

Service Action

Code: 34L4



Subject	Transmission Control Module (TCM) Software				
Document History	Date		Summary		
	08/03/2023		Original publication		
Affected Vehicles	Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
	USA	2017	2018	A3 CABRIOLET	713
	USA	2017	2018	A3 SEDAN	7,898
	USA	2018	2018	S3 SEDAN	589
	CAN	2017	2018	A3 SEDAN	515
	CAN	2018	2018	S3 SEDAN	115
	<p>Check Campaigns/Actions screen in Elsa on the day of repair to verify that a VIN qualifies for repair under this action. Elsa is the <u>only</u> valid campaign inquiry & verification source.</p> <ul style="list-style-type: none"> ✓ Campaign status must show "open." ✓ If Elsa shows other open action(s), inform your customer so that the work can also be completed at the same time the vehicle is in the workshop for this campaign. 				
About this Service Action	Audi is providing updated transmission control module (TCM) software to enhance an in-vehicle alert should a problem arise within the auxiliary hydraulic pump. Additionally, if a specific fault is found after the software is updated, a repair will be made to the transmission.				
Code Visibility	On or about August 03, 2023, the campaign code will be applied to affected vehicles.				
Owner Notification	Owner notification will take place in August 2023. Owner letter examples are included in this bulletin for your reference.				
Campaign Expiration Date	This campaign expires on March 01, 2027 . Repairs must be performed on or before this date to be eligible for payment. Keep this expiration date in mind when scheduling customers for this action. If a customer wishes to have this service performed after the expiration date, your dealerships normal costs associated with this repair will apply.				
Additional Information	<p>Please alert everyone in your dealership about this action, including Sales, Service, Parts and Accounting personnel. Contact Warranty if you have any questions.</p> <p>Dealers must ensure that every affected inventory vehicle has this campaign completed <u>before delivery to consumers</u>.</p>				

Parts Information (if auxiliary hydraulic pump requires replacement)

Parts Control Type: Free Order	Parts will be managed by Free Order
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Initial Allocation: NO	There will be no parts allocation. Please reference the Repair Projection Tool (below) to view your potential VIN population.
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Repair Projection Tool: (right click to open)	
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Criteria	Quantity	Part Number	P.O.C. Part Description		Ordering Method
01	2	01M-323-255	SEAL RING (o-ring for driveshaft)		Free Order
	1	06B-105-313-D	BEARING (needle bearing – confirm part number in ETKA)		
	1	0BH-325-147	CLIP (for mechatronic connector)		
	1	0GC-398-008-D	REPSET (repair kit)		
	1	0GC-927-377	GASKET (seal for mechatroic connector) (if damaged)		
	1	1K0-253-141-AA Or 1K0-253-141-S	CLAMP (exhaust clamp - S3) Or CLAMP (exhaust clamp - A3)		
	2	7E0-407-297	RING (driveshaft circlip)		
	1	D -174-003-M2	SEALANT		
	0.1	G -055-128-A1	SEAL GREASE (for axle seal installation)		
	Up to 1 Or Up to 2	G -12E-100-1G CON Or G -12E-050-1G RTU	COOLANT (concentrate) Or COOLANT (pre-mix)	USA ONLY	
	Up to 1 Or Up to 2	G -12E-100-2G CON Or G -12E-050-2G RTU	COOLANT (concentrate) Or COOLANT (pre-mix)	CANADA ONLY	
	7	G -055-529-A2	GEAR OIL		
	2	N -015-081-6	NUT (coupling rod)		
	6	N -103-320-02	NUT (transverse link)		
	2	N -105-524-02	BOLT (steering rack)		
	3	N -105-524-04	BOLT (gearbox mounting)		
	1	N -107-847-01	BOLT (pendulum support)		
	1	N -107-848-01	SCREW (pendulum support)		
6	N -107-854-01	SCREW (assembly mounting)			

Continued on next page

Criteria	Quantity	Part Number	P.O.C. Part Description	Ordering Method
01	3	N -908-461-02	SCREW (front propshaft)	Free Order
	1	N -909-654-01	SCREW (drain plug)	
	6	N -909-911-02 or N -911-082-01	BOLT (driveshaft – confirm part number in ETKA)	
	4	N -910-669-01	BOLT (middle propshaft)	
	4	N -910-889-01	SCREW (bevel box – AWD only)	
	1	N -912-010-01	BOLT (pendulum support)	
	4	N -912-312-01	SCREW (assembly mounting)	
	5	WHT-000-729-A	BOLT (noise insulation)	
	3	WHT-005-179	SCREW (rear propshaft)	

NOTE

Campaign parts should always be ordered as per the parts information in this circular. The ordering system will supersede the part, if applicable.

Claim Entry Instructions

The labor times listed here may differ from the labor operations and labor times listed in ELSA.

After campaign has been completed, enter claim as soon as possible to help prevent work from being duplicated elsewhere. Attach the Elsa screen print showing action open on the day of repair to the repair order.

If customer refused campaign work:

- ✓ U.S. dealers: Submit the request through Audi Warranty Online under the Campaigns/Update option.
- ✓ Canada dealers: Upload the repair order [signed by customer] to Audi WIN/Operations/Campaign Closure.

Service Number	34L4		
Damage Code	0099		
Parts Vendor Code	002		
Claim Type	Sold vehicle: 7 10 Unsold vehicle: 7 90		
Causal Indicator	Mark labor as causal if fault does not set after software update Mark REPSET* as causal if fault sets after software update		
Vehicle Wash/Loaner	Do not claim wash/loaner under this action		
Criteria I.D.	01		
	Update TCM software. Fault not stored after software update and road test.		
	LABOR		
	Labor Op	Time Units	Description
	2706 89 50	SEE ELSA	Connect battery charger
	0151 00 00	Time stated on diagnostic protocol	Update TCM software
AND (if necessary)	Add only if fault P0C29 stored after software update and road test. Remove and install transmission. Replace auxiliary hydraulic pump and perform basic settings.		
	LABOR (AWD vehicles)		
	Labor Op	Time Units	Description
	3435 19 16	SEE ELSA	Transmission remove+reinstall (AWD only)
	3435 42 99	380	Replace auxiliary hydraulic pump (AWD only)
	LABOR (FWD vehicles)		
	Labor Op	Time Units	Description
	3435 19 20	SEE ELSA	Transmission remove+reinstall (FWD only)
	3435 42 99	350	Replace auxiliary hydraulic pump (FWD only)

Continued on next page

PARTS		
Quantity	Part Number	Description
1.00	0GC398008D	REPSET*
2.00	01M323255	ROUND SEAL
1.00	06B105313D	NEEDLE BEARING
1.00	0BH325147	RETAINING CLIP
1.00	0GC927377	GASKET
1.00	1K0253141AA or 1K0253141S	DUAL CLAMP (S3) or DUAL CLAMP (A3)
2.00	7E0407297	LOCK RING
1.00	D 174003M2	SILCONE SEALANT
0.10	G 055128A1	SEAL GREASE
Up to 40.00 or Up to 2.00	G 12E100S1 or G 12E050S0	COOLANT (concentrate) or COOLANT (pre-mix)
7.00	G 055529A2	GEAR OIL
2.00	N 0150816	SHOULDERED HEX. NUT
6.00	N 10332002	SHOULDERED HEX. NUT
2.00	N 10552402	BOLT, HEX. HD. WITH SHOULDER
3.00	N 10552404	BOLT, HEX. HD. WITH SHOULDER
1.00	N 10784701	BOLT
1.00	N 10784801	SCREW
6.00	N 10785401	HEXAGON FLANGE SCREW (COMBI)
3.00	N 90846102	12 POINT SOCKET HEAD SCREW
1.00	N 90965401	PLUG WITH SEAL
6.00	N 90991102 or N 91108201	BOLT, WITH POLYGON SOCKET HD. (driveshaft bolts – confirm part number in ETKA)
4.00	N 91066901	BOLT, HEX. HD. WITH SHOUL (COMBI)
4.00	N 91088901	SOCKET HD. SCREW WITH COLLAR
1.00	N 91201001	BOLT, HEX, HD. (COMBI)
4.00	N 91231201	SCREW
5.00	WHT000729A	HEX SOCKET HEAD BOLT (COMBI)
3.00	WHT005179	12 POINT SOCKET HEAD SCREW

Customer Letter Example (USA)

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <MODEL YEAR> <BRAND> <CARLINE>, <VIN>

Subject: Service Action 34L4 - Transmission Control Module (TCM) Software

Dear Audi Owner,

As part of Audi's ongoing commitment to customer satisfaction, we are informing you of our decision to conduct a service action on certain 2017-2018 model year Audi vehicles. Our records show that you are the owner of a vehicle affected by this action.

About this Service Action: Audi is providing updated transmission control module (TCM) software to enhance an in-vehicle alert should a problem arise within the auxiliary hydraulic pump. Additionally, if a specific fault is found after the software is updated, a repair will be made to the transmission.

What will we do? Your authorized Audi dealer will update the transmission control module (TCM) software in your vehicle. This work will take about an hour to complete and will be performed for you free of charge.

Additionally, if a specific fault is found after the software is updated, a repair will be made to the transmission. If this additional work is necessary, it will take about a day and will be performed for you free of charge.

Please keep in mind that your dealer may need additional time for the preparation of this service action, as well as to accommodate their daily workshop schedule.

What should you do? In order to limit any possible inconvenience, please contact your authorized Audi dealer as soon as possible to schedule this service. Please keep in mind that your dealer may need additional time for the preparation of the repair, as well as to accommodate their daily workshop schedule. For your convenience, you can also visit www.audiusa.com and click on the "Find a Dealer" link to locate a dealer near you and schedule this service.

This service action will be available for you **free of charge only until March 01, 2027**. If you wish to have this service performed after that date, your dealer's normal costs associated with this repair will apply.

Lease vehicles and address changes If you are the lessor and registered owner of the vehicle identified in this action, please forward this letter immediately via first-class mail to the lessee within ten (10) days of receipt. If you have changed your address or sold the vehicle, please fill out the enclosed prepaid Owner Reply card and mail it to us so we can update our records.

Can we assist you further? If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Audi Customer Experience at 1-800-253-2834 or via our "Contact Us" page at www.audiusa.com.

Checking your vehicle for open Recalls and Service Campaigns To check your vehicle's eligibility for repair under this or any other recall/service campaign, please visit the **Recall/Service Campaign Lookup** tool at www.audiusa.com and enter your Vehicle Identification Number (VIN).

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your vehicle continues to meet and exceed your expectations.

Sincerely,

Audi Customer Protection

Customer Letter Example (Canada)

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <MODEL YEAR> <BRAND> <CARLINE>, <VIN>

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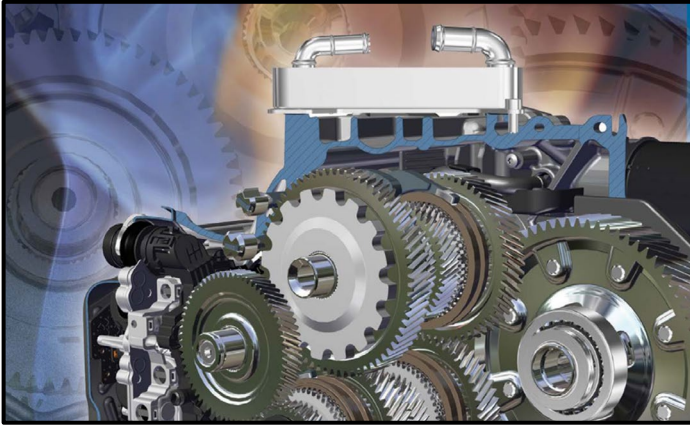
Can we assist you further? If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Audi Customer Relations Monday through Friday from 8AM to 8PM EST at 1-800-822-2834 or via our "Contact Audi Canada" page at www.audi.ca.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your vehicle continues to meet and exceed your expectations.

Sincerely,

Audi Customer Protection

Repair Overview





- Update TCM software.
- Perform road test and check for TCM faults afterward.
- Replace auxiliary hydraulic pump inside gearbox only if specific faults set.

! NOTE





- These repair instructions may differ from the labor operations and labor times listed in ELSA.
- Damages resulting from improper repair or failure to follow these work instructions are the dealer's responsibility and are not eligible for reimbursement under this action.
- This procedure must be read in its entirety prior to performing the repair.
- Due to variations in vehicle equipment and options, the steps/illustrations in this work procedure may not identically match all affected vehicles.
- Diagnosis and repair of pre-existing conditions in the vehicle are not covered under this action.
- When working during extreme temperatures, it is recommended that the vehicle be allowed to acclimate inside the shop to avoid temperature-related component damage/breakage.

Required Tools (software update)







	<p>Battery Tester/Charger -VAS5908- (or equivalent charger with a current rating of at least 90A)</p>		<p>Diagnostic Tester -VAS6150X/VAS6160X- (or equivalent)</p>
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Required Tools (auxillary hydraulic pump replacement – if required)

NOTE: Refer to ELSA Repair Manual as needed for additional tools not listed here

	<p>Transmission Support -3282- (or equivalent, -T40173- for example)</p>		<p>Transmission Support -VW353-</p>
	<p>Holding Plate -VW309A-</p>		<p>Engine and Transmission Holder -VAS6095A-</p>
	<p>Transmission Support – Bolt -3282/34- (or equivalent)</p>		<p>Transmission Support - Mounting Plate 61 -3282/61- (or equivalent)</p>
	<p>Slide Hammer Set -VW771- (or equivalent)</p>		<p>Socket - 8mm -T40276- (or equivalent)</p>

 <p>Socket And Extended Bit -T10107A- (or equivalent)</p>	 <p>T-Handle Hook -3438- (or equivalent) Qty. = 2</p>
 <p>Puller - Unit Injector -T10055-</p>	 <p>Drive Axle Wedge Tool -T10161-</p>
 <p>Retaining Bar -T10524-</p>	 <p>Puller - Bevel Gear -T10472-</p>
 <p>Puller -T10525-</p>	 <p>Hose Clamps - Up To 25mm -3094- (or equivalent)</p>
 <p>Engine Bung Set -VAS6122- (or equivalent)</p>	 <p>Engine and Gearbox Jack -VAS6931- (or equivalent)</p>
 <p>Pry lever -80-200- (or equivalent)</p>	 <p>Socket - Xzn 14 -T10061- (or equivalent)</p>

 <p>Thrust Piece -T10526-</p>	 <p>Seal Installer - Bevel Box -T10243- (or equivalent)</p>
 <p>Bearing Installer - Bearing Press Piece -VW207C-</p>	 <p>Counter Support (Kukko 22/1) - VAS251621- (or equivalent)</p>
 <p>Internal Puller -VAS251635- (or equivalent)</p>	 <p>Circlip Pliers -VAS5503A- (or equivalent)</p>
 <p>Guide Pins – Gearbox -T40288-</p>	 <p>Thrust Piece -T10457- (or equivalent)</p>
 <p>Insert Tool - 18mm -T10179- (or equivalent)</p>	

Repair Instruction

Section A - Check for Previous Repair

Applicable criteria ID(s)	Campaign/Action Status
01 ← 2	Open ← 1

EXAMPLE

Campaign/Action	Start	Designation
→ 3	2015-11-10	W-SERV_ACT -
	2018-12-13	RECALL -
	2017-05-16	A-RECALL -

EXAMPLE

- Enter the VIN in Elsa and proceed to the “Campaign/Action” screen.

TIP

On the date of repair, print this screen and keep a copy with the repair order.

- Confirm the Campaign/Action is open <arrow 1>. If the status is closed, no further work is required.
- Note the Applicable Criteria ID <arrow 2> for use in determining the correct work to be done and corresponding parts associated.

CRITICAL REPAIR STEP

 **STOP!** 

If multiple software update Campaign/Actions are open, they must be performed in order of the Start date <arrow 3>. The oldest should be performed first.

- **All Safety Recalls must be completed prior to completing this campaign.**
- **Proceed to Section B.**

Section B – Update TCM Software

NOTE

Prior to launching the VAS Diagnostic Tester and starting an update, ensure the following conditions are met;

- ✓ **The ODIS software is completely up to date.**
 - Refer to the “Alerts” section on ServiceNet home page for the current ODIS version.
- ✓ **The battery charger is connected to the vehicle battery and remains connected for the duration of the software update.**
 - Battery voltage must remain above 12.5 volts for the duration of the software update. Failure to do so may cause the update to fail, which could result in damage to the control module. Control modules damaged by insufficient voltage will not be covered.
- ✓ **The screen saver and power saving settings are off.**
 - Failure to do so may result in the tester entering power save mode during the software update, which could result in damage to the control module.
- ✓ **The VAS Diagnostic Tester is plugged in using the supplied power adapters.**
 - Under no circumstances should the tester be used on battery power alone during the software update. Failure to do so may result in the tester powering off during the update, which could result in damage to the control module.
- ✓ **Flash process through “Audi Flashing” not Guided Fault Finding (GFF).**
 - DO NOT USE Guided Fault Finding (GFF) to perform this flash. Using GFF will cause the flash to take longer. Requests for additional time will not be considered.
- ✓ **The VAS Diagnostics Interface MUST ONLY be connected to the tester with a USB cable.**
 - Performing a software update using a Bluetooth or WiFi connection increases the risk of losing connection during the update, which could result in damage to the control module. It also greatly increases the time required to perform the update. Requests for additional time or parts will be denied if the GFF log shows the update was performed using Bluetooth or WiFi.

NOTE

- All campaign software updates must be completed during a single, standalone ODIS Diagnostic Session. You must fully complete this campaign and send all logs before beginning any other campaigns or operations.
- If there are any ODIS “Hot-Fix” patches installed, they must be removed from the scan tool before beginning this operation. ODIS “Hot-Fix” patches may affect the update process.

WARNING

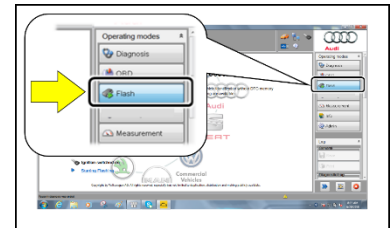
Radiator Fan(s) may cycle ON high speed during the Update Process! There is a serious risk that personal injury may result if contact is made with spinning fan blades. Keep hands and all objects away from Radiator Fan(s) during Update Process!

IMPORTANT

To Update-Programming using SVM, review and follow instructions in Technical Bulletin 2011732: *Software Version Management (SVM) Operating Instructions*.

The SVM Process must be completed in its entirety so the database receives the update confirmation response. A warranty claim may not be reimbursed if there is no confirmation response to support the claim.

- Switch off all consumers, air conditioning, heater blower motor, lights, heated seats, etc.
- Ensure the latest version of ODIS is downloaded.
- Ensure diagnostic head is connected to ODIS tester via USB cable.
- Move selector lever to P.
- Use operating mode, FLASH.
- Select “SVM – Code Input”.
- Enter SVM code **34L4A576** and follow the on screen prompts.
- When exiting the FLASH program, ensure the diagnostic log is sent to GFF Paperless.



After the update:

- Perform a short road test (2-5 minutes).
- If NO gearbox warning lamp or gearbox warning message appears in the instrument cluster:
 - No further work is required.
 - Proceed to Section D.
- If the gearbox warning lamp or a gearbox warning message appears in the instrument cluster:
 - The fault memory must be read out.
 - If fault “P0C2900 – Activation for auxiliary hydraulic pump for transmission oil implausible” is set:
 - The auxiliary hydraulic pump must be replaced.
 - Proceed to Section C.

NOTE

If the gearbox warning lamp lights up at a later date (after the vehicle has been returned to the customer), please refer to Technical Bulletin 2050723 (US), 2049489 (Canada).

Section C – Replacing Auxiliary Hydraulic Pump

A video outlining replacement of the auxiliary hydraulic pump is available.

Click on the link below or scan the QR code to access the video.

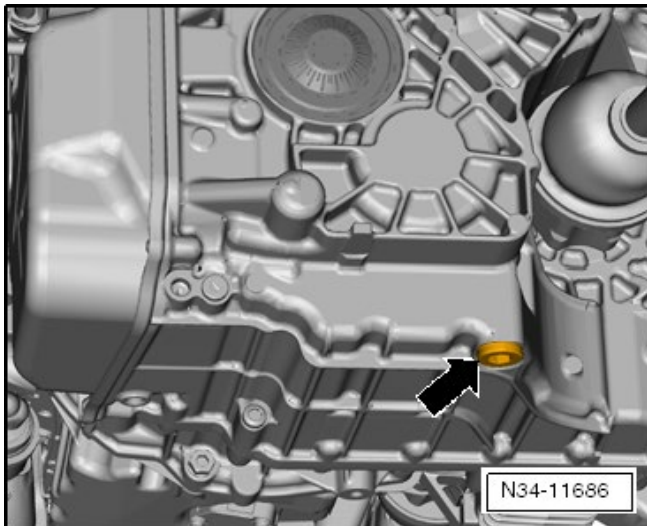
<https://audi-external.kzoplatfrom.com/player/medium/2535675175601443997>



NOTE

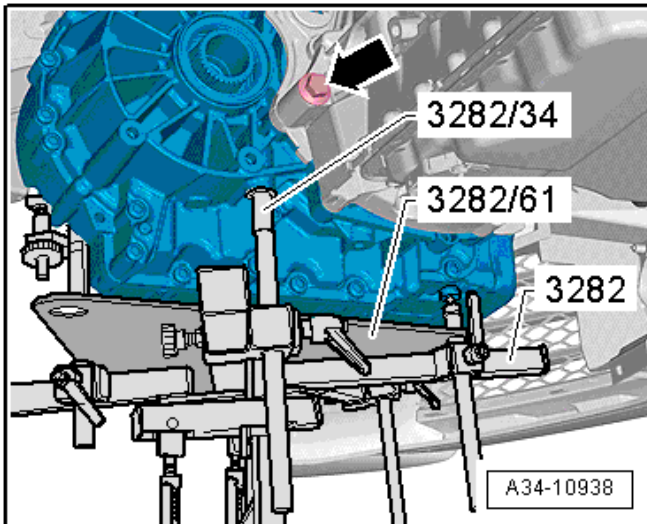
If internal or external damage caused by the auxiliary hydraulic pump bolts coming loose is found before or during the repair:

- Take clear photos
- U.S. dealers: Upload photos of the damage to Doc-It for review. Contact Audi warranty for authorization.
- Canadian dealers: Create a TAC WEB ticket with the photos attached for review.



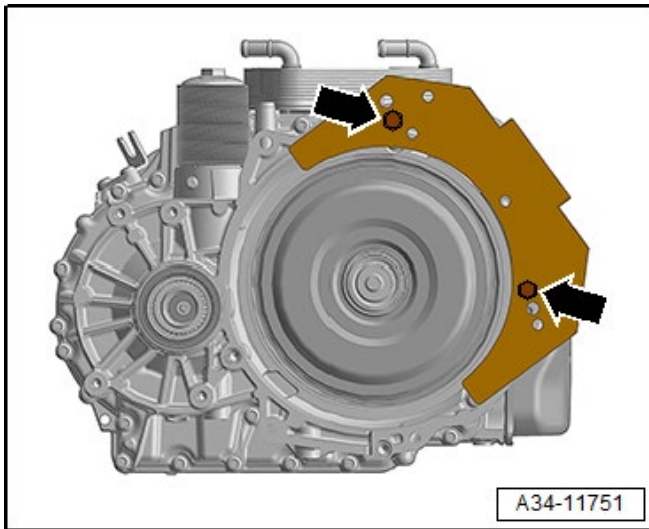
Drain gear oil:

- See ELSA Repair Manual: *Repair manual > Drivetrain > 7-Speed Dual Clutch Transmission 0GC > 34 Controls, Housing > Transmission Fluid > Transmission Fluid, Draining and Filling*



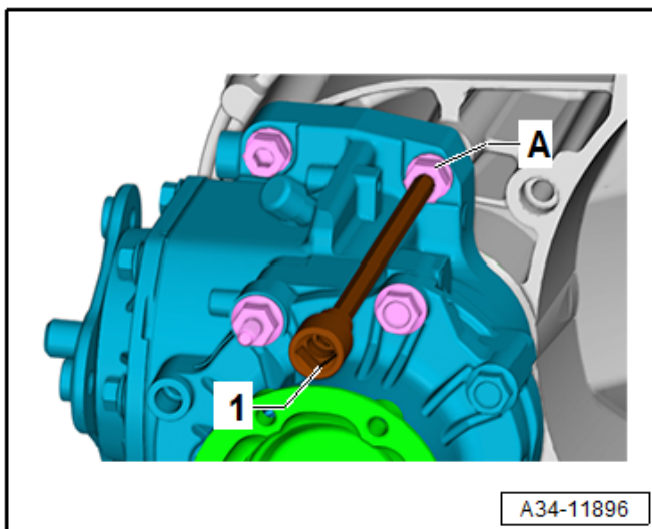
Remove transmission:

- See ELSA Repair Manual: *Repair manual > Drivetrain > 7-Speed Dual Clutch Transmission 0GC > 34 Controls, Housing > Transmission, Removing and Installing > Transmission, Removing > Transmission, Removing, Vehicles with 2.0L TFSI Engine*



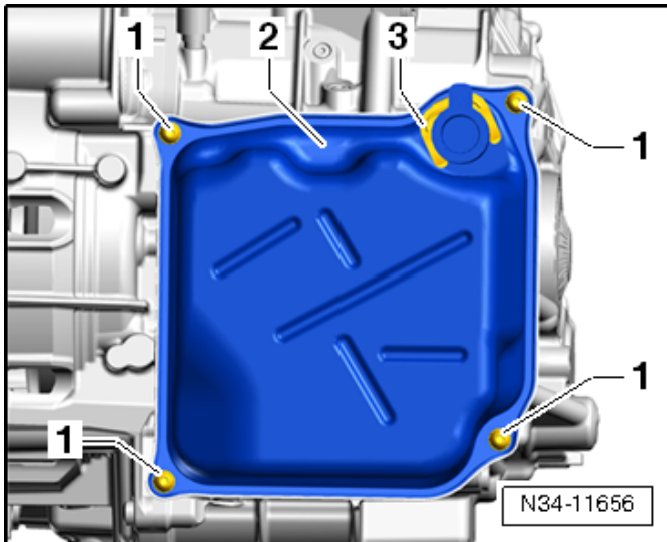
Secure transmission to stand:

- See ELSA Repair Manual: *Repair manual > Drivetrain > 7-Speed Dual Clutch Transmission 0GC > 34 Controls, Housing > Securing on Engine and Transmission Holder*



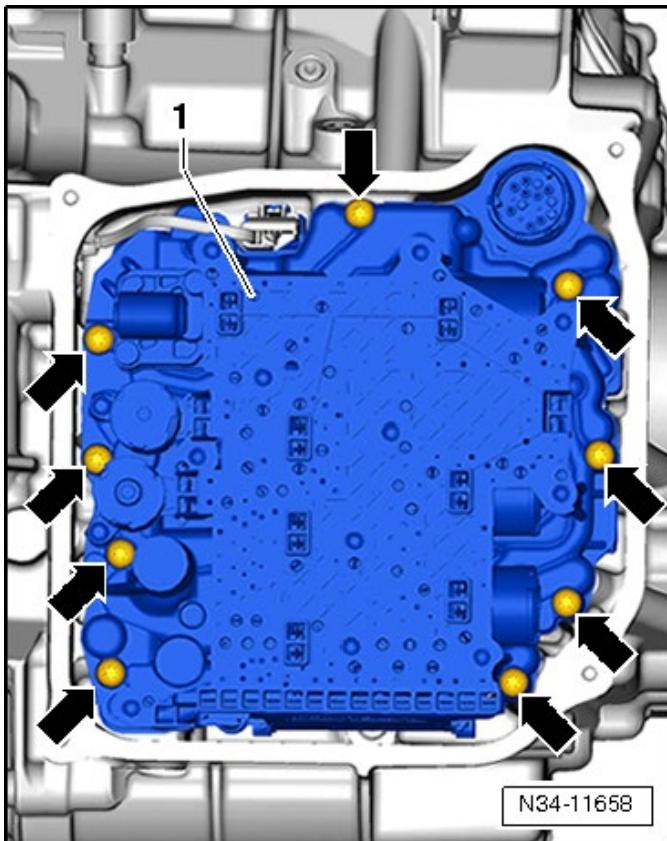
Remove bevel box (AWD vehicles only):

- See ELSA Repair Manual: *Repair manual > Drivetrain > 7-Speed Dual Clutch Transmission 0GC > 34 Controls, Housing > Bevel Box > Bevel Box, Removing*



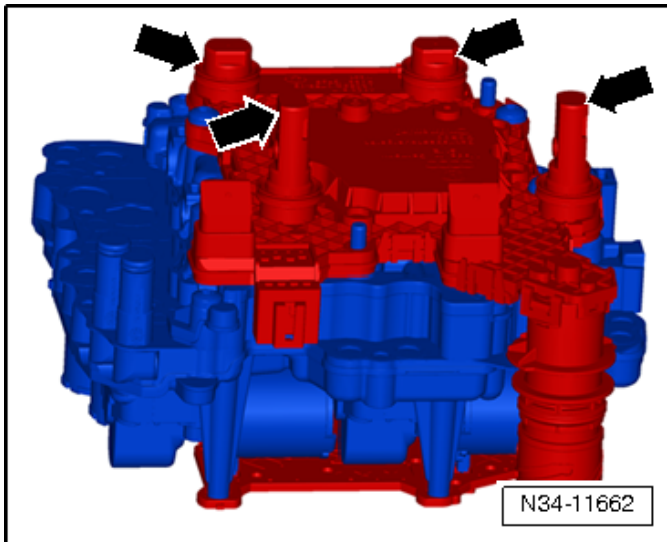
Remove transmission oil pan:

- Place used oil collection container under the transmission.
- Remove the clamp <3>.
- Loosen and remove the screws <1> in a diagonal sequence.
- Remove the oil pan <2> and if necessary loosen the oil pan by hitting lightly with a rubber hammer.



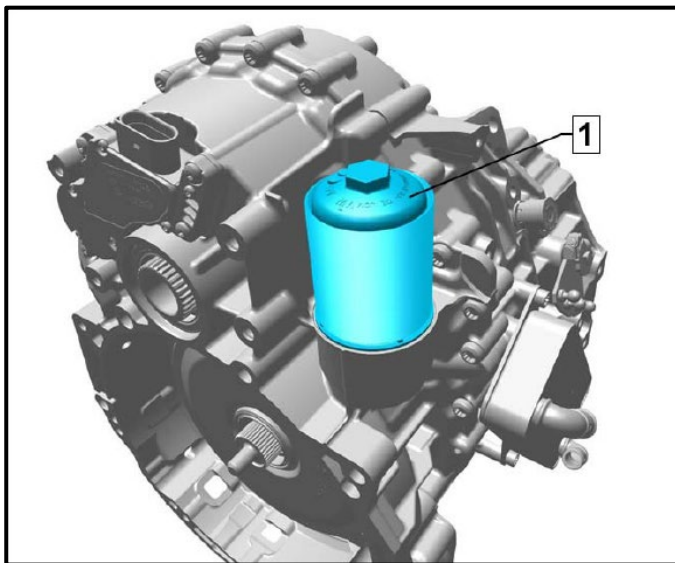
Remove mechatronic:

- Loosen and remove the screws <arrows> in a diagonal sequence.
- Carefully remove the mechatronic <1>.



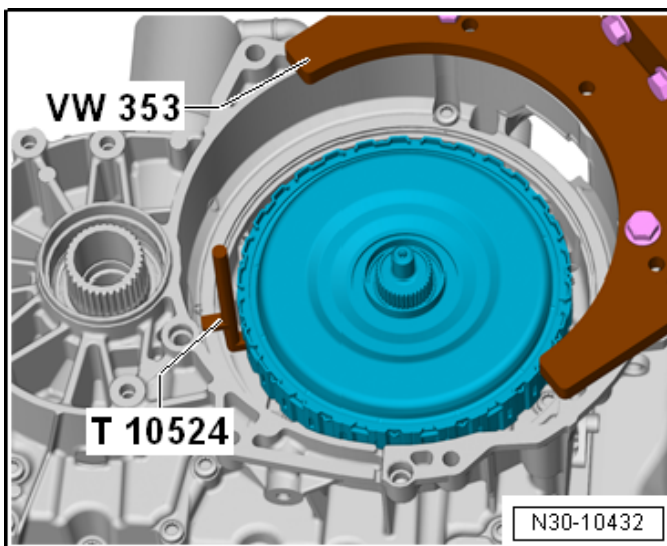
Store the Mechatronic properly:

- Store the Mechatronic so that the sensors <arrows> face upward.
- Place and cover the mechatronic on clean, lint free cloths.



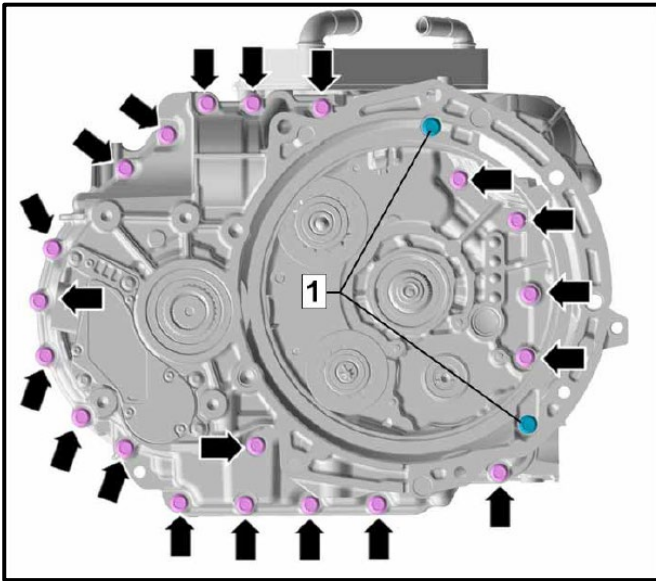
Remove gear oil filter:

- Remove gear oil filter housing <1> and filter.



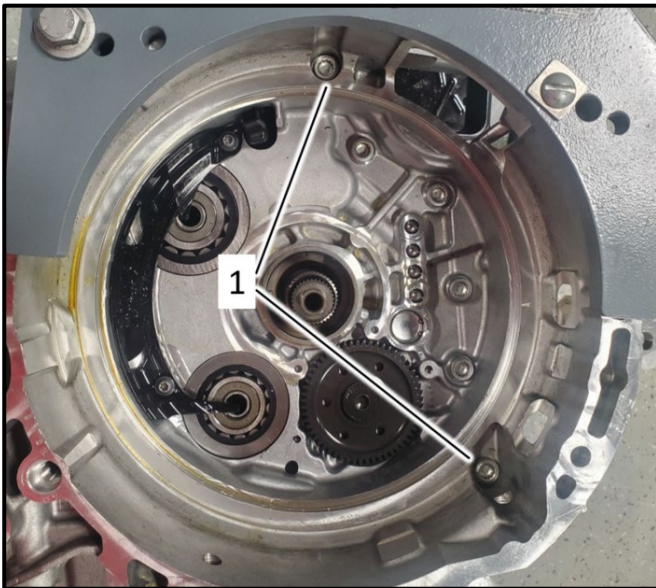
Remove dual clutch:

- See ELSA Repair Manual: *Repair manual > Drivetrain > 7-Speed Dual Clutch Transmission 0GC > 30 Clutch > Clutch > Dual Clutch, Removing*

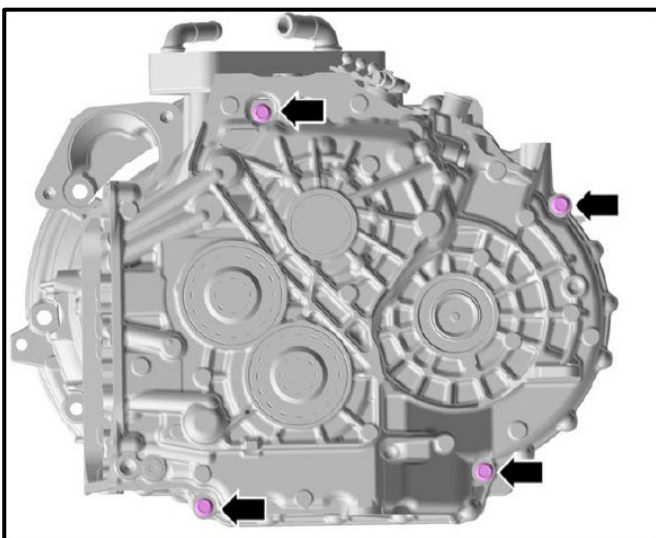


Remove housing bolts on clutch side:

- **DO NOT REMOVE BOLTS <1>.**
- Remove bolts <arrows>.
- Note the lengths of the removed bolts. There are two different length bolts.

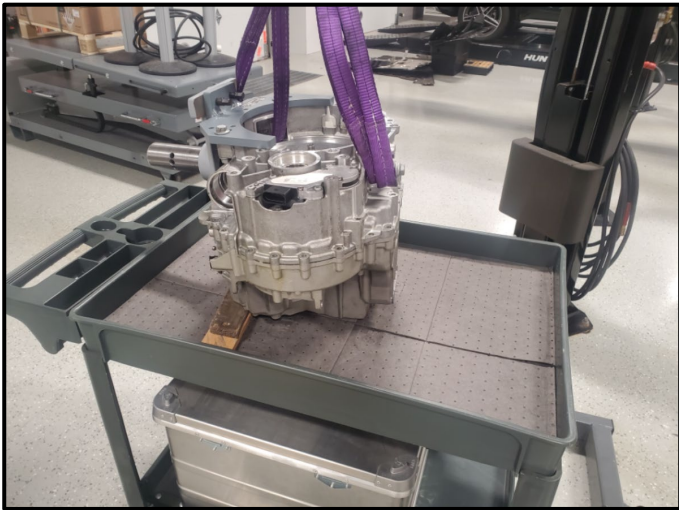


- Alternate view of the two bolts <1> **that are not removed** at this time.



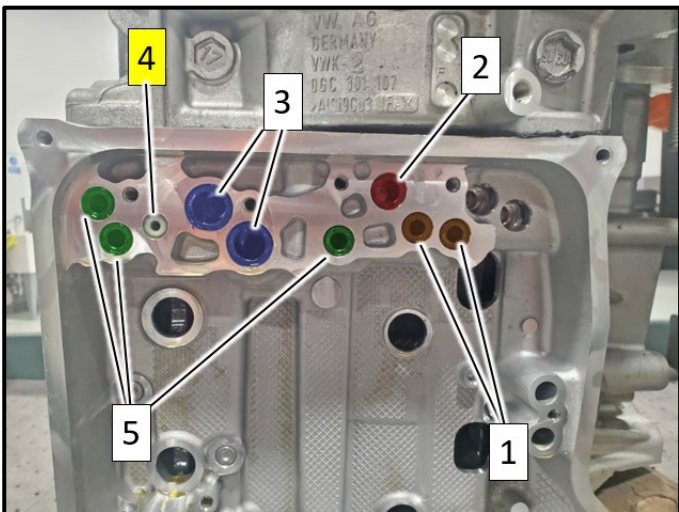
Remove housing bolts on gearbox side:

- Rotate transmission on stand.
- Remove bolts <arrows>.



Move transmission:

- Move transmission to a suitable work bench or cart.
- The splined shaft must face upward.
- Support the transmission from tipping using wood blocks as needed.

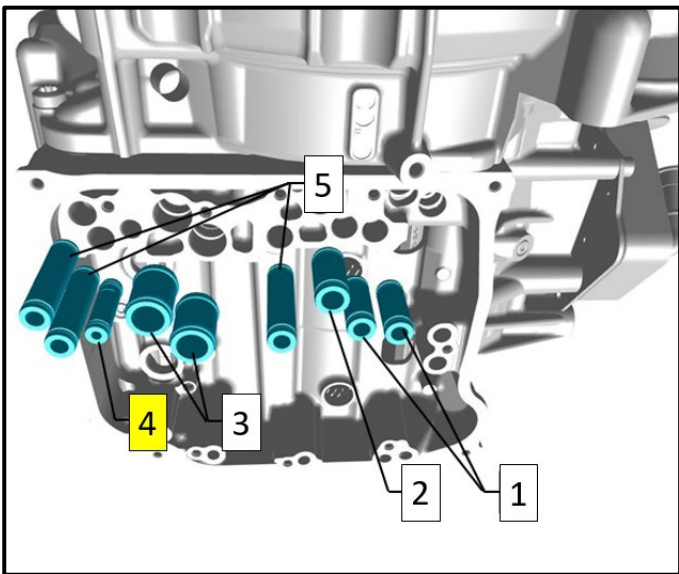


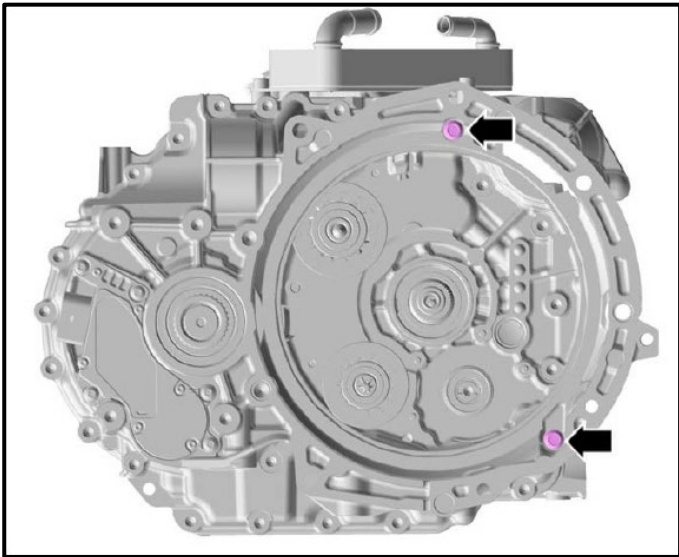
Remove oil guide tubes:

- Loosen each oil tube by turning slightly using suitable circlip pliers.
- Then pull each oil tube out.
- Screw a suitable self-tapping screw or wood screw into the oil tube <4>, loosen the tube and then pull it out.

NOTE

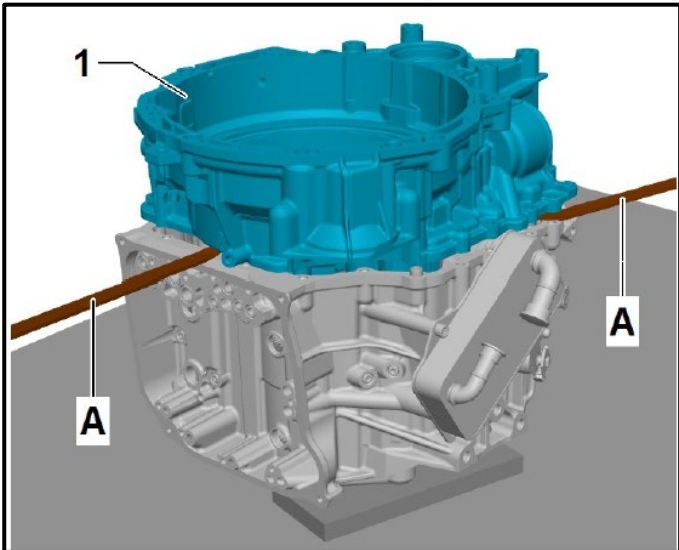
When removing the oil tubes, parts of the seals can become cut off.
Make sure there no seal pieces left in the gearbox.





Remove remaining two housing bolts:

- Remove bolts <arrows>.

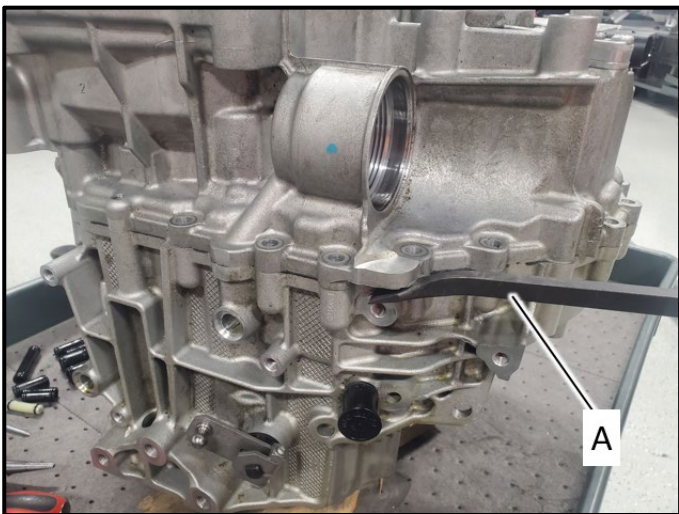


Release sealant bead:

- Carefully release sealant bead between housing sections by applying minimal force using pry bars <A>.

! TIP

If the housings are not separating, make sure all of the oil guide tubes are removed.

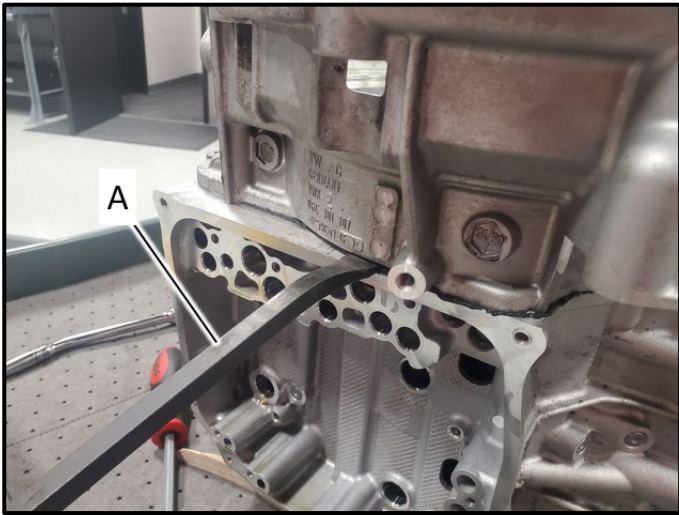


! NOTE

Proper positioning of pry bar <A> shown.

! CAUTION

Risk of irreparable damage to gearbox housing.
 Use extreme care when releasing the sealant bead and do not use excessive force.
 Pay close attention to surfaces being pried against so that damage does not occur.

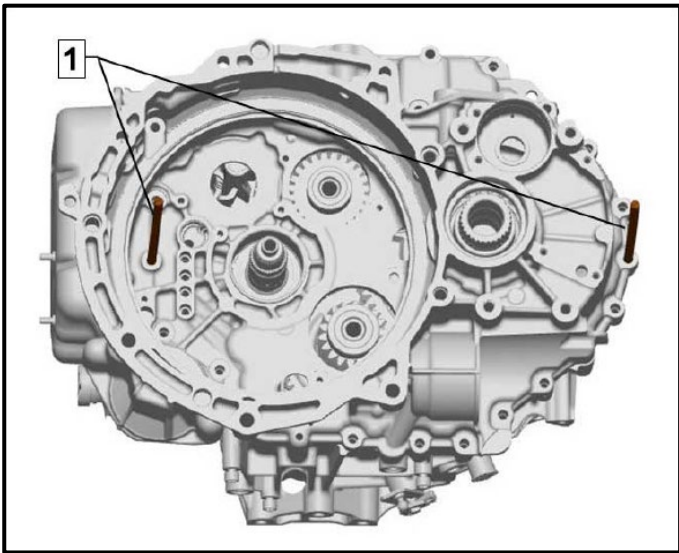


NOTE

Proper positioning of pry bar <A> shown.

CAUTION

Risk of irreparable damage to gearbox housing.
 Use extreme care when releasing the sealant bead and do not use excessive force.
 Pay close attention to surfaces being pried against so that damage does not occur.
 Pay particular attention to the transmission oil pan sealing surface. The surface must not be damaged.

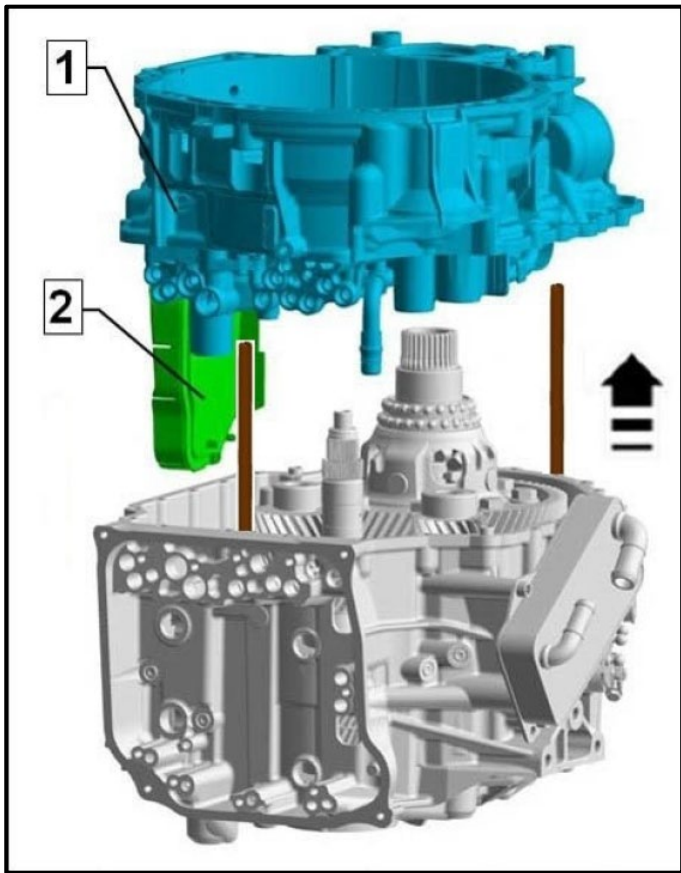


Install guide pins:

- Screw guide pins -T40288- <1> into gearbox housing on opposite sides, as shown.

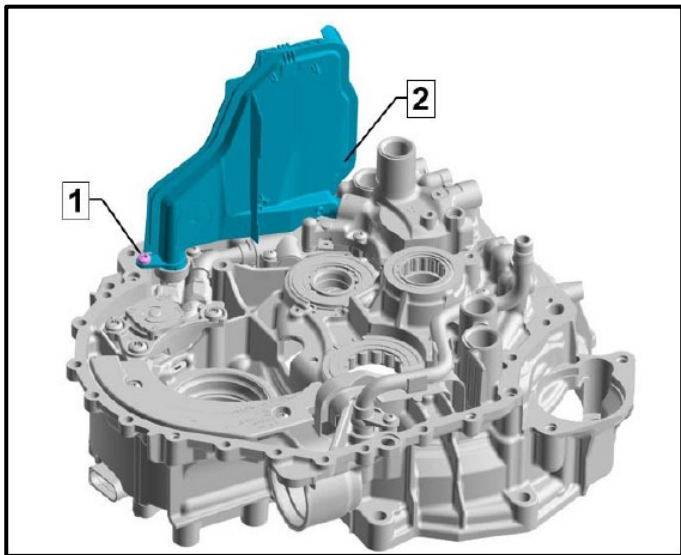


- To aid in re-assembly, mark the position of both guide pins on gearbox housing with a felt-tip pen.



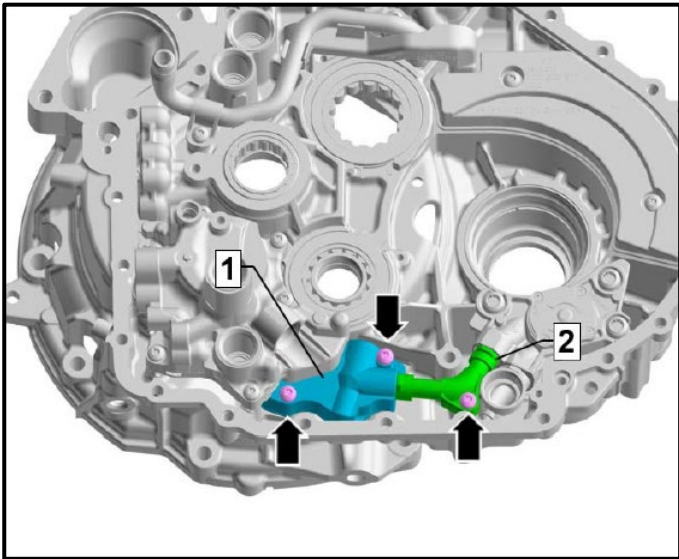
Remove clutch housing:

- Lift clutch housing <1> off vertically along guide pins.
- Place clutch housing <1> down safely on a suitable workbench with intake filter <2> facing upwards.



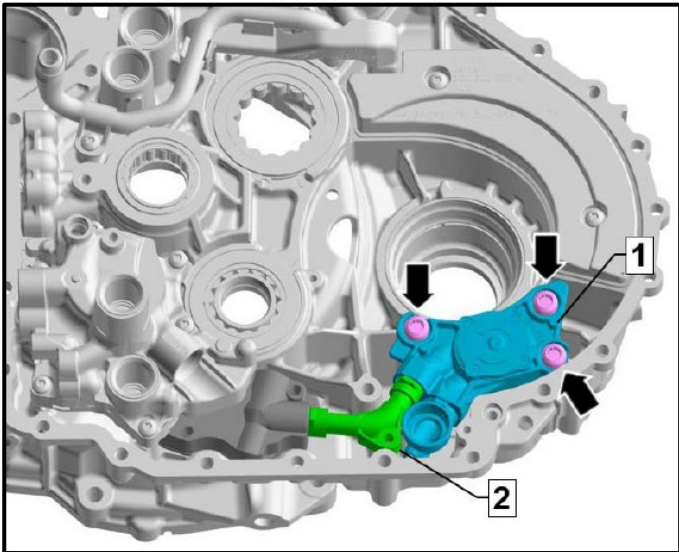
Remove filter:

- Remove bolt <1> and remove intake filter <2>.



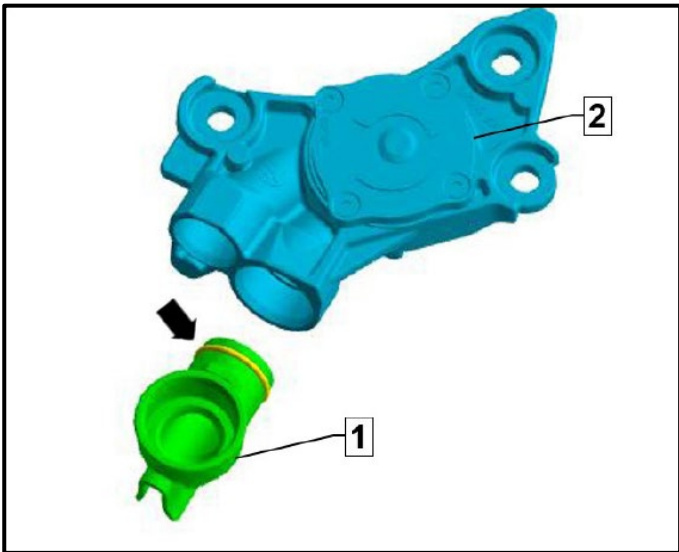
Remove changeover valve bolts:

- The changeover valve and pipe are not removed.
- Remove bolts <arrows> for changeover valve <1> and oil pipe <2>.
- Note the length of the removed bolts. There are two different length bolts.

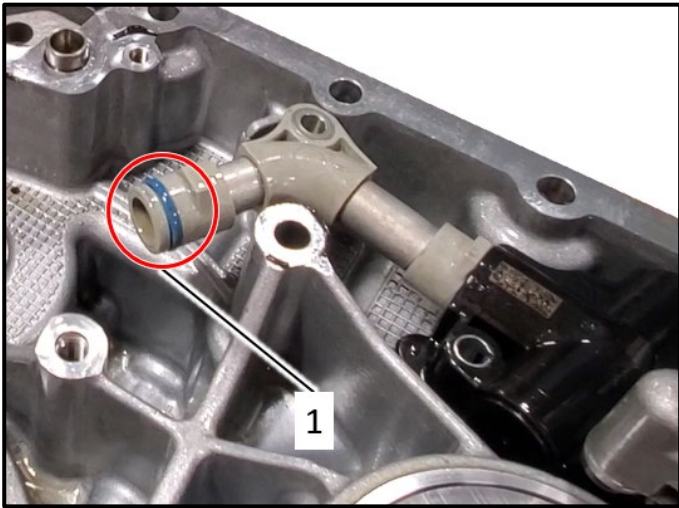


Remove auxiliary hydraulic pump:

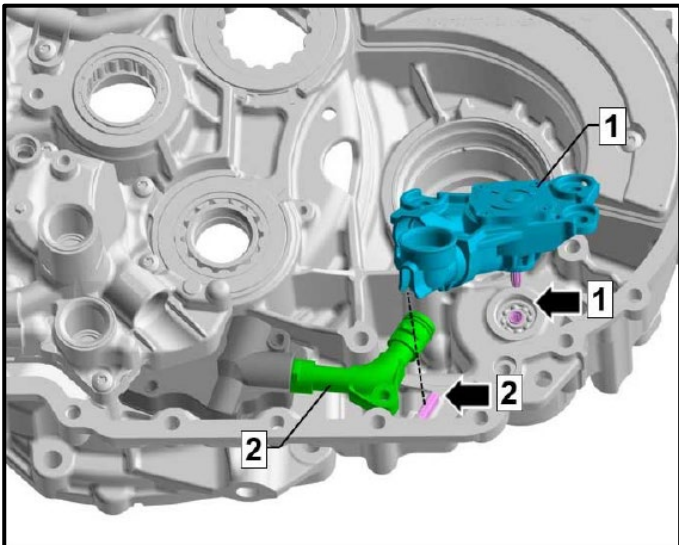
- Remove bolts <arrows>.
- Carefully detach auxiliary hydraulic pump <1> upwards and pull it out of oil pipe <2>.



- **Replacing auxiliary hydraulic pump:**
- Fit a new oil pipe <1> from the repair kit to the new auxiliary hydraulic pump <2>.
- Coat the o-ring on the oil pipe with clean oil.

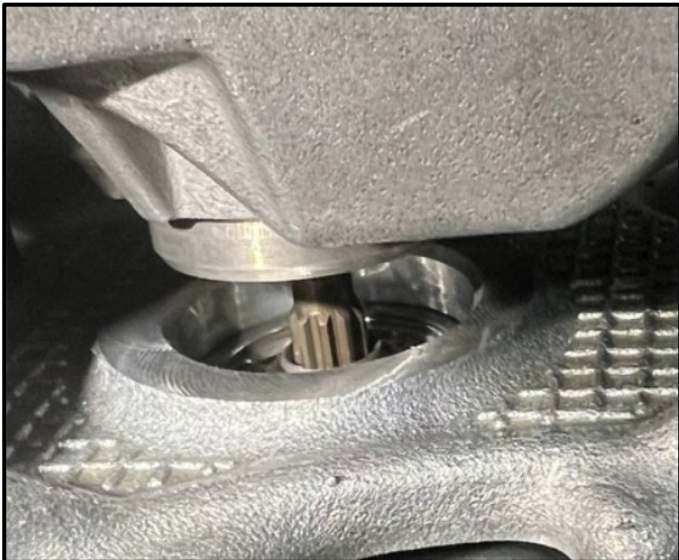


- Install new O-ring <1> from the repair kit on the changeover valve oil pipe.



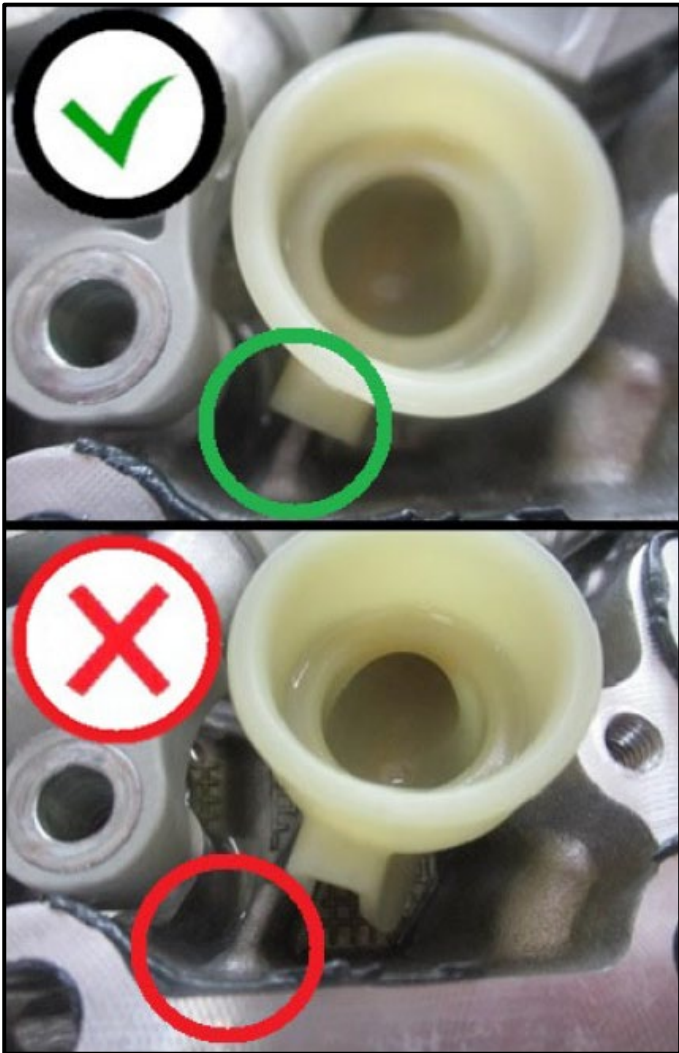
Install auxiliary hydraulic pump:

- Install new auxiliary hydraulic pump with oil pipe from the repair kit in the reverse order of removal.
- When installing, ensure that the shaft matches up with the splines in the housing <arrow 1> and the oil pipe guide is fitted on the rib <arrow 2> on the housing.



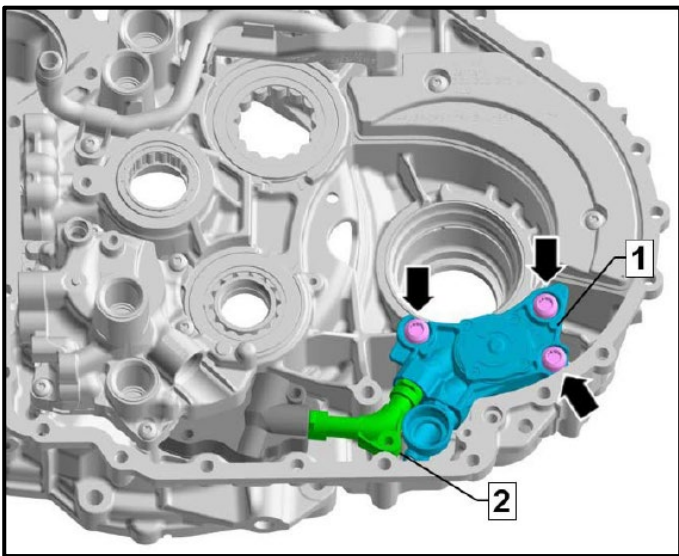
! NOTE

Detail of auxiliary hydraulic pump shaft splines shown.



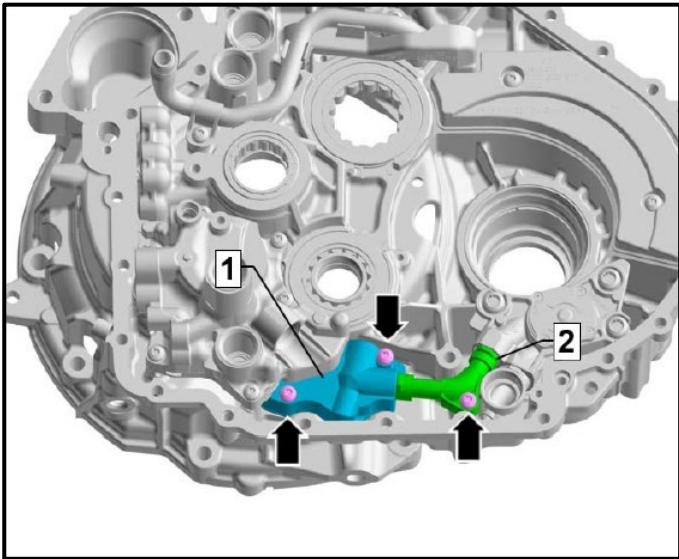
Verify oil pipe installation:

- Verify that the oil pipe is installed correctly as shown.
- The recess on the oil pipe must fit correctly over the rib on the housing.



Install new auxiliary hydraulic pump bolts:

- Install new bolts <arrows> from the repair kit and torque to 20 Nm + 90°.



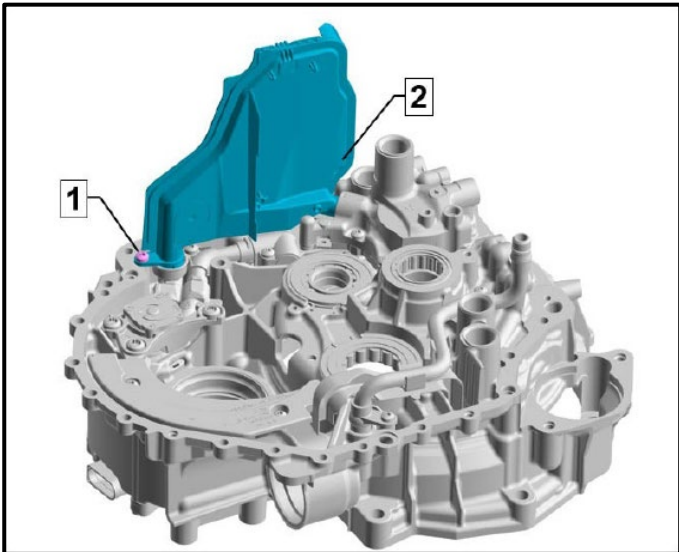
Install new bolts for changeover valve and oil pipe:

- Install new bolts <arrows> from the repair kit and torque to 8 Nm + 90°.



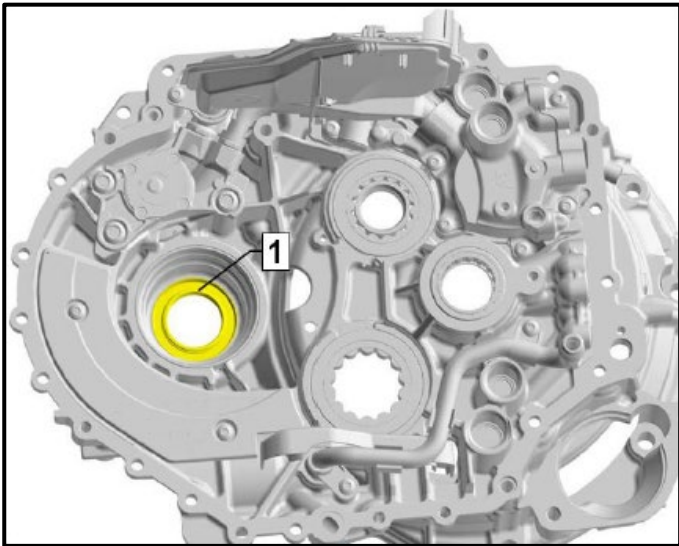
NOTE

Please note that the bolt for the oil pipe is shorter than the two bolts for the changeover valve.



Install new filter and bolt:

- Install new filter <2> from the repair kit and torque new bolt from the repair kit <1> to 8 Nm + 90°.

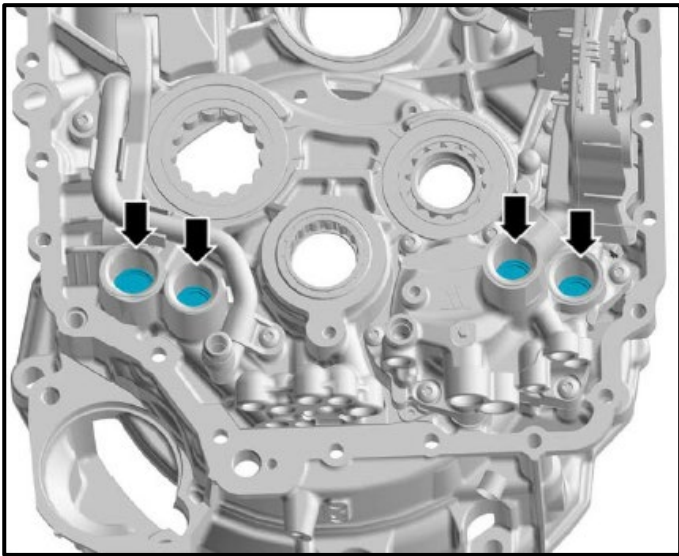


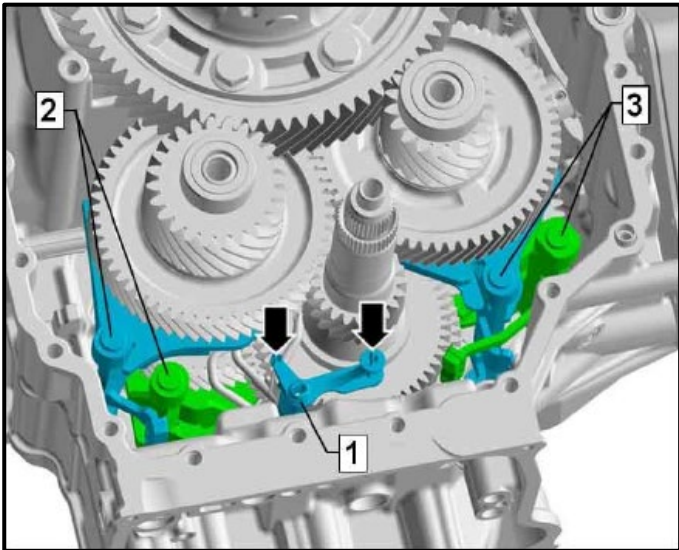
Remove oil seal:

- Remove oil seal <1> from clutch housing.

Prepare gearbox housing for assembly:

- Clean the sealing surfaces on both housings thoroughly.
- Allow cleaner to dry completely.
- Ensure there is no dirt or sealant residue left inside the gearbox.
- Ensure all oil passages are free of dirt and residue.
- Carefully press pistons for selector rods <arrows> into end position using a suitable tool (socket, for example) if necessary.

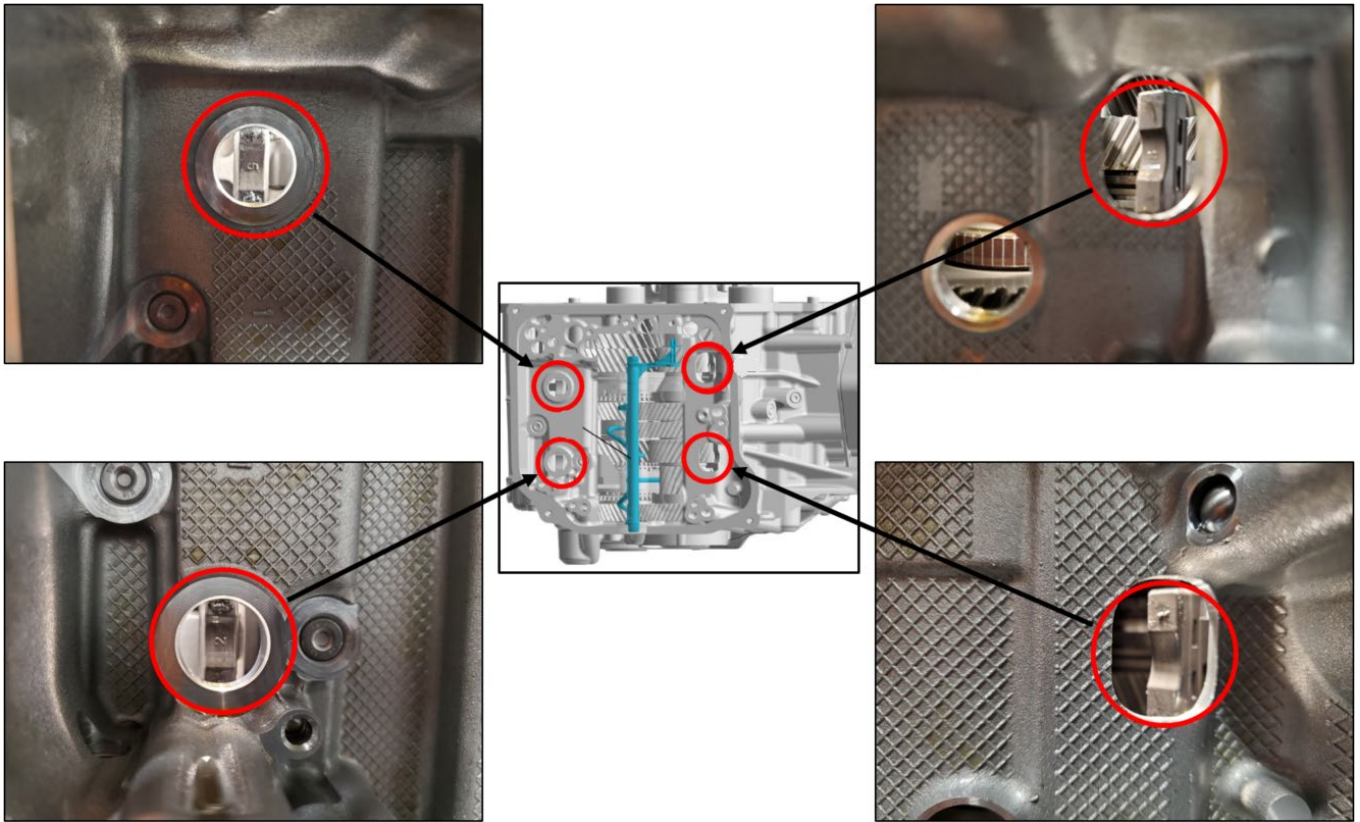


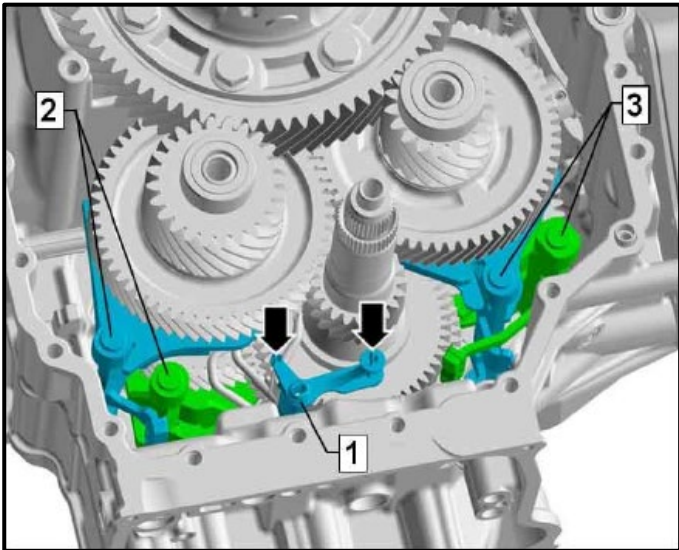


- Move shift forks <2> and <3> into neutral position.

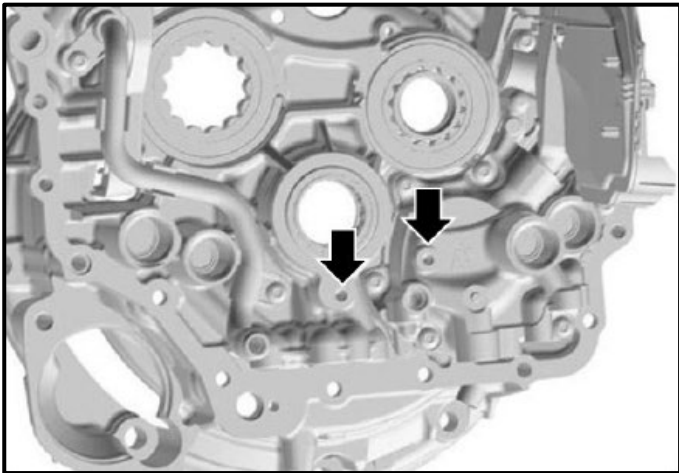
NOTE

The shift forks are in the neutral position when the radius cut out on the shift forks are clearly visible in the center of the windows of the gearbox housing.

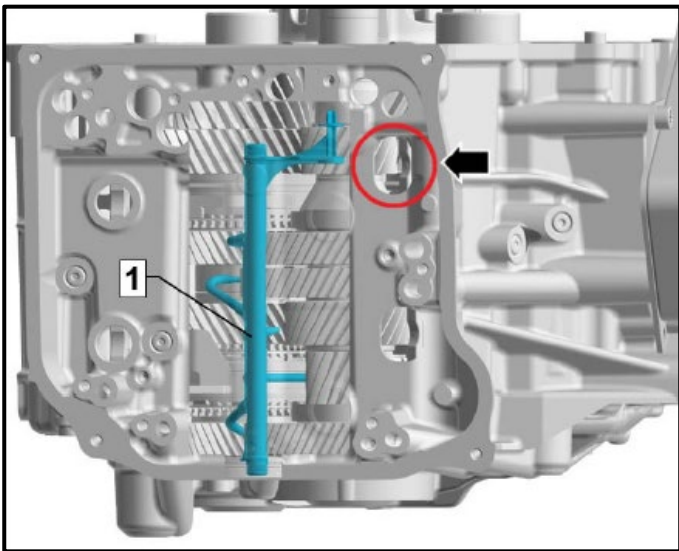




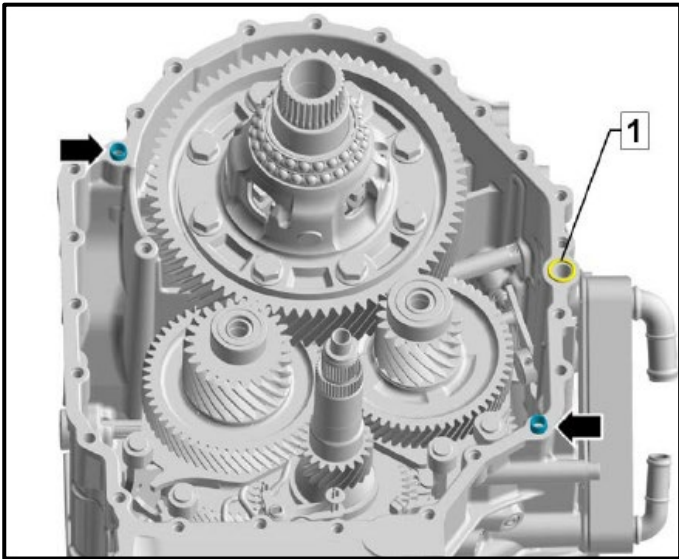
- Align injection pipe <1> correctly in housing; guides <arrows> must align precisely with clutch housing when fitted.
- Move selector forks <2> and <3> into neutral position.



- The two guides of the injection pipe must be inserted precisely into the corresponding holes <arrows> in the clutch housing during assembly.
- In the event of an incorrect alignment, it will not be possible to install the clutch housing.



- When fitting the housing sections together, you can reach through the opening <arrow> with your finger to adjust the position of the injector pipe <1> slightly.

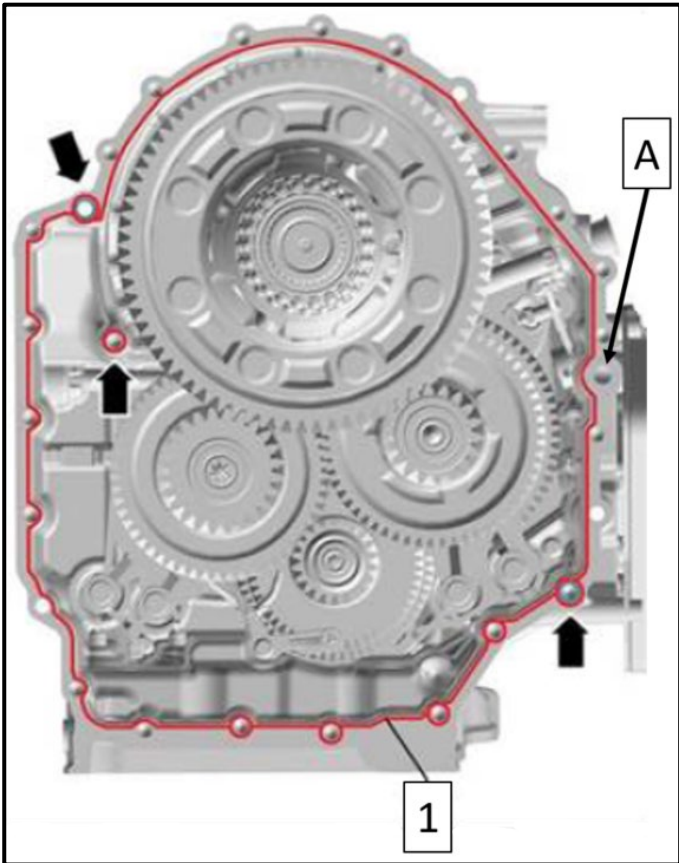


- Install new o-ring <1> from the repair kit.

NOTE

To aid in assembly, the o-ring can be held in place using no more than one gram of Vaseline.

- Check that dowel sleeves <arrows> are not damaged and are seated correctly.

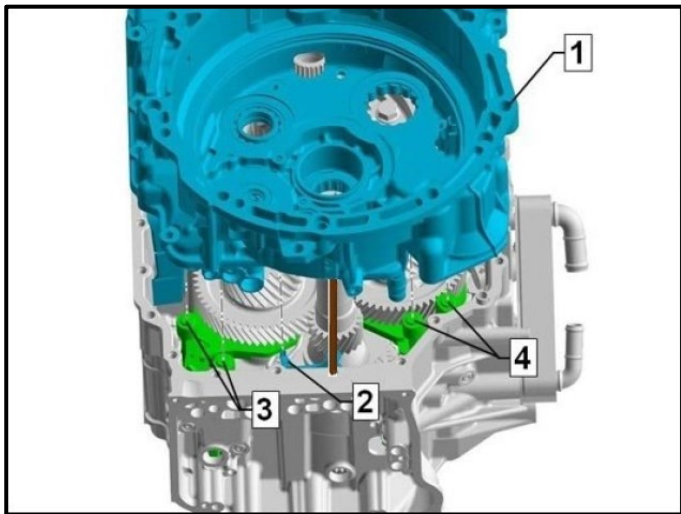


Apply sealant:

- Apply a bead of sealant <1> to the gearbox housing as shown.
- Ensure sealant is applied completely around any openings as shown in the illustration.
- Pay close attention to the dowel sleeves and “turret” <arrows>. Ensure sealant is applied completely around those openings.

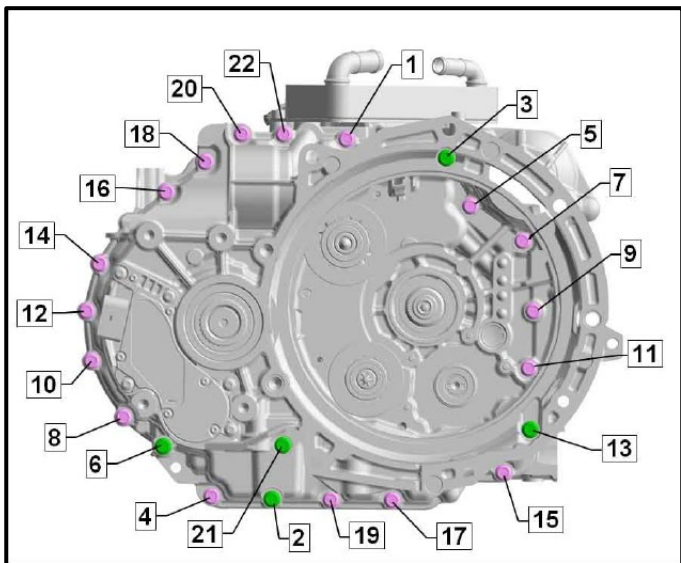
NOTE

The O-ring is installed at area <A>. Note that sealant is only applied on the inside edge of the housing in the area of the O-ring. Do not allow sealant to enter the oil opening.



Reassemble gearbox housing:

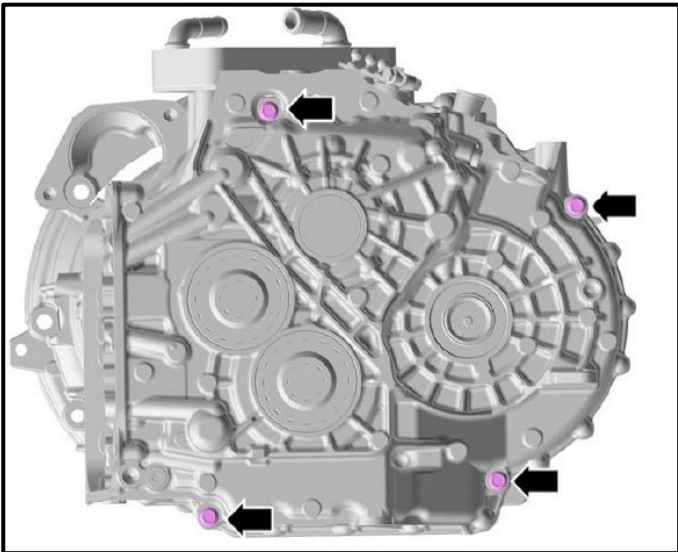
- Reference the previously made marks and reinstall guide pins -T40288- into the gearbox housing (if the guide pins were previously removed).
- With the assistance of a second technician, carefully install clutch housing <1> on roller bearings in gearbox housing.
- When installing, pay attention to injection pipe <2> and selector forks <3> and <4>.
- With minimal corrections and shaking lightly, fit housing sections together until air gap between housings is 0 mm.
- If an air gap of 0 mm is not attained, lift clutch housing <1> again and check positions of injection pipe <2> and selector forks <3> and <4>, and correct if necessary.
- Again with minimal corrections and shaking lightly, fit housing sections together until air gap is 0 mm.
- Unscrew guide pins -T40288-.
- Screw in new bolts <1 to 22> from repair kit for housing hand tight on clutch end.



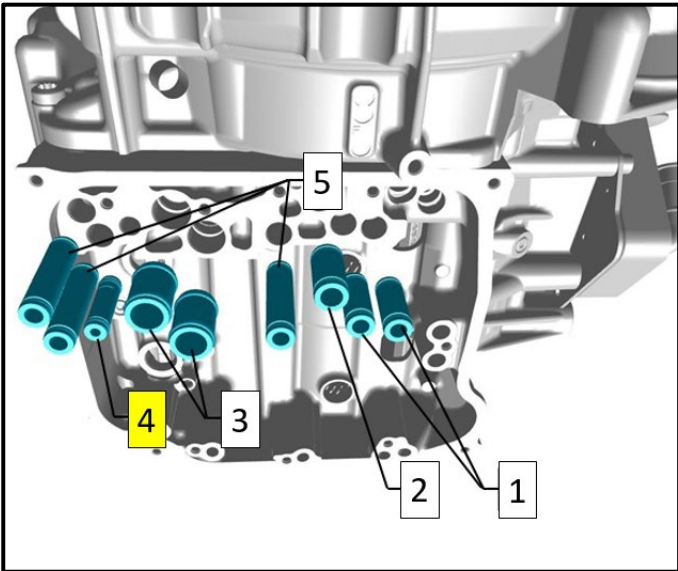
NOTE

Note the different bolt lengths:

- Pink bolts = M8x38
 - Green bolts = M8x75
- After all bolts are hand tight, torque the bolts as follows in sequence <1 to 22>:
 - 1st stage = 20 Nm.
 - 2nd stage = 90°
 - The gearbox can now be moved to the engine stand for final assembly.

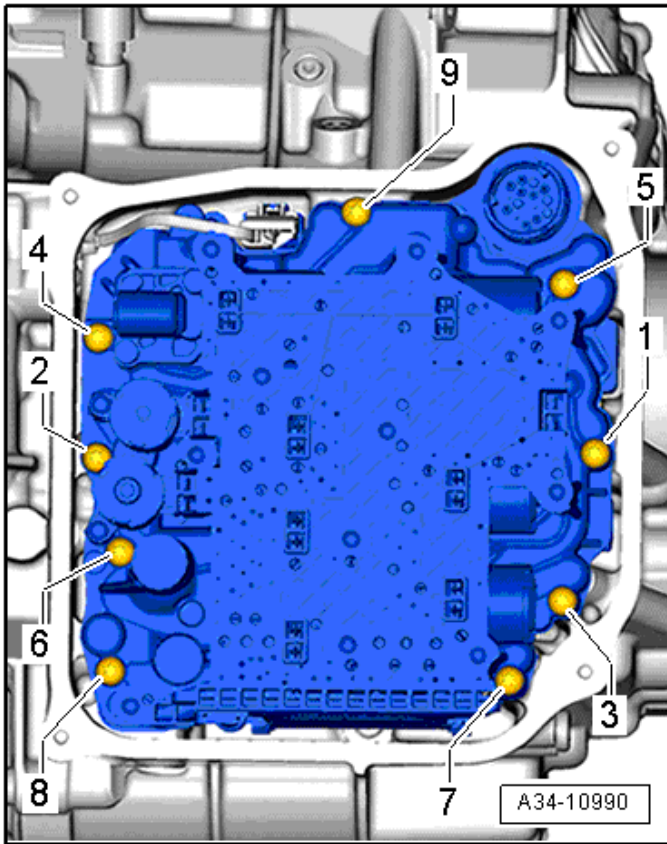


- Install new bolts <arrows> from the repair kit and torque to 20 Nm + 90°.



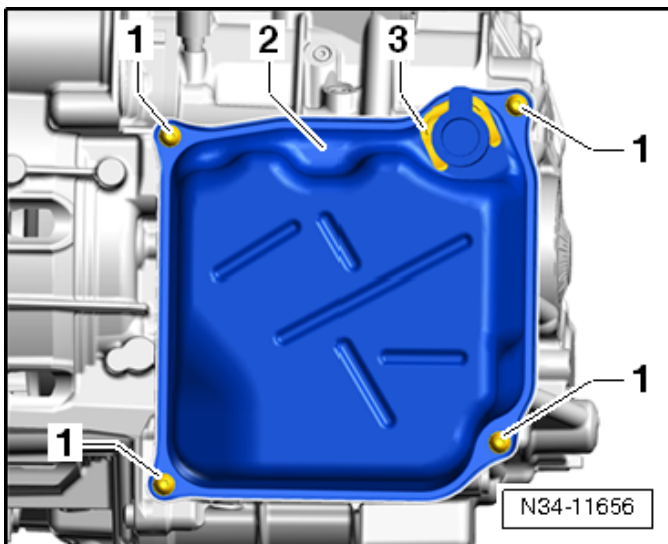
Install new oil guide tubes:

- Lubricate new oil guide tubes lightly with gearbox oil before installing.
- Install new oil guide tubes <1 to 5> from the repair kit.



Reinstall Mechatronic:

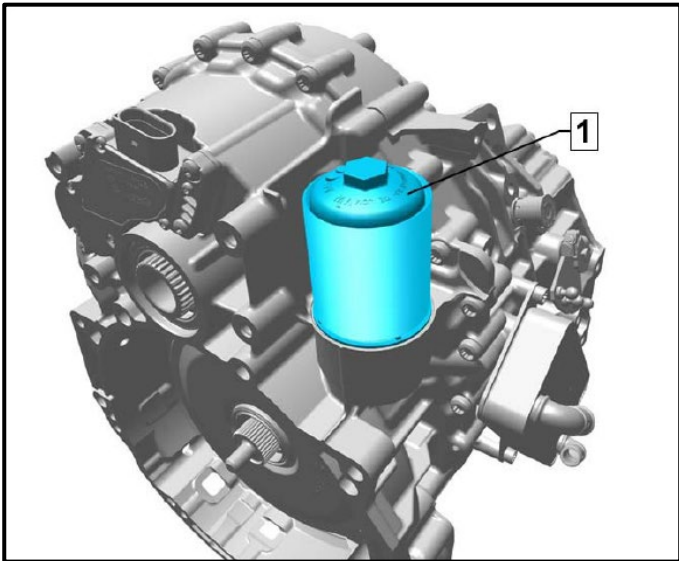
- Installation is the reverse order of removal.
- Use new bolts from the repair kit.
- Tighten bolts as follows in sequence <1 to 9>:
 - 1st stage = by hand
 - 2nd stage = 8 Nm
 - 3rd stage = 45°



Install new cover from repair kit:

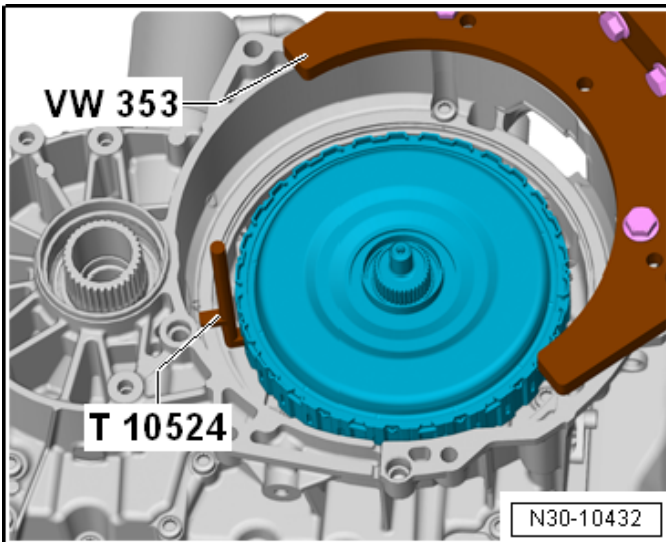
- Clean the sealing surface on the gearbox housing of oil and grease.
- Coat the O-ring with new gear oil.
- Install new cover from repair kit in the reverse order of removal.
- Tighten new bolts from repair kit diagonally in multiple steps and torque to 8 Nm + 60°.
- Install new clamp <3>.

Part Number	Part Description
0BH-325-147	Retaining clamp



Install new gear oil filter from repair kit:

- Coat O-ring with new gear oil.
- Install new gear oil filter and housing and torque to 50 Nm.



Install dual clutch:

- See ELSA Repair Manual: *Repair manual > Drivetrain > 7-Speed Dual Clutch Transmission OGC > 30 Clutch > Clutch > Dual Clutch, Installing*
- Use new circlip from repair kit.

NOTE

The dual clutch does not need to be re-adjusted; the retaining ring can be re-used, contrary to the information in the Repair Manual.



Install new oil seals:

- Reference ELSA Repair Manual: *Repair manual > Drivetrain > 7-Speed Dual Clutch Transmission OGC > 39 Final Drive, Differential > Seals*

NOTE

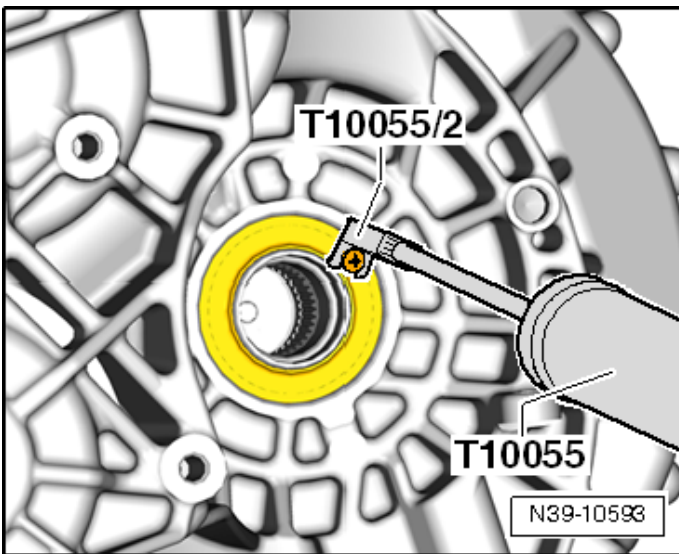
The repair kit can be used for vehicles with front-wheel drive or all-wheel drive and includes three seals; please make sure that there is always one oil seal left over.

AWD vehicles:

- Left seal p/n = 0BH-409-400-E
- Right seal p/n = 02Q-409-189-A

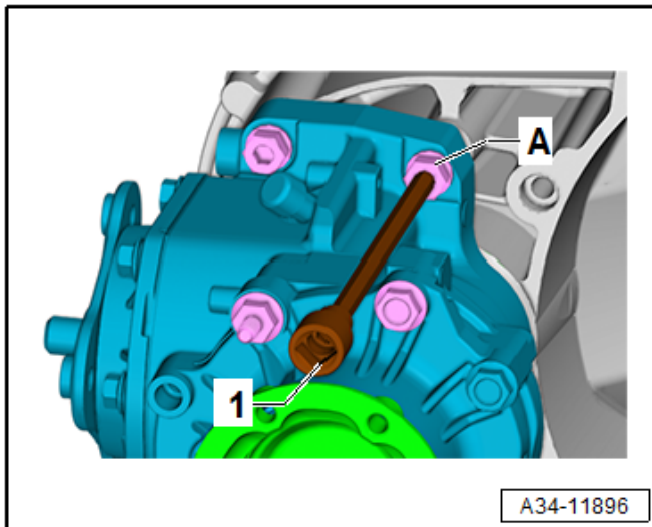
FWD vehicles:

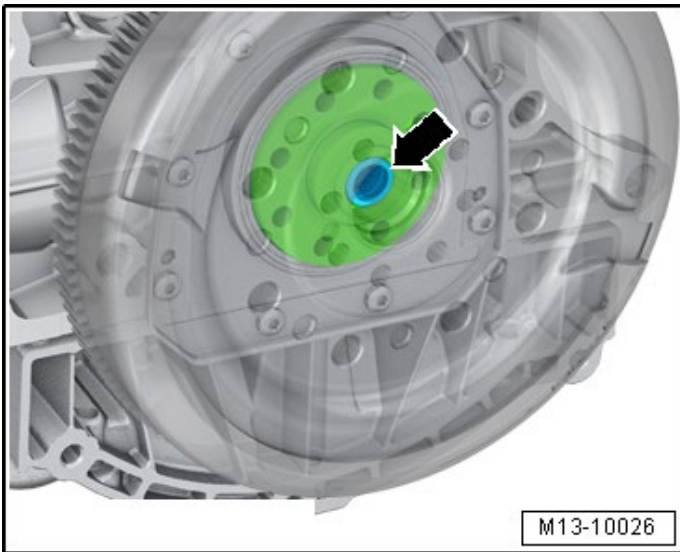
- Left seal p/n = 0BH-409-400-E
- Right seal p/n = 0BH-409-400-E



Reinstall bevel box (AWD vehicles only):

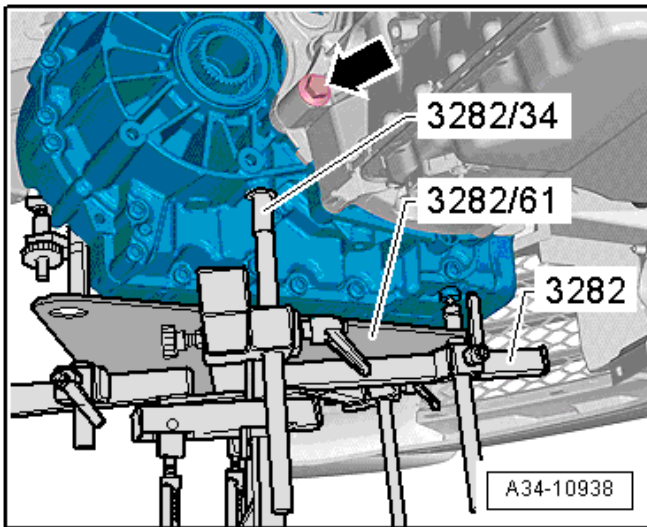
- See ELSA Repair Manual: *Repair manual > Drivetrain > 7-Speed Dual Clutch Transmission OGC > 34 Controls, Housing > Bevel Box > Bevel Box, Installing*
- Use new bolts.





Replace crankshaft needle bearing:

- Reference ETKA for the correct needle bearing part number.
- See ELSA Repair Manual: *Repair manual > Engine > Servicing – 4-Cylinder 2.0L 4V TFSI Engine (EA 888 Generation III BZ) > 13 Crankshaft, Cylinder Block > Crankshaft > Crankshaft Needle Bearing, Replacing*

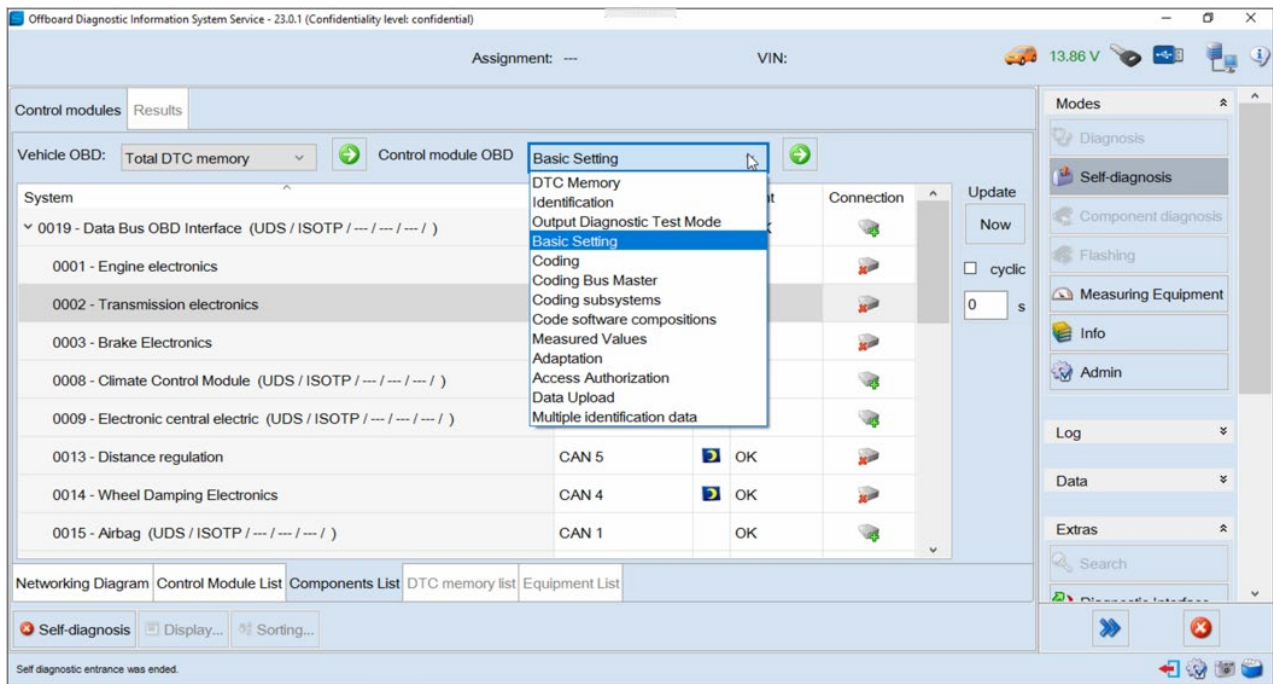


Reinstall transmission:

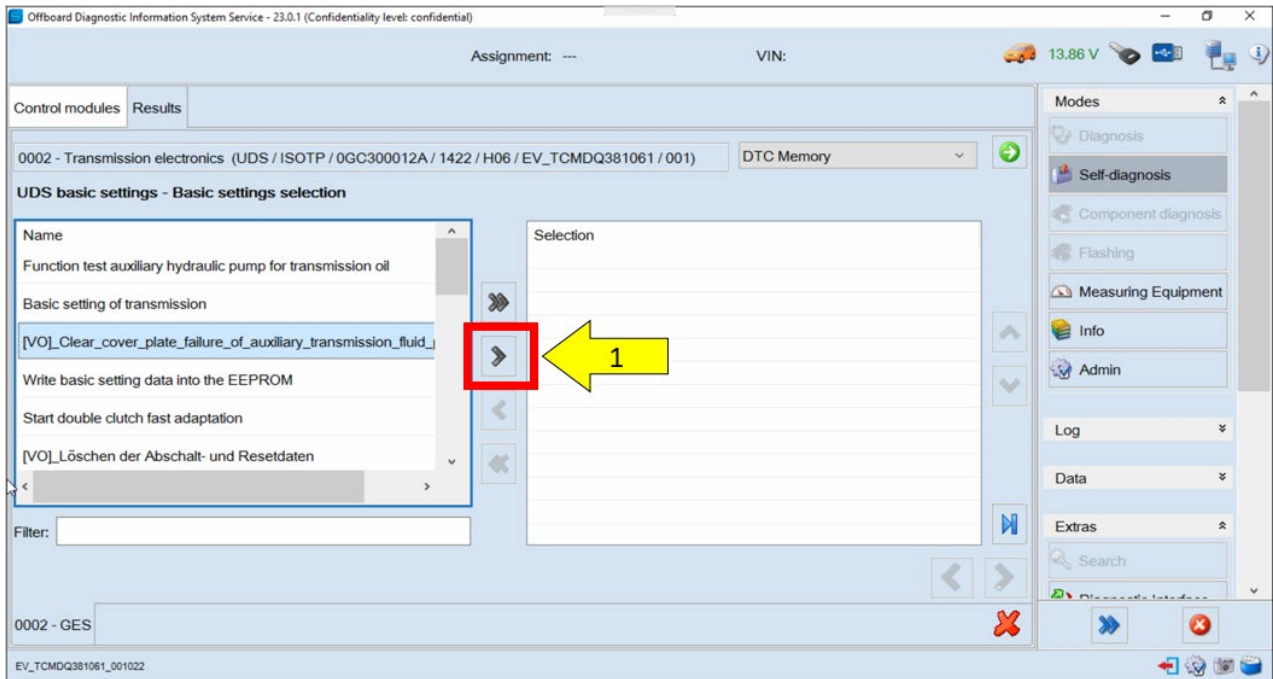
- See ELSA Repair Manual: *Repair manual > Drivetrain > 7-Speed Dual Clutch Transmission 0GC > 34 Controls, Housing > Transmission, Removing and Installing > Transmission, Installing*

Clear TCM DTC memory and perform basic settings:

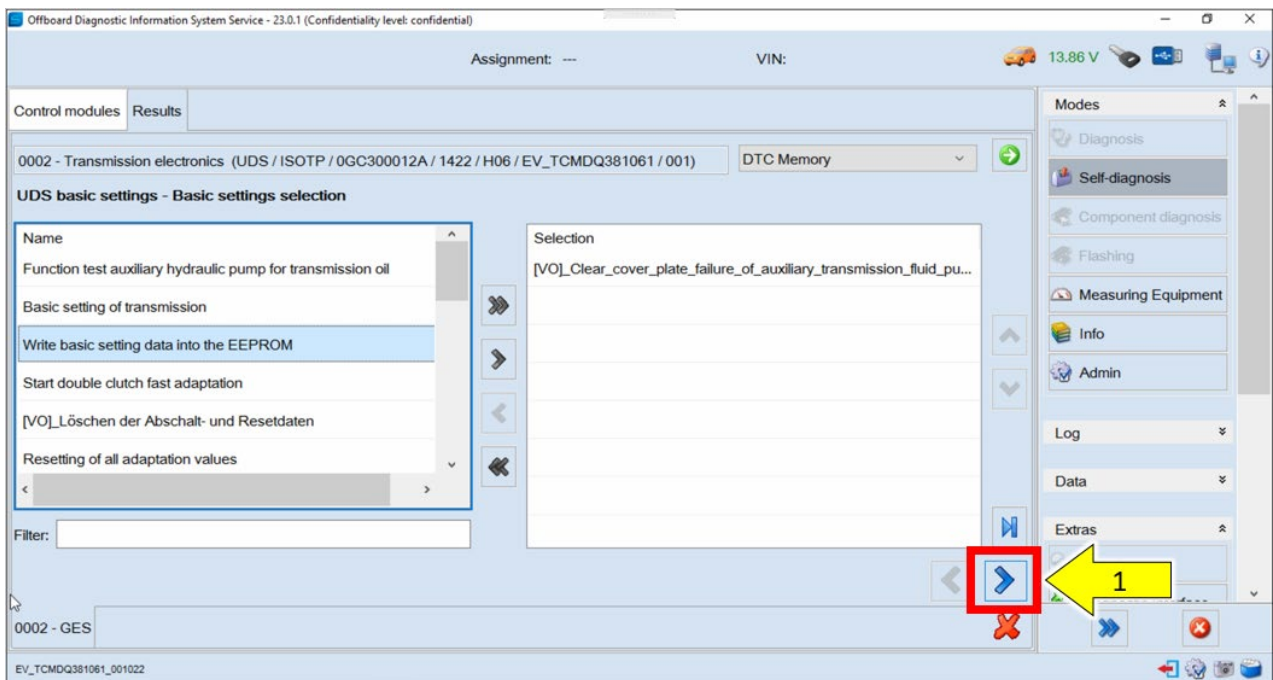
- Connect diagnostic tester to the vehicle.
- Perform a full vehicle scan using Diagnosis.
- Switch to Self-diagnosis.
- Select “Basic Setting” for 0002 – Transmission electronics.



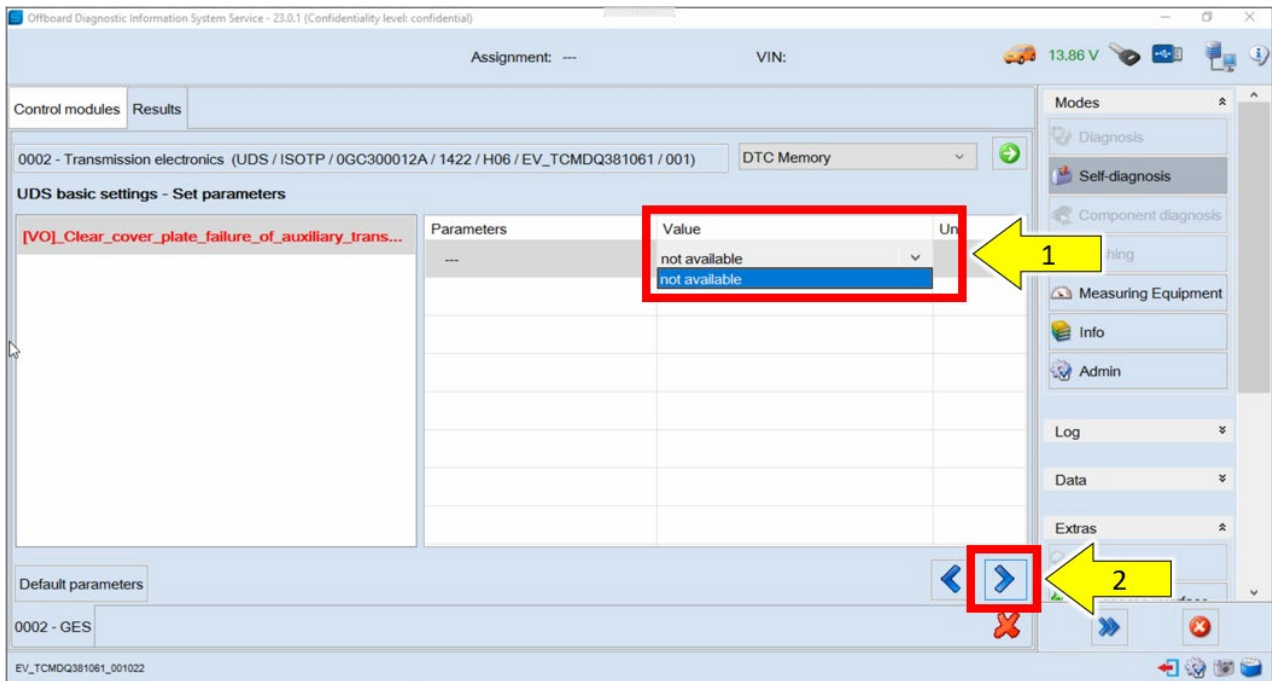
- Move basic setting, “[VO]_Clear_cover_plate_failure_of_auxilliary_fluid_pump” to the selection box.
 - The basic setting can be moved by double clicking the basic setting, or by clicking on arrow <1>.



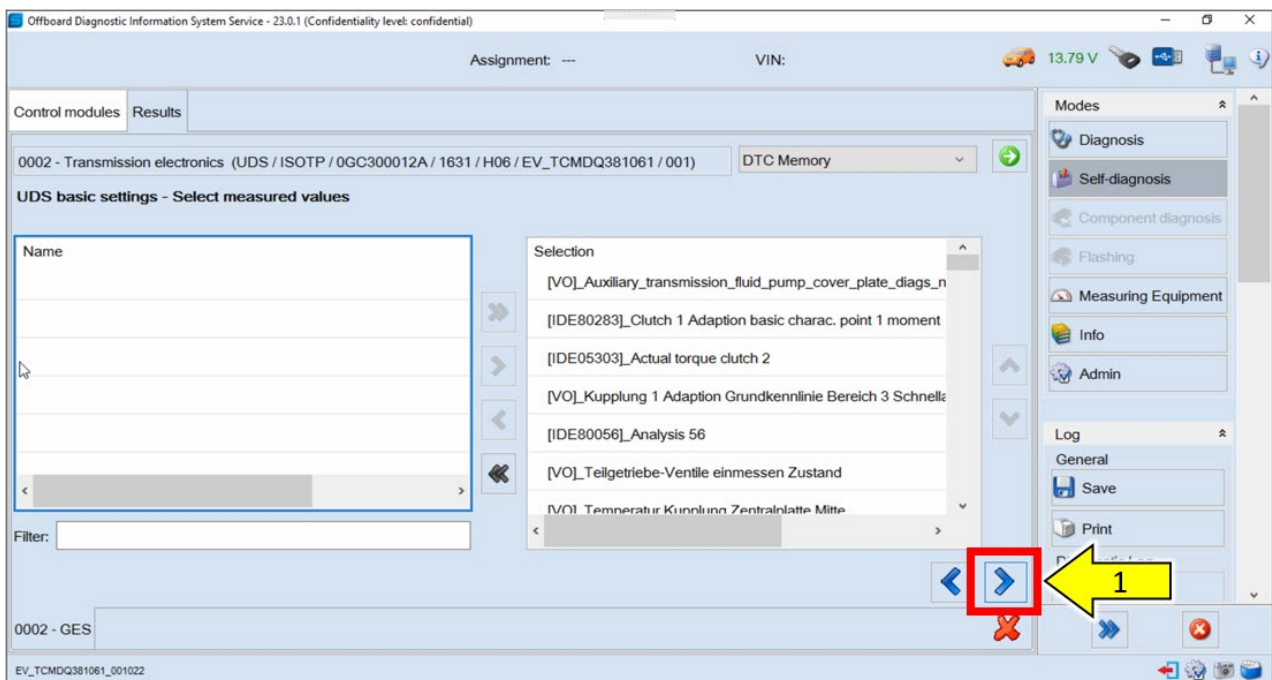
- Once the basic setting is in the selection box, continue by clicking the blue forward arrow <1>.



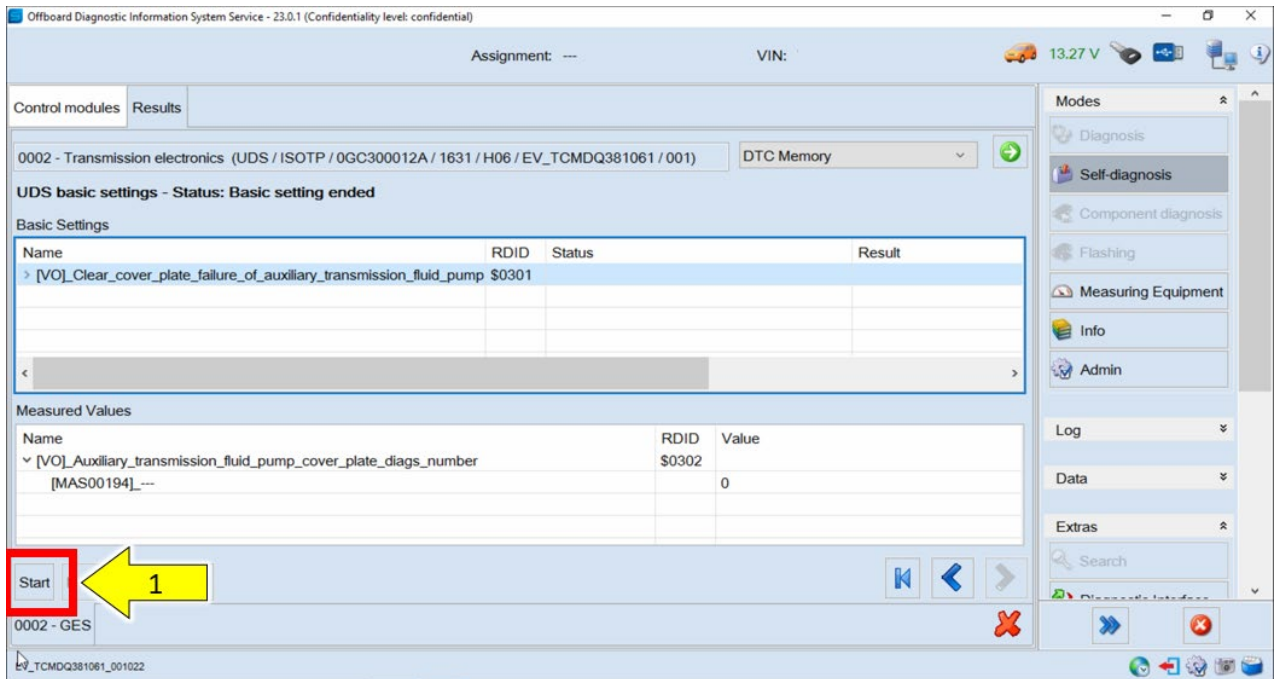
- Click in the empty “Value” box and select “not available” <1>.
- Continue by clicking the blue forward arrow <2>.



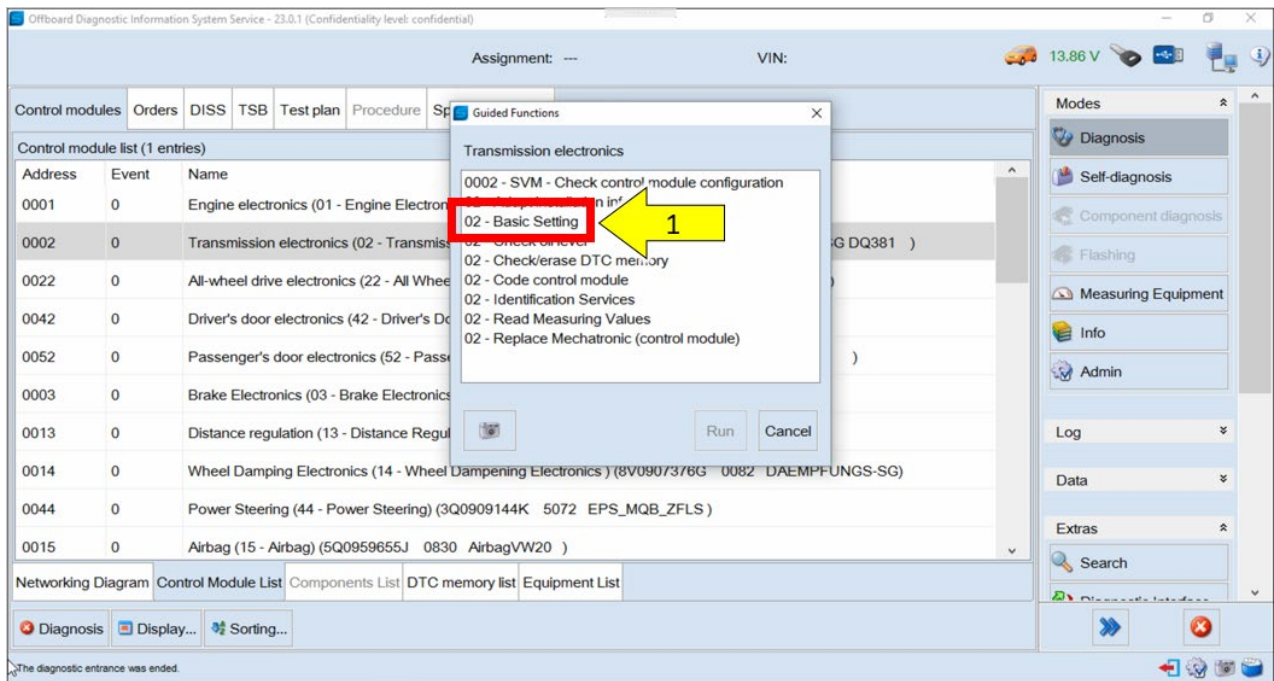
- All measured values will need to be moved to the selection box, and measured value “[VO]_Auxilliary_transmission_fluid_pump_cover_plate_diags_number” will need to be listed first.
 - Type “fluid” in the filter box and move measured value, “[VO]_Auxilliary_transmission_fluid_pump_cover_plate_diags_number” to the selection box.
 - Then delete “fluid” from the filter box and move all of the remaining measured values to the selection box.
 - Once all measured values are in the selection box, click on the blue forward arrow <1>.



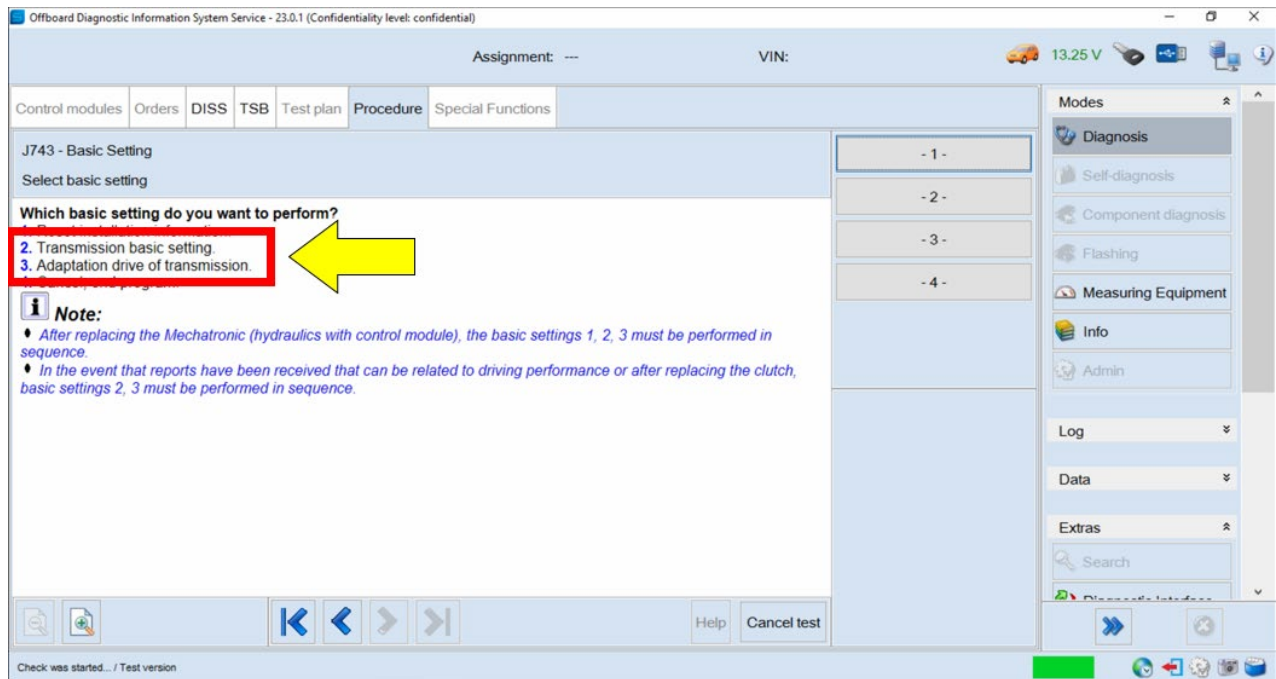
- Click “Start” <1> to begin the basic setting routine.
- Once the basic setting is complete, the event memory entry will then be set to “intermittent” and can be erased.



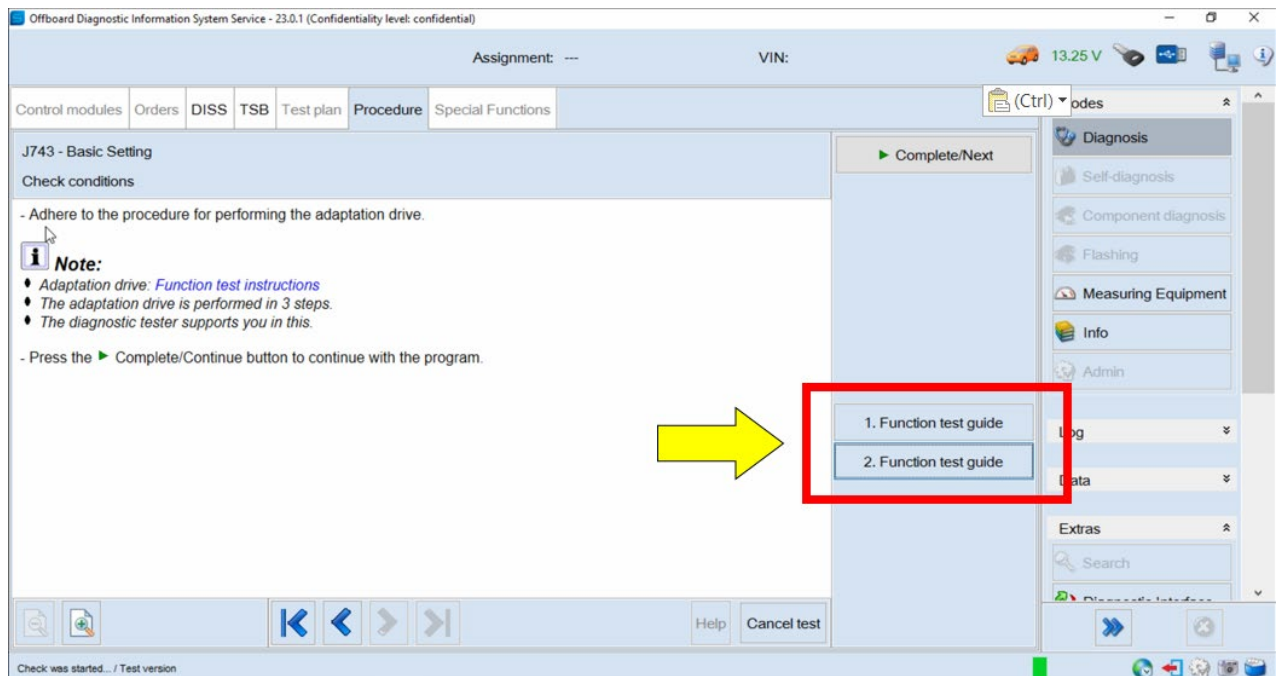
- Once the fault is erased, switch to Operating Mode “Diagnosis.”
- Select Guided Functions test plan, “02 – Basic Setting” <1>.
- Follow the on-screen prompts.



- Perform the following basic settings in sequence and follow the on-screen prompts:
 - Transmission basic setting
 - Adaptation drive of transmission



- Pay close attention to the information found in the Function test guides before performing the “Adaptation drive of transmission” basic setting.



After basic settings are complete, Proceed to Section D.

Section D – Campaign Completion Stamp

I certify that this campaign
has been performed in strict
accordance with the applicable
Audi repair procedure.

SAGA Code: _____
Technician: _____
Date: _____

Item#: AUD4927ENG

-OR-

Je certifie que cette
campagne de rappel a été
exécutée suivant les strictes
directives de réparation
d'Audi

Code de SAGA: _____
Technicien: _____
Date: _____

Item # AUD4927FRE

- Once the campaign has been completed, the technician should stamp the repair order.
- Stamps are available for ordering through the Compliance Label Ordering Portal.
- **Proceed to Section E**

Section E - Parts Return/Disposal

Properly store (retain), destroy or dispose of removed parts in accordance with all state/province and local requirements, unless otherwise indicated and/or requested through the Warranty Parts Portal (WPP) for U.S. and the Part Destruction and Core Disposition Report for Canada.