



Safety Recall

Code: 34J6 – Interim Repair

Subject Mechatronic Accumulator Housing

Release Date November 24, 2020

IMPORTANT INFORMATION THIS INTERIM REPAIR APPLIES ONLY TO VEHICLES THAT ARRIVE AT YOUR DEALERSHIP WITH SPECIFIC FAULTS OUTLINED IN THE WORK INSTRUCTIONS.

Affected Vehicles

Country	Beginning Model Year	Ending Model Year	Vehicle
USA	2013	2015	JETTA HYBRID
CAN	2013	2013	JETTA HYBRID

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 only valid campaign inquiry & verification source.

- ✓ 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.

Problem Description

Hairline cracks may develop in the accumulator housing of the transmission (mechatronic unit), leaking and leading to insufficient transmission oil pressure. If this happens, the transmission warning light will illuminate in the instrument panel. If the warning light is ignored and the vehicle is driven, the clutch may not engage. There could be a sudden loss of power to the wheels, potentially leading to a vehicle crash.

Interim Corrective Action

This circular will provide claiming and repair instructions in the event a vehicle arrives with specific faults in control unit 0002 prior to the release of the 34J6 Safety Recall final remedy.

Precautions

Customers are advised: Do not ignore the transmission warning light if it comes on. If the light comes on, owners are advised to contact an authorized Volkswagen dealer without delay to have the vehicle inspected. Please refer to the vehicle owner's manual for more information on warning lights.

Code Visibility

On or about December 20, 2019, the campaign code was applied to affected vehicles.

Owner Notification

A second interim owner notification will take place in November 2020. Owner letter examples are included in this bulletin for your reference.

Additional Information

Please alert everyone in your dealership about this action, including Sales, Service, Parts and Accounting personnel. Contact Warranty if you have any questions.

IMPORTANT REMINDER ON VEHICLES AFFECTED BY SAFETY & COMPLIANCE RECALLS

New Vehicles in Dealer Inventory: It is a violation of federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied. By law, dealers must correct, prior to delivery for sale or lease, any vehicle that fails to comply

with an applicable Federal Motor Vehicle Safety Standard or that contains a defect relating to motor vehicle safety.

Pre-Owned Vehicles in Dealer Inventory: Dealers should not deliver any pre-owned vehicles in their inventory which are involved in a safety or compliance recall until the defect has been remedied.

Dealers must ensure that every affected inventory vehicle has this campaign completed before delivery to consumers.

Fill out and affix Campaign Completion Label (CAMP 010 000) after work is complete.

Labels can be ordered at no cost via the Compliance Label Ordering portal at www.vwhub.com.

Claim Entry Instructions

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 request via WISE under the *Campaigns/Update/Recall Closure* option.
- ✓ Canada dealers: Upload the repair order [signed by customer] to Volkswagen WIN/Operations/Campaign Closure.

Service Number	34J6	
Damage Code	0099	
Parts Vendor Code	WWO	
Claim Type	Sold vehicle: 7 10 Unsold vehicle: 7 90	
Causal Indicator	Mark mechatronic* as causal part	
Vehicle Wash/Loaner	Do not claim wash/loaner under this action U.S.A.: Loaner/rental coverage cannot be claimed under this action. However, loaner/rental may be covered under the mobility program. Please refer to the Volkswagen Warranty Policy and Procedures Manual for loaner claims information and reimbursement details. Canada: Loaner/rental coverage cannot be claimed under this action. Please refer to Volkswagen Service Loaner Program to determine loaner eligibility.	
Criteria I.D.	01	
	LABOR	
	Labor Op	Time Units
	3511 19 99	340
	0150 00 50	Time stated on diagnostic protocol
		Description
		Replace mechatronic
		GFF Diagnosis and operations
	PARTS	
	Quantity	Part Number
	1.00	0CG325025B ***
	3.00	01X301127C
	1.00	5C0998152
	Up to 0.30	G 004000M2
	Up to 40.00	G 013A8JS0
	2.00	G 055512A2
	4.00	WHT001922
		Description
		See ETKA - Mechatronic*
		Round Hd. Screw
		Repair Kit
		Oil For Hydraulic System and Power Steer
		Coolant
		Transm. Oil
		Bolt, with Polygon Socket Hd.

<MONTH YEAR>

This notice applies to your vehicle: <VIN>

<CUSTOMER NAME>

<MODEL YEAR> <BRAND> <MODEL>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

NHTSA: 19V866

Volkswagen Recall: 34J6 – Mechatronic Accumulator Housing

SECOND NOTICE - INTERIM SAFETY RECALL NOTICE FOR YOUR VEHICLE**A recall repair is expected to be available in March 2021**

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. Volkswagen has decided that a defect, which relates to motor vehicle safety, exists in certain Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

Recall Description: Hairline cracks may develop in the accumulator housing of the transmission (mechatronic unit), leaking and leading to insufficient transmission oil pressure. If this happens, the transmission warning light will illuminate in the instrument panel. If the warning light is ignored and the vehicle is driven, the clutch may not engage. There could be a sudden loss of power to the wheels, potentially leading to a vehicle crash.

What you should do:

- As long as your vehicle is functioning normally, there is nothing you need to do now. We will send you another letter as soon as your dealer has the parts on hand to complete this recall work on your vehicle.
- **If the transmission warning light illuminates in the instrument panel, immediately contact your authorized Volkswagen dealer and request a diagnostic service appointment under Safety Recall 34J6. Do not ignore the transmission warning light if it comes on.**
 - If diagnosis shows that the transmission warning light is on due to specific fault code(s) related to the recall issue described above, your dealer will order the necessary parts to fix your vehicle. In this case, both the diagnosis and repair will be completed for you free of charge. A repair performed in this case will remove the safety defect from your vehicle, and you will not need to return again for repairs under this safety recall.
 - If the transmission warning light is on for reasons unrelated to this recall (specific fault codes are not present at the time of diagnosis), your dealer will advise about the repairs that are needed, and tell you what the diagnosis and repair costs will be. In cases where necessary repairs are not recall-related, customers should be prepared to cover costs related to both diagnosis and repair. Depending on the repairs required, you may still need to return at a later date for repairs under this safety recall.

We apologize for any inconvenience you may experience due to this issue, however your safety and that of your passengers remains our top priority.

Sincerely,

Volkswagen Customer Protection

<MONTH YEAR>

This notice applies to your vehicle: <VIN>

<CUSTOMER NAME>

<MODEL YEAR> <BRAND> <MODEL>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

Transport Canada Recall: 2019-610

Volkswagen Recall: 34J6 – Mechatronic Accumulator Housing

SECOND NOTICE - INTERIM SAFETY RECALL NOTICE FOR YOUR VEHICLE**A recall repair is expected to be available in March 2021**

This notice is sent to you in accordance with the requirements of the Motor Vehicle Safety Act. This is to inform you that your vehicle may contain a defect that could affect the safety of a person. Our records show that you are the owner of a vehicle affected by this action.

Recall Description: Hairline cracks may develop in the accumulator housing of the transmission (mechatronic unit), leaking and leading to insufficient transmission oil pressure. If this happens, the transmission warning light will illuminate in the instrument panel. If the warning light is ignored and the vehicle is driven, the clutch may not engage. There could be a sudden loss of power to the wheels, potentially leading to a vehicle crash.

What you should do:

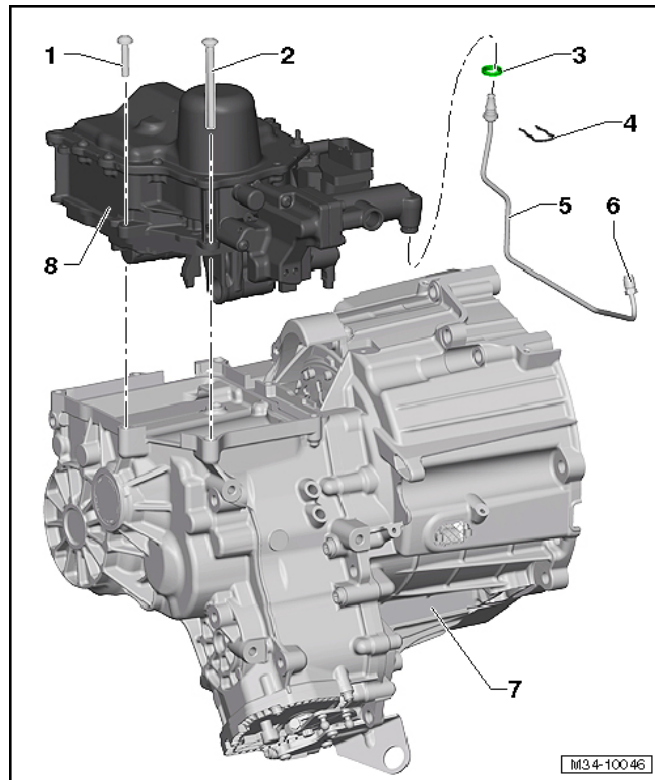
- As long as your vehicle is functioning normally, there is nothing you need to do now. We will send you another letter as soon as your dealer has the parts on hand to complete this recall work on your vehicle.
- **If the transmission warning light illuminates in the instrument panel, immediately contact your authorized Volkswagen dealer and request a diagnostic service appointment under Safety Recall 34J6. Do not ignore the transmission warning light if it comes on.**
 - If diagnosis shows that the transmission warning light is on due to specific fault code(s) related to the recall issue described above, your dealer will order the necessary parts to fix your vehicle. In this case, both the diagnosis and repair will be completed for you free of charge. A repair performed in this case will remove the safety defect from your vehicle, and you will not need to return again for repairs under this safety recall.
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We apologize for any inconvenience you may experience due to this issue, however your safety and that of your passengers remains our top priority.

Sincerely,

Volkswagen Customer Protection

Repair Overview



Replace the mechatronics ONLY if the vehicle arrives with one or more of the following faults in control unit 0002 prior to the release of the 34J6 Safety Recall final remedy.

- P17BF: Hydraulic pump. Anti-play protection
- P0841: Transmission Fluid Pressure Sensor/Switch A Range/Performance
- P189C: Function restriction due to insufficient pressure build-up

One of more of these faults MUST be present for these instructions to apply.

If any of these required faults are not present, replacement of the mechatronic will not be covered under this action. Each claim for a mechatronic will be reviewed. If the required faults are not present in GFF Paperless, the claim will be rejected.

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.

Parts Information

Quantity	Part Number	Part Description
1	SEE ETKA	Mechatronic
3	01X-301-127-C	Mechatronic Bolt
1	5C0-998-152	Repair Kit
1	G -004-000-M2	Hydraulic Fluid
2.0 L	G -055-512-A2	Transmission Fluid
4	WHT-001-922	Mechatronic Bolt
See ELSA/ETKA		Coolant

NOTE

The specified part numbers reflect the status at the start of this service action. Interim updates made in ETKA can cause a listed part number to become unavailable. In this case, the new part number specified in ETKA should be used.

Required Tools

Continued on next page



 <p>Used Oil Collection and Extraction Unit -SMN372000- (or equivalent)</p>	 <p>Oil Filler -VAS6262A-</p>
 <p>Adapter For Oil Filling -VAS6262/4-</p>	 <p>Oil Filler – Adapter -VAS6262/7-</p>
 <p>Guide Pins -T10093-</p>	 <p>Shop Crane -VAS6100- (or equivalent)</p>

Repair Instruction


Section A - Check for Previous Repair

TIP

If Campaign Completion label is present, no further work is required.

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

EXAMPLE

Campaign/Action	Start	Designation
	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.

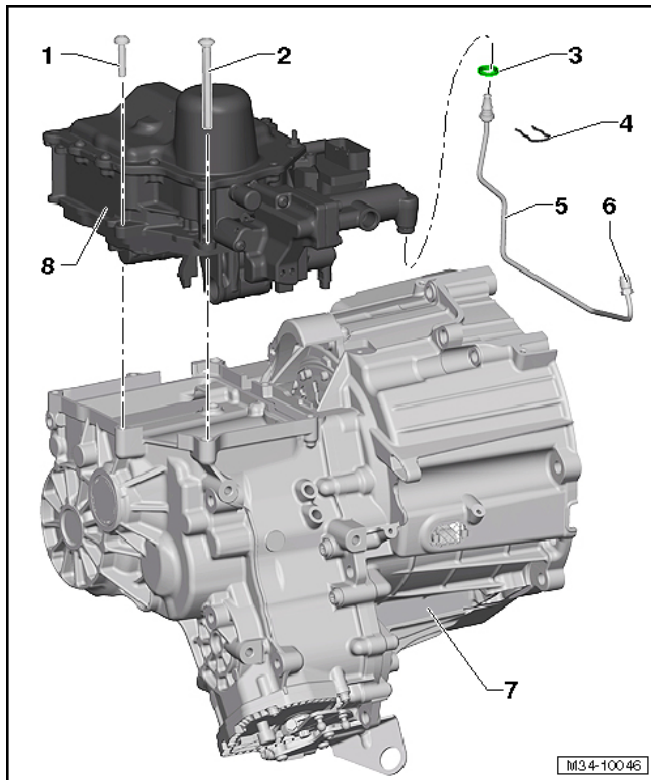
CRITICAL REPAIR STEP

 **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 – Evaluating TCM Faults



- Using GFF Diagnosis, check control unit 0002 for faults.
- If one or more of the following faults are set in control unit 0002: P17BF, P0841 or P189C
 - The mechatronic requires replacement.
 - Proceed to Section C.
- If additional faults are set in control unit 0002 and P17BF, P0841 or P189C are also set:
 - Contact Volkswagen Technical Assistance.
- If faults P17BF, P0841 or P189C are not present in control unit 0002:
 - No work can be performed under the campaign at this time.
 - The diagnosis and repair of faults will not be covered under this action.
 - No claim can be entered for this action at this time.

Section C – Replacing Mechatronic

WARNING

Read and follow the information below when de-energizing the high-voltage system to reduce the risk of fatal injury.

- Only a qualified technician (high-voltage technician) should disable the high-voltage electrical system.
- The High-Voltage Technician (HVT) makes sure the system is de-energized and cannot be re-energized again.
- The high-voltage technician assures that the system cannot be re-energized again by safely storing the key, the High-Voltage System Maintenance Connector -TW- and the pilot line connector.
- The High-Voltage Technician (HVT) puts a sign on the vehicle saying the voltage is disabled.
- Only hybrid electrically instructed persons may perform all work (maintenance, tire changing, Convenience System) on vehicles with a high-voltage system. If there is any uncertainty, discuss with the responsible high-voltage technician.
- A high-voltage technician must disable the system before any work can be performed on the high-voltage electrical system or any other service work to the body.
- Only a High-Voltage Expert (HVE) may perform repairs to the vehicle if it is not possible to disable the high-voltage electrical system.
- Individuals with electrical medical equipment must not work on vehicles with a high-voltage electrical system. Examples of electrical medical equipment include pain medication pumps, implanted heart defibrillators, pacemakers, insulin pumps and hearing aids.

WARNING

Working with high-voltage cables:

- Do not support yourself or lay tools on the high-voltage cable or on any of its components.
- When working near high-voltage components and high-voltage cables, do not use tools that generate heat, that have sharp edges or that are used for cutting or shaping, such as welding, soldering, hot air or thermal adhesive equipment.
- When working near high-voltage components and high-voltage cables, do not use tools that generate heat such as welding, soldering, hot air or thermal adhesive equipment.
- Do not excessively bend or flex high-voltage cables.
- Always contact a High-Voltage Technician (HVT) if there are questions or if something is not clearly understood.

⚠ WARNING

The system is under pressure.

The DSG Transmission Mechatronic -J743- has a pressure reservoir that can hold up to 60 bar (870 psi) pressure. The cover on the DSG Transmission Mechatronic -J743- and the pressure reservoir may not be opened.

⚠ CAUTION

Danger of causing damage to the transmission.

Do not let the engine run when the DSG Transmission Mechatronic -J743- is removed or when there is no transmission fluid in the engine. Do not tow the vehicle either.

! NOTE

- Review the General Repair Information in ELSA: *Repair Manual > Drivetrain > Direct Shift Gearbox > 00 General, Technical Data > Repair Information*
- The dual clutch is self-adjusting. Vibrations can affect the adjusting tool. In addition, when the Mechatronic is removed, the "abrupt pulling away" of the Assembly Lever Mechatronic -T10407- among the engaging levers will have a negative effect on the adjusting tool.
- After unpacking or installing, do not dispose of the packaging and the ventilation pipe cap of a new Mechatronic. They are required for returning the removed Mechatronic.
- The fluid in a new Mechatronic is already filled correctly. Do not drain out any fluid.

- Secure the rear lid so that it cannot close because the battery is going to be disconnected.

! NOTE

Access to the luggage compartment when the power is off is possible, but with difficulty.

De-energize the high-voltage system:

- Perform a full GFF scan.
- Select the “Test Plan” tab.
- Select the “Select Individual Tests” button.
- Select the test plan by following the path:
 - Body (Repair Group 01; 27; 50 through 97)
 - Interior/Exterior Electrical System (Repair group 01; 27; 50 - 97)
 - 01 – OBD
 - 8C - hybrid battery management | J840
 - 8C - hybrid battery energy management, functions
 - De-energizing the high-voltage system
- Pay close attention to the test plan instructions when de-energizing the high-voltage system.

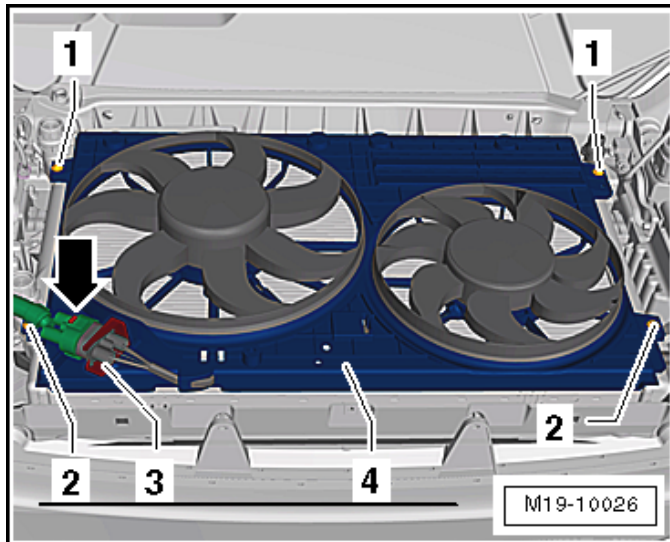
NOTE

The wording of the ODIS test plans may differ from these instructions.

- Save the diagnostic session.

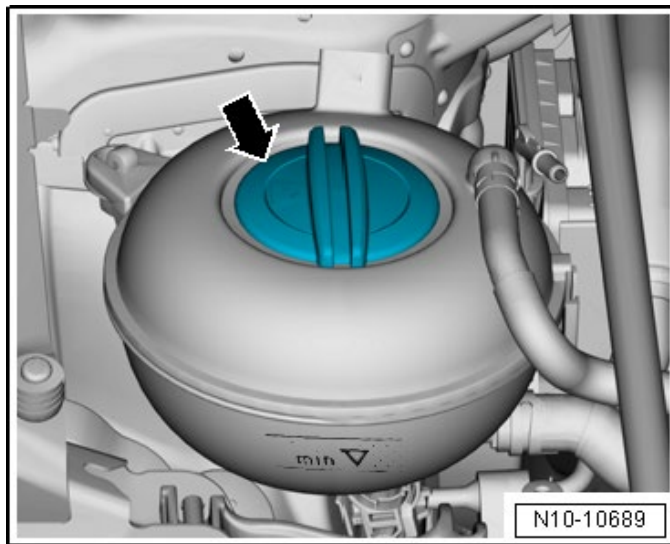
Prepare mechatronics for removal:

- Move the selector lever into »P«.
- Connect the Vehicle Diagnostic Tester and turn on the ignition.
- Select Guided Functions.
- Select Move Gear Selector Into -Neutral- under “7-speed DSG® transmission”.
- Turn off the ignition.



Remove fan shroud:

- Remove noise insulation.
- Remove the bolts at the top of the fan shroud <1>.
- Release and disconnect the connector <arrow>.
- Remove the bolts at the bottom of the fan shroud <2>.
- Remove the fan shroud downward.



Drain the coolant:

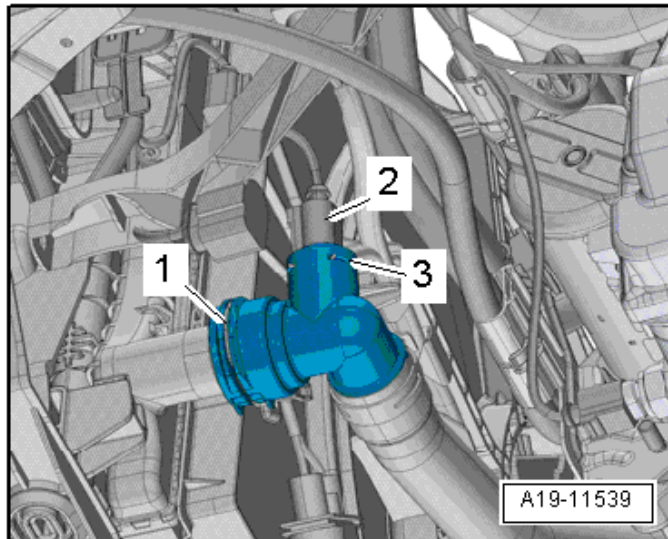
⚠ WARNING

Risk of burning due to hot steam and hot coolant.

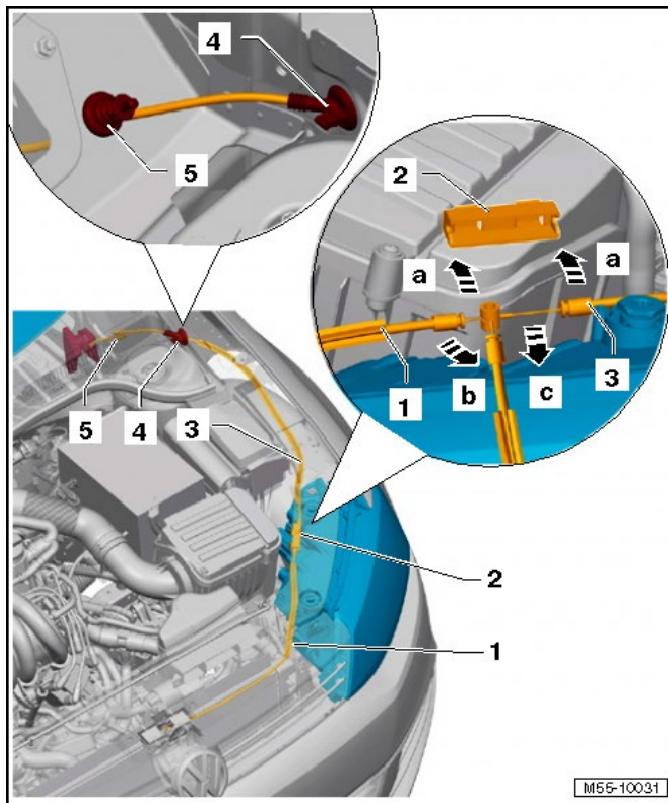
- When engine is warm, the cooling system is under pressure.
- Reduce pressure by covering coolant expansion tank cap with cloths and carefully opening.
- Remove the cap <arrow> from the coolant reservoir.
- Place a drip tray underneath the vehicle.

i TIP

Removing the coolant reservoir cap before raising the vehicle is recommended.



- Disconnect the connector <2> on the Engine Coolant Temperature Sensor on Radiator Outlet -G83-.
- Open the clamp <1>.
- Remove the left coolant hose at the bottom of the radiator and drain the coolant.
- After the coolant is drained, reconnect left coolant hose and reconnect connector.

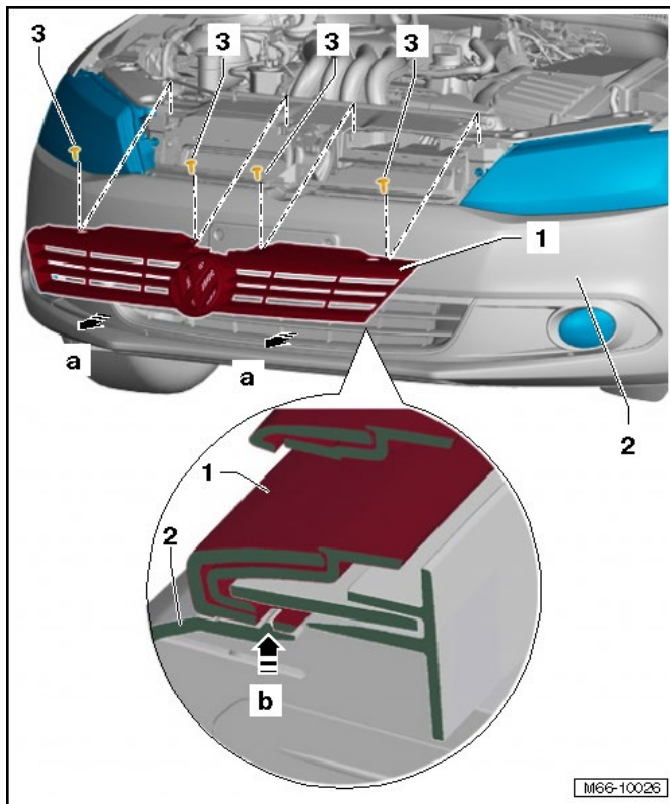


Disconnect hood release cable:

- Remove left plenum chamber cover.
- Remove the cover for the cable coupling <2> above the headlamp on the driver side from the lock carrier.
- Remove the cover <2> from the cables <1 and 3> in direction of <arrows a>.
- Move the cable <1> 90° in direction of <arrow b> and then remove it <1> from its mount <3> in direction of <arrow c>.

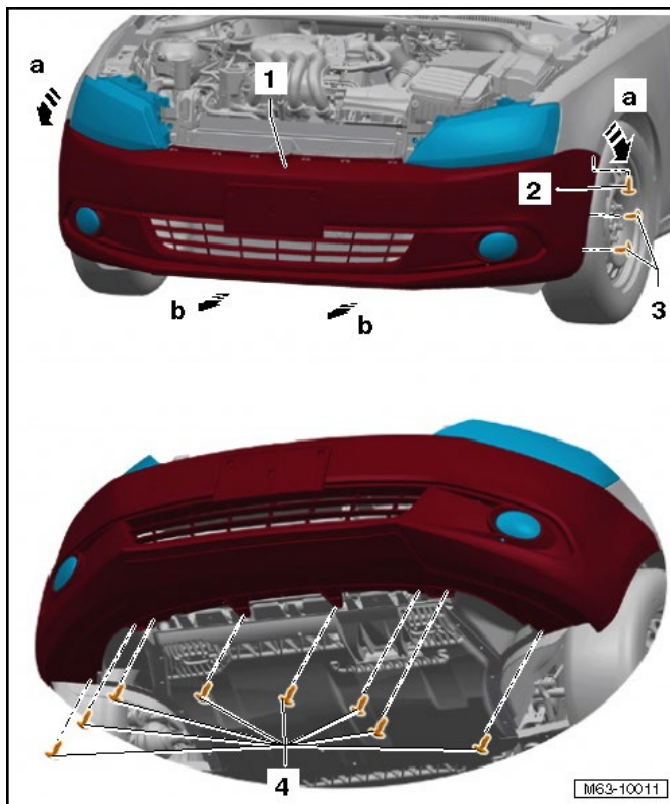
NOTE

During reassembly, make sure the grommets <4 and 5> are installed correctly when installing the cable <3>.



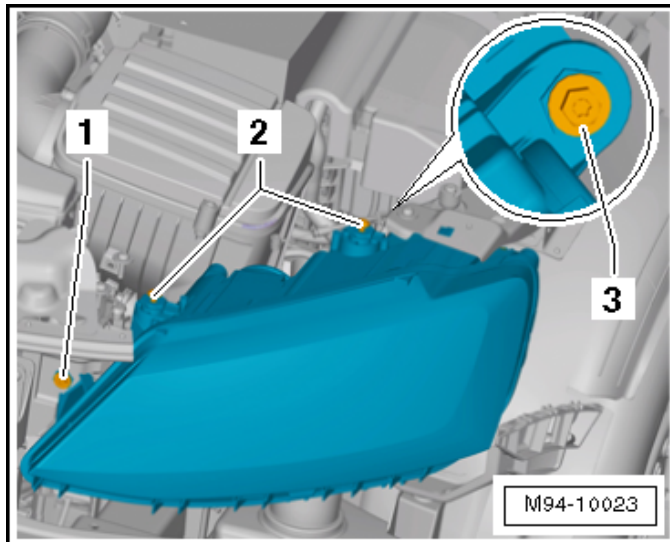
Remove radiator grille:

- Remove the bolts <3>.
- Remove the radiator grille <1> from the front bumper cover <2> in direction of <arrow a>.



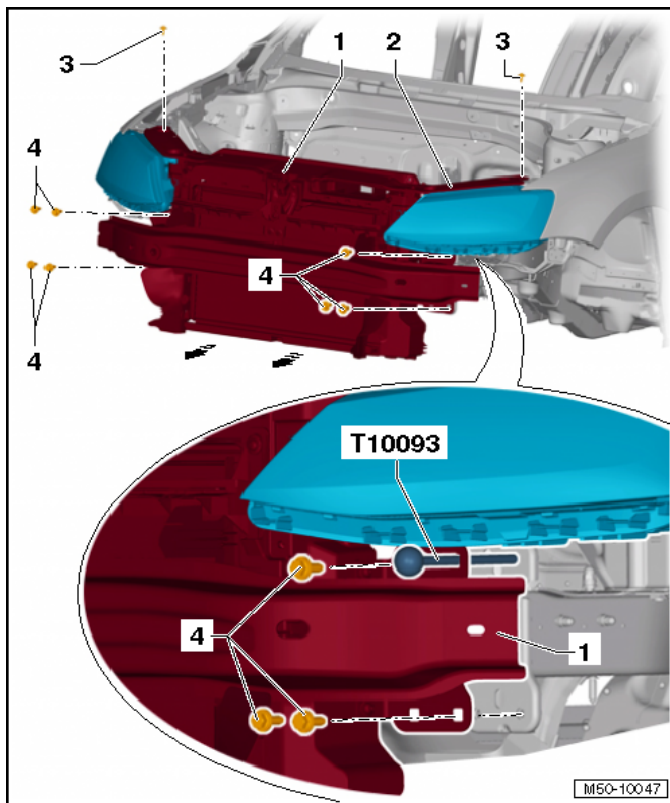
Remove front bumper cover:

- Remove the bolts <2> in the wheel housing (pointing upward) on the left and right sides.
- Remove the left and right wheel housing liner bolts <3>.
- Remove the bolts <4> from underneath.
- A second technician is required for the rest of the removal procedure.
- Pull the front bumper cover <1> out of the guides on the left and right sides of the fender in direction of <arrows a>.
- Remove the front bumper cover <1> in direction of <b arrows> from the vehicle. A second technician is needed for this.
- Disconnect the connectors from any electrical components.

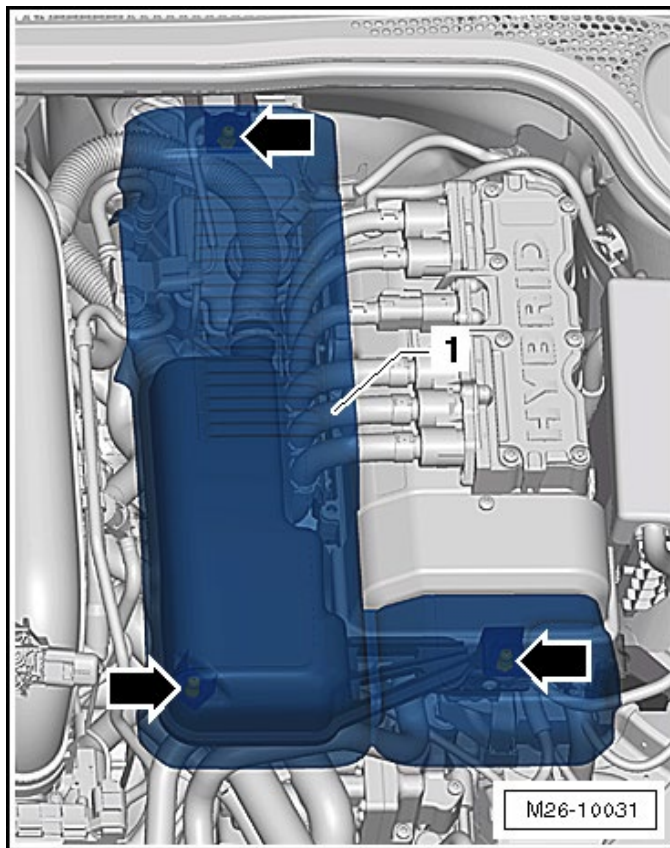


Bring lock carrier into service position:

- Remove the left and right bolts <3> on the back of the headlamp.

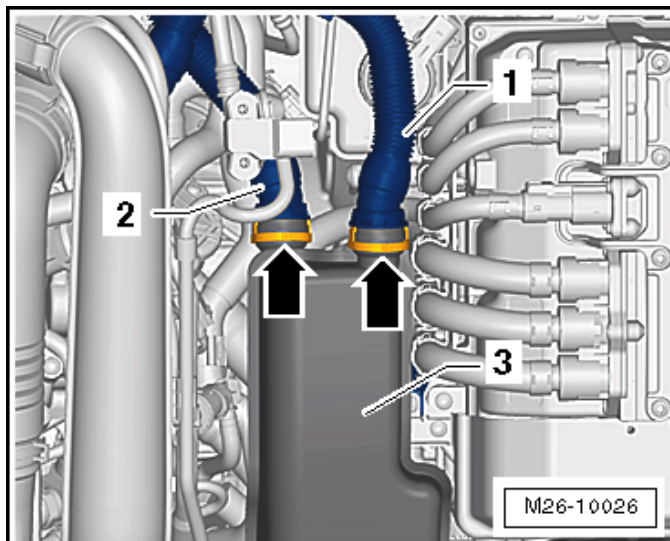


- Remove only one bolt <4> from the left and right longitudinal members.
- Install the -T10093- into the holes in the left and right longitudinal member where the bolts were.
- Remove the remaining bolts <4> in the left and right longitudinal members.
- Have a second technician hold the hood and support rod.
- Remove the upper left and right bolts <3> from the retaining brackets <2>.
- Pull the lock carrier and attachments <1> forward approximately 10 cm on the -T10093- <arrows>. Be careful of the wires on the lock carrier.
- Disconnect the connectors if necessary.
- Disconnect the charge pressure hoses if necessary.

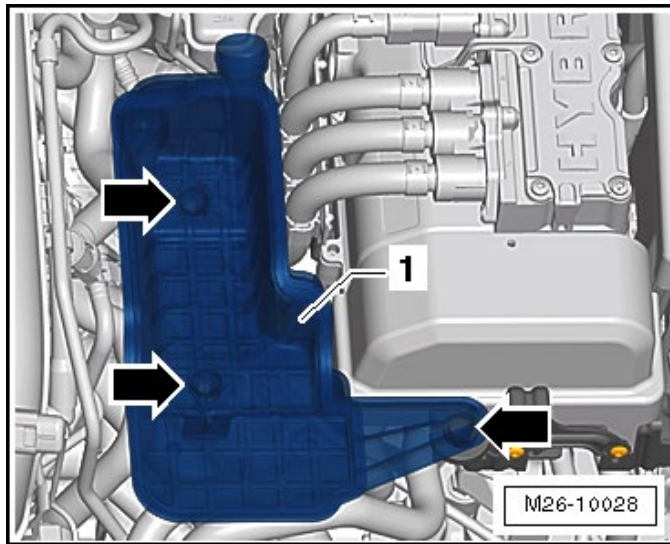


Remove damper cover:

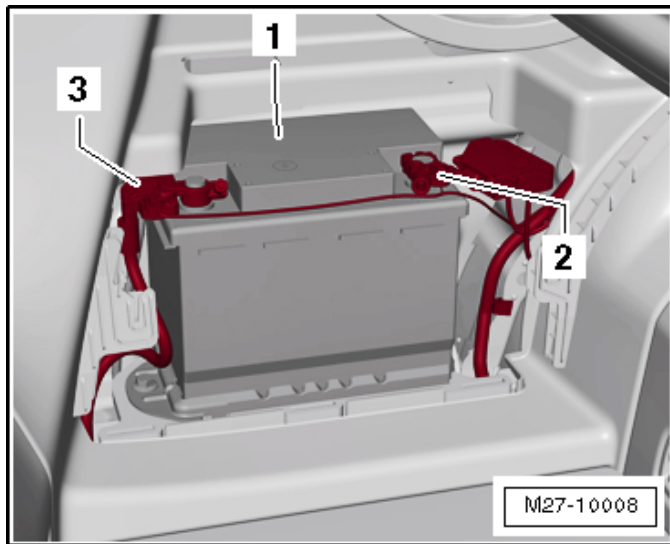
- Unclip and remove the damper cover <1> upward from the retainers <arrows>.



- Squeeze the locking ring <arrows> on both sides and remove the air lines <1 and 2> from the damper <3>.

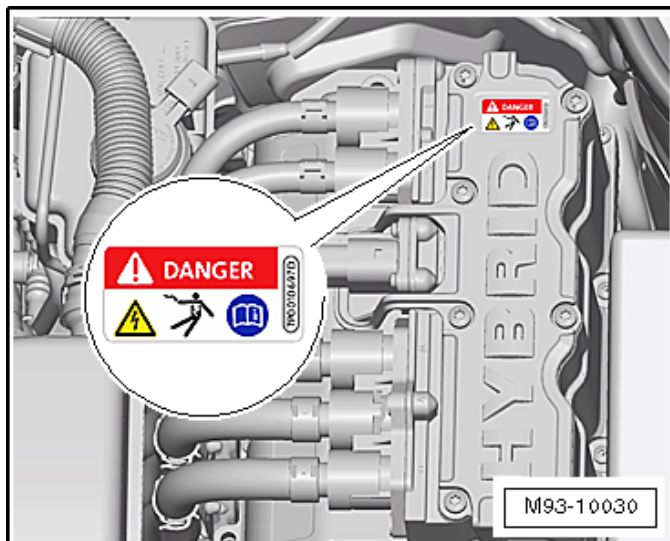


- Remove the damper <1> upward from the rubber bushings <arrows>.



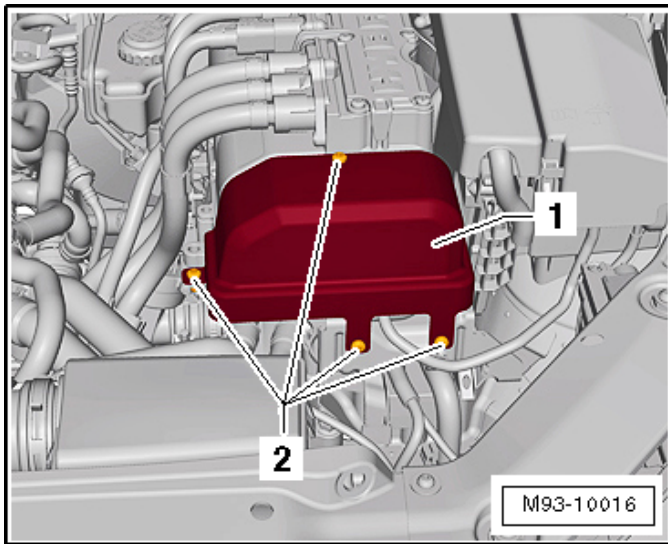
Disconnect the 12V battery:

- Turn off the ignition and all electrical equipment and remove the ignition key.
- Disconnect the battery ground cable terminal clamp <3> on the battery negative terminal.

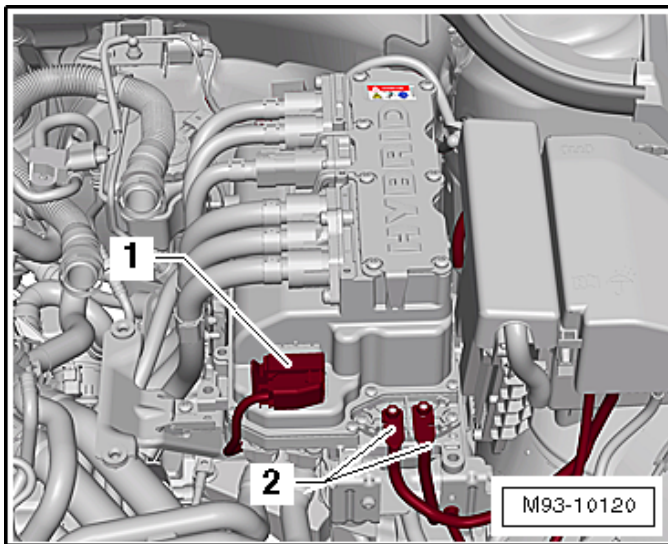


Remove the Electric Drive Power and Control Electronics -JX1-:

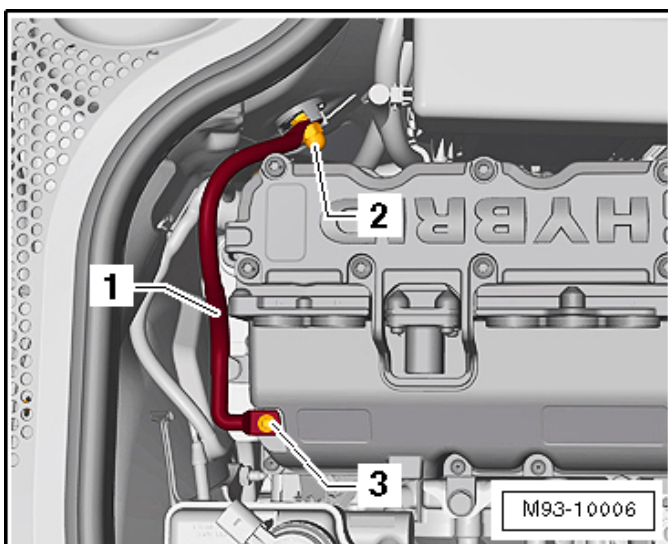
- Be careful not to damage the red warning label on the Electric Drive Power and Control Electronics -JX1-.



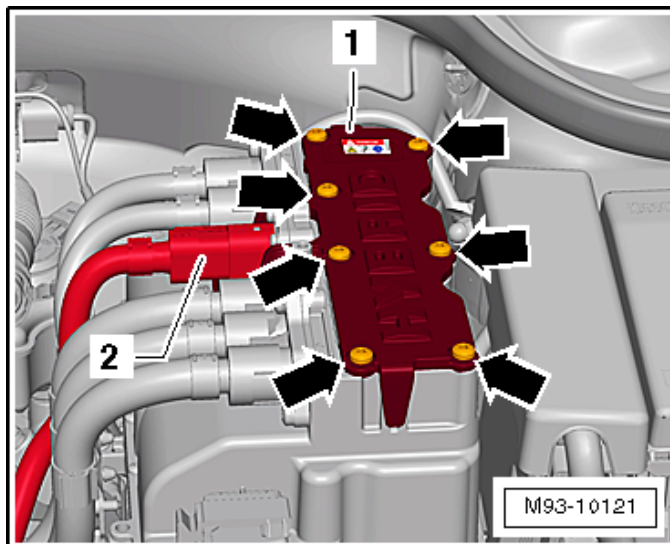
- Remove the cover <1>.
- Remove the screws <2> and then remove the cover <1> from the Electric Drive Power and Control Electronics -JX1-.



- Remove the cover from terminal 30/terminal 31.
- Unscrew and remove terminal 30/terminal 31 <2>.
- Remove the connector <1>.



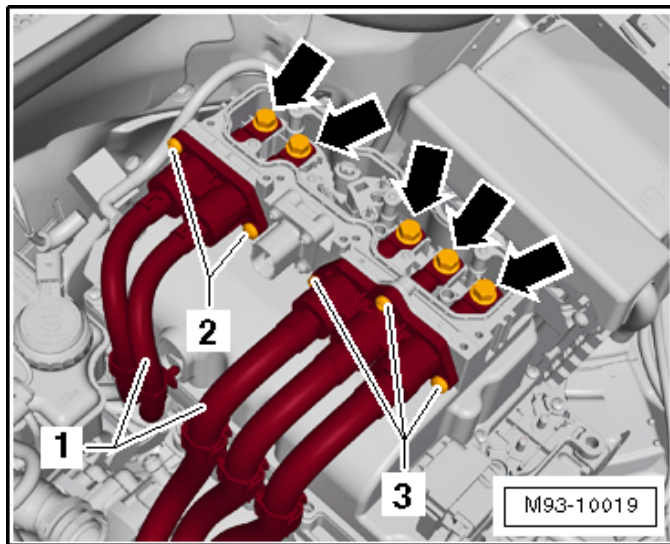
- Remove bolt <3> and loosen the potential equalization cable <1> from the Electric Drive Power and Control Electronics -JX1-.



- Disconnect and remove the Electric A/C Compressor High-Voltage Cable -P3- <2>.
- Remove the bolts <arrows> on the cover <1> and then remove the cover <1>.

⚠ CAUTION

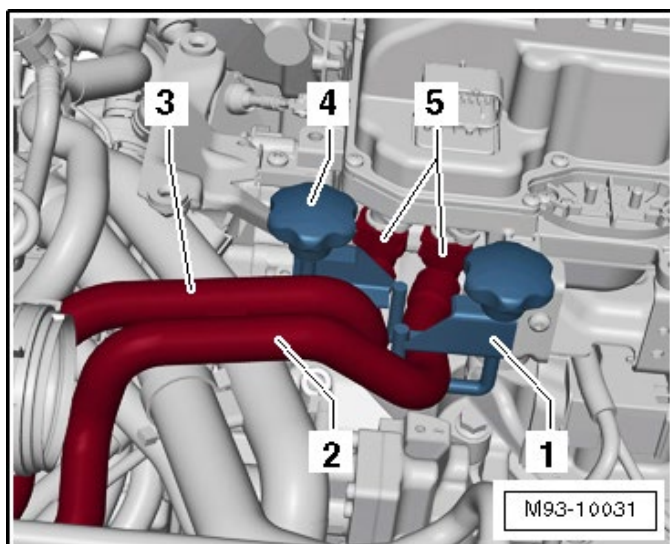
Be careful not to damage the seal inside the cover.



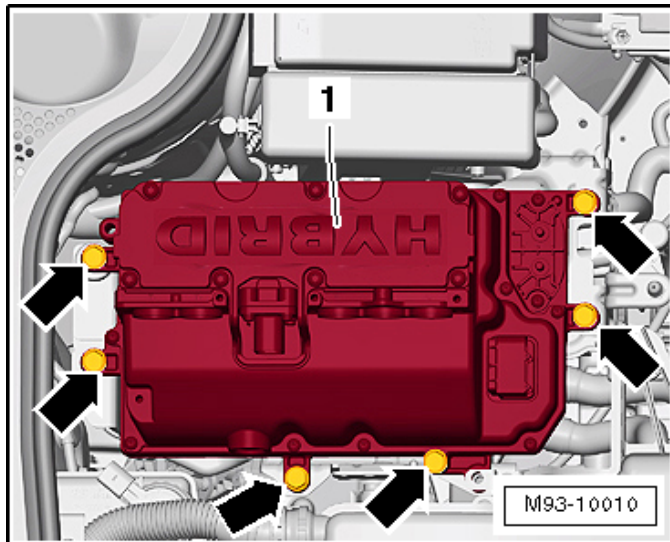
- Remove the bolts from the high-voltage connections <arrows>.
- Remove the bolts from the high-voltage cables <2 and 3>.
- Pull the high-voltage cables <1> carefully with light movements out of the Electric Drive Power and Control Electronics -JX1-.

⚠ CAUTION

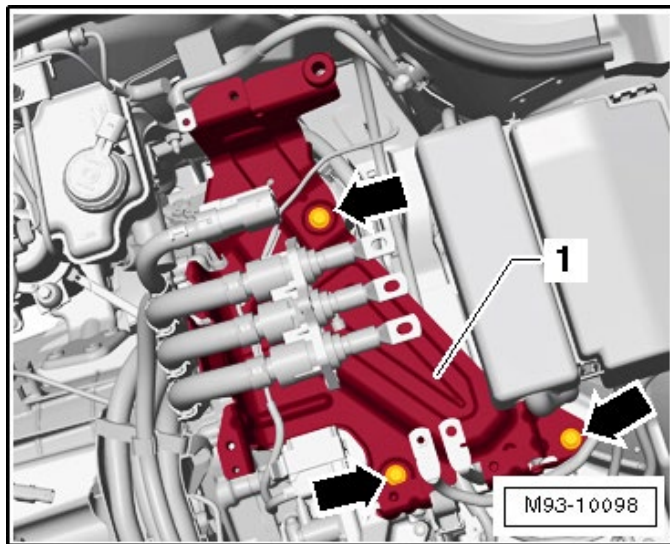
Be careful not to damage the seals on the high-voltage cables.



- Clamp off both coolant lines <2 and 3> with Hose Clamps -3094- <1 and 4>.
- Open and remove both hose couplings <5>.
- Catch the escaping coolant in a suitable container.

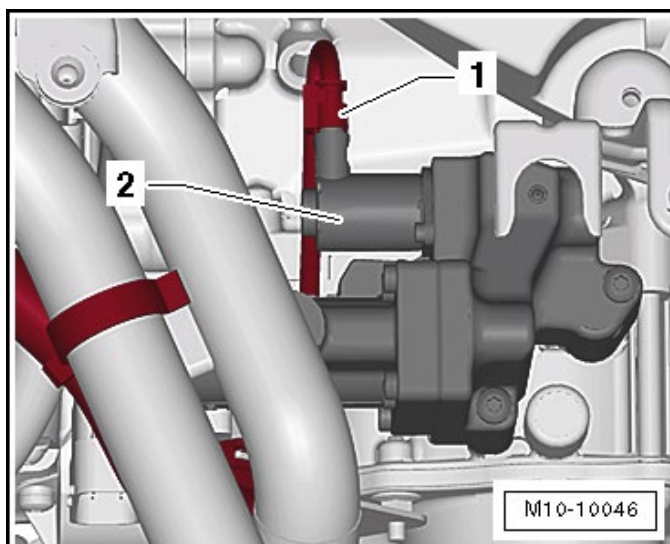


- Remove the screws <arrows> and then remove the Electric Drive Power and Control Electronics -JX1- <1> from the bracket.



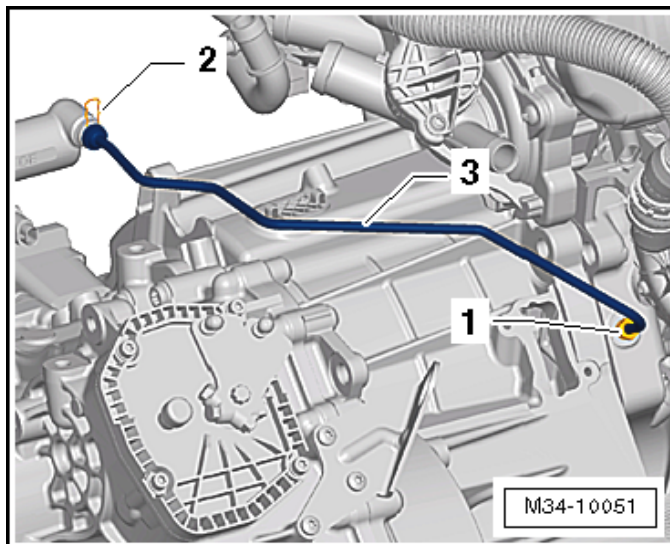
Remove bracket for JX1:

- Remove the high voltage cables bracket from the transmission housing.
- Remove bolts <arrows>.
- Remove the bracket <1> for the JX1.



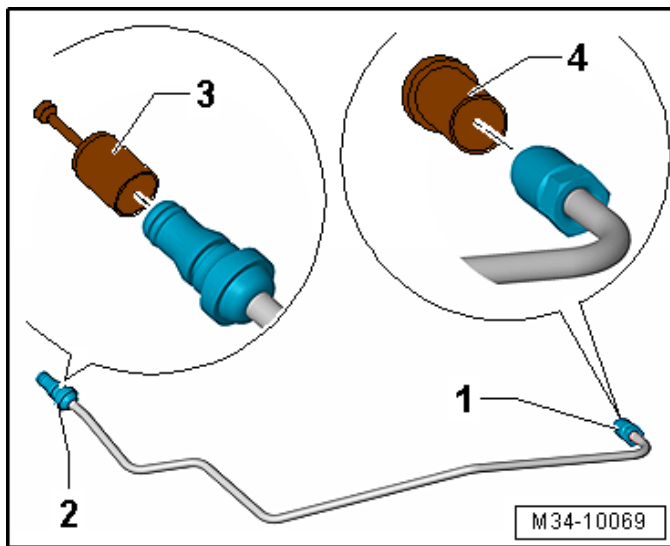
Disconnect connector:

- Disconnect the connector <1> from the valve <2> on the Mechatronic and pull the wiring harness from the front bracket on the transmission.

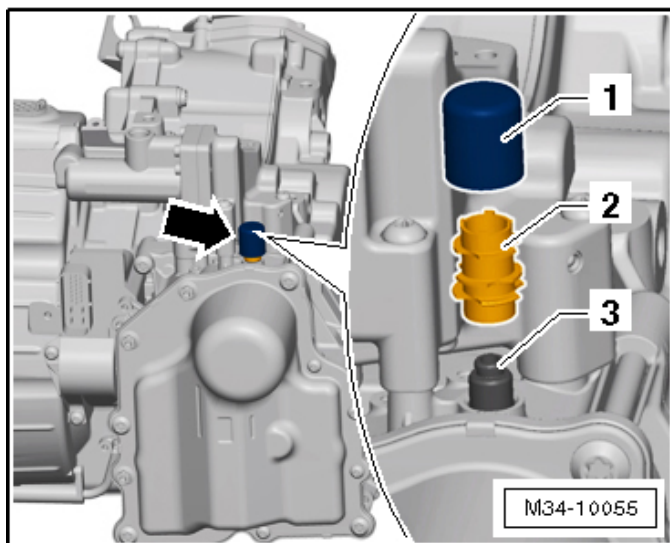


Disconnect hydraulic line:

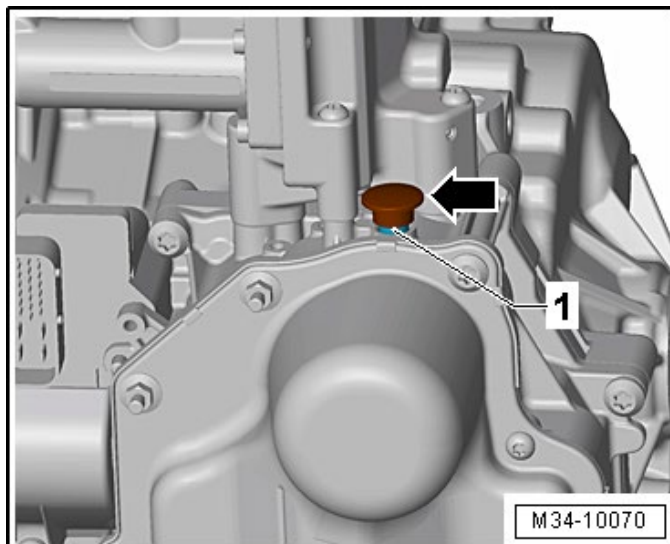
- Remove the clamp <2> from the Mechatronic.



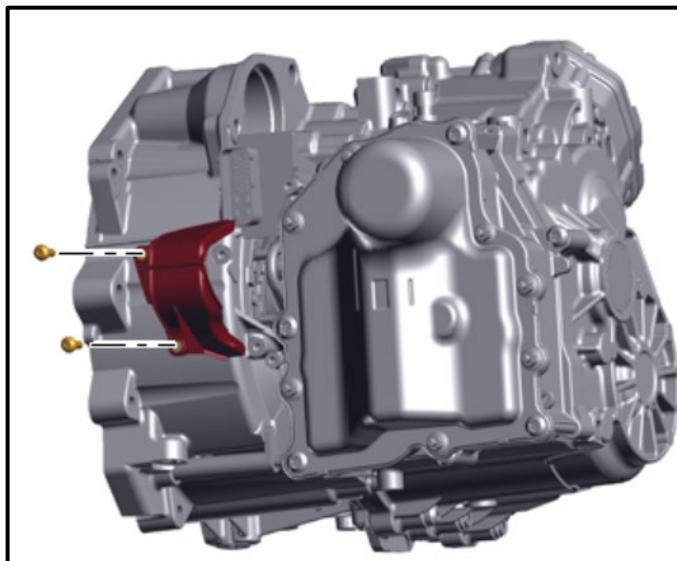
- Seal the hydraulic line connection <2> immediately with new sealing plugs <3> from the Repair Kit 5C0-998-152. Preferably the hydraulic fluid should remain in the line if possible, to prevent the fluid from getting dirty.



- Remove the cap <1> from the Mechatronic. The bleeder <2> remains on the ventilation <3> while doing this.
- The bleeder <2> must be removed so that no hydraulic fluid can leak out of the Mechatronic.



- Seal the breather <1> with a plug so that no fluid can leak out <arrow>.

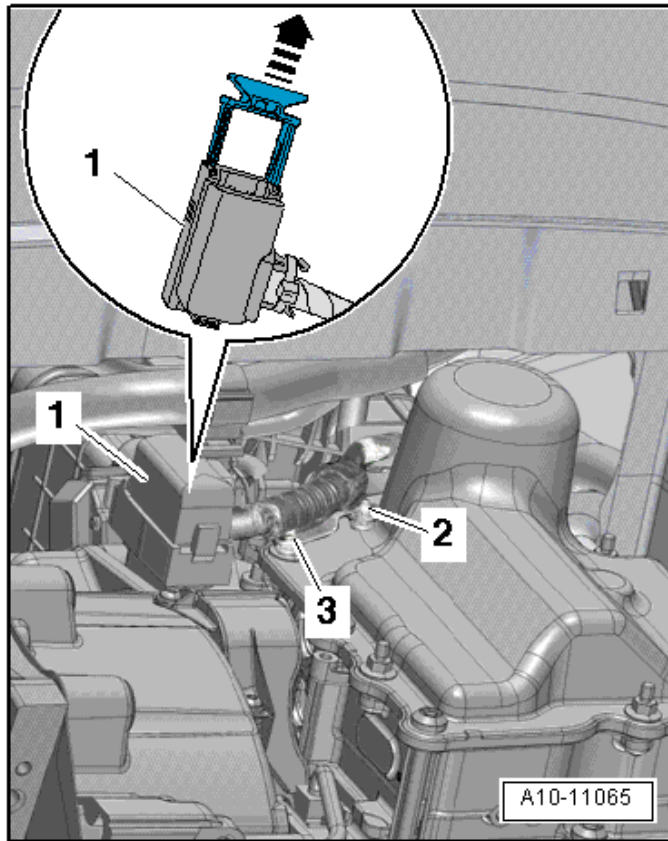


- If equipped remove the cover over the engaging levers.

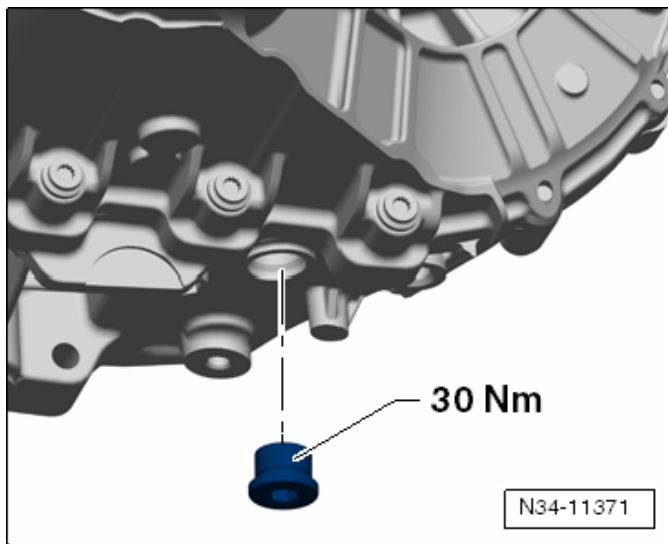
⚠ CAUTION

Risk of damaging transmission components.
Never touch the contacts in the transmission connector. The electrostatic discharge will damage the control module and Mechatronic.

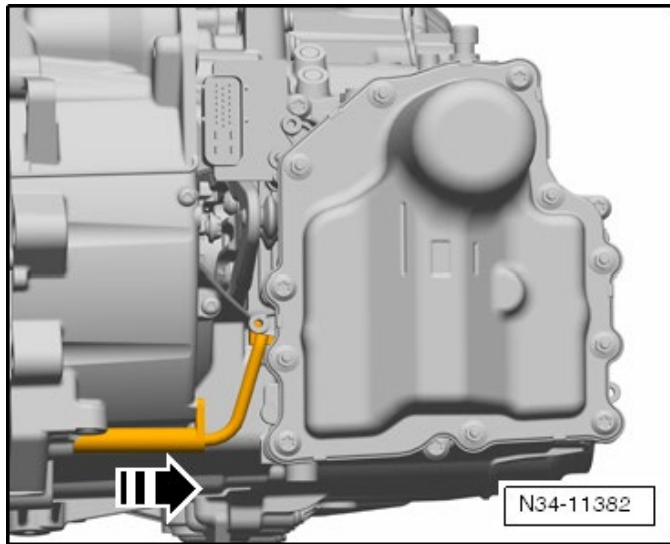
- To electrostatically discharge, touch the Ground (GND) (without glove).



- Disconnect the connector <1> for the DSG Transmission Mechatronic -J743- by pulling the locking mechanism upward in direction of <arrow>.
- Remove the nuts <2 and 3> from the double bolts.
- Remove the bracket for the electric wires from the transmission.



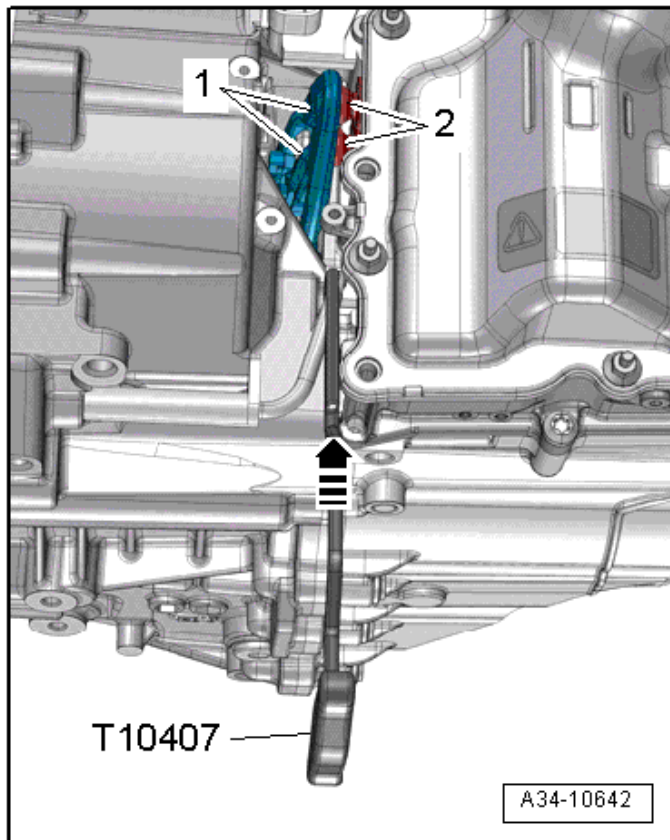
- Place the Used Oil Collection and Extraction Unit -SMN372500- underneath.
- Remove the drain plug from the transmission.
- Drain the fluid and then install the drain plug and tighten it to 30 Nm.



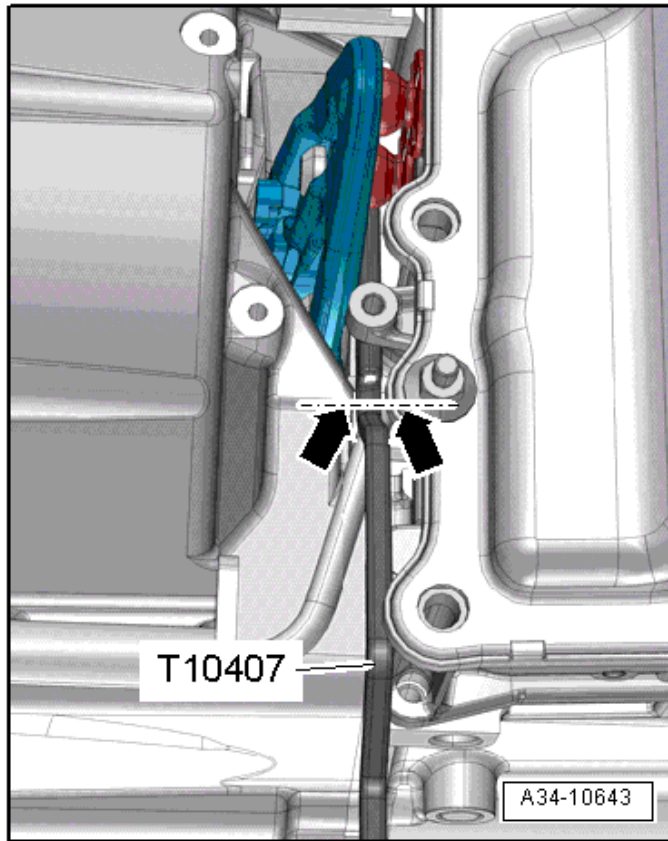
- Unclip Transmission Input Speed Sensor 3 -G641- carefully from the housing in direction of <arrow> with a screwdriver.

NOTE

In the following work step, both engaging levers on the dual clutch are lifted by the Mechatronic valve lifters. Otherwise the engaging levers will jam the Mechatronic by the lifters and then it is not possible to remove the Mechatronic



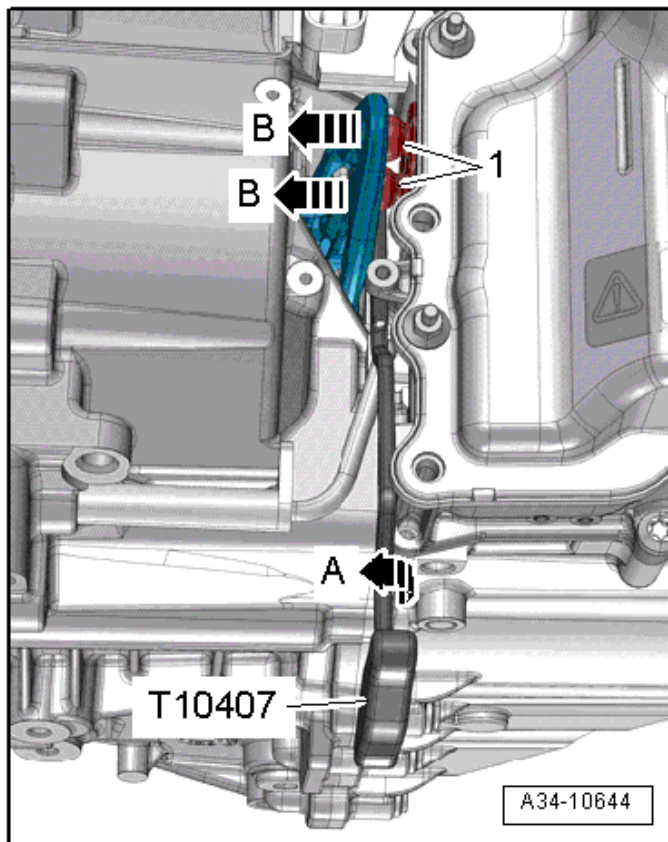
- Insert the Assembly Lever - Mechatronic -T10407- under the lifter <2> between the transmission housing and both engaging levers <1> in direction of <arrow>, as illustrated.



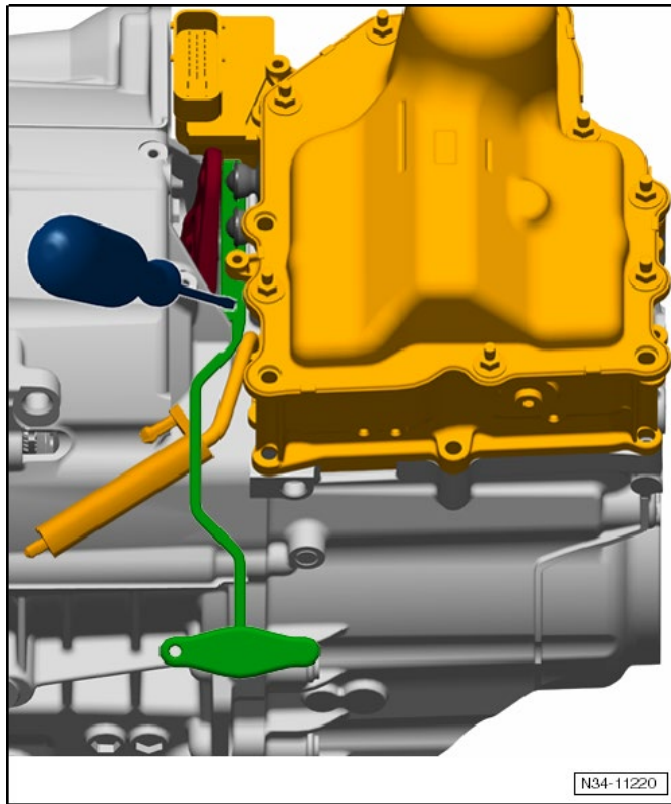
- Insert the Assembly Lever - Mechatronic -T10407- just far enough until the groove on it lines up with the rib on the housing <arrows>, as illustrated. Do not insert it all the way.

NOTE

The back of the Assembly Lever must touch the transmission housing.



- Turn the Assembly Lever - Mechatronic -T10407- counter-clockwise 90° <arrow A>, in order to lift the engaging lever off the lifters <1> in direction of <arrow B>.



- Hold the Assembly Lever - Mechatronic -T10407- against the transmission housing with a screwdriver to prevent it from slipping while turning it.

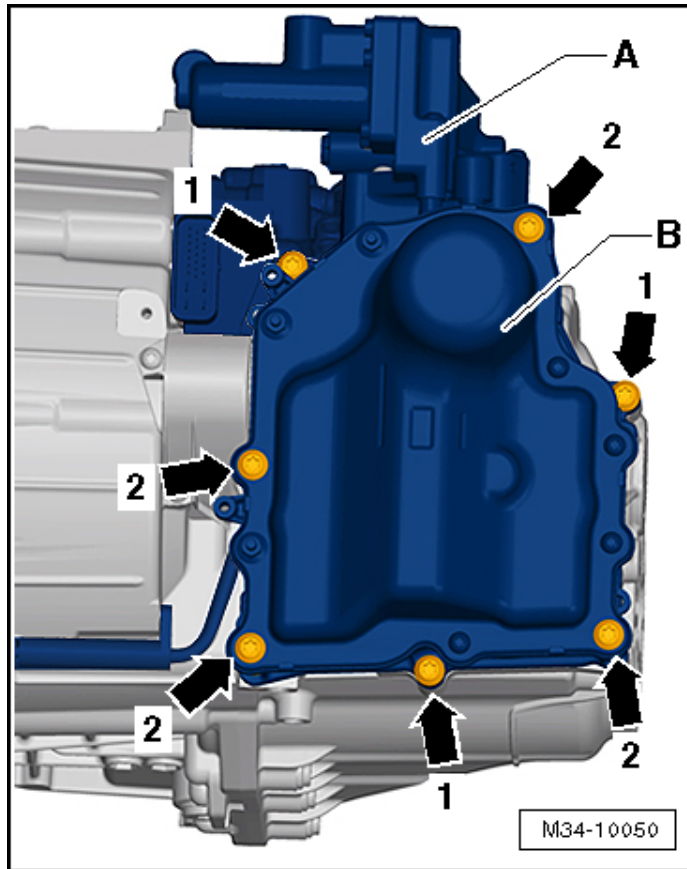
NOTE

- The Assembly Lever - Mechatronic -T10407- remains inserted between the engaging levers and transmission housing while removing and installing the Mechatronic.
- Press the Assembly Lever - Mechatronic - T10407- against the transmission housing, if necessary.

CAUTION

Risk of damaging transmission components.

- Touch or remove the DSG Transmission Mechatronic -J743- only after having electrostatically discharged yourself by touching a grounded metal object (for example, bare handed with a ground).
- Never touch the contacts in the transmission connector. The control module as well as the Mechatronic can become damaged by the static discharge.



CAUTION

Risk of damaging the DSG Transmission Mechatronic -J743-

- Do not loosen the bolts on the cover for the DSG Transmission Mechatronic -J743-.
- Place the removed DSG Transmission Mechatronic -J743- so that no fluid can leak out.
- Do not remove the valve block from the Mechatronic.

- Remove the bolts <arrows 2> diagonally.
- Remove the bolts <arrows 1>.

TIP

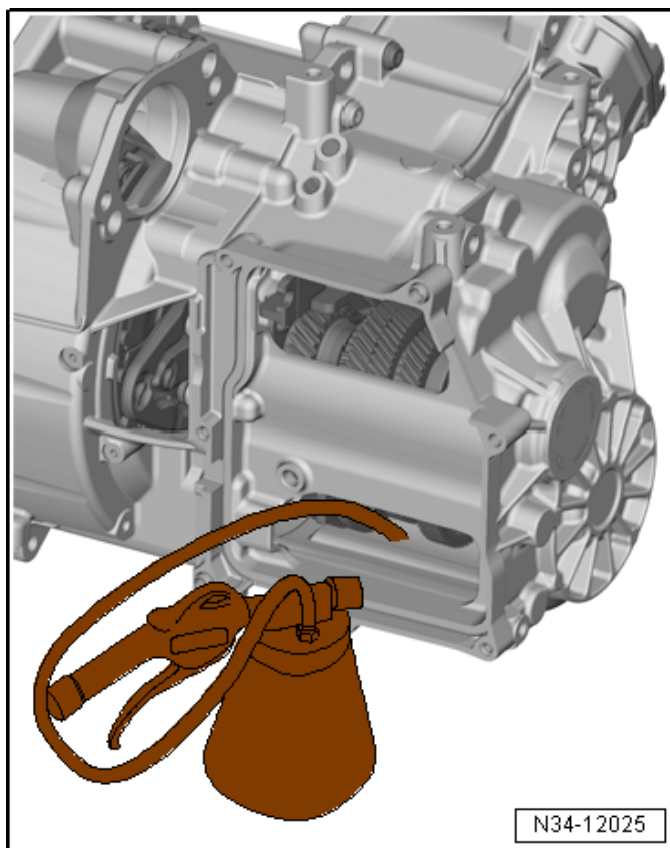
The bolts are two different lengths. Pay attention to the installation position.

- Remove the Mechatronic and valve block <A> from the transmission.

CAUTION

Risk of damaging the DSG Transmission Mechatronic -J743-

- It may not be possible to remove the Mechatronic.
- In this case, the gear selector is caught on the top of the Mechatronic on the left side.
- Do not use increased force to remove the Mechatronic.
- In this case, it will be necessary to manually move the Mechatronic into its removal position. Refer to: ELSA Repair Manual → Chapter "Mechatronic, Moving into Removal Position by Hand".



NOTE

Before installing the Mechatronic the rest of the oil must be extracted from the transmission.

- Extract the remaining oil from the transmission using the Suction Pump -VAS5226-.

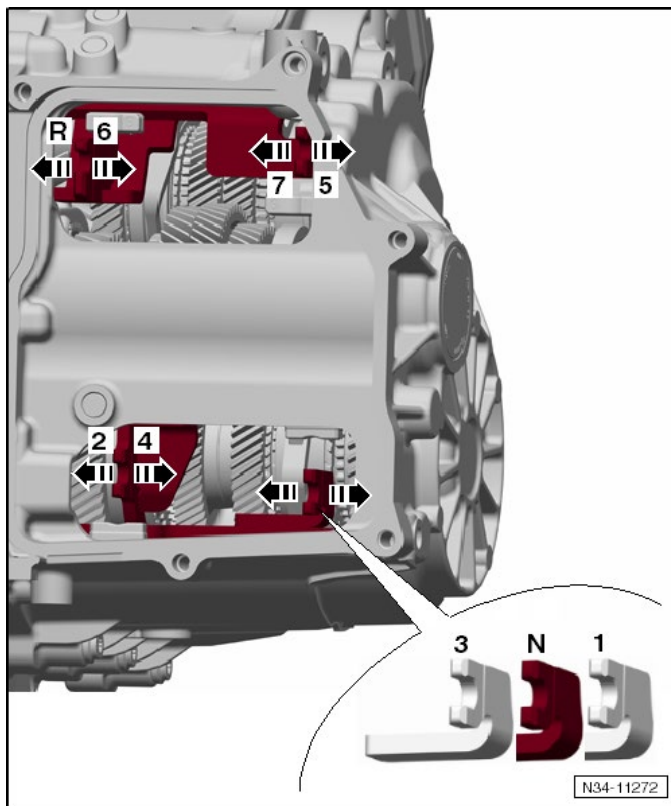
Prepare new mechatronic for installation:

CRITICAL REPAIR STEPS

 **STOP!** 

These steps must be followed precisely to ensure a successful repair

- Make sure all shift forks are in the center position before installing the DSG Transmission Mechatronic -J743-.
- The following illustration shows the center position as -N-.
- In this position, there is no gear engaged and neutral is selected.
- Check each of the 4 shift forks by hand first.
- Each shift fork has three positions:
 - Gear engaged
 - Neutral -N-
 - Gear engaged
- Move all four shift forks one time into each position <arrows> one after the other.
- After doing this, move the shift forks back into the center position -N-.



N - Neutral

R - Reverse Gear

1 - First Gear

2 - Second Gear

3 - Third Gear

4 - Fourth Gear

5 - Fifth Gear

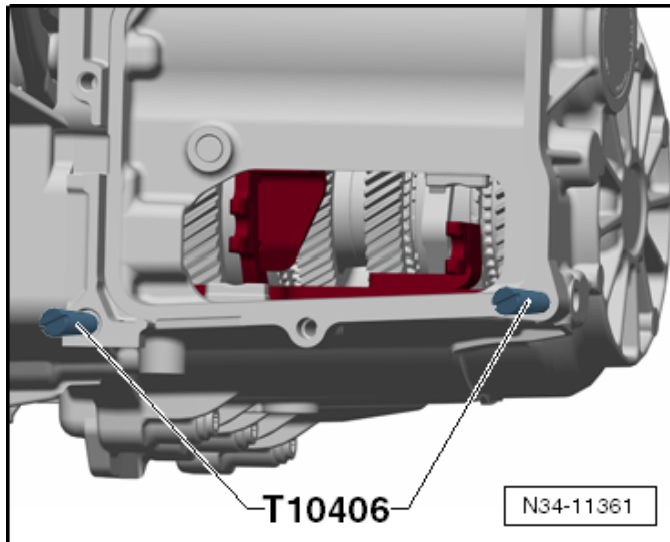
6 - Sixth Gear

7 - Seventh Gear

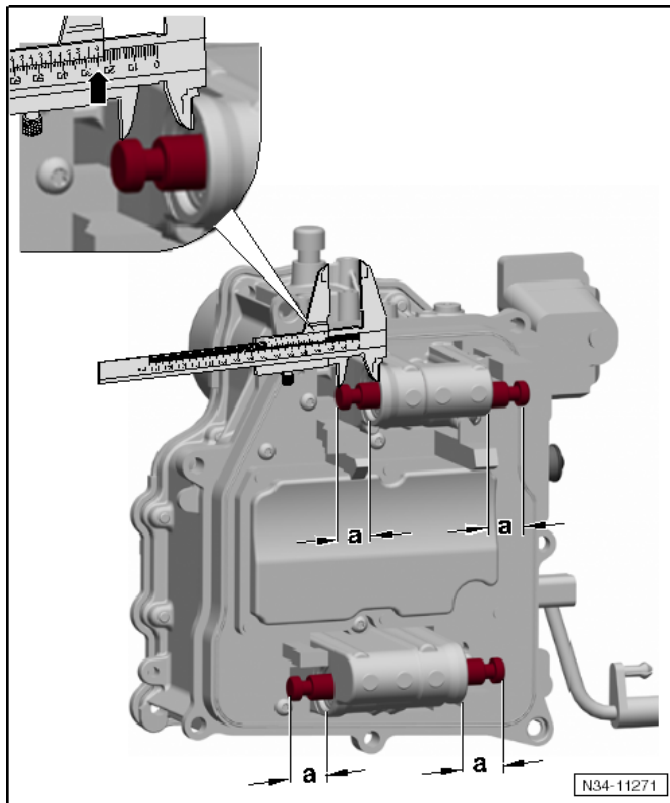
NOTE

The fluid in a new Mechatronic is already filled correctly.

The new Mechatronic is already sealed with the Protective Cap - 0AM 325 120 A-.



- Clean the sealing surface, which the Mechatronic will be touching later.
- Install the Guide Bolt - Mechatronic -T10406- hand tight.



Adjust the gear selector:

CAUTION

Risk of damaging the DSG Transmission Mechatronic -J743-.

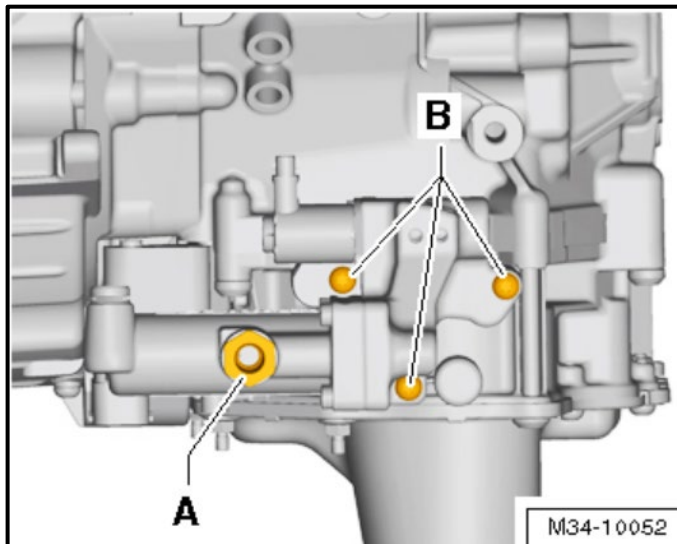
Do not pry out the plunger on the sensors.

CRITICAL REPAIR STEPS

STOP! STOP!

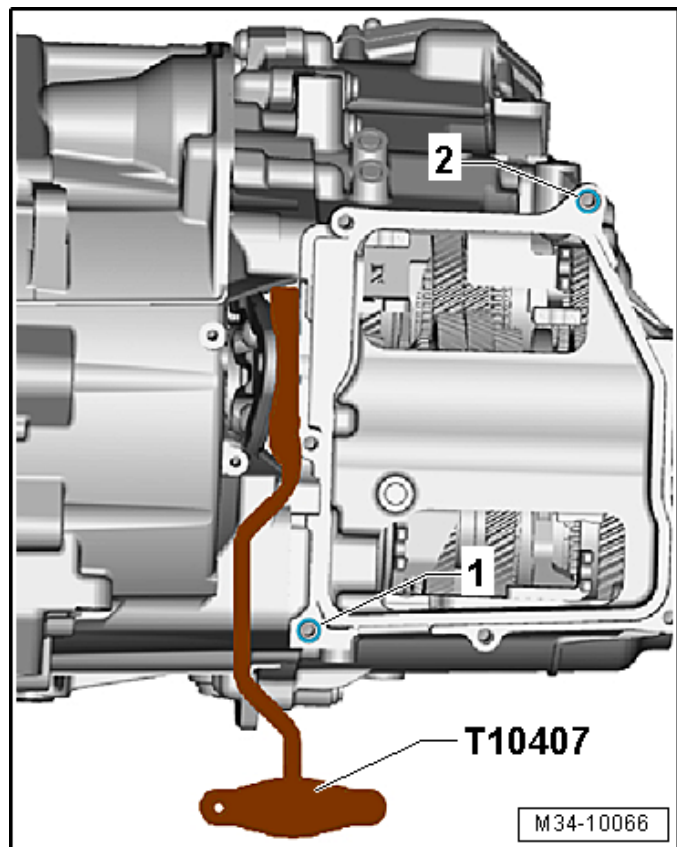
These steps must be followed precisely to ensure a successful repair

- The gear selectors should be moved in and out a few times before setting the correct position to ensure the gear selectors do not stick.
- Move the four gear selectors on the back of the DSG Transmission Mechatronic -J743- into the correct positions.
- Correct position: $a = 25 \text{ mm}$.

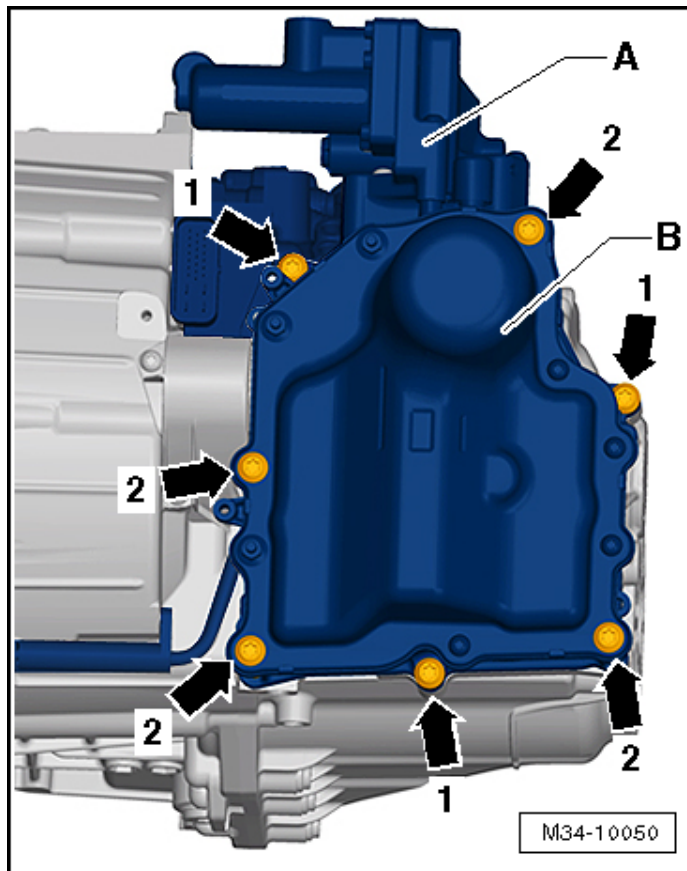


Installing new mechatronic:

- If bolt and washer <A> is missing from new Mechatronic, transfer bolt and washer from old Mechatronic to new Mechatronic. Torque bolt <A> to 15 Nm.
- Do not open the plugs securing the valve block to the Mechatronic.



- Clean the sealing surface on the Mechatronic.
- The seal on the DSG Transmission Mechatronic -J743- must fit completely into the groove.
- The Assembly Lever -T10407- is inserted between the engaging lever and the transmission housing.
- The two alignment sleeves <1 and 2> for centering the Mechatronic on the transmission housing must be installed.



- Mount the Mechatronic together with the valve block <A>. Make sure that the Mechatronic gear positions are not pressed out of their position.

Part Number	Part Description
WHT-001-922	M8x90 bolt (x4)
01X-301-127-C	M8x35x30 bolt (x3)

- Install new bolts <arrows> in the following sequence:

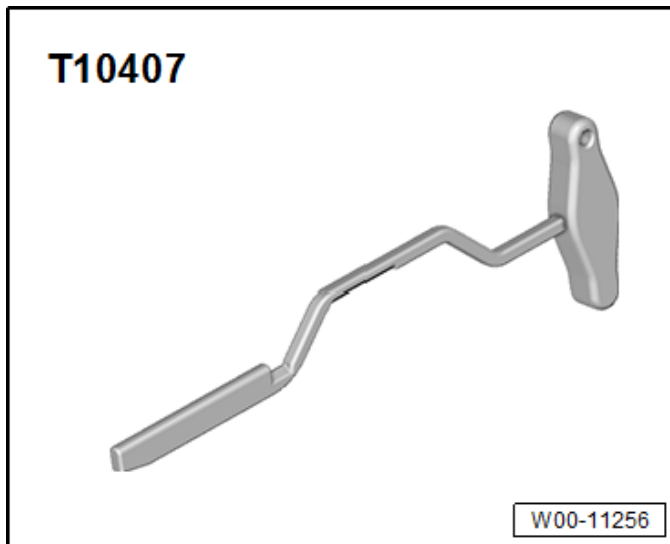
Step	Bolts	Specification
1	<arrows 1>	Install the bolt hand-tight.
2	Remove the Guide Bolt - Mechatronic -T10406-	
3	<arrows 2>	Install the bolt hand-tight.
4	<arrows 1 and 2>	10 Nm diagonally

CAUTION

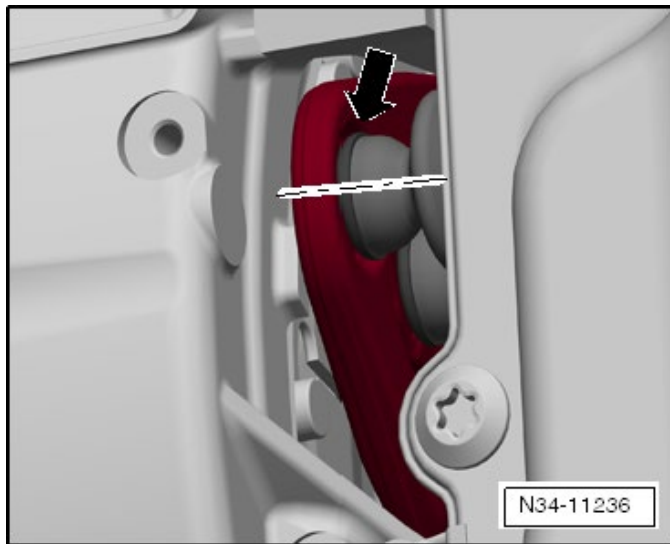
There is a risk of damaging the clutches.

If the engaging levers hit the Mechatronic clutch positioner, they will get overloaded and the clutch self-adjustment will be active. It is not possible to reset the self-adjustment.

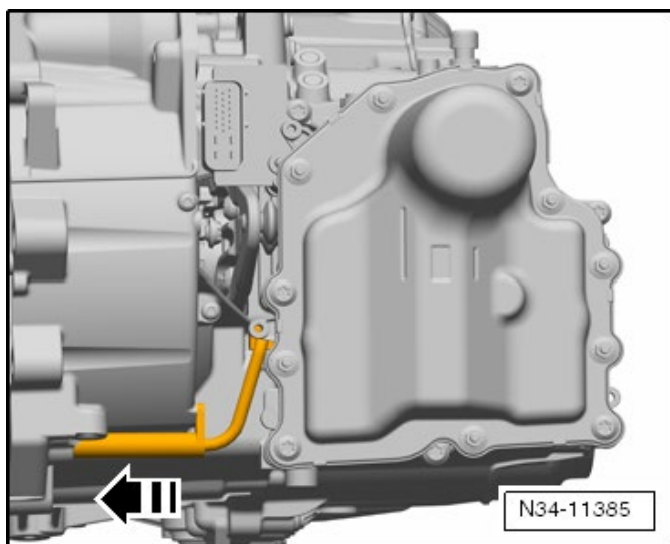
- Both clutch positioners must fit correctly into the mounts on the clutch engaging levers.
- The rubber grommets on the clutch positioners must not be damaged.
- The rubber grommets must seal the Mechatronic tight.



- Turn the Assembly Lever - Mechatronic -T10407- slowly and carefully clockwise and remove it.



- The lifters must move slowly into the mounts.
- Pull the lifters far enough until they fit correctly in the mounts.



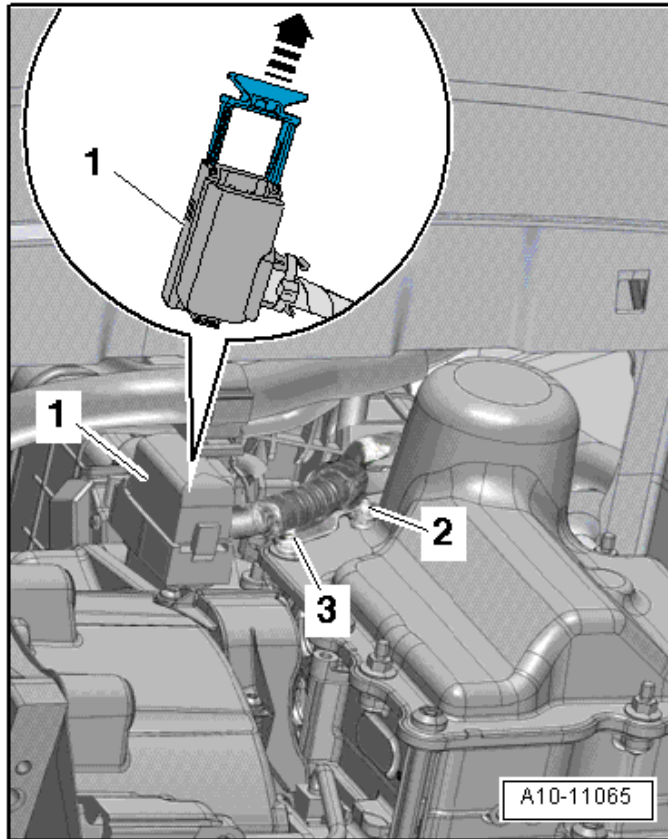
- Install the Transmission Input Speed Sensor 3 -G641-.
- Be careful of the sensor. The clip must not be damaged.
- The sensor must fit completely in its retainer and must be touching the transmission housing. Replace the Mechatronic if the sensor is loose or if the clip is broken.

CAUTION

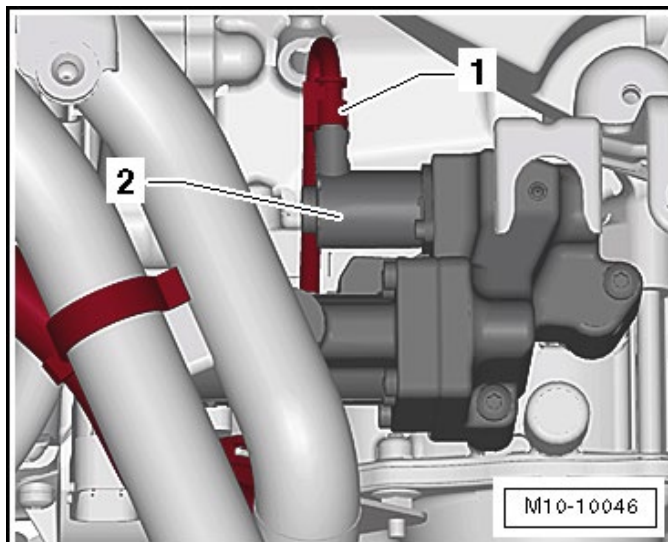
Danger of causing damage to transmission components.

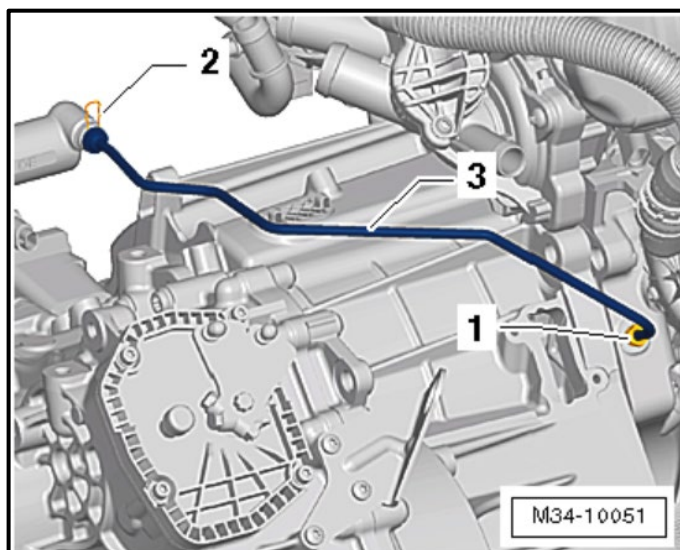
Never touch the contacts in the transmission connector. The control module as well as the Mechatronic can become damaged by the static discharge.

- To electrostatically discharge, touch the ground (without glove). Do not touch connector or »open« electronic components directly.
- Attach the front bracket <A> to the transmission <arrows> and torque nuts <2> and <3> to 9 Nm.
- Connect and lock the Mechatronic connector.



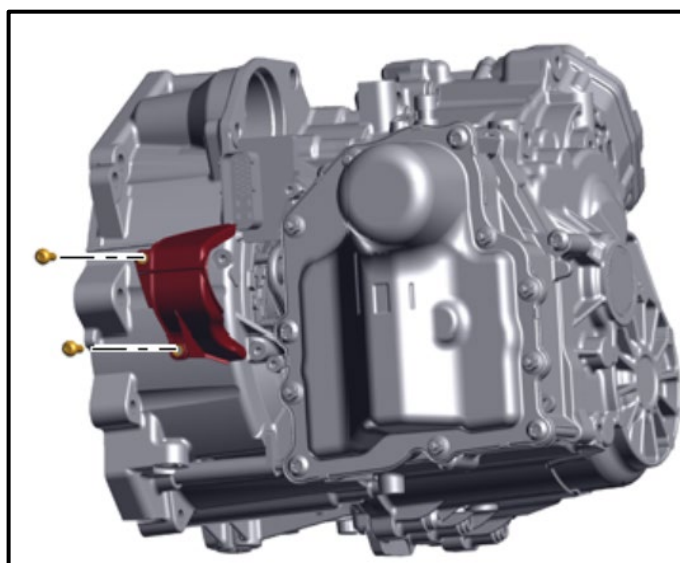
- If a protective cap is located in the switch valve connector <2>, it must be removed before attaching the connector <1>.
- Connect the connector <1> to the valve <2> on the Mechatronic and attach the wiring harness to the front bracket on the transmission.





Reinstall hydraulic line:

- Check O-ring for damage. If the O-ring is damaged, the hydraulic line must be replaced.
- Install the hydraulic line <3> on the engine and valve block/Mechatronic.
- Push the clamps <2> onto the the valve block/Mechatronic.
- Lightly pull on the hydraulic pipe <3> to ensure it is secured.
- Tighten the bolt <1> on the engine for the hydraulic line to 18 Nm. (If loosened)



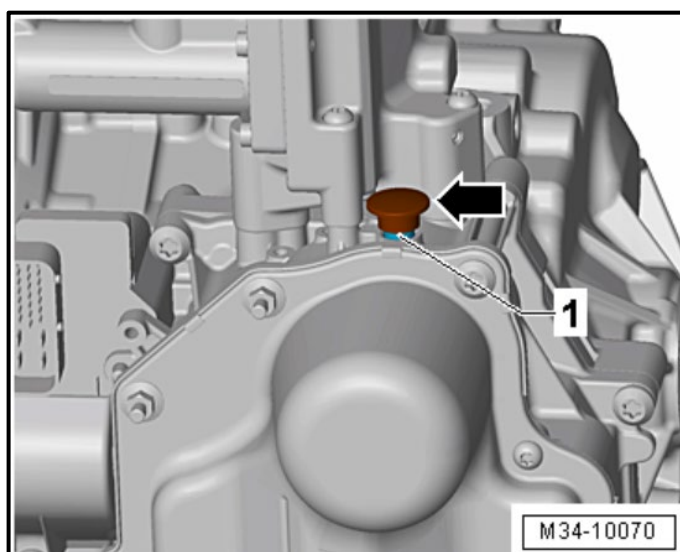
Install cover (if equipped):

- If equipped install the cover over the engaging levers and torque bolts to 8 Nm.

⚠ CAUTION

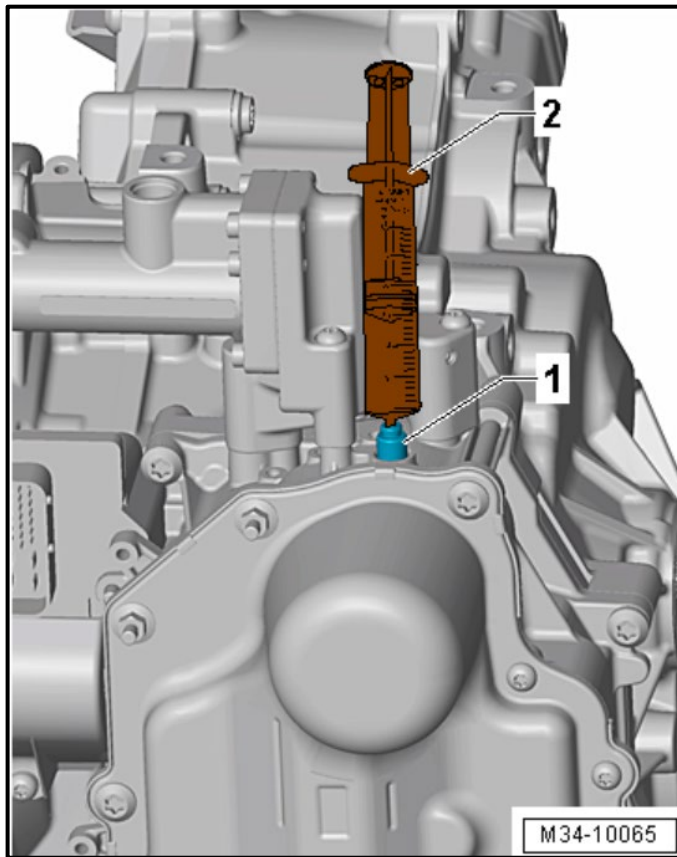
Risk of damaging transmission components.
Never touch the contacts in the transmission connector. The electrostatic discharge will damage the control module and Mechatronic.

- To electrostatically discharge, touch the Ground (GND) (without glove).



Top off hydraulic fluid (if necessary):

- If more than 20 ml of hydraulic fluid leaked out, then at least 30 ml (may need more depending on how much leaked out) of hydraulic fluid must be added.
- Remove the Protective Cap <arrow> from the vent <1> on the DSG Transmission Mechatronic -J743-.



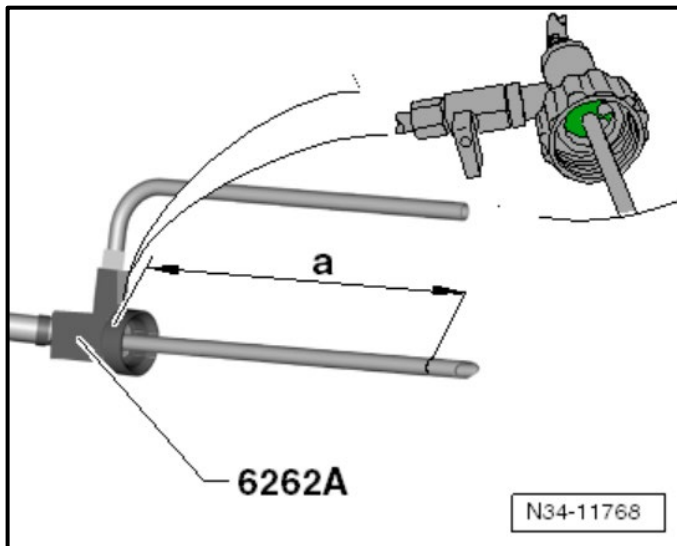
- If more than 20 ml of hydraulic fluid leaked out, then at least 30 ml (may need more depending on how much leaked out) of hydraulic fluid must be added via the vent <1> using the disposable syringe <2>.
- Fill the new disposable syringe with at least 30 ml hydraulic fluid.

Part Number	Part Description
G -004-000-M2	Hydraulic Fluid

⚠ CAUTION

Risk of causing damage to the Mechatronic.

- Always use a new container to comply with cleanliness requirements.
- Note the hydraulic fluid expiration date.
- Always use a new disposable syringe from the Repair Kit -5C0 998 152-. The disposable syringe must not be reused.



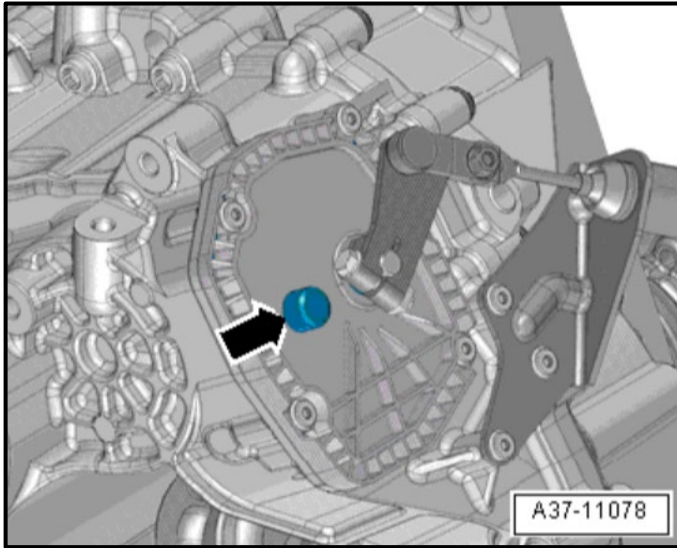
Fill transmission fluid:

ⓘ NOTE

- It may be necessary to shorten the bleed pipe on the Adapter For Oil Filling -VAS6262A-
- Shorten the pipe to dimension <a>. This assures the pipe on the Oil Filler -VAS6262A- will not touch the bottom on some oil containers.
- Dimension <a> = 210 mm and is measured starting from the shaft (the green surface) on the Adapter For Oil Filling -VAS6262A-.
- The pipe can be cut using a pipe cutter (-VAS6056/2, for example).

NOTE

- The transmission fluid is a permanent filling.
- It is not possible to check the transmission fluid level.
- If the transmission is leaking, find the cause and correct it.
- After that it is necessary to drain all the transmission fluid and fill it again.
- Fill the fluid exactly to the specified quantity.
- This assures the transmission is filled correctly.
- Underfilling or overfilling the transmission fluid will cause the transmission to malfunction.



- Remove the bleed cap <arrow> next to the transmission gearshift lever.

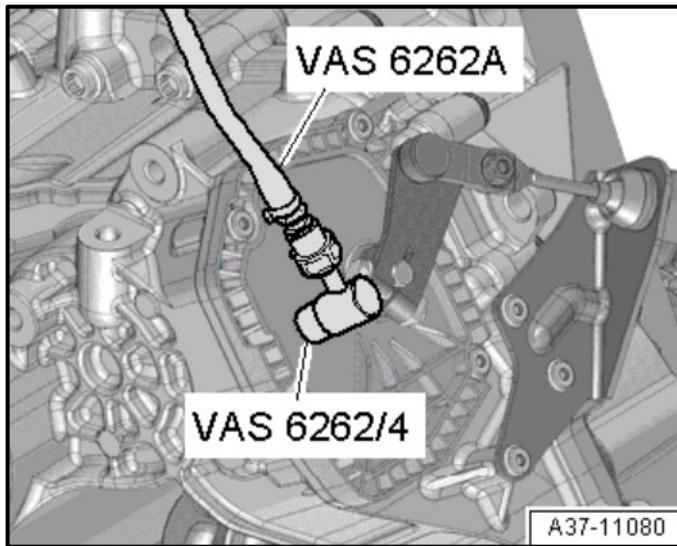


- Shake the bottle of transmission fluid before opening.
- Install the Adapter -VAS6262/7- on the bottle.
- Hold the container so that no fluid can run into the filling hose.

CAUTION

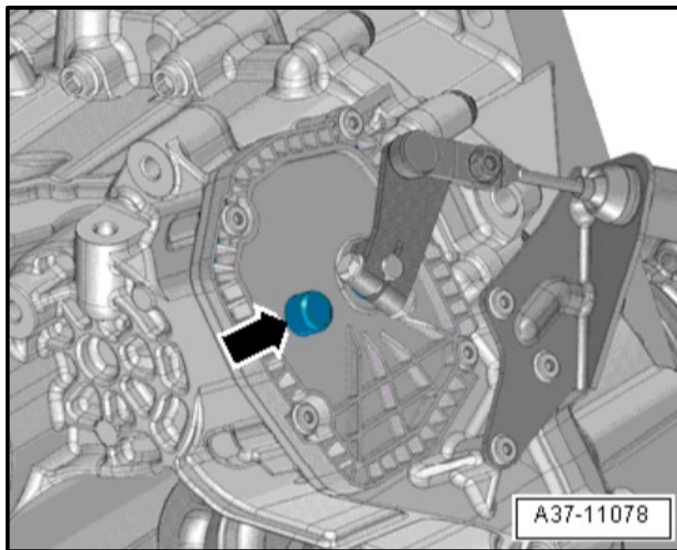
Danger of causing damage to the transmission.

- Using other fluids can cause malfunctions or transmission failure.
- The Oil Filler -VAS6262A- with the Adapter For Oil Filling -VAS6262/4- must be clean and transmission fluid must not be mixed with another fluid!

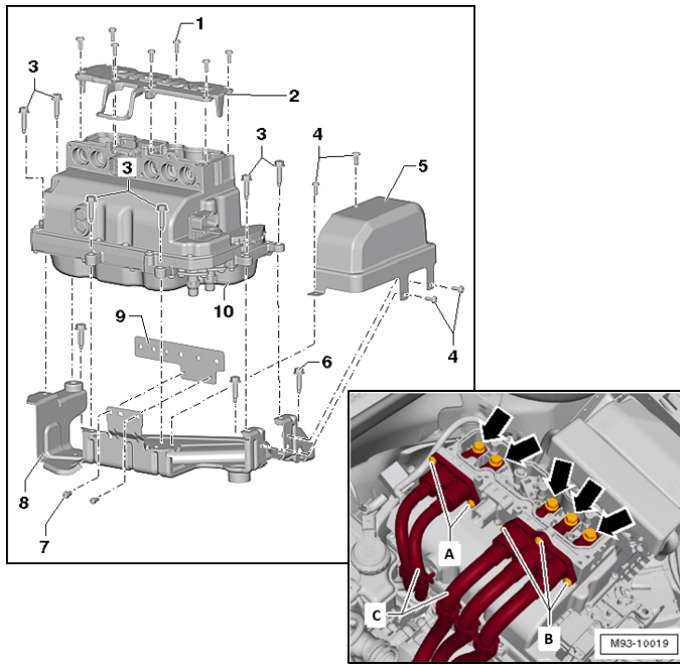


- Connect the Adapter For Oil Filling -VAS6262/4- to the filling hose and mount it on the bleeder on the transmission.
- Fill the transmission with **2.0 L** of transmission fluid.

Part Number	Part Description
G -055-512-A2	Transmission Fluid

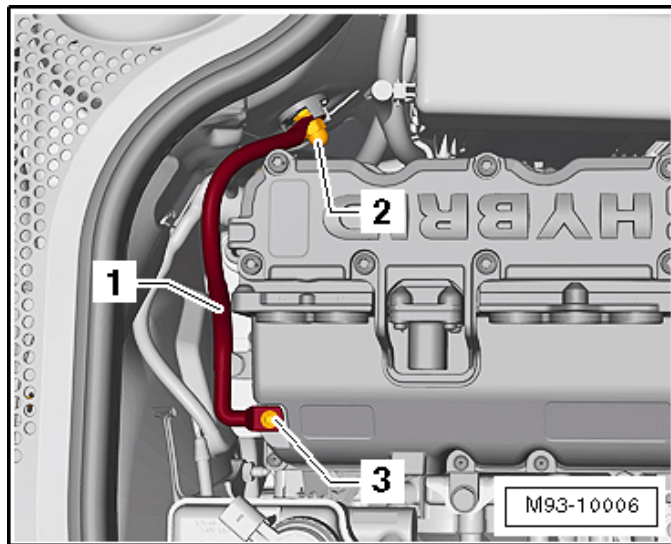


- Remove the Oil Filler -VAS6262A- after filling. Wipe the area around the bleed hole with a clean cloth and install the cap <arrow>.



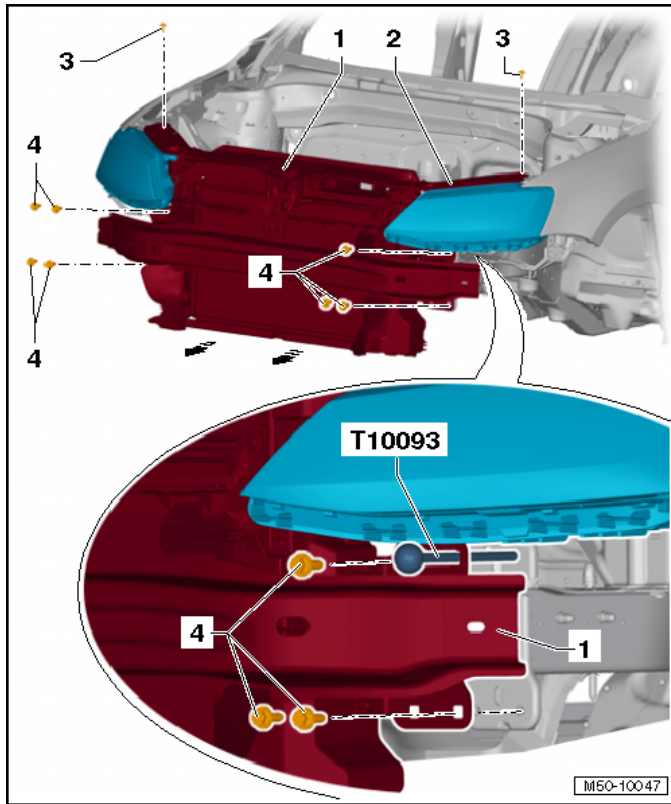
Reinstall the Electric Drive Power and Control Electronics -JX1-:

- Installation is the reverse order of removal.
- Torque bolts as follows:
 - Bracket for <8> to 9 Nm.
 - Threaded connections <A and B> to 5 Nm
 - High-voltage cables <arrows> to 20 Nm.
 - -JX1- bolts <3> to 20 Nm.
 - Terminal 30/31 connection to 20 Nm.
 - Cover bolts <4> to 9 Nm.
 - Cover bolts <1> to 7 Nm.



Install potential equalization cable:

- Attach cable <1> to the -JX1-.
- Install bolt <3> and torque to 9 Nm.

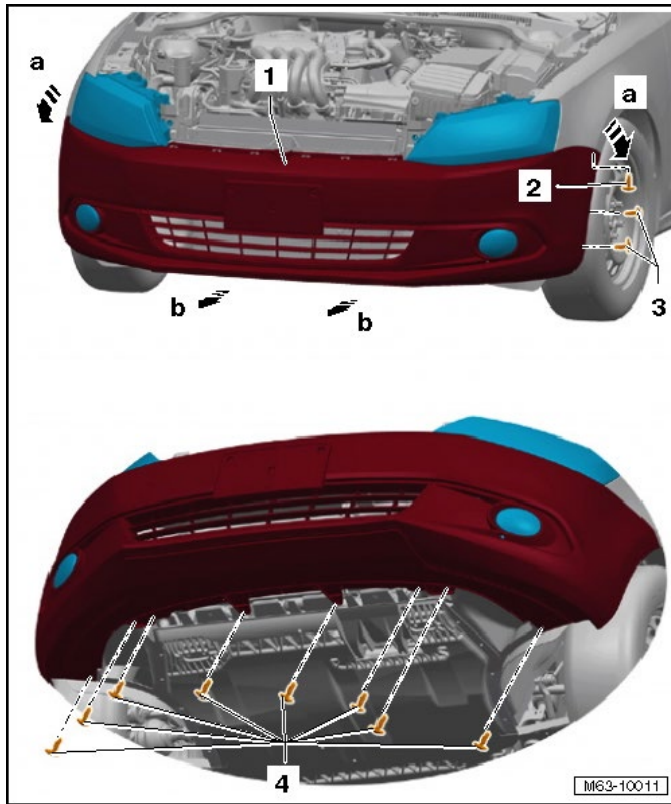


Take lock carrier out of service position:

- Push the lock carrier with the attachments <1> onto the -T10093- on the longitudinal members.
- Install the bolts <3 and 4>, but do not torque.
- Align the lock carrier with the attachments <1> on the longitudinal members and between the fenders.
- Torque bolts <3> to 8 Nm.
- Torque bolts <4> to 60 Nm.

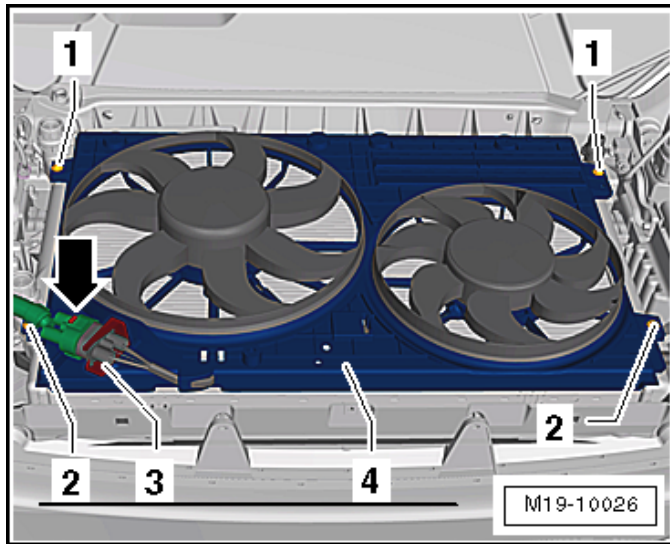
NOTE

- Make sure that the charge air cooler pressure hoses are re-installed correctly.
- The hoses and lines must not be pinched.
- Reconnect connectors (if necessary).
- Reconnect charge pressure hoses (if necessary).



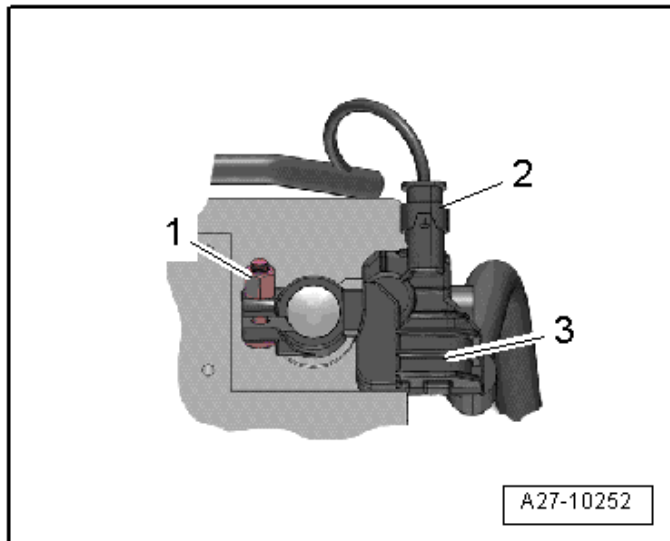
Reinstall front grill and bumper cover:

- Installation is the reverse order of removal.
- Torque fasteners as follows:
 - Front grill screws - 2 Nm.
 - Screw <2> - 2.7 Nm.
 - Screws <3 and 4> - 2 Nm.



Reinstall fan shroud:

- Installation is the reverse order of removal.
- Torque bolts <1 and 2> to 5 Nm.

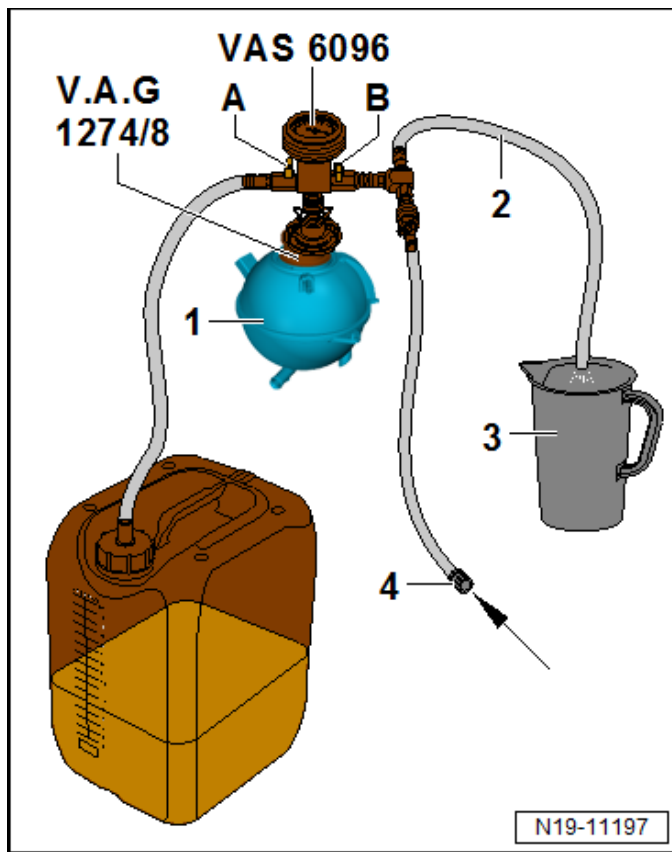


Reconnect 12V battery:

- Disconnect the connector <2> from the Battery Monitoring Control Module -J367- <3> (if equipped).
- Attach the battery ground cable clamp by hand to the battery negative terminal and torque the nut <1> to 6 Nm.
- Reconnect the connector to the Battery Monitoring Control Module -J367- (if equipped).
- Cycle the ignition off and back on.
- Set clock to local time.
- Activate the convenience open/close functions.
- Check the DTC memories of all the control units and erase under-voltage faults if necessary.

NOTE

- After connecting the battery and switching on the ignition, the ASR/ESP Control Lamp -K155- and Electromechanical Power Steering Indicator Lamp light up continuously. The indicator lamps switch off automatically after driving a short distance (less than 100 meters). This activates Steering Angle Sensor -G85-.



Fill the coolant:

- Fill the coolant according to the ELSA Repair Manual: *Repair Manual > Engine > 4-Cylinder Direct Injection (1.4L Engine, 4V, EA 211, Turbocharger, Hybrid) > 19 Cooling System > Coolant System/Coolant > Coolant, Draining and Filling*

Re-energize the high voltage system:

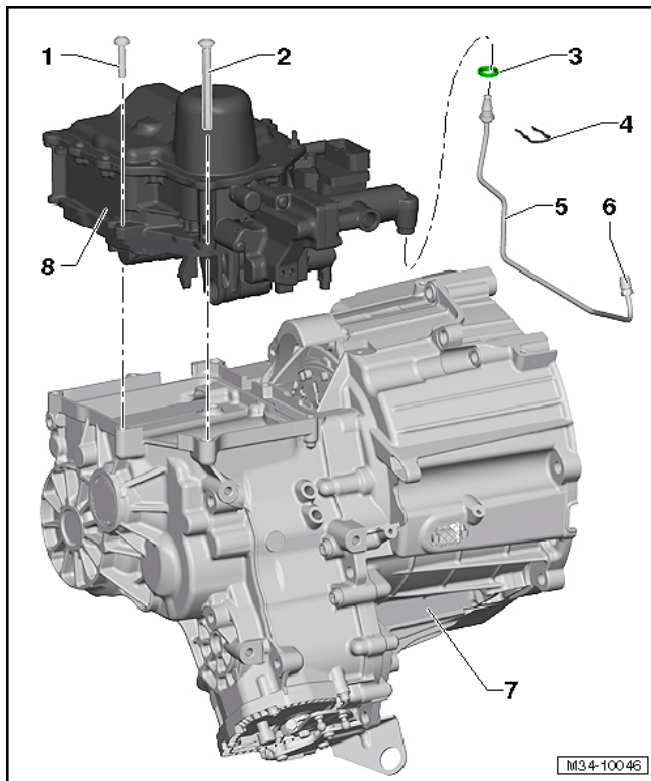
- Restore the previous ODIS session.
- Select the “Test Plan” tab.
- Select the “Select Individual Tests” button.
- Select the test plan by following the path:
 - Body (Repair Group 01; 27; 50 through 97)
 - Interior/Exterior Electrical System (Repair group 01; 27; 50 - 97)
 - 01 – OBD
 - 8C - hybrid battery management | J840
 - 8C - hybrid battery energy management, functions
 - Re-energizing the high-voltage system
- Pay close attention to the test plan instructions when re-energizing the high-voltage system.

NOTE

The wording of the ODIS test plans may differ from these instructions.

Reinstall remaining components:

- Reassemble the damper cover in the reverse order of removal.
- Reinstall the noise insulation in the reverse order of removal.



Perform mechatronic basic settings via the ODIS test plan:

- Observe the following when performing the basic settings:
 - All faults have been cleared through Vehicle OBD.
 - High Voltage connectors must have an audible click when secured.
 - Parking brake is in the “OFF” position.
 - All 4 passenger doors and hood remain closed during the basic settings.
 - Trunk is OPEN with a battery maintainer installed on the 12v battery.

Perform the following to complete the KO clutch bleed test plan:

Step 1:

- Using ODIS, go to AW01 ECM > Guided Functions > Bleed Disengaging Clutch > then select option (1) Ventilation and follow the Guided Functions steps in the test plan.
- Once the test is completed, the test plan will usually exit out to the main control module OBD screen of ODIS.

Step 2:

- Using ODIS, go to AW01 ECM > Guided Functions > Bleed Disengaging Clutch > then select option (2) Air Entrapment and follow the Guided Functions steps in the test plan.
- If fault P309D sets after the basic setting procedure, Step 1 and 2 may need to be repeated up to three times.

Proceed to Section D

Section D – Campaign Completion Label

Install Campaign Completion Label

- Fill out and affix Campaign Completion Label, part number CAMP 010 000, next to the vehicle emission control information label.

 **TIP**

Ensure Campaign Completion Label does not cover any existing label(s).

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.