

#### KMA Genuine Approved Accessories (Preparation)

Vehicle Model	Borrego
Model Year	2009
KMA Part No.	UH090 AY310

Accessory	Main Light Kit
Difficulty	В

Denotes safety equipment required to be

used such as a mask, goggles, rubber

gloves, and hearing protection.

- Preparation
- Disassembly
- Accessory Installation
- Reassembly Sheet
- Function Check
- Trouble Shooting

Note: Difficulty stated above reflects the minimum level of expertise required to install the accessory

(B) Dealer Technician

(C) Master Technician

#### **Instructional Symbols / Definitions**



Denotes warnings that may lead to serious physical injury or vehicle damage.

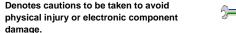


Denotes quality processes to be checked prior to moving to the next step.





Pg. 1





Denotes specific tools that are necessary to complete the step.





Denotes cautions to be taken to avoid vehicle and component damage.



Denotes instructional steps necessary to complete the process.

Rubber Gloves

Hearing Protection

#### **Basic Required Hand Tools**



Driver

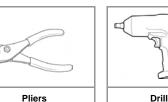
Socket (10 mm)

Scribe or Center

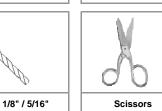
Punch

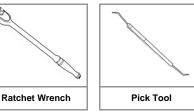


Safe)

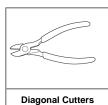












#### **Specialty Required Tools**

Multi Meter Vinyl Tape					
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#### Notes to the Installer

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

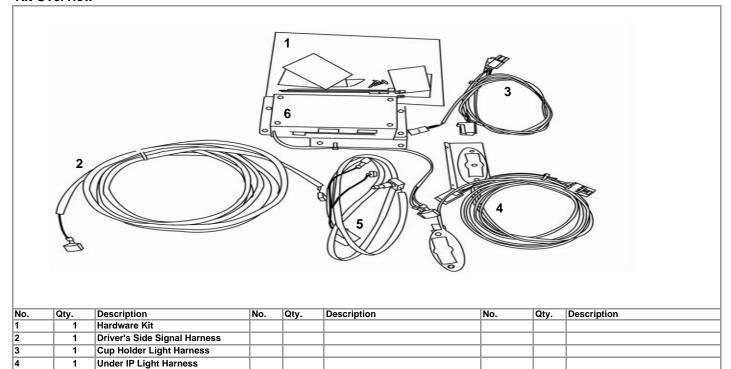
Ensure that the vehicle is properly protected in the area that the accessory is to be installed.

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 inspection page the AM/FM and satellite set frequencies.

#### **Kit Overview**



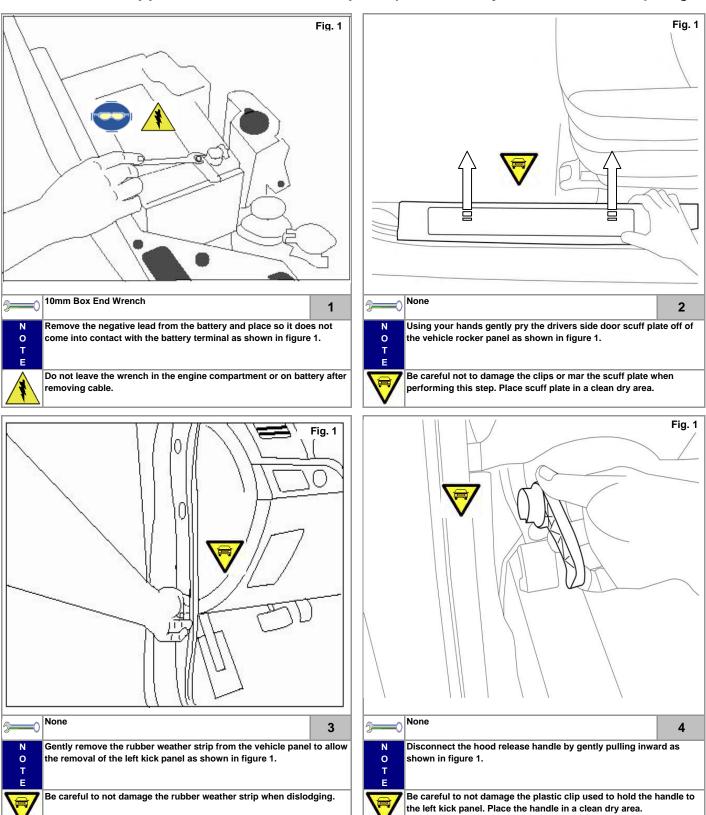
#### **Hardware Overview**

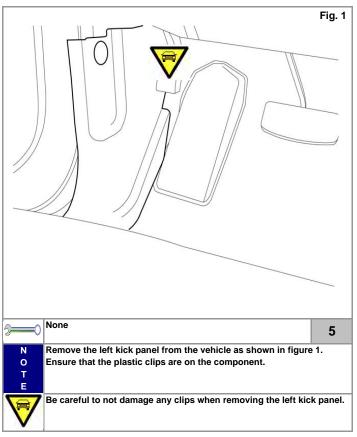
Switch Harness

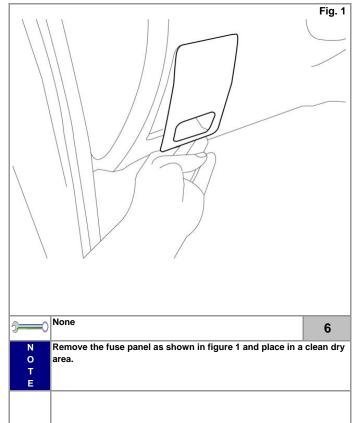
Controller Module Assembly

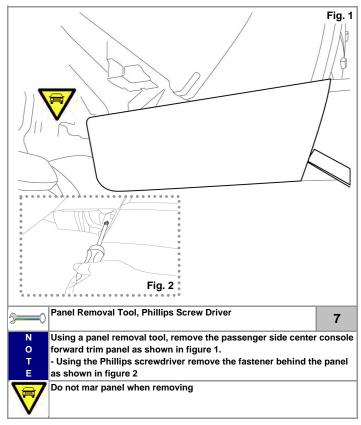
Ha	Idware Overview		
A		F O O	
2	#4 x 3/8 Pan Head Self Tapping Screw	1 Cup Holder Lens Kit	
В	-aaaaa (O	G (Control of the control of the con	
1	#10 x 1/2 Pan Head Self Tapping Screw	4 T-Taps	
С		Н	
2	8-32 x 1/2 Pan Head Machine Screw	25 4" Wire ties	
D			
2	8-32 Nylock	2 7" Wire Ties	
E		J	
9	Foam Pad	1 Switch Cap	
			Hardware Kit Total

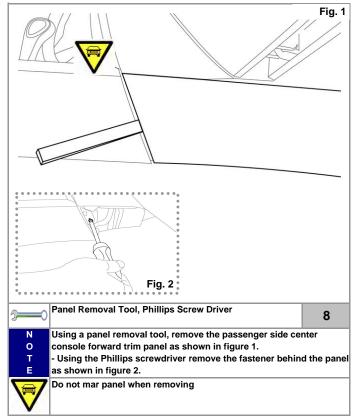
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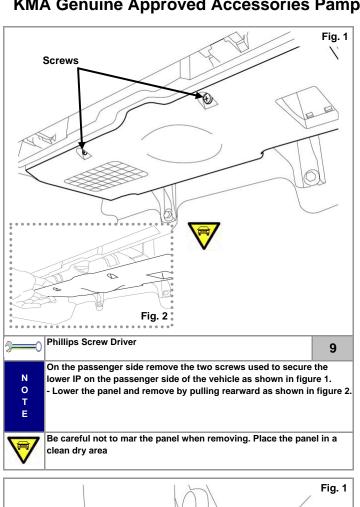


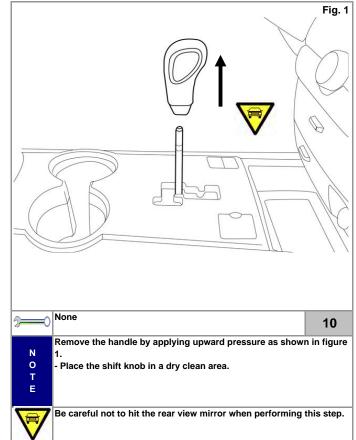


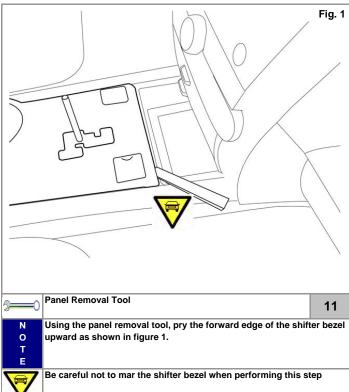


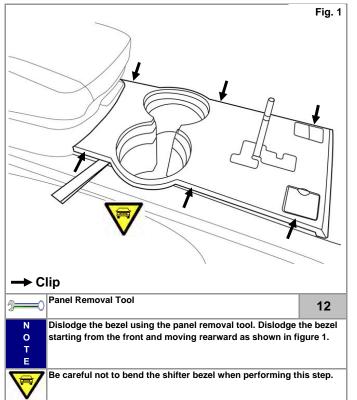


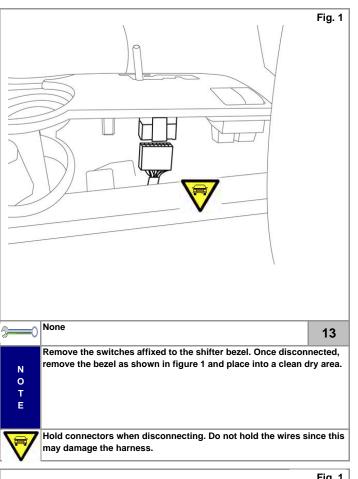


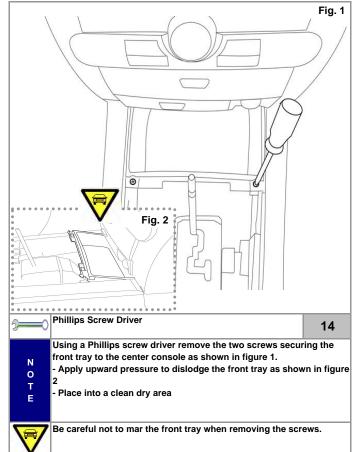


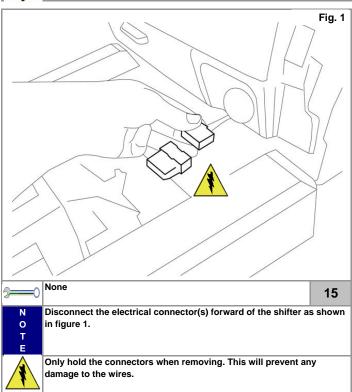


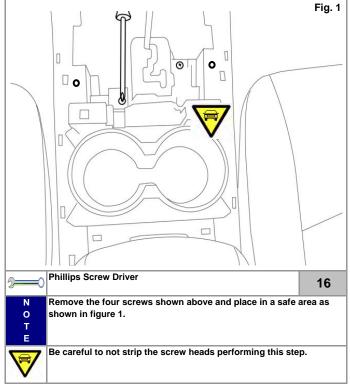


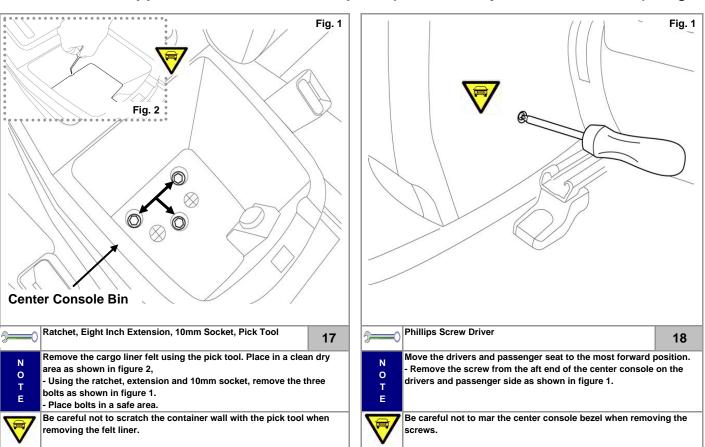


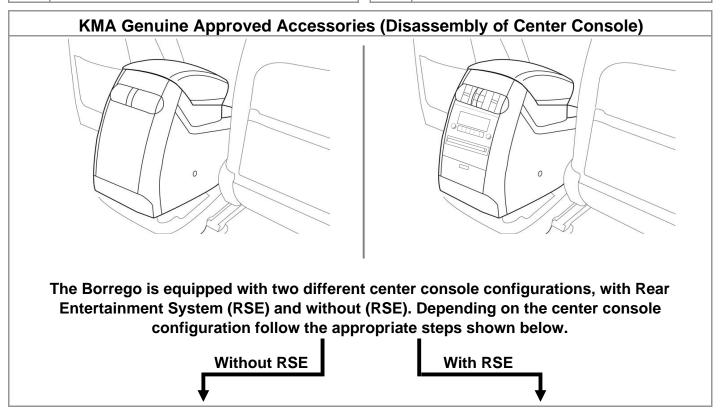


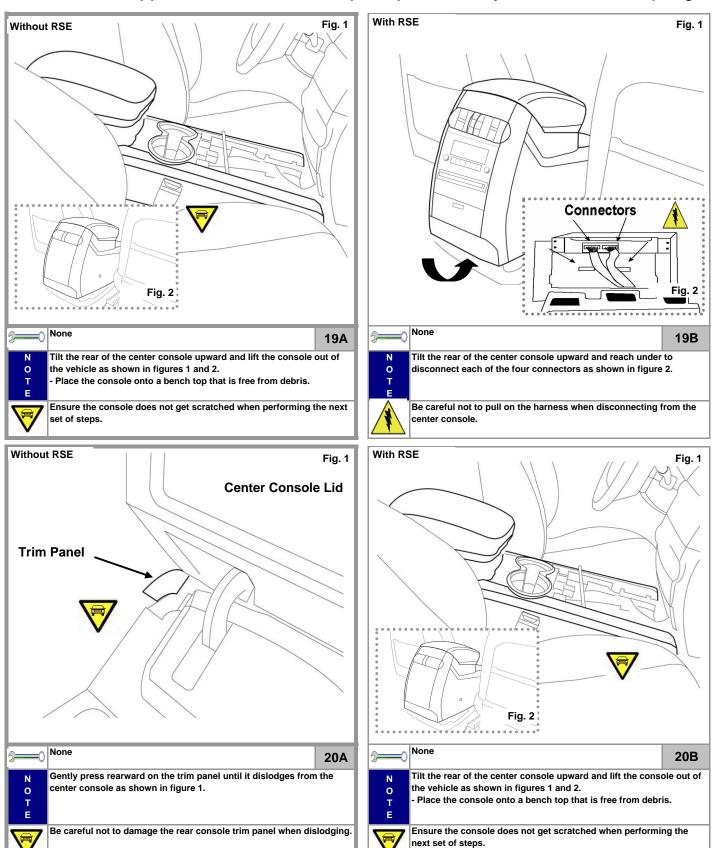


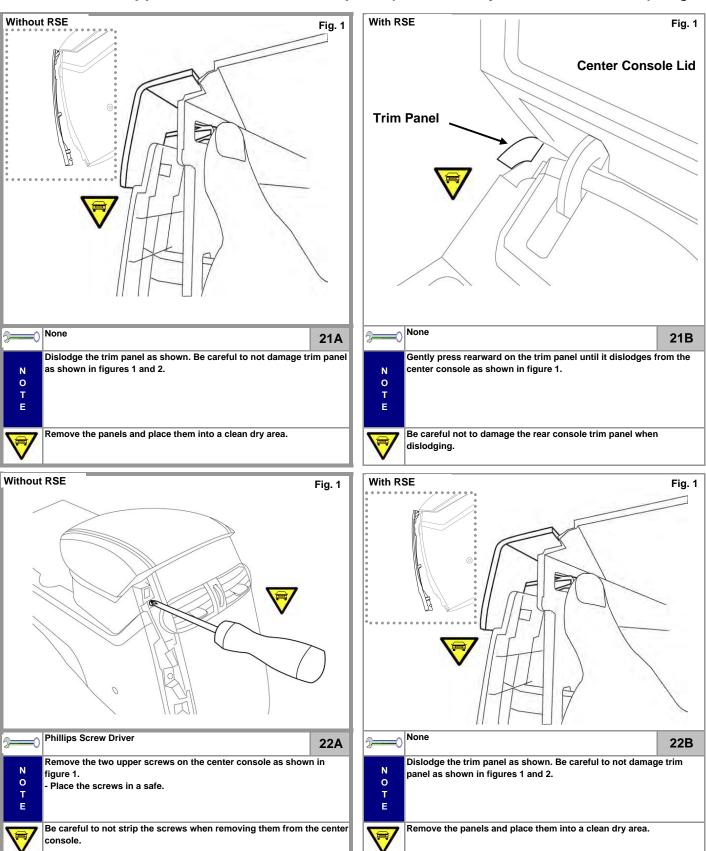


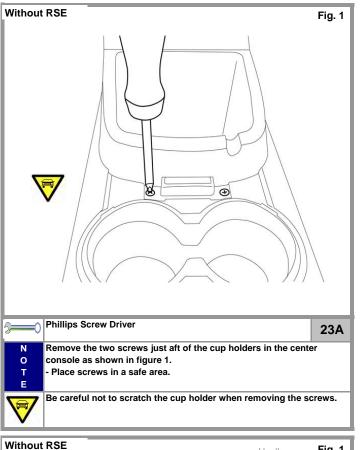


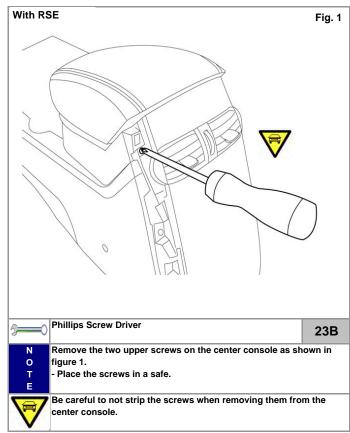


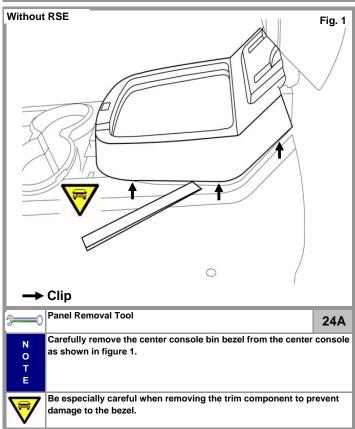


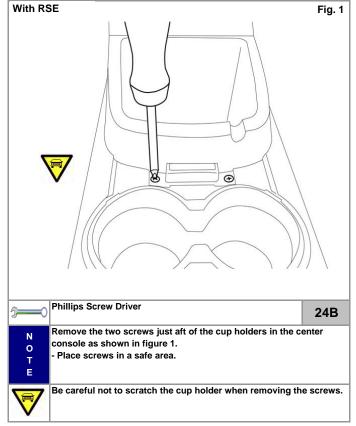


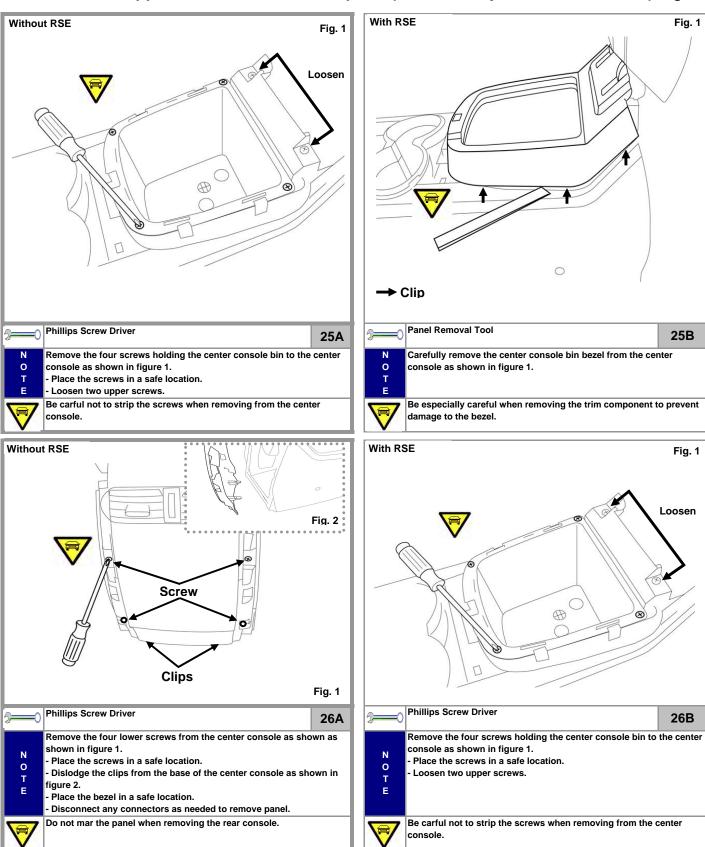


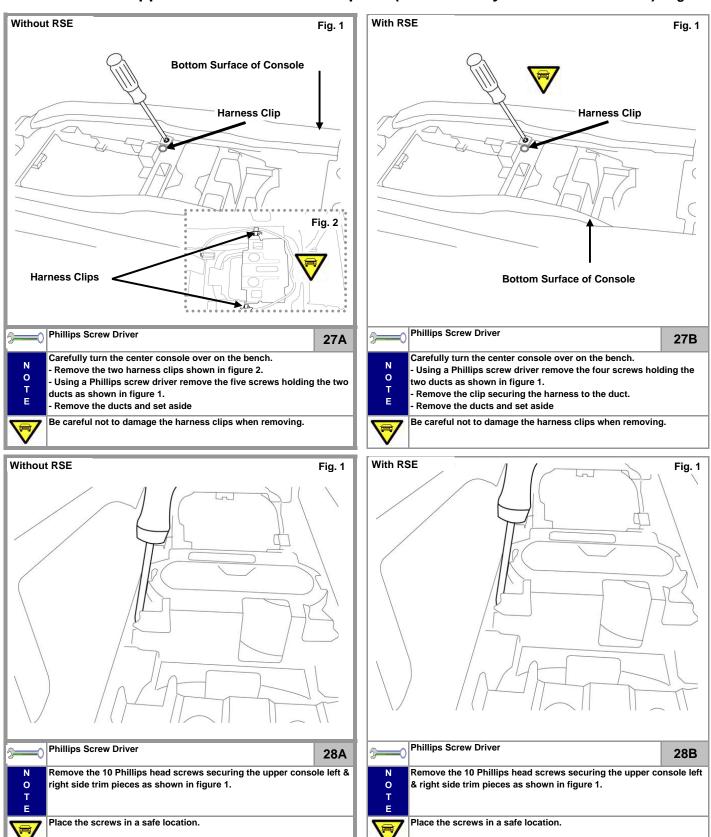


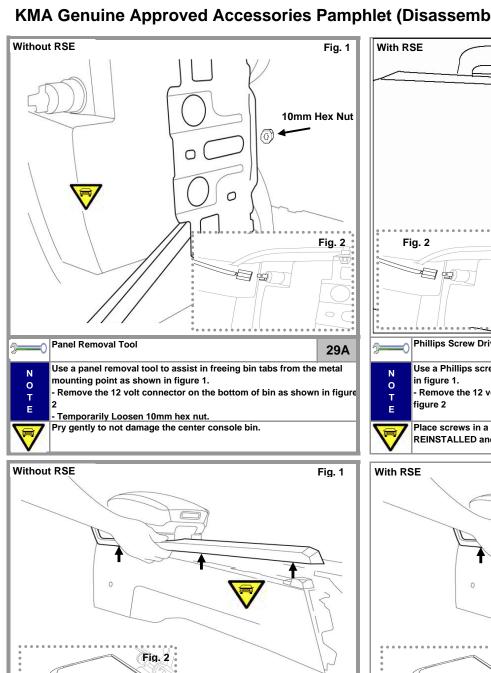


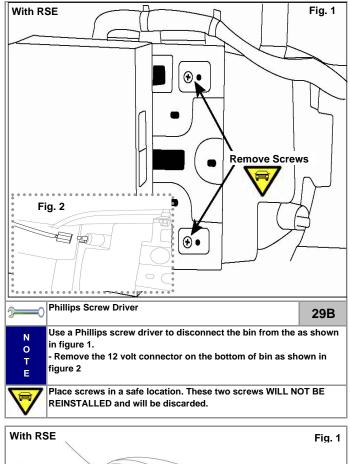


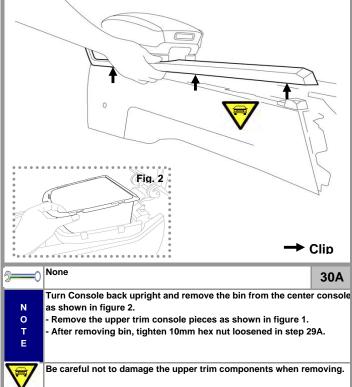


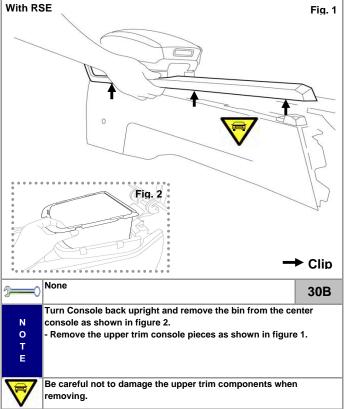


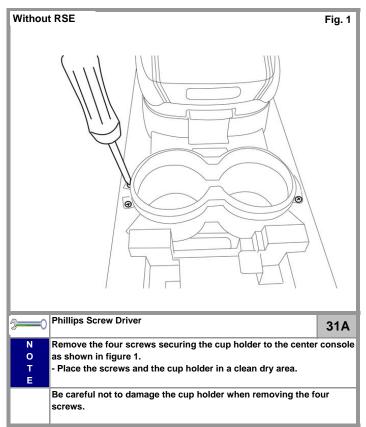


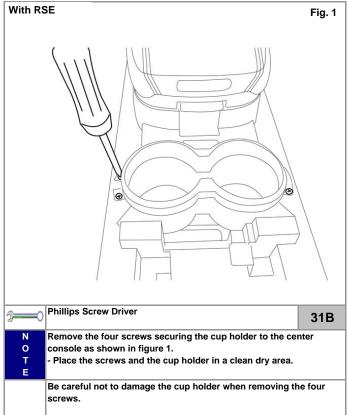


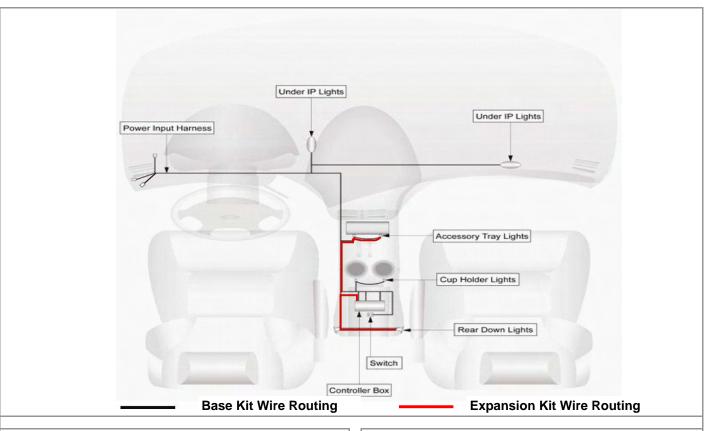


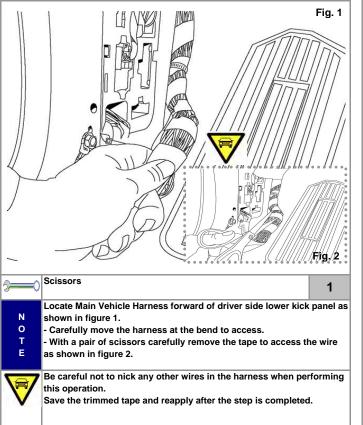


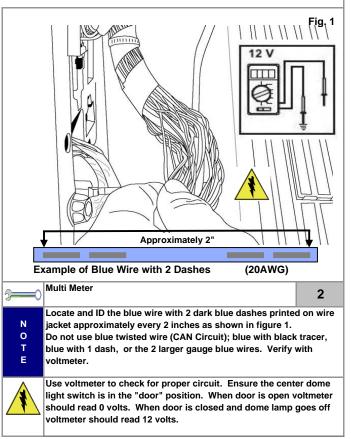




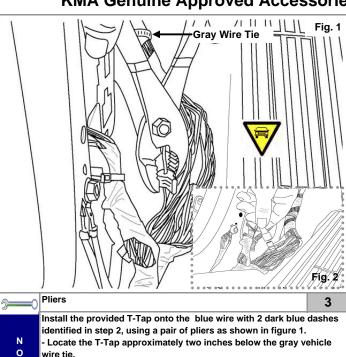








#### KMA Genuine Approved Accessories Pamphlet (Installation of Base Kit)

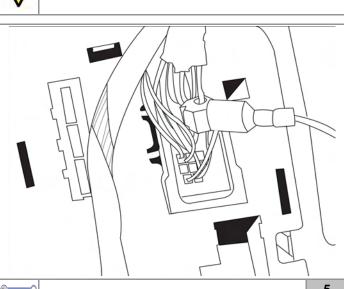


- Carefully insert the male spade terminal marked (Connect to Dome Lamp Circuit) from the drivers side signal harness shown in figure 2.



Ε

Reinstall previously removed tape before proceeding.



Install the provided T-Tap onto the WHITE wire identified in step 4 using a pair of pliers as shown in figure 1.

Carefully connect the WHITE wire with male quick disconnect labeled (Connect to B+ circuit T-tap) from the light kit wire harness to the T-tap.

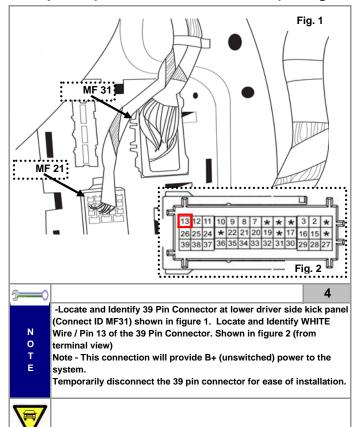


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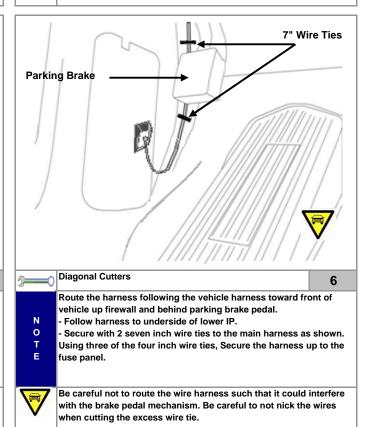
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Ε

Make sure quick disconnect is inserted securely to t-tap Ensure that the 39 pin connector is re-attached to the vehicle before moving to the next step.

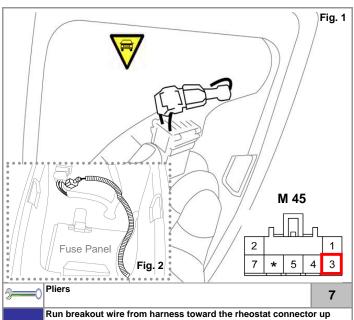


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#### KMA Genuine Approved Accessories Pamphlet (Installation of Base Kit)





past fuse panel as shown in figure 2.

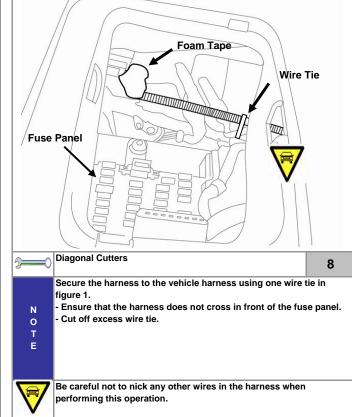
- Disconnect the rheostat connector from the vehicle.
- Using a pair of pliers locate the red wire (pin #3) and lock the provided t-tap onto the M 45 connector as shown in figure 1 (from terminal view).
- Attach the male spade connector marked (Head Lamp rheostat connector) to the T-Tap. Re-install the vehicle M 45 connector.

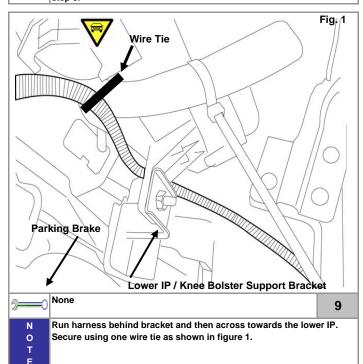


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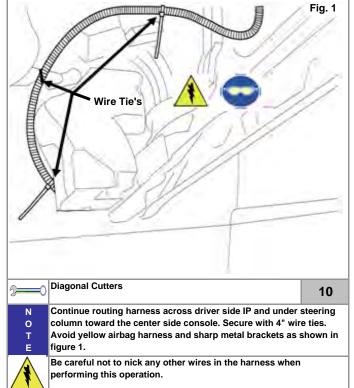
Ensure the spade connector fully inserts into the T-Tap prior to moving to the next step.

Wrap the t-tap and connector with one piece of foam tape as shown in step 8.





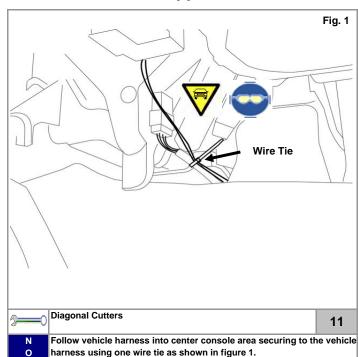
Be careful not to nick any other wires in the harness when performing

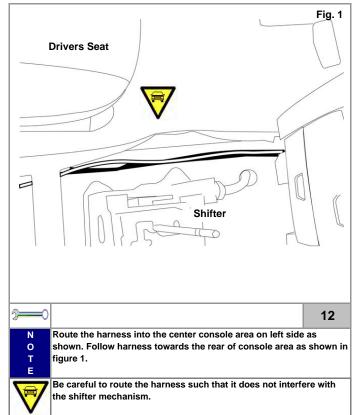


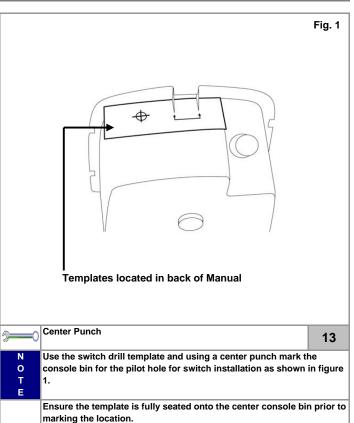
this operation.

## KMA Genuine Approved Accessories Pamphlet (Installation of Base Kit)

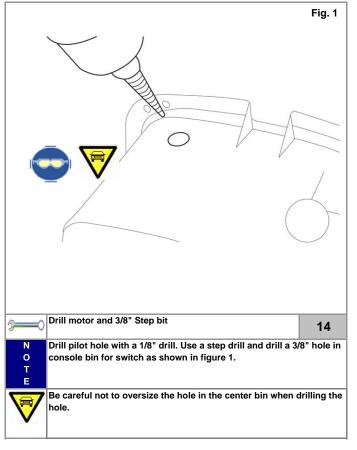
Pg. 18

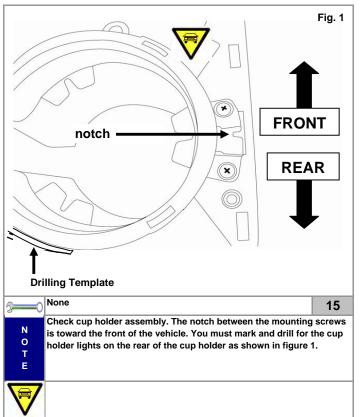


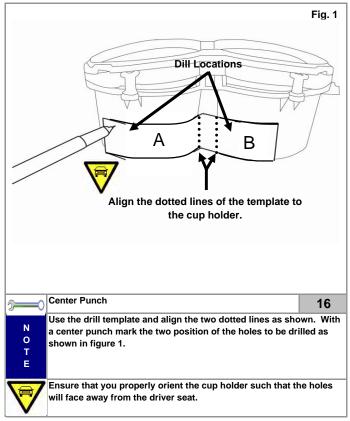


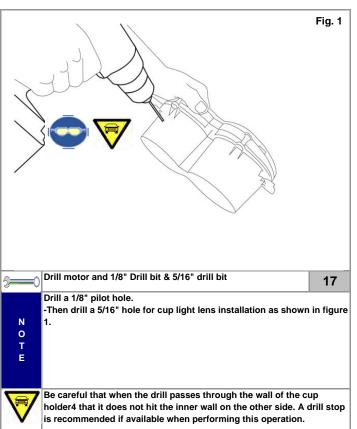


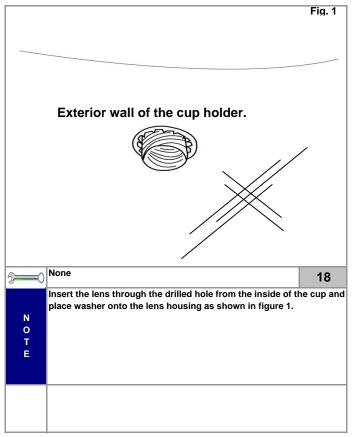
Be careful not to nick any other wires in the harness when performing

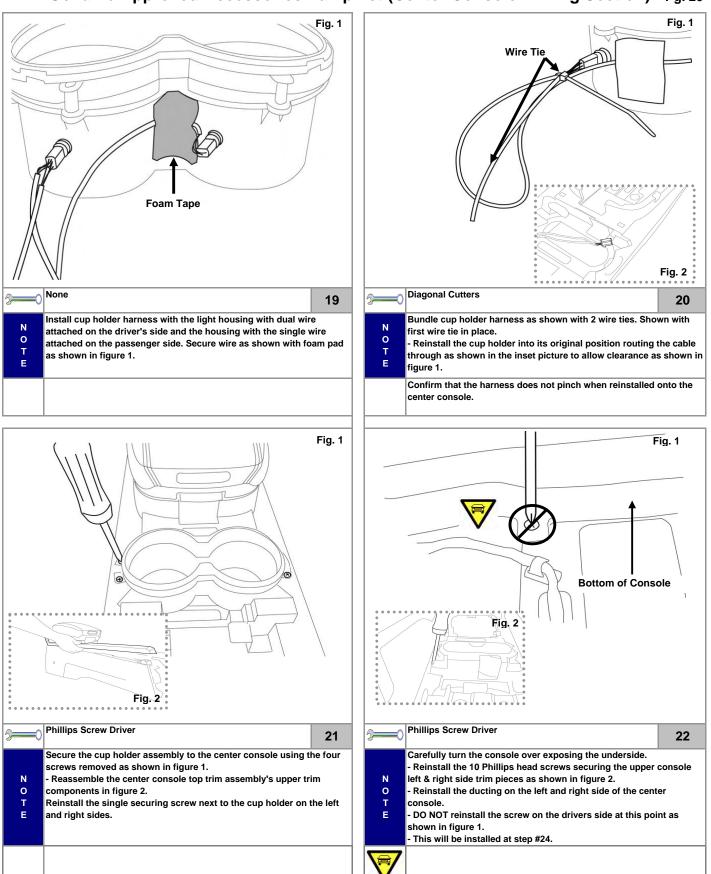


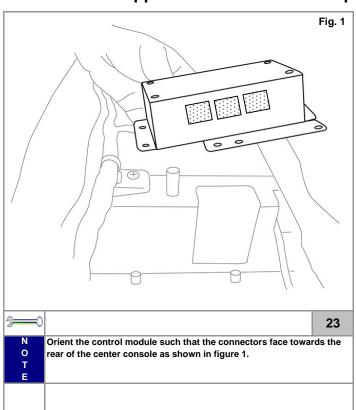


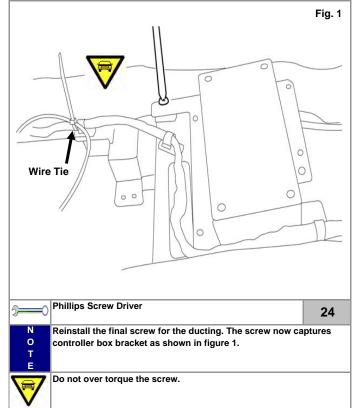


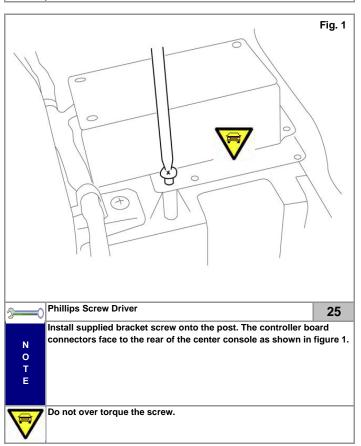


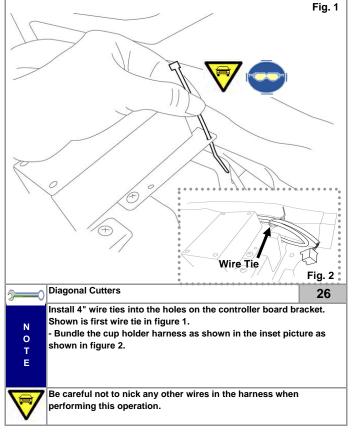


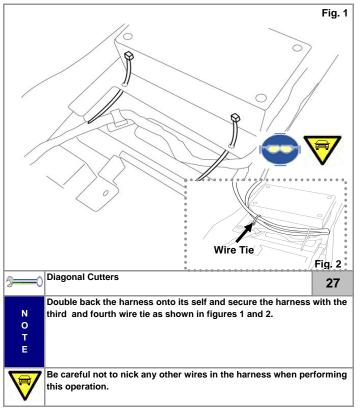


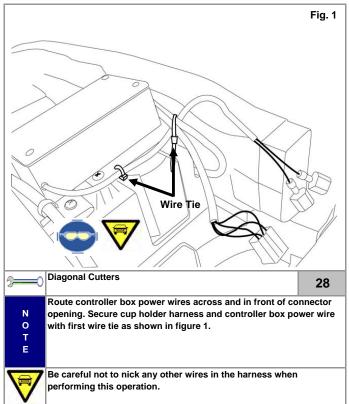


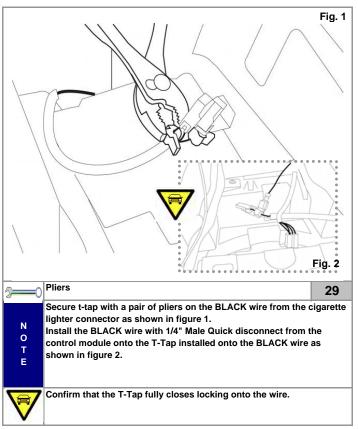


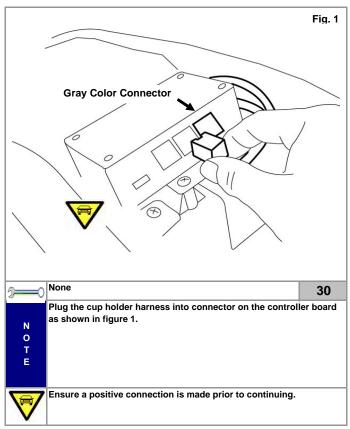


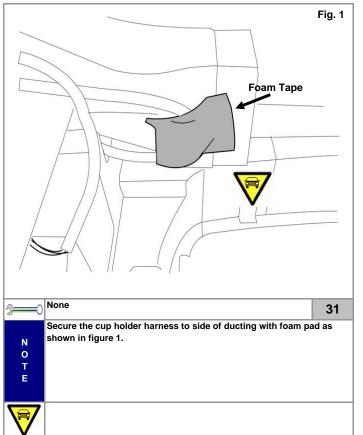


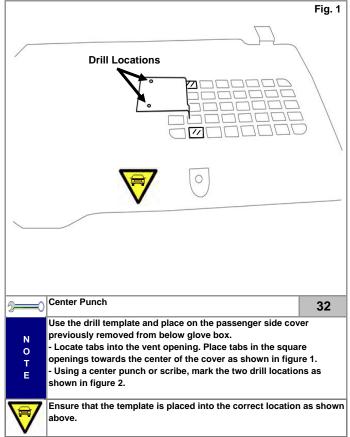


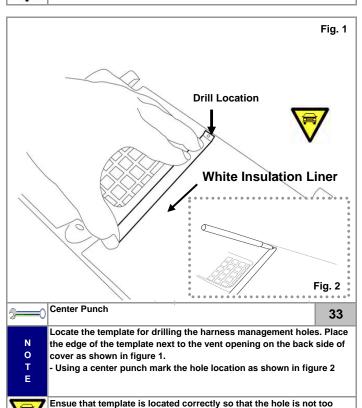


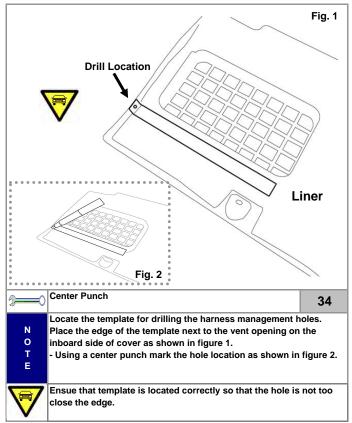




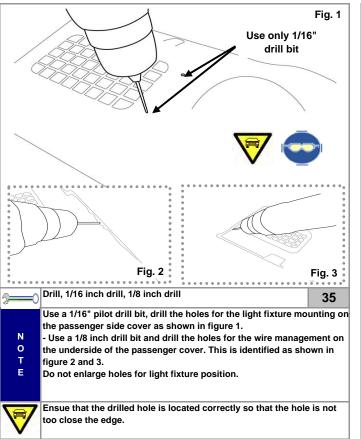


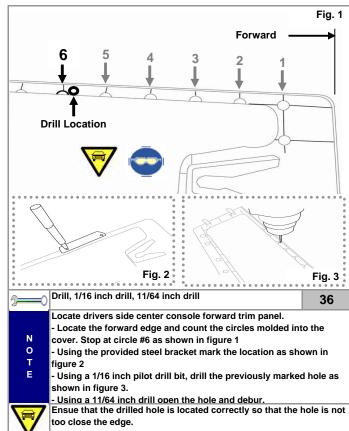


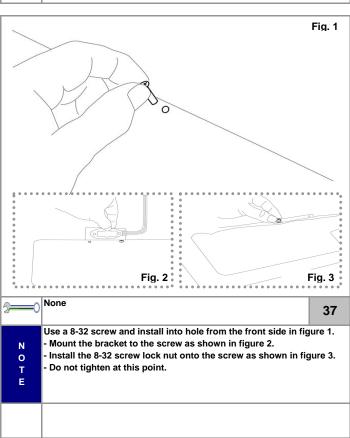


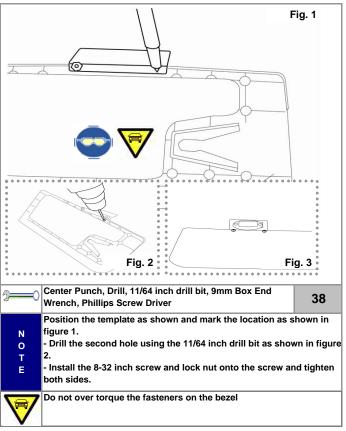


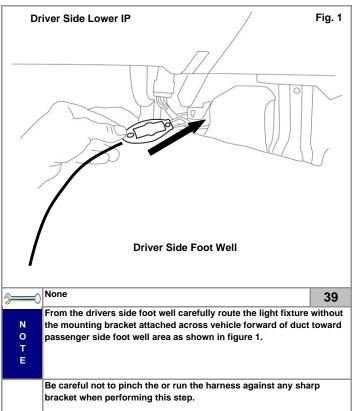
close the edge.

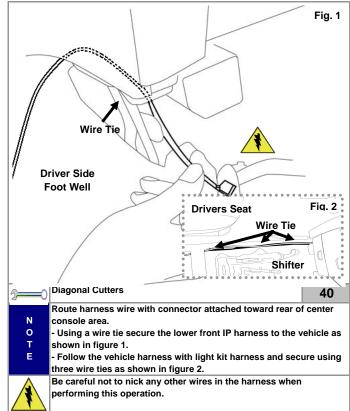


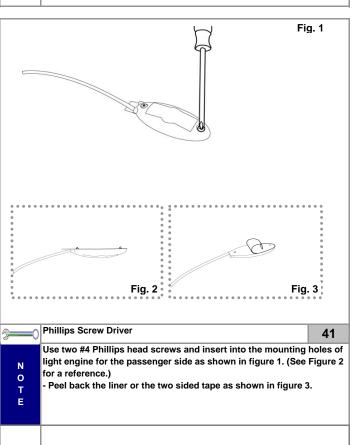


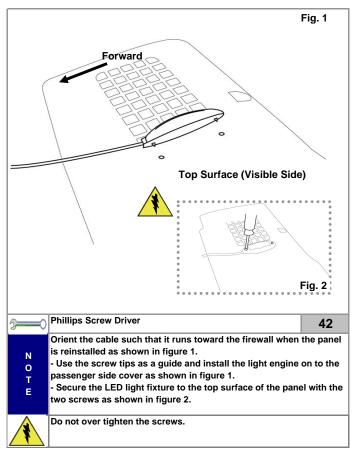


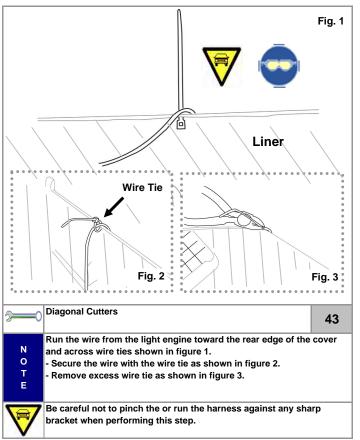


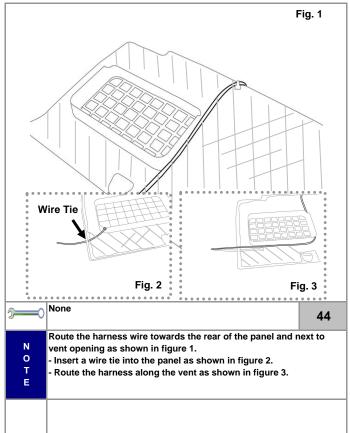


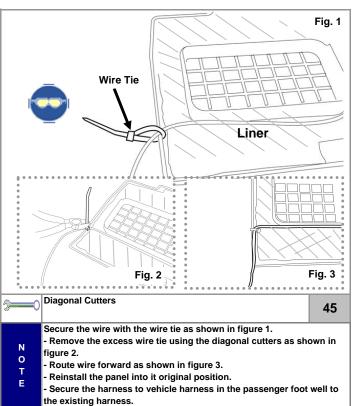












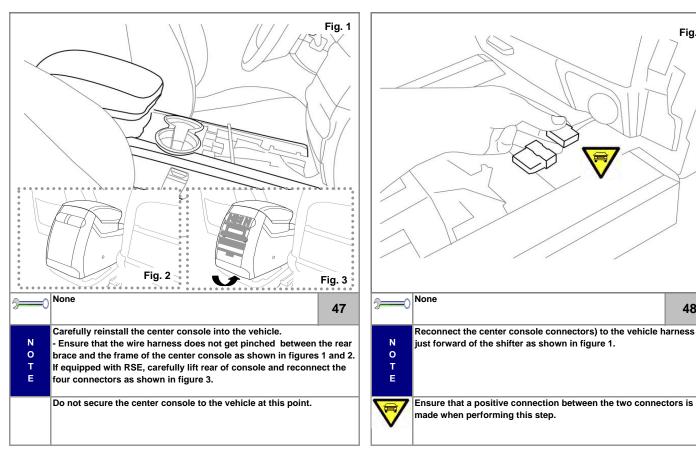
Ensure the wire does not get pinched or nicked when removing the

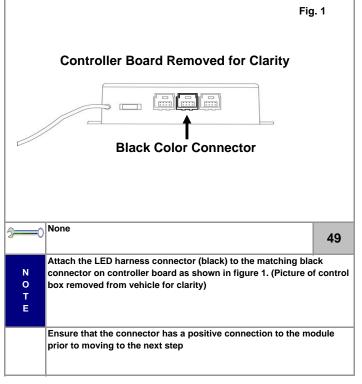
#### **NOTICE:** Expansion Kit

If both the base kit and expansion kit are to be installed into the vehicle, open the expansion kit at this point and complete the installation using the enclosed instructions beginning at step #19. The expansion kit contains lighting for the forward tray and rear floor lighting.

If only base kit is to be installed, continue at step #47 of this manual.

<b>—</b>	46
N O T E	





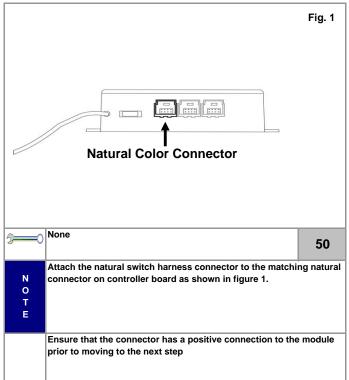
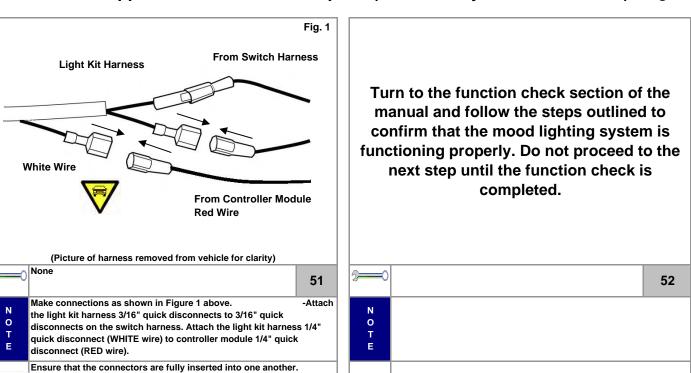
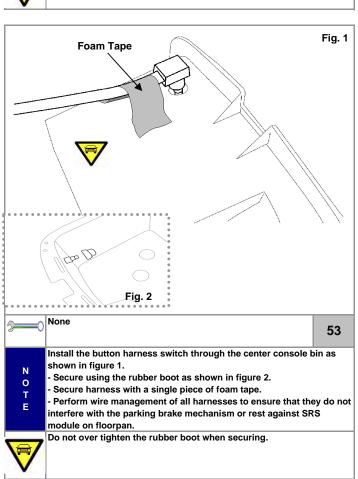
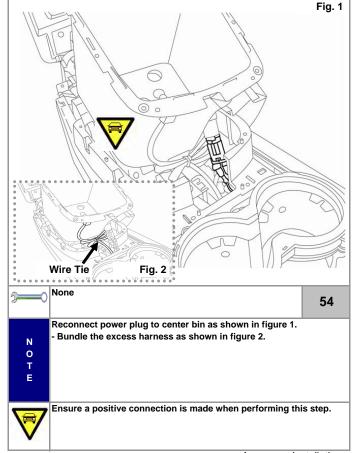


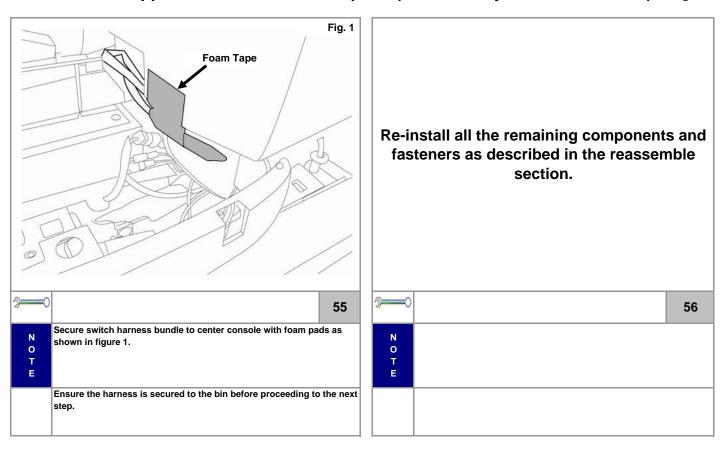
Fig. 1







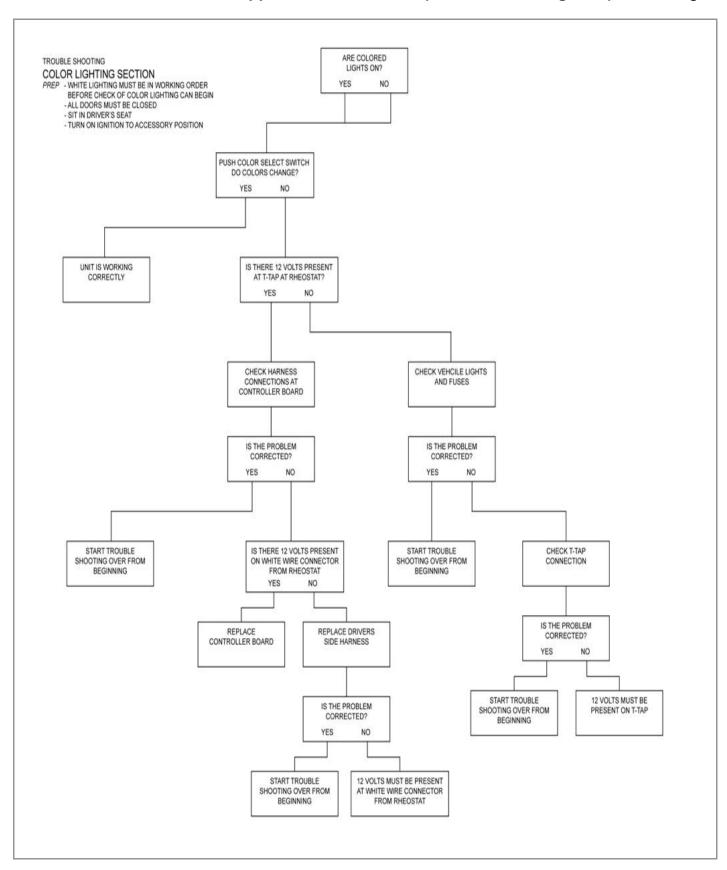
Pg. 28

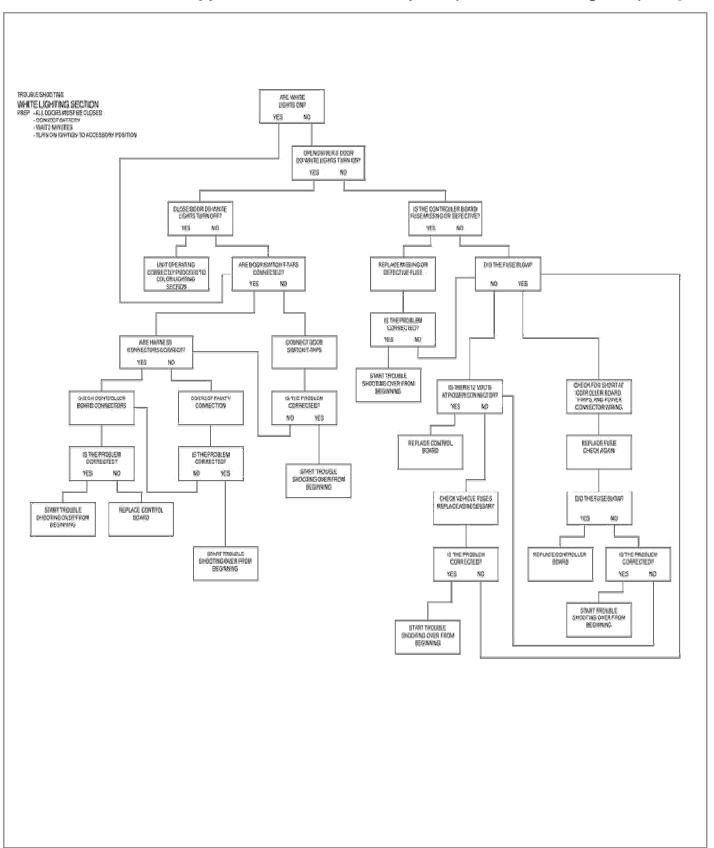


	Item in Question	Disassembly Section	Visual Review
<b>✓</b>	Reinstall the center bin and secure using the four screws.	Instruction Ref. Pg. 9 Step 25 Fig. 1	Bin will be flush to center console after installation without any gaps. Ensure the switch harness does not get pinched.
<b>✓</b>	Reinstall the center console bin bezel by aligning the clips and lower then lock into position	Instruction Ref. Pg. 8 Step 24 Fig 1	Ensure the console is completely flush paying attention to the area around the bolster hinge.
<b>✓</b>	Reinstall the two original screws removed from the center console bin bezel.	Instruction Ref. Pg. 8 Step 23 Fig. 1	Do not over torque the screws.
<b>✓</b>	Reinstall the three bolts removed in the center bin that hold the center console.	Instruction Ref. Pg. 7 Step 17 Fig. 1	Do not over torque the three bolts.
<b>✓</b>	Reinstall the center console felt liner into the center console.	Instruction Ref. Pg. 7 Step 17 Fig. 2	Fits flat in the bin
V	Reinstall the two screws used to secure the center console to the shifter base.	Instruction Ref. Pg. 6 Step 16 Fig. 1	Do not over torque the screws.
<b>✓</b>	Reinstall the forward Tray locking it into position and using the two original screws removed	Instruction Ref. Pg. 6 Step 14 Fig. 1	Do not over torque the screws.
<b>✓</b>	Reinstall the connectors to the shifter bezel and reinstall the bezel onto the center console.	Instruction Ref. Pg. 6 Step 13 Fig. 1	Ensure that all the clips are locked down and the bezel is completely seated onto the center console.
<b>✓</b>	Orient the shift knob over the shift post and lock by pressing down firmly.	Instruction Ref. Pg. 5 Step 10 Fig. 1	Ensure the shift knob is firmly seated.
<b>✓</b>	Reinstall the original screw onto the side of the center console forward end on the passenger side of the vehicle.	Instruction Ref. Pg. 4 Step 8 Fig. 2	Do not over torque the screw.
V	Reinstall the passenger foot well inner kick panel. Ensure the panel locks onto the forward clip. Lock panel to forward end of the center console	Instruction Ref. Pg. 4 Step 8 Fig. 1	Ensure that the LED harness wire is not pinched
<b>✓</b>	Move the front seats forward. Reinstall the two screws removed from the side of the center console.	Instruction Ref. Pg. 7 Step 18 Fig. 1	Do not over torque the screw.
<b>✓</b>	Reinstall the rear bezel panel onto the center console beginning with the clips at the bottom. Secure the rear panel using the six original screws.	Instruction Ref. Pg. 8 Step 22 Fig. 1	Ensure the panel locks into the Center console. Pay attention to the lower clips and that it properly locks onto the center console near the top bolster.

	Item in Question	Disassembly Section	Visual Review
	Install the trim bezel pieces onto the rear console that were originally removed	Instruction Ref.	Start at the top ensuring that the trim panels fully lock onto the uppe edge. Be careful to not damage the component when reinstalling the trim panels onto the rear console. Fix the carpet floor mat before
		Pg. 8 Step 21 Fig. 2	moving forward.
	Reinstall the original screw onto the side of the center console forward end on the drivers side	Instruction Ref.	Do not over torque the screw.
$\bigcirc$	of the vehicle.	Pg. 4 Step 7 Fig. 2	
	Reinstall the drivers foot well inner kick panel.	Instruction Ref.	Ensure that the LED harness wire is not pinched
<b>✓</b>	Ensure the panel locks onto the forward clip.  Lock panel to forward end of the center  console	Pg. 4 Step 7 Fig. 1	
	Reinstall the fuse panel cover	Instruction Ref.	Ensure is locks firmly into position.
$\checkmark$		Pg. 4 Step 6 Fig. 1	
	Install the left kick panel onto the vehicle. Ensure that all the clips engage properly	Instruction Ref.	Take your time installing this component to ensure that no wires get pinched and that the panel fully seats onto the vehicle.
<b>✓</b>	including the forward and rear trim clips.	Pg. 4 Step 5 Fig. 1	
<b>✓</b>	Reinstall the hood latch onto the hood release mechanism.	Instruction Ref. Pg. 3 Step 4	Ensure the handle fully locks onto the clip
	Reinstall the rubber weather proof strip along	Fig. 1	Ensure that the rubber seal is fully seated into the channel to preven
<b>✓</b>	the door edge next to the kick panel	Pg. 3 Step 3	damage when the driver door is closed.
	Reinstall the door scuff plate onto the drivers side. Ensure that it is positioned to correctly	Fig. 1 Instruction Ref.	Scuff plate should be locked down completely. Check the inboard forward and rearward edge to ensure it is fully seated.
$\checkmark$	install onto the plate. Pay attention to the forward inboard edge when installing.	Pg. 3 Step 2 Fig. 1	
	Reinstall the negative battery cable onto the battery lead. Tighten normally. Ensure no tools	Instruction Ref.	Make sure the cables are secure.
$\checkmark$	are in the engine compartment and close the hood	Pg. 3 Step 1 Fig. 1	-
	-	Instruction Ref.	
	-	Instruction Ref.	
	-	Instruction Ref.	_
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	Items To Be Checked	Results of the Check
	Ensure that the ignition key is in the "OFF" position	Key is removed from the ignition switch
	Close the doors including the rear hatch	Doors closed
<b>✓</b>	Temporarily place the negative cable onto the battery lead.	Vehicle systems are active.
<b>✓</b>	Open each of the four doors (Drivers, Passenger, and two rear door one at a time	LED's installed illuminate a soft white light.
<b>V</b>	Close doors	LED's turn "OFF" in conjunction with the dome light circuit.
<b>✓</b>	Close doors and activate the alarm system using the key fob.	LED's turn "OFF" in conjunction with the dome light circuit.
<b></b>	Using the key fob, de-activate the alarm system.	White light is emitted from the LED's
<b>✓</b>	With all the doors closed, place key in the ignition and turn to the ACC position. Turn on the headlights and press the system button.	Color light emits from the LED's.
<b>✓</b>	Continue to press the system	The lights alternate color and go to the "OFF" position.
<b>✓</b>	Turn "OFF" the headlights and cycle the ignition switch to the "OFF" position	The color lights turn "OFF"
<b>✓</b>	Remove the negative lead from the battery and place so it does not come into contact with the battery terminal.	End of function test. Return the installation section and complete the remainder of the installation steps.





## MY 09 KIA BORREGO INTERIOR ILLUMINATION INSTALLATION TEMPLATES

# MAIN KIT



MY09 KIA Borrego Interior Light Kit Passenger Side Wire Management Drill Template

