

#PIC5960: Diagnostic Tip - Memory Seat / Power Seat Operational Characteristics - (Feb 3, 2014)

Subject: Diagnostic Tip - Memory Seat / Power Seat Operational Characteristics



**Models: 2014 Chevrolet Corvette
Equipped with Memory Package (RPO AAB)**

The power seat, Memory recall and Easy Exit recall operations may seem erratic or seem to operate only intermittently. Often times, this is likely normal operation and requires no repairs. Gaining a better understanding and familiarization of this all-new system's operational characteristics will help achieve the desired operation of the seat's features.

Some common comments are:

The seat won't recall when I enter the vehicle (this may or may not be intermittent).

The seat only moves if I hold the Memory Recall/Easy Exit button down (this may or may not be intermittent).

The seat stops moving when I release the Memory Recall/Easy Exit button (this may or may not be intermittent).

Sometimes the seat moves completely to the stored position by pressing and releasing the Memory Recall/Easy Exit button, other times I have to hold the button down until it stops moving.

The seat barely moves, then stops, when I press the Memory Recall/Easy Exit button. If I release the button and press it again, the seat does the same thing (this may or may not be intermittent).

Becoming familiar with the following three areas of Power Seat/Memory Seat will aid in assisting customers with power seat and memory seat functionality.

Limit Switches

This all-new system utilizes two switches that were not used on prior models.

1. The Bulkhead Limit Switch

This switch is used in both seating positions, is located on the left and right body harness conduit, and acts to prevent damage to the body harness and seatback covers when the seat/seatback are moved in a rearward direction. When this switch is "Active" the seat movements, from both the Power Seat Switch and Memory Recall/Easy Exit buttons are limited to only allow movements that will bring the seat/seatback forward, away from the switch. This switch is "Active" when pressure is detected against the rear bulkhead/carpet area directly behind the seats. It will read "Inactive" when pressure is removed from this area.

2. The Seatback Unlock Switch

This switch is used in both seat positions and is located inside the seatback assembly at the recliner mechanism. It acts to prevent the seat from moving further rearward to ensure that

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the seatback can return to the normal upright position. When this switch is "Active" the seat movements, from both the Power Seat Switch and Memory Recall/Easy Exit buttons are limited to only allow movements that will bring the seat/seatback forward. This switch is "Active" when the seatback is manually folded forward. It will read "Inactive" when the seatback is in the normal, driving position.

Note: Both of these switches are viewable in the GDS2 scan tool for both seats. If you experience a concern, you should first monitor these switch values for being "Active." The most common reason for the Bulkhead Limit switch being "Active" is if the Easy Exit setting is stored in a position that applies pressure to the rear bulkhead, or in cases where an object has fallen, or is being stored, behind the seatback and applies sufficient pressure to activate the switch.

Supervised / Unsupervised Movements

This all-new system utilizes two modes that were not used on prior models.

1. Unsupervised Movement

Note: Pressing any Power Seat or Memory Recall/Easy Exit button again during unsupervised movement will stop the seat movement. Press and release, within 0.5 second, the desired Memory Recall/Easy Exit button again to resume the recall to the stored position.

There are several criteria that must be met before the vehicle will allow unsupervised movement to occur. These criteria differ based on Transmission type.

a) Automatic Trans – The vehicle is running, the transmission is in Park, the Seatback Unlock Switch AND Bulkhead Limit Switch are both Inactive.

Important: Regardless of transmission type, the Memory Recall button MUST be pressed and released in less than 0.5 second. If the button is pressed longer than 0.5 second the control module changes the request for movement to a supervised movement, meaning the seat will stop moving when the button is released. At this point you may either continue holding the button until the stored position is obtained, or release the button, then press and release it within 0.5 second to activate unsupervised movement.

2. Supervised Movement

Note: releasing the memory seat button during this operation will stop the seat movement, press and hold the switch again to resume movement to the desired position. Only the Unsupervised memory recall operation can occur when the vehicle ignition is not in the Run Position. If the Bulkhead Limit Switch or Seatback Unlock Switch are Active you will either get no operation or supervised operation (depending on which switch is Active and the requested direction of seat travel).

Auto Memory Recall

This all-new system allows the user to Enable or Disable the Auto Memory Recall operation of the seat.

Auto memory recall is when the seat moves to a previously stored positions either when opening the Left Door or when the Ignition is turned on. In order for Auto Recall to function, you must first have the feature turned On in the Personalization menu of the Radio.

The operation of Auto Memory Recall will differ based on Transmission type.

Automatic Trans:

a) At Driver Door Open – When the Vehicle ignition is off, after the customer has pressed the Unlock fob button, they have 4 minutes to open the driver door. This will allow the seat to recall to the desired position as long as the Bulkhead Limit Switch or Seatback Unlock Switch are Inactive. If the driver door is already open, then pressing the Unlock fob button will cause the seat to recall to the desired position as long as the Bulkhead Limit Switch or Seatback Unlock Switch are Inactive.

b) At Ignition On – When the ignition button is pressed the seats will recall to the desired position without a memory recall button press as long as the Bulkhead Limit Switch or Seatback Unlock Switch are Inactive.

Manual Trans:

The only available selection is On or Off. If On is selected - When the Vehicle ignition is off and upon opening the driver door the seat will recall to the desired position as long as the Bulkhead Limit Switch or Seatback Unlock Switch are Inactive.

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