# Safety Recall Code: 42L1



Subject

**Rear Axle Trailing Arm Lock Nut** 

**Release Date** 

June 18, 2021

**REVISION SUMMARY** 

Work instructions updated with information to avoid damaging wind deflector pins

**Affected Vehicles** 

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2020	2021	A4 ALLROAD	442
USA	2020	2021	A4 SEDAN	5,097
USA	2020	2021	A5 CABRIOLET	433
USA	2020	2021	A5 COUPE	469
USA	2019	2021	A5 SPORTBACK	2,148
USA	2020	2021	A6 ALLROAD	371
USA	2020	2021	A6 SEDAN	2,760
USA	2020	2021	A7	254
USA	2020	2021	A8	282
USA	2020	2021	Q5	19,246
USA	2021	2021	Q5 SPORTBACK	3
USA	2021	2021	Q7	2,727
USA	2021	2021	Q8	1,156
USA	2019	2021	RS5 COUPE	76
USA	2019	2021	RS5 SPORTBACK	157
USA	2021	2021	RS6 AVANT	176
USA	2021	2021	RS7	270
USA	2021	2021	RS Q8	116
USA	2020	2021	S4 SEDAN	498
USA	2020	2021	S5 CABRIOLET	142
USA	2020	2021	S5 COUPE	129
USA	2019	2021	S5 SPORTBACK	839
USA	2020	2021	S6 SEDAN	293
USA	2020	2021	S7	167
USA	2020	2021	S8	90
USA	2020	2021	SQ5	2,649
USA	2021	2021	SQ5 SPORTBACK	3
CAN	2020	2021	A4 ALLROAD	62
CAN	2020	2021	A4 SEDAN	842
CAN	2020	2020	A5 CABRIOLET	24
CAN	2020	2020	A5 COUPE	52
CAN	2019	2021	A5 SPORTBACK	403

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CAN	2020	2021	A6 ALLROAD	28
CAN	2020	2021	A6 SEDAN	44
CAN	2020	2021	A7	18
CAN	2020	2021	A8	5
CAN	2020	2021	Q5	2,745
CAN	2021	2021	Q5 SPORTBACK	1
CAN	2021	2021	Q7	132
CAN	2021	2021	Q8	113
CAN	2019	2021	RS5 COUPE	21
CAN	2021	2021	RS5 SPORTBACK	10
CAN	2021	2021	RS6 AVANT	37
CAN	2021	2021	RS7	23
CAN	2021	2021	RS Q8	41
CAN	2020	2021	S4 SEDAN	85
CAN	2020	2021	S5 CABRIOLET	20
CAN	2020	2021	S5 COUPE	75
CAN	2020	2021	S5 SPORTBACK	265
CAN	2020	2021	S6 SEDAN	23
CAN	2020	2021	S7	12
CAN	2020	2021	S8	8
CAN	2020	2021	SQ5	306
CAN	2021	2021	SQ5 SPORTBACK	1

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."
- ✓ 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**

Due to stress corrosion cracking on lock nuts of particular production batches, the nut of the eccentric bolt on the trailing arm of the rear axle may break which may cause alterations in the wheel alignment of the rear axle. This could be noticed by a steering wheel misalignment when driving straight ahead or by the vehicle pulling to one side when braking or accelerating.

It cannot be ruled out that the rear axle could suddenly and uncontrollably move in the wrong direction at higher speeds. This can lead to a loss of vehicle control and a crash without warning.

#### **Corrective Action**

The affected lock nut will be replaced. If the screw connection is already damaged, it will be replaced completely.

#### **Precautions**

If this condition is present in the vehicle, the driver may notice a steering wheel misalignment when driving straight ahead or the vehicle pulling to one side when braking or accelerating. Should this occur, owners are advised to contact an authorized Audi dealer without delay and make arrangements to have the vehicle inspected/repaired.

#### **Code Visibility**

On or about May 28, 2021, the campaign code was applied to affected vehicles.

#### Owner Notification

Owner notification will take place in June 2021. 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.

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#### IMPORTANT REMINDER ON VEHICLES AFFECTED BY SAFETY & COMPLIANCE RECALLS

<u>New Vehicles in Dealer Inventory:</u> 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.

<u>Pre-Owned Vehicles in Dealer Inventory:</u> 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 <u>before</u> <u>delivery to consumers</u>.

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# **Parts Information**

Parts will be managed with a weekly Upper Order Limit. Command (POC) for your Upper Order Limit quantity.	Please see Parts On

Initial Allocation: YES	Dealers will be sent an initial allocation prior to customer notification. If no initial allocation was received, please reference the Repair Projection Tool (below) to view your potential VIN population.
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Repair Projection Tool: (right click to open)	<b>Q</b>
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Criteria	Quantity	Part Number	P.O.C. Part Description	Ordering Method
4A, 4K, A8, FY, Q7 or Q8	4	WHT-010-234	FLANGE NUT	UOL
8W or F5	2			

# • NOTE

The specified part numbers reflect the status at the start of this 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.

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# **Claim Entry Instructions**

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

After campaign has been completed, enter claim as soon as possible to help prevent work from being duplicated elsewhere. Attach the Elsa screen print showing action <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.
- ✓ <u>Canada dealers:</u> Upload the repair order [signed by customer] to Audi WIN/Operations/Campaign Closure.

Service Number	42L1		
Damage Code	0099		
Parts Vendor Code	002		
Claim Type	Sold vehicle: 7	10	
	Unsold vehicle:	7 90	
Causal Indicator	Mark FLANGE	NUT* as causal part	
Vehicle Wash/Loaner	Do not claim wa	sh/loaner under this ad	otion
Criteria I.D.	8W or F5		
	LABOR		
	Labor Op	Time Units	Description
	4211 55 99	80	Replace control arm nuts
	PARTS		
	Quantity Part Number		Description
	2.00	WHT010234	FLANGE NUT*
Criteria I.D.	4A, 4K, A8, FY, Q7, or Q8		
	LABOR		
	Labor Op	Time Units	Description
	4211 56 99	90	Replace control arm nuts
	PARTS		
	Quantity Part Number		Description
	4.00	WHT010234	FLANGE NUT*

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# Customer Letter Example (USA)

<MONTH YEAR>

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

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

NHTSA: 21V295

Subject: Safety Recall 42L1 - Rear Axle Trailing Arm Lock Nut

Dear Audi Owner.

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. Audi has decided that a defect, which relates to motor vehicle safety, exists in certain 2019-2021 model year Audi vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue?

Due to stress corrosion cracking on lock nuts of particular production batches, the nut of the excentric bolt on the trailing arm of the rear axle may break which may cause alterations in the wheel alignment of the rear axle. This could be noticed by a steering wheel misalignment when driving straight ahead or by the vehicle pulling to one side when braking or accelerating.

The rear axle could suddenly and uncontrollably move in the wrong direction at higher speeds. This can lead to a loss of vehicle control and a crash without warning.

What will we do?

To correct this defect, your authorized Audi dealer will replace the affected lock nut. If the screw connection is already damaged, it will be replaced completely. This work will take about an hour to complete and will be performed for you free of charge. 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.

What should you do?

Please contact your authorized Audi dealer without delay to schedule this recall repair. For your convenience, you can also visit www.audiusa.com and click on the "Find a Dealer" link to locate a dealer near you and schedule this service.

Precautions you should take

If this condition is present in the vehicle, the driver may notice a steering wheel misalignment when driving straight ahead or the vehicle pulling to one side when braking or accelerating. Should this occur, owners are advised to contact an authorized Audi dealer without delay and make arrangements to have the vehicle inspected/repaired.

Lease vehicles and address changes

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

Can we assist you further?

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

for open Recalls and **Service Campaigns** 

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

If you still cannot obtain satisfaction, you may file a complaint with: The Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

**Audi Customer Protection** 

# **Customer Letter Example (Canada)**

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

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

Transport Canada Recall: 2021249

Subject: Safety Recall 42L1 - Rear Axle Trailing Arm Lock Nut

Dear Audi Owner,

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.

#### What is the issue?

Due to stress corrosion cracking on lock nuts of particular production batches, the nut of the excentric bolt on the trailing arm of the rear axle may break which may cause alterations in the wheel alignment of the rear axle. This could be noticed by a steering wheel misalignment when driving straight ahead or by the vehicle pulling to one side when braking or accelerating.

It cannot be ruled out that the rear axle could suddenly and uncontrollably move in the wrong direction at higher speeds. This can lead to a loss of vehicle control and a crash without warning.

#### What will we do?

To correct this defect, your authorized Audi dealer will replace the affected lock nut. If the screw connection is already damaged, it will be replaced completely. This work will take about an hour to complete and will be performed for you free of charge. 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.

What should you do? Please contact your authorized Audi dealer without delay to schedule this recall repair.

#### Precautions vou should take

If this condition is present in the vehicle, the driver may notice a steering wheel misalignment when driving straight ahead or the vehicle pulling to one side when braking or accelerating. Should this occur, owners are advised to contact an authorized Audi dealer without delay and make arrangements to have the vehicle inspected/repaired.

#### Lease vehicles and address changes

If you are the lessor and registered owner of the vehicle identified in this letter, you shall forward this letter (and any subsequent notice, if applicable) to the lessee within ten (10) days of receipt. If you have changed your address or sold the vehicle identified in this letter, 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?

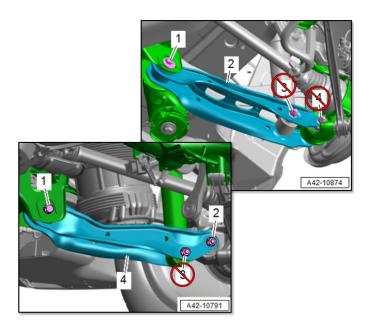
If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Audi Customer Relations Monday through Friday from 8AM to 8PM EST at 1-800-822-2834 or via our "Contact Audi Canada" page at www.audi.ca.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

**Audi Customer Protection** 

# **Repair Overview**



- A4 and A5 variants: Replace left and right control arm nuts at the connection to the subframe.
- All other models: Replace left and right control arm nuts at the subframe and at the wheel bearing housing.

# **!** 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.

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# **Required Tools**



Engine and Gearbox Jack
-VAS6931-



Engine/Gearbox Jack Adapter - Wheel Hub Support -T10149-

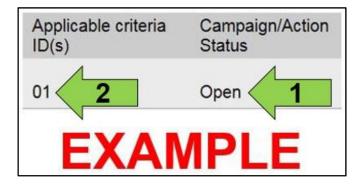


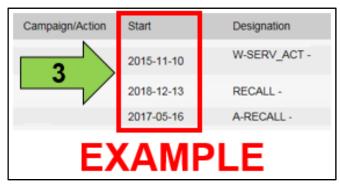
Tensioning Strap
-T10038(or equivalent)

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# 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.



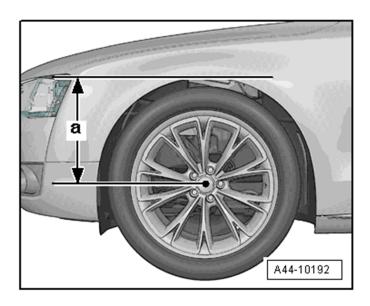
open, they must be performed in order of the Start date <arrow 3>. The oldest should be performed first.

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

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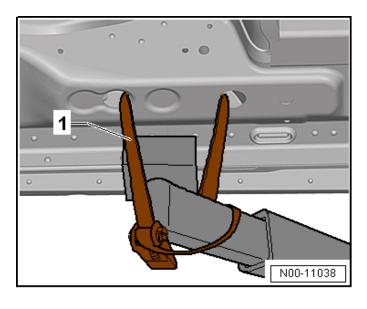
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# Section B - Repair Procedure



# Measure curb weight position:

- Vehicles with air suspension: set the driving mode to "normal."
- The curb weight position measurement will be made at both <u>rear</u> wheels.
- Determine and record the measurement <a> from the center of the wheel to the lower edge of the fender/wheel housing.
- Vehicles with air suspension: turn on the "vehicle lift mode". Refer to the Owner's Manual.



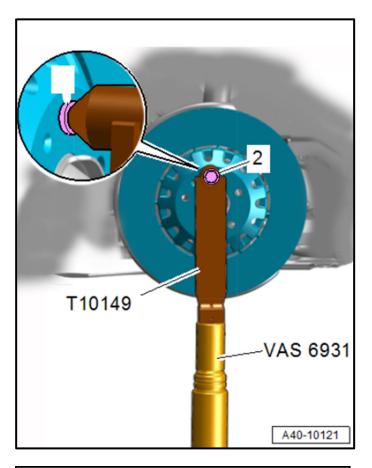
#### Secure vehicle on the hoist:

# **A** WARNING

When suspension is lifted in curb weight position, the vehicle must be secured on the hoist to prevent it from tipping off the hoist.

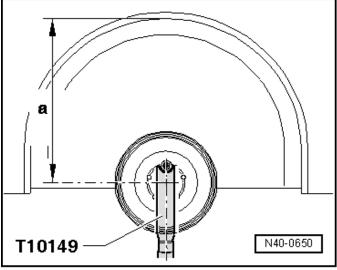
 Secure vehicle so it does not tip off the hoist using -T10038- or equivalent.

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# Set rear suspension at curb weight position:

- · Remove both rear wheels.
- Perform work on one side at a time.
- Turn the wheel hub, until a wheel bolt hole is at the top.
- Install the -T10149- with a wheel bolt <2> on the wheel hub.



 Lift the wheel bearing housing, until the previously recorded dimension <a> has been reached.

# **A** WARNING

# Risk of accident!

- When suspension is lifted in curb weight position, the vehicle must be secured on the hoist to prevent it from tipping off the hoist.
- Do not lift or lower the vehicle when the -VAS6931- is under the vehicle.
- Do not leave the -VAS6931- under the vehicle any longer than necessary.

# Vehicles with Criteria F5 or 8W

Proceed to Sub-Section 1

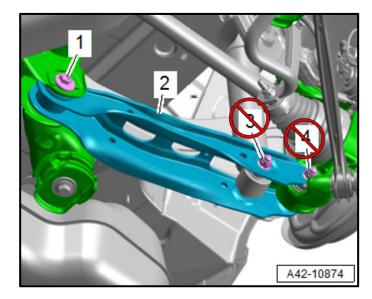
# Vehicles with Criteria FY, 4A, 4K, Q7, Q8 or A8:

Proceed to Sub-Section 2

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# Sub-Section 1:

# Replacing rear lower control arm nuts on A4 and A5 models (criteria F5 or 8W):



 The nuts at connection <1> of <u>both</u> rear lower control arms <2> will be replaced.



- Mark the eccentric washer with marker prior to loosening the nut.
- Counterhold the bolt when loosening and tightening the nut.
- Torque the new nut to 140 Nm.

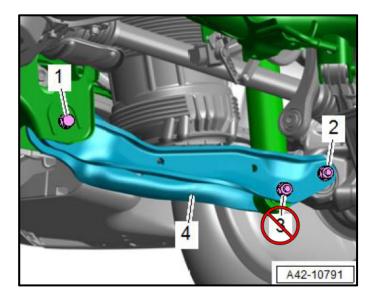
- Remove the -T10149- in the reverse order of installation.
- · Removing securing straps.
- Reinstall wheels and torque wheel bolts to 120 Nm.

# **Proceed to Section C**

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# **Sub-Section 2:**

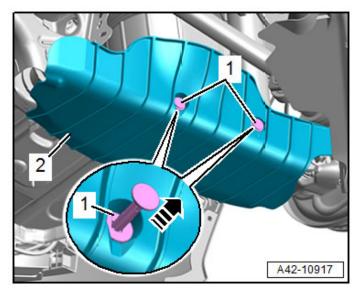
Replacing rear lower control arm nuts on all other models (criteria FY, 4A, 4K, Q7, Q8 or A8)

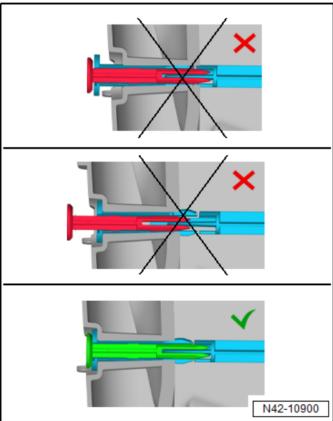


• The nuts at connection <1> and <2> of both rear lower control arms <4> will be replaced.

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- If necessary, remove the wind deflectors from the control arm to access the connections:
  - Release the retainers in direction of <arrow> and remove the retaining pin <1>.
  - Remove the wind deflector <2> from the lower control arm.

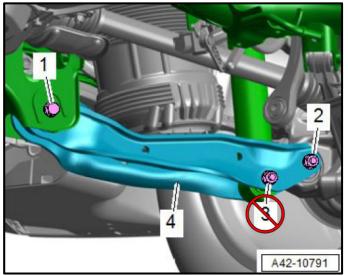
# U NOTE

- Do not use excessive force when attempting to pull out locking pin <1> from the front side of the lower wind deflector.
- If the locking pin cannot be easily pulled out, the entire pin can be driven out from the back side (rear of lower control arm) with light force from a hammer.
- Once the entire pin is removed, the center locking pin can be pressed out into the correct installation position, and the pin can be reused.

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• Mark the eccentric washer with marker prior to loosening the nut.



- Counterhold the bolts when loosening and tightening the new nut.
- Torque the new nut for connection <1> to 140 Nm.
- Torque nut for connection <2> to 130 Nm + 180°.

# ① NOTE

Contrary to the ELSA repair manual, the bolt at connection <2> does not require replacement.

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- Reinstall the wind deflector in the reverse order of removal, if necessary.
- Remove the -T10149- in the reverse order of installation.
- Remove securing straps.
- Reinstall wheels and torque wheel bolts as follows:

A6 and A7 Models		
Model	Torque Specification	
All models	120 Nm	
A8 Models		
Model	Torque Specification	
All models	120 Nm	
Q3 Models		
Model	Torque Specification	
All models	140 Nm	
Q5 Models		
Model	Torque Specification	
All models	140 Nm	
Q7 and Q8 Models		
Model	Torque Specification	
All models	160 Nm	

# **Proceed to Section C**

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# 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:	_

Item#: AUD4927ENG

-OR-

Je certifie que cette campagne de rappel a été exécutée suivant les strictes directives de réparation d'Audi
Code de SAGA:
Technicien:
Date:

Item # AUD4927FRE

- Once the campaign has been completed, the technician should stamp the repair order.
- Stamps are available for ordering through the Compliance Label Ordering Portal.
- Proceed to Section 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) for U.S. and the Part Destruction and Core Disposition Report for Canada.

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