



SIB 24 04 23

2024-03-29

RECALL 23V-821: REPLACE TRANSMISSION MECHATRONICS

This Service Information Bulletin (Revision 3) replaces SI B24 04 23 **dated January 2024**.

Please perform the procedure outlined in this Service Information on all affected vehicles before customer delivery. In the event the customer has already taken delivery of the vehicle, please perform the procedure the next time the vehicle is in the shop if the campaigns have a status of remedy available. Otherwise, please release the vehicle.

<input type="checkbox"/>	THIS REPAIR IS MOBILE FRIENDLY
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What's New:

- Procedure updated
- Engine variant for Mechatronic part number updated

MODEL

F90 (M5 Sedan)	G01 (X3 Sports Activity Vehicle)	G20 (3 Series Sedan)
F91 (M8 Convertible)	G02 (X4 Sports Activity Coupe)	G22 (4 Series Coupe)
F92 (M8 Coupe)	G05 (X5 Sports Activity Vehicle)	G23 (4 Series Convertible)
F93 (M8 Gran Coupe)	G06 (X6 Sports Activity Coupe)	G26 (4 Series Gran Coupe)
F95 (X5 M Sports Activity Vehicle)	G14 (8 Series Convertible)	G29 (Z4 Roadster)
F96 (X6 M Sports Activity Coupe)	G15 (8 Series Coupe)	G30 (5 Series Sedan)
F97 (X3 M Sports Activity Vehicle)	G16 (8 Series Gran Coupe)	G80 (M3 Sedan)

AFFECTED VEHICLES

- Vehicles which require this campaign to be completed will show it as “Open” when checked either in AIR, AWP, Campaign Summary, or Warranty Vehicle Inquiry.
- Please make sure you check your dealer inventory as soon as possible. You can see a list of affected vehicles in Inventory Campaign Details (ICD) under ROSS.
- This recall affects approximately 536 vehicles.

SITUATION

BMW AG has issued a Delivery Stop (effective September 28, 2023) on certain Model Year 2023 BMW vehicles that were produced between January 23, 2023, and June 15, 2023.

As of December 4, 2023, this Delivery Stop has been upgraded to a Safety Recall.

The Integrated Transmission Control Unit (ITCU) may not have been produced according to specifications by the supplier. A weld seam may not have been manufactured correctly. Over time, this could allow transmission oil to leak into the ITCU which could affect functionality of the transmission.

Do not deliver to a customer, a New, Certified Pre-Owned or Used vehicle subject to a Delivery Stop, until the vehicle is repaired. Do not use or sell replacement equipment/parts subject to a Delivery Stop.

The Recall Notice and Q&A have been attached for further information.

CORRECTION

Replace the automatic transmission mechatronics unit.

PROCEDURE

Follow Repair Instruction **24 34 569 Replace Mechatronics**.

Refer to attachment if the repair instruction is not listed in AIR/ISTA by VIN.

PARTS INFORMATION

To determine the part number below that is to be installed and used for the claim submission for the specific vehicle being repaired, enter the VIN/chassis number into either ETK or AIR, this will consider the specific equipment and/or options that are fitted to the vehicle.

Part Number	Description	Quantity
24 34 8 098 297	RP mechatronics repair kit (S63, S58)	1
24 34 5 A13 1E0	RP mechatronics repair kit (N63)	1
24 34 8 743 457	RP mechatronics repair kit (B58 w/48 V)	1
24 34 5 A13 1E6	RP mechatronics repair kit (B46, B48, B58)	1

Sublet – Bulk Material

Part Number	Description	Quantity
83 22 5A12A00	Automatic transmission fluid (1L)	Sublet qty as applicable

Additionally, other materials and small parts that are not specified above, such as fluids, lubricants, one-time use screws, nuts, and seals, which must be replaced or installed (according to the ISTA repair instructions/ETK/AIR), are to be selected from the Electronic Parts Catalog, and/or other approved BMW resources according to the respective vehicle type. Invoiced these items separately under the Repair Code listed in this bulletin.

CLAIM INFORMATION

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Reimbursement for this Recall will be via normal claim entry utilizing the applicable work package information below, and the part number above that applies.

Repair Code:	0024730100	F9x Gx Replacing transmission mechatronics
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Below are the special flat rate labor operation code choices for this action.

Completion before the first vehicle delivery to a customer or the vehicle is already in the workshop

Work Pkg	Labor Operation	Description (Plus work)	Labor Allowance
# 1	00 75 720	Replacing the transmission mechatronics, program and encode the vehicle control units, includes Carrying out vehicle test (00 00 556/61 21 528)	As applicable
Or:			
# 2	00 75 721	Replacing the transmission mechatronics (Programming and encoding the vehicle control units was performed in conjunction with another campaign/repair during the same workshop visit)	As applicable

Or:

The vehicle arrives at your center and this Recall shows open (No other Main work will be performed or claimed during this workshop visit)

Work Pkg	Labor Operation	Description (Main work)	Labor Allowance
# 3	00 75 184	Replacing the transmission mechatronics, program and encode the vehicle control units, includes Carrying out vehicle test (00 00 006/61 21 528)	As applicable
Or:			
# 4	00 75 185	Replacing the transmission mechatronics (Programming and encoding the vehicle control units was performed in conjunction with another campaign/repair during the same workshop visit)	As applicable

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Only one of the flat rate labor operation codes listed above can be used for claim submission and reimbursement. Also, only one Main work flat rate labor operation code can be claimed per workshop visit.

Claim Repair Comments

Only reference the SIB number and the work package (Pkg) number performed in the RO technician notes and in the claim comment section (For example: B24 04 23 WP 1), unless otherwise required by State law.

Sublet – Bulk Materials (RO and Claim Comments Required)

Sublet Code 4	See the sublet reimbursement calculations below	Reimbursement for the repair-related bulk material as noted above (Do not use the BMW part number for claim submission)
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Sublet reimbursement calculation for claiming the applicable repair-related bulk material (BMW part number) is at the “dealer net price amount” for the quantity used plus your center’s handling.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

Vehicle Programming and Encoding

During this workshop visit, the affected vehicle may also show one or more programming and encoding Technical Campaign repairs open. The programming and encoding procedure may only be invoiced one time.

After replacing the transmission mechatronics, select this open Recall Technical Campaign to perform and submit for updating the vehicle to a required I-level or higher (This includes labor operation codes 00 00 006/556, 61 21 528 and 61 00 730).

For any other open campaigns, be sure to perform any additional before and/or after work (including attaching labels) as required. Close any remaining open programming and encoding Campaign repairs as outlined in the corresponding Service Information Bulletin.

To obtain the corresponding flat rate unit (FRU) allowance information from the BMW Group AIR application resource, start by entering the Chassis Number (the last seven (7) characters of the VIN, select the applicable Model if two or more vehicle choices show), or enter the full VIN (17 characters), click on the "Search" button. Next, click on the "Flat Rate Units" button and enter the flat rate labor operation code in the field to the right, click "Search" to display the Flat Rate Unit Group detail choices.

Vehicle Programming and Encoding – Additional Work (RO and Claim Comments Required)

This procedure automatically reprograms and encodes any vehicle control modules that do not have the latest software I-level.

If one or more control modules fail during the reprogramming procedure, claim the required consequential repair work procedures to address this issue (including performing the IRAP Control Unit Recovery first as required, refer to the SIB in AIR) under the Repair Code in this bulletin together with the corresponding labor operation codes and their flat rate unit (FRU) allowance(s), including the diagnosis* that applies.

Please explain the additional work procedures that were performed (The why and the what) on the repair order and in the claim comments.

For covered repairs that address control module failures that occurred prior to performing this reprogramming procedure, claim this work with the Repair Code listed in AIR together with the corresponding labor operation codes and their flat rate unit (FRU) allowance(s), including the diagnosis* that applies.

(*) Based on which one applies to your center, please refer to **SI B01 01 20** or **B01 07 20** for the applicable procedure for documenting, claiming, and explaining, on the RO and in the claim comments, your diagnosis work time (WT), job/repair work time (WT), and the vehicle repairs your center performed, unless otherwise required by State law.

Alternative Mobility Solution (AMS) for Vehicle Owners (RO and Claim Comments Required)

This Recall's repair qualifies for Alternative Mobility Solution (AMS) expense reimbursement, claim this item under the Repair Code noted above as follows:

- Sublet Code 2 - Itemize the AMS sublet amount on the repair order and in the claim comment section.

Please refer to [SI B01 29 16](#) for additional information.

Reimbursement of Prior Customer-Pay Repairs (TREAD Act)

Based on the issue, and the age of the Affected Vehicles being addressed by this Safety Recall Campaign,
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However, if you do receive a reimbursement request from a customer for a prior repair that may qualify, please contact the Warranty department (include a legible copy of the invoice) through IDS by selecting Coverage, Policy, Coding Questions and Mileage Corrections. The Warranty department will review and respond to your inquiry accordingly.

FEEDBACK REGARDING THIS BULLETIN

Technical Feedback	To submit feedback for the technical topic of this bulletin: Submit your feedback in the rating box at the top of this bulletin
Warranty Feedback	To submit feedback for the CLAIMS section of this bulletin: Submit an IDS ticket to the Warranty Department, or use the chat available in the Warranty Documentation Portal
Parts Feedback	To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department

Supporting Materials

[picture_as_pdf Attachment 1 to SI B24 03 24.pdf](#)

[picture_as_pdf B240423 Recall Notice.pdf](#)

[picture_as_pdf B240423 23V-821-ITCU-FAQ-\(04Dec2023\).pdf](#)

SAFETY RECALL NOTICE

To: All Center Operators, Sales Managers, Service Managers, Parts Managers and Warranty Processors

RE: Recall 23V-821: Transmission Mechatronic – B24 04 23

BMW AG has issued a Delivery Stop (effective September 28, 2023) on certain Model Year 2023 BMW vehicles that were produced between January 23, 2023, and June 15, 2023.

As of December 4, 2023, this Delivery Stop has been upgraded to a Safety Recall.

Please be reminded that it is a violation of federal law (The Safety Act) for you to sell, lease or deliver any new motor vehicle covered by this notification until the recall repair has been performed. This means that Centers may not legally deliver new motor vehicles to consumers until they are fixed or use/sell replacement equipment/parts subject to this recall. Note also that substantial civil penalties apply to violations of the Safety Act.

Also, you should not sell, lease or deliver any Certified Pre-Owned or used vehicles subject to a safety recall until the repair is completed.

Please follow any special instructions that we provide to you for the return or disposition of recall parts.

We appreciate all your assistance with this Recall.

RECALL 23V-821: REPLACE TRANSMISSION MECHATRONICS

Replacing Transmission Mechatronics



- Deactivate the vehicle electrical system HV (if required) and 12V as described in the VIN specific repair instruction.

Follow VIN specific repair instructions in ISTA/AIR to access the transmission oil pan (removing the specific under panels)

⚠ CAUTION

Materials harmful to health.

Contact with fluids harmful to health!

- Note and follow safety instructions on containers.
- Conduct all work in appropriate personal protective equipment only.

⚠ RISK OF DAMAGE

Damage to the transmission oil pan.

Non-observance of the transmission oil specifications may lead to severe damage to the automatic transmission.

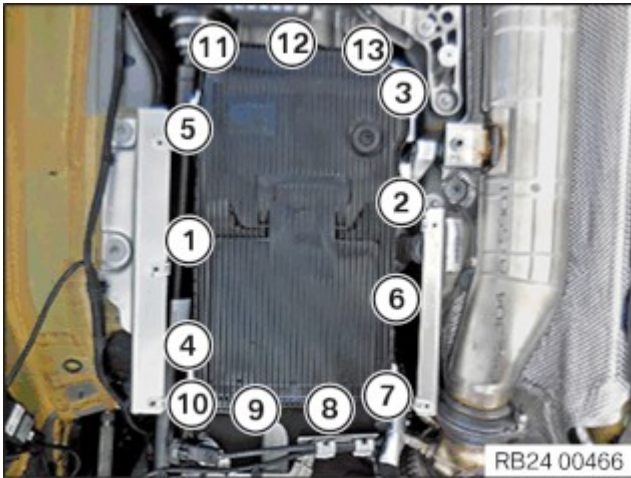
- Remove transmission oil pan only after it has cooled down.
- Use only the approved transmission oil.
- After completion of repair work, check transmission oil level.

i TECHNICAL INFORMATION

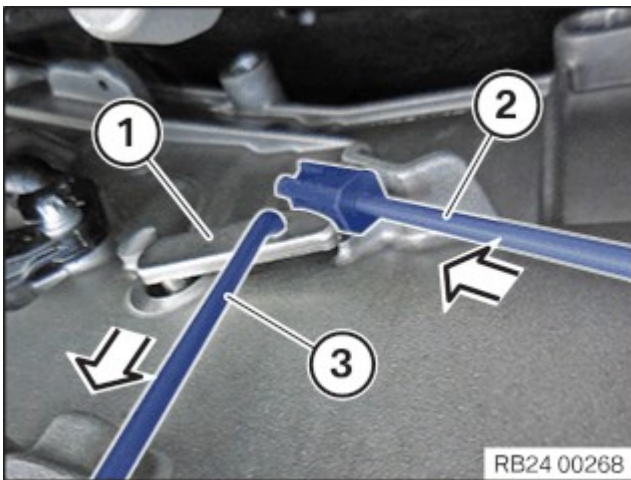
Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.



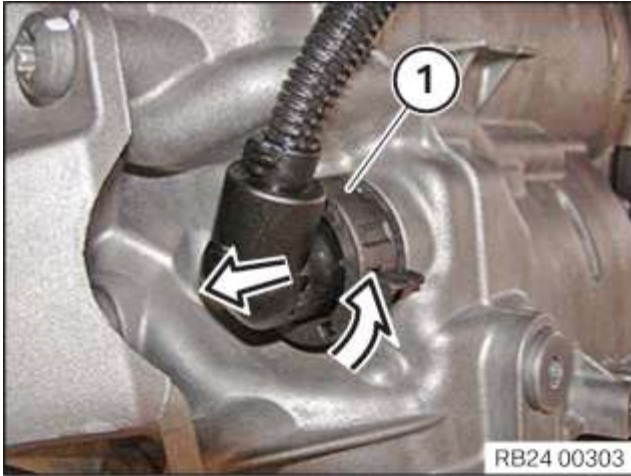
- Release oil drain plug **1**.
- Drain automatic transmission oil.



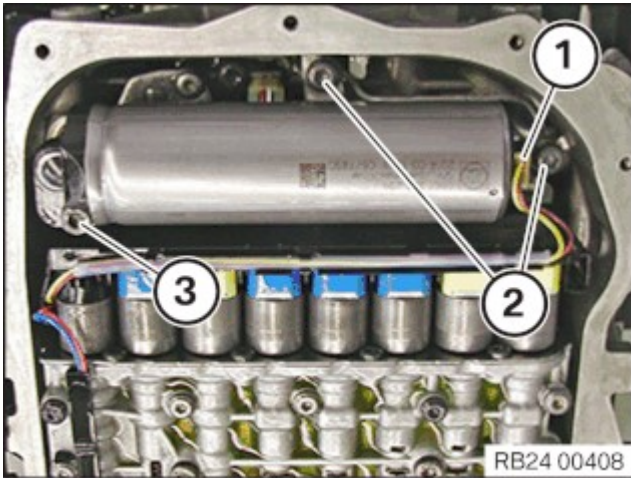
- Loosen screws **1** to **13**.
- Remove transmission oil pan.



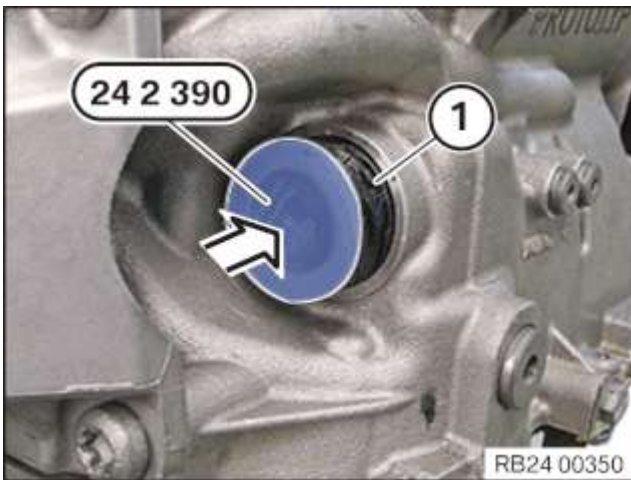
- Pull the selector shaft tappet **1** downward with the special tool **2** 355 850 3 in the direction of the arrow.
- Install the special tool **2** 355 850 2 between the selector shaft tappet **1** and transmission housing in arrow direction.



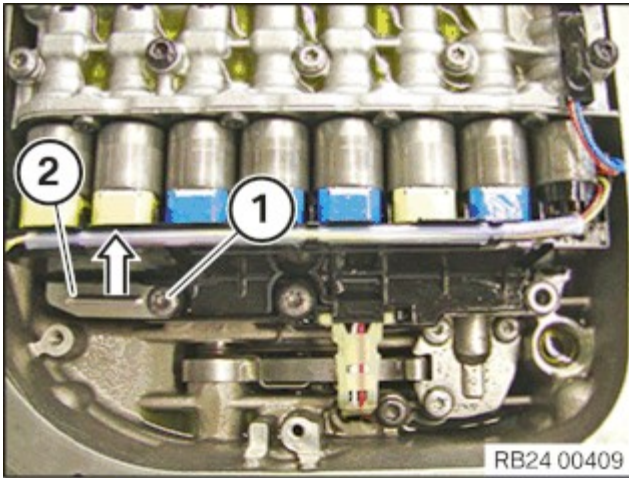
- Turn connector **1** in arrow direction and
- detach.



- Unlock connector **1**.
- Remove the oil volume reservoir screws **2** and **3** to remove the reservoir.



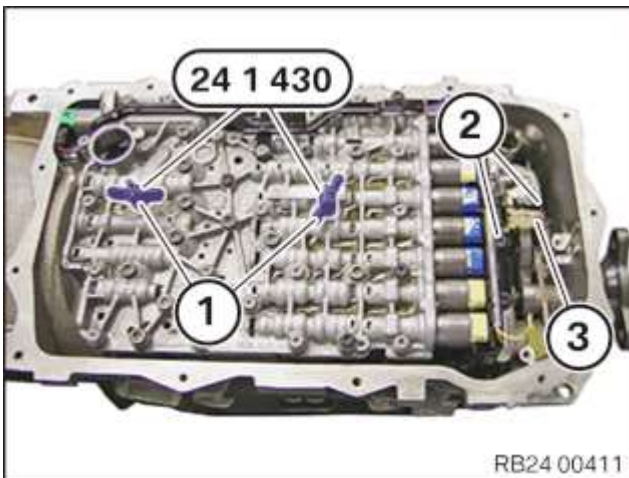
- Insert special tool 0 494 213 (24 2 390) in sealing sleeve **1**.



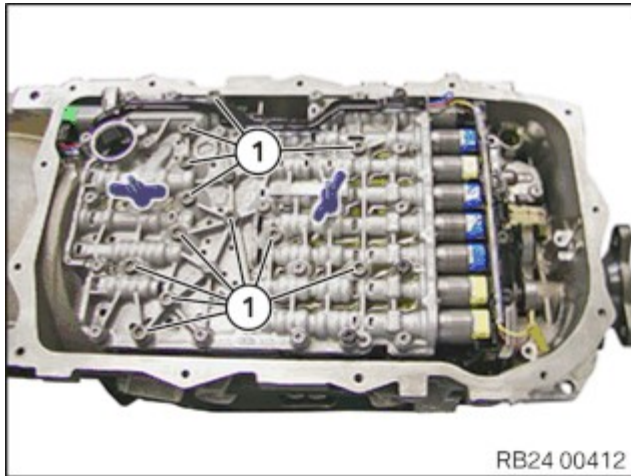
- Release the screw **1** and unlock the sealing sleeve with the slide **2** in arrow direction.



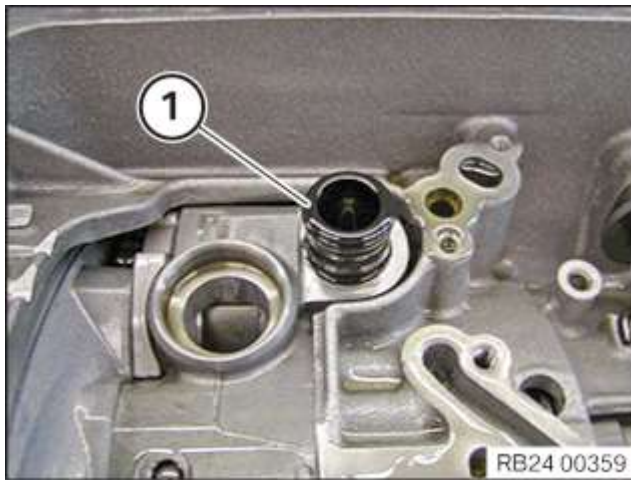
- Observe the installation position of the sealing sleeve **1**.
- The sealing sleeve **1** must be installed in the same position during installation.
- Pull out the sealing sleeve **1** in direction of the arrow.



- Release the screws from the mechatronics in the marked area **1**.
- Install the special tool 0 496 715 (24 1 430) in the marked area **1**.
- Tighten the wing nuts **1**.
- Loosen screws **2**.
- Carefully pull the output RPM sensor **3** out of the housing and insert it in the recess on the module.
- (note the position of the RPM sensor during removal/install)



- Loosen screws 1.
- Remove the wing nuts of special tool 0 496 715 (24 1 430).
- Carefully remove mechatronics.



- Remove pressure pipe 1.

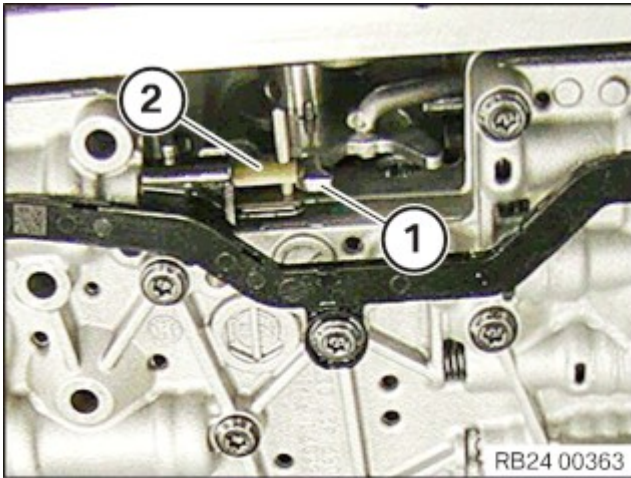
Have the repair kit ready.

Parts: Mechatronics repair kit

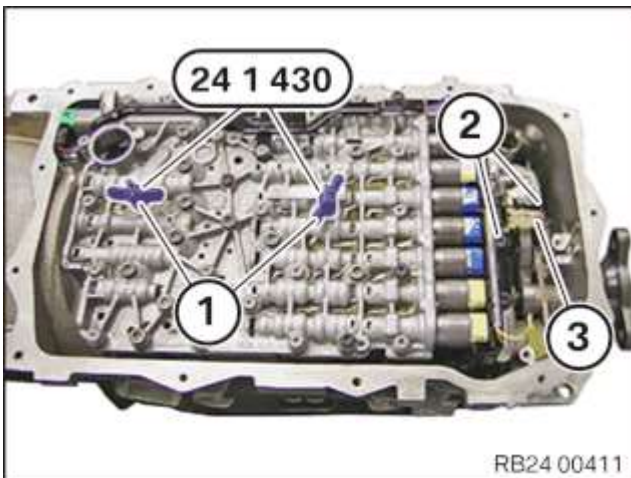
- Mechatronics
- Mechatronics bolts
- Pressure pipe
- Mechatronics sealing ring
- Oil volume reservoir/oil pump
- Bolts for oil volume reservoir/electric oil pump
- Sealing ring for oil volume reservoir/electric oil pump
- Transmission oil pan with seal
- Transmission oil pan bolts
- Oil filler plug



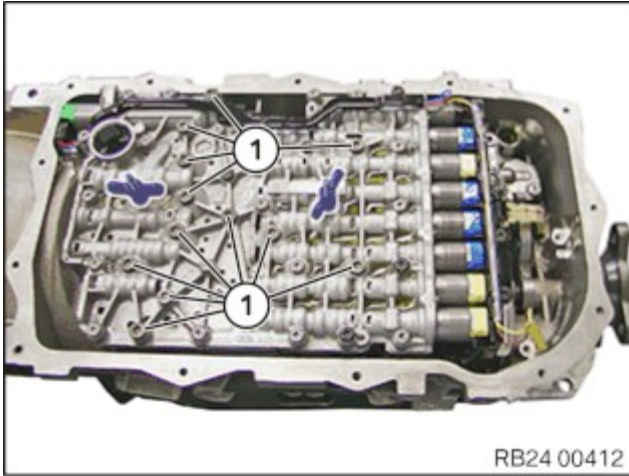
- Renew pressure pipe 1.



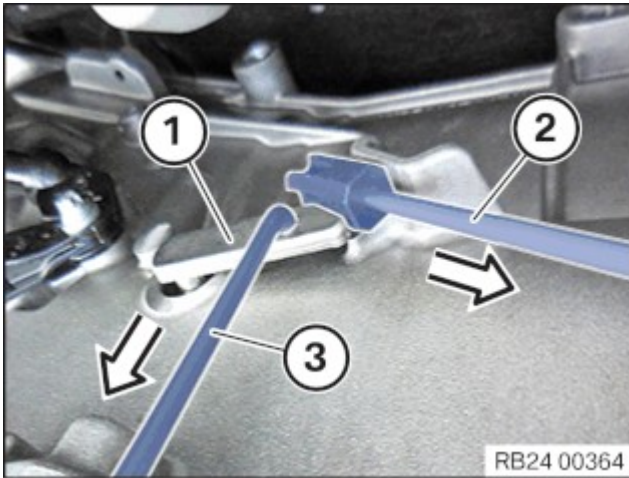
- Fit mechatronics unit.
- Feed the shifting claw 1 into the gearshift shaft 2.



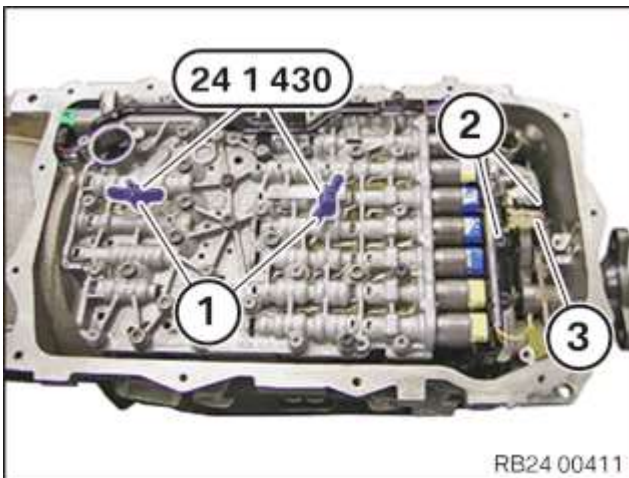
- Install mechatronics.
- Tighten wing nuts 1 of the special tool 0 496 715 (24 1 430) alternately until the mechatronics is applied to the transmission.



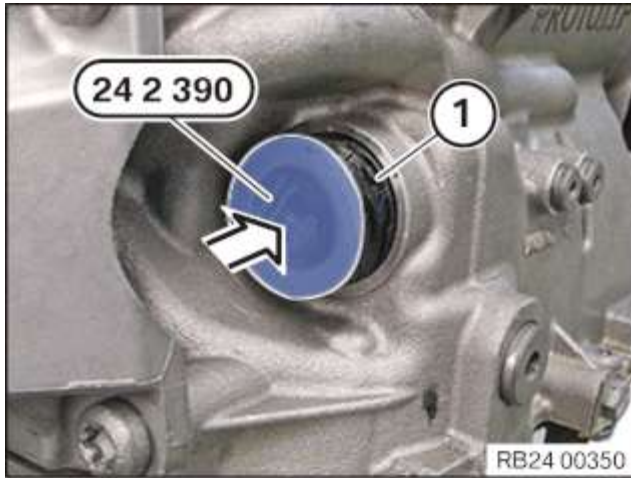
- Renew screws **1**.
- Position the screws **1** and slightly tighten.



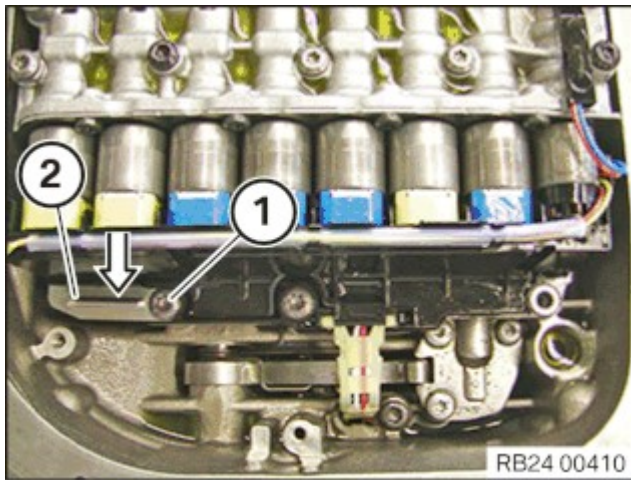
- Pull the pin of the selector shaft **1** with the special tool **2 355 850 3** downward in the arrow direction.
- Remove the special tool **2 355 850 2** in the arrow direction.



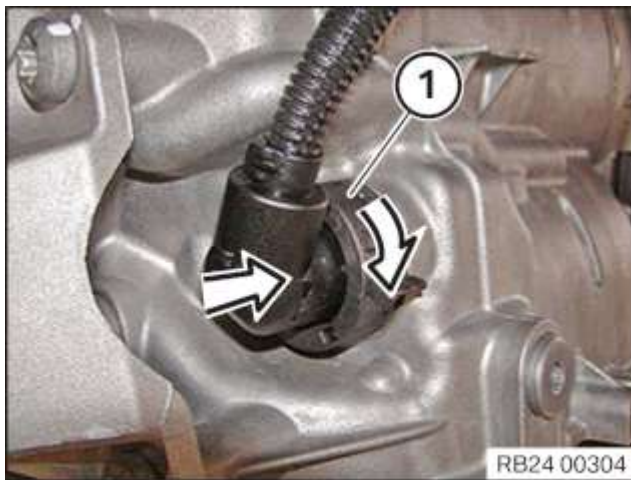
- Attach output RPM sensor **3** carefully and slide onto the stop.
- Renew screws **2**.
- Position the screws **2** and slightly tighten.
- Loosen wing nuts.
- Remove the special tool **0 496 715 (24 1 430)**.
- Renew screws **1**.
- Position the screws **1** and slightly tighten.



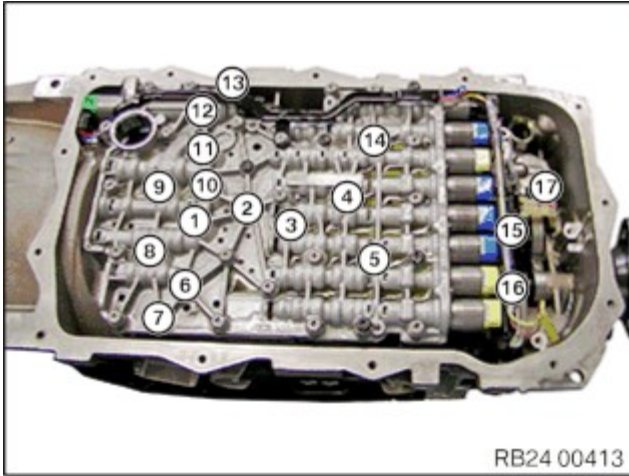
- Replace sealing sleeve 1.
- Carefully insert the sealing sleeve 1.
- The lug must be in the inner surface.
- Turn the sealing sleeve 1 until the lug is inserted in the groove of the transmission.
- Slide in sealing sleeve 1 up to the stop.
- The lug on the sealing sleeve must not be damaged!
- Remove the special tool 0 494 213 (24 2 390).



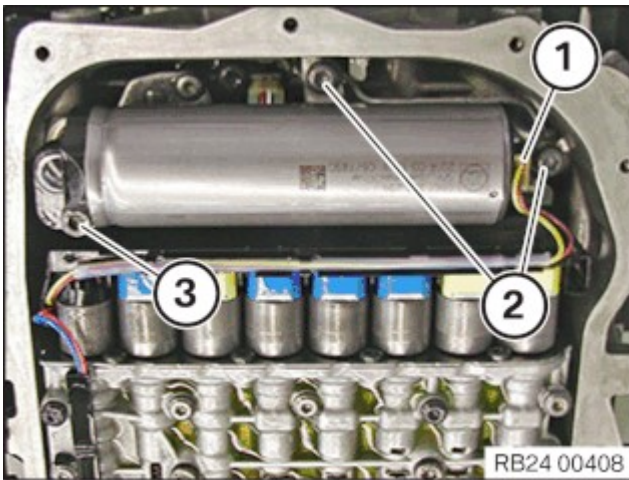
- Lock the sealing sleeve with the slide 2.
- Position the screw 1 and slightly tighten.



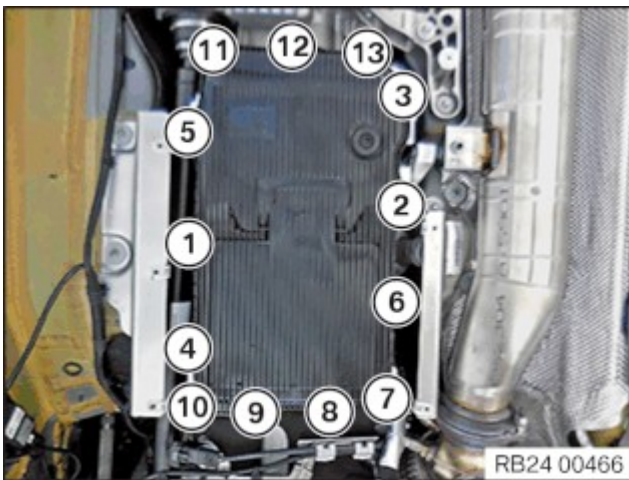
- Insert the connector 1 in the arrow direction.
- Lock the connector 1 by turning in the arrow direction.



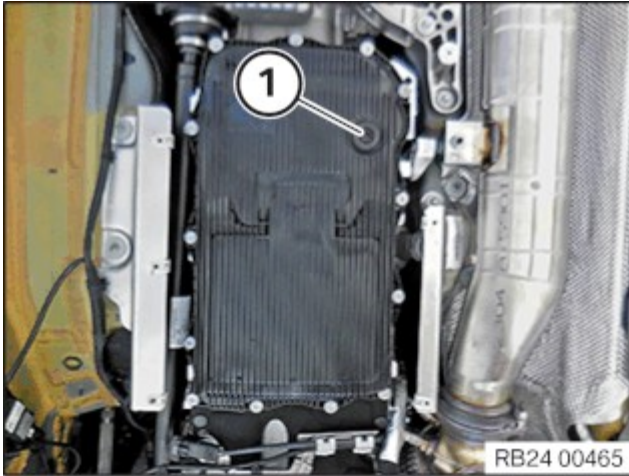
- Tighten the screws in order from **1** to **17**.
- **Mechatronics to transmission M6x59, M6x20 Renew screws. Tightening torque 8Nm**
- **Output RPM sensor to transmission (position 17) M6x20 Renew screw. Joining torque 4Nm Angle of rotation 12°**



- Install the oil volume reservoir.
- Renew screws (M6x20, M6x59).
- Tighten screws (M6x20) **2**.
- Tighten screws (M6x59) **3**.
- **Tightening torque 8Nm**
- Lock connector **1**.



- Clean the contact surface of the transmission oil pan on the transmission.
- Renew screws **1** to **13**.
- Position the transmission oil pan.
- Hand-tighten the bolts.
- Tighten the screws in order from **1** to **13**.
- **Tightening torque 10Nm**



- If necessary, tighten the oil drain plug **1**.
- **Tightening torque 8Nm**

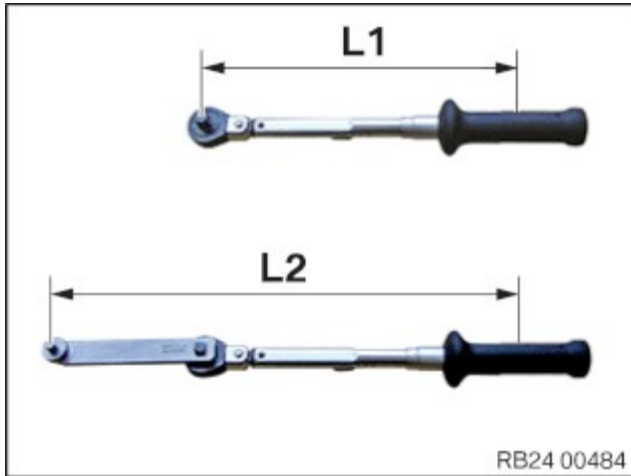


- Activate the vehicle electrical system as described in the described in the VIN specific repair instruction.

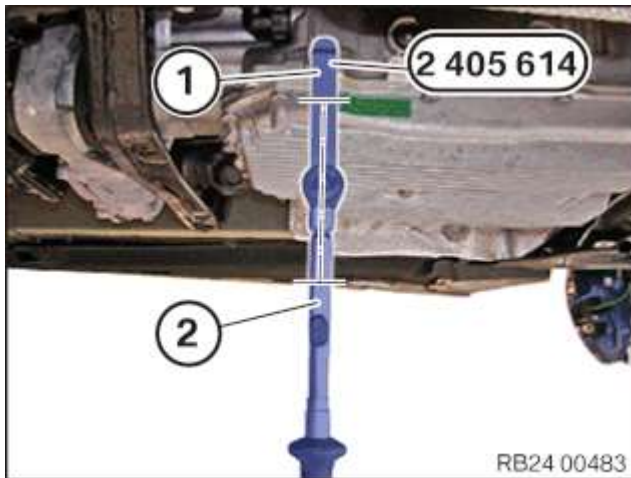
- Connect diagnostic system.
- Observe the predefined transmission oil temperatures for the oil-level adjustment with the diagnostic system:
- Initial condition: Transmission oil temperature 30 °C to 40 °C.
- End condition: Transmission oil temperature 40 °C to 50 °C.
- Call up service function (drive).
- Carry out oil-level adjustment in accordance with instructions.



- Loosen the oil filler plug **1** using the special tool **2 405 614**.
- Top up automatic transmission fluid according to the instructions in the diagnostic system.



- The setpoint torque needs to be adjusted due to the increased length of the torque wrench with special tool 2 405 614.
- **Tightening torque for fill plug 35Nm**
- Measure L1 and L2 from the center of the grip to the center of the square drive.
- Torque setting on torque wrench = $35\text{Nm} \times \text{L1/L2}$.



- Renew the oil filler plug 1 and the sealing ring.
- The oil filler plug is included in the repair kit.
- Make sure that the special tool 2 405 614 and the torque wrench 2 align while tightening the oil filler plug 1.
- Tighten the oil filler plug 1 with the special tool 2 405 614 and the torque wrench 2 using the setting from previous step.

Reinstall underbody panels as described in VIN specific Repair Instructions.

Safety Recall
23V-821
ITCU
Model Year 2023
Various BMW Models
Issue Date: 12/04/2023

Q1. Which BMW Group models in the US are potentially affected by this Safety Recall?

Certain Model Year 2023 BMW models in the US are potentially affected.

Q2. What is the specific issue?

The Integrated Transmission Control Unit (ITCU) may not have been produced according to specifications by the supplier. A weld seam may not have been manufactured correctly. Over time, this could allow transmission oil to leak into the ITCU which could affect functionality of the transmission.

Q3. Why are other models / vehicles not included in this Safety Recall?

Other models have an ITCU that was produced to specifications by the supplier.

Q4. Can I continue to drive my vehicle?

Yes. However, when you are notified by BMW of this Safety Recall, please contact an authorized BMW center to schedule an appointment as soon as possible. For the latest updates to this Safety Recall, please visit [bmwusa.com/recall](https://www.bmwusa.com/recall). **If you are not the only driver of this vehicle, please advise all other drivers of this important information.**

Q5. How did BMW Group become aware of the issue?

BMW Group became aware of the issue through its quality control procedures.

Q6. How will I be informed of this Safety Recall?

Owners of potentially affected vehicles will be notified via First Class mail and requested to schedule an appointment with an authorized BMW center to have the remedy performed. Owners can locate their nearest authorized BMW center at [bmwusa.com/dealer](https://www.bmwusa.com/dealer).

To ensure BMW has the most up-to-date contact and vehicle information, owners should register their vehicle at [bmwusa.com/myBMW](https://www.bmwusa.com/myBMW). Registration is free and will give them access to other information specific for their BMW vehicle. Alternatively, owners can visit [bmwusa.com/recall](https://www.bmwusa.com/recall) and click on “**Manage recall notices and contact information**”.

Q7. How will my vehicle be remedied?

Potentially affected vehicles will have the transmission mechatronics module replaced.

Q8. Do I have to wait for BMW to contact me to have the remedy performed?

Yes. We are in the process of implementing this Safety Recall to ensure that the necessary parts, tools, and procedures are available. For the latest updates to this recall, please visit [bmwusa.com/recall](https://www.bmwusa.com/recall).