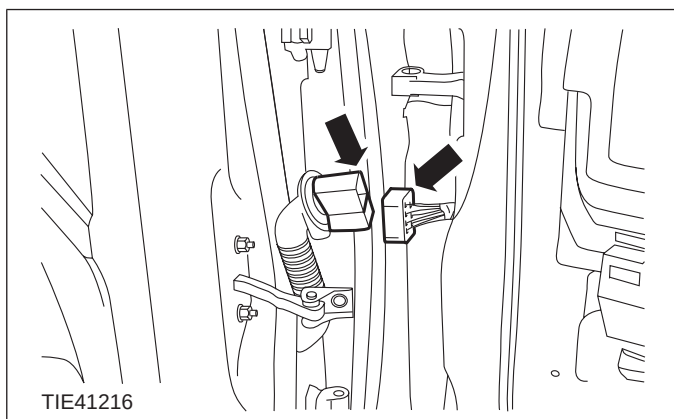
1. **⚠ CAUTION:** Protect the door using a soft cloth to prevent damage to the front door.
With the aid of another technician and a suitable trolley jack, support and detach the front door from the front door hinges.

Item 6 Door

1. Detach the front door wiring harness from the A-pillar.



2. Disconnect the front door wiring harness electrical connector.

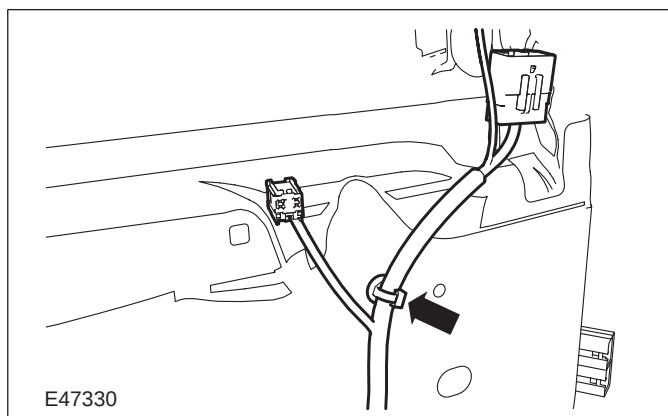


3. **⚠ CAUTION:** After the front door wiring harness electrical connector has been disconnected, position the front door back onto the front door hinges. Failure to follow this instruction may cause damage to the front door.

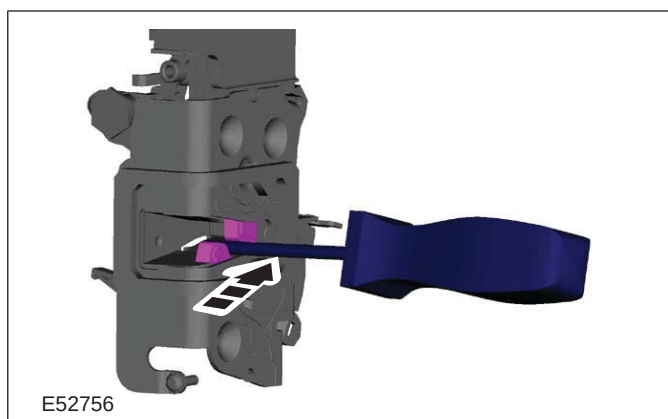
Position the front door onto the front door hinges.

Item 9 Front door wiring harness retaining clip

1. Detach the front door wiring harness retaining clip from the front door.

**Item 10 Front door latch remote control cable**

1. Using a suitable screwdriver, latch the front door lock into the closed position.

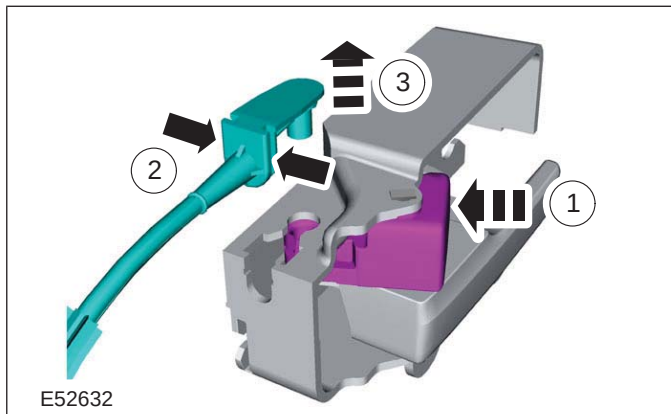


2. Detach the front door latch remote control cable from the front door latch remote control handle.

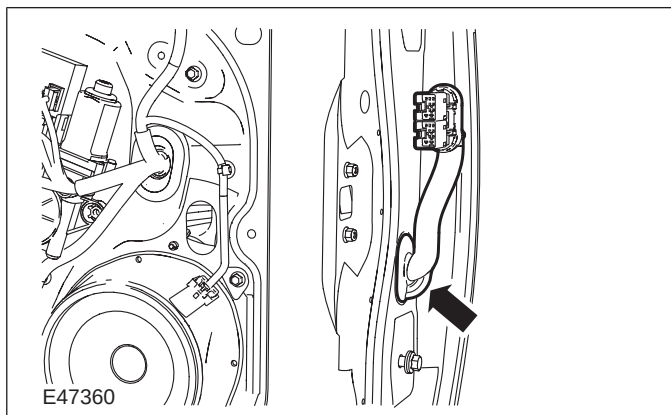
1. Operate the door latch remote control handle lock to the lock position.
2. Release the remote control cable retaining clips.

REMOVAL AND INSTALLATION

3. Detach the inner remote control cable from the remote control handle lock lever.

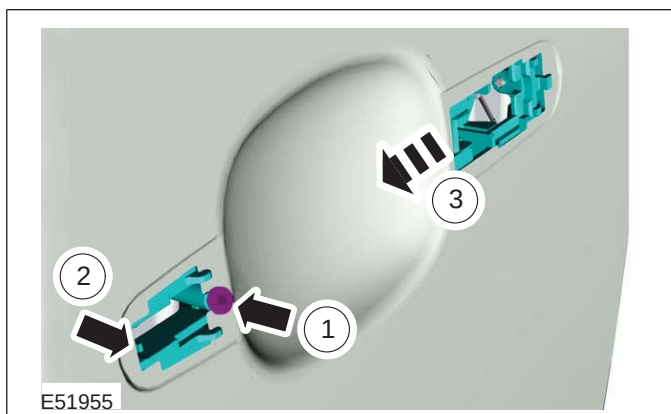
**Item 11 Front door wiring harness**

1. Detach and push the front door wiring harness into the front door.

**Item 12 Door lock actuator retaining screw**

1. Detach the front door lock actuator.

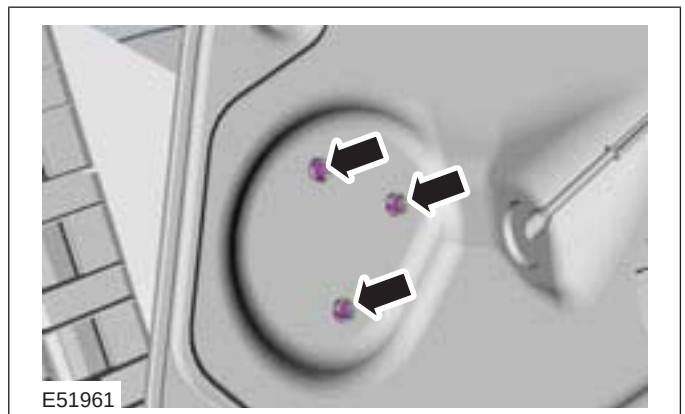
1. Loosen the door lock actuator retaining screw.
2. Release the door lock actuator retaining clip.
3. Slide the door lock actuator towards the front of the vehicle.

**Item 13 Front door inner panel**

CAUTION: When removing the front door inner panel, care must be taken that the door wiring harness is not trapped or placed under excessive strain.

Item 15 Front door handle, lock and latch retaining bracket

1. Press in the centers of the front door handle, lock and latch retaining bracket retaining clip locking pins.

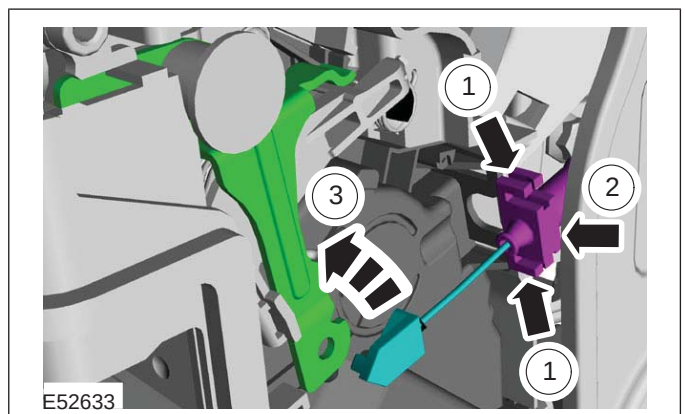
**Item 16 Front door latch remote control cable**

1. **NOTE:** Do not kink the front door latch remote control cable.

NOTE: In order to remove the front door latch remote control cable from the front door latch lever the cable must be rotated.

Disconnect the front door latch remote control cable from the front door latch.

1. Using a suitable screwdriver, release the front door latch remote control cable locking tangs from the front door latch.
2. Detach the front door latch remote control outer cable from the front door latch.
3. Rotate the front door latch remote control cable.



REMOVAL AND INSTALLATION

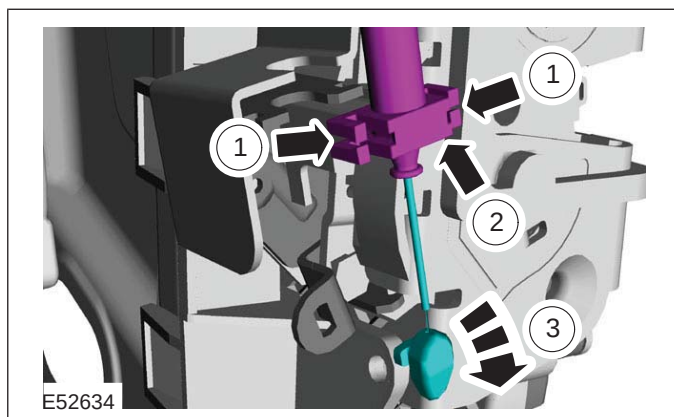
Item 17 Exterior front door handle remote control cable

1. **NOTE: Do not kink the exterior front door handle remote control cable.**

NOTE: In order to remove the exterior front door handle remote control cable from the front door latch lever the cable must be rotated.

Disconnect the exterior front door handle remote control cable from the front door latch.

1. Using a suitable screwdriver, release the exterior front door handle remote control outer cable locking tangs from the front door latch.
2. Detach the exterior front door handle remote control cable from the front door latch.
3. Rotate the exterior front door handle remote control cable.



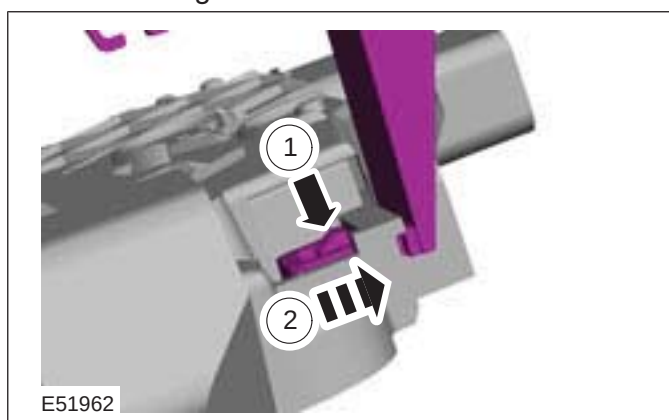
Item 18 Front door latch retaining bracket retaining rivet

1. Using a suitable hand drill remove and discard the door latch retaining bracket retaining rivet.

Item 19 Front door latch

1. Detach the front door lock actuator from the front door handle, lock and latch retaining bracket.

1. Press the front door handle, lock and latch retaining bracket release clip.
2. Slide the front door handle, lock and latch retaining bracket out of the front door latch.



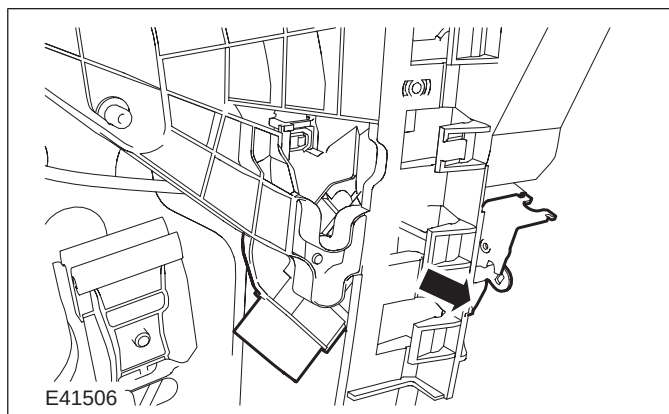
2. Detach the door lock cylinder actuator rod from the front door latch.

Installation Details

Item 19 Front door latch

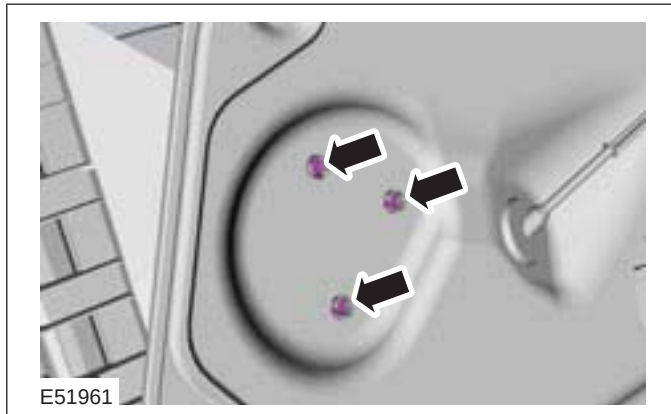
1. Connect the door lock cylinder actuator rod to the front door latch.
2. Install the front door latch.

- Using a suitable Rivet gun install a new front door latch rivet.



REMOVAL AND INSTALLATION**Item 15** Front door handle, lock and latch retaining bracket

1. Install the front door handle, lock and latch retaining bracket to the door inner panel.
2. From the back of the front door handle, lock and latch retaining bracket press in the retaining clip locking pins.

**Item 13** Front door inner panel

1. Before installing the front door inner panel retaining bolts, feed the door wiring harness electrical connector through the front door wiring harness hole.

Item 12 Door lock actuator retaining screw

1. Install the front door lock actuator to the front door.
2. Tighten the front door lock actuator retaining screw.

Item 5 Door hinge retaining bolts

1. Apply a coating of adhesive to the door hinge retaining bolts.

REMOVAL AND INSTALLATION

Front Door Latch — 4-Door/5-Door/Wagon, Vehicles With: Keyless Vehicle System

General Equipment

Electric hand drill

Rivet gun

Materials

Name	Specification
Adhesive - Loctite 243	WSK-M2G349-A7

1. Remove the front door trim panel.

For additional information, refer to: **Front Door Trim Panel - 4-Door/5-Door/Wagon** (501-05 Interior Trim and Ornamentation, Removal and Installation).

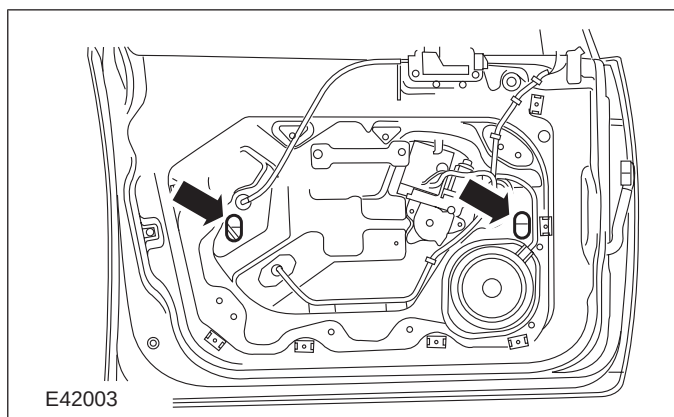
2. Remove the exterior front door handle.

For additional information, refer to: **Exterior Front Door Handle - Vehicles With: Keyless Vehicle System** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

3. Connect the battery ground cable.

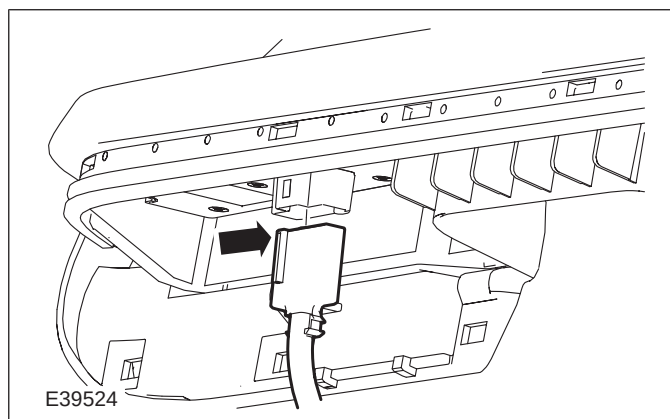
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

4. Remove the front door window regulator grommets.

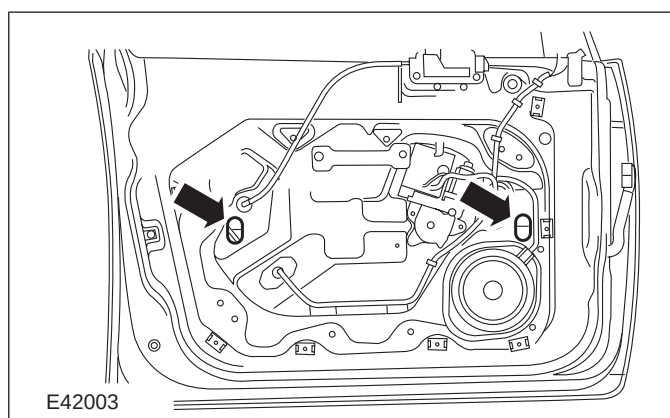


5. NOTE: Support the front door power window control unit.

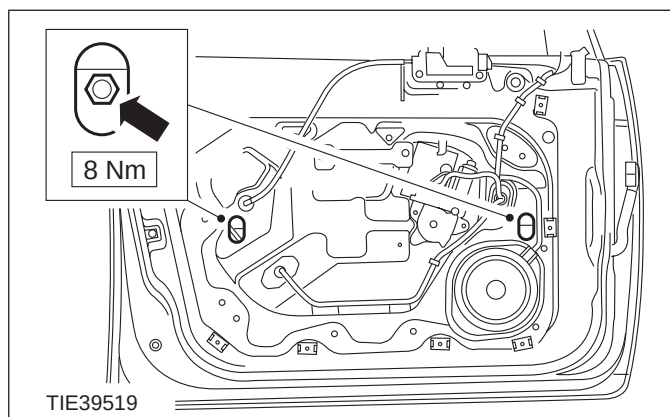
Connect the front door power window control switch electrical connector.



6. Using the front door power window control switch, align the window glass clamp retaining bolts with the access holes.



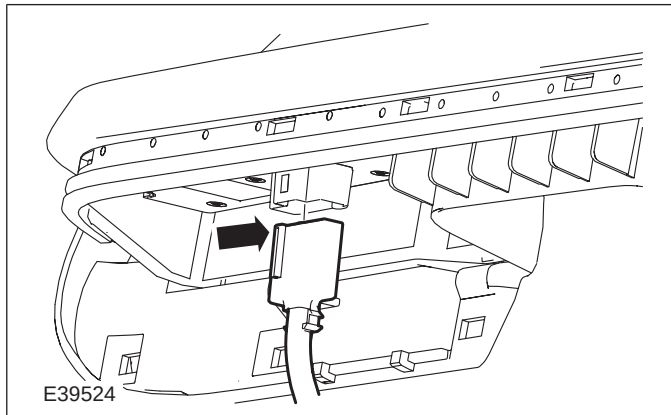
7. Loosen the front door window glass clamp retaining bolts.



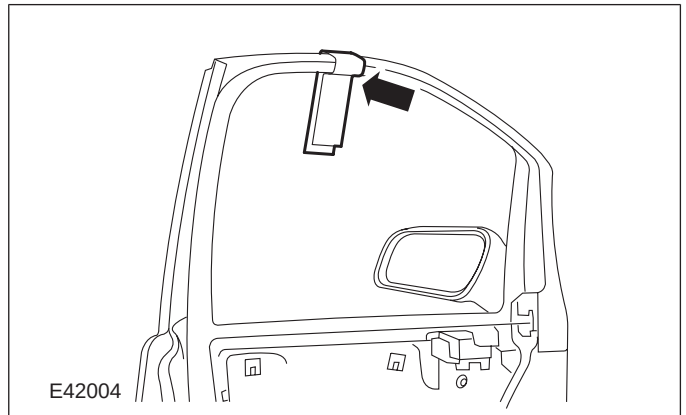
8. Raise the front door window glass.

REMOVAL AND INSTALLATION

9. Disconnect the front door power window control switch electrical connector.



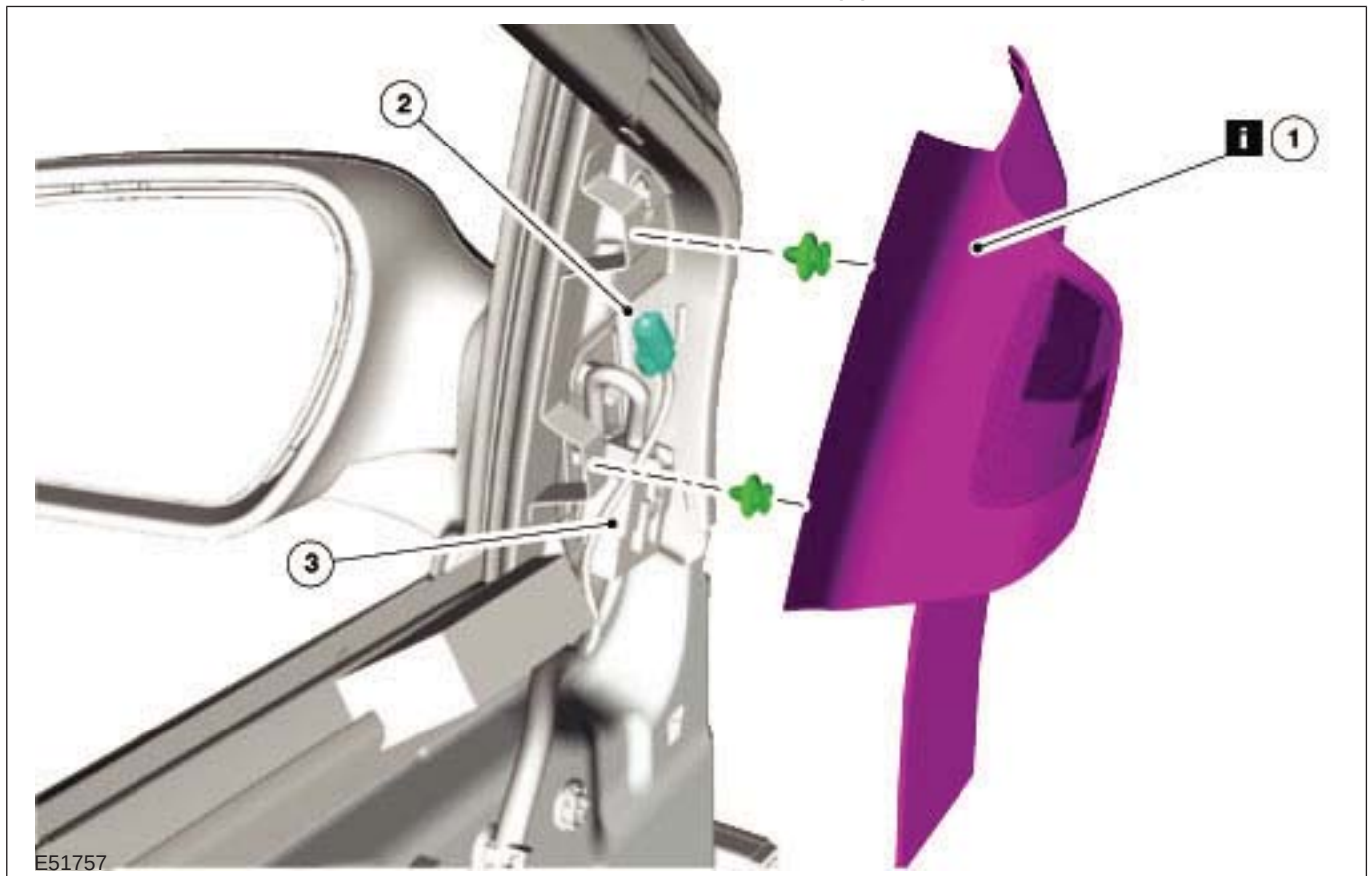
10. Using suitable tape, secure the front door window glass to the front door.



11. Disconnect the battery ground cable.

For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

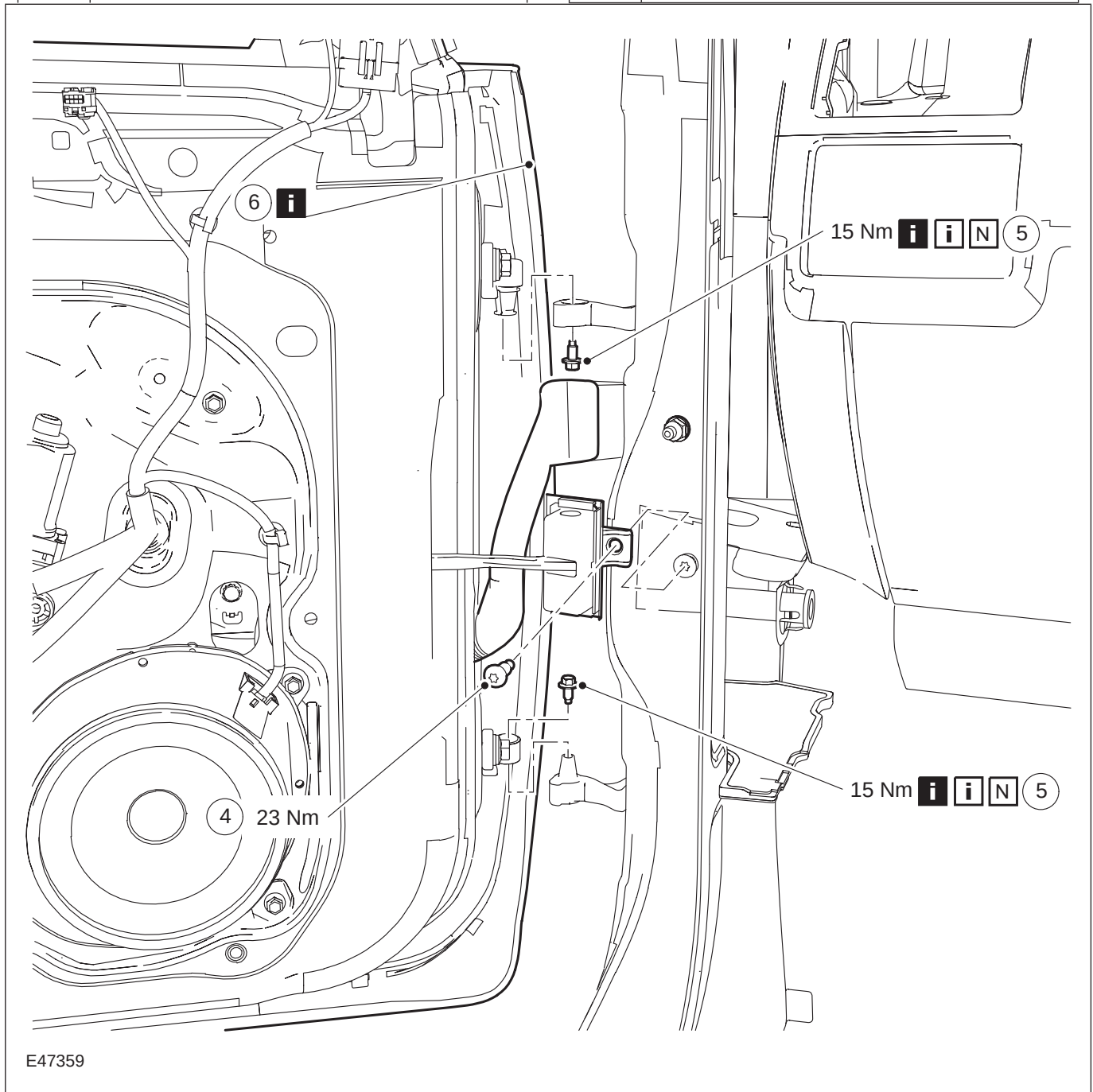
12. Remove the components in the order indicated in the following illustration(s) and table(s).



REMOVAL AND INSTALLATION

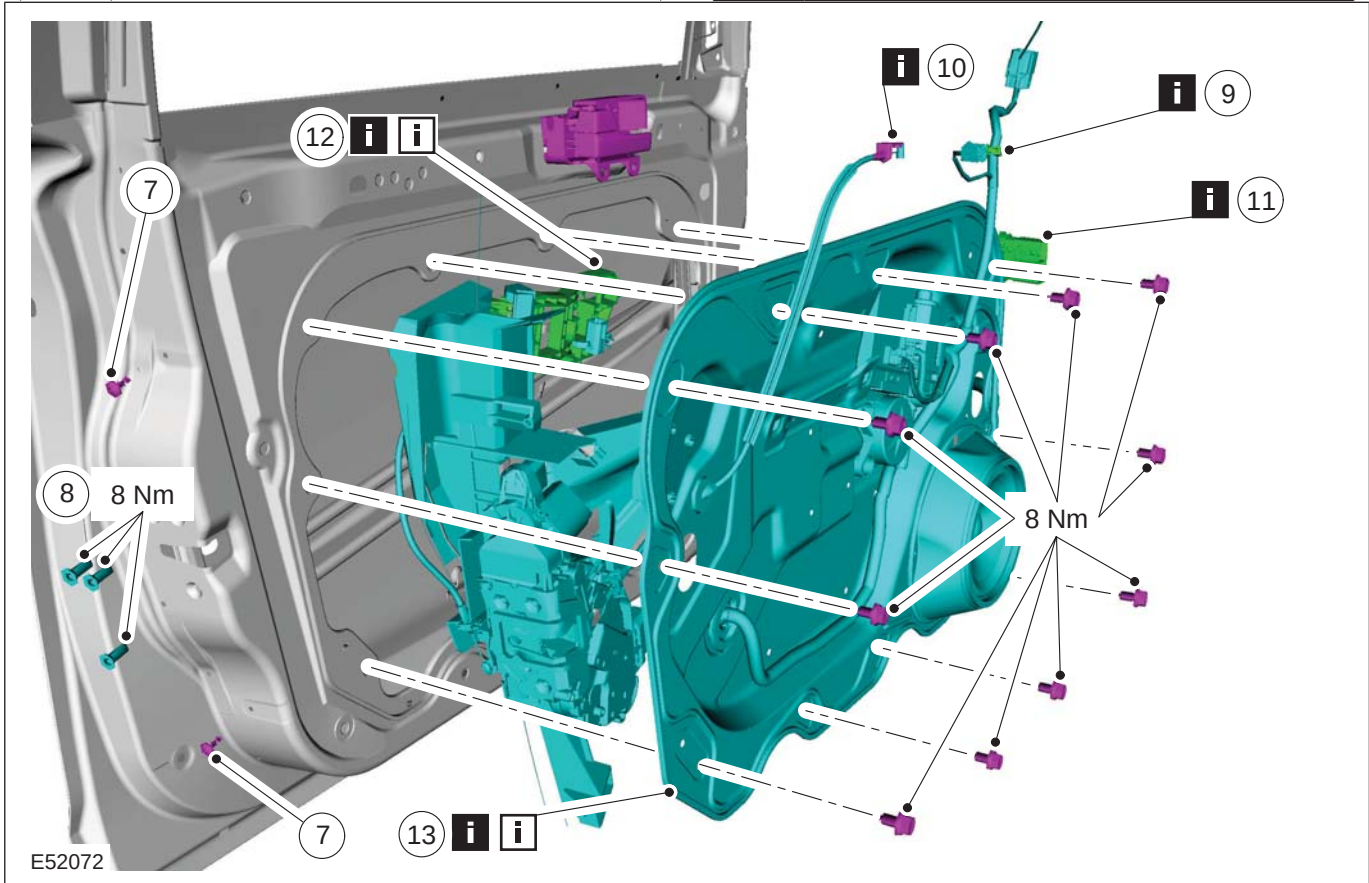
Item	Description
1	Exterior mirror interior trim panel See Removal Detail
2	Front door tweeter speaker electrical

Item	Description
	connector
3	Exterior mirror electrical connector (if equipped)



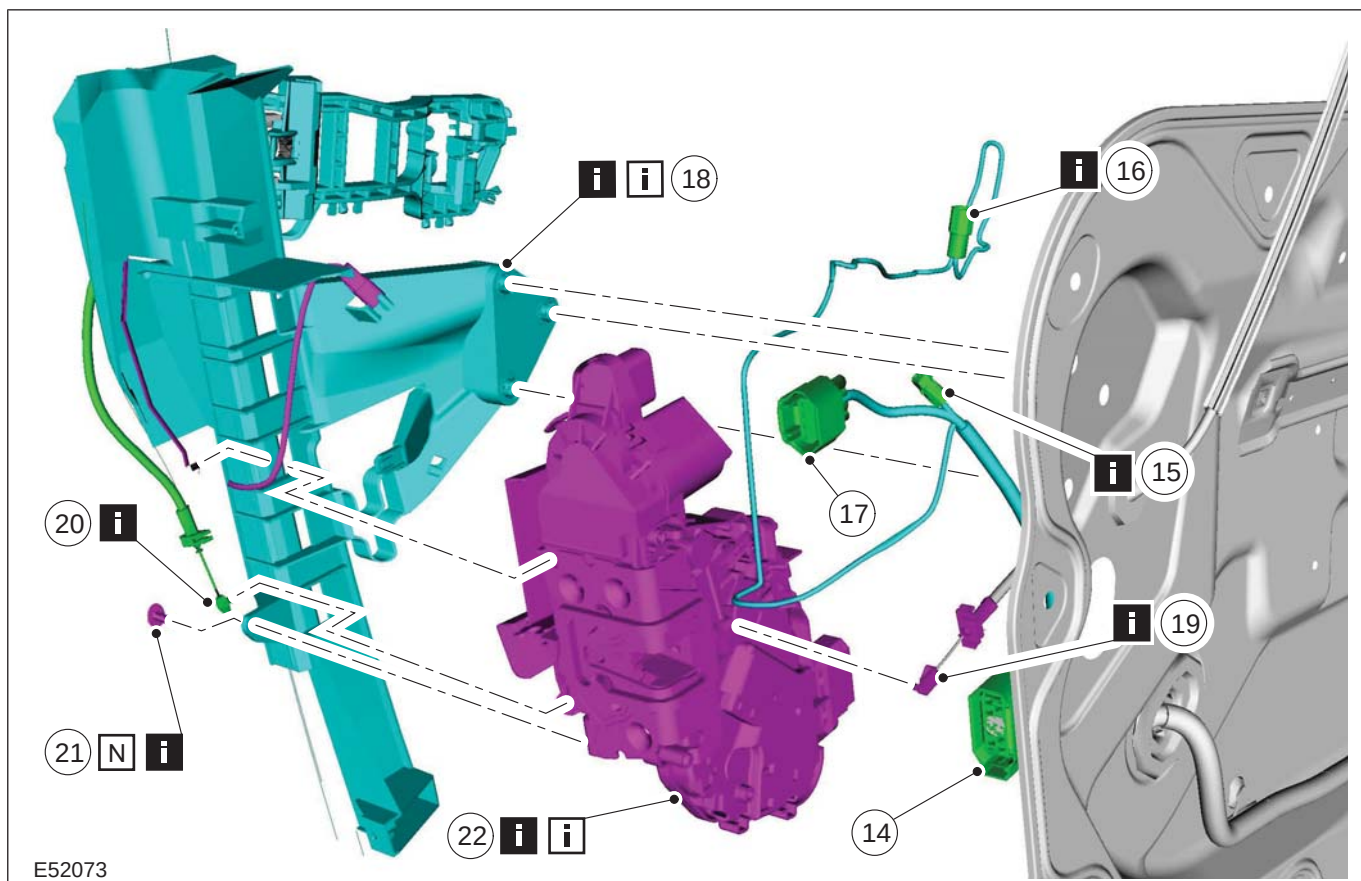
REMOVAL AND INSTALLATION

Item	Description	Item	Description
4	Door check strap retaining bolt		See Installation Detail
5	Door hinge retaining bolts See Removal Detail	6	Door (left-hand door shown) See Removal Detail



Item	Description	Item	Description
7	Front door handle, lock and latch retaining bracket retaining screws	11	Front door wiring harness See Removal Detail
8	Front door latch retaining bolts	12	Front door lock actuator retaining screw See Removal Detail See Installation Detail
9	Front door wiring harness retaining clip See Removal Detail	13	Front door inner panel See Removal Detail See Installation Detail
10	Front door latch remote control cable See Removal Detail		

REMOVAL AND INSTALLATION



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Item	Description
14	Front door latch electrical connector
15	Front door lock cylinder position sensor electrical connector See Removal Detail
16	Exterior front door handle RKE electrical connector See Removal Detail
17	Front door latch RKE electrical connector
18	Front door handle, lock and latch retaining bracket See Removal Detail See Installation Detail
19	Front door latch remote control cable See Removal Detail

Item	Description
20	Front exterior door handle remote control cable See Removal Detail
21	Front door latch retaining bracket retaining rivet See Removal Detail
22	Front door latch See Removal Detail See Installation Detail

13. To install, reverse the removal procedure.

14. Vehicles with global closing, initialize the door window motors.

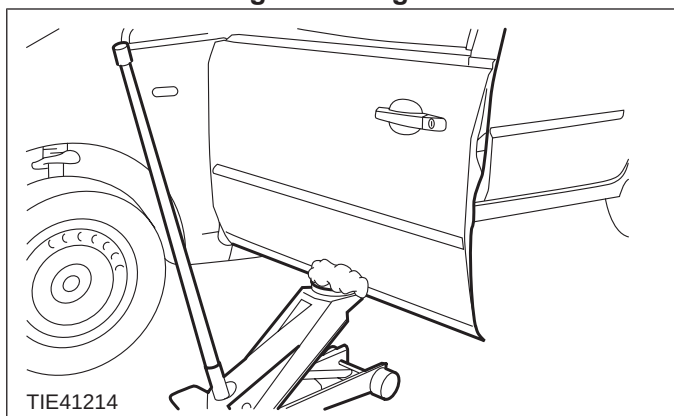
For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

Removal Details

Item 1 Exterior mirror interior trim panel

CAUTION: Do not place excessive strain on the exterior mirror and front door tweeter speaker wiring harness.

REMOVAL AND INSTALLATION

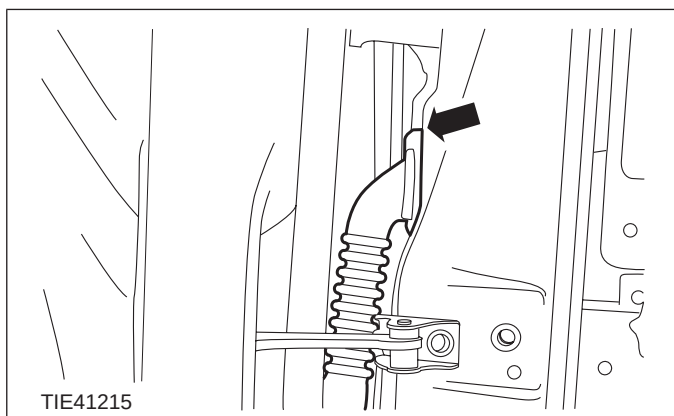
Item 5 Door hinge retaining bolts

1. **⚠ CAUTION:** Protect the door using a soft cloth to prevent damage to the front door.

With the aid of another technician and a suitable trolley jack, support and detach the front door from the front door hinges.

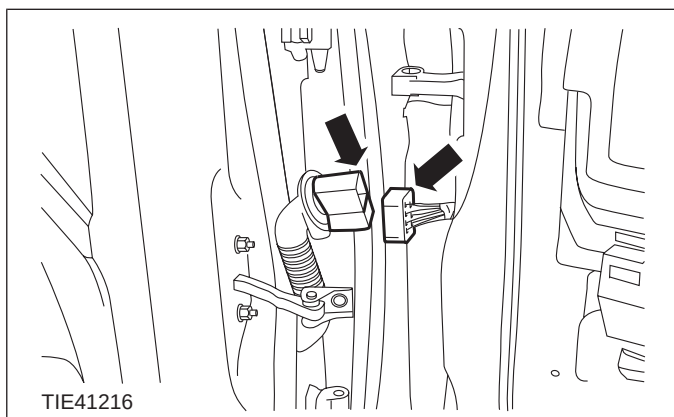
Item 6 Door (left-hand door shown)

1. Detach the electrical connector from the A-pillar.



2. Remove the front door.

- Disconnect the electrical connector.

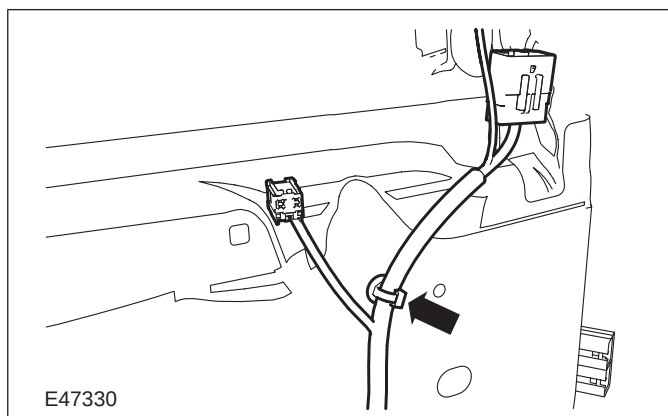


3. **⚠ CAUTION:** After the front door wiring harness electrical connector has been disconnected, position the front door back onto the front door hinges. Failure to follow this instruction may cause damage to the front door.

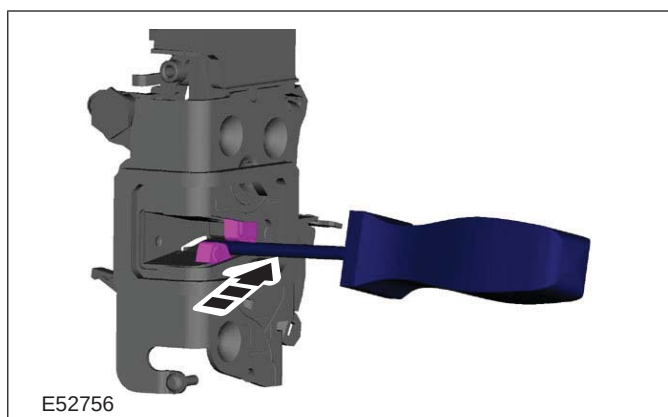
Position the front door onto the front door hinges.

Item 9 Front door wiring harness retaining clip

1. Detach the front door wiring harness retaining clip from the front door.

**Item 10 Front door latch remote control cable**

1. Using a suitable screwdriver, latch the front door lock into the closed position.

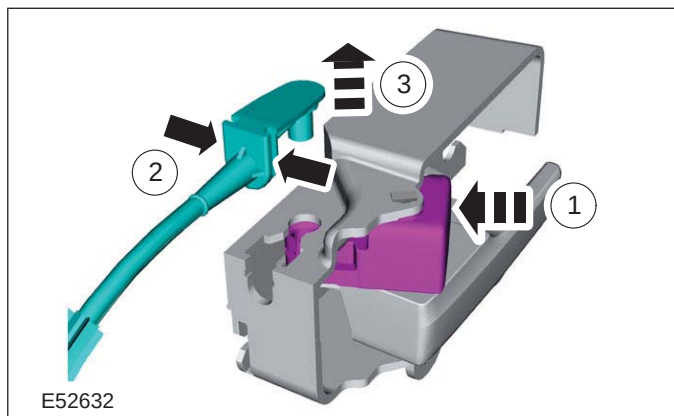


2. Detach the front door latch remote control cable from the front door latch remote control handle.

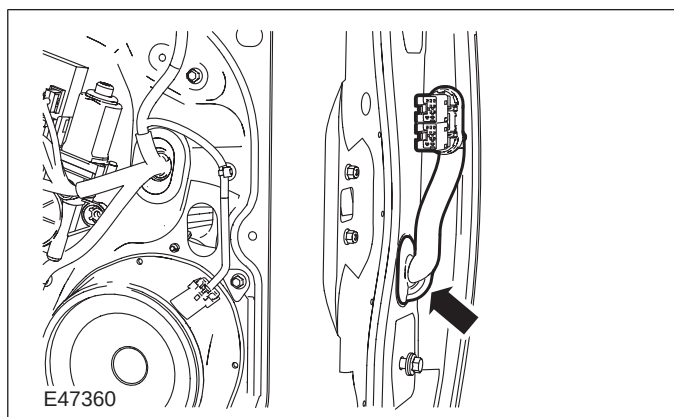
1. Operate the door latch remote control handle lock to the lock position.
2. Release the remote control cable retaining clips.

REMOVAL AND INSTALLATION

3. Detach the inner remote control cable from the remote control handle lock lever.

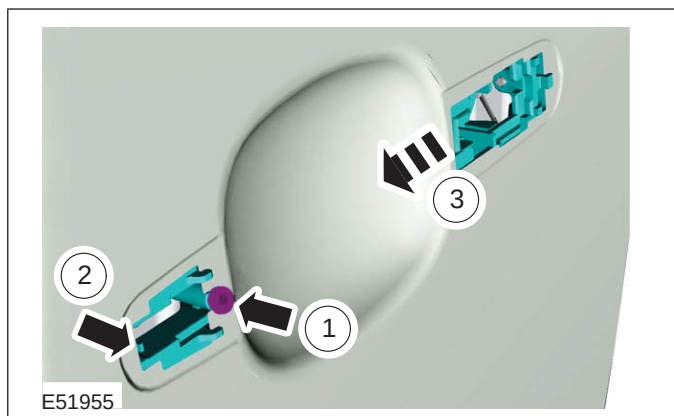
**Item 11 Front door wiring harness**

1. Detach and push the front door wiring harness into the front door.

**Item 12 Front door lock actuator retaining screw**

1. Detach the front door lock actuator.

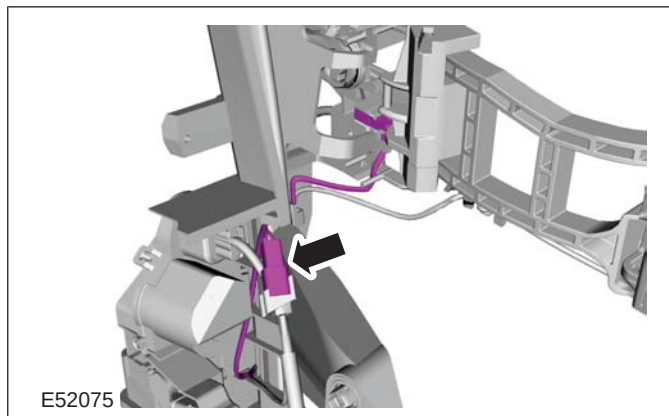
1. Loosen the front door lock actuator retaining screw.
2. Release the front door lock actuator retaining clip.
3. Slide the front door lock actuator towards the front of the vehicle.

**Item 13 Front door inner panel**

CAUTION: When removing the front door inner panel, care must be taken that the door wiring harness is not trapped or placed under excessive strain.

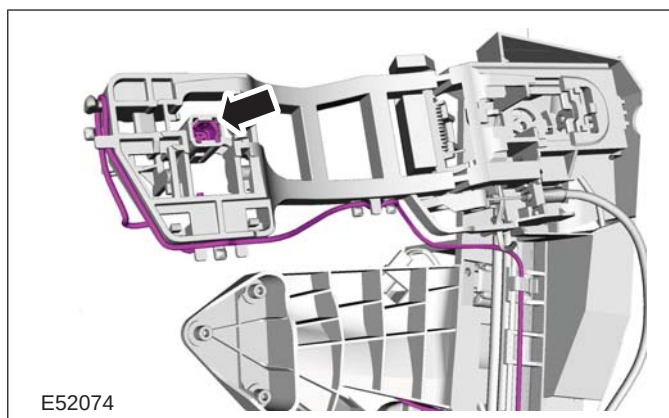
Item 15 Front door lock cylinder position sensor electrical connector

1. Disconnect the front door lock cylinder position sensor electrical connector.

**Item 16 Exterior front door handle RKE electrical connector**

NOTE: Make a note of the clipping position of the exterior front door handle RKE harness.

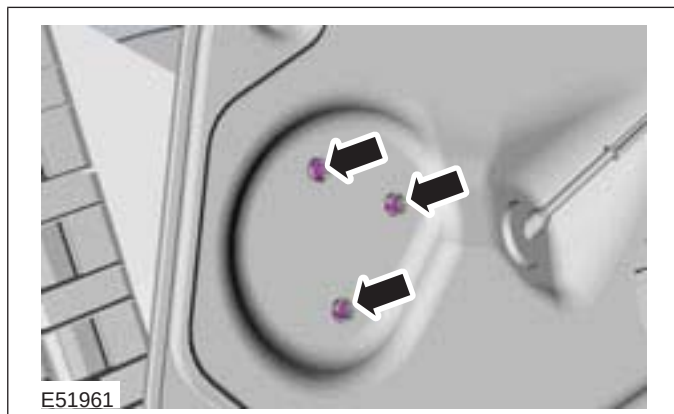
1. Detach the exterior front door handle RKE electrical connector and harness from the front door handle reinforcement.



REMOVAL AND INSTALLATION

Item 18 Front door handle, lock and latch retaining bracket

1. Press in the centers of the front door handle, lock and latch retaining bracket retaining clip locking pins.

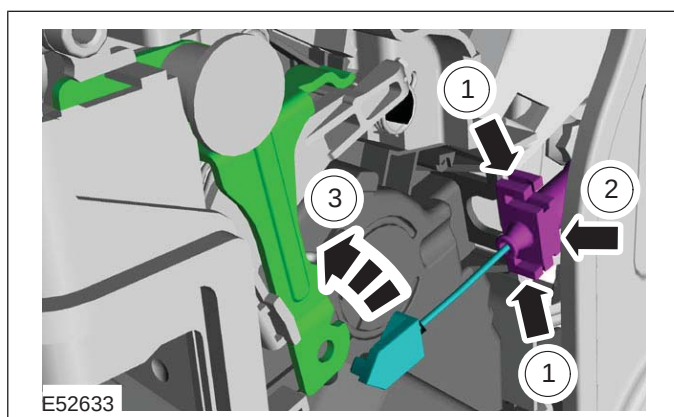
**Item 19** Front door latch remote control cable

1. **NOTE:** Do not kink the front door latch remote control cable.

NOTE: In order to remove the front door latch remote control cable from the front door latch lever the cable must be rotated.

Disconnect the front door latch remote control cable from the front door latch.

1. Using a suitable screwdriver, release the front door latch remote control cable locking tangs from the front door latch.
2. Detach the front door latch remote control outer cable from the front door latch.
3. Rotate the front door latch remote control cable.

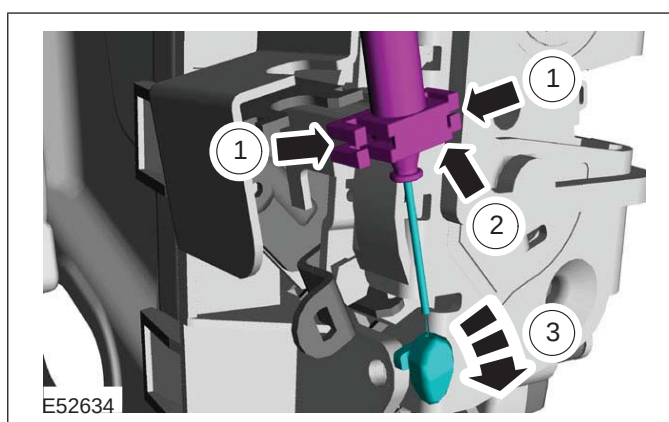
**Item 20** Front exterior door handle remote control cable

1. **NOTE:** Do not kink the front exterior door handle remote control cable.

NOTE: In order to remove the front exterior door handle remote control cable from the front door latch lever the cable must be rotated.

Disconnect the front exterior door handle remote control cable from the front door latch.

1. Using a suitable screwdriver, release the front exterior door handle remote control outer cable locking tangs from the front door latch.
2. Detach the front exterior door handle remote control cable from the front door latch.
3. Rotate the front exterior door handle remote control cable.

**Item 21** Front door latch retaining bracket retaining rivet

1. Using a suitable Electric hand drill remove and discard the door latch retaining bracket retaining rivet.

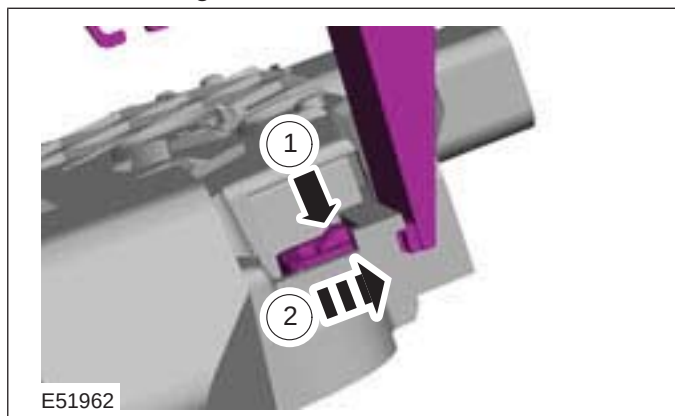
Item 22 Front door latch

1. Detach the front door latch actuator from the front door handle, lock and latch retaining bracket.

1. Press the front door handle, lock and latch retaining bracket release clip.

REMOVAL AND INSTALLATION

2. Slide the front door handle, lock and latch retaining bracket out of the front door latch.

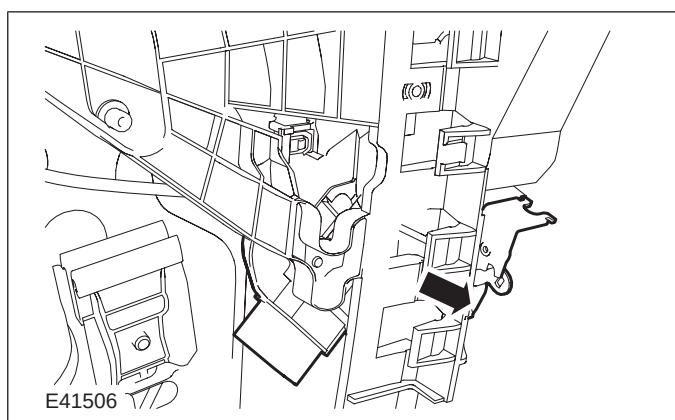


2. Detach the front door lock cylinder actuator rod from the front door latch.

Installation Details

Item 22 Front door latch

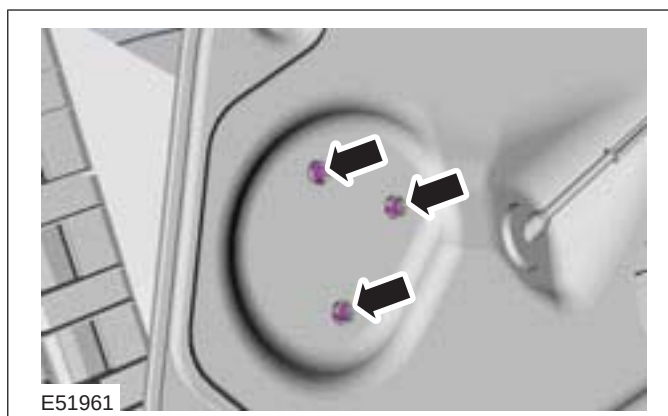
1. Connect the front door lock cylinder actuator rod to the front door latch.
2. Install the front door latch.
 - Using a suitable Rivet gun install a new front door latch rivet.



Item 18 Front door handle, lock and latch retaining bracket

1. Install the front door handle, lock and latch retaining bracket to the door inner panel.

2. From the back of the front door handle, lock and latch retaining bracket press in the retaining clip locking pins.



Item 13 Front door inner panel

1. Before installing the front door inner panel retaining bolts, feed the door wiring harness electrical connector through the front door wiring harness hole.

Item 12 Front door lock actuator retaining screw

1. Install the front door lock actuator to the front door.
2. Tighten the front door lock actuator retaining screw.

Item 5 Door hinge retaining bolts

1. Apply a coating of **adhesive** to the door hinge center retaining bolts.

REMOVAL AND INSTALLATION

Front Door Lock Actuator — 3-Door

Materials	
Name	Specification
Adhesive - Loctite 243	WSK-M2G349-A7

1. Remove the front door trim panel.

For additional information, refer to: **Front Door Trim Panel - 3-Door** (501-05 Interior Trim and Ornamentation, Removal and Installation).

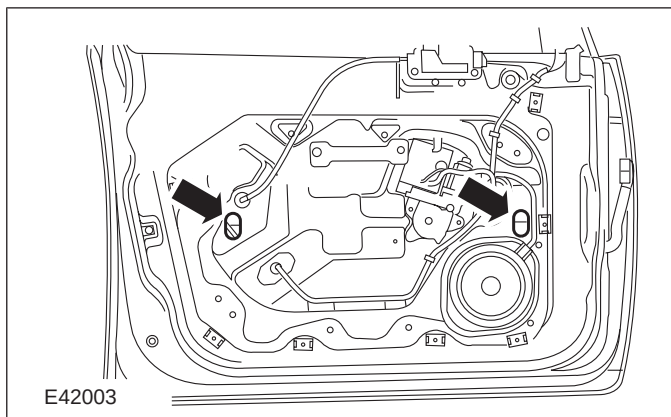
2. Remove the exterior front door handle.

For additional information, refer to: **Exterior Front Door Handle - Vehicles With: Keyless Vehicle System** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

3. Connect the battery ground cable.

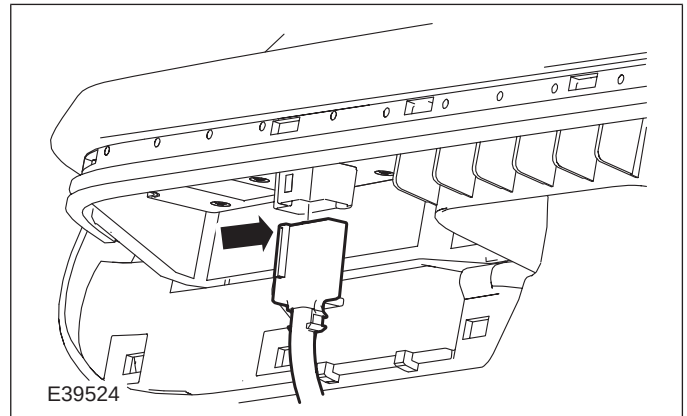
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

4. Remove the front door window regulator grommets.

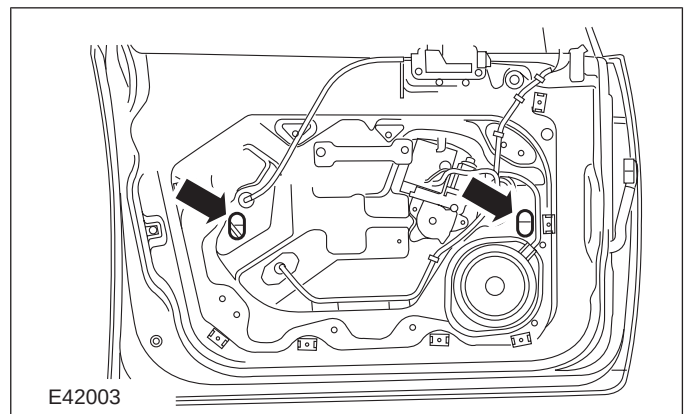


5. NOTE: Support the front door power window control unit.

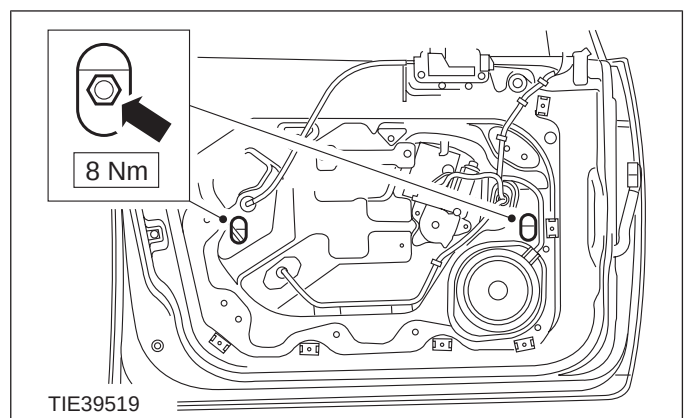
Connect the front door power window control switch electrical connector.



6. Using the front door power window control switch, align the window glass clamp bolts with the access holes.



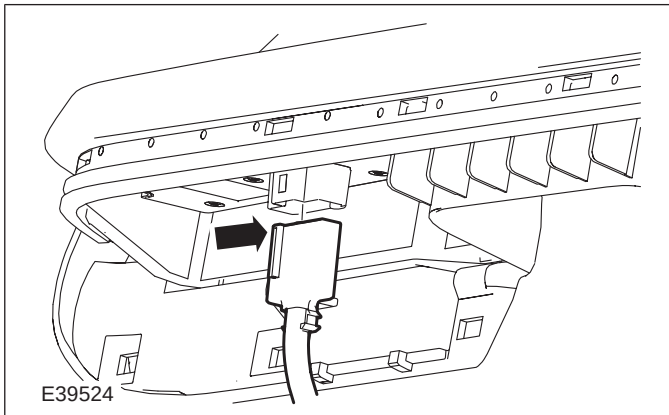
7. Loosen the front door window glass clamp retaining bolts.



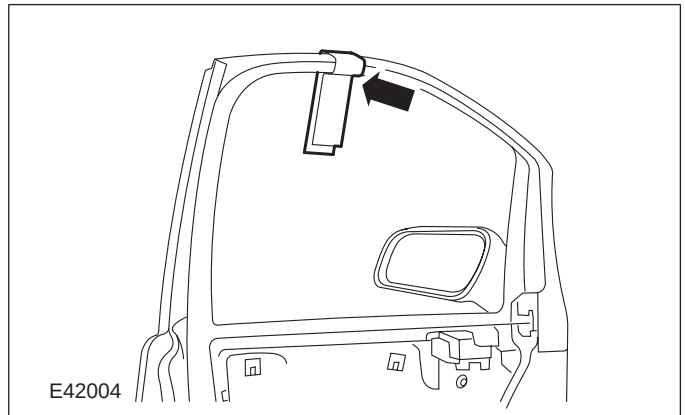
8. Raise the front door window glass.

REMOVAL AND INSTALLATION

9. Disconnect the front door power window control unit electrical connector.



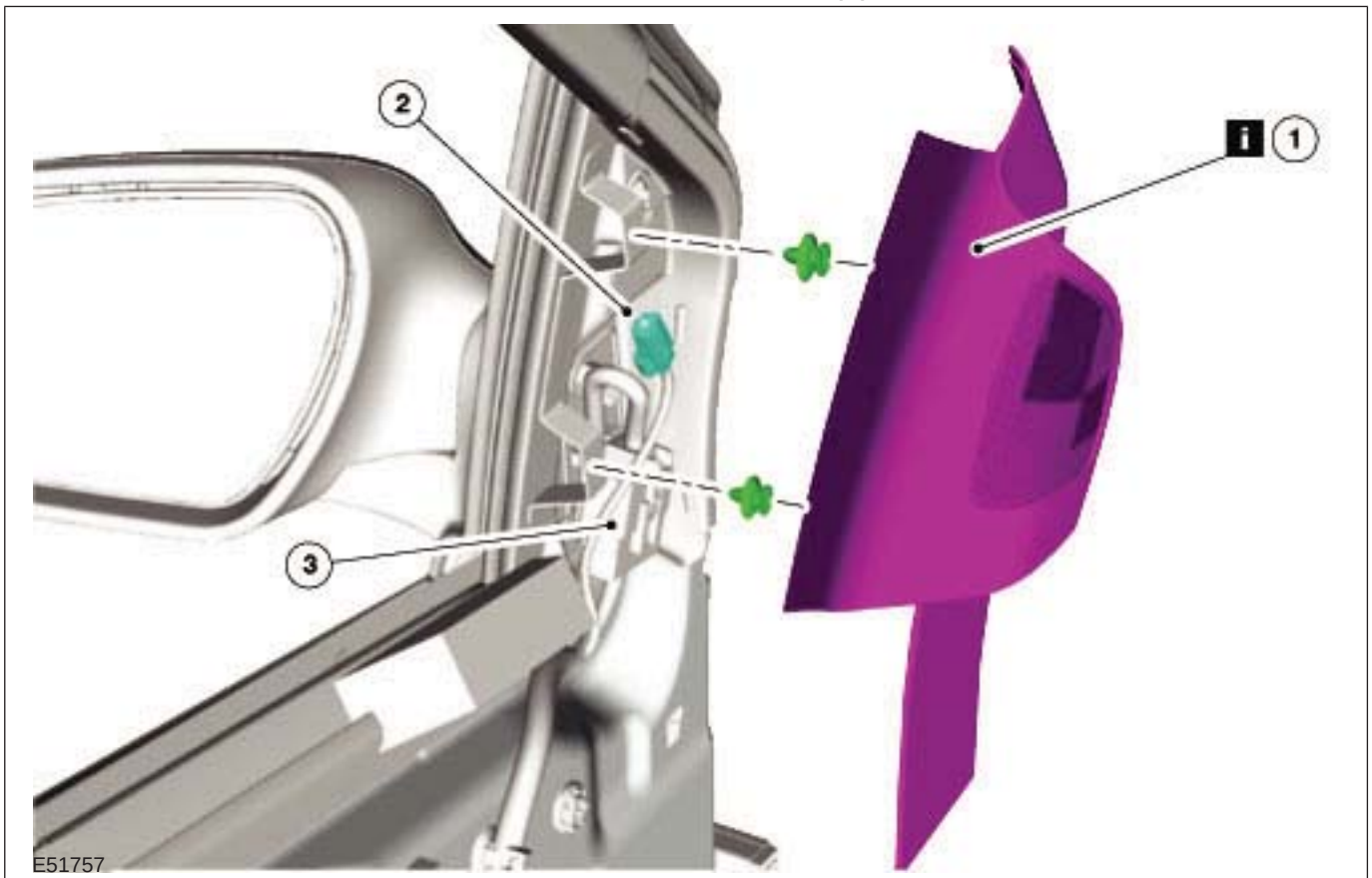
10. Using suitable tape, secure the front door window glass to the front door.



11. Disconnect the battery ground cable.

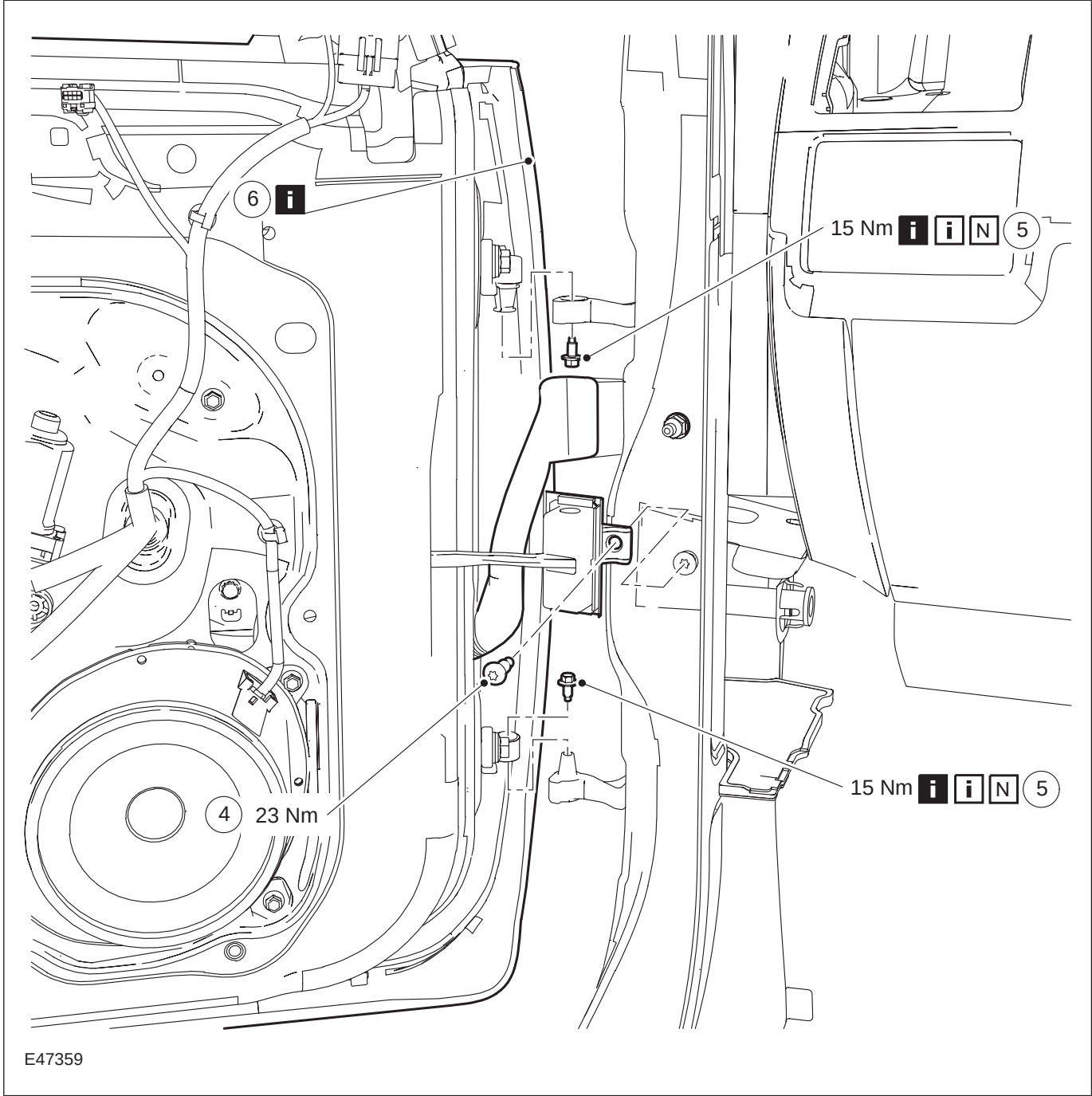
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

12. Remove the components in the order indicated in the following illustration(s) and table(s).



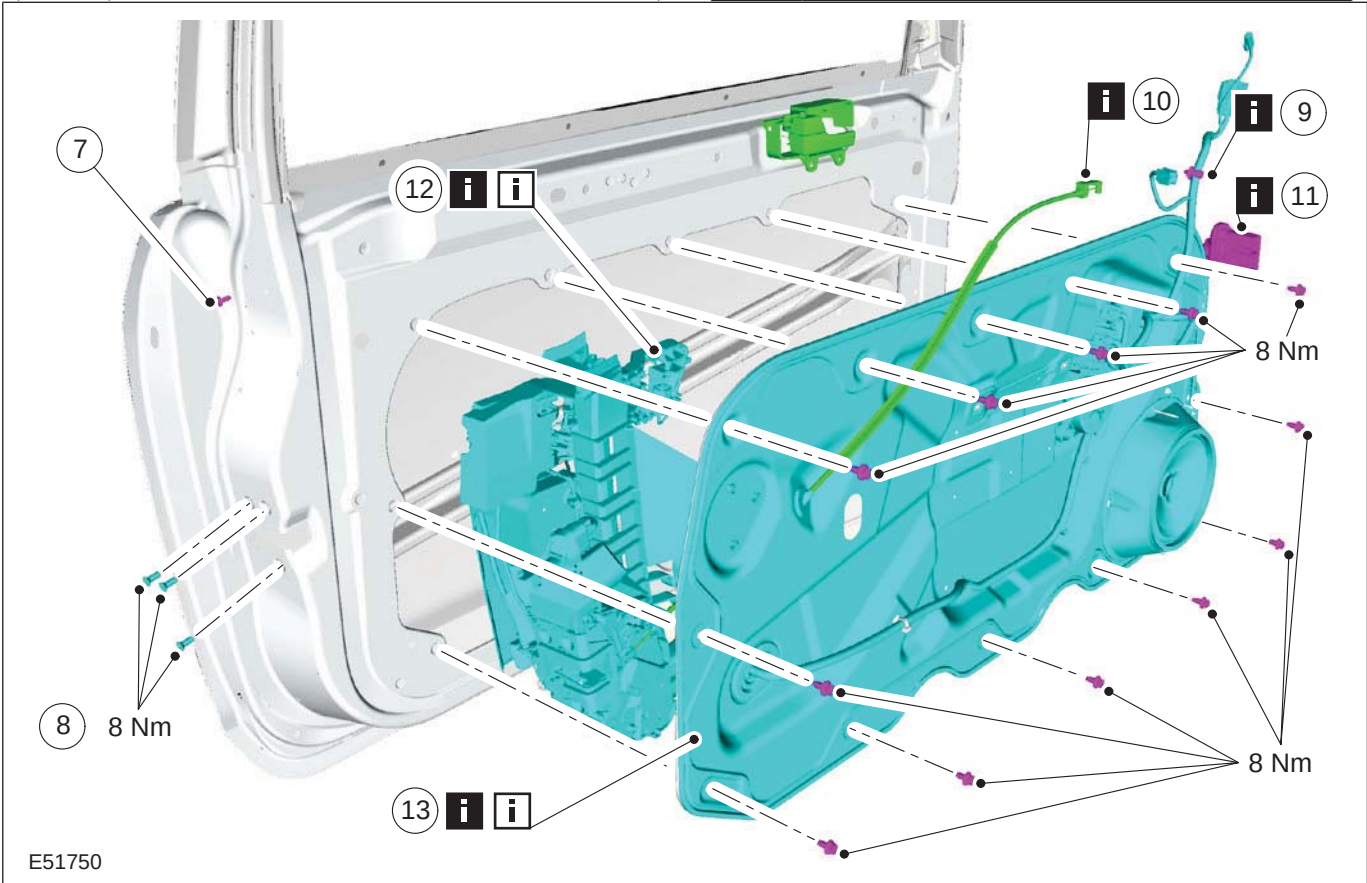
REMOVAL AND INSTALLATION

Item	Description	Item	Description
1	Exterior mirror interior trim panel See Removal Detail		connector
2	Front door tweeter speaker electrical	3	Exterior mirror electrical connector (if equipped)



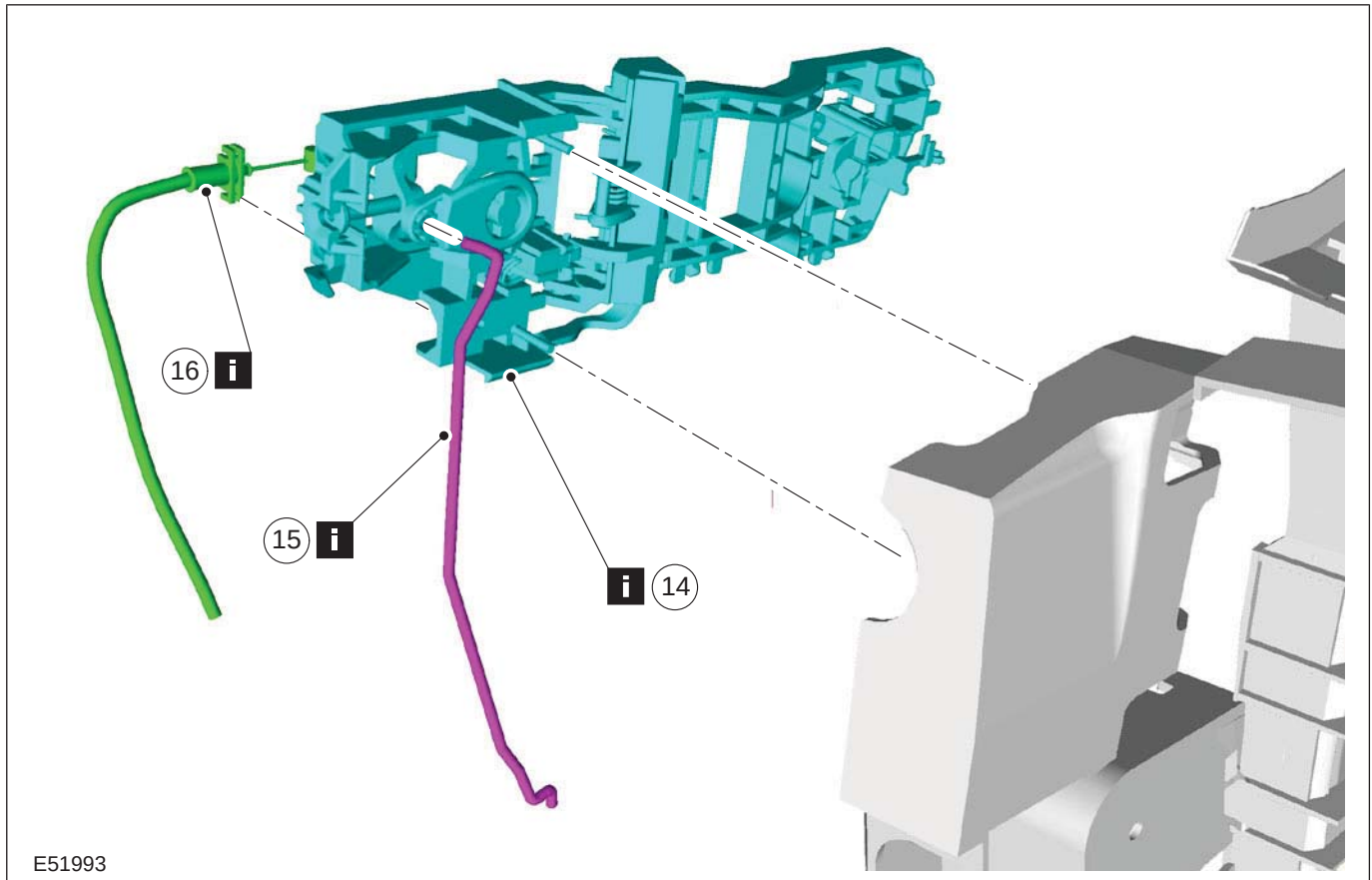
REMOVAL AND INSTALLATION

Item	Description	Item	Description
4	Door check strap		See Installation Detail
5	Door hinge retaining bolts See Removal Detail	6	Door (left-hand door shown) See Removal Detail



Item	Description	Item	Description
7	Front door handle, lock and latch retaining bracket retaining screw	11	Front door wiring harness See Removal Detail
8	Front door latch retaining bolts	12	Front door lock actuator retaining screw See Removal Detail See Installation Detail
9	Front door wiring harness retaining clip See Removal Detail	13	Front door inner panel See Removal Detail See Installation Detail
10	Front door latch remote control cable See Removal Detail		

REMOVAL AND INSTALLATION



E51993

Item	Description
14	Front door handle reinforcement See Removal Detail
15	Front door lock cylinder actuator rod See Removal Detail
16	Front door exterior handle remote control cable See Removal Detail

13. To install, reverse the removal procedure.

14. Vehicles with global closing, initialize the door window motors.

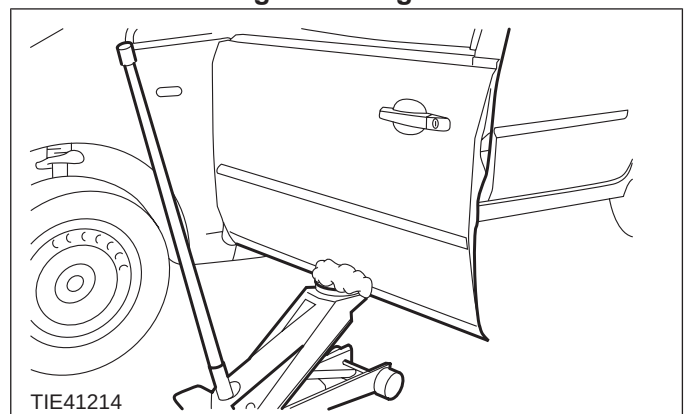
For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

Removal Details

Item 1 Exterior mirror interior trim panel

CAUTION: Do not place excessive strain on the exterior mirror and front door tweeter speaker wiring harness.

Item 5 Door hinge retaining bolts



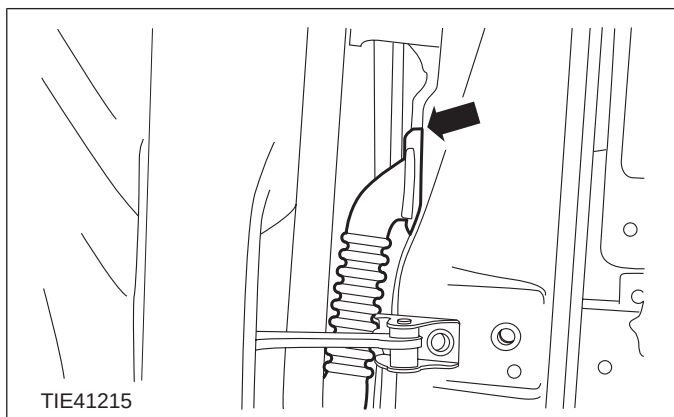
REMOVAL AND INSTALLATION

1. **⚠ CAUTION:** Protect the door using a soft cloth to prevent damage to the front door.

With the aid of another technician and a suitable trolley jack, support and detach the front door from the front door hinges.

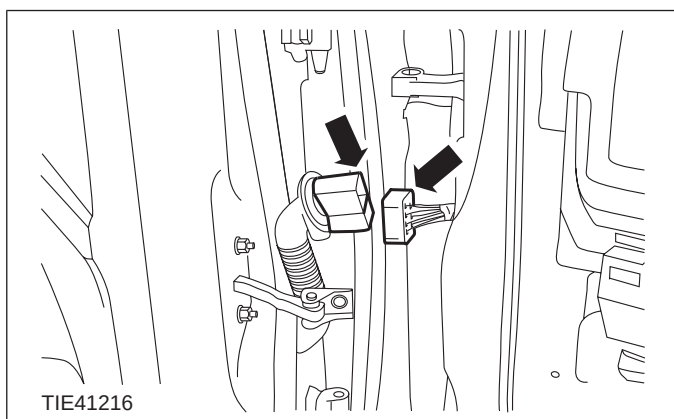
Item 6 Door (left-hand door shown)

1. Detach the electrical connector from the A-pillar.

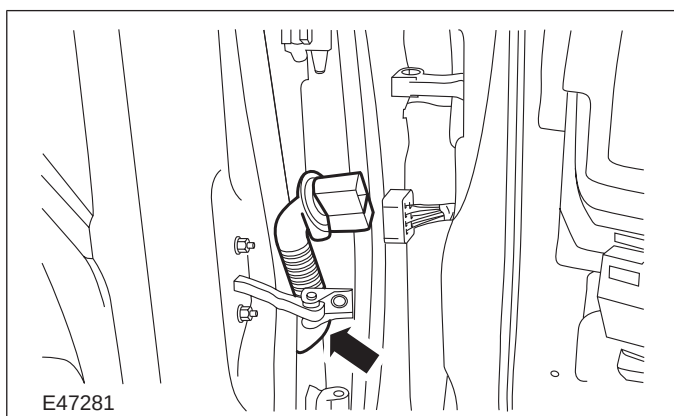


2. Remove the front door.

- Disconnect the electrical connector.



3. Push the front door wiring harness into the door.

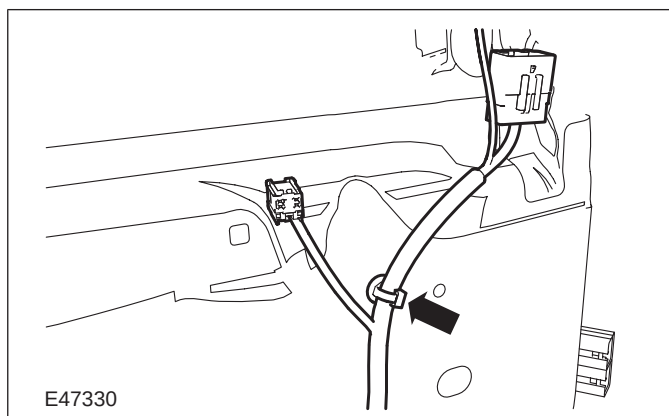


4. **⚠ CAUTION:** After the front door wiring harness electrical connector has been disconnected, position the front door back onto the front door hinges. Failure to follow this instruction may cause damage to the front door.

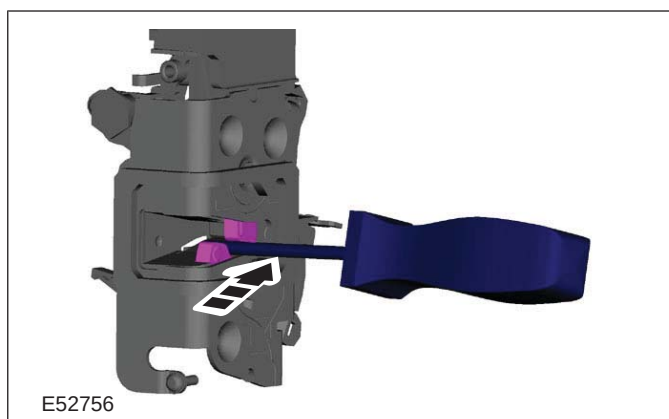
Position the front door onto the front door hinges.

Item 9 Front door wiring harness retaining clip

1. Detach the front door wiring harness retaining clip from the front door.

**Item 10 Front door latch remote control cable**

1. Using a suitable screwdriver, latch the front door lock into the closed position.

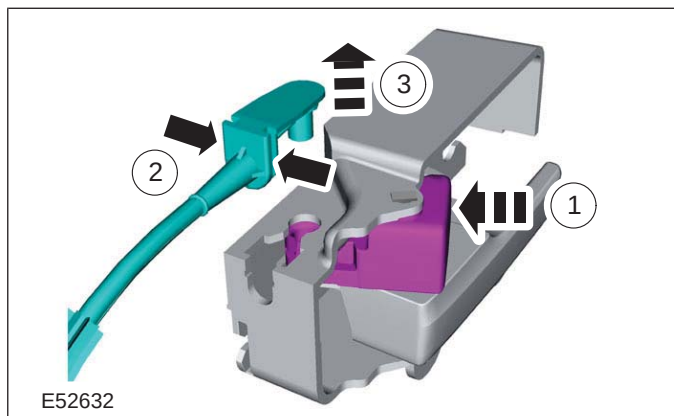


2. Detach the front door latch remote control cable from the front door latch remote control handle.

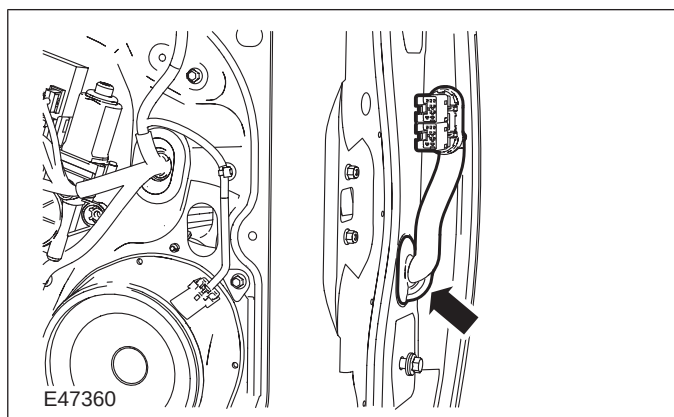
1. Operate the door latch remote control handle lock to the lock position.
2. Release the remote control cable retaining clips.

REMOVAL AND INSTALLATION

3. Detach the inner remote control cable from the remote control handle lock lever.

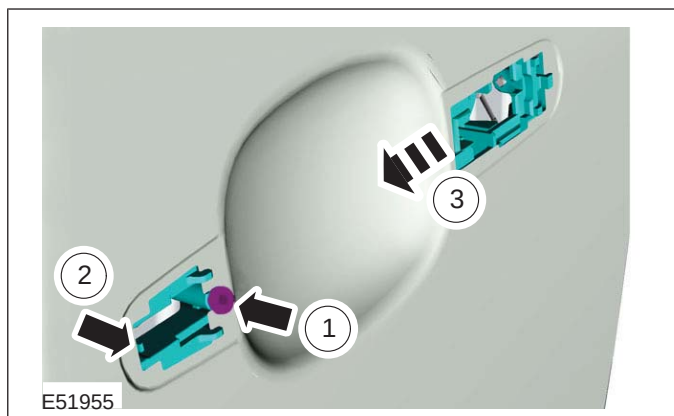
**Item 11 Front door wiring harness**

1. Detach and push the front door wiring harness into the front door.

**Item 12 Front door lock actuator retaining screw**

1. Detach the front door lock actuator.

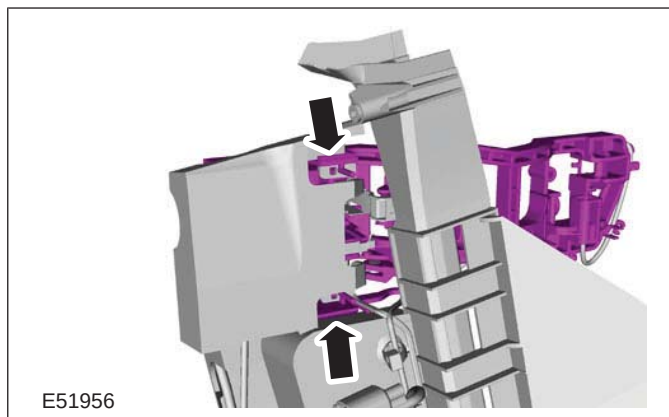
1. Loosen the front door lock actuator retaining screw.
2. Release the front door lock actuator retaining clip.
3. Slide the front door lock actuator towards the front of the vehicle.

**Item 13 Front door inner panel**

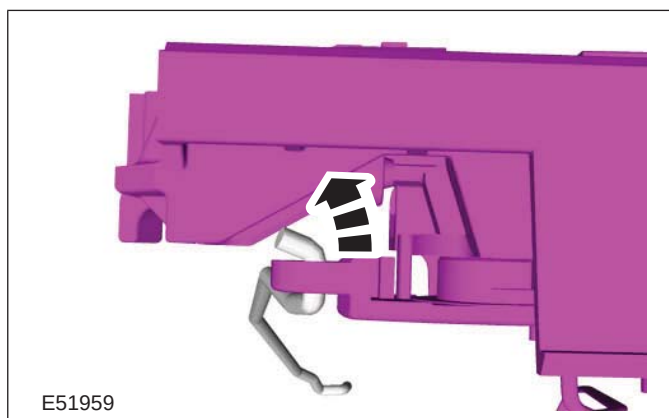
CAUTION: When removing the front door inner panel, care must be taken that the door wiring harness is not trapped or placed under excessive strain.

Item 14 Front door handle reinforcement

1. Detach the front door handle reinforcement from the front door handle, lock and latch retaining bracket.

**Item 15 Front door lock cylinder actuator rod**

1. Detach the front door lock cylinder actuator rod from the front door handle reinforcement.

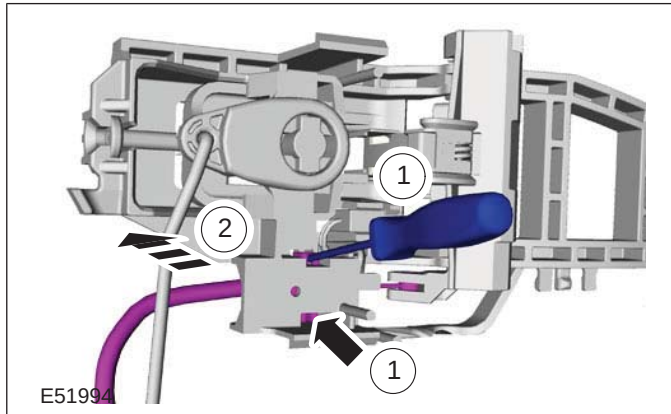
**Item 16 Front door exterior handle remote control cable**

1. Detach the front door exterior handle remote control cable from the front door handle reinforcement.

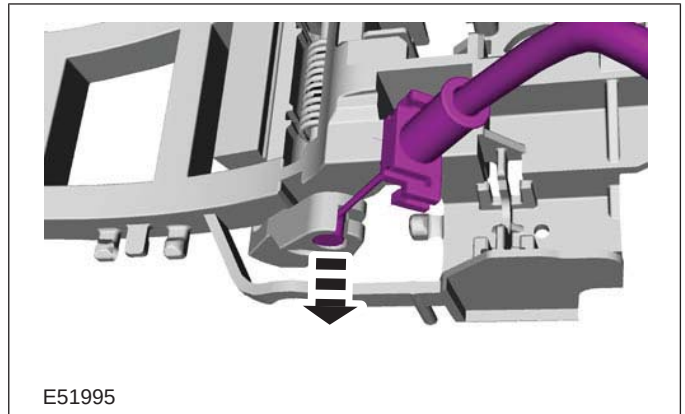
1. Using a suitable flat blade screwdriver, release the front door exterior handle remote control cable retaining clips.

REMOVAL AND INSTALLATION

2. Slide the front door exterior handle remote control cable off of the front door handle reinforcement retainers.



2. Align the front door exterior handle remote control inner cable with the slot in the front door handle reinforcement and remove.



Installation Details

Item 13 Front door inner panel

1. Before installing the front door inner panel retaining bolts, feed the door wiring harness electrical connector through the front door wiring harness hole.

Item 12 Front door lock actuator retaining screw

1. Install the front door lock actuator to the front door.
2. Tighten the front door lock actuator retaining screw.

Item 5 Door hinge retaining bolts

1. Apply a coating of adhesive to the door hinge retaining bolts.

REMOVAL AND INSTALLATION

Front Door Lock Actuator — 3-Door, Vehicles With: Keyless Vehicle System

Materials	
Name	Specification
Adhesive - Loctite 243	WSK-M2G349-A7

1. Remove the front door trim panel.

For additional information, refer to: **Front Door Trim Panel - 3-Door** (501-05 Interior Trim and Ornamentation, Removal and Installation).

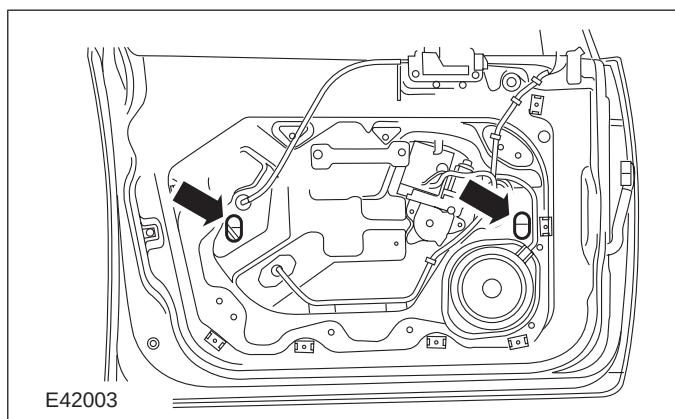
2. Remove the exterior front door handle.

For additional information, refer to: **Exterior Front Door Handle - Vehicles With: Keyless Vehicle System** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

3. Connect the battery ground cable.

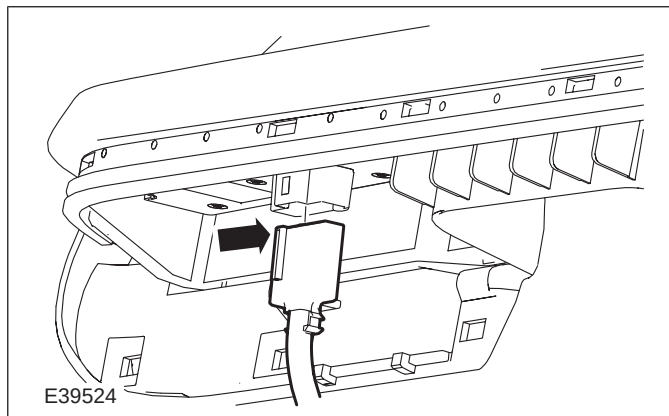
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

4. Remove the front door window regulator grommets.

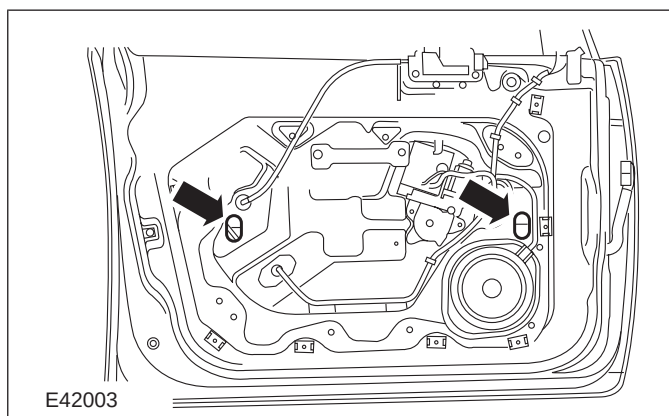


5. NOTE: Support the front door power window control unit.

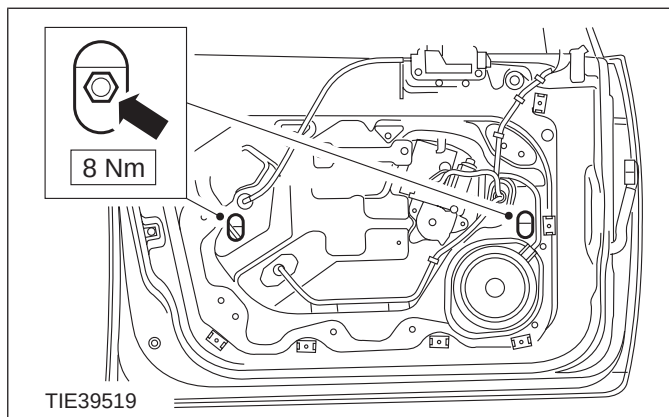
Connect the front door power window control switch electrical connector.



6. Using the front door power window control switch, align the window glass clamp bolts with the access holes.



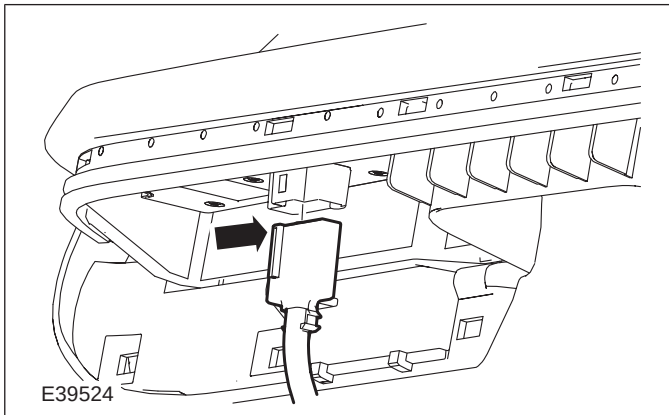
7. Loosen the front door window glass clamp retaining bolts.



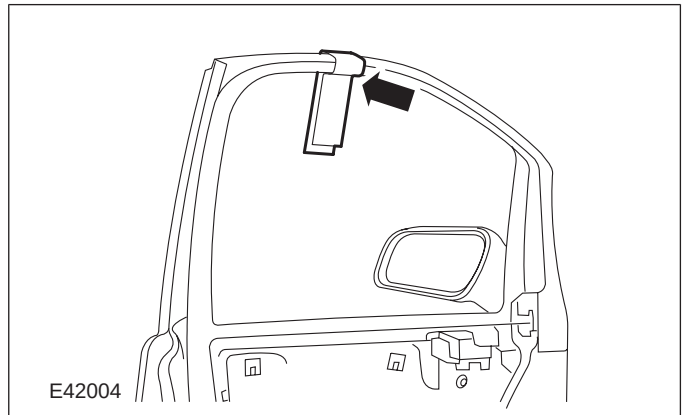
8. Raise the front door window glass.

REMOVAL AND INSTALLATION

9. Disconnect the front door power window control switch electrical connector.



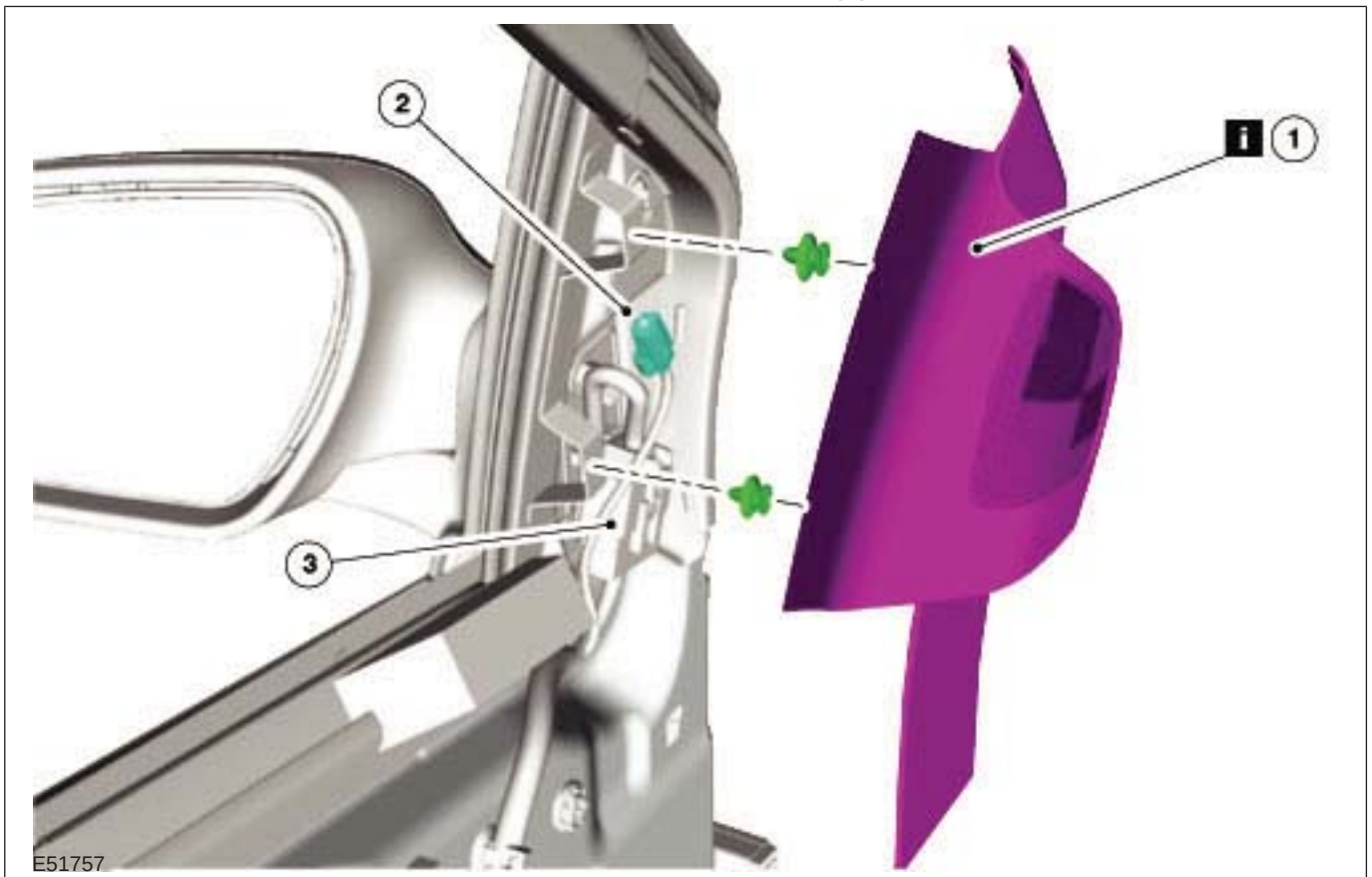
10. Using suitable tape, secure the front door window glass to the front door.



11. Disconnect the battery ground cable.

For additional information, **refer to: Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

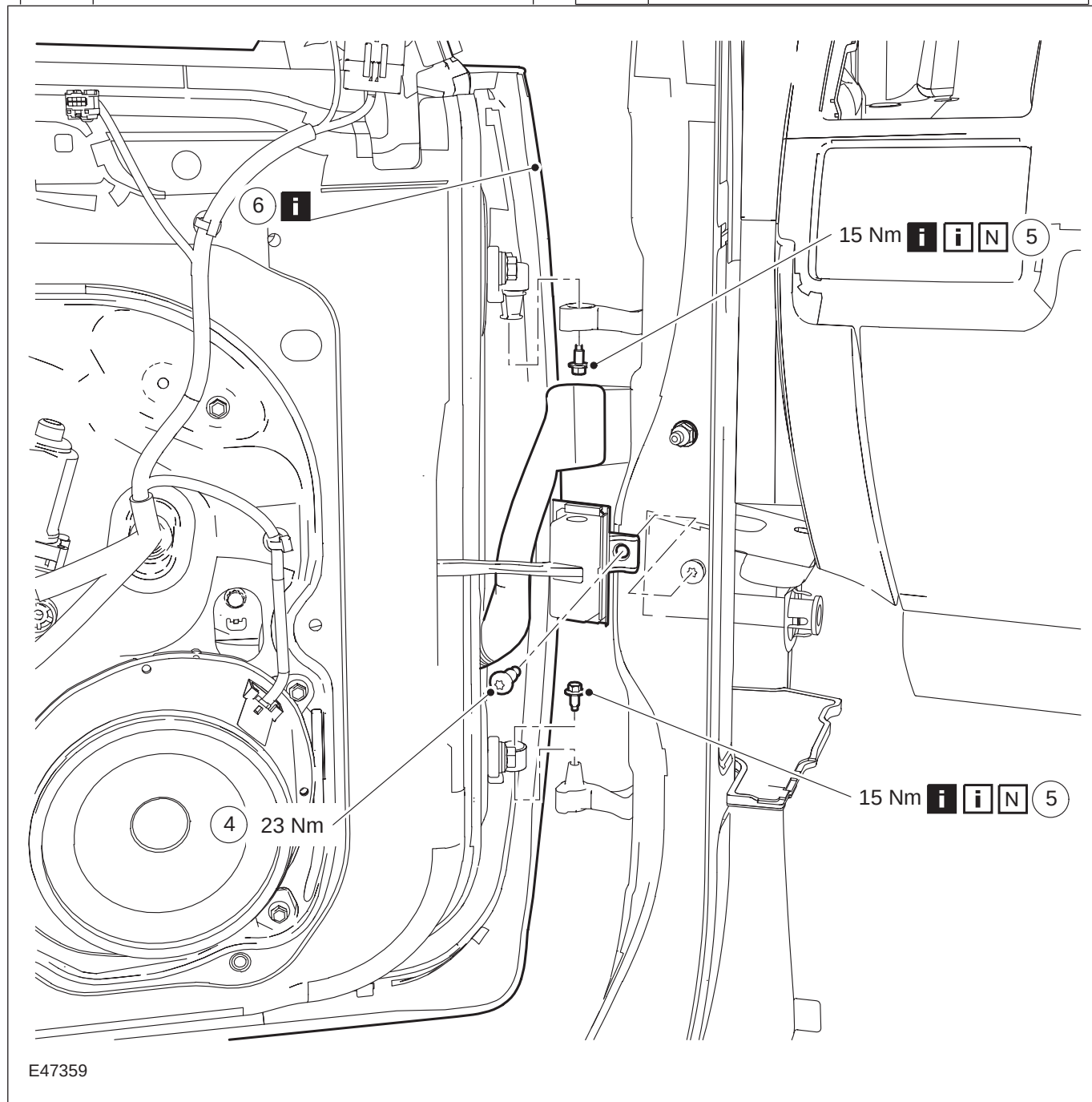
12. Remove the components in the order indicated in the following illustration(s) and table(s).



REMOVAL AND INSTALLATION

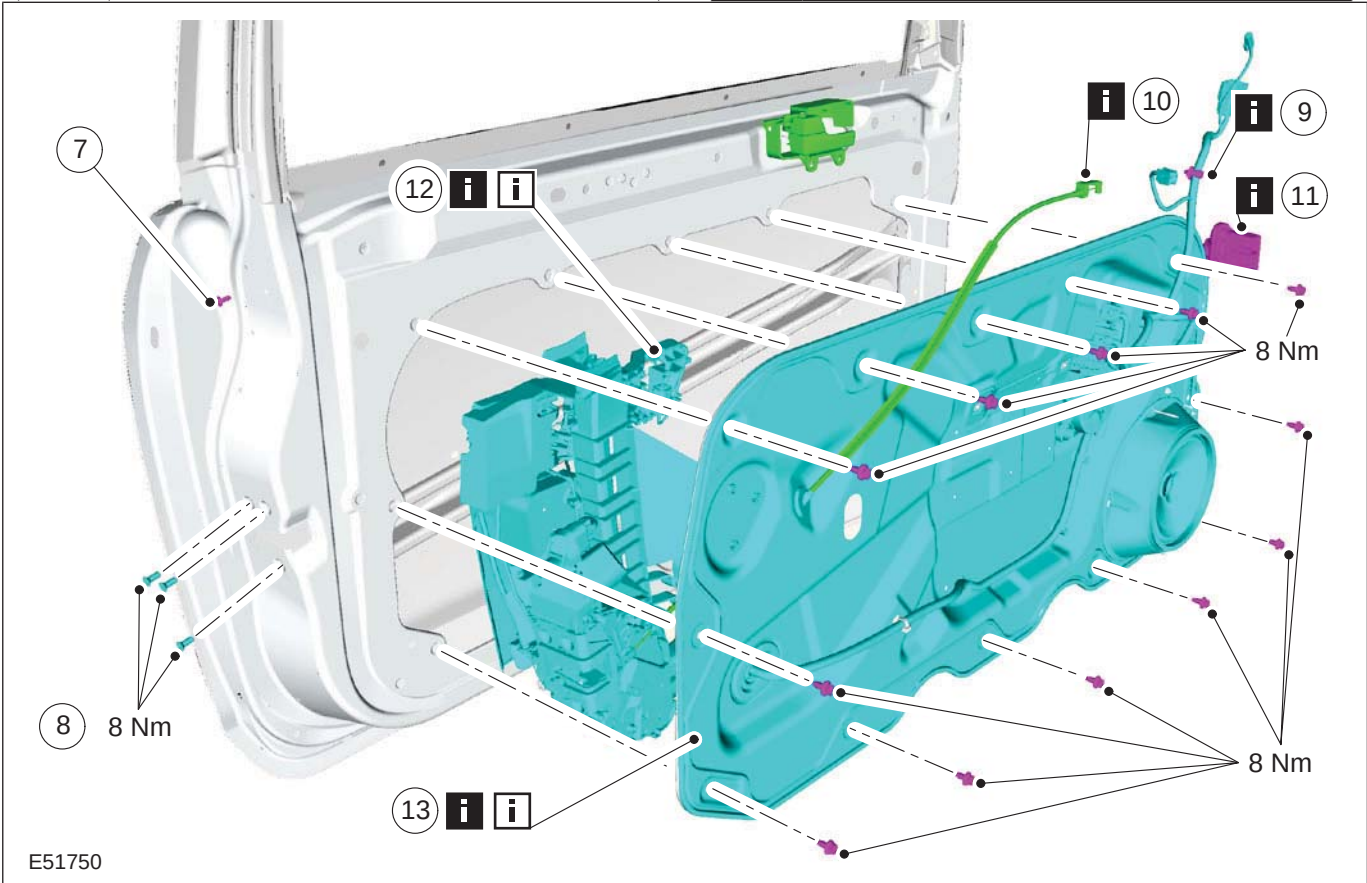
Item	Description
1	Exterior mirror interior trim panel See Removal Detail
2	Front door tweeter speaker electrical

Item	Description
	connector
3	Exterior mirror electrical connector (if equipped)



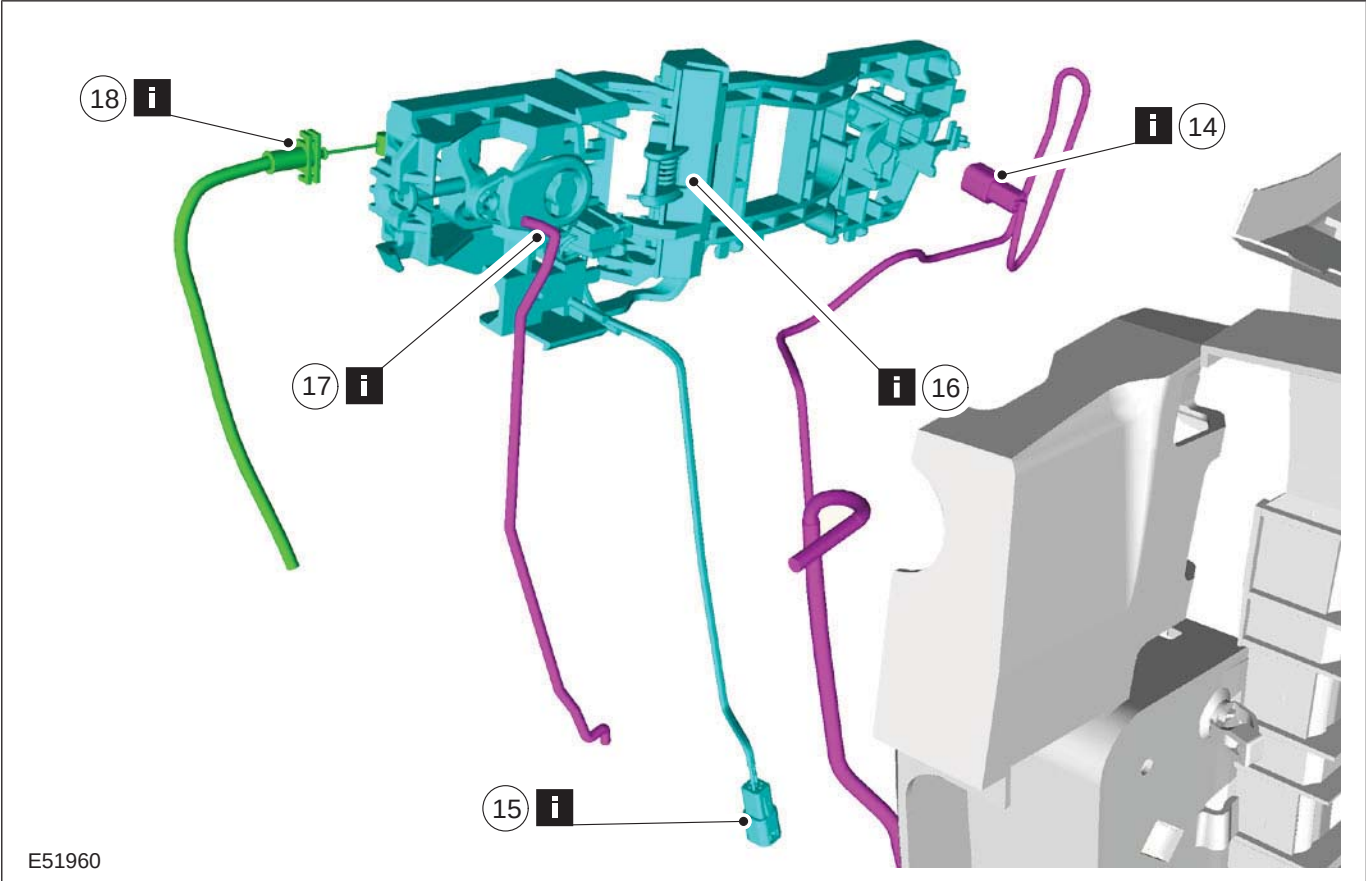
REMOVAL AND INSTALLATION

Item	Description	Item	Description
4	Door check strap		See Installation Detail
5	Door hinge retaining bolts. See Removal Detail	6	Door (left-hand door shown) See Removal Detail



Item	Description	Item	Description
7	Front door handle, lock and latch retaining bracket retaining screw	11	Front door wiring harness See Removal Detail
8	Front door latch retaining bolts	12	Front door lock actuator retaining screw See Removal Detail See Installation Detail
9	Front door wiring harness retaining clip See Removal Detail	13	Front door inner panel See Removal Detail See Installation Detail
10	Front door latch remote control cable See Removal Detail		

REMOVAL AND INSTALLATION



Item	Description
14	Exterior front door handle RKE electrical connector See Removal Detail
15	Front door lock cylinder position sensor electrical connector See Removal Detail
16	Front door handle reinforcement See Removal Detail

Item	Description
17	Front door lock cylinder actuator rod See Removal Detail
18	Front door exterior handle remote control cable See Removal Detail

13. To install, reverse the removal procedure.
14. Vehicles with global closing, initialize the door window motors.

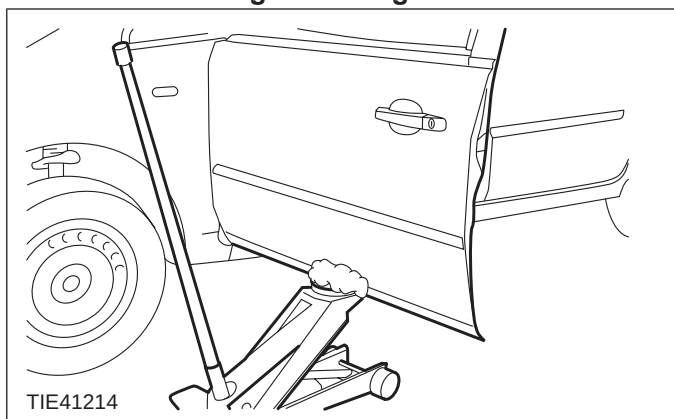
For additional information, **refer to: Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

Removal Details

Item 1 Exterior mirror interior trim panel

CAUTION: Do not place excessive strain on the exterior mirror and front door tweeter speaker wiring harness.

REMOVAL AND INSTALLATION

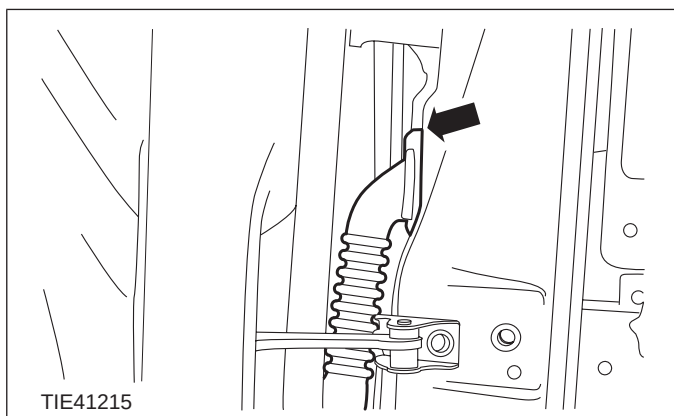
Item 5 Door hinge retaining bolts.

1. **⚠ CAUTION:** Protect the door using a soft cloth to prevent damage to the front door.

With the aid of another technician and a suitable trolley jack, support and detach the front door from the front door hinges.

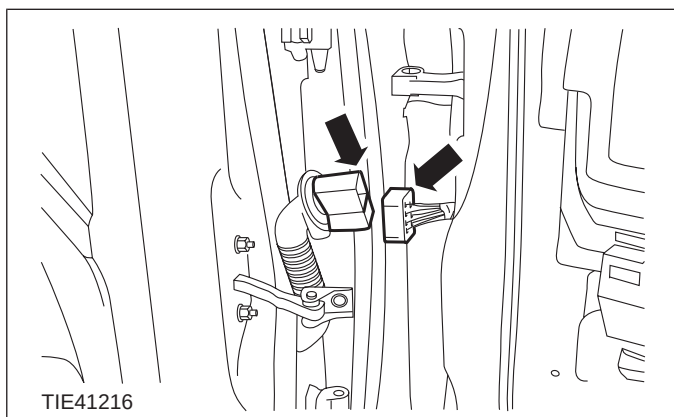
Item 6 Door (left-hand door shown)

1. Detach the electrical connector from the A-pillar.

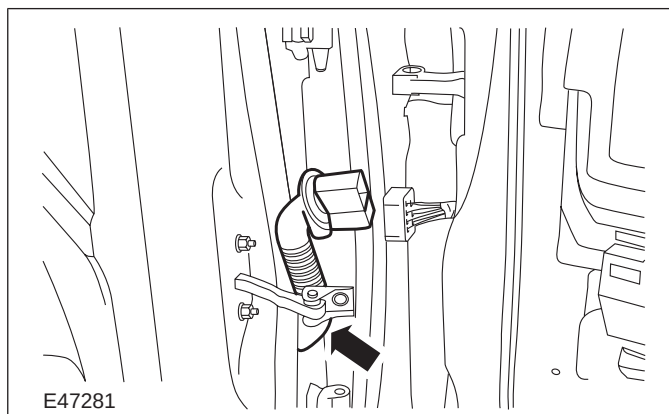


2. Remove the front door.

- Disconnect the electrical connector.



3. Push the front door wiring harness into the door.

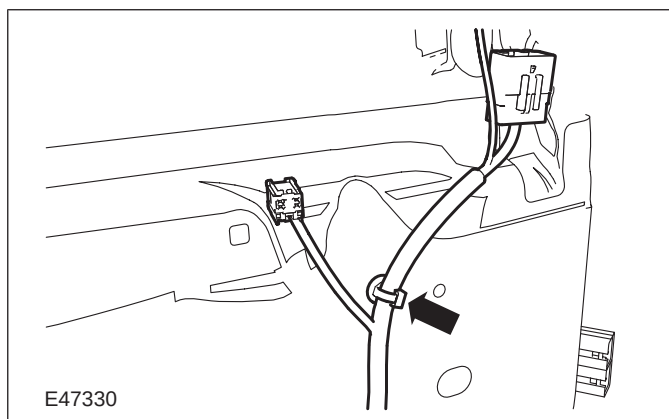


4. **⚠ CAUTION:** After the front door wiring harness electrical connector has been disconnected, position the front door back onto the front door hinges. Failure to follow this instruction may cause damage to the front door.

Position the front door onto the front door hinges.

Item 9 Front door wiring harness retaining clip

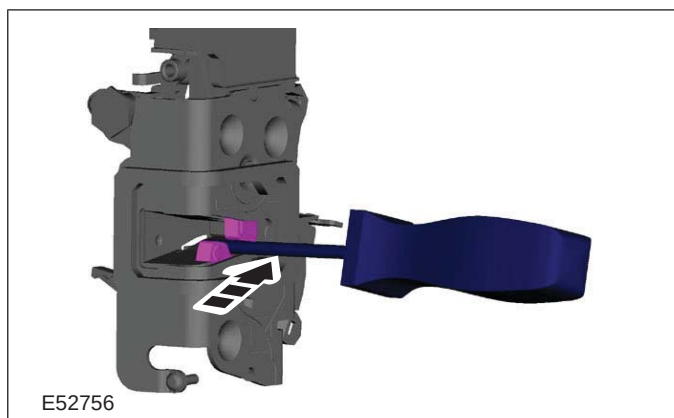
1. Detach the front door wiring harness retaining clip from the front door.



REMOVAL AND INSTALLATION

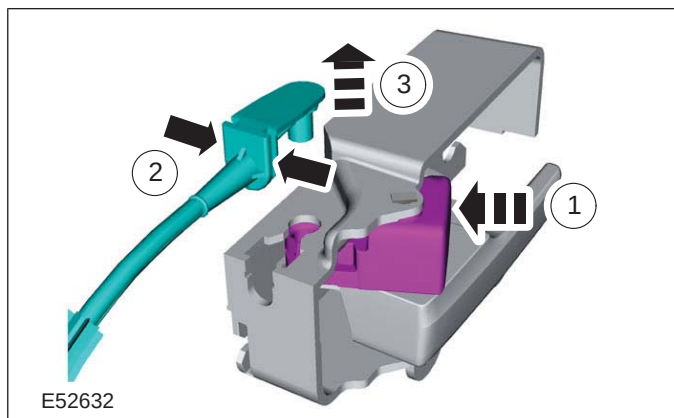
Item 10 Front door latch remote control cable

1. Using a suitable screwdriver, latch the front door lock into the closed position.

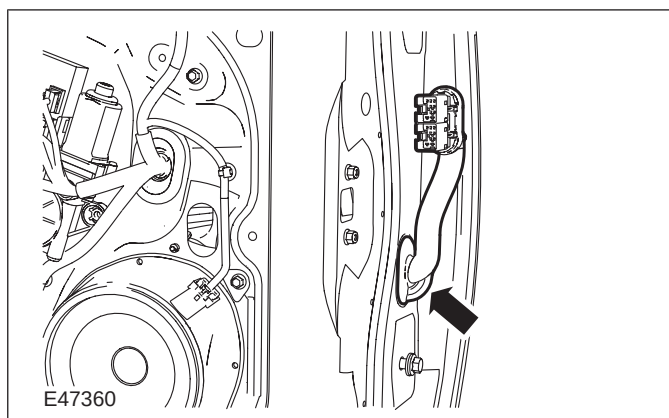


2. Detach the front door latch remote control cable from the front door latch remote control handle.

1. Operate the door latch remote control handle lock to the lock position.
2. Release the remote control cable retaining clips.
3. Detach the inner remote control cable from the remote control handle lock lever.

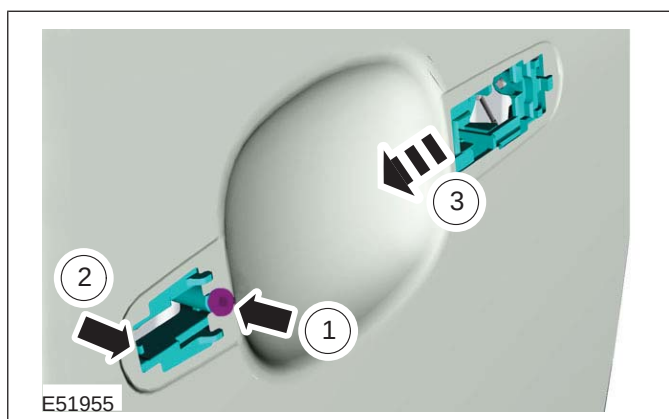
**Item 11 Front door wiring harness**

1. Detach and push the front door wiring harness into the front door.

**Item 12 Front door lock actuator retaining screw**

1. Detach the front door lock actuator.

1. Loosen the front door lock actuator retaining screw.
2. Release the front door lock actuator retaining clip.
3. Slide the front door lock actuator towards the front of the vehicle.

**Item 13 Front door inner panel**

CAUTION: When removing the front door inner panel, care must be taken that the door wiring harness is not trapped or placed under excessive strain.

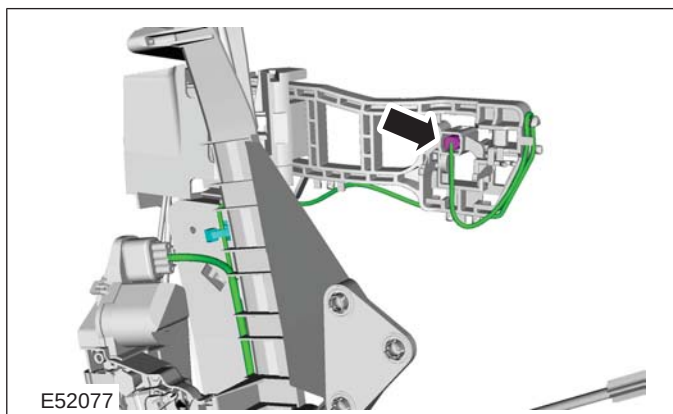
Item 14 Exterior front door handle RKE electrical connector

NOTE: Make a note of the clipping position of the exterior front door handle RKE harness.

1. Disconnect the front door handle RKE electrical connector and detach the wiring

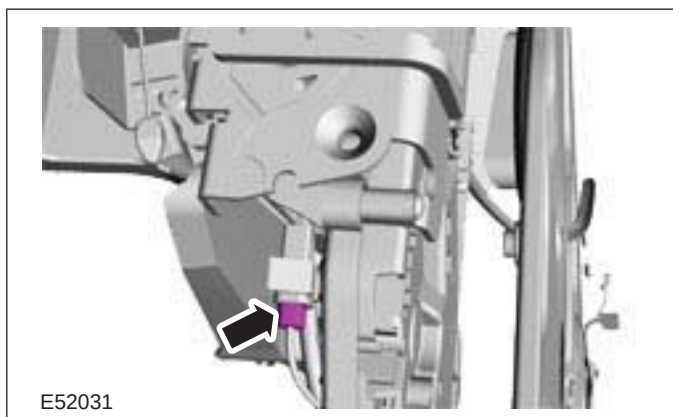
REMOVAL AND INSTALLATION

harness from the front door handle reinforcement.



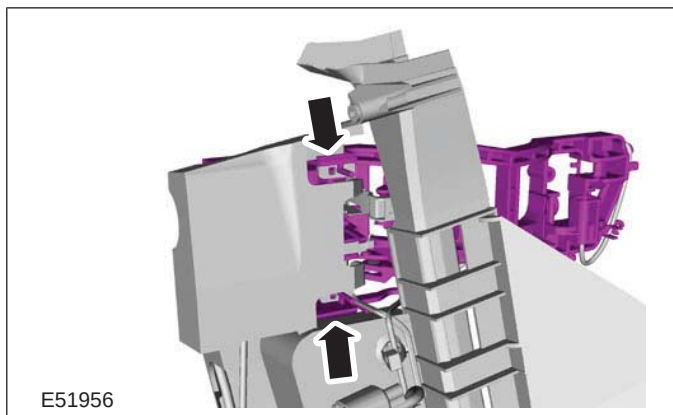
Item 15 Front door lock cylinder position sensor electrical connector

1. Disconnect the front door lock cylinder position sensor electrical connector.



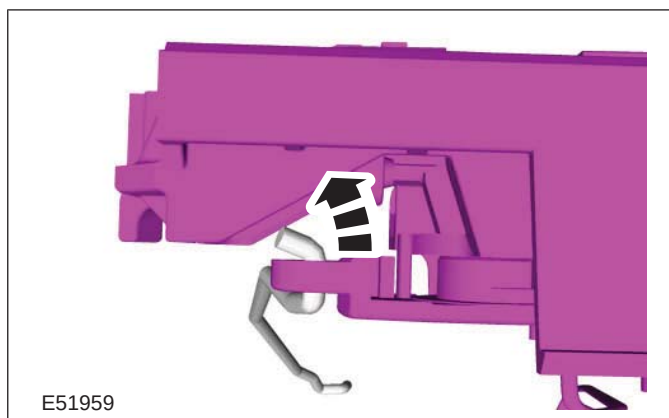
Item 16 Front door handle reinforcement

1. Detach the front door handle reinforcement from the front door handle, lock and latch retaining bracket.



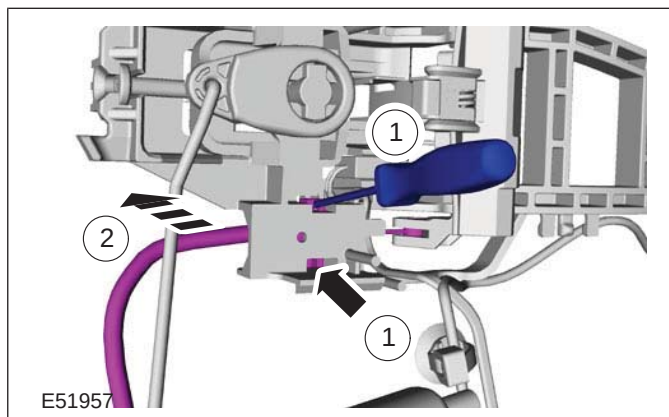
Item 17 Front door lock cylinder actuator rod

1. Detach the front door lock cylinder actuator rod from the front door handle reinforcement.



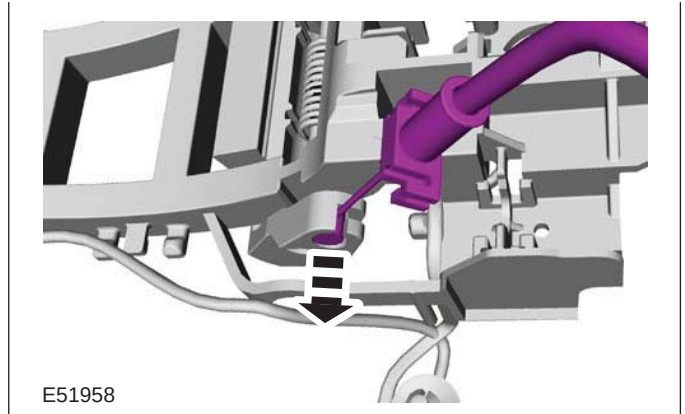
Item 18 Front door exterior handle remote control cable

1. Detach the front door exterior handle remote control cable from the front door handle reinforcement.
1. Using a suitable flat blade screwdriver, release the front door exterior handle remote control cable retaining clips.
2. Slide the front door exterior handle remote control cable off of the front door handle reinforcement retainers.



REMOVAL AND INSTALLATION

2. Align the front door exterior handle remote control inner cable with the slot in the front door handle reinforcement and remove.

**Installation Details****Item 13 Front door inner panel**

1. Before installing the front door inner panel retaining bolts, feed the door wiring harness electrical connector through the front door wiring harness hole.

Item 12 Front door lock actuator retaining screw

1. Install the front door lock actuator to the front door.
2. Tighten the front door lock actuator retaining screw.

Item 5 Door hinge retaining bolts.

1. Apply a coating of adhesive to the door hinge retaining bolts.

REMOVAL AND INSTALLATION

Front Door Lock Actuator — 4-Door/5-Door/Wagon

General Equipment

Trolley jack

Materials

Name	Specification
Adhesive - Loctite 243	WSK-M2G349-A7

1. Remove the front door trim panel.

For additional information, refer to: **Front Door Trim Panel - 4-Door/5-Door/Wagon** (501-05 Interior Trim and Ornamentation, Removal and Installation).

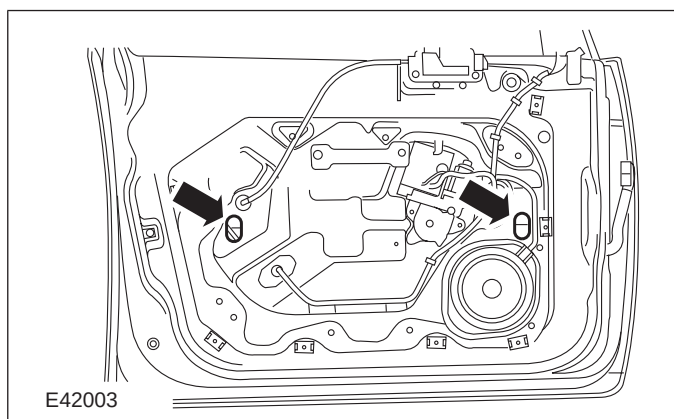
2. Remove the exterior front door handle.

For additional information, refer to: **Exterior Front Door Handle** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

3. Connect the battery ground cable.

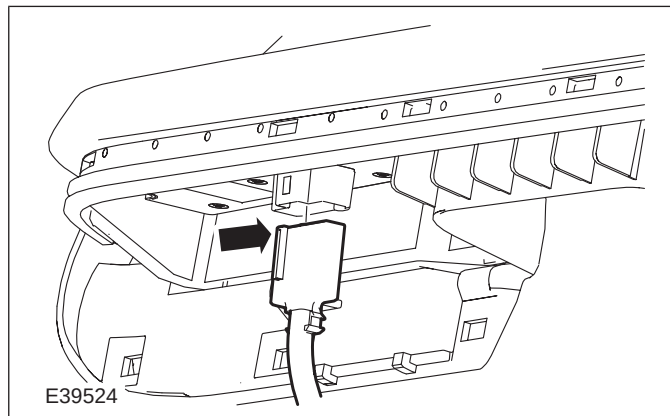
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

4. Remove the front door window regulator grommets.

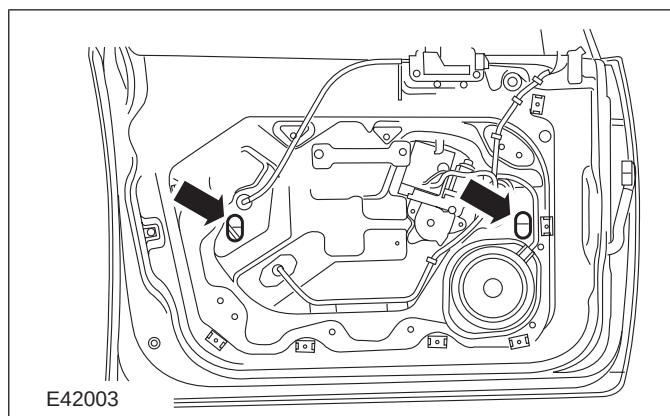


5. NOTE: Support the front door power window control unit.

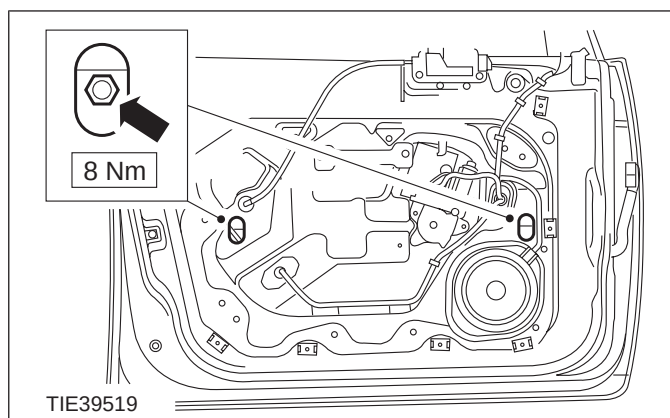
Connect the front door power window control unit electrical connector.



6. Using the front door power window control unit, align the front door window glass clamp bolts with the access holes.

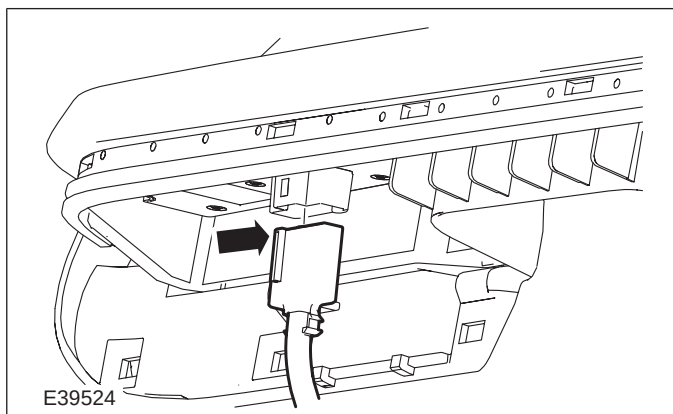


7. Loosen the front door window glass clamp retaining bolts.

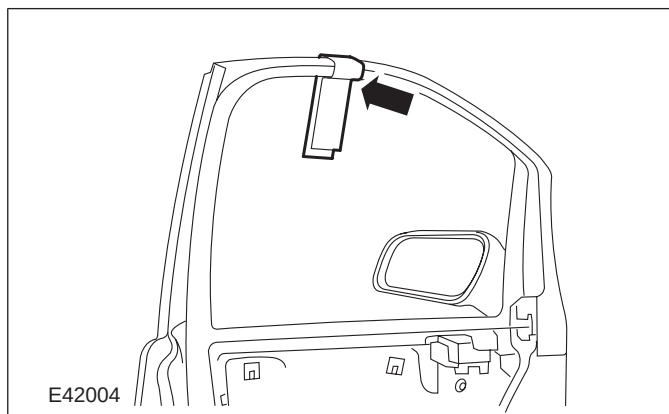


REMOVAL AND INSTALLATION

8. Disconnect the front door power window control unit electrical connector.



10. Using suitable tape, secure the front door window glass to the front door.

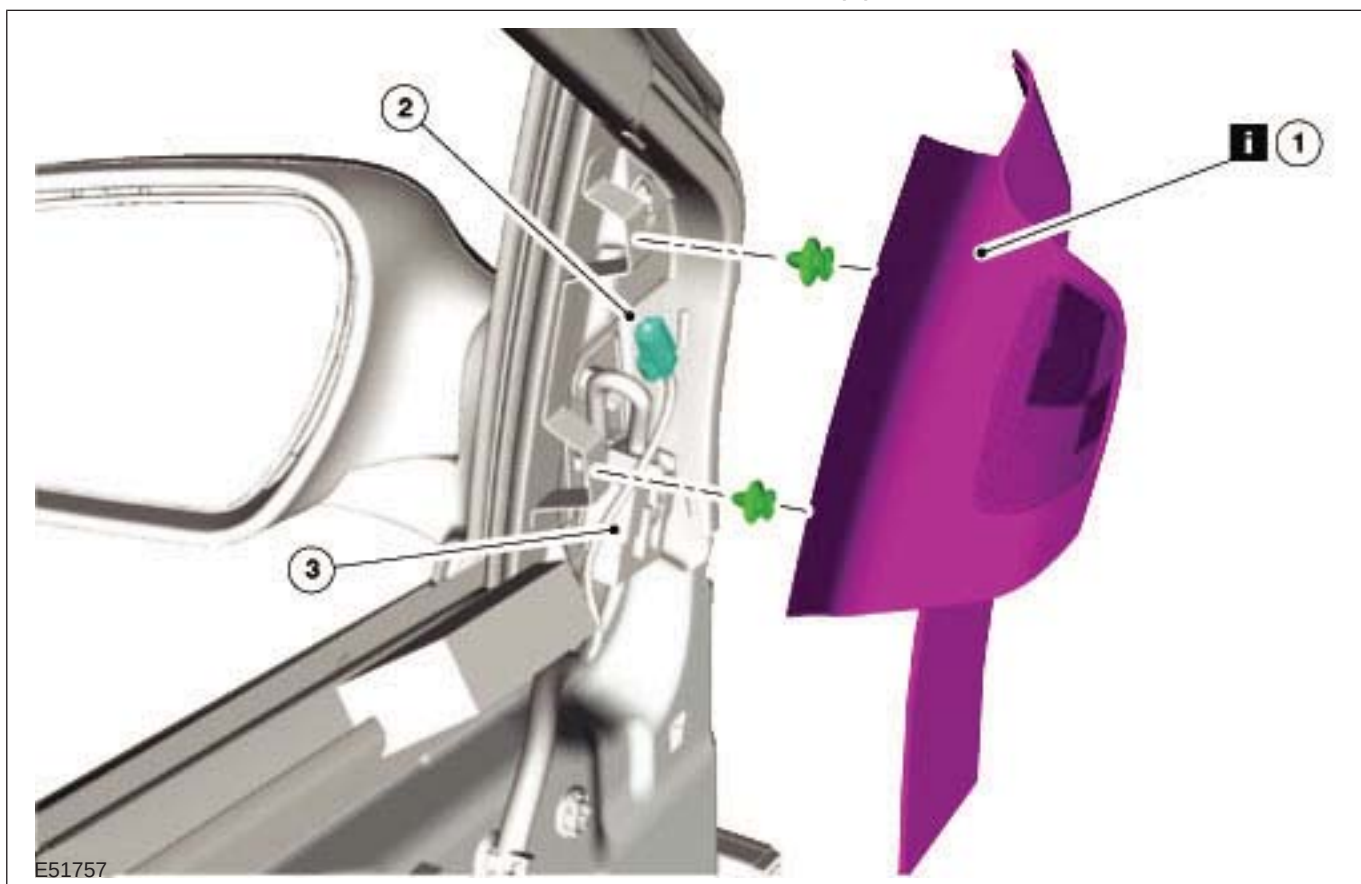


9. Raise the front door window glass.

11. Disconnect the battery ground cable.

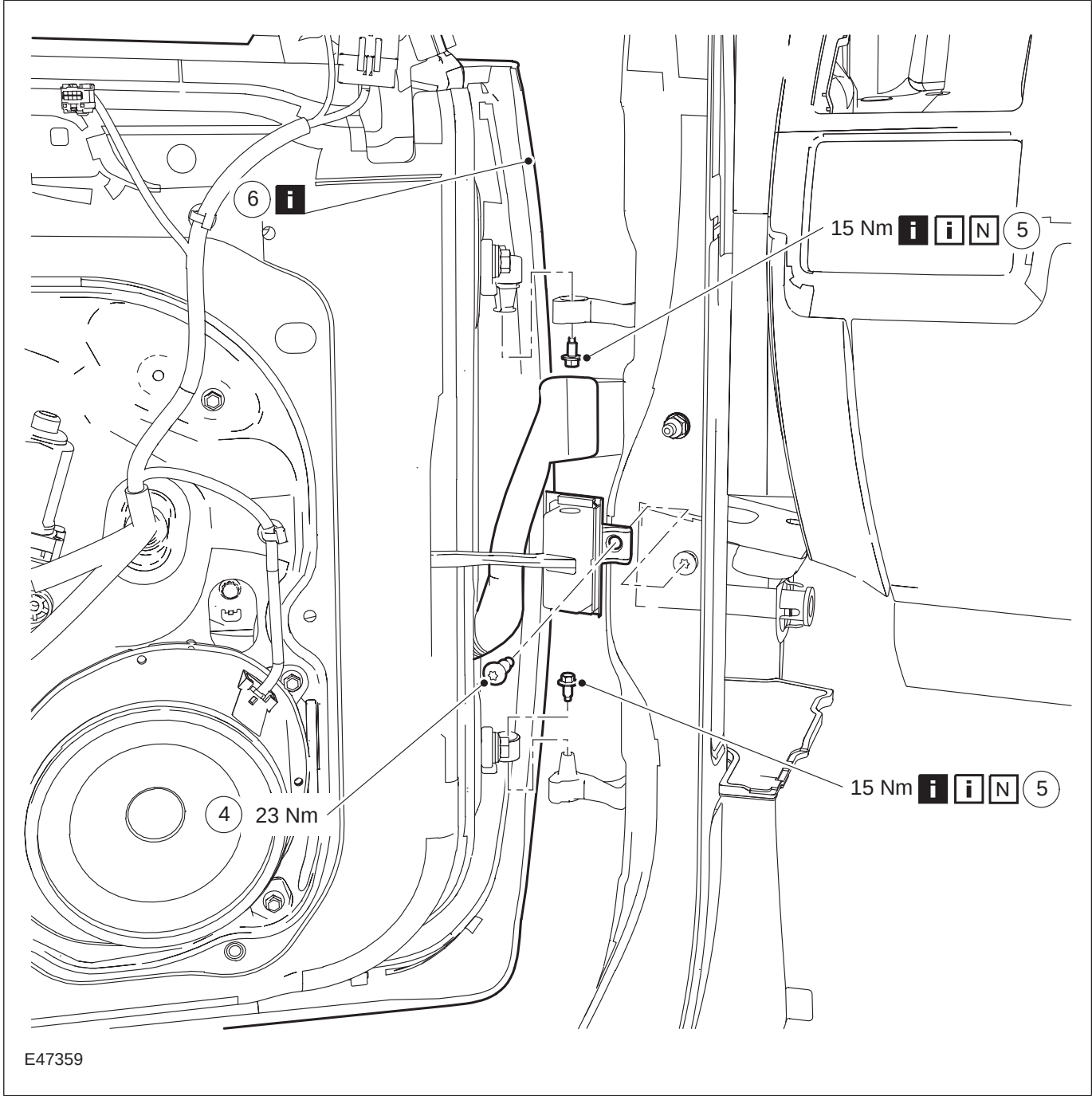
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

12. Remove the components in the order indicated in the following illustration(s) and table(s).



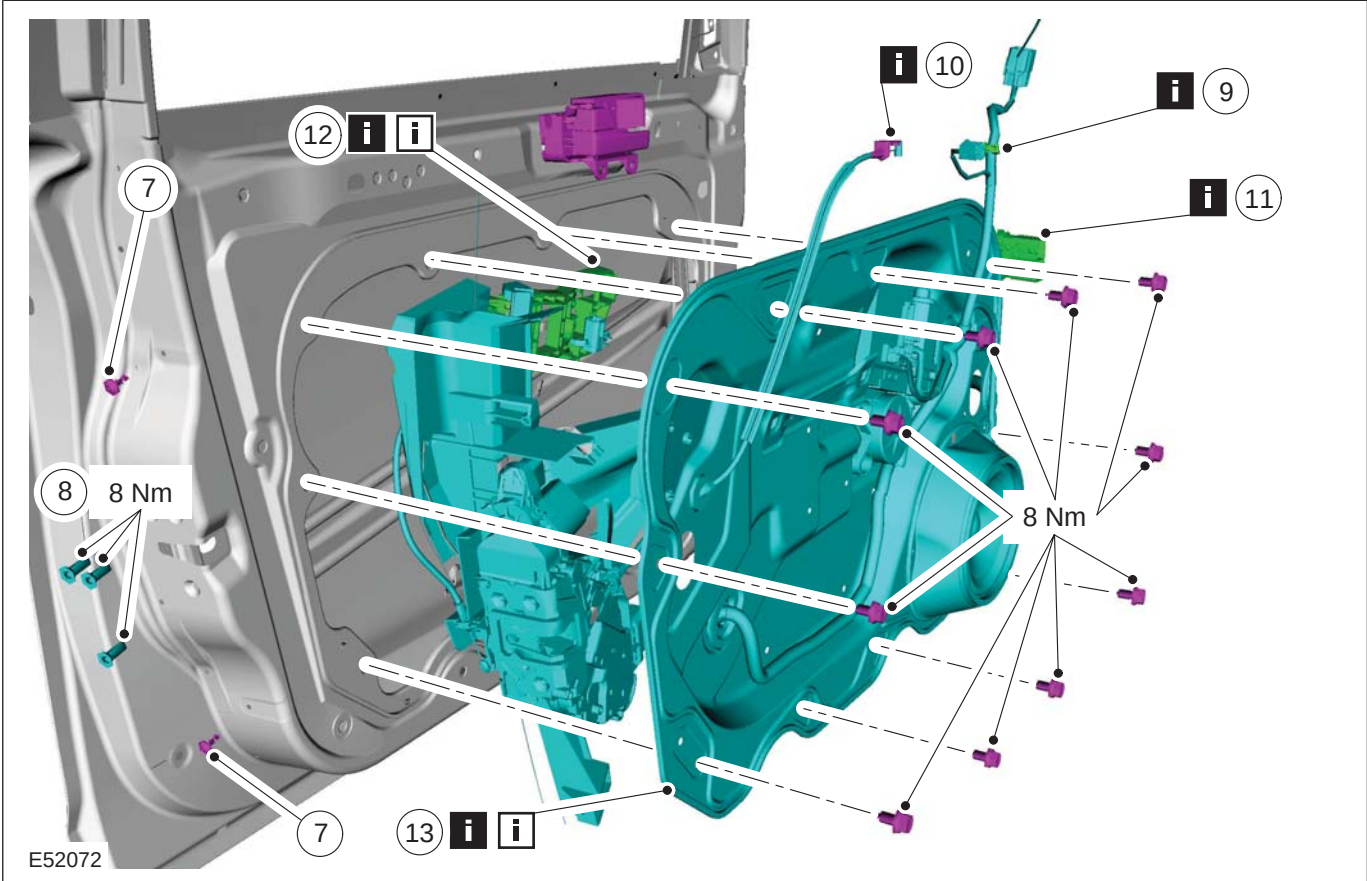
REMOVAL AND INSTALLATION

Item	Description	Item	Description
1	Exterior mirror interior trim panel See Removal Detail		connector
2	Front door tweeter speaker electrical	3	Exterior mirror electrical connector (if equipped)



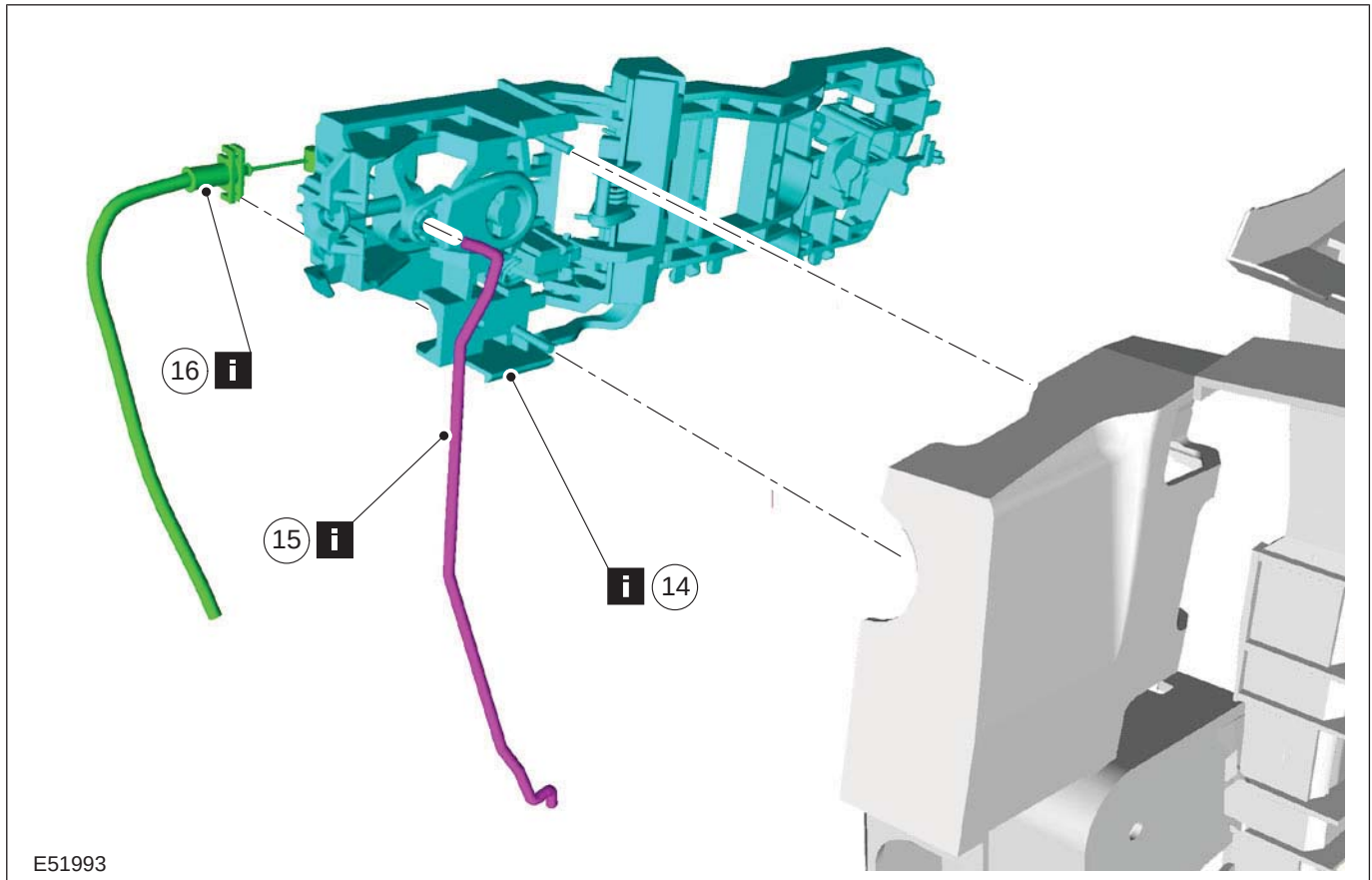
REMOVAL AND INSTALLATION

Item	Description	Item	Description
4	Door check strap		See Installation Detail
5	Door hinge retaining bolts See Removal Detail	6	Door See Removal Detail



Item	Description	Item	Description
7	Front door handle, lock and latch retaining bracket retaining screws	11	Front door wiring harness See Removal Detail
8	Front door latch retaining bolts	12	Front door lock actuator retaining screw See Removal Detail See Installation Detail
9	Front door wiring harness retaining clip See Removal Detail	13	Front door inner panel See Removal Detail See Installation Detail
10	Front door latch remote control cable See Removal Detail		

REMOVAL AND INSTALLATION



E51993

Item	Description
14	Front door lock actuator See Removal Detail
15	Front door lock cylinder actuator rod See Removal Detail
16	Front door exterior handle remote control cable See Removal Detail

13. To install, reverse the removal procedure.

14. Vehicles with global closing, initialize the door window motors.

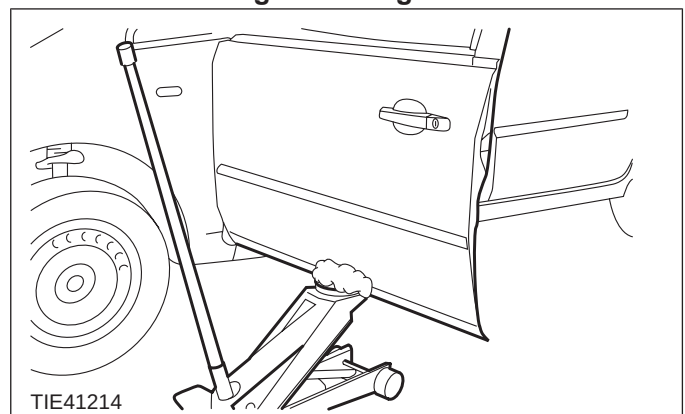
For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

Removal Details

Item 1 Exterior mirror interior trim panel

CAUTION: Do not place excessive strain on the exterior mirror and front door tweeter speaker wiring harness.

Item 5 Door hinge retaining bolts

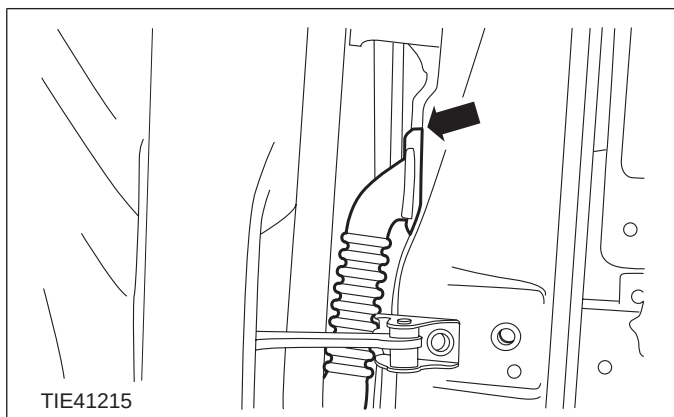


REMOVAL AND INSTALLATION

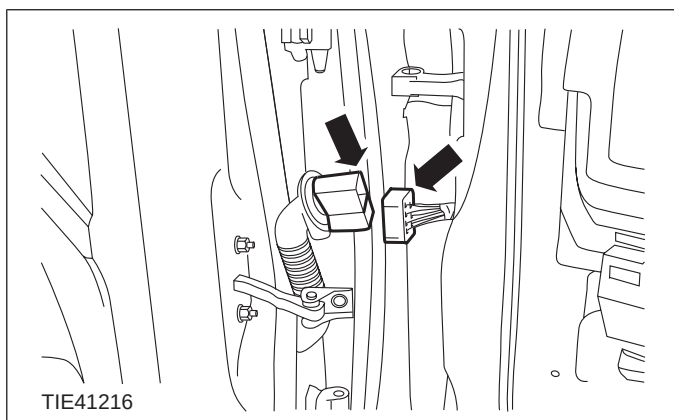
1. **⚠ CAUTION:** Protect the door using a soft cloth to prevent damage to the front door.
With the aid of another technician and a suitable trolley jack, support and detach the front door from the front door hinges.

Item 6 Door

1. Detach the front door wiring harness from the A-pillar.



2. Disconnect the front door wiring harness electrical connector.

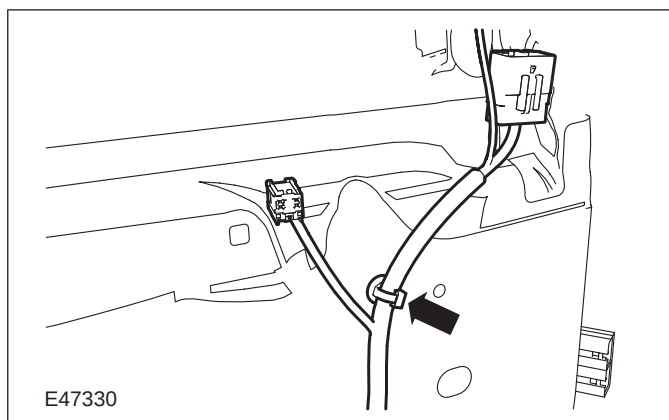


3. **⚠ CAUTION:** After the front door wiring harness electrical connector has been disconnected, position the front door back onto the front door hinges. Failure to follow this instruction may cause damage to the front door.

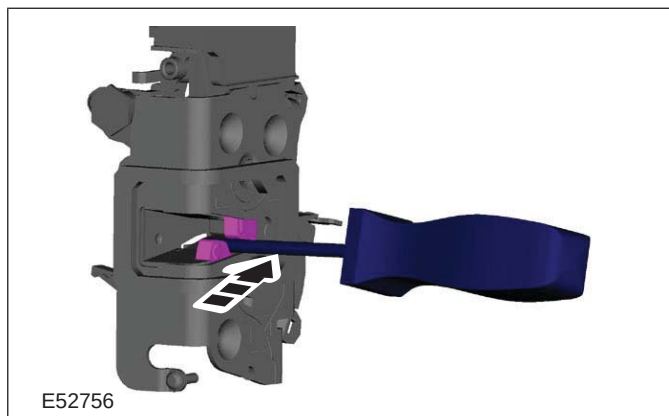
Position the front door onto the front door hinges.

Item 9 Front door wiring harness retaining clip

1. Detach the front door wiring harness retaining clip from the front door.

**Item 10 Front door latch remote control cable**

1. Using a suitable screwdriver, latch the front door lock into the closed position.

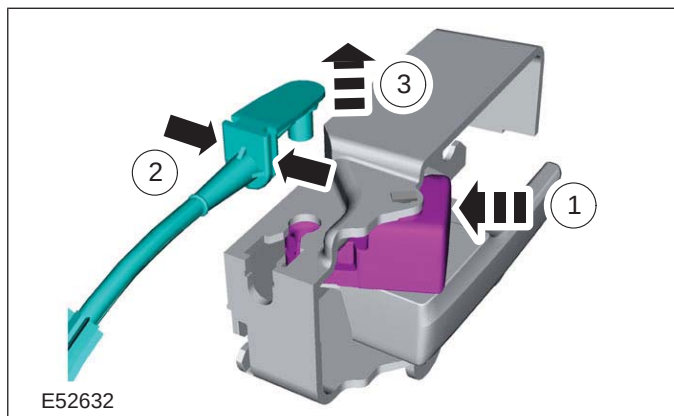


2. Detach the front door latch remote control cable from the front door latch remote control handle.

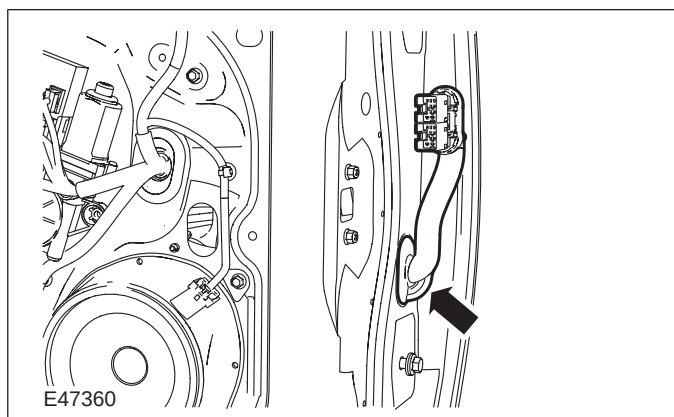
1. Operate the door latch remote control handle lock to the lock position.
2. Release the remote control cable retaining clips.

REMOVAL AND INSTALLATION

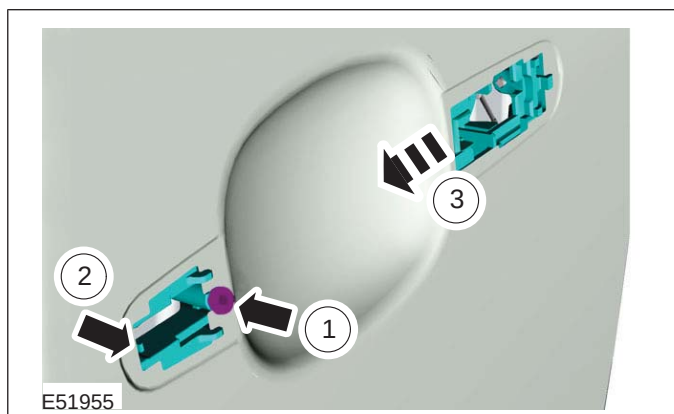
3. Detach the inner remote control cable from the remote control handle lock lever.

**Item 11 Front door wiring harness**

1. Detach and push the front door wiring harness into the front door.

**Item 12 Front door lock actuator retaining screw**

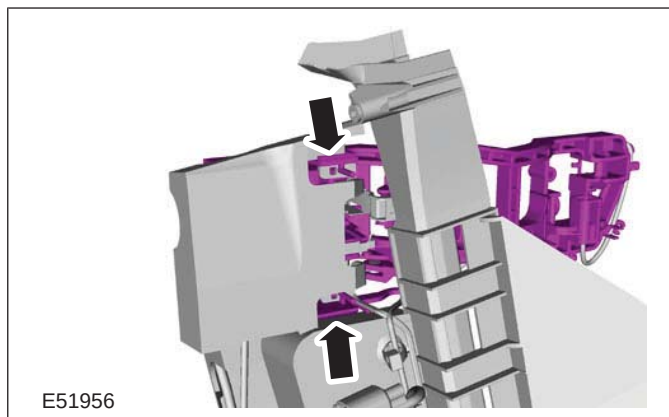
1. Detach the front door lock actuator .
 1. Loosen the door lock actuator retaining screw.
 2. Release the door lock actuator retaining clip.
 3. Slide the door lock actuator towards the front of the vehicle.

**Item 13 Front door inner panel**

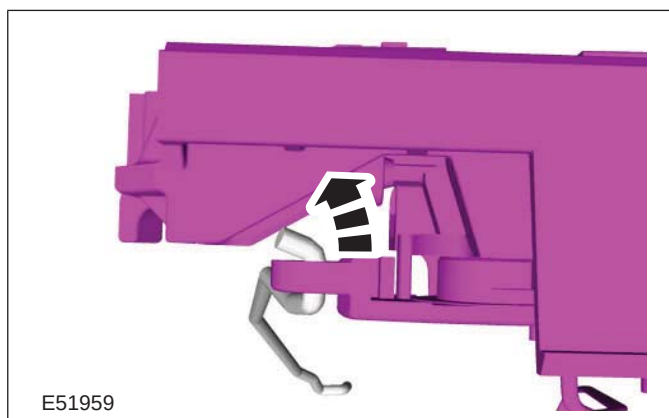
- CAUTION:** When removing the front door inner panel, care must be taken that the door wiring harness is not trapped or placed under excessive strain.

Item 14 Front door lock actuator

1. Detach the front door lock actuator from the front door handle, lock and latch retaining bracket.

**Item 15 Front door lock cylinder actuator rod**

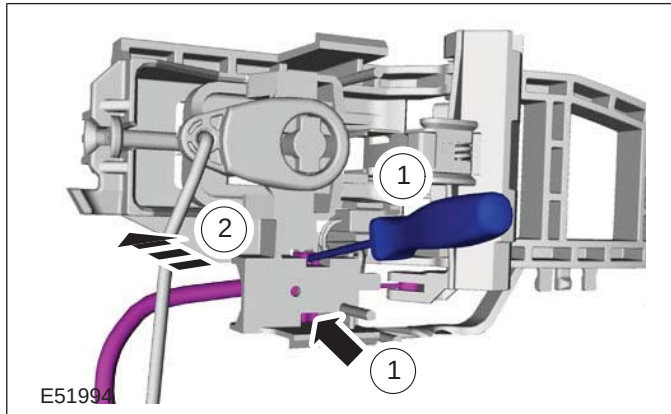
1. Detach the front door lock cylinder actuator rod from the front door lock actuator.

**Item 16 Front door exterior handle remote control cable**

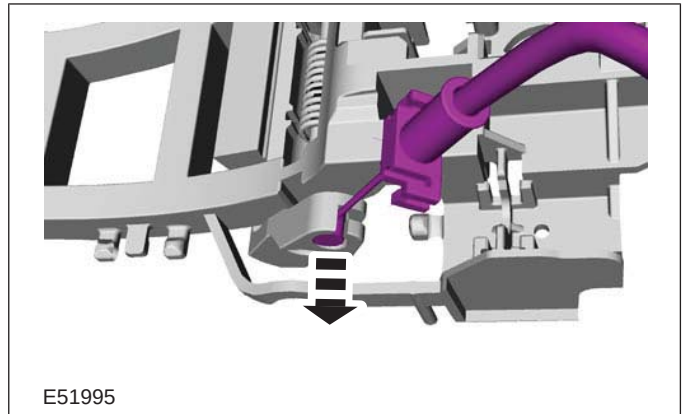
1. Detach the front exterior door handle remote control cable from the front door lock actuator.
 1. Using a suitable flat blade screwdriver, release the exterior front door handle remote control cable retaining clips.

REMOVAL AND INSTALLATION

2. Slide the exterior front door handle remote control cable off of the front door lock actuator.



2. Align the exterior front door handle remote control inner cable with the slot in the front door lock actuator and remove.

**Installation Details****Item 13 Front door inner panel**

1. Before installing the front door inner panel retaining bolts, feed the door wiring harness electrical connector through the front door wiring harness hole.

Item 12 Front door lock actuator retaining screw

1. Install the front door lock actuator to the front door.
2. Tighten the front door lock actuator retaining screw.

Item 5 Door hinge retaining bolts

1. Apply a coating of adhesive to the door hinge retaining bolts.

REMOVAL AND INSTALLATION

Front Door Lock Actuator — 4-Door/5-Door/Wagon, Vehicles With:
Keyless Vehicle System

Materials	
Name	Specification
Adhesive - Loctite 243	WSK-M2G349-A7

1. Remove the front door trim panel.

For additional information, refer to: **Front Door Trim Panel - 4-Door/5-Door/Wagon** (501-05 Interior Trim and Ornamentation, Removal and Installation).

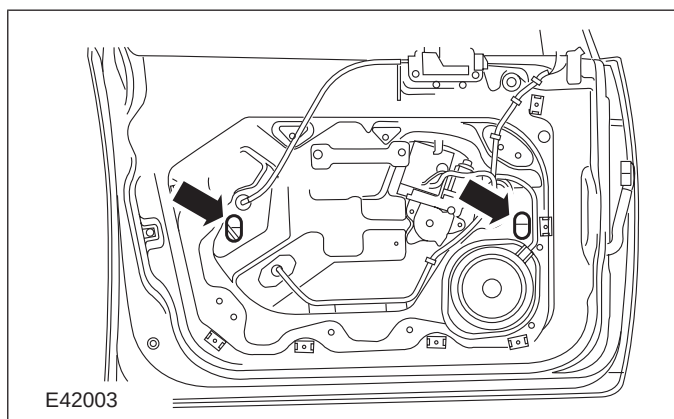
2. Remove the exterior front door handle.

For additional information, refer to: **Exterior Front Door Handle - Vehicles With: Keyless Vehicle System** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

3. Connect the battery ground cable.

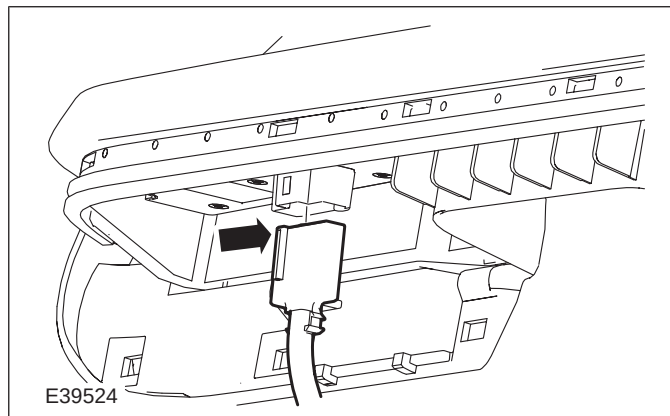
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

4. Remove the front door window regulator grommets.

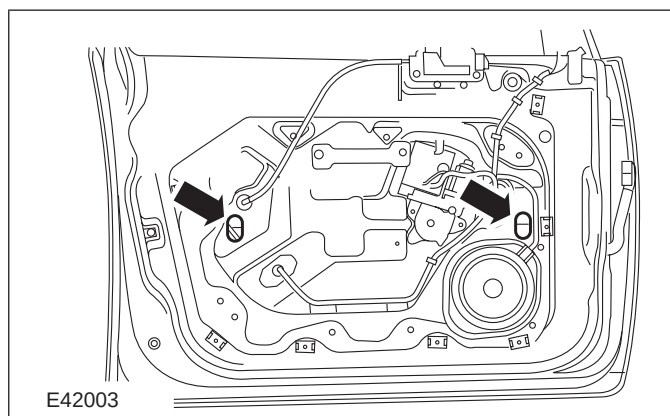


5. NOTE: Support the front door power window control unit.

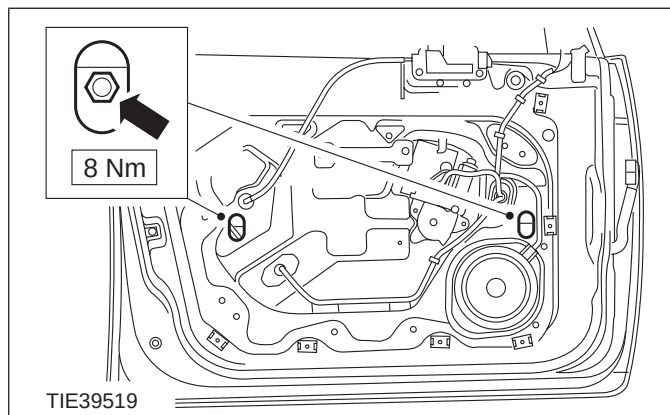
Connect the front door power window control switch electrical connector.



6. Using the front door power window control switch, align the window glass clamp bolts with the access holes.



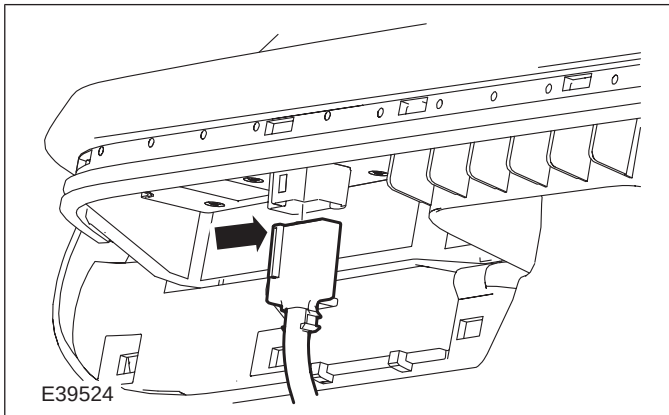
7. Loosen the front door window glass clamp retaining bolts.



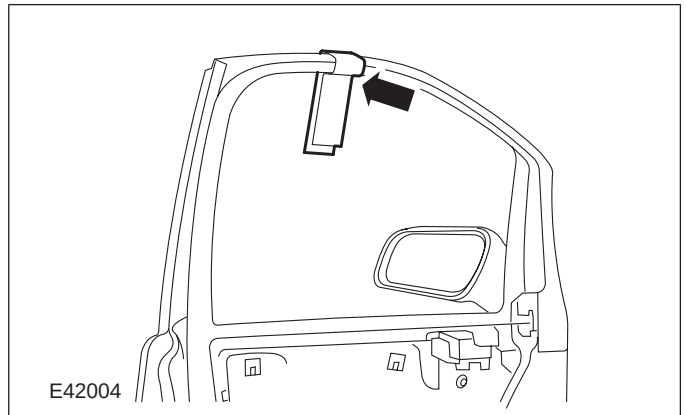
8. Raise the front door window glass.

REMOVAL AND INSTALLATION

9. Disconnect the front door power window control switch electrical connector.



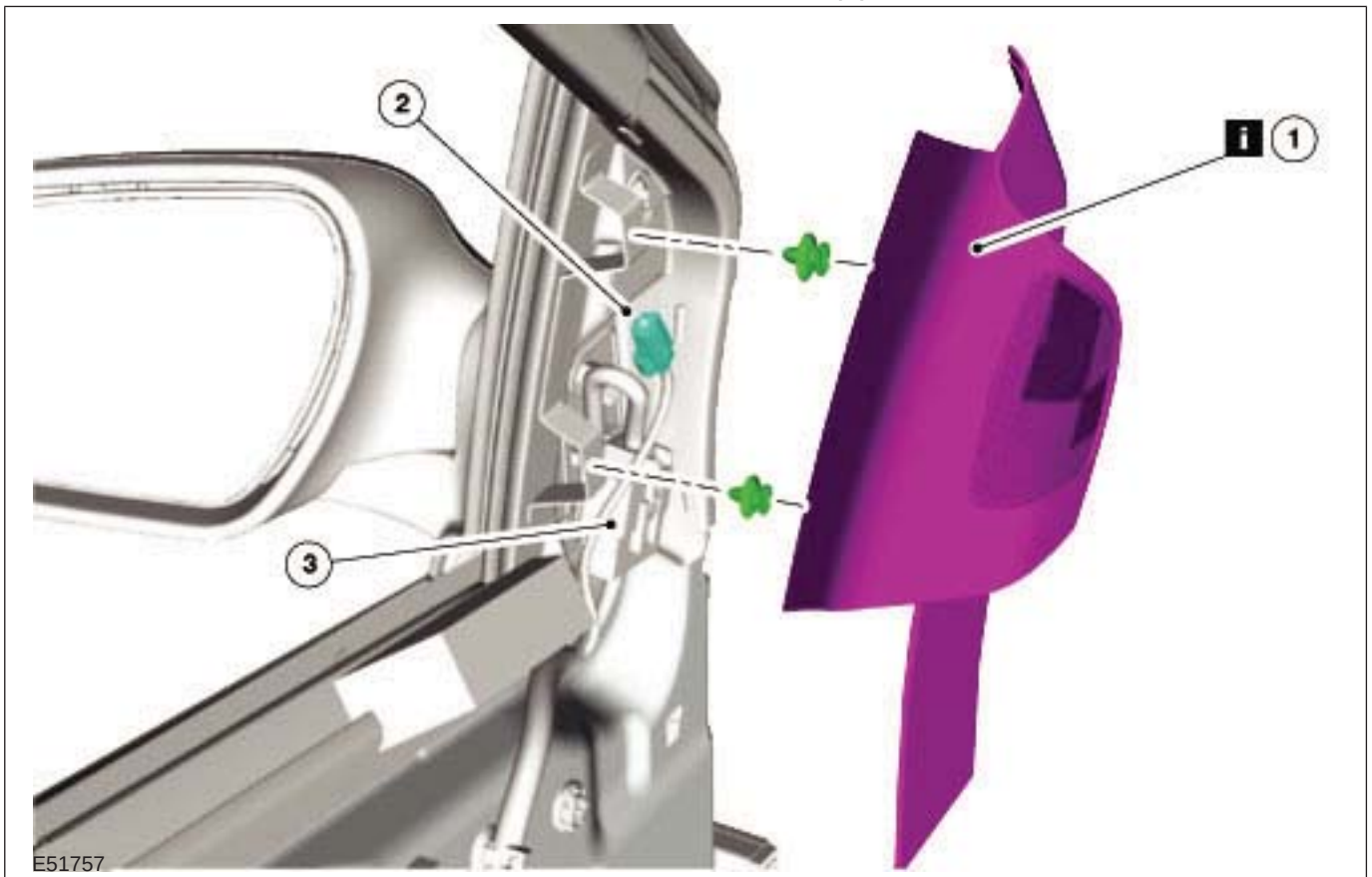
10. Using suitable tape, secure the front door window glass to the front door.



11. Disconnect the battery ground cable.

For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

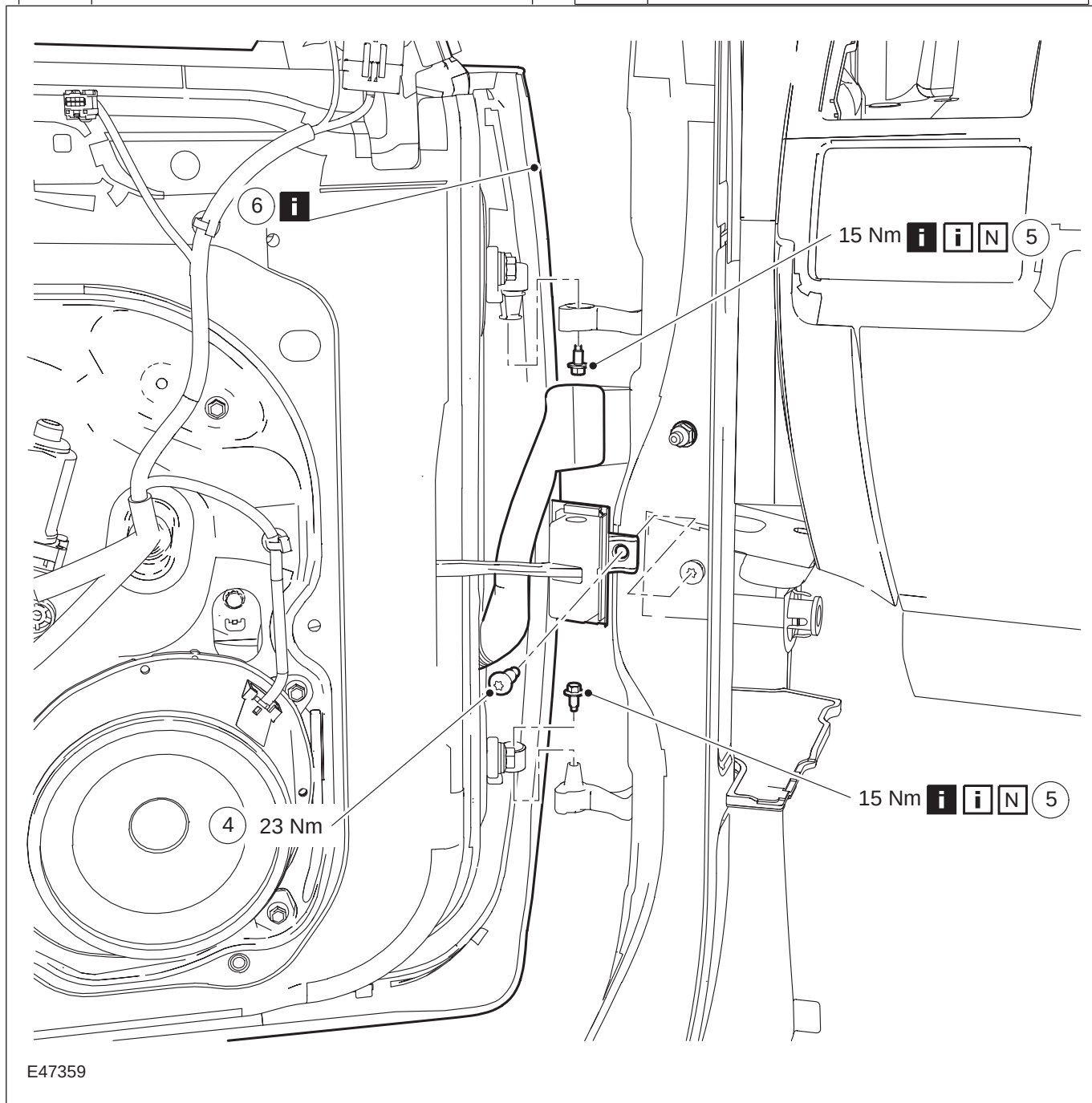
12. Remove the components in the order indicated in the following illustration(s) and table(s).



REMOVAL AND INSTALLATION

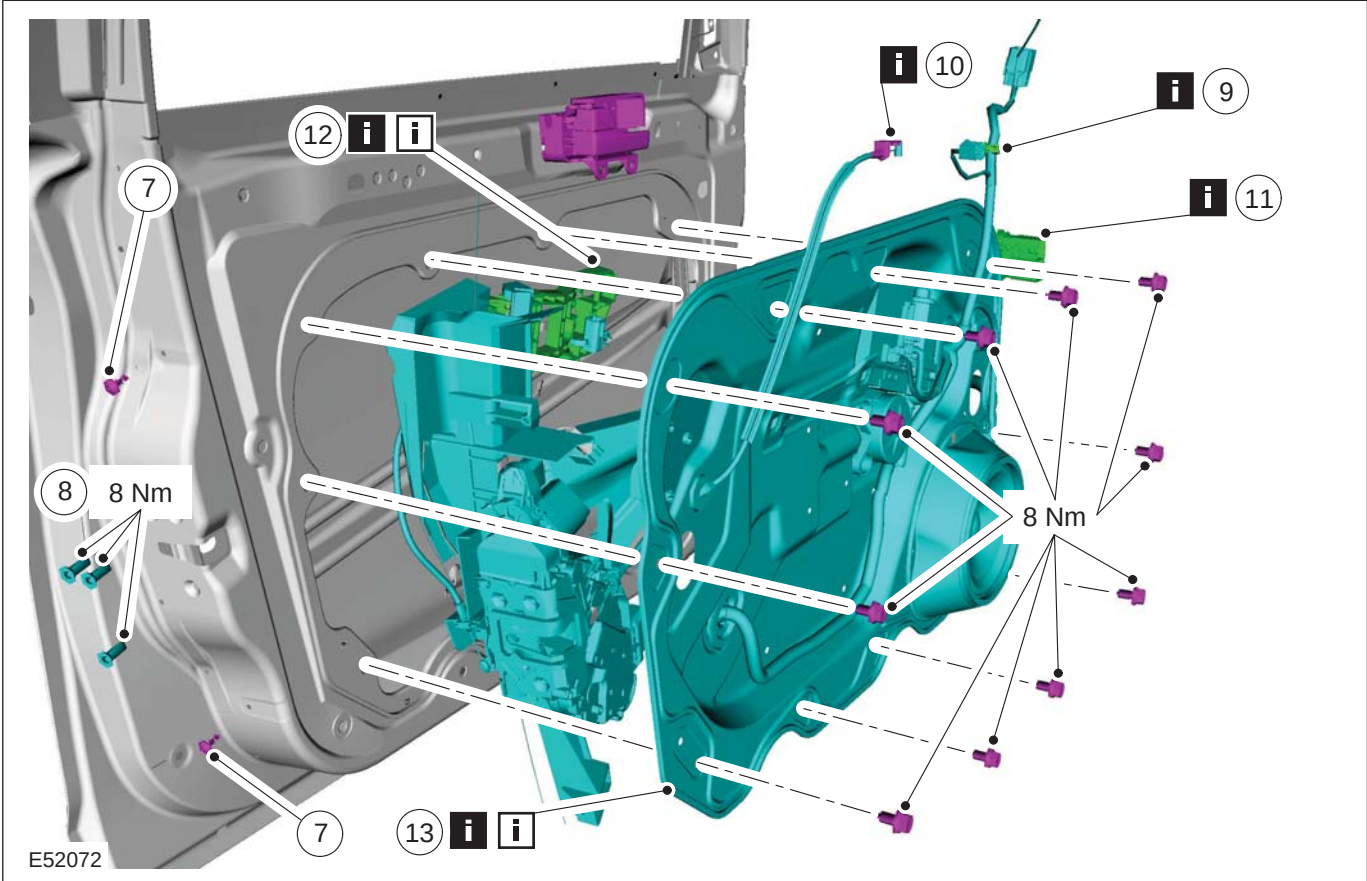
Item	Description
1	Exterior mirror interior trim panel See Removal Detail
2	Front door tweeter speaker electrical

Item	Description
	connector
3	Exterior mirror electrical connector (if equipped)



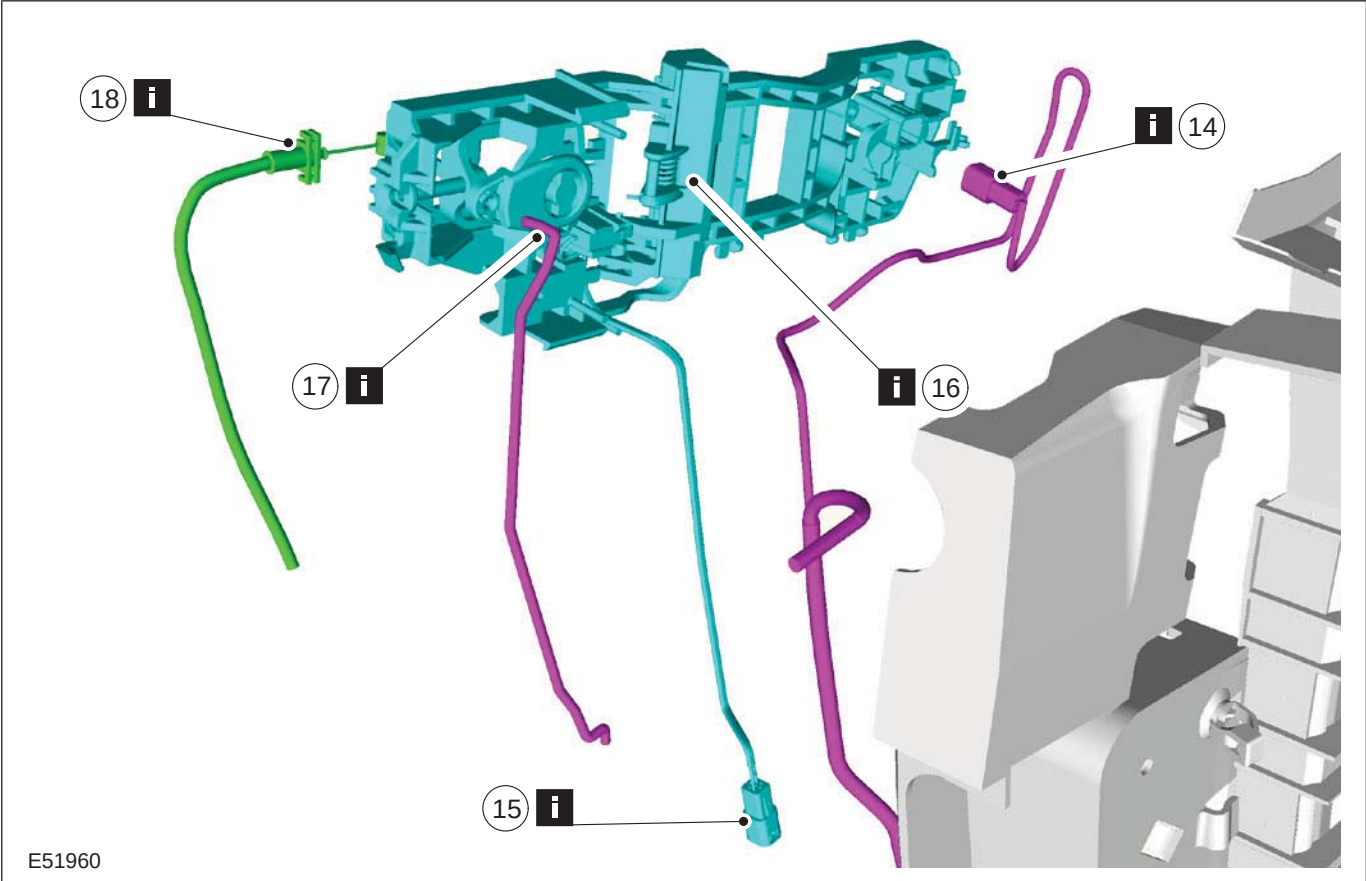
REMOVAL AND INSTALLATION

Item	Description	Item	Description
4	Door check strap		See Installation Detail
5	Door hinge retaining bolts See Removal Detail	6	Door (left-hand door shown) See Removal Detail



Item	Description	Item	Description
7	Front door handle, lock and latch retaining bracket retaining screw	11	Front door wiring harness See Removal Detail
8	Front door latch retaining bolts	12	Front door lock actuator retaining screw See Removal Detail See Installation Detail
9	Front door wiring harness retaining clip See Removal Detail	13	Front door inner panel See Removal Detail See Installation Detail
10	Front door latch remote control cable See Removal Detail		

REMOVAL AND INSTALLATION



Item	Description
14	Exterior front door handle RKE electrical connector See Removal Detail
15	Front door lock cylinder position sensor electrical connector See Removal Detail
16	Front door handle reinforcement See Removal Detail

Item	Description
17	Front door lock cylinder actuator rod See Removal Detail
18	Front door exterior handle remote control cable See Removal Detail

13. To install, reverse the removal procedure.

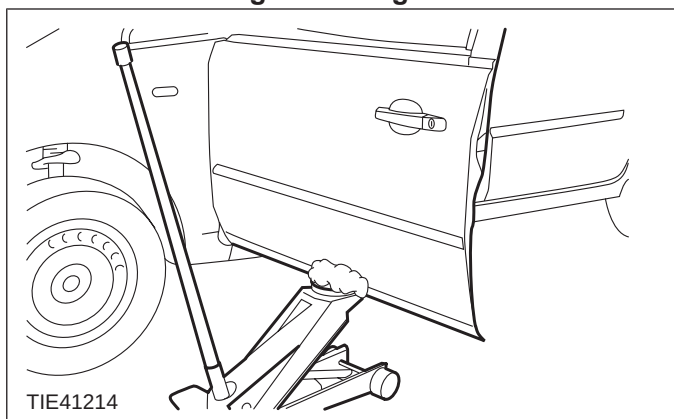
Removal Details

Item 1 Exterior mirror interior trim panel

 **CAUTION:** Do not place excessive strain on the exterior mirror and front door tweeter speaker wiring harness.

REMOVAL AND INSTALLATION

Item 5 Door hinge retaining bolts

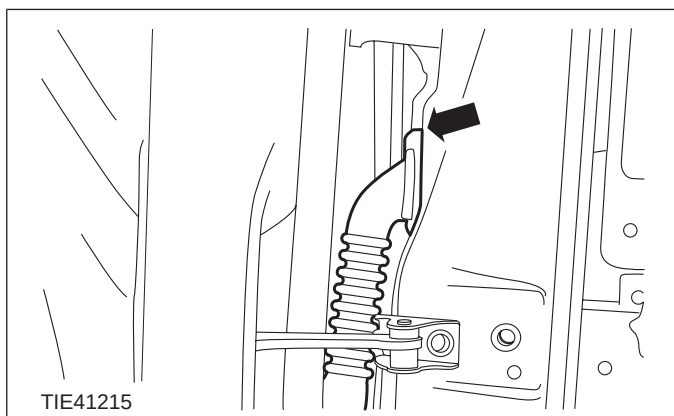


1. **⚠ CAUTION:** Protect the door using a soft cloth to prevent damage to the front door.

With the aid of another technician and a suitable trolley jack, support and detach the front door from the front door hinges.

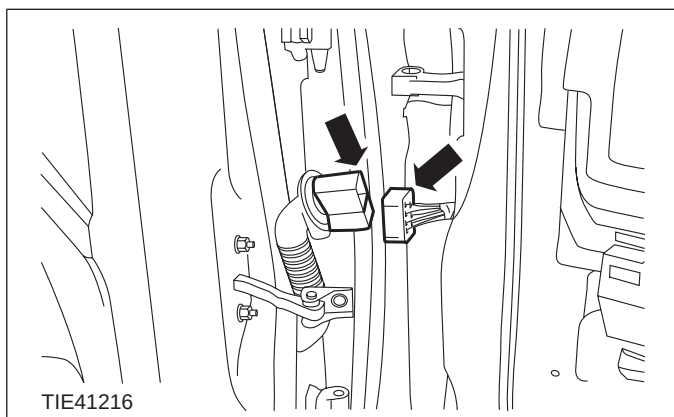
Item 6 Door (left-hand door shown)

1. Detach the electrical connector from the A-pillar.

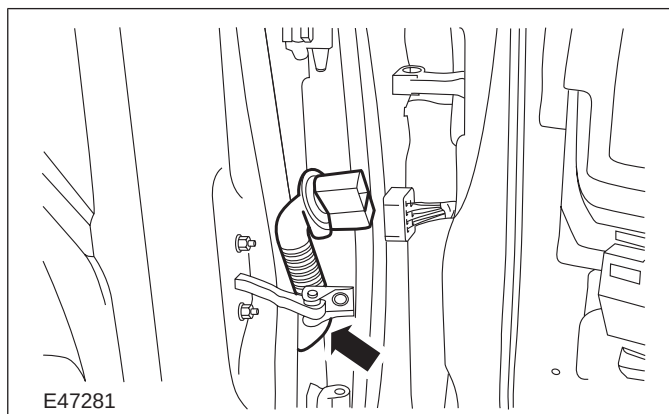


2. Remove the front door.

- Disconnect the electrical connector.



3. Push the front door wiring harness into the door.

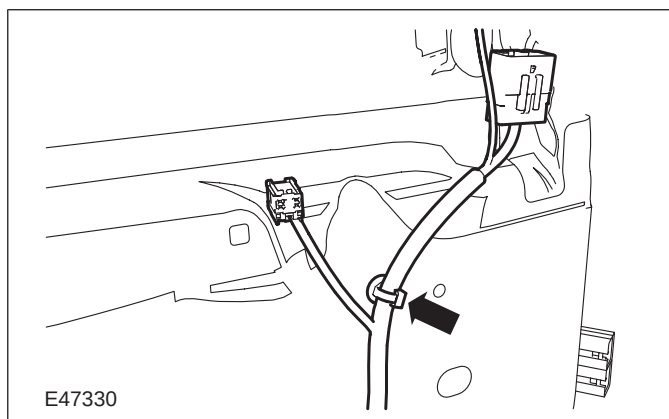


4. **⚠ CAUTION:** After the front door wiring harness electrical connector has been disconnected, position the front door back onto the front door hinges. Failure to follow this instruction may cause damage to the front door.

Position the front door onto the front door hinges.

Item 9 Front door wiring harness retaining clip

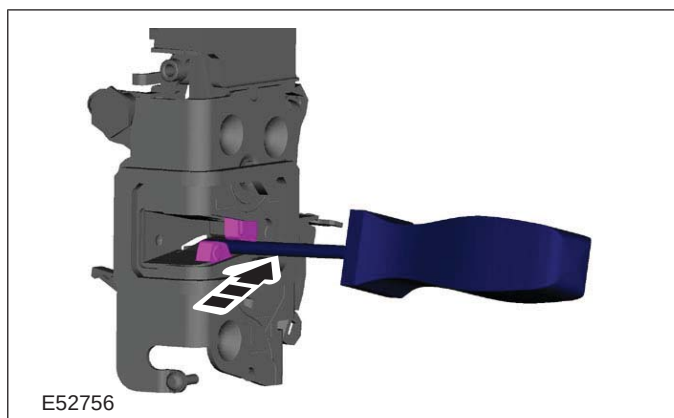
1. Detach the front door wiring harness retaining clip from the front door.



REMOVAL AND INSTALLATION

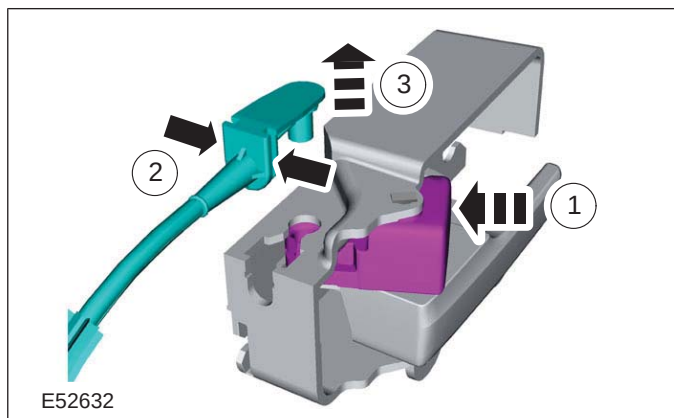
Item 10 Front door latch remote control cable

1. Using a suitable screwdriver, latch the front door lock into the closed position.

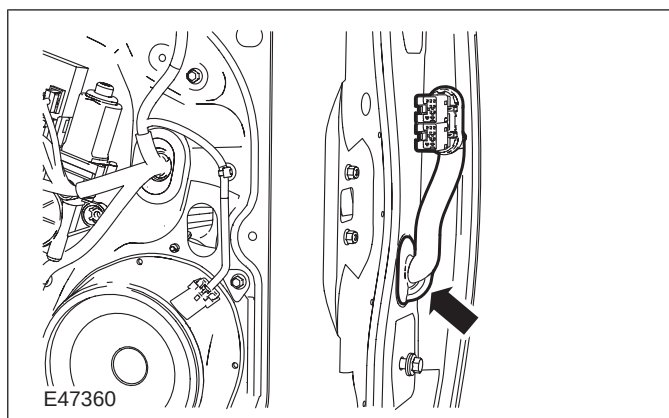


2. Detach the front door latch remote control cable from the front door latch remote control handle.

1. Operate the door latch remote control handle lock to the lock position.
2. Release the remote control cable retaining clips.
3. Detach the inner remote control cable from the remote control handle lock lever.

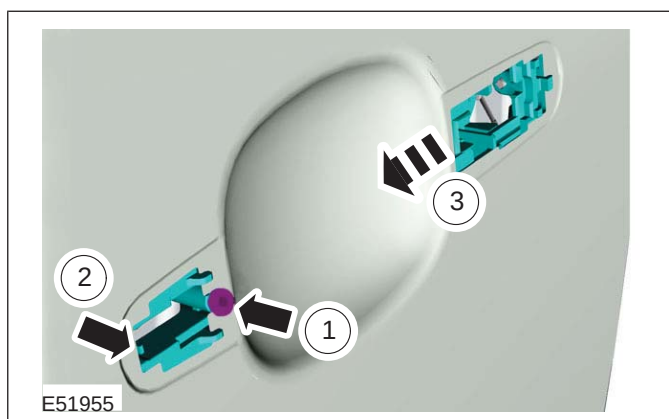
**Item 11 Front door wiring harness**

1. Detach and push the front door wiring harness into the front door.

**Item 12 Front door lock actuator retaining screw**

1. Detach the front door lock actuator.

1. Loosen the front door lock actuator retaining screw.
2. Release the front door lock actuator retaining clip.
3. Slide the front door lock actuator towards the front of the vehicle.

**Item 13 Front door inner panel**

CAUTION: When removing the front door inner panel, care must be taken that the door wiring harness is not trapped or placed under excessive strain.

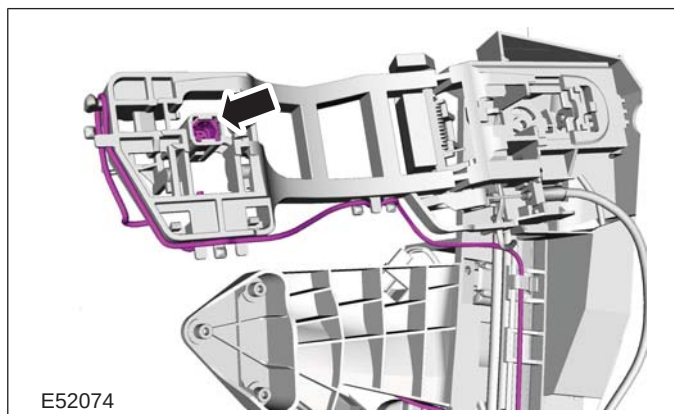
Item 14 Exterior front door handle RKE electrical connector

NOTE: Make a note of the clipping position of the exterior front door handle RKE harness.

1. Disconnect the front door handle RKE electrical connector and detach the wiring

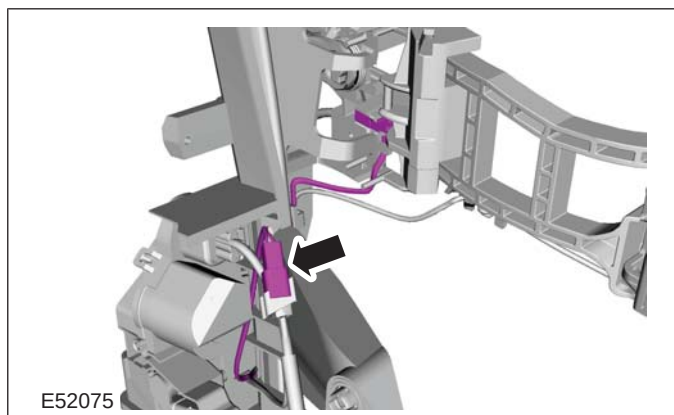
REMOVAL AND INSTALLATION

harness from the front door handle reinforcement.



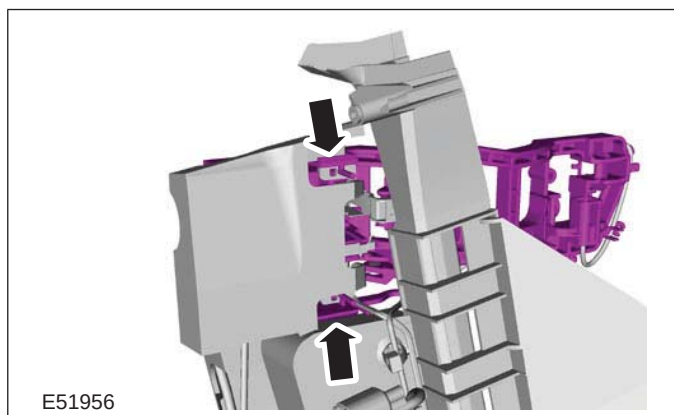
Item 15 Front door lock cylinder position sensor electrical connector

1. Disconnect the front door lock cylinder position sensor electrical connector and detach the sensor harness from the retaining clips.



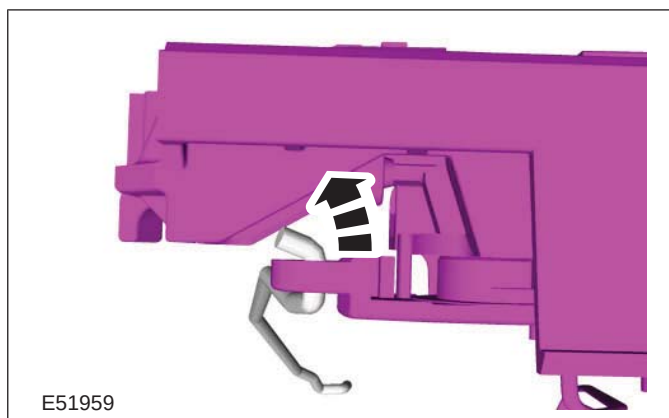
Item 16 Front door handle reinforcement

1. Detach the front door handle reinforcement from the front door handle, lock and latch retaining bracket.



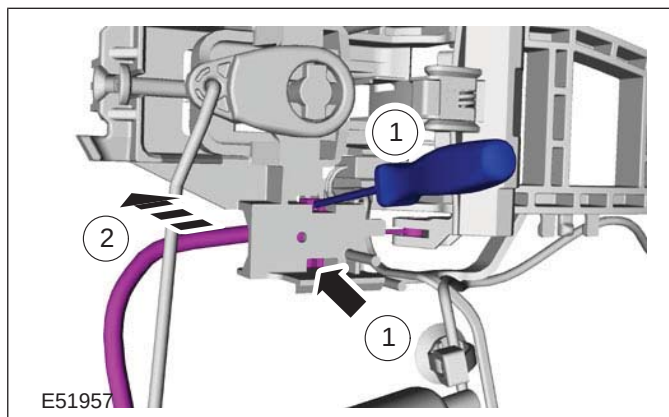
Item 17 Front door lock cylinder actuator rod

1. Detach the front door lock cylinder actuator rod from the front door handle reinforcement.



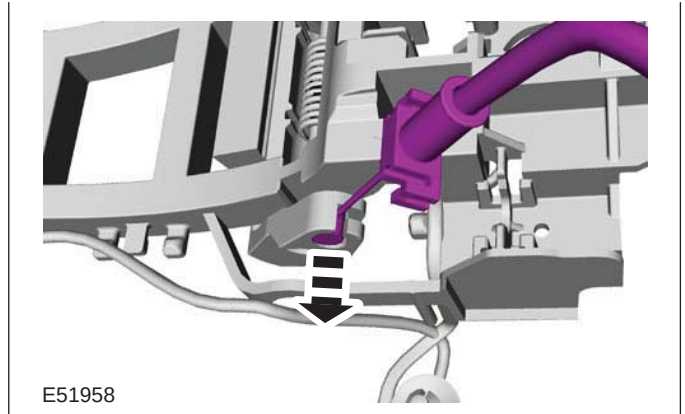
Item 18 Front door exterior handle remote control cable

1. Detach the front door exterior handle remote control cable from the front door handle reinforcement.
1. Using a suitable flat blade screwdriver, release the front door exterior handle remote control cable retaining clips.
2. Slide the front door exterior handle remote control cable off of the front door handle reinforcement retainers.



REMOVAL AND INSTALLATION

2. Align the front door exterior handle remote control inner cable with the slot in the front door handle reinforcement and remove.

**Installation Details****Item 13 Front door inner panel**

1. Before installing the front door inner panel retaining bolts, feed the door wiring harness electrical connector through the front door wiring harness hole.

Item 12 Front door lock actuator retaining screw

1. Install the front door lock actuator to the front door.
2. Tighten the front door lock actuator retaining screw.

Item 5 Door hinge retaining bolts

1. Apply a coating of adhesive to the door hinge retaining bolts.

REMOVAL AND INSTALLATION

Rear Door Lock Actuator

All vehicles

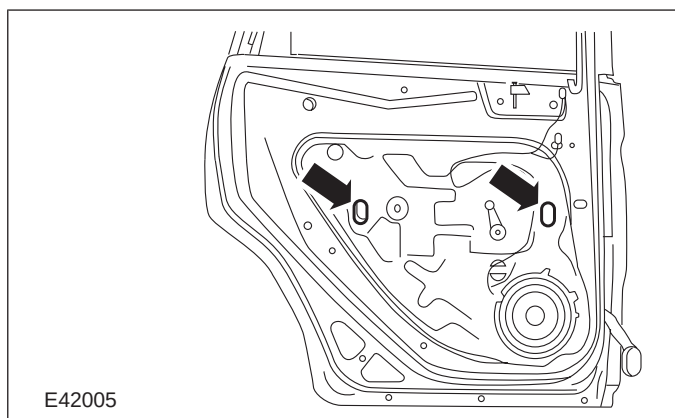
1. Remove the rear door trim panel.

For additional information, refer to: **Rear Door Trim Panel - Vehicles With: Manual Windows** (501-05 Interior Trim and Ornamentation, Removal and Installation) / **Rear Door Trim Panel - Vehicles With: Power Windows** (501-05 Interior Trim and Ornamentation, Removal and Installation).

2. Remove the exterior rear door handle.

For additional information, refer to: **Exterior Rear Door Handle** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

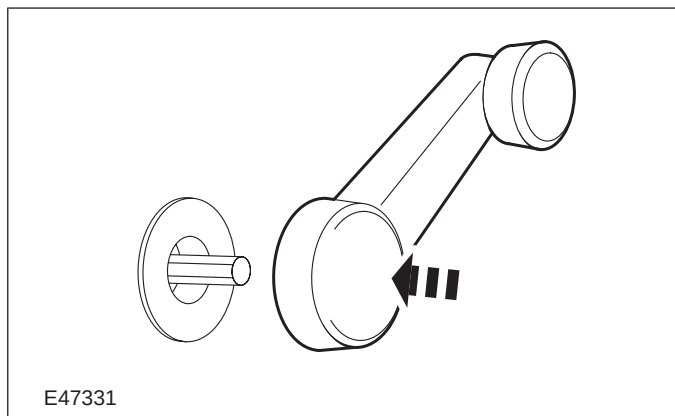
3. Remove the rear door window regulator grommets.



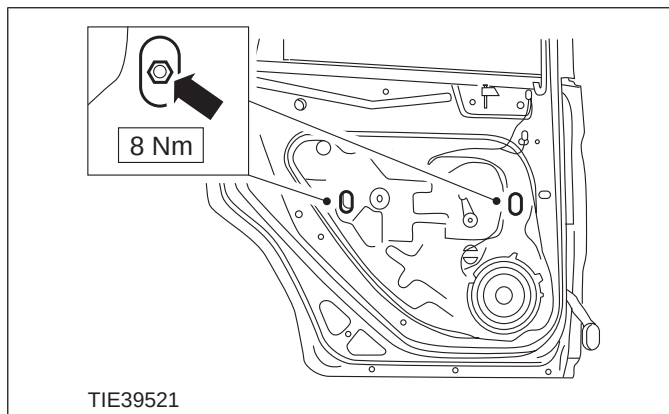
Vehicles with manual windows

4. Install the window regulator handle.

- Using the rear door window regulator handle, align the window glass clamp bolts with the access holes.

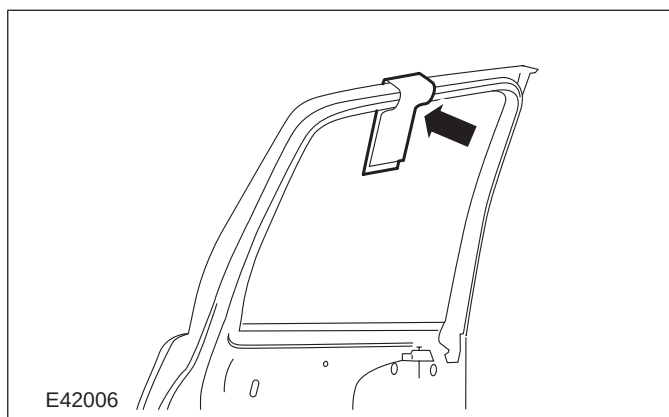


5. Loosen the rear door window glass clamp bolts.



6. Raise the rear door window glass.

7. Using suitable tape, secure the rear door window glass to the rear door.



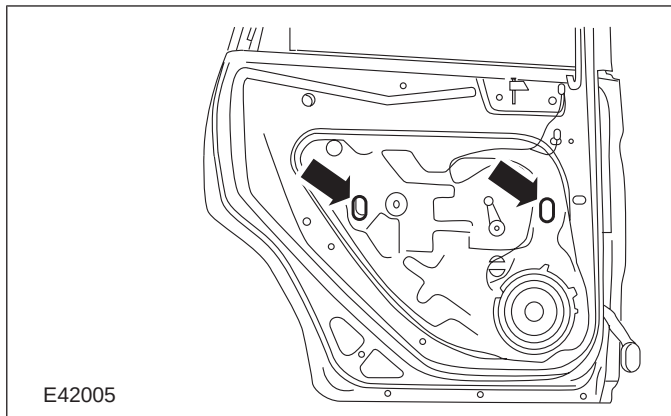
Vehicles with power windows

8. Connect the battery ground cable.

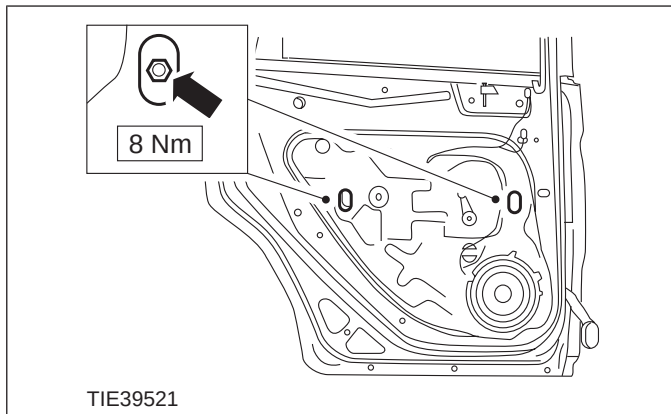
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

REMOVAL AND INSTALLATION

9. Using the front door power window control unit, align the rear door window glass clamp bolts with the access holes.

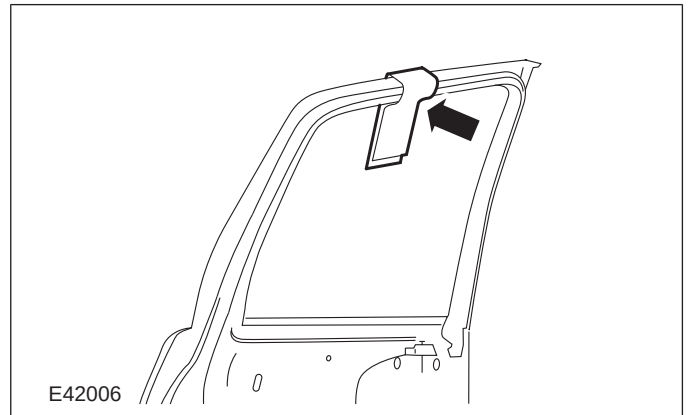


10. Loosen the rear door window glass clamp bolts.



11. Raise the rear door window glass.

12. Using suitable tape, secure the rear door window glass to the rear door.

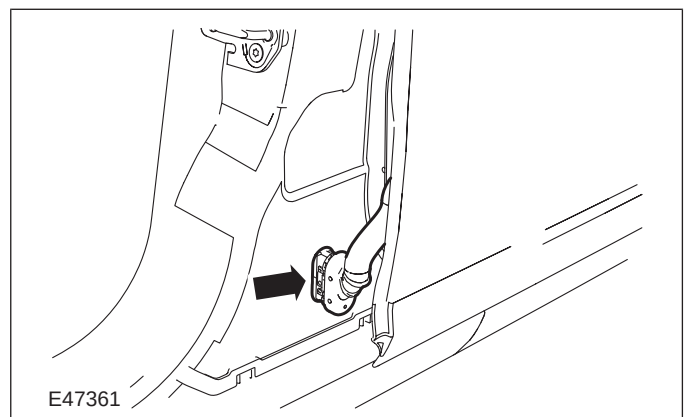


13. Disconnect the battery ground cable.

For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

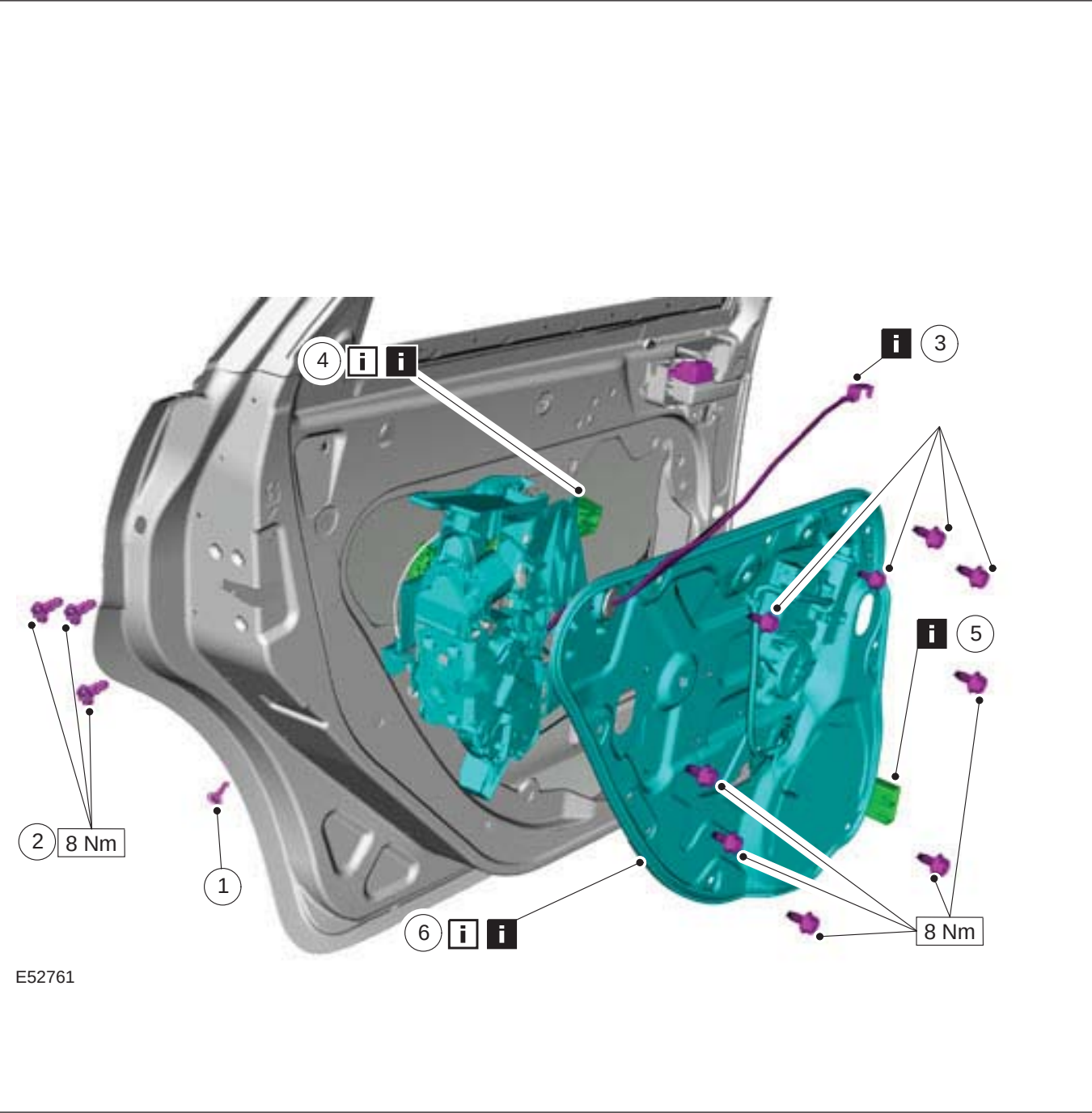
All vehicles

14. Detach and disconnect the rear door wiring harness.



15. Remove the components in the order indicated in the following illustration(s) and table(s).

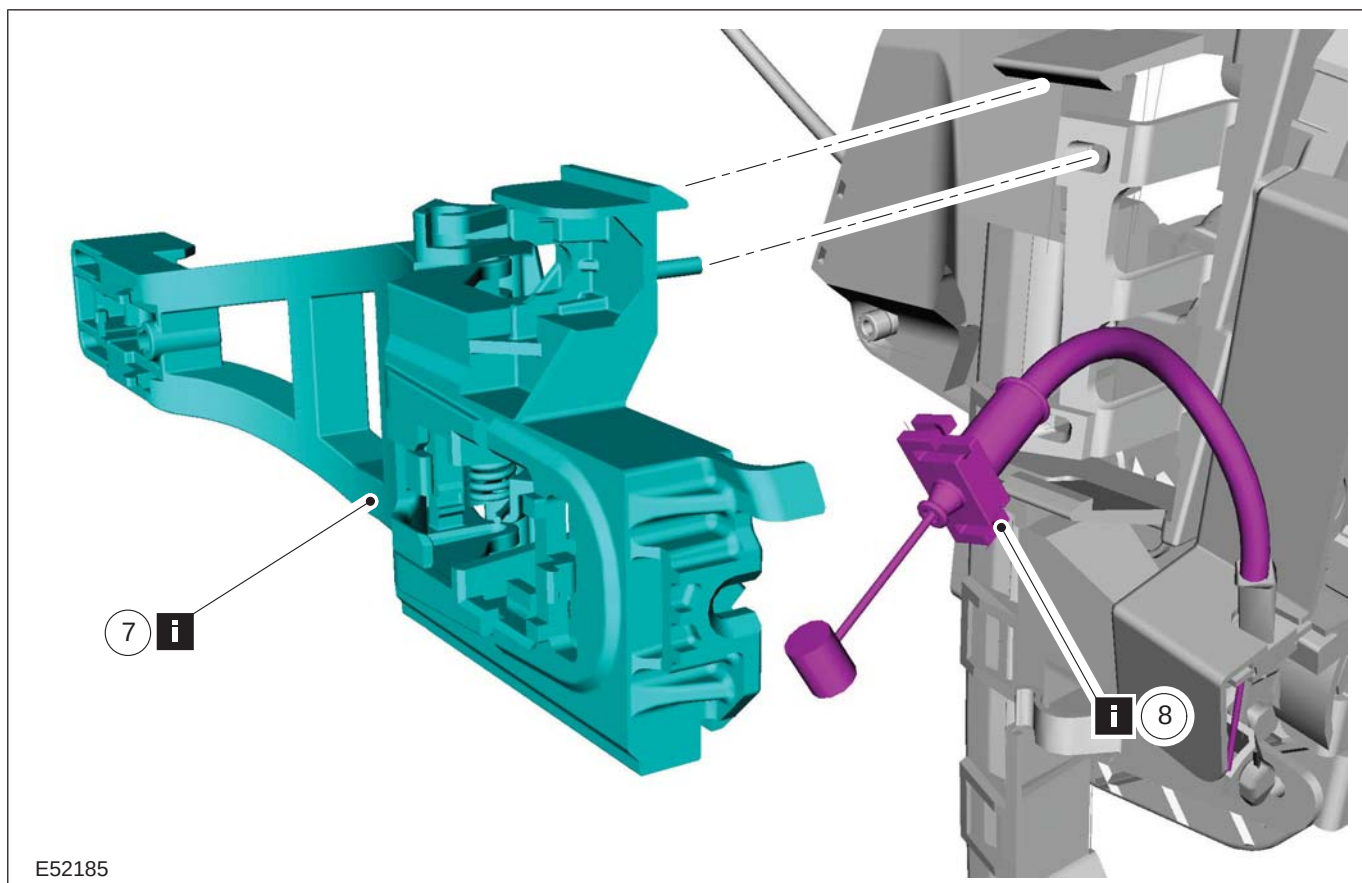
REMOVAL AND INSTALLATION



Item	Description
1	Rear door latch bracket retaining screw
2	Rear door latch retaining bolts
3	Rear door latch remote control cable See Removal Detail
4	Rear door lock actuator retaining screw See Removal Detail See Installation Detail

Item	Description
5	Rear door wiring harness See Removal Detail
6	Rear door inner panel See Removal Detail See Installation Detail

REMOVAL AND INSTALLATION



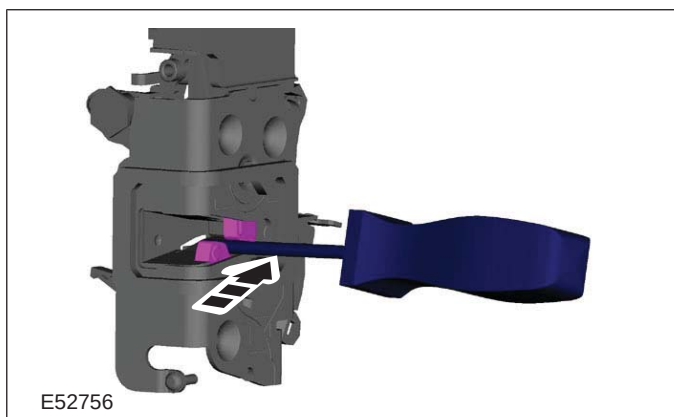
Item	Description
7	Rear door lock actuator See Removal Detail
8	Exterior rear door handle remote control cable See Removal Detail

16. To install, reverse the removal procedure.

Removal Details

Item 3 Rear door latch remote control cable

1. Using a suitable screwdriver, latch the rear door lock into the closed position.

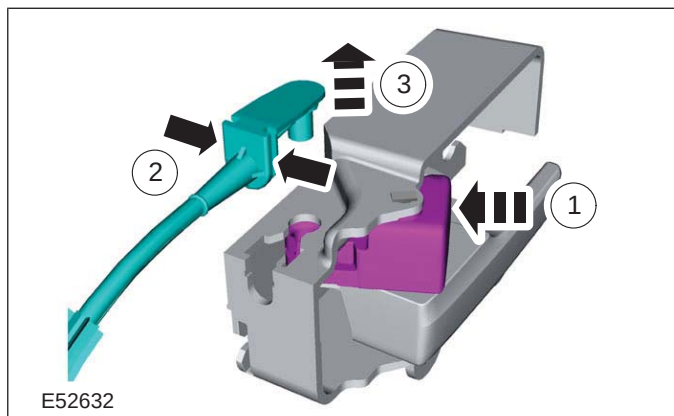


2. Detach the rear door latch remote control cable from the rear door latch remote control handle.

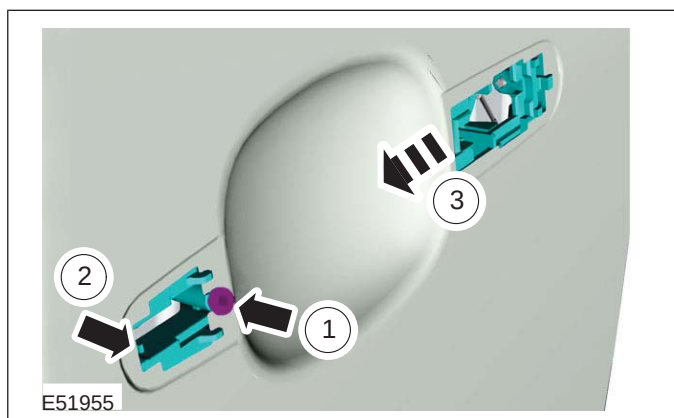
1. Operate the door latch remote control handle lock to the lock position.
2. Release the remote control cable retaining clips.

REMOVAL AND INSTALLATION

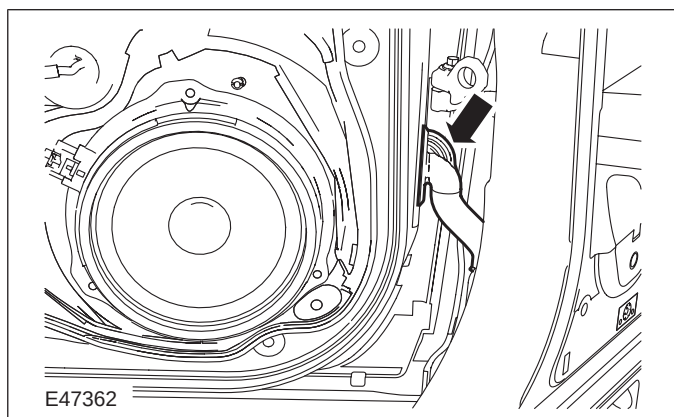
3. Detach the inner remote control cable from the remote control handle lock lever.

**Item 4 Rear door lock actuator retaining screw****1. Detach the rear door lock actuator.**

1. Loosen the door lock actuator retaining screw.
2. Release the door lock actuator retaining clip.
3. Slide the door lock actuator towards the front of the vehicle.

**Item 5 Rear door wiring harness**

1. Detach and push the rear door wiring harness into the rear door.

**Item 6 Rear door inner panel**

CAUTION: When removing the front door inner panel, do not trap or place excessive strain on the door wiring harness.

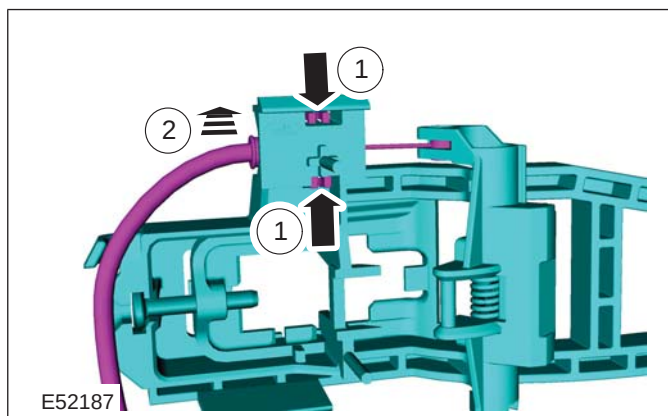
Item 7 Rear door lock actuator

1. Detach the rear door lock actuator from the latch support bracket.

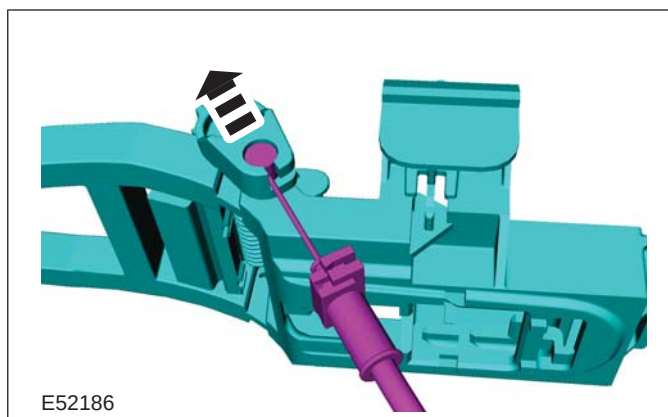
Item 8 Exterior rear door handle remote control cable

1. Detach the exterior rear door handle remote control cable from the rear door lock actuator.

1. Using a suitable flat blade screwdriver, release the exterior rear door handle remote control cable retaining clips.
2. Slide the exterior rear door handle remote control cable off the rear door lock actuator retainers.



2. Align the exterior rear door handle remote control inner cable with the slot in the door lock actuator and remove.



REMOVAL AND INSTALLATION**Installation Details****Item 6** Rear door inner panel

1. Before installing the rear door inner panel retaining bolts, feed the door wiring harness electrical connector through the rear door wiring harness hole.

Item 4 Rear door lock actuator retaining screw

1. Install the rear door lock actuator to the rear door.
2. Tighten the rear door lock actuator retaining screw.

REMOVAL AND INSTALLATION

Rear Door Latch

General Equipment

Electric hand drill

Rivet gun

All vehicles

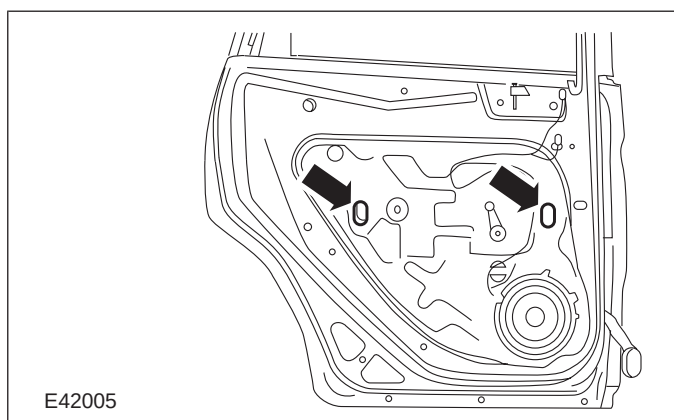
1. Remove the rear door trim panel.

For additional information, **refer to: Rear Door Trim Panel - Vehicles With: Manual Windows** (501-05 Interior Trim and Ornamentation, Removal and Installation) / **Rear Door Trim Panel - Vehicles With: Power Windows** (501-05 Interior Trim and Ornamentation, Removal and Installation).

2. Remove the exterior rear door handle.

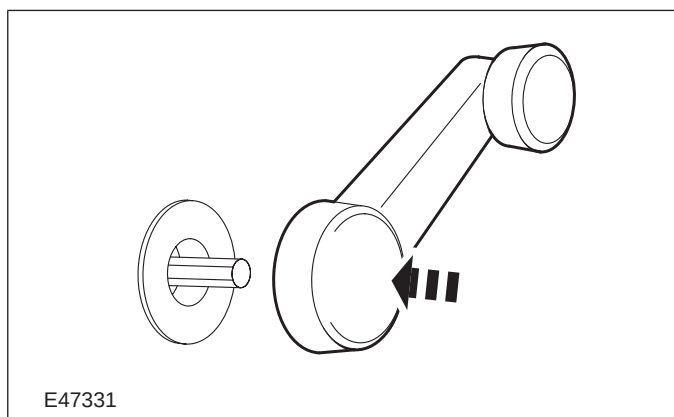
For additional information, **refer to: Exterior Rear Door Handle** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

3. Remove the rear door window regulator grommets.



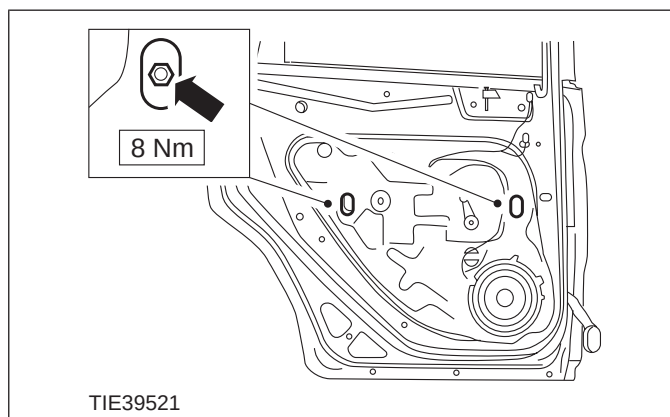
Vehicles with manual windows

4. Install the window regulator handle.



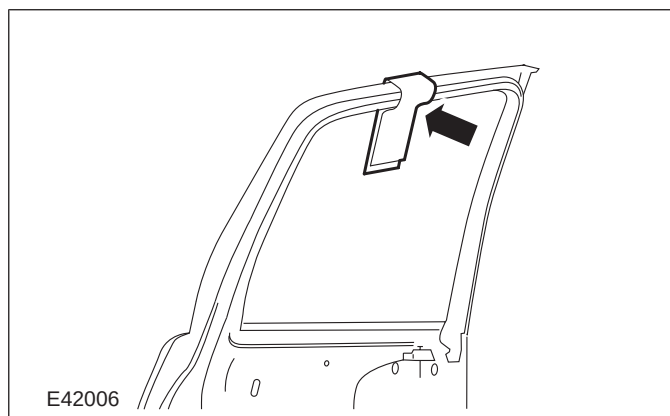
5. Loosen the rear door window glass clamp bolts.

- Using the rear door window regulator handle, align the window glass clamp bolts with the access holes.



6. Raise the rear door window glass.

7. Using suitable tape, support the rear door window glass to the rear door.



Vehicles with power windows

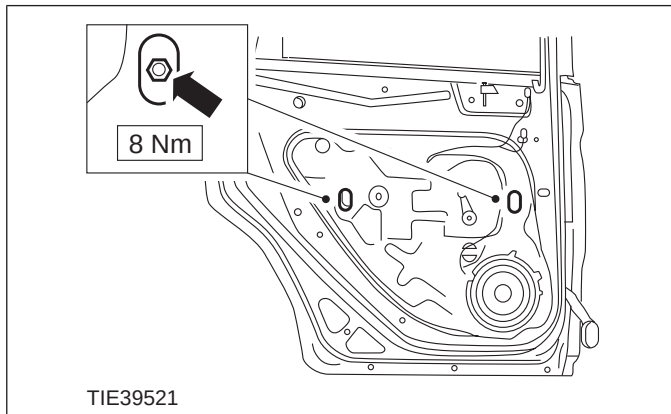
8. Connect the battery ground cable.

For additional information, **refer to: Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

9. Loosen the rear door window glass clamp bolts.

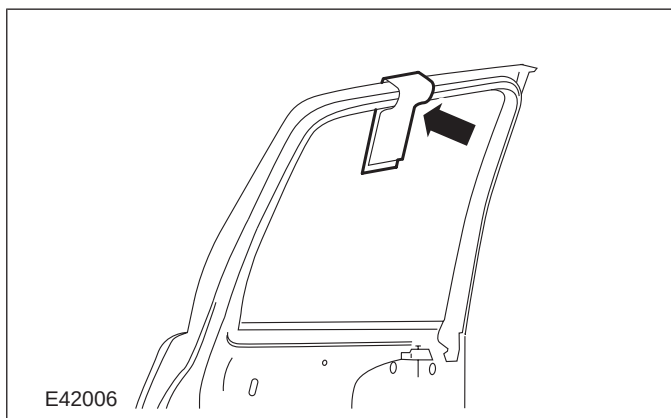
REMOVAL AND INSTALLATION

- Using the front door power window control unit, align the window glass clamp bolts with the access holes.



10. Raise the rear door window glass.

11. Using suitable tape, support the rear door window glass to the rear door.

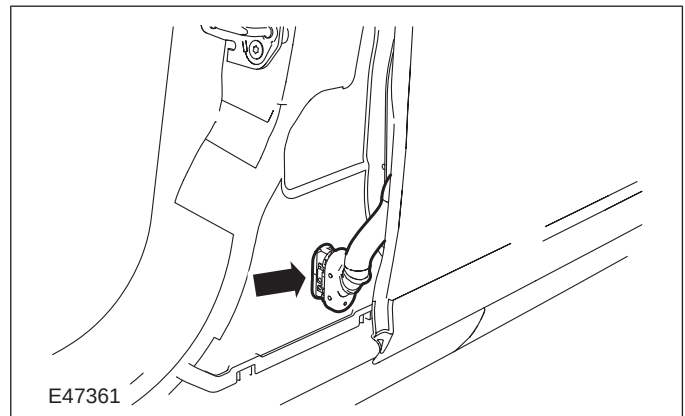


12. Disconnect the battery ground cable.

For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

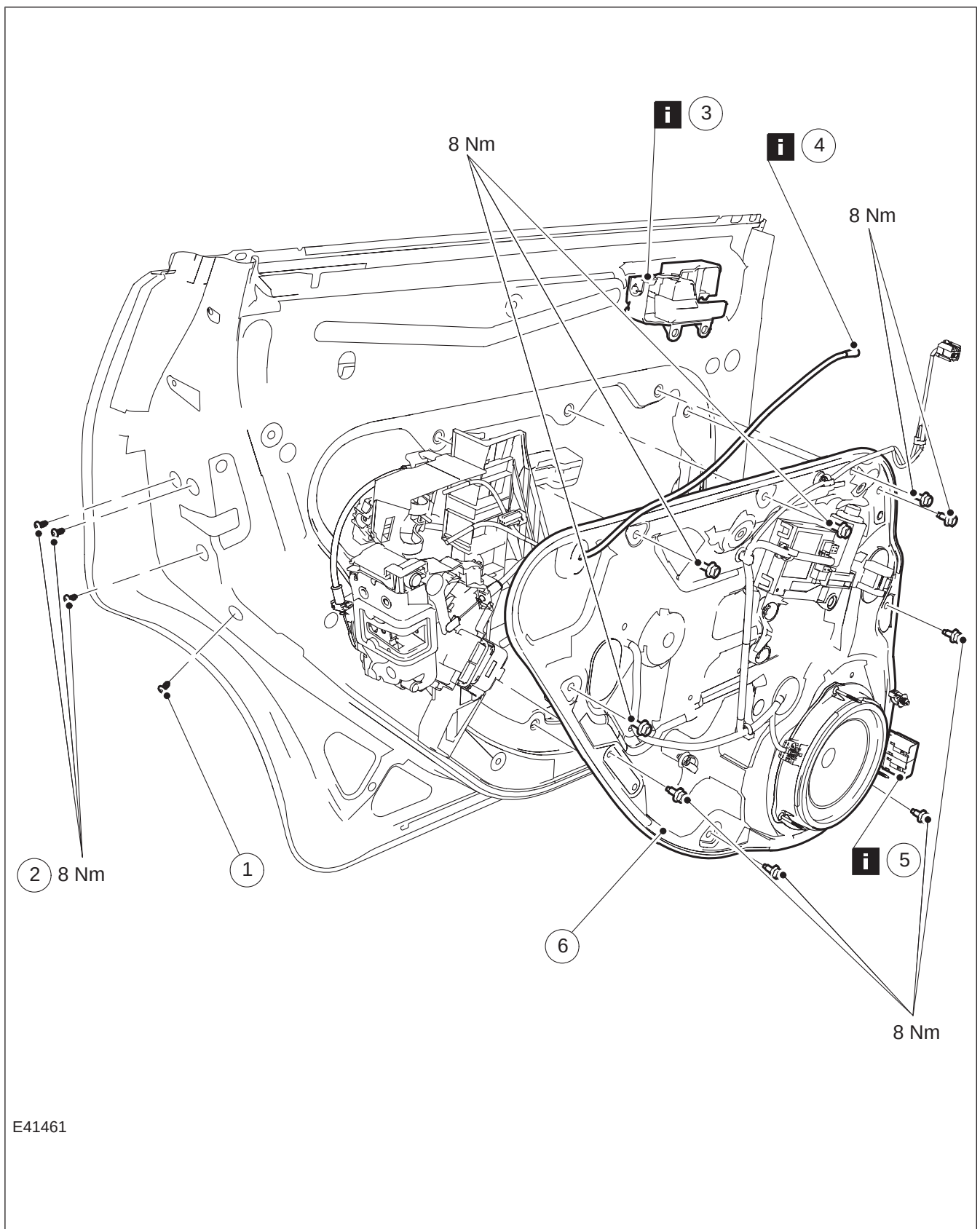
All vehicles

13. Detach and disconnect the rear door wiring harness.



14. Remove the components in the order indicated in the following illustration(s) and table(s).

REMOVAL AND INSTALLATION

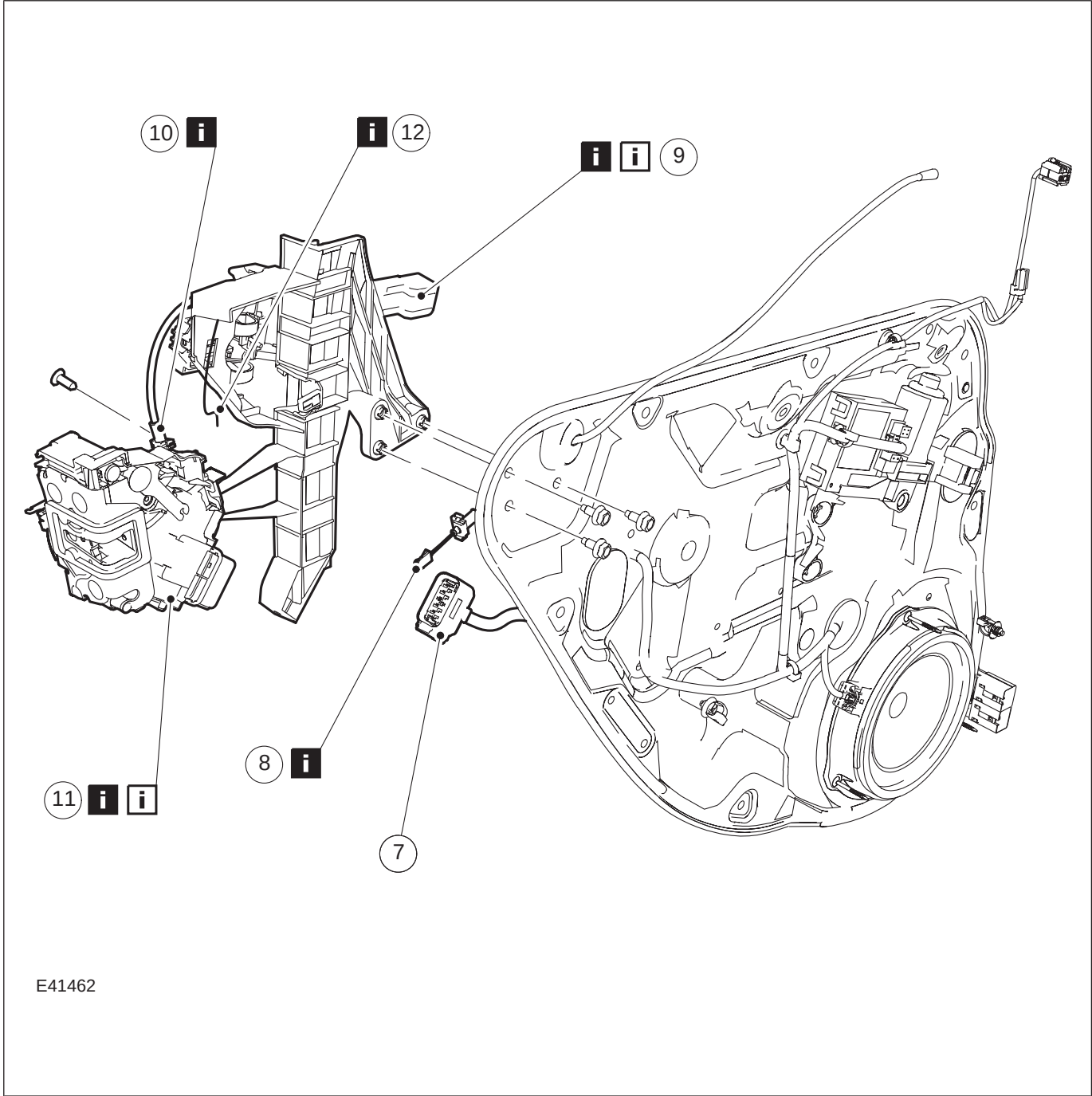


Item	Description
1	Rear door latch bracket retaining screw
2	Rear door latch retaining bolts

Item	Description
3	Rear door latch remote control handle lock See Removal Detail

REMOVAL AND INSTALLATION

Item	Description	Item	Description
4	Rear door latch remote control cable See Removal Detail	5	Rear door wiring harness See Removal Detail
		6	Rear door inner panel



Item	Description	Item	Description
7	Rear door latch electrical connector	9	Rear door handle, lock and latch retaining bracket See Removal Detail See Installation Detail
8	Rear door latch remote control cable See Removal Detail	10	Rear exterior door handle remote control See Removal Detail

REMOVAL AND INSTALLATION

Item	Description
11	Rear door latch See Removal Detail See Installation Detail
12	Rear door latch remote control handle actuator rod See Removal Detail

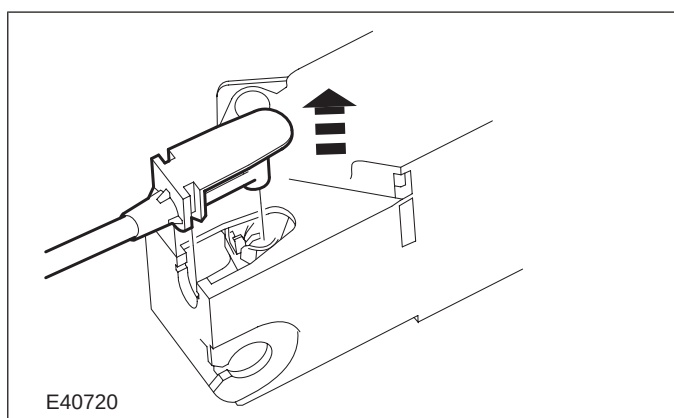
Removal Details

Item 3 Rear door latch remote control handle lock

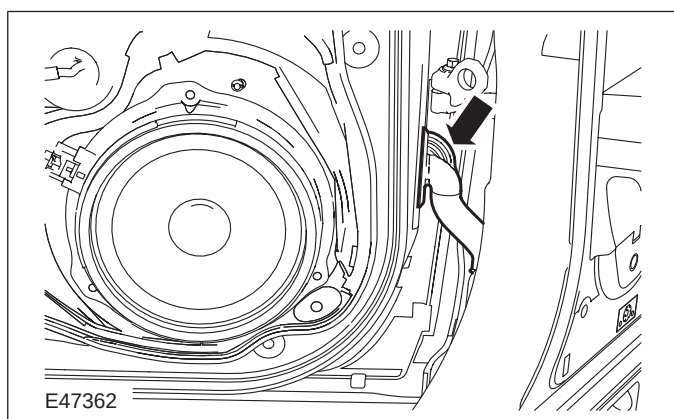
1. Operate the door latch remote control handle lock to the lock position.

Item 4 Rear door latch remote control cable

1. Disconnect the rear door latch remote control cable from the rear door latch remote control.

**Item 5** Rear door wiring harness

1. Detach and push the rear door wiring harness into the rear door.



15. To install, reverse the removal procedure.

16. Initialize the door window motors.

For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

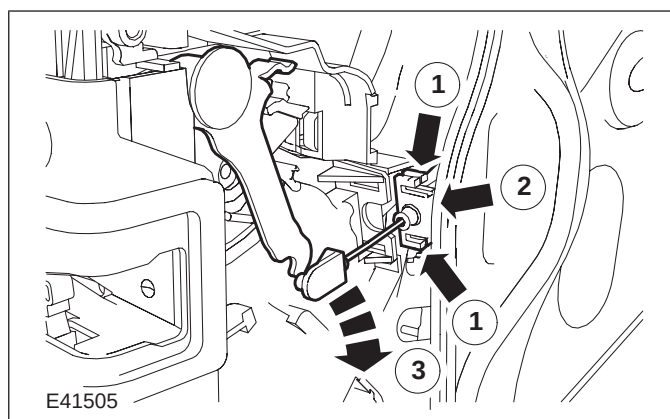
Item 8 Rear door latch remote control cable

1. **NOTE:** Do not kink the rear door latch remote control cable.

NOTE: In order to remove the rear door latch remote control cable from the rear door latch lever the cable must be rotated.

Disconnect the rear door latch remote control cable from the rear door latch.

1. Using a suitable screwdriver, detach the rear door latch remote control cable locking tangs from the rear door latch.
2. Detach the rear door latch remote control outer cable from the rear door latch.
3. Rotate the rear door latch remote control cable.

**Item 9** Rear door handle, lock and latch retaining bracket

1. Using a suitable Electric hand drill remove the rear door handle, lock and latch retaining bracket rivets.

Item 10 Rear exterior door handle remote control

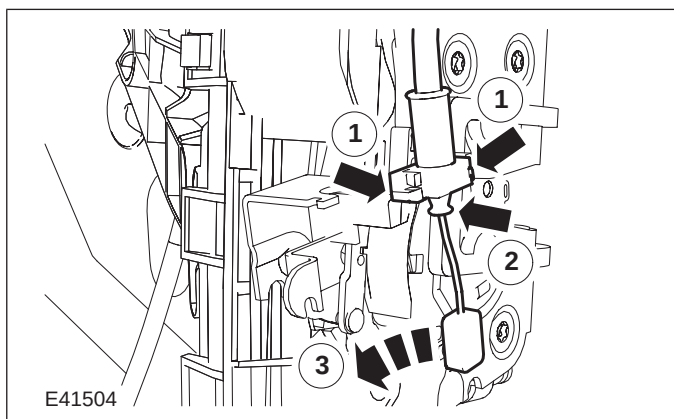
1. **NOTE:** Do not kink the rear exterior door handle remote control cable.

REMOVAL AND INSTALLATION

NOTE: In order to remove the rear exterior door handle remote control cable from the rear door latch lever the cable must be rotated.

Disconnect the rear exterior door handle remote control cable from the rear door latch.

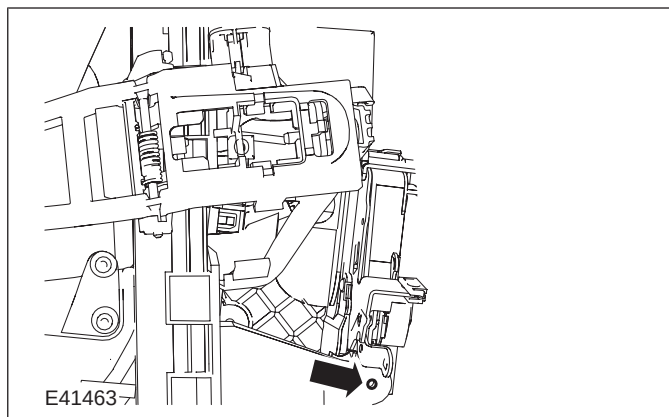
1. Using a suitable screwdriver, detach the rear exterior door handle remote control outer cable locking tangs from the rear door latch.
2. Detach the rear exterior door handle remote control cable from the rear door latch.
3. Rotate the rear exterior door handle remote control cable.



Item 11 Rear door latch

1. Detach the rear door latch.

- Using a suitable Electric hand drill remove the rear door latch rivet.



Item 12 Rear door latch remote control handle actuator rod

1. Remove the rear door latch.

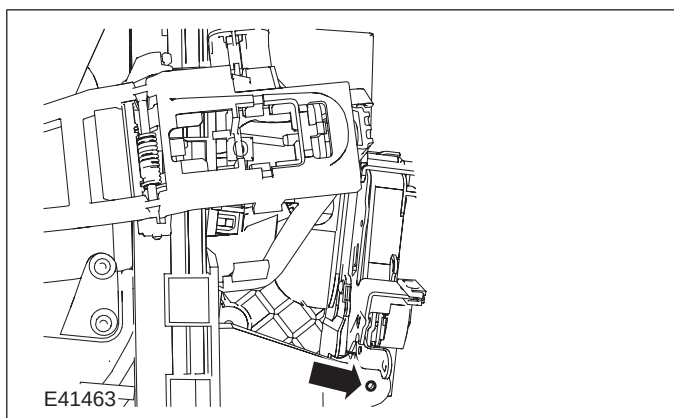
1. Detach the rear door latch remote control handle actuator rod from the front door latch.

Installation Details

Item 11 Rear door latch

1. Install the rear door latch.

- Using a suitable Rivet gun install the rear door latch rivet.



Item 9 Rear door handle, lock and latch retaining bracket

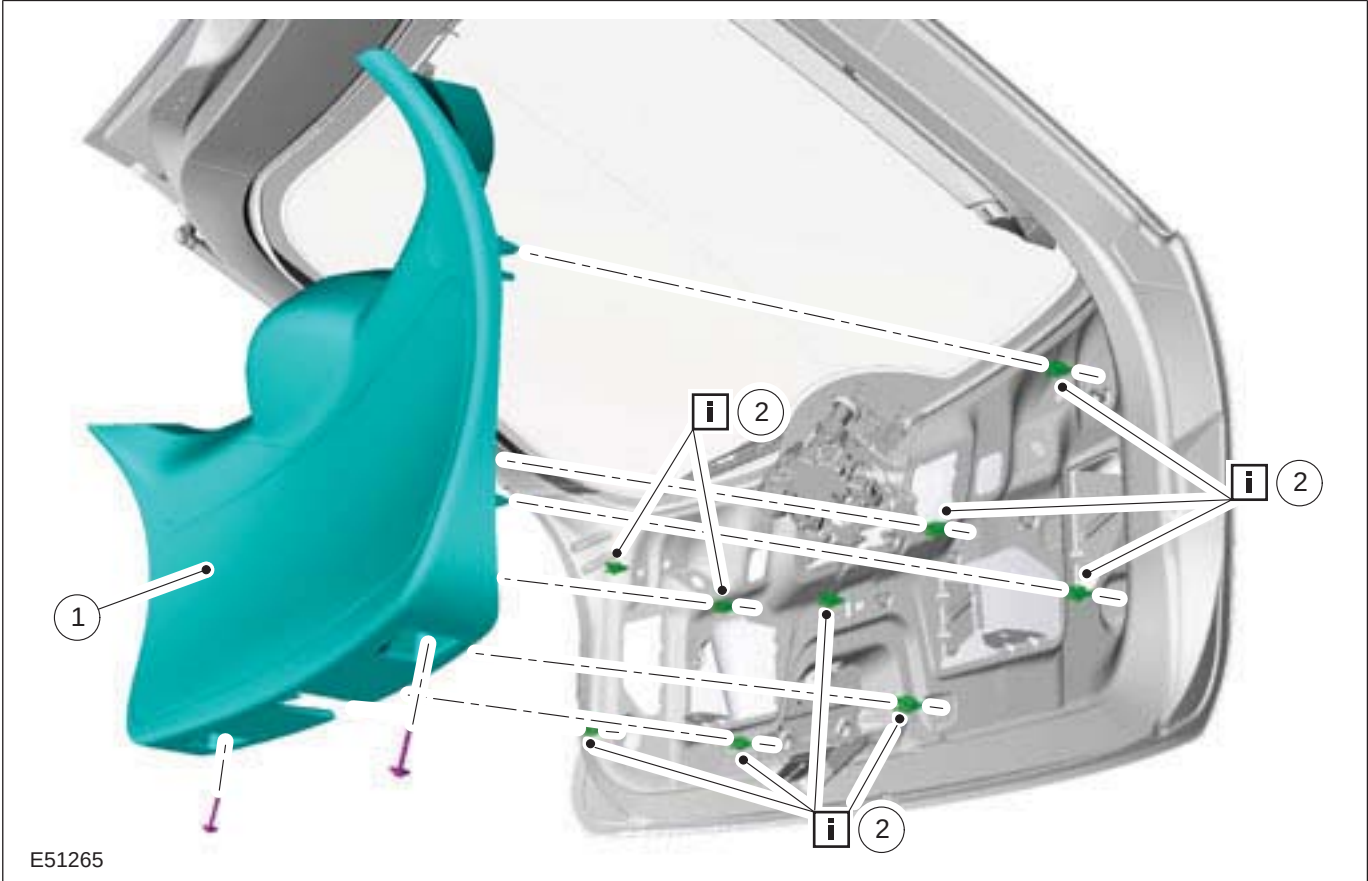
1. Align the rear door handle, lock and latch retaining bracket to the rear door inner panel.

- Using suitable screws attach the rear door handle, lock and latch retaining bracket to the rear door inner panel.

REMOVAL AND INSTALLATION

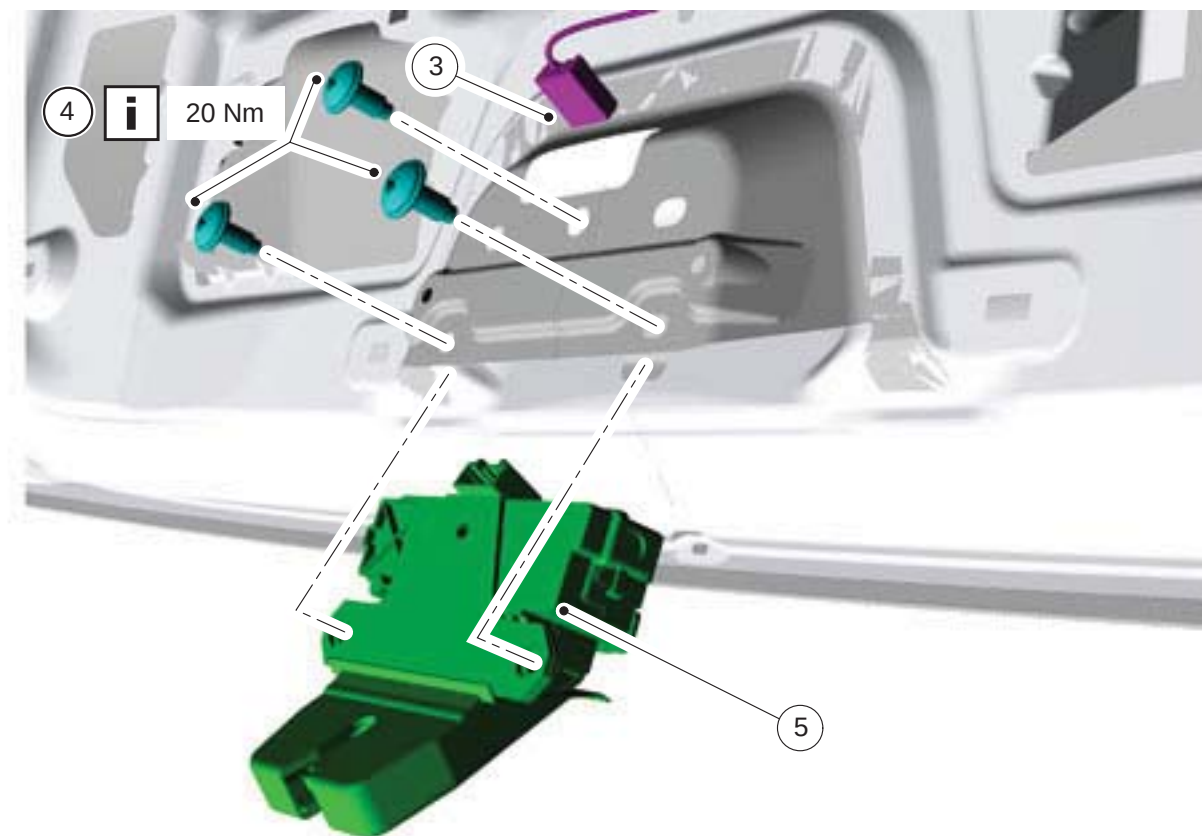
Liftgate Latch — 3-Door/5-Door

1. Remove the components in the order indicated in the following illustration(s) and table(s).



Item	Description
1	Liftgate trim panel
2	Liftgate trim panel retaining clips See Installation Detail

REMOVAL AND INSTALLATION



E51266

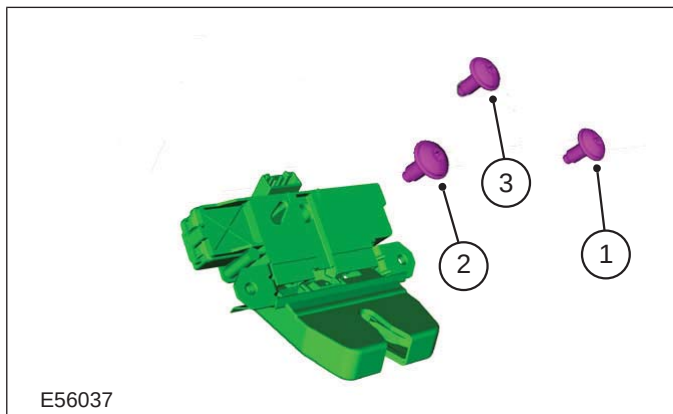
Item	Description
3	Liftgate latch electrical connector
4	Liftgate latch retaining bolts See Installation Detail
5	Liftgate latch

2. To install, reverse the removal procedure.

Installation Details

Item 4 Liftgate latch retaining bolts

1. Install the liftgate latch retaining bolts finger tight in the order shown.



E56037

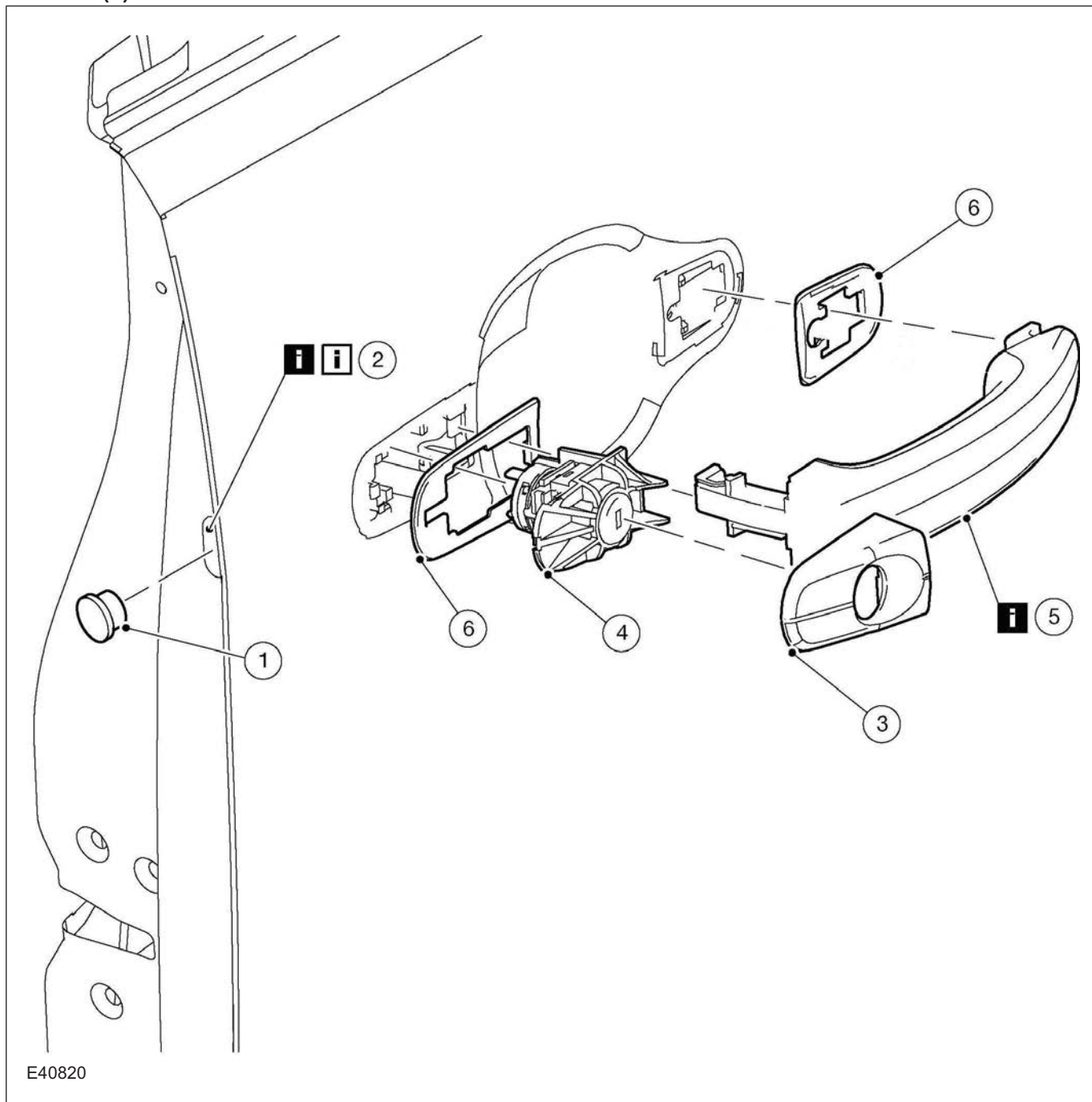
Item 2 Liftgate trim panel retaining clips

1. Install the liftgate trim panel retaining clips to the liftgate trim panel before installing to the liftgate.

REMOVAL AND INSTALLATION

Exterior Front Door Handle

1. Remove the components in the order indicated in the following illustration(s) and table(s).



Item	Description
1	Exterior front door handle retaining screw grommet
2	Exterior front door handle retaining screw See Removal Detail See Installation Detail

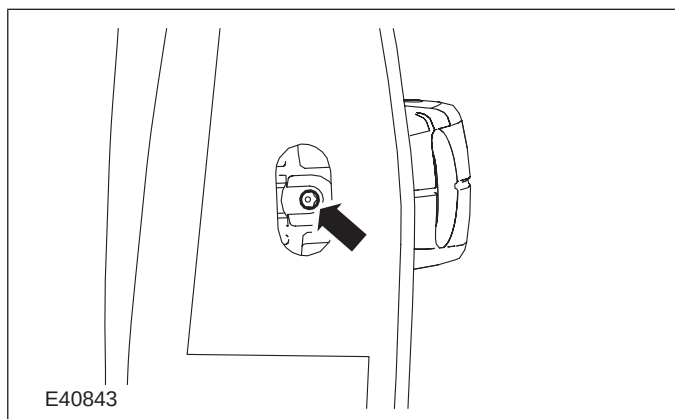
Item	Description
3	Exterior front door handle trim
4	Door lock cylinder
5	Exterior front door handle See Removal Detail
6	Exterior front door handle seals

REMOVAL AND INSTALLATION

2. To install, reverse the removal procedure.

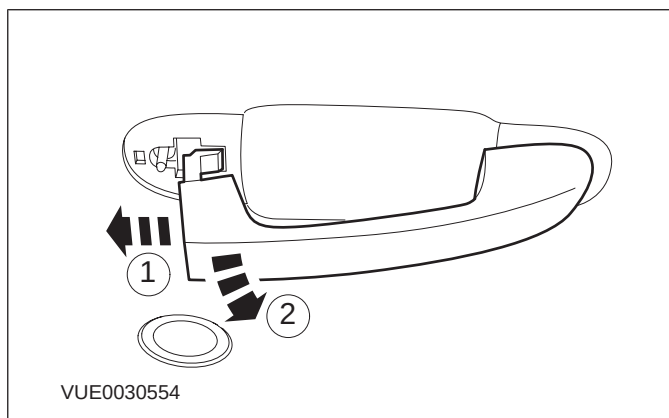
Removal Details**Item 2 Exterior front door handle retaining screw**

1. Loosen the exterior front door handle retaining screw.

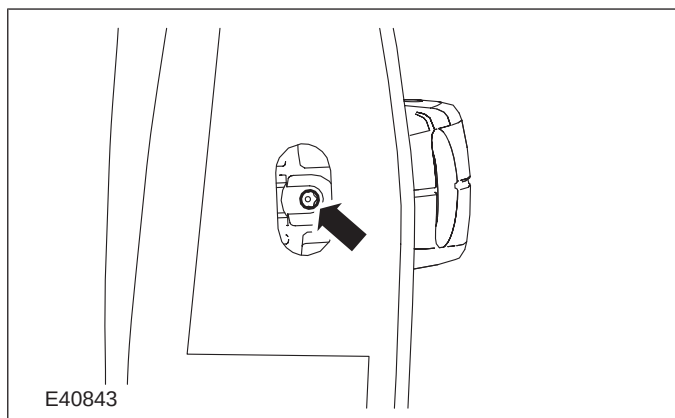
**Item 5 Exterior front door handle**

1. Remove the exterior front door handle.

1. Slide the exterior front door handle rearwards to disengage it from the exterior front door handle bracket.
2. Remove the exterior front door handle.

**Installation Details****Item 2 Exterior front door handle retaining screw**

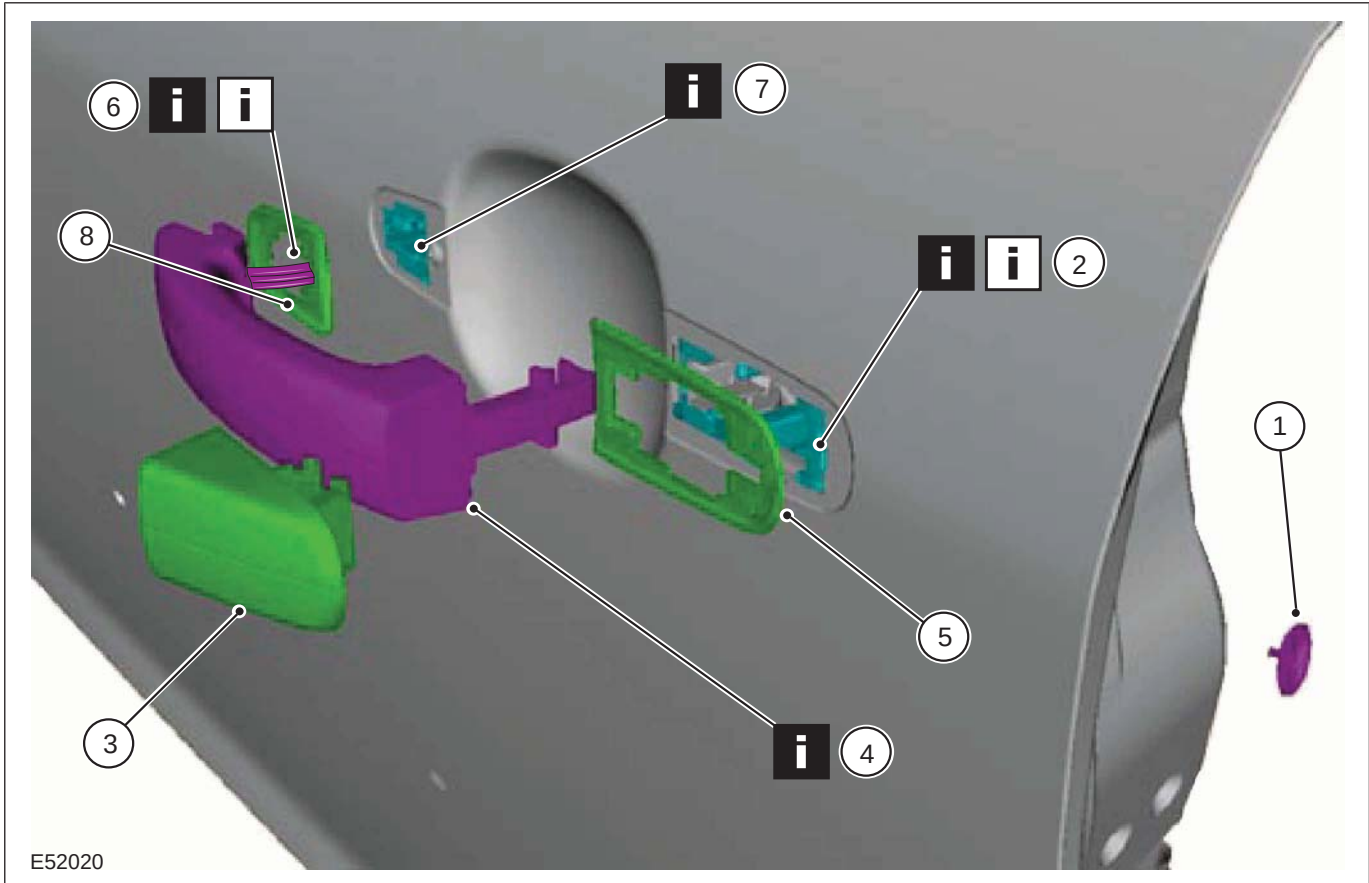
1. Tighten the exterior front door handle retaining screw.



REMOVAL AND INSTALLATION

Exterior Front Door Handle — Vehicles With: Keyless Vehicle System

1. Remove the components in the order indicated in the following illustration(s) and table(s).



Item	Description
1	Exterior front door handle retaining screw grommet
2	Exterior front door handle retaining screw See Removal Detail See Installation Detail
3	Exterior front door handle bezel
4	Exterior front door handle See Removal Detail
5	Exterior front door handle gasket

Item	Description
6	Exterior front door handle antenna wiring harness See Removal Detail See Installation Detail
7	Exterior front door handle antenna electrical connector See Removal Detail
8	Exterior front door handle seal

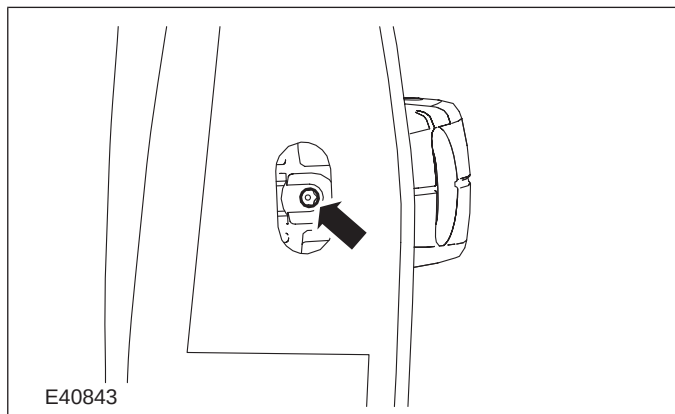
2. To install, reverse the removal procedure.

Removal Details

REMOVAL AND INSTALLATION

Item 2 Exterior front door handle retaining screw

1. Loosen the exterior front door handle retaining screw until the exterior front door handle bezel can be removed.

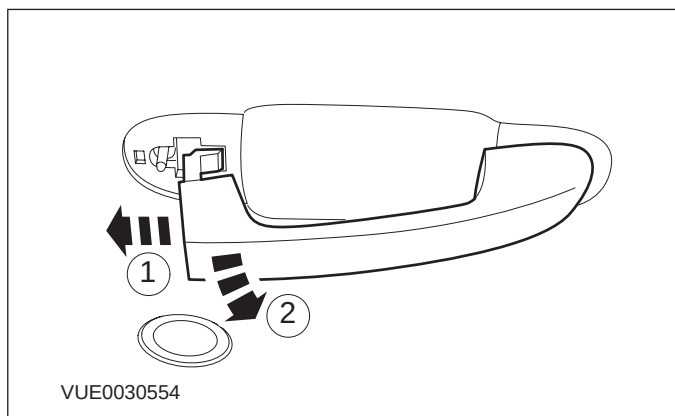


Item 4 Exterior front door handle

1. **NOTE:** Do not place excessive strain on exterior front door handle antenna wiring harness.

Detach the exterior front door handle.

1. Slide the exterior front door handle rearwards to disengage it from the exterior front door handle bracket.
2. Detach the exterior front door handle.



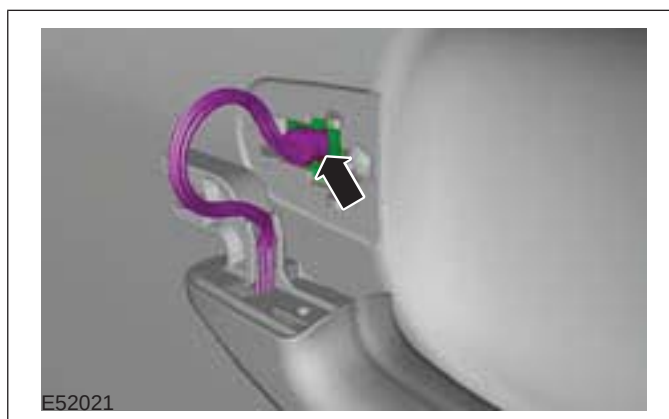
Item 6 Exterior front door handle antenna wiring harness

NOTE: Do not place excessive strain on the exterior front door handle antenna wiring harness.

1. Pull the exterior front door handle antenna wiring harness until an audible click is heard and the exterior front door handle antenna wiring harness electrical connector is in the horizontal position.

Item 7 Exterior front door handle antenna electrical connector

1. Disconnect the exterior front door handle antenna electrical connector from the exterior front door handle antenna electrical connector and holder.



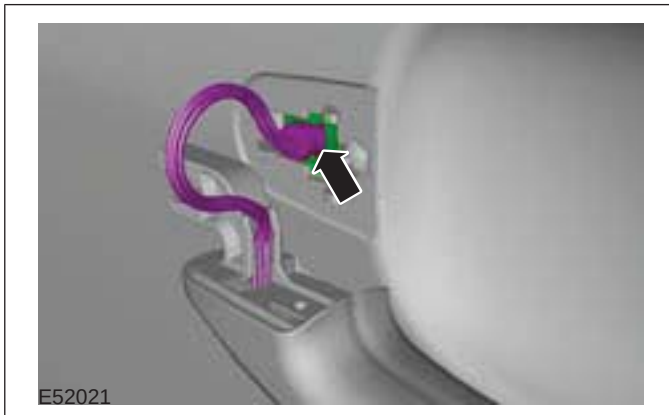
Installation Details

Item 6 Exterior front door handle antenna wiring harness

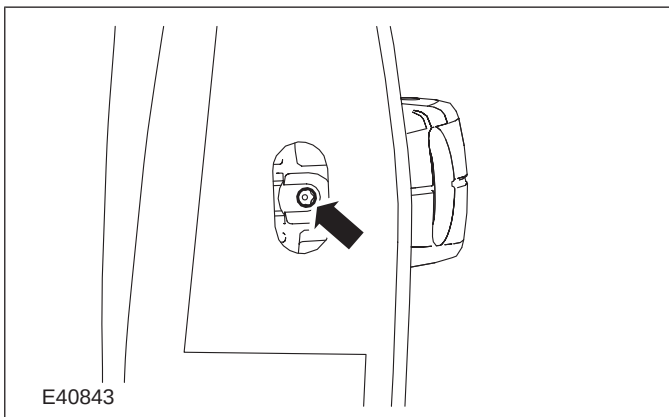
1. Lift and push the exterior front door handle antenna wiring harness electrical into the

REMOVAL AND INSTALLATION

exterior front door handle antenna electrical connector and holder.

**Item 2 Exterior front door handle retaining screw**

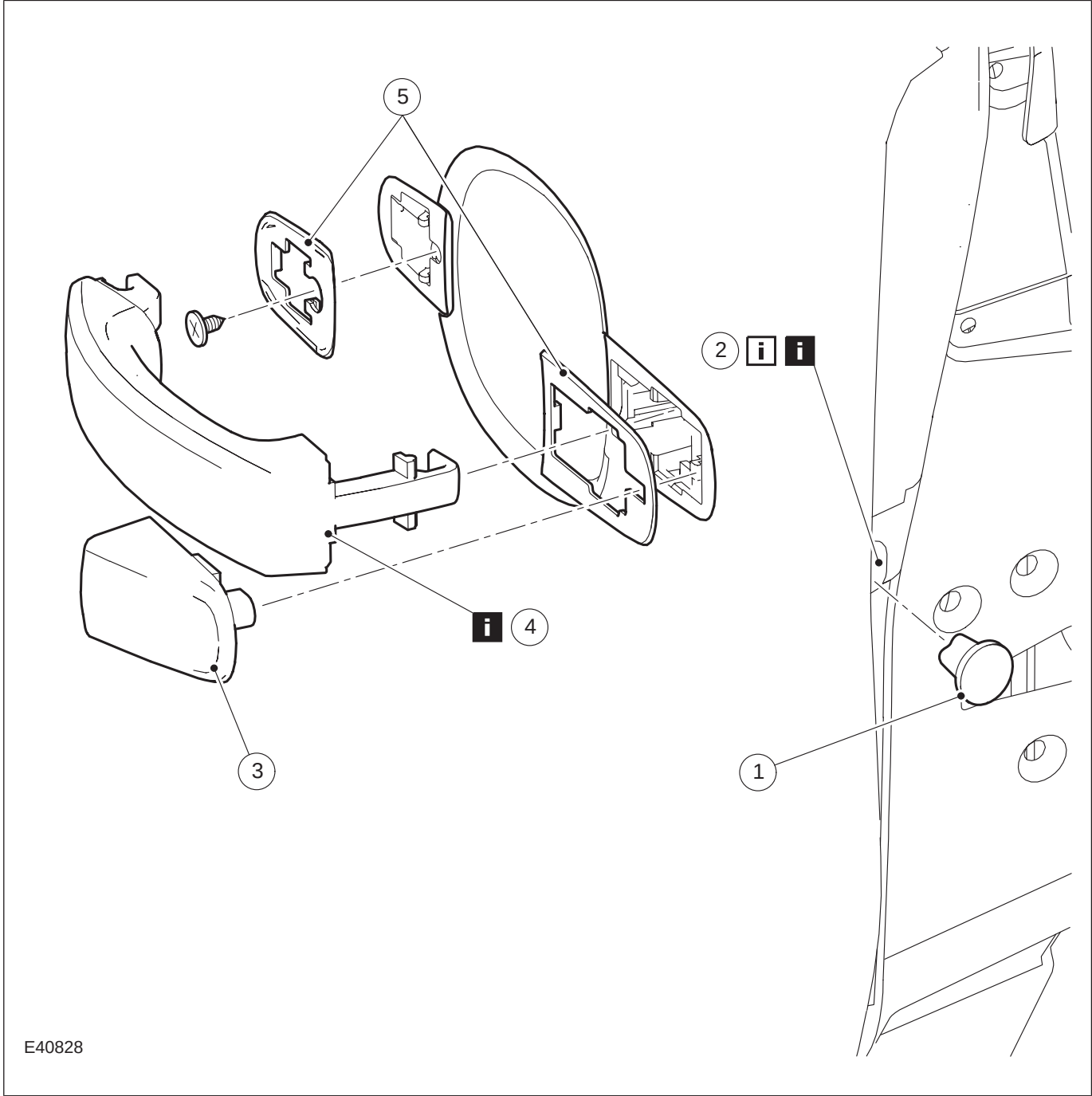
1. Tighten the exterior front door handle retaining screw.



REMOVAL AND INSTALLATION

Exterior Rear Door Handle

1. Remove the components in the order indicated in the following illustration(s) and table(s).



E40828

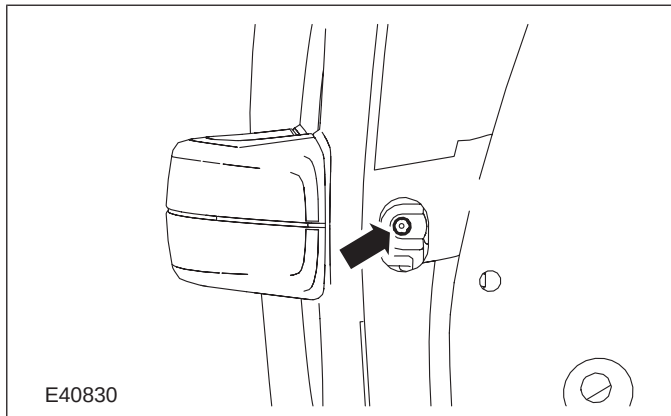
Item	Description
1	Exterior rear door handle retaining screw grommet
2	Exterior rear door handle retaining screw See Removal Detail See Installation Detail

Item	Description
3	Exterior rear door handle trim
4	Exterior rear door handle See Removal Detail
5	Exterior front door handle seals

2. To install, reverse the removal procedure.

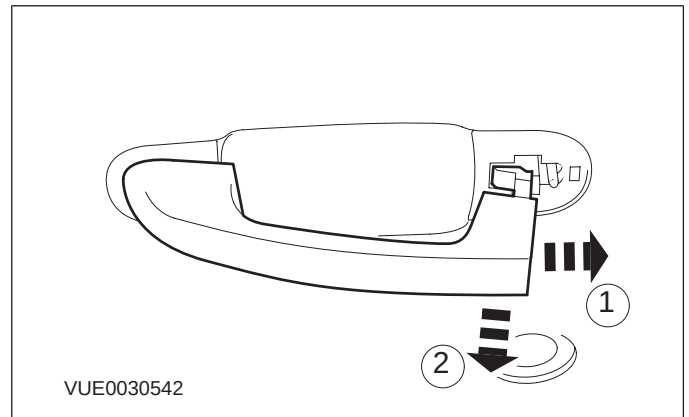
REMOVAL AND INSTALLATION**Removal Details****Item 2 Exterior rear door handle retaining screw**

1. Loosen the exterior rear door handle retaining screw.

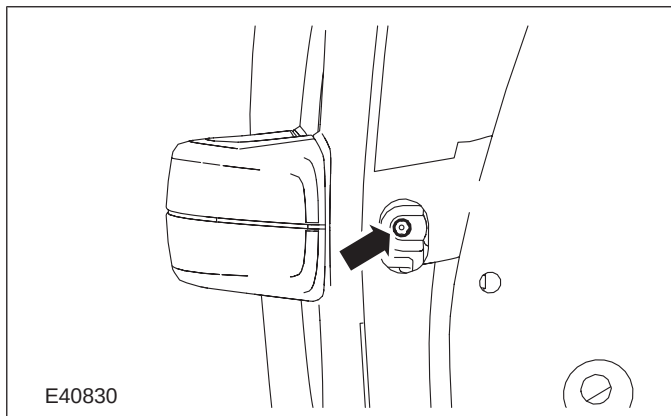
**Item 4 Exterior rear door handle**

1. Remove the exterior rear door handle.

1. Slide the exterior rear door handle towards the rear of the vehicle to disengage it from the exterior rear door handle bracket.
2. Remove the exterior rear door handle.

**Installation Details****Item 2 Exterior rear door handle retaining screw**

1. Tighten the exterior rear door handle retaining screw.

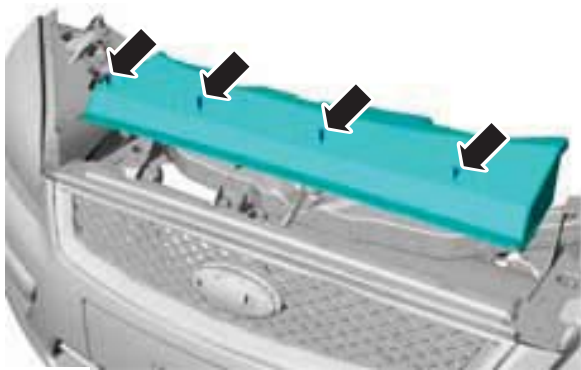
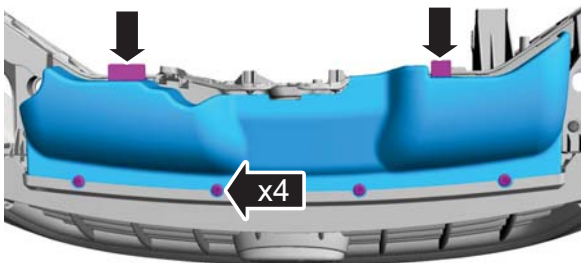


REMOVAL AND INSTALLATION

Hood Lock Cylinder

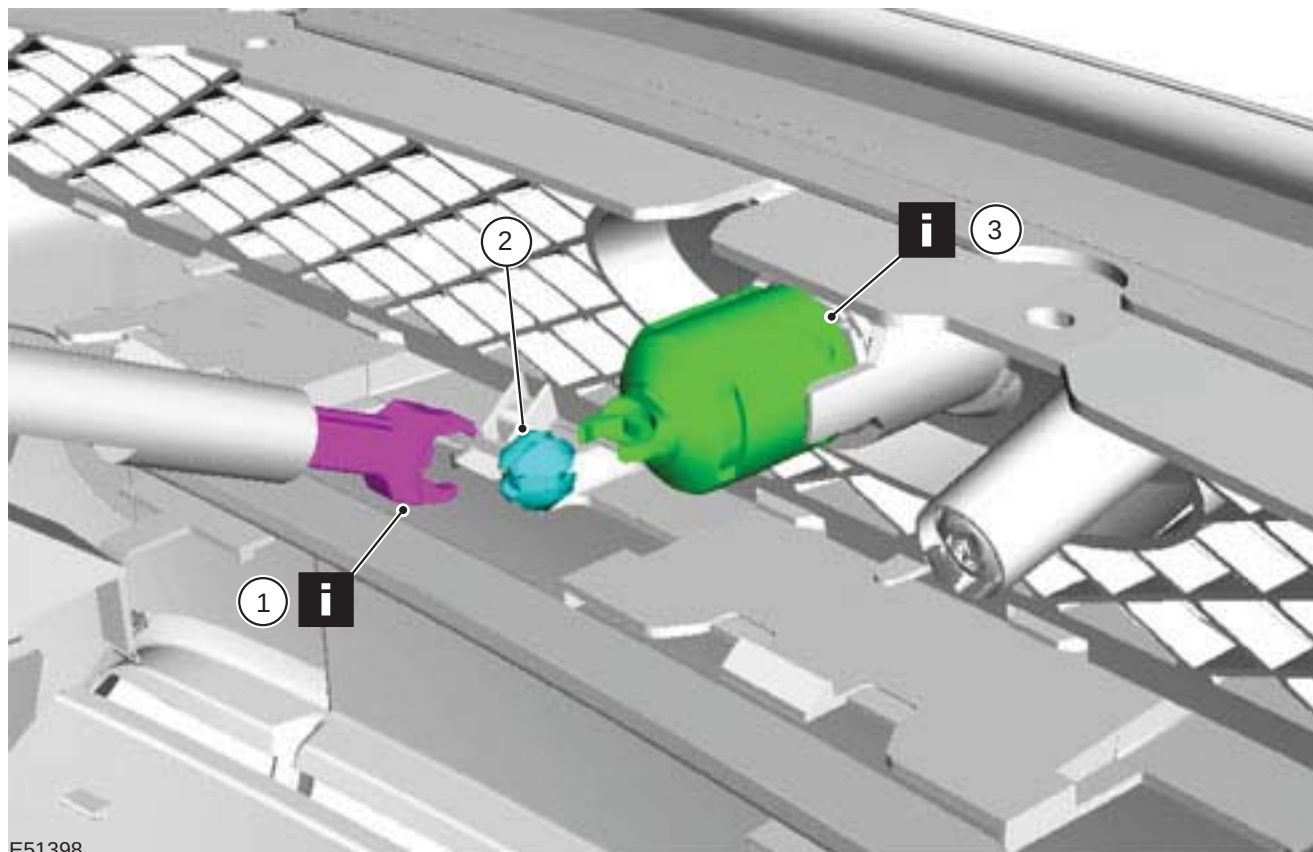
1. Remove the air deflector.

2. Remove the components in the order indicated in the following illustration(s) and table(s).



E112650

REMOVAL AND INSTALLATION



E51398

Item	Description
1	Hood lock cylinder to hood latch connecting rod See Removal Detail
2	Hood lock cylinder rod swivel joint
3	Hood lock cylinder See Removal Detail

3. To install, reverse the removal procedure.

Removal Details

Item 1 Hood lock cylinder to hood latch connecting rod

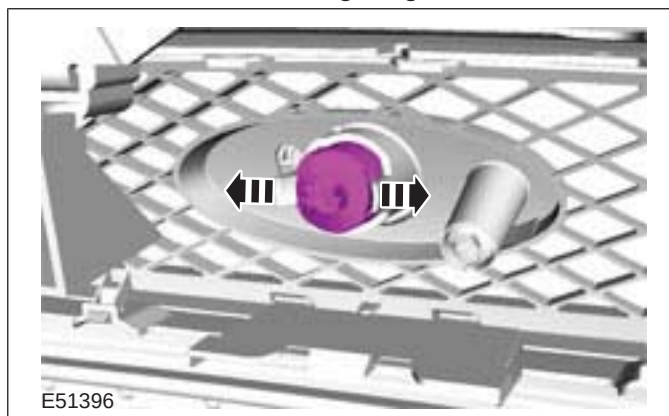
1. **NOTE:** Make a note of the position and orientation of the hood lock cylinder to hood latch connecting rod.

Disconnect the hood lock cylinder to hood latch connecting rod from the hood lock cylinder swivel joint.

Item 3 Hood lock cylinder

1. Detach the hood lock cylinder from the radiator grille.

- Release the locking tangs.

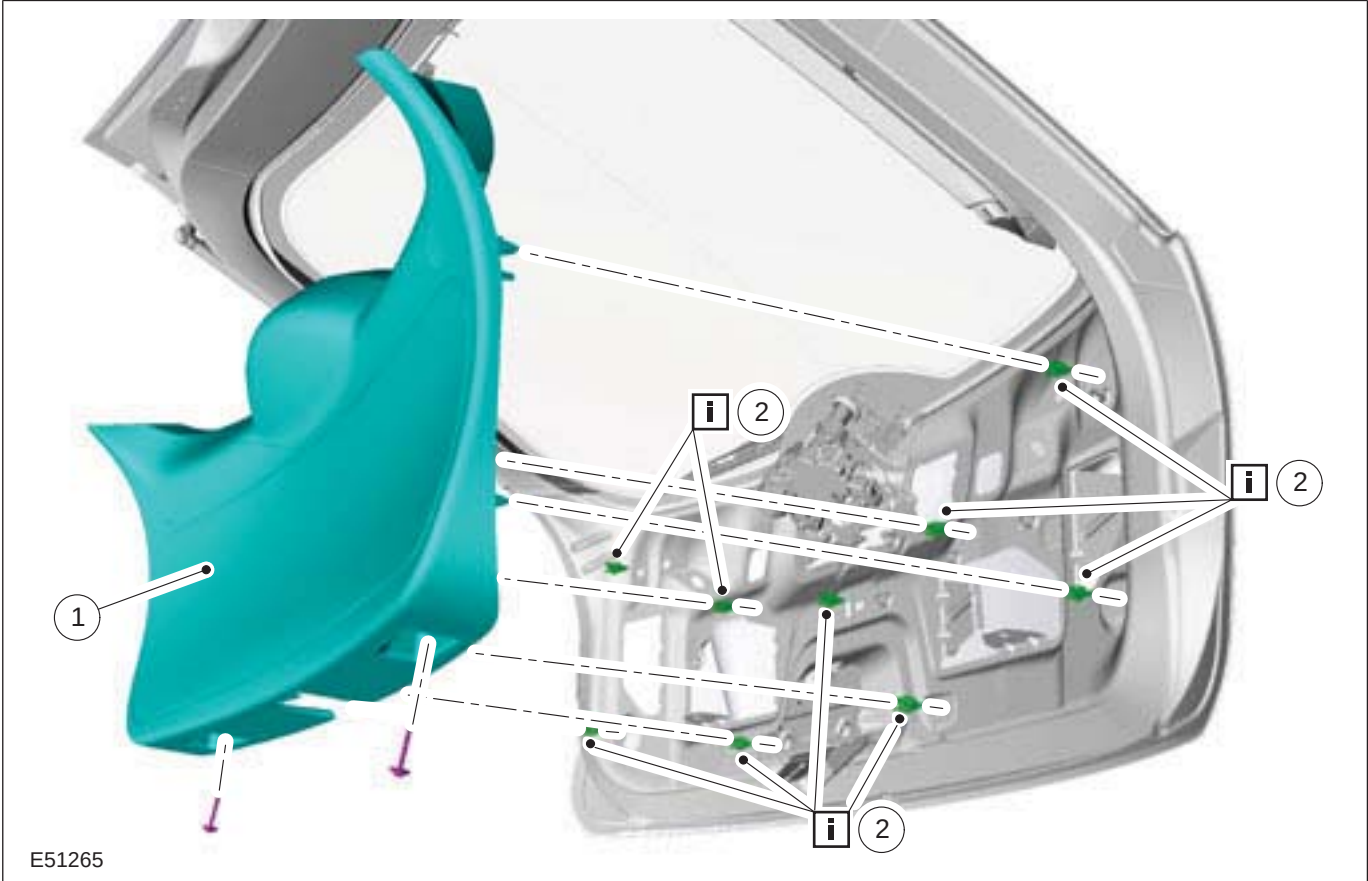


E51396

REMOVAL AND INSTALLATION

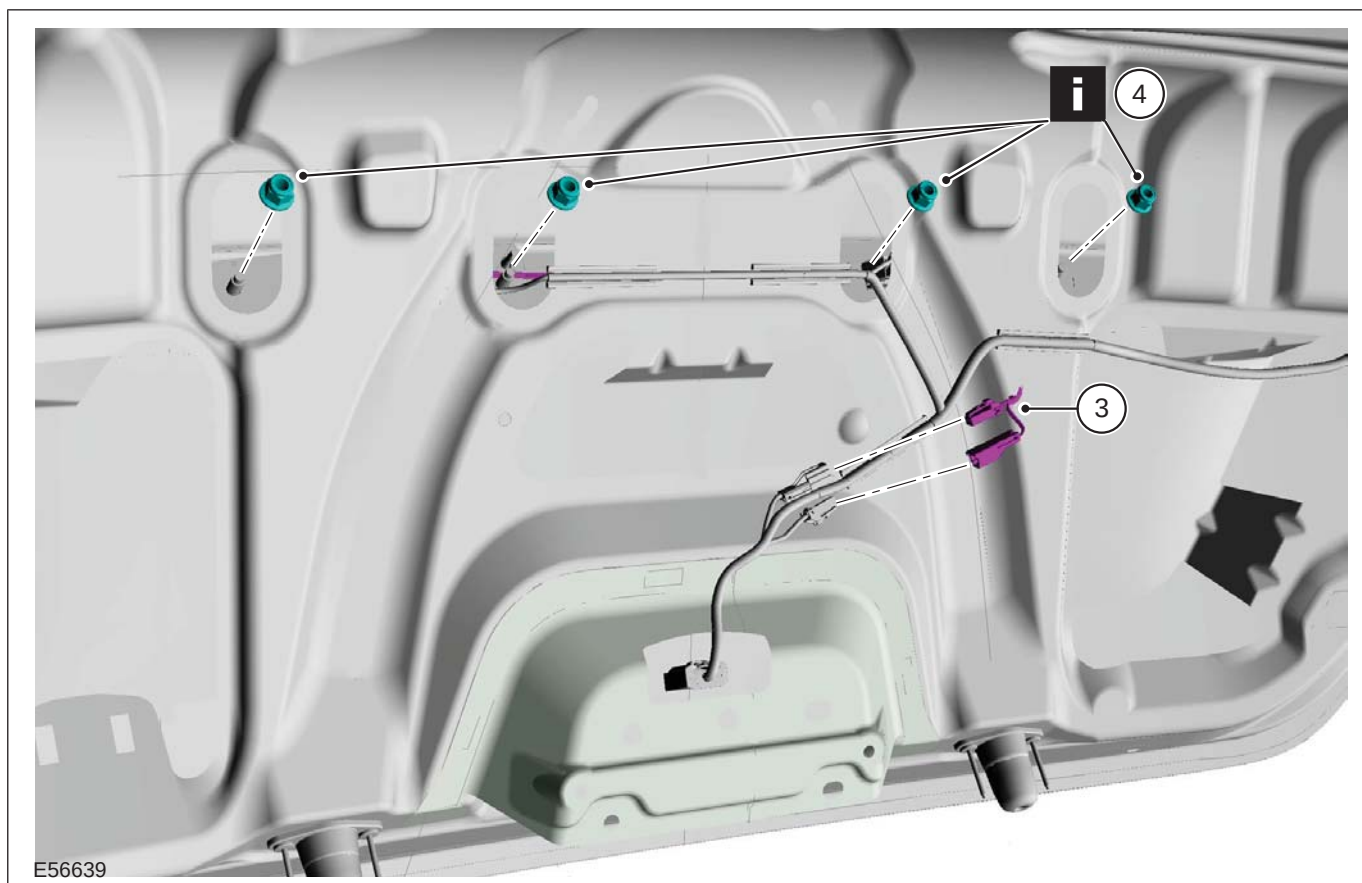
Exterior Liftgate Release Switch — 3-Door/5-Door

1. Remove the components in the order indicated in the following illustration(s) and table(s).



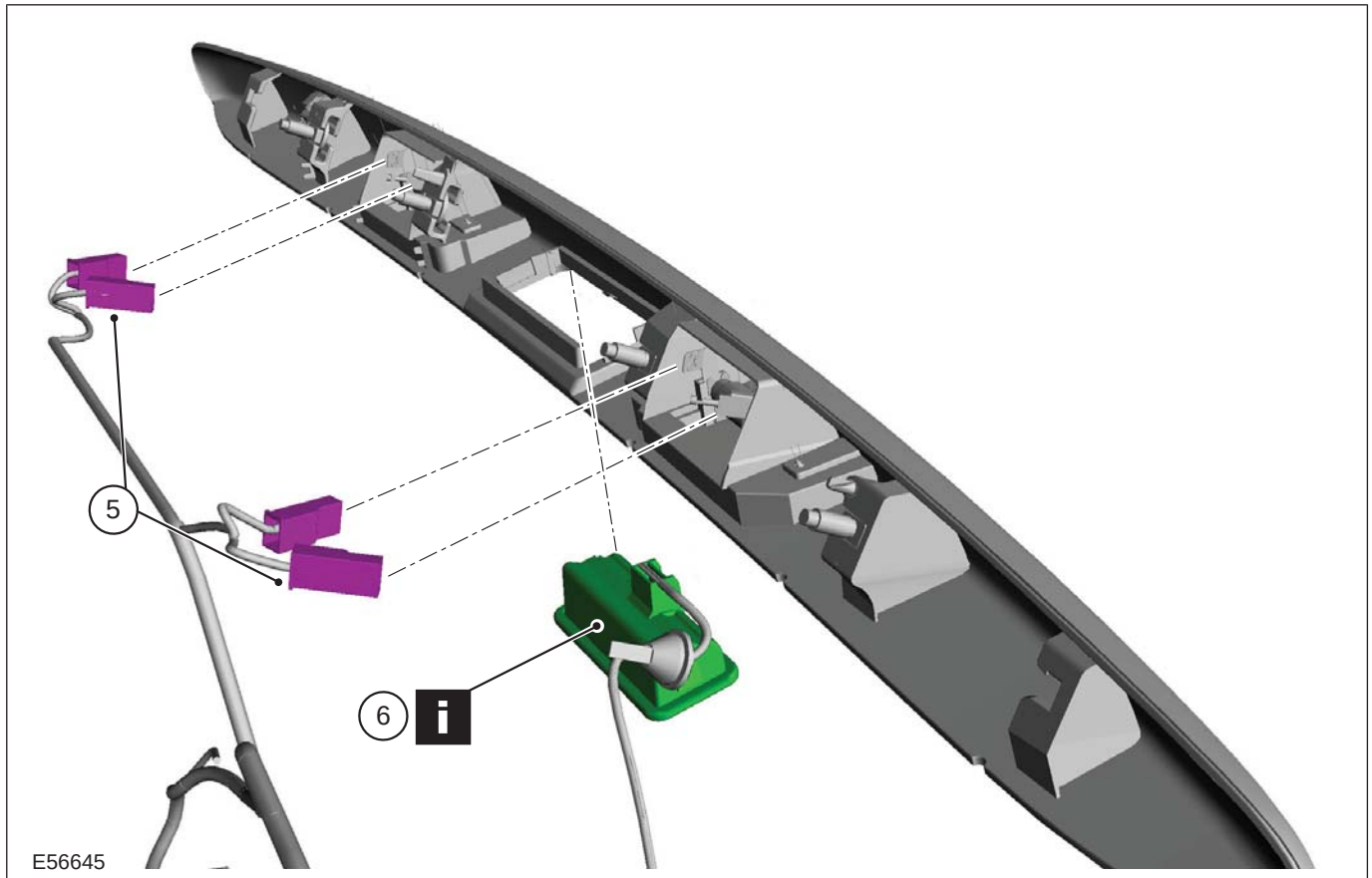
Item	Description
1	Liftgate trim panel
2	Liftgate trim panel retaining clips See Installation Detail

REMOVAL AND INSTALLATION



Item	Description
3	Exterior liftgate release switch electrical connectors
4	Licence plate illumination panel retaining nuts See Removal Detail

REMOVAL AND INSTALLATION



Item	Description
5	Licence plate illumination electrical connectors
6	Exterior liftgate release switch See Removal Detail

2. To install, reverse the removal procedure.

Removal Details

Item 4 Licence plate illumination panel retaining nuts

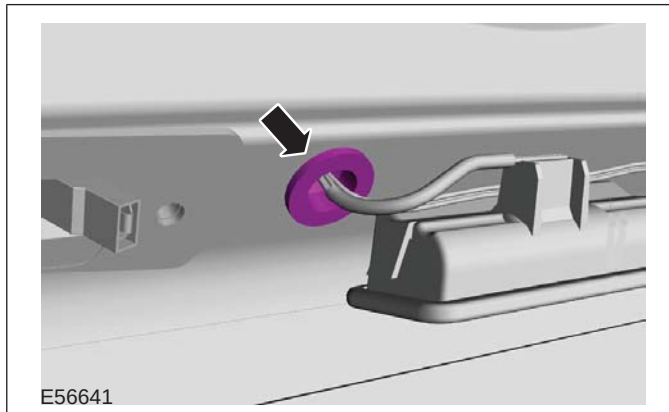
1. **CAUTION:** Make sure that excessive strain is not placed on the licence plate illumination panel electrical connectors and wiring harnesses.

Detach the licence plate illumination panel from the liftgate.

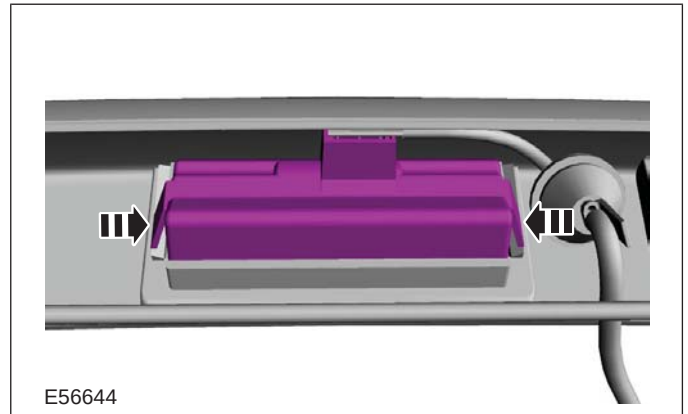


REMOVAL AND INSTALLATION

2. Detach the exterior liftgate release switch wiring harness grommet from the liftgate.

**Item 6 Exterior liftgate release switch**

1. Press the clips and remove the exterior liftgate release switch from the licence plate illumination panel.

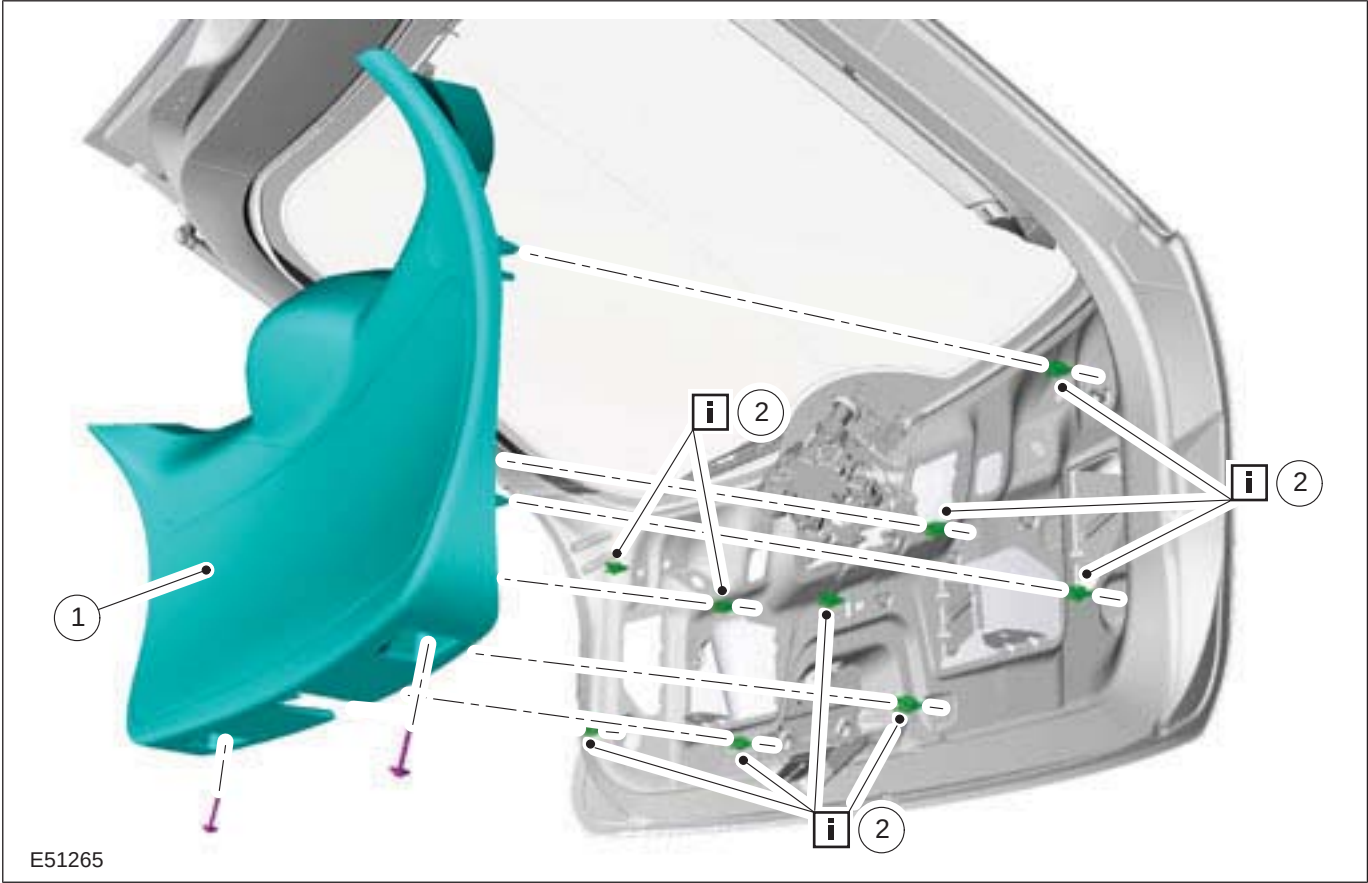
**Installation Details****Item 2 Liftgate trim panel retaining clips**

1. Install the liftgate trim panel retaining clips to the liftgate trim panel before installation to the liftgate.

REMOVAL AND INSTALLATION

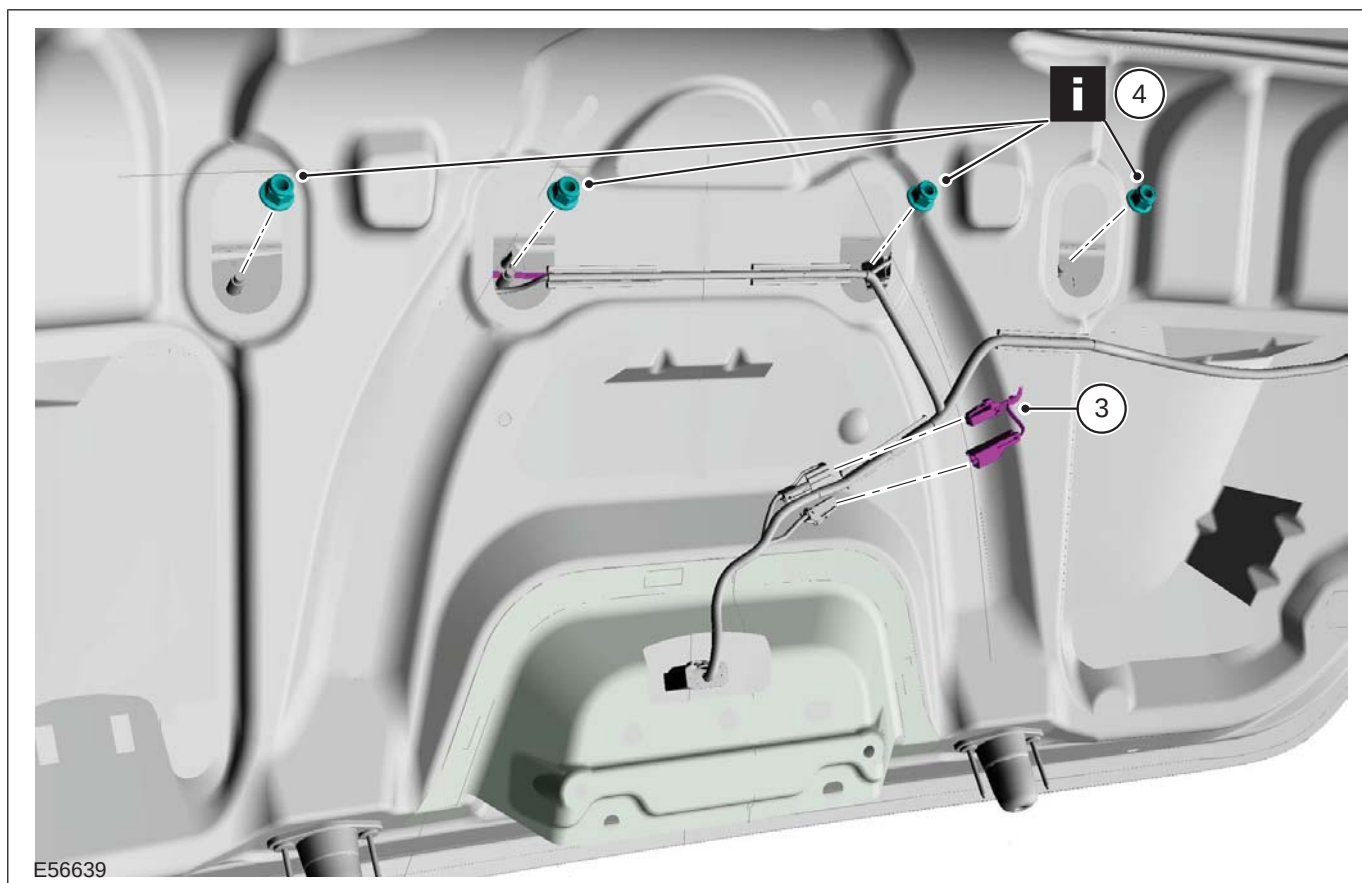
Exterior Liftgate Release Switch — 3-Door/5-Door, Vehicles With:
Keyless Vehicle System

1. Remove the components in the order indicated in the following illustration(s) and table(s).



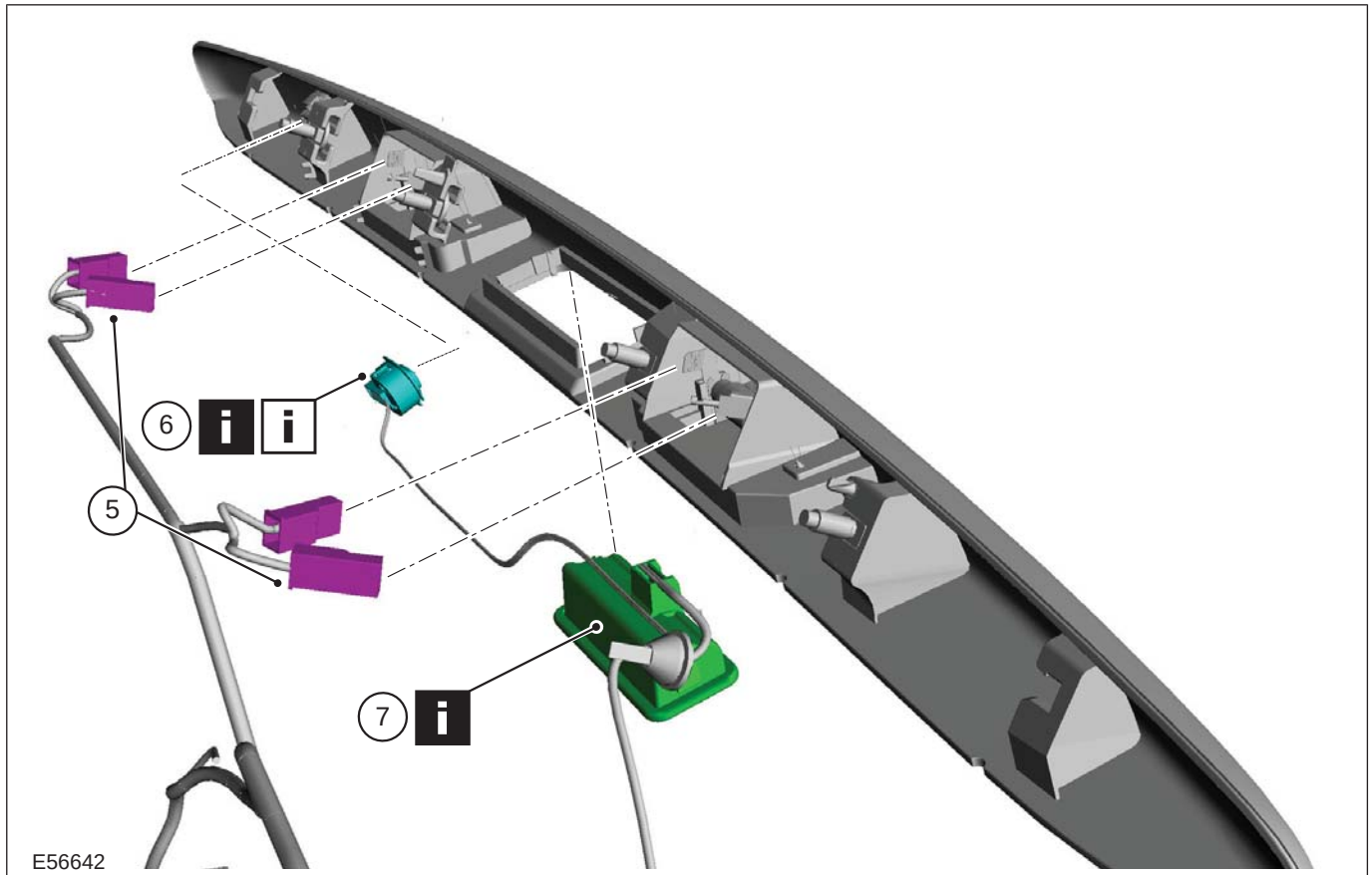
Item	Description
1	Liftgate trim panel
2	Liftgate trim panel retaining clips See Installation Detail

REMOVAL AND INSTALLATION



Item	Description
3	Exterior liftgate release switch electrical connectors
4	Licence plate illumination panel retaining nuts See Removal Detail

REMOVAL AND INSTALLATION



Item	Description
5	Licence plate illumination electrical connectors
6	Keyless vehicle liftgate lock button See Removal Detail See Installation Detail
7	Exterior liftgate release switch See Removal Detail

2. To install, reverse the removal procedure.

Removal Details

Item 4 Licence plate illumination panel retaining nuts

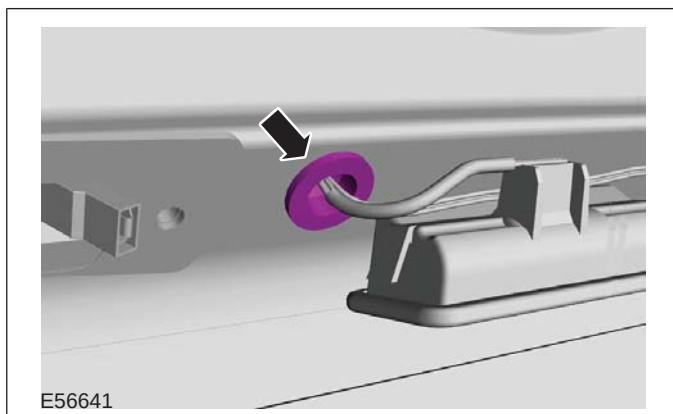
1. **CAUTION:** Make sure that excessive strain is not placed on the licence plate illumination panel electrical connectors and wiring harnesses.

Detach the licence plate illumination panel from the liftgate.



REMOVAL AND INSTALLATION

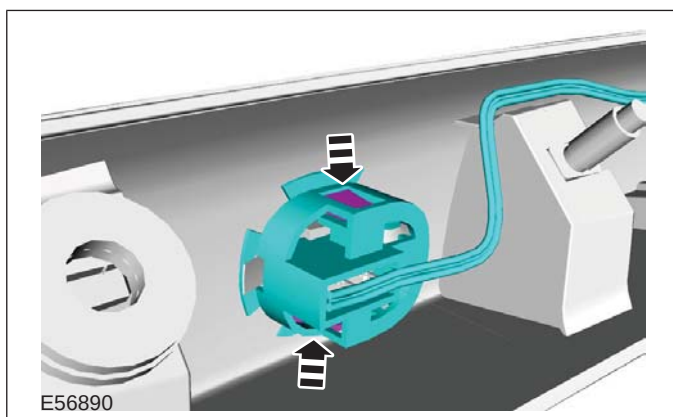
2. Detach the exterior liftgate release switch wiring harness grommet from the liftgate.



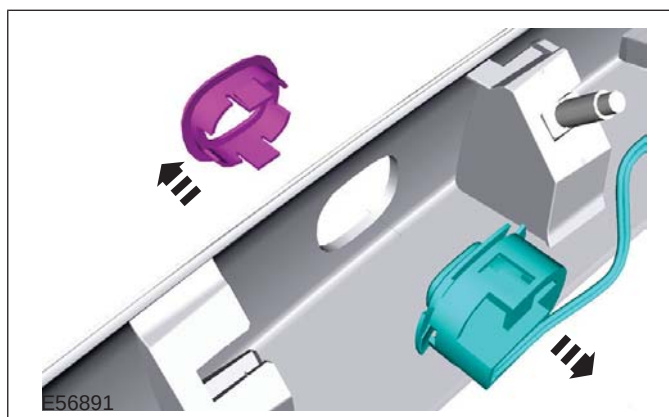
Item 6 Keyless vehicle liftgate lock button

1. **NOTE:** Make a note of the routing of the keyless vehicle liftgate lock button wiring harness.

Detach the keyless vehicle liftgate lock button from the keyless vehicle liftgate lock button retainer.

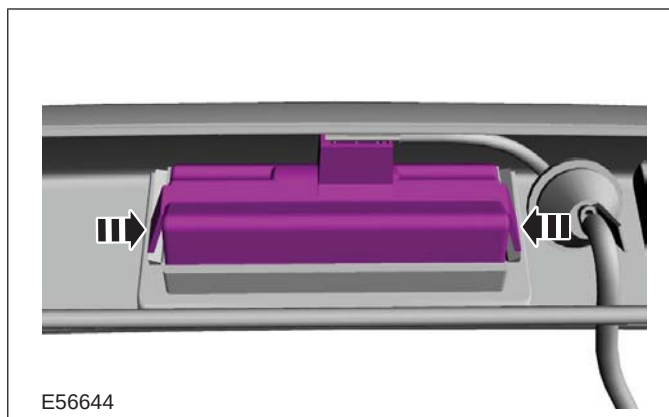


2. Remove the keyless vehicle liftgate lock button and keyless vehicle liftgate lock button retainer from the licence plate illumination panel.



Item 7 Exterior liftgate release switch

1. Press the clips and remove the exterior liftgate release switch from the licence plate illumination panel.



Installation Details

Item 6 Keyless vehicle liftgate lock button

- CAUTION:** Make sure the routing of the keyless vehicle liftgate lock button wiring harness is the same as when removed. Failure to follow this instruction may result in damage to the wiring harness.

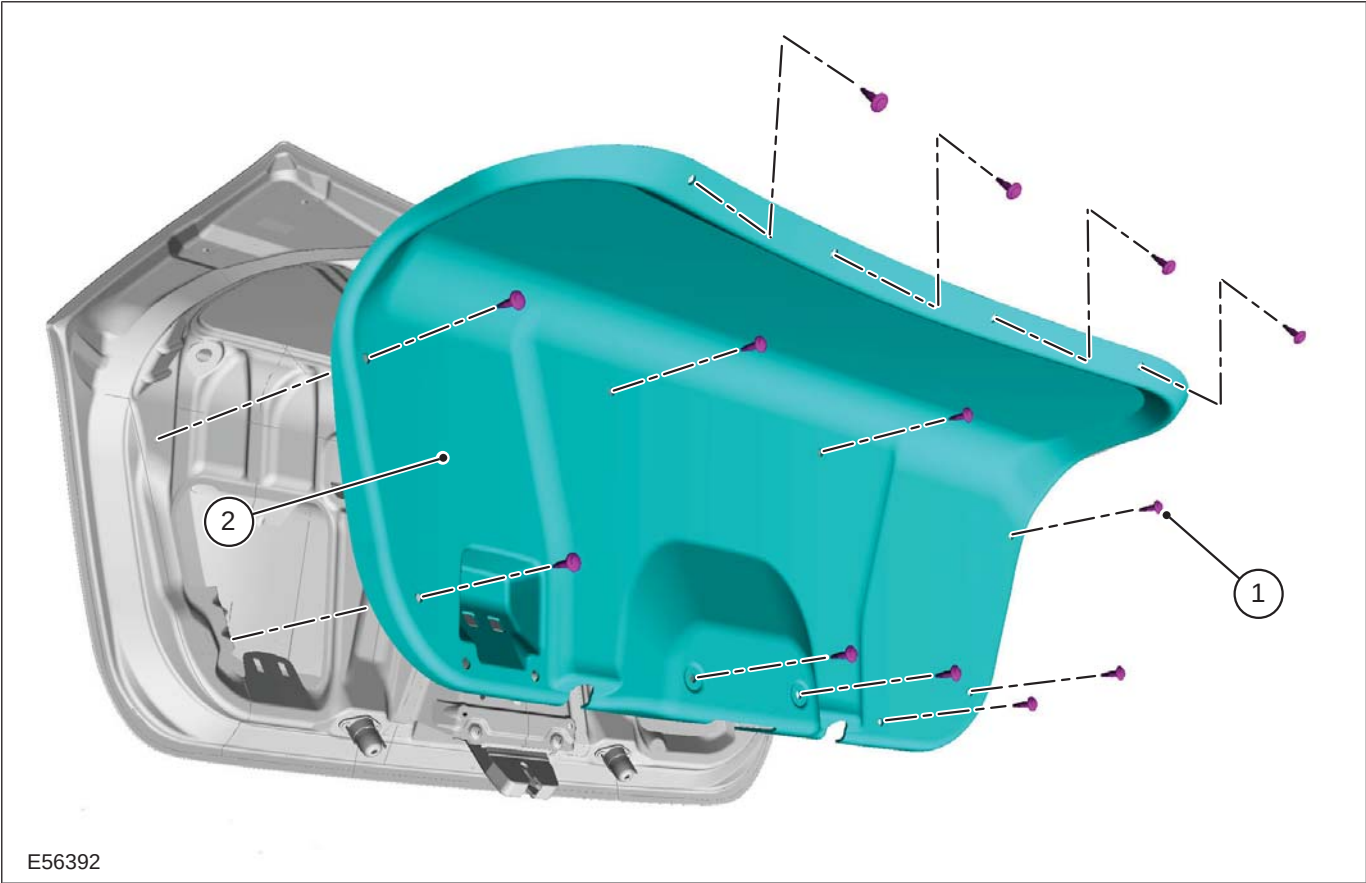
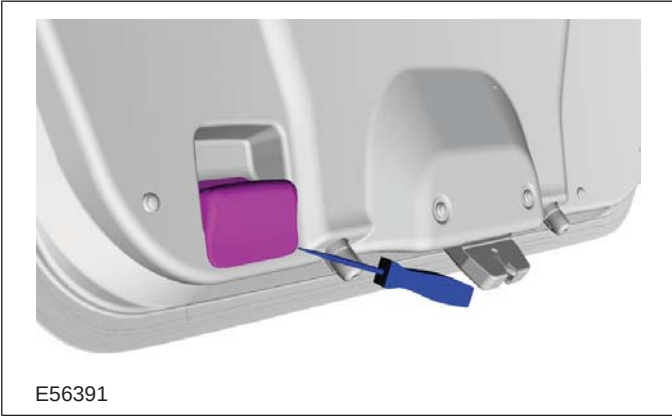
Item 2 Liftgate trim panel retaining clips

1. Install the liftgate trim panel retaining clips to the liftgate trim panel before installation to the liftgate.

REMOVAL AND INSTALLATION

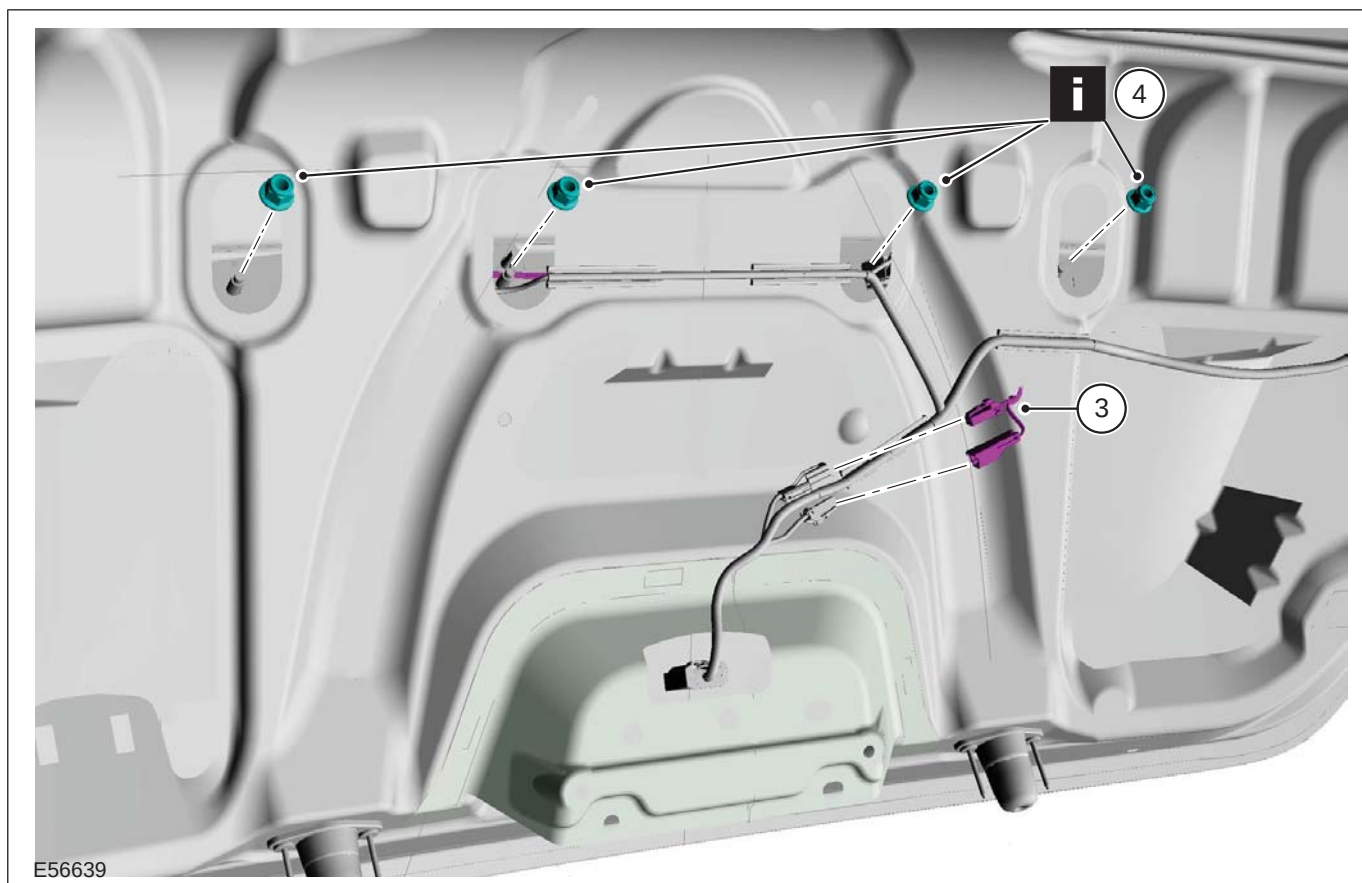
Exterior Luggage Compartment Lid Release Switch

1. Using a suitable flat blade screwdriver, remove the luggage compartment lid trim panel handle from the luggage compartment lid trim panel.
2. Remove the components in the order indicated in the following illustration(s) and table(s).



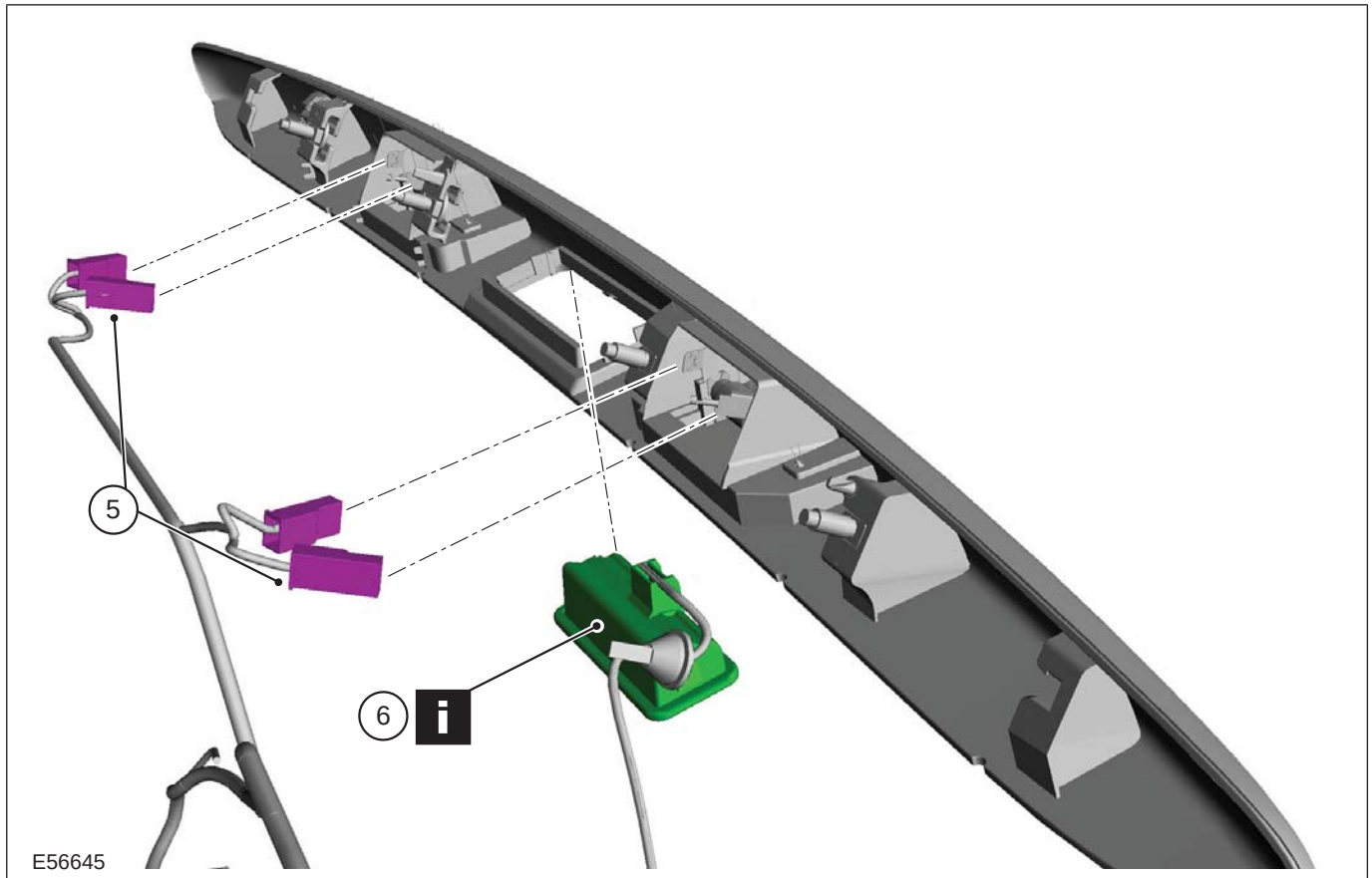
Item	Description
1	Luggage compartment lid trim panel retaining clips
2	Luggage compartment lid trim panel

REMOVAL AND INSTALLATION



Item	Description
3	Exterior luggage compartment lid release switch electrical connectors
4	Licence plate illumination panel retaining nuts See Removal Detail

REMOVAL AND INSTALLATION



Item	Description
5	Licence plate illumination panel electrical connectors
6	Exterior luggage compartment lid release switch See Removal Detail

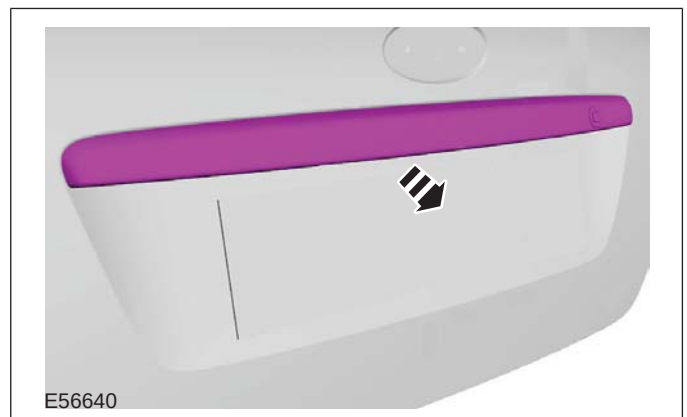
3. To install, reverse the removal procedure.

Removal Details

Item 4 Licence plate illumination panel retaining nuts

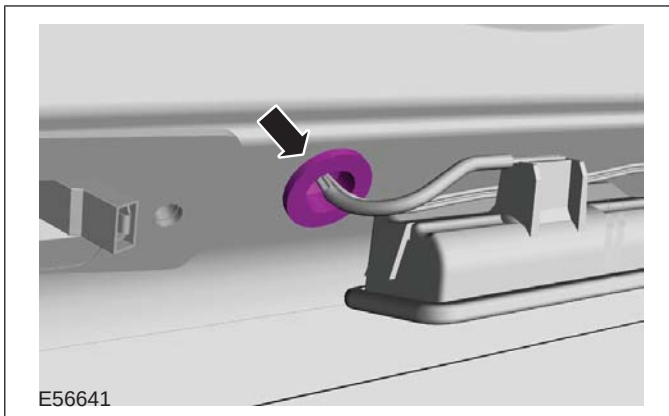
1. **CAUTION:** Make sure that excessive strain is not placed on the licence plate illumination panel electrical connectors and wiring harnesses.

Detach the licence plate illumination panel from the luggage compartment lid.

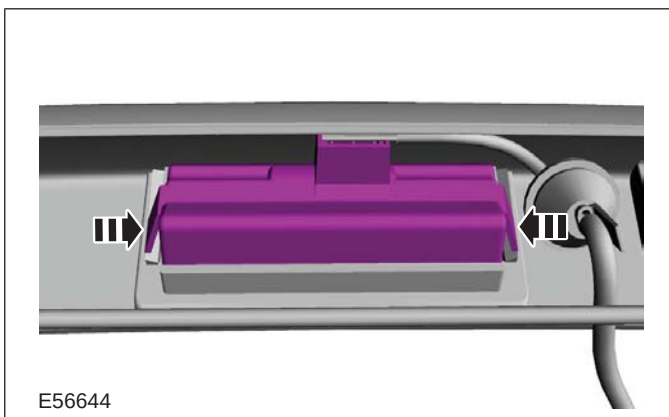


REMOVAL AND INSTALLATION

2. Detach the exterior luggage compartment lid release switch wiring harness grommet from the luggage compartment lid.

**Item 6 Exterior luggage compartment lid release switch**

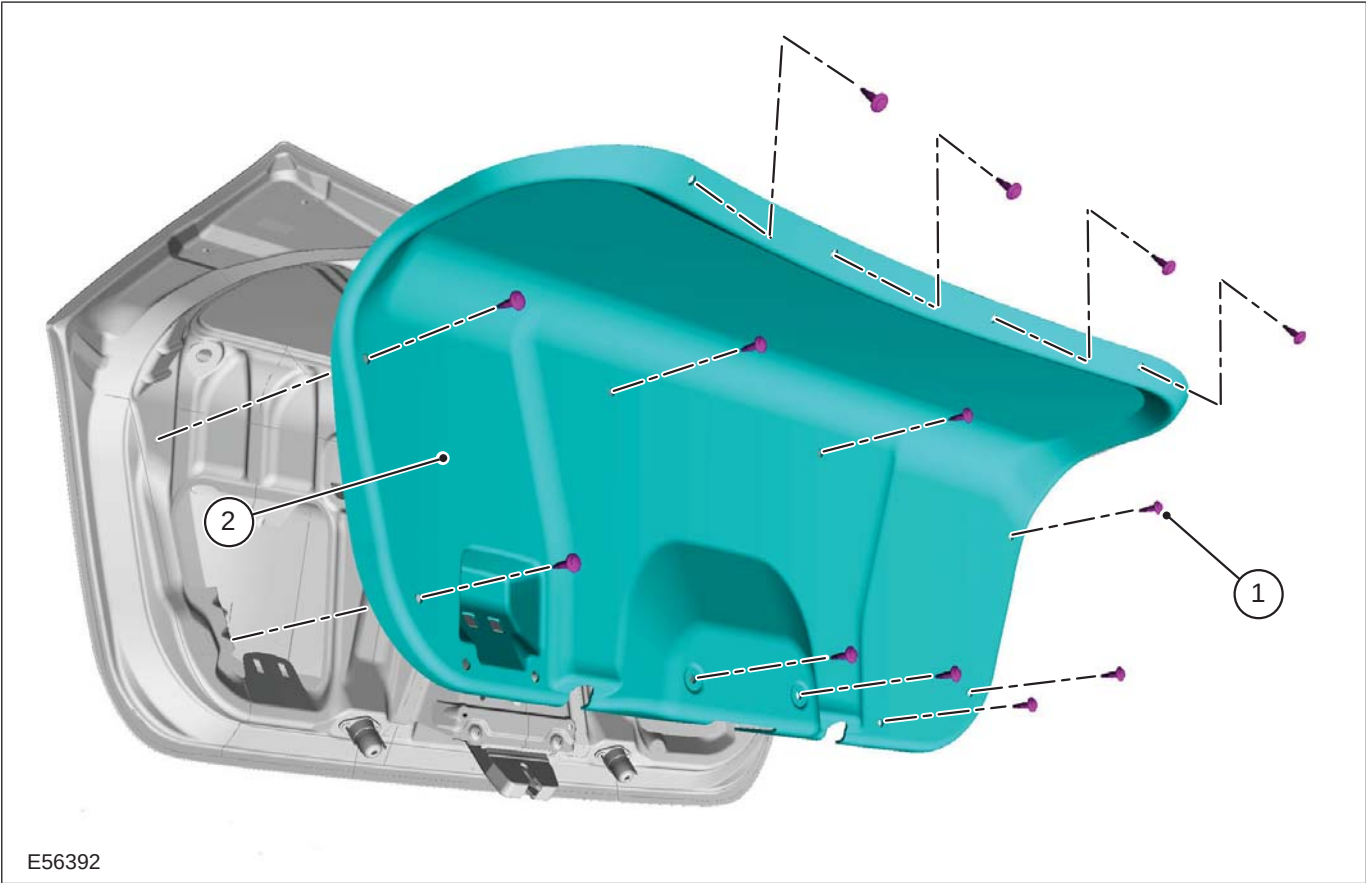
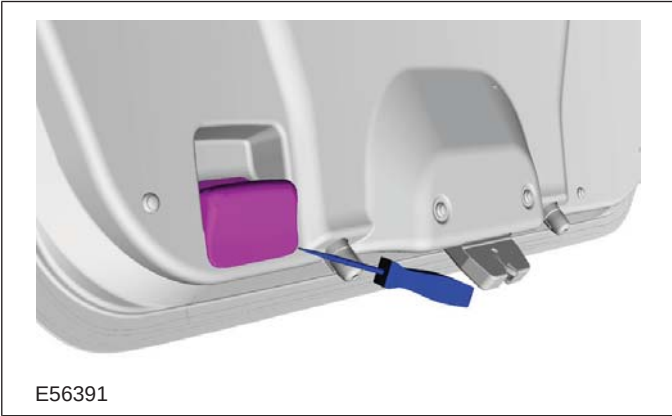
1. Press the clips and remove the luggage compartment lid release switch from the licence plate illumination panel.



REMOVAL AND INSTALLATION

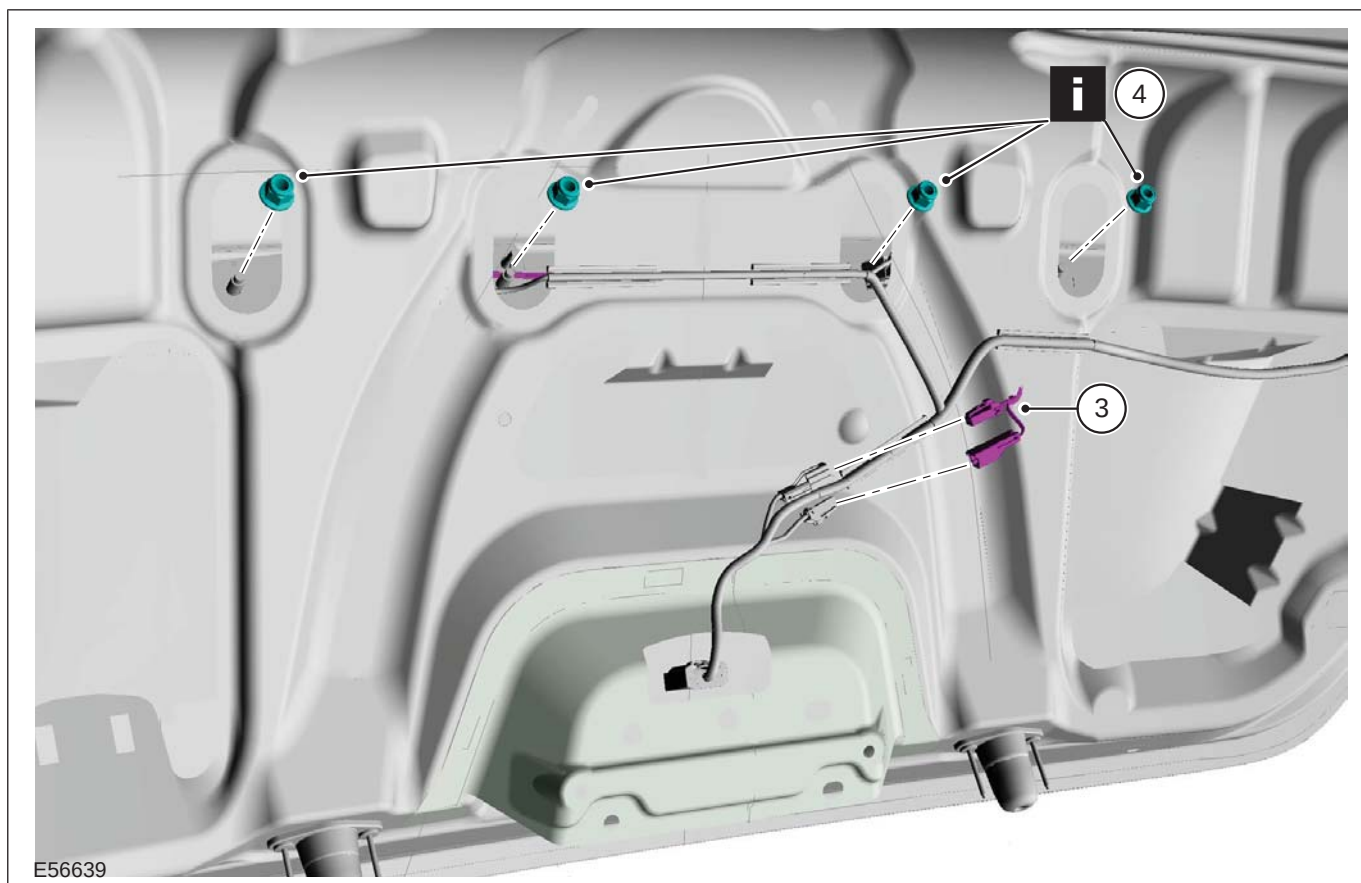
Exterior Luggage Compartment Lid Release Switch — Vehicles With: Keyless Vehicle System

1. Using a suitable flat blade screwdriver, remove the luggage compartment lid trim panel handle from the luggage compartment lid trim panel.
2. Remove the components in the order indicated in the following illustration(s) and table(s).



Item	Description
1	Luggage compartment lid trim panel retaining clips
2	Luggage compartment lid trim panel

REMOVAL AND INSTALLATION



Item	Description
3	Exterior luggage compartment lid release switch electrical connectors
4	Licence plate illumination panel retaining nuts See Removal Detail

3. To install, reverse the removal procedure.

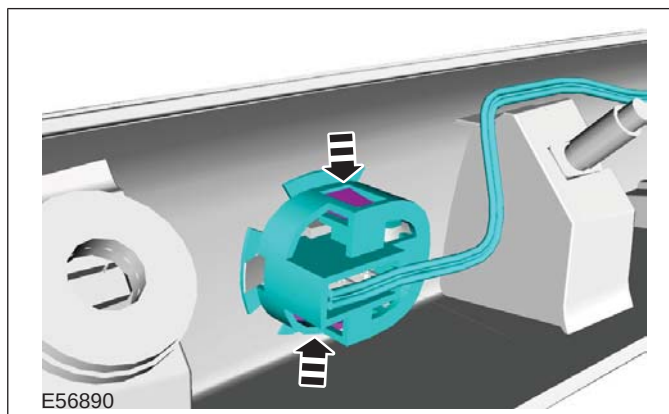
G458703en

REMOVAL AND INSTALLATION

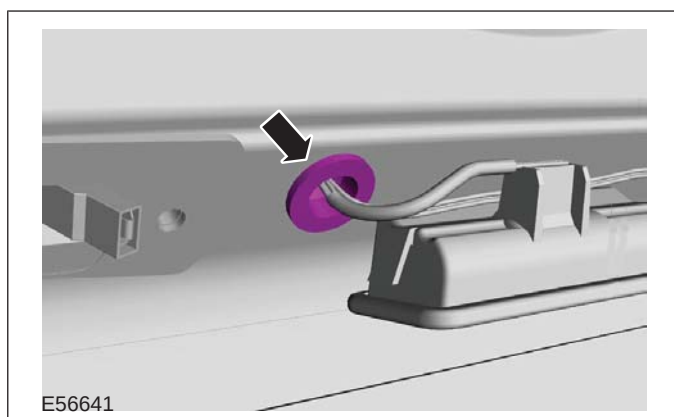
Detach the licence plate illumination panel from the luggage compartment lid.



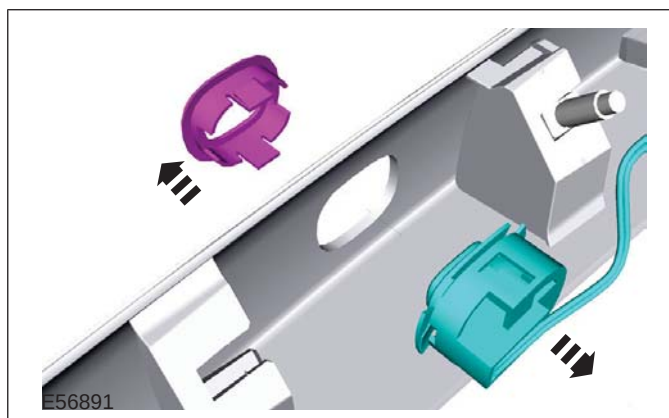
vehicle luggage compartment lock button retainer.



2. Detach the exterior luggage compartment release switch wiring harness grommet from the luggage compartment lid.



2. Remove the keyless vehicle luggage compartment lid lock button and keyless vehicle luggage compartment lid lock button retainer from the licence plate illumination panel.



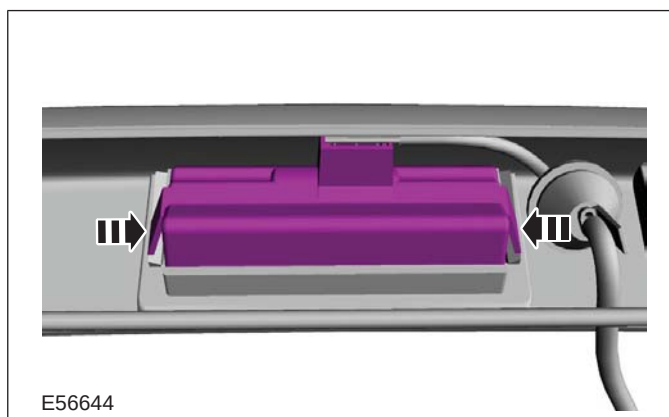
Item 6 Keyless vehicle luggage compartment lid lock button

1. **NOTE:** Make a note of the routing of the keyless vehicle liftgate lock button wiring harness.

Detach the keyless vehicle luggage compartment lid lock button from the keyless

Item 7 Exterior luggage compartment lid release handle

1. Press the clips and remove the luggage compartment lid release switch from the licence plate illumination panel.



REMOVAL AND INSTALLATION**Installation Details**

Item 6 Keyless vehicle luggage compartment lid lock button



CAUTION: Make sure the routing of the keyless vehicle luggage compartment lid lock button wiring harness is the same as when removed. Failure to follow this instruction may result in damage to the wiring harness.

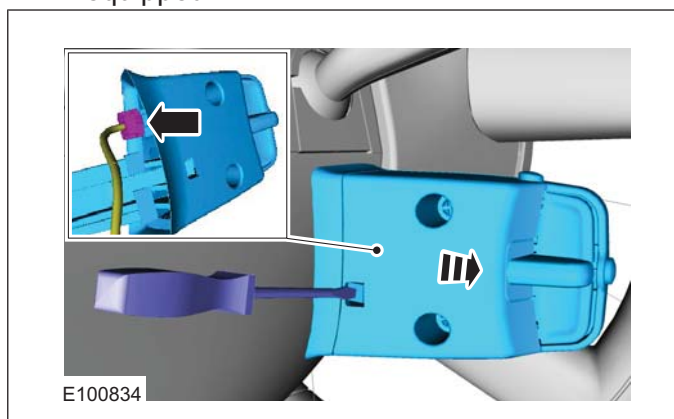
REMOVAL AND INSTALLATION

Ignition Lock Cylinder — Vehicles With: Keyless Vehicle System

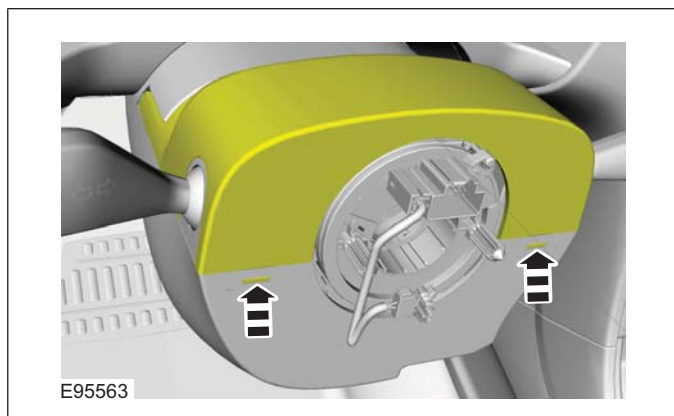
Removal

NOTE: Removal steps in this procedure may contain installation details.

1. If equipped.



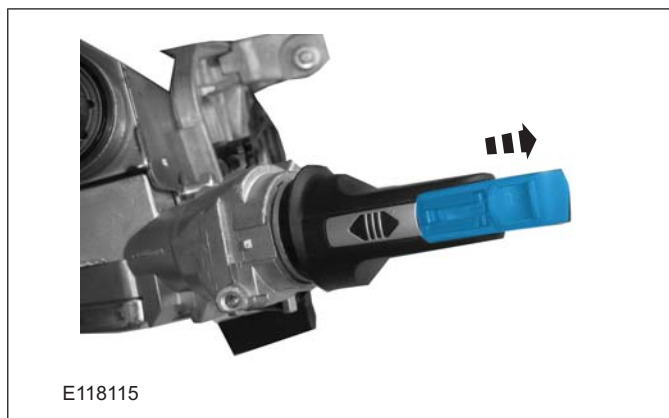
- 2.



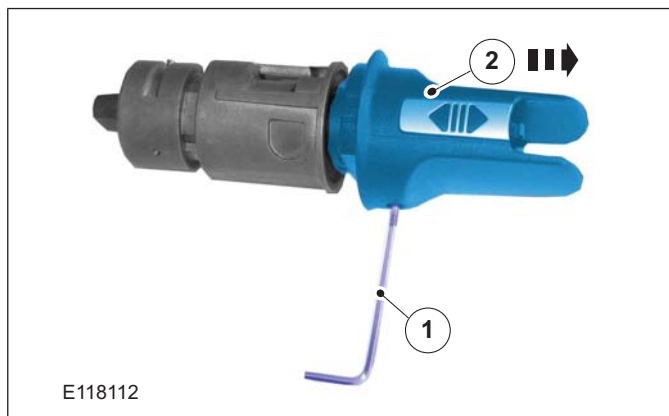
- 3.



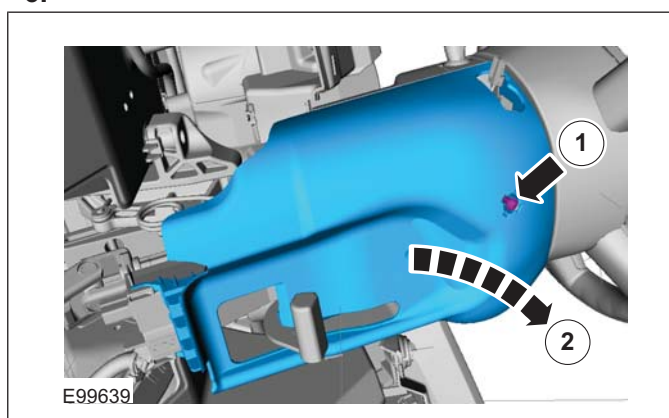
- 4.



- 5.

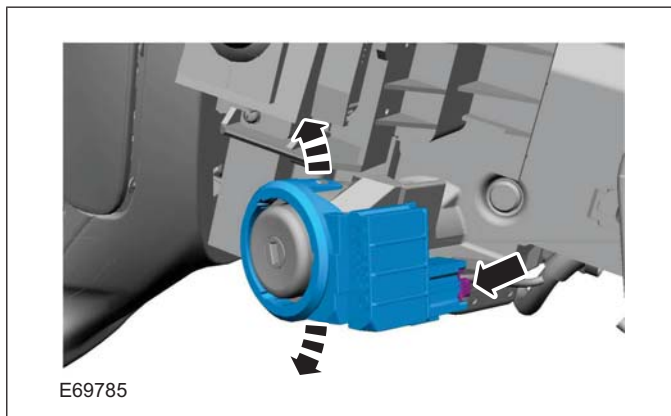


- 6.

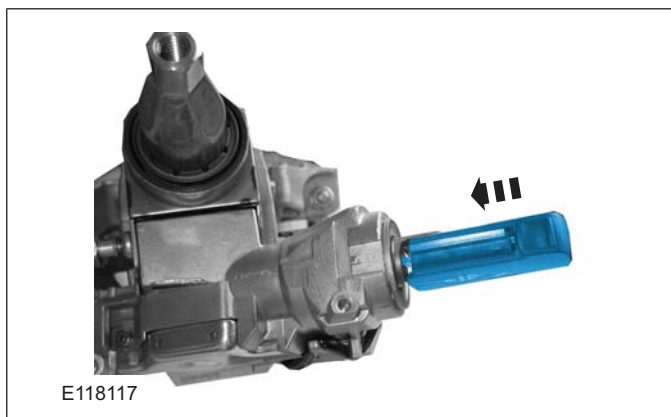


REMOVAL AND INSTALLATION

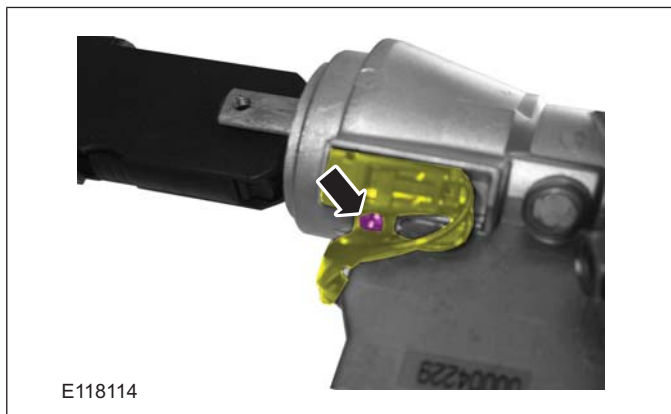
7.



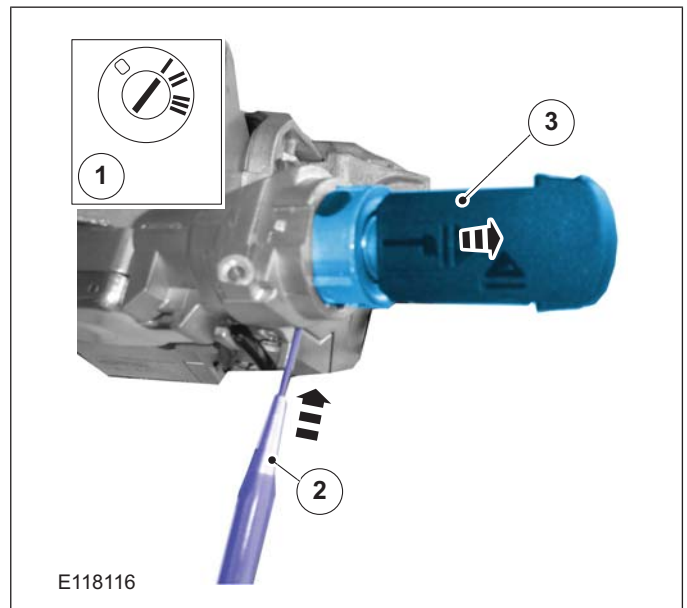
8.



9.



10.



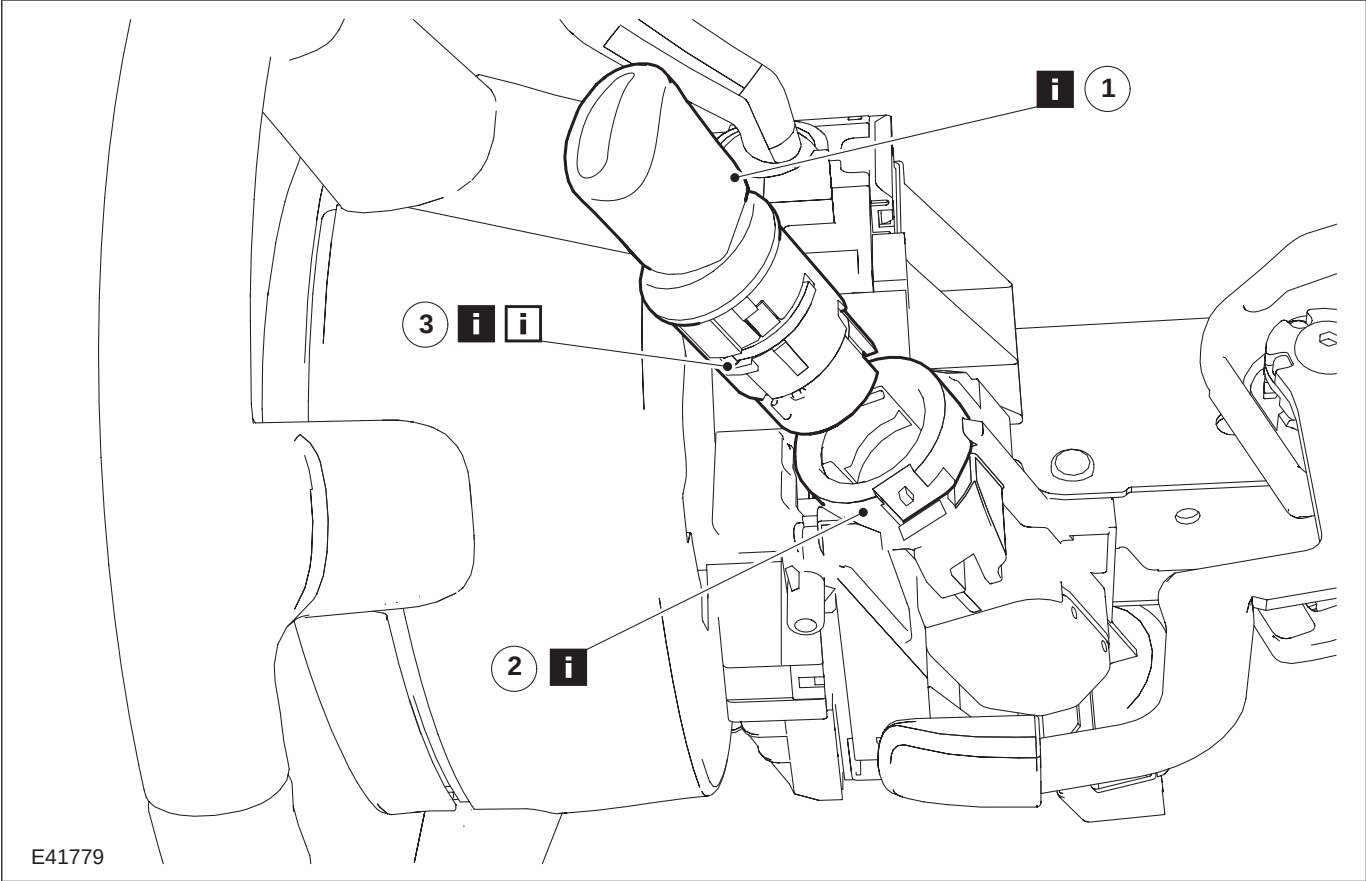
Installation

1. To install, reverse the removal procedure.

REMOVAL AND INSTALLATION

Ignition Lock Cylinder — Vehicles Without: Keyless Vehicle System

1. Remove the passive anti-theft system (PATS) transceiver. For additional information, refer to Section 419-01A [Anti-Theft - Active] / 419-01B [Anti-Theft - Passive].
2. Remove the components in the order indicated in the following illustration(s) and table(s).



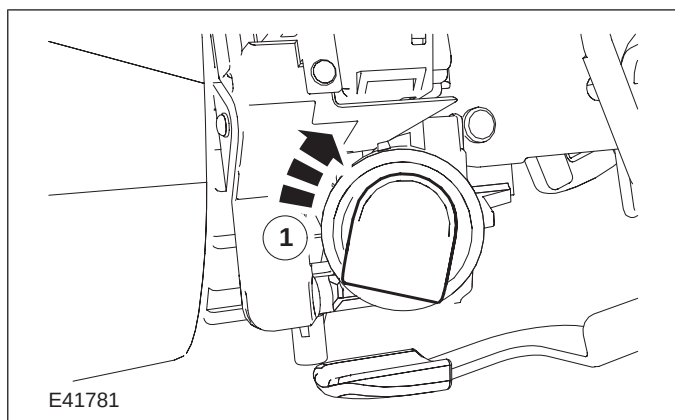
Item	Description
1	Ignition key See Removal Detail
2	Ignition lock cylinder locking button See Removal Detail
3	Ignition lock cylinder See Removal Detail See Installation Detail

3. To install, reverse the removal procedure.

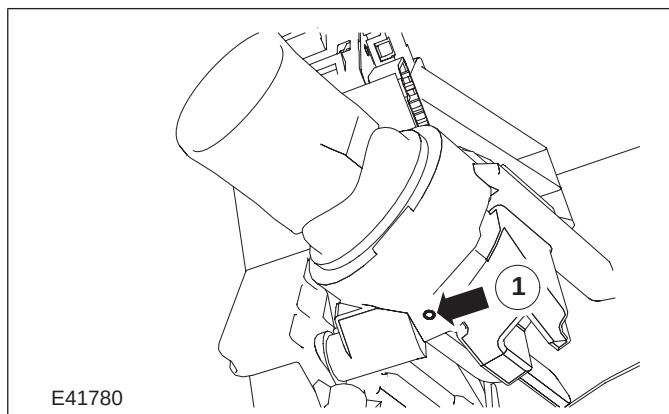
Removal Details

REMOVAL AND INSTALLATION**Item 1 Ignition key**

1. Turn the ignition key to the **ACCESSORY** position.



lock cylinder is released from the steering column.

**Item 2 Ignition lock cylinder locking button**

1. Using a suitable punch press the ignition lock cylinder locking button until the ignition

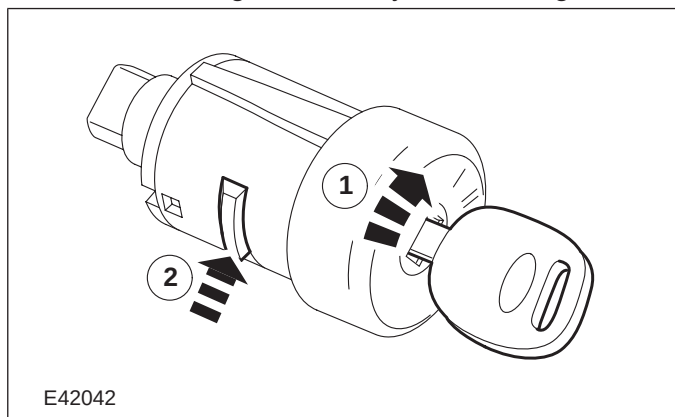
Item 3 Ignition lock cylinder

1. **NOTE:** Make sure the ignition lock cylinder locking button is released before the removal of the ignition lock cylinder.

Remove the ignition lock cylinder and ignition key.

Installation Details**Item 3 Ignition lock cylinder**

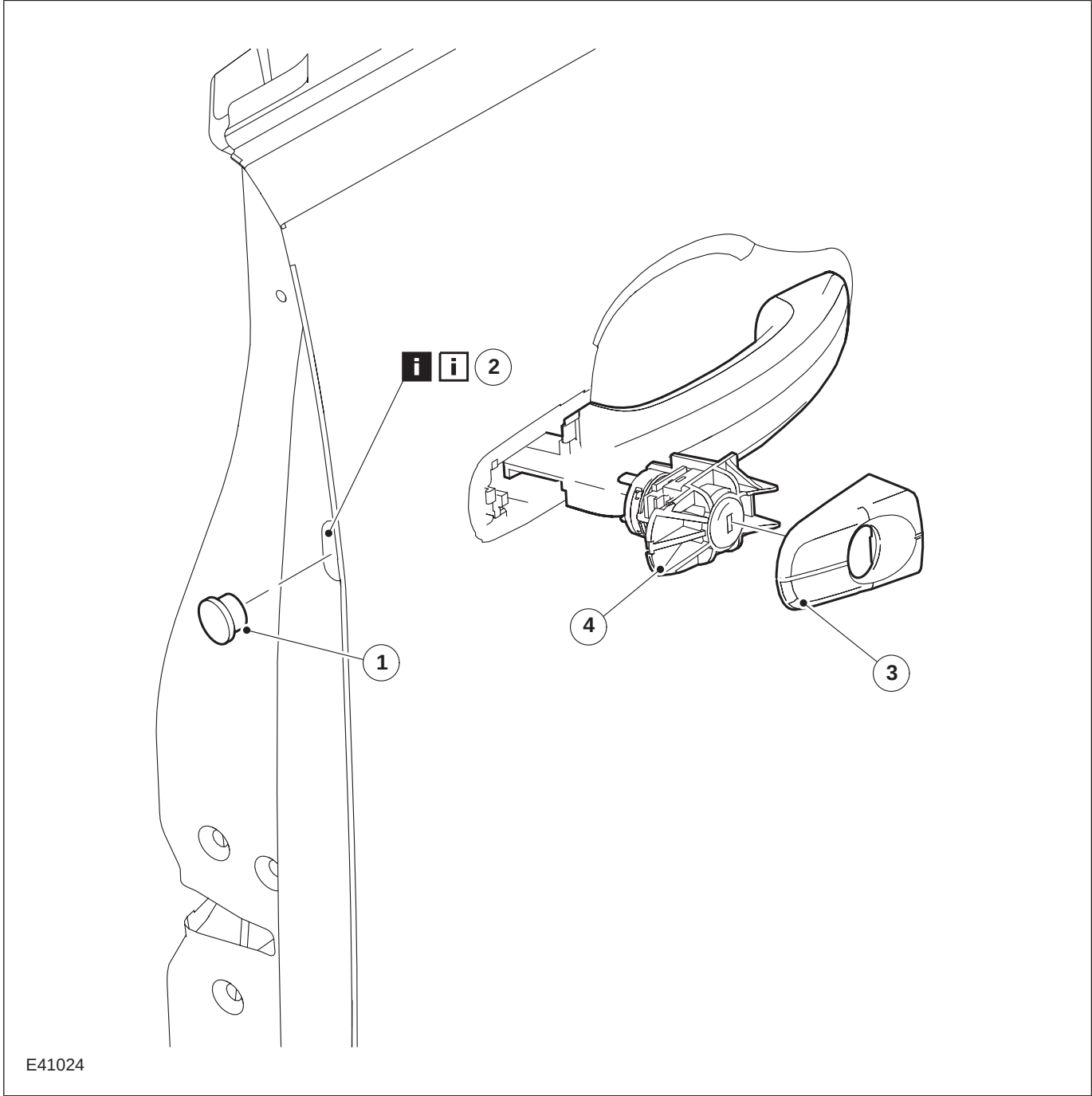
1. Install the ignition lock cylinder.
 1. Turn the ignition key to the **ACCESSORY** position.
 2. Press the ignition lock cylinder locking button.



REMOVAL AND INSTALLATION

Door Lock Cylinder

1. Remove the components in the order indicated in the following illustration(s) and table(s).



E41024

Item	Description
1	Exterior front door handle retaining screw grommet
2	Exterior front door handle retaining screw See Removal Detail See Installation Detail

Item	Description
3	Exterior front door handle trim
4	Door lock cylinder

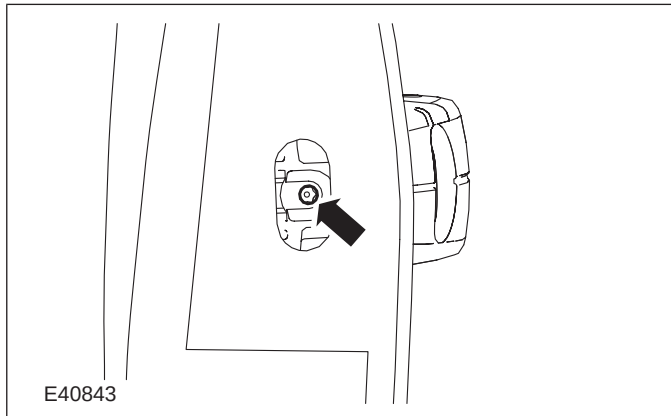
2. To install, reverse the removal procedure.

REMOVAL AND INSTALLATION

Removal Details

Item 2 Exterior front door handle retaining screw

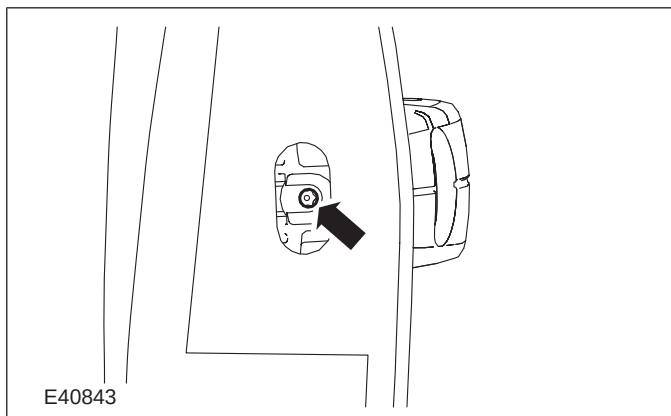
1. Loosen the exterior front door handle retaining screw.



Installation Details

Item 2 Exterior front door handle retaining screw

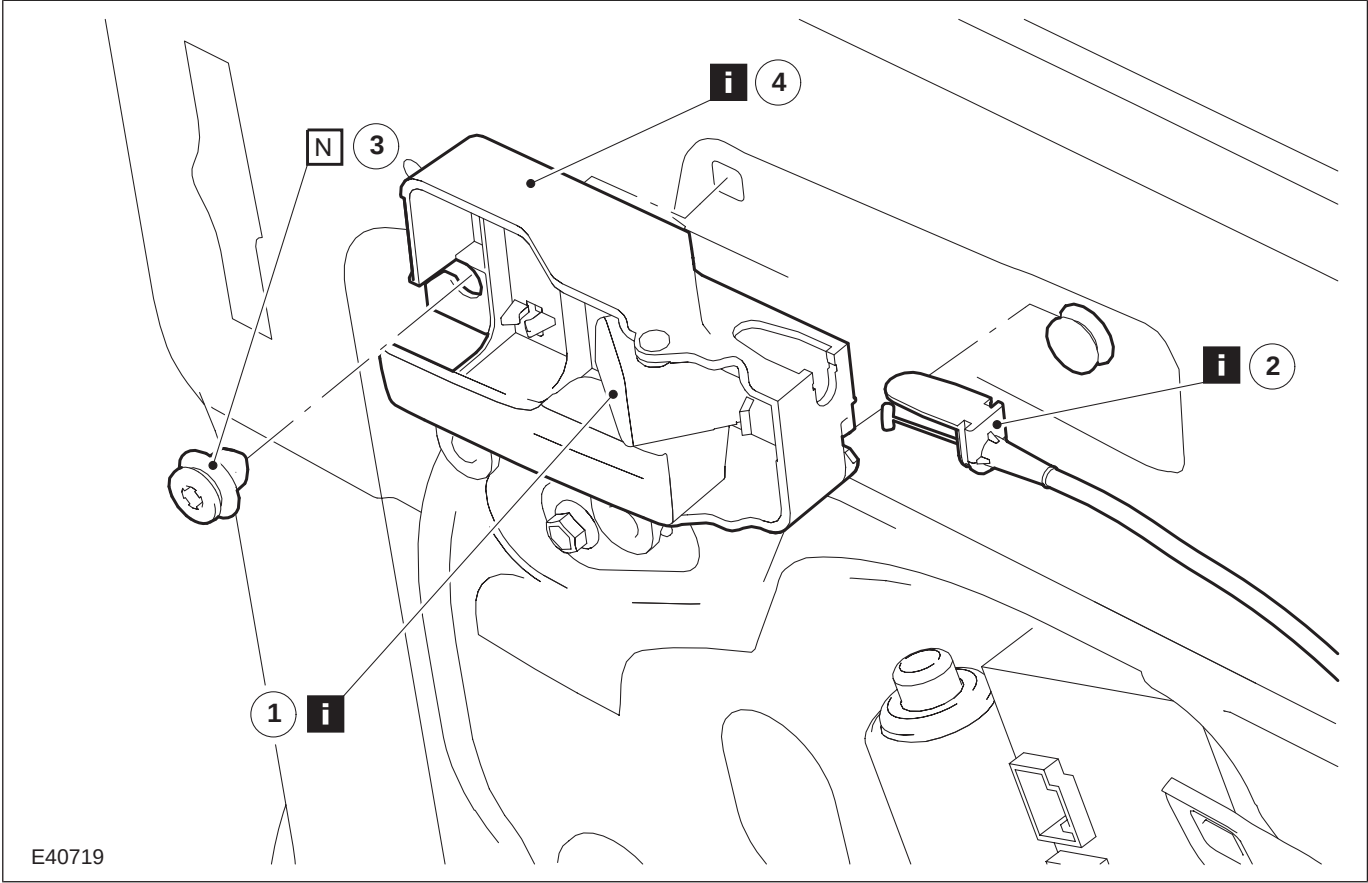
1. Tighten the exterior front door handle retaining screw.



REMOVAL AND INSTALLATION

Door Latch Remote Control

1. Remove the door trim panel. For additional information, refer to Section **501-05 [Interior Trim and Ornamentation]**.
2. Remove the components in the order indicated in the following illustration(s) and table(s).



Item	Description
1	Door latch remote control handle lock See Removal Detail
2	Door latch remote control cable See Removal Detail

Item	Description
3	Door latch remote control retaining clip
4	Door latch remote control See Removal Detail

3. To install, reverse the removal procedure.

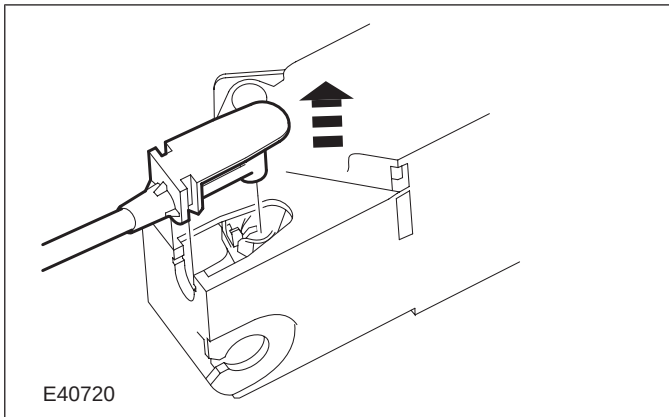
Removal Details

Item 1 Door latch remote control handle lock

1. Operate the door latch remote control handle lock to the lock position.

REMOVAL AND INSTALLATION**Item 2 Door latch remote control cable**

1. Disconnect the door latch remote control cable from the door latch remote control.

**Item 4 Door latch remote control**

1. Slide the door latch remote control away from the door latch remote control retaining clip.

REMOVAL AND INSTALLATION

Keyless Vehicle Module

General Equipment

Worldwide Diagnostic System (WDS)

Removal

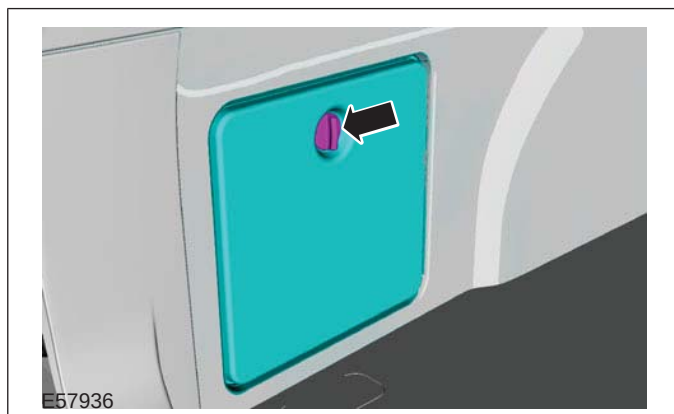
All vehicles

1. Disconnect the battery ground cable.

For additional information, **refer to: Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

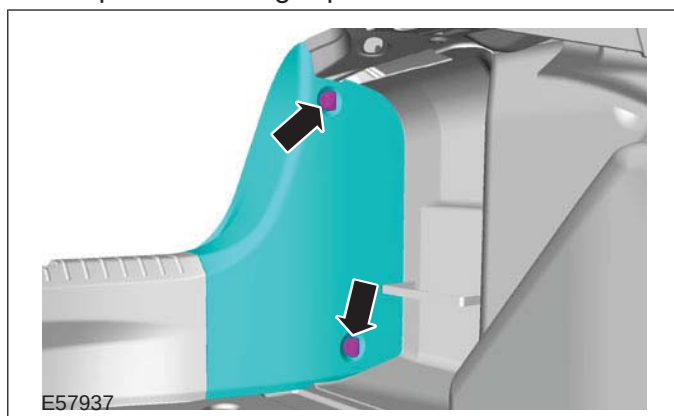
Wagon

2. Open the loadspace storage compartment lid.

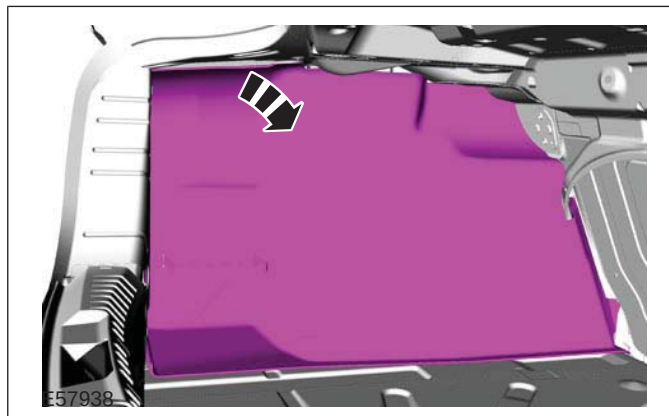


4-door

3. Remove the loadspace floor covering.
4. Remove the rear lamp assembly access trim panel.
 - Remove the rear lamp assembly access trim panel retaining clips.

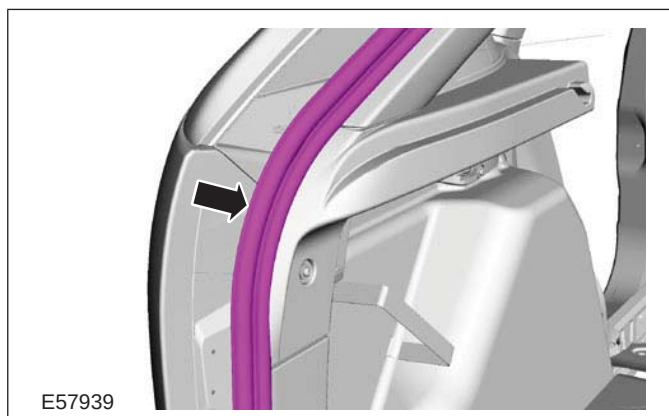


5. Detach the loadspace trim panel to gain access to the keyless vehicle module.



3-door and 5-door

6. Remove the loadspace floor covering.
 7. Tilt the rear seat cushion forward.
 8. Tilt the rear seat backrest forward.
 9. Remove the C-pillar trim.
- For additional information, **refer to: C-Pillar Trim Panel - 4-Door/5-Door** (501-05 Interior Trim and Ornamentation, Removal and Installation).
10. Detach the liftgate opening weather strip.

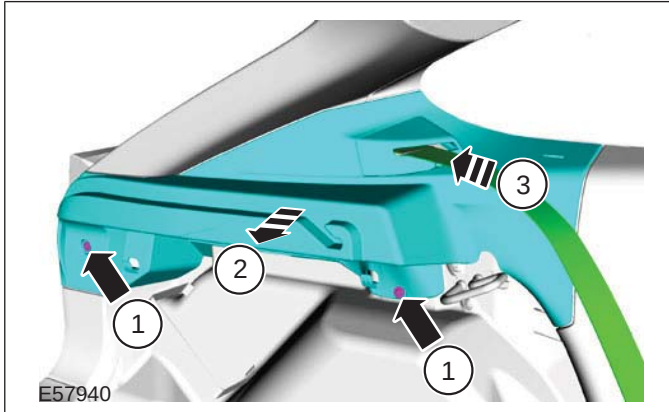


11. Detach the parcel shelf support trim panel. (3 door vehicle shown, 5 door vehicle similar).

1. Remove the parcel shelf support trim panel retaining screws.
2. Pull the parcel shelf support trim panel away from the body panel to disengage the locking clips between the D-pillar trim panel and the parcel shelf support trim panel.

REMOVAL AND INSTALLATION

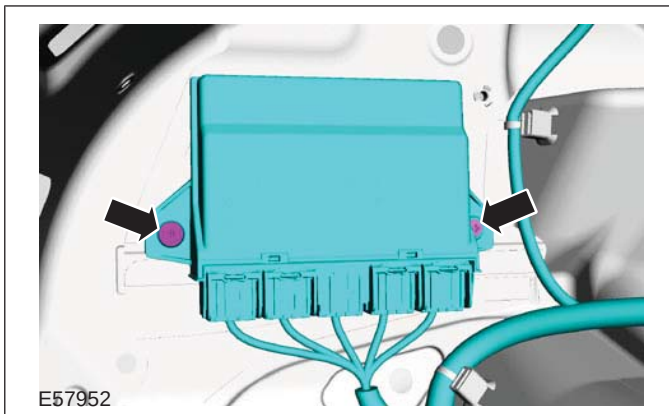
3. Feed the rear seat safety belt through the parcel shelf support trim panel and position the parcel shelf trim panel to one side.



All vehicles

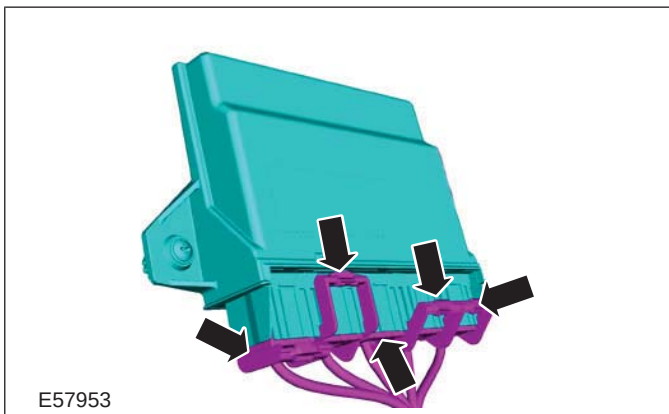
12. Detach the keyless vehicle module. (3 door vehicle shown, 5 door, 4 door and wagon vehicles similar).

- Remove the keyless vehicle module retaining screws.



13. Remove the keyless vehicle module.

- Disconnect the keyless vehicle module electrical connectors.



Installation

All vehicles

1. To install, reverse the removal procedure.
2. If a new keyless vehicle module is installed, program the new keyless vehicle module using the WDS Program Module routine.
3. If a new keyless vehicle module is installed, initialize the new keyless vehicle module to the central junction box (CJB) and the steering column lock control unit, using the WDS Initialize System routine.
4. If a new keyless vehicle module is installed, teach the minimum required number of keys to the keyless vehicle module, using the WDS Teach Key function.

Vehicles with global closing

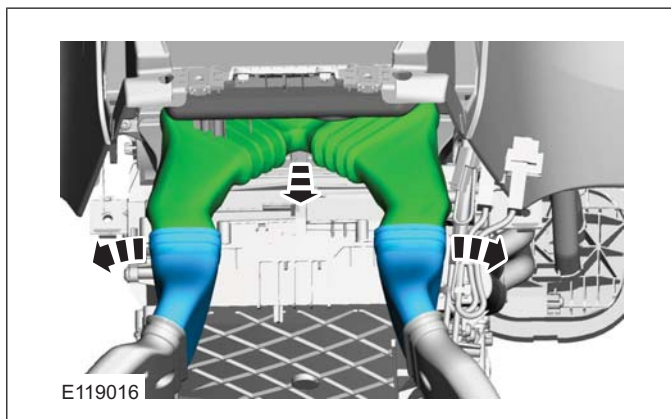
5. Initialize the door window motors.

For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

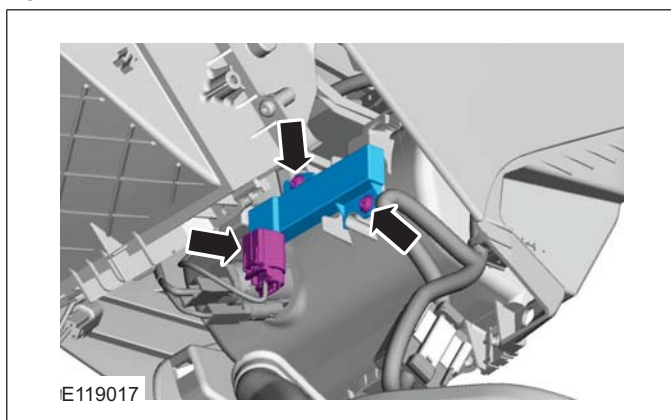
REMOVAL AND INSTALLATION**Keyless Vehicle Front Antenna****Removal**

1. Refer to: Floor Console - Vehicles Built From: 03/2007, Vehicles With: Center Armrest (501-12 Instrument Panel and Console, Removal and Installation).

2.



3.

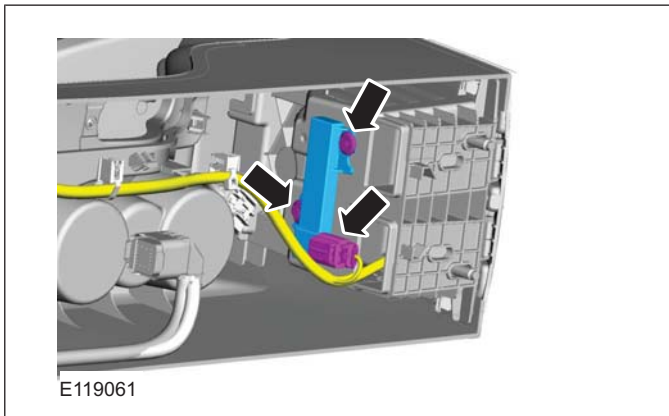
**Installation**

1. To install, reverse the removal procedure.

REMOVAL AND INSTALLATION**Keyless Vehicle Center Antenna****Removal**

1. Refer to: Floor Console - Vehicles Built From: 03/2007, Vehicles With: Center Armrest (501-12 Instrument Panel and Console, Removal and Installation).

2.

**Installation**

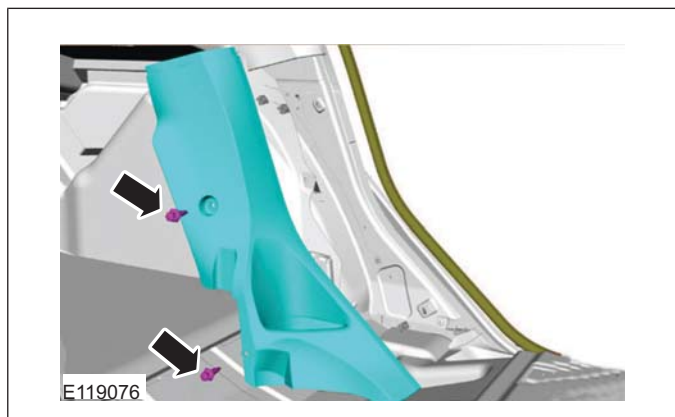
1. To install, reverse the removal procedure.

REMOVAL AND INSTALLATION

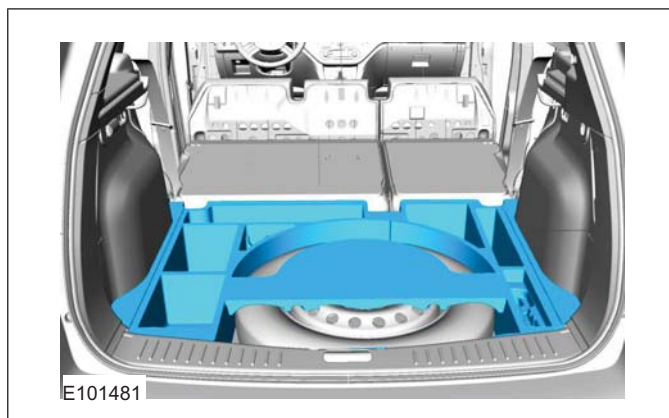
Keyless Vehicle Rear Antenna

Removal

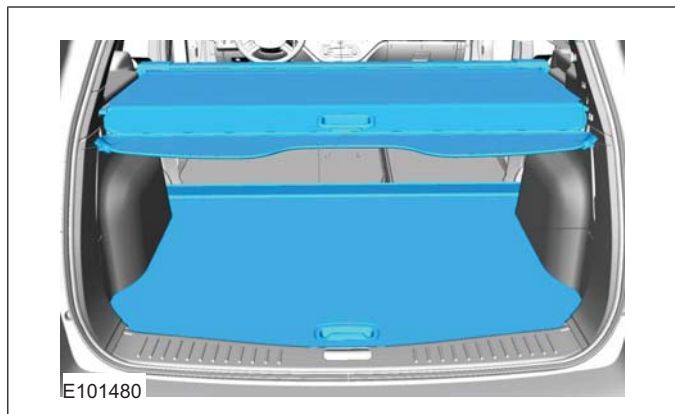
1.



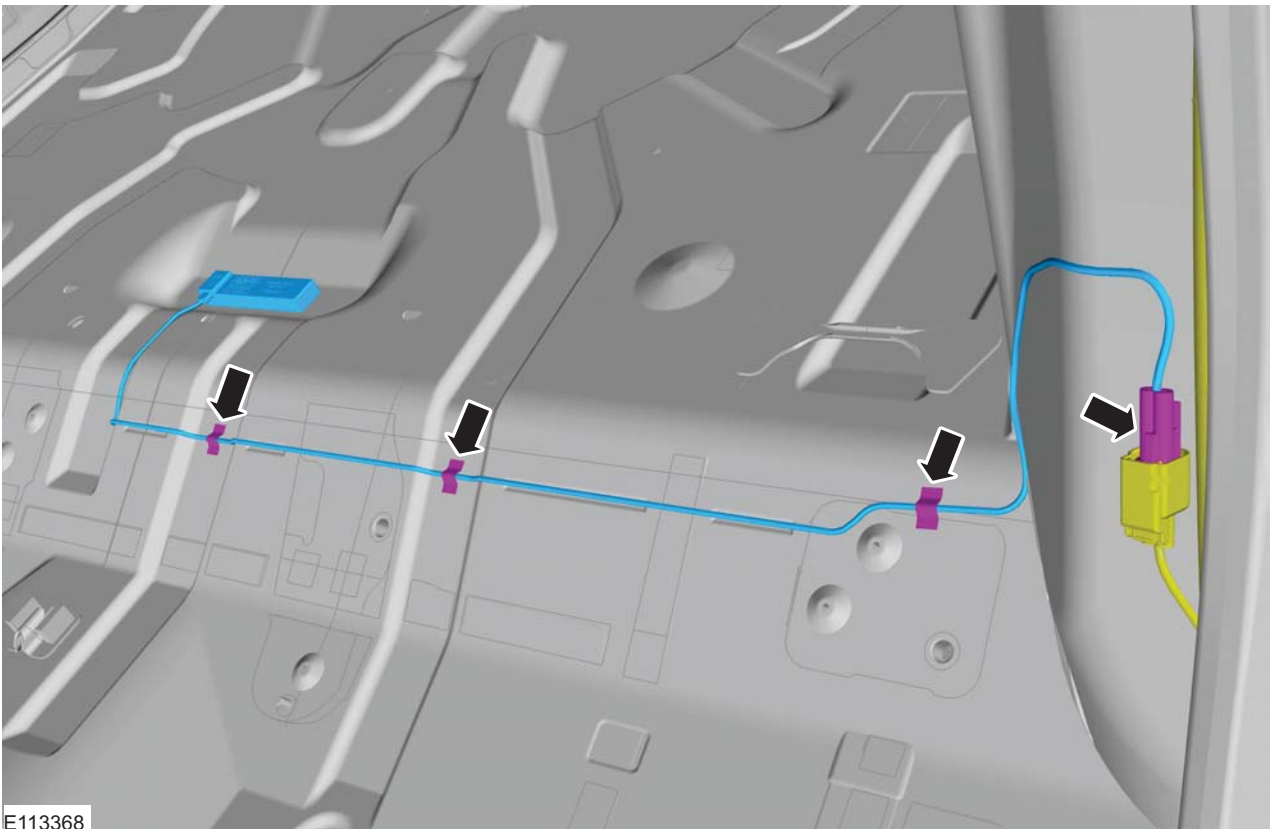
3.



2.



4.

REMOVAL AND INSTALLATION**Installation**

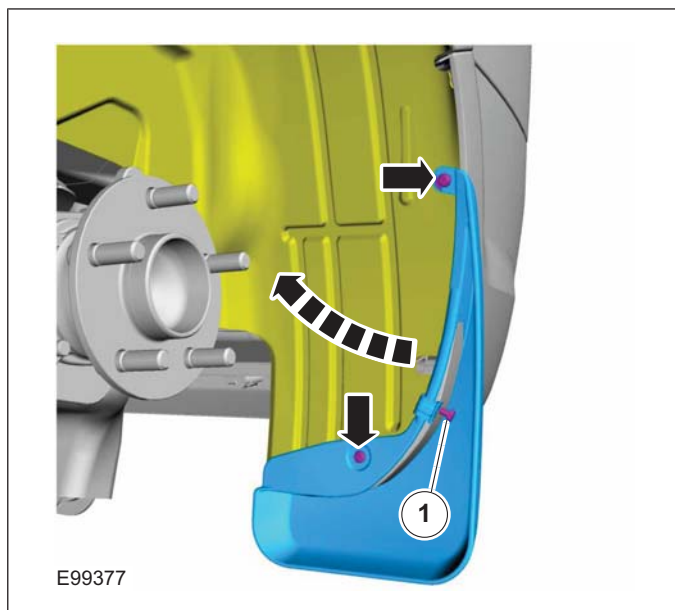
1. To install, reverse the removal procedure.

REMOVAL AND INSTALLATION

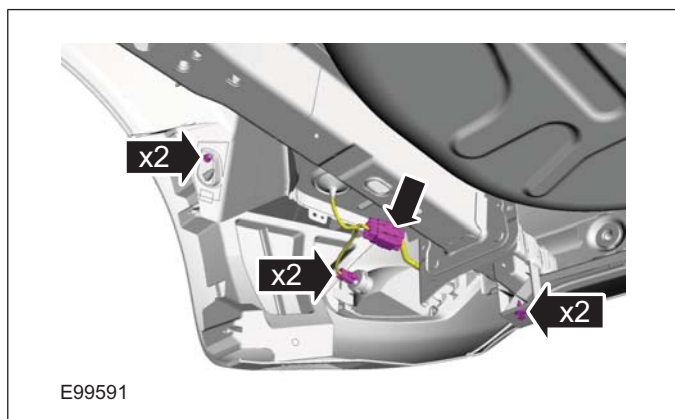
Keyless Vehicle Rear Bumper Antenna

Removal

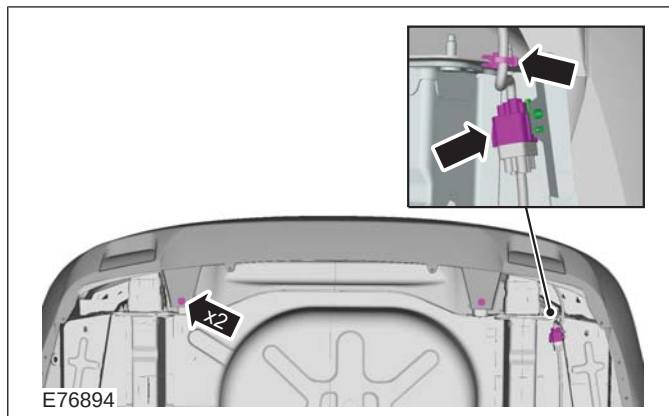
1. **Refer to: Jacking** (100-02 Jacking and Lifting, Description and Operation).
- Refer to: Lifting** (100-02 Jacking and Lifting, Description and Operation).
- 2.
3. 1. If equipped.
2. On both sides.



4.

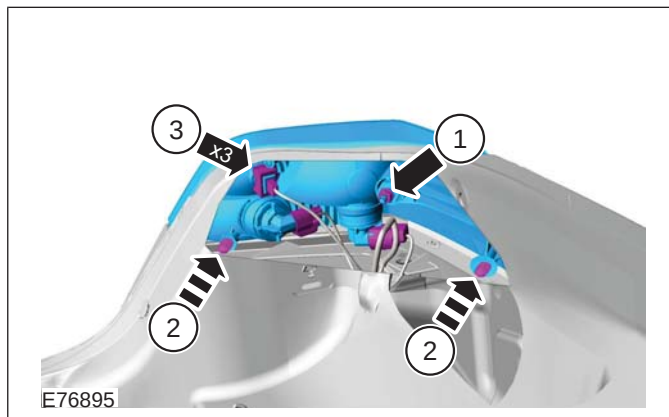


5.



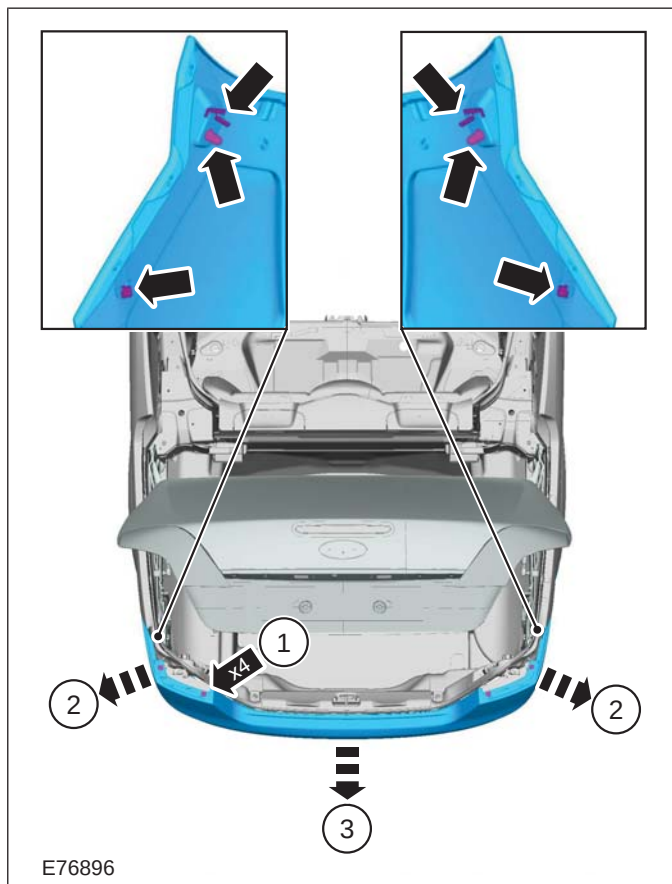
Convertible

6.



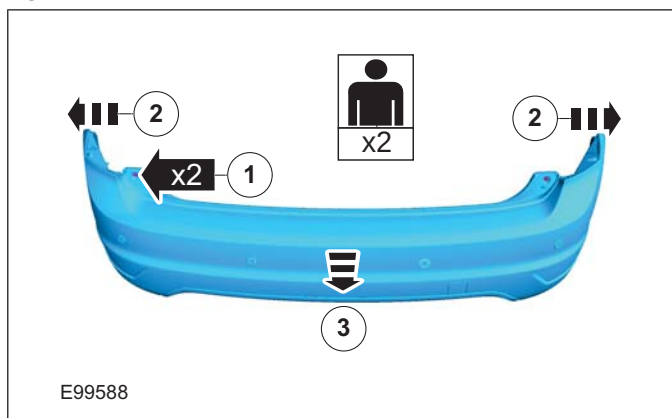
REMOVAL AND INSTALLATION

7. **NOTE:** This step requires the aid of another technician.



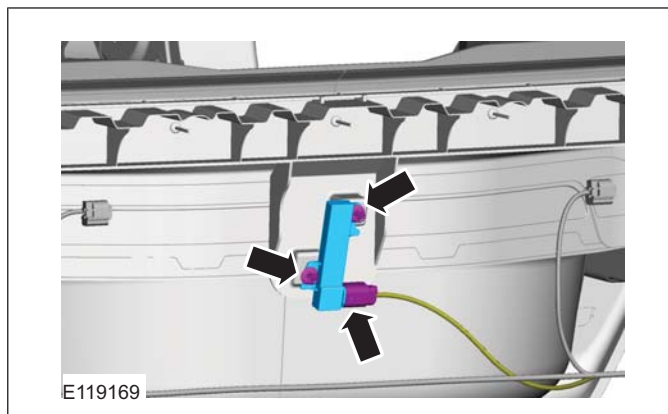
3-door, 4-door and 5-door

8.



All vehicles

9.



Installation

1. To install, reverse the removal procedure.

REMOVAL AND INSTALLATION

Radio Frequency (RF) Receiver

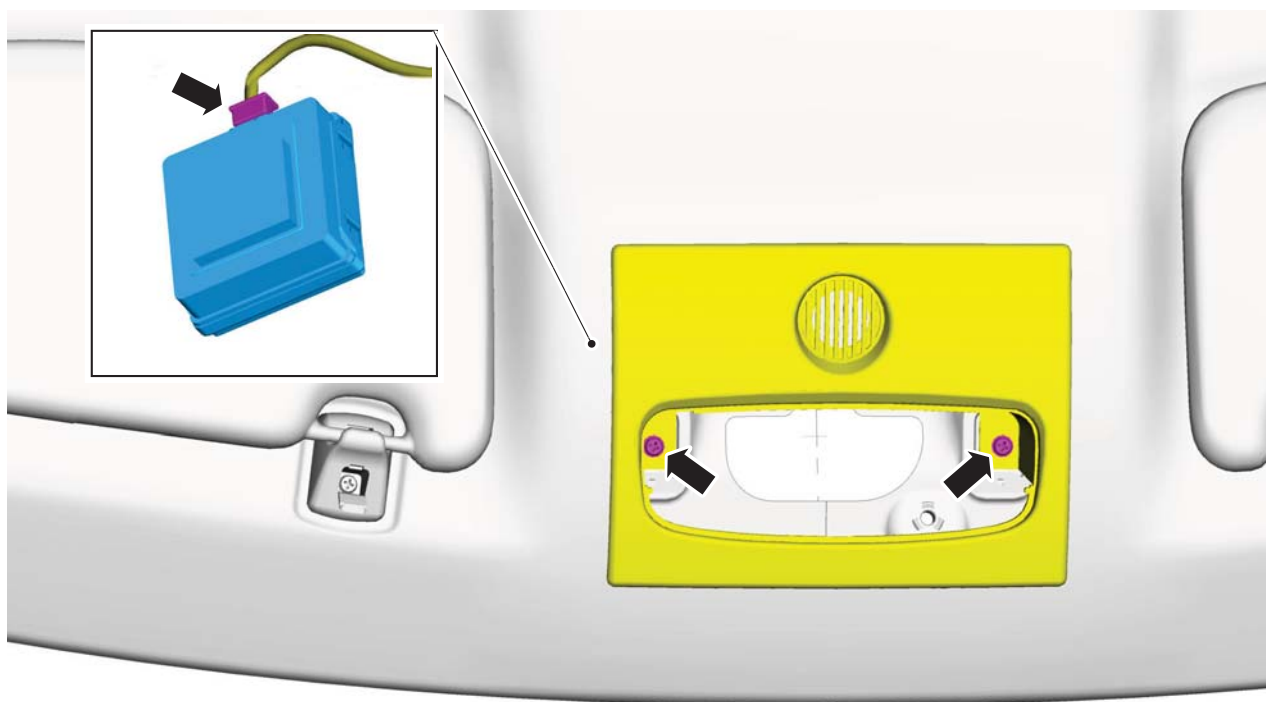
Removal

1.



E119793

2.

REMOVAL AND INSTALLATION

E119794

Installation

1. To install, reverse the removal procedure.

DISASSEMBLY AND ASSEMBLY

Hood Lock Cylinder

General Equipment

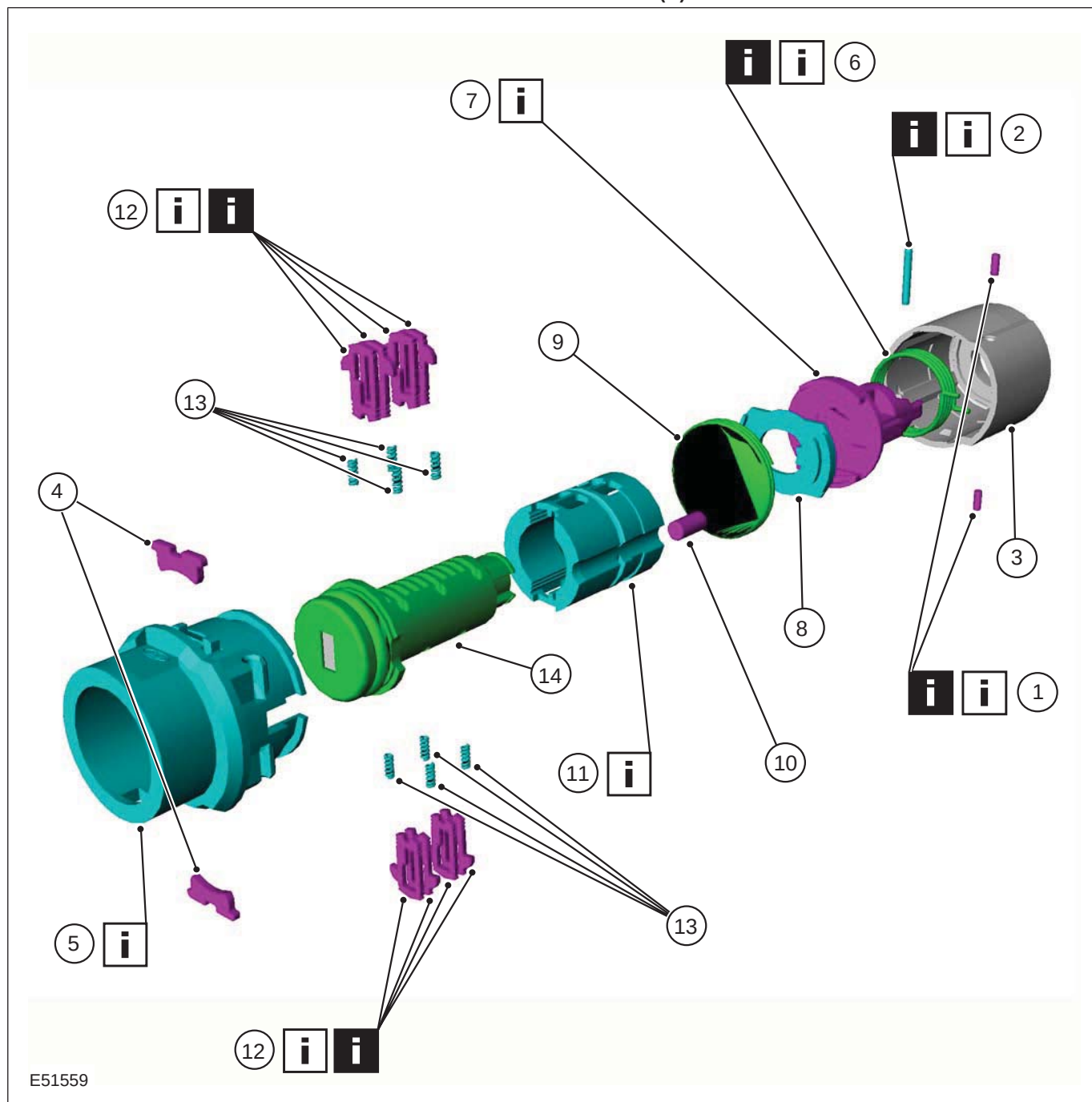
Punch

NOTE: To obtain the key code, please use either the driver door lock cylinder, ignition lock cylinder or tailgate lock cylinder. The hood lock cannot be used, because two of the ten tumblers have been removed from the hood lock cylinder.

- 1. Remove the hood lock cylinder.**

For additional information, refer to: **Hood Lock Cylinder** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

- 2. Disassemble the components in the order indicated in the following illustration(s) and table(s).**



DISASSEMBLY AND ASSEMBLY

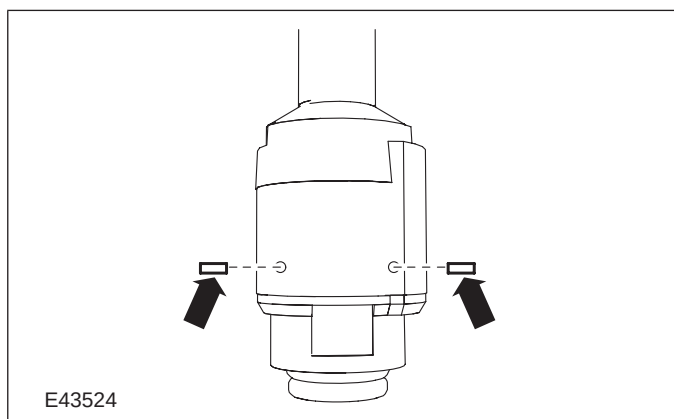
Item	Description
1	Hood lock cylinder locking pins See Disassembly Detail See Assembly Detail
2	Hood lock cylinder locking pin See Disassembly Detail See Assembly Detail
3	Hood lock cylinder housing
4	Hood lock cylinder barrel cover locking clips See Disassembly Detail
5	Hood lock cylinder barrel cover See Assembly Detail
6	Hood lock cylinder return spring See Disassembly Detail See Assembly Detail

Item	Description
7	Hood lock cylinder connecting clip See Assembly Detail
8	Hood lock cylinder washer
9	Hood lock cylinder spring
10	Hood lock cylinder roll pin
11	Hood lock cylinder barrel cover See Disassembly Detail See Assembly Detail
12	Hood lock cylinder barrel tumblers See Disassembly Detail See Assembly Detail
13	Hood lock cylinder barrel tumbler springs
14	Hood lock cylinder barrel

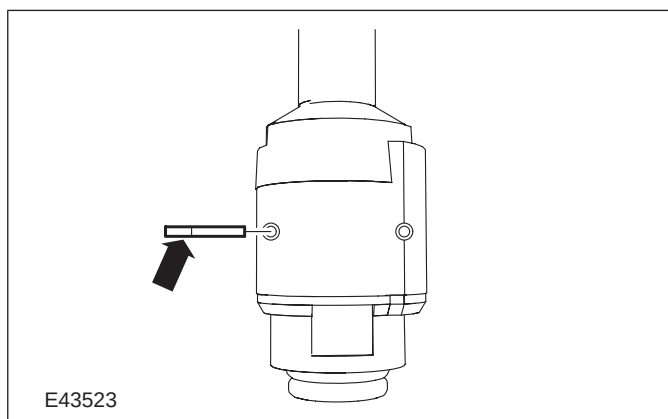
3. To assemble, reverse the disassembly procedure.

Disassembly Details**Item 1 Hood lock cylinder locking pins**

- Using a suitable **Punch**, remove the hood lock cylinder locking pins.

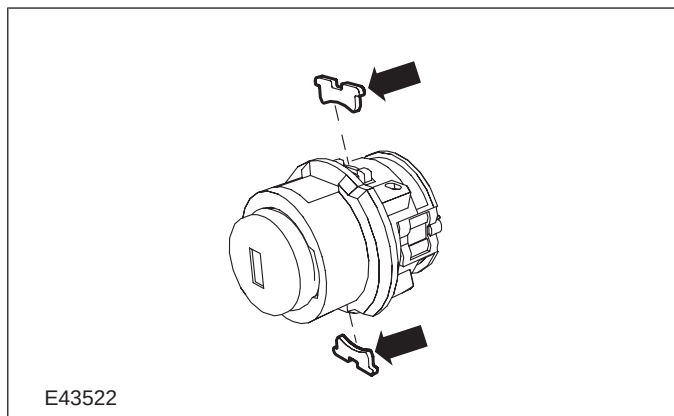
**Item 2 Hood lock cylinder locking pin**

- Using a suitable **Punch**, remove the hood lock cylinder locking pin.

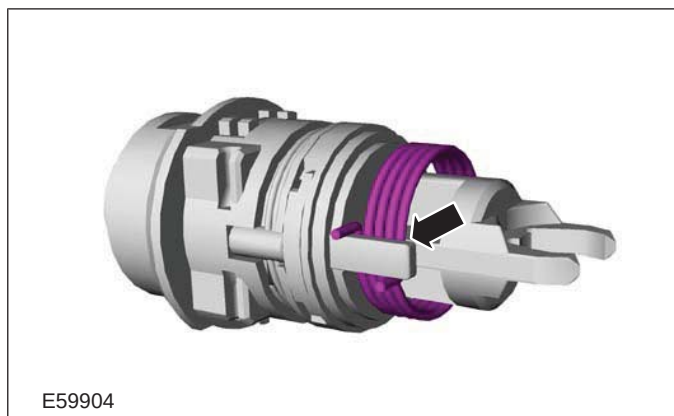


DISASSEMBLY AND ASSEMBLY**Item 4 Hood lock cylinder barrel cover locking clips**

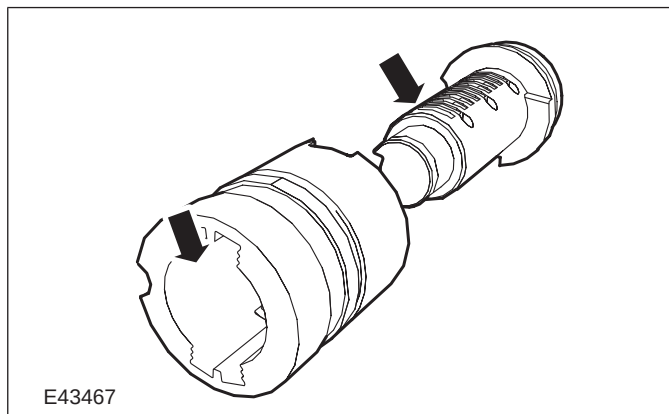
1. Using a suitable tool, remove the hood lock cylinder barrel cover locking clips.

**Item 6 Hood lock cylinder return spring**

1. **NOTE:** Make a note of the position of the hood lock cylinder return spring.
Remove the hood lock cylinder return spring.

**Item 11 Hood lock cylinder barrel cover**

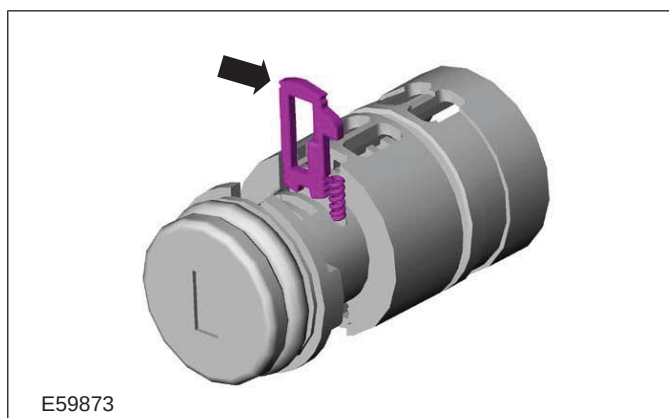
1. Remove the hood lock cylinder barrel guide.

**Item 12 Hood lock cylinder barrel tumblers**

1. **NOTE:** Make sure to read the key code from the key entry to the end of the lock barrel in sequence.

NOTE: Make a note of the position and orientation of the hood lock cylinder barrel tumblers.

Remove the hood lock cylinder barrel tumblers in the correct order.

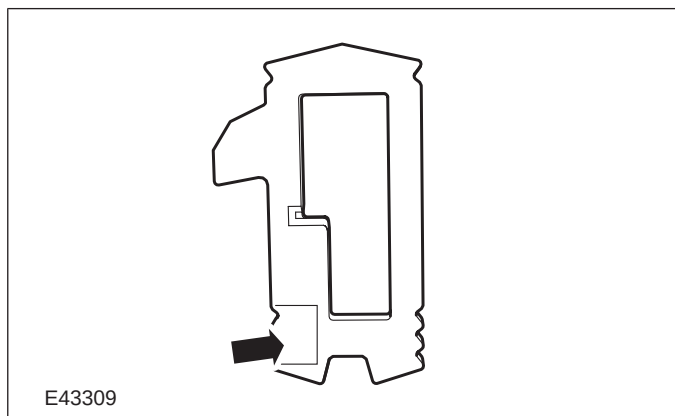
**Assembly Details****Item 12 Hood lock cylinder barrel tumblers**

1. **NOTE:** Make sure to read the key code from the key entry to the end of the lock barrel in sequence.

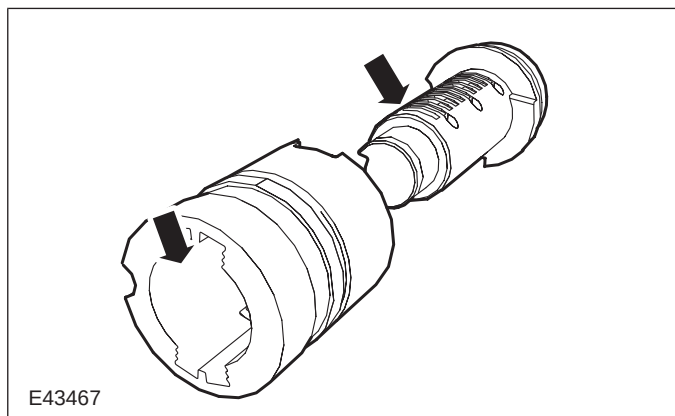
NOTE: One group of tumblers is signed with a one digit number (1 to 5), the other group of tumblers is signed with a two digit number (11 to 15).

DISASSEMBLY AND ASSEMBLY

Assemble the hood lock cylinder barrel tumblers in the correct order.

**Item 11 Hood lock cylinder barrel cover**

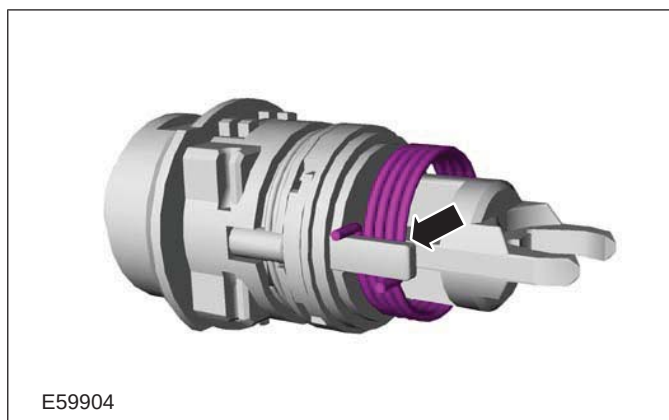
NOTE: Make sure that the hood lock cylinder cover guide indents align with the hood lock cylinder barrel.

**Item 7 Hood lock cylinder connecting clip**

NOTE: An audible click can be heard when the hood lock cylinder return spring cap is installed correctly.

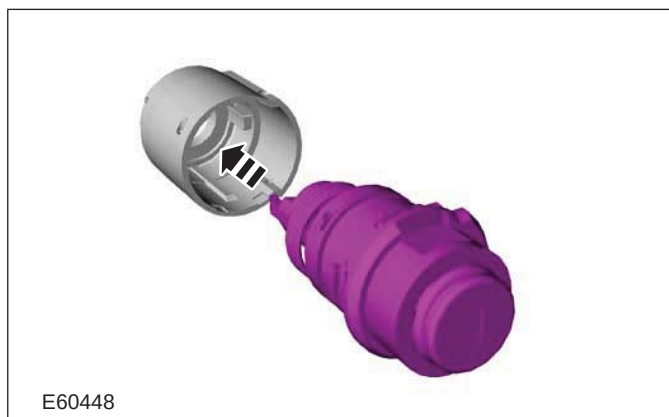
Item 6 Hood lock cylinder return spring

1. Install the hood lock cylinder return spring in the same position as removed.

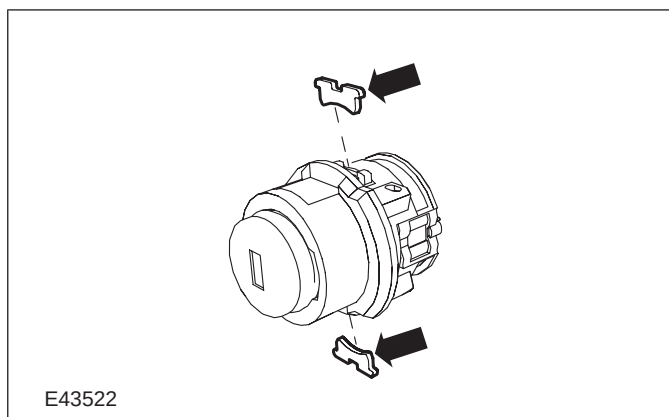
**Item 5 Hood lock cylinder barrel cover**

1. **NOTE:** The hood lock cylinder can only be installed to the hood lock cylinder housing in one position.

Install the hood lock cylinder barrel cover into the hood lock cylinder housing.

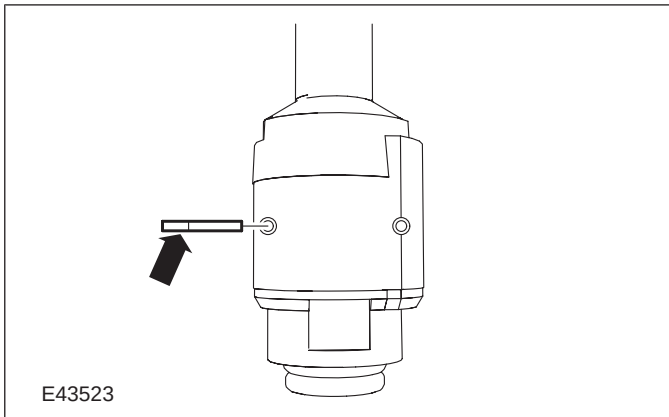
**Item 4 Hood lock cylinder barrel cover locking clips**

1. Install the hood lock cylinder barrel cover locking clips.

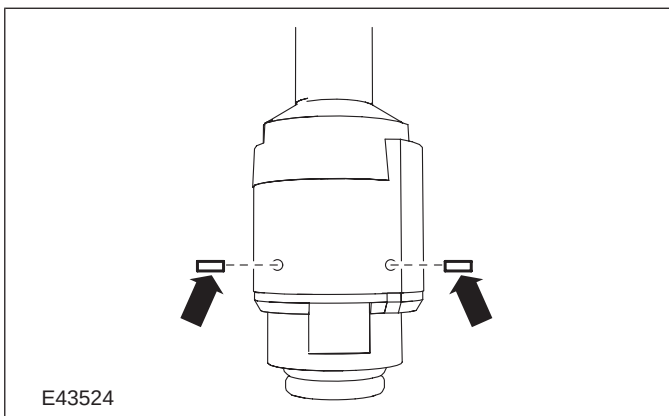


DISASSEMBLY AND ASSEMBLY**Item 2 Hood lock cylinder locking pin**

1. Using a suitable **Punch**, install the hood lock cylinder locking pin.

**Item 1 Hood lock cylinder locking pins**

1. Using a suitable **Punch**, install the hood lock cylinder locking pins.



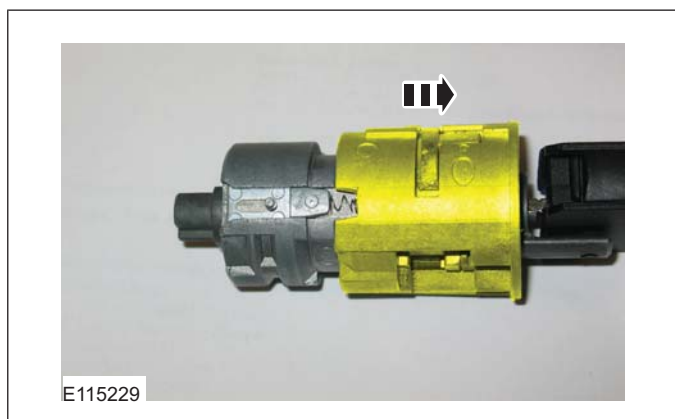
DISASSEMBLY AND ASSEMBLY

Ignition Lock Cylinder — Vehicles With: Keyless Vehicle System

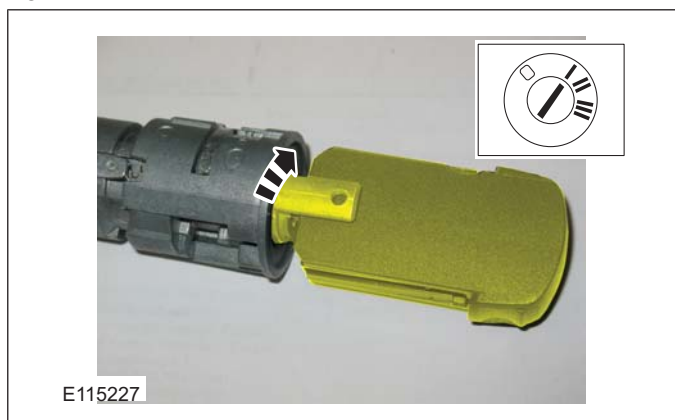
Disassembly

1. Refer to: Ignition Lock Cylinder - Vehicles With: Keyless Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

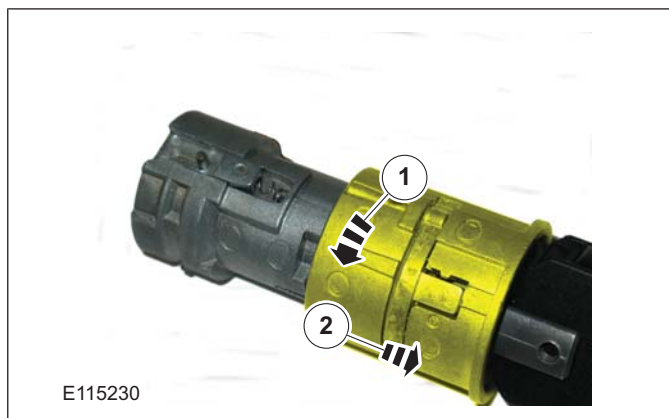
2.



3.



4.



5.

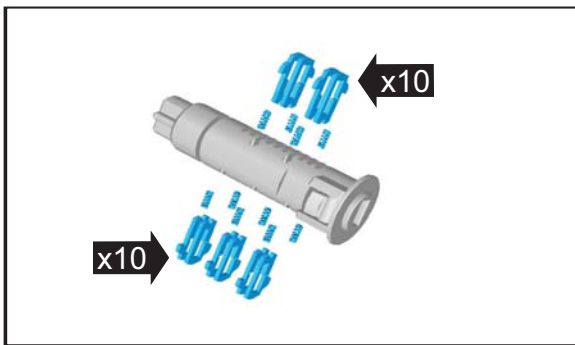


6. **NOTE:** Make sure to read the key code from the key entry to the end of the lock barrel in sequence.

NOTE: Make a note of the position and orientation of the ignition lock cylinder barrel tumblers.

NOTE: One group of tumblers is signed with a one digit number (1 to 5), the other group of tumblers is signed with a two digit number (11 to 15).

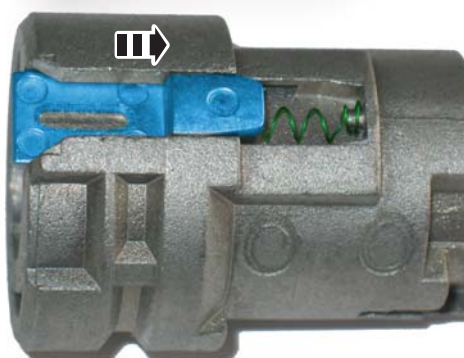
DISASSEMBLY AND ASSEMBLY



E115740

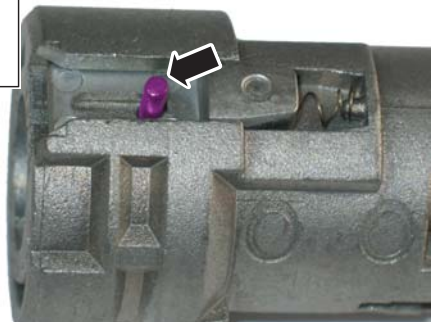
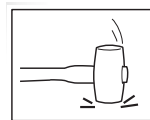
Assembly

7.



E115898

8.

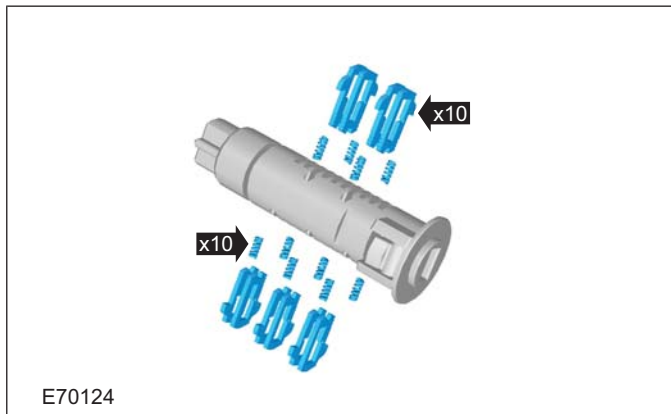


E115900

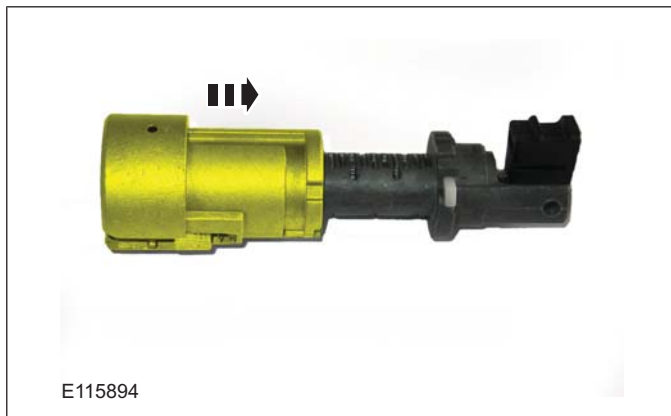
9. **NOTE:** One group of tumblers is signed with a one digit number (1 to 5), the other group of

DISASSEMBLY AND ASSEMBLY

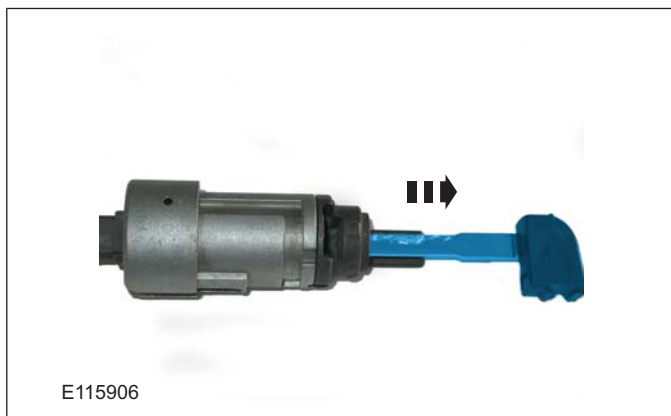
tumblers is signed with a two digit number (11 to 15).



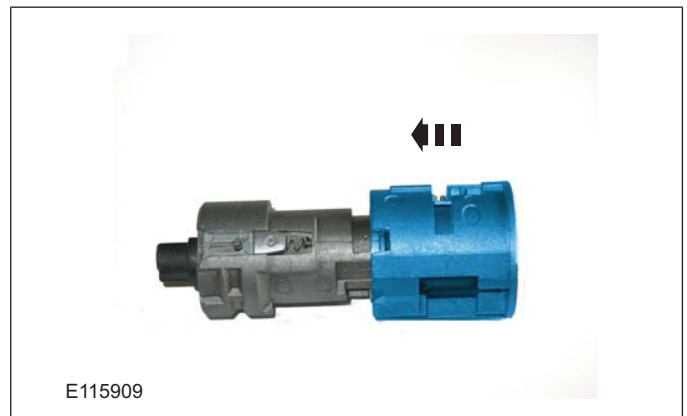
10.



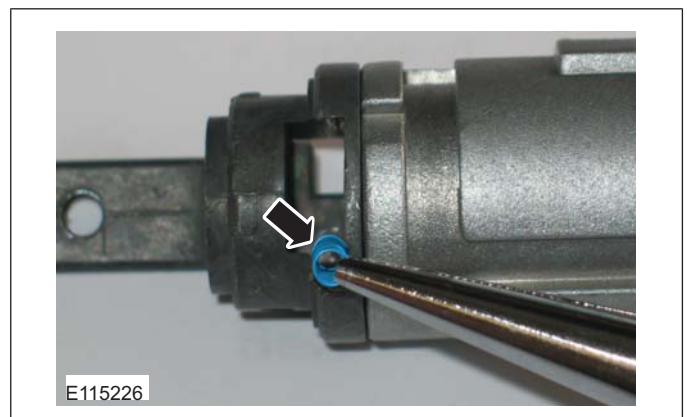
11.



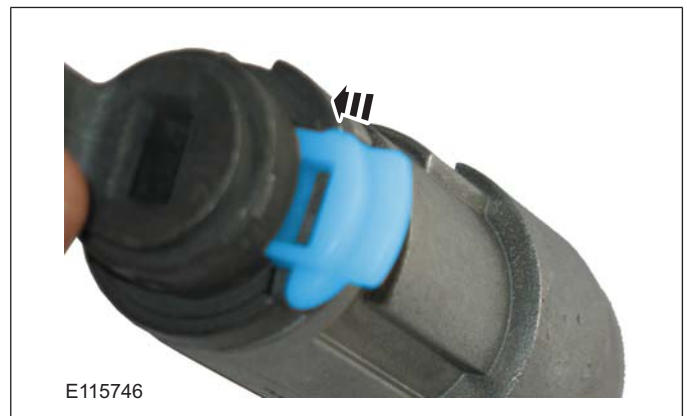
12.



13.

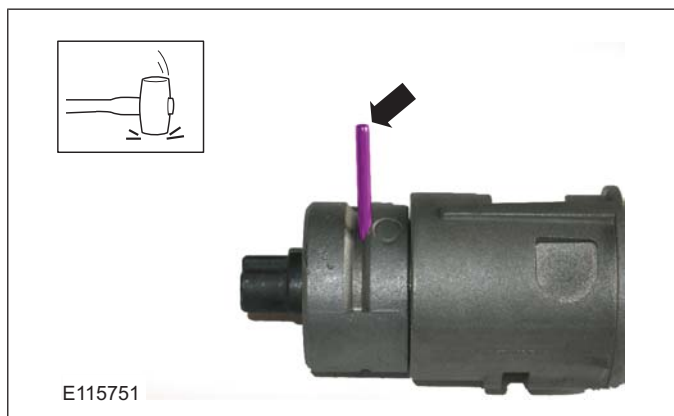


14.

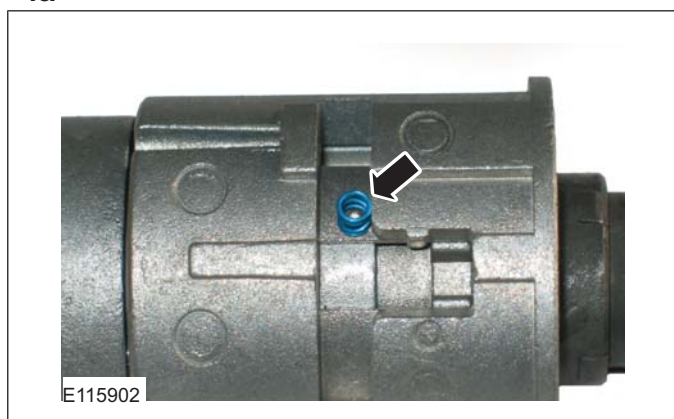


DISASSEMBLY AND ASSEMBLY

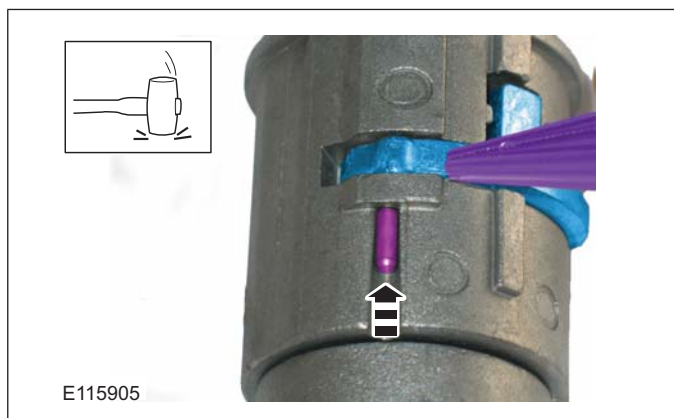
15.



16.



17.



DISASSEMBLY AND ASSEMBLY

Ignition Lock Cylinder — Vehicles Without: Keyless Vehicle System

General Equipment

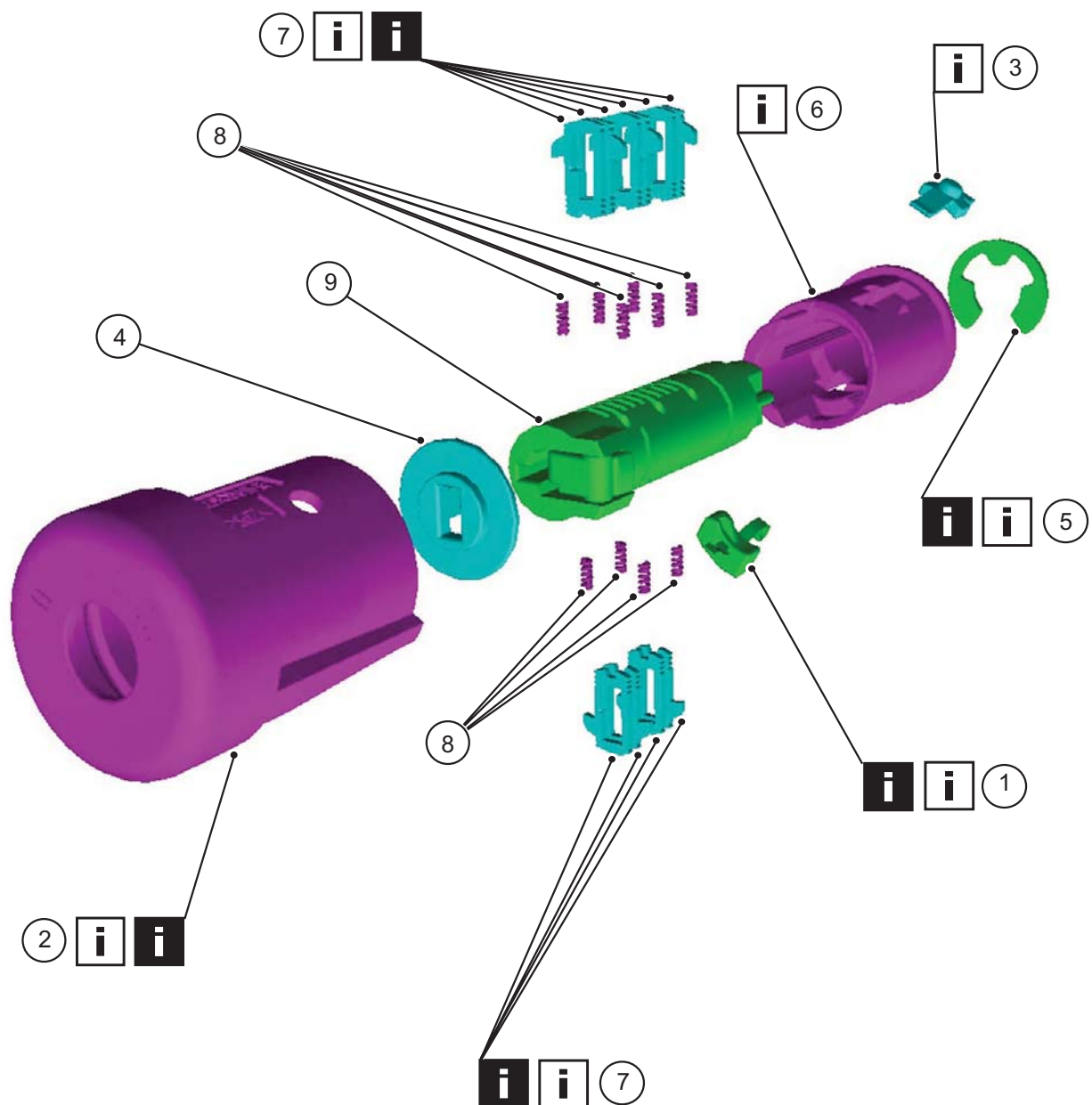
Flat-bladed screwdriver

1. Remove the ignition lock cylinder.

**For additional information, refer to: Ignition
Lock Cylinder - Vehicles Without: Keyless**

Vehicle System (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

2. Disassemble the components in the order indicated in the following illustration(s) and table(s).



E43468

DISASSEMBLY AND ASSEMBLY

Item	Description
1	Ignition lock cylinder locking button See Disassembly Detail See Assembly Detail
2	Ignition lock cylinder housing See Disassembly Detail See Assembly Detail
3	Ignition lock cylinder retaining clip See Assembly Detail
4	Ignition lock cylinder barrel cover
5	Ignition lock cylinder retaining clip See Disassembly Detail See Assembly Detail
6	Ignition lock cylinder barrel guide See Assembly Detail

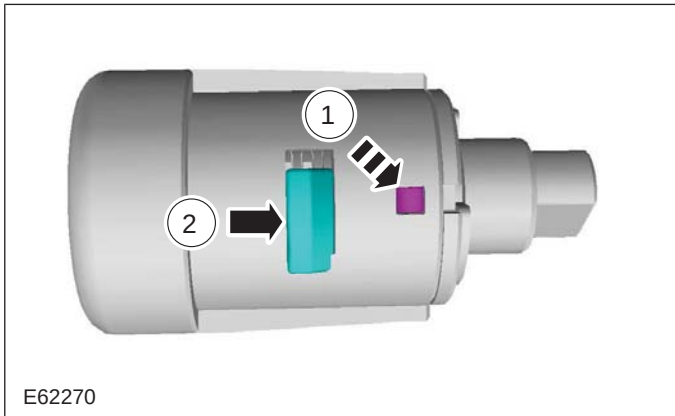
Item	Description
7	Ignition lock cylinder barrel tumblers See Disassembly Detail See Assembly Detail
8	Ignition lock cylinder barrel tumbler springs
9	Ignition lock cylinder barrel

3. To assemble, reverse the disassembly procedure.
4. Install the ignition lock cylinder.

For additional information, refer to: **Ignition Lock Cylinder - Vehicles Without: Keyless Vehicle System** (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

Disassembly Details

Item 1 Ignition lock cylinder locking button



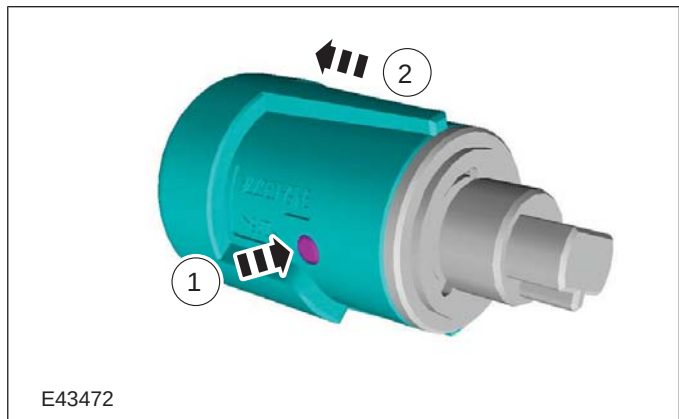
1. Remove the ignition lock cylinder locking button.
1. Using a suitable tool, release the ignition lock cylinder locking button leaf spring and remove the ignition lock cylinder locking button leaf spring.

2. Detach the ignition lock cylinder locking button from the ignition lock cylinder housing and remove the ignition lock cylinder locking button.

Item 2 Ignition lock cylinder housing

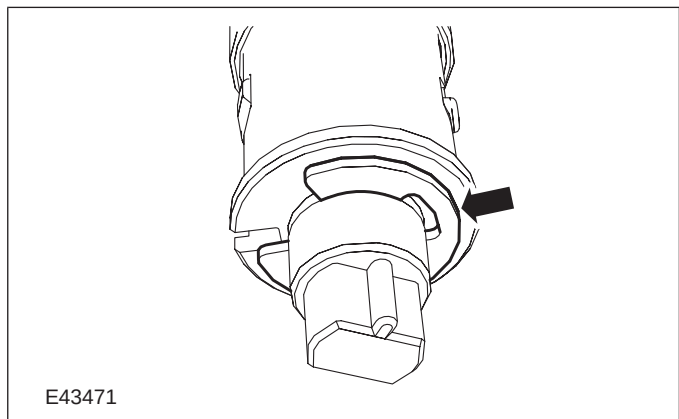
1. Remove the ignition lock cylinder housing.
1. Operate the ignition lock cylinder retaining clip.

2. Slide the ignition lock cylinder housing away from the ignition lock cylinder barrel guide.



Item 5 Ignition lock cylinder retaining clip

1. Using a suitable Flat-bladed screwdriver remove the ignition lock cylinder retaining clip.

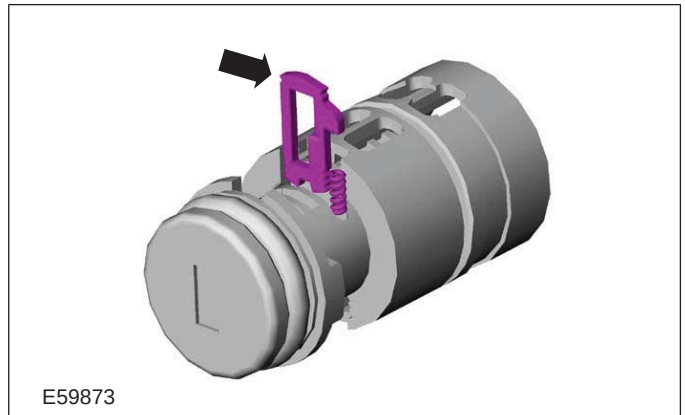


DISASSEMBLY AND ASSEMBLY**Item 7 Ignition lock cylinder barrel tumblers**

1. **NOTE:** Make sure to read the key code from the key entry to the end of the lock barrel in sequence.

NOTE: Make a note of the position and orientation of the ignition lock cylinder barrel tumblers.

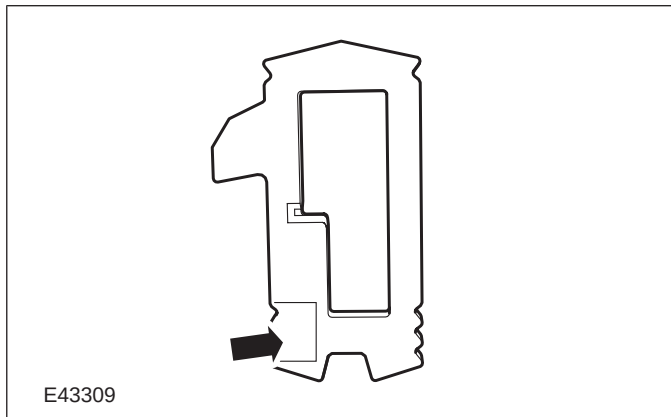
Remove the ignition lock cylinder barrel tumblers and springs in the correct order.

**Assembly Details****Item 7 Ignition lock cylinder barrel tumblers**

1. **NOTE:** Make sure to read the key code from the key entry to the end of the lock barrel in sequence.

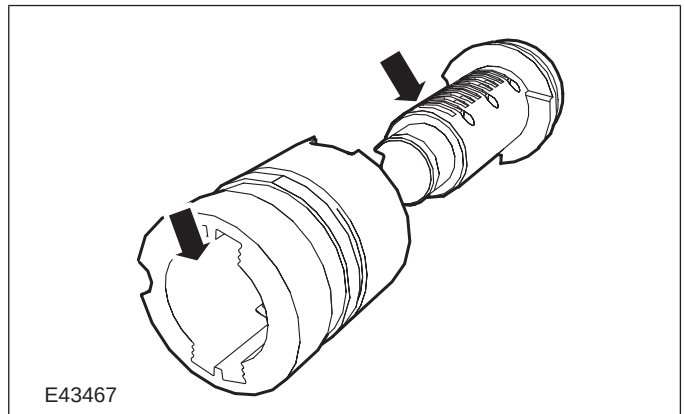
NOTE: One group of tumblers is signed with a one digit number (1 to 5), the other group of tumblers is signed with a two digit number (11 to 15).

Assemble the ignition lock cylinder barrel tumblers and springs in the correct order.

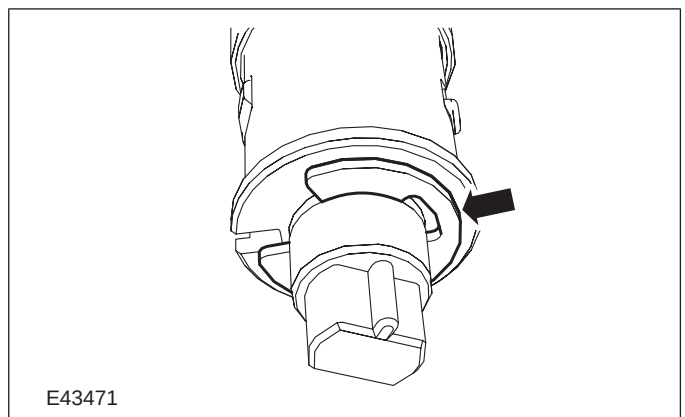
**Item 6 Ignition lock cylinder barrel guide**

1. **NOTE:** Make sure that the ignition lock cylinder barrel guide indents align with the ignition lock cylinder barrel guide.

Install the key and the assembled lock cylinder barrel into the ignition lock cylinder barrel guide and remove the key.

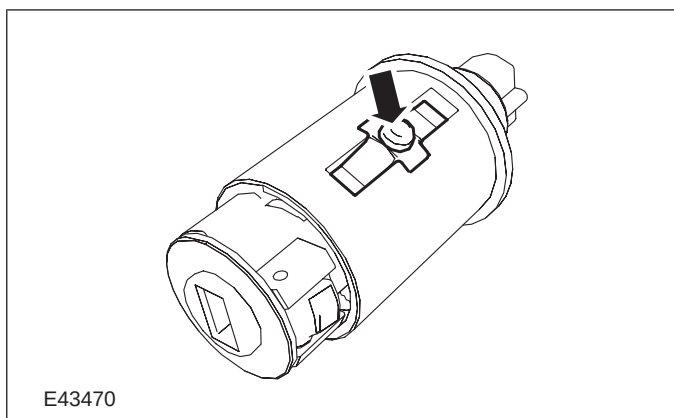
**Item 5 Ignition lock cylinder retaining clip**

1. Install the ignition lock cylinder retaining clip.

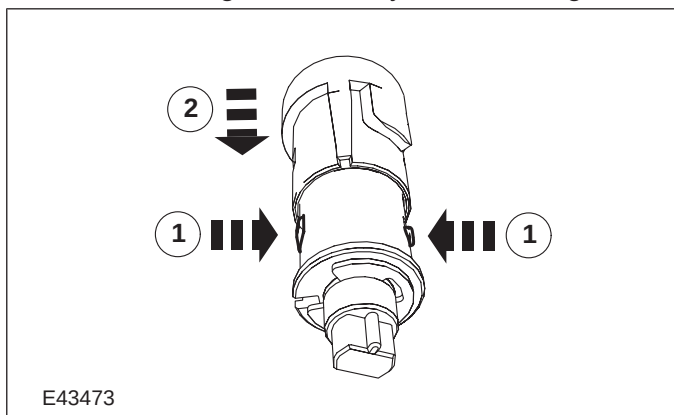


DISASSEMBLY AND ASSEMBLY**Item 3 Ignition lock cylinder retaining clip**

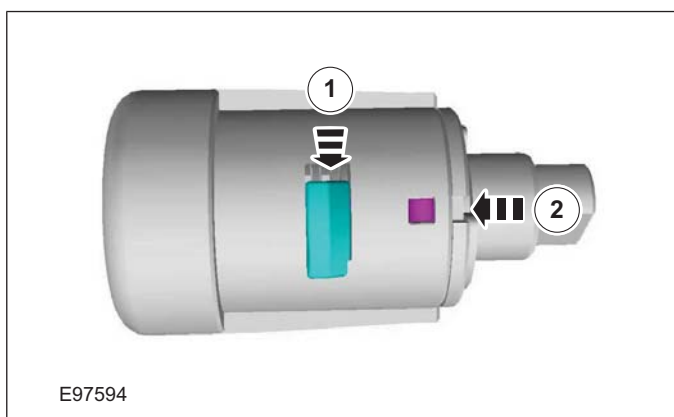
1. Install the ignition lock cylinder retaining clip in the position shown.

**Item 2 Ignition lock cylinder housing**

1. Install the ignition lock cylinder housing.
 1. Operate the ignition lock cylinder retaining spring and locking button.
 2. Slide the ignition lock cylinder housing onto from the ignition lock cylinder barrel guide.

**Item 1 Ignition lock cylinder locking button**

1. Assemble the ignition lock cylinder locking button and leaf spring and install in the position shown.



DISASSEMBLY AND ASSEMBLY

Door Lock Cylinder

General Equipment

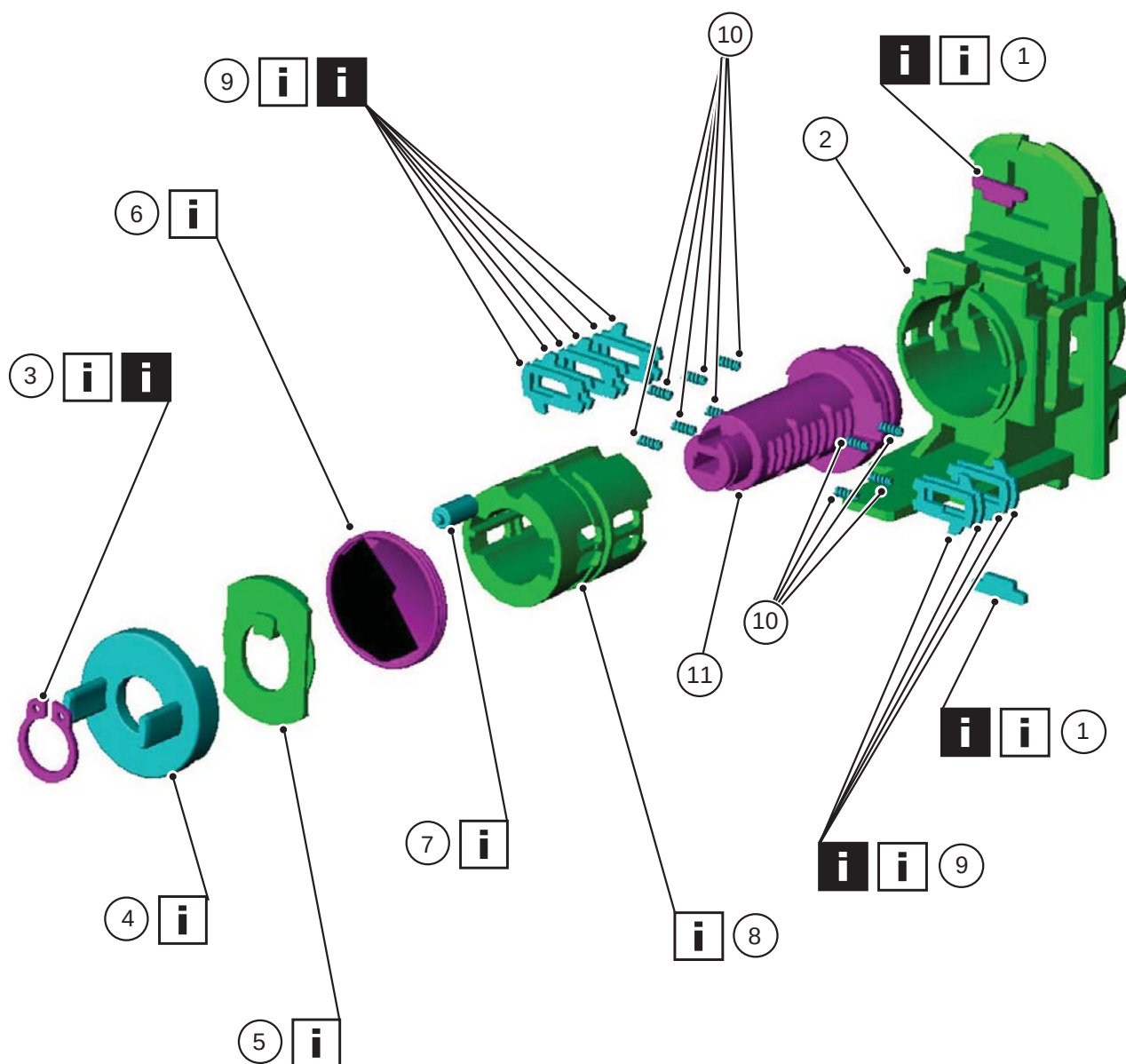
Punch

1. Remove the door lock cylinder.

For additional information, refer to: **Door Lock Cylinder** (501-14 Handles, Locks,

Latches and Entry Systems, Removal and Installation).

2. Disassemble the components in the order indicated in the following illustration(s) and table(s).



E43865

DISASSEMBLY AND ASSEMBLY

Item	Description
1	Door lock cylinder barrel locking pins See Disassembly Detail See Assembly Detail
2	Door lock cylinder barrel housing
3	Door lock cylinder retaining clip See Disassembly Detail See Assembly Detail
4	Door lock cylinder latch actuator See Assembly Detail
5	Door lock cylinder latch actuator driver See Assembly Detail
6	Door lock cylinder guide pin retaining spring See Assembly Detail
7	Door lock cylinder guide pin See Assembly Detail

Item	Description
8	Door lock cylinder barrel guide See Assembly Detail
9	Door lock cylinder barrel tumblers See Disassembly Detail See Assembly Detail
10	Door lock cylinder barrel tumbler springs
11	Door lock cylinder barrel

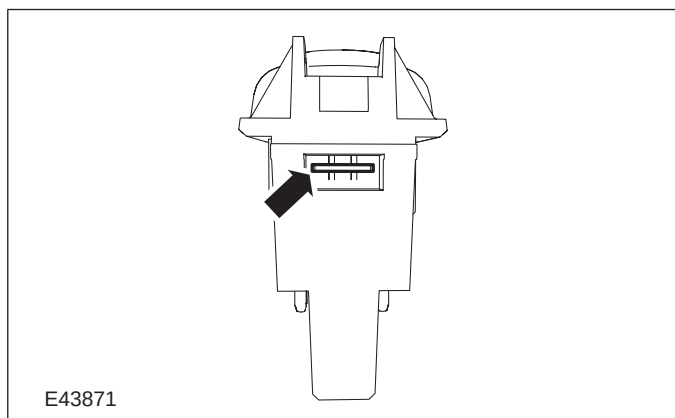
3. To assemble, reverse the disassembly procedure.

4. Install the door lock cylinder.

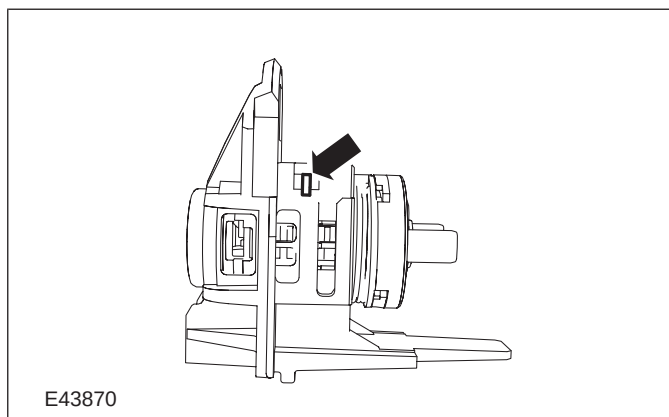
For additional information, refer to: Door Lock Cylinder (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).

Disassembly Details**Item 1 Door lock cylinder barrel locking pins**

1. Remove the door lock cylinder lower retaining pin.

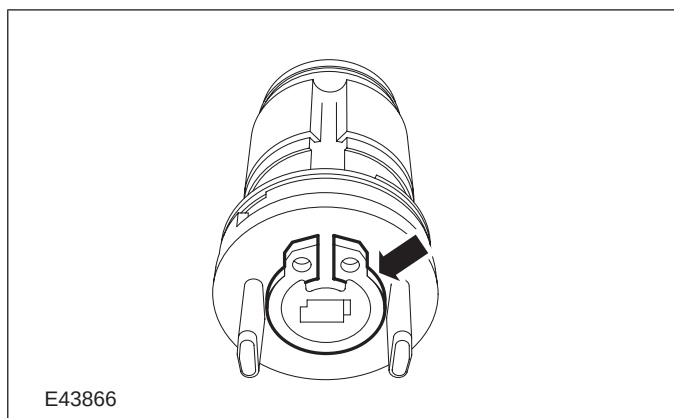


2. Using a suitable Punch, remove door lock cylinder upper retaining pin.



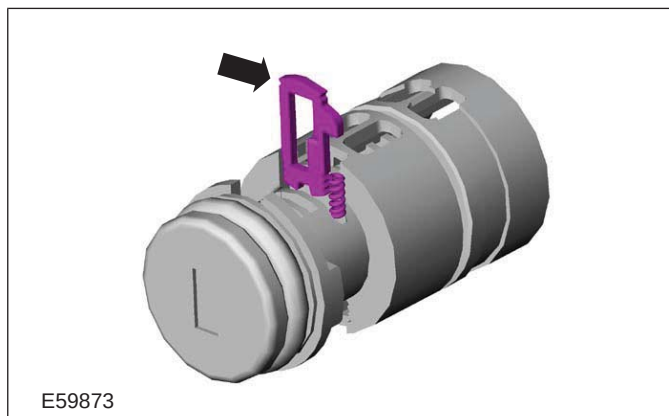
DISASSEMBLY AND ASSEMBLY**Item 3 Door lock cylinder retaining clip**

1. Remove the door lock cylinder retaining clip from the door lock cylinder.



NOTE: Make a note of the position and orientation of the door lock cylinder barrel tumblers.

Remove the door lock cylinder barrel tumblers and springs in the correct order.

**Item 9 Door lock cylinder barrel tumblers**

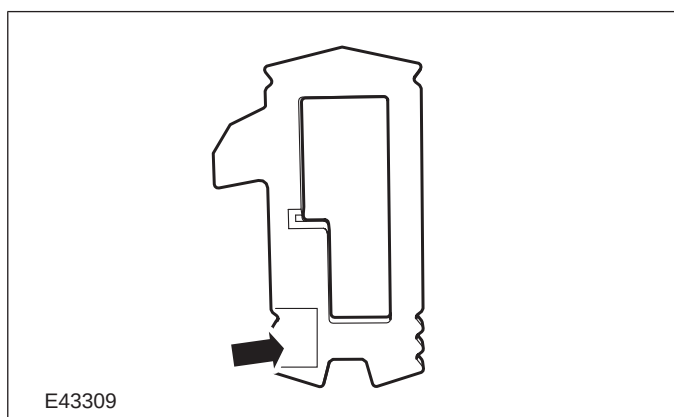
1. **NOTE:** Make sure to read the key code from the key entry to the end of the lock barrel in sequence.

Assembly Details**Item 9 Door lock cylinder barrel tumblers**

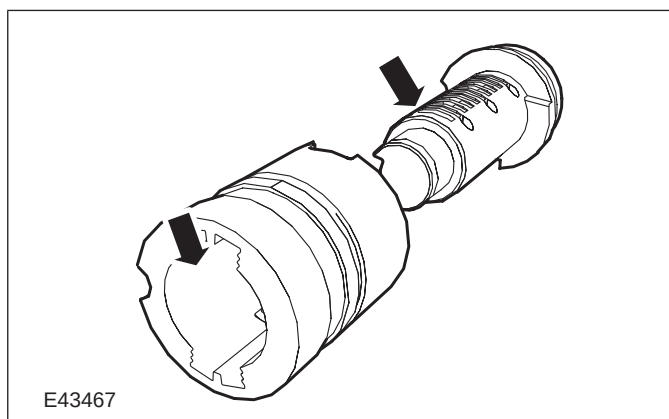
1. **NOTE:** Make sure to read the key code from the key entry to the end of the lock barrel in sequence.

NOTE: One group of tumblers is signed with a one digit number (1 to 5), the other group of tumblers is signed with a two digit number (11 to 15).

Assemble the door lock cylinder barrel tumblers and springs in the correct order.



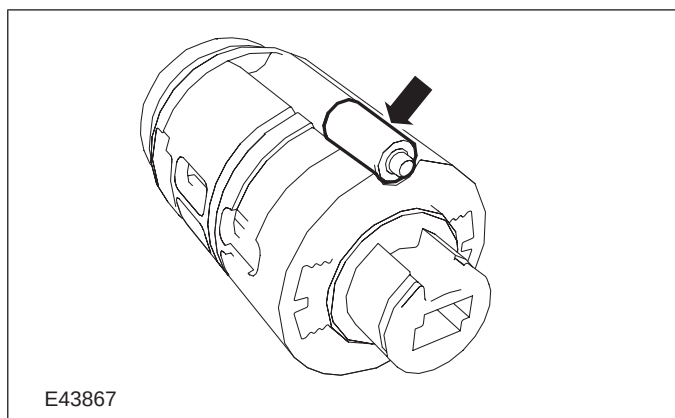
Install the key and the assembled lock cylinder barrel into the door lock cylinder barrel guide and remove the key.

**Item 8 Door lock cylinder barrel guide**

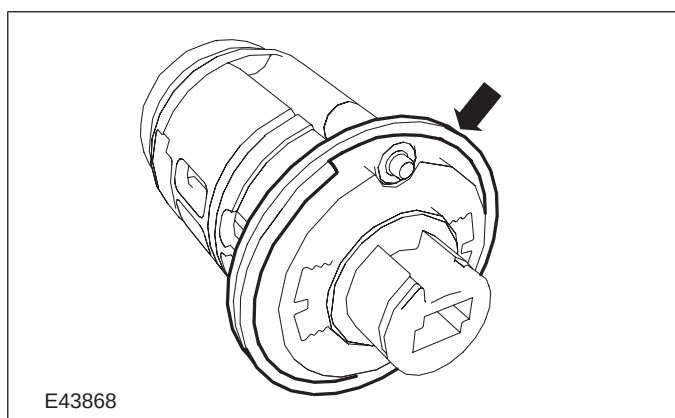
1. **NOTE:** Make sure that the door lock cylinder cover guide indents align with the door lock cylinder barrel.

DISASSEMBLY AND ASSEMBLY**Item 7 Door lock cylinder guide pin**

1. Place the door lock cylinder guide pin in the door lock cylinder barrel guide recess.

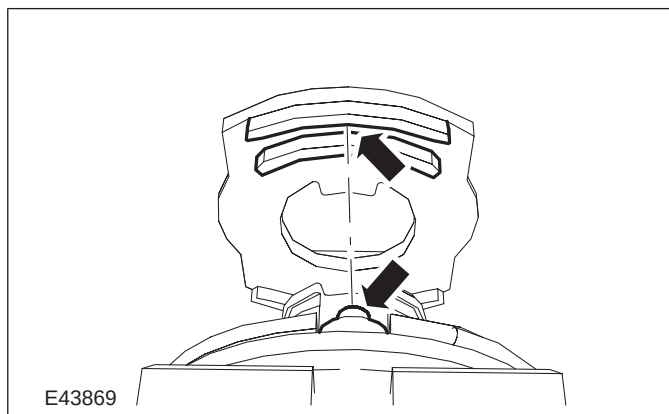
**Item 6 Door lock cylinder guide pin retaining spring**

1. Assemble the door lock cylinder guide pin retaining spring on to the door lock cylinder barrel guide.

**Item 5 Door lock cylinder latch actuator driver**

1. **NOTE:** Make sure that the door lock cylinder guide pin retaining spring is located in the door lock cylinder latch actuator driver groove.

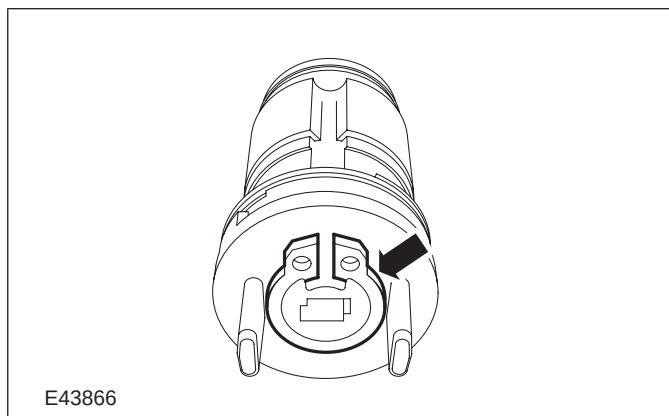
Install the door lock cylinder latch actuator driver.

**Item 4 Door lock cylinder latch actuator**

NOTE: An audible click can be heard when the door lock cylinder latch actuator is installed correctly.

Item 3 Door lock cylinder retaining clip

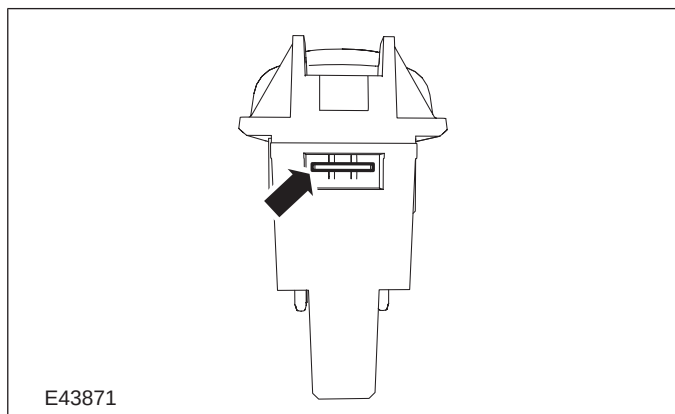
1. Install the door lock cylinder retaining clip.

**Item 1 Door lock cylinder barrel locking pins**

1. **NOTE:** After the door lock cylinder lower retaining pin has been installed the door lock cylinder housing locking pins must be knocked down, locking the door lock cylinder lower retaining pin in place.

DISASSEMBLY AND ASSEMBLY

Install the door lock cylinder barrel retaining pin.



2. Install the door lock cylinder barrel retaining pin.

