

Safety Recall Code: 24Gi

REVISION

Subject

Fuel Rail Bolts

Release Date

April 30, 2021

REVISION SUMMARY

Updated parts information. Either injector part number can be used for all model years

Affected Vehicles

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2016	2018	JETTA	218,192
CAN	2016	2017	JETTA	33,414

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

The fuel rail bolts on affected vehicles may become loose over time. This can result in a fuel leak. Leaking fuel, in the presence of an ignition source, may result in a vehicle fire.

Corrective Action

Replace the affected fuel rail bolts and, if necessary, replace the fuel rail.

Precautions

If this condition is present in the vehicle, owners may notice a fuel odor or see leaking fuel coming from the engine compartment. Owners experiencing this condition with their vehicle are advised to contact an authorized Volkswagen dealer without delay to make arrangements to have the vehicle inspected/repaired.

Code Visibility

On or about February 21, 2021, the campaign code was applied to affected vehicles.

Owner Notification

Owner notification took place in March 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.

IMPORTANT REMINDER ON VEHICLES AFFECTED BY SAFETY & COMPLIANCE RECALL

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.

<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 before delivery to consumers.

April 2021 24Gi Page 1 of 31

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.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 2 of 31

Parts Information

Criteria	Quantity	Part Number	P.O.C. Part Description	Ordering Method (see desciptions below)
	4	N -105-464-03	TORX SCREW	Allocation
	4	036-129-717-E	GASKET	Allocation
	1	WHT-001-386	GASKET (O-RING)	Allocation
	1	WHT-003-247	WASHER (O-RING)	Allocation
	Up to 8 L	See ETKA/POC	G13 COOLANT	See Parts on Command

Add ONLY if fuel rail bolts are found loose or broken:

X4



Do not order the following parts unless they are absolutley needed! The expected need for the following parts is less than 1%. Ordering parts unnecessarily will cause delays.

1	04E-133-320-D	FUEL DISTR (fuel rail)	VIN to Order
4	04E-906-036-Q or 04E-906-036-AF	INJECTOR (either part number can be used based on part availability)	VIN to Order
4	04E-133-036-A	SUPP. PART	UOL
1	04E-130-241-AR	PIPE	VIN to Order

Parts	Control	Type:
Alloca	ation	

Parts allocation will occur once per week with planned delivery on Fridays. Allocation will occur for 8 weeks then will transition to Upper Order Limits. Allocation requests for additional parts will not be accepted.

Parts Control Type: VIN to Order

If parts are needed to support a vehicle repair:

- US Dealers use AVA
- CAN Dealers contact the Parts Specialists via phone (800-767-6552), email (VWoAPartsSpecialists@vw.com), or chat/text with the VIN to order

Parts Control Type: Upper Order Limit (UOL)

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

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.

Repair Projection Tool:

(right click to open)





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.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 3 of 31

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

Closure.			
Service Number	24Gi		
Damage Code	0099		
Parts Vendor Code	wwo		
Claim Type	Sold vehicle: 7	10	
	Unsold vehicle:	7 90	
Causal Indicator	Mark OVAL SO	CKET HEAD BOLT WIT	TH HEX DRIVE* as causal part
Vehicle Wash/Loaner	Do not claim wa	sh/loaner under this ac	tion
	 U.S.A.: Loaner/rental coverage cannot be claimed under this action. However, loaner/rental may be covered under the Alternate Transportation 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. 		
Cuitavia I D	VA		
Criteria I.D.	X4		
Criteria I.D.		manifold, inspect fuel ra	ail bolts, no bolts were found loose; replace fuel
Criteria I.D.	Remove intake		ail bolts, no bolts were found loose; replace fuel
Criteria I.D.	Remove intake		
Criteria I.D.	Remove intake rail bolts		LABOR
Criteria I.D.	Remove intake rail bolts Labor Op	Time Units 200	LABOR Description
Criteria I.D.	Remove intake rail bolts Labor Op	Time Units 200	LABOR Description Replace fuel rail bolts
Criteria I.D.	Remove intake rail bolts Labor Op 2441 35 99	Time Units 200	Description Replace fuel rail bolts PARTS
Criteria I.D.	Remove intake rail bolts Labor Op 2441 35 99 Quantity	Time Units 200 Part Number	Description Replace fuel rail bolts PARTS Description OVAL SOCKET HEAD BOLT WITH HEX
Criteria I.D.	Remove intake rail bolts Labor Op 2441 35 99 Quantity 4.00	Time Units 200 Part Number N 10546403	Description Replace fuel rail bolts PARTS Description OVAL SOCKET HEAD BOLT WITH HEX DRIVE*
Criteria I.D.	Remove intake rail bolts Labor Op 2441 35 99 Quantity 4.00 4.00	Time Units 200 Part Number N 10546403 036129717E	Description Replace fuel rail bolts PARTS Description OVAL SOCKET HEAD BOLT WITH HEX DRIVE* GASKET

Continued on next page

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 4 of 31

-OR-	Remove intake manifold, inspect fuel rail bolts, one or more bolts found loose; replace fuel rail bolts, fuel rail and fuel injectors		
	LABOR		
	Labor Op	Time Units	Description
	2441 55 99	260	Replace fuel rail bolts, fuel rail and injectors
			PARTS
	Quantity	Part Number	Description
	4.00	N 10546403	OVAL SOCKET HEAD BOLT WITH HEX DRIVE*
	4.00	036129717E	GASKET
	1.00	04E130241AR	PIPE
	4.00	04E133036A	SUPPORT PART
	1.00	04E133320D	FUEL RAIL
		04E906036Q	
	4.00	or 04E906036AF	INJECTOR
	Up to 40.00	G 013A8JS0	COOLANT ADDITIVE
	1.00	WHT001386	GASKET
	1.00	WHT003247	SEAL RING

April 2021 24Gi Page 5 of 31

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: 20V648

Subject: Safety Recall 24Gi - Fuel Rail Bolts

Dear Volkswagen Owner,

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 2016-2018 model year Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue? The fuel rail bolts on affected vehicles may become loose over time. This can result

in a fuel leak. Leaking fuel, in the presence of an ignition source, may result in a

vehicle fire.

What will we do? To correct this defect, your authorized Volkswagen dealer will replace the affected fuel

rail bolts and, if necessary, replace the fuel rail. This work will take a few hours 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.

Please contact your authorized Volkswagen dealer without delay to schedule this What should you do?

recall repair. To set up an appointment online, please visit www.vw.com/find-a-dealer.

Precautions you should

take

If this condition is present in the vehicle, owners may notice a fuel odor or see leaking fuel coming from the engine compartment. Owners experiencing this condition with their vehicle are advised to contact an authorized Volkswagen dealer without delay to

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.

Reimbursement of **Expenses**

If you have previously paid for repairs relating to the condition described in this letter, please refer to the enclosed form that explains how to request reimbursement.

Can we assist you further?

If your authorized Volkswagen dealer fails or is unable to complete this work free of charge within a reasonable time, or if you should have any questions about this communication, please reach out to us using your preferred method of communication

at www.vw.com/contact or by calling us at 800-893-5298.

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 www.vw.com/owners/recalls and enter your Vehicle Identification Number (VIN) into the Recall/Service Campaign Lookup tool.

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,

Volkswagen 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: 2020-502

Subject: Safety Recall 24Gi - Fuel Rail Bolts

Dear Volkswagen 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? The fuel rail bolts on affected vehicles may become loose over time. This can result

in a fuel leak. Leaking fuel, in the presence of an ignition source, may result in a

vehicle fire.

What will we do? To correct this defect, your authorized Volkswagen dealer will replace the affected fuel

> rail bolts and, if necessary, replace the fuel rail. This work will take a few hours 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 Volkswagen dealer without delay to schedule this

recall repair.

Precautions you should

take

If this condition is present in the vehicle, owners may notice a fuel odor or see leaking fuel coming from the engine compartment. Owners experiencing this condition with their vehicle are advised to contact an authorized Volkswagen dealer without delay to

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.

Reimbursement of

Expenses

If you have previously paid for repairs relating to the condition described in this letter, please refer to the enclosed form that explains how to request reimbursement.

Can we assist you

further?

If your authorized Volkswagen dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Customer Relations, Monday through Friday from 8AM to 8PM EST by phone at 1-800-822-8987 or via our "Contact Us"

page at www.vw.ca.

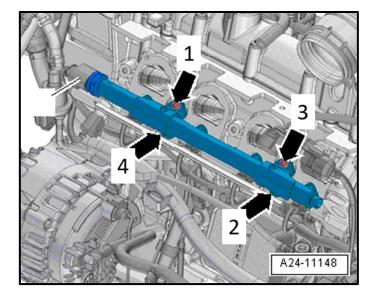
We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

Volkswagen Customer Protection

24Gi Page 7 of 31 April 2021

Repair Overview



 Inspect fuel rail bolts and replace fuel rail and injectors, if necessary.

! 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.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 8 of 31

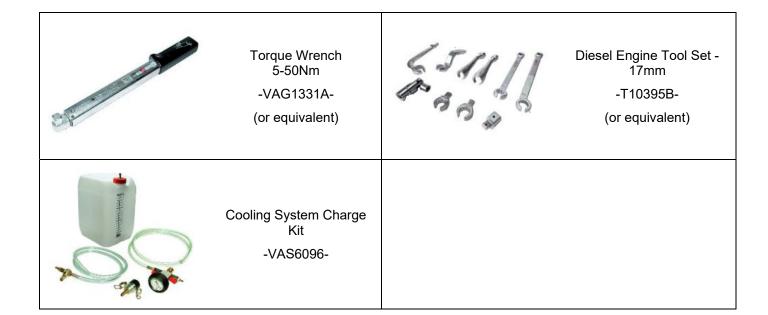
Required Tools



Continued on next page

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 9 of 31



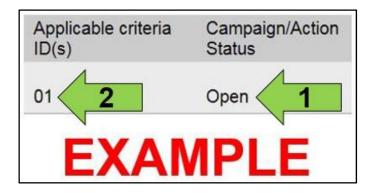
April 2021 24Gi Page 10 of 31

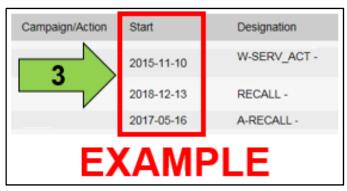
Repair Instruction

Section A - Check for Previous Repair

i TIP

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





• 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.



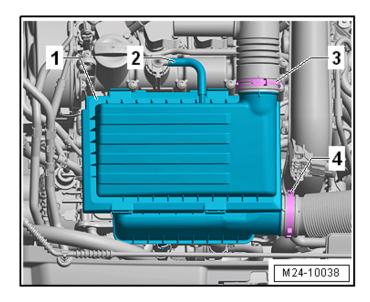
open, they must be performed in order of the Start date <arrow 3>. The oldest should be performed first.

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

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

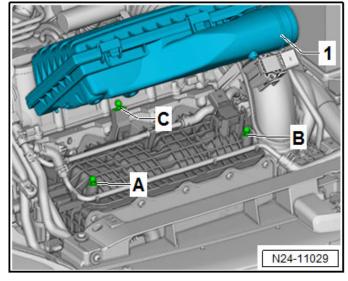
April 2021 24Gi Page 11 of 31

Section B - Removing Intake Manifold



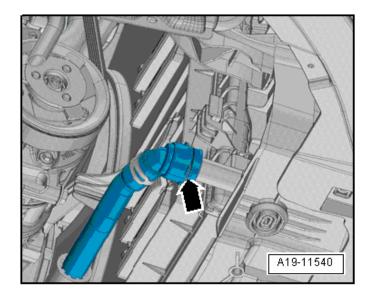
Remove air filter housing:

- Remove vacuum hose <2> from air filter housing <1>.
- Loosen spring clamps <3> and <4>.



- Pull the air filter housing <1> upward off of the ball pins and off of the air duct hoses.
- Remove the air filter housing from the ball pin <C>.
- Remove the air filter housing from the ball pins <B and A>.

April 2021 24Gi Page 12 of 31



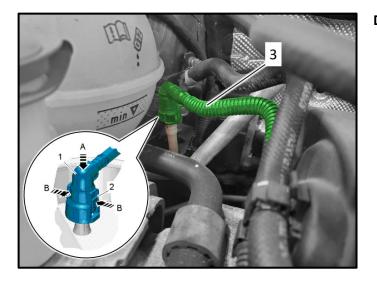
Drain engine coolant:

A CAUTION

The cooling system is under pressure when the engine is warm. Risk of scalding due to hot steam and hot coolant.

Scalding the skin and other parts of the body is possible.

- Wear safety gloves.
- Wear protective eyewear.
- Reduce the pressure by covering the coolant expansion tank cap with a cloth and carefully opening it.
 - Remove noise insulation.
 - See ELSA Repair Manual: Repair manual > Body Exterior > 66 Exterior Equipment > Noise Insulation > Noise Insulation, Removing and Installing, Gasoline Engine
 - Drain the coolant:
 - See ELSA Repair Manual: Repair manual > Engine > 4-Cylinder Fuel Injection Engine (1.4L Engine, 4V, EA211, Turbocharger) > 19 Cooling System > Coolant System/Coolant > Coolant, Draining and Filling

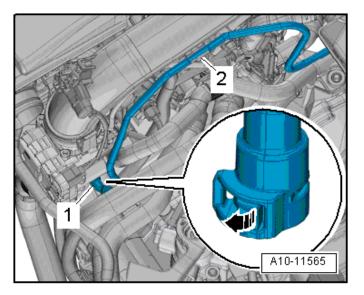


Disconnect EVAP line <3>:

- First push the hose coupling <1> downward in direction of <arrow A>.
- Then press the release buttons in direction of sarrows B>.
- Then remove the hose coupling upward with the release buttons pressed.
- Free up EVAP line <3> from the hose clips on the timing cover.

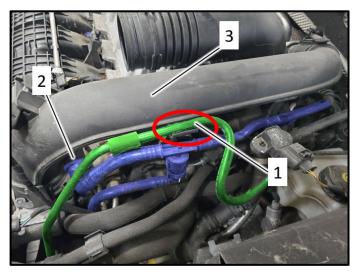
The repair information in this document is intended for use only by skilled technicians who have the proper tools, equipment and training to correctly and safely maintain your vehicle. These procedures are not intended to be attempted by "do-it-yourselfers," and you should not assume this document applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 13 of 31



Free up vacuum hose:

- Open the retainer in direction of <arrow> and remove the vacuum hose <1> using a pick tool, for example
- Free up the vacuum hose on the air duct pipe <2>.



Disconnect hoses from air duct pipe:

A CAUTION

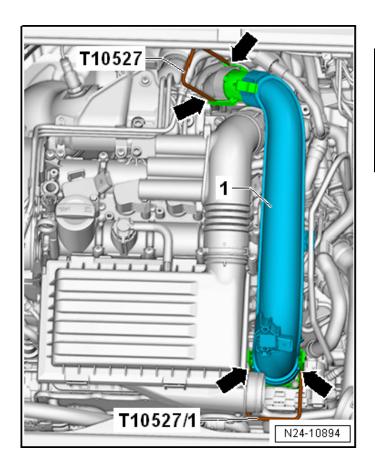
Risk of Consequential Damage

Use extreme care when removing connections from the air duct pipe.

Ensure the vacuum hose <1> and EVAP line <3> are disconnected before attempting to remove the air duct pipe <3>

- Unclip vacuum hose <1> from air duct pipe <3>.
- Release locking tabs using a small screwdriver or pick and disconnect EVAP line <2> from air duct pipe <3>.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.



Remove air duct pipe:

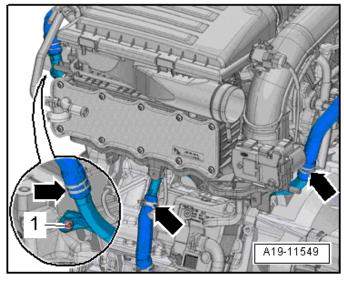
A CAUTION

Risk of Consequential Damage

Use extreme care when releasing the retainers for the air duct pipe.

Avoid rocking the air duct pipe back and forth when removing.

- Remove the connector from the Charge Air Pressure Sensor -GX26-.
- Release the retainers <arrows> using the -T10527- and -T10527/1-.
- Release the catches using the -T10527- and remove the air duct pipe.
- Seal the open connections with clean plugs from the -VAS6122- .

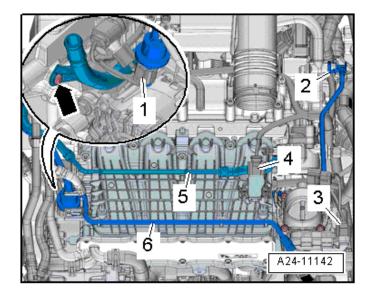


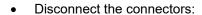
Prepare intake manifold for removal:

- Remove the bolt <1> and loosen the clamps <arrows>.
- · Remove the coolant hoses.

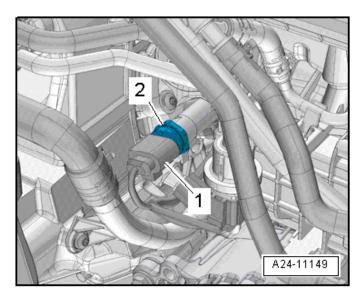
The repair information in this document is intended for use only by skilled technicians who have the proper tools, equipment and training to correctly and safely maintain your vehicle. These procedures are not intended to be attempted by "do-it-yourselfers," and you should not assume this document applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 15 of 31

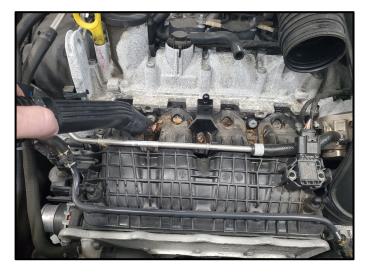




- For EVAP Canister Purge Regulator Valve 1 -N80-
- 2. For the Throttle Valve Control Module -GX3-
- 3. For Intake Manifold Sensor -GX9-
- Ignore the <arrow> in the image.
- Press the release buttons and remove the EVAP canister hose <2>.
- Unclip the fuel supply line <5> and the coolant line <6> from the intake manifold and move them to the side.

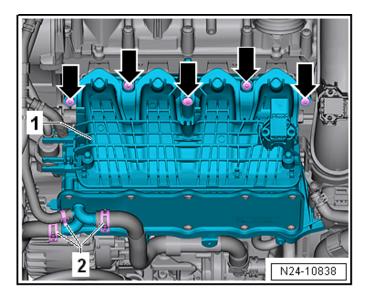


- Disconnect the connector <1> from the Fuel Pressure Sensor -G247-.
- Disconnect the connector from the oil pressure switch.



 Vacuum any debris that has accumulated on top of the intake manifold

April 2021 24Gi Page 16 of 31



Remove intake manifold:

- Loosen the clamps <2> and remove the coolant hoses.
- Remove the bolts <arrows>.
- Remove the intake manifold <1>.



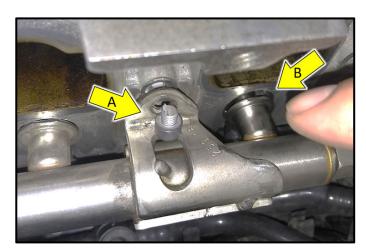
Seal openings:

 Seal openings in cylinder head with clean, lint free shop rags.

Proceed to Section C

April 2021 24Gi Page 17 of 31

Section C - Inspecting Fuel Rail Bolts





The inspection will consist of three steps:

• All four fuel rail bolts must be inspected.

<u>Step 1</u> - Visual inspection for broken bolt, obviously loose bolts, exposed injector seal.

Step 2 – Check for loose bolts by hand.

Step 3 - Carry out a gap test.

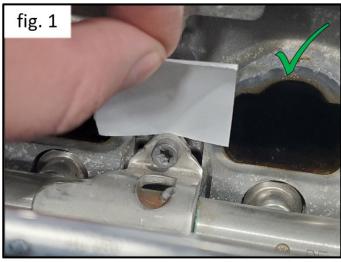
Inspection Step 1 (visual inspection):

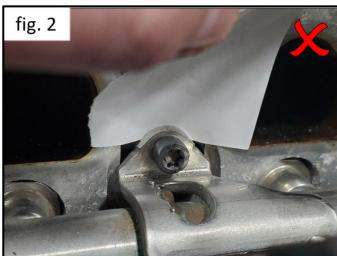
- Visually inspect all four fuel rail bolts for broken bolts or bolts that have backed out and are obviously loose <arrow A>.
- Visually inspect for signs that the fuel rail is pulling away from the cylinder head and exposing the fuel injector seal <arrow B>.
- If <u>any</u> of the four bolts are broken or loose, or a fuel injector seal is exposed:
 - The fuel rail and injectors must be replaced.
 - Proceed to Section D.
- If all four bolts pass the first inspection, proceed to Inspection Step 2.

Inspection Step 2 (check for loose bolts by hand):

- Check for loose fuel rails bolts by hand, without using tools.
- All four fuel rail bolts must be checked.
- If <u>any</u> of the four bolts are loose:
 - The fuel rail and injectors must be replaced.
 - o Proceed to Section D.
- If all four bolts pass the second inspection, proceed to Inspection Step 3.

April 2021 24Gi Page 18 of 31





Inspection Step 3 (gap test):



U NOTE

It may be possible that a fuel rail bolt is loose, but the pressure of a damaged fuel rail bracket prevents the bolt from be loosened by hand.

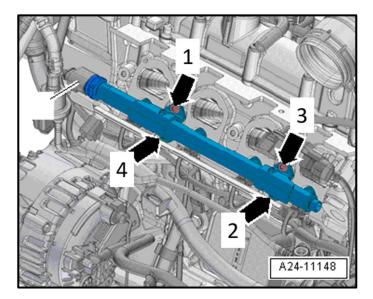
- ALL FOUR FUEL RAIL BOLTS MUST BE INSPECTED.
- Check the gap between the cylinder head and the back side of the fuel rail bracket using a 0.1 mm feeler gauge.



For illustration purposes, a standard piece of printer paper was used. Using a 0.1 mm feeler gauge is the preferred method, although a piece of standard printer paper will also work.

- If the feeler gauge passes between the cylinder head and fuel rail bracket and stops at the fuel rail bolt, this is evidence that the bolt has loosened (fig. 2).
- If any bolt fails the gap test:
 - The fuel rail and fuel injectors must be replaced.
 - Proceed to Section D.
- If the feeler gauge does not pass between the cylinder head and fuel rail bracket, the connection is OK (fig. 1). Move on to the next connection.
- If all four fuel rail bolts have passed all three inspection steps:
 - The fuel rail bolts must be replaced one at a time.
 - Proceed to the next step.

April 2021 24Gi Page 19 of 31



Replacing fuel rail bolts:



Critical Torque Specification

To avoid any potential comebacks, the bolts must be torqued correctly and in the correct sequence.

Part Number	Part Description
N -105-464-03	Fuel rail bolt (x4)

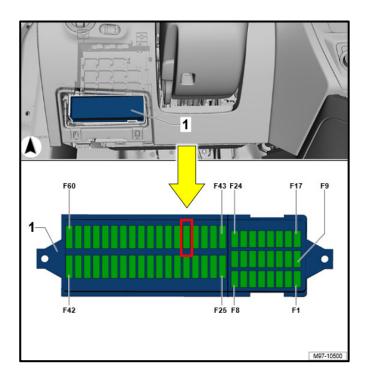
- Replace and torque fuel rail bolts <u>one at a</u> <u>time</u> in the sequence <1> through <4>.
- Torque new bolts to 8 Nm + 90°.

Proceed to Section E

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 20 of 31

Section D - Replacing Fuel Rail and Fuel Injectors



Remove fuel pump fuse:

A DANGER

RISK OF FIRE!!

At no time should the following occur while the fuel system is opened:

- Ignition be turned on
- Front doors opened
- Engine attempted to be started

Removal of the fuse for the fuel pump control module will prevent inadvertent activation of the fuel pump if the front doors are opened or if the ignition is turned on.

- Access the SC fuse panel <1>.
- Remove fuse SC 47 <arrow>.

A WARNING

The fuel system is under pressure. Risk of injury from fuel spraying out.

- Wear protective eyewear.
- Wear safety gloves.
- Reduce the pressure: place clean cloths around the connection point and carefully open the connection point.



Risk of Repeat Repair

Pay attention so that no dirt enters the open fuel line connections.

Remove high pressure pipe:

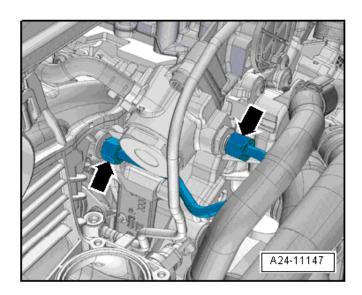
Place a cloth underneath to catch escaping fuel



Risk of Repeat Repair

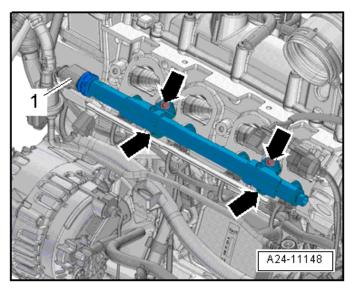
To avoid damage to the high pressure fuel pump union, the union (if equipped) must be counter-held when removing or installing the high pressure pipe.

- Counterhold the union (if equipped) on the high pressure fuel pump.
- Remove the union nuts <arrows> and the high pressure pipe.



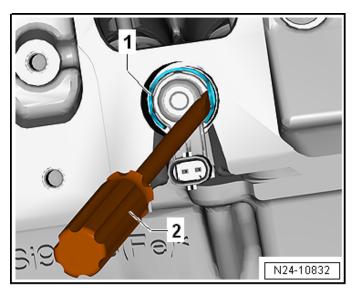
The repair information in this document is intended for use only by skilled technicians who have the proper tools, equipment and training to correctly and safely maintain your vehicle. These procedures are not intended to be attempted by "do-it-yourselfers," and you should not assume this document applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 21 of 31



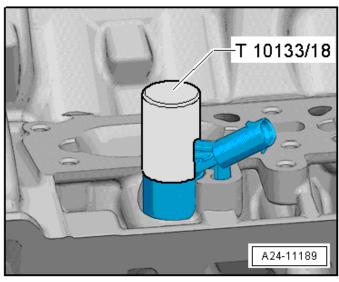
Remove fuel pressure sensor and fuel rail:

- Remove the Fuel Pressure Sensor -G247- <1> using the -T40218-.
- Remove the bolts <arrows> and pull the fuel rail off the fuel injectors.



Remove fuel injectors:

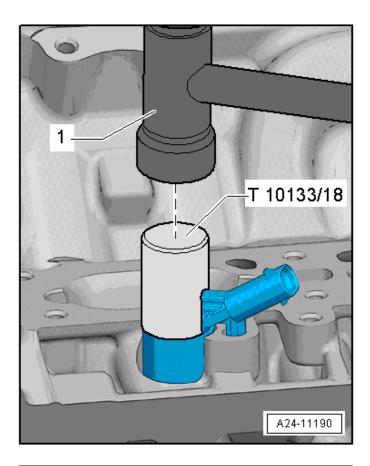
 Pry the support ring <1> off the fuel injector with a screwdriver <2>.



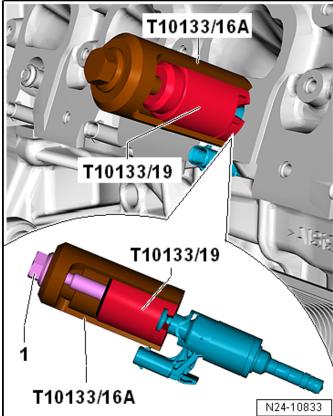
• Push the -T10133/18- over the fuel injector.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 22 of 31

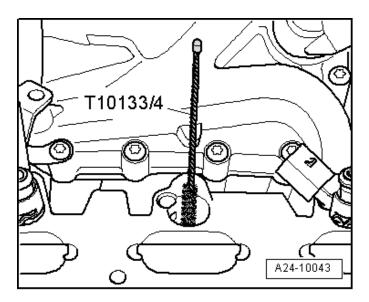


Carefully hit the sleeve to loosen the fuel injector.



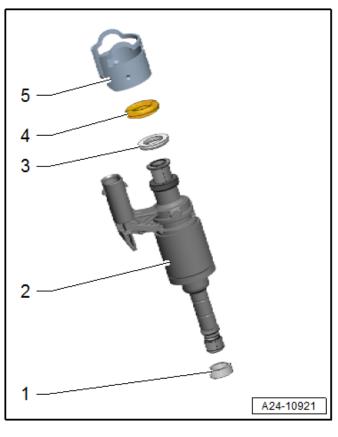
- Use a torque wrench adjusted to 5 Nm to remove the fuel injector.
- Position the -T10133/19- on the groove on the fuel injector.
- Position the -T10133/16A- on the puller.
- Turn the bolt and remove the fuel injector <1>.
- If the tightening specification limit of 5 Nm is reached without the fuel injector loosening, remove the puller again and start again.
- Loosen the fuel injector using the sleeve.
- · Repeat this on each fuel injector.

April 2021 24Gi Page 23 of 31



Clean fuel injector hole:

- Clean the hole in the cylinder head with the -T10133/4-.
- Use a clean towel to clean combustion residue from the groove for the combustion chamber seal and the fuel injector shaft.



Install new fuel injectors:

Part Number	Part Description
04E-906-036-Q	Injector (x4) (either part
or	number can be used based
04E-906-036-AF	on part availability)
04E-133-036-A	Support Ring (x4)

- Installation is the reverse order of removal.
- Support ring <5> must be replaced.
- The new fuel injector has seals <1>, <3> and
 <4> pre-installed.
- Coat O-ring <4> with clean engine oil before installing fuel injector.
- Combustion chamber seal <1> must NOT be oiled.



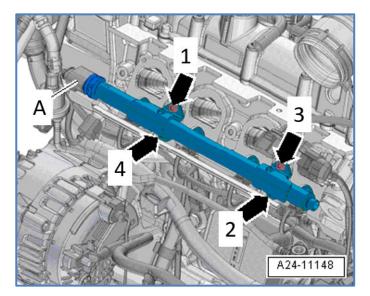
Risk of Repeat Repair

To avoid repeat repairs:

- O-ring <4> must be coated with clean engine oil
- Combustion chamber seal <1> must NOT be oiled.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 24 of 31



Install new fuel rail with new fuel rail bolts:

Part Number	Part Description
04E-133-320-D	Fuel Rail
N -105-464-03	Fuel rail bolt (x4)

Installation in the reverse order of removal.

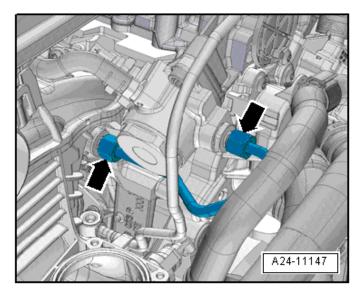
A CAUTION

Critical Torque Specification

- To avoid any potential comebacks, the bolts must be torqued correctly and in the correct sequence.
- Use extreme care when installing fuel rail onto fuel injectors to avoid damaging seals.
 - Install fuel rail onto the fuel injectors with even pressure
 - Install and torque fuel rail bolts <u>one at a time</u> in the sequence <1> through <4>.
 - Torque new bolts to 8 Nm + 90°.
 - Install fuel pressure sensor <A> and torque to 22 Nm.
 - Do not coat the thread on the fuel pressure sensor.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 25 of 31



Install new high pressure pipe:

Part Number	Part Description
04E-130-241-AR	Pipe

A CAUTION

Risk of Repeat Repair

The high pressure pipe must be aligned properly with the high pressure pump and the fuel rail. It must not be on an angle when tightening.

- Coat the thread on the union nut with clean engine oil.
- Tighten the high pressure pipe union nuts <arrows> by hand, making sure they are seated without tension.

A CAUTION

Critical Torque Specification

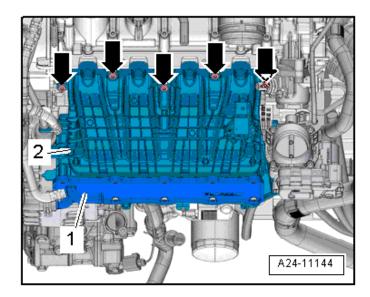
- The union nuts <arrows> must be torqued to the correct specification. Otherwise, a fuel leak could occur.
- To avoid damage to the high pressure fuel pump union, the union (if equipped) must be counter-held when applying the final torque on the high pressure pipe.
 - Torque the union nuts to 16 Nm + 45° with the -VAG1331- and a suitable adapter from -T10395/A-.

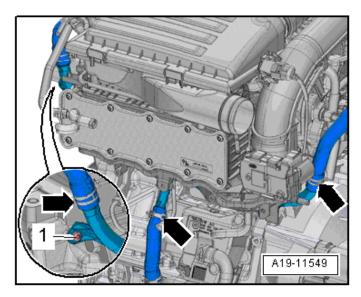
Proceed to Section E.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 26 of 31

Section E - Vehicle Reassembly





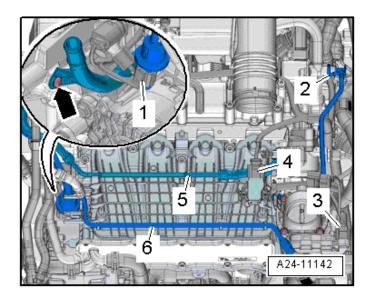
Installation is the reverse order of removal:

• Replace the intake manifold seals.

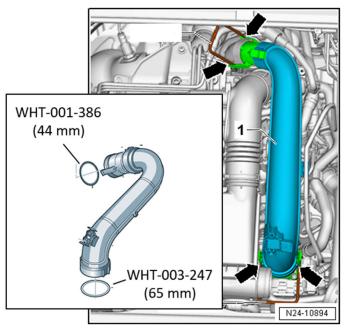
Part Number	Part Description	
036-129-717-E	Intake Manifold Seals (x4)	

- Tighten the bolts <arrows> in stages as follows:
 - Starting in the center and alternating from side to side, install by hand all the way in.
 - 2. Starting from the center and alternating from side to side, torque to 8 Nm
- Reconnect coolant hoses and EVAP hoses.
- Ensure coolant hose clamps are positioned correctly.
- Torque coolant pipe bolt <1> to 8 Nm.

April 2021 24Gi Page 27 of 31



- Reconnect all electrical connectors.
- Secure fuel supply line and coolant line.



A CAUTION

Risk of Consequential Damage

Use extreme care when reinstalling the air duct pipe.

Avoid rocking the air duct pipe back and forth when installing.

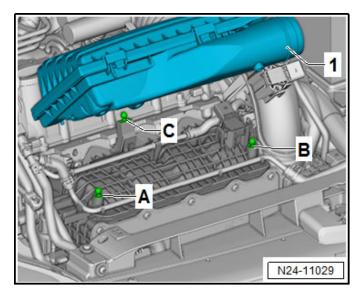
Replace air duct pipe O-rings.

Part Number	Part Description
WHT-001-386	44 mm O-ring
WHT-003-247	65 mm O-ring

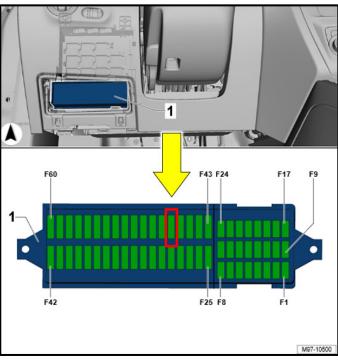
- Coat O-rings lightly with clean engine oil before installing air duct pipe <1>.
- Ensure the contact area for the air duct pipe in the turbo inlet is clean.
- Ensure locking retainers <arrows> are fully engaged.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 28 of 31



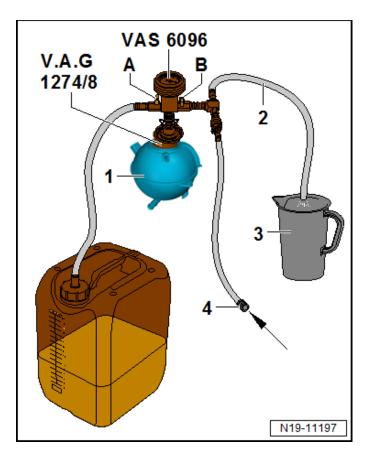
- Reinstall air filter housing.
- Push the air filter housing <1> on the ball pins <A and B>.
- Then push the air filter housing on the ball pin <C>.
- The hose connections as well as air duct pipes and hoses must be free of oil and grease before installing.
- Use a silicone-free lubricant to mount the air guide hoses.



Reinstall fuel pump fuse (if removed):

Reinstall fuse SC 47.

April 2021 24Gi Page 29 of 31



Fill coolant:

- See ELSA Repair Manual: Repair manual > Engine > 4-Cylinder Fuel Injection Engine (1.4L Engine, 4V, EA211, Turbocharger) > 19 Cooling System > Coolant System/Coolant > Coolant, Draining and Filling
- Install noise insulation in the reverse order of removal.
 - Torque noise insulation screws to 2 Nm.

Proceed to Section F

April 2021 24Gi Page 30 of 31

Section F - 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.

i TIP

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

Proceed to Section G

Section G - 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.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

April 2021 24Gi Page 31 of 31