SIB 52 05 20 2020-09-09

BACKREST MISALIGNMENT OF 60/40 SECOND ROW SEAT

MODEL

E-Series	Model Description	Affected Option Code
G05	X5 Sports Activity Vehicle (SAV)	Equipped with the standard equipment second row 60/40 split bench seats.
G06	X6 SAV	
G07	X7 SAV	

SITUATION

On vehicles equipped with the second row 60/40 split bench seats, the backrests may not properly align between the two seats.

NOTE: Refer to TRI B52 23 19 for more information on these seats.

CAUSE

1-Vehicles produced prior to 10/1/2019 may require an additional washer to be added under the seat- to-floor mount.

2-The seats are not initialized or have not gone full travel during last movement.

3-Seat frame is bent.

4-The end stop needs to be adjusted due to manufacturing tolerances.

CORRECTION

1-See SI B52 04 19 and B52 19 19.

2-See attached rework instruction to initialize the seats and move to Comfort position.

3-Replace seat frame that may have been damaged by leaving objects on the seat when folding.

4-See attached rework instruction to adjust the seat(s) end stops.

PROCEDURE

See attached rework instruction.

WARRANTY INFORMATION

This Service Information Bulletin provides the corresponding Technical Information that will help in understanding the situation and assist you in addressing the issue described above.

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries	Submit feedback at the top of this bulletin
Warranty inquiries	Submit an IDS ticket to the Warranty Department
Parts inquiries	Submit an IDS ticket to the Parts Department

Supporting Materials

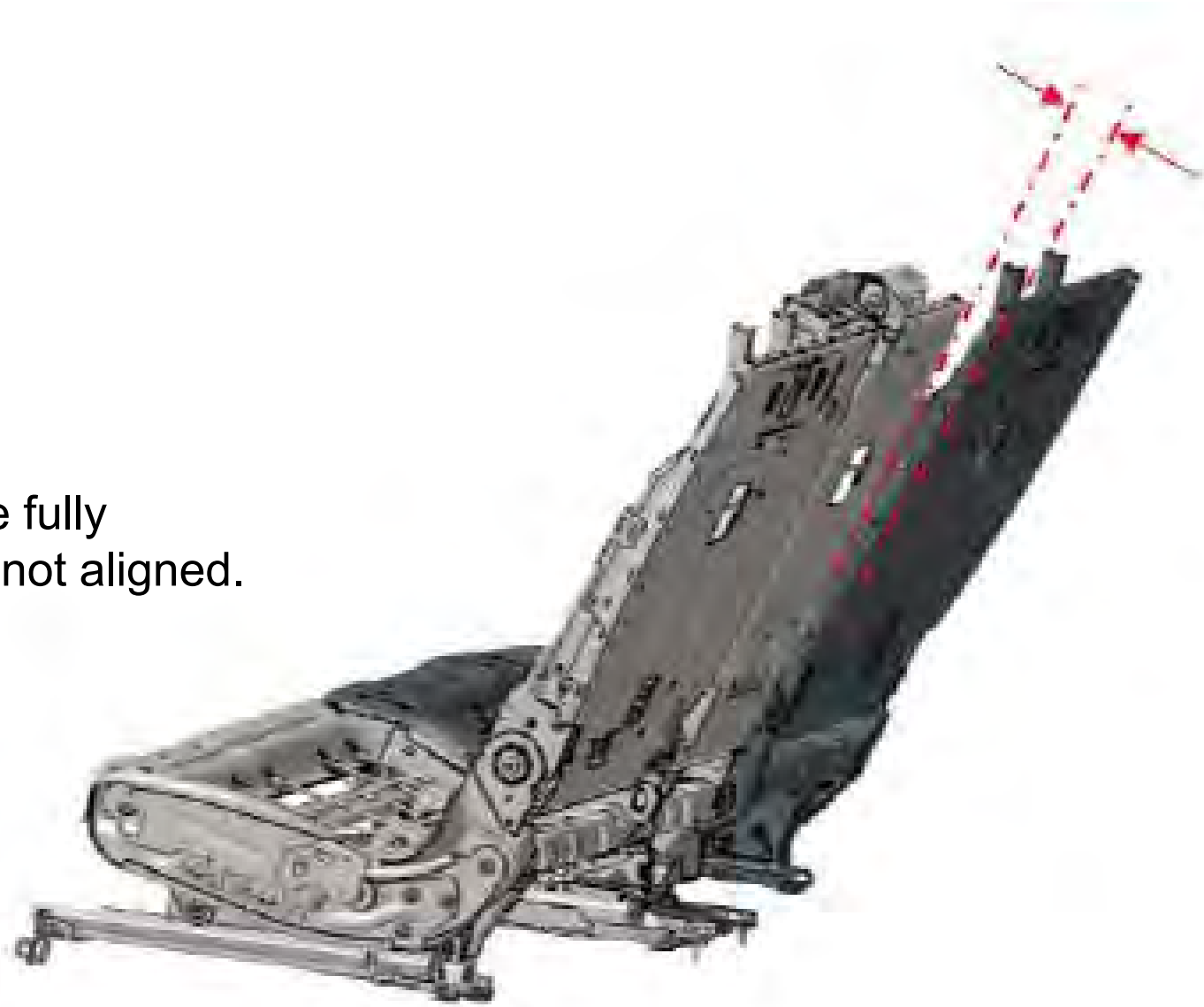
picture_as_pdf B520520 Second row 60 40 seatback alignment.pdf

Backrest misalignment of 60/40 second row seat

G05 (X5)
G06 (X6)
G07 (X7)

Situation:
When the second row split 60/40 seats are in the fully rearward COMFORT position the seatbacks are not aligned.

See TRI B52 23 19 for more information on these seats.



Backrest misalignment of 60/40 second row seat

Procedure:
To test if the seats are misaligned you must first cycle the seats, (move bottom and backrest full travel by manually operating the seat buttons on the side of each seat.) and then move them to the COMFORT position by pressing the “Home” button on both sides of the seat (button circled in yellow).

If the seats don’t move, or a check control message is Displayed, then first run a vehicle test and check for Stored fault codes.

When seats are in the COMFORT position, use the backrest button on the side of the seat to recline the seat back further. If the seat is able to move beyond that stop then the seats must be initialized to learn full travel.

Backrest misalignment of 60/40 second row seat

Procedure:

If there are no stored faults (*except for seat initialization)*
then perform the seat initialization test plan in ISTA:
Under VEHICLE MANAGEMENT

- SERVICE FUNCTIONS
- BODY
- SEATS
- SEAT ADJUSTMENT STANDARDIZATION

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

- SMFA - Seat Module Driver
- SMBF - Seat Module Passenger
- SMFAH - Seat Module Driver Rear
- SMBFH - Seat Module Passenger Rear

Since these vehicles use networked seats all must be initialized, repeat this test plan for all 4 seat modules. The rear modules control BOTH the second and third row of seats (if equipped). Once second row seat module initialization begins both the 2nd and 3rd row seats will move.

Backrest misalignment of 60/40 second row seat

Now that the seats are initialized, use luggage compartment buttons to see if the seats are misaligned:

- Cycle the 2nd row seat backrest to the cargo loading position (backrest folded flat) by pressing the MAX LUGGAGE button, row 1 bottom button. Depending upon vehicle options up to three rows of seats may sequentially move. (button circled in blue)

  Operation takes time so wait for all seats to complete travel before proceeding. (*Vehicles built prior to 7/2019 can benefit from programming to 19-07-510 or higher.)*

- Cycle the 2nd row seat backrest to the MAX SEATING button, row 1 top button. (button circled in red)

- Once the seats have completed travel move seats to the COMFORT position by pressing the “Home” button on both sides of the seat (button circled in yellow).

Backrest misalignment of 60/40 second row seat

- A large misalignment can indicate the seats have not gone full travel during the previous movement, that the frame is bent or that there is an obstruction within the seat mechanism.
- Check for obstructions.
- Manually operate the seat controls (side of seat) to see if the backrest can be moved any further back.
- Repeat seat initialization test plan for 2nd row seats only.

Backrest misalignment of 60/40 second row seat

Measure the backrest offset (**measurement is of the exposed fabric**)

- A misalignment of under 8 mm is acceptable and within manufacturing tolerance.
- A rework of the seat should only be done if the misalignment is **greater than 8 mm**.
- Small removal of material and tests are required until the misalignment disappears. A maximum of 2.5 mm of material can be removed.
- 1mm removed at end stop is approximately 9mm movement of the backrest)
- **CAUTION: If too much material is removed from the end stop the seat will no longer function properly and a replacement seat frame will be needed to restore functionality.**

Backrest misalignment of 60/40 second row seat

To determine which seat will be adjusted:

Rework 40% Seat

So we will be modifying the seat that's backrest sits further forward.

Rework 60% Seat

Backrest Rework 40% seat – Tools required

- Torx key/bit (T30)
- Flat head screwdriver
- Flat hand file
- 12V power source to power up seat motor
- 4 pin V cable **612 160** to connect to seat motor (Part Number 83 30 0 493 948)
- Red paint

Backrest Rework 40% seat

There are two end stops on each seat, an in-board IB and out-board OB stop.

For this example we are showing a rework of the OB stop of the 40% seat.

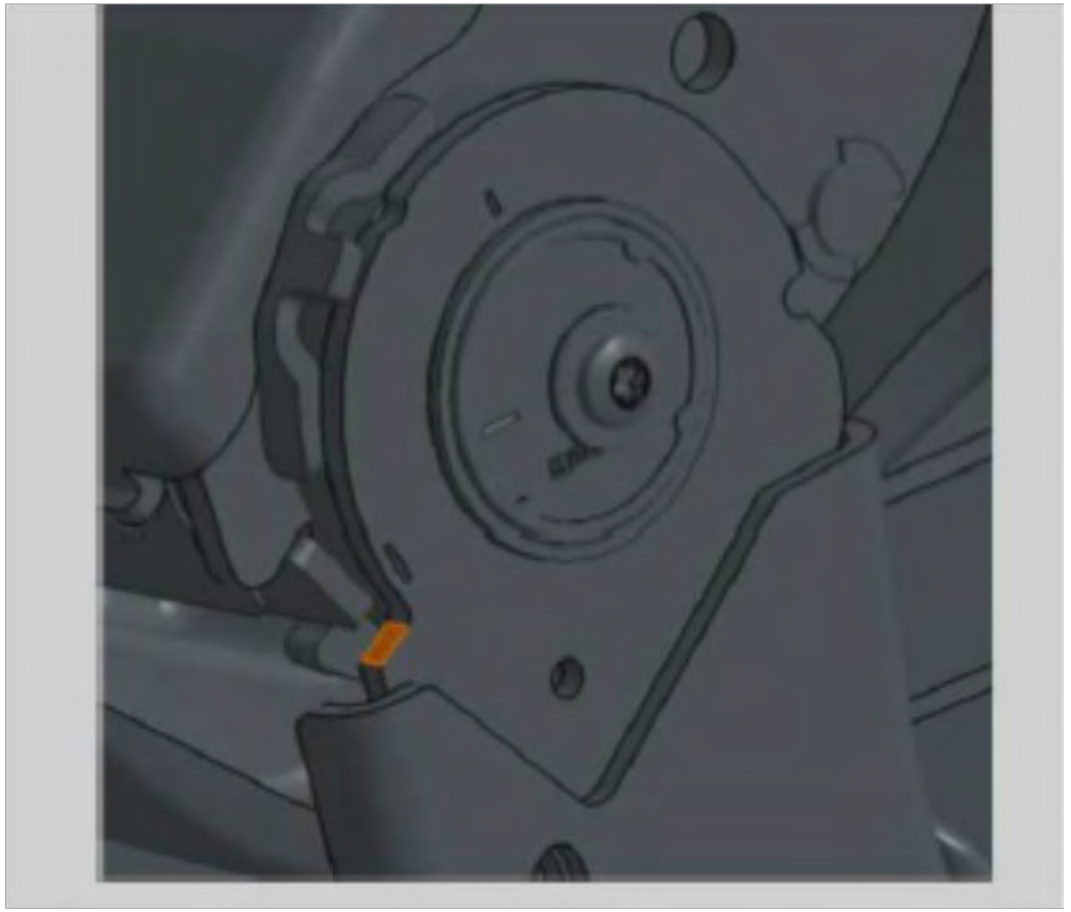
Before doing any rework of the end stop, check to ensure one end stop is making contact.

If they are not making contact on either side then the seat is not initialized, or the seat frame could be bent.

DO NOT rework the end stop until it is contacting the seat backrest.

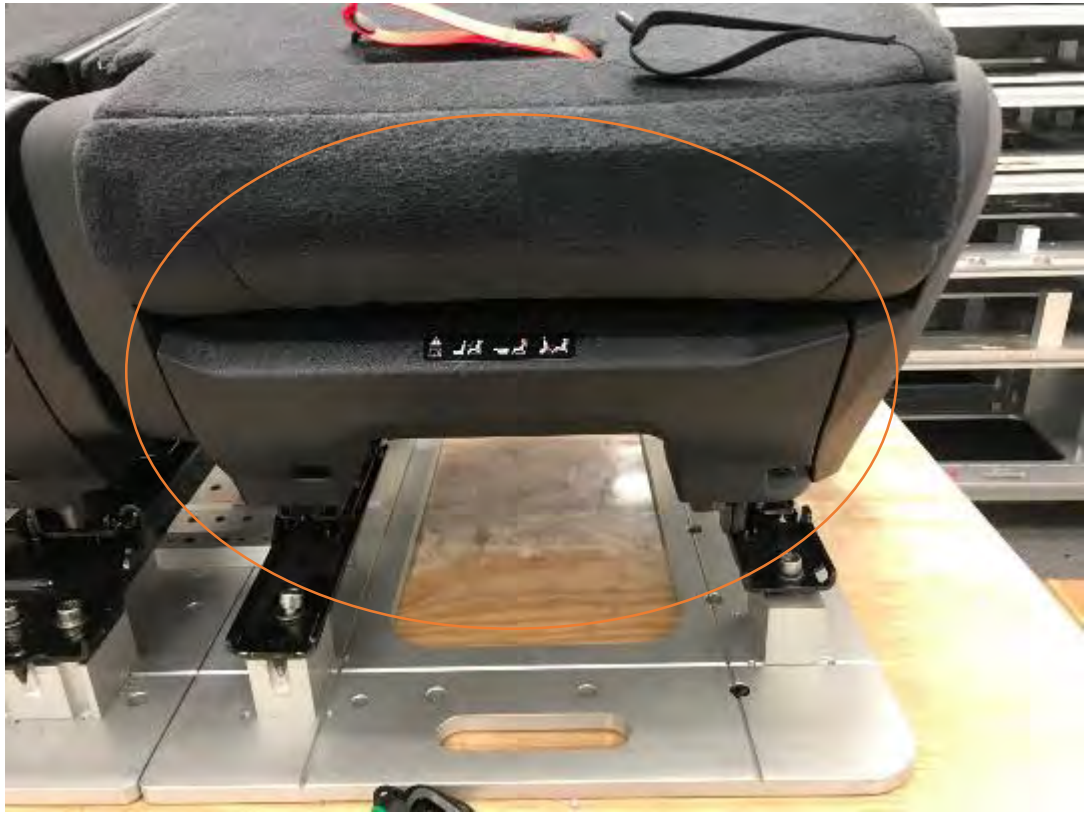
If performing these modifications with seat installed in vehicle, move the 60% seat to EZ access position for more working room.

Backrest Rework 40% seat



OB = Out Board (side of seat closest to the door)

Backrest Rework 40% seat



Remove seat cover, lower back of the seat, held by two T30 Torx screws.

Backrest Rework 40% seat

Pull the seat cover piece upwards to remove it. There are four plastic retaining hooks.

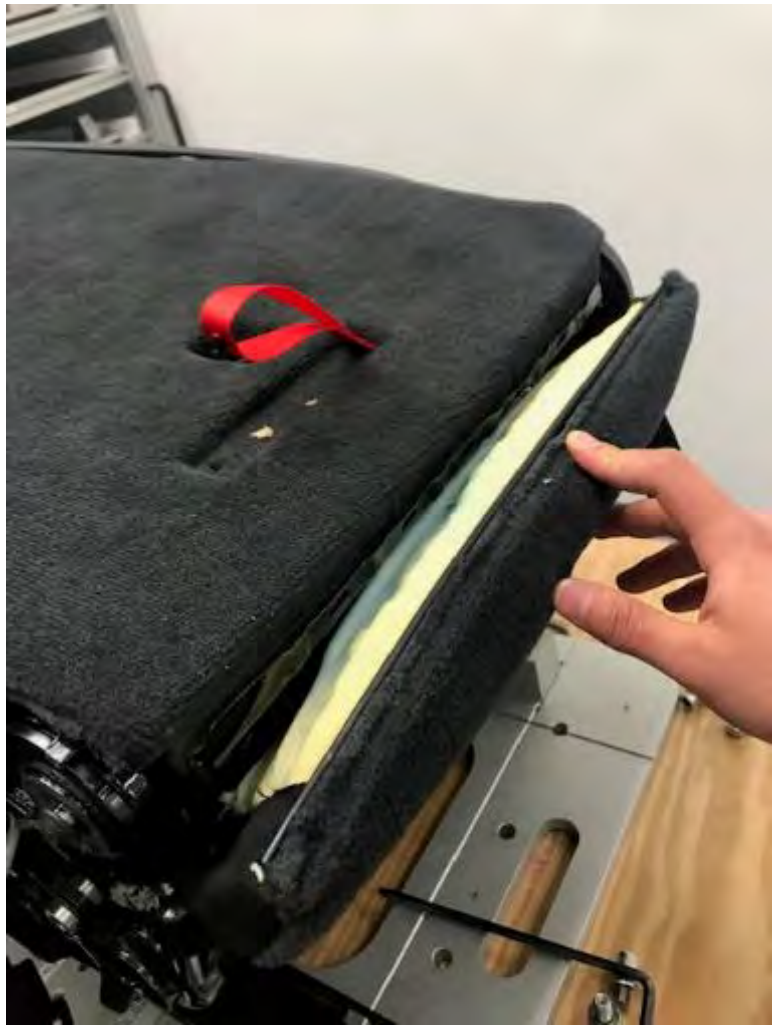
Backrest Rework 40% seat

The recliner cover has two T30 screws.

1. Detach lower retainer
2. Remove front screw (T30)
3. Remove side cover. Pull up from the top and the end stop will be visible.

Backrest Rework 40% seat

The trim needs to be removed to connect the power source to move the backrest. The trim lifts out of a metal channel shared with the seat cover retainer.



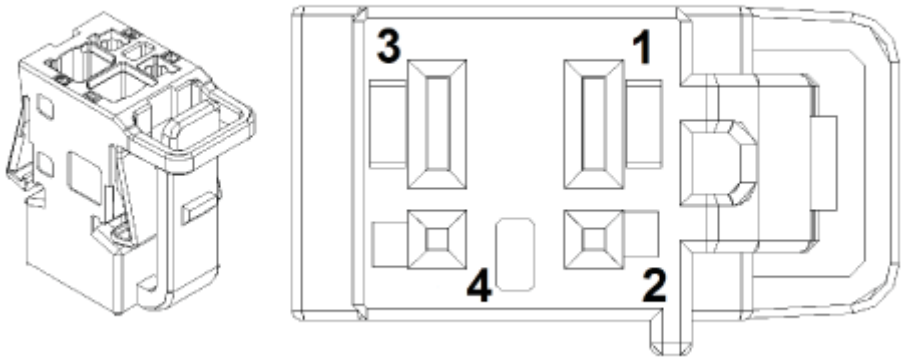
Backrest Rework 40% seat

Access the Drive of forward/back seat adjustment, passenger's side rear:

SMBFH controlled M3 motor, connector M370*1B

Use 4 pin test cable that was auto shipped (SI B04 30 01)
Part Number (V cable) 612 160
Order Part Number 83 30 0 493 948

The two largest pins are for the servomotor.



Backrest Rework 40% seat

The electric motor for adjusting, folding down and setting the backrest upright is located here on the 40% seat.

Backrest Rework 40% seat

Plug in the 12V power source and drive seat to fold flat position, this action will move and expose the end stop to be reworked.

Only one end stop will be contacting, either IB or OB, this is the end stop to rework.

The seat is designed to function with only 1 end stop touching.

Backrest Rework 40% seat

The amount of material to be removed is not defined, **small removal of material** and tests are required until the misalignment disappears. **A maximum of 2.5 mm of material can be removed.** (1mm removed at end stop is approximately 9mm movement of the backrest)
This can be tested by driving the seat to the comfort position and again check the alignment.
You must hook the seat up to the car and re-initialize the seat so it finds the new home position. Once you are done modifying the end stop apply a small dab of red paint to either side of the end stop so a technician in the future will know this modification has already been performed.

Backrest Rework 40% seat

Once alignment is satisfactory, it's recommended to reattach the recliner cover and the lower back plastic cover before reattaching the backrest trim. This will leave more space for assembly.

The trim can be pushed into place using a dull thin plastic tool or putty knife.

Backrest Rework 60% seat

Remove material from the end stop on IO and OB side

Remove recliner cover IB and OB
OB = Out Board (side of seat closest to the door)

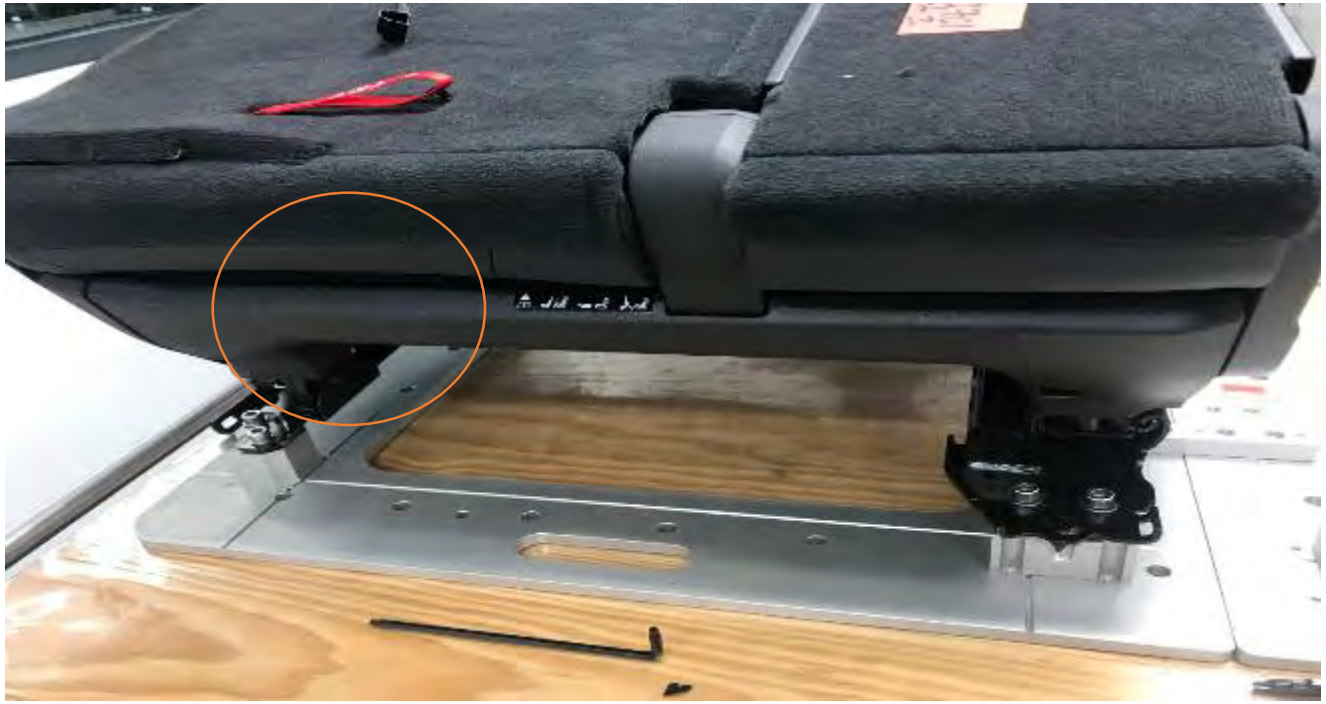
IB = In Board (side of seat toward center of vehicle)

Only one end stop will be contacting, either IB or OB, this is the end stop to rework.

The seat is designed to function with only 1 end stop touching.

Backrest Rework 60% seat

Rework instructions 60%



Remove seat cover, lower back of the seat, held by two T30 Torx screws.

Backrest Rework 60% seat

The electric motor for adjusting, folding down and setting the backrest upright is located here on the 60% seat.

Backrest Rework 60% seat

Remove the trim on the lower back panel.

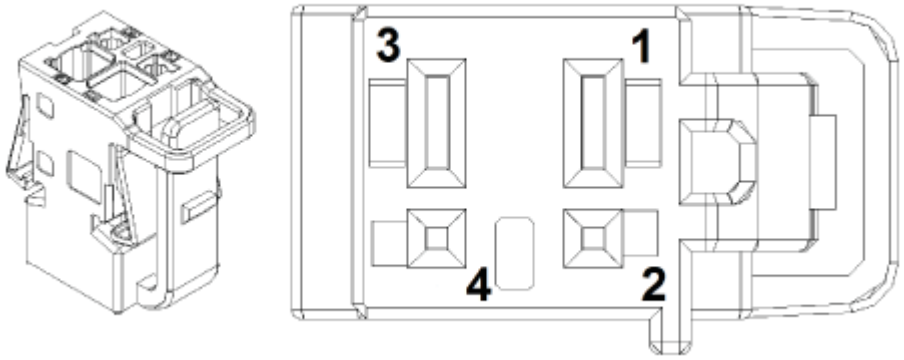
Backrest Rework 60% seat

Access the Drive of forward/back seat adjustment, driver's side rear::

SMFAH controlled M71 motor, connector M369*1B

Use 4 pin test cable that was auto shipped (SI B04 30 01)
Part Number (V cable) 612 160
Order Part Number 83 30 0 493 948

The two largest pins are for the servomotor.



Backrest Rework 60% seat

Below are the locations of hooks which need to be disconnected in order to remove the rear cover. A flat head screwdriver can help with removal.

Backrest Rework 60% seat

Remove the recliner cover screw and pull it out carefully from the top. Consider that the cover has some hooks, a flat head screwdriver will help release.

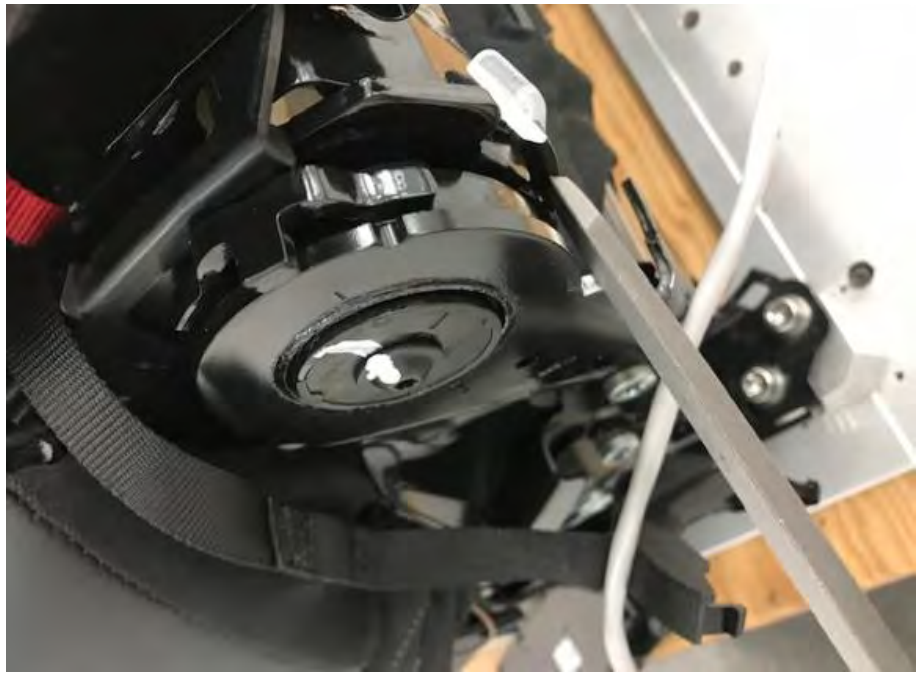
Backrest Rework 60% seat

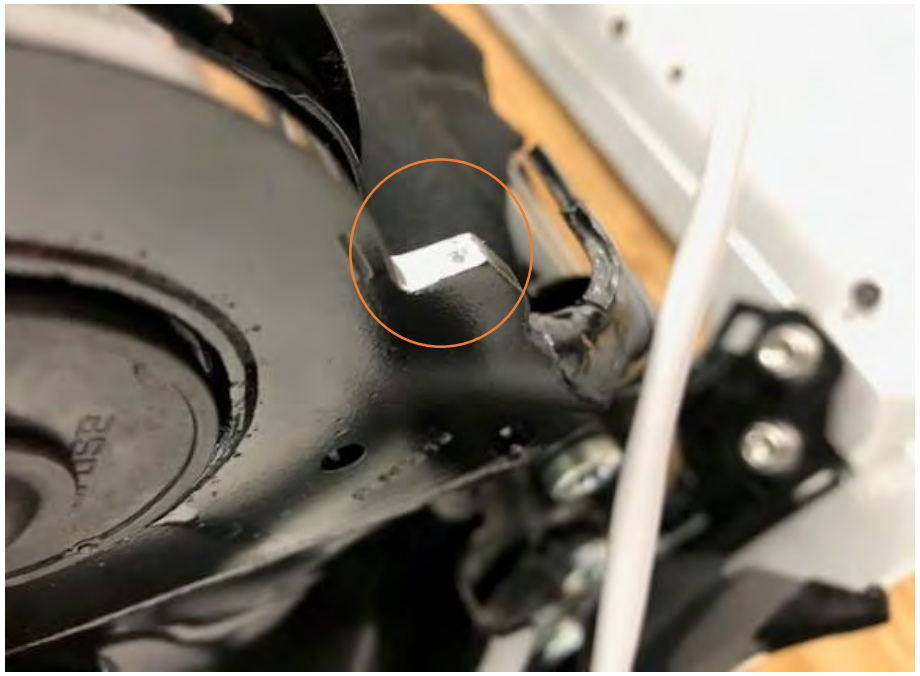
Push the switch panel to the rear, to avoid damage be careful to not apply too much force. The panel is connected and it´s not necessary to remove the full recliner cover to perform the rework.

Backrest Rework 60% seat (OB)

Identify the end stop and the part to be reworked, the same rework as the 40% is necessary for the 60%.

Backrest Rework 60% seat (OB)





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Backrest Rework 60% seat (IB)

It´s necessary to remove the trim from the seats as the space is limited. Use a screwdriver to remove from the top.

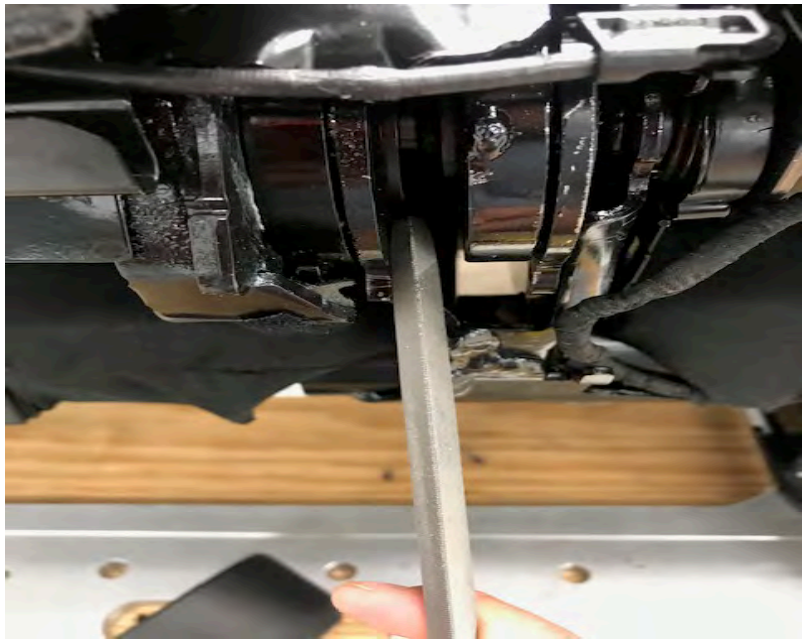
Backrest Rework 60% seat (IB)

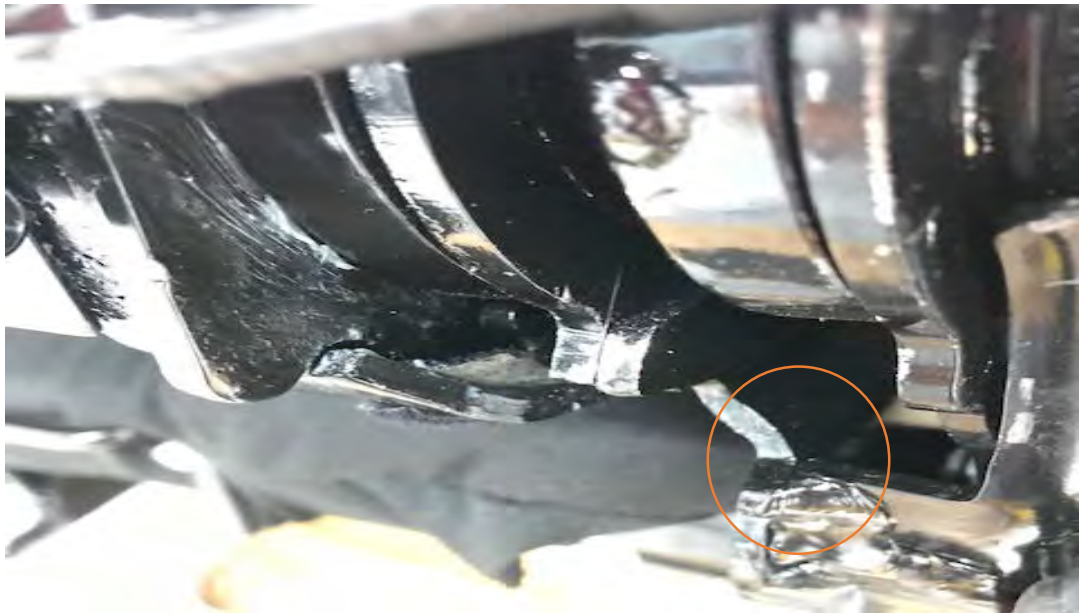
Use the screwdriver to remove the hooks from both sides.

Backrest Rework 60% seat (IB)

Once the hooks are released pull out the part and identify the IB end stop to be reworked.

Backrest Rework 60% seat (IB)





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Backrest Rework 60% seat

Install the recliner cover and the lower plastic cover before reattaching the back panel trim.