



SIB 72 04 17

2020-03-18

FALSE WARNINGS THAT THE FRONT PASSENGER SEAT IS OCCUPIED WITHOUT THE SEAT BELT BUCKLED

This Service Information Bulletin (Revision 10) replaces SI B72 04 17 dated **September 2019**.

What's New (Specific text highlighted):

- Correction
- Procedure and video
- Flowchart attachment

MODEL

F90 (M5 Sedan) produced to August 2018	G01 (X3 Sports Activity Vehicle) produced to July 2018	G02 (X4 Sports Activity Coupe) produced to July 2018	G05 (X5 SAV) produced from July 2018 to September 2018
G12 (7 Series Sedan) produced to July 2018	G30 (5 Series Sedan) produced to July 2018	G32 (6 Series Gran Turismo) produced to July 2018	

SITUATION

Acoustic and visual warnings indicate that the front passenger seat is occupied and the safety belt is not fastened, when the seat is actually unoccupied.

If the situation is currently present, sit in the seat and move the seat to a slightly different position. The POL (Passenger Occupancy Light) light should now function correctly.

In some cases the Air bag Warning Light was illuminated. Advanced Crash Safety Module (ACSM) fault "930A1C - Front passenger seat occupancy detection transmitting fault (moisture)" is stored.

CAUSE

Any or all of the following can contribute to this situation:

1. Electronics (e.g., smart phones or laptops) are connected to the USB charging port or cigarette lighter and placed on the seat.
2. The seat was wet (e.g. very high humidity, spilled liquids or rain).
3. Faulty plug connection to the Evaluation Electronics CIS (Capacitive Interior Sensing).
4. Excessive spacing between the seat mat sensor signal wires and their grounding shield sleeve.

CORRECTION

- Perform a **non-invasive** check for moisture / stains on the seat and at the CIS evaluation electronics module electrical connector
- If there is no obvious moisture / stains, secure the loose cables by installing 2 cable ties
- If the 2 cables ties are already installed properly and the fault is still occurring:
 - Check for moisture damage to the CIS mat
 - If no moisture is found, replace the CIS seat mat

Note: Do not replace the CIS electronics or the ACSM module for this situation.

PROCEDURE

For conditions that are similar to the situation described above:

1. Verify with the customer that no objects were lying on the seat that could have caused the warnings.

Note: Electronic devices that are placed on the front passenger seat, e.g., laptop computers, mobile phones, etc., could cause the front passenger airbag warning lamp to activate.

This behavior occurs primarily with devices that are connected to the vehicle electrical system via a USB cable or other charger adapter.

In vehicles with an acoustic safety belt warning, this could cause the warning signal to sound.

2. Moisture on the seat surface can also cause a faulty seat occupancy detection. In this case ACSM fault 930A1C will be stored.

- Perform a **non-invasive** check for signs of moisture.

a) If moisture is found, dry the mat and clear the fault. Moisture caused by outside influence is a non-warranty issue.

b) If no moisture is found, proceed to the next step

3. If steps 1 and 2 do not identify the cause of the warnings, access the label on the seat mat harness and follow the attached diagnosis flow chart. If the flow chart recommends installation of 2 cable ties, proceed to step 4.



As referenced in the Diagnosis Chart attachment, an AI index of 01 is shown (circled).

4. Install 2 cable ties on the seat wiring harness as shown in the attached repair instructions and in this video <https://tinyurl.com/V520218>

- a. Cable Strap P/N 46 51 7 659 522 (2.5 mm Width, 1.1 mm Height)
- b. Set the cable tie tightening tool adjustment to 3.75 when securing the cable ties.
- c. The cable ties **ONLY GO AROUND THE WIRING HARNESS**. Do not attach the cable ties to the seat frame.
- d. The purpose of these two cable ties is to tighten the ground shield sleeve around the two signal wires.
- e. If you find that the two cable straps have been installed previously and the fault has returned, replace the seat heating/CIS mat.
- f. If you are replacing the CIS seat mat and its still old stock, install the two cable ties in addition to the new seat heating/CIS mat.

5. Check the validity of the repair by ensuring no faults or check control messages are displayed.

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:
61 13 1 372 391	Cable tie (L=100 W=2.5)	2
Refer to ETK or AIR	CIS seat mat / Seat heater	1 if needed

PARTS OVERVIEW.

GRUSB7218-01

Note: Replacing the CIS electronics or the ACSM module will not correct this issue.

WARRANTY INFORMATION

Covered, for defects in materials or workmanship (non-moisture related issues), under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

Defect Code:	6577081400 Mat, SBE, Front temporary malfunction	
Labor Operation	Description	Labor Allowance
65 99 000	Work time to secure the CIS cable under the seat (Main work)	4 FRU
Or:		
65 99 000	Work time to secure the CIS cable under the seat (Plus work – Vehicle is already in the workshop)	2 FRU

Or:

The Two (2) cables ties are already installed properly

Labor Operation	Description	Labor Allowance
00 00 006	Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work)	Refer to AIR
Or:		
00 00 556	Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work)	Refer to AIR
And:		
61 21 528	Connect an approved battery charger/power supply (indicated in AIR as Charging battery)	Refer to AIR
And		
65 77 ###*	Replacing seat occupancy mat for passenger seat	Refer to AIR
And:		

61 00 730	Programming/encoding control unit(s)	Refer to AIR
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If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006

*Refer to AIR for the applicable seat occupancy mat flat rate labor operation number and FRU allowance that applies to the vehicle's seat type being repaired.

And, additionally for the:

e-Vehicles

Labor Operation	Description	Labor Allowance
61 25 910	Recharging high-voltage battery unit (to high voltage charging socket)	Refer to AIR

During the same workshop visit, if a vehicle also requires another Technical Campaign or repair that also includes programming and encoding the control units, the programming procedure may only be invoiced one time.

Programming and Encoding - Vehicle Control Units (RO and Claim Comments Required)

The programming procedure automatically reprograms and encodes all vehicle control modules which do not have the latest software I-level. If one or more control module failures occur during this programming procedure:

- Please claim this consequential control module-related repair work (including performing the IRAP Control Unit Recovery procedure first as required, refer to the SIB in AIR) under the defect code listed in this bulletin with the applicable AIR labor operations.

Please explain this additional work (The why and what) on the repair order and in the claim comments section.

For control module failures that occurred prior to performing this programming procedure:

- When covered under an applicable limited warranty, claim this control module-related repair work using the applicable defect code and labor operations in AIR (including diagnosis with separate punch times).

Other Repairs

If other eligible and covered work is performed as a result of performing the ISTA diagnostics and related test plans, claim this work with the applicable defect code and the labor operations that are listed in AIR (including diagnosis with separate punch times).

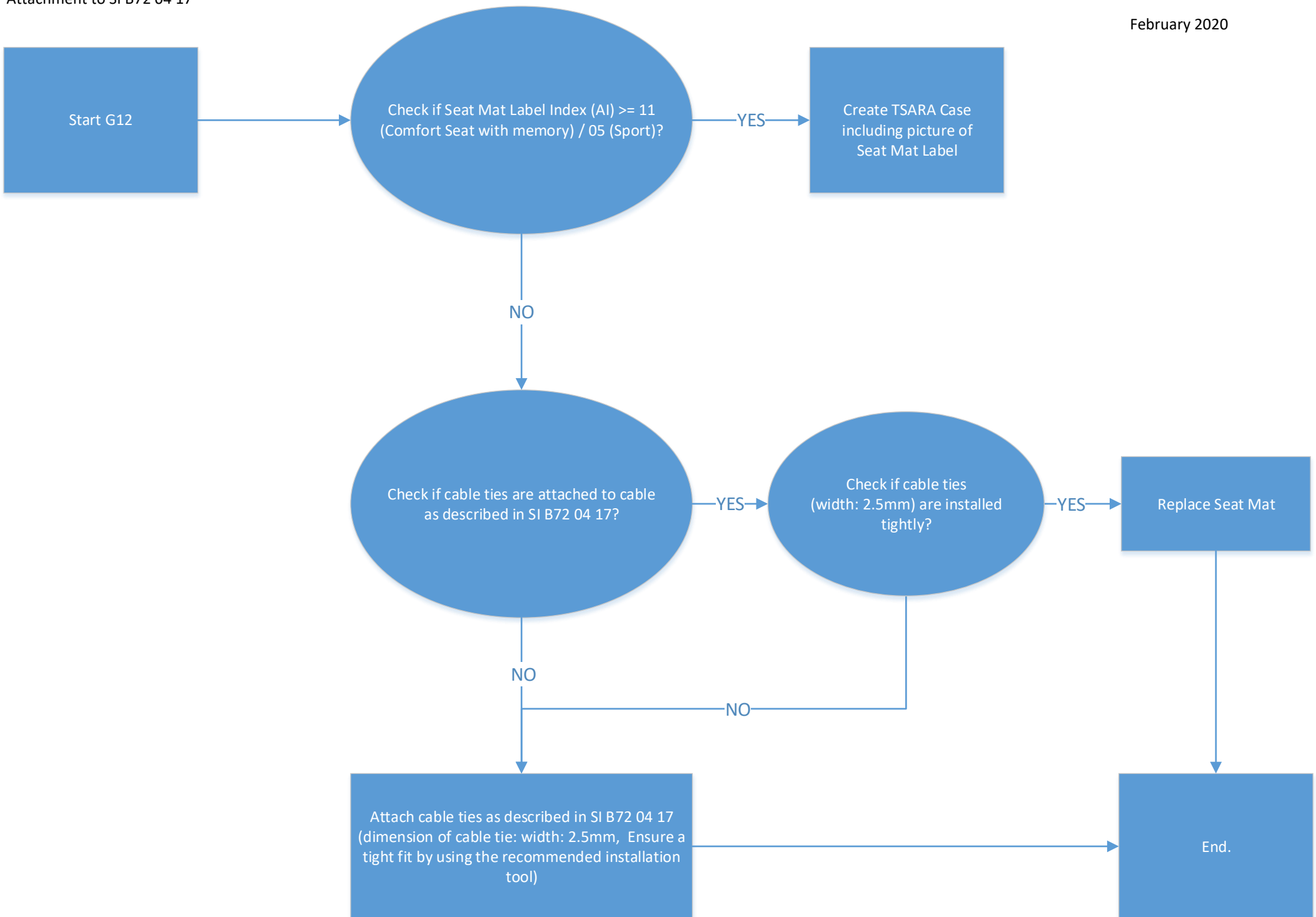
Supporting Materials

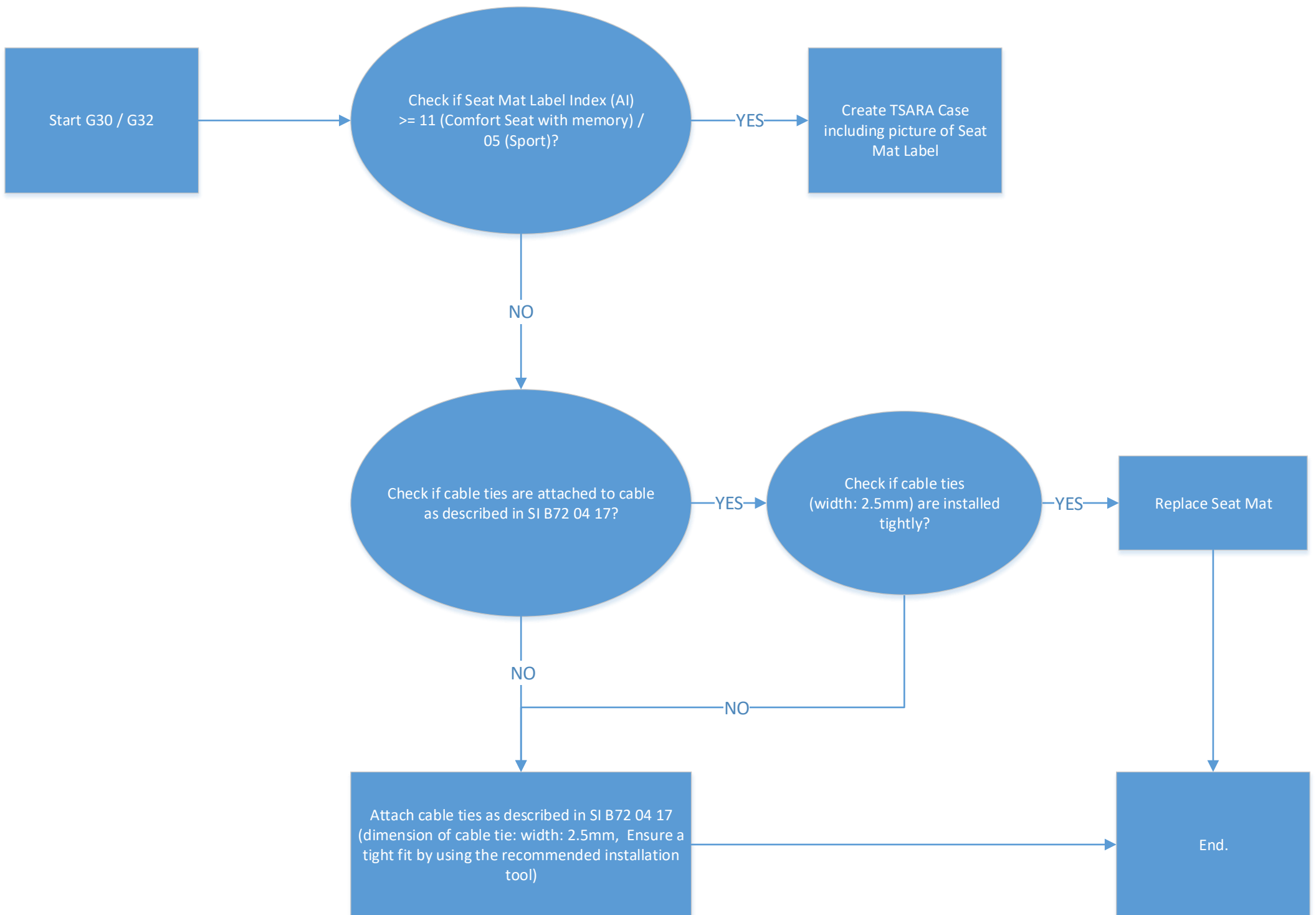
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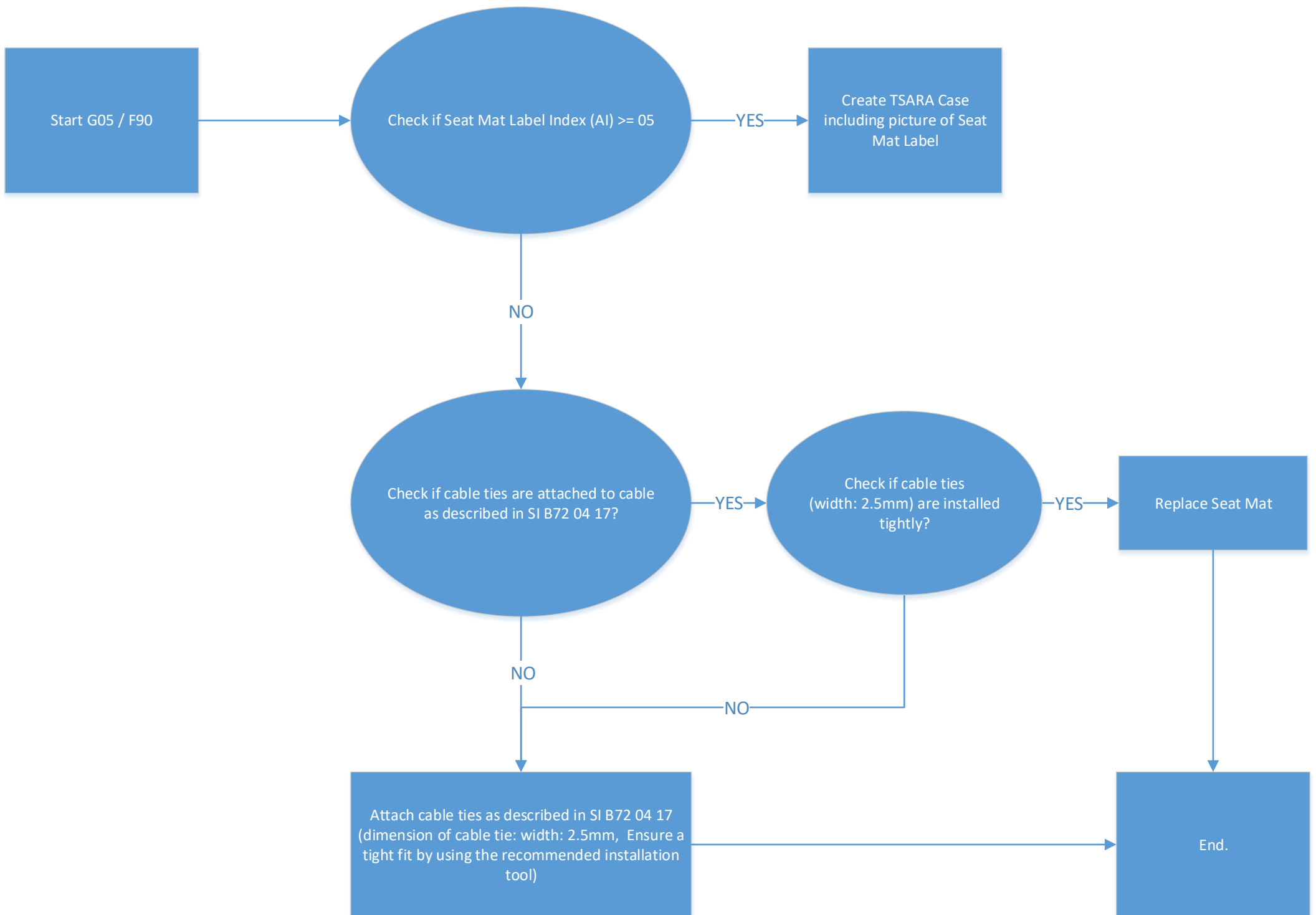
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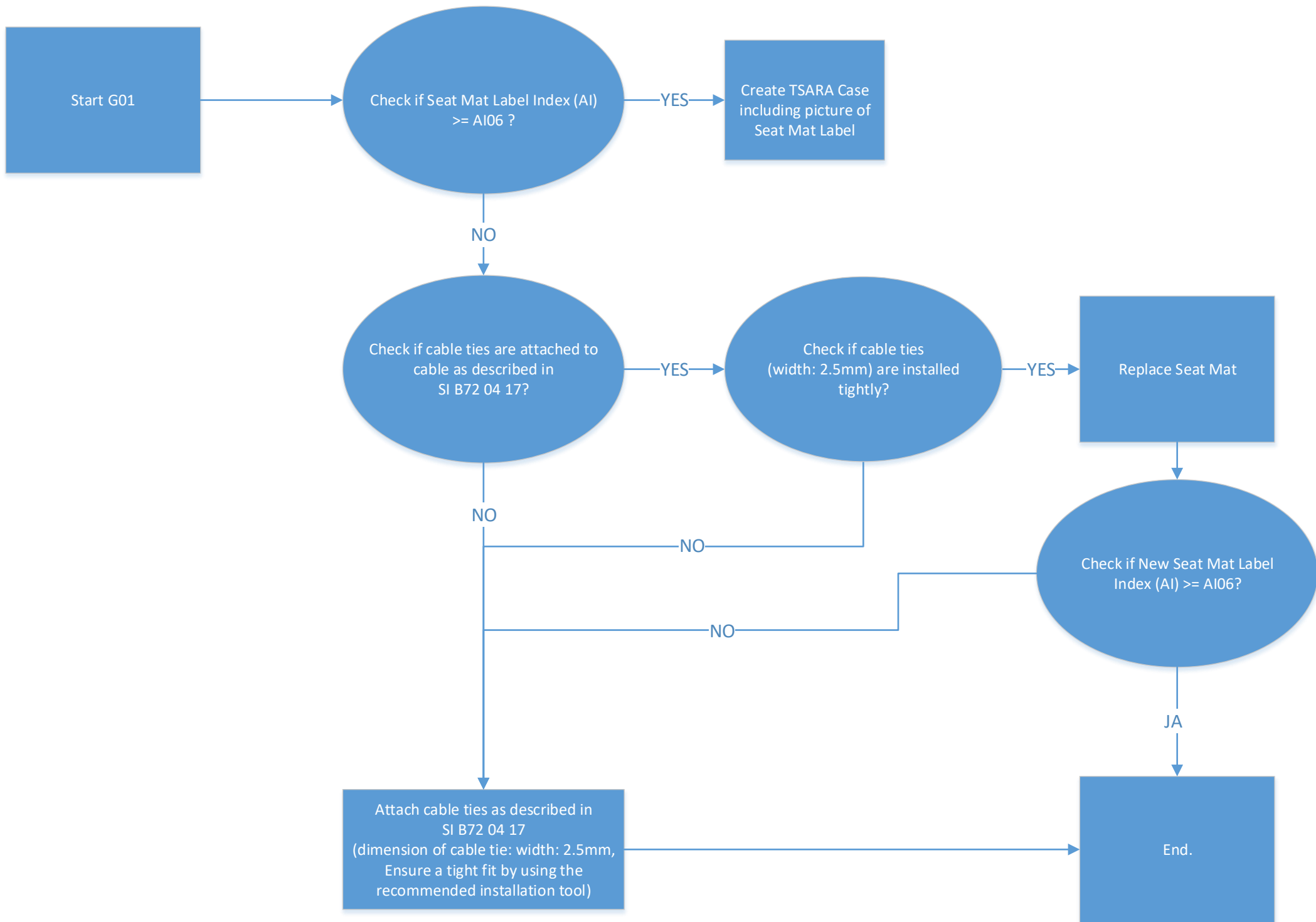
Videos

[72 01 20](#)






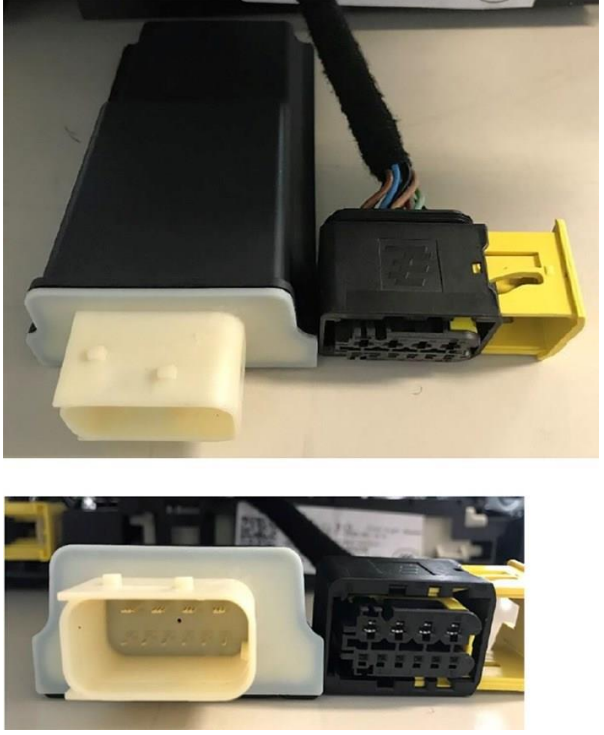


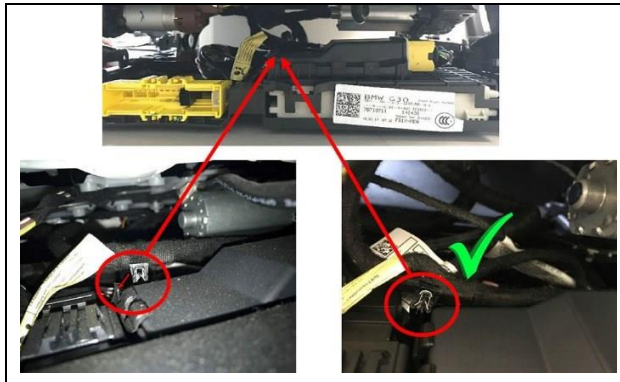


The SI **B72 04 17_Attachment** supersedes **dated September 2019**

New information provided by this revision is preceded by this symbol

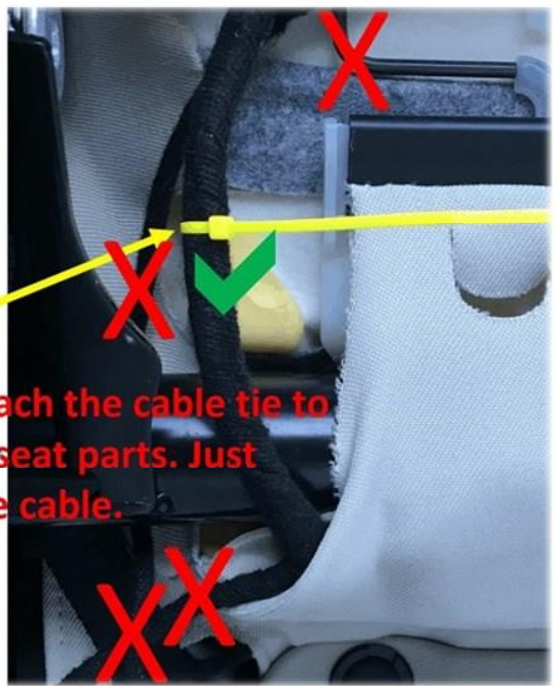
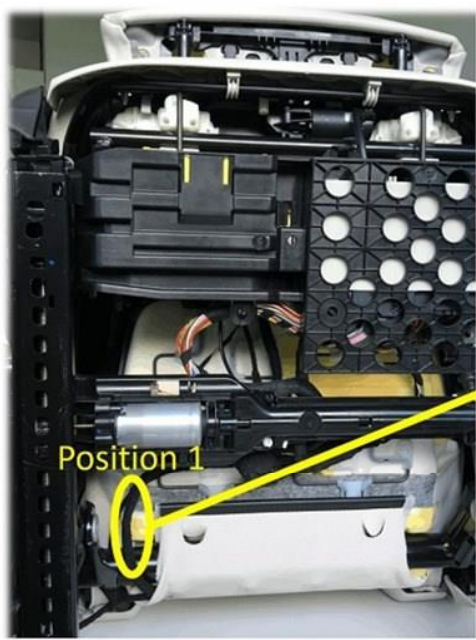
PASSENGER OCCUPANCY DETECTION ERROR CORRECTION

	<ol style="list-style-type: none"> 1. Move the front seat to its highest position. 2. Detach the lower front seat trim. 3. Disconnect the Evaluation Electronics(CIS) plug connection.
	<ol style="list-style-type: none"> 4. Check the plug for conditions resulting in impossible poor electrical connection – corrosion, bent pins, etc. – removing control unit if needed, as shown. 5. Repair any connection problems. 6. Securely re-install control unit, if removed. 7. Reconnect plug into CIS.



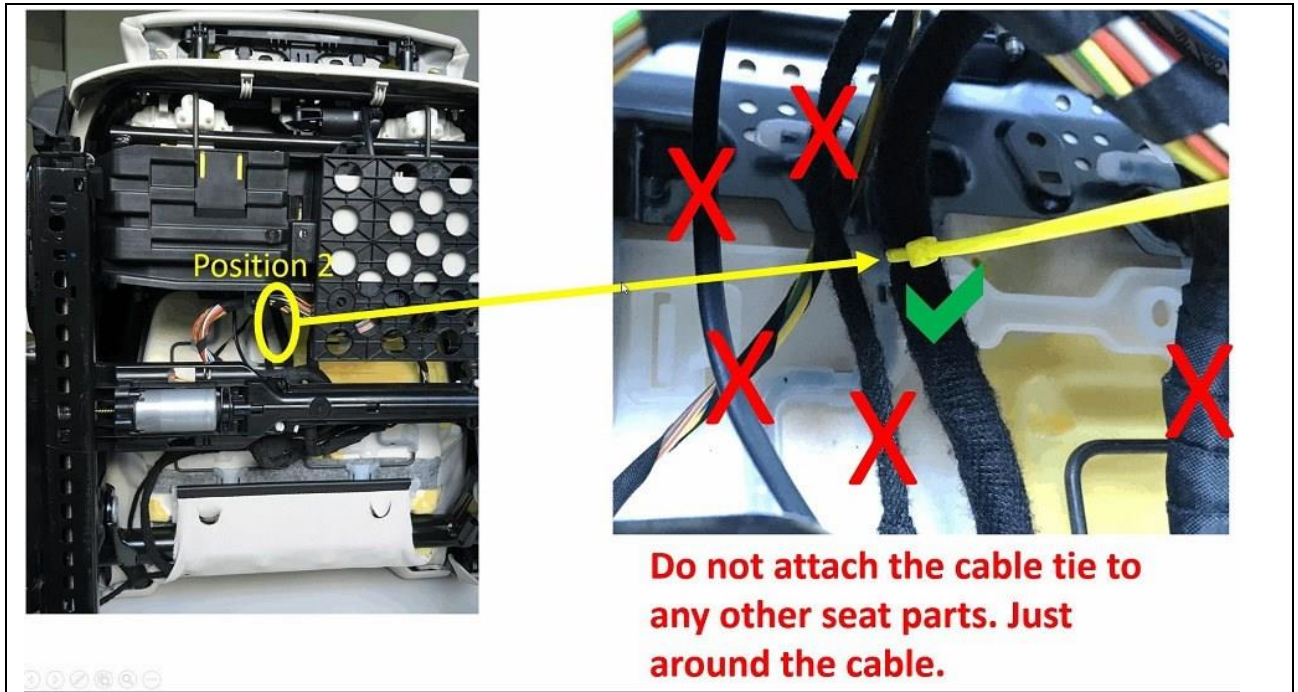
8. Secure the loose clip attached to cables, as shown.

For cable tie position, review the: <https://tinyurl.com/V520218>



Do not attach the cable tie to any other seat parts. Just around the cable.

First cable tie position as shown in above photo



Secound cable tie position as shown in above photo

	<p>UPDATE!</p> <p>9. With the tool shown in the picture, tie the cable tie only around the harness. To correctly tension the cable tie set the tool to 3.75</p>
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10. Re-attach seat trim panel.
11. Verify free motion of seat belt and seat adjustment.
12. Verify correct operation of occupant detection system. There should be no fault memory entries for airbag warnings.
13. Check the POL function.