



KIA Genuine Accessories

Vehicle Model Sorento 4 Cyl
 Model Year 2014~
 Part No. 1U061 ADUS1

Accessory Tow Hitch Harness Kit
 Difficulty (B)

Note: Difficulty stated above reflects the minimum level of expertise required to install the accessory
 (A) Customer (B) Dealer Technician (C) Master Technician

Instructional Symbols / Definitions

	Denotes warnings that may lead to serious physical injury or vehicle damage.		Denotes quality processes to be checked prior to moving to the next step.	Denotes safety equipment required to be used such as a mask, goggles, rubber gloves, and hearing protection.	
	Denotes cautions to be taken to avoid physical injury or electronic component damage.		Denotes specific tools that are necessary to complete the step.		
	Denotes cautions to be taken to avoid vehicle and component damage.	NOTE	Denotes instructional steps necessary to complete the process.		
				Rubber Gloves	Hearing Protection

Basic Required Hand Tools

Ratchet	Extension	10mm Socket	#2 Phillips Head Screwdriver
Diagonal Cutters	Torque Wrench		

Specialty Required Tools:

- Vehicle Lift
- Test Light or Voltmeter
- Fish Wire

Notes to the Installer:

Read the entire installation pamphlet prior to beginning the installation of the accessory.

Ensure that the vehicle is properly protected in the area that the accessory is to be installed.

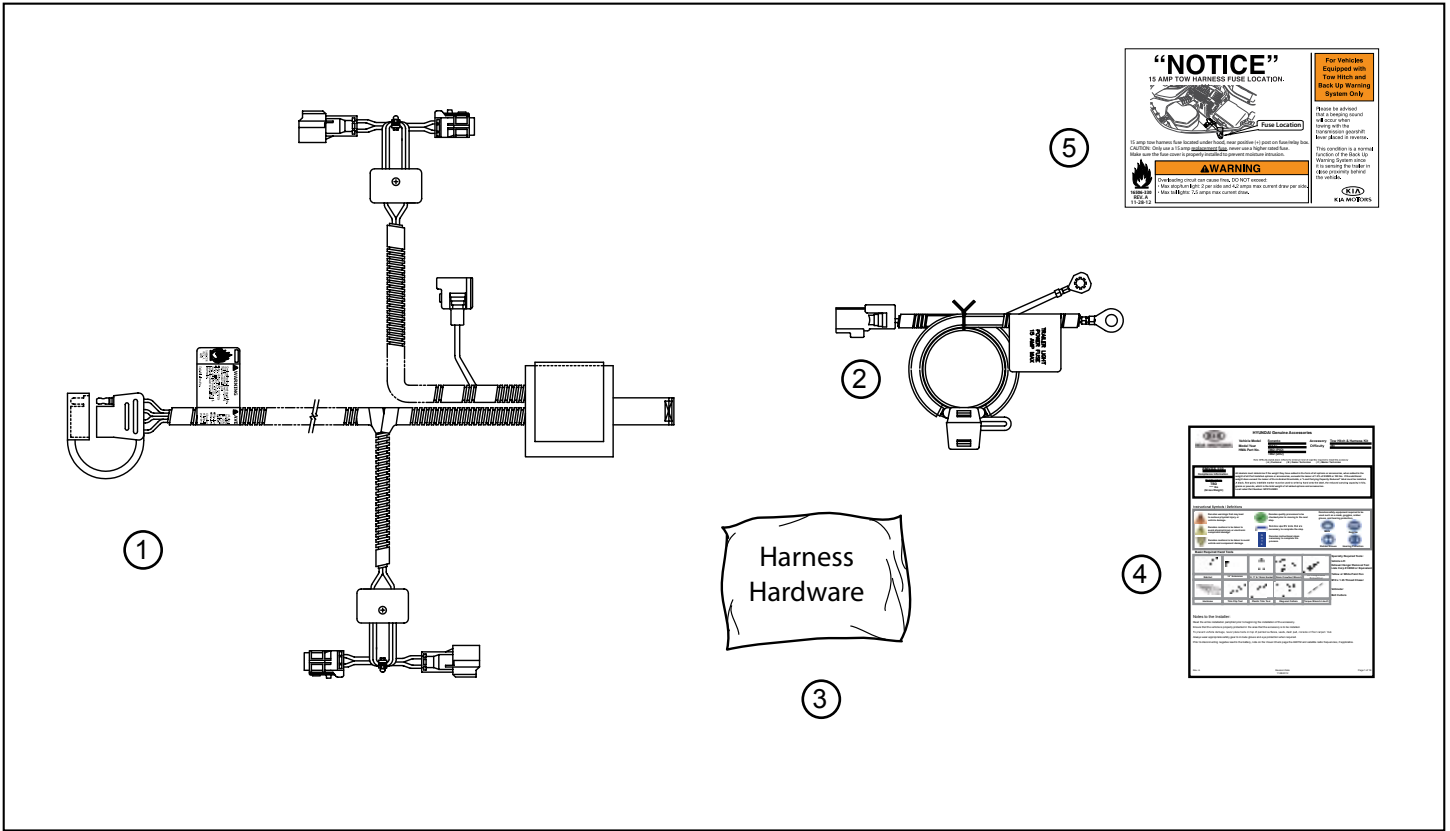
To prevent vehicle damage, never place tools on top of painted surfaces, seats, dash pad, console or floor carpet / mat.

Always wear appropriate safety gear to include gloves and eye protection when required.

Prior to disconnecting negative lead to the battery, note on the Visual Check page the AM/FM and satellite radio frequencies, if applicable.

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Kit Overview



No.	Qty.	Description
1	1	Tow Harness
2	1	Power Harness
3	1	Harness Hardware
4	1	Instructions
5	1	Fuse Location Card

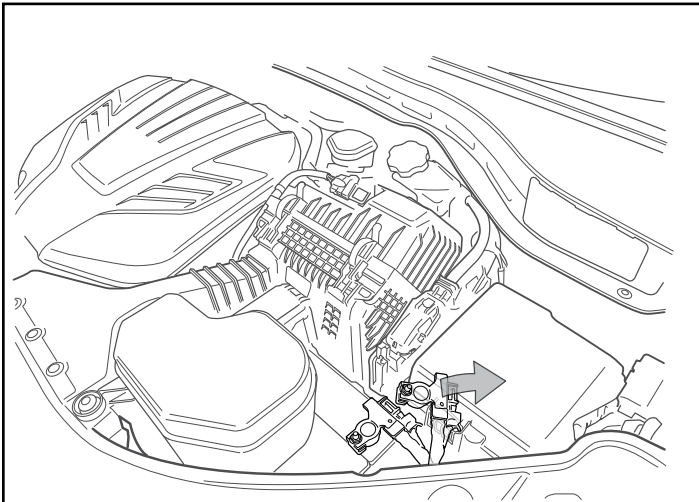
Harness Hardware Kit Overview



A	B	C	D	E	F
19*	1	2*	2	1	1
Cable tie, 8.5"	Cable tie, 14"	Foam Pad	Push Mount Cable Tie	M6 Stud Mount Cable Tie	M6 Bolt

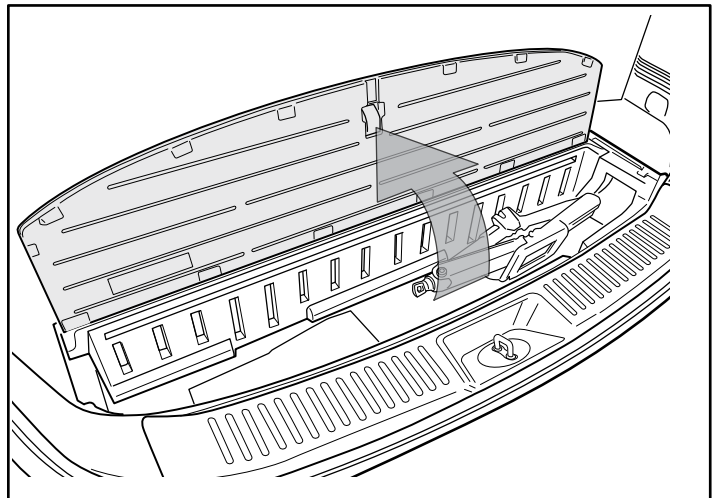
* Extra components intentionally placed in kit as spares. Please follow direction for proper placement of each component.


Hardware Kit Total
26

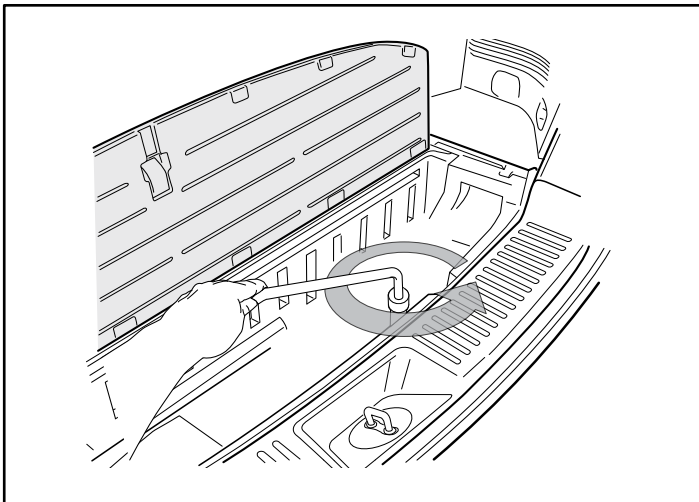
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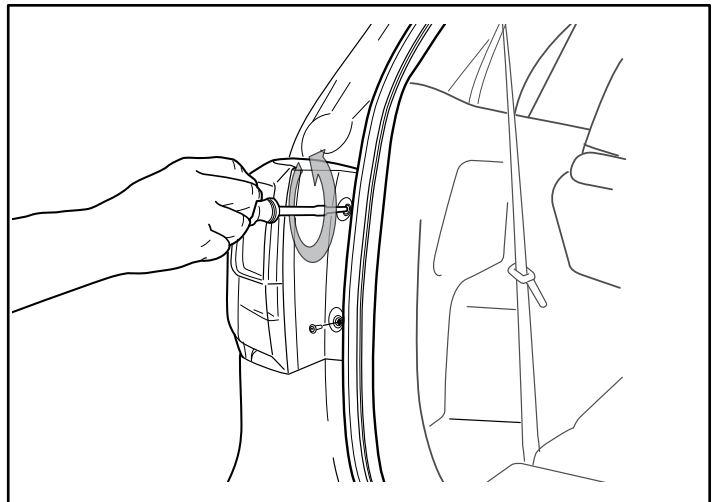
	10mm Socket, Ratchet and Vehicle Lift	1
NOTE	Place vehicle on vehicle lift. Use lift later as needed to work underneath the vehicle. Open rear hatch before disconnecting battery as rear hatch uses electric release mechanism. Record any pre-set stations (if applicable). Using a 10mm socket and ratchet, disconnect and isolate the vehicle's negative battery cable.	
	WARNING: Shock Hazard. Do not touch vehicle's negative battery terminal to vehicle's positive battery terminal. Serious injury and damage to the vehicle may occur. Adhere to shop lift safety standards	




		2
NOTE	Open the top of the rear storage compartment.	

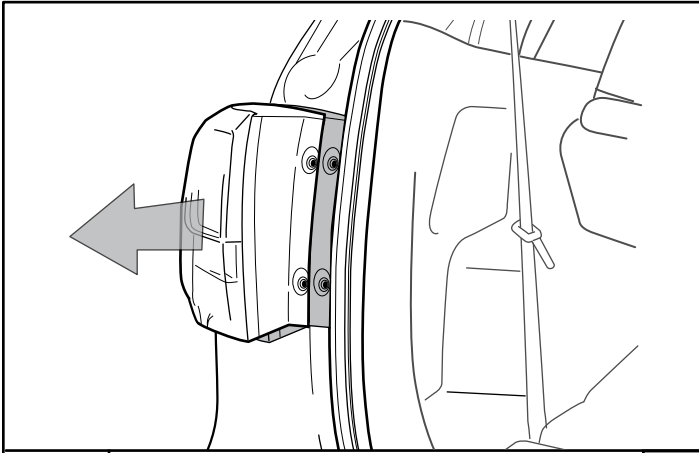


		3
NOTE	Locate the vehicle's spare tire release. Using the vehicle lug wrench and socket extension, lower and remove the spare tire.	



	#2 Phillips Screwdriver	4
NOTE	Using a #2 phillips screwdriver, remove the two (2) screws from the driver side tail lamp assembly. Repeat the same procedure for the passenger side tail lamp.	

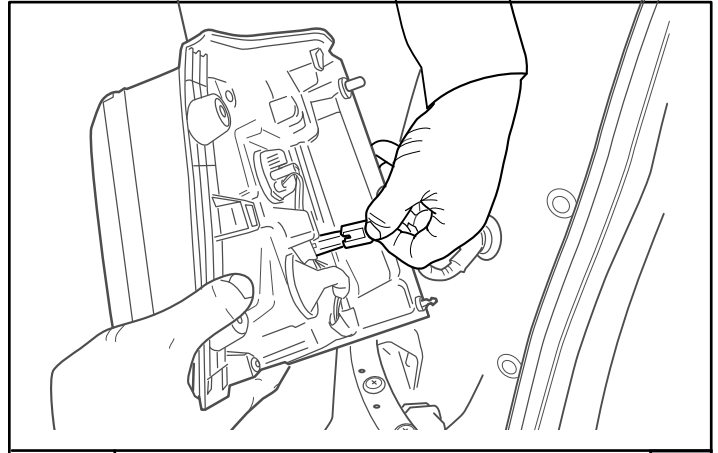
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5

NOTE

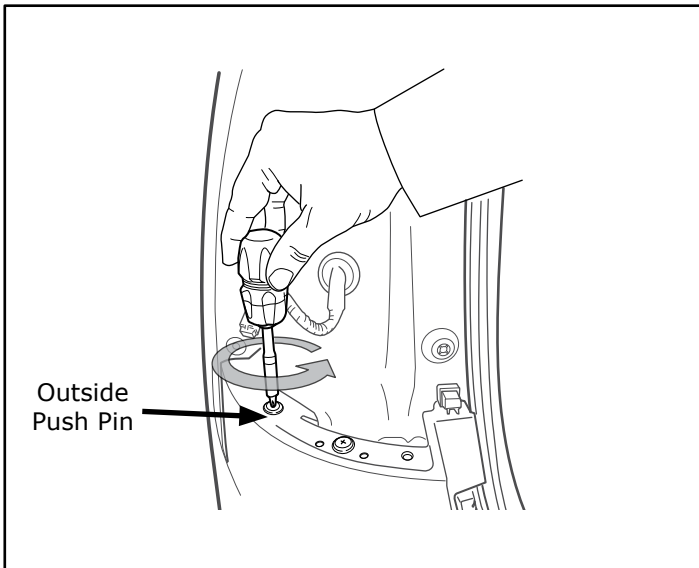
Pull directly back to remove the tail lamp assembly. Repeat the same procedure for the passenger side tail lamp.



6

NOTE

Disconnect the vehicle harness from the tail lamp assembly by pressing the locking tab, as shown, and carefully set aside. Repeat the same procedure for the passenger side tail lamp.

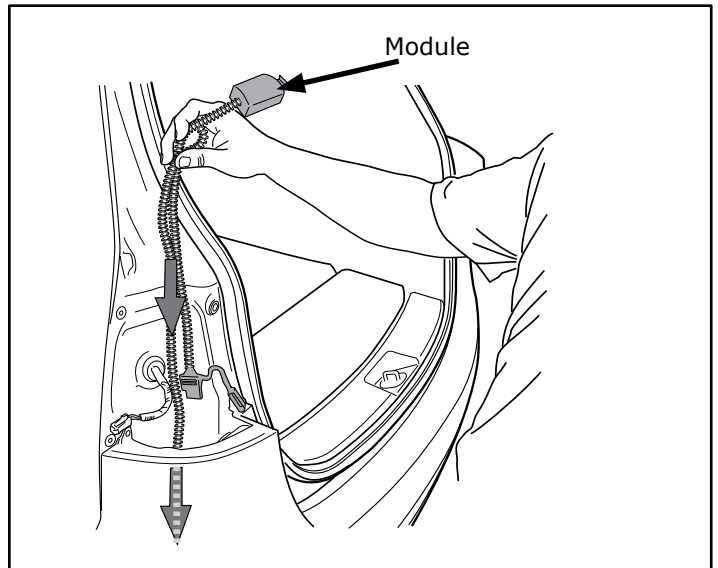


#2 Phillips Screwdriver

7

NOTE

Using a #2 phillips screwdriver, remove the plastic push pin as shown and discard. Complete this only for the driver side of the vehicle.



8

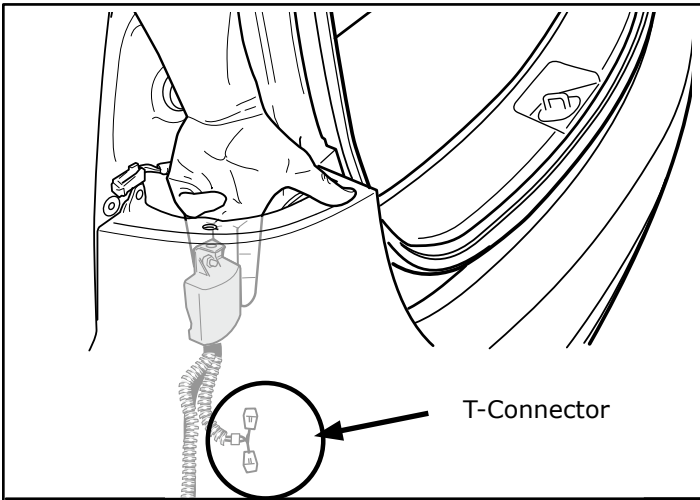
NOTE

Feed the 4-Flat wire and tow harness connector plugs down the drivers side tail lamp pocket of the rear fascia up to the module and bracket.

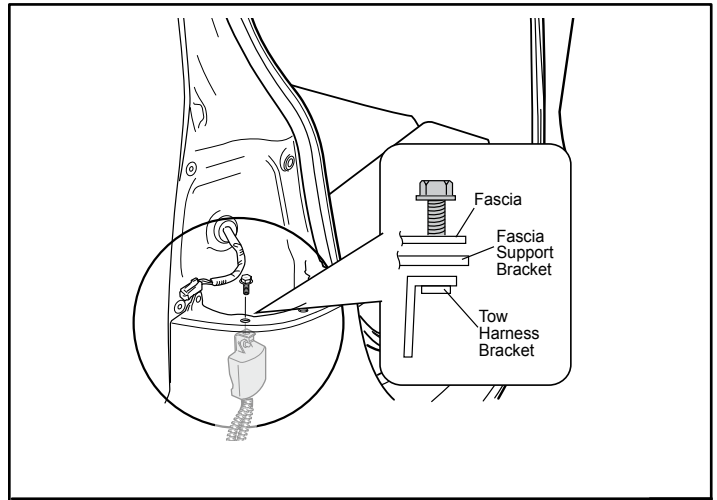


Make sure to keep the driver side T-connection visible.

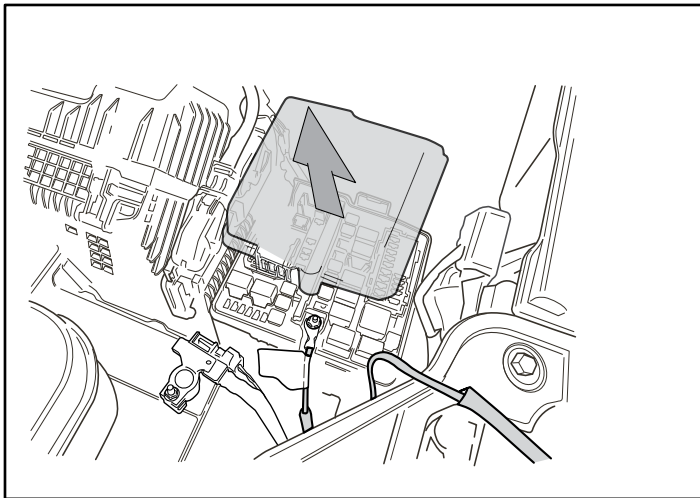
KIA Genuine Accessories



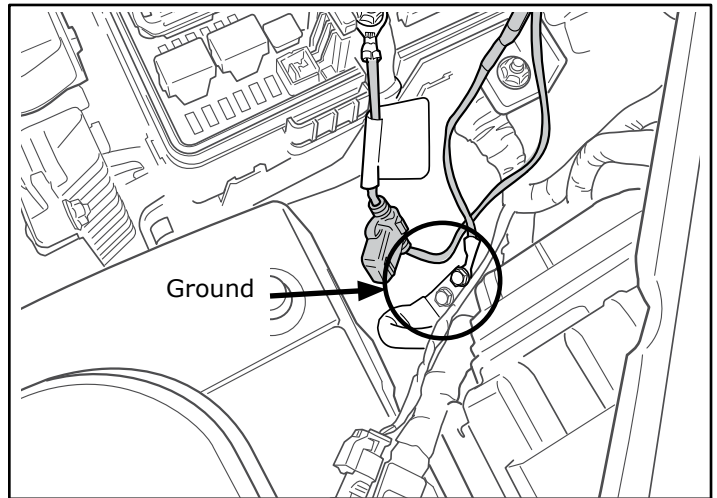
		9
NOTE	Using your fingers to hold the module bracket, feed in the remaining harness and hold the bracket under the rear fascia hole as shown.	



	10mm Socket, Ratchet and Torque Wrench	10
NOTE	Mount the module and bracket under rear fascia support bracket and hole with the provided M6 bolt. Tighten the M6 bolt using a 10mm socket and ratchet. Torque to 6 ~ 7.5 N.m (0.62 ~ 0.76 kgf.m, 4.5 ~ 5.5 lbs-ft).	

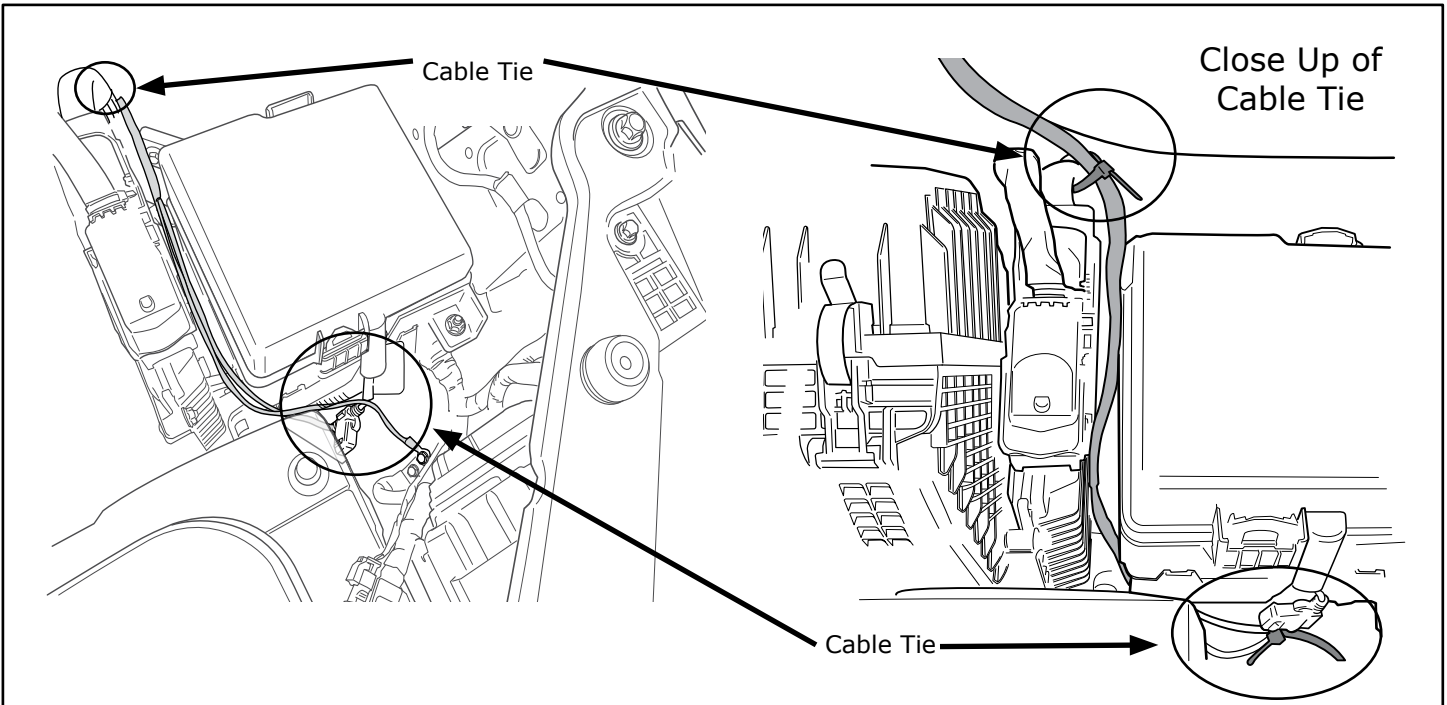


	10mm Socket, Ratchet and Torque Wrench	11
NOTE	Move to the front of the vehicle, locate the fuse/relay box in the engine compartment. Remove cover. Using a 10mm socket and ratchet, remove the positive terminal nut and attach the power harness power wire ring terminal, as shown. Tighten to 9.8 ~ 11.8 N.m (1.0 ~ 1.2 kgf.m, 7.2 ~ 8.7 lbs-ft)	



	10mm Socket, Ratchet and Torque Wrench	12
NOTE	Locate the negative battery cable connection to the vehicle and remove the first bolt as shown. Attach the ground wire ring terminal and replace bolt. Tighten to 3.9 N.m ~ 5.9 N.m (0.4 ~ 0.6 kgf.m, 2.9 ~ 4.3 lbs-ft)	

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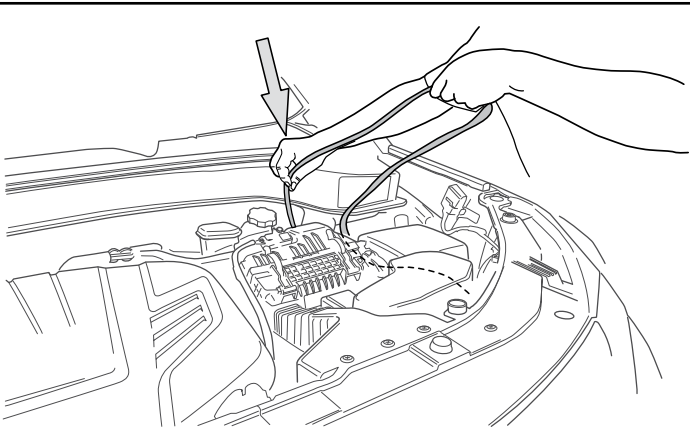


Diagonal Cutters

13

NOTE

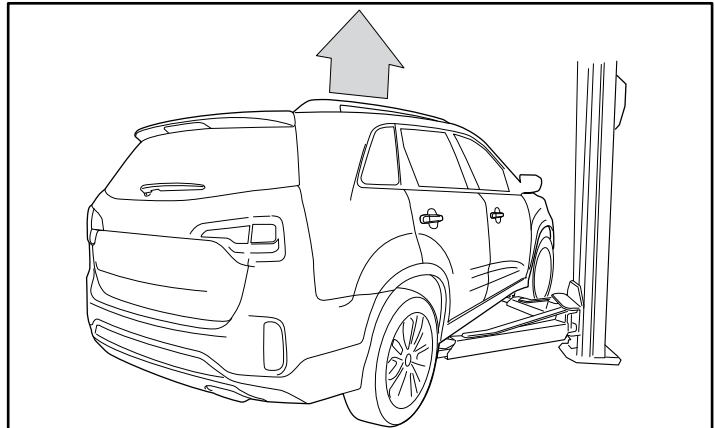
Route power harness wire along the left side of the fuse/relay box. Use two (2) 8.5" cable ties to secure in the locations as shown. Using diagonal cutters, trim excess cable ties.



14

NOTE

Feed the remaining length of the power harness down into the engine compartment, as shown.



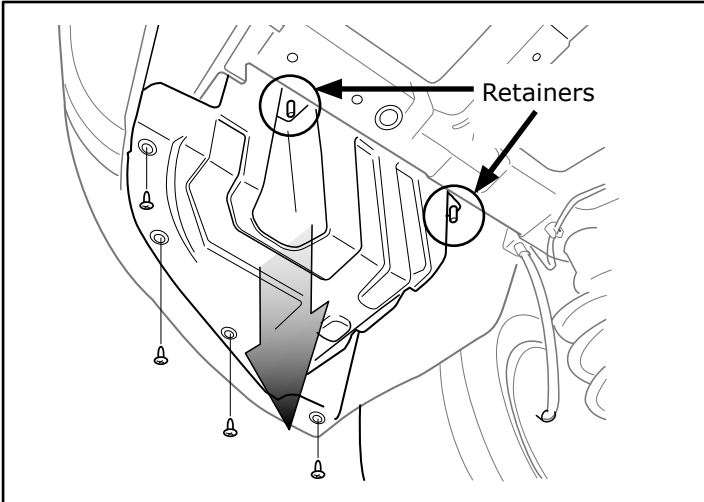
Vehicle Lift


15

NOTE


Use vehicle lift to raise the vehicle.

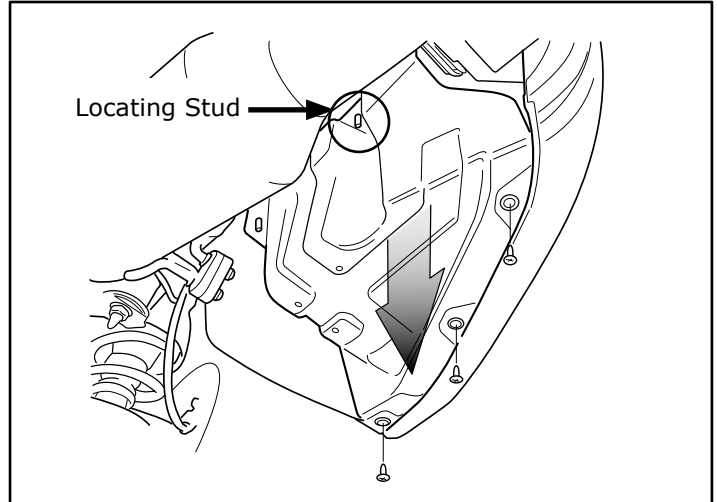
KIA Genuine Accessories




 #2 Phillips Screwdriver 16


NOTE From underneath the vehicle, locate the drivers side rear plastic cover. Using a #2 phillips screwdriver, remove the four (4) plastic push pins. Pull the cover straight down to unseat the cover from the two (2) locator studs.

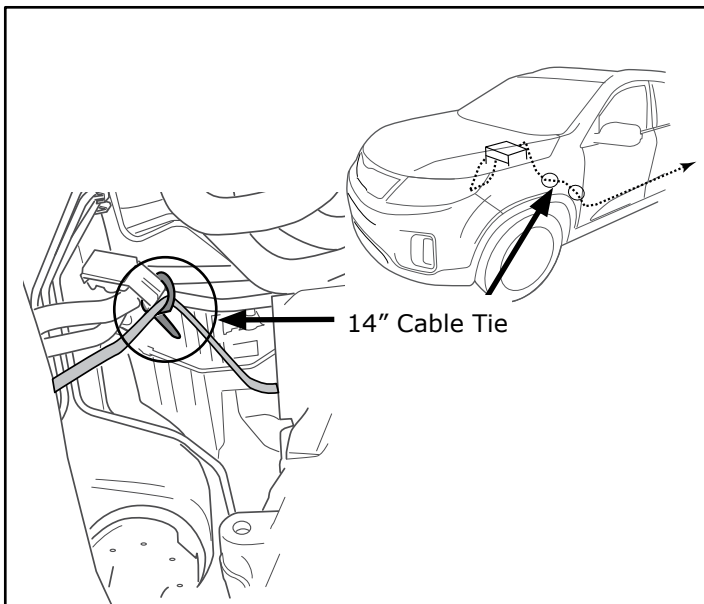
 Retainer Clips may remain on locator studs. Remove the clips from studs and reinsert into the covers




 #2 Phillips Screwdriver 17

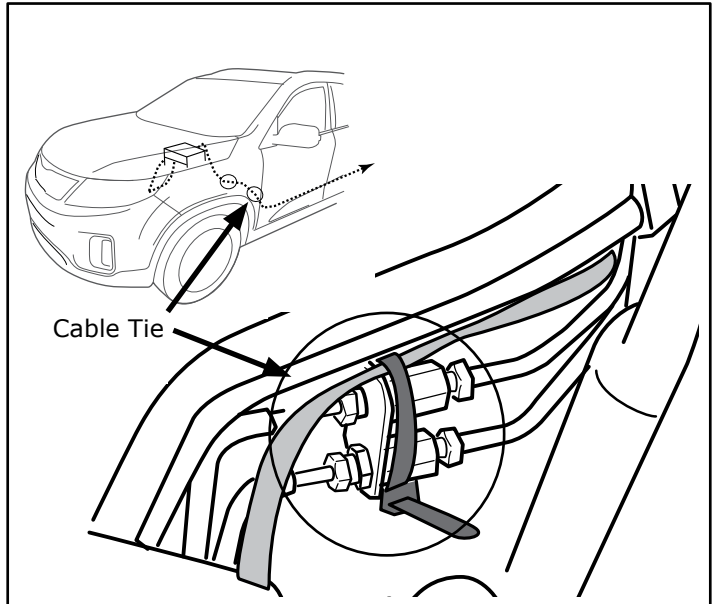
NOTE From underneath the vehicle, locate the passenger side rear plastic cover. Using a #2 phillips screwdriver, remove the three (3) plastic push pins. Pull the cover straight down to unseat the cover from the two (2) locator studs.

 Retainer Clips may remain on locator studs. Remove the clips from studs and reinsert into the covers



 Diagonal Cutters 18

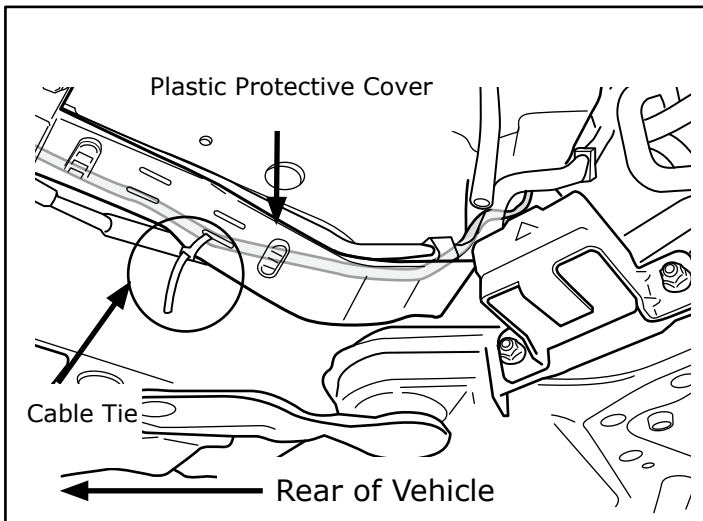
NOTE Locate the power harness that was fed down from engine compartment and gently pull any excess through to begin routing. Using one (1) 14" cable tie, cable tie to bracket as shown. Using diagonal cutters, trim excess cable tie.



 Diagonal Cutters 19

NOTE Continue routing and using one (1) 8.5" cable tie, cable tie to metal brake line as shown. Using diagonal cutters, trim excess cable tie.

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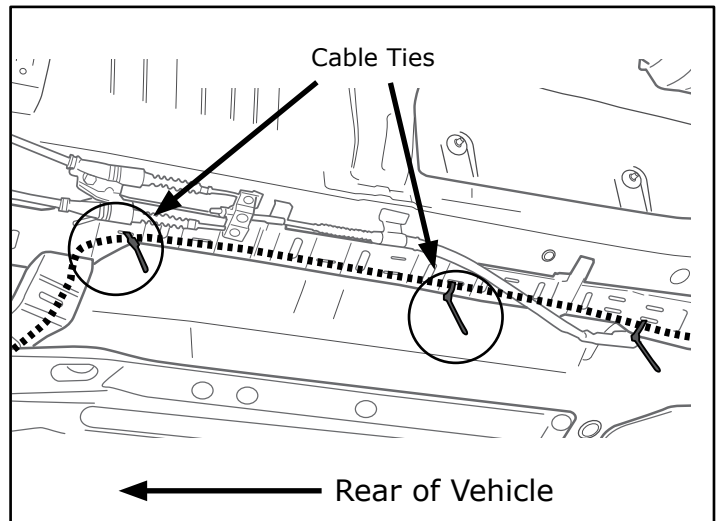


Diagonal Cutters

20

NOTE

Continue routing rearward and gently pull up any slack. Insert the power harness up under the plastic protective cover for the brake lines. Using one (1) 8.5" cable tie, cable tie as shown. Using diagonal cutters, trim excess cable tie.

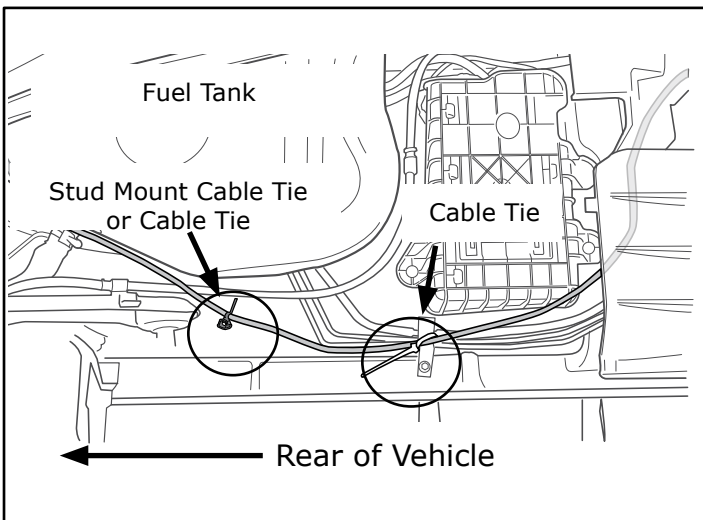


Diagonal Cutters

21

NOTE

Continue routing rearward under the plastic protective cover and gently pull to take up any excess slack. Using two (2) 8.5" cable ties, cable tie as shown. Using diagonal cutters, trim excess cable tie.

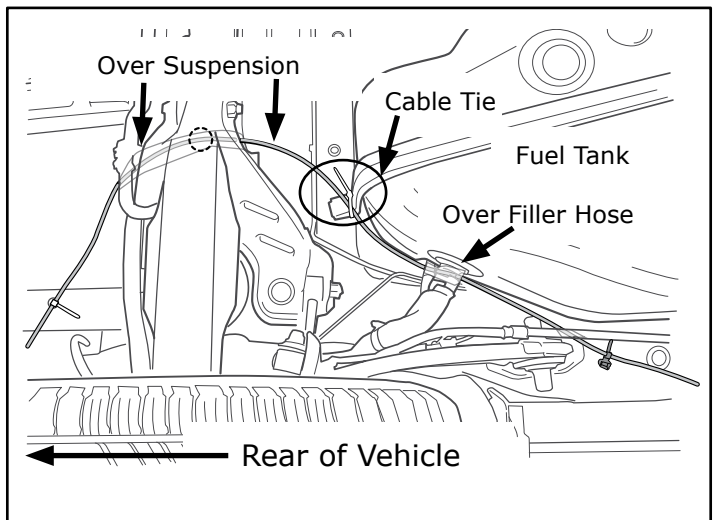


Diagonal Cutters

22

NOTE

Route from the plastic brake line cover over and across the plastic shield using one (1) 8.5" cable tie to the brake line metal bracket, as shown. The next location may be another metal bracket to tie to OR it may simply be a stud (depending on the vehicle trim level). If it is a stud you will need to use the stud mount cable tie provided in the hardware kit. Please attach the power harness according to what condition you find using one (1) 8.5" cable tie or stud mount.



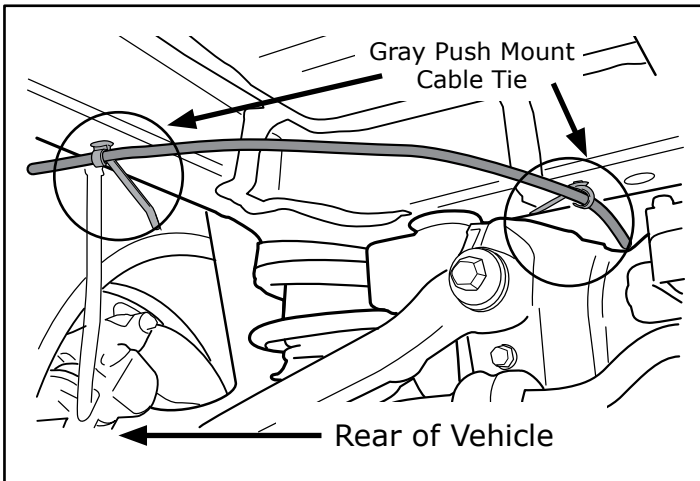
Diagonal Cutters

23

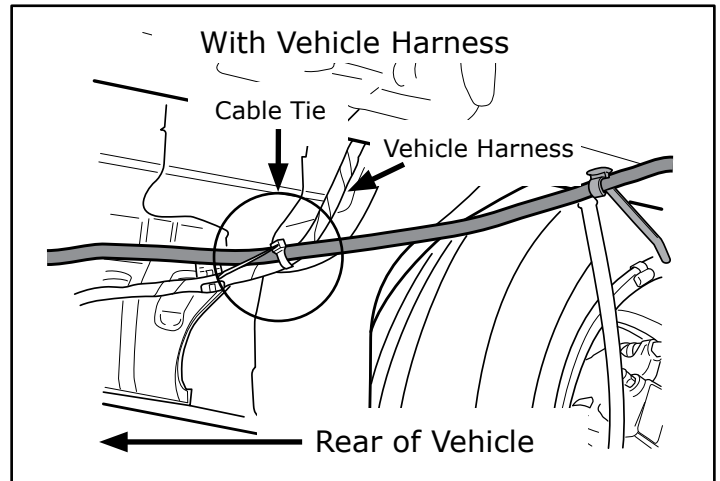
NOTE

Continue routing rearward over the fuel tank filler tube and over the suspension arm as shown. Take up any excess slack and attach using one (1) 8.5" cable tie as shown. Trim excess cable tie.

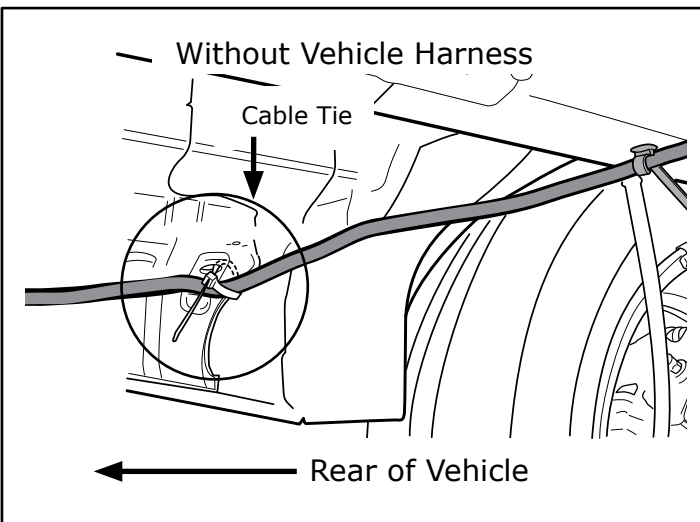
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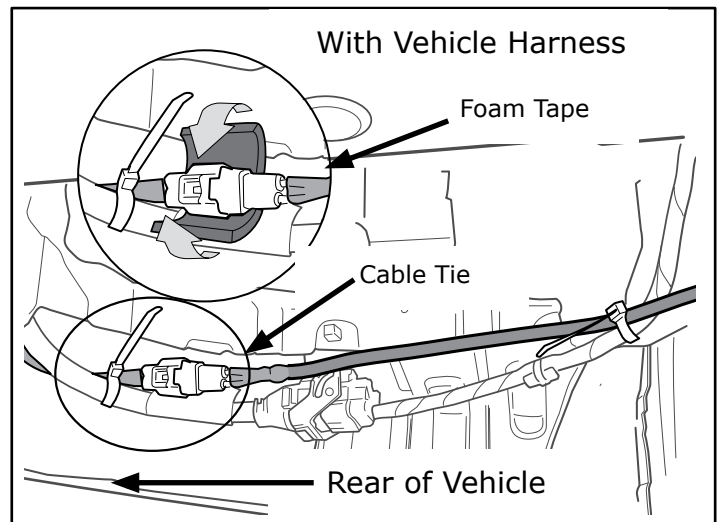
	Diagonal Cutters	24
NOTE	Continue routing rearward and secure power harness by inserting two (2) push mount cable ties into the hole locations shown. One location is hidden above the suspension arm. Gently pull up any excess slack of the power harness and secure to the push mount cable ties. Trim excess cable ties.	



	Diagonal Cutters	25
NOTE	Using one (1) 8.5" cable tie, cable tie the power harness power wire to the vehicle harness, as shown. Using diagonal cutters, trim excess cable tie. If not equipped with vehicle harness, follow procedure in Step 26.	

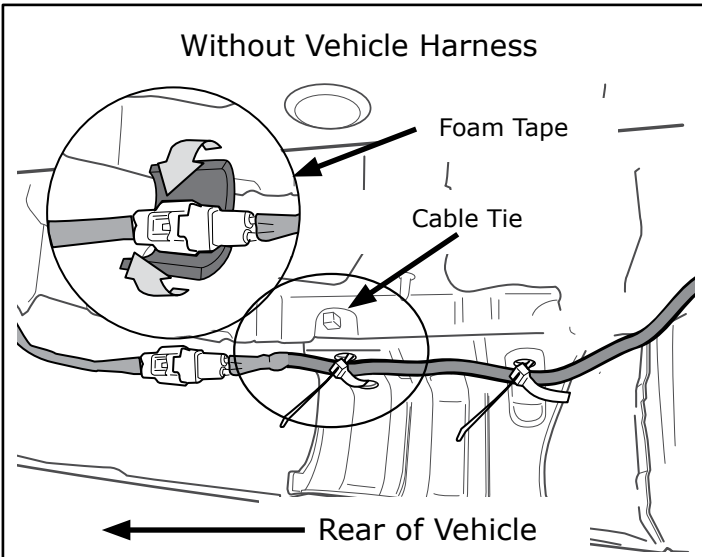


	Diagonal Cutters	26
NOTE	When vehicle harness is not present, secure the power wire in the drilled vehicle hole, as shown above with one (1) 8.5" cable tie. Trim excess cable tie.	

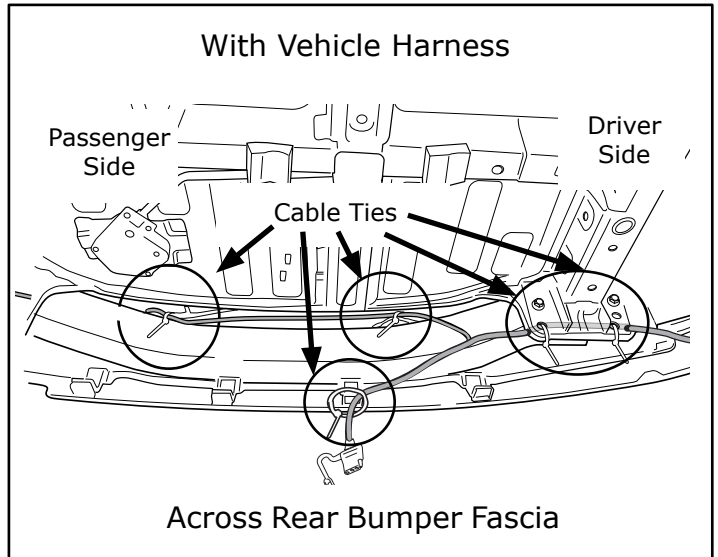


	Diagonal Cutters	27
NOTE	Connect the power harness just routed under the vehicle to the tow harness connector hanging down from the driver side tail light pocket. Both connectors are gray in color. Once connected, wrap the connection with one (1) foam pad. Using one (1) 8.5" cable ties, cable tie as shown. Trim excess cable tie. If not equipped with vehicle harness, follow procedure in Step 28.	

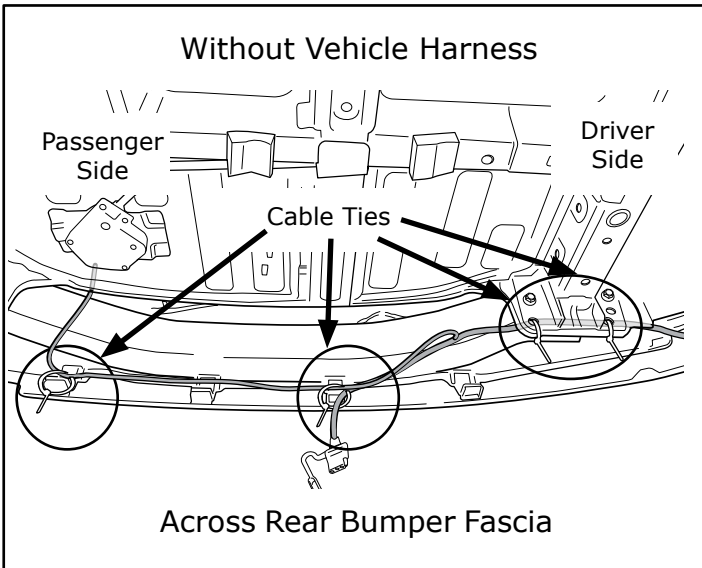
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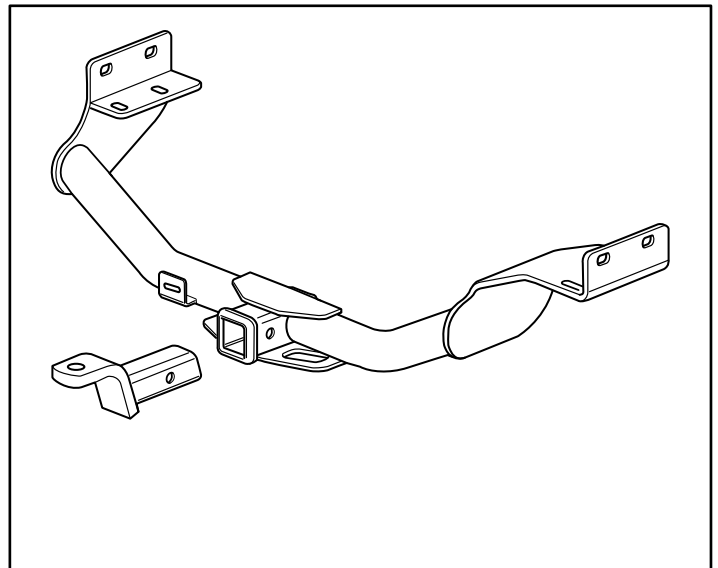
	Diagonal Cutters	28
NOTE	When the vehicle harness is not present, secure the power wire harness as shown above using one (1) 8.5" cable tie. Trim excess cable tie.	



	Diagonal Cutters	29
NOTE	Route the 4-flat harness and the T-connection for the passenger side along the bumper fascia and using five (5) 8.5" cable ties, cable tie as shown. Be sure to pull up any excess slack as you move over to the passenger side. Trim excess cable ties. If not equipped with vehicle harness, follow procedure in Step 30.	

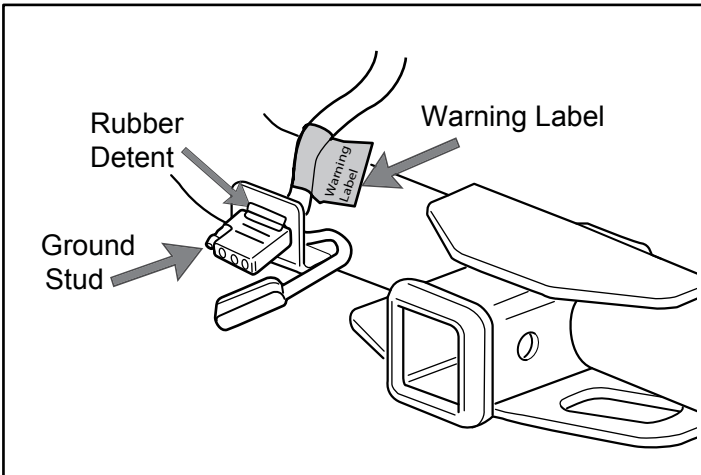


	Diagonal Cutters	30
NOTE	When vehicle harness is not present, route the 4-flat harness and the T-connection for the passenger side along the bumper fascia and using four (4) 8.5" cable ties, cable tie as shown. Be sure to pull up any excess slack as you move over to the passenger side. Trim excess cable ties.	



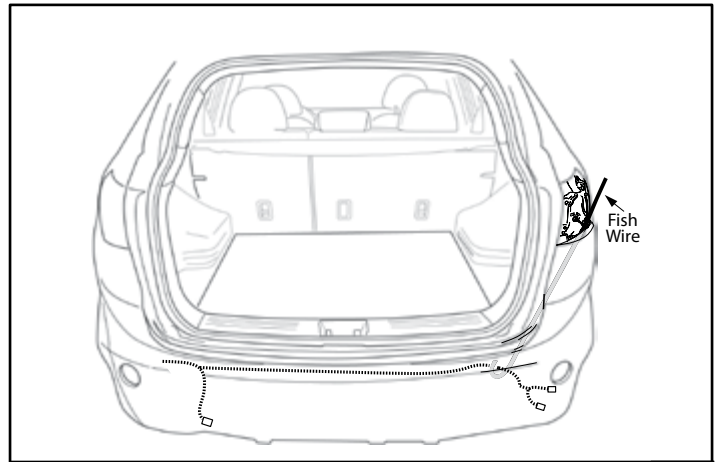
		31
NOTE	Install trailer hitch according to the hitch Installation instructions.	

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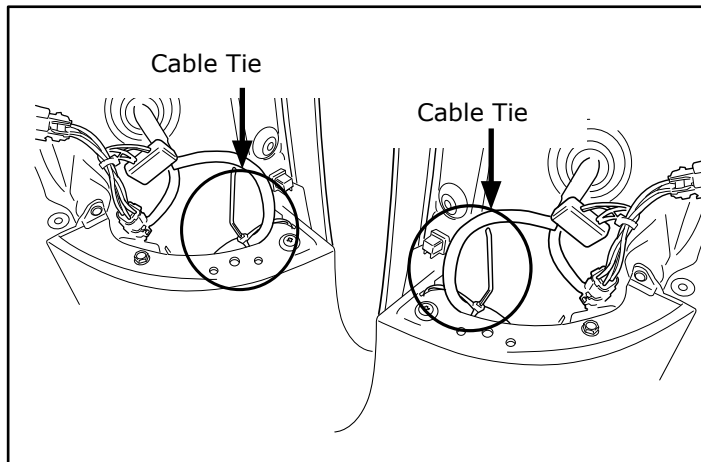
NOTE Route the 4-Flat connector over the top of the tow hitch and through the mounting bracket welded to the hitch. Mount the 4-Flat connector with the ground stud on the left hand side of the bracket. Push the 4-Flat through the bracket until the first rubber detent is visible and the connector is firmly locked into position, as shown above. Secure the weather cap over the 4-Flat connector.



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Fish Wire

NOTE Using a fish wire, route the T-connection up through the passenger tail lamp pocket as shown.



34

Diagonal Cutters

NOTE Pull up the excess slack and secure the passenger side T-connection harness with one (1) cable tie to the rear fascia support bracket, as shown. Repeat for driver side. Trim excess cable ties.

Connect the T-connectors between the tail lights and the vehicle harness the tail lights on both sides.

WARNING Connector should be fully inserted with locking tabs in place.

“NOTICE”

15 AMP TOW HARNESS FUSE LOCATION.

Fuse Location

15 amp tow harness fuse located under hood, near positive (+) post on fuse/relay box.
CAUTION: Only use a 15 amp replacement fuse, never use a higher rated fuse.
 Make sure the fuse cover is properly installed to prevent moisture intrusion.

For Vehicles Equipped with Tow Hitch and Back Up Warning System Only

Please be advised that a beeping sound will occur when towing with the transmission gearshift lever placed in reverse.

This condition is a normal function of the Back Up Warning System since it is sensing the trailer in close proximity behind the vehicle.

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WARNING

Overloading circuit can cause fires. DO NOT exceed:

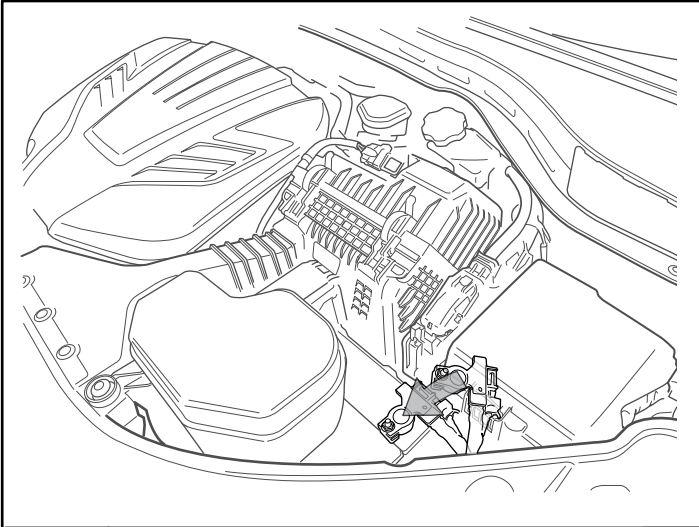
- Max stop/turn light: 2 per side and 4.2 amps max current draw per side.
- Max tail lights: 7.5 amps max current draw.

16506-330
REV. A
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35

NOTE Place fuse location card inside vehicle glove box.

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Ratchet and 10mm Socket

36

NOTE

Reconnect Battery.

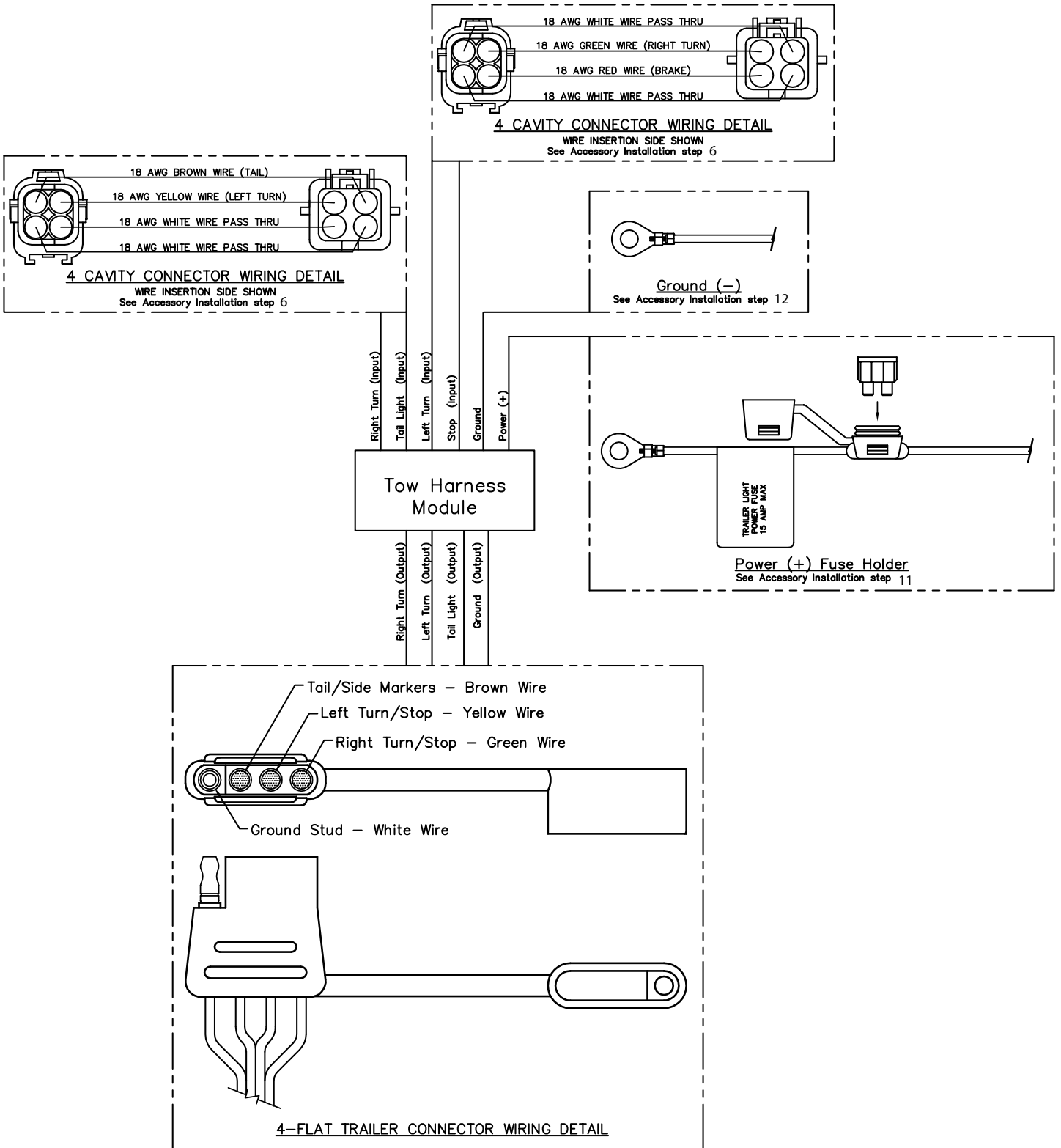
Replace rear tail lamp removed in step 5 and 6.

Perform function check on Page 14.



Reassemble vehicle following the reverse order of step 2-11.






Place receiver plug, ball mount kit, pin and clip under the cargo floor board in the cargo storage compartment.

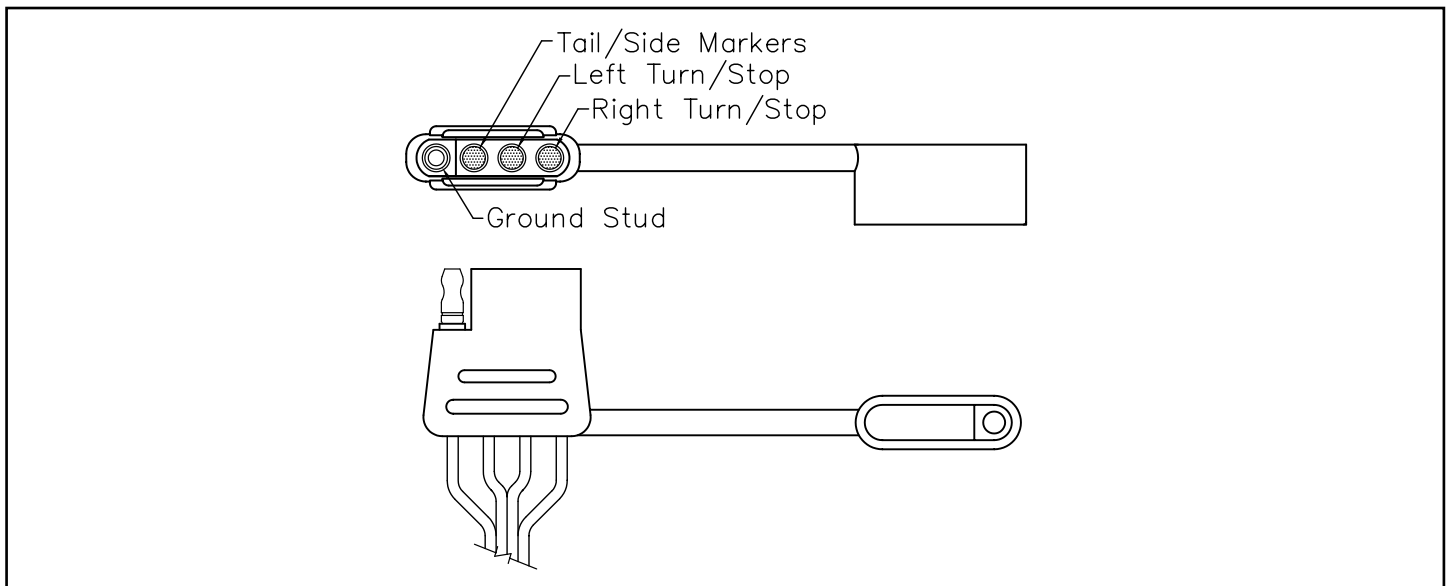
KIA Genuine Accessories Wiring Layout











KIA Genuine Accessories Function Check

		
	Test Light or Voltmeter	1
NOTE	<p>Test and verify installation with a test light.</p> <p>Turn ignition off & ensure all vehicle lights are off for 10 seconds prior to testing.</p> <p>For vehicles with smart key applications, push button to turn the ignition completely off for 10 seconds prior to testing</p> <p>Turn on ignition.</p>	




	Items To Be Checked	Results of the Check
	Test 4-Flat Connector <u>marker light</u> circuit.	Tester should illuminate/sound when the vehicle lights are activated. Verify vehicle lights are functioning normally.
	Test 4-Flat Connector <u>brake light</u> circuit.	Tester should illuminate/sound when the vehicle brakes are activated. Verify vehicle lights are functioning normally.
	Test 4-Flat Connector <u>right turn signal</u> circuit.	Tester should illuminate/sound when the right turn signal is activated. Confirm correct operation when combined with vehicle brake lights also. Verify vehicle lights are functioning normally.
	Test 4-Flat Connector <u>left turn signal</u> circuit.	Tester should illuminate/sound when the left turn signal is activated. Confirm correct operation when combined with vehicle brake lights also. Verify vehicle lights are functioning normally.
	Test 4-Flat Connector <u>hazard indicator</u> circuit.	Tester should illuminate/sound when the hazard indicator is activated. Verify vehicle lights are functioning normally.



KIA Genuine Accessories Visual Check

Items To Be Checked		Results of the Check
	All connectors are fully inserted with locking tabs engaged. Connection points have been wrapped with foam tape.	Connections secure.
	Tow harness has been properly secured under vehicle. There should be no slack. Harness should be routed as far away from exhaust system as possible.	Properly routed.
	Negative battery terminal has been reassembled.	Connection secure.
	The Fuse Location Notice Card has been placed in vehicle glove box.	Fuse Location Notice Card in glove box.
	Verify storage compartment is in place and secure.	In place and secure.
	Reset the AM/FM and satellite radio frequencies, if applicable.	Frequencies confirmed.
	The spare tire is reinstalled and seated properly.	Properly seated in the original location & is not crooked or misaligned.
	Reinstall muffler hangers.	Properly secured.

Troubleshooting

Items To Be Checked			
	No Power to 4-Flat Connector: Check trailer wiring harness 15 amp fuse per Fuse Location Notice Card.	Instruction Ref.	
		Installation step 35	
	No Power to trailer light functions: Check 4-Fat connection between tester and vehicle to make sure the connection is fully engaged.	Instruction Ref.	
		N/A	
	No Power to trailer light functions: Check all connections points. Connectors should be fully inserted with locking tabs in place.	Instruction Ref.	
		Installation steps 11, 12, 27, 28, 34 & 36	