

# SAFETY RECALL CAMPAIGN

SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

## \* NOTICE

This bulletin has been revised to include additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.

This bulletin provides the procedure to inspect the Front Wiring Harness for damage to the wiring insulation on some 2018MY Kia Stinger vehicles produced from July 20, 2017 through June 8, 2018.

- If no damage is found, dealers are to install a grommet to cover the hole in the left fender apron panel.
- If wiring damage is found, dealers are to replace the front wiring harness and install a grommet to cover the hole in the left fender apron panel.

The Front Wiring Harness ("harness") is located in the engine and passenger compartment of the vehicle. The harness can come in contact with a burr on the edge of a hole in the sheet metal of the left fender apron body panel. Such contact can damage the insulation of one or more wires and cause an electrical short circuit, increasing the risk of a fire.

Before conducting the procedure, verify 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 WebDCS Warranty Coverage (validation) Inquiry Screen (Service  $\rightarrow$  Warranty Coverage  $\rightarrow$  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.

#### File Under: <Safety Recall Campaign>

Circulate To:	🛛 General Manager	Service Manager	🛛 Parts Manager	
Service Advisor	s 🛛 🖾 Technicians	☑ Body Shop Manager	I Fleet Repair	

#### Page 2 of 22

SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

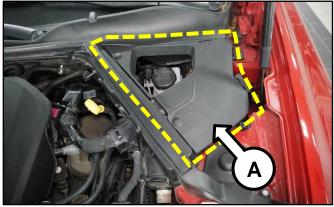
#### **Inspection Procedure:**

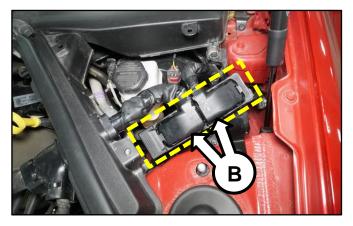
1. Record the customer's radio presets and then disconnect the negative "-" battery terminal.

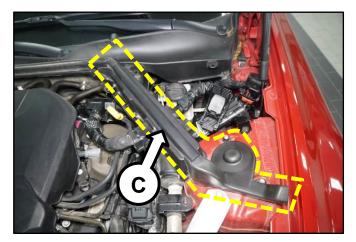


2. Remove the engine side cover (A).

3. Disconnect the two (2) ECU connectors (B).







4. Detach the hood seal (C).

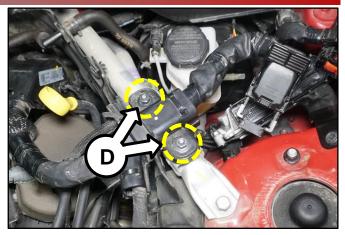
Page 3 of 22

SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

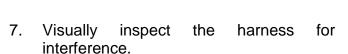
5. Remove the two (2) harness protector retaining nuts (D).

Tightening torque for nuts (D): 43.4 - 69.4 lb.in (4.9 - 7.8 Nm, 0.5 - 0.8 kgf.m)

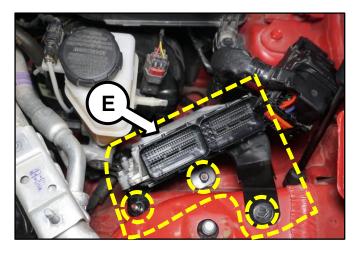


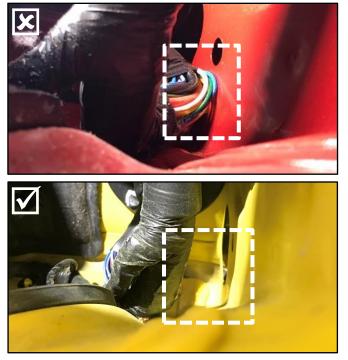
 Remove the one (1) ECU bracket mounting bolt and two (2) bracket mounting nuts and then remove the ECU and bracket assembly (E).

Tightening torque (bolt and nuts): 7.2 - 8.7 lb.ft (9.8 - 11.8 Nm, 1.0 - 1.2 kgf.m)



- If the harness is touching the left fender apron panel (☑), proceed to the next step.
- If the harness is not touching the panel (☑), proceed to step 13 on page 5.



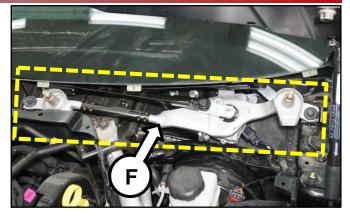


#### Page 4 of 22

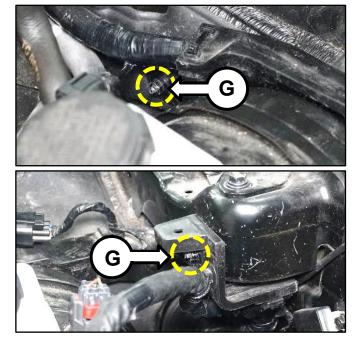
SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

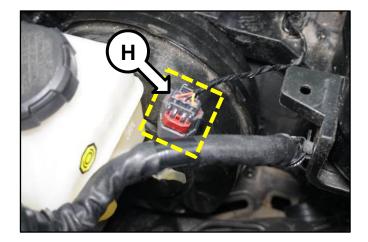
 Remove the windshield wiper assembly (F) by referring to steps 2 through 5 of the "Body Electrical System → Windshield Wiper/Washer → Front Wiper Motor → Repair procedures" chapter in the applicable Shop Manual.



9. Remove the two (2) wire harness protector retaining nuts (G) located by the brake booster.



10. Disconnect the brake master cylinder connector (H).

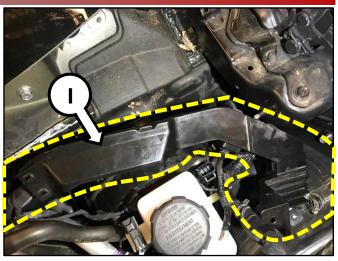


#### Page 5 of 22

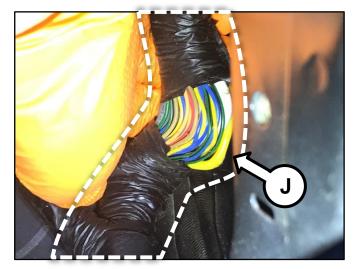
#### SUBJECT:

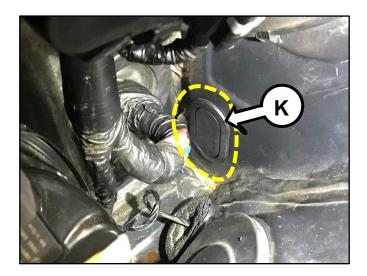
### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

 Carefully move the harness and protector (I) away from the firewall enough to allow access to the lower area of the harness.



- Reach behind the hood and into the well area to slightly pull up the harness. Thoroughly inspect the harness for any damage.
  - If there is damage to the harness, open a Techline case <u>online</u> and <u>do</u> <u>not proceed</u> with claim submission until wire harness replacement approval or denial is determined. See page 6 for the Front Wiring Harness Replacement procedure.
  - If there is no damage to the harness, proceed to the next step.
- Install a rubber grommet at the opening (K) shown.





- 14. Reinstall all removed components in the reverse order of removal.
- 15. Verify proper operation of the vehicle and restore the customer's radio presets.

#### Page 6 of 22

#### SUBJECT:

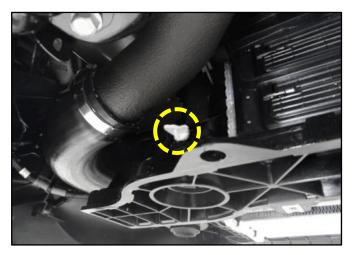
### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

Front Wiring Harness Replacement Procedure:

### **\*** IMPORTANT

Refer to the "Body Electrical System  $\rightarrow$  General Information" chapter in the applicable Shop Manual on KGIS for important information on handling connectors, wires, and harnesses.

1. With the vehicle on a lift, remove the engine under cover and begin coolant drain.



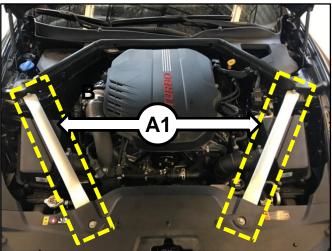
2. While draining the coolant with a small catch container underneath the vehicle, remove the two (2) strut bars (A1).

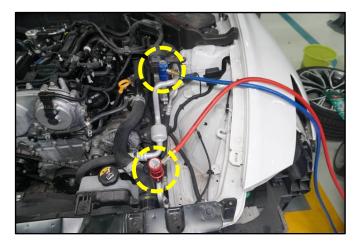
### **\*** NOTICE

Be sure to close the drain plug when coolant drain is complete.

Tightening torque (strut bars): 34 – 45 lb.ft (46.4 – 60.8 N.m, 4.7 – 6.2 kgf.m)

 Recover the AC refrigerant by referring to the "Heating, Ventilation, and Air Conditioning → Air Conditioning System → Repair procedures" chapter in the applicable Shop Manual on KGIS.



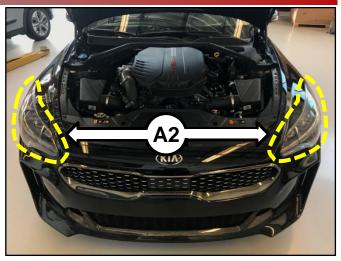


#### Page 7 of 22

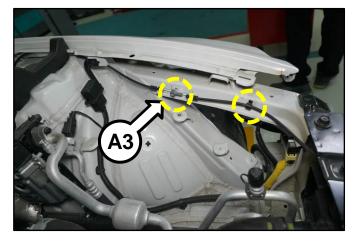
#### SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

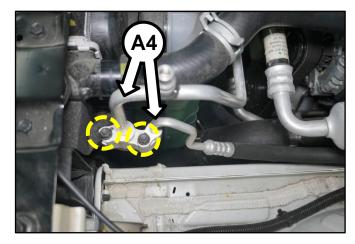
 Remove the headlamps (A2) by referring to the "Body Electrical System → Lighting System → Headlamps → Repair procedures" chapter in the applicable Shop Manual on KGIS.



5. Separate the hood latch cable at the cable joint (A3) and detach the cable retaining clip.



6. Remove the two (2) air conditioning pipe (high pressure and a/c pressure transducer) retaining nuts and detach the two pipes (A4).



#### Page 8 of 22

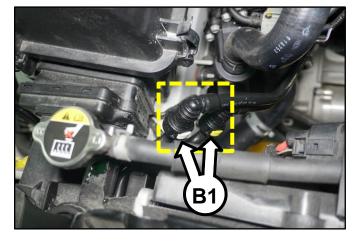
SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

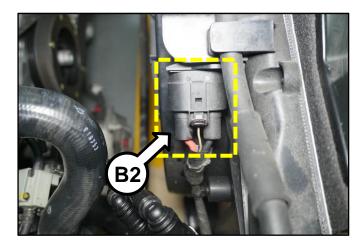
7. Detach the <u>upper and lower</u> radiator hoses from the radiator.



8. Detach the transmission oil cooler inlet and outlet pipes (B1) from the transmission cooler.



9. Disconnect the cooling fan connector (B2).

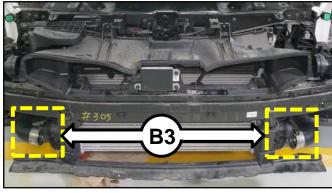


#### Page 9 of 22

#### SUBJECT:

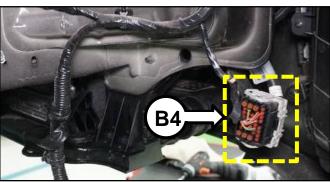
### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

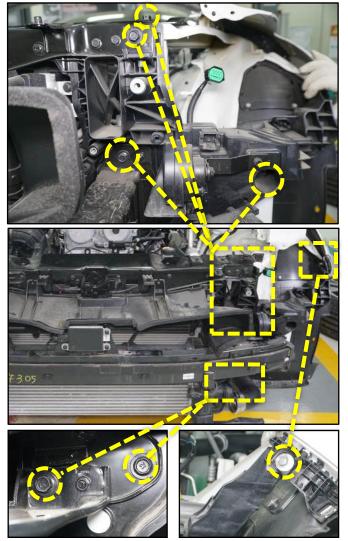
10. Detach the intercooler inlet and outlet hoses (B3).



11. Disconnect the front end module connector (B4).

12. Remove the seven (7) front end module carrier retaining bolts on <u>each side</u> of the carrier and remove the front end module carrier.





TSB: SC170 (Rev 1) Stinger (CK) December 2018

#### Page 10 of 22

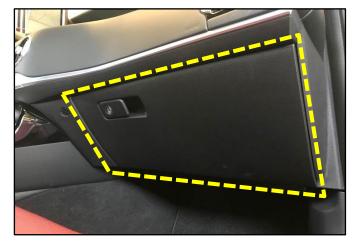
SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

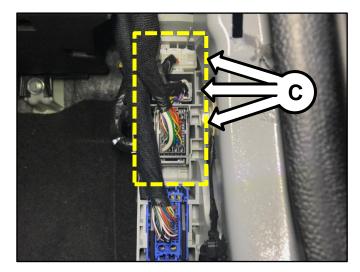
 Remove the engine and transmission assembly (A) by referring to the "Engine Mechanical System → Engine and Transmission Assembly → Engine and Transmission Assembly → Repair procedures" chapter in the applicable Shop Manual on KGIS.



 Remove the glove box assembly (B) by referring to the "Body (Interior and Exterior) → Crash Pad → Glove Box Housing → Repair procedures" chapter in the Shop Manual on KGIS.

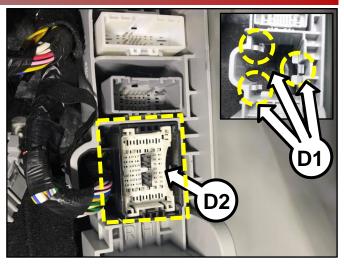


 Disconnect the three upper connectors (C) at the floor harness joint housing located at the front passenger footwell.

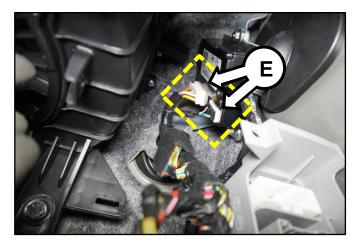


### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

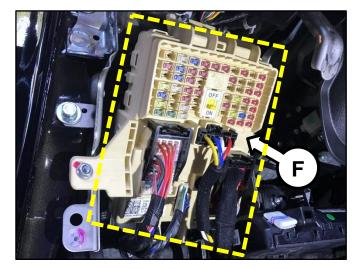
16. Carefully release the three (3) locking tabs (D1) and remove the connector (D2).



 Disconnect the two (2) connectors (E) at the Electric Oil Pump Inverter, located above the front passenger foot well floor harness joint housing.



18. Remove the Integrated Central Control Unit (ICU) (F) by referring to the "Body Electrical System → Fuses And Relays → Relay Box (Passenger Compartment) → Repair procedures" chapter in the applicable Shop Manual on KGIS.

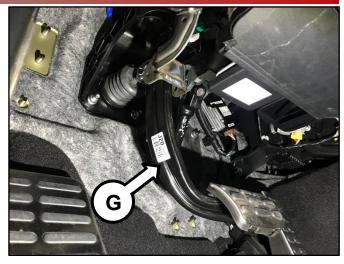


#### Page 12 of 22

SUBJECT:

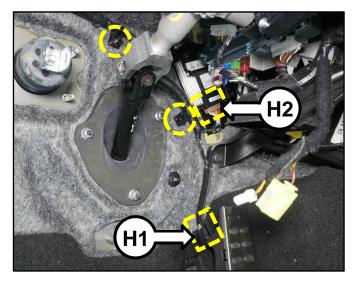
### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

19. Refer to the "Brake System  $\rightarrow$  Brake System  $\rightarrow$  Brake Pedal  $\rightarrow$  Repair procedures" chapter in the applicable Shop Manual on KGIS to <u>partially</u> <u>remove</u> the brake pedal assembly (G) enough to remove the wiring harness past the brake pedal assembly.

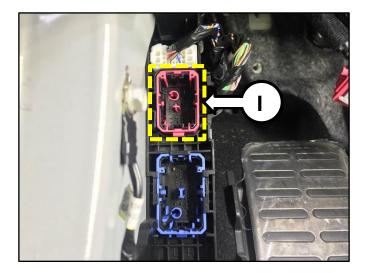


 Disconnect the Accelerator Pedal Position Sensor (H1) and if equipped, disconnect the AWD ECU connector (H2). Detach the harness retaining clips.

**Note**: The brake pedal assembly was completely removed for demonstration of wiring harness routing only. Complete removal of the brake pedal assembly is not necessary.

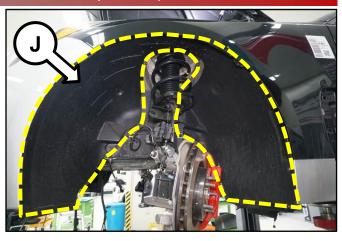


21. Remove the center connector (I) from the floor harness joint housing located at the driver footwell.



### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

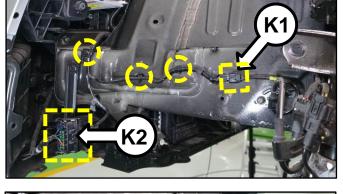
22. Remove both front fender liners (wheel guards) (J).

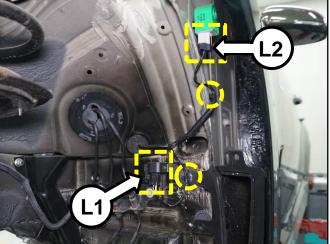


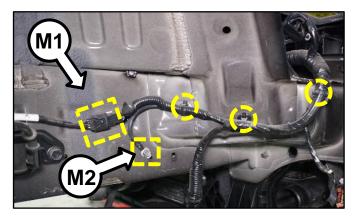
23. Disconnect the left front wheel speed sensor (K1) and extension harness (K2) and detach the wiring harness retaining clips.

24. Disconnect the external buzzer connector (L1) and, if equipped, disconnect the left front electronic control suspension (ECS) G-sensor connector (L2). Detach the wiring harness retaining clips.

25. Disconnect the right front wheel speed sensor (M1) and ground (M2). Detach the wiring harness retaining clips.





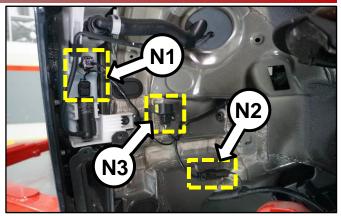


#### Page 14 of 22

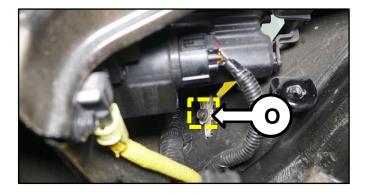
SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

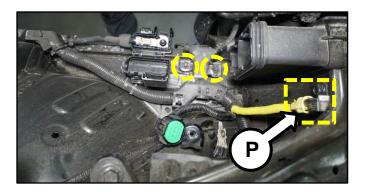
26. Disconnect the washer motor and level sensor connectors (N1), battery harness connector (N2), and, if equipped, the right front ECS connector (N3). Detach the wiring harness retaining clips.



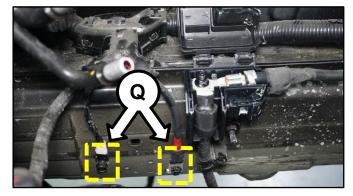
27. Remove the ground retaining nut and disconnect the ground (O).



28. Disconnect the front passenger impact sensor connector (P). Detach the wiring harness retaining clips.



29. Remove the two (2) ground retaining bolts and disconnect the two (2) ground cables (Q).



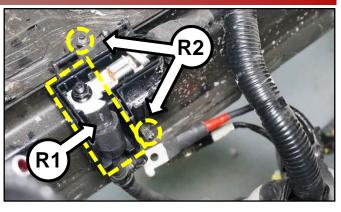
### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

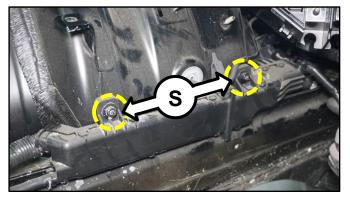
30. If not already performed, disconnect the battery cable (R1) and then remove the two (2) battery junction block retaining nuts (R2).

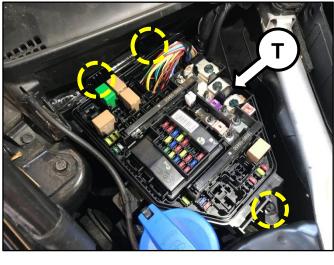
31. Remove the two (2) wiring harness protector retaining nuts (S).

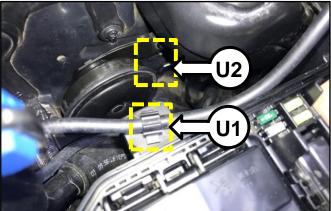
32. Remove the three (3) junction box retaining bolts for removal of the junction box (T).

 Detach the washer nozzle clip (U1) from the junction box (T) and then disconnect the horn connector (U2).







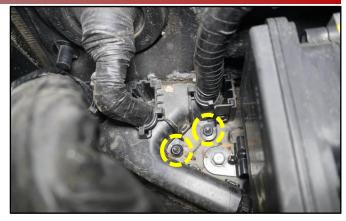


#### Page 16 of 22

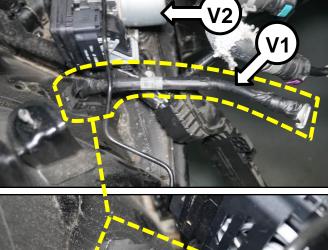
SUBJECT:

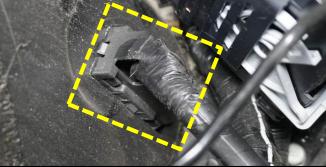
### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

34. Remove the two (2) wiring harness protector retaining nuts.

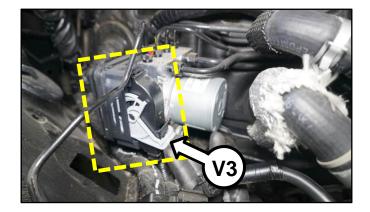


 Remove the ground cable and grommet (V1) located next to the Electronic Stability Control (ESC) module (V2).





36. Disconnect the ESC connector (V3).



#### Page 17 of 22

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

37. Remove the two (2) ESC module retaining bolts.

SUBJECT:

38.

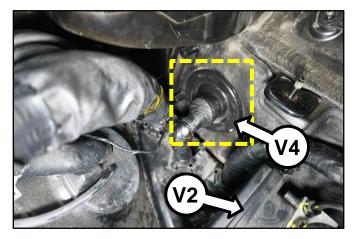
retaining clips.



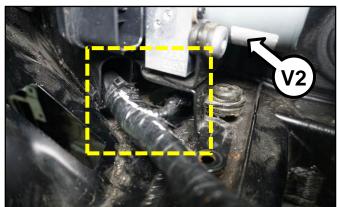


Detach the grommet (V4) from the firewall, located behind the ESC module (V2) and pull out connector (D2) removed in step 4 of this procedure.

Detach the two (2) wiring harness



40. Remove the wiring harness from underneath the ESC module (V2).

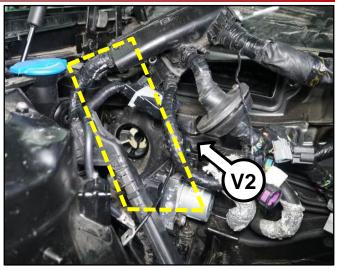


#### Page 18 of 22

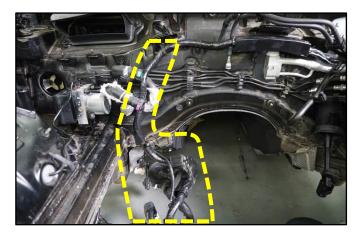
SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

41. Remove the protected section of the wiring harness between the ESC module and hardline.



42. Complete the passenger side of the front wiring harness removal.



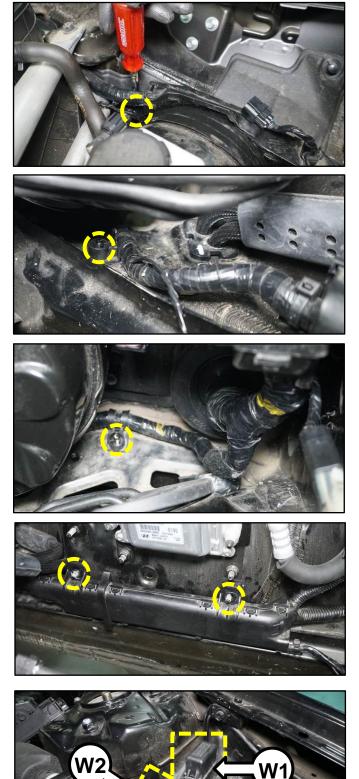
43. Detach the two (2) wiring harness protector retaining clips above the heater exchange valve.



### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

45. Ensure the wiring harness retaining clips are detached from above the brake booster and the wiper motor and master cylinder connectors have been removed.

Trace the wiring harness and detach all wiring harness retaining clips.



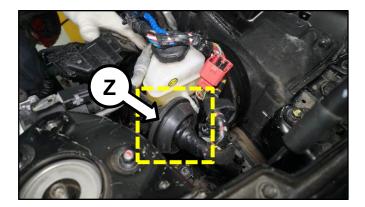
46. Detach the Multipurpose Check connector (W1) from the vehicle and disconnect the A/C Pressure Transducer connector (W2). Detach the wiring harness retaining clip.

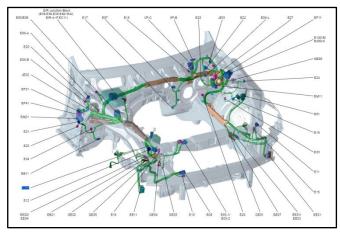
#### Page 20 of 22

#### SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

- 47. Disconnect the left front impact sensor connector (X).





51. Verify proper operation of the vehicle and erase any stored DTCs (e.g., EPS, ESC, and TPMS) that may have been set by this procedure. Verify no leaks exist and ensure engine oil and coolant are at their proper level. If any DTCs are still active, follow any related diagnosis and repair as needed.

 Remove the two (2) ground retaining nuts and disconnect the two (2) ground

cables (Y).

49. Remove the grommet (Z) located by the left fender apron and completely remove the rest of the front wiring harness between the brake booster and lines.

50. Install the new front wiring harness, ensuring proper routing of harness and secured connections at all connectors.

> Refer to the "Harness Layout  $\rightarrow$  Front Harness  $\rightarrow$  Schematic Diagrams" chapter in the applicable ETM Manual on KGIS for details.

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

#### AFFECTED VEHICLE RANGE:

Model	Production Date Range		
Stinger (CK)	July 20, 2017 through June 8, 2018		

#### **REQUIRED PART:**

Part Name	Part Number	Figure
Rubber Grommet	84253 B1000QQK	

#### **RELATED PART:**

Part Name	Part Number	Figure			
2.0T Front Wiring	91215 J5551QQK				
	91215 J5561QQK	Portmana ()			
	91215 J5671QQK				
	91215 J5681QQK				
Harness	91215 J5731QQK	ERA-benton Bloom (BSS BRIAR-HA2) ESEMAN (BSS) ERA-HA2) ESEMAN (BSS) ERA (BSS) ET			
	91215 J5741QQK	2004			
	91215 J5751QQK	50 504			
	91215 J5761QQK	400			
	91219 J5061QQK	178 June 1997			
	91219 J5071QQK				
	91219 J5101QQK				
	91219 J5111QQK				
	91219 J5121QQK				
3.3TT Front Wiring Harness	91219 J5131QQK				
hamooo	91219 J5141QQK				
	91219 J5151QQK				
	91219 J5161QQK				
	91219 J5171QQK				
	912E0 J5020QQK				

#### Page 22 of 22

SUBJECT:

### FRONT WIRING HARNESS INSPECTION/REPLACEMENT AND GROMMET INSTALLATION (SC170)

# WARRANTY INFORMATION: N Code: N99 C Code: C99

N Code Claim Type	: N99 C Code Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
R	64501 J5000	0	(SC170) Front Wiring Inspection & Grommet Installation	181144R0	0.3 M/H	84253 B1000QQK	1
R	64501 J5000	0	(SC170) Wiper Assembly R&R, Front Wiring Inspection & Grommet Installation	181144R1	0.6 M/H	84253 B1000QQK	1
			(SC170) <u>2.0T</u> Wiper Assembly			84253 B1000QQK	1
						91215 J5551QQK	
						91215 J5561QQK	
		R&R, Front Wiring Inspection, & Wire Harness R&R <b>(Techline Approval</b> <b>Required)</b>	181144R2	7.2 M/H	91215 J5671QQK	1	
					91215 J5681QQK		
					91215 J5731QQK		
					91215 J5741QQK 91215 J5751QQK		
					91215 J5761QQK		
		0	(SC170) <u>3.3TT</u> Wiper Assembly R&R, Front Wiring			84253	
R	64501 J5000					B1000QQK	1
						91219 J5061QQK	
						91219 J5071QQK	
						91219 J5101QQK	
						91219 J5111QQK	
		Inspection, & Wire Harness R&R (Techline Approval Required)	181144R3	8.7 M/H	91219 J5121QQK	1	
					91219 J5131QQK		
					91219 J5141QQK		
					91219 J5151QQK		
					91219 J5161QQK		
					91219 J5171QQK		
						912E0 J5020QQK	

Notes:

If damage to the wire harness is found, please do not proceed with claim submission until the wire harness R&R approval or denial is determined by Techline. This is to avoid prematurely submitting for the rubber grommet installation only and losing the ability to claim for the wire harness R&R.

If necessary, enter sublet code 'X2' for rental expense reimbursement.

# \* NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference <u>SC170</u> when accessing the WebDCS system.