



## SIB 52 23 19 SEATS IN THE G05, G06, G07

2022-04-05

This Service Information Bulletin (Revision 11) replaces TRI B52 23 19 **dated February 20212**.  
This bulletin is information only, no claim information intended.

### What's New (Specific text highlighted):

- This Service Bulletin B52 23 19 replaces TRI B52 23 19.
- Seat heating information added
- Seat small parts information added
- 2nd row Captain/Business seat information added
- Parts Information updated

### MODEL

E-Series	Model Description	Production Date
G05	X5 Sports Activity Vehicle	From Start of Production (SoP)
G06	X6 Sports Activity Vehicle	
G07	X7 Sports Activity Vehicle	

### INFORMATION

Refer to attachment B52 23 19.

### Supporting Materials

[picture\\_as\\_pdf B52 23 19 Seat Guide.pdf](#)

[picture\\_as\\_pdf B52 23 19\\_REV11.pdf](#)

### Videos

[52 01 19](#)

[52 02 19](#)

[52 01 21](#)



# G07 BMW X7.

## REAR SEAT CONTROLS AND OPERATION.

**BMW GROUP UNIVERSITY**

NICE TO KNOW | 25 MARCH 2019



# 2019 BMW X7. DRIVER'S DOOR CONTROLS



Lock switch

- THESE BUTTONS WILL SLIDE THE 2<sup>ND</sup> ROW SEATS FORWARD AND BACKWARD.
- IF THE SEAT IS RECLINED OR FOLDED DOWN, IT WILL BRING THEM TO AN UPRIGHT POSITION BEFORE SLIDING, BUT IT WILL NOT FOLD THE SEATBACK DOWN.
- THIS IS THE "GENTLEMAN/LIMO FUNCTION".
- WHEN PRESSES, ADJUSTING THE DRIVER'S SEAT WILL MOVE THE FRONT PASSENGER SEAT INSTEAD.

# 2019 BMW X7.

## 2<sup>ND</sup> ROW SEATS CONTROLS: BENCH OR CAPTAIN.



- THESE CONTROLS ARE IDENTICAL ON THE SIDE OF THE BENCH OR CAPTAIN SEAT.
- ON A BENCH SEAT, IT CONTROLS THE 2<sup>ND</sup> ROW PASSENGER WITH MIDDLE SECTION.
- **1) STANDARD BUTTON RESETS THE 2<sup>ND</sup> ROW TO A DEFAULT, COMFORT POSITION.**  
THIS BUTTON IS HELPFUL FOR TROUBLESHOOTING SEAT MOVEMENT RESTRICTIONS:  
EXAMPLE: THE 2<sup>ND</sup> ROW WITH CAPTAIN CHAIRS IS TILTED FORWARD AND YOU PRESS THE MAX SPACE/CARGO ON THE REAR PANEL (SEE PAGE 8), BUT NOTHING MOVES. PRESS THE STANDARD BUTTON TO RESET THE 2<sup>ND</sup> ROW AND THEN TRY AGAIN.  
NO MATTER HOW THE 2<sup>ND</sup> ROW SEAT ENDED UP IN ITS POSITION, THE STANDARD BUTTON WILL RESET IT BACK TO ITS STANDARD, COMFORT POSITION.
- **2) SLIDE FORWARD AND BACKWARDS**
- **3) PIVOT SEATBACK FORWARDS AND BACKWARDS**



## 2019 BMW X7. BENCH SEAT 2<sup>ND</sup> ROW CONTROLS.



- THIS IS LOCATED ON THE “SHOULDER” OF THE 2<sup>ND</sup> ROW SEAT.
- THIS BUTTON FOLDS THE SEAT DOWN AND LIFTS THEM BACK UP.
- THEY ARE 1 TOUCH.
- NOTE: CAPTAINS CHAIRS DO NOT HAVE THIS BUTTON AS THEY DO NOT FOLD FLAT.

# 2019 BMW X7. BENCH SEAT 2<sup>ND</sup> ROW CONTROLS.



- THIS BUTTON ALLOWS FOR EASY ACCESS TO THE 3<sup>RD</sup> ROW.
- IT WORKS JUST LIKE IT DOES ON OUR 2 DOOR COUPE MODELS.
- IT IS 1 TOUCH.
- NOTE: IF YOU ARE HAVING ISSUES WITH THE DRIVER'S SEAT RECLINE,  
  
DO A FULL CYCLE WITH THIS BUTTON AND MAKE SURE IT LOCKS BACK INTO PLACE.

**SEE SIB B52 01 19 FOR MORE DETAILS**

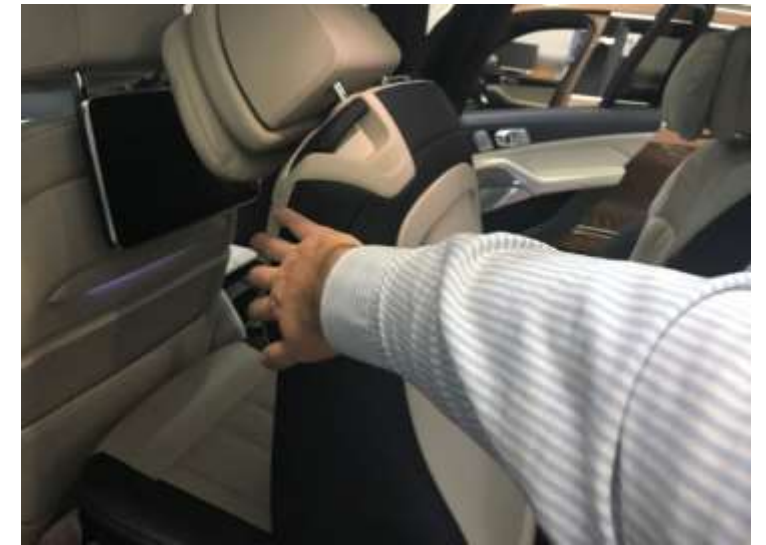
# 2019 BMW X7. CAPTAIN'S CHAIRS 2<sup>ND</sup> ROW CONTROLS.



- THIS LEVER MOVES THE SEAT FORWARD AS WELL AS LIFT/TILT TO ALLOW EASY ACCESS TO THE 3<sup>RD</sup> ROW.
- MANUALLY, PULL UP **AND** FOLD THE SEAT FORWARD TO INITIATE MOVEMENT (BOTH TILT AND LIFT).
- IF YOU HOLD IT UP, THEN LET IT GO, IT WILL START RETURNING TO ITS ORIGINAL POSITION.
- MANUALLY MOVE THE CHAIR BACK TO ITS ORIGINAL POSITION BY PULLING BACK ON THE SEAT (SEE BELOW) UNTIL YOU HEAR A CLICK. THE SEAT WILL THEN PROCEED TO RESEAT ITSELF.



- NOTE: THE ISOFIX CHILD SEAT ANCHORS ARE LOCATED ON THE FLOORBOARD, NOT ON THE BACK OF THE SEATS.



# 2019 BMW X7. 2<sup>ND</sup> ROW BENCH SPLIT.



## 40/20/40 BENCH SPLIT:

**THE BENCH SEAT MOVES ELECTRONICALLY AS A 60/40 SPLIT, BUT HAS A FULL 40/20/40 SPLIT.**

- THE MIDDLE SECTION OF THE BENCH SEAT CAN BE FOLDED DOWN:
  - 1) FOLD THE ARMREST DOWN
  - 2) PULL DOWN ON THE TAB AND PULL FORWARD
- THERE IS A PIN SECURING THE MIDDLE SECTION. IT RETRACTS WHEN THE MIDDLE SECTION IS FOLDED DOWN.
  - PUSH THE MIDDLE SECTION BACK UP AND LOCK IT BACK IN TO POSITION, OR
  - IF ITS SISTER SEAT IS DOWN, PUSHING UP ON THE MIDDLE SECTION TO REATTACH IS EASIEST.





# 2019 BMW X7. REAR DOOR 3<sup>RD</sup> ROW SEAT CONTROLS.

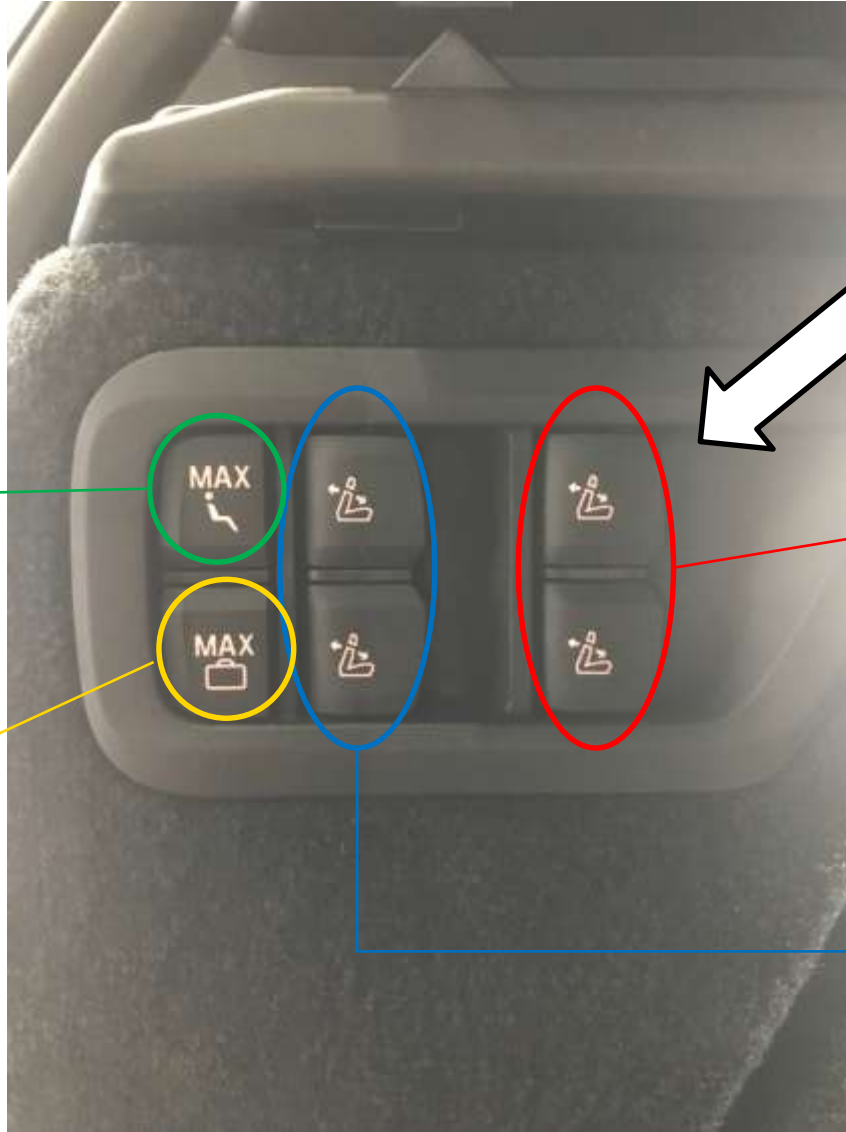


- THESE ARE LOCATED ON THE C PILLAR, NEAR THE 2<sup>ND</sup> ROW SEATBELTS.
- THEY OPERATE THE 3<sup>RD</sup> ROW SEATS FROM THE REAR DOORS.
- THEY ARE 1 TOUCH BUTTONS.
- PULLING THE BUTTON TOWARDS YOU PULLS THE SEATBACK DOWN.
- PUSHING DOWN PUSHES THE SEATBACK UP.
- KEEP IN MIND THERE IS A 2-3 SECOND DELAY. PRESSING A SECOND TIME TOO QUICKLY WILL CANCEL THE COMMAND.
- THERE IS A SMALL HANDLE TO ASSIST IN ENTERING/EXITING THE 3<sup>RD</sup> ROW.

# 2019 BMW X7. CARGO SPACE SEAT CONTROLS.

- MAX COMFORT RAISES ANY LOWERED SEATS.
- IT ALLOWS FOR THE MAX LEGROOM OF ALL PASSENGERS.
- IT WILL MOVE THE 2<sup>ND</sup> ROW UP TO ALLOW MORE LEGROOM FOR THE 3<sup>RD</sup> ROW.

- MAX SPACE WILL DROP ALL THE SEATS.
- TO ALLOW FOR AS MUCH CARGO SPACE AS POSSIBLE.
- NOTE: CAPTAINS CHAIRS DO NOT FOLD FLAT.



- THESE BUTTONS CONTROL THE 2<sup>ND</sup> ROW SEATS.
- THEY ARE 1 TOUCH.
- THERE IS A SLIGHT DELAY, SO BE PATIENT.
- PUSH BUTTONS DOWN TO FOLD SEATS DOWN.
- PULL BUTTONS UP TO UNFOLD SEATS.
- IN ORDER TO PREVENT COLLISION, SOMETIMES THE 3<sup>RD</sup> ROW WILL HAVE TO MOVE TO ALLOW 2<sup>ND</sup> ROW MOVEMENT.

- THESE BUTTONS CONTROL THE 3<sup>RD</sup> ROW SEATS.
- THEY ARE 1 TOUCH.
- THERE IS A SLIGHT DELAY, SO BE PATIENT.
- PUSH DOWN TO FOLD DOWN.
- PULL UP TO UNFOLD.
- IN ORDER TO PREVENT COLLISION, SOMETIMES THE 3<sup>RD</sup> ROW WILL HAVE TO MOVE TO ALLOW 2<sup>ND</sup> ROW MOVEMENT.



# 2019 BMW X7. GENERAL NOTES.



## DRIVER'S SEAT MOVEMENT:

WHEN THE 2<sup>ND</sup> ROW SEATS ARE MOVING, THE DRIVER'S SEAT WILL SOMETIMES MOVE TO ALLOW TRAVEL FOR THE SECOND ROW SEATS. WHILE THERE APPEARS TO BE PLENTY OF ROOM, YOU HAVE TO CONSIDER THE FACT THAT CARS EQUIPPED WITH REAR SEAT ENTERTAINMENT WILL HAVE A LARGE DISPLAY THAT PROTRUDES OFF THE SCREEN

**EXAMPLE ISSUE: COULDN'T ADJUST THE DRIVER'S SEAT/IT IS TOO UPRIGHT/WON'T RECLINE**  
THE SEATS WILL MOVE AROUND TO AVOID COLLISION. THEY SHOULDN'T BE OPERABLE AGAIN UNTIL THE SEAT BEHIND THEM IS IN ITS FIXED POSITION AGAIN.

## STOPPING MOVEMENT/ CANCELLING ACTION:

AN OBJECT OR A PASSENGER'S PRESENCE IS NOT SUFFICIENT TO STOP THE SEAT FROM CONTINUING TO MOVE. THE SEATS ARE NOT TOUCH SENSITIVE FOR ANTI-PINCH, THERE MUST BE FELT/ADDED RESISTANCE.

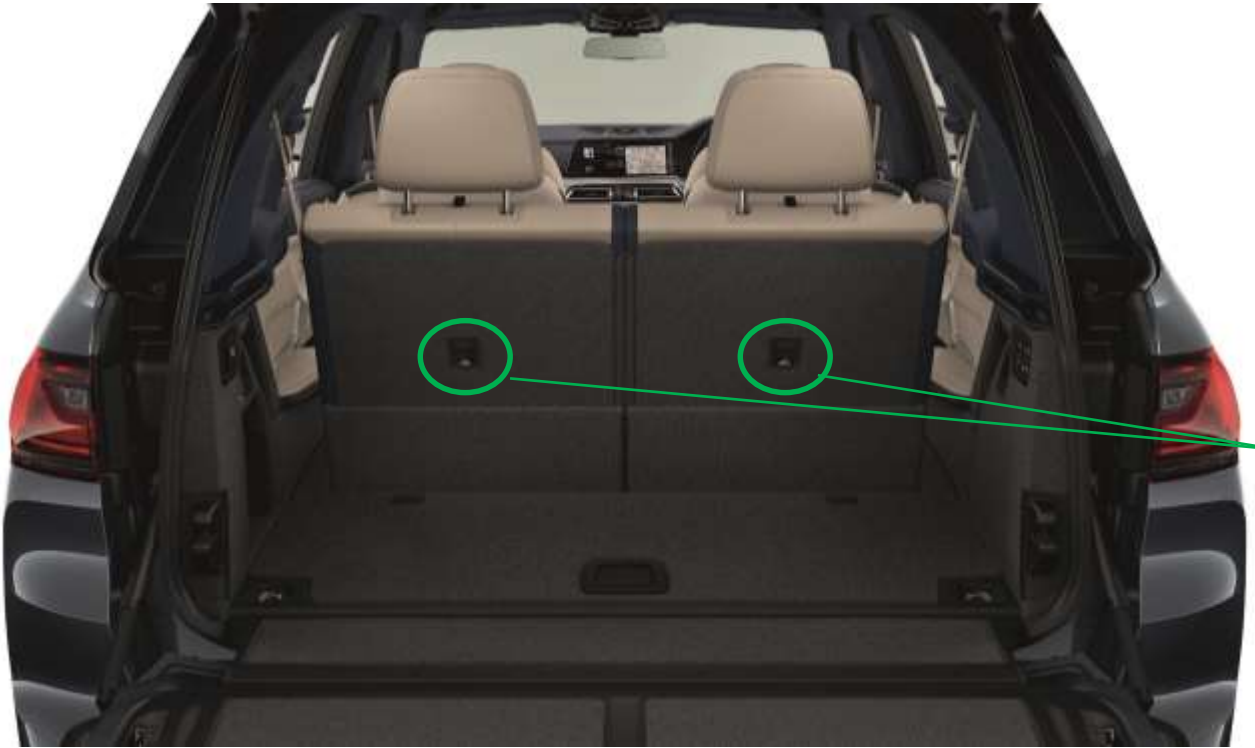
**1) PRESSING ANY SEAT BUTTON WILL CANCEL THE SEAT'S MOVEMENT.**

**2) PRESSING AGAINST A SEAT ALREADY IN MOTION WILL STOP THE SEAT.**

EXAMPLE ISSUE: YOU ARE A TALL PASSENGER IS SEATED IN THE FRONT ROW. THE SEAT BEGINS TO SLIDE FORWARD TO ACCOMMODATE 2<sup>ND</sup> ROW MOVEMENT. PRESS AGAINST THE FORWARD MOTION OF THE SEAT BY PUSHING AGAINST THE DASH OR PRESSING AGAINST THE SEAT USING YOUR BACK.

EXAMPLE ISSUE: YOU ARE TILTING THE CAPTAIN'S SEAT BACK DOWN TO ITS SEATED POSITION AND YOUR CARGO HAS TIPPED OVER AND ROLLED UNDER THE SEAT OR THE FAMILY DOG JUMPED IN UNEXPECTEDLY. USE YOUR FULL HAND TO SIMPLY HIT AT ANY OF THE BUTTON CLUSTERS. NO PRECISION IS NEEDED, ANY BUTTON PRESSED WILL STOP MOVEMENT.

# 2019 BMW X7. GENERAL NOTES.



THERE IS ONE MOTOR IN THE REAR SEAT.

THIS ONE MOTOR CONTROLS ALL 3 FUNCTIONS FOR THE 3<sup>RD</sup> ROW SEAT.

- 1) THE MOTOR FOLDS DOWN THE HEADRESTS
- 2) THE MOTOR PULLS THE PINS IN THE SIDE OF THE SEAT THAT KEEP IT LOCKED TOGETHER (SAFETY FEATURE FOR ACCIDENTS).
- 3) THE MOTOR FOLDS THE SEAT DOWN.

THIS DESIGN REDUCES THE COMPLEXITY IN THE SEATS AND MOVING PARTS.

NOTE: THE ISOFIX CHILD SEAT ANCHORS ARE LOCATED ON BACK OF THE SEATS, SO THE 3<sup>RD</sup> ROW ON THE X7 IS CAPABLE OF SECURING TWO CHILD SEATS (UNLIKE THE X5 3<sup>RD</sup> ROW).



# 2019 BMW X7. GENERAL NOTES.



## 5 ZONE CLIMATE:

**IF BOTH SEATS OF THE 3<sup>RD</sup> ROW SEATS ARE FOLDED, IT WILL DISABLE THE USE OF THE 5<sup>TH</sup> ZONE CLIMATE CONTROL (IF EQUIPPED WITH COLD WEATHER PACKAGE)**

REAL LIFE SITUATION: PUTTING BOTH SEATS DOWN TO TRAVEL WITH THE FAMILY ST. BERNARD NAMED FLUFFY MEANS THAT FLUFFY WON'T HAVE AN OPERATIONAL 5<sup>TH</sup> ZONE CLIMATE.

NOTE: THE STORED CARGO COVER IS SLIGHTLY MORE DIFFICULT TO REMOVE ON VEHICLES EQUIPPED WITH 5 ZONE CLIMATE. PRACTICE REMOVING THIS YOURSELF SEVERAL TIMES AND SHARE YOUR KNOW-HOW WITH YOUR CLIENTS TO MAKE THE ACTION AS EASY AS POSSIBLE.



Haven't gotten the knack? Try this:

1. Remove both cubby covers
2. Twist up
3. Lift up over light
4. Follow path between buttons and cargo rail

# Service Information Bulletin

Seats

April 5, 2022

B52 23 19

## SEATS IN THE G05, G06, G07

This Service Information Bulletin (Revision 11) replaces TRI B52 23 19 dated February 20212.

This bulletin is information only, no claim information intended.

**What's New** (Specific text highlighted):

- This Service Bulletin B52 23 19 replaces TRI B52 23 19.
- Seat heating information added
- Seat small parts information added
- 2nd row Captain/Business seat information added
- Parts Information updated

## MODEL

E-Series	Model Description	Production Date
G05	X5 Sports Activity Vehicle	From Start of Production (SoP)
G06	X6 Sports Activity Vehicle	
G07	X7 Sports Activity Vehicle	

## INFORMATION

See Attachment B52 23 19 Rev11.PDF for this complete bulletin.

With the launch of the G05 (X5) Sports Activity Vehicle in August 2018, a new style of networked seats was introduced that have new operating parameters. This service information bulletin details the operation of the new style seats.

The biggest change is that the vehicle's 3 rows of seats will all communicate with one another, so that a problem with one seat can affect the operation of the other 2 rows of seats. This is done to ensure two seats cannot interfere with one another during operation.

The button controls also differ, in that there is a time delay between pushing the button(s) and when the seat responds. If a customer doesn't know about this small delay, they may push the same button a second time which will cancel the operation, leading to customer inquiries.

For details on each of the features shown below, please refer to ISTA or AIR and read through the Functional Description (FUB) documents.

Seat information can also be found on TIS in the training reference manuals:

- G05 Complete Vehicle - ST1831
- G07 Complete Vehicle - ST1832

The seat initialization procedure can be found in ISTA by choosing

- SERVICE FUNCTIONS
- BODY
- SEATS
- SEAT ADJUSTMENT STANDARDIZATION

Then select the correct ABL test plan for the relevant seat.

When a seat is not initialized, some seemingly unrelated functions such as seat heating may be disabled.

To manually move a seat and see status requests, select the seat you want to initialize from the vehicle test screen (Control Unit Tree):

- SMFA - Seat Module Driver
- SMBF - Seat Module Passenger
- SMFAH - Seat Module Driver's Side Rear
- SMBFH - Seat Module Passenger Side Rear

Highlight the correct seat module and then select 'Call up ECU Functions'.  
Then select 'Seat Adjustment'.

### First Row Seats, Second Row Seats with Executive - Captain's Seats

#### Possible Adjustments of the Seat

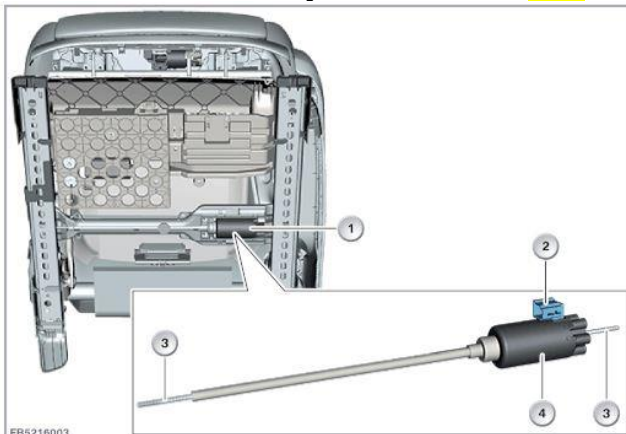


Index	Explanation	Index	Explanation
1	Headrest restraint height adjustment	2	Backrest upper section adjustment
3	Backrest angle adjustment*	4	Backrest width adjustment
5	Forward/back seat adjustment*	6	Seat height adjustment*
7	Seat angle adjustment	8	Seat depth adjustment
9	Lumbar-support adjustment		

\* Seat function also possible for the rear seat

The first row seat and the second row seat executive/captain's seats function similarly.

#### Forward / Back adjustment motor **SLV**

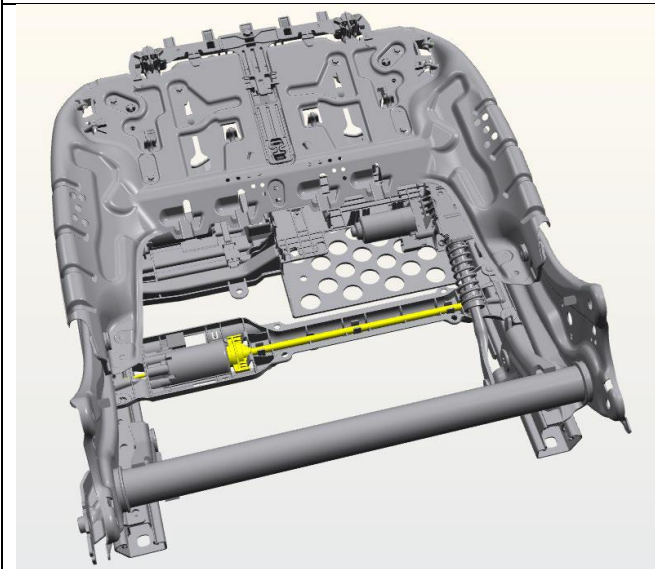


Item	Explanation	Item	Explanation
1	Forward/back seat adjustment drive unit	2	4-pin plug connection
3	Spindle	4	Adjustment motor with gear

#### **NOTE:**

The **plastic tray** that the seat motor mounts to is only available for replacement with the seat rail assembly.

The seat motor and **flexible shafts** that connect the seat rails to the motor are available separately.



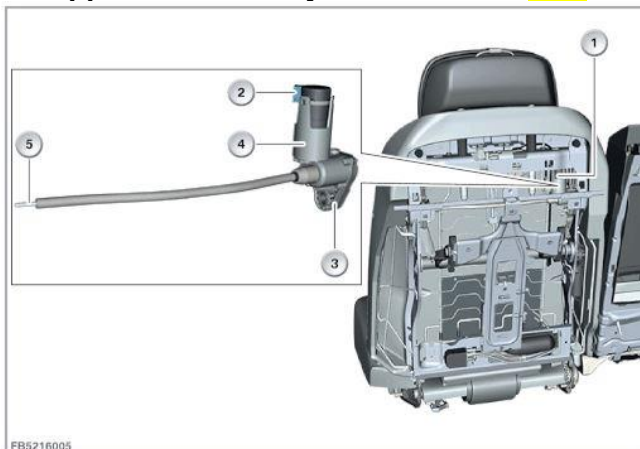
The 2 **flexible shafts** that connect the seat rails to the motor are contained in part number 52 10 7 314 203. This kit contains both the long and short drive cables and small parts.



The seat rails are equipped with a **mechanical end stop**.

- When replacing a seat rail, this end stop must be transferred to the new rail.
- Failure to install these end stops will prevent the seat from initializing.
- End stop part number 52 10 7 469 879

#### Upper Backrest adjustment motor **LKV**

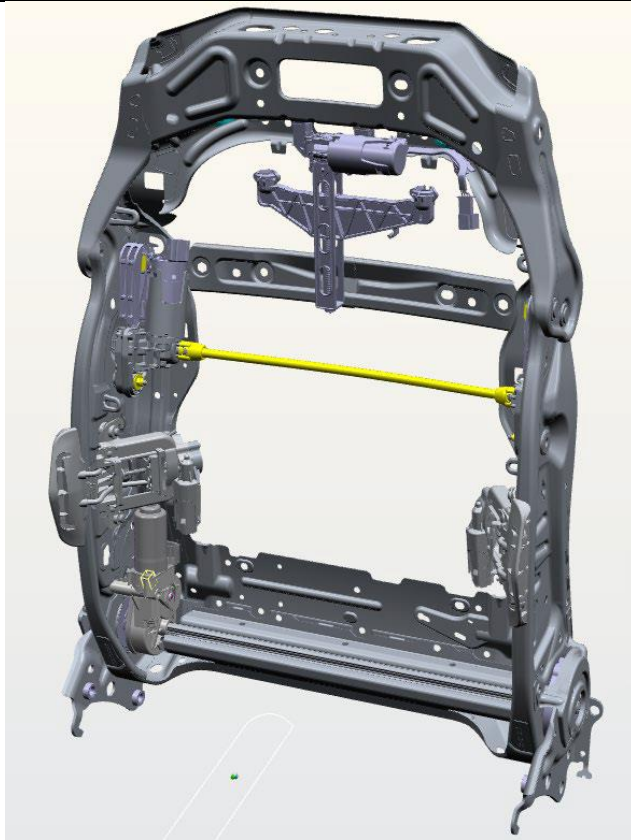


Item	Explanation	Item	Explanation
1	Backrest upper section adjustment motor	2	4-pin plug connection
3	Transmission	4	Servomotor
5	Spindle		

#### **NOTE:**

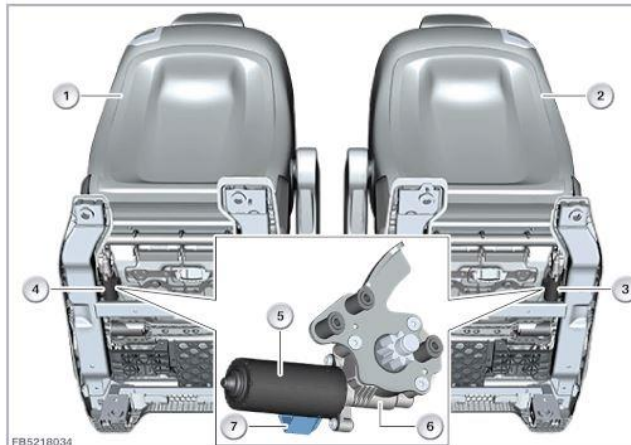
The motor and **flexible shaft** that connects the seat back to the motor are available separately.





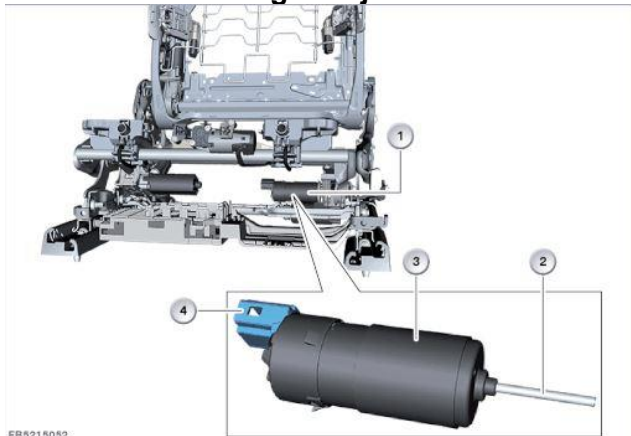
The **flexible shaft** that connects the seat back to the motor is contained in kit part number 52 10 7 454 056 along with small parts for install.

### Lower Backrest adjustment motor



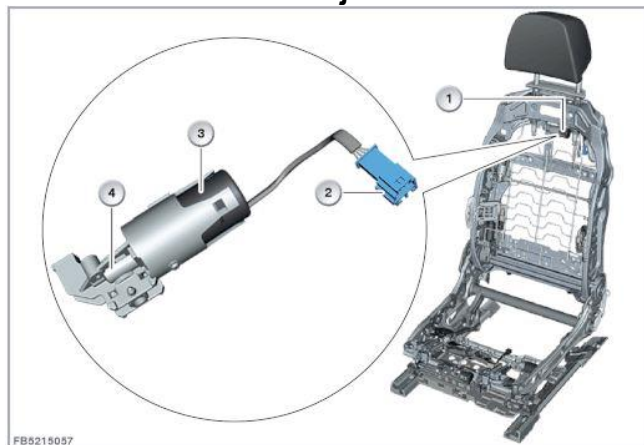
Index	Explanation	Index	Explanation
1	Rear seat backrest (driver's side)	2	Rear seat backrest (passenger's side)
3	Seat height adjustment drive on passenger's side rear	4	Seat height adjustment drive on driver's side rear
5	Servomotor	6	Transmission
7	4-pin plug connection		

### Seat Angle Adjustment



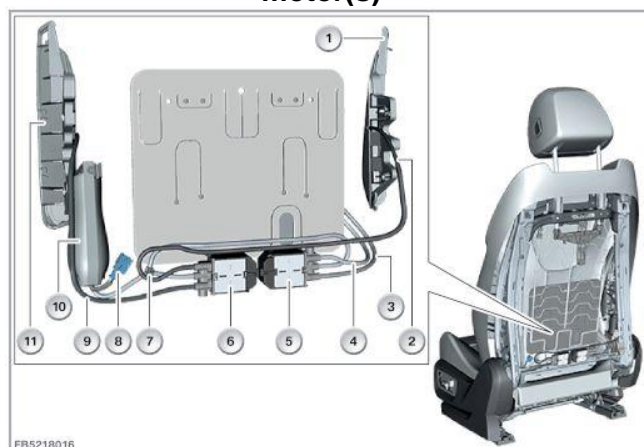
Index	Explanation	Index	Explanation
1	Drive unit for seat cushion tilt adjustment	2	Spindle
3	Adjustment motor with gear	4	4-pin plug connection

### Head Restraint adjustment motor



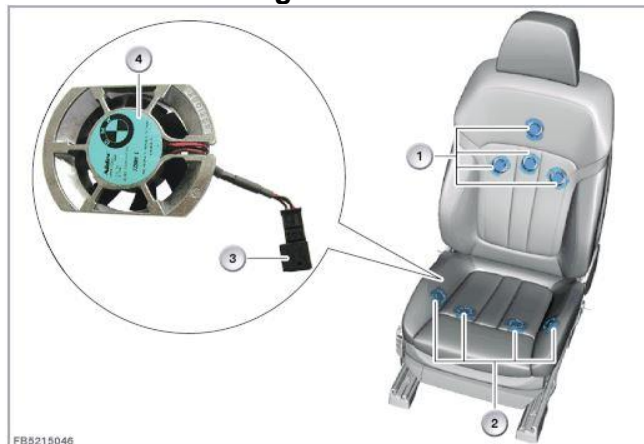
Item	Explanation	Item	Explanation
1	Drive for head restraint height adjustment	2	4-pin plug connection
3	Servomotor	4	Transmission

### Backrest width / Lumbar adjustment motor(s)



Index	Explanation	Index	Explanation
1	Backrest width adjustment, right	2	Compressed air line to the air cushion for the right backrest width adjustment
3	Compressed air line to lumbar support 2	4	Compressed air line to lumbar support 1
5	Lumbar support valve block	6	Backrest width adjustment valve block
7	Distributor (distributes the compressed air delivered by the pneumatic pump to both valve blocks)	8	Plug connection for pneumatic pump (2-pin)
9	Compressed air line to the air cushion for the left backrest width adjustment	10	Electrically driven pneumatic pump
11	Backrest width adjustment, left		

### Cooling Fan motors



Item	Explanation	Item	Explanation
1	Fans in the backrest	2	Fans in the seat surface
3	three-pin plug connection	4	Fan

The fan motors in these vehicles work differently than previous models. The fans work to draw heat away from the body rather than blow hot air onto the body.

### Seat Heater Mats

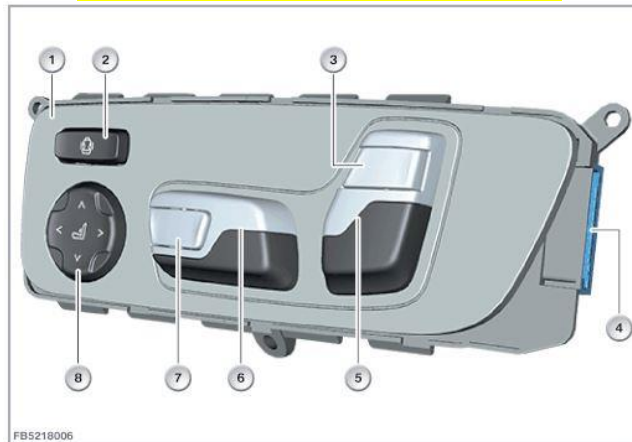


The seat heater mat is controlled by the seat module.

#### NOTE:

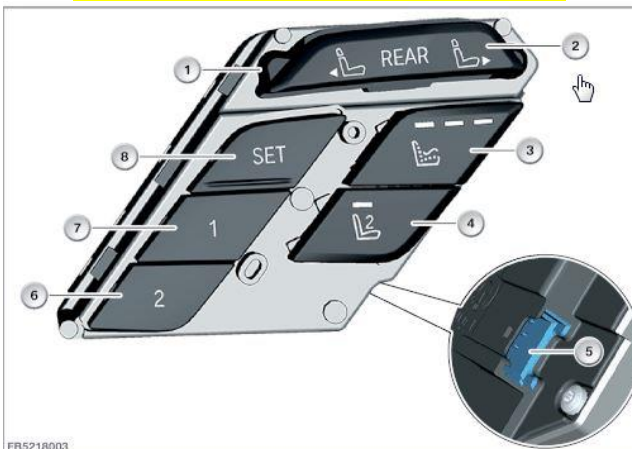
- Seat heaters are low priority power consumers. If the battery voltage is low the seat heaters may not operate until battery state of charge (SOC) recovers.
- When a seat is not initialized, some seemingly unrelated functions such as seat heating may be disabled. If the seat heater is inoperative on the Pre-Delivery Inspection (PDI) go thru the test plan for seat initialization.

### Drivers seat mounted switch block



Index	Explanation	Index	Explanation
1	Seat adjustment switch block, driver's side	2	Switch for seat back width adjustment
3	Button for backrest upper section adjustment	4	10-pin plug connection
5	Button for backrest angle and headrest height adjustment	6	Switch for forward/back, height and seat angle adjustment
7	Button for seat depth adjustment	8	Lumbar support switch

### Drivers door-mounted switch block

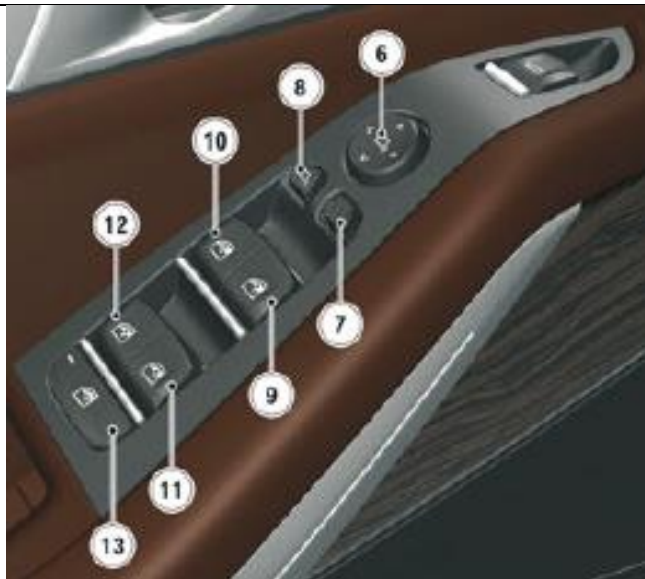


Index	Explanation	Index	Explanation
1	Switch block, seat on driver's door	2	Rear easy-entry facility
3	Button for massage function with function indicator light	4	Button for gentleman function with function indicator light
5	4-pin plug connection	6	Position button 2 (calling the stored seat position)
7	Position button 1 (calling the stored seat position)	8	SET button (store seat position)

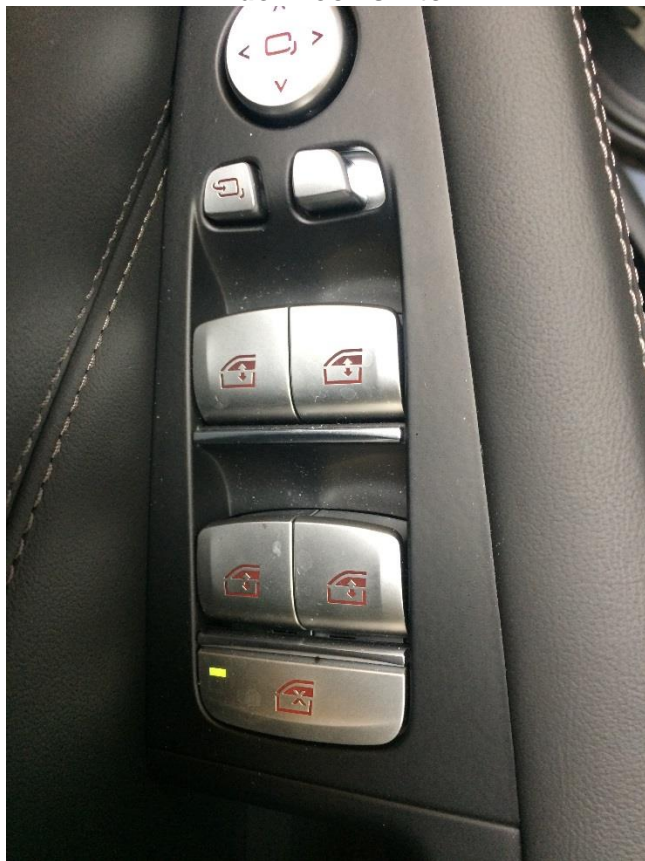
### Drivers door-mounted window switch block

The window lock switch (13) is on the driver's door switch block.





**Window lock switch**



**2<sup>nd</sup> Row Lift / Tilt adjustment**

- Always confirm this is turned off when diagnosing seat operation concerns
- If the LED is lit on the switch then the lock is turned on
- The lock may not turn off if the driver's door is open

This lockout switch affects multiple systems in the vehicle. If the LED is turned on, it will lock out the following:

- Window Controls
  - Power sun shades (if equipped)
  - Sunroof Controls (3<sup>rd</sup> row only)
  - \*\*Seat Controls (2<sup>nd</sup> and 3<sup>rd</sup> row) on side of seat and C pillar mounted controls
- \*\* NOTE:** Vehicles with I-Level S18A-20-07-500 or higher no longer lock the controls of the 2<sup>nd</sup> and 3<sup>rd</sup> row seats.

**2<sup>nd</sup> Row Captains Seat only**

This lever moves the seat forward and lifts/tilts to allow easy access to the 3<sup>rd</sup> row seats.

- If you hold it up, then let it go, it will return to its original position
- Or, you can pull back on the entire seat manually until you hear the seat click and it will finish returning to its original position





- **Captains Seat** will move forward but doesn't fold flat



#### **2<sup>nd</sup> Row Captains Seat only**

The M6 bolt that mounts the second-row seat armrests is available separately. Part number 52 20 9872574.



#### **1<sup>st</sup> and 2<sup>nd</sup> Row Captains/Business Seat only**

##### **NOTES:**

- For the bolts (#5 in picture) that hold the seat adapter (bottom) to the seat frame (middle), use part number **07 14 9 321 690** (4 total needed per seat)
- The bolts that hold the seat bottom (middle of picture) to the seat backrest (Top) are available under part number **07 11 9 908 419** (4 total needed per seat)

**2<sup>nd</sup> Row Lift - Tilt adjustment cam**



When the lever controlling the Bowden cable for the tilt adjustment is not applied, the microswitch is depressed by the cam.

**2<sup>nd</sup> Row Lift - Tilt adjustment cam**

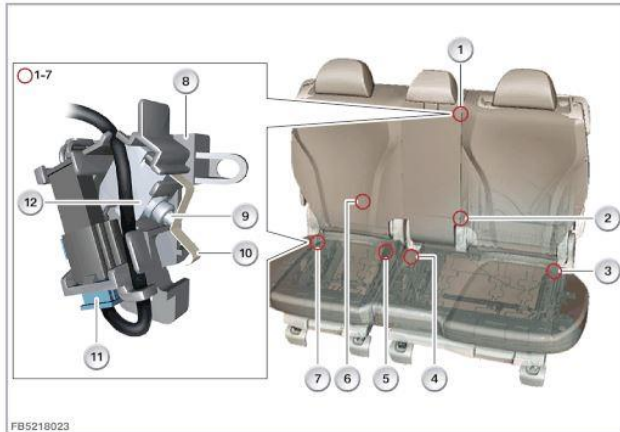


When the lever controlling the Bowden cable for the tilt adjustment is applied, the microswitch is no longer actuated by the cam.

<p style="text-align: center;"><b>J Safety Hooks</b></p> 	<p>The second row seats have a safety interlock when they are in the normal seating position. This “J hook” interlock is there in case of an accident.</p> <p>The seats can slide forward or rearward when in the normal seating position, but they cannot lift upwards until they slide forward on the seat rail.</p> <p>If the seat is properly initialized, it will not cause interference between the J hooks. However if a seat is not initialized, it is possible to move the seat forward, raise it, then slide it backwards. This can force the J hooks to interfere.</p> <p>Do not operate seats unless they are initialized.</p> <p>For more details see the video</p> <ul style="list-style-type: none"> <li>• B52 01 19 - G05-G07 Seat Troubleshooting 6 Passenger</li> </ul>
<p style="text-align: center;"><b>Second Row Comfort / Bench Seats (40-20-40 Split seats, aka 60/40 seat)</b></p>	
<p style="text-align: center;"><b>Seat overview</b></p>  <p style="font-size: small;">Comfort seats in the rear</p>	<ol style="list-style-type: none"> <li>1. Cupholder</li> <li>2. Release for head restraint tilt</li> <li>3. Release for electrically folding the backrest</li> <li>4. Button for electric easy entry function</li> <li>5. ISOFIX mount</li> <li>6. Button for electric seat adjustment</li> <li>7. Safety belt height adjustment</li> </ol>
<p style="text-align: center;"><b>Electric motor locations</b></p>	<ol style="list-style-type: none"> <li>1. Electric Motors for adjusting, folding down and raising up the backrest</li> <li>2. Electric Motors for Forward / Back Adjustment</li> <li>3. Electric Motors for Comfort Entry</li> </ol>



### Microswitch Locations



FB5218023

Index	Explanation	Index	Explanation
1	Microswitch of left seat bench 3	2	Emergency release microswitch for left seat bench
3	Microswitch of left seat bench	4	Microswitch of left seat bench 2
5	Microswitch of right seat bench	6	Emergency release microswitch of right seat bench
7	Microswitch of right seat bench 2	8	Holder
9	Bucket tappet	10	Lever
11	three-pin plug connection	12	Microswitch

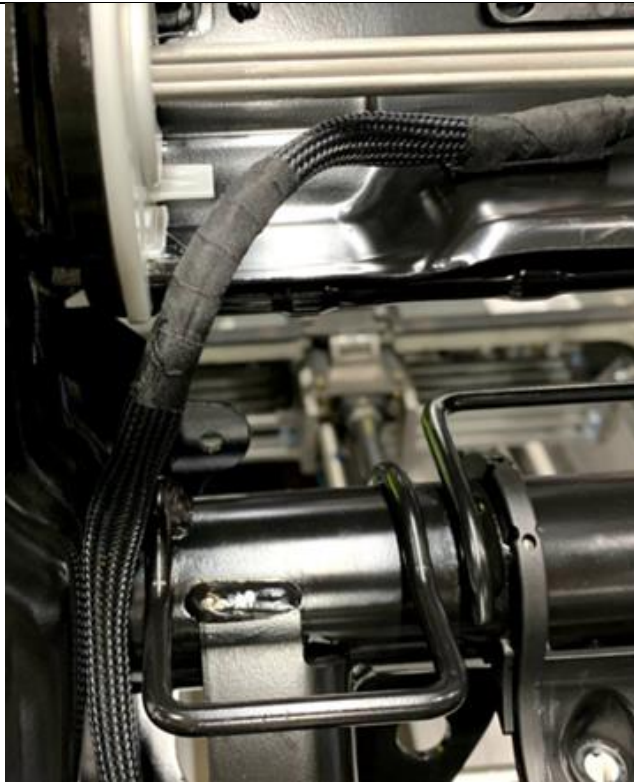
### Harness Routing near folding seatback

Drivers side 60% seat

The wiring harness can be damaged if routed incorrectly at the folding seatback (recliner). The pictures shows the factory routing.

The white plastic plate at the top of each photo is for pinch protection and must be installed as per the picture (the color of the plate may vary).





Passenger side 40% seat

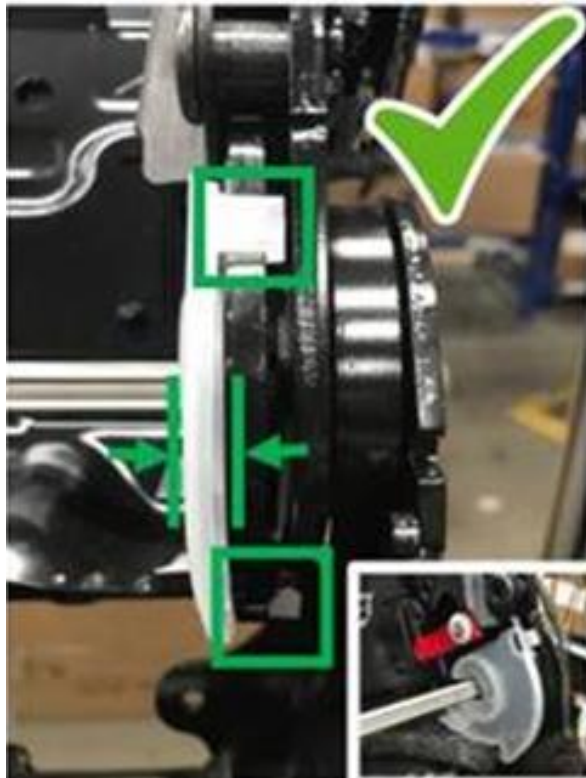


Pinch protection plate

MD LH Inner Recliner Plate





MD RH Inner Recliner Plate



**Lift - Fold adjustment**



This button is located on the 'shoulder' of the 2<sup>nd</sup> row seat and folds the seat down or lifts it back up.

<p><b>Easy Access to 3<sup>rd</sup> row</b></p> 	<p>This button is located on the side of the 2<sup>nd</sup> row seat and it allows easy access to the 3<sup>rd</sup> row seats.</p>
<p><b>2<sup>nd</sup> row seat mounted switch block</b></p> 	<p>These controls are identical on the side of the bench or captain seats.</p> <p>On a bench seat, the middle section moves with the driver seat</p> <ol style="list-style-type: none"> <li>1 Resets the 2<sup>nd</sup> row seat to its default position</li> <li>2 Seat Forward - Backward</li> <li>3 Seatback Forward - Backward</li> </ol>
<p><b>Cupholder - Armrest</b></p>	<p>The armrest of the 60/40 seat can be folded down to access the cupholders.</p> <p>The armrest position is not monitored.</p>



**Center 20% Seat section**



**Center 20% Seat section mounting pin**

The center section (20%) of the seat can be folded down independently of the driver's 2<sup>nd</sup> row seat by pulling on the release (circled).

The center section (20%) is a monitored status. If this is folded down, it can influence the front seat backrest position if the vehicle thinks there will be interference between the seats.

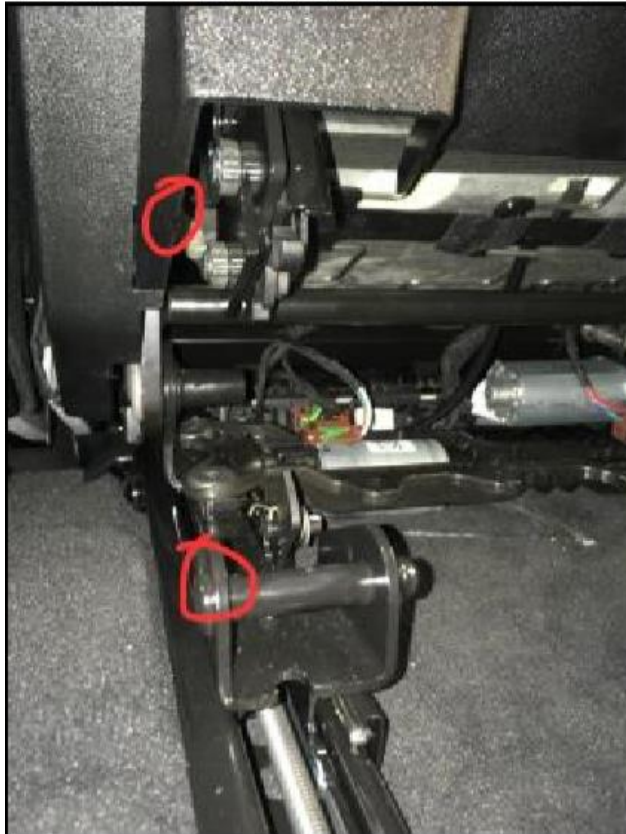
The middle section of the seat is retained by a pin (circled) on the driver's 2<sup>nd</sup> row seat.

- This pin folds down - retracts into the seat once the middle section is folded

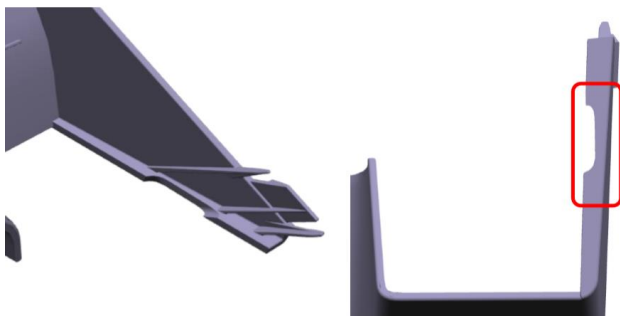




### Passenger 40% Seat Trim Inteferece



NEW DESIGN



**G05 vehicles ONLY** - The inner seat trim can contact the seat rail when returning from the easy entry position. Modified trim was introduced into production December 2020.

On G05 vehicles produced prior to 12/2020 where the seat trim contacts the seat rail, the trim can be modified with either a small belt sander or file.

See attached TIS Noise Catalogue video [V520121.mp4](#) Trim Interference Noise.



**Cam Interlock on latch**

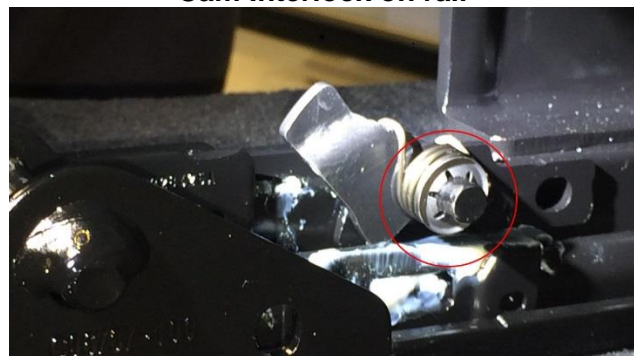


At the seat bottom latch there is an interlock cam (circled) that turns to actuate a microswitch when the seat is unlatched and tilted forward.

This picture shows the cam that is attached to the seat latch assembly.

- This cam is moved when it contacts the tab mounted on the seat rail

**Cam Interlock on rail**



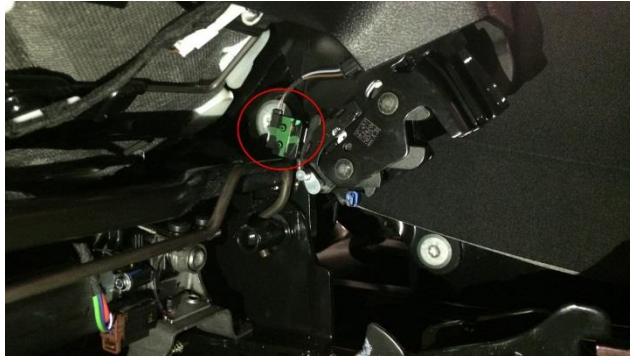
The matched section of the cam interlock is located on the seat rail. This tab (shown raised) contacts the interlock when the seat is lowered to its normal seating position.

The spring lock beveled star washer (circled; P/N 52 20 5A37D37) must keep contact on the spring, or the tab can move out of position damaging the cam interlock.

For more details see the attached video

- B52 02 19 - G05-G07 Seat Troubleshooting 7 Passenger

### Cam interlock Microswitch

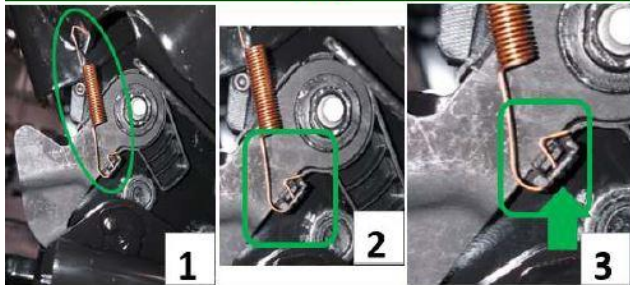


Here is the microswitch location (circled) for the cam interlock.

Replacement microswitch with plastic cap for the 60/40 seat is P/N 52 20 5A37D34.

### Crash lock Spring correct

OK



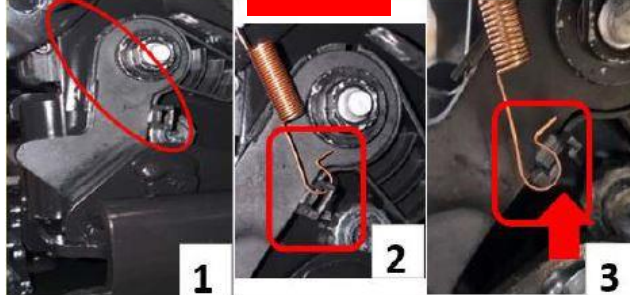
On the side of the seat at the pivot there is a crash lock spring.

- This spring keeps the latch spring loaded so it won't release in case of an accident

The spring is shown in the correct position.

### Crash lock Spring incorrect

not OK



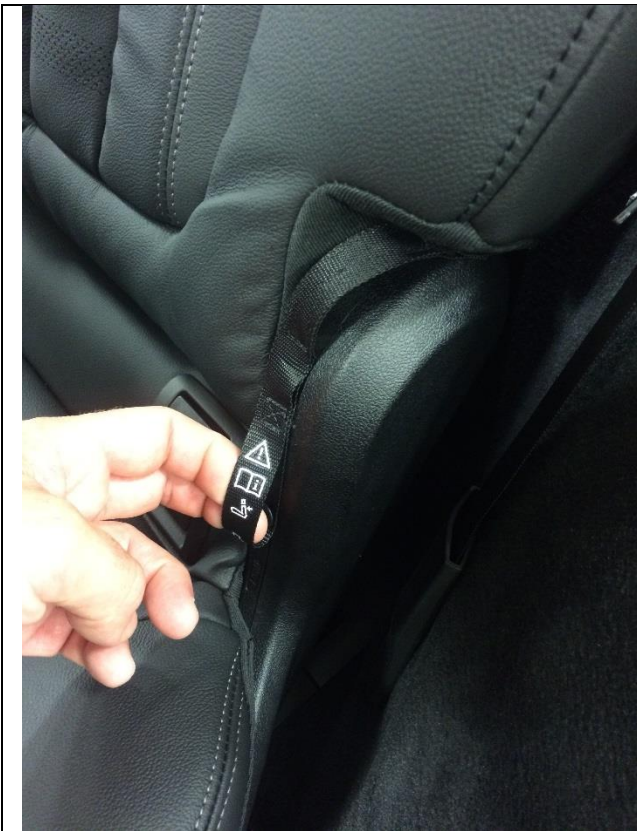
Here the spring is out of its correct position.

### Seat Manual Release 1

The seat can be manually released in case of electrical failure to access the third row seats.

- This is located at the outer pivot point on each side of the 2<sup>nd</sup> row seat.





### Seat Manual Release 2



The seat release (red) is for the third row passenger to actuate, enabling exiting the vehicle in case of electrical failure.





### **REPLACEMENT SEAT COMES IN SHIPPING POSITION #1 / SEAT STUCK IN FOLDED POSITION**

The second-row seat is shipped in a folded-flat position. When in this shipping position, the manual releases detailed above will not work. The manual release will only allow the seat to fold. To unfold the seat it must be either electrically (#1) or mechanically (#2) turned at the backrest pivot

Reference the attachment to SI B52 05 20 and power the seat backrest motor directly with a drill battery and connector (V cable 612 160) to open/unfold the backrest. Once the backrest has been powered open, the manual release cables will then allow the backrest to fold.



### **REPLACEMENT SEAT COMES IN SHIPPING POSITION #2 / SEAT STUCK IN FOLDED POSITION**

When in this shipping position the seat can also be unfolded by spinning the circled pivot by hand using a screwdriver.

This pivot can be accessed after removal of the T25 screw.

### **16 point Seat Mounting bolts**

The seats are mounted with a new style 16 point internal bolt.

- Always replace the bolt after removal
- Torque to 42 Nm



#### 16 point special tool(s)



For the new style 16 point internal seat mounting bolts use either:

- Wheel lock kit P/N 83 30 0 492 518: use the #32 socket
- A special tool P/N 36 13 6 765 545

#### Third Row manual seats

**Upright position**

A – Third Row Seats in upright position

a



Drivers seat folded down

b



B – Third Row Seats with Drivers side folded down.

### Third Row Power Seats

Seat overview



Index	Explanation
1	Cupholder
2	Mounting point for luggage compartment roller cover
3	Roof air vent
4	Armrest
5	Release loop for folding the backrest
6	Button for electrically folding the right-hand seat
7	Button for electrically folding the left-hand seat
8	ISOFIX
9	Footwell air outlet
10	Type C USB socket (option SA 4FL or SA 6FH)
11	Lashing hook

C-pillar mounted switch block

The buttons (**S311** and **S312**) to control the third row seats are located on the C-pillar.

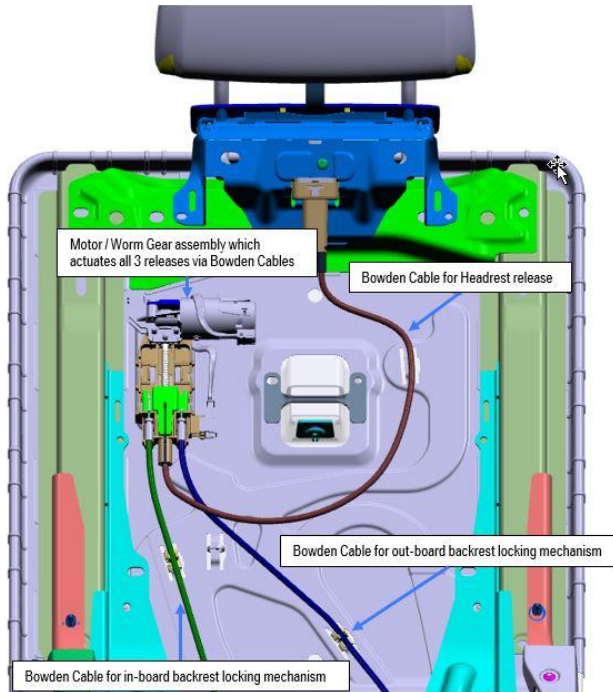
- Pulling the button lowers the seatback





- Pushing the button raises the seatback
- The small recess above the buttons is there to assist in entering the 3<sup>rd</sup> row
- Wiring Schematics for these motors can be found under “Electric seats 6 seats”

#### Motor for head restraint fold and latch release



In each seat backrest there is one motor that controls 3 Bowden cables.

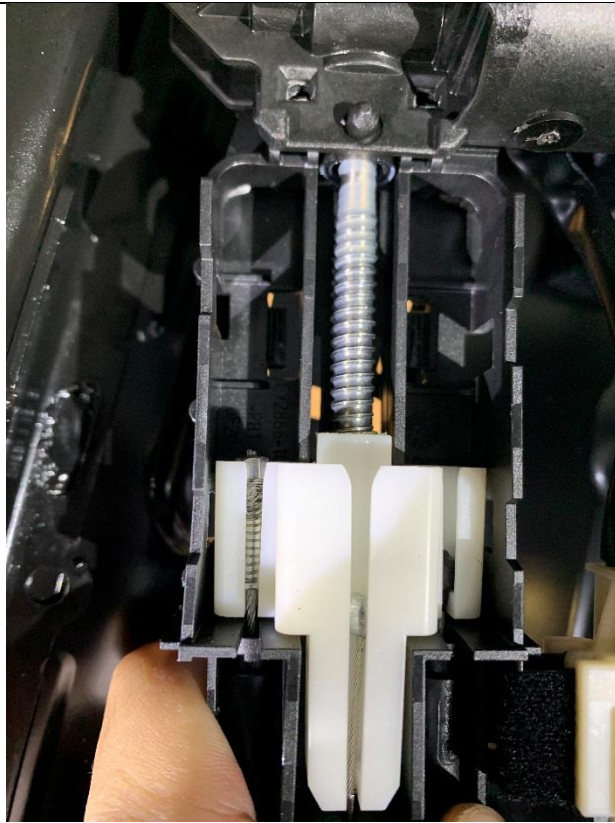
- One of the cables controls the head restraint folding. Once pulled, the headrest will release and pivot downwards.
- **Raising the headrest back into the upright position must be done by pushing up on it by hand**
- The other two cables control the latch release at the seat pivot to enable the seat to fold

#### Cables for head restraint fold / latch release

The 3 Bowden cables are housed in a common housing that moves along a worm gear assembly.

- When the electric motor activates, it spins the worm gear to pull up on the housing so that all 3 cables move simultaneously
- There is a hall effect sensor built in





- These motors, **M383** (driver) and **M384** (passenger) are controlled by the second-row seat modules
- Wiring Schematics for these motors can be found under “Electric seats 6 seats” or “Seat Adjustment driver’s side, rear” / “Seat Adjustment passenger’s side, rear”

For more details see either attached video:

- B52 01 19 - G05/G07 Seat Troubleshooting 6 Passenger
- B52 02 19 - G05/G07 Seat Troubleshooting 7 Passenger

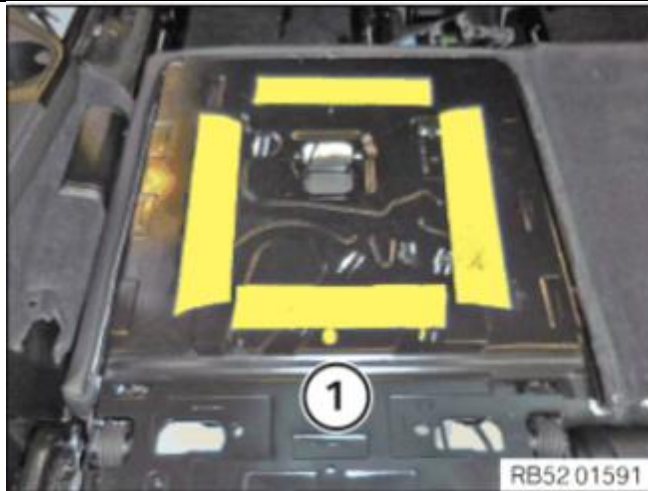
#### Headrest Manual Release



There is a manual pull release to fold the headrest(s) located under the headrest.

**NOTE:** To remove the rear seat headrest assembly, you must remove the headrest leather cover. **This cover will be destroyed during removal and will have to be replaced.**

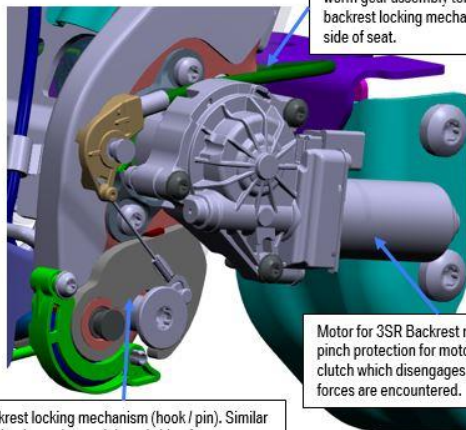
Some parts replacement of the seat can be done without removal of the headrest. For example, if replacing the seatback frame assembly there is no need to separate the head restraint from the guide rod assembly. Once the seat cover is released from the original frame, you can easily raise the seat cover and cushion as one assembly to gain access to the two retaining bolts of the guide rod assembly to the frame and remove the complete assembly without damaging the head rest restraint, hence it’s not necessary to replace the head restraint.



The rear panel of the third-row seat is additionally held in place with adhesive strips. Make sure to use the required adhesive tape when installing the rear panel on the backrest using P/N 83 19 0 445 309

### Seat Folding Motor

G07 3<sup>rd</sup> Row Seat – Overview Picture.



Bowden cable which originates at motor / worm gear assembly terminating at backrest locking mechanism on outboard side of seat.

Motor for 3SR Backrest movement. No pinch protection for motor, but has clutch which disengages when high forces are encountered.

Backrest locking mechanism (hook / pin). Similar mechanism exists on inboard side of seat.

At the seat pivot point of each seat backrest there is one motor that folds the seat up / down.

- There is a hall effect sensor built in
- These motors, **M371** (driver) and **M372** (passenger), are controlled by the second-row seat modules
- Wiring Schematics for these motors can be found under “Electric seats 6 seats” or “Seat Adjustment driver’s side, rear” / “Seat Adjustment passenger’s side, rear”

### D Pillar mounted switch block location



The buttons (**S273**) to control both the 2<sup>nd</sup> and 3<sup>rd</sup> row seats are in the cargo area of the vehicle on the driver’s side.

- Wiring Schematics for this switch block can be found under “Luggage Compartment Switch Block”
- There is a slight delay from when the buttons are pressed until the seats move. If a button is pressed before seat movement is finished it will stop the seats operation.

### D Pillar mounted switch block

#### 1. MAX Buttons

- **Top** button – Moves all 4 seats to the maximum seating position. All seats move upright, 2<sup>nd</sup> row moves forward to allow max legroom for all passengers
- **Bottom** button – Moves all 4 seats to the maximum cargo position. The third-row seats fold flat. The second-row



seats operation will vary depending upon options. 60/40 Bench Seat will fold flat. Captains Seats will move forward but don't fold flat

2. These buttons are for the 3<sup>rd</sup> row seats.

- Push to fold seats down; headrest will fold down
- Pull to raise seats up; headrest will not return to up position. They must be manually moved by hand to the up position.

3. These buttons are for the 2<sup>nd</sup> row seats.

- Push to fold seats down
- Pull to raise seats up
- The second-row seats operation will vary depending upon options:
- 60/40 Bench Seat will fold flat

**Captains Seats** will move forward but **don't fold flat**

We have released numerous Service Information Bulletins to address various customer concerns:

#### **First Row Seats (All Models):**

- For various noises from the front seats see SI **B52 05 19**
- For a seat cover that comes off the thigh support see SI **B52 10 19**
- For noises from the front seat headrest during operation see SI **B52 13 19**
- For seat occupancy mat (CIS) warnings on vehicles produced up to 9/2018 see SI **B72 04 17**
- For information on seat rail end stops see SI **B52 01 21**

#### **Second Row 60/40 electronically adjusted seat (All Models):**

- For creasing or ripples in the 2<sup>nd</sup> row 60/40 Bench Seat please reference SI **B52 03 19**
- The seats received revised software August 2019. Updating earlier vehicles to the newer SW can prevent some faults from occurring, see SI **B52 17 19**
- For a 2<sup>nd</sup> row 60/40 Bench Seat in vehicles produced from 6/24/19 to 10/1/19 that intermittently wont latch we have two production based bulletins-
  - For the Drivers side seat see SI **B52 04 19**
  - For the Passengers side seat see SI **B52 19 19**
- Backrest misalignment of 60/40 second row seat SI **B52 05 20**
- Noise from 40% seat when returning from EZ entry position, see attached video Trim Interference Noise [V520121](#)
- The latch mechanism mounting nuts were replaced in some 2021 vehicles under service action rework seat mechanism 2nd row seat **B52 05 21**

#### **Second Row 60/40 mechanically adjusted seat (G05 / G06):**

- For various noises from the 2<sup>nd</sup> row seat see SI **B52 06 19**

#### **Third Row seat G07:**

- For headrest(s) or third row seat(s) that doesn't fold see **B52 09 20**

#### **All Seats (All Models):**

- Software improvements come August 2019 which changes certain seat operations. For a detailed list of the changes see SI **B52 21 19**
- All G05 / G07 produced up to August 1, 2019 can be updated to 7/2019 SW as per Service Action SI **B65 19 19**

**Videos available on TIS:**

- B52 01 19 - G05/G07 Seat Troubleshooting 6 Passenger
- B52 02 19 - G05/G07 Seat Troubleshooting 7 Passenger

**ATTACHMENTS:** See attached **Seat Guide** on operating the seats

**PARTS INFORMATION**

Obtain and confirm the part numbers for your specific vehicle by entering the chassis number in either ETK or AIR which takes into account specific equipment and/or options.

Part Number	Description	Quantity
52 20 5A37D34	Spare part kit microswitch	1
52 20 5A37D37	(Washer) Spare part kit EE window	1
52 20 9872574	(Bolt) Repair set armrest	1
52 10 7454056	Flexible shaft and small parts (Upper Backrest adjustment motor LKV)	1
52 10 7469879	(Seat End Stop) Spacer	1
83 19 0445309	Double-Sided Adhesive Tape GT 6008 P	1
52 10 7 314 203	Flexible Shafts and small parts (Forward / Back adjustment motor SLV)	1
07 14 9 321 690	(Bolt) Holds seat adapter to seat frame (Business/Captain seats – 4 per seat)	4
07 11 9 908 419	(Bolt) Holds seat bottom to seat backrest (Business/Captain seats – 4 per seat)	4