# Service Action Code: 87i1



#### Subject

#### **Pressure & Temperature Sensors**

**Document History** 

Date	Summary		
02/13/2024	Original publication		

#### Affected Vehicles

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2021	2021	ID4	15,822

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**

On vehicles manufactured within a specific period, the pressure/temperature sensor in the air conditioning system may fail. If this happens, the air conditioning system will no longer function.

#### **Corrective Action**

Inspect and, if necessary, replace the affected pressure/temperature sensor.

#### **Code Visibility**

On or about February 13, 2024, the campaign code will be applied to affected vehicles.

#### **Owner Notification**

Owner notification will take place in February 2024. Owner letter examples are included in this bulletin for your reference.

## Campaign Expiration Date

This campaign expires on *December 31, 2028.* Work 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 work performed after the expiration date, your normal parts and labor cost associated with this work 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>.

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.

## Parts Information (if required)

Criteria	Quantity	Part Number	P.O.C. Part Description	Ordering Method (see description below)
	1	4M0-959-603-E	SENSOR	Free Order
E2	Up to 1.2 ml	G -052-535-1M-DSP	OIL REFRIG	Free Order
	Up to 46 g		R1234yf refrigerant (Locally sourced)	

Parts Control Type: Free Order  Parts will be managed by Free Order			
Initial Allocation:	Please reference the Repair Projection Tool (below) to view your potential VIN population.		
Repair Projection Tool: (right click to open)	<b>Q</b>		



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

#### **Claim Entry Instructions**

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

After campaign has been completed, enter claim as soon as possible to help prevent work from being duplicated elsewhere. Attach the ELSA screen print showing action <u>open on the day of repair</u> to the repair order. If customer refused campaign work:

✓ U.S. dealers: Submit request via WISE under the Campaigns/Update/Recall Closure option

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Service Number	87i1			
Damage Code	0099			
Parts Vendor Code	wwo			
Claim Type	Sold vehicle: 7 10			
	Unsold vehicle: 7 90			
Causal Indicator	Mark labor as causal if the sensor is ok			
	Mark SENSOR* as causal if the sensor requires replacement			
Vehicle Wash/Loaner	Do not claim wash/loaner under this action			
	<u>U.S.A.:</u> 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.			
Criteria I.D.	E2			
	Pressure/temperature sensor inspection			
	LABOR			
	Labor Op	Time Units	Description	
	8709 01 99	25	Check pressure/temperature sensor	

ADD (ONLY if necessary)	Replace pressure/temperature sensor			
	LABOR			
	Labor Op	Time Units	Description	
	8709 55 99	90	Replace pressure/temperature sensor	
	PARTS			
	Quantity	Part Number	Description	
	1.00	4M0959603E	SENSOR*	
	0.01	G 052535M2	OIL FOR REFRIGERANT COMPRESSOR	
	OUTSIDE MATERIAL			
	Part Number	Quantity	Description	Amount
	ZVP000134YF	Up to 1.6 oz (46 g)	A/C Refrigerant – R1234yf	Up to \$6.50 (\$4.07 per oz)
	Please enter part numbers in ALL CAPS			

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. ©2024 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

#### **Customer Letter Example (USA)**

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

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

Subject: Service Action 87i1 - Pressure/Temperature Sensor

Dear Volkswagen Owner,

As part of Volkswagen's ongoing commitment to customer satisfaction, we are informing you of our decision to conduct a service action on certain 2021 model year Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue? On vehicles manufactured within a specific period, the pressure/temperature sensor

in the air conditioning system may fail. If this happens, the air conditioning system will

no longer function.

What will we do? Your authorized Volkswagen dealer will inspect and, if necessary, replace the affected

pressure/temperature sensor. This work will take about two 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 work, as well as to accommodate their daily

workshop schedule.

What should you do? Please contact your authorized Volkswagen dealer as soon as possible to schedule

this work. To set up an appointment online, please visit <a href="www.vw.com/find-a-dealer.">www.vw.com/find-a-dealer.</a>

This service action will be available for you <u>free of charge only until December 31, 2028.</u> If you wish to have this work performed after that date, your dealer's normal

costs associated with this repair will apply.

Lease vehicles and address changes

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

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 <a href="https://www.vw.com/contact">www.vw.com/contact</a> 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 <a href="www.vw.com/owners/recalls">www.vw.com/owners/recalls</a> and enter your Vehicle Identification Number (VIN) into the Recall/Service Campaign Lookup tool.

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,

Volkswagen Customer Protection

## Safety Precautions When Working NEAR the High-voltage System (additional information is also available in the ELSA Repair Manual)

## A DANGER

#### Extremely dangerous due to high voltage.

- The voltage levels in the high-voltage system constitute a safety hazard. Danger of severe or fatal injuries from electric shock if high-voltage components or high-voltage wiring are damaged.
- Carry out a visual check of high-voltage components and high-voltage wiring.
- Never use cutting/forming tools or other sharp-edged implements.
- Never perform work using welding, brazing, thermal bonding or hot air in the area of high-voltage components and high-voltage cables.

#### **Repair Overview**



- Inspect G395 pressure/temperature sensor.
- Replace 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.

#### **Required Tools**



R1234yf Air Conditioning Service Unit -ROB1234YFXor -VAS581005-



Engine Bung Set
-VAS6122(or equivalent)



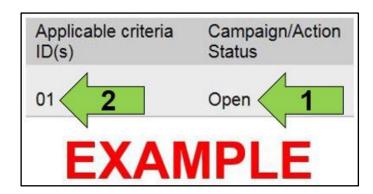
Socket – 24mm -T40284-(or equivalent)

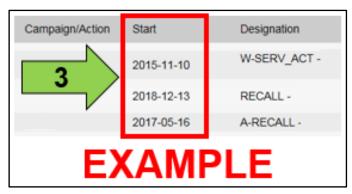
#### **Repair Instruction**

#### 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

first.

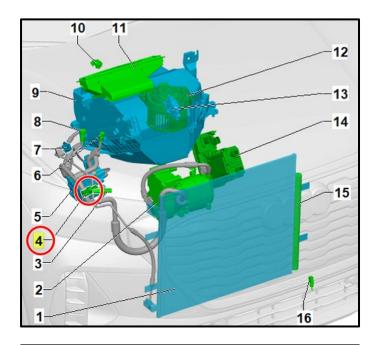
On the date of repair, print this screen and keep a copy with the repair order.

- 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.



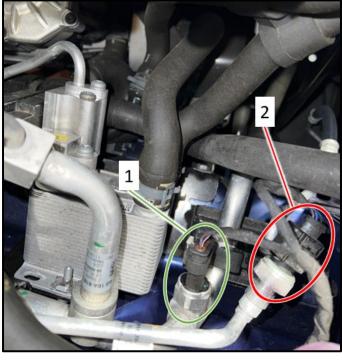
- All Safety Recalls must be completed prior to completing this campaign.
- Proceed to section B

#### Section B - Inspect G395 Sensor



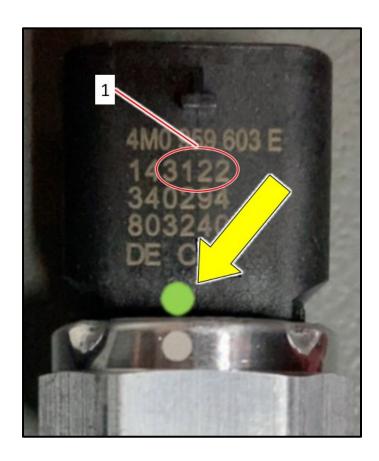
#### Inspect G395 Sensor:

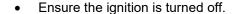
 Locate the G395 sensor <4> in the under hood compartment.



## ① NOTE

The G395 and G805 sensors are located next to each other. The G395 <1> is located on the low-side A/C line and the G805 <2> is on the high-side A/C line. The connector can also be used to identify the G395. The G395 has a 4 pin connector with 3 wires and a blank cavity. The G805 has a 3 pin connector with 3 wires.





- Disconnect the sensor.
- Check for a green dot <arrow> on the connector housing of the G395.
- If the green dot is present:
  - o No further work is required.
  - Proceed to section D.
- If the green dot is NOT present:
  - Check the production date <1> of the G395 sensor.
  - If the G395 sensor was produced calendar week 23 of 2020 through calendar week 30 of 2021, the sensor must be replaced.

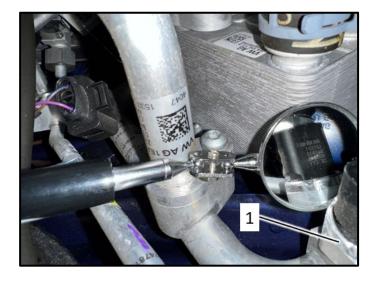


The production date <1> of the sensor pictured is calendar week 31 of 2022. This sensor does not require replacement. The date format is week/year.

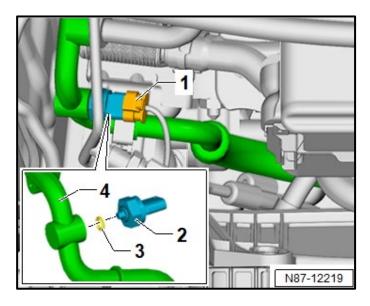
- If the G395 sensor requires replacement:
  - Proceed to section C.
- If the G395 sensor does not require replacement:
  - No further work is required.
  - Proceed to section D.

## U NOTE

If the G395 <1> is positioned in a way that the production information is not visible, a mirror can aid in inspecting the sensor.



#### Section C - G395 Sensor Replacement



Replace the G395 sensor:

#### **A** CAUTION

The cooling system may be under pressure. There is a risk of scalding due to hot steam and hot coolant.

Scalding of 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 suitable towel and carefully open it.



#### **A** CAUTION

Danger of frostbite due to refrigerant coming out under pressure. Frostbite on the skin and other parts of the body is possible.

- Wear safety gloves.
- Wear protective eyewear.
- Evacuate or drain refrigerant and open the refrigerant circuit immediately.
- If more than 10 minutes have elapsed since evacuating or draining the refrigerant and the refrigerant circuit was not opened, evacuate or drain the refrigerant again. Pressure develops in the refrigerant circuit due to evaporation.



#### NOTE

At the time of publication, the repair manual states to open any valves in the refrigerant circuit through ODIS that are not opened when de-energized. The N541 and N636 **DO NOT** need to be opened through ODIS for replacement of the G395.

- Replace the G395 <2> per the ELSA repair manual:
  - Repair manual > Heating, Ventilation and Air Conditioning > 87 Air Conditioning > Refrigerant Circuit, R134a/R1234yf > Pressure/Temperature Sensor G395, Removing and Installing
- Recharge the A/C system with the amount of refrigerant that was recovered.
- Proceed to section D

#### Section D - Campaign Completion Label

#### **Install Campaign Completion Label**

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



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

#### **Proceed to Section E**

#### Section E - Parts Return/Disposal

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