

**Front Seat Track Motor****Material**

Item	Specification
Multi-Purpose Grease XG-4	ESR-M1C159-A

**Removal**

**⚠ WARNING:** Always wear safety glasses when repairing a supplemental restraint system (SRS) vehicle and when handling an air bag module. This will reduce the risk of injury in the event of an accidental deployment.

**⚠ WARNING:** Never probe the connectors on the air bag module. Doing so can result in air bag deployment, which can result in personal injury.

**⚠ WARNING:** To reduce the risk of personal injury, do not use any memory saver devices.

**⚠ WARNING:** The tightening torque of the seat track fasteners is critical for proper seat track system operation. Failure to follow these instructions may result in the failure of the seat to perform as designed with resultant risk of personal injury to the vehicle occupant.

**NOTE:** If a seat equipped with a supplemental restraint system (SRS) component is being serviced, the SRS must be depowered.

**NOTE:** The air bag warning lamp illuminates when the RCM fuse is removed and the ignition switch is ON. This is normal operation and does not indicate a supplemental restraint system (SRS) fault.

**NOTE:** The SRS must be fully operational and free of faults before releasing the vehicle to the customer.

**NOTE:** Wear protective gloves as needed when handling components or parts that have pointed or sharp edges.

**All seats**

1. Move the seat so the front and rear vertical motors are positioned in the middle of their travel.
2. **NOTE:** If the seat does not move while activating the seat control switch, push on the seat cushion in the direction needed while activating the switch.

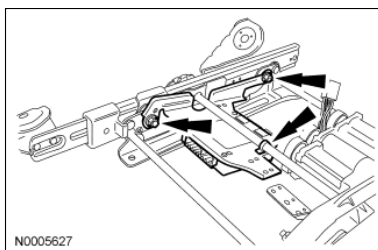
If the seat cannot be moved, a new seat track assembly must be installed.

Move the seat horizontally to access all seat-to-floor fasteners.

3. Depower the supplemental restraint system (SRS). For additional information, refer to Supplemental Restraint System (SRS) Depowering and Repowering in the General Procedures portion of [Section 501-20B](#).
4. Remove the seat. For additional information, refer to [Front Seat — Captain's Chair and 40 Percent Seat, Without Side Air Bags](#) or [Front Seat — Captain's Chair with Side Air Bag](#) in this section.
5. Remove the seat track. For additional information, refer to [Seat Track — Power, without Side Air Bag](#) or [Seat Track — Power, with Side Air Bag](#) in this section.

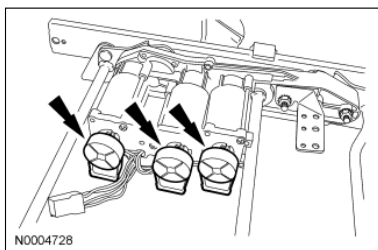
**Driver seat**

6. Remove the two nuts, then remove the memory seat module and bracket.



7. **NOTE:** The memory position sensors are interchangeable.

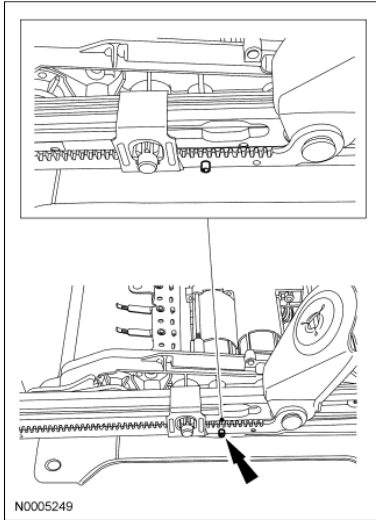
Rotate each memory seat position sensor counterclockwise and remove the three sensors.



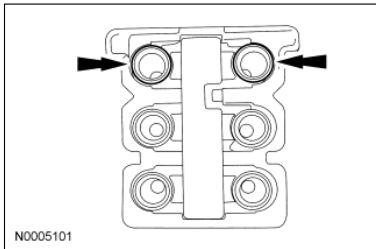
**All seats**

8. **NOTE:** Note the location of the roll pin for installation.

Remove the roll pin (if equipped) and retain it for installation.



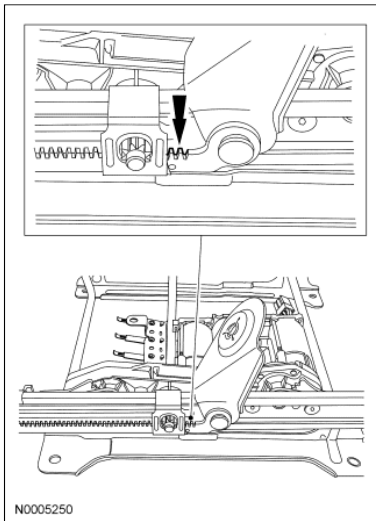
9. To change the seat track horizontal position, apply power and ground to the pins shown.



10. **NOTE:** If not correctly positioned, the seat track motor assembly cannot be removed from the seat track.

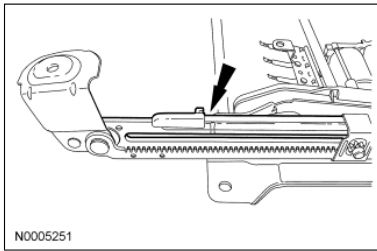
**NOTE:** If the seat track does not move, manually turn the drive tube while applying power to the horizontal motor.

Position the seat track horizontally by applying power and ground to the seat track motor pins (as shown in the previous step). Position the outboard track most of the way forward so that two teeth are showing next to the outboard retainer clip and a flat spot on the drive tube is positioned upward.



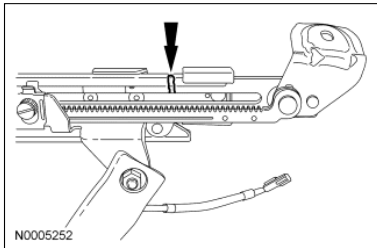
11. **NOTE:** This step is critical so that during installation the inboard and outboard tracks can be checked to make sure they are in alignment with each other.

Mark the position of the outboard track C-channel to the plastic coated slide as shown.

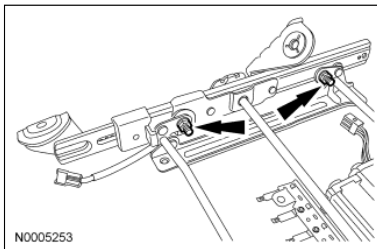


12. **NOTE:** This step is critical so that during installation the inboard and outboard tracks can be checked to make sure they are in alignment with each other.

Mark the position of the inboard track C-channel to the plastic coated slide as shown.



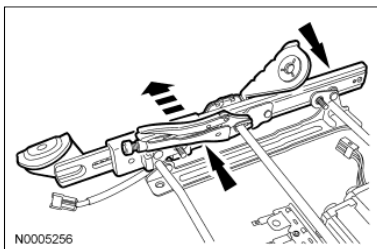
13. Remove the two nuts at the lift links.



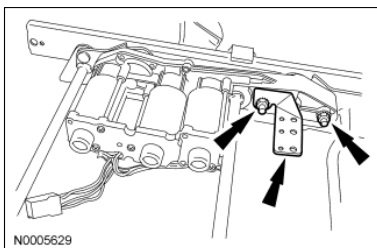
14. **NOTE:** The drive tube is press-fit to stub shafts on each end. A hammer may be necessary to separate the drive tube.

**NOTE:** The drive tube must be clamped at the inboard track gear stub shaft to allow the drive tube to separate at the seat track motor gear stub shaft.

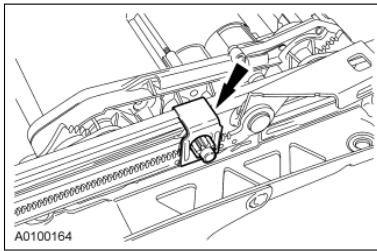
Clamp the locking pliers on the flats of the drive tube where it reaches over the inboard track gear stub shaft. Tap on the locking pliers, separate the drive tube from the seat track motor assembly stub shaft and remove the inboard track and drive tube.



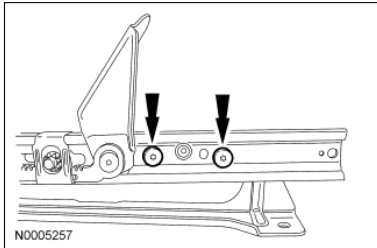
15. Remove the two nuts and the bracket.



16. Remove the outboard retainer clip.

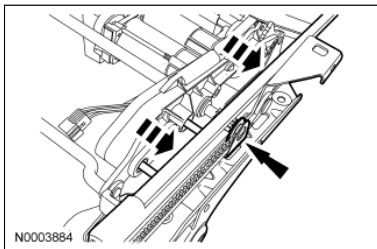


17. Remove the two bolts holding the seat track motor assembly to the outboard track.

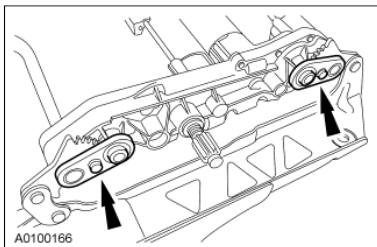


18. **NOTE:** The pinion cage will be removed with the outboard track.

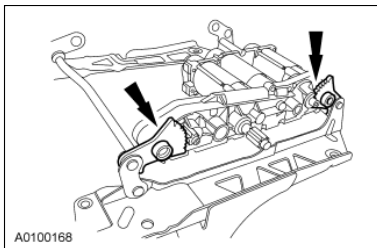
Carefully pry between the seat track motor assembly and the outboard track and remove the outboard track.



19. Carefully pry and remove the two support straps.



20. Pry and remove the seat track motor assembly from the upper support assembly.

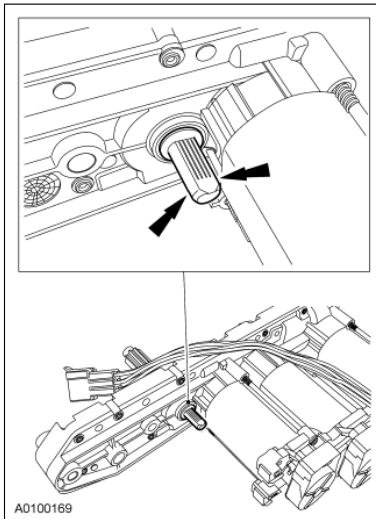


## Installation

### All seats

1. **NOTE:** This step is critical in getting the inboard and outboard tracks in alignment. Otherwise, when installing the seat in vehicle, the holes in the track mounting ears will not align to the holes in the floor pan and the seat track may prematurely fail due to binding.

Position the new and old seat track motor assembly side by side. Position the new seat track motor assembly stub shaft flat spots (splines) in the same position as the old seat track motor assembly flat spots. If necessary, apply power and ground to the new seat track motor electrical connector as shown during removal to obtain the same position.



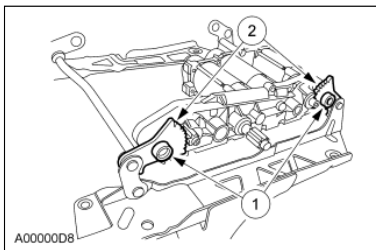
2. **NOTE:** The front and rear height adjustment gears do not have to mesh with the seat track motor assembly gears at the same teeth as when disassembled.

Install the seat track motor assembly to the upper support assembly.

1. **NOTE:** Make sure the motor is positioned right side up.

Install the seat track motor assembly pivots through the front and rear height adjustment gear brackets.

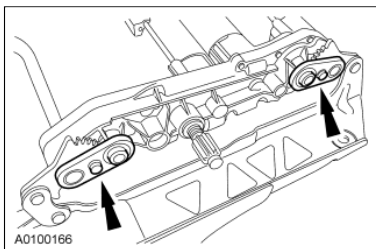
- Apply multi-purpose grease to the motor pivots.
2. Mesh the seat track motor assembly gears to the front and rear height adjustment gears.
- There should not be a gap between the upper support assembly gears and the seat track motor assembly housing.



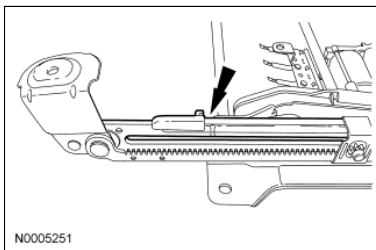
3. **WARNING:** The support straps are load-bearing components during a crash event. The support straps must be correctly installed during assembly of the seat track. Failure to follow these instructions may result in the failure of the seat to perform as designed with resultant risk of personal injury to the vehicle occupant.

Install the support straps.

- The support straps must fit flush against the front and rear height adjustment gears.

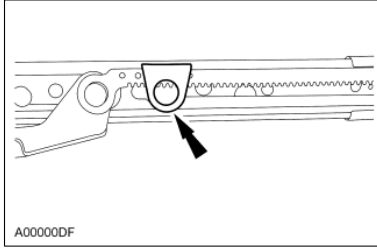


4. Check to make sure the index marks on the outboard track C-channel and plastic coated slide are still in alignment.

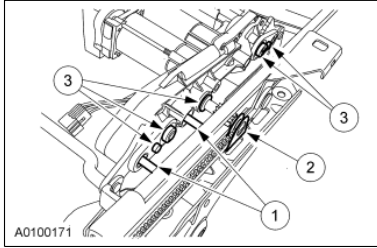


5. **WARNING:** The pinion cage is a load-bearing component during a crash event. The pinion cage must be correctly installed during assembly of the seat track. Failure to follow this instruction may result in the failure of the seat to perform as designed with resultant risk of personal injury to the vehicle occupant.

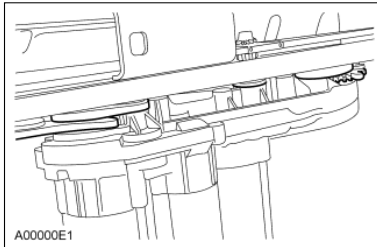
Position the pinion cage onto the outboard track.



6. Install the outboard track.
  1. Position the track studs through the seat track motor assembly.
  2. While sliding the track studs through the seat track motor assembly, position the pinion cage opening around the seat track motor assembly gear.
  3. Fit the support straps and seat track motor assembly gear bushing alignment pins into the track openings.

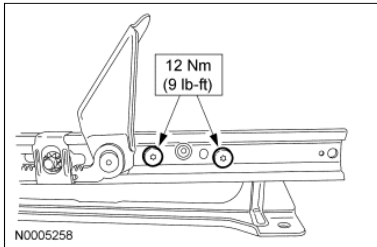


7. When assembled, make sure the outboard track, support straps, front and rear height adjustment gears and seat track motor assembly all fit flush against each other.
  - Make sure the support straps and seat track motor assembly gear bushing alignment pins fit into the track openings.

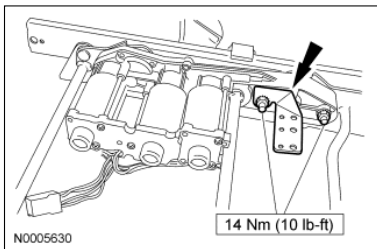


8.  **CAUTION: Do not overtighten or damage will occur.**

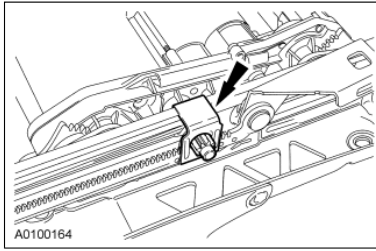
Install the two bolts holding the seat track motor assembly to the outboard track.



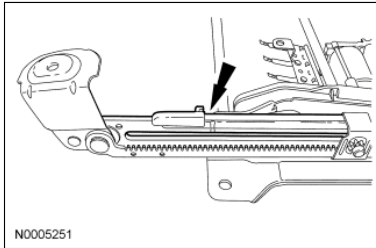
9. Install the bracket and two nuts.



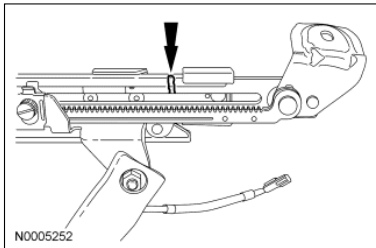
10. Install the outboard retainer clip.



11. Check to make sure the index marks on the outboard track C-channel and plastic coated slide are still in alignment.
- The index marks on the outboard track C-channel and plastic coated slide must align at this step. If the index marks do not match up, repeat Steps 1 through 10.



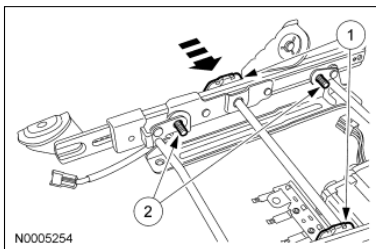
12. Check to make sure the index marks on the inboard track C-channel and plastic coated slide are still in alignment.



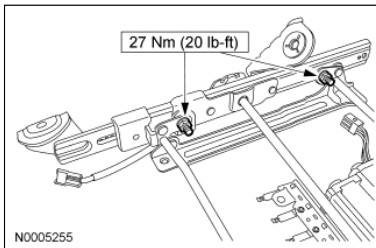
13. **NOTE:** When assembled, a small gap between one of the gears and the drive tube may exist.

Assemble the seat track motor assembly, upper support assembly and inboard track together.

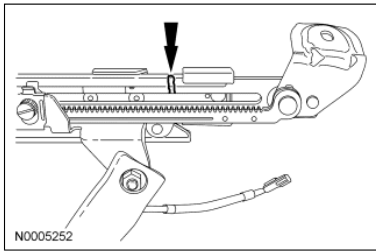
1. Align the drive tube to the motor stub shaft. Tap the nose of the inboard track gear toward the seat track motor stub shaft.
  - Positioning a block of metal or wood behind the motor gear can aid assembly.
2. While tapping the parts together, simultaneously engage the front and rear lift links to the inboard track.
  - When the lift links are up against the inboard track, with the bushings through the hole and seated, the drive tube is fully engaged.



14. Install the nuts holding the inboard track to the upper support assembly lift links.

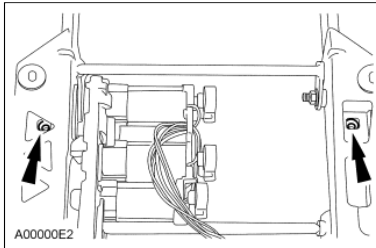



15. Check to make sure the index marks on the inboard track C-channel and plastic coated slide are still in alignment.
- The index marks on the inboard track C-channel and plastic coated slide must align at this step. If the index marks do not match up, repeat Steps 12 through 14.



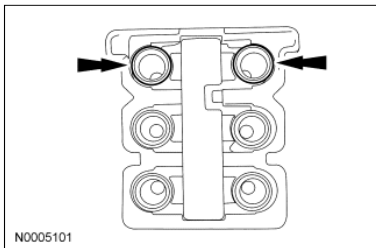
16. Position the seat track in the vehicle.


- The left and right front mounting feet holes should align with the floor pan mounting holes, without pushing or pulling the seat track to force alignment. Check the witness marks (indentations) in the carpet. The tracks should line up closely with them.
- If the seat track does not align to the vehicle, check to make sure the index marks on the inboard and outboard track rails and guides are still in alignment. Repeat the necessary steps until the index marks align.



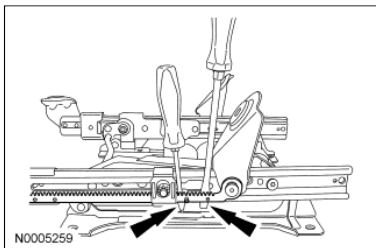
17.  **CAUTION:** The seat must be repositioned prior to installing the roll pin or damage to the seat track will result.

Apply power and ground to the pins shown to reposition the seat horizontally, allowing the roll pin to be installed without prohibiting seat travel.



18.  **CAUTION:** The seat track gear rack must be supported during installation of the roll pin or damage to the seat track will result.

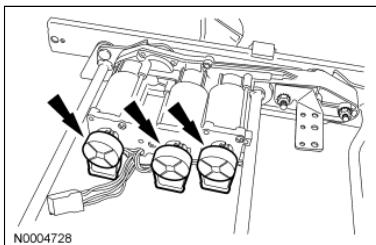
Support the seat track gear rack using two screwdrivers (or similar suitable tools) as shown. Install the roll pin into its original position.



#### Driver seat

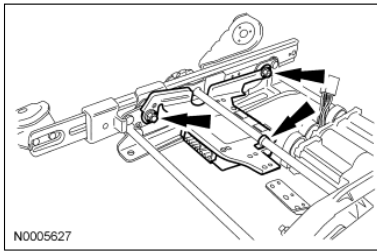
19. **NOTE:** The memory position sensors are interchangeable.

Position each of the three seat position sensors and rotate clockwise to install.



20. Install the memory seat module and bracket, then install the two nuts.



**All seats**

21. Install the seat track. For additional information, refer to [Seat Track — Power, without Side Air Bag](#) or [Seat Track — Power, with Side Air Bag](#) in this section.
22. Install the seat. For additional information, refer to [Front Seat — Captain's Chair and 40 Percent Seat, Without Side Air Bags](#) or [Front Seat — Captain's Chair with Side Air Bag](#) in this section.
23. Repower the supplemental restraint system (SRS). For additional information, refer to Supplemental Restraint System (SRS) Depowering and Repowering in the General Procedures portion of [Section 501-20B](#).

**Driver seat**

24. If equipped with memory seats, cycle the driver seat in its full range of travel in all directions.
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