# **Service Action Code: 34H8**

Subject	DSG Gearbox		
Release Date	May 01, 2019		
<b>Revision Summary</b>	Updated work procedure, torque specifications updated on page 43 for ball joint nuts.		
Affected Vehicles	U.S.A. & CANADA: Certain 2017 MY Audi A3 Sedan, A3 Cabriolet & TT Coupe		
	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.		
	✓ Campaign status must show "open."		
	<ul> <li>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.</li> </ul>		
Problem Description	Over time, affected vehicles may develop gearbox noise due to an insufficient supply of oil within the gearbox.		
<b>Corrective Action</b>	Replace the DSG gearbox.		
Parts Information	Parts allocation did not occur. Dealers should place orders by VIN for affected vehicles currently in dealer inventory. Dealers scheduling customer vehicle repairs must place their parts order by VIN and ensure that parts are on-hand when the vehicle arrives at the dealership for the scheduled repair appointment.		
Code Visibility	On or about May 25, 2017, affected vehicles were listed on the Inventory Vehicle Open Campaign Action report under My Dealership Reports (found on <u>www.accessaudi.com</u> & OMD Web). A list was not posted for dealers who did not have any affected vehicles.		
	On or about May 25, 2017, this campaign code showed open on affected vehicles in Elsa.		
	On or about May 25, 2017, affected vehicles were identified with this campaign code in the VIN Lookup tool at <u>www.audiusa.com.</u>		
Owner Notification	Owner notification took place in May, 2017. Owner letter examples are included in this bulletin for your reference.		
Campaign Expiration Date	This campaign expires on <b>December 31, 2020.</b> 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 parts and labor cost associated with this repair will apply.		
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.		
	Dealers must ensure that every affected inventory vehicle has this campaign completed <u>before</u> <u>delivery to consumers</u> .		

### **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 <u>open on the day of repair</u> 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: Fax repair order to Warranty at (905) 428-4811.

Service Number	34H8		
Damage Code	0099		
Parts Vendor Code	002		
Claim Type	Sold vehicle: 7 10 Unsold vehicle: 7 90		
Causal Indicator	Mark DSG Gearbox as causal part		
Vehicle Wash/Loaner	Do not claim wash/loaner under this action		
Criteria I.D.	8V		
	Replace DSG Gearb Labor operation: Quantity 1.00 Per ETKA/ELSA -OR- Quantity 1.00 Per ETKA/ELSA	box (MY 2017 A3) 3435 23 99 Part Number 0D9300014Q 00K Per ETKA Part Number 0D9300014N 005 Per ETKA	710 T.U.          Description         DSG Transmission         All required hardware/fluids per Elsa         Description         DSG Transmission         All required hardware/fluids per Elsa
Criteria I.D.	FV		
	Replace DSG Gearbox (MY 2017 TT)         Labor operation:       3435 24 99         Quantity       Part Number         Description		Description
	1.00 Per ETKA/ELSA	0D9300014P 00B Per ETKA	DSG Transmission All required hardware/fluids per Elsa
		IGILINA	An required hardware/hulds per Elsa

<MONTH YEAR>

<CUSTOMER NAME> <CUSTOMER ADDRESS> <CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <VIN>

### Subject: Service Action 34H8 – DSG Gearbox Certain 2017 Model Year Audi A3 Sedan & TT Coupe

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 model year Audi A3 Sedan & TT Coupe vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue?	Over time, affected vehicles may develop gearbox noise due to an insufficient supply of oil within the gearbox.	
What will we do?	Your authorized Audi dealer will replace the DSG gearbox in your vehicle. This work will take about a day to complete and will be performed for you free of charge.	
What should you do?	Because your dealer must special order the parts needed to complete this repair on your vehicle, please call your authorized Audi dealer as soon as possible to schedule this repair. Your dealer will ensure that the correct parts are available at the dealership when you arrive for your scheduled appointment. For your convenience, you can also visit <u>www.audiusa.com</u> and click on the "Find a Dealer" link to locate a dealer near you and 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.	
	This service action will be available for you <u>free of charge <b>only until December 31</b>, <b>2020.</b> If you wish to have this service performed after that date, your dealer's normal parts and labor cost associated with this repair will apply.</u>	
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 <u>www.audiusa.com</u> .	
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 <b>Recall/Service Campaign Lookup</b> tool at <u>www.audiusa.com</u> 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: <VIN>

### Subject: Service Action 34H8 – DSG Gearbox Certain 2017 Model Year Audi A3 Sedan, A3 Cabriolet & TT Coupe

Dear Audi Owner,

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What should you do?	Because your dealer must special order the parts needed to complete this repair on your vehicle, please call your authorized Audi dealer as soon as possible to schedule this repair. Your dealer will ensure that the correct parts are available at the dealership when you arrive for your scheduled appointment.
	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.
	This service action will be available for you <u>free of charge <b>only until December 31</b></u> . <u><b>2020</b></u> . If you wish to have this service performed after that date, your dealer's normal parts and labor cost 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 Relations Monday through Friday from 8AM to 8PM EST at 1-800-822-2834 or via our "Contact Audi Canada" page at <u>www.audi.ca.</u>

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

# **Campaign Work Procedure**

# **I**NOTE

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.

# **Required Parts**

Quantity	Part Number	Part Description	
	0D9 300 014N 005	DSG Transmission (per ETKA)	
1	0D9 300 014Q 00K	DSG Transmission (per ETKA)	
	0D9 300 014P 00B	DSG Transmission (per ETKA)	
Per ETKA/ELSA	Per ETKA	All required hardware/fluids per Elsa	

Note: Do not use remanufactured parts on new vehicle inventory vehicles.

**Required Tools** 



A CONTRACT	Engine and Gearbox Jack -VAS6931-		Transmission Support - Mounting Plate 42A -3282/42A-
	Hose Clamps - Up To 25 mm -3094-	States of the second se	Tensioning Strap -T10038-
	Engine Bung Set -VAS6122-	Contraction of the second	Insert Tool - 18mm -T10179-
	Socket - Xzn 14 -T10061-		-T40150/4- from the Engine Support Bracket -T40150-
	Engine Support - Basic Set Movable Joint -T40091/3- (quantity 2)	/3-3	Engine Support Supplement Set - Spindle -T40093/3- (quantity: 2) from the Engine Support Supplement Set -T40093B-

/2 x 2 /1 x 4	Assembly Tool, Sub- frame Alignment -T10486A-	/   /7   /5   /2 /9 /8 /6 /4	Counterhold - Kit - Multiple Use -T10172-
5	Bearing Installer - Bearing Press Piece -VW207C-		Puller - Kukko Internal- 14-19mm
	Puller - Kukko Counterstay Model: 22/1 (supersedes to VAS251621)		Puller - Ball Joint -T10187-

# **Repair Instruction**

# **Section A - Check for Previous Repair**



• Enter the VIN in Elsa and proceed to the "Campaign/Action" screen.

# **i** 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.

**Proceed to Section B** 

# Section B – Replace DSG Gearbox

# 

Risk of injury. Refer to "Warning and Safety Precautions", found in Appendix A at the end of this document.

# 

Due to variations in vehicle equipment and options, the steps/illustrations in this work procedure may not identically match all affected vehicles.



# 

This procedure contains mandatory replaceable parts. Refer to ETKA and the component overview prior to starting the procedure.

### Mandatory Replacement Parts

- Bolts Engine to Transmission Connecting
- Bolts Subframe Mount
- Bolts Bevel Box Bracket
- Bolts Drive Axle, Rear Driveshaft
- Lock washers Selector Mechanism Cable
- O-rings Connector
- Nuts Ball joint, tie rod end, stabilizer bar end link

See ETKA for additional details.

- Move the selector lever into "P".
- Press the button on the electro-mechanical parking brake to activate it.
- Turn off the ignition.





• Carefully pull the engine cover off the bolts one after the other in direction of <arrows>. Do not pull sharply on the engine cover or pull it to one side.





Air Filter Housing, Removing

- Remove the bolts <1 and 3>.
- Open the lock in direction of <arrow> and remove the cover <2>.

- Free up the coolant hose <2>.
- Release the locking mechanism in direction of <arrows> and remove the air guide upper section <1>.





- Disconnect the vacuum hose <1>.
- Loosen the clamp <2> and remove the air guide hose.
- Carefully remove the air filter housing <3>.

- Turn the steering wheel to the straight-ahead position and remove the ignition key so that the steering wheel lock engages.
- Turn the steering wheel so that the wheels are in the straight-ahead position and then tape it secure <arrow> so that it cannot turn.
- Vehicles with "Keyless Access Authorization System":
  - Switch the ignition off and open the driver door so the steering wheel lock locks.





### Battery, Removing

- Turn off the ignition and all electrical equipment.
- Remove the ignition key, if equipped.
- Open the heat protection sleeve cover.
- Open the cover <4> over the battery negative terminal.
- Loosen the nut <6> a few turns and disconnect the battery ground cable terminal clamp <5> from the battery negative terminal.
- Open the cover <3> over the battery positive terminal.
- Loosen the nut <2> several turns and remove the battery positive cable terminal <1> from the battery positive terminal.
- Pull the heat protection sleeve <4> slightly upward.

### 

For vehicles with trunk mounted batteries, disconnect and isolate the negative terminal before proceeding with this repair. It will not be necessary to remove trunk mounted batteries.

- Remove the bolt <2> from the bracket <1>.
- Remove the bracket <1>.
- Remove the Battery <3> in the direction of travel from the battery tray and lift it upward out of the engine compartment.



### Versions with transmission ventilation:

• Detach the transmission ventilation <1> from the battery tray and set aside by releasing the catch <2> and removing the transmission ventilation upward in direction of <arrow>.

• Free up the wiring harness from the battery tray <arrows>.





- Remove the bolts and nut <2>.
- Remove the battery tray <1>.





- If equipped, remove the nut <3> and bolt <1>.
- Free up the coolant pipe <2>.

- If equipped, remove the nut <1> from the upper bolt of the Starter.
- Remove the ground cable <2>.





- Disconnect the connector <4> by sliding the retainer back and pressing the release down.
- Remove the cap <5>.
- Remove the nut <6> and terminal 30/B+.
- Remove the starter bolts <1 and 2>. Remove the lower bolt <1> first.
- Remove the starter <3> upward.

# **I**NOTE

There is a risk of damaging the DSG Transmission Mechatronic -J743- with static electricity. Do not touch contacts in DSG Transmission Mechatronic -J743- connector with hands.

- Discharge static electricity before disconnecting the DSG Transmission Mechatronic -J743- connector. To discharge any static electricity, touch the vehicle ground with hand (without wearing a glove).
- Release the connector twist lock <1> for the Mechatronic by turning it counter-clockwise (in the direction of the starter) and remove the connector.





• Remove the footwell trim panel by removing the nuts <arrows>.

• Remove the bolt <1> for the universal joint <2> and then remove the universal joint in the direction of <arrow>.





• Remove the front and rear noise insulation.

• Disconnect the connector for the Oil Level Thermal Sensor -G266- <arrow> and free up the wire from the subframe.







• Remove the bolts <arrows> on the bracket for the exhaust pipe.

• If equipped, disconnect the connector <1> from the Left Front Level Control System Sensor -G78- or Right Front Level Control Sensor -G289-.

- Remove the front wheels.
- Remove the ball joint nuts <arrows> on the left and right side of the vehicle.
- Remove the control arm from the ball joint.







- Remove the left and right nuts <1> from the coupling rod <3>
- Remove the left and right coupling rod <3> from the stabilizer bar <2>.

- Remove tie rod end nut.
- Remove the tie rod end from the wheel bearing housing using tool -T10187-.

• Remove the bolts <arrows> on the pendulum support.







- Place the -VAS6931- <2> under the subframe.
- Place for example a block of wood <1> between -VAS6931- and subframe.
- Clean the -T10486A- threads if necessary.

# 

There is a risk of damaging the subframe threaded connection threads on the body. The subframe bolts on the body must not be loosened or tightened with an impact wrench.

# 

- When locating the subframe, the locating pins (-T10486-) must be installed one at a time. Do not remove the next subframe bolt until the locating pin is installed.
- The -T10486- may only be tightened to a maximum of 20 Nm, otherwise the threads of the locating bolts will be damaged.
  - Remove bolt <1> and install -T10486-.
  - Remove bolt <6> and install -T10486-.
  - Remove bolt <7> and install -T10486-.
  - Remove bolt <8> and install -T10486-.
  - The subframe is now located.

### For Audi A3 Cabrio:

- Remove the left and right underbody panel.
- Remove the left and right bolts <arrows> and then remove the diagonal brace <1>.



- Loosen the bolts <2, 3, 4, and 5> for the left and right support <arrows>.
- Slowly lower the subframe just enough to gain access to the steering gear heat shield and connectors. Do not put tension on the wiring.

• Free up the cable guide from the subframe, to do this remove the expanding clip <arrow>.





• Remove the bolts <arrows> and remove the heat shield <1> from the steering gear.







• Disconnect the connectors <2 and 3> from the steering gear.

# **I**NOTE

When lowering the subframe, be sure to route the oil level sending unit wiring harness through the subframe before lowering any further to avoid damaging the connector.

• Secure the subframe to the -VAS6931- with the accompanying strap and lower the subframe.

- Clamp off coolant hoses on transmission oil cooler with -3094-.
- Loosen the hose clamps <arrows>, remove the coolant hoses from the transmission fluid cooler.
- Seal the open lines and connections with clean plugs from the -VAS6122-.





• Remove the nuts <arrows>, and remove the bracket from the oil pan.

# **I**NOTE

The threaded bolts are welded to the front of the oil pan.

• Remove all the bolts in the transmission to engine connection that are accessible from above.

# **I**NOTE

The bolt <3> is located in the opening for the starter.



### Remove the plenum chamber cover:

- Remove the windshield wiper arms.
- Remove the seal <1>.
- Coat the transition between the windshield <2> and the plenum chamber cover <5> with some soapy water. Starting at the window edge, carefully remove the plenum chamber cover vertically upward from the retainer on the windshield.
- Remove the plenum chamber cover <5> by carefully removing the plenum chamber cover tab <3> in the direction of <arrow> from the windshield mount <4>.



- Remove caps above the front suspension strut bolted connections.
- Place the -10-222A/31-1- and -10-222A/31-2on the suspension strut mounts with the ribs <arrow> facing the direction of travel.
- Position the -10-222A/4- with -T40091/3- as shown in the illustration.

- Install the additional tools on the left in the engine compartment as illustrated.
- Attach the left -10-222A/11- carabiner hook to the engine lifting eye <arrow>.
- Slightly tension the engine/transmission assembly with the spindle, do not lift.

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Т10038

• Remove the nut <arrow> and remove the ground wire.

• Remove the left and right drive axles from the transmission by removing the bolts <arrow>.

• Secure the drive axles to the suspension strut using a -T10038-.







• If equipped, remove the nuts <1> and the heat shield. Heat shield location and configuration can differ from shown.

• If equipped, remove the bolts <1> and the heat shield <2>. Heat shield location and configuration can differ from shown.

• Remove the bolts <A and B> from the bevel box and remove the heat shield <1>.







• To loosen or tighten, counterhold the driveshaft on the rear final drive using -T10172-.

- Remove the three bolts securing the driveshaft coupling to the bevel box, as shown.
- Push the front driveshaft all the way back and tie it up using a -T10038-.

- Remove the bolts <1> from the cable mounting bracket <2>.
- Remove the lock washer <3> and then remove the selector lever cable from the transmission in the direction of the <arrow>.





• Remove the bolts <1 and 2> and bevel box transmission support.

- To remove the transmission the -3282- must be equipped with the -3282/42A-.
- Place the -3282- on the -VAG1383A-.
- Align the arms of the transmission support so that they match up with the holes in the -3282/42A-.
- Install support elements as shown on the -3282/42A- The "retaining plate with hole" is used as a front support element.
- Place the -VAG1383A- under the transmission.
  - The arrow symbol on the adjusting plate points in the direction of travel.
- Align the -3282- so that it is parallel to the transmission.
- Install the -3282/29- in the transmission.
- Attach the "retaining plate with hole" securely to the transmission <arrow> as shown.
- Insert the last support element in the transmission as shown.
- Support the transmission by lifting it from underneath using the -VAG1383A-.





• Remove bolts <1 and 2> and remove transmission bracket <A>.

- Lower the engine/transmission assembly with the -10-222A/11- until dimension <a> is reached between the transmission housing and the transmission mount.
  - Dimension  $\langle a \rangle$  = maximum 65 mm.

- Remove the remaining bolts from transmission to engine connection.
- Remove the transmission from the alignment sleeves.
- Remove the transmission from the engine.
- Lower the transmission carefully using the -VAG1383A-.
- When lowering, change position of transmission with spindles on -3282-.





- Replace the needle bearing in the crankshaft.
- Always replace the needle bearing <arrow> after separating the engine and transmission.
- If the needle bearing in the crankshaft is damaged, the gears will no longer shift correctly.
- The front edges of the internal puller must not be broken off.

### **Remove Needle Bearing:**

- Remove the needle bearing <1> from the crankshaft <2> using a standard internal puller such as the Puller Kukko Internal 14-19mm -21/2- and counter support Puller Kukko Counterstay -22/1- (superseded to VAS251621, or equivalent).
- The internal puller must be positioned behind the needle ring <arrow>.



# 

### **Install Needle Bearing:**

- Clean the bearing seat in the crankshaft and thinly coat with grease.
- Drive the needle bearing into the crankshaft up to the installation depth using the Bearing Installer Bearing Press Piece -VW207C-.

Installation Depth Dimension <a> = 2.0 mm

• Installation Depth Dimension <a> = 2.0 mm

# **I**NOTE

If the needle bearing was unintentionally pushed in too deeply, it must be replaced, because it will be damaged when it is removed again.





• Check if the alignment sleeves <A> for centering the engine/transmission are in the cylinder block and insert them if they are not.

- Mount the new transmission on the -3282- and secure it.
- Clean input shaft splines and clean hub, remove corrosion and apply only a very thin coating of lubricant. Refer to the Parts Catalog. Remove any excess grease.
- Check to make certain the alignment sleeves for centering the engine/transmission are in the cylinder block. If required, remove the alignment sleeve(s) from the old transmission and insert them into the cylinder block.
- Carefully raise the transmission with the -VAG1383A- and bring it into the installation position using the -3282-.
- Insert transmission without pinching any lines.
- Attach transmission to engine. Tighten the bolts first by hand.

Refer to the chart in the next step for transmission to engine bolt lengths, locations, and torque specifications.



- Install and tighten to specification the lower • transmission bolts first <5, 6, 7, and 8>.
- Once bolts <5, 6, 7, and 8> are installed and • torqued to specification, remove the -3282transmission support from the transmission and lower the -VAG1338A- engine and transmission jack.
- Install and tighten the remaining transmission • bolts. See chart below for bolt locations, lengths, and tightening specifications.

ltem	Bolt	Nm	
1, 2, 3, <sup>1)</sup> and 4	M12x55	80	
5, 6, and 7	M10x50	40	
8	M12x70	80	
А	Alignment sleeve for centering		
<u></u>			

<sup>1)</sup> The bolt is only accessible through the opening for the removed starter.



# **I**NOTE

One bolt is located inside the hole for the starter <arrow>. Use -T10061- to reinstall the bolt.





- Align the engine/transmission assembly without tension.
- Install the left transmission mount as follows:
  - Replace all the bolts <1 and 2>.
  - o Install the new bolt first hand-tight.
  - Install the bolts <1> in the transmission bracket <A>.
- Align the engine/transmission in its installation position. To do so, lift it until the transmission bracket is completely touching the transmission mount.
- Pry the transmission bracket <A> into the seat using a screwdriver while tightening the bolts <2>.
- Tighten the bolts <2> to 60 Nm + 90° turn. Tighten the bolts <1> to 40 Nm + 90° turn.

# **I**NOTE

- There is a risk of damaging the threads in the transmission bracket by inserting the bolts at an angle.
- Before installing the bolts <2>, the transmission bracket and transmission mount support arm must be absolutely parallel to each other. If necessary, lift the back of the transmission using the Engine and Gearbox Jack.



• Remove the -T-10-222A- from the engine and chassis.

- Reinstall the plenum chamber cover <5> onto the windshield mount <4>.
- Reinstall the windshield wiper arms and tighten the nuts to 21 Nm.

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• Reinstall the starter <3>. Tighten the bolts <1 and 2> to 40Nm, and reconnect electrical connections <4 and 6> to the starter.

- Connect the connector <A> from the DSG Transmission Mechatronic -J743- as follows:
  - The arrow <D> on the Mechatronic
     <B> must line up with the connector
     <A> as well as with the tab <C>.
  - Connect the connector <A> carefully all the way and then turn the lock clockwise in the direction of <arrow>.






- Attach the drive axles to the transmission.
- Install new bolts. Follow the tightening specifications below based on application:
  - Internal Multipoint Bolt M8 x 48: First tighten diagonally to 10 Nm, then tighten diagonally again to 40 Nm.
  - Internal Multipoint Bolt M10 x 52: First tighten diagonally to 10 Nm, then tighten diagonally again to 70 Nm.

- If equipped, reinstall the nuts <1> and the heat shield.
- Tighten the heat shield nuts <1> to 20 Nm.

- If equipped, reinstall the bolts <1> and the heat shield <2>.
- Tighten the heat shield bolts <1> to 25 Nm.



- New bolts <1 and 2> should be installed.
- Hand-tighten all bolts first, starting with bolts <1>, then bolts <2>, in sequence.
- Follow the installation and tightening sequence:
  - First hand tighten bolts <1>: Tighten the bolts to 40 Nm.
  - Then hand tighten bolts <2>: Tighten the bolts to 40 Nm.

• Insert the driveshaft with the flexible disc on the bevel box flange shaft. When positioning, make sure that the seal <arrow> in the centering bushing is not damaged.

• Attach the driveshaft to the bevel box flange and install the bolts <arrows>. Tighten the bolts to 50 Nm + 90°.

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- Tighten the lower bolt with the threaded stud to 40 Nm.
- Tighten the upper bolt to 20 Nm.



#### Reinstall the subframe:

- Slowly raise the subframe up into position just enough to reconnect the steering gear electrical harness and reinstall the steering gear heatshield.
- The removal of the locating pins is reverse of installation, noting the following:
  - Only remove one locating pin at a time and replace each with a new bolt.





• Reinstall the steering gear electrical harness fastener.

- Reconnect the wiring harness <1> onto the steering gear <2> <arrows>.
- Route all wiring and harness connections, around the subframe the remainder of the way.







- Reconnect the connectors <1 and 2> onto the steering gear.
- Route the electrical connector and harness for the oil level sensor through the subframe.

• Reinstall the bolts <arrows> and install the heat shield <1> onto the steering gear.

- Lift the subframe further and carefully install the subframe onto the locating pins <1>.
- Make certain that the locating pins do not move during the reinstallation of the subframe or the vehicle alignment may be compromised.



- Install the new subframe bolts <1, 6, 7, and 8> in order. Tighten to 70Nm + 180° turn.
- Only remove one locating pin and install one subframe bolt at a time.
- Install new subframe bolts <2, 3, 4, and 5> in order and tighten to 50Nm +90° turn.



 Reconnect the connector <1> to the Left Front Level Control System Sensor -G78- and/or Right Front Level Control Sensor -G289-.

- Install the pendulum support with new bolts <1> on the transmission.
- Tighten the new bolts to 50Nm + 90°.

The repair information in this document is intended for use only by skilled technicians who have the proper tools, equipment and training to correctly and safely maintain your vehicle. These procedures are not intended to be attempted by "do-it-yourselfers," and you should not assume this document applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Audi dealer. ©2019 Audi of America, Inc. and Audi Canada. All Rights Reserved.

N40-10690

N40-10689







- Install new hex nuts <1> onto the right and left coupling rod <3>.
- Tighten the coupling rod nuts to 65 Nm.

- Install the new ball joint nuts <arrows> on the left and right side of the vehicle.
- Tighten the nuts to 40 Nm + 45 Deg.

 Reinstall the exhaust system bracket onto the subframe <arrows> and tighten the bolts to 23 Nm.







- Reinstall the selector lever cable.
- The selector lever cable lock washers and Orings <arrows> must be replaced. Install new cable lock washers.
- Adjust the selector lever cable if necessary.

• Reconnect the connector for the Oil Level Thermal Sensor -G266- <arrow>.

Install a new bolt <1> for the universal joint
<2> and tighten the bolt to 20 Nm + 90°.





• Reinstall the footwell trim panel and install the nuts <arrows>.

• Remove the securing tape from the steering column <arrow> and verify no residue was left. If tape residue exists, clean the surface with a suitable cleaner.



- Reinstall the starter <3>. Tighten the bolts <1 and 2> to 40Nm, and reconnect electrical connections <4 and 6> to the starter.
- If equipped, reconnect the ground connection.

- Connect the connector <A> from the DSG Transmission Mechatronic -J743- as follows:
  - The arrow <D> on the Mechatronic <B> must line up with the connector <A> as well as with the tab <C>.
  - Connect the connector <A> carefully all the way and then turn the lock clockwise in the direction of <arrow>.







• If equipped, reinstall the nut <3> and bolt <1> on the coolant pipe <2> and tighten to 9 Nm.

- Reinstall the transmission coolant valve and tighten the bolts <1> to 9 Nm.
- Reinstall the electrical connector <2>
- Reinstall the coolant hoses and reconnect the clamps <arrows>.
- Remove the -3094- coolant hose clamps.

• Reinstall the battery tray and tighten the fasteners <2> to 9 Nm.



- Reinstall the battery, reinstall the hold down clamp <1> and tighten the hold down clamp bolt <2> to 15 Nm.
- Reconnect the positive battery cable terminal and tighten the nut to 6 Nm.
- Reconnect the negative battery cable and tighten the nut to 6 Nm.
- Reconnect all wiring harness connections and ventilation tubes, if equipped.

# **I**NOTE

For vehicles with trunk mounted batteries, reconnect the negative terminal. The battery will still be installed in trunk mounted applications.

- Carefully reinstall the air filter housing <3>.
- Reconnect the vacuum hose <1>.
- Reconnect the clamp <2>.







- Reinstall the coolant hose <2>.
- Connect the locking mechanism <arrows> on the air guide upper section <1>.

- Reinstall the bolts <1 and 3> and tighten to 6 Nm.
- Reconnect the locks <arrow> and reinstall the cover <2>.

- Reinstall the engine cover.
- In order to prevent causing damage, do not hit the engine cover with your fist or tool.
- Position the engine cover while paying attention to the oil filler tube and oil dipstick.
- Press the engine cover into the rubber grommets on the left side first, then into the ones on the right side.





- Top off the coolant reservoir to account for any coolant lost during removal of the transmission cooler lines.
- Verify the DSG transmission fluid level using ODIS test plan. Add fluid as necessary.
- Recheck coolant level after the engine is warm.

• Reinstall the front and rear noise insulation.

- Connect the ODIS diagnostic tester and clear any faults found.
- Adapt and code the new Mechatronics as needed.
- For vehicles with a vehicle level sensor, perform the basic setting for the wheel damping electronics. Refer to Vehicle Diagnostic Tester.
- Reset all customer convenience settings (onetouch power windows, clock, radio presets, etc).

### Section C – Campaign Completion Stamp

I certify that this campaign has been performed in strict accordance with the applicable Audi repair procedure.	
SAGA Code:	-
Technician:	-
Date:	-
OR-	
Je certifie que cette campagne de rappel a été exécutée suivant les strictes directives de réparation	
Je certifie que cette campagne de rappel a été exécutée suivant les strictes	
Je certifie que cette campagne de rappel a été exécutée suivant les strictes directives de réparation d'Audi	

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- 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 D** 

## Section D - 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).

#### Appendix A – Warning and Safety Precautions

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- Risk of injury and accident by accidentally engaging a selector lever position with the engine running.
- Move the selector lever into "P" and set the parking brake before working on a running engine.
- Risk of injury if the engine starts automatically in vehicles with a Start/Stop System.
  - For vehicles with an activated Start/Stop System (recognizable from a notification in the instrument cluster), the motor can be started automatically if needed.
  - Always make sure the Start/Stop System is disabled when working on the vehicle (ignition switched off, if needed, turn the ignition back on).
- There is a risk of an accident due to distractions and improperly secured testing equipment. Always secure testing equipment to the rear seat with a strap and have a second technician operate it in the rear seat.
  - Risk of the front passenger airbag deploying during an accident. Technicians should not operate testing equipment from the front passenger seat during a road test.
  - o Operating testing equipment while driving is a distraction.
  - o Testing equipment that is not secured properly increases the risk of personal injury.

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- Risk of destroying electronic components when disconnecting the battery. Follow the steps when disconnecting the battery.
- Always turn off the ignition before disconnecting the battery.