



GROUP	MODEL
Safety Recall Campaign	2022-2023MY Carnival (KA4)
NUMBER	DATE
SC265	May 2023

SAFETY RECALL CAMPAIGN

TRAILER TOW HITCH HARNESS REPAIR AND FUSE/LABEL REPLACEMENT (SC265)

This bulletin provides information to inspect the tow hitch harness assembly and, based on the inspection, either repair the tow hitch harness assembly with a protective harness extension or replace the tow hitch harness assembly with a new one on certain 2022-2023MY Carnival (KA4) vehicles produced from January 4, 2021 through February 2, 2023, equipped with a Genuine Kia accessory trailer tow hitch assembly (Refer to page 8). In addition, this bulletin also provides information to replace the TRAILER 1 '30A' fuse with a new '15A' fuse on all vehicles being repaired with the protective harness extension. A fire may occur in the area of the tow hitch harness module while driving or while the vehicle is parked with the ignition OFF. The tow hitch harness module printed circuit board (PCB) may be susceptible to water inflow through the trailer tow hitch harness wiring connector which can result in an electrical short circuit, increasing the risk of a tow hitch harness module fire. A fire increases the risk of injury. Follow the procedure outlined in this publication to inspect and, as necessary, repair or replace the tow hitch harness assembly and, also install the lower amperage fuse and junction box cover label. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

NOTICE

There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected vehicle until it has been repaired pursuant to the procedures set forth in this bulletin.

NOTICE

To assure complete customer satisfaction, always remember to refer to KDealer+ Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

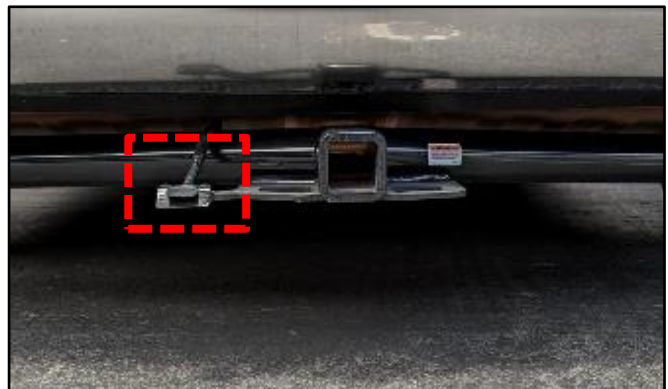
Inspection Procedure:

NOTICE

VINs under **SC265A (PIO)** & **SC265B (DIO)** - Dealer Installed Option (DIO) vehicles require an inspection of the trailer tow hitch option on the vehicle.

1. Inspect the rear of the vehicle (**SC265A&B**).

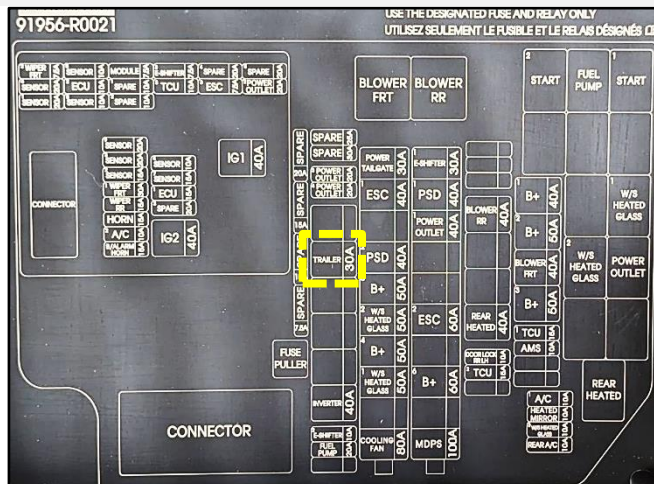
- Vehicle is **not equipped** with a tow hitch harness. No further action is required.
- Vehicle is equipped with an aftermarket tow hitch harness (not a 'Genuine Kia' part), then no further action is required.
- Vehicle is equipped with a 'Genuine Kia' 4-Pin tow hitch harness. If so, proceed to the 'Repair Procedure' on page 3.



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Repair Procedure:

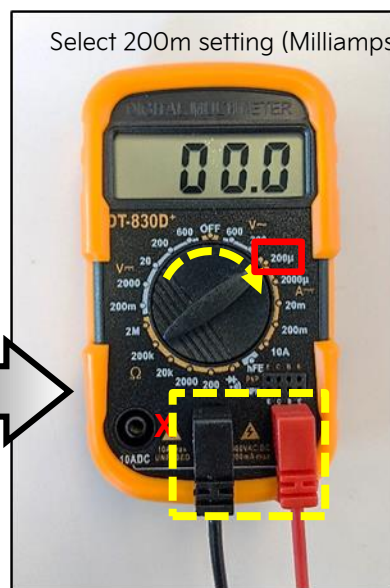
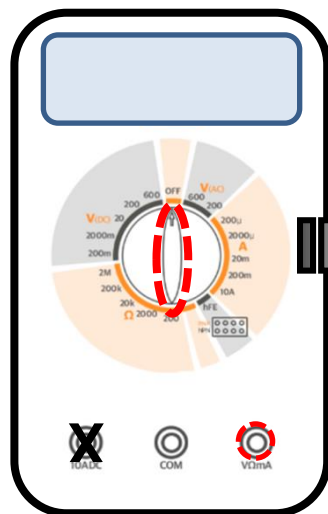
1. Open the hood and remove the engine room fuse block cover and set aside.
2. Remove the 'TRAILER' 30A fuse from the area shown in the fuse block.



3. Using a digital multimeter (DMM), turn the selection knob and set it to Milliamps (mA).
(When using SC197 multimeter) PN: DT-830D

Reading Milliamps:

Meter Setting	Displayed Value
20mA	DO NOT USE
200mA	0-200
10A	DO NOT USE

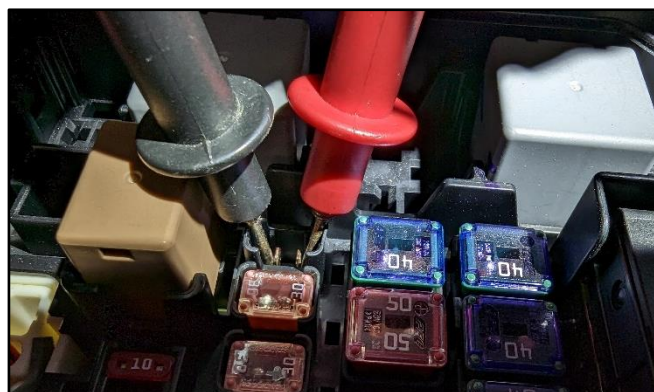


Select 200m setting (Milliamps)

ⓘ IMPORTANT

This test procedure must be performed with the ignition 'OFF'. (DO NOT 'START' the engine at any time during the test procedure.)

4. Using the two (2) SST Multimeter jumper leads, carefully contact the two (2) exposed pin contacts on the 'TRAILER' fuse location as shown.

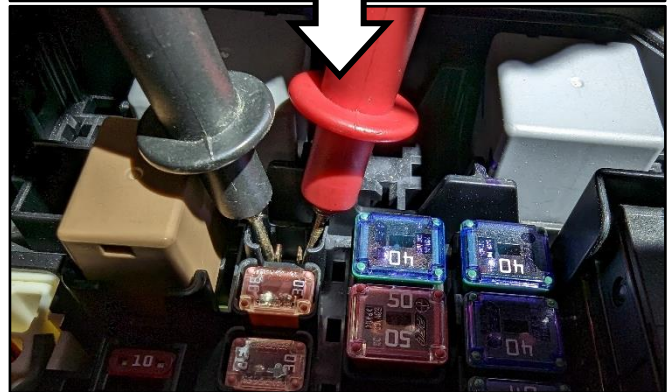


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5. Upon touching the two (2) fuse insert pin contacts, the DMM will display between 0 and 20mA and then start to decrease towards 0mA as the circuit goes back to sleep.

Measure the Multimeter value/reading for at least 5-6 seconds.

- If the DMM displays 13mA or less, proceed to **repair** the trailer hitch harness 'extension'. Continue to step 6. Refer to the **IMPORTANT** notice box instructions on page 8.
- If the DMM displays 13mA or more, then **replace** the trailer hitch harness 'assembly' by referring to: "Service Materials → Accessory Information → Body (Interior and Exterior) → 2022 - Carnival (KA4) Tow Hitch Harness (ROF67 AC400) Isheet" on KGIS **and then** skip to step 16.



6. Raise the vehicle on a lift to gain access to the trailer hitch harness at the rear of the vehicle.



- 7a. Cut the one (1) or two (2) cable ties securing the trailer hitch harness to the vehicle.

- 7b. Loosen the two (2) trailer hitch harness bracket retaining nuts.

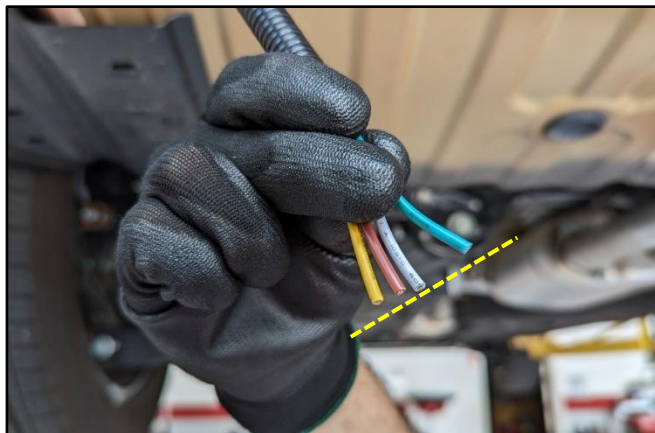


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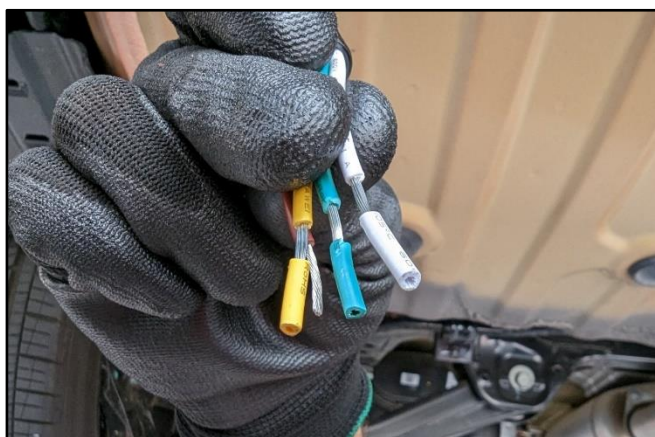
- 8a. Detach the 4-pin trailer hitch harness from the trailer hitch and allow to hang down freely.
- 8b. Align the 'new' 4-pin trailer hitch harness extension against the existing 4-pin trailer harness on the vehicle.



- 9a. Mark the existing 4-pin trailer harness and carefully, cut the existing harness's outer corrugate/insulation tubing on the vehicle.
- 9b. Using wire cutters, cut-off the end of the existing trailer harness from the vehicle.



10. Strip 12mm (0.5" in.) off each of the four (4) wires and then twist the loose wire strands together.



11. Take the new 4-pin wire harness extension, match the corresponding colors and crimp each of the four (4) wires butt-connectors to the vehicle harness.

Note: Crimp each butt-connector individually and gently pull on each wire after crimping to ensure it is secured.

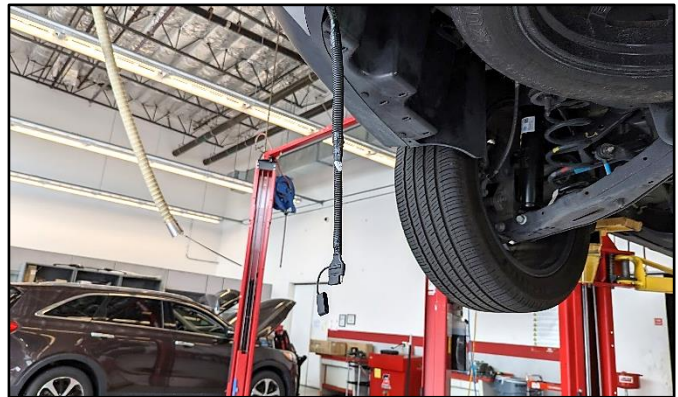


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12. Using a heat gun, direct hot air to the butt-connectors to allow them to shrink tight for a water-proof seal.



13. Slide the loose corrugated/insulation tubing from the new wire harness extension over the repair area (butt-connectors) and align the markings.



14. Using electrical tape, wrap the loose wire harness corrugated/insulation tubing around both corrugated/insulation tube ends.

15. Reinstall the trailer hitch 4-pin connector to the tow hitch on the vehicle in the reverse order of removal.

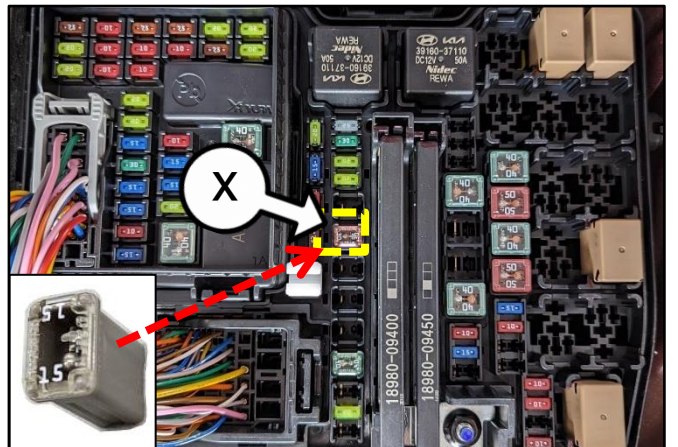


Note: Be sure to secure the harness to the same location of the previously removed cable ties from step 7a. (Refer to iSheet)

16. **30A FUSE** → **15A FUSE** (X)
 - Discard the removed 30A fuse and install the new 15A fuse (X).

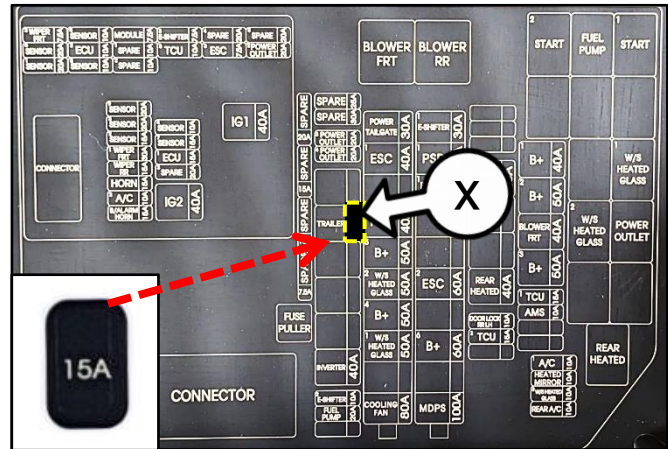
ⓘ IMPORTANT

Ensure to replace the TRAILER 1 '30A' fuse with the new '15A' fuse.



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- Adhere the new '15A' label (X) to the bottom of the junction fuse box cover, where shown.
- Reinstall the junction box cover and close the hood.



- Perform the trailer lighting Function Check List below and confirm normal operation.

Trailer Light Function Check				
IG position	Headlight position	Input	Trailer Test Light Expected Output	OK or NG?
0 (off)	0 (off)	<none>	all lights off	
		L turn signal	↑	
		R turn signal	↑	
		Hazard button	slow flash, R & L brake light	
		Brake pedal	solid light, R & L brake light	
	1 (driving light)	<none>	solid low light, R & L brake lights	
		L turn signal	↑	
		R turn signal	↑	
		Hazard button	slow flash, R & L brake light	
		Brake pedal	solid light, R & L brake light	
1 (ACC)	0 (off)	<none>	all lights off	
		L turn signal	slow flash, L brake light	
		R turn signal	slow flash, R brake light	
		Hazard button	slow flash, R & L brake light	
		Brake pedal	solid light, R & L brake light	
	1 (driving light)	L turn + Brake	solid R brake light, slow flash L brake light	
		R turn + Brake	solid L brake light, slow flash R brake light	
		Hazard + Brake	solid light, R & L brake light	
		<none>	solid low light, R & L brake lights	
		L turn signal	slow flash, L brake light	
2 (Engine On)	0 (off)	R turn signal	slow flash, R brake light	
		Hazard button	slow flash, R & L brake light	
		Brake pedal	solid light, R & L brake light	
		L turn + Brake	solid R brake light, slow flash L brake light	
		R turn + Brake	solid L brake light, slow flash R brake light	
	1 (driving light)	Hazard + Brake	solid light, R & L brake light	
		<none>	solid low light, R & L brake lights	
		L turn signal	slow flash, L brake light	
		R turn signal	slow flash, R brake light	
		Hazard button	slow flash, R & L brake light	
1 (driving light)	Brake pedal	solid light, R & L brake light		
	L turn + Brake	solid R brake light, slow flash L brake light		
	R turn + Brake	solid L brake light, slow flash R brake light		
	Hazard + Brake	solid light, R & L brake light		
	<none>	solid low light, R & L brake lights		



SUBJECT: TRAILER TOW HITCH HARNESS REPAIR AND FUSE/LABEL REPLACEMENT (SC265)

GENUINE KIA 4-PIN HARNESS CLAIM GUIDELINES

Installation Type	Claim Type	Campaign VINs
PIO	Trailer Tow Hitch Harness Inspection + 15A Fuse/Label + Harness Extension Repair*	SC265A
	Trailer Tow Hitch Harness Inspection + 15A Fuse/Label + Harness Replacement	
DIO	Trailer Tow Hitch Harness Inspection + 15A Fuse/Label + Harness Extension Repair*	SC265B
	Trailer Tow Hitch Harness Inspection + 15A Fuse/Label + Harness Replacement	
	Not Kia Genuine 4-Pin Harness (Inspection Only)	


❗ IMPORTANT

***Vehicles requiring the 'Harness Extension Repair' will need to be parked until this TSB is revised to include the clip/fastener tie, which secures the harness extension to the trailer hitch. DO NOT attempt to complete this harness extension repair, until this TSB is revised to include the clip/fastener tie. All claims are subject to review and chargeback.**

AFFECTED VEHICLE RANGE:

Model	Production Date Range
Carnival (KA4)	January 4, 2021 to February 2, 2023

REQUIRED TOOL:

Tool Name	Figure	Part Number	Comments
4-Pin Trailer Light Wire Circuit Tester**		N/A	Locally Sourced

Dealers will receive a one-time reimbursement for the purchase of a 4-Pin Trailer Light Wire Circuit Tester via parts statement credit. The credit of \$10.00 was issued in the May parts statement.



SUBJECT: TRAILER TOW HITCH HARNESS REPAIR AND FUSE/LABEL REPLACEMENT (SC265)
REQUIRED PART:

Part Name	Part Number	Figure	Qty.
15A Fuse & Label Kit	18790 04930QQK		1
4-Pin Trailer Tow Hitch Extension Harness	S9F67 AC900QQK		1
4-Pin Trailer Tow Hitch Harness Assembly	ROF67 AC700	N/A	1
Harness Fastener/Clip Tie	TBD		1

WARRANTY INFORMATION: SC265A (PIO) - SC265B (DIO)
N Code: N99 C Code: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
R	ROF67 AC400	0	(SC265A) Install 15A Fuse/Label + Harness Extension Repair (PIO Equipped)	TBD	0.8 M/H	18790 04930QQK S9F67 AC900QQK	1
			(SC265A) Install 15A Fuse/Label + Harness Replacement (PIO Equipped)	A5234RR2	0.6 M/H	18790 04930QQK ROF67 AC700	1
R	ROF67 AC400	0	(SC265B) Install 15A Fuse/Label + Harness Extension Repair (DIO Equipped)	TBD	0.8 M/H	18790 04930QQK S9F67 AC900QQK	1
			(SC265B) Install 15A Fuse/Label + Harness Replacement (DIO Equipped)	A5234RR4	0.6 M/H	18790 04930QQK ROF67 AC700	1
		0	(SC265B) Tow Hitch Harness Inspection Only (DIO Not Equipped)	A5234RRO	0.1 M/H	N/A	0

Note: Refer to Warranty Bulletin 2023-14 for claim submission procedures. **The Technical Service Bulletin (TSB) will be updated with parts and claim information for 'Harness Extension Repair' as soon as it is available.**

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SC265** when accessing the KDealer+ system.

