



GROUP	MODEL
ELE	2025-2026MY Carnival (KA4) w/ Lambda III 3.5 GDI
NUMBER	DATE
403 (Rev 1, 11/24/2025)	November 2025

TECHNICAL SERVICE BULLETIN

SUBJECT: SERVICE ACTION: A/C COMPRESSOR REPLACEMENT (SA632)

NOTICE

This bulletin has been revised as a Combination TSB/SA and includes additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.

This bulletin provides information to address air conditioning performance issues reported on certain 2025-2026 model year Carnival (KA4) vehicles produced between December 1, 2024, and June 12, 2025. Customers may experience intermittent cooling or insufficient cooling at low blower speeds. The cause may be excessive clearance between the compressor piston and cylinder, which reduces refrigerant compression and results in inconsistent or weak cooling performance. Follow the procedure outlined in this publication to inspect the air conditioning system and, if necessary, replace the A/C compressor. Before beginning, confirm that the vehicle is listed among the affected VINs in dealer stock only.

NOTICE

A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

Repair status for a VIN is provided on KDealer+ (Service → Warranty Coverage → Warranty Coverage Inquiry → Campaign Information). Not completed Recall / Service Action reports are available on KDealer+ (Consumer Affairs → Not Completed Recall → Recall VIN → Select Report), which includes a list of affected vehicles.

This issue number is SA632.

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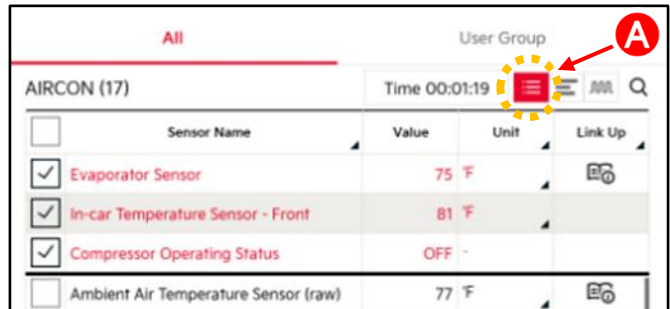
Inspection Procedure:

1. Start the engine and connect KDS to the vehicle.
2. Adjust the climate control settings as shown in the chart.



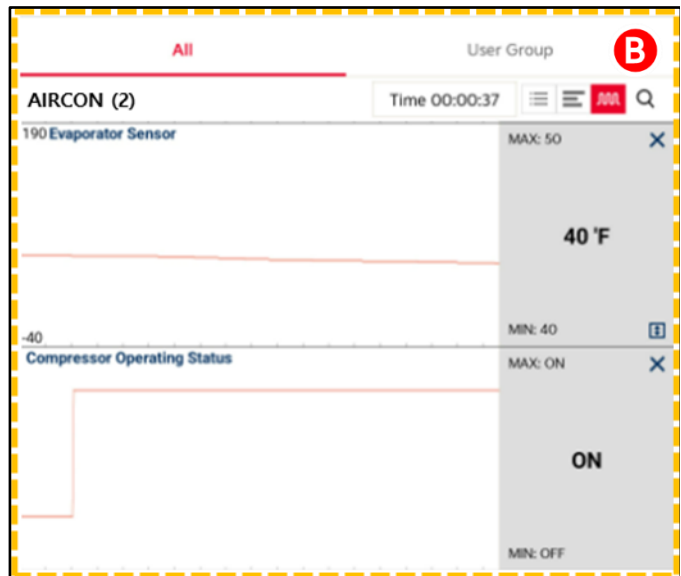
Item	Setting	Image
Recirculation	On	
Temperature	LO	
A/C	On	
Blower Speed	1	
Air flow	Face level	
Rear	LO, 1	
Sync	On	

3a. In KDS navigate to:
“Expert Diagnosis → Data Analysis → AIRCON”



- 3b. Choose:
- ✓ **Evaporator Sensor**
 - ✓ **Compressor Operating Status**



3c. Switch the display mode (A) to graph view (B).

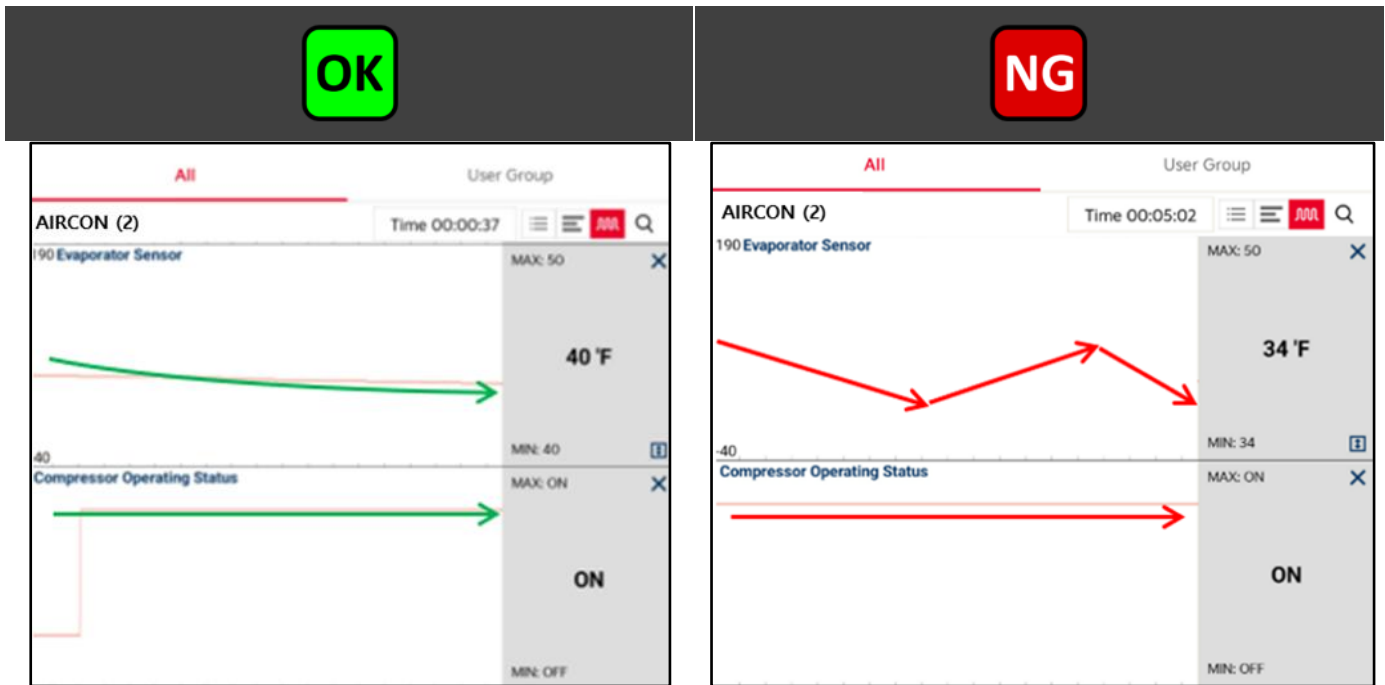


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4. Allow the air conditioning system to operate for five minutes without making any adjustments to the control panel. Observe the sensor readings throughout the five-minute period and evaluate the changes. Then, determine whether the vehicle meets the defect criteria as outlined in the table below.

	Condition
	The temperature decreases steadily from the beginning throughout the five-minute operation.
	The temperature does not decrease, or may even rise during the five-minute operation.
	The temperature fluctuates during the five-minute operation.



5. If, during the five-minute operation, any of the following conditions occur:
 - The temperature does not decrease
 - The temperature rises
 - The temperature fluctuates

Then replace the compressor assembly.

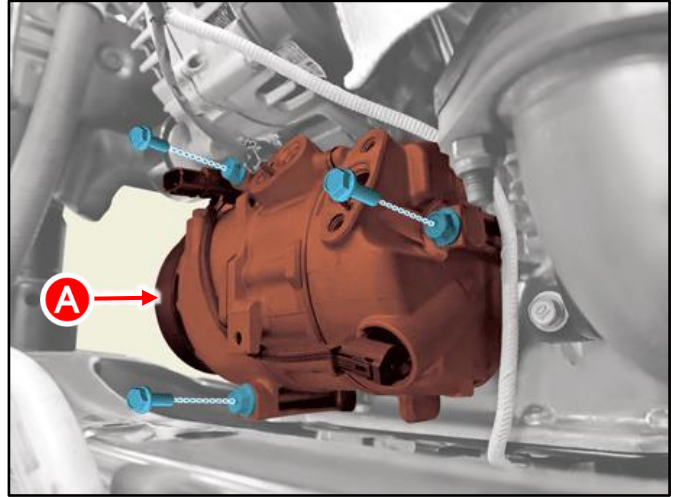


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Repair Procedure:

1. Replace the compressor assembly (A) by referring to "Heating, Ventilation And Air Conditioning → Air Conditioning System → Compressor → Removal and Installation" in the applicable Shop Manual on KGIS.



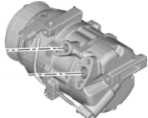

AFFECTED VEHICLE RANGE:

Model	Production Date Range
Carnival (KA4)	December 1, 2024 to June 12, 2025

REQUIRED TOOL:

Tool Name	Part Number	Figure	Comments
Kia Diagnostic System (KDS)	N/A		KDS + VCI
Mahle ACX 2299	ACX 2299		R-1234yf

REQUIRED PART:

Part Name	Part Number	Figure	Qty.	Comments
Compressor Assembly	97701 R0100QQK		1	N/A
R-1234yf Refrigerant*	Locally Sourced		If needed	Capacity 770 ± 25g (27.17 ± 0.88 oz.)

***Note: A Mahle A/C record is required to claim refrigerant. Dealer can only claim the missing refrigerant noted in the Mahle A/C record when the vehicle does not meet specifications listed above.**



SUBJECT:

SERVICE ACTION: A/C COMPRESSOR REPLACEMENT (SA632)**WARRANTY INFORMATION: (SERVICE ACTION) FOR VEHICLES IN DEALER STOCK**

N Code: N99 C Code: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
V	97701 R0100	0	(SA632) Air Conditioning Operation Inspection (OK)	250173R1	0.2 M/H	N/A	0
		0	(SA632) Air Conditioning Operation Inspection (NG) + A/C Compressor Replacement	250173R0	1.8 M/H	97701 R0100QQK	1
						UM016 CH113W1 and/or UM016 CH113W3	If Needed

Note: When substitute transportation is provided, manually enter sublet code 'X2' for rental expense reimbursement or one roundtrip rideshare expense. Make sure to submit any substitute transportation claim at the time of the warranty expense.

Replacement P/N UM016 CH113W1 (1 gram) and/or UM016 CH113W3 (100 grams) are used to populate A/C Service Record, which contains the refrigerant quantities, RO#, service date, etc., used during repair (if needed); Refer to Mahle A/C Record.

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA632 when accessing the KDealer+ system.

