

Vehicle Model Model Year

Part No.

OPTIMA 2014~ 4UF60 AQ500 Accessory Difficulty

Remote Engine Start-Key Start

- Accessory Installation

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

(A) Customer

(B) Dealer Technician

(C) Master Technician

Ensure vehicle is equipped with automatic transmission, power door locks and power windows. If vehicle is not equipped with these options, do not proceed. Ensure vehicle does NOT have SMART KEY (PUSH BUTTON IGNITION SYSTEM).

Instructional Symbols / Definitions



Denotes warnings that may lead to serious physical injury or vehicle



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

Denotes safety equipment required to be used such as a mask, safety glasses, 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.



Denotes instructional steps necessary to complete the





Hearing Protection

Basic Required Hand Tools



Ratchet



10 mm Socket



12 mm Socket



Extension



Phillips Screwdriver





× ALCOHOL 50/50 Isopropyl

Alcohol (70%) and

Water Mix





Notes to the Installer:

Read the entire installation manual 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 the negative lead to the battery, note the AM/ FM and satellite set frequencies on the inspection page,

Ensure the transportation fuse is properly installed before performing the function check on page 10.

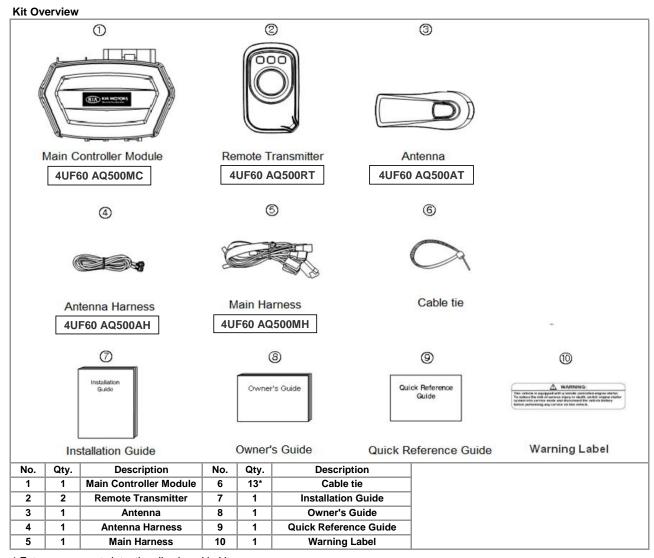
Open driver's door window.

Vehicle should be at room temperature.

Ensure vehicle is equipped with automatic transmission. If the vehicle is not equipped with these options, do not proceed.



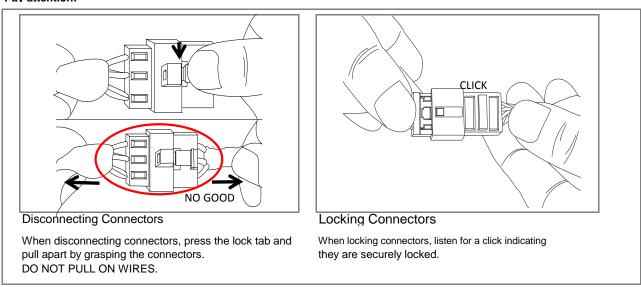
Technical Support For Authorized Dealers - (1) 855-225-7344 Hours: 9:00 a.m. - 5:00 p.m. EST Monday - Friday

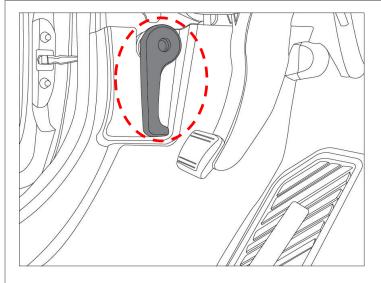


^{*} Extra components intentionally placed in kit as spares.

Please follow directions for proper placement of each component.

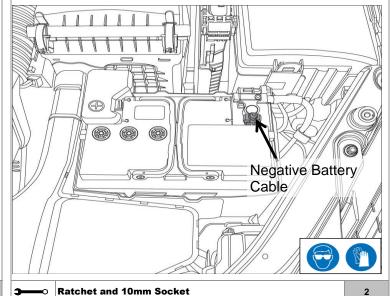
Pay attention!





1. Locate Hood Lever on the Driver's Kick Panel as shown above.

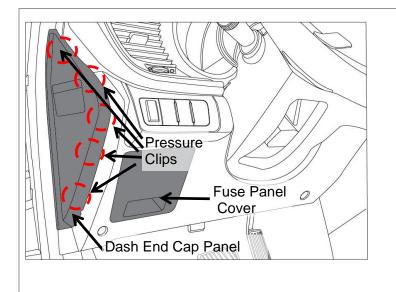
2. Pull the Hood Lever to open the Hood.



Using a Ratchet and 10 mm Socket, remove and isolate the Negative Battery Cable from the battery.

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WARNING! Shock Hazard. Do not touch vehicle's negative battery terminal to vehicle's positive battery terminal. Serious physical injury or electronic component damage may occur.

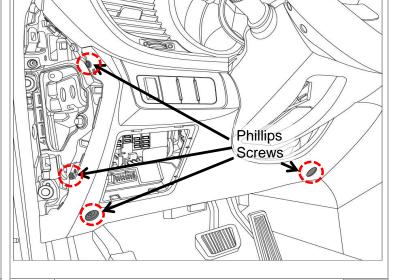


Trim Removal Tool

1. Remove the Fuse Panel Cover
2. Using a Trim Removal Tool, remove the Driver's Side Dash End
Cap Panel by prying outward to disengage the five (5) Pressure

Clips.

Store the removed part in a safe location to prevent damage.

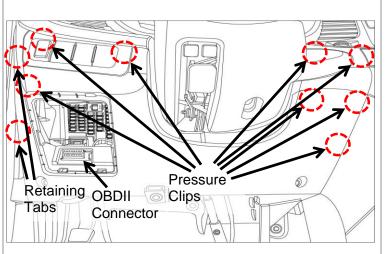


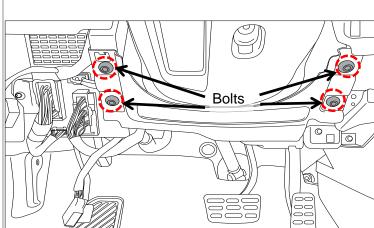
Using a Phillips Screwdriver, remove the two (2) Phillips Screws from the side of the Lower Dash Panel.

Phillips Screwdriver

Using a Philips Screwdriver, remove the two (2) Phillips Screws from the bottom of the panel.

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Trim Removal Tool

1. Using a Trim Removal Tool, remove the lower trim panel by carefully prying outward to release the two (2) Retaining Tabs and eight (8) Pressure Clips.

- 2. Remove the OBD II Connector from the lower trim panel.
- 3. Disconnect any remaining connectors, if equipped.
- 4. Pull upward and rearward to remove the panel.

1. Using Ratchet and 10 mm Socket, remove the four (4) 10 mm Bolts securing the Knee Bolster Plate.

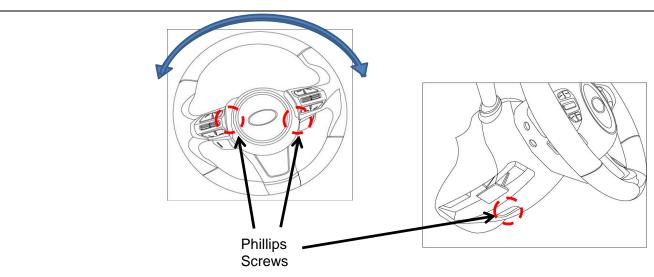
Ratchet and 10 mm Socket

N O T

Store the removed part in a safe location to prevent damage.

WARNING! Knee bolster plate may be sharp.

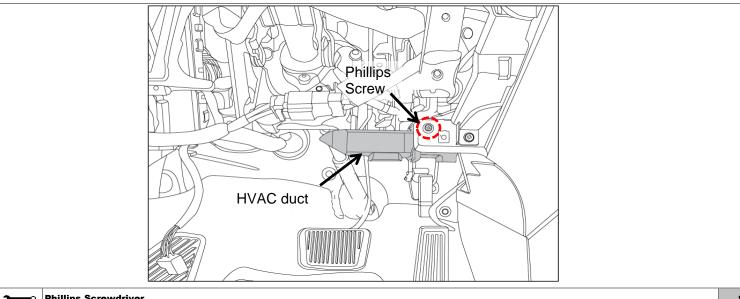




Phillips Screwdriver and Trim Removal Tool

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- Using a Phillips Screwdriver, remove the three (3) Phillips Screws securing the Steering Column Shroud, one (1) underneath and two (2) behind the Steering Wheel. Turn the Steering Wheel for access.**
- 2. Release the Tilt Adjust Lever of Steering Wheel.
- 3. Using Trim Removal Tool, pull down on Bottom Trim Cover to separate and remove the Lower Steering Column Shroud from the vehicle to provide the access to the 6-pin Ignition Switch Connector.
- 4. Adjust the Tilt Steering Wheel to the fully extended position and lock into place.
- *NOTE: To access screws, insert key and turn to the ACC position, in order to prevent steering wheel from locking.



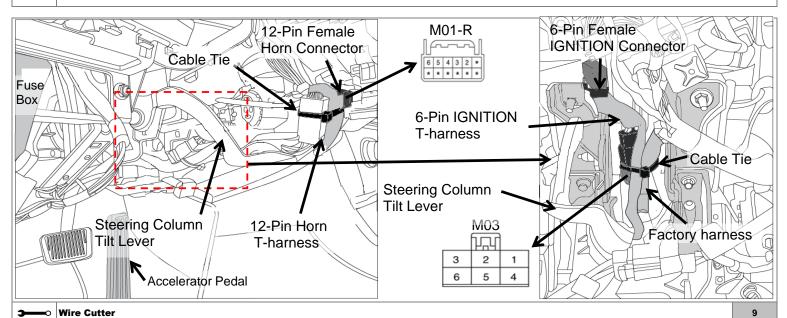
Phillips Screwdriver

1. Remove the one (1) Phillips Screw securing the HVAC Duct from the dash assembly.

2. Remove the HVAC Duct from the vehicle.



Store the removed part in a safe location to prevent damage.

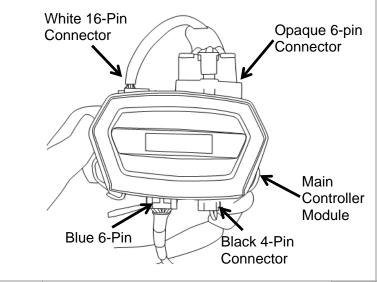


1. Locate the one (1) 6-Pin Connector and one (1) 12-Pin Connector under the Steering Column.

- 2. Disconnect two (2) Factory Female (one 6-pin, one 12-pin) connectors and plug into the corresponding Remote Start Harness Connectors.
- 3. Using cable tie, tie the 12-pin Horn T-harness to factory harness, as shown above.
- 4. To avoid interference with Steering Column adjustment, place the M03 connector & 6-pin IGNITION T- Harness at the center of the Steering Column and tie to factory harness, as shown above.
- 5. Using Wire Cutter, trim off excess cable ties.



WARNING! Engine Stall Hazard. To prevent stress / damage to the remote start wire harness, ensure that it does not contact any vehicle components or any sharp metal edges by adjusting the tilt / telescopic steering column in all positions. Fully extend the steering column out and lock in place. Ensure all connectors are fully engaged and locked in place. An engine stall could cause serious physical injury or vehicle damage.

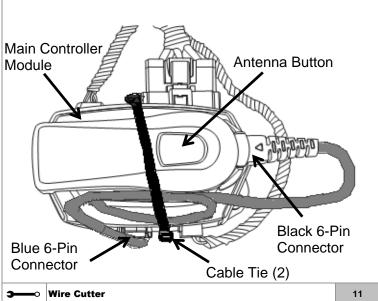


1. Connect the 6-pin Remote Start Harness Connector

- (Opaque Color) to the Main Controller Module. 2. Connect 4-pin Remote Start Harness Connector (Black color) to the Main Controller Module.
- 3. Connect 16-pin Remote Start harness connector (White color) to the Main Controller Module.
- 4. Connect 6-pin Antenna connector (Blue color) to the Main Controller Module.



Ensure that each connector is fully seated in the Main Controller

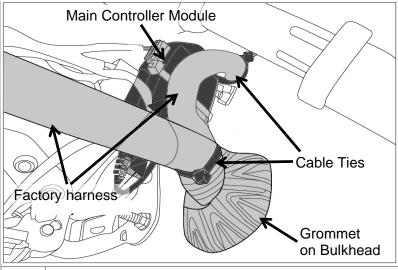


- 1. Remove film from double side tape on Antenna and adhere to the top of the Main Controller Module as shown above.
- 2. Connect 6-Pin Antenna Connector (Black color) to the Antenna. Make sure the connector is fully seated and locked.
- 4. Join two (2) cable ties together and install around Main Controller Module and Antenna to secure both parts together.
- 5. Using Wire Cutter, trim off excess wire cable ties.



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Pay attention not to route cable ties over antenna button or electrical connectors.



Main Controller Module - Two (2) cable ties "Run Cable Tie" through each hole on Main Controller Module and tie to vehicle harness.

Cable Tie Mounting Holes

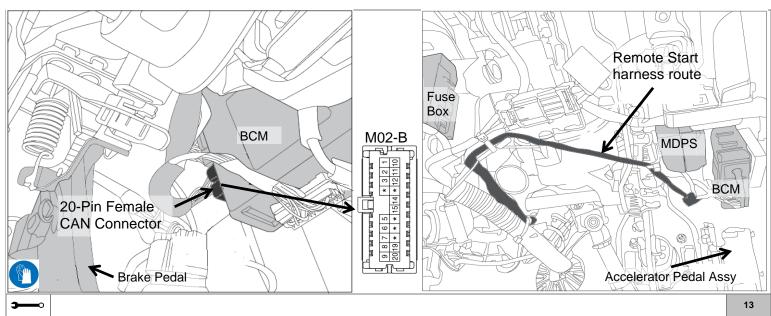
Wire Cutter

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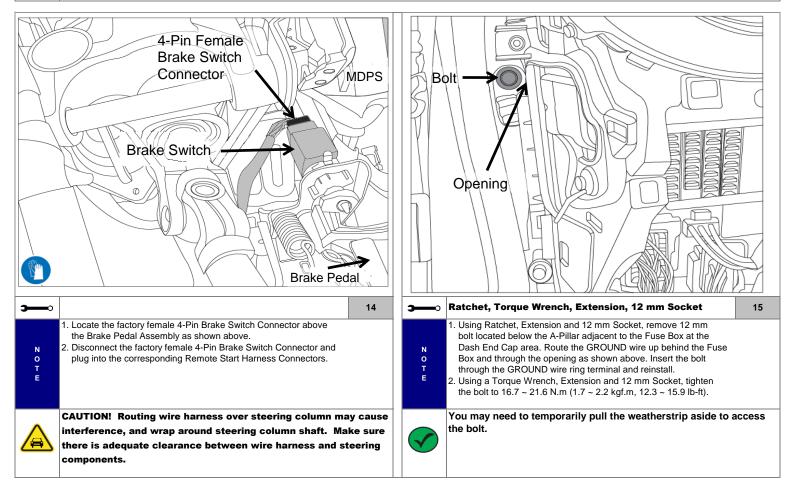
1. Install the "Main Controller Module" on the left side of the factory harness/Grommet and using two (2) Cable Ties, tie to the factory harness as shown above. 2. Using Wire Cutter, trim off excess cable ties.

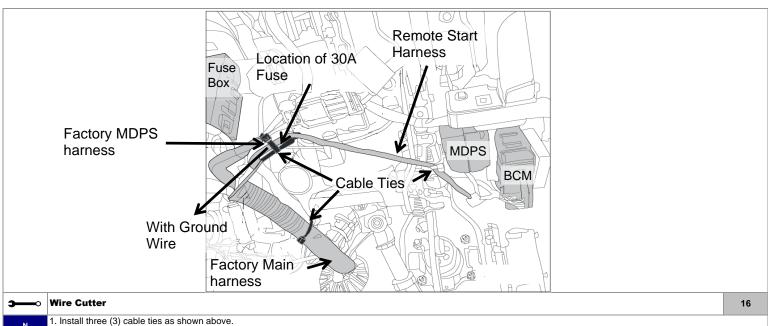


Pay attention not to allow other factory components to depress the antenna button. Make sure wire harnesses do not interfere with driver's feet.



- 1. Locate the BCM above the Accelerator Pedal, as shown above.
- 2. Route the remote start harness from the main controller module over to the BCM, as shown above.
- 3. There are four (4) connectors. Disconnect the Factory 20-Pin Female CAN Connector located as shown above and then plug into the corresponding Remote Start T-Harness Connectors.

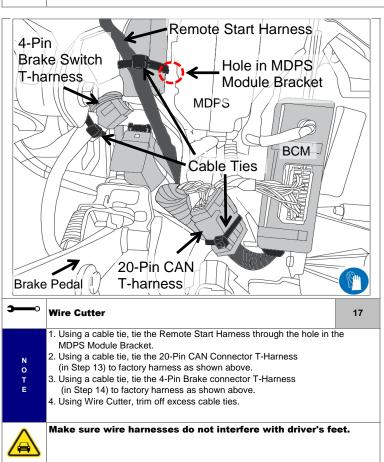


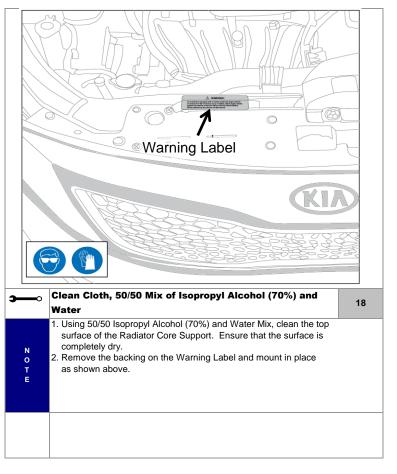


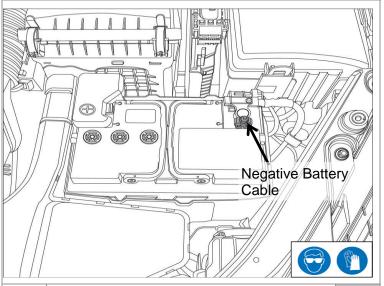
2. Using Wire Cutter, trim off excess cable ties.



Make sure wire harnesses do not interfere with driver's feet.









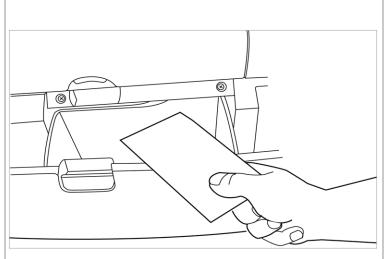
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1. Reconnect the Negative Battery Cable.

- 2. Test LOCK/UNLOCK function using Factory Key FOB.
- Close all doors, trunk and hood.
 Perform the Function Check on the following page.



If vehicle is not responding, please carefully re-check all wiring connections, especially antenna wiring and main module connections per the Troubleshooting Section on page 11.



Torque Wrench, Extension and 10mm Socket Reinstall all panels in reverse order of removal. When reinstalling the Knee Bolster Plate, use a Torque Wrench, Extension, and 10mm socket, tighten four (4) 10mm Bolts to: 10.0 N.m (1.0 Kgf.m, 7.0 lb.ft).

2. Attach the Remote Transmitters to Factory Key Fob Rings.

- 3. Place the Quick Reference Guide and the Owner's Guide into the vehicle's glove box.

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KIA Genuine Accessories Function Check

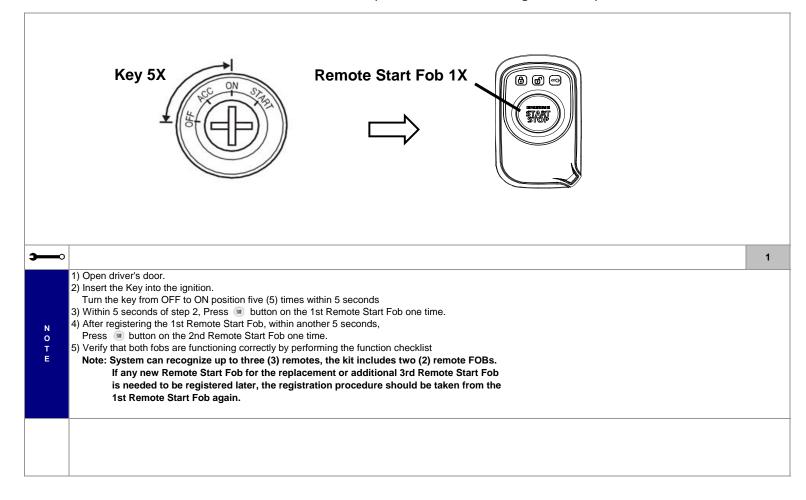
1. Basic function checklist

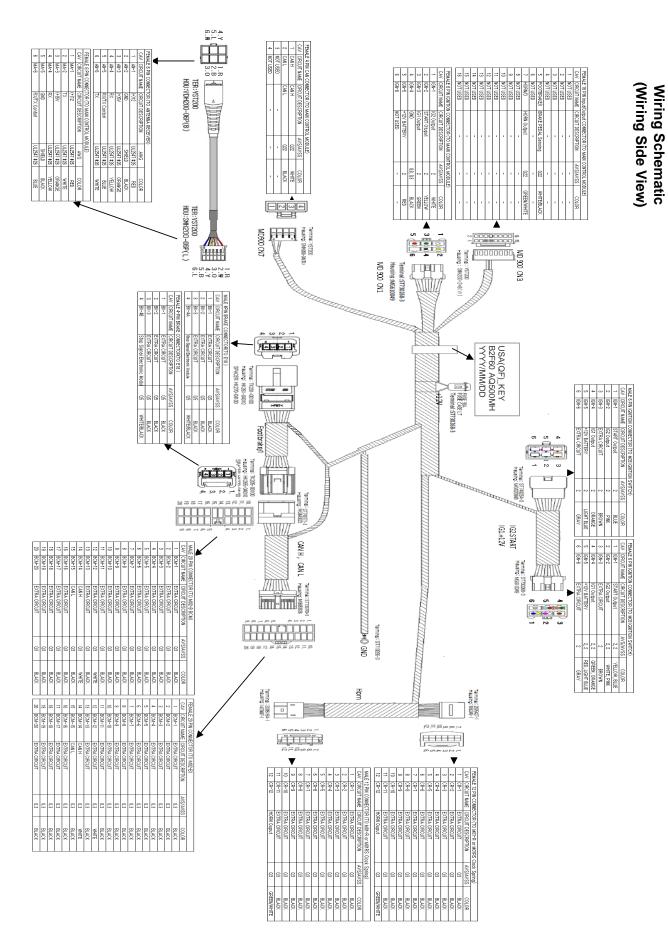
Items To Be Checked		Results Of The Check
	1. Press button one time (All doors, hood & trunk are closed).	Remote Lock LED flash, vehicle signal lights flashes once and All doors will lock.
	Press button 2 times Press button 2 more times	Remote Unlock LED flash, vehicle signal light flashes twice and Driver's door will unlock. Remote Unlock LED flash, vehicle signal light flashes twice.
	2. Fless button 2 more times	Remote Unlock LED flash, vehicle signal light flashes twice and All doors will unlock.
	1. Press button one time	Remote Lock LED flash, vehicle signal light flashes once and All doors will lock.
	2. Then within 3 seconds, press and hold button for 2 seconds.	Remote key LED will flash, the engine will crank and start within 5 seconds and the vehicle signal light flashes twice after Engine Start.
	1. Press button 2 times (After starting engine with remote)	Remote Unlock LED flash, vehicle signal light flashes twice and Driver's door will unlock.
	2. Press button 2 more times (After starting engine with remote)	Remote Unlock LED flash, vehicle signal light flashes twice and All doors will unlock.
	Press button one time (After starting engine with remote)	Remote Lock LED flash, vehicle signal light flashes once and All doors will lock.
✓	Press brake pedal. (After starting engine with remote and pressing Unlock button 2 times)	The Engine will shut down immediately.
	Press and hold button for 2 seconds (After starting engine with remote)	Remote Key LED flash, the Engine will shut down.
	Open the hood. (After starting engine with remote)	The Engine will shut down immediately.
	Open any door (After starting engine with remote and pressing Unlock button 4 times)	The Engine will shut down after 30 seconds after door opening.
	Open trunk (After starting engine with remote and pressing Unlock button 4 times)	The Engine will shut down after 50 seconds after trunk opening.

KIA Genuine Accessories Troubleshooting

	Issue / Concern	Item To Be Checked
✓	The vehicle does not LOCK by using the Remote Start Key Fob.	 ■ Check the vehicle status. ① Engine is OFF ② KEY is not in the ignition ③ All Doors are Closed ④ Hood and Trunk are Closed
	The vehicle LOCKS, UNLOCKS, but does not START (no cranking sound).	 Make sure the Valet mode is OFF. Please refer to Owner's Guide - Page 6. Valet/Service Mode, To Exit Valet Mode/Service mode. Improper button activation procedure. Please refer to Function Check, No.1 Basic function checklist. After verifying the Valet mode is OFF and the button is pressed correctly, If the vehicle still does not start, it might be an Installation Issue - Call the Technical Support number on page 1 for assistance.
✓	The vehicle LOCKS, UNLOCKS, but does not START and there is CRANKING sound from the engine.	 ■ Please check the battery in the vehicle. ■ If the vehicle still does not start, it might be an Installation Issue. - Call the Technical Support number on page 1 for assistance.
	The remote does NOT LOCK / UNLOCK and does not START the vehicle. The Remote LED lights flash when buttons are pressed.	■ The remote is not pairing to the vehicle. Please see Remote Start Fob Pairing Procedure on Page 12.
	The LED light on the remote fob does not light up.	■ Change the batteries in the remote fob. Please refer to the Owner's Guide for details.
	Engine turns off when entering vehicle after starting engine with remote.	 Vehicle will shut off after 30 seconds of opening door if key is not in IG ON position noted in the owner's guide. Please refer to Owner's Guide Page 4. Remote Starting your Vehicle, Driving Off. Vehicle will shut off after 30 seconds of opening door if the brake pedal is pressed before the key is in ignition ON position.
	Engine does not turn off immediately when the brake pedal is pressed after starting engine with remote.	 Verify the brake connector is correctly installed, please refer to step 14, page 7. Verify Driving Off after remote starting. Engine does not turn off after Driving Off even when the brake pedal is pressed.

KIA Genuine Accessories (Remote Start Fob Pairing Procedure)





Revision Date 03/05/2014

Remote Start