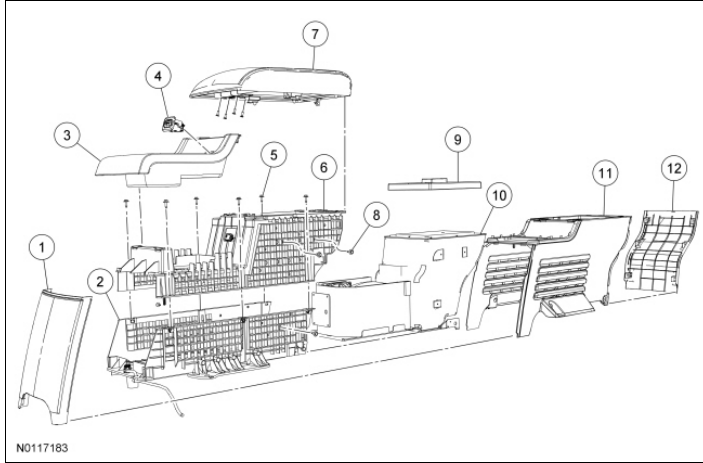


**Refrigerator**

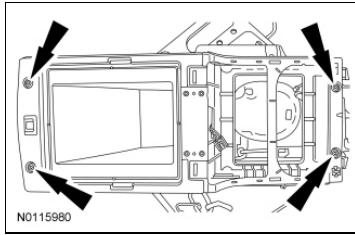
**Rear console**



Item	Part Number	Description
1	04567	Front finish panel
2	045A90B	Bottom panel
3	13562B	Top trim panel
4	14D468	Refrigerator switch assembly
5	W505153	Panel screws (6 required)
6	045A90A	Top panel
7	06024	Rear armrest
8	W505153	Refrigerator screws (6 required)
9	044672	Refrigerator lid
10	045A36	Refrigerator
11	045C22	Side finish panel
12	045E24	Rear finish panel

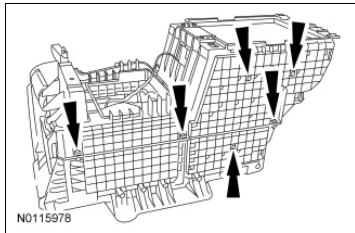
**Removal and Installation**

1. Remove the rear floor console. For additional information, refer to Console - Rear, Floor in this section.
2. Remove the rear armrest.
3. Remove the rear finish panel.
4. Remove the refrigerator switch assembly.
5. Remove the 4 top trim panel screws.

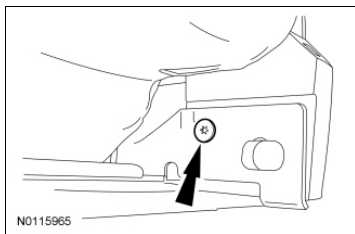


6. Remove the side finish panel by sliding the panel towards the rear.

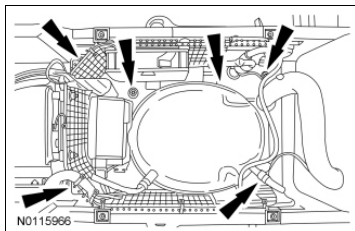
7. Separate the upper and lower console inner structure panels by removing the 6 screws on each side.



8. Remove the two torx screws from the lower rear of the refrigerator.



9. Remove the six torx screws from the refrigerator.



10. Remove the refrigerator.

11. To install, reverse the removal procedure.

- Transfer parts as needed.
- Make sure to align the trim panel retaining clips to the retaining clip holes in the rear floor console.



## Material

Item	Specification	Fill Capacity
Multi-Purpose Grease XG-4 and/or XL-5, or equivalents	ESB-M1C93-B	-
Penetrating and Lock Lubricant (US); Penetrating Fluid (Canada) XL-1 (US); CXC-51-A (Canada)	-	-

## Torque Specifications

Description	Nm	lb-ft	lb-in
Door latch bolts	8	-	71
Door latch striker bolts	28	21	-
Exterior door handle reinforcement bolt	8	-	71
Hood latch bolts	11	-	97
Hood latch release handle bolt	2	-	18
Hood latch striker bolts	11	-	97
Liftgate latch bolts	9	-	80
Liftgate latch striker bolts	30	22	-
Liftgate molding bolts	4	-	35
Window glass rear track nuts	11	-	97

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## Handles, Locks, Latches and Entry Systems

**NOTE:** The Smart Junction Box (SJB) is also known as the Generic Electronic Module (GEM).

### Hood Latch

The hood latch consists of the following components:

- Hood latch release handle and cable
- Hood latch

### Front Door

The front door consists of the following components:

- Door lock control switch
- Door lock cylinder
- Exterior front door handle
- Exterior front door handle reinforcement
- Front door latch
- Front door lock push button rod
- Interior door handle actuator cable
- Interior door handle
- Keyless entry keypad (if equipped)

### Rear Door

The rear door consists of the following components:

- Exterior rear door handle
- Exterior rear door handle reinforcement
- Interior door handle actuator cable
- Interior door handle
- Rear door latch
- Rear door lock push button rod

### Manual Liftgate

The manual liftgate consists of the following components:

- Liftgate release switch (on liftgate moulding)
- Liftgate latch

### Power Liftgate

The power liftgate consists of the following components:

- Liftgate release switch (on liftgate moulding)
- Liftgate latch
- Liftgate/Trunk Module (LTM) (in the left rear D-pillar area)

## **Power Lock/Unlock**

The power lock/unlock feature requests all of the vehicle doors locked or unlocked upon a customer request from either interior door lock control switch in the vehicle. The power door locking system functions independently of ignition status or vehicle speed.

## **Autolock**

The autolock feature locks all the doors when all the doors (including the liftgate) are closed, the key is in the RUN position, the transmission is in any gear, and the vehicle speed is greater than 20 km/h (12 mph).

The autolock feature repeats when any door is opened then closed while the ignition is still in the RUN position, the vehicle speed is 15 km/h (9 mph) or slower, and the vehicle then attains a speed greater than 20 km/h (12 mph).

Refer to Autolock and Auto-Unlock Programming in this section for programming information.

## **Auto-Unlock**

**NOTE:** The doors will not auto-unlock if the vehicle has been electronically locked before the driver door is opened.

The auto-unlock feature unlocks all the doors when the ignition is in the RUN position, all the doors are closed, and the vehicle has been in motion at a speed greater than 20 km/h (12 mph). The vehicle then comes to a stop and the ignition is switched to LOCK or ACC, and the driver door is opened within 10 minutes of the ignition being switched to OFF, LOCK or ACC.

Refer to Autolock and Auto-Unlock Programming in this section for programming information.

## **Smart Unlock**

The smart unlock feature prevents the doors from locking with the key in the ignition lock cylinder. When the SJB receives a lock command from a door lock control switch, and the key is in the ignition lock cylinder with one of the front doors open, the SJB commands all the doors to unlock.

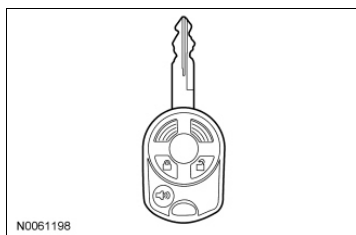
## **Remote Keyless Entry (RKE)**

The Remote Keyless Entry (RKE) system uses an Integrated Keyhead Transmitter (IKT). The IKT incorporates both the Passive Anti-Theft System (PATS) functions and the RKE transmitter functions in a single device.

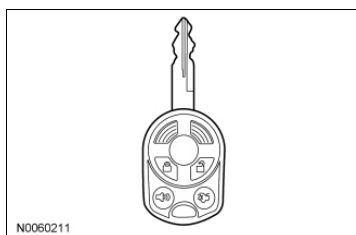
The RKE transmitter is programmed automatically during PATS programming. During PATS programming, the Instrument Cluster (IC) obtains the Transmitter Identification Code (TIC) from the IKT and sends the TIC data over the Medium Speed Controller Area Network (MS-CAN) to the SJB .

The SJB accepts programming of up to 4 IKTs . In addition to the IKTs , 4 standard keyfobs can also be programmed to the vehicle if requested by the customer. Refer to Key Programming Using Two Programmed Keys or Integrated Keyhead Transmitter (IKT) Key Programming Using Diagnostic Equipment in Section 419-01B for key programming information. Refer to Remote Keyless Entry (RKE) Transmitter Programming in this section for key fob programming information.

### Without Power Liftgate



### With Power Liftgate



The IKT initiates the following electronic system functions:

- Unlocks the LH front door
- Unlocks all doors
- Locks all doors
- Activates/deactivates the panic alarm
- Commands the interior lamps on (when unlocking) and off (when locking)
- Provides a long flash of the turn signals when UNLOCK is pressed
- Sounds the horn once when LOCK is pressed twice within 3 seconds, and the doors are closed
- Sounds the horn twice when LOCK is pressed twice within 3 seconds, and any door is ajar

The IKT has a normal operating range of 10 m (33 ft).

### Remote Keyless Entry (RKE) Lock/Unlock Control - Unlock

The RKE feature provides lock/unlock functions independently of ignition state, vehicle speed, or transmission position. The RKE feature provides a stepped (if enabled) process for unlocking the doors. Upon receipt of the first request for unlocking the doors, the RKE control feature unlocks the driver door only and provides a long flash of the turn signals. If another unlock request is received within 3 seconds of the first, the RKE feature unlocks all the doors. This feature can be changed to 1-step unlock, so that all the doors unlock on the first press of the unlock button. Refer to [Stepped Unlock Programming](#) in this section for programming information.

### Remote Keyless Entry (RKE) Lock/Unlock Control - Lock

The RKE feature requests that all the doors be locked when the lock button is pressed. On any press of the lock button with all doors closed, the doors lock and the turn signals flash 1 time. If any door or luggage compartment lid is ajar, no flash occurs and the horn chirps twice. As soon as the last door or luggage compartment lid is closed, the turn signals flash. If 2 presses of the lock button are received within 3 seconds, the horn chirps once and the turn signals flash twice to indicate that all the doors are closed and locked. If any door or luggage compartment lid is ajar when the second lock request is received within 3 seconds of the first, the RKE transmitter feature requests the horn chirp twice without flashing the turn signals to indicate it locked all the doors but 1 or more doors are ajar. When the ignition is in the RUN or START state, the turn signal flashes and horn chirp confirmations do not occur.

### **Remote Keyless Entry (RKE) Power Liftgate Release**

The RKE feature provides liftgate release function independently of key position. The vehicle speed must be less than 5 km/h (3 mph) for this function to work.

### **Remote Keyless Entry (RKE) Memory Seat Feature**

The RKE feature provides memory seat feature. When the unlock button on an IKT is pressed, the drivers seat, adjustable pedals and exterior mirrors move to the desired memory position (the seat, pedal, and mirror position corresponds to the IKT being used). This feature can be enabled/disabled. Refer to [Remote Memory Activation](#) and [Remote Memory Deactivation](#) in this section.

### **Panic Alarm**

The panic alarm feature provides audible and visual alarms which are evident from the exterior of the vehicle. The panic alarm feature requests that the turn signals are flashed and the horn sounds until deactivation. The flashing of the outputs occurs simultaneously. Activation of the panic alarm is accomplished by pressing the panic button on an IKT whenever the key is in the OFF position. At all other times this feature is disabled. Deactivation of an active panic alarm is accomplished by any of the following actions:

- A second press of the IKT panic button
- The key is switched out of the OFF position
- A period of 2 minutes and 45 seconds has elapsed since the initial activation

### **Keyless Entry Keypad**

The keypad, is integrated into the B-pillar applique on the driver door, and provides a method for customers to access their vehicle without an IKT . The keypad feature:

- Locks all doors
- Unlocks the driver door (with stepped unlock enabled)
- Unlocks all doors
- Command the interior lamps on (when unlocking) and off (when locking)
- Programs/erases the customer key code
- Enables/disables auto-unlocking
- Enables/disables autolocking
- Recalls memory seat/power mirror positions (if equipped)

The keypad feature operates independently of key position status, vehicle speed, or transmission position. The keypad is touch sensitive and will not work if gloves are worn. When a keypad button is touched, the keypad buttons illuminate to provide better visibility. If the lock all doors command is entered or 5 seconds have elapsed since the last button press, the illumination is turned off. The keypad is also illuminated any time the courtesy lighting is on.

Each vehicle equipped with a keypad is programmed with a 5-digit entry code. This code is provided to the customer through a wallet card in the Owner's Literature. In addition, this code is available through a scan tool and is also printed on the SJB label. When entering codes, each digit must be entered within 5 seconds of the previous button press. The SJB accepts the programming of 3 personal entry codes. Refer to [Keyless Entry Keypad Code Programming](#) in this section for programming information.

### **Locking the Doors with the Keyless Entry Keypad System**

It is not necessary to enter the factory set or personal code prior to locking all doors. To lock all doors, touch and hold the 7/8 and 9/0 controls at the same time for approximately 2 seconds.



### **Unlocking the Doors with the Keyless Entry Keypad System**

To unlock the driver door (if stepped unlock is disabled), enter either the factory set code or a personal code; each digit must be pressed within 5 seconds of the prior digit. The interior lamps illuminate.

To unlock all doors, enter either the factory set code or a personal code (driver door unlocks) and press the 3/4 button within 5 seconds. This feature can be changed to 1-step unlock, so that all the doors unlock on the entry of the factory set or personal code. Refer to Stepped Unlock Programming in this section for programming information.

### **Keyless Entry Keypad Memory Seat Feature**

The keypad provides memory seat feature. The feature is associated with personal codes and positions the driver seat, adjustable pedals, and exterior mirrors to the Driver 1 or Driver 2 memory setting. Refer to Keyless Entry Keypad Code Programming in this section for programming information.

### **Anti-Scan Feature**




To provide added security, the keypad is disabled for 1 minute after 35 button presses without a valid entry code being entered. The keypad flashes during this 1-minute mode with all functionality disabled except for the 7/8 and 9/0 buttons still being allowed to lock the vehicle.

Anti-scan is turned off after 1 minute of keypad inactivity.

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**Handles, Locks, Latches and Entry Systems**

## Special Tool(s)

 ST2834-A	Vehicle Communication Module (VCM) and Integrated Diagnostic System (IDS) software with appropriate hardware, or equivalent scan tool
 ST3095-A	Fluke 77-IV Digital Multimeter FLU77-4 or equivalent
 ST2574-A	Flex Probe Kit 300-NUD105-R025DE or equivalent

## Material

Item	Specification
Multi-Purpose Grease XG-4 and/or XL-5, or equivalents	ESB-M1C93-B
Penetrating and Lock Lubricant (US); Penetrating Fluid (Canada) XL-1 (US); CXC-51-A (Canada)	-

**Principles of Operation**

**NOTE:** The Smart Junction Box (SJB) is also known as the Generic Electronic Module (GEM).

The SJB receives inputs and delivers outputs to many of the electronically-controlled features of the vehicle. The SJB constantly monitors the system under its control and reports a concern in the form of a DTC.

**Power Locks**

The SJB monitors the door lock control switches. When the SJB receives an unlock/lock command from either door lock control switch, the SJB energizes a relay (internal to the SJB ) to supply the correct power and grounds for the door lock actuators.

**Liftgate Release**

The liftgate release switch operates the liftgate latch electronically. When the switch is pressed, the SJB processes the input and releases the liftgate latch.

The doors must be unlocked electronically in order for the SJB to release the liftgate latch. When this condition is met and the SJB receives the input from the liftgate release switch, the SJB provides power to the latch.

**Remote Keyless Entry (RKE)**

The SJB interprets radio frequency signals from the Remote Keyless Entry (RKE) transmitters. The SJB requests the illuminated entry feature to turn the interior lamps on when an unlock command is received. If a lock command is received, the illuminated entry feature turns off.

The RKE transmitter supplies a signal to the SJB when any button is pressed. The SJB then supplies voltage to the appropriate door lock actuator(s) to lock or unlock the doors. The RKE transmitter can also be used to activate the panic alarm. On vehicles with memory, the RKE transmitter causes the SJB to send a Medium Speed Controller Area Network (MS-CAN) message to the Driver Seat Module (DSM) to activate all memory features to the positions associated with the RKE transmitter being used.

### **Keyless Entry Keypad**

The keyless entry keypad is hardwired to the SJB . The SJB interprets the inputs from the keyless entry keypad and then controls the associated operation. The keyless entry keypad is illuminated for 5 seconds when any button is pressed and when the courtesy lighting is on. The SJB requests the illuminated entry feature to turn the interior lamps on when a valid entry code is received. If a lock all doors code is entered, the illuminated entry feature turns off.

**NOTE:** The keyless entry keypad does not lock the doors if the driver door is ajar.

The keyless entry keypad supplies a signal to the SJB when the buttons are touched. The SJB then supplies voltage to the appropriate door lock actuator(s) to lock or unlock the doors. On vehicles with memory, the keyless entry keypad also causes the SJB to send a MS-CAN message to the DSM to activate all memory features to the positions associated with the personal entry code entered on the keypad.

### **Field-Effect Transistor (FET) Protection**

Field-Effect Transistor (FET) is a type of transistor that when used with module software can be used to monitor and control current flow on module outputs. The FET protection strategy is used to prevent module damage in the event of excessive current flow.

The SJB utilizes an FET protective circuit strategy for many of its outputs (for example, a headlamp output circuit). Output loads (current level) are monitored for excessive current (typically short circuits) and are shut down (turns off the voltage or ground provided by the module) when a fault event is detected. A continuous DTC is stored at the fault event and a cumulative counter is started.

When the demand for the output is no longer present, the module resets the FET circuit protection to allow the circuit to function. The next time the driver requests a circuit to activate that has been shut down by a previous short ( FET protection) and the circuit remains shorted, the FET protection shuts off the circuit again and the cumulative counter advances.

When the excessive circuit load occurs often enough, the module shuts down the output until a repair procedure is carried out. Each FET protected circuit has 3 predefined levels of short circuit tolerance based on the harmful effect of each circuit fault on the FET and the ability of the FET to withstand it. A module lifetime level of fault events is established based upon the durability of the FET . If the total tolerance level is determined to be 600 fault events, the 3 predefined levels would be 200, 400 and 600 fault events.

When each tolerance level is reached, the continuous DTC that was stored on the first failure cannot be cleared by a command to clear the continuous DTCs. The module does not allow this code to be cleared or the circuit restored to normal operation until a successful self-test proves that the fault has been repaired. After the self-test has successfully completed (no on-demand DTCs present), DTC B106E and the associated continuous DTC (the DTC related to the shorted circuit) automatically clears and the circuit function returns.

When the first or second level is reached, the continuous DTC (associated with the short circuit) sets along