

# **READ ME FIRST**

**TECHNICAL SUPPORT  
1-800-FORD-KEY  
CANADIAN DEALERS  
BILINGUAL FRENCH/ENGLISH  
TECHNICAL SUPPORT  
(514)973-2846**

For convenience this document uses short names when referring to a particular system or kit. The list below identifies the short names used herein:  
Remote Start System —>**RKE/VSS/RMST**

Navigating this document can be accomplished by: 1) using the buttons in the Acrobat toolbar or 2) clicking on the bookmark links in the bookmark pane to the left. (Clicking on the (+) symbols next to a bookmark will expand that bookmark, revealing additional selections).

This installation instruction covers the installation of all Remote Start Kits.

**Vehicle wiring is subject to change. All possible efforts have been taken to ensure that the information contained herein is accurate as of the revision dates indicated. As such, it is critical that vehicle circuits are tested prior to making any connections, to ensure that the proper vehicle circuit has been located.**

Prior to beginning this installation it is recommended that you lower the driver's door window to prevent locking the keys in the vehicle.

Prior to beginning your first installation of this product it is recommended that you:

- 1 Thoroughly review and print out the instructions;
- 2 Review the reference section to become acquainted with the additional information that is available.
- 3 Go through the vehicle specific wiring and use as a reference during the installation.
- 4 Review the installation video on the Ford Genuine Accessory website that is located with the RMST Installation Instructions.

## Ford Accessory Vehicle Security, Keyless Entry and Remote Start Warranty Return Procedures

### **DO NOT CLAIM PARTS WARRANTY ON FORM 1863**

#### Parts Warranty Processing:

Lifetime limited coverage to original purchaser on all components against defects and workmanship. (For complete Warranty details, please refer to the warranty section found at the rear of each Security or Remote Start systems Owners Manual) Contact the warrantor, Code Systems for return authorization/replacement approval for failed components at no charge by the manufacturer. Return of Components to Code Systems requires the following:

1. Dealer/FAD representative must call the Ford Vehicle Security System Dealer Warranty Department at 1-800-FORDKEY (1-800-367-3539) to obtain generic claim form.
2. Fill out claim form and identify the defective component, **not the entire kit**, and fax to 1-631-231-5785.
3. Dealer/FAD will receive via fax the claim form with RA number authorizing the return of defective components.
4. Dealer/FAD is to box the defective component (including a copy of the claim form) with the claim number clearly written on the package(s) and ship them freight pre-paid to:

Ford Service Parts  
180 Marcus Blvd.  
Hauppauge, NY 11788

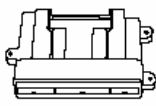
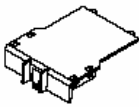









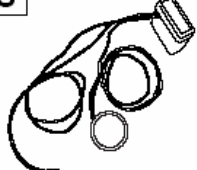

**Note:** If the package is sent without a claim number/claim number visible on the outside of the package, the shipment will be refused and returned at sender's expense.

5. Once a tracking number for the returning component has been issued to Code Systems, replacement components will be shipped within 24 hours via regular UPS ground transportation.
6. Dealer/FAD is responsible for service parts not returned/received by the Warranty Service Center within 30 days of the original claim date. Post the 60 days; the Dealer/FAD will be liable for all non-returned components at service part pricing.

Removal and reinstallation labor may be reimbursable under the New Vehicle Limited Warranty or 12-month/12,000 mile warranty (which ever is greater) and must be submitted by filling a warranty claim through ACES II.













## REFERENCE SECTION

### KIT CONTENTS

<b>A</b>  PC-14 - 7L2J-19G367-AA PC-34 - 7L3J-19G367-AA	<b>B</b>  RKEVSSRMST - 7L3J-19A498-AA RMST - 7L2J-19A498-AA VSS - 7L3J-19A498-BA	<b>C</b>  7L2J-15K601-AA	<b>E</b>  TYPE "A" 7L2J-14B504-AA
<b>F</b>  TYPE "B" 7L5J-14B504-AA	<b>G</b>  TYPE "C" 7W3J-14B504-AA	<b>M</b>  2W7J-19G366-AA	<b>N</b>  2W7J15603-AA
<b>P</b> 	<b>Q</b> 	<b>R</b> 	<b>S</b>  7L2Z-19G365-AA
<b>T</b>  YL3Z-19G390-AA			

### PARTS BAG CONTENTS

NOTE: Part bag contents are not available as service items

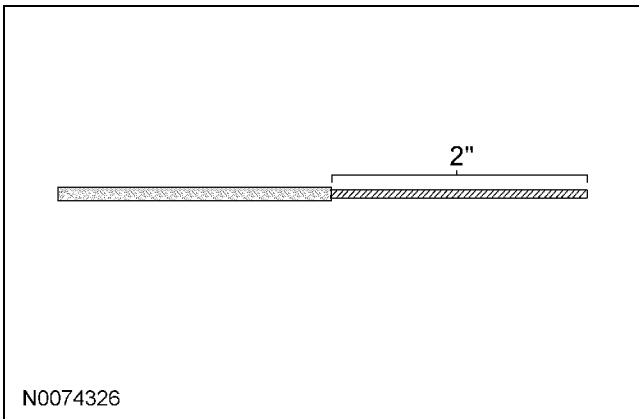
<b>T</b> 750 OHM  1X	<b>U</b> 1800 OHM  1X	<b>V</b>  2X	<b>W</b>  6X
<b>X</b>  2X	<b>Y</b>  5X	<b>Z</b>  10X	<b>AA</b>  1X
<b>BB</b>  2X	<b>CC</b>  7X	<b>DD</b> FUSE BAG CONTENTS 5A  1X	<b>EE</b> 15A  PC-14 - 4X PC-34 - 7X

## GENERAL PROCEDURES

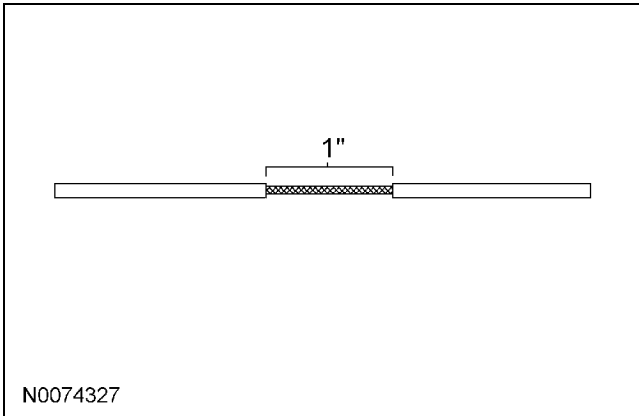
### Proper Splicing Techniques

**NOTE:** Follow this procedure when a wire can be spliced without cutting the wire in half.

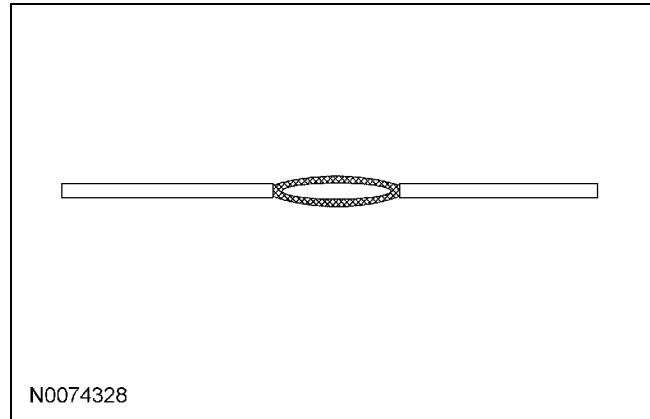
1. Strip approximately two inches of insulation from the wire to be installed in the vehicle.



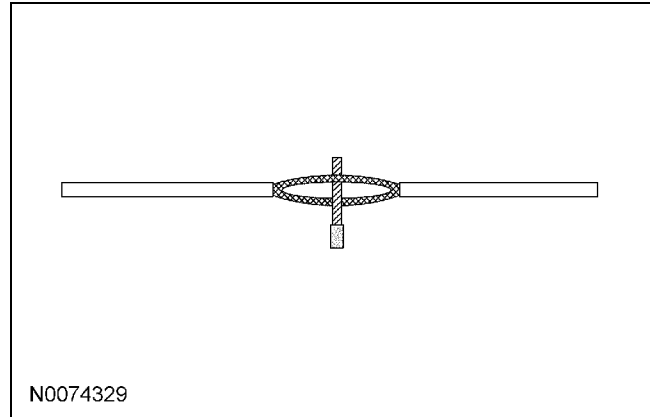
2. On the vehicle wire to be spliced into, strip one inch of insulation from the wire.



3. On the vehicle wire to be spliced into, separate the strands to allow the new wire to be placed between the parted strands of wire.

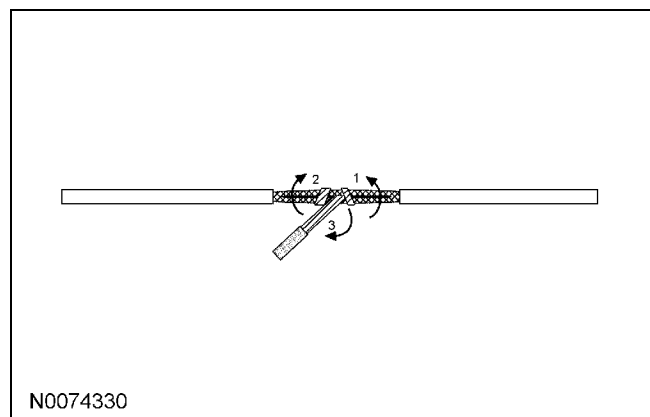


4. Insert the new wire between the parted strands. If more than one wire is being spliced, wrap them in opposite directions.



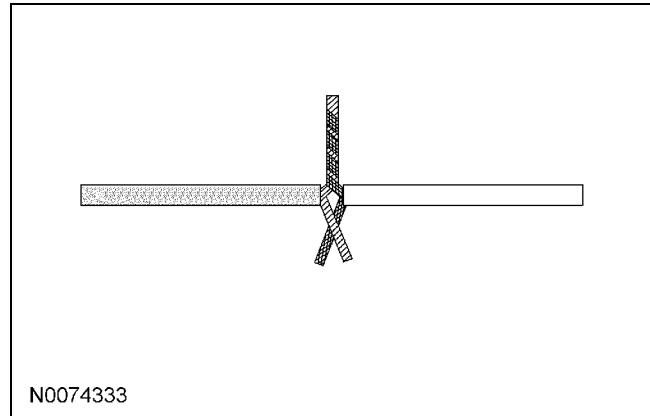
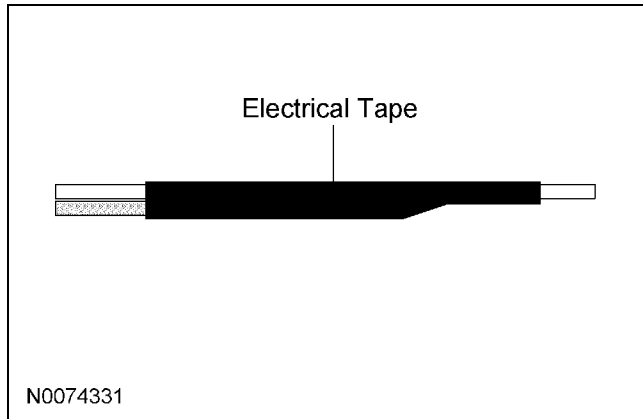
**NOTE:** Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

5. Wrap the new wire around one side of the split strands, then wrap it around the other side.
  - Solder the connection.



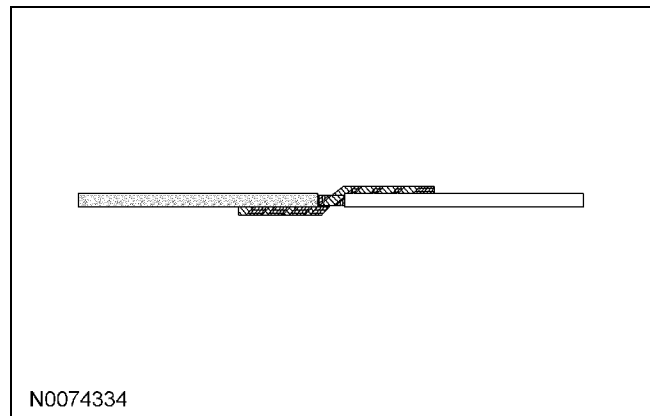
**GENERAL PROCEDURES (Continued)**

6. Wrap the connection with electrical tape so the tape covers the wires approximately two inches on either side of the connection.
  - Tape the wires together as shown in the illustration.



**NOTE:** Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

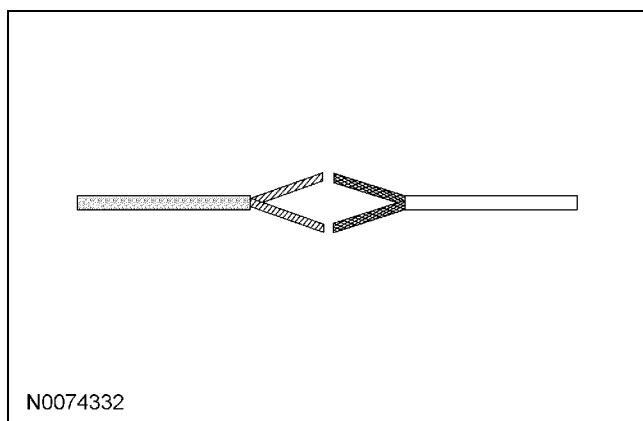
3. Lay the upper strand of wire to one side, then lay the lower strand of wire to the other side as shown in the illustration.
  - Solder the wires together.

**Splicing End to End Connections**

**NOTE:** When both ends of the wire are cut, use the end to end wire splicing procedure.

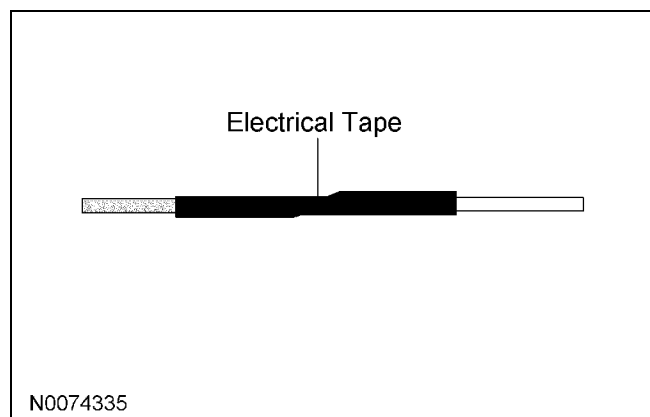
**NOTE:** Follow the steps below for end to end wire splicing.

1. To make an end to end connection, start by stripping one inch of insulation from each of the wires. Part each wire into equal strands as shown in the illustration.



2. Place the wires next to each other and twist the upper and lower strands together as shown.

4. Wrap the connection with electrical tape so the tape covers the wires approximately two inches on either side of the connection.



## User Preferences

### Adding 2-Way Remote Controls to Your System

**NOTE:**

The system has the ability to operate from up to eight (8) 2-way remote controls. Follow these instructions to add a remote control to your system.

**NOTE:**

The vehicle should be in "park" while performing this procedure.

1. Open the driver's door and enter the vehicle.
2. Press and hold the brake pedal.
3. Turn the vehicle ignition to the ON position and then to the OFF position 6 times, ending in the ON position (On, Off, On, Off, On, Off, On, Off, On, Off, On, Off, On).  
The horn will chirp three (3) times. This indicates that the unit has entered the remote control programming mode.
4. Release the brake pedal.
5. Press the start button on the 2-way remote control to be programmed. The horn will sound once, indicating that the system has "learned" that remote control.
6. Repeat step 5 for any additional remote controls.
7. Turn the vehicle ignition off to exit the programming mode. Test all 2-way remote controls to ensure that they work properly.

### Optional Activation Methods - Single Press & Hold / Double Press

**NOTE:**

The 2-Way Remote Start and Vehicle Security System comes pre-programmed to start the vehicle when the start button on the 2-way remote transmitter is pressed 2 times. The 2-Way Remote Start and Vehicle Security System may be programmed to activate by pressing and holding the start button on the 2-way remote transmitter by following these instructions.

3. Open the driver's door and enter the vehicle, close driver's door.
4. Ensure vehicle is in Park and the brake pedal is not depressed.
3. Turn the vehicle ignition to the ON position.
4. Press the start button on the 2-way transmitter 3 times within 5 seconds. The horn will chirp 1 time, indicating that the remote start system will now start with a "Press and Hold".
5. Turn the vehicle ignition to the OFF position to exit the programming mode.
6. Repeat steps 1 - 5 to return the vehicle to the factory setting.
  - 1 chirp = Press and Hold to start.
  - 2 chirps = Double Press to start.

## GENERAL PROCEDURES

### Shock Sensor Setting

#### Remote Start with Keyless Entry and Security System

**NOTE:** Control modules with an alarm feature contain one internal shock sensor with a Lite Touch and Full Shock settings. When the vehicle is armed, the force which sounds the horn due to impact is determined by the Lite Touch setting. When the vehicle is armed, the force at which sounds the alarm due to impact is determined by the Full Shock setting.

**NOTE:** The Full Shock Level should always be less sensitive than the Lite Touch Level.

1. Close the driver door and turn the ignition key to the ON position.
  2. Press and hold the override button until the horn honks.
  3. Press and hold the override button until the horn honks four times. This is option bank 1.
  4. Select the first option in option bank 1, which is the Lite Touch adjustment programming option. Press button 3 on the key fob.
  5. To test and adjust the current sensitivity level, start by tapping on the outer rim of the steering wheel with the palm of your hand, gradually increase the force of the taps until the horn honk is detected. this should be set to honk at a light to medium impact level. To adjust the level, press Unlock on the key fob to decrease the sensitivity or press Lock to increase the sensitivity.
  6. Turn the ignition key to the OFF position.
  7. Arm the system and check the new settings.
-

# RKE/VSS/REMOTE START SYSTEM INSTALLATION

## CONTENTS

### INSTALLATION

[RKE/VSS/Remote Start](#)

### GENERAL PROCEDURES

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[Programming](#)

[Functional Test](#)

[Troubleshooting](#)

[Shock Sensor Setting](#)

### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)



## INSTALLATION

### Remote Start

#### Escape/Mariner

**NOTICE:** Remote start systems are only applicable to vehicles with automatic transmissions.

**NOTE:** Both original keys are required for all remote start systems on vehicles equipped with SECURILOCK.

1. Verify correct kit number.

#### Review RKE/VSS/RMST Installation Kit Contents

**NOTE:** Kits are vehicle specific and are not interchangeable.

2. Review the RKE/VSS/RMST kit contents.

#### Remote Keyless Entry/ Vehicle Security System/Remote Start (RKE/VSS/RMST) System Kit

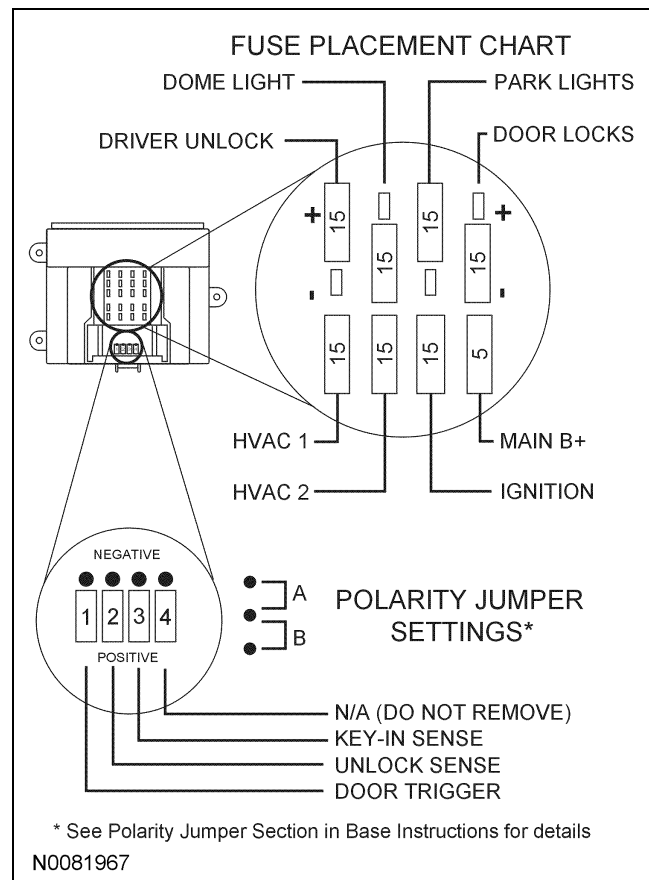
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS
1	OPERATORS QUICK REFERENCE WALLET CARD

#### Remote Keyless Entry/ Vehicle Security System/Remote Start (RKE/VSS/RMST) System Kit (Continued)

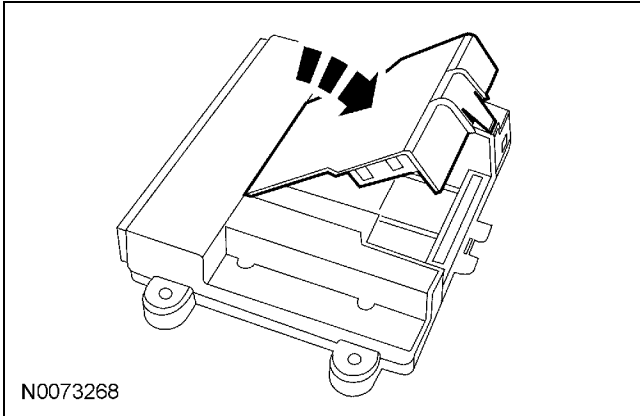
QUANTITY	DESCRIPTION
1	UNDERHOOD WARNING LABEL
1	RELAY (YL3Z-19G390-AA)
1	SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS)

### Module Preparation

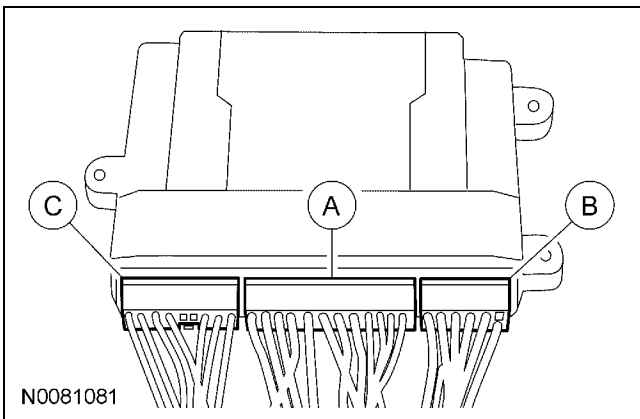
3. Place the supplied fuses into the power distribution block on the control module.
  - Move the polarity jumpers to their proper locations on the control module, see illustration.



4. Place the software cartridge onto the RKE/VSS/RMST control module.

**INSTALLATION (Continued)**

5. Plug the wiring harness(es) into the module.
- A - Harness: 24-way, used on all systems.
  - B - Harness: 10-way, used on all systems with RMST.
  - C - Harness: 16-way, used on all systems with RKE/VSS/RMST.



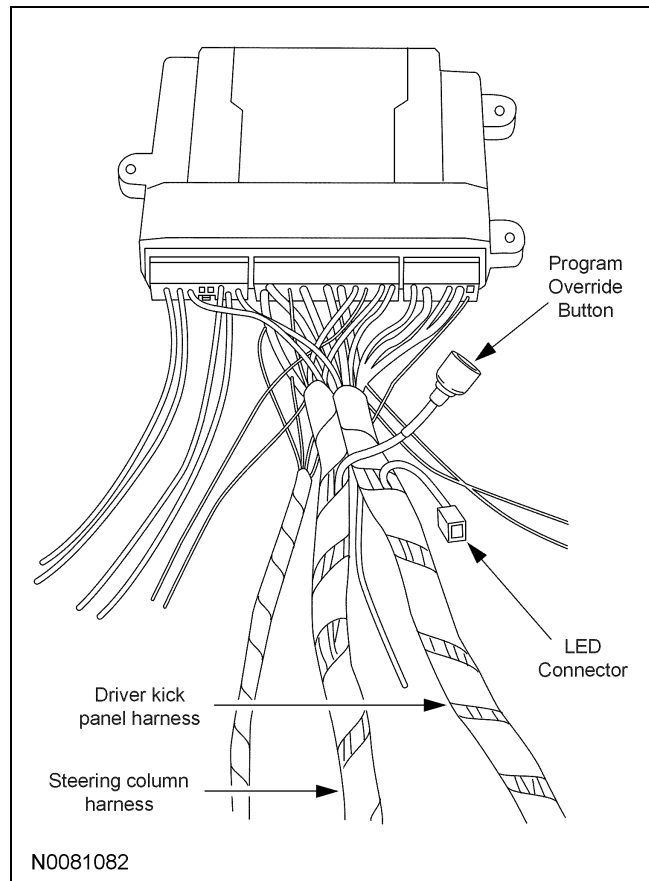
6. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

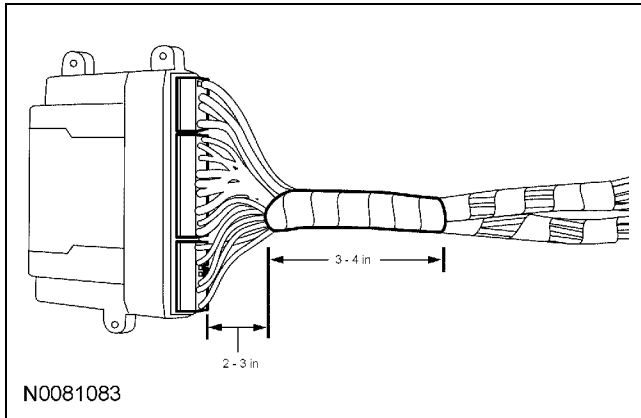
Splice the following wires to the A-4 Red wire in the A connector of the control module approximately 8 inches from the connector

- B-2 Red wire in the B connector.

7. Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18". Depending on the vehicle, there will be 2 to 5 different wire groups
- Trim the unused wires approximately 6 - 8" from the module.



8. Tape the harness sections together, making sure to cover all of the unused wires.

**INSTALLATION (Continued)****Vehicle Preparation**

9. Remove the steering column opening trim.
10. Remove the 3 lower steering column shroud screws.
11. Remove the upper and lower steering column shrouds.
12. Remove the left hand scuff plate and cowl trim panel.

**Dipole Antenna Mounting**

**NOTE:** For good range of operation, the dipole antenna must be installed correctly.

**NOTE:** Keep these points in mind when selecting a location and mounting the dipole antenna.

- Do not mount the antenna behind or on any metal film or window tinting on the windshield.
- Do not mount the antenna so that one of the antenna elements touches or crosses any vehicle wiring and/or metal.
- On vehicles without metal film in the windshield around the rear view mirror, mount the antenna between the headliner and the rear view mirror.
- On vehicles equipped with an electronic mirror, or on vehicles with metal film around the rearview mirror, mount the antenna approximately 3 inches below the mirror attachment point to the windshield and/or mirror electronics.

13. Choose a suitable mounting location following the guidelines above.

**Install The Dipole Antenna**

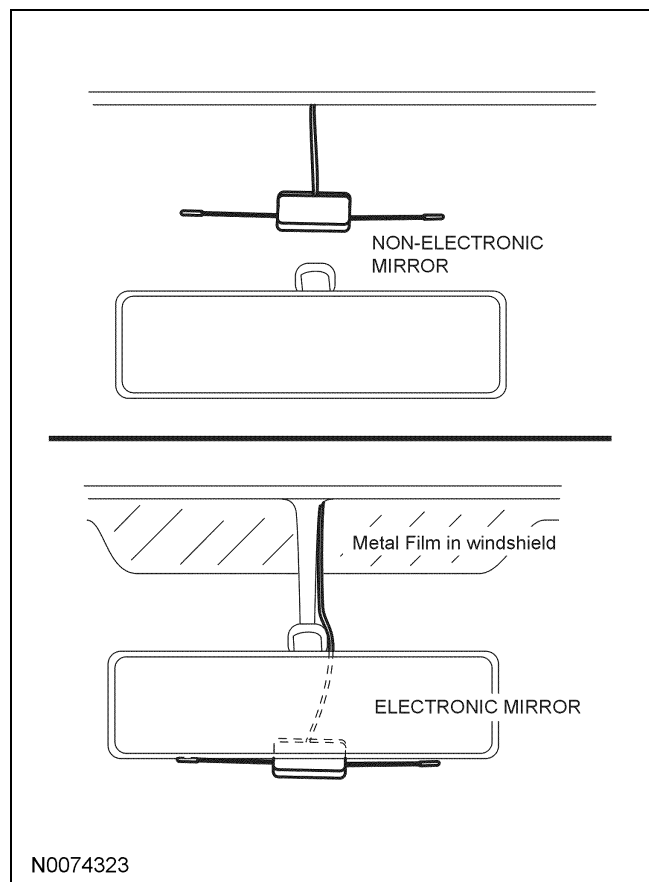
14. Clean the mounting surface using an alcohol base solution and a clean cloth.

15. **NOTE:** Do not touch the adhesive, reduced adhesion may result.

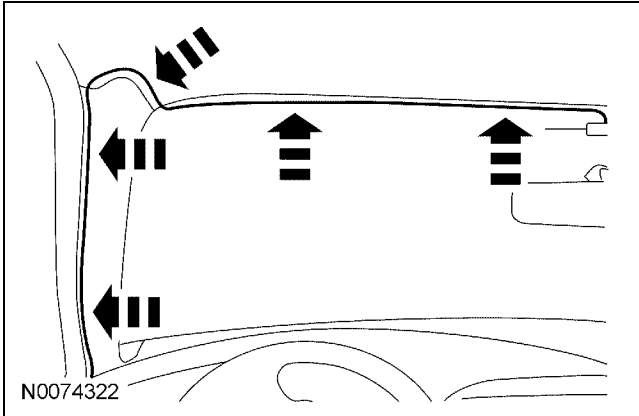
**NOTE:** Make sure that the long wire on the antenna is pointing toward the top of the windshield since this wire will be routed along the headliner.

**NOTE:** The wire will be attached to the control module later in this procedure.

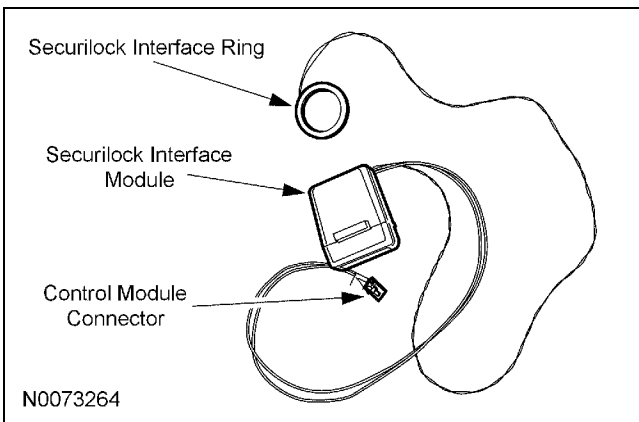
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



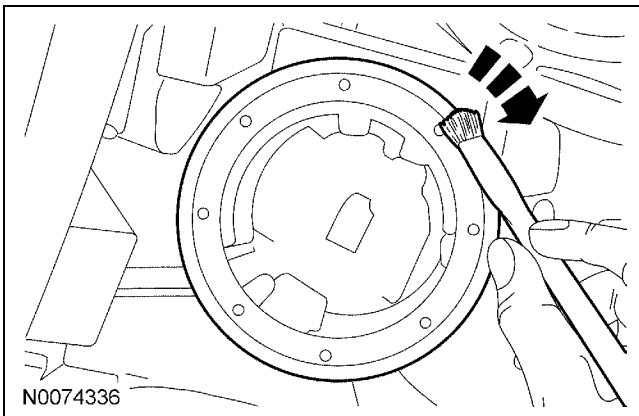
16. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

**INSTALLATION (Continued)****Install The Securilock Interface Kit**

17. Route the ring of the SECURILOCK interface antenna lead up along the steering column to the PATS transceiver location.



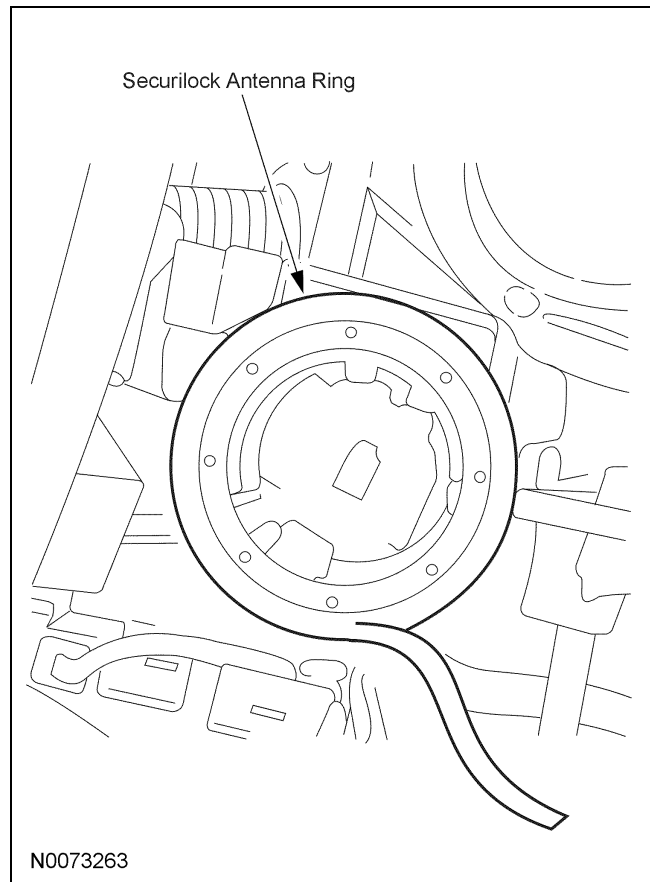
18. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



19. **NOTICE:** Do not damage the transceiver ring during installation or while installing the steering column shroud.

**A damaged transceiver ring will result in an inoperable remote start system.**

Remove the protective backing from the SECURILOCK antenna ring. Place the SECURILOCK ring over the PATS transceiver and press firmly in place.

**Install The Securilock Interface Module**

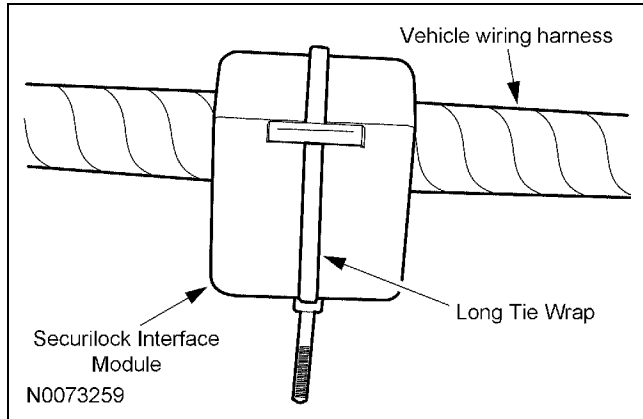
20. **NOTE:** Do Not mount the SECURILOCK Interface Module to or within 3" of a metal surface, including any underdash brackets, or in the knee bolster area.

Mount the SECURILOCK Interface Module to an underdash wiring harness using one of the supplied long tie wraps.

**INSTALLATION (Continued)**

21. **NOTICE:** Do not attach the harness to the steering column.

Route the harness and connector to the module mounting location.

**Install the RKE/VSS/RMST Control Module and Harness Assembly**

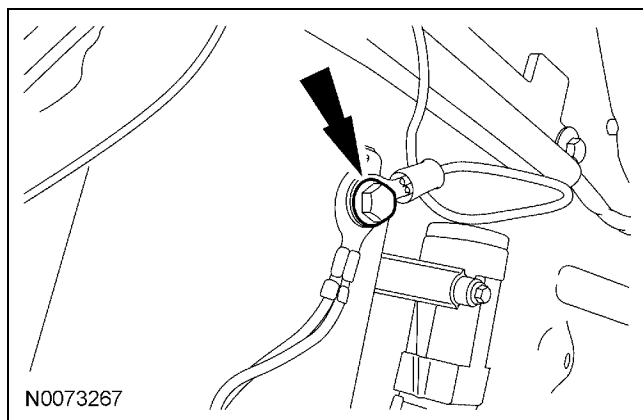
22. Place the RKE/VSS/RMST Control Module and Harness Assembly in the vehicle.

**Identify Circuit Wires For Connections**

**NOTE:** For vehicle specific wiring diagram(s) click [here](#).

**NOTE:** For proper wire splicing techniques click [here](#).

23. Connect the Black ground wire from the control module harness to the chassis ground point in the driver kick panel.



24. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition switch is in the RUN/START position.

A logic probe will show ground on the correct wire, then show power when the Ignition switch is in the RUN/START position.

Identify the White/Orange ignition circuit wire at the ignition switch harness.

25. Connect the Pink wire from the control module harness to the White/Orange ignition circuit wire at the ignition switch harness.

26. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition switch is in the RUN/ACC position.

A logic probe will show ground on the correct wire, then show power when the Ignition switch is in the RUN/ACC position.

Identify the Violet/Green RUN/ACC circuit wire at the ignition switch harness.

27. Connect the Orange wire from the control module harness to the Violet/Green RUN/ACC circuit wire at the ignition switch harness.

28. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the key is in the ignition lock cylinder.

A logic probe will show ground on the correct wire, then show power when the key is in the ignition lock cylinder.

Identify the Blue/Gray key-in-sense circuit wire at the ignition switch harness.

29. Connect the Black/White wire from the control module harness to the Blue/Gray key-in-sense circuit wire at the ignition switch harness.

30. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the ignition is in the START position.

A logic probe will show ground on the correct wire, then show power when the ignition is in the START position.

Identify the Blue/White starter circuit wire at the ignition switch harness.

**INSTALLATION (Continued)**

31. Connect the Violet wire from the control module harness to the harness Blue/White starter circuit wire at the ignition switch harness.
32. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the horn button is held.  
A logic probe will show open on the correct wire, then show ground when the horn button is held.  
Identify the Brown horn circuit wire in the steering column harness.
33. Connect the Brown/Black wire from the control module harness to the Brown horn circuit wire in the steering column harness.
34. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the brake pedal is pressed.  
A logic probe will show ground on the correct wire, then show power when the brake pedal is pressed.  
Identify the Violet/White brake output circuit wire at the brake switch location.
35. Connect the Brown wire from the control module harness to the Violet/White brake output circuit wire at the brake switch location.
36. **NOTE:** A DVOM connected to the correct wire will show 12V with the vehicle door(s) open and the dome light on, then show 0V with the vehicle door(s) closed and the dome light off.  
**NOTE:** A logic probe connected to the correct wire will show power with the vehicle door(s) open and the dome light on, then show ground with the vehicle door(s) closed and the dome light off.  
**NOTE:** Be sure that the dome light has timed out and is off before performing the door closed test.  
Be sure that the dome lamp is illuminated before performing the door open test.  
Identify the Gray/Violet dome light circuit wire at the driver kick panel harness location.
37. Connect the Green/Violet wire from the control module harness to the Gray/Violet dome light circuit wire at the driver kick panel harness location.
38. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the lock all switch is pressed.  
A logic probe will show ground on the correct wire, then show power when the lock all switch is pressed.  
Identify the Gray/Brown lock all motors circuit wire at the driver kick panel harness location.
39. Connect the White/Blue wire from the control module harness to the Gray/Brown lock all motors circuit wire at the driver kick panel harness location.
40. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door lock switch is pressed.  
A logic probe will show open on the correct wire, then show ground when the door lock switch is pressed.  
Identify the Blue/Green door lock circuit wire at the driver kick panel harness location.
41. Connect the Blue wire from the control module harness to the Blue/Green door lock circuit wire at the driver kick panel harness location.
42. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door unlock switch is pressed.  
A logic probe will show open on the correct wire, then show ground when the door unlock switch is pressed.  
Identify the Yellow/Violet door unlock circuit wire at the driver kick panel harness location.
43. Connect the Green wire from the control module harness to the Yellow/Violet door unlock circuit wire at the driver kick panel harness location.

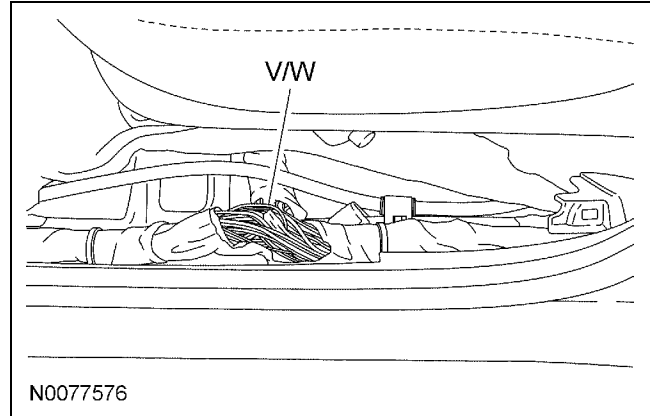
**INSTALLATION (Continued)**

44. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the driver door unlock switch is pressed.

A logic probe will show ground on the correct wire, then show power when the driver door unlock switch is pressed.

Identify the Blue/Green driver door unlock motor circuit wire at the driver kick panel harness location.

45. Connect the Brown wire from the control module harness to the Blue/Green driver door unlock motor circuit wire at the driver kick panel harness location.
46. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the unlock all doors switch is pressed.
- A logic probe will show ground on the correct wire, then show power when the unlock all doors switch is pressed.
- Identify the Violet/Gray unlock all doors motor circuit wire at the driver side rear sill plate harness location.
47. Connect the Light Green wire from the control module harness to the Violet/Gray unlock all doors motor circuit wire at the driver side rear sill plate harness location.
48. **NOTE:** A DVOM connected to the correct wire will show 0V with the switch in the OFF position and 12V with the switch in the parking lights ON position.
- A logic probe connected to the correct wire will show ground with the switch in the OFF position and power with the switch in the parking lights ON position.
- Identify the Violet/White parking lights on circuit wire at the driver sill plate harness coming from the passenger side heading rearward.



49. Connect the White wire from the control module harness to the Violet/White parking lights on circuit wire at the driver sill plate harness location.
50. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the liftgate release switch is pressed.
- A logic probe will show ground on the correct wire, then show power when the liftgate release switch is pressed.
- Identify the Brown/Yellow lift glass release circuit wire at the driver sill plate harness coming from the passenger side heading rearward.
51. Connect the Blue/Green lift glass output wire from the control module harness to the Brown/Yellow lift glass release circuit wire at the driver sill plate harness coming from the passenger side heading rearward.

**INSTALLATION (Continued)****Install The Hood Safety Switch**

52. **NOTE:** Route the hood safety switch wire carefully avoiding any moving parts or components that can produce excessive heat.

**NOTE:** Using a piece of convolute adds in the appearance of the installation.

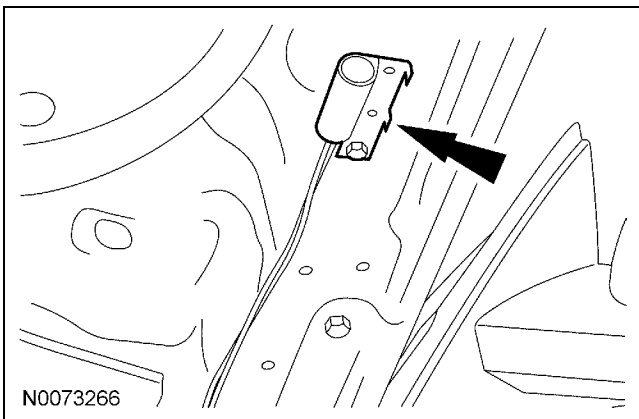
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

Failure to position the switch properly could result in one of the following:

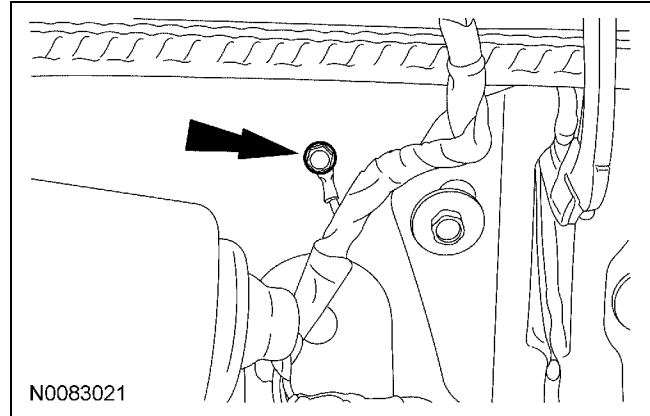
- False alarm trips
- Non-Remote Start events
- Inadvertent shutdown during Remote Start

Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

53. Apply rustproofing compound (PM-12-A) to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).

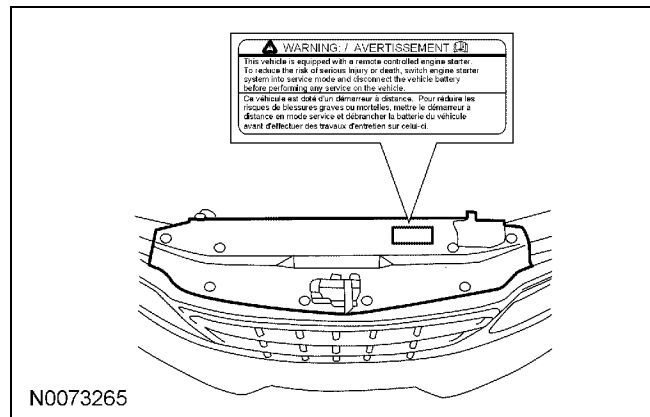


54. Connect hood switch ground wire to a suitable location on the bulkhead.



55. **NOTE:** Place the label on the radiator fan shroud or similar area.

Install the underhood warning label



56. Route the Grey hood safety switch wire from the RKE/VSS/RMST control module through the bulkhead into the engine compartment and attach to the hood safety switch.
57. Connect the dipole antenna to the RKE/VSS/RMST control module.
58. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.



**INSTALLATION (Continued)****Optional Connections/Features - Driver Door Priority Unlock**

**NOTE:** For vehicle specific wiring diagram(s) click [here](#).

59. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the door unlock switch is pressed.

A logic probe will show ground on the correct wire, then show power when the door unlock switch is pressed.

Identify the Blue/Green power door unlock motor circuit wire at the driver kick panel harness.

60. Cut the Blue/Green power door unlock motor circuit wire at the driver kick panel harness
61. Connect the Tan wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire going toward the front of the vehicle.
62. Connect the following wires to the cut Blue/Green driver door unlock motor circuit wire going toward the back of the vehicle
- Tan/Red wire from the control module harness.
  - Brown wire from the control module harness.

**Optional Connections/Features - Headlights**

63. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the headlights ON.

A logic probe will show power on the correct wire, then show ground when the headlights ON.

Identify the Green/Brown Flash-To-Pass circuit wire at the multifunction switch.

64. Connect the Red/White wire from the control module harness to the Green/Brown Flash-To-Pass circuit wire at the multifunction switch.

**Power Connection**

65. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in any position.

A logic probe will show power on the correct wire with the key in any position.

Identify the Blue/Red Battery circuit wire in the ignition switch harness.

66. Connect the two Red wires from the control module harness A-4 and B-2 to the Blue/Red Battery circuit wire in the ignition switch harness.

**Program The RKE/VSS/RMST System**

67. [Refer to the RKE/VSS/RMST programming section for this vehicle \(click here\).](#)

**Secure RKE/VSS/RMST Harness and Control Module**

68. Use the supplied tie wraps to secure the RKE/VSS/RMST harness wires.
69. **NOTE:** Do not mount the control module in the knee bolster area.
- To ensure the best performance of the built-in shock sensor, secure the control module at three points to the vehicle.
- Use the supplied long tie wraps to mount the RKE/VSS/RMST control module to the underdash wiring harness.

**Install Trim**

70. Install the left hand scuff plate and cowl trim panel.
71. Install the upper and lower steering column shrouds.
- Install the 3 screws.
72. Install the steering column opening trim.

## GENERAL PROCEDURES

### Programming

#### Programming the Module

- NOTE:** If the vehicle options (Key-in sense polarity, door ajar polarity, or tach mode) are not programmed correctly, vehicle will not remote start or operate properly.

**NOTE:** Make sure that the hood is closed before proceeding.

**NOTE:** The LED on the remote start harness must be visible to complete module programming.

**NOTE:** The remote start override button must be accessible.

#### Programming Options: Entering Programming Mode

- See chart below for programming information.

##### Option Bank - 1 Chart (4 - Honks)

BANK	OPTIONS	DESCR	LED
1	1	LITE TOUCH ADJUST	NOTE 1
1	2	FULL SHOCK ADJUST	NOTE 1
1	4	DOOR AJAR INVERT	ON
1	5	UNLOCK SENSE INVERT	ON
1	6	KEY-IN SENSE INVERT	ON

##### Option Bank - 2 Chart (5 - Honks)

BANK	OPTIONS	DESCR	LED
2	1	STARTER INTERRUPT	OFF
2	8	DRIVER UNLOCK RELAY	NOTE 2

##### Option Bank - 3 Chart (6 - Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

##### Option Bank - 4 Chart (7 - Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

**NOTE:** 1. Perform proper adjustments following the “Shock Sensor Setting”, refer to General Procedures [click here](#).

**NOTE:** 2. See the Optional Connections/Features, refer to Vehicle Specific Wiring Diagram(s) [click here](#).

- Open the driver door.  
All other doors should remain closed.
- Turn the ignition key to the RUN position.
- Press and hold the remote start system override button for at least 10 seconds.  
After 10 seconds the horn will honk 3 times, indicating the system is now in the learn mode.
- Press and release the override button. The horn will honk 4 times indicating the system has entered the first program bank.  
If not please check the following:
  - Brake pedal switch wire solder connection.
  - Hood closed and Grey hood safety switch wire solder connection.
  - Dome light circuit wire solder connections.
  - The key is in the RUN position.
  - The software cartridge is firmly seated in the RMST module.
  - The RMST harness connections are firmly seated in the RMST module.

**GENERAL PROCEDURES (Continued)**

**NOTE:** If you require additional assistance: CALL 1-800-FORD KEY.

7. Press and release the remote start fob panic button 4 times.

The horn will honk 4 times indicating the system has entered the option 4 of the first program bank.

**NOTICE:** When turning the LED on or off using the remote start lock button, press and immediately release the remote start button.

8. The LED must be ON for option 4. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

**NOTE:** When programming the remote start module, if the remote start fob unlock button is pressed, the horn will chirp 4 times indicating the system returned to the factory default settings. If this occurs, return to step 1 of the programming section to reprogram the remote start module.

9. Press and release the remote start fob panic button.

The horn will honk 5 times indication the system has entered the option 5 of the first program bank.

10. The LED must be ON for option 5. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

11. Press and release the remote start fob panic button.

The horn will honk 6 times indication the system has entered the option 6 of the first program bank.

12. The LED must be ON for option 6. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

13. Press and release the override button. The horn will honk 5 times indicating the system has entered the second option bank.

14. Press and release the remote start fob panic button.

The horn will honk 1 time indication the system has entered the option 1 of the second program bank.

15. The LED must be OFF for option 1. If the LED is not illuminated no action is required. If the LED is illuminated press the remote start fob lock button and verify the LED does not illuminate.

16. Press and release the override button 2 times. The horn will honk 7 times indicating the system has entered the fourth option bank.

17. Press and release the remote start fob panic button.

The horn will honk 1 time indication the system has entered the option 1 of the fourth program bank.

18. The LED must be ON for option 1. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

**NOTE:** The remote start module is now programmed.

19. **NOTE:** Immediately after programming the remote start module, program the SECURILOCK.

**Programming the SECURILOCK**

**NOTE:** Two PATS keys are required to program the SECURILOCK.

**NOTE: IMPORTANT:** Each of the following steps should be completed with no more than 5 seconds delay between steps.

20. Insert the first ignition key and turn to the run position.

Watch for the PATS light to turn off. Remove the first key.

21. Insert the second ignition key and turn to the run position.

Watch for the PATS light to turn off. Remove the second key.

**GENERAL PROCEDURES (Continued)**

---

22. Press and hold the remote start button for 3 seconds.



The PATS light should stay on for 3-5 seconds before turning off, which means that the SECURILOCK was successfully programmed.

**NOTE:** If the PATS light blinks rapidly, repeat steps 1-3 to retry programming the SECURILOCK.

**NOTE:** The engine will start if the Remote Start kit has been installed correctly, the brake is not depressed, and the hood and doors are closed.

## GENERAL PROCEDURES

### Functional Test

**NOTE:** If during any of the steps of the functional test, the remote start system or vehicle doesn't react or perform accordingly, please refer to the remote start troubleshooting guide.

**NOTE:** For remote start troubleshooting guide click [here](#).

1. Make sure all doors are closed but hood is open and windows are down (doors will be locking).
2. Press and hold the Start button on the remote control key fob for 2-3 seconds - Horn should honk once indicating receipt of the start request.
3. The remote start systems should turn on the ignition, but then honk the horn twice and shut down indicating the hood is open.
4. Close the hood, and insert a key into the ignition switch.
5. Attempt to re-start the vehicle again using the key fob.
6. The remote start systems should turn on the ignition, but then honk the horn five times and shut down indicating a key is in the ignition switch.
7. Remove the key and open a door.
8. Attempt to re-start the vehicle again using the key fob.
9. The remote start systems should turn on the ignition, but then honk the horn three times and shut down indicating a door is open.
10. Close the door.
11. Attempt to re-start the vehicle again using the key fob.

12. Once the vehicle starts, verify that all heat and A/C functions operate normally and that the doors have locked.
13. On vehicles equipped with power window interrupt, Attempt to close windows to check power window interrupt function.
14. Once all systems have been checked, open the door\*, or press the brake pedal - the remote start systems should shut down.

**NOTE:** \*MyKey vehicle remote start systems will shut down upon vehicle entry. Please see vehicle owner's guide or remote start owner's manual for more information.

### Troubleshooting

15. **NOTE:** When attempting to remote start your vehicle, the system has several safety checks that it performs. If any of these inputs are present that should not be, the system will respond back to you with several horn "chirps" to help you identify which input is present. These "chirps" will occur after initiating a start sequence with the transmitter, the system will turn on the ignition, but then respond back with several horn "chirps" and abort the starting process.

**Example:** Depress the remote start fob button for 3 seconds and then release. The vehicle horn will "chirp" one time to indicate that RMST signal was received. If the vehicle doesn't start and the horn "chirps" 3 times, there is a fault - "Vehicle Door is Open"

CHIRPS	PROBLEM
1 Chirp	SECURILOCK not programmed correctly, or the SECURILOCK antenna ring is damaged.
2 Chirps	BRAKE is being pressed, or the HOOD is open.
3 Chirps	One of the vehicles DOORS are open.
4 Chirps	TACH not programmed.

**GENERAL PROCEDURES (Continued)**

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<b>CHIRPS</b>	<b>PROBLEM</b>
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

---

## '12 Escape/Hybrid

### RKE/VSS/RMST MODULE WIRE HARNESS

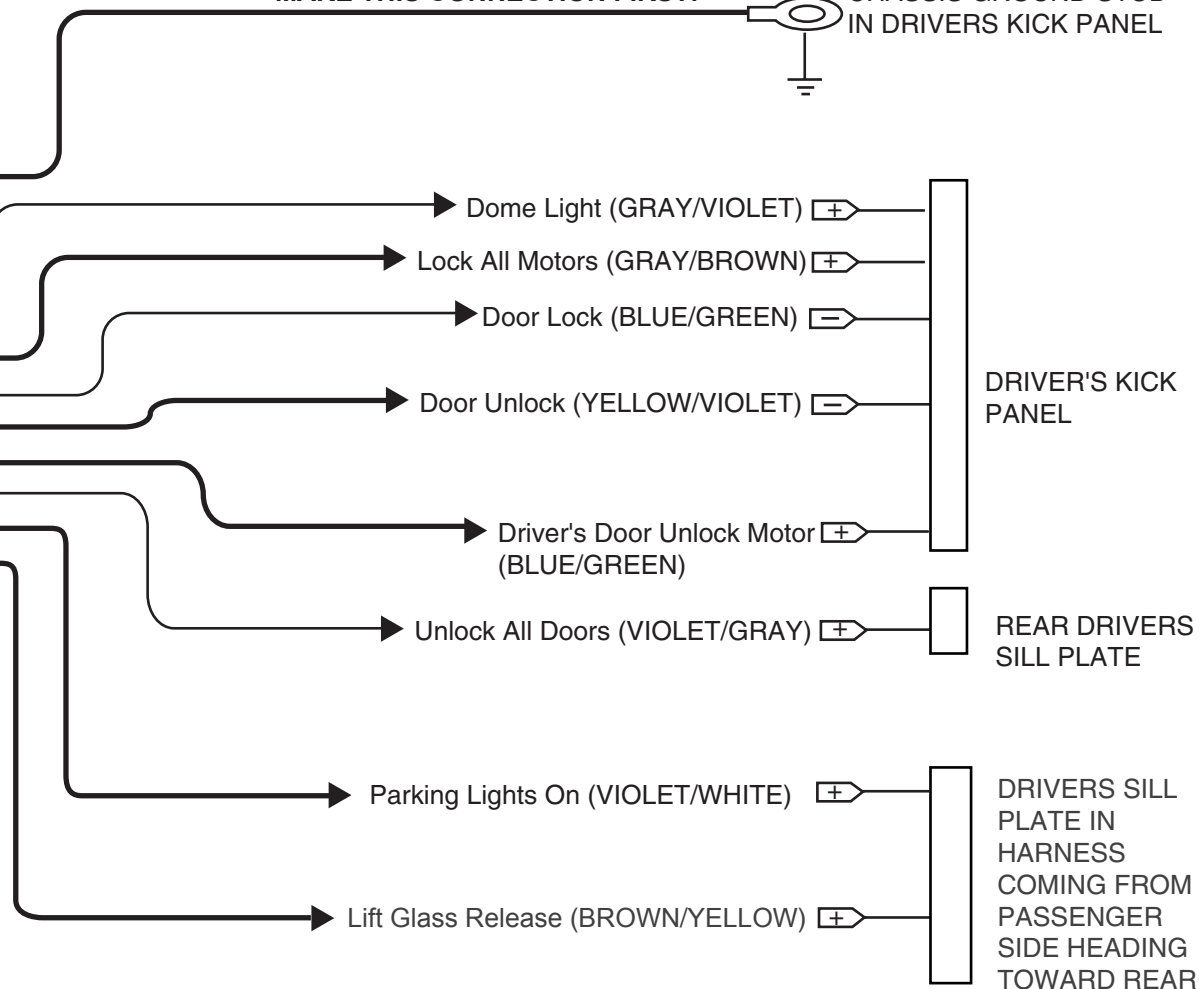
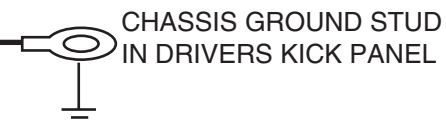
#### DRIVER'S SIDE KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground

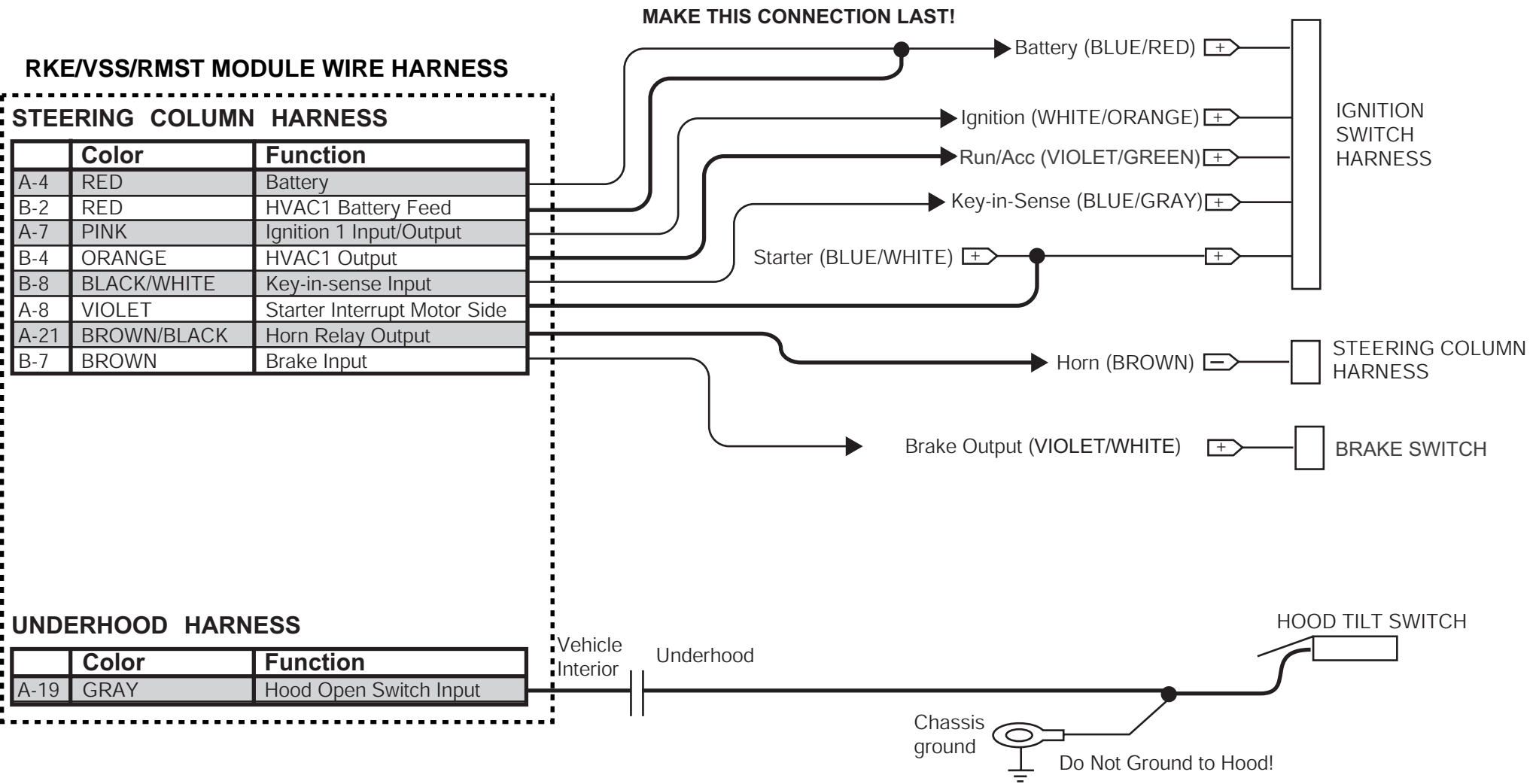
#### KICK PANEL HARNESS

	Color	Function
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-11	WHITE/BLUE	Arm Input
A-2	BLUE	Door Lock Output
A-14	GREEN	Door Unlock Output
A-9	BROWN	Disarm Input
A-12	LT. GREEN	Unlock Switch Sense Input
A-1	WHITE	Parking Light Output
A-24	BLUE/GREEN	Trunk Release Output

**MAKE THIS CONNECTION FIRST!**



'12 Escape/Hybrid





## OPTIONAL CONNECTIONS / FEATURES

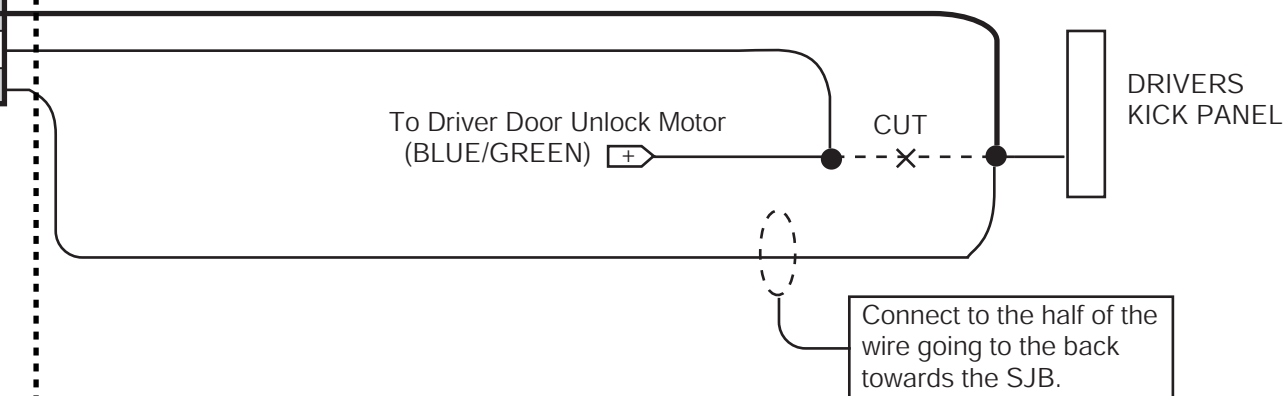
### OPTION PROGRAMMING REQUIREMENTS

BANK	OPTION	DESCRIPTION	LED
2	8	DRIVER UNLOCK RELAY	ON
3	1	DRIVER PRIORITY UNLOCK	ON

### RKE/VSS/RMST MODULE WIRE HARNESS

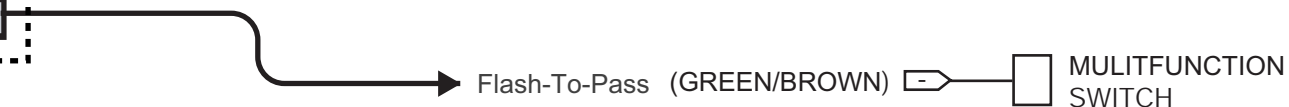
#### DRIVER'S DOOR PRIORITY UNLOCK

	Color	Function
C-9	TAN/RED	Driver Door Unlock Switch
A-13	TAN	Driver Door Unlock Motor
A-9	BROWN	Disarm Input



#### HEADLIGHTS/REAR DEFROSTER

	Color	Function
C-10	RED/WHITE	Headlight Output



[Manual Table of Content](#)

# RKE/VSS/REMOTE START SYSTEM INSTALLATION

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[RKE/VSS/Remote Start](#)

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[Troubleshooting](#)

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### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start

#### E-Series

NOTICE: Remote start systems are only applicable to vehicles with automatic transmissions.

NOTE: Both original keys are required for all remote start systems on vehicles equipped with SECURILOCK.

1. Verify correct kit number.

#### Review RKE/VSS/RMST Installation Kit Contents

NOTE: Kits are vehicle specific and are not interchangeable.

2. Review the RKE/VSS/RMST kit contents.

#### Remote Keyless Entry/ Vehicle Security System/ReMoTe STart (RKE/VSS/RMST) System Kit

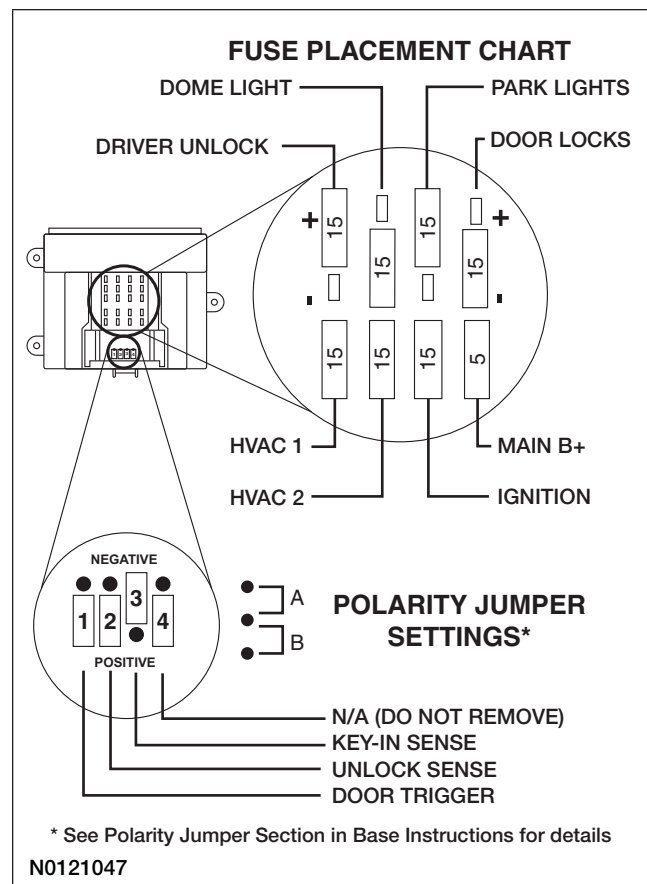
QUANTITY	DESCRIPTION
1	MODULE ASSEMBLY
1	RKE/VSS/RMST SOFTWARE CARTRIDGE ASSEMBLY
2	6 BUTTON POWERCODE TRANSMITTER
3	WIRING HARNESS ASSEMBLIES
1	DIPOLE ANTENNA
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS
1	OPERATORS QUICK REFERENCE WALLET CARD

#### Remote Keyless Entry/ Vehicle Security System/ReMoTe STart (RKE/VSS/RMST) System Kit (Continued)

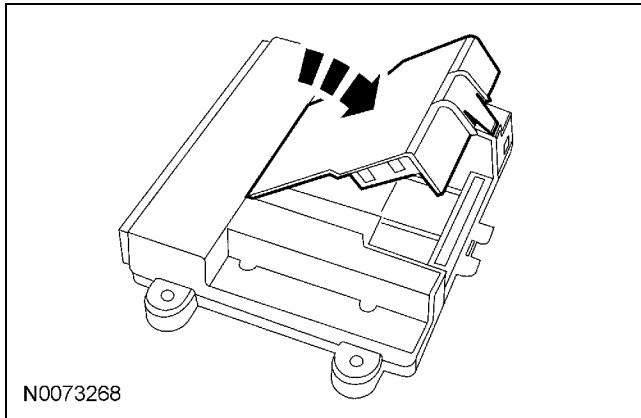
QUANTITY	DESCRIPTION
1	UNDERHOOD WARNING LABEL
1	SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS)

#### Module Preparation

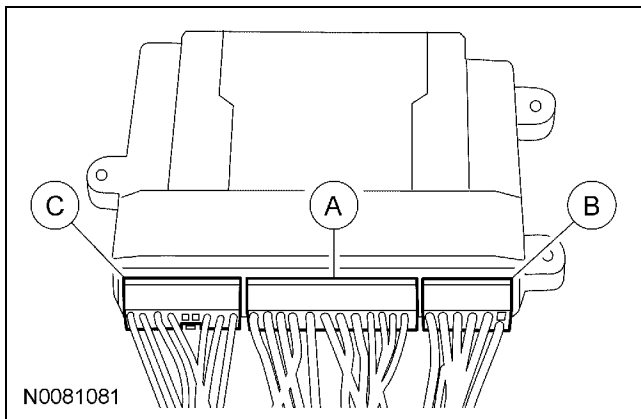
3. Place the supplied fuses into the power distribution block on the remote start control module.
  - Move the polarity jumpers to their proper locations on the control module, see illustration.



4. Place the software cartridge onto the control module.

**INSTALLATION (Continued)**

5. Plug the wiring harness(es) into the module.
  - A - Harness: 24-way, used on all systems.
  - B - Harness: 10-way, used on all systems with RKE/VSS/RMST.
  - C - Harness: 16-way, used on all systems with RKE/VSS/RMST.

**Vehicles With Factory RKE**

6. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

Connect the following wire to the A-20 Green/Violet wire in the A connector of the control module approximately 8 inches from the connector

- A-3 Black/White wire in the A connector.

7. **NOTE:** Skip this step if Optional/Feature - Driver Priority unlock is installed.

Connect the following wire to the A-9 Brown wire in the A connector of the control module approximately 8 inches from the connector

- A-24 Blue/Green wire in the A connector.

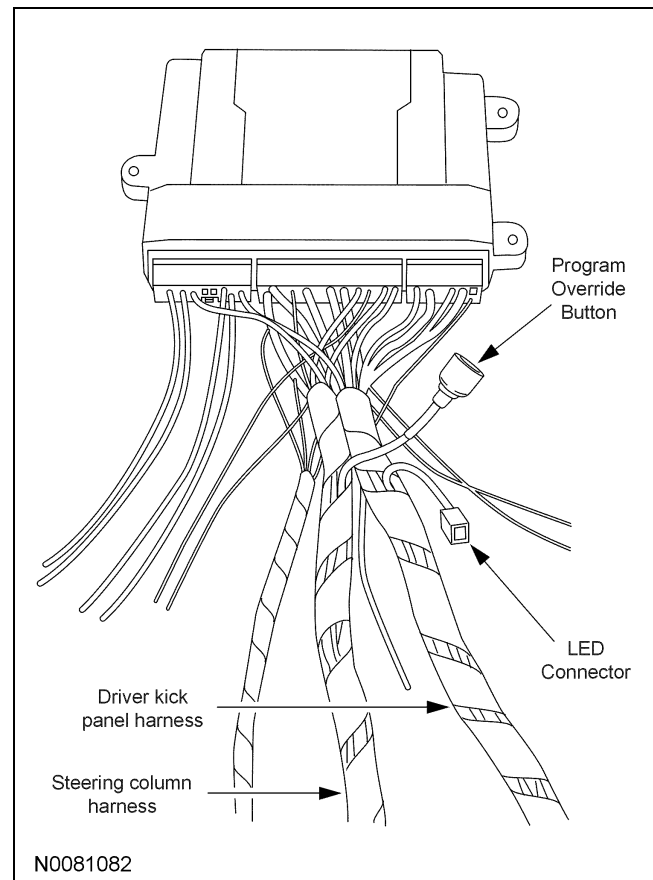
8. **NOTE:** Skip this step if Optional/Feature - Headlight Illumination is installed

Cut and tape off Red/White headlight output wire C-10 located in the C connector.

**All Vehicles**

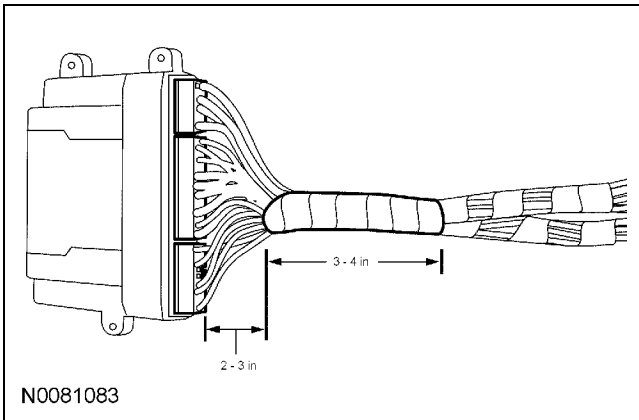
9. Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18". Depending on the vehicle, there will be 2 to 5 different wire groups.

Trim the unused wires approximately 6 - 8" from the module.



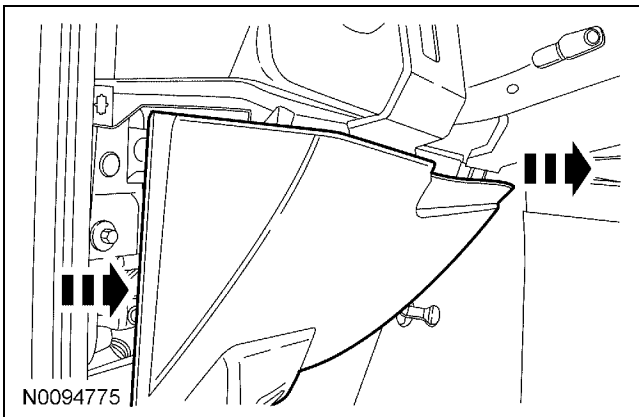
## INSTALLATION (Continued)

10. Tape the harness sections together, making sure to cover all of the unused wires.

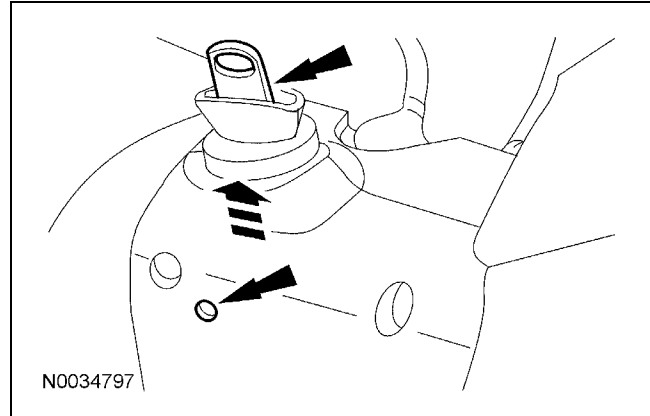


### Vehicle Preparation

11. Pull the steering column opening cover off the lower instrument panel.



12. Remove the lower steering column shroud.
13. Remove the left hand scuff plate and cowl trim panel.
14. Remove the ignition switch lock cylinder.
- Insert the ignition key into the lock cylinder and turn the ignition switch to the RUN position.
  - Push the ignition switch lock cylinder release tab with a punch while pulling out the ignition switch lock cylinder.



15. If equipped, remove the tilt release lever handle.
16. Remove the (3) screws and the steering column shrouds.

### Dipole Antenna Mounting

**NOTE:** For good range of operation, the dipole antenna must be installed correctly.

**NOTE:** Keep these points in mind when selecting a location and mounting the dipole antenna.

- Do not mount the antenna behind or on any metal film or window tinting on the windshield.
- Do not mount the antenna so that one of the antenna elements touches or crosses any vehicle wiring and/or metal.
- On vehicles without metal film in the windshield around the rear view mirror, mount the antenna between the headliner and the rear view mirror.
- On vehicles equipped with an electronic mirror, or on vehicles with metal film around the rearview mirror, mount the antenna approximately 3 inches below the mirror attachment point to the windshield and/or mirror electronics.

17. Choose a suitable mounting location following the guidelines above.

### Install The Dipole Antenna

18. Clean the mounting surface using an alcohol base solution and a clean cloth.

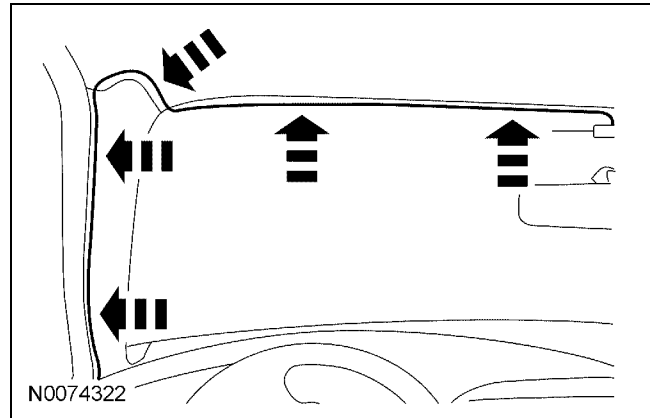
**INSTALLATION (Continued)**

19. **NOTE:** Do not touch the adhesive, reduced adhesion may result.

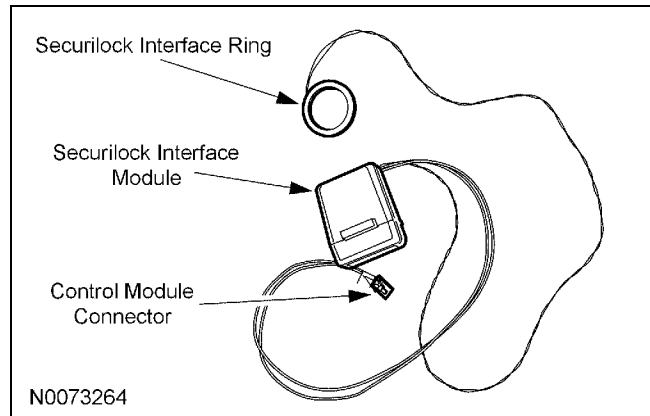
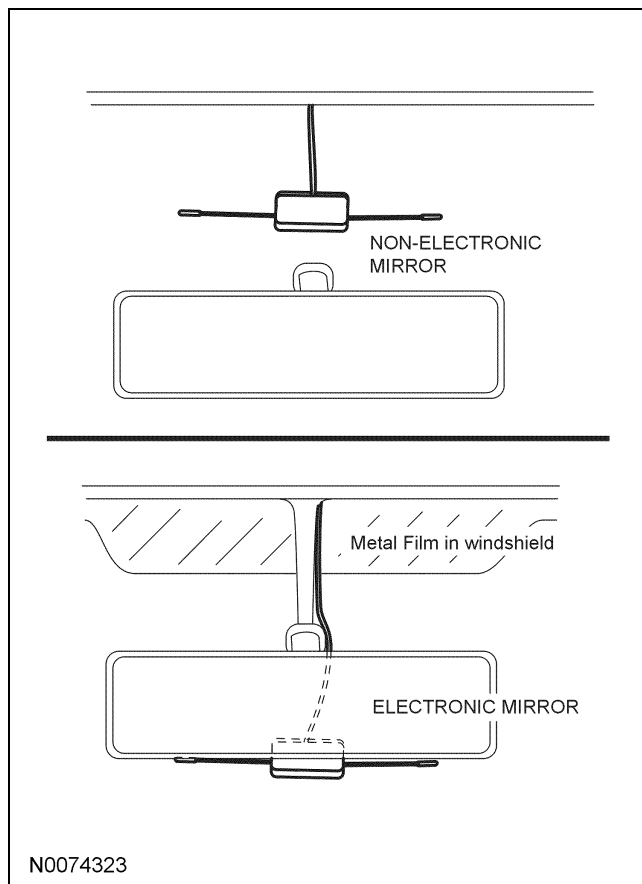
**NOTE:** Make sure that the long wire on the antenna is pointing toward the top of the windshield since this wire will be routed along the headliner.

**NOTE:** The wire will be attached to the control module later in this procedure.

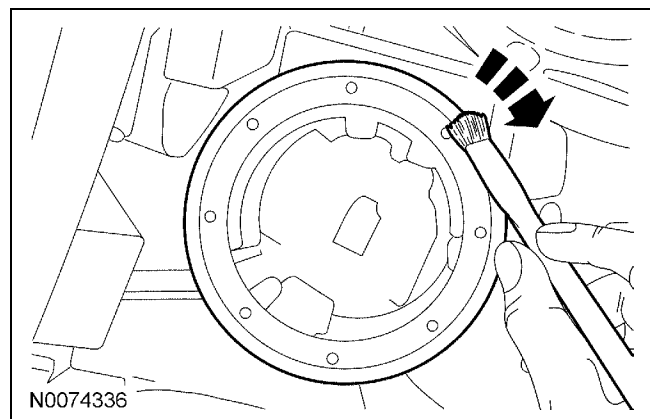
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



21. Route the ring of the SECURILOCK interface antenna lead up along the steering column to the PATS transceiver location.



22. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



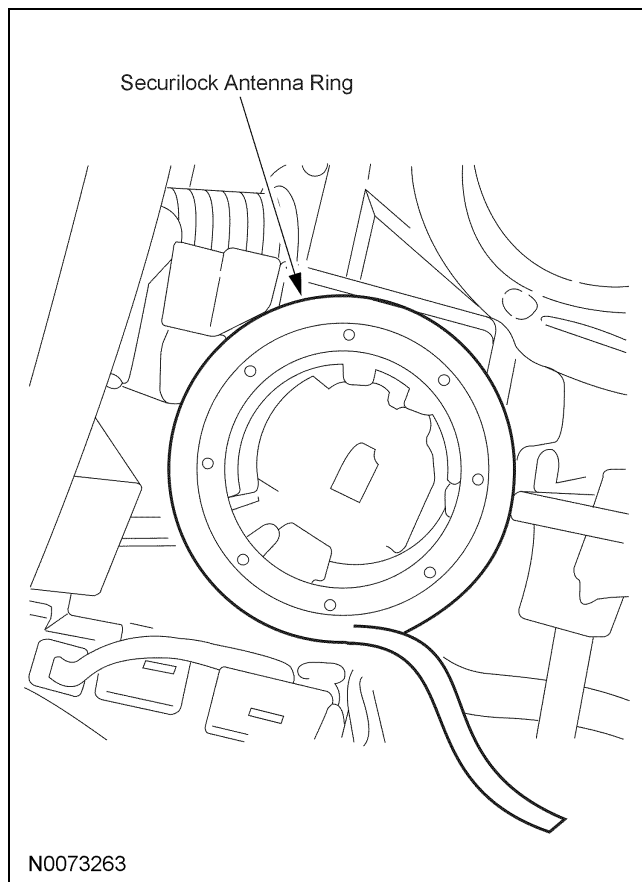
20. Route the dipole antenna cable along the headliner and down the A pillar toward the floor. The wire can be tucked behind the headliner without removing or loosening any of the trim panels.

## INSTALLATION (Continued)

23. **NOTICE:** Do not damage the transceiver ring during installation or while installing the steering column shroud.

A damaged transceiver ring will result in an inoperable remote start system.

Remove the protective backing from the SECURILOCK antenna ring. Place the SECURILOCK ring over the PATS transceiver and press firmly in place.



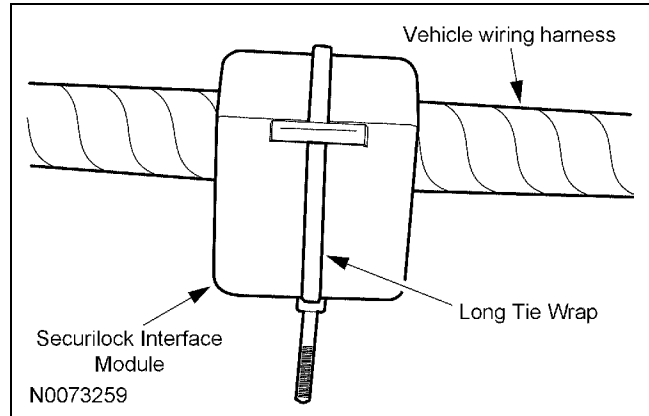
### Install The Securilock Interface Module

24. **NOTE:** Do not mount the SECURILOCK Interface Module to or within 3'' of a metal surface, including any underdash brackets, or in the knee bolster area.

Mount the SECURILOCK Interface Module to and underdash wiring harness using one of the supplied long tie wraps.

25. **NOTICE:** Do not attach the harness to the steering column.

Route the harness and connector to the module mounting location.



### Install the Remote Start Control Module and Harness Assembly

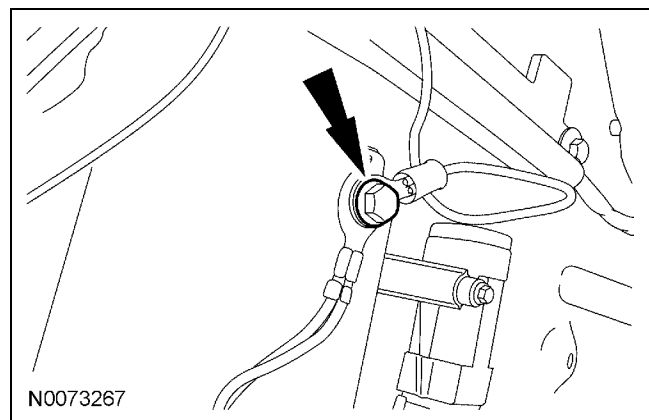
26. Install the ignition lock cylinder.
27. Place the remote start module and harness assembly in the vehicle.

### Identify Circuit Wires For Connections

**NOTE:** For vehicle specific wiring diagram(s) click [here](#).

**NOTE:** For proper wire splicing techniques click [here](#).

28. Connect the Black ground wire from the control module to the chassis ground point in the driver kick panel.



**INSTALLATION (Continued)**

29. **NOTE:** A DVOM connected to the correct wire will show 12V with the vehicle door(s) open and the dome light on, then show 0V with the vehicle door(s) closed and the dome light off.
- NOTE:** A logic probe connected to the correct wire will show power with the vehicle door(s) open and the dome light on, then show ground with the vehicle door(s) closed and the dome light off.
- NOTE:** Be sure that the dome light has timed out and is off before performing the door closed test.
- Be sure that the dome lamp is illuminated before performing the door open test.
- Identify the Gray/Violet dome light circuit wire C2280A pin 9 at the driver kick panel.
30. Connect the Green/Violet wire from the remote start module harness to the Gray/Violet dome light circuit wire C2280A pin 9 at the driver kick panel.
31. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door lock switch is pressed.
- A logic probe will show open on the correct wire, then show ground when the door lock switch is pressed.
- Identify the Gray/Yellow power door lock circuit wire at the driver kick panel.
32. Connect the Blue wire from the control module to the Gray/Yellow power door lock circuit at the driver kick panel.
33. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the door unlock switch is pressed.
- A logic probe will show open on the correct wire, then show ground when the door unlock switch is pressed.
- Identify the Violet/Gray power door unlock circuit wire at the driver kick panel.
34. Connect the Green wire from the control module to the Violet/Gray power door unlock circuit at the driver kick panel.
35. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door lock switch.
- A logic probe will show ground on the correct wire, then show power while depressing the door lock switch.
- Identify the Gray/Brown lock motor circuit wire at the driver kick panel.
36. Connect the White/Blue wire from the control module harness to the Gray/Brown lock motor circuit wire at the driver kick panel.
37. **NOTE:** Skip this step if Optional/Feature - Driver Priority unlock is installed.
- NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door unlock switch.
- A logic probe will show ground on the correct wire, then show power while depressing the door unlock switch.
- Identify the Blue/Green driver door unlock motor circuit wire C265 pin 5 at the driver kick panel.
38. Connect the Brown wire from the control module harness to the Blue/Green driver door unlock motor circuit wire C265 pin 5 at the driver kick panel.
39. **NOTE:** A DVOM connected to the correct wire will show 0V with the switch in the OFF position and 12V with the switch in the parking lights ON position.
- A logic probe connected to the correct wire will show ground with the switch in the OFF position and power with the switch in the parking lights ON position.
- Identify the Violet/White parking lights on circuit wire at the SPDJB connector C2280E pin 6 or looped under green tape at the driver kick panel.
40. Connect the White wire from the control module to the Violet/White parking lights on circuit wire at the SPDJB connector C2280E pin 6 or looped under green tape at the driver kick panel.



**INSTALLATION (Continued)**

41. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the door unlock switch.

A logic probe will show ground on the correct wire, then show power while depressing the door unlock switch.

Identify the Violet/Gray door unlock circuit wire C210 pin 35 under the passenger door sill plate.

42. Connect the Light Green wire from the control module harness to the Violet/Gray door unlock circuit wire C210 pin 35 under the passenger door sill plate.

43. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V with headlights ON.

A logic probe will show power on the correct wire, then show ground with headlights ON.

Identify the Green/Brown flash-to-pass circuit wire at the multifunction switch or at SJB C2280B connector pin 43.

44. Connect the Red/White wire from the control module harness to the Green/Brown flash-to-pass circuit wire at the multifunction switch or at SJB C2280B connector pin 43.

45. **NOTE:** A DVOM connected to the correct wire will show 12V with the vehicle door(s) open and the dome light on, then show 0V with the vehicle door(s) closed and the dome light off.

**NOTE:** A logic probe connected to the correct wire will show power with the vehicle door(s) open and the dome light on, then show ground with the vehicle door(s) closed and the dome light off.

**NOTE:** Be sure that the dome light has timed out and is off before performing the door closed test.

Be sure that the dome lamp is illuminated before performing the door open test.

Identify the Green/Blue dome light circuit wire at the dimmer switch.

46. Connect the Black/White wire from the remote start module harness to the Green/Blue dome light circuit wire at the dimmer switch.

47. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the RUN and START positions.

A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the RUN and START positions.

Identify the White/Orange ignition circuit wire at the Ignition Switch.

48. Connect the Pink wire from the control module harness to the White/Orange ignition circuit wire at the Ignition Switch.

49. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the RUN position.

A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the RUN position.

Identify the Violet/Green run/acc circuit wire at the Ignition Switch.

50. Connect the Orange wire from the control module harness to the Violet/Green run/acc circuit wire at the Ignition Switch.

51. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the RUN position.

A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the RUN position.

Identify the Brown/Yellow run circuit wire at the ignition switch harness.

52. Connect the Orange/White wire from the control module harness to the Brown/Yellow run circuit wire at the ignition switch harness.

53. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the Ignition Switch is in the START position.

A logic probe will show ground on the correct wire, then show power when the Ignition Switch is in the START position.

Identify the Blue/White starter circuit wire at the Ignition Switch.

**INSTALLATION (Continued)**

54. Connect the Violet wire from the control module harness to the harness Blue/White starter circuit wire at the Ignition Switch.
55. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the key is in the ignition lock cylinder.  
A logic probe will show ground on the correct wire, then show power when the key is in the ignition lock cylinder.  
Identify the Blue/Gray Key-in-Sense circuit wire at the Gray connector on the right side of the steering column.
56. Connect the Black/White wire from the control module to the Blue/Gray Key-in-Sense circuit wire at the Gray connector on the right side of the steering column.
57. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the horn button is held.  
A logic probe will show power on the correct wire, then show ground when the horn button is held.  
Identify the Blue/White horn circuit wire at the Gray connector on the right side of the steering column.
58. Connect the Brown/Black wire from the control module to the Blue/White horn circuit wire at the Gray connector on the right side of the steering column.
59. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the brake pedal.  
A logic probe will show ground on the correct wire, then show power while depressing the brake pedal.  
**NOTE:** Alternate color and location: Light Green located in the driver kick panel.  
Identify the Violet/White brake switch circuit wire at the brake switch.
60. Connect the Brown wire from the control module to the Violet/White brake switch circuit wire at the brake switch.

**Vehicles W/O Factory RKE**

**NOTE:** Refer to vehicle specific wiring diagram(s) [click here](#).

61. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the driver door lock switch is pressed.  
A logic probe will show ground on the correct wire, then show power when the driver door lock switch is pressed.  
Identify the Gray/Yellow driver power door lock motor circuit wire at the driver kick panel harness.
62. Cut the Gray/Yellow driver door lock motor circuit wire at the driver kick panel harness.
63. Connect the Blue/Black wire from the control module harness to the cut Gray/Yellow driver door lock motor circuit wire going toward the front of the vehicle.
64. Connect the Blue wire from the control module harness to the cut Gray/Yellow driver door lock motor circuit wire going toward the back of the vehicle.
65. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the driver door unlock switch is pressed.  
A logic probe will show ground on the correct wire, then show power when the driver door unlock switch is pressed.  
Identify the Blue/Green driver power door unlock motor circuit wire C265 pin 5 at the driver kick panel harness.
66. Cut the Blue/Green driver door unlock motor circuit wire C265 pin 5 at the driver kick panel harness.
67. Connect the Green/Black wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire C265 pin 5 going toward the front of the vehicle.
68. Connect the Green/Black wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire C265 pin 5 going toward the back of the vehicle.

**INSTALLATION (Continued)****Optional Connections / Features Driver Door Priority Unlock**

**NOTE:** Refer to vehicle specific wiring diagram(s) [click here](#).

69. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when the driver door unlock switch is pressed.

A logic probe will show ground on the correct wire, then show power when the driver door unlock switch is pressed.

Identify the Blue/Green driver power door unlock motor circuit wire C265 pin 5 at the driver kick panel harness.

70. Cut the Blue/Green driver door unlock motor circuit wire C265 pin 5 at the driver kick panel harness.
71. Connect the Tan/Red wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire C265 pin 5 going toward the back of the vehicle.
72. Connect the Tan wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire C265 pin 5 going toward the front of the vehicle.
73. Connect the Brown wire from the control module harness to the cut Blue/Green driver door unlock motor circuit wire C265 pin 5 going toward the back of the vehicle.

**Install The Hood Safety Switch**

74. **NOTE:** Route the hood safety switch wire carefully avoiding any moving parts or components that can produce excessive heat.

**NOTE:** Using a piece of convolute adds in the appearance of the installation.

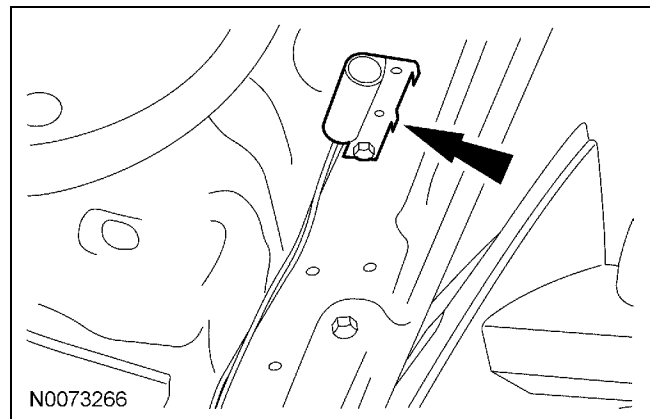
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

Failure to position the switch properly could result in one of the following:

- False alarm trips
- Non-Remote Start events
- Inadvertent shutdown during Remote Start

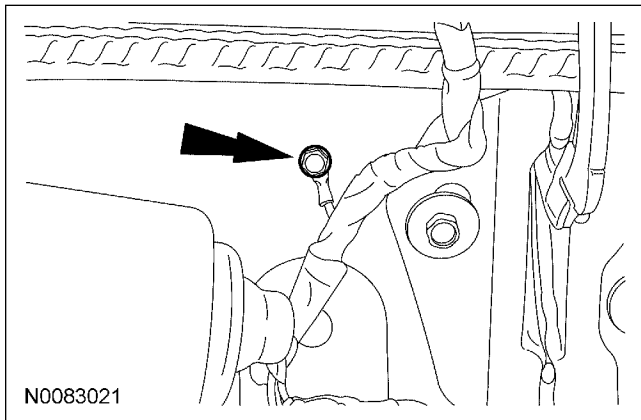
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

75. Apply rustproofing compound to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).



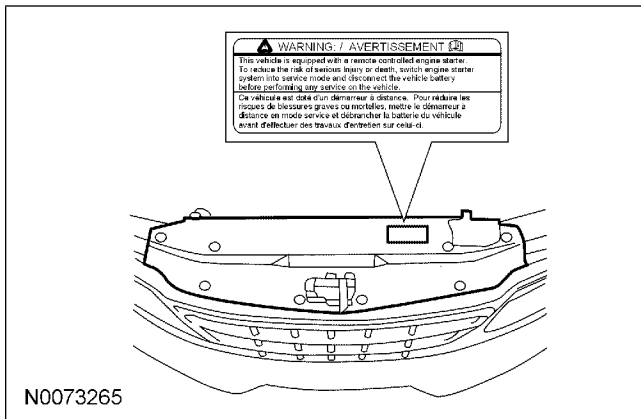
**INSTALLATION (Continued)**

76. Connect hood switch ground wire to a suitable location on the bulkhead.



77. **NOTE:** Place the label on the radiator fan shroud or similar area.

Install the underhood warning label



78. Route the Grey hood safety switch wire from the RKE/VSS/RMST control module through the bulkhead into the engine compartment and attach to the hood safety switch.
79. Connect the dipole antenna to the RKE/VSS/RMST control module.
80. Connect the SECURILOCK interface module to the RKE/VSS/RMST control module.

**Power Connection**

81. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in any position. A logic probe will show power on the correct wire with the key in any position. Identify two Blue/Red Battery circuit wires in the ignition switch.
82. Connect the one Red wire from the control module harness to the one Blue/Red battery circuit wire in the ignition switch.
83. Connect the remaining Red wire from the control module harness to the remaining Blue/Red battery circuit wire in the ignition switch.

**Program The RKE/VSS/RMST System**

84. [Refer to the RKE/VSS/RMST programming section for this vehicle \(click here\).](#)

**Secure RKE/VSS/RMST Harness and Control Module**

85. Use the supplied tie wraps to secure the RKE/VSS/RMST harness wires.
86. **NOTE:** Do not mount the control module in the knee bolster area.
- To ensure the best performance of the built-in shock sensor, secure the control module at three points to the vehicle.
- Use the supplied long tie wraps to mount the RKE/VSS/RMST control module to the underdash wiring harness.

**Install Trim**

87. Install the (3) screws and the steering column shroud.
88. If equipped, install the tilt release lever handle.
89. Install the lower instrument panel steering column cover.

---

**INSTALLATION (Continued)**

90. Install the left hand scuff plate and cowl trim panel.
-

## GENERAL PROCEDURES

### Programming

#### Programming the Module

- NOTE:** If the vehicle options (Key-in sense polarity, door ajar polarity, or tach mode) are not programmed correctly, vehicle will not remote start or operate properly.

**NOTE:** Make sure that the hood is closed before proceeding.

**NOTE:** The LED on the remote start harness must be visible to complete module programming.

**NOTE:** The remote start override button must be accessible.

#### Programming Options: Entering Programming Mode

- See chart below for programming information.

##### Option Bank - 1 Chart (4 - Honks)

BANK	OPTIONS	DESCR	LED
1	1	LITE TOUCH ADJUST	NOTE 1
1	2	FULL SHOCK ADJUST	NOTE 1
1	4	DOOR AJAR INVERT	ON
1	5	UNLOCK SENSE INVERT	ON
1	6	KEY-IN SENSE INVERT	ON

##### Option Bank - 2 Chart (5 - Honks)

BANK	OPTIONS	DESCR	LED
2	1	STARTER INTERRUPT	OFF

##### Option Bank - 2 Chart (5 - Honks) (Continued)

BANK	OPTIONS	DESCR	LED
2	8	DRIVER UNLOCK RELAY	NOTE 2

##### Option Bank - 3 Chart (6 - Honks)

BANK	OPTIONS	DESCR	LED
3	1	DRIVER PRIORITY UNLOCK	NOTE 2

##### Option Bank - 4 Chart (7 - Honks)

BANK	OPTIONS	DESCR	LED
4	1	TACHLESS MODE	ON

**NOTE:** 1. Perform proper adjustments following the “Shock Sensor Setting”, refer to General Procedures [click here](#).

**NOTE:** 2. See the Optional Connections/Features, refer to Vehicle Specific Wiring Diagram(s) [click here](#).

- Open the driver door.  
All other doors should remain closed.
- Turn the ignition key to the RUN position.
- Press and hold the remote start system override button for at least 10 seconds.  
After 10 seconds the horn will honk 3 times, indicating the system is now in the learn mode.

**GENERAL PROCEDURES (Continued)**

6. Press and release the override button. The horn will honk 4 times indicating the system has entered the first program bank.

If not please check the following:

- Brake pedal switch wire solder connection.
- Hood closed and Grey hood safety switch wire solder connection.
- Dome light circuit wire solder connections.
- The key is in the RUN position.
- The software cartridge is firmly seated in the RMST module.
- The RMST harness connections are firmly seated in the RMST module.

**NOTE:** If you require additional assistance: CALL 1-800-FORD KEY.

7. Press and release the remote start fob panic button 4 times.

The horn will honk 4 times indicating the system has entered the option 4 of the first program bank.

**NOTICE:** When turning the LED on or off using the remote start fob button, press and immediately release the remote start button.

8. The LED must be ON for option 4. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

**NOTE:** When programming the remote start module, if the remote start fob unlock button is pressed, the horn will chirp 4 times indicating the system returned to the factory default settings. If this occurs, return to step 1 of the programming section to reprogram the remote start module.

9. Press and release the remote start fob panic button.

The horn will honk 5 times indication the system has entered the option 5 of the first program bank.

10. The LED must be ON for option 5. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

11. Press and release the remote start fob panic button.

The horn will honk 6 times indication the system has entered the option 6 of the first program bank.

12. The LED must be ON for option 6. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

13. Press and release the override button. The horn will honk 5 times indicating the system has entered the second option bank.

14. Press and release the remote start fob panic button.

The horn will honk 1 time indication the system has entered the option 1 of the second program bank.

15. The LED must be ON for option 1. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

16. Press and release the override button 2 times. The horn will honk 7 times indicating the system has entered the fourth option bank.

17. Press and release the remote start fob panic button.

The horn will honk 1 time indication the system has entered the option 1 of the fourth program bank.

18. The LED must be ON for option 1. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob lock button and verify the LED illuminates.

19. **NOTE:** Vehicles equipped with a diesel engine go to the next step. Vehicles equipped with a gas engine skip step 19 and proceed to step 21. Press and release the remote start fob panic button 4 times.

The horn will honk 5 times indication the system has entered the option 5 of the fourth program bank.

**GENERAL PROCEDURES (Continued)**

20. The LED must be ON for option 5. If the LED is illuminated no action is required. If the LED is not illuminated press the remote start fob button and verify the LED illuminates.

**NOTE:** The remote start module is now programmed.

21. **NOTE:** Immediately after programming the remote start module, program the SECURILOCK.

**Programming the SECURILOCK**

**NOTE:** Two PATS keys are required to program the SECURILOCK.

**NOTE: IMPORTANT:** Each of the following steps should be completed with no more than 5 seconds delay between steps.

22. Insert the first ignition key and turn to the run position.

Watch for the PATS light to turn off. Remove the first key.

---

23. Insert the second ignition key and turn to the run position.

Watch for the PATS light to turn off. Remove the second key.

24. Press and hold the remote start button



for 3 seconds.  
The PATS light should stay on for 3-5 seconds before turning off, which means that the SECURILOCK was successfully programmed.

**NOTE:** If the PATS light blinks rapidly, repeat steps 1-3 to retry programming the SECURILOCK.

**NOTE:** The engine will start if the Remote Start kit has been installed correctly, the brake is not depressed, and the hood and doors are closed.



## GENERAL PROCEDURES

### Functional Test

**NOTE:** If during any of the steps of the functional test, the remote start system or vehicle doesn't react or perform accordingly, please refer to the remote start troubleshooting guide.

**NOTE:** For remote start troubleshooting guide click [here](#).

1. Make sure all doors are closed but hood is open and windows are down (doors will be locking).
2. Press and hold the Start button on the remote control key fob for 2-3 seconds - Horn should honk once indicating receipt of the start request.
3. The remote start systems should turn on the ignition, but then honk the horn twice and shut down indicating the hood is open.
4. Close the hood, and insert a key into the ignition switch.
5. Attempt to re-start the vehicle again using the key fob.
6. The remote start systems should turn on the ignition, but then honk the horn five times and shut down indicating a key is in the ignition switch.
7. Remove the key and open a door.
8. Attempt to re-start the vehicle again using the key fob.
9. The remote start systems should turn on the ignition, but then honk the horn three times and shut down indicating a door is open.
10. Close the door.
11. Attempt to re-start the vehicle again using the key fob.
12. Once the vehicle starts, verify that all radio, heat, and A/C functions operate normally and that the doors have locked.
13. On vehicles equipped with power window interrupt, Attempt to close windows to check power window interrupt function.
14. Once all systems have been checked, press the brake pedal - the remote start systems should shut down.

### Troubleshooting

15. **NOTE:** When attempting to remote start your vehicle, the system has several safety checks that it performs. If any of these inputs are present that should not be, the system will respond back to you with several horn "chirps" to help you identify which input is present. These "chirps" will occur after initiating a start sequence with the transmitter, the system will turn on the ignition, but then respond back with several horn "chirps" and abort the starting process.

**Example:**Depress the remote start fob button for 3 seconds and then release. The vehicle horn will "chirp" one time to indicate that RMST signal was received. If the vehicle doesn't start and the horn "chirps" 3 times, there is a fault - "Vehicle Door is Open"

CHIRPS	PROBLEM
1 Chirp	SECURILOCK not programmed correctly, or the SECURILOCK antenna ring is damaged.
2 Chirps	BRAKE is being pressed, or the HOOD is open.
3 Chirps	One of the vehicles DOORS are open.
4 Chirps	TACH not programmed.

**GENERAL PROCEDURES (Continued)**

---

<b>CHIRPS</b>	<b>PROBLEM</b>
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

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# '12 E-Series

## RKE/VSS/RMST MODULE WIRE HARNESS

### DRIVERS SIDE KICK PANEL HARNESS

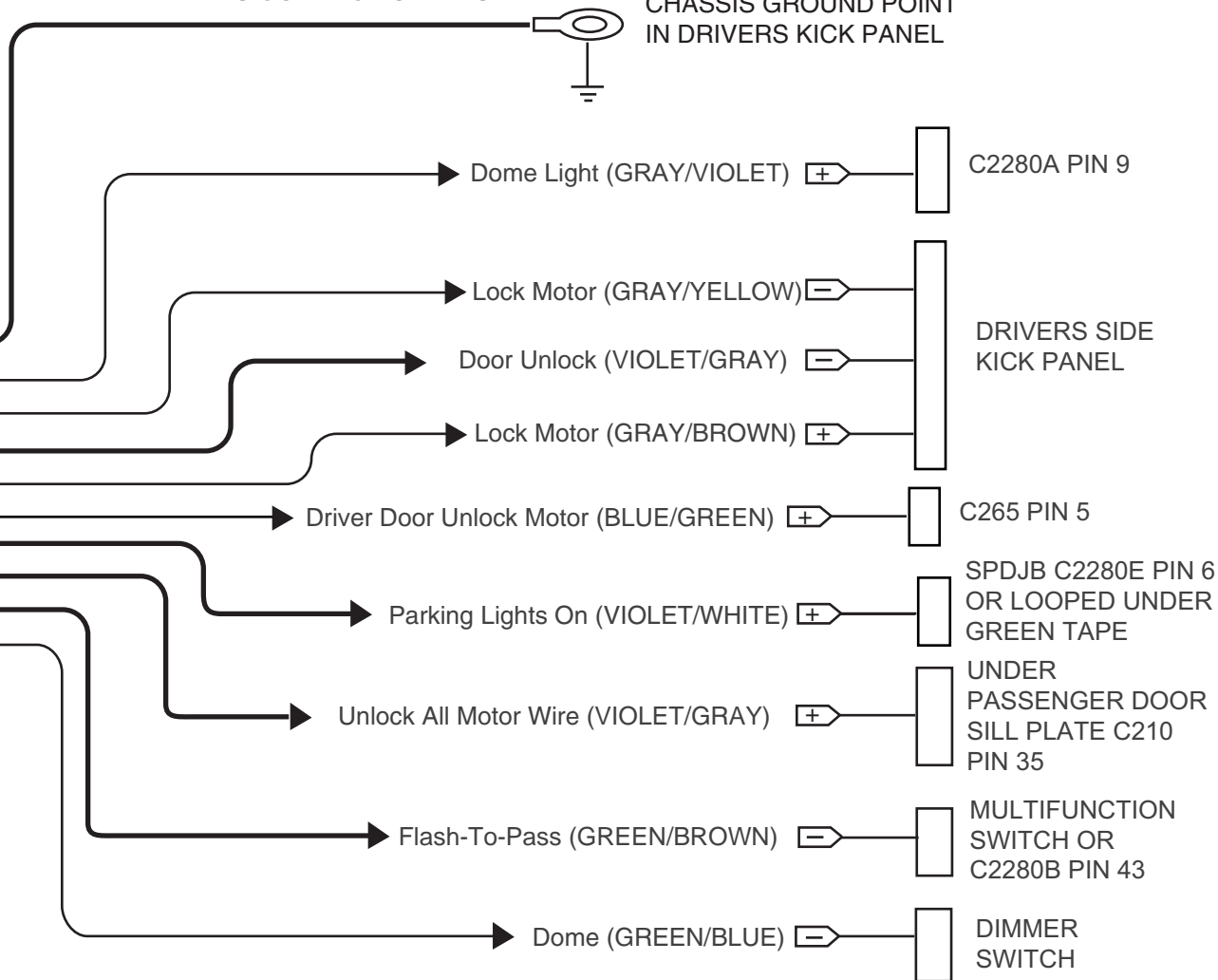
	Color	Function
A-5	BLACK	Ground
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-2	BLUE	Door Lock Output
A-14	GREEN	Door Unlock Output
A-11	WHITE/BLUE	Arm Input
A-9	BROWN	Disarm Input
A-1	WHITE	Parking Light Output
A-12	LT GREEN	Unlock Switch Sense
C-10	RED/WHITE	Headlight Output
A-3	BLACK/WHITE	Domelight Output

### UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT  
IN DRIVERS KICK PANEL



Vehicle  
Interior

Engine  
Compartment

Chassis  
Ground

Do Not Ground to Hood!

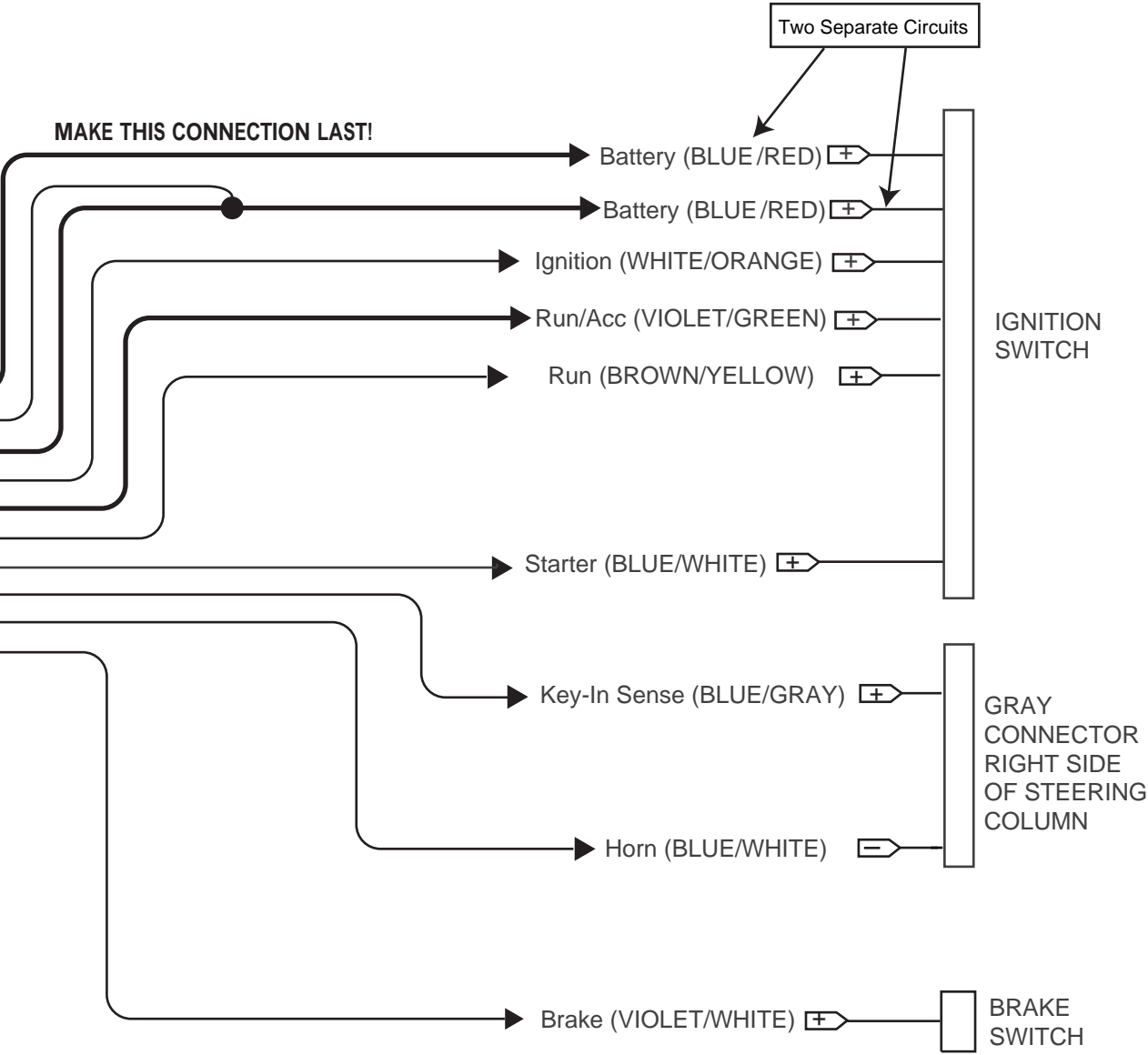
Hood Tilt Switch

'12 E-Series

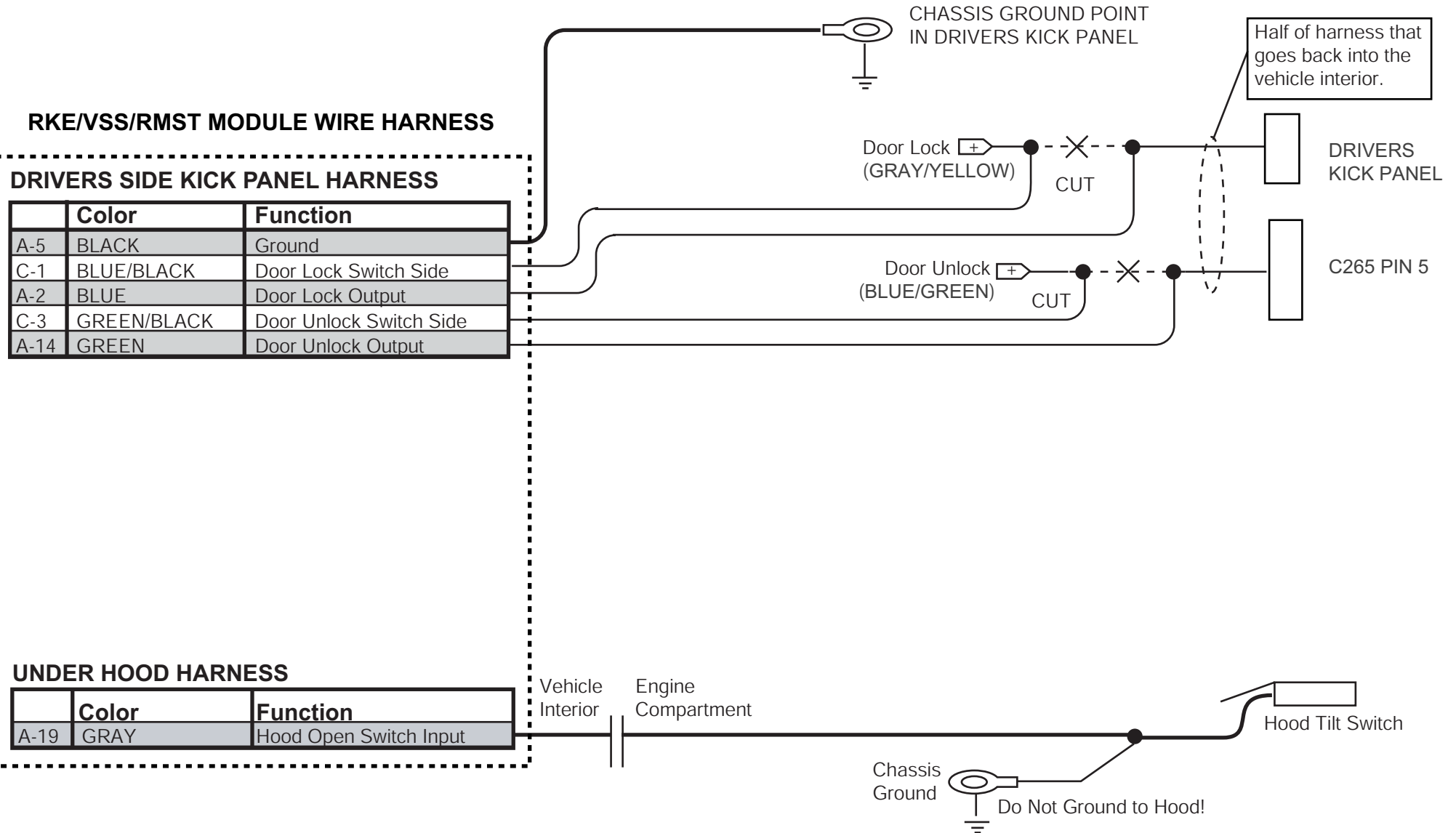
RKE/VSS/RMST MODULE WIRE HARNESS

STEERING COLUMN HARNESS

	Color	Function
A-4	RED	Battery
B-1	BLUE	HVAC2 Feed
B-2	RED	HVAC 1 Battery Feed
A-7	PINK	Ignition 1 Input/Output
B-4	ORANGE	HVAC 1 Output
B-5	ORANGE/WHITE	HVAC 2 Output
A-8	VIOLET	Starter Output
B-8	BLACK/WHITE	Key-in-sense Input
A-21	BROWN/BLACK	Horn Relay Output
B-7	BROWN	Brake Input



MAKE THIS CONNECTION FIRST!



OPTIONAL CONNECTIONS / FEATURES

OPTION PROGRAMMING REQUIREMENTS

BANK	OPTION	DESCRIPTION	LED
2	8	DRIVER UNLOCK RELAY	ON
3	1	DRIVER PRIORITY UNLOCK	ON

RKE/VSS/RMST MODULE WIRE HARNESS

DRIVER'S DOOR PRIORITY UNLOCK

	Color	Function
C-9	TAN/RED	Driver Door Unlock Switch
A-13	TAN	Driver Door Unlock Motor
A-9	BROWN	Disarm Input

w/Factory RKE only

To Driver Door Unlock Motor  
(BLUE/GREEN)

CUT

DRIVERS  
KICK PANEL  
HARNESS  
C265 PIN 5

Connect to the half of  
the wire going to the  
back of the vehicle

# **RKE/VSS/REMOTE START SYSTEM INSTALLATION**

## **CONTENTS**

### **VEHICLE PREPARATION**

Hood Switch Kit Installation

### **INSTALLATION**

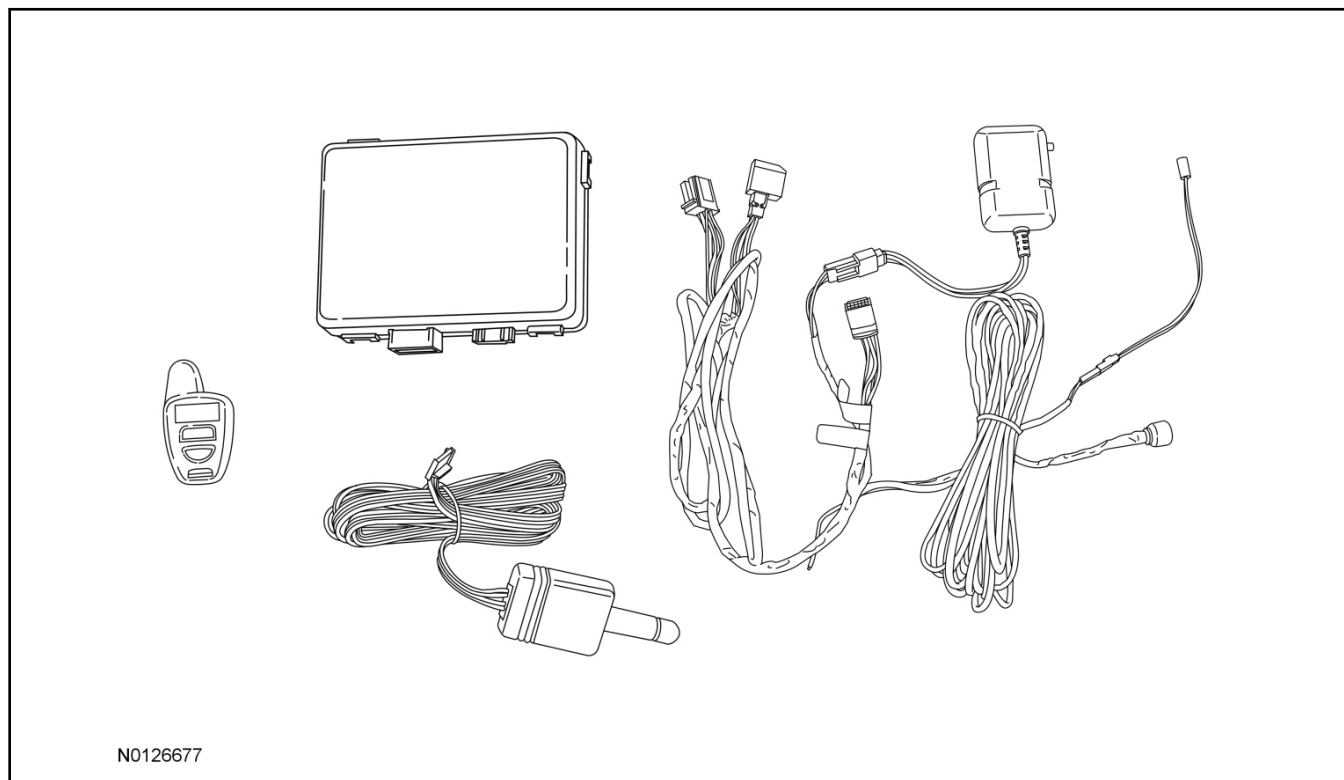
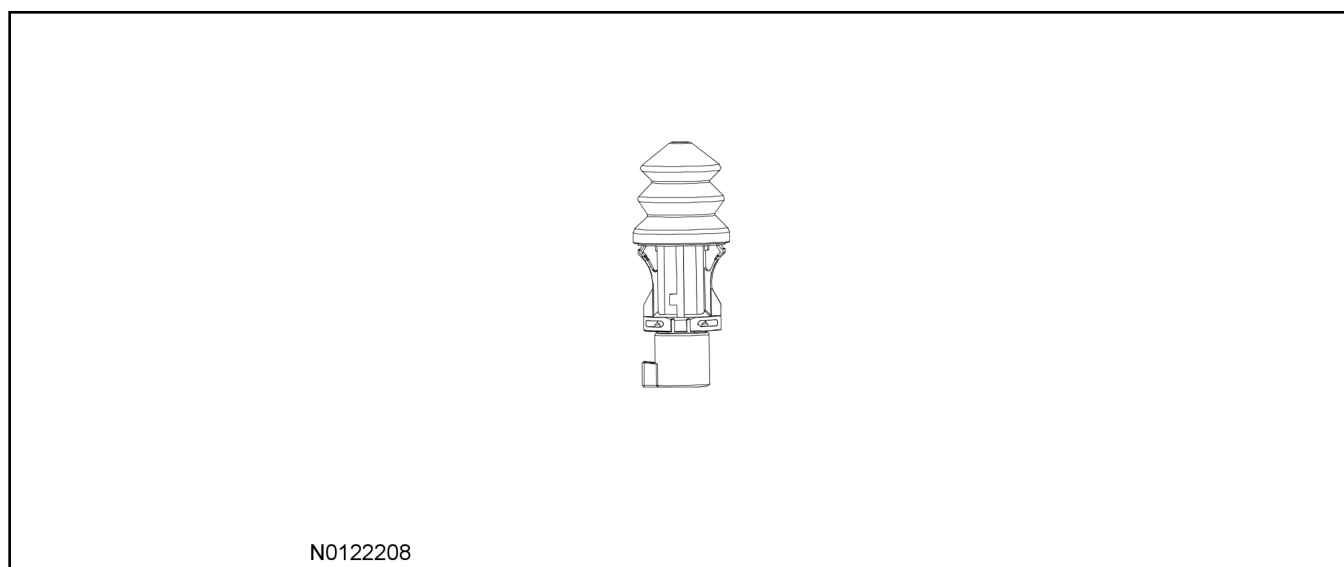
RKE/VSS/Remote Start

### **GENERAL PROCEDURES**

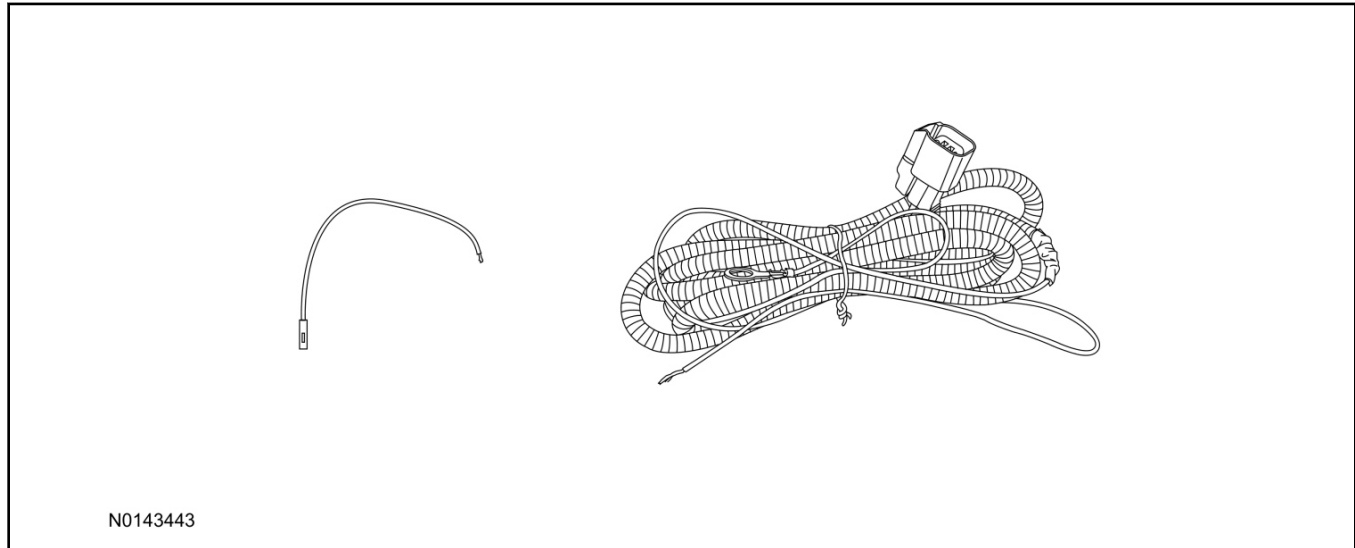
Remote Start System Activation

Functional Test

User Preferences

**INSTALLATION****Remote Start System/Vehicle Security****Remote Start System/Vehicle Security (RMST/VSS) Components****Hood Switch Kit - SE Vehicles Only**



**INSTALLATION (Continued)****Hood Switch Wire Harness Kit - SE Vehicles Only****Explorer**

1. Verify correct kit number.

**Review The Remote Start System/Vehicle Security (RMST/VSS) Installation Kit Contents**

2. Review the RMST/VSS kit contents.

**Remote Start System/Vehicle Security (RMST/VSS) kit**

QUANTITY	DESCRIPTION
1	Bi-directional Key Fob
1	Remote Start Module
1	Bi-directional Antenna
1	Remote Function Actuator (RFA) Module T-Harness
1	Shock Sensor
1	LED

**Review Hood Switch Kit Contents**

3. Review the Hood Switch kit contents.

**Hood Switch Kit**

QUANTITY	DESCRIPTION
1	Hood Switch Assembly

**Review Hood Switch Wire Harness Kit Contents**

4. Review the Hood Switch kit contents.

**INSTALLATION (Continued)****Hood Switch Wire Harness Kit**

QUANTITY	DESCRIPTION
1	Body Control Module (BCM) Terminal Wire
1	Hood Switch Wire Harness

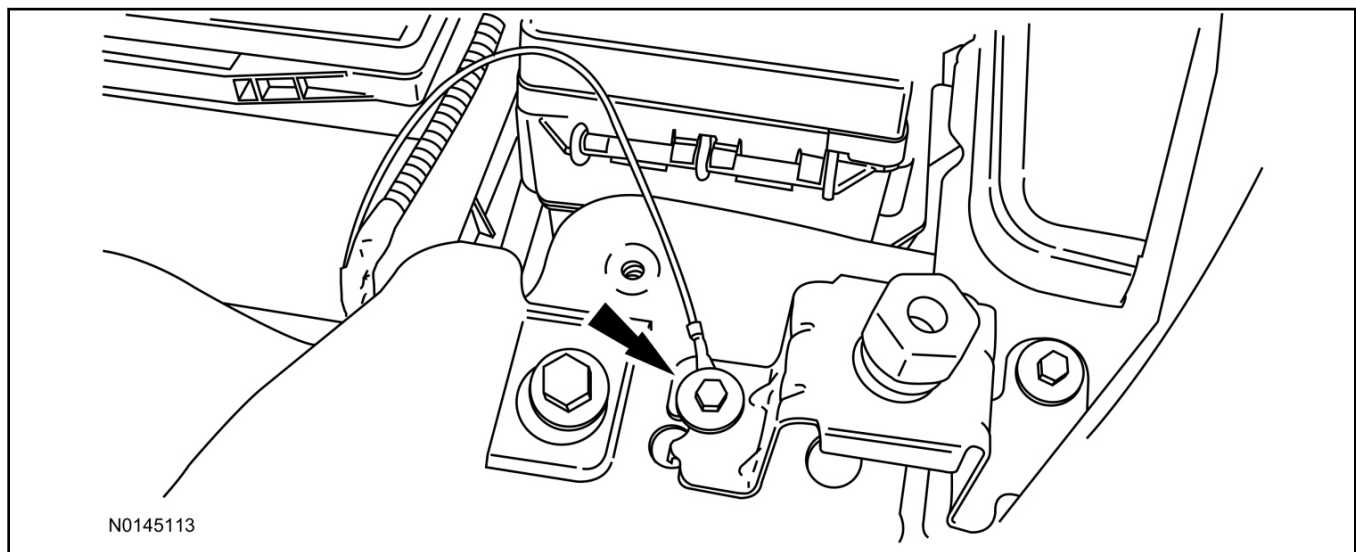
**Vehicle Preparation**

5. Verify that the vehicle is equipped with a hood switch, and hood switch wire harness.
  - If the vehicle is not equipped with a hood switch wire harness, refer to "Hood Switch Wire Harness Installation" within this procedure.
  - If the vehicle is not equipped with a OE hood switch, refer to "Hood Switch Installation" within this procedure.

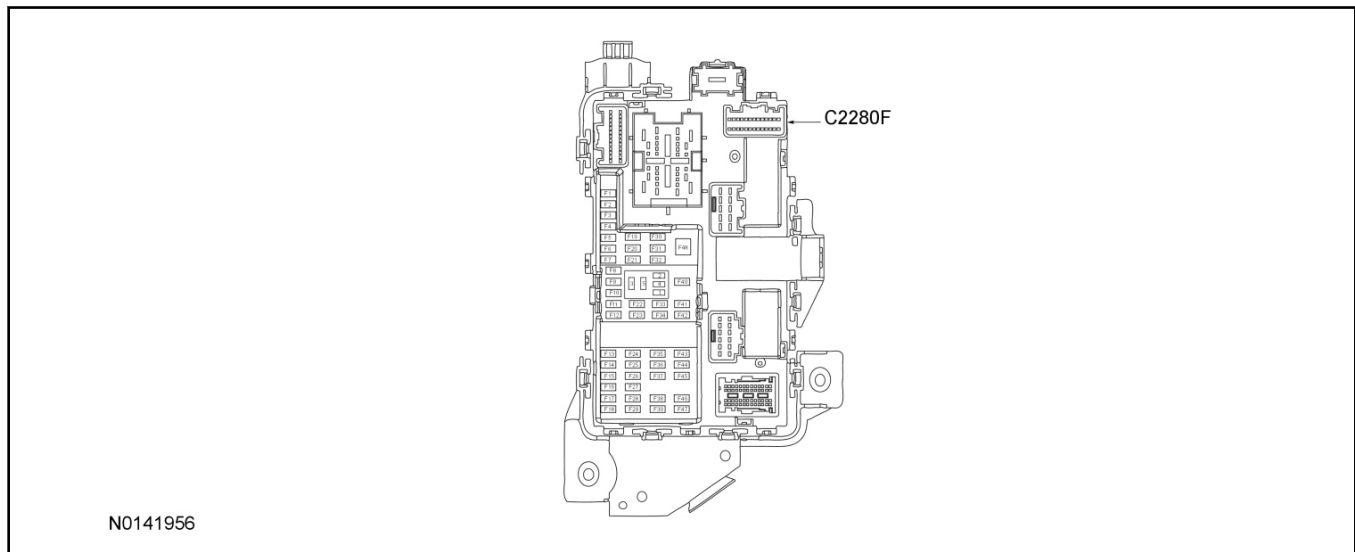
**Hood Switch Wire Harness Installation****NOTE:**

This procedure is only required if the vehicle is not equipped with a hood switch wire harness.

6. Remove the fender bolt and install the hood switch ground wire, using the previously removed bolt.
  - Tighten to 12 Nm (106 lb-in).



7. Route the hood switch wire harness into the vehicle through the bulkhead grommet.
  - Secure the hood switch wire harness with zip-ties.
8. Disconnect Body Control Module (BCM) connector C2280F.

**INSTALLATION (Continued)**

9. If equipped, remove the pin plug from BCM connector C2280F Pin 2.
- If the vehicle is not equipped with a hood switch wire harness from the factory C2280F will not have a wire at the Pin 2 location.

10. **NOTICE:**

**Check that the all wire pins are attached firmly and properly positioned/secured within the connector shell, after performing this step.**

Insert the BCM terminal wire from the hood switch wire harness kit into BCM connector C2280F Pin 2.

- Some disassembly of BCM connector C2280F may be required to perform this step.

11. Connect BCM connector C2280F.

**NOTICE:**

**Refer to "Proper Wire Splicing Techniques" before proceeding.**

12. Connect the hood switch wire harness wire to the BCM Terminal Wire.

- Secure the wire harness assembly with zip-ties.

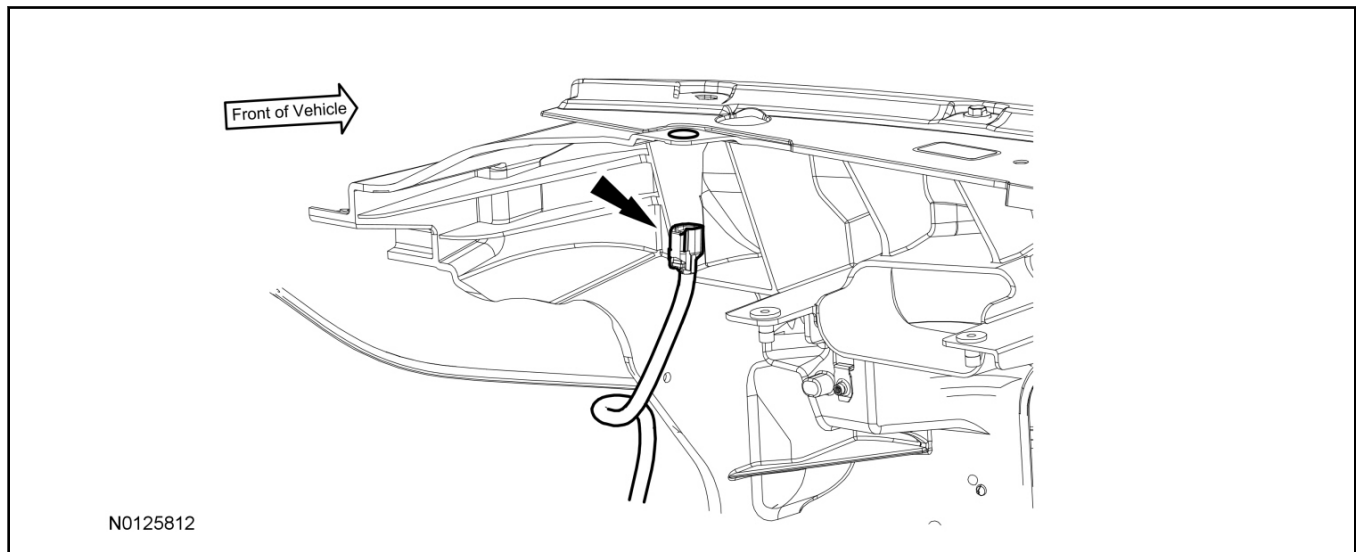
### **Hood Switch Installation**

**NOTE:**

Hood switch installation is only required if the vehicle is not currently equipped with a hood switch.

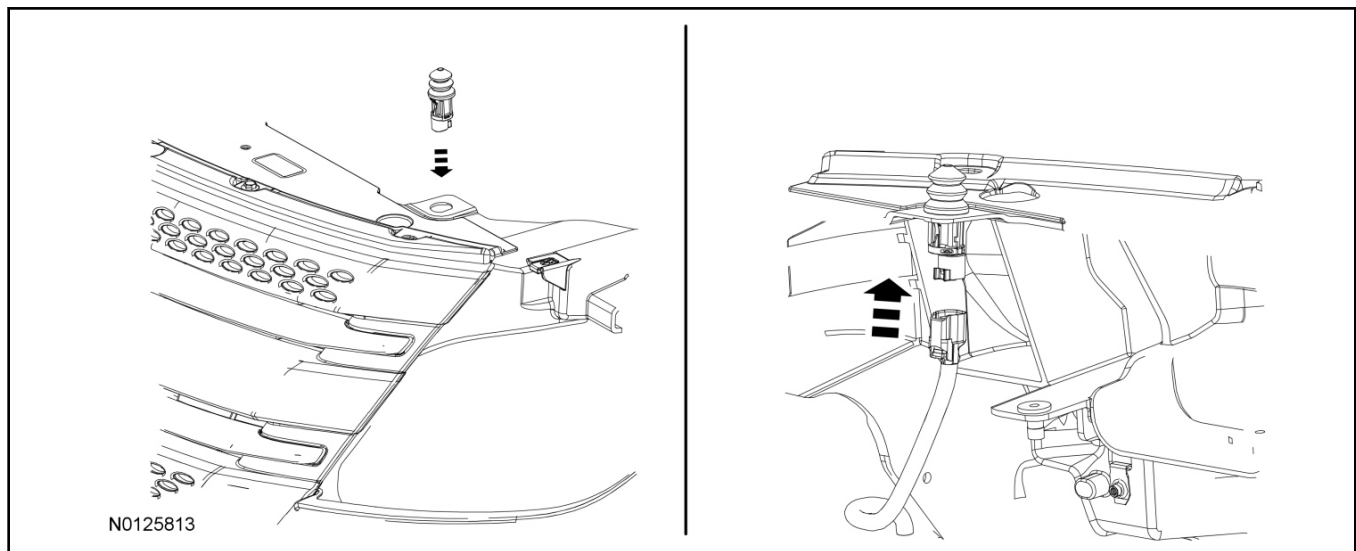
13. Locate the vehicle's existing "OE" hood switch wire harness, located on the LH side of the vehicle below the radiator core support.

- If required remove the vehicle's air cleaner assembly, to access the vehicles "OE" hood switch wire harness. For additional information, refer to Workshop Manual (WSM), Section 303-12.

**INSTALLATION (Continued)**

14. Install the OE hood switch assembly to the existing hood switch mounting location, on the LH side of the upper radiator core support as shown.

- If equipped, remove the dummy plug from the upper radiator core support.
- Position the flat spot on the hood switch to the flat spot on the radiator core support.
- Connect the electrical connector to the hood switch.



**INSTALLATION (Continued)****Remove Trim**

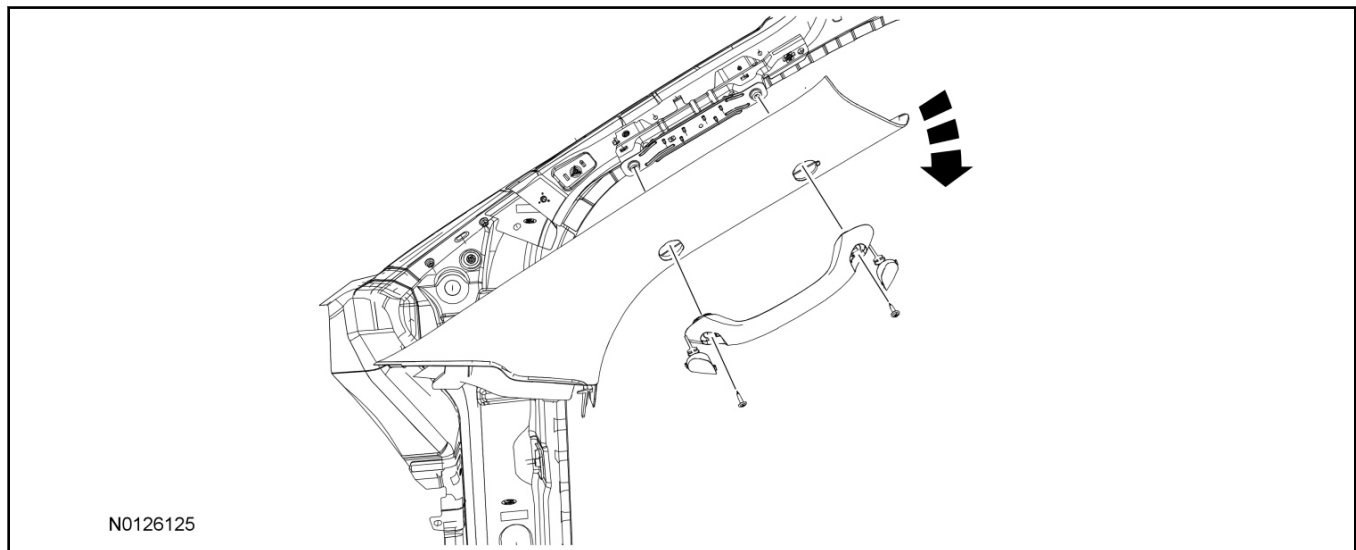
15. Position the RH front door weatherstrip away from the A-pillar trim panel.

16. **NOTICE:**

**The A-Pillar assist handle bolt covers have a tether attaching them to the assist handle and do not come off the assist handle.**

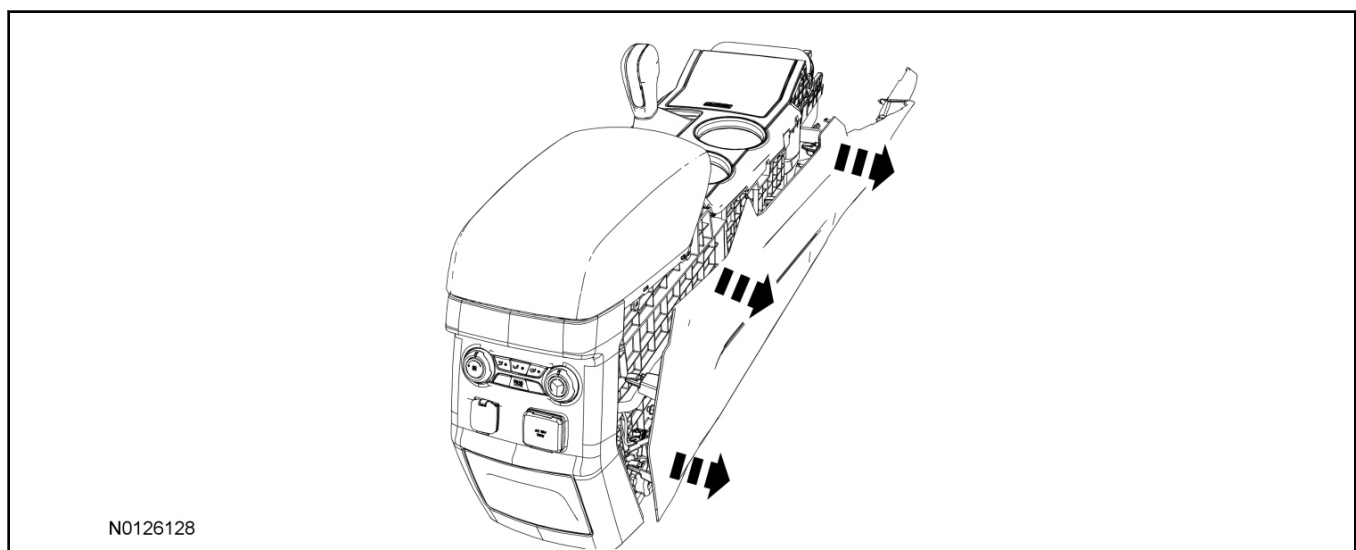
Remove the RH A-pillar trim panel.

- 1 Remove the 2 A-pillar assist handle bolt covers.
- 2 Remove the 2 A-pillar assist handle bolts and the A-pillar assist handle.
- 3 Pull outward on the A-pillar trim panel to release the clips and remove the trim panel.



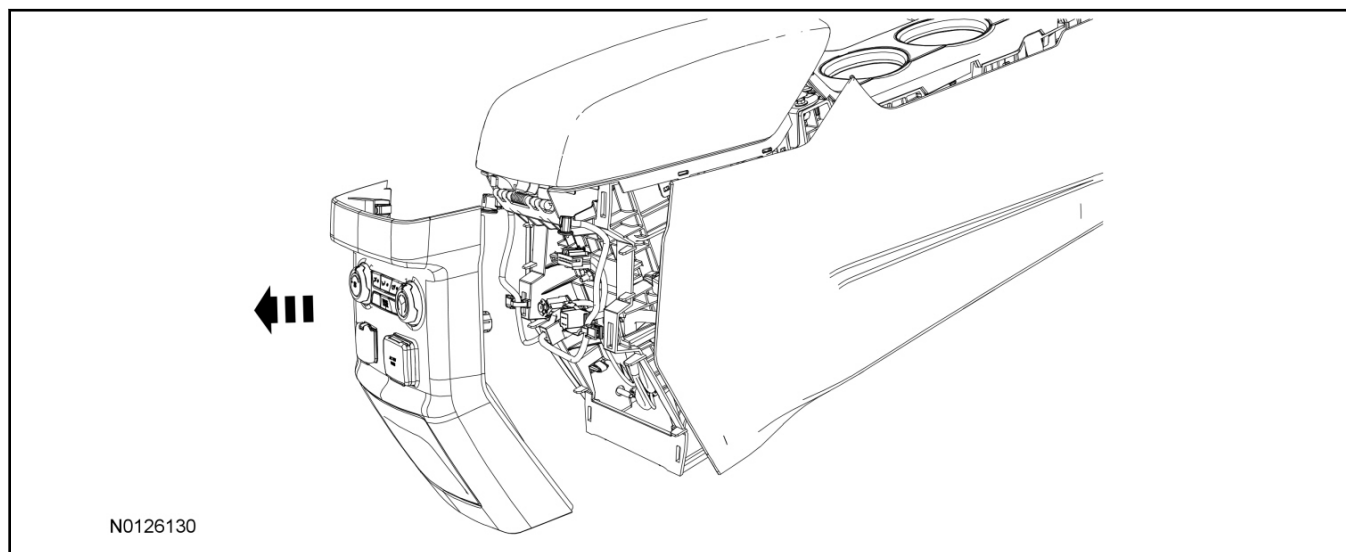
17. Remove the glove compartment opening door, For additional information, refer to Workshop Manual (WSM), Section 501-12.

18. Detach the RH floor console side trim panel from the floor console.

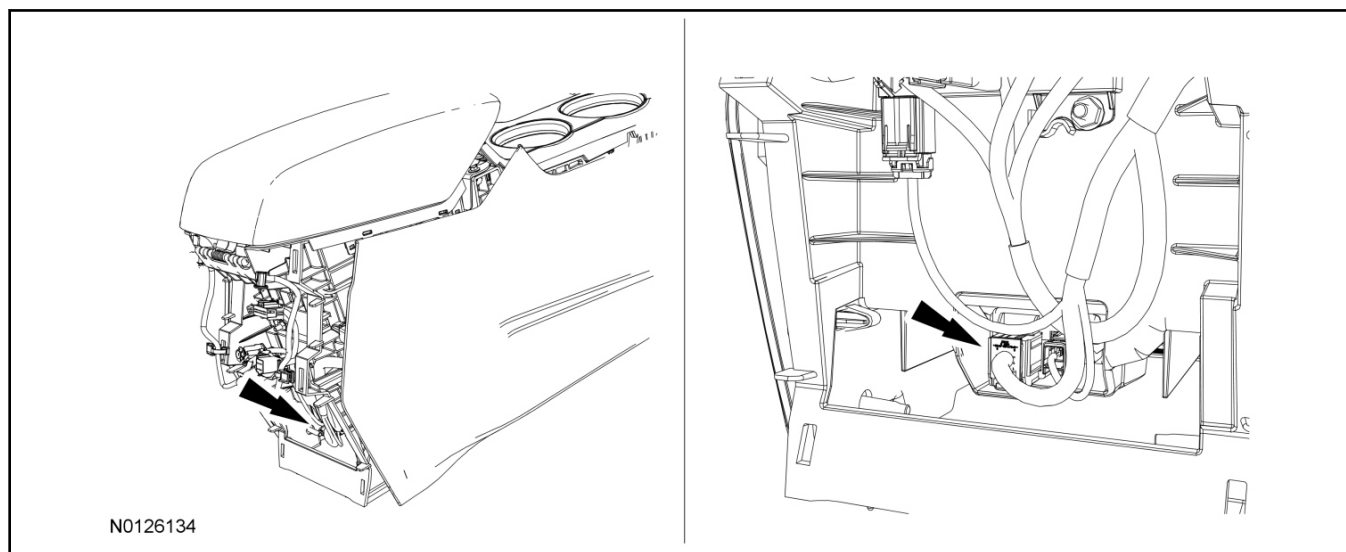


**INSTALLATION (Continued)**

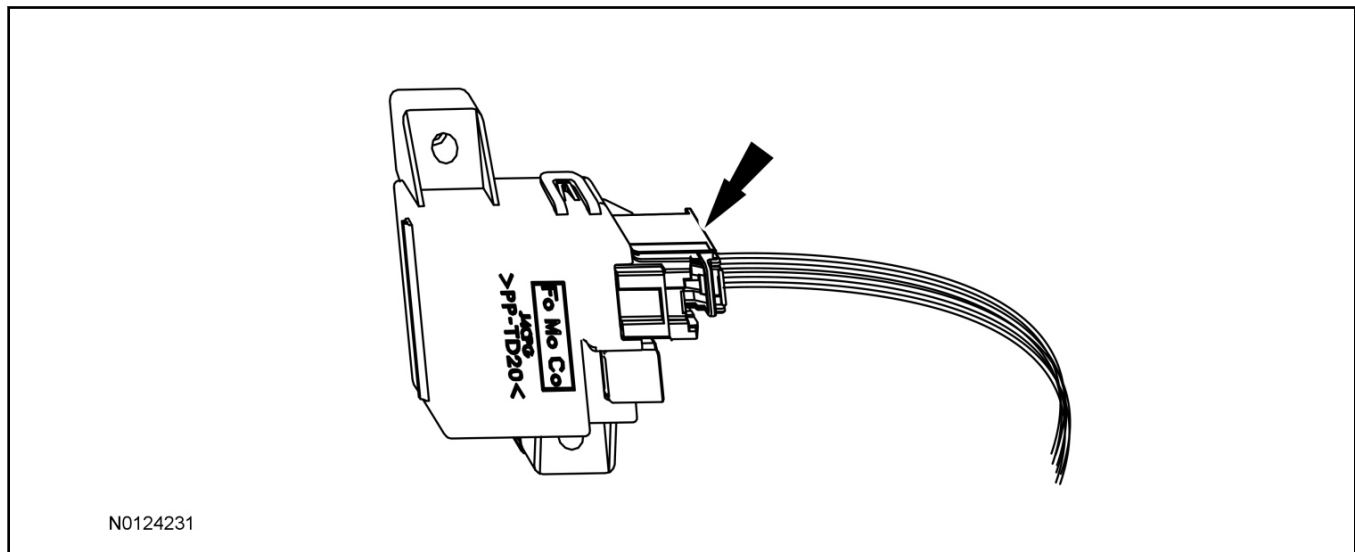
19. Detach the floor console rear trim panel from the floor console.



20. Locate the Tire Pressure Monitor (TPM) Module.



21. **NOTE:**  
Floor console removed for clarity.  
Disconnect the TPM module.

**INSTALLATION (Continued)**

N0124231

**Bi-directional Antenna Mounting****NOTE:**

For good range of operation, the bi-directional antenna must be installed correctly.

**NOTE:**

Keep these points in mind when selecting a location and mounting the antenna.

- Do not mount the bi-directional antenna behind or on any metal film or window tinting on the windshield.
- Do not mount the bi-directional antenna so that one of the bi-directional antenna elements touches or crosses any vehicle wiring and/or metal.
- On vehicles without metal film in the windshield around the rear view mirror, mount the bi-directional antenna between the headliner and the rear view mirror.
- On vehicles equipped with an electronic mirror, or on vehicles with metal film around the rearview mirror, mount the bi-directional antenna approximately 3 inches below the mirror attachment point to the windshield and/or mirror electronics.

22. Choose a suitable bi-directional antenna mounting location based on the guidelines above.

**Install The Bi-directional Antenna**

23. Clean the mounting surface using an alcohol base solution and a clean cloth.

**NOTE:**

Do not touch the adhesive, reduced adhesion may result.

**NOTE:**

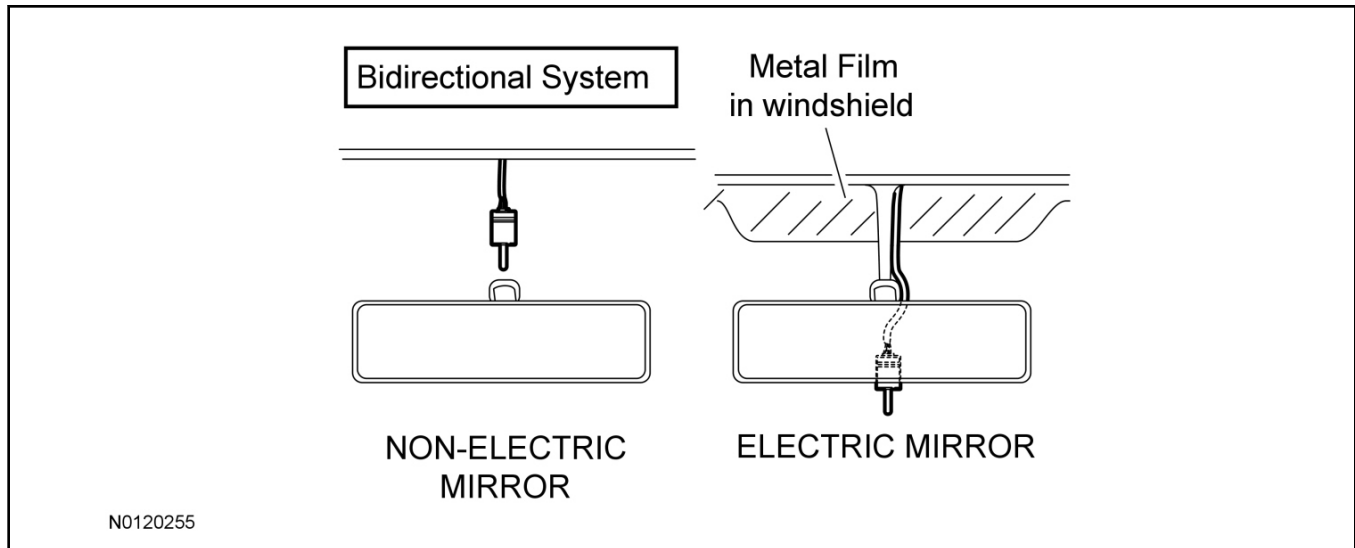
Make sure that the long wire on the bi-directional antenna is pointing towards the top of the windshield since this wire will be routed along the headliner.

**NOTE:**

The bi-directional antenna electrical connector will be attached to the control module later in this procedure.

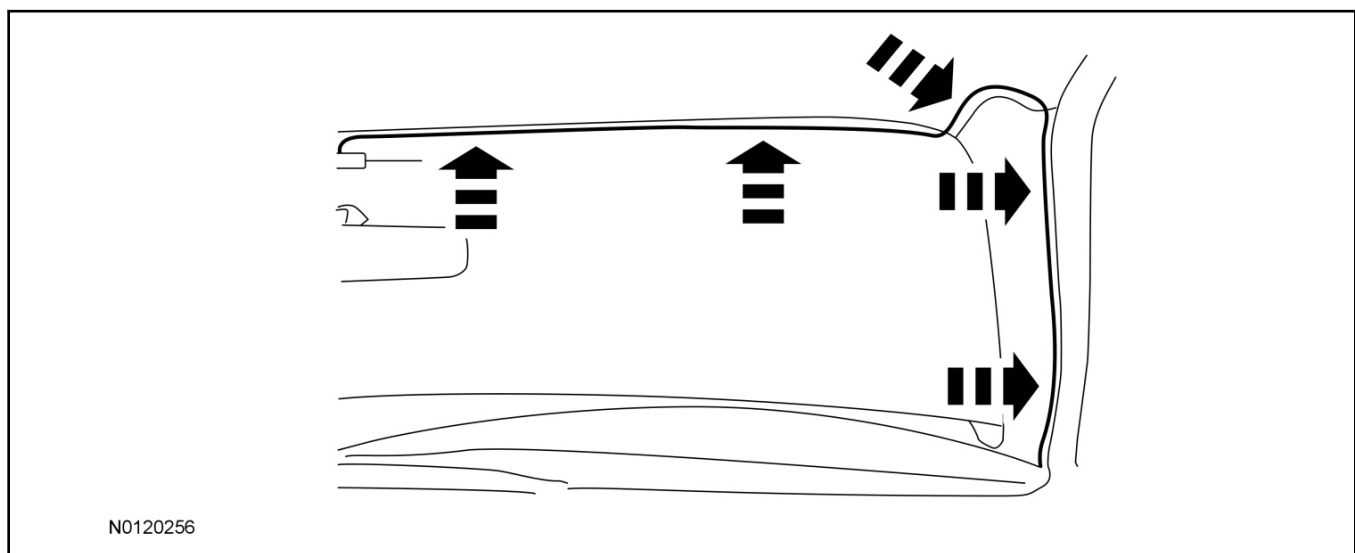
**INSTALLATION (Continued)**

24. Remove the protective backing from the adhesive on the bi-directional antenna and firmly press the body of the bi-directional antenna to the windshield.



25. Route the bi-directional antenna cable.

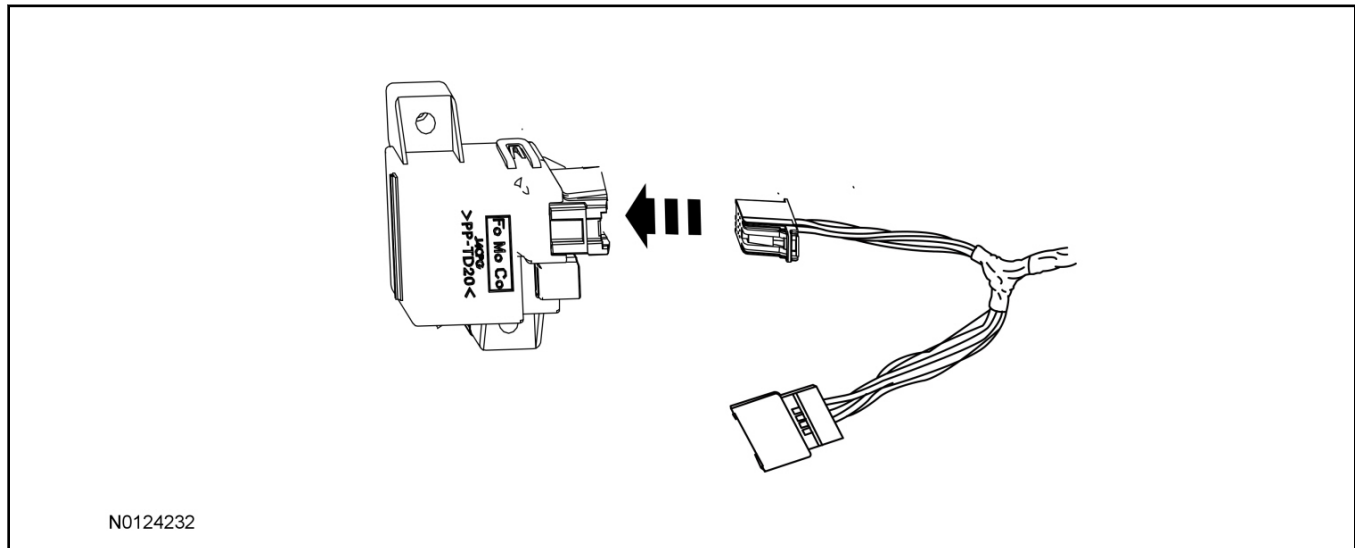
- Route inside the headliner to the A-pillar.
- Route down the A-pillar, behind the side air bag. Secure as required with tie-straps.
- Continue routing into the RH instrument panel side trim area and inside the instrument panel, coming out of the glove box.



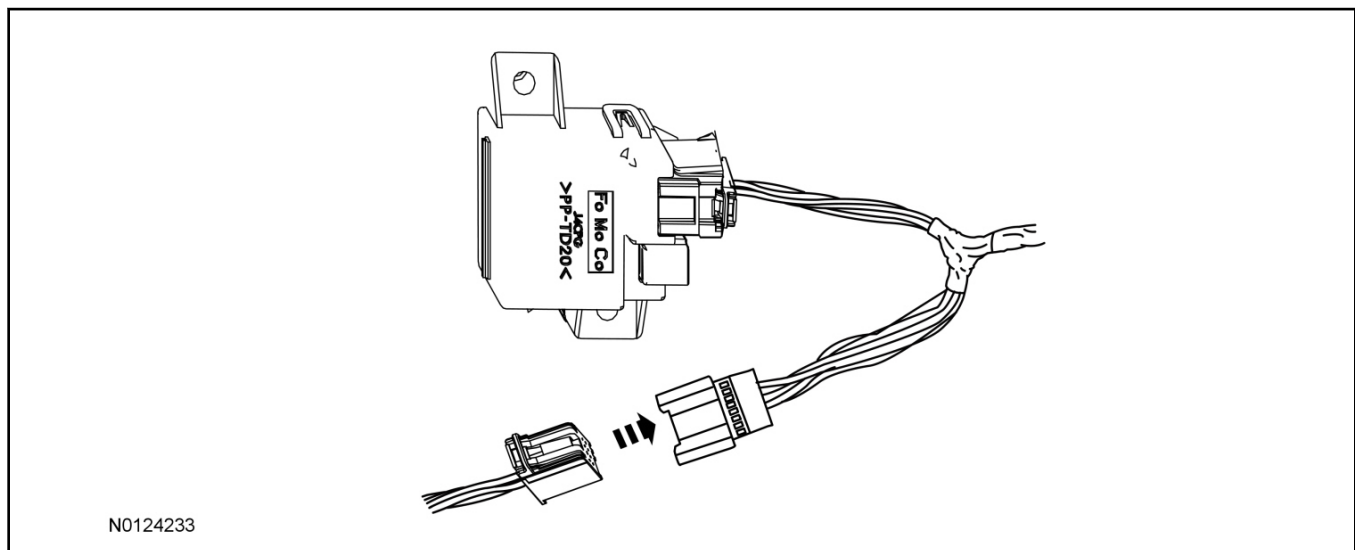


**INSTALLATION (Continued)****Install T-Harness**

26. Connect the female end of the 8-pin T-harness to the TPM module.



27. Connect the male end of the 8-pin T-harness to the vehicle's existing TPM module harness.



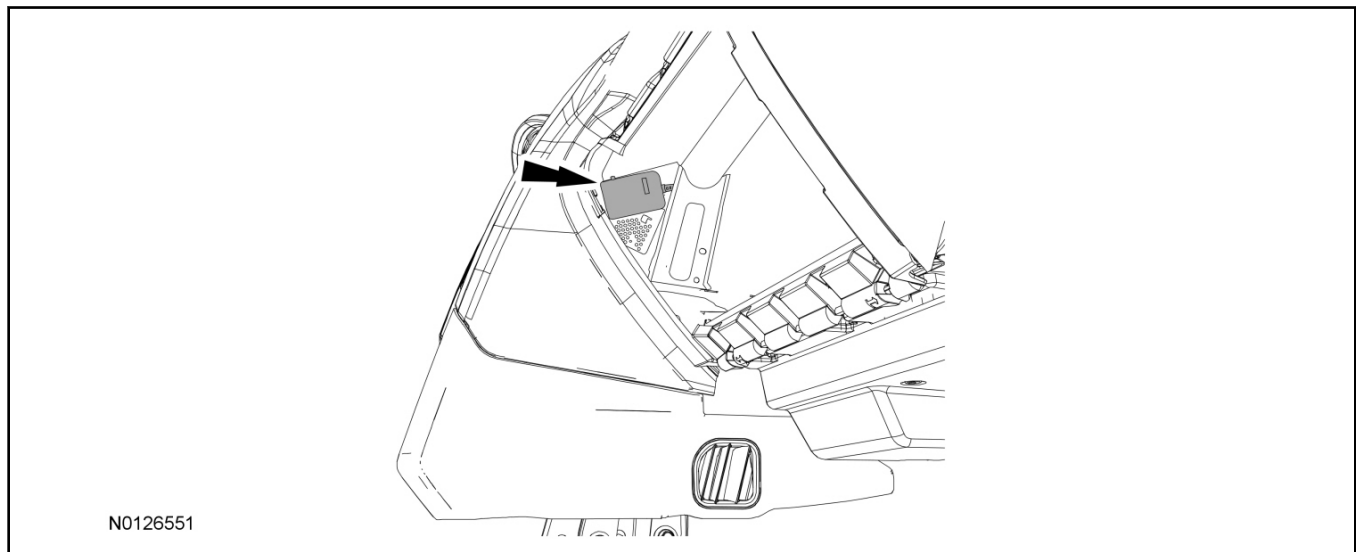
28. Route the T-harness along the floor console, from the TPM module to the glove box opening.

- Secure the T-harness with tie-straps.

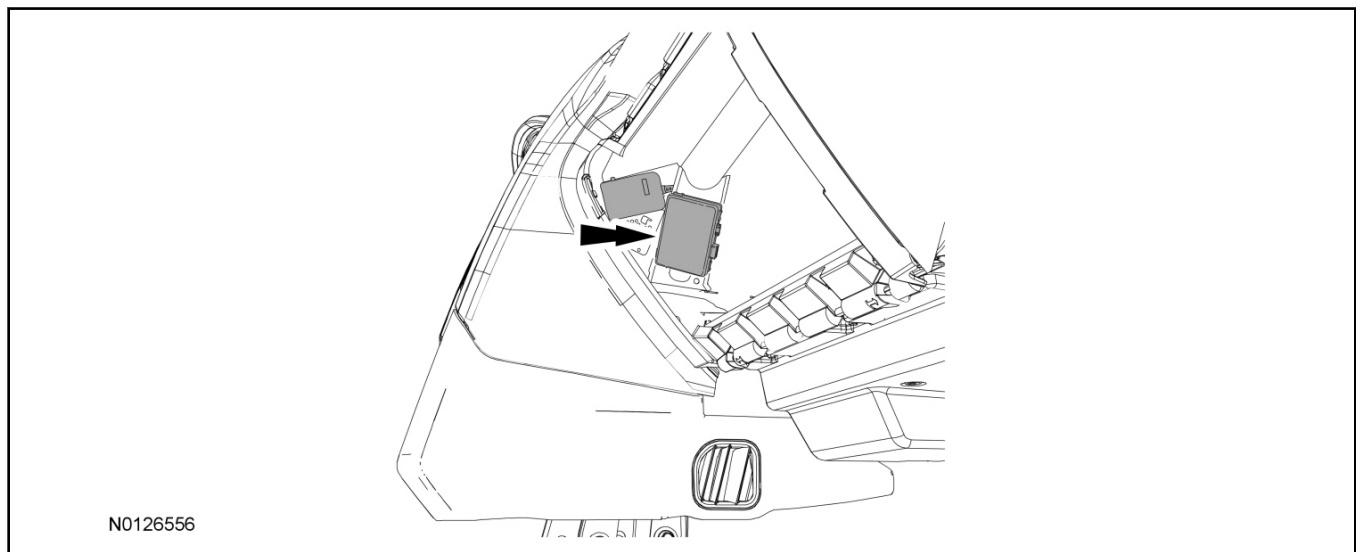
**Shock Sensor Mounting**

29. Mount the Shock Sensor onto the instrument panel frame.

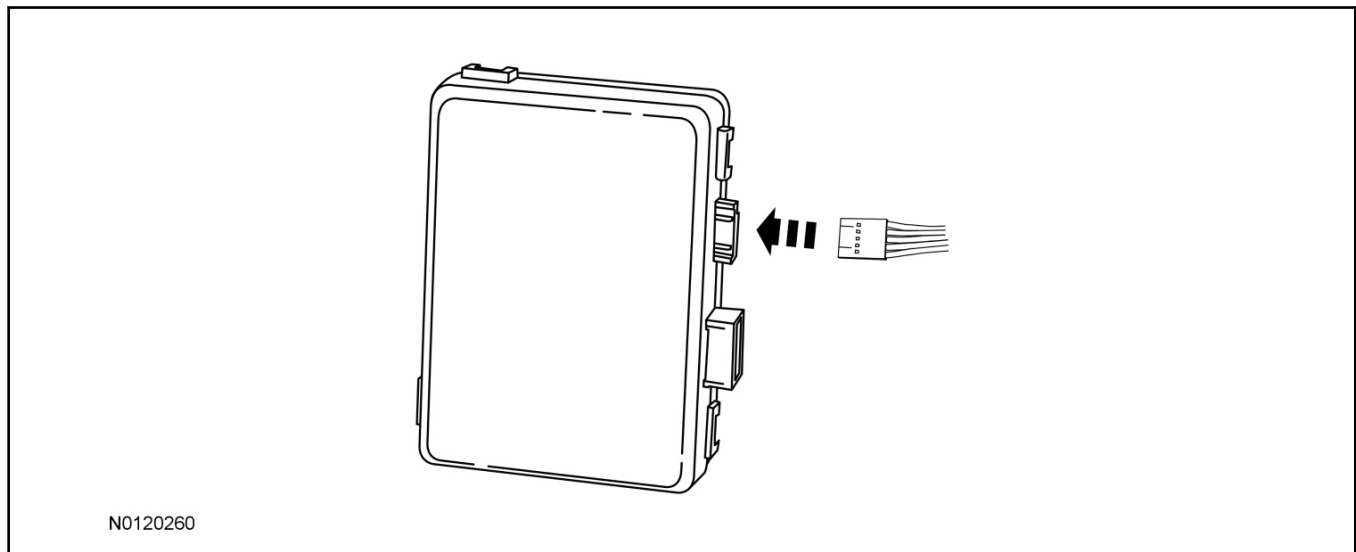
- Secure with tie-straps.

**INSTALLATION (Continued)****Install CGEA Module**

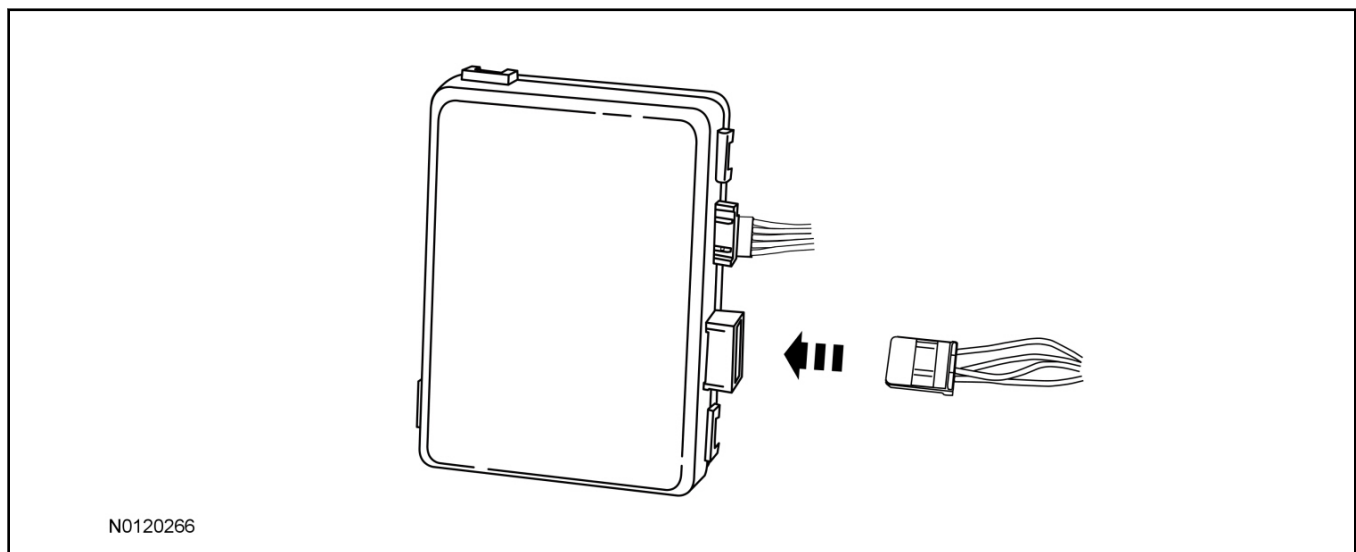
30. Position the CGEA module into the glove box opening. Secure the CGEA module to the glove box frame with tie-straps.



31. Connect the bi-directional antenna to the CGEA module.
- Secure the bi-directional antenna harness with tie-straps.

**INSTALLATION (Continued)**

32. Connect the T-harness to the CGEA module.

**LED Mounting**

33. Route the LED harness through the instrument panel to the driver side of the vehicle.
34. Using the following guidelines select a mounting location for the LED on the driver's side of the vehicle.
- Have at least 3/4" clearance behind any trim panel for the wiring harness to be routed.
  - Be clearly visible from the driver's side window.
  - Do not mount the LED on trim panels that cover air bags.
35. Mount the LED at an appropriate location on the driver's side of the vehicle using the guidelines listed above.
- Drill a 9/32" hole into the selected location, for the LED to mount in.
36. Secure the LED wire harness with tie-straps.

**INSTALLATION (Continued)**

---

**Remote Start/Vehicle Security Harness - Programming Button**

37. Use the following guidelines when securing the programming button.

- Secure on the passenger side of the vehicle.
- Must be hidden from view.
- Must be accessible without removing trim.
- Secure with tie-straps.

**Install Trim**

38. Install the floor console rear trim panel to the floor console.

39. Attach the RH floor console side trim panel, to the floor console.

40. Install the glove compartment opening door, For additional information, refer to WSM, Section 501-12.

**NOTE:**

Check the routing of the bi-directional antenna wire to make sure it will not interfere with A-pillar trim panel installation.

41. Install the RH A-pillar trim panel.

- 1 Install the A-pillar assist handle and the 2 A-pillar assist handle bolts.
  - Tighten to 9 Nm (80 lb-in).
- 2 Install the 2 A-pillar assist handle bolt covers.

42. Position the RH front door weatherstrip back around the A-pillar trim panel.

**Remote Start Activation**

43. Verify that the IDS is updated to the most current version.

44. Connect IDS.

- Follow the prompts to select new vehicle session.
- Enter VIN.

45. Activate the remote start using the IDS.

- Select the Tool Box icon.
- Select Body.
- Select Security.
- Select Remote Start.
- Verify that the information on the IDS screen is correct and all procedures have been followed.
- Select Yes. This will enable the remote start function on the vehicle.

**INSTALLATION (Continued)**

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46. For vehicles equipped with standard message center, verify that the remote start option now appears.
  - Using the Select and Arrow buttons on the steering wheel, select Settings.
  - Select Convenience.
  - Select Remote Start.
  - Select System.
  - Verify that the remote start system is checked.
47. For vehicles equipped with advanced message center, verify that the remote start option now appears.
  - Using the Select and Arrow buttons on the steering wheel, select Settings.
  - Select Vehicle Settings.
  - Select Vehicle.
  - Select Remote Start System.
  - Verify that the remote start system is enabled.

**Programming the Panic/Car Finder Button****NOTE:**

Make sure the brake pedal is not depressed during this sequence.

48. Press the vehicle's unlock button located on the driver's door. Make sure all doors are unlocked.
49. Put the key in the ignition.
50. Cycle eight times rapidly (within 10 seconds) between the 1 (OFF/LOCK) position and 3 (ON) position.
  - The eighth turn must end in the 3 (ON) position. The doors will lock, then unlock, to confirm that the programming mode has been activated.
51. Wait for 10 seconds and the remote start module will program itself to the system.
  - After 20 seconds, you will automatically exit the programming mode. The doors will lock, then unlock, to confirm that the programming mode has been exited.
52. Press and release the Panic/Car Finder button on the remote start keyfob to confirm that the button has been programmed. The vehicle should honk 4-6 times.

**Vehicle Security System Activation**

53. Cycle the vehicle ignition from OFF to ON.
54. Wait 10 seconds.
55. Press and hold the Program Override Button for 3 seconds. The LED will turn ON for 5 seconds. The parking lights will flash, and the horn will honk once to confirm Vehicle Security activation.
56. Turn OFF the vehicle ignition.

**INSTALLATION (Continued)****Functional Test**

57. The Shock Sensor sensitivity setting defaults to maximum sensitivity (fully clockwise). This level can be reduced by turning the knob on the sensor counter clockwise to the desired sensitivity.

- With the Vehicle Security System armed, a light tap of the Shock Sensor should trigger the warning chirp.
- With the Vehicle Security System armed, a hard tap of the Shock Sensor should trigger the vehicle panic alarm.

**NOTE:**

Do not put a key in the ignition for the following steps.

58. Make sure the shift lever is in PARK and the ignition is in the OFF position. Remove all keys from the vehicle.

59. Close the hood.

60. Close all of the vehicle doors.

61. Start the vehicle by pressing the remote start button 2 times on the bi-directional key fob.



62. Confirm the remote start works with the vehicle in park and with the hood and doors closed.

63. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.

64. Open the hood.

65. **NOTE:**

Vehicle doors should be closed while performing this step.

Confirm that the vehicle will not start with the hood open.

**Please contact Ford Hotline with any issues regarding remote start functionality.**

**Please contact 1-800-FORD-KEY with any issues regarding hardware or kit contents.**

# **RKE/VSS/REMOTE START SYSTEM INSTALLATION**

## **CONTENTS**

### **VEHICLE PREPARATION**

Hood Switch Kit Installation

### **INSTALLATION**

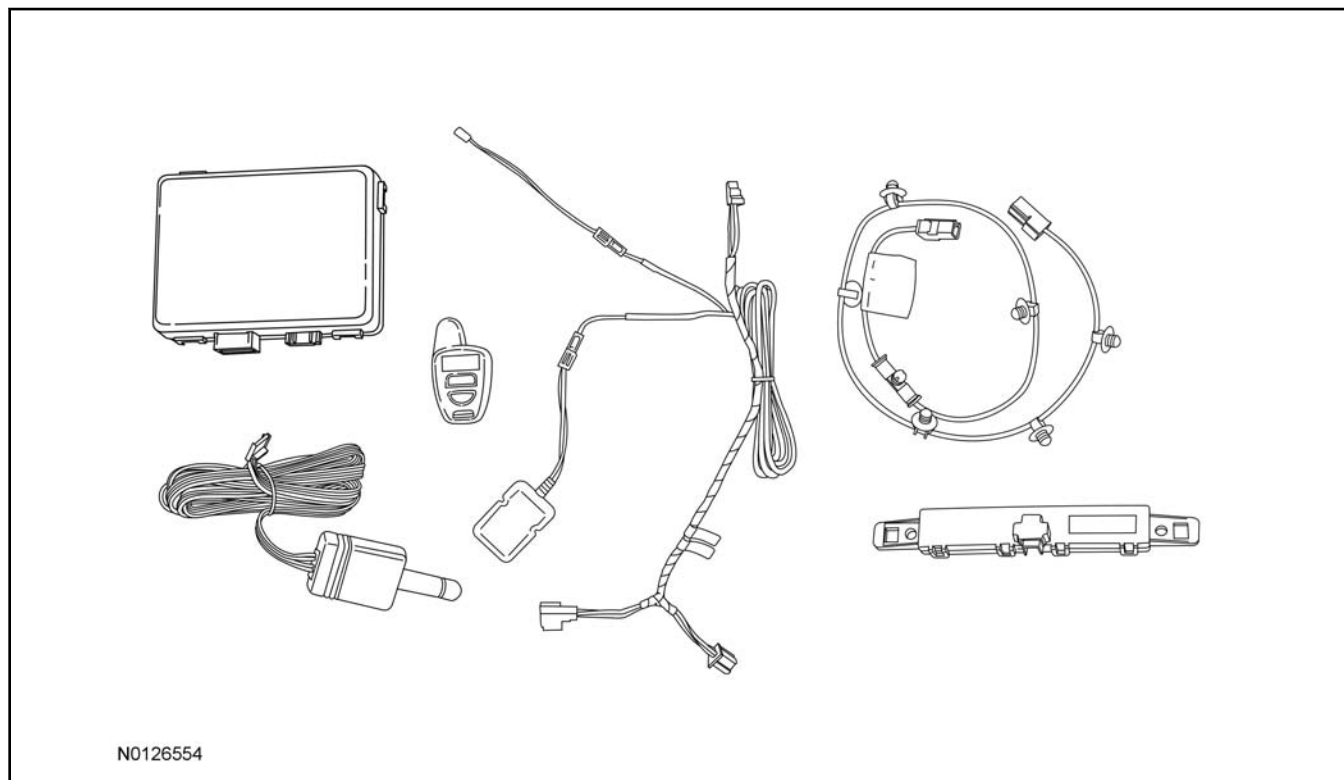
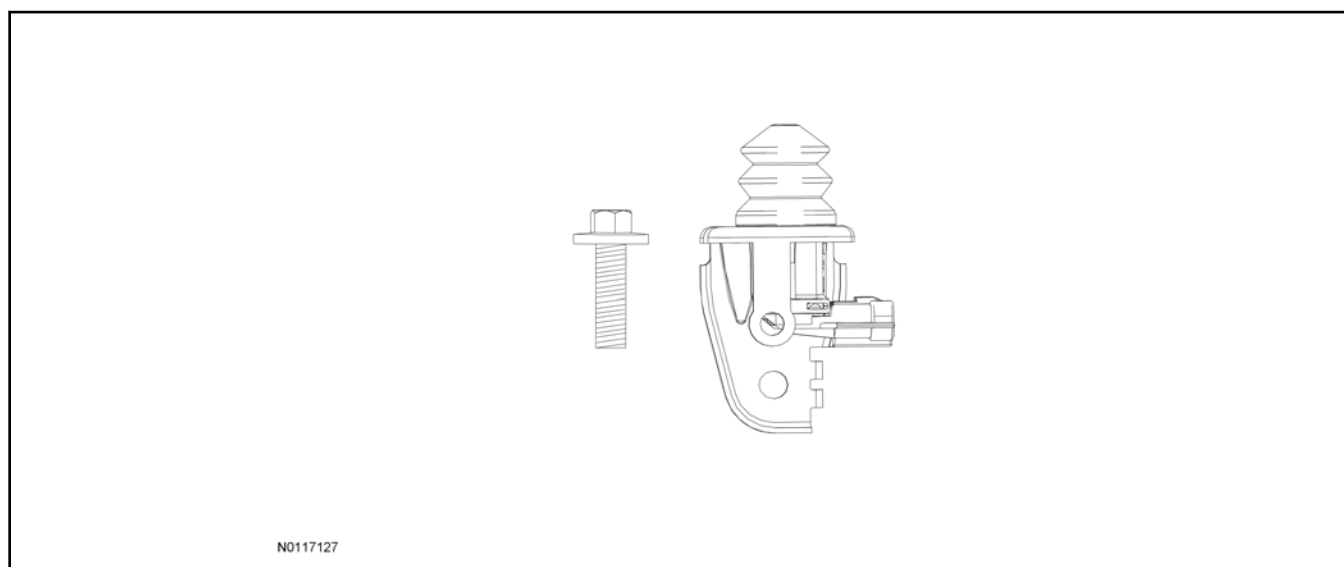
RKE/VSS/Remote Start

### **GENERAL PROCEDURES**

Remote Start System Activation

Functional Test

User Preferences

**INSTALLATION****Remote Start System/Vehicle Security — F-Super Duty****Remote Start System/Vehicle Security (RMST/VSS) Components****Hood Switch Kit Components - Sold separately if needed****F-Super Duty**

1. Verify correct kit number.



**INSTALLATION (Continued)****Review The Remote Start System/Vehicle Security (RMST/VSS) Installation Kit Contents**

2. Review the RMST/VSS kit contents.

**Remote Start System/Vehicle Security (RMST/VSS) kit**

QUANTITY	DESCRIPTION
1	Bi-directional Key Fob
1	Antenna Jumper Wire
1	Antenna Module
1	Remote Start Module
1	Bi-directional Antenna
1	TPM Module T-harness
1	Shock Sensor
1	LED

**Review Hood Switch Kit Contents**

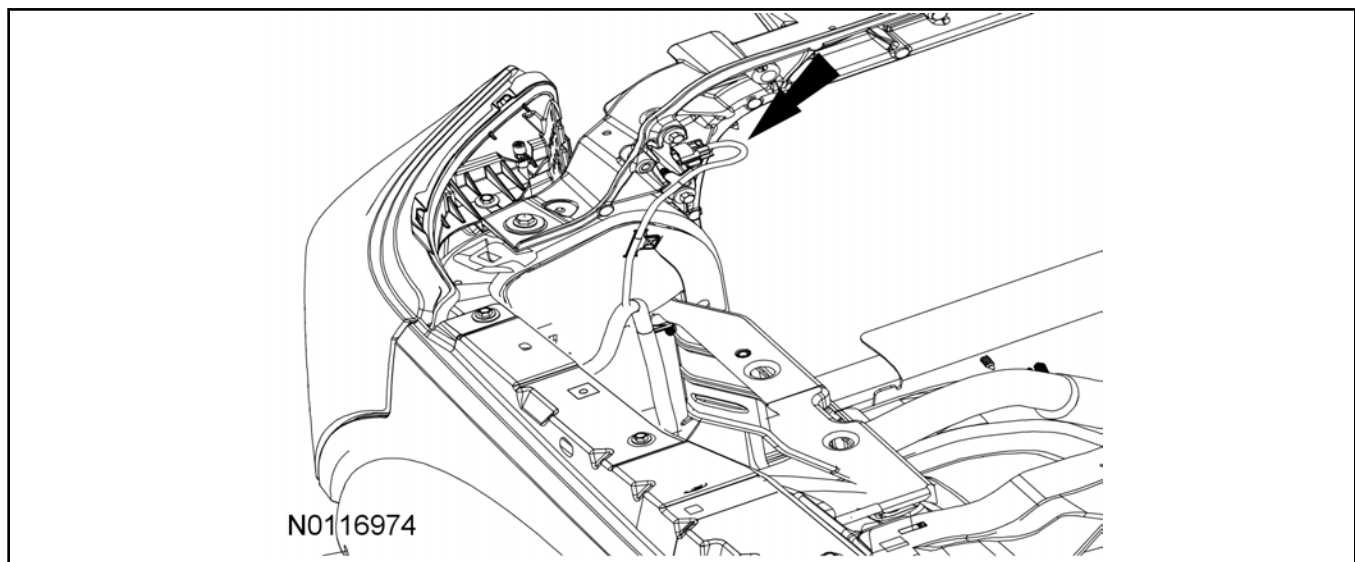
3. Review the Hood Switch kit contents.

**Hood Switch OE Kit**

QUANTITY	DESCRIPTION
1	Bolt
1	Hood Switch Assembly

**Hood Switch Installation (If Required)**

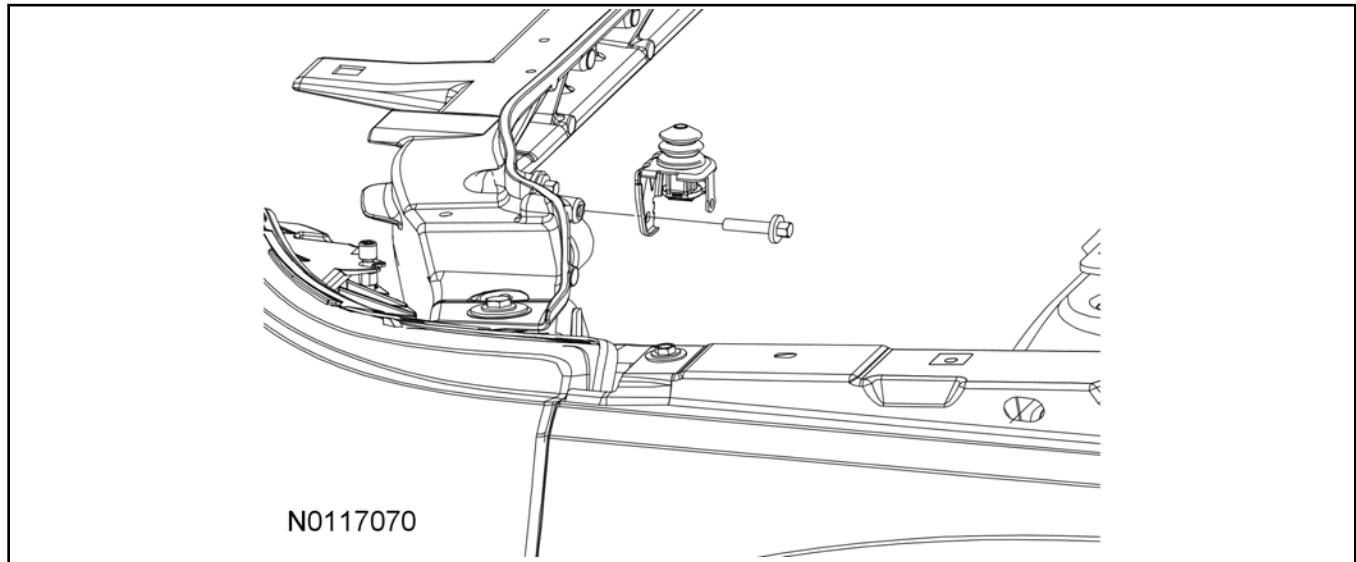
4. Verify that an OE hood switch is installed.
- If the vehicle is not equipped with an OE hood switch see hood switch installation in this procedure.
5. Locate the hood switch harness located on the LH side of the upper radiator core support.



6. Install the Hood switch assembly to the existing hood switch mounting on the upper radiator core support as shown.

**INSTALLATION (Continued)**

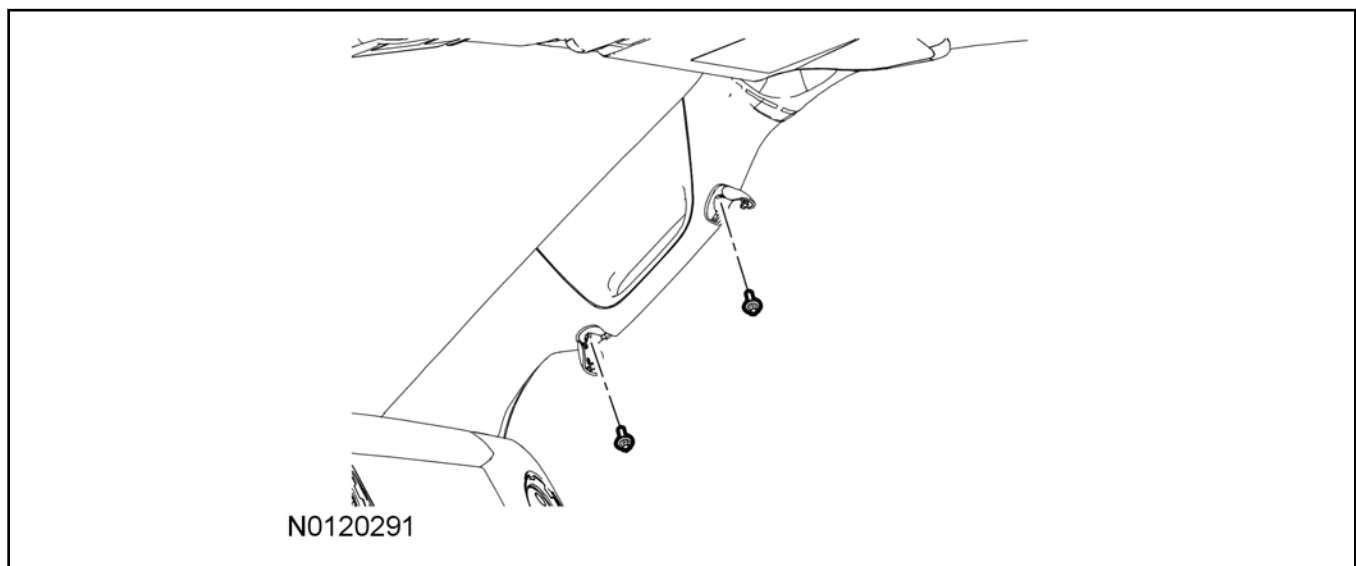
- Install the bolt.
- Tighten to 10 Nm (89 lb-in).



7. Connect the electrical connector to the hood switch.
8. Install the hood switch wire harness push pin retainer to the hood switch bracket.

**Vehicle preparation**

9. Remove the RH instrument panel side trim.
10. Open the RH A-pillar trim panel bolt covers.
11. Loosen the RH A-pillar trim panel bolts.

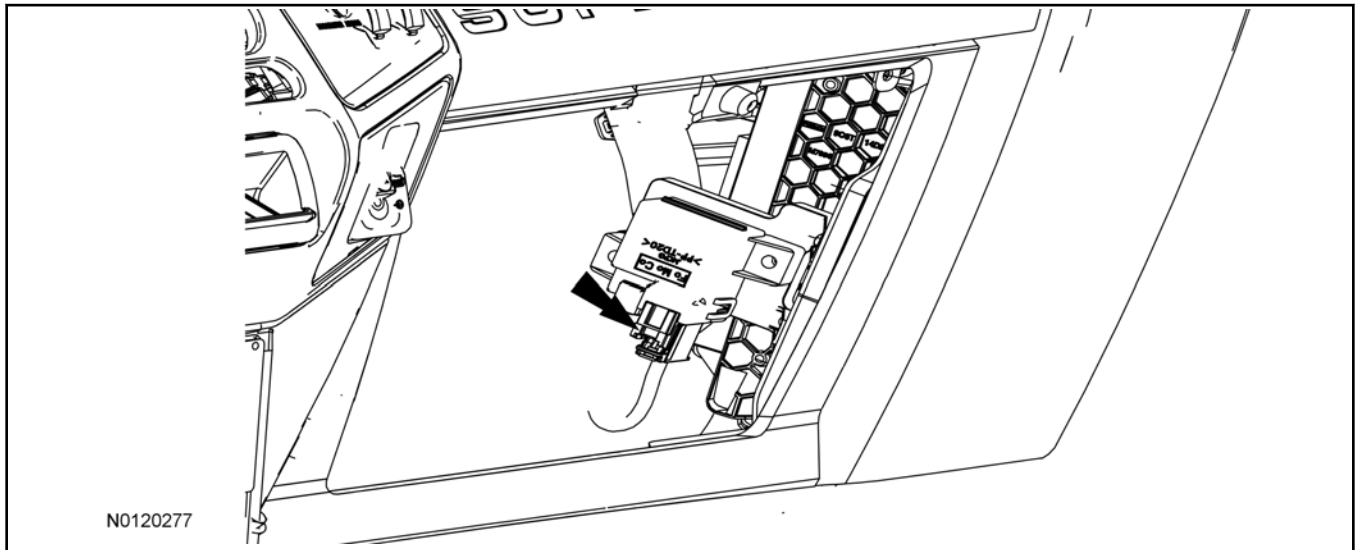
**NOTE:**

Carefully rotate the A-pillar trim panel during this step.

12. Remove the RH A-pillar trim panel.
13. Open the glove compartment and empty the contents.

**INSTALLATION (Continued)**

14. Push in the 2 side tabs and fully lower the glove compartment.
15. Disconnect the TPM module.

**Bi-directional Antenna Mounting****NOTE:**

For good range of operation, the bi-directional antenna must be installed correctly.

**NOTE:**

Keep these points in mind when selecting a location and mounting the antenna.

- Do not mount the bi-directional antenna behind or on any metal film or window tinting on the windshield.
- Do not mount the bi-directional antenna so that one of the bi-directional antenna elements touches or crosses any vehicle wiring and/or metal.
- On vehicles without metal film in the windshield around the rear view mirror, mount the bi-directional antenna between the headliner and the rear view mirror.
- On vehicles equipped with an electronic mirror, or on vehicles with metal film around the rearview mirror, mount the bi-directional antenna approximately 3 inches below the mirror attachment point to the windshield and/or mirror electronics.

16. Choose a suitable bi-directional antenna mounting location based on the guidelines above.

**Install The Bi-directional Antenna**

17. Clean the mounting surface using an alcohol base solution and a clean cloth.

**NOTE:**

Do not touch the adhesive, reduced adhesion may result.

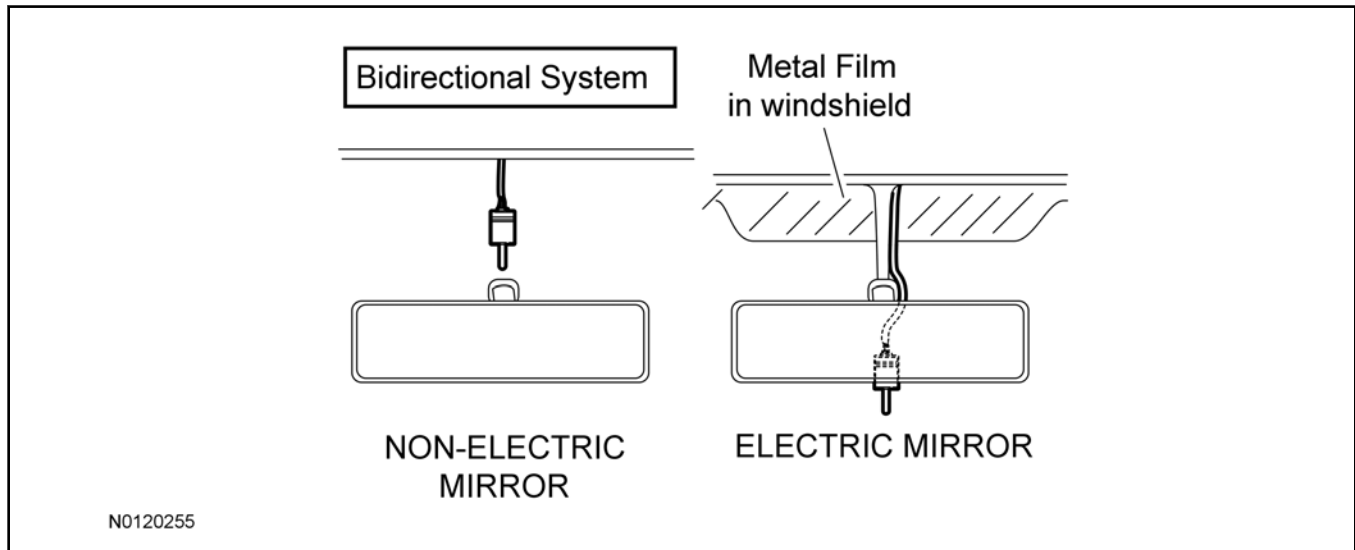
**NOTE:**

Make sure that the long wire on the bi-directional antenna is pointing towards the top of the windshield since this wire will be routed along the headliner.

**INSTALLATION (Continued)****NOTE:**

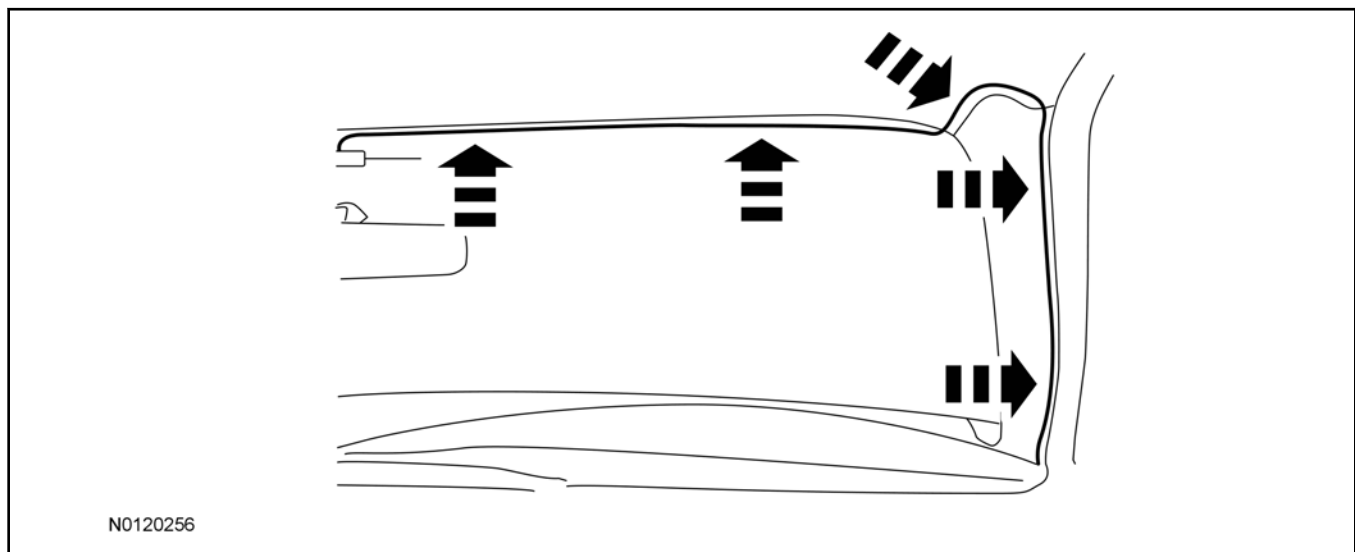
The bi-directional antenna electrical connector will be attached to the control module later in this procedure.

18. Remove the protective backing from the adhesive on the bi-directional antenna and firmly press the body of the bi-directional antenna to the windshield.



19. Route the bi-directional antenna cable.

- Route inside the headliner to the A-pillar.
- Route down the A-pillar, behind the side air bag. Secure as required with tie-straps.
- Continue routing into the RH instrument panel side trim area and inside the instrument panel, coming out of the glove box.

**Installation**

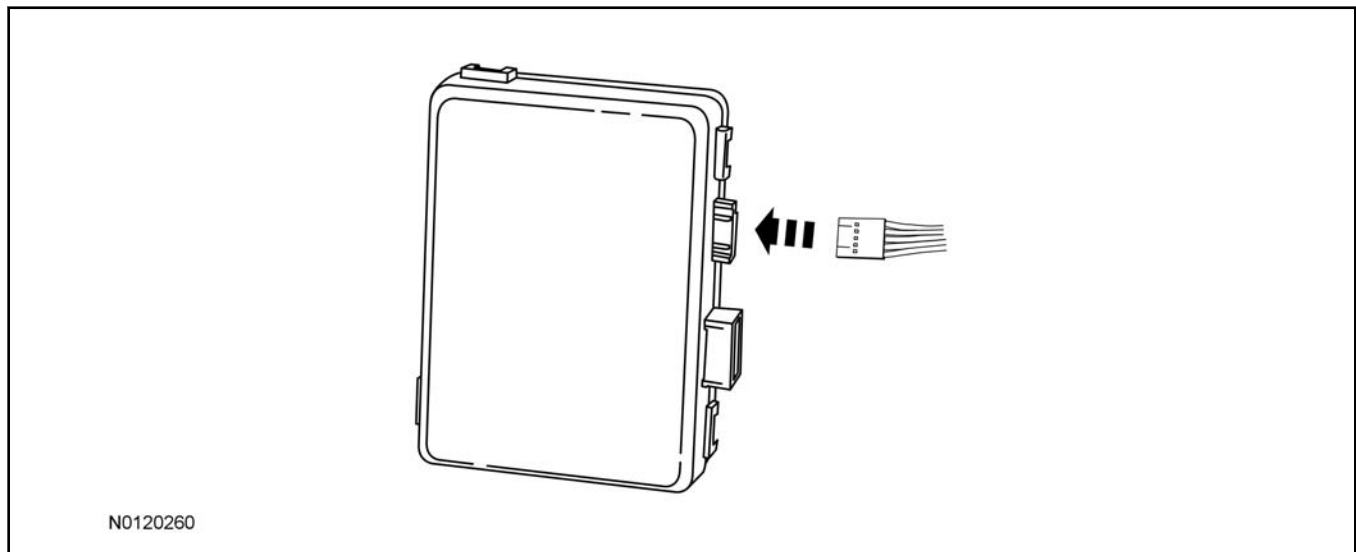
20. Install the CGEA module to the vehicle.

- Mount to the bulkhead metal surface behind and to the right of the TPM module.

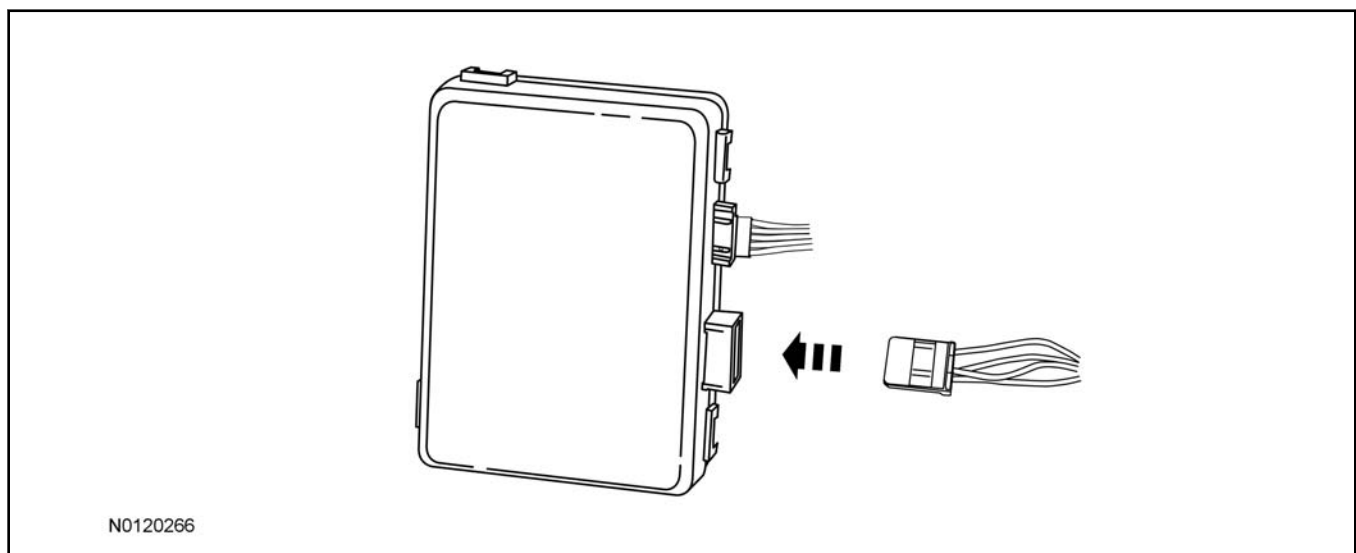
21. Connect the bi-directional antenna to the CGEA module.

**INSTALLATION (Continued)**

- Secure the bi-directional antenna harness with tie-straps.



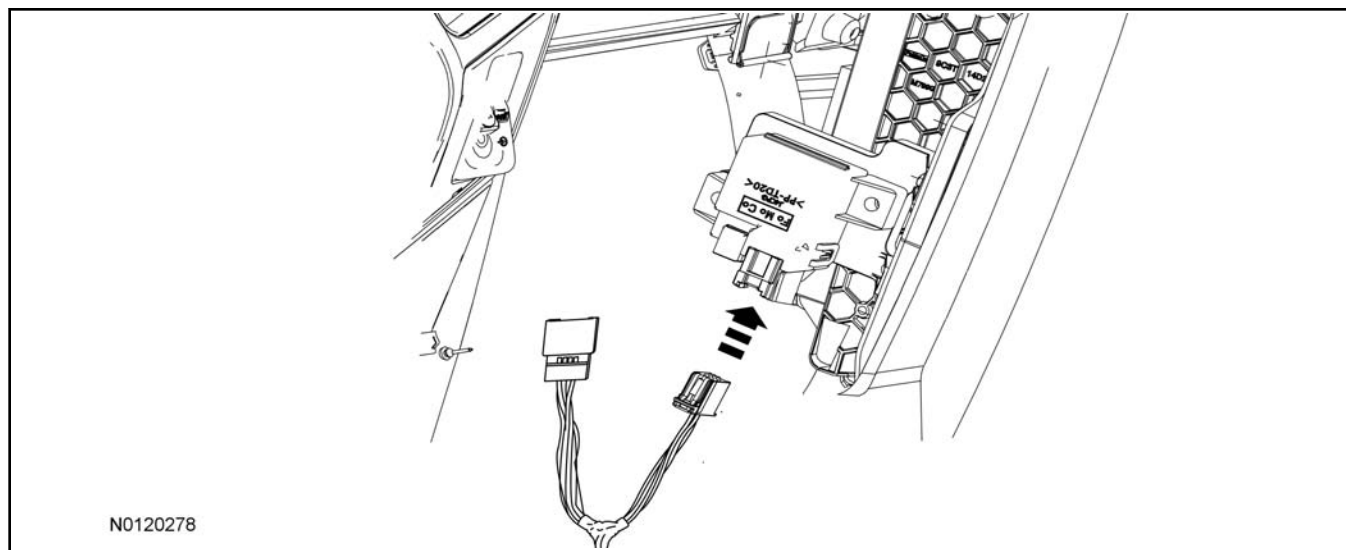
22. Connect the T-harness to the remote start module.



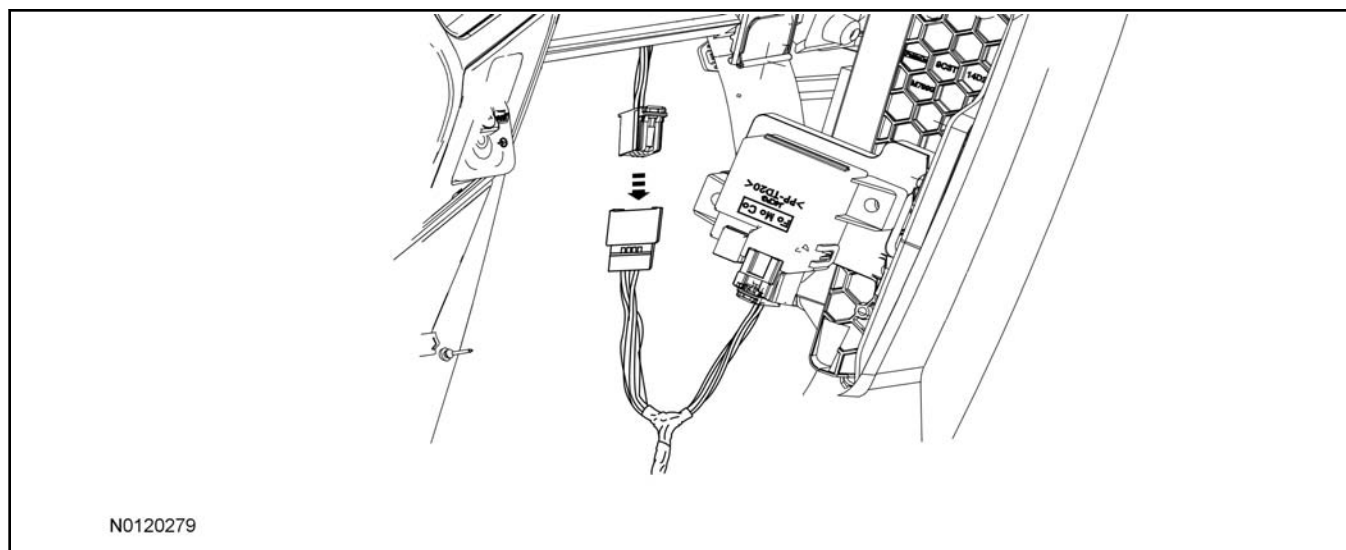
23. Route the female end of the T-harness to the TPM module.

- Secure the harness with tie-straps.

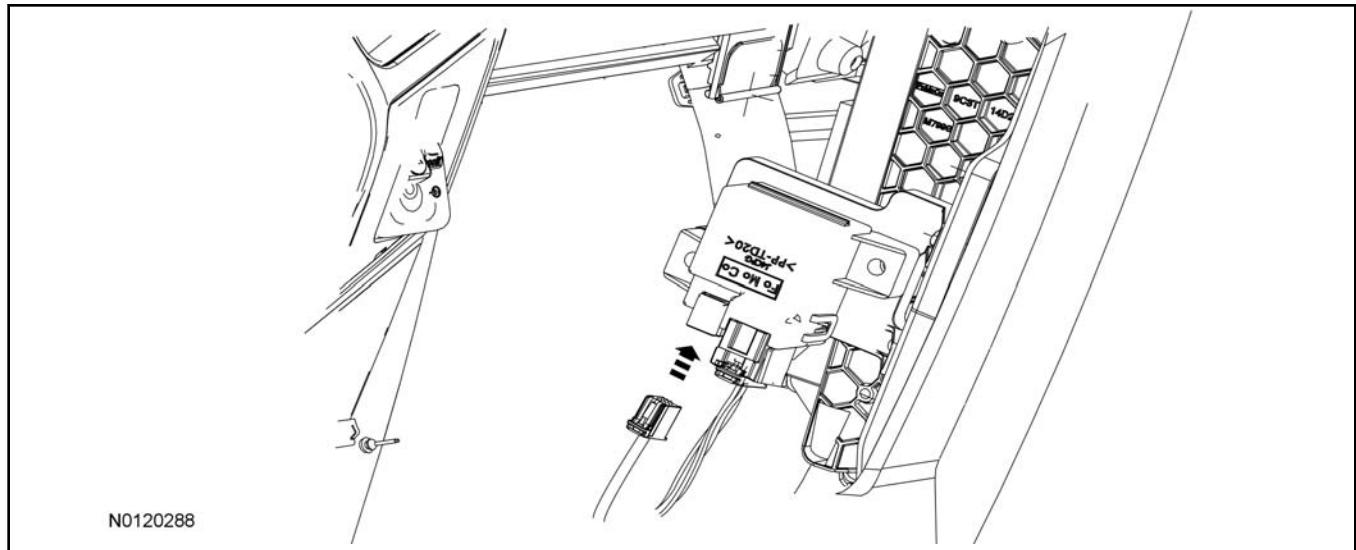
24. Connect the female end of the 8-pin T-harness to the TPM module.

**INSTALLATION (Continued)**

25. Connect the male end of the 8-pin T-harness to the vehicle's existing TPM module harness.



26. Connect the antenna jumper wire to the TPM module.

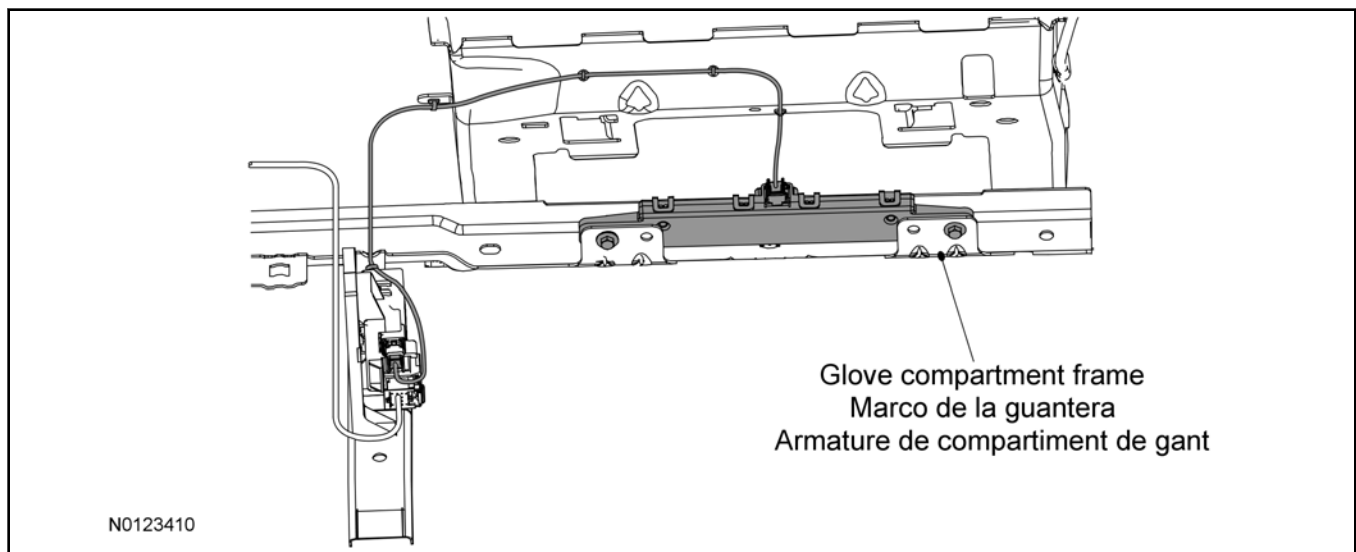
**INSTALLATION (Continued)****27. NOTE:**

View is from inside the instrument panel glove box area.

**NOTE:**

The white push-pin attaches to the back of the TPM module bracket.

Route the TPM antenna jumper wire along the glove compartment frame as shown, using the existing push pin holes.



28. Secure the antenna module to the glove box frame on top of the existing antenna module brackets.

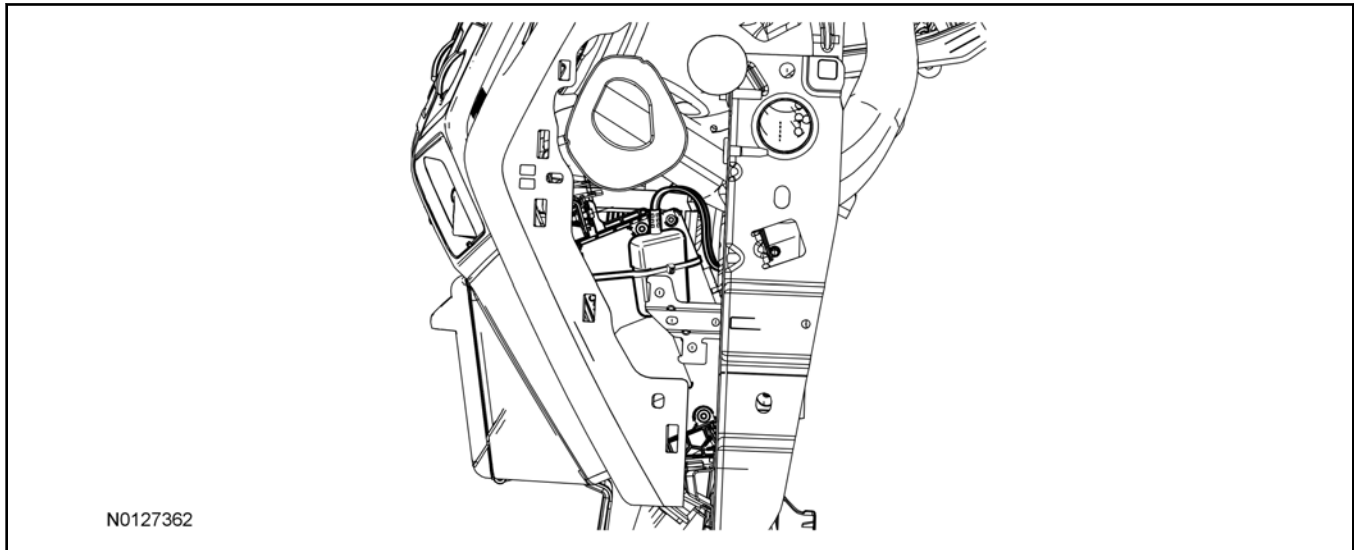
- Secure the antenna module with tie straps through the existing bracket holes.

29. Connect the antenna jumper wire connector to the antenna module.

**INSTALLATION (Continued)****Shock Sensor Mounting**

30. Mount the Shock Sensor onto the Accessory Protocol Interface Module (APIM).

- 1 Remove the RH Instrument panel side trim panel.
- 2 Position the Shock Sensor onto the APIM.
- 3 Secure with a tie-strap.
- 4 Install the RH Instrument panel side trim panel.

**LED Mounting**

31. Route the LED harness through the instrument panel to the driver side of the vehicle.
32. Using the following guidelines select a mounting location for the LED on the driver's side of the vehicle.
- Have at least 3/4" clearance behind any trim panel for the wiring harness to be routed.
  - Be clearly visible from the driver's side window.
  - Do not mount the LED on trim panels that cover air bags.
33. Mount the LED at an appropriate location on the driver's side of the vehicle using the guidelines listed above.
- Drill a 9/32" hole into the selected location, for the LED to mount in.
34. Secure the LED wire harness with tie-straps.

**Install Trim**

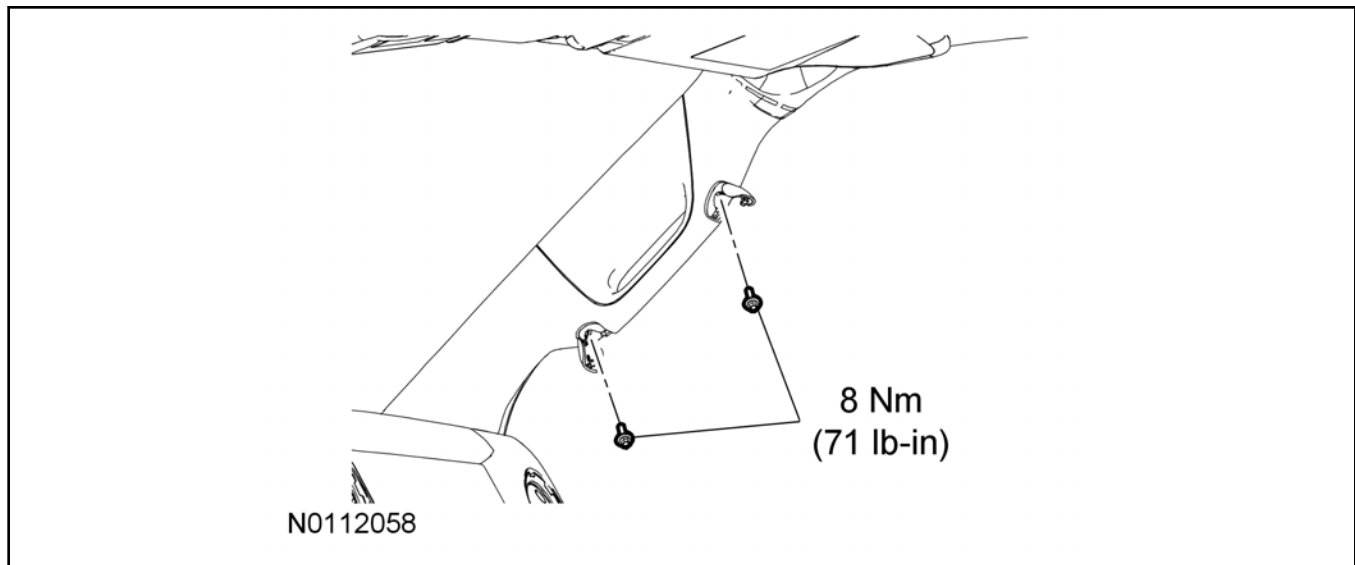
35. **NOTICE:**

**While closing the glove compartment make sure that the TPM harness and antenna harness do not come in contact with the glove compartment door.**

Close the glove compartment.

36. Install the RH A-pillar trim panel.
37. Tighten the RH A-pillar trim panel bolts.
- Tighten to 8 Nm (71 lb-in).



**INSTALLATION (Continued)**

38. Close the RH A-pillar trim panel bolt covers.

39. Install the RH instrument panel side trim.

**Remote Start Activation**

40. Verify that the IDS is updated to the most current version.

41. Connect IDS.

- Follow the prompts to select new vehicle session.
- Enter VIN.

42. Activate the remote start using the IDS.

- Select the Tool box icon.
- Select Body.
- Select Security.
- Select Remote Start.
- Verify that the information on the IDS screen is correct and all procedures have been followed.
- Select Yes, this will enable the Remote Start function on the vehicle.

43. For vehicles equipped with standard message center, verify that the remote start option now appears.

- Using the select button on the LH side of the steering wheel, cycle through the options and verify that the remote start option appears.
- Select ok and verify that the remote start system is enabled.

44. For vehicles equipped with advanced message center, verify that the remote start option now appears.

- Using the select and arrow buttons on the LH side of the steering wheel, select settings.
- Select vehicle.

**INSTALLATION (Continued)**

- Select remote start.
- Select system.
- Verify that the remote start system is enabled.

**Programming the Panic/Car Finder button****NOTE:**

Ensure the brake pedal is not depressed during this sequence.

45. Press the vehicles unlock button located on the drivers door, make sure all doors are unlocked.
46. Put the key in the ignition.
47. Cycle eight times rapidly (within 10 seconds) between the 1 (OFF/LOCK) position and 3 (ON).
  - The eighth turn must end in the 3 (ON) position. The doors will lock, then unlock, to confirm that the programming mode has been activated.
48. Wait for 10 seconds and the Remote Start Module will program itself to the system.
  - After 20 seconds, you will automatically exit the programming mode. The doors will lock, then unlock, to confirm that the programming mode has been exited.
49. Press and release the Panic/Car Finder button on the Remote Start keyfob to confirm that the button has been programmed. The vehicle should honk 4-6 times.

**Vehicle Security System Activation**

50. Cycle the vehicle ignition from OFF to ON.
51. Wait 10 seconds.
52. Press and hold the Program Override Button for 3 seconds. The LED will turn ON for 5 seconds. The parking lights will flash, and the horn will honk once to confirm Vehicle Security activation.
53. Turn OFF the vehicle ignition.

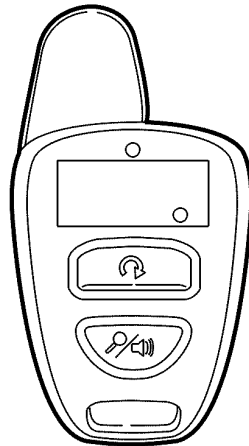
**Functional Test**

54. The Shock Sensor sensitivity setting defaults to maximum sensitivity (fully clockwise). This level can be reduced by turning the knob on the sensor counter clockwise to the desired sensitivity.
  - With the Vehicle Security System armed, a light tap of the Shock Sensor should trigger the warning chirp.
  - With the Vehicle Security System armed, a hard tap of the Shock Sensor should trigger the vehicle panic alarm.

**NOTE:**

Do not put a key in the ignition for the following steps.

55. Make sure the ignition is in "park" and the ignition is in the "off" position, remove all keys from the vehicle.
56. Close the hood.
57. Close all of the vehicle doors.
58. Start the vehicle by pressing the remote start button 2 times on the bi-directional key fob.

**INSTALLATION (Continued)**

N0097292

**BIDIRECTIONAL FOB**

59. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
60. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
61. Open the hood.
62. **NOTE:**  
Vehicle doors should be closed while performing this step.

Confirm that the vehicle will not start with the hood open.

**Please contact Ford Hotline with any issues regarding remote start functionality.**

**Please contact 1-800-FORD-KEY with any issues regarding hardware or kit contents.**

# **RKE/VSS/REMOTE START SYSTEM INSTALLATION**

## **CONTENTS**

### **VEHICLE PREPARATION**

Hood Switch Kit Installation

### **INSTALLATION**

RKE/VSS/Remote Start

### **GENERAL PROCEDURES**

Remote Start System Activation

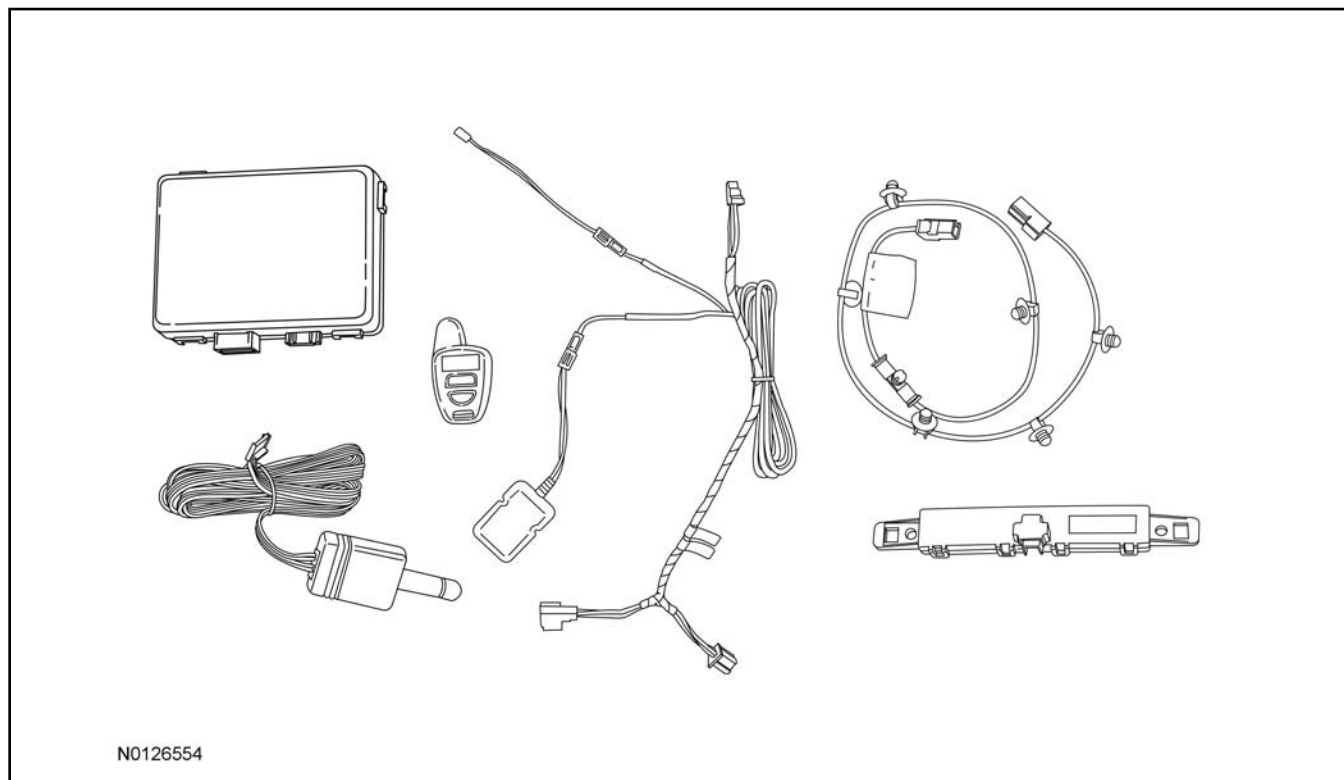
Functional Test

User Preferences

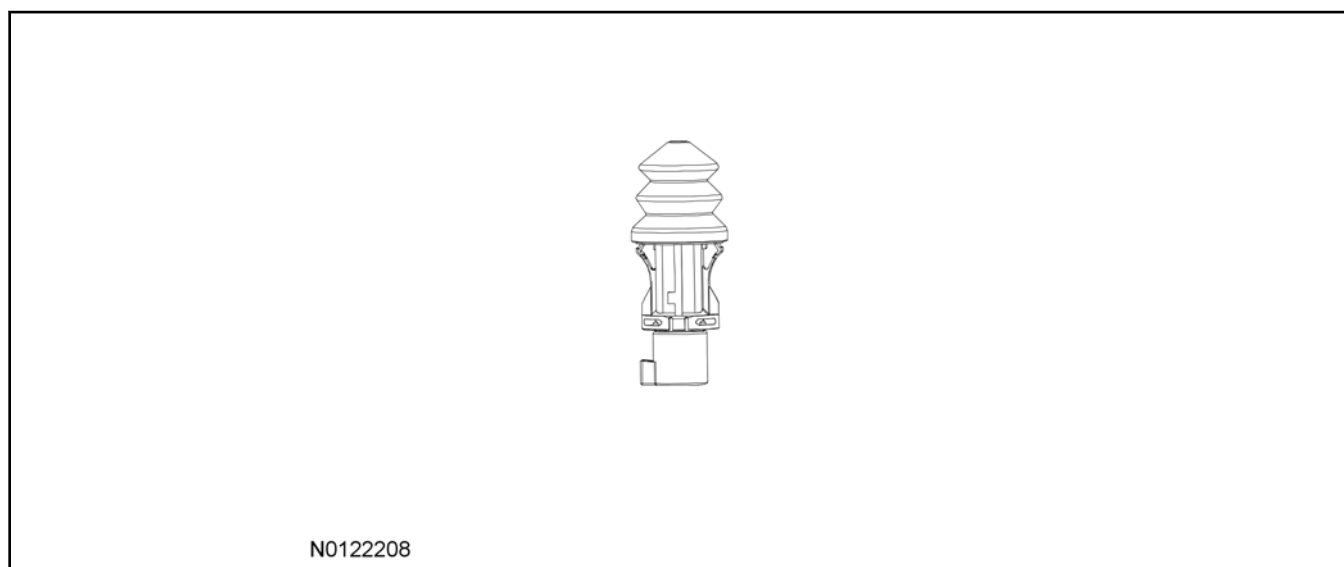
## INSTALLATION

### Remote Start System/Vehicle Security

#### Remote Start System/Vehicle Security (RMST/VSS) Components



#### Hood Switch Kit Components - Sold separately if needed



### Edge

1. Verify correct kit number.

**INSTALLATION (Continued)****Review The Remote Start System/Vehicle Security (RMST/VSS) Installation Kit Contents**

2. Review the RMST/VSS kit contents.

**Remote Start System/Vehicle Security (RMST/VSS) kit**

QUANTITY	DESCRIPTION
1	Bi-directional Key Fob
1	Antenna Jumper Wire
1	Antenna Module
1	Remote Start Module
1	Bi-directional Antenna
1	RFA Module T-Harness
1	Shock Sensor
1	LED

**Review Hood Switch Kit Contents**

3. Review the Hood Switch kit contents.

**Hood Switch Kit**

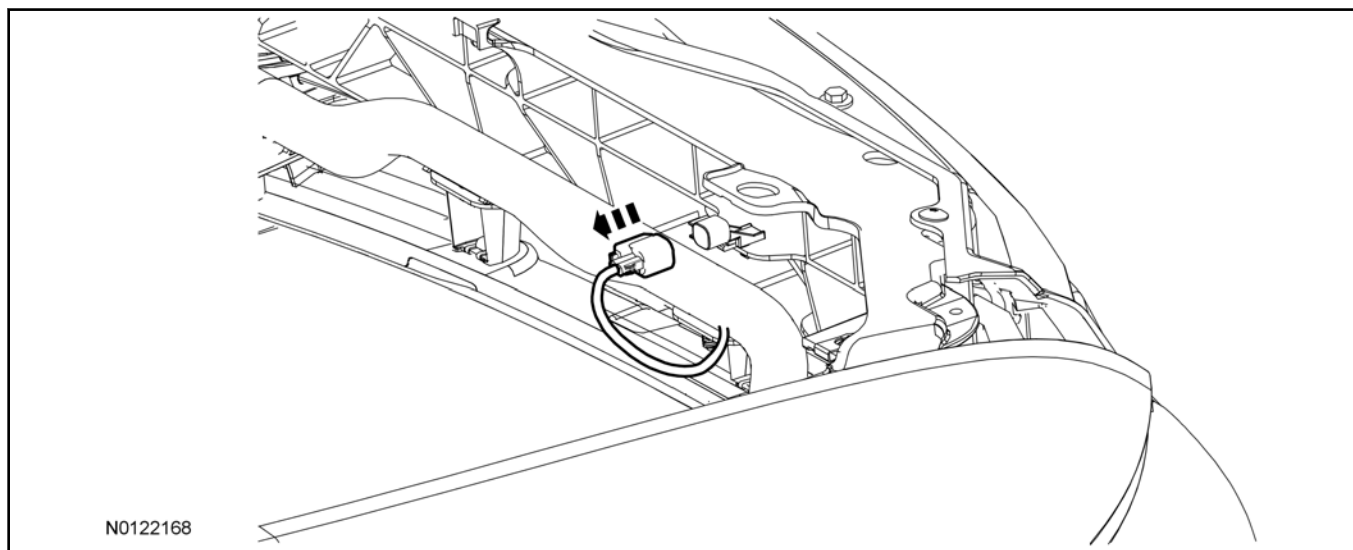
QUANTITY	DESCRIPTION
1	Hood Switch Assembly

**Vehicle Preparation**

4. Verify that an OE hood switch is installed.
- If the vehicle is not equipped with an OE hood switch, refer to Hood Switch Installation in this procedure.

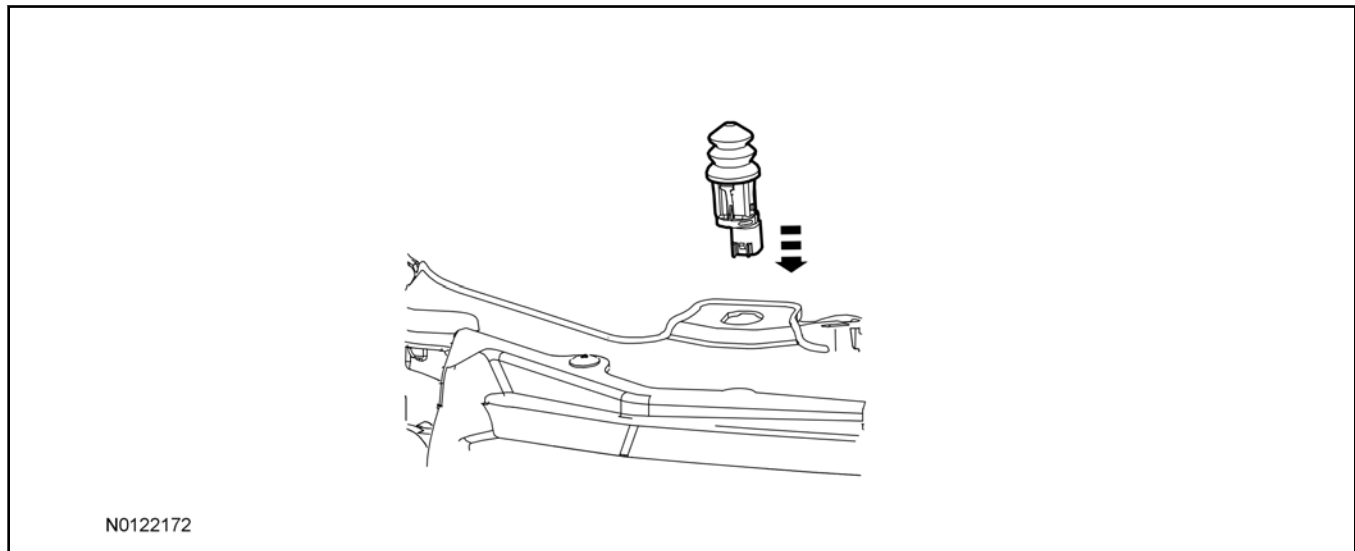
**Hood Switch Installation**

5. Disconnect the existing hood switch electrical connector from the insulator cap, located on the RH side of the radiator core support.



**INSTALLATION (Continued)**

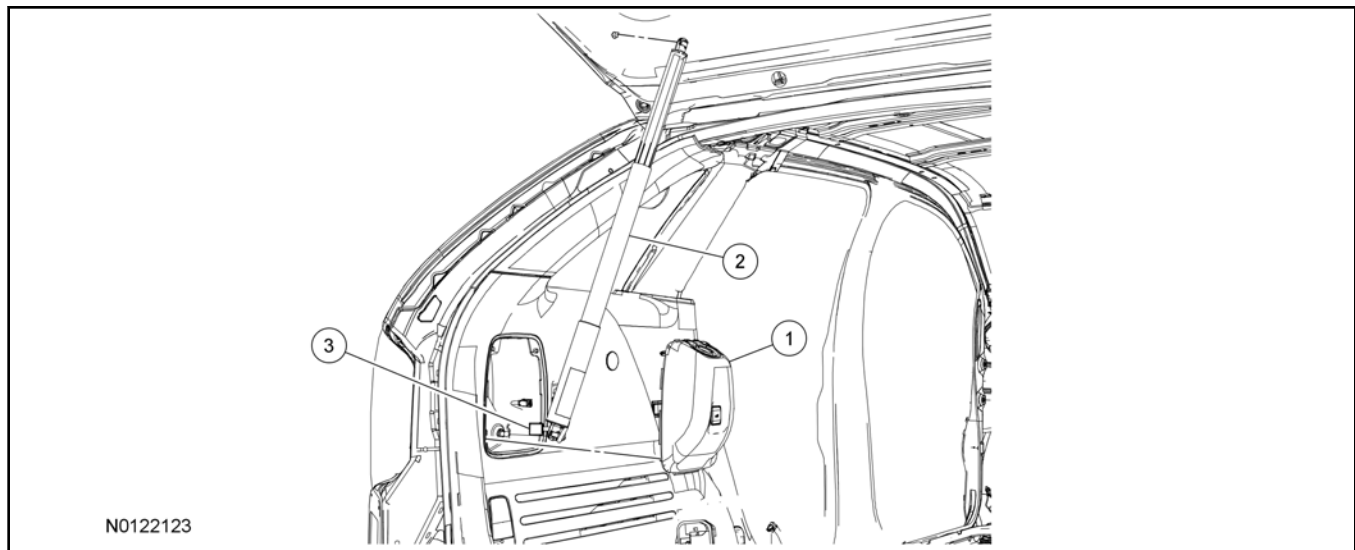
6. Install the OE hood switch assembly to the existing hood switch mounting location, on the upper radiator core support as shown.
  - Position the flat spot on the hood switch with the flat spot on the radiator core support.



7. Connect the electrical connector to the hood switch.

**Remove Power Liftgate Motor**

8. Open the liftgate.
9. If equipped, remove the power liftgate motor assembly.
  - 1 Remove the LH quarter trim panel access cover.
  - 2 Disconnect the power liftgate motor from the power liftgate motor mounts.
  - 3 Disconnect the power liftgate motor electrical connector and remove the power liftgate motor assembly.



**INSTALLATION (Continued)****Position Aside LH Quarter Trim Panel**

10. Remove the rear cargo load area.
  - Remove the foam blocks from the spare tire well.
11. Remove the LH safety belt lower anchor bolt cover and remove the LH safety belt lower anchor bolt.
12. If equipped, remove the cargo net hook.
13. **NOTE:**  
Make sure the pushpin retainers are removed with the quarter trim panel.

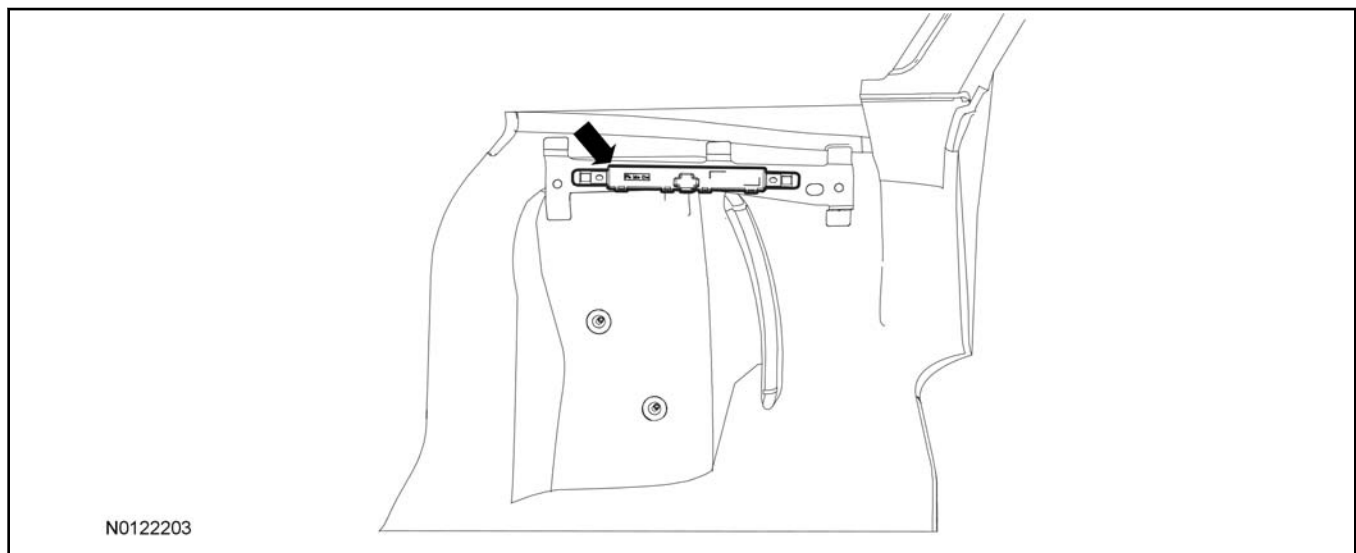
Detach the push pin retainers and position the LH quarter trim panel aside to access the Tire Pressure Monitor (TPM).

**Remove LH C-Pillar Trim Panel**

14. Remove the LH rear safety belt D-ring cover and remove the safety belt bolt.
15. Remove the LH C-pillar trim panel screw cover.
16. Remove the LH C-pillar trim panel screw.
17. Remove the C-pillar trim panel.
  - Pull outward and downward to remove the C-pillar trim panel.

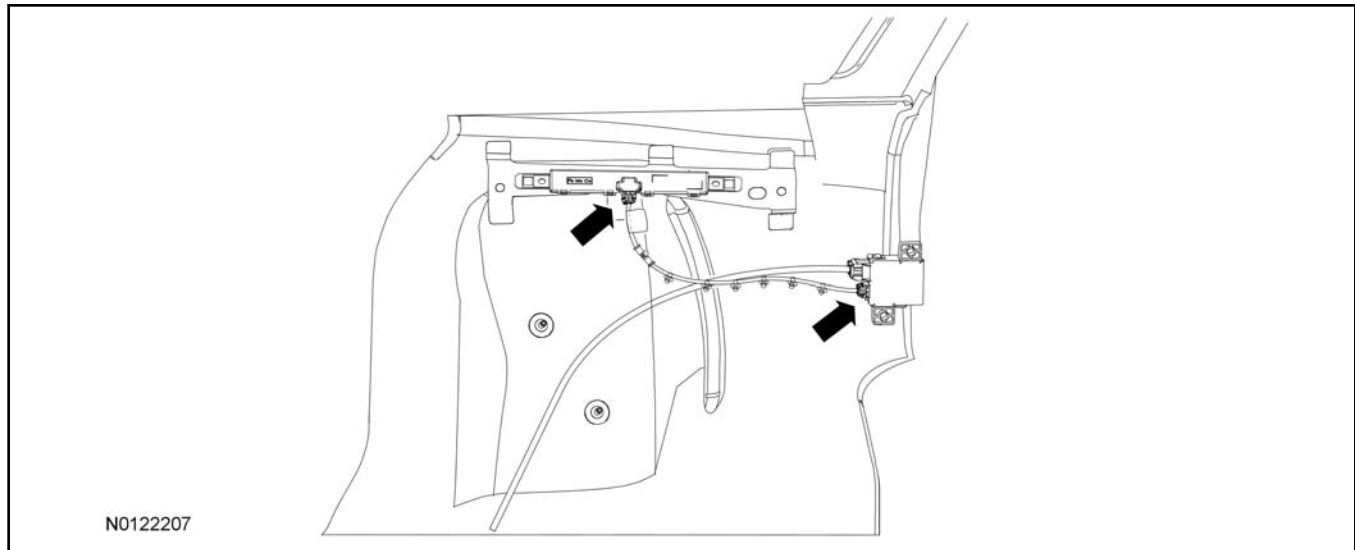
**Antenna Module Installation**

18. Position the antenna module into the vehicle and secure with tie straps.



19. **NOTE:**  
LH quarter trim panel removed for clarity.  
Install the antenna jumper wire to the vehicle.
  - Connect to the antenna module and to the TPM module.
  - Secure with tie straps.
  - The push pins on the antenna jumper wire are not used for this application.



**INSTALLATION (Continued)****Install the Antenna**

20. Clean the mounting surface using an alcohol based solution and a clean cloth.

**NOTE:**

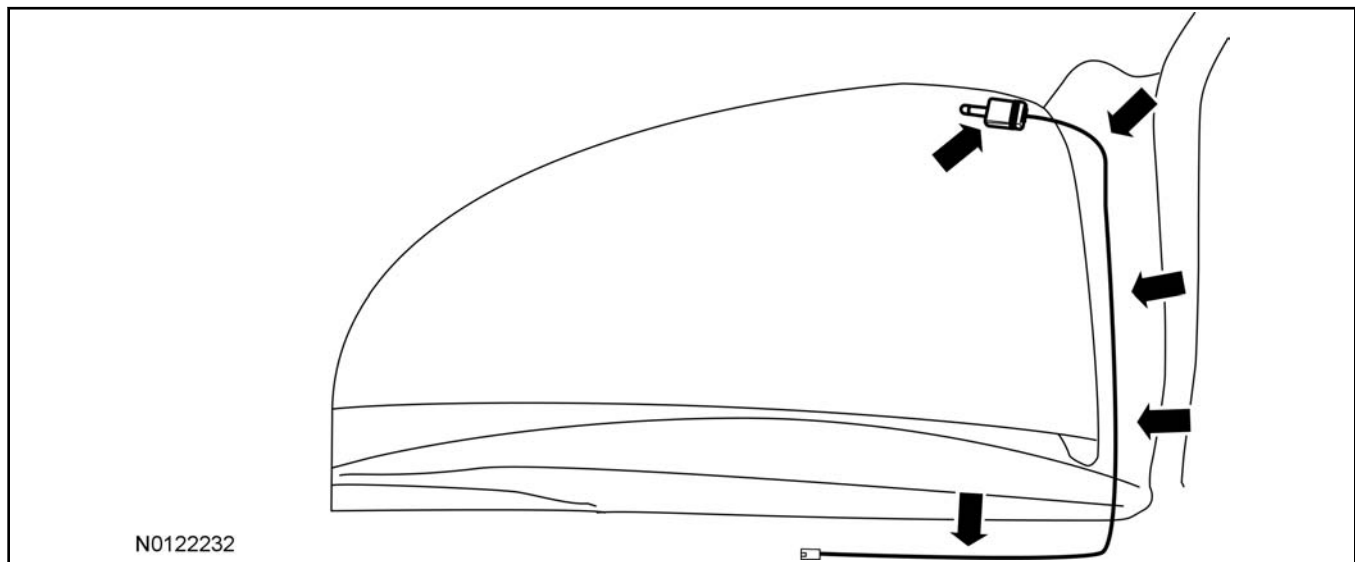
Do not touch the adhesive, reduced adhesion may result.

**NOTE:**

The wire harness will be connected to the control module later in this procedure.

21. Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the LH rear quarter window glass.

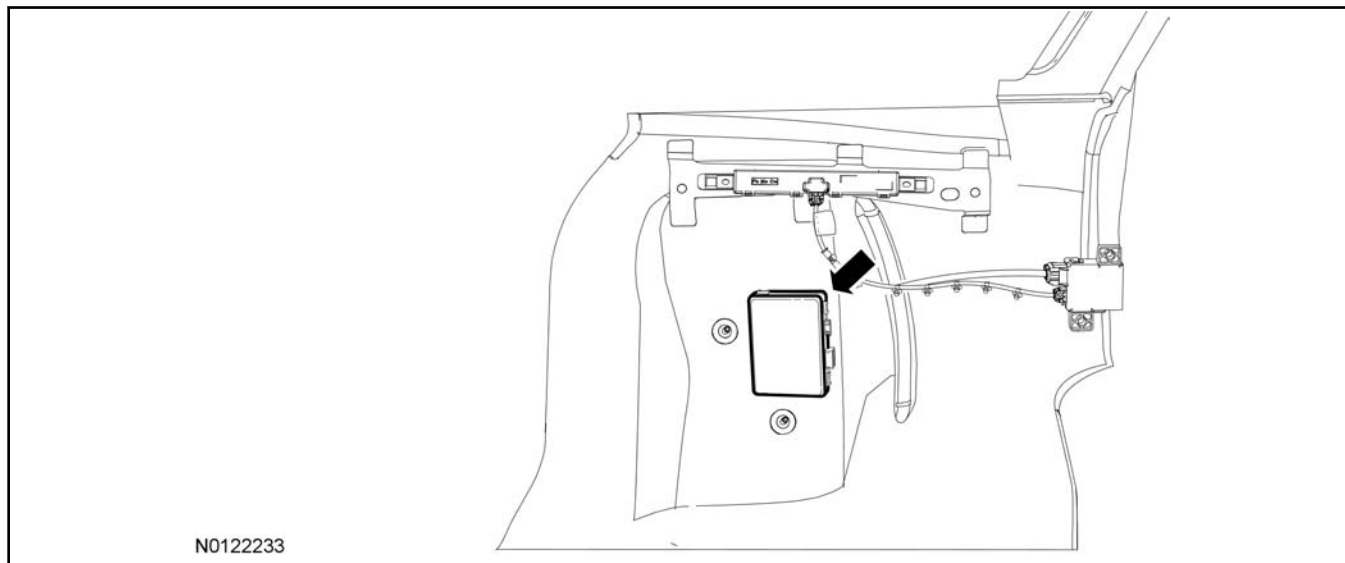
- Route the antenna cable down the C-pillar to the quarter panel where the remote start module will be mounted.
- Secure the antenna wire harness with tie straps.



**INSTALLATION (Continued)****Install CGEA module**

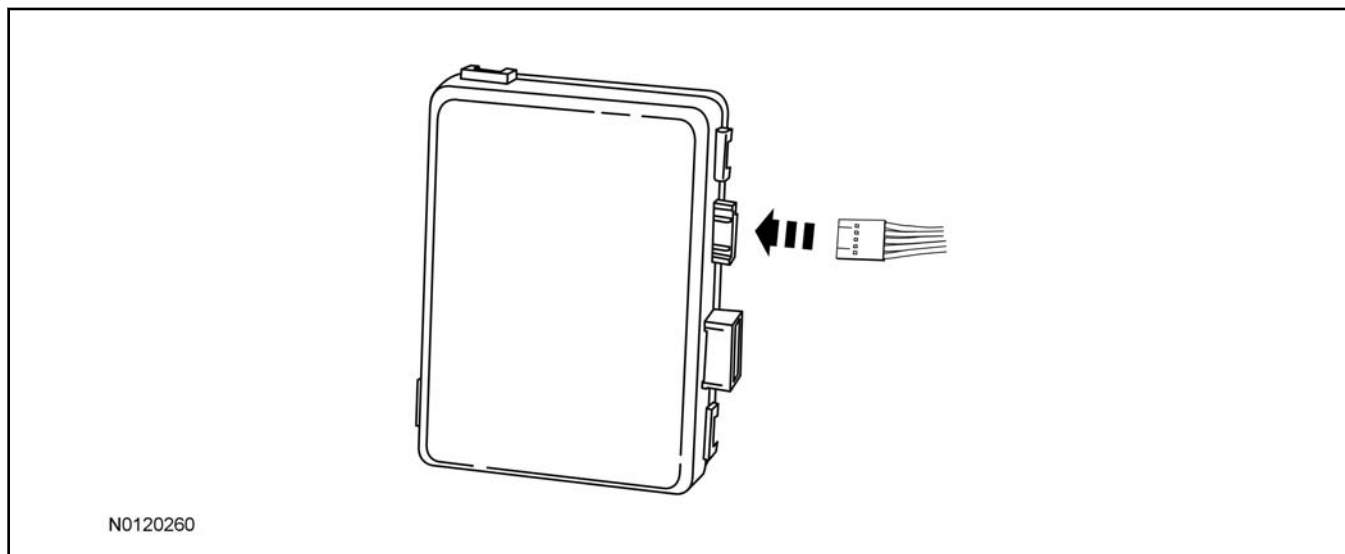
22. Remove the protective backing from the 3m Dual Lock™ strips and install the remote start module to the vehicle.

- Mount to a flat metal surface on the vehicle's LH quarter panel.

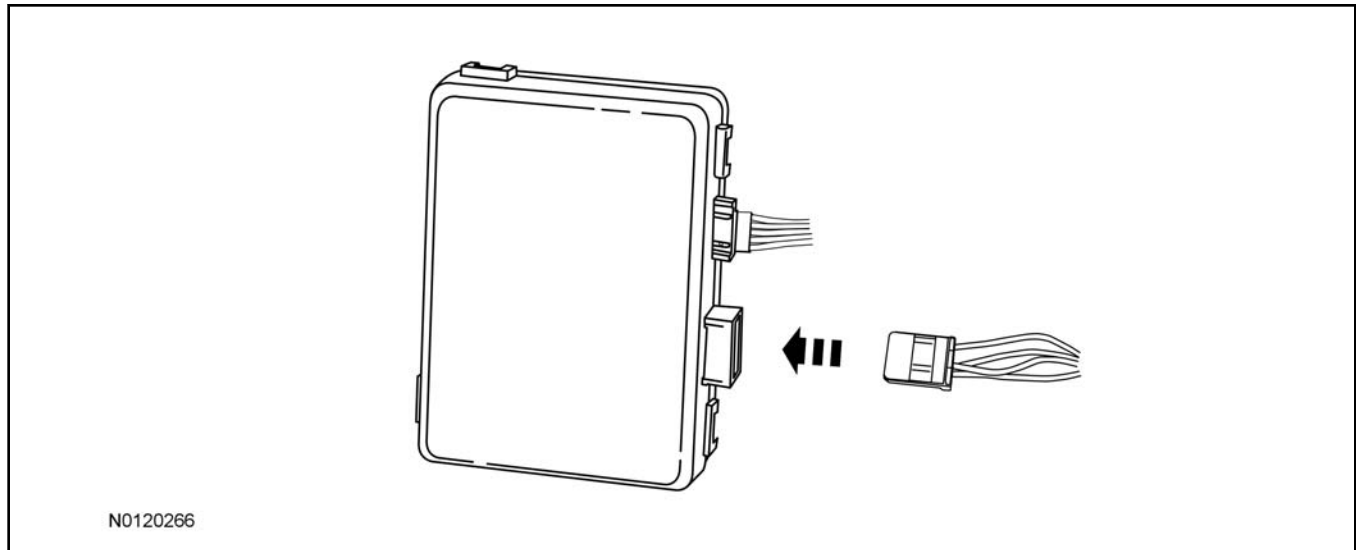


23. Connect the bi-directional antenna to the remote start module.

- Secure the bi-directional antenna harness with tie-straps.



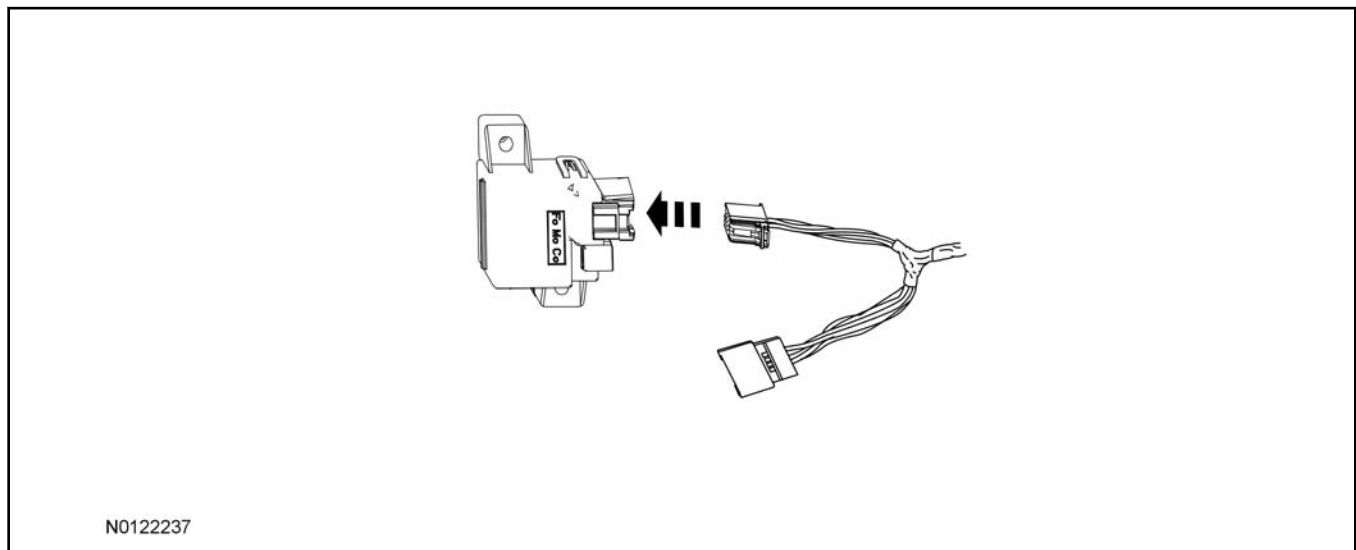
24. Connect the T-harness to the remote start module.

**INSTALLATION (Continued)**

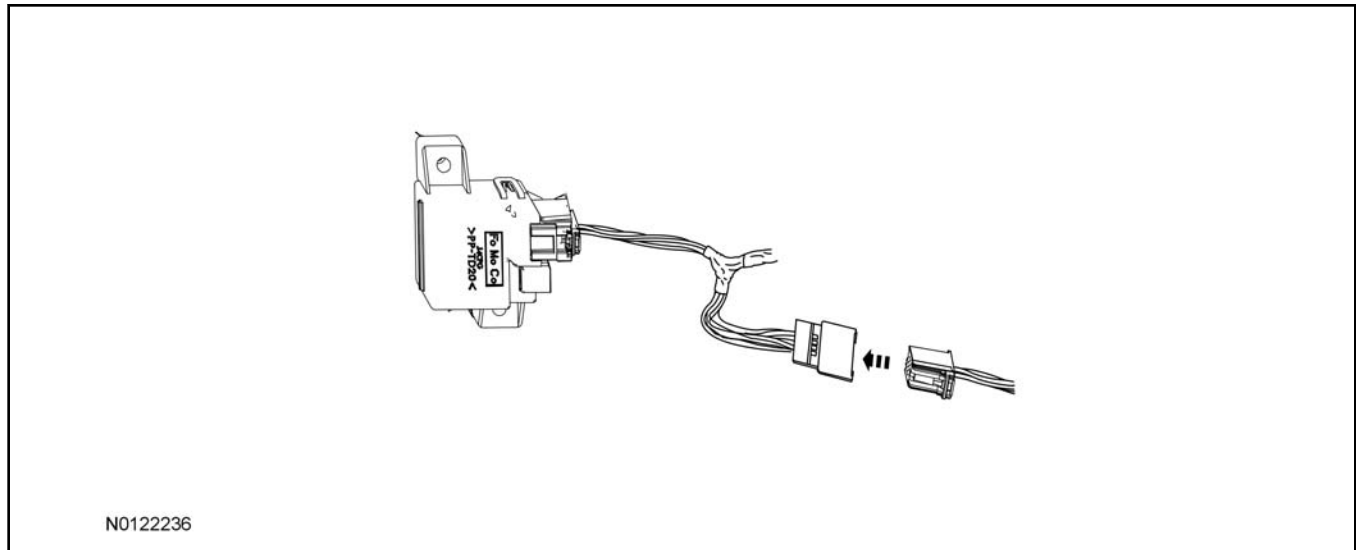
25. Route the female end of the T-harness to the TPM module.

- Secure the harness with tie-straps.

26. Connect the female end of the 8-pin T-harness to the TPM module.

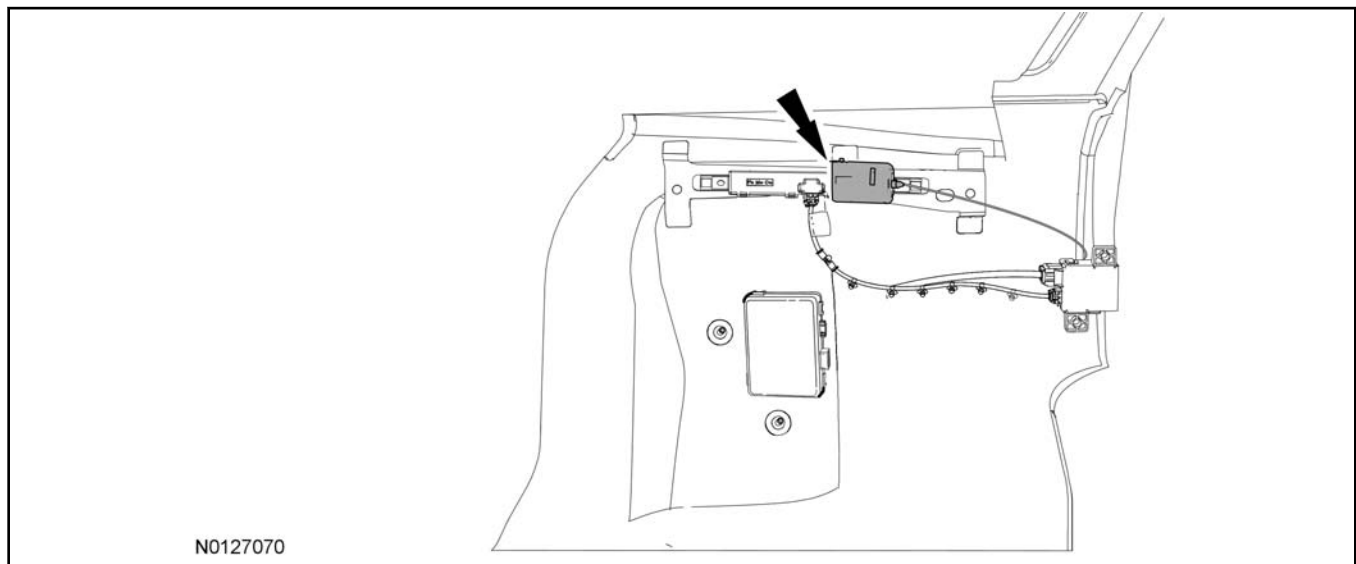


27. Connect the male end of the 8-pin T-harness to the vehicle's existing TPM module harness.

**INSTALLATION (Continued)****Shock Sensor Mounting**

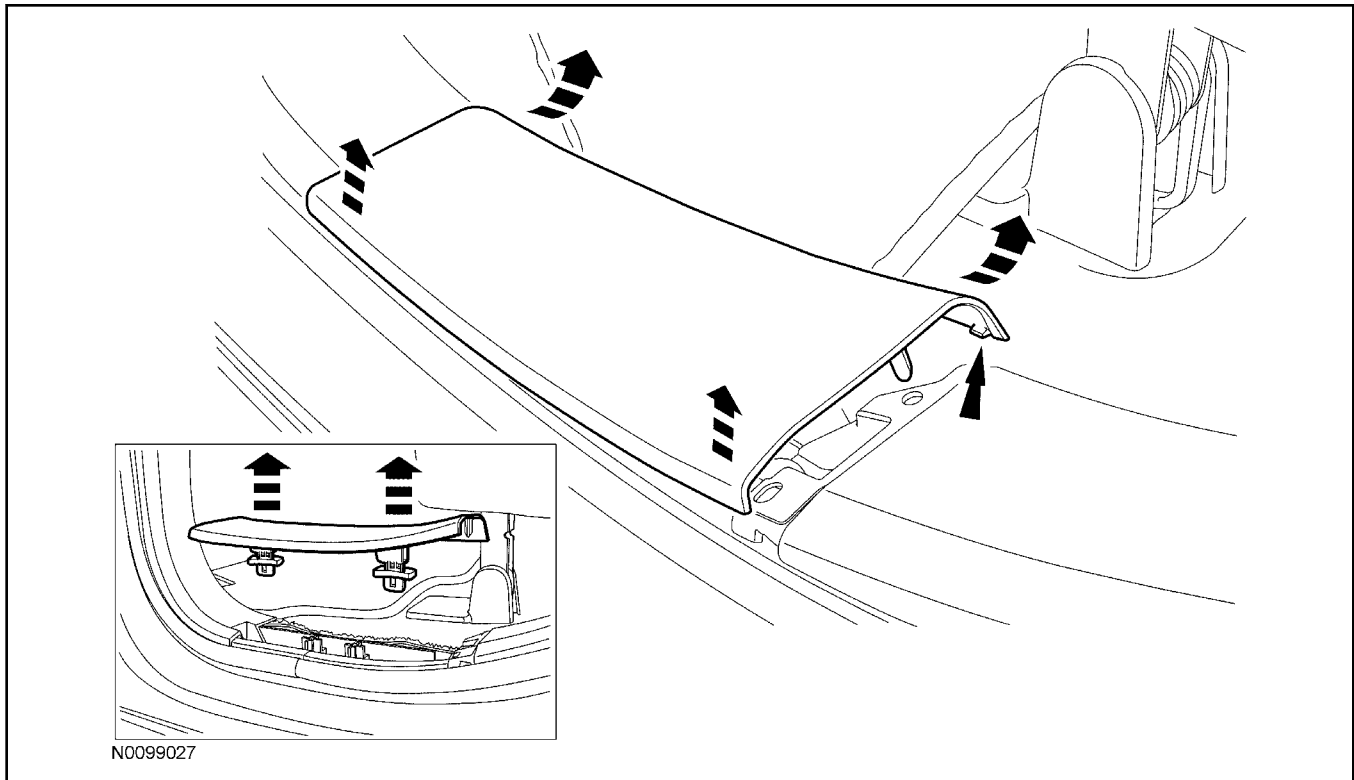
28. Mount the Shock Sensor onto the antenna module.

- Secure with tie-straps.

**LED Mounting****NOTE:**

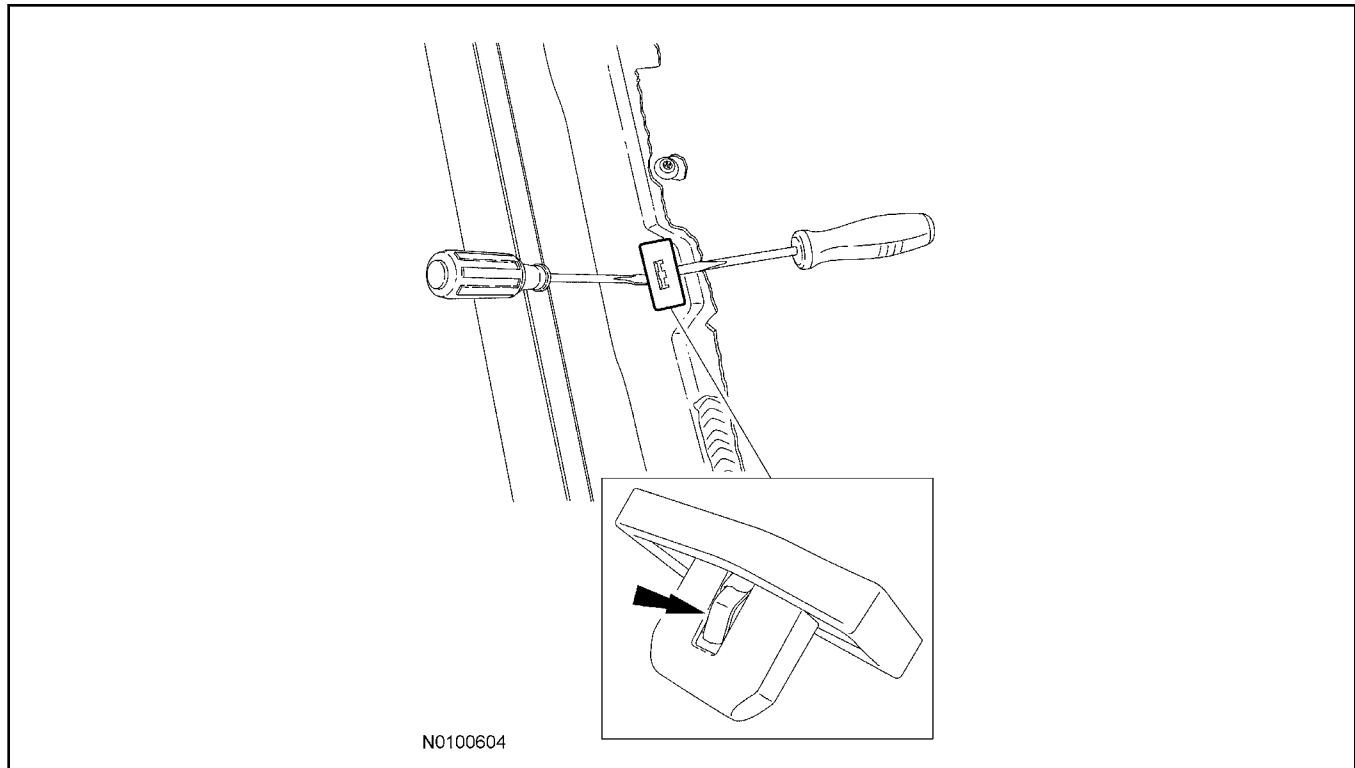
For LED wire harness routing, removal of the LH front door scuff plate trim panel is not required.

29. Remove the LH rear door scuff plate trim panel by lifting on the rear inside lip of the scuff plate trim panel and lift the scuff plate trim panel enough to release the rear retaining clip from the body. Lift the front inside lip of the scuff plate trim panel and lift the scuff plate trim panel to release the front retaining clip. Remove the scuff plate trim panel.

**INSTALLATION (Continued)****NOTICE:**

**To avoid damage to the scuff plate trim panel, remove any retaining clips from the body and attach them to the scuff plate trim panel before installation.**

30. If any of the scuff plate trim panel retaining clips stay attached to the body, release the retaining clip from the body. Attach the retaining clip to the scuff plate trim panel before installation.

**INSTALLATION (Continued)**

31. Route the LED harness to the front driver side of the vehicle.
  - Hide the wire harness by tucking it under the B-pillar and LH door trim panels.
32. Using the following guidelines select a mounting location for the LED on the driver's side of the vehicle.
  - Have at least 3/4" clearance behind any trim panel for the wiring harness to be routed.
  - Be clearly visible from the driver's side window.
  - Do not mount the LED on trim panels that cover air bags.
33. Mount the LED at an appropriate location on the driver's side of the vehicle using the guidelines listed above.
  - Drill a 9/32" hole into the selected location, for the LED to mount in.
34. Secure the LED wire harness with tie-straps.

**NOTICE:**

**When installing the LH rear door scuff plate trim panel be sure that the LED wire harness does not get pinched.**

35. Install the LH scuff plate trim panel, reverse removal procedure.

**Install LH C-Pillar Trim Panel**

36. Install the LH C-pillar trim panel.
37. Install the LH C-pillar trim panel screw.
  - Tighten to 9 Nm (80 lb-in).

**INSTALLATION (Continued)**

---

38. Install the LH C-pillar trim panel screw cover.

**NOTE:**

Inspect the safety belt D-ring cover for damage. If the safety belt D-ring cover does not remain in place, install a new cover.

39. Install the safety belt bolt and install the safety belt D-ring cover.

- Tighten to 54 Nm (40 lb-ft).

**Install LH Quarter Trim Panel**

40. Position the LH quarter trim panel back.

- Engage push pin retainers.

41. If equipped, install the cargo net hook.

- Tighten to 3 Nm (27 lb-in).

42. Install the LH rear safety belt lower anchor bolt.

- Tighten to 54 Nm (40 lb-ft).

43. **NOTE:**

Inspect the safety belt lower anchor bolt cover for damage. If the safety belt lower anchor bolt cover does not remain in place, install a new cover.

Install the LH safety belt lower anchor bolt cover.

44. Install the rear cargo load area.

- Install the foam blocks into the spare tire well.

**Install Power Liftgate Motor**

45. If equipped, install the power liftgate motor assembly.

- 1 Install the power liftgate motor assembly and connect the power liftgate motor electrical connector.
- 2 Connect the power liftgate motor to the power liftgate motor mounts.
- 3 Install the LH quarter trim panel access cover.

**Remote Start Activation**

46. Verify that the IDS is updated to the most current version.

47. Connect IDS.

- Follow the prompts to select new vehicle session.
- Enter VIN.

48. Activate the remote start using the IDS.

- Select the Tool Box icon.
- Select Body.
- Select Security.

**INSTALLATION (Continued)**

- Select Remote Start.
  - Verify that the information on the IDS screen is correct and all procedures have been followed.
  - Select Yes. This will enable the remote start function on the vehicle.
49. For vehicles equipped with standard message center, verify that the remote start option now appears.
- Using the Select and Arrow buttons on the steering wheel, select Settings.
  - Select Convenience.
  - Select Remote Start.
  - Select System.
  - Verify that the remote start system is checked.
50. For vehicles equipped with advanced message center, verify that the remote start option now appears.
- Using the Select and Arrow buttons on the steering wheel, select Settings.
  - Select Vehicle Settings.
  - Select Vehicle.
  - Select Remote Start System.
  - Verify that the remote start system is enabled.

**Programming the Panic/Car Finder Button****NOTE:**

Make sure the brake pedal is not depressed during this sequence.

51. Press the vehicle's unlock button located on the driver's door. Make sure all doors are unlocked.
52. Put the key in the ignition.
53. Cycle eight times rapidly (within 10 seconds) between the 1 (OFF/LOCK) position and 3 (ON) position.
- The eighth turn must end in the 3 (ON) position. The doors will lock, then unlock, to confirm that the programming mode has been activated.
54. Wait for 10 seconds and the remote start module will program itself to the system.
- After 20 seconds, you will automatically exit the programming mode. The doors will lock, then unlock, to confirm that the programming mode has been exited.
55. Press and release the Panic/Car Finder button on the remote start keyfob to confirm that the button has been programmed. The vehicle should honk 4-6 times.

**Vehicle Security System Activation**

56. Cycle the vehicle ignition from OFF to ON.
57. Wait 10 seconds.



**INSTALLATION (Continued)**

58. Press and hold the Program Override Button for 3 seconds. The LED will turn ON for 5 seconds. The parking lights will flash, and the horn will honk once to confirm Vehicle Security activation.
59. Turn OFF the vehicle ignition.

**Functional Test**

60. The Shock Sensor sensitivity setting defaults to maximum sensitivity (fully clockwise). This level can be reduced by turning the knob on the sensor counter clockwise to the desired sensitivity.
  - With the Vehicle Security System armed, a light tap of the Shock Sensor should trigger the warning chirp.
  - With the Vehicle Security System armed, a hard tap of the Shock Sensor should trigger the vehicle panic alarm.

**NOTE:**

Do not put a key in the ignition for the following steps.

61. Make sure the shift lever is in park and the ignition is in the off position. Remove all keys from the vehicle.
62. Close the hood.
63. Close all of the vehicle doors.
64. Start the vehicle by pressing the remote start button 2 times on the bi-directional key fob.



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**BI-DIRECTIONAL KEY FOB**

65. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
66. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
67. Open the hood.
68. **NOTE:**  
Vehicle doors should be closed while performing this step.

Confirm that the vehicle will not start with the hood open.

**Please contact Ford Hotline with any issues regarding remote start functionality.**

**Please contact 1-800-FORD-KEY with any issues regarding hardware or kit contents.**

# **RKE/VSS/REMOTE START SYSTEM INSTALLATION**

## **CONTENTS**

### **VEHICLE PREPARATION**

Hood Switch Kit Installation

### **INSTALLATION**

RKE/VSS/Remote Start

### **GENERAL PROCEDURES**

Remote Start System Activation

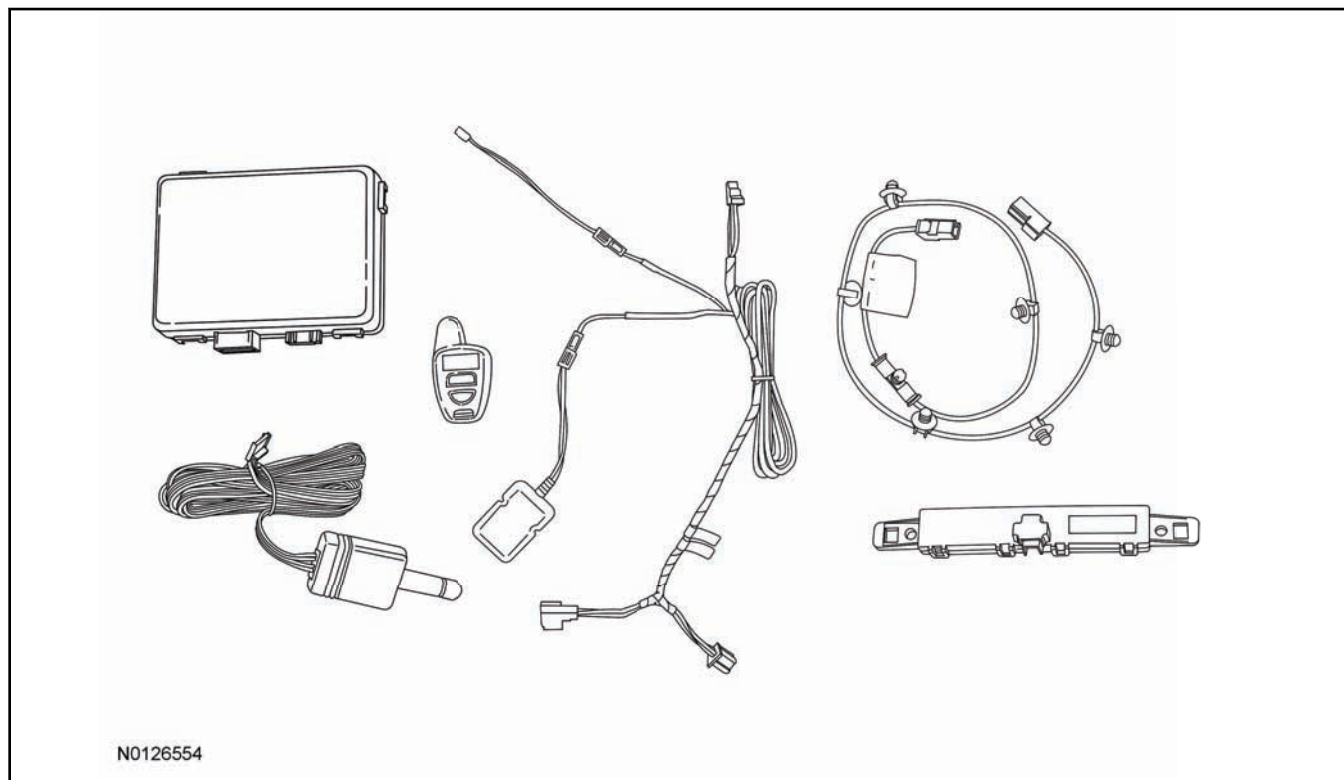
Functional Test

User Preferences

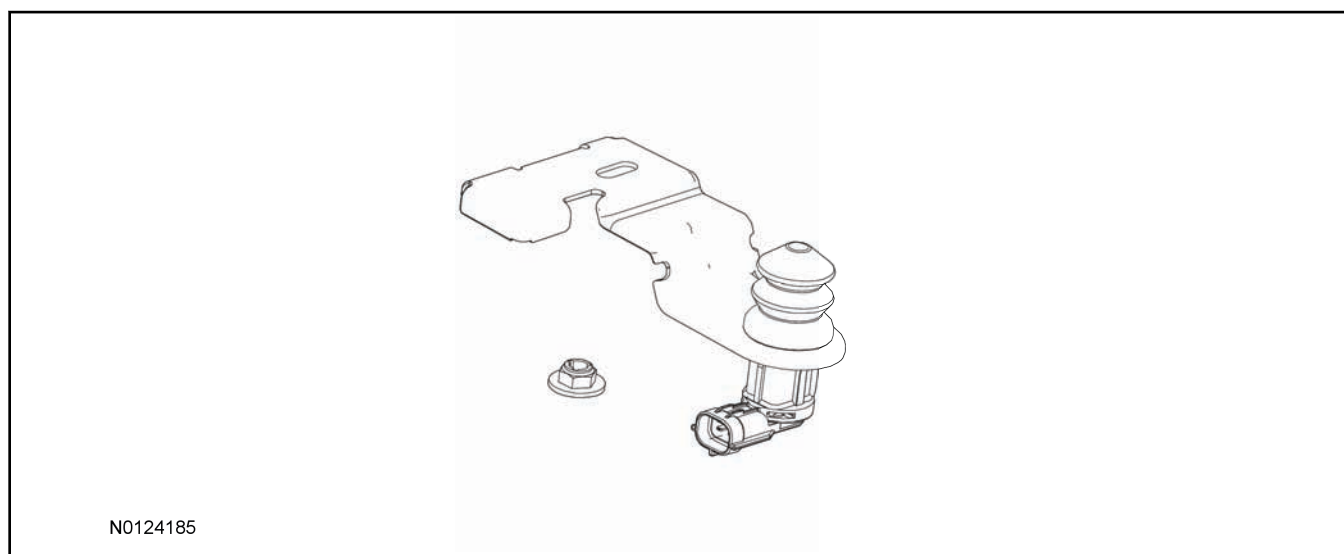
## INSTALLATION

### Remote Start System/Vehicle Security - F-150

#### Remote Start System/Vehicle Security (RMST/VSS) Components



#### Hood Switch Kit Components - Sold separately if needed



### F-150

1. Verify correct kit number.

**INSTALLATION (Continued)****Review The Remote Start System/Vehicle Security (RMST/VSS) Installation Kit Contents**

2. Review the RMST/VSS kit contents.

**Remote Start System/Vehicle Security (RMST/VSS) kit**

QUANTITY	DESCRIPTION
1	Bi-directional Key Fob
1	Antenna Jumper Wire
1	Antenna Module
1	Remote Start Module
1	Bi-directional Antenna
1	TPM Module T-harness
1	Shock Sensor
1	LED

**Review Hood Switch Kit Contents**

3. Review the Hood Switch kit contents.

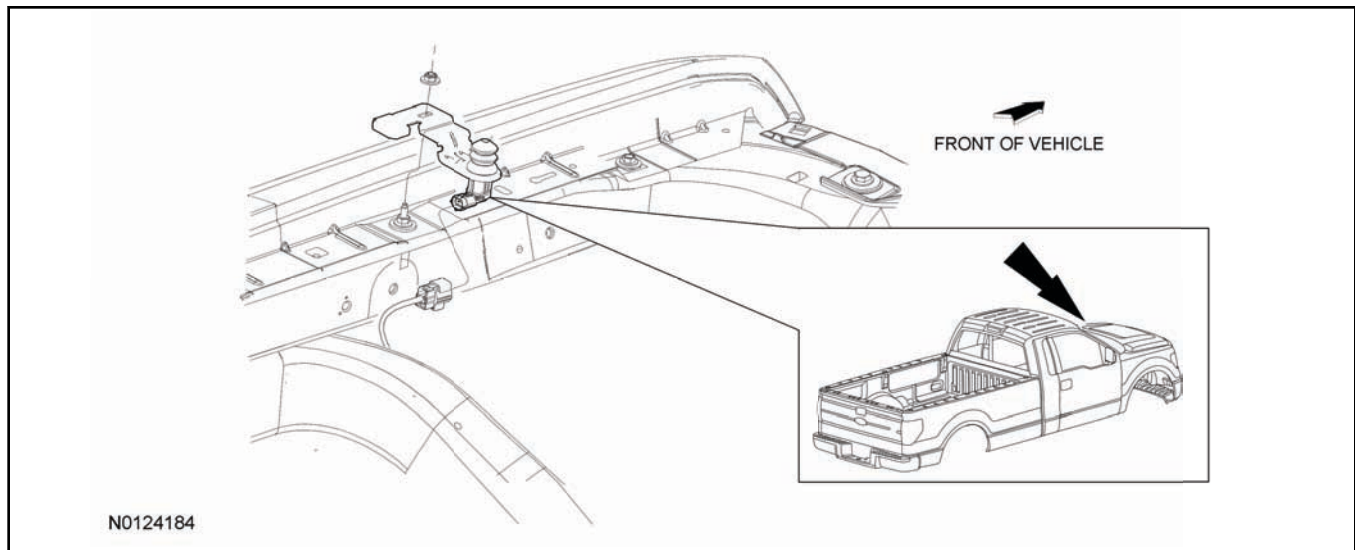
**Hood Switch Kit**

QUANTITY	DESCRIPTION
1	Nut
1	Hood Switch Assembly

4. Verify that an OE hood switch is installed.
- If the vehicle is not equipped with an OE hood switch see hood switch installation in this procedure.

**Hood Switch Installation**

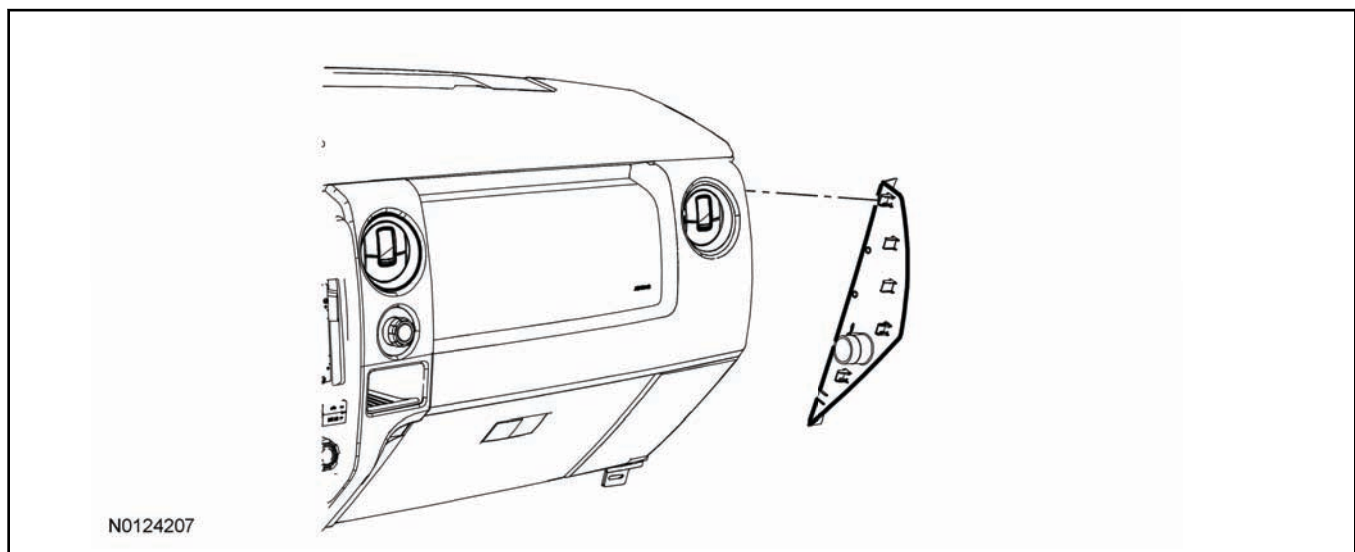
5. Locate the hood switch electrical connector located on the coolant reservoir.
- Disconnect the hood switch electrical connector from the coolant reservoir retainer plug.
6. Install the Hood switch assembly.
- Install the nut.
  - Tighten to 6 Nm (53 lb-in).

**INSTALLATION (Continued)**

7. Connect the electrical connector to the hood switch.

**Vehicle preparation**

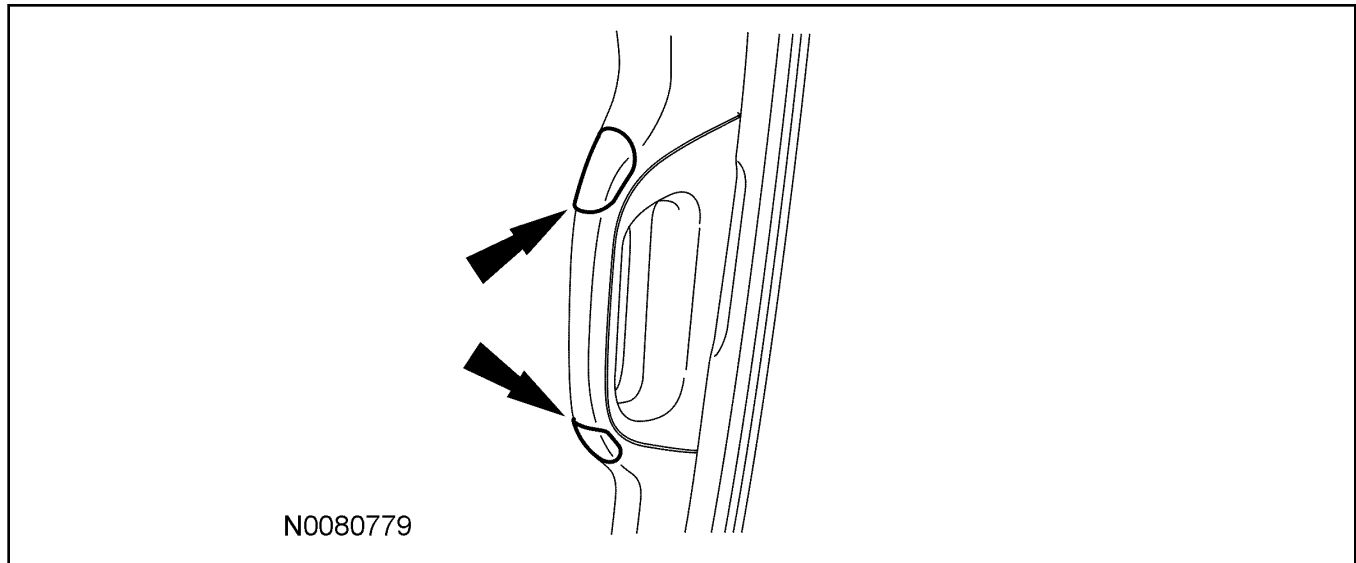
8. Remove the RH instrument panel side finish panel.



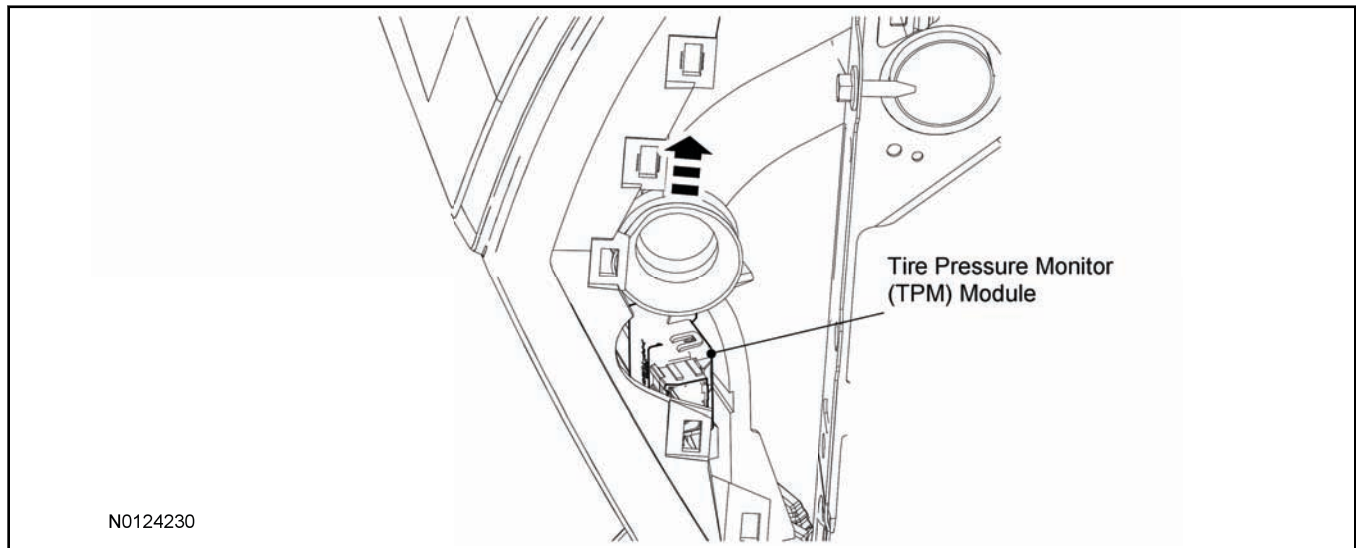
9. **NOTICE:**

Use a non-marring flat-blade tool and start on the inside edge of the covers. Covers are equipped with a tether. Failure to follow this direction may result in damage to the component.

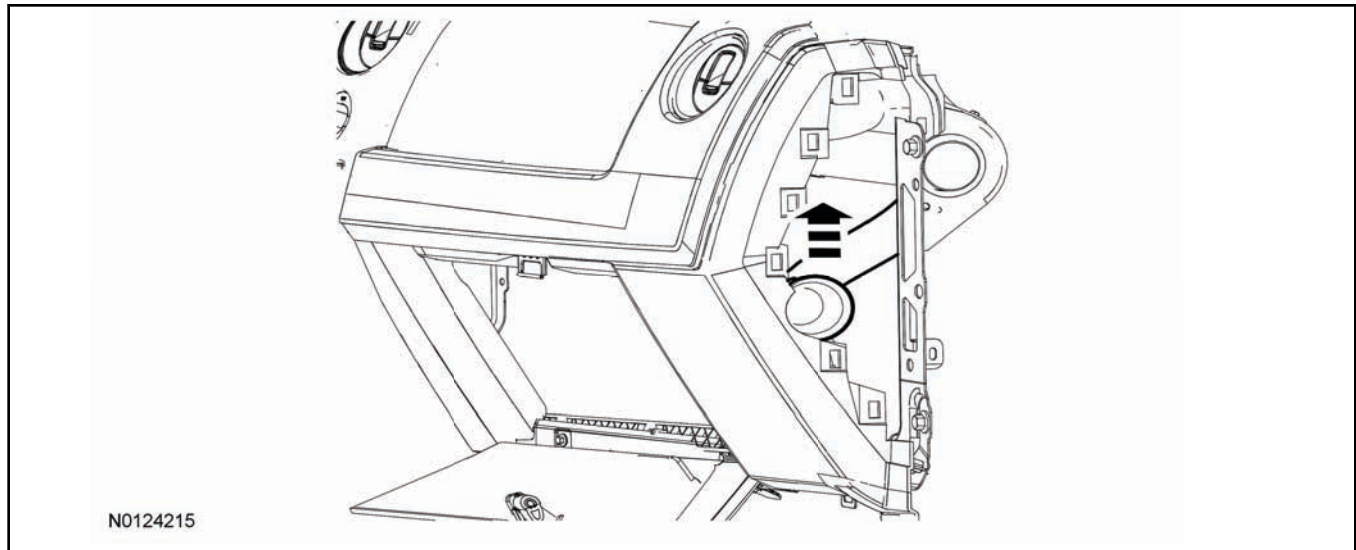
Remove the passenger side assist handle bolt covers.

**INSTALLATION (Continued)**

10. Remove the assist handle bolts.
11. If equipped with a speaker in the A-pillar trim panel, disconnect the speaker electrical connector.
12. Remove the RH A-pillar trim panel.
  - Pull outward to release the retainer clip.
13. Open the glove compartment and empty the contents.
14. Push in the 2 side tabs and fully lower the glove compartment.
15. Locate the Tire Pressure Monitor (TPM) Module.

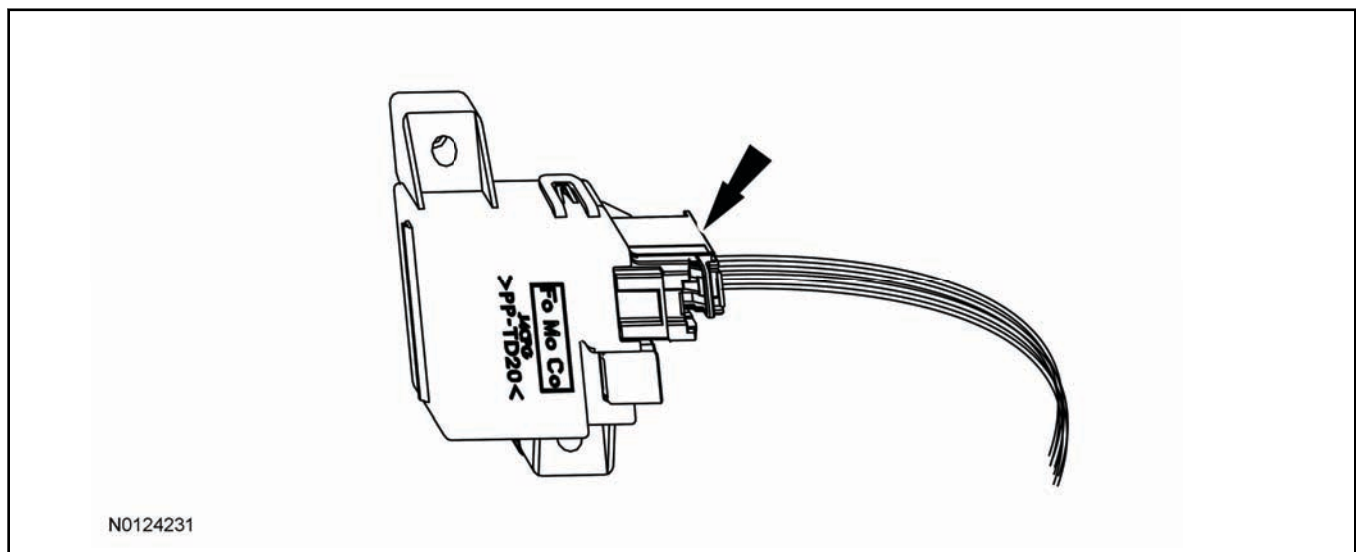


16. Position the A/C duct to access the TPM module electrical connectors.

**INSTALLATION (Continued)****17. NOTE:**

Instrument panel removed for clarity.

Disconnect the TPM module.

**Bi-directional Antenna Mounting****NOTE:**

For good range of operation, the bi-directional antenna must be installed correctly.

**NOTE:**

Keep these points in mind when selecting a location and mounting the antenna.

- Do not mount the bi-directional antenna behind or on any metal film or window tinting on the windshield.
- Do not mount the bi-directional antenna so that one of the bi-directional antenna elements touches or crosses any vehicle wiring and/or metal.
- On vehicles without metal film in the windshield around the rear view mirror, mount the bi-directional antenna between the headliner and the rear view mirror.

**INSTALLATION (Continued)**

- On vehicles equipped with an electronic mirror, or on vehicles with metal film around the rearview mirror, mount the bi-directional antenna approximately 3 inches below the mirror attachment point to the windshield and/or mirror electronics.

18. Choose a suitable bi-directional antenna mounting location based on the guidelines above.

**Install The Bi-directional Antenna**

19. Clean the mounting surface using an alcohol base solution and a clean cloth.

**NOTE:**

Do not touch the adhesive, reduced adhesion may result.

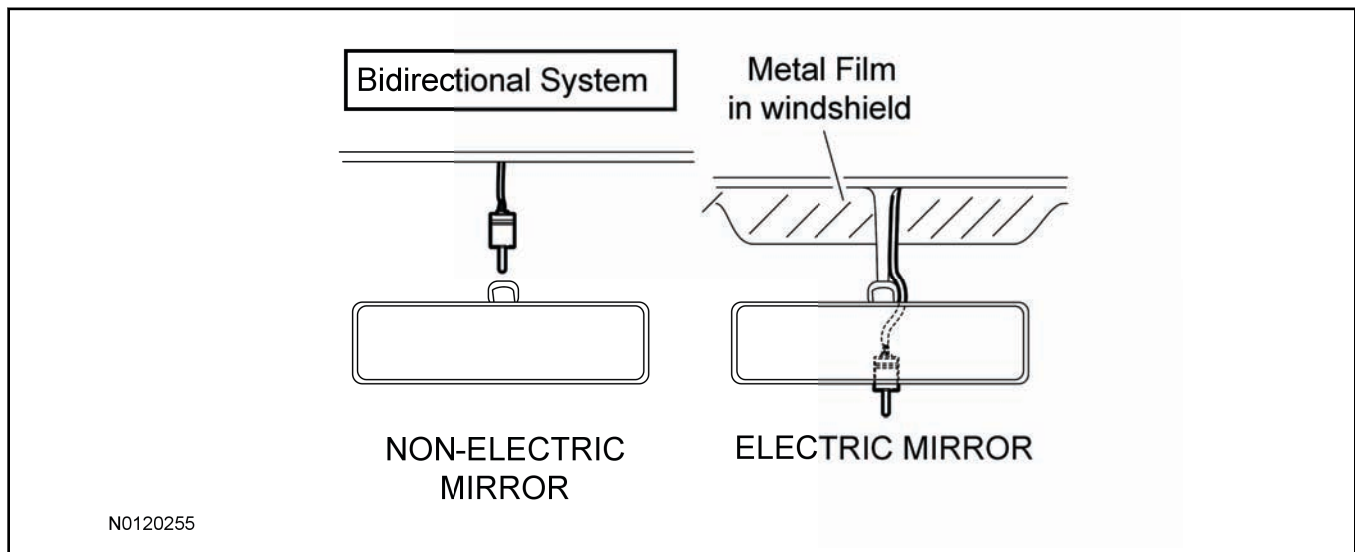
**NOTE:**

Make sure that the long wire on the bi-directional antenna is pointing towards the top of the windshield since this wire will be routed along the headliner.

**NOTE:**

The bi-directional antenna electrical connector will be attached to the control module later in this procedure.

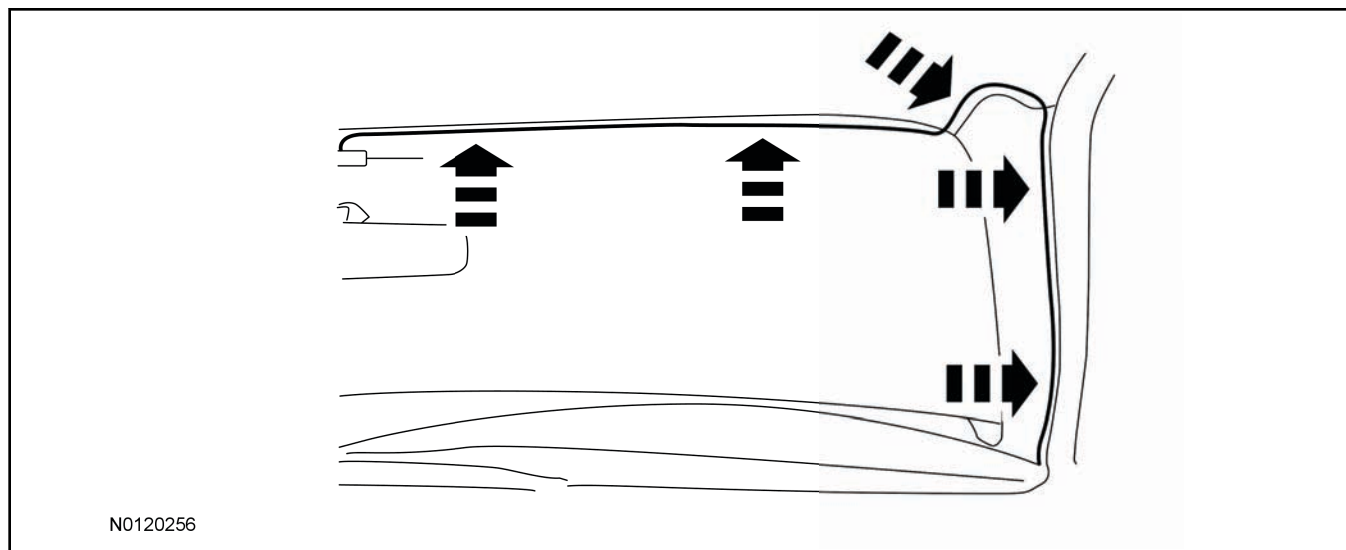
20. Remove the protective backing from the adhesive on the bi-directional antenna and firmly press the body of the bi-directional antenna to the windshield.



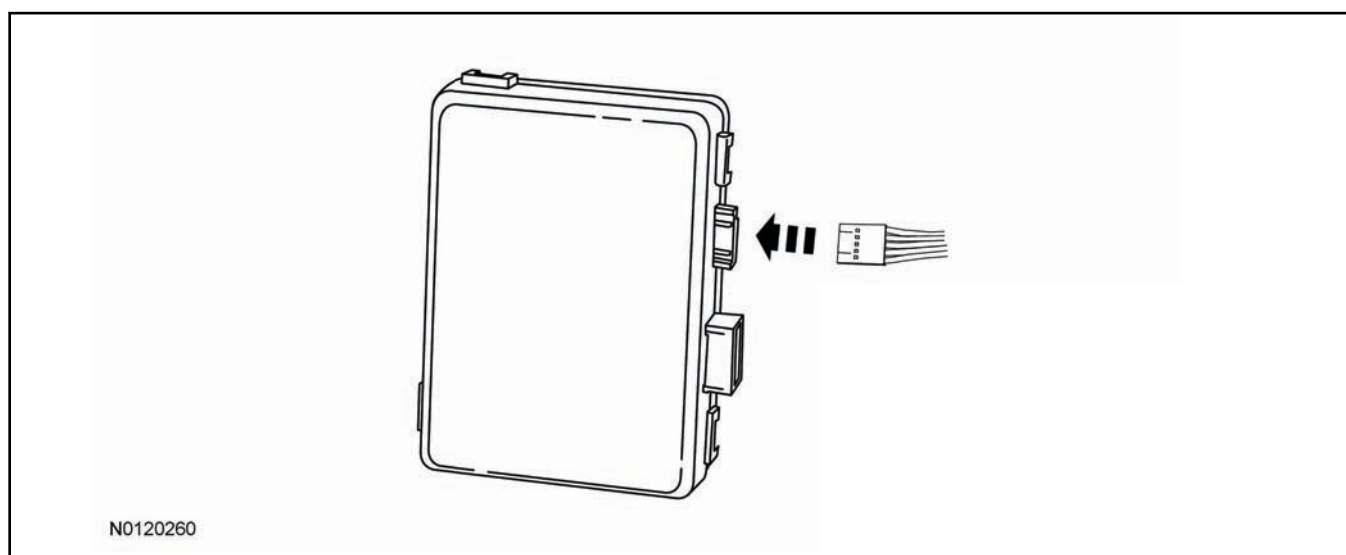
21. Route the bi-directional antenna cable.

- Route inside the headliner to the A-pillar.
- Route down the A-pillar, behind the side air bag. Secure as required with tie-straps.
- Continue routing into the RH instrument panel side trim area and inside the instrument panel, coming out of the glove box.

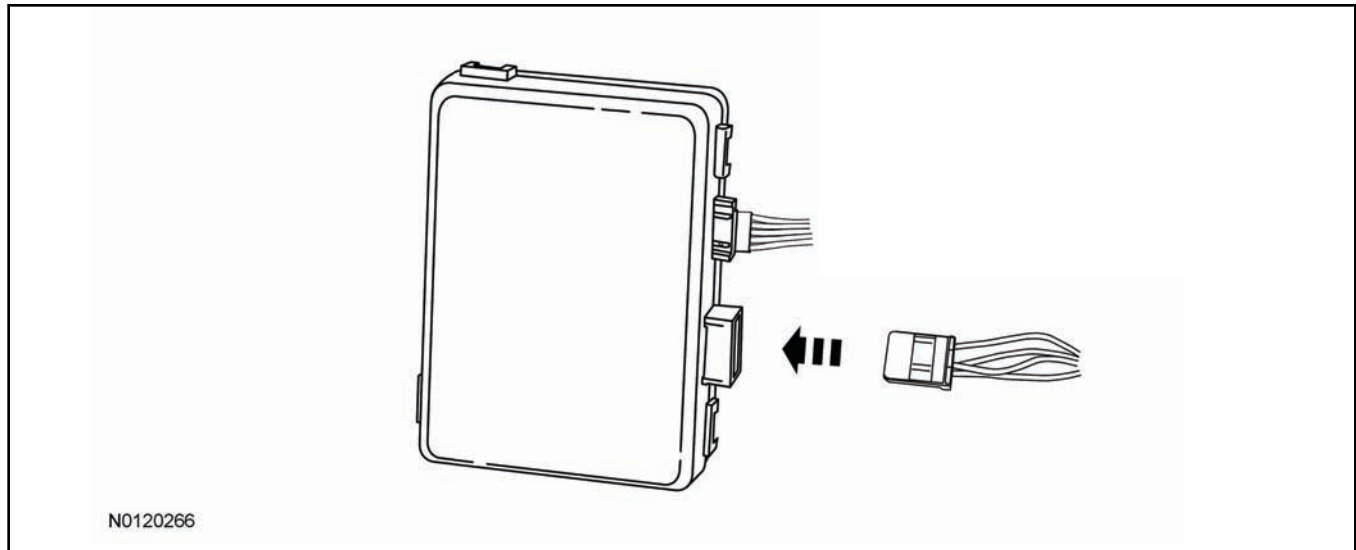


**INSTALLATION (Continued)****Installation**

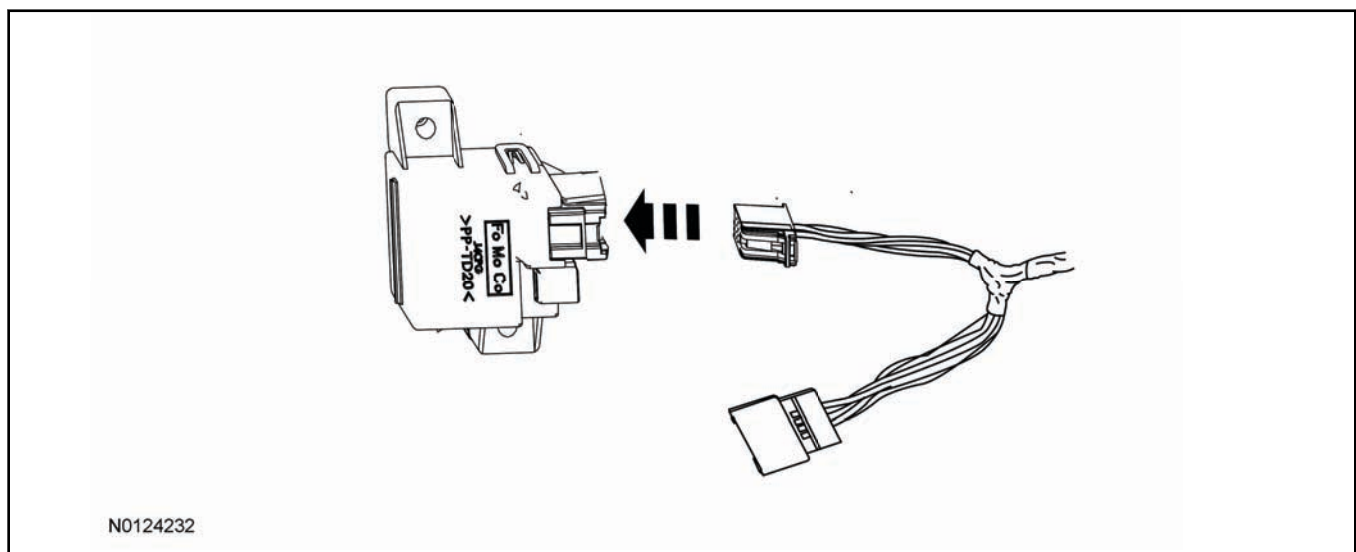
22. Connect the bi-directional antenna to the CGEA module.
- Secure the bi-directional antenna harness with tie-straps.



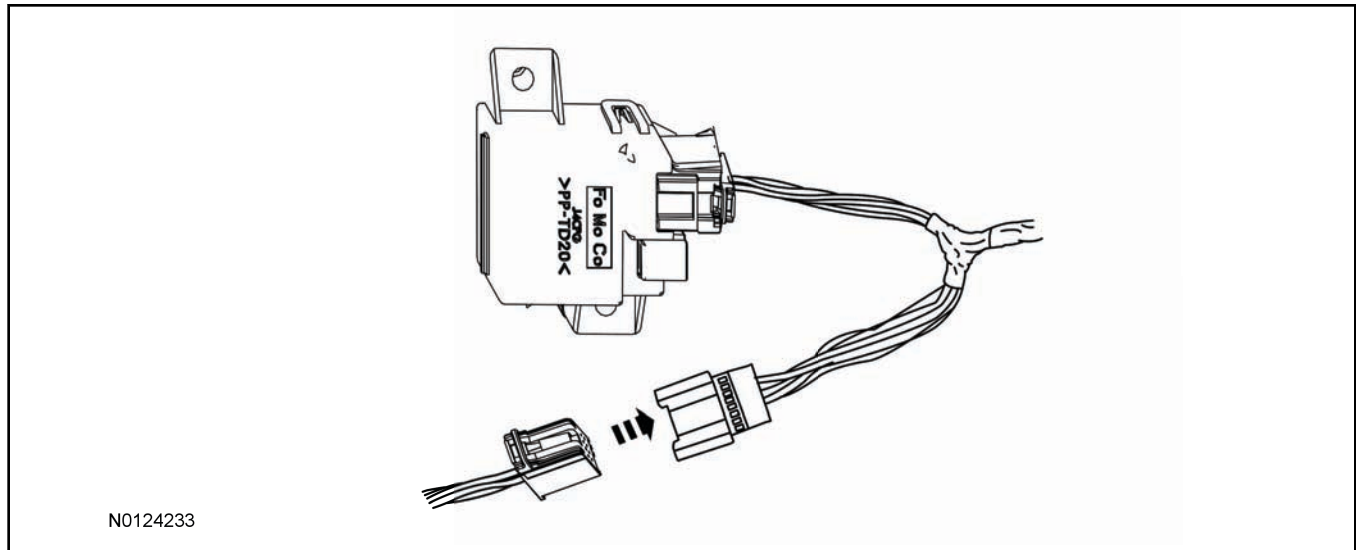
23. Connect the T-harness to the CGEA module.

**INSTALLATION (Continued)**

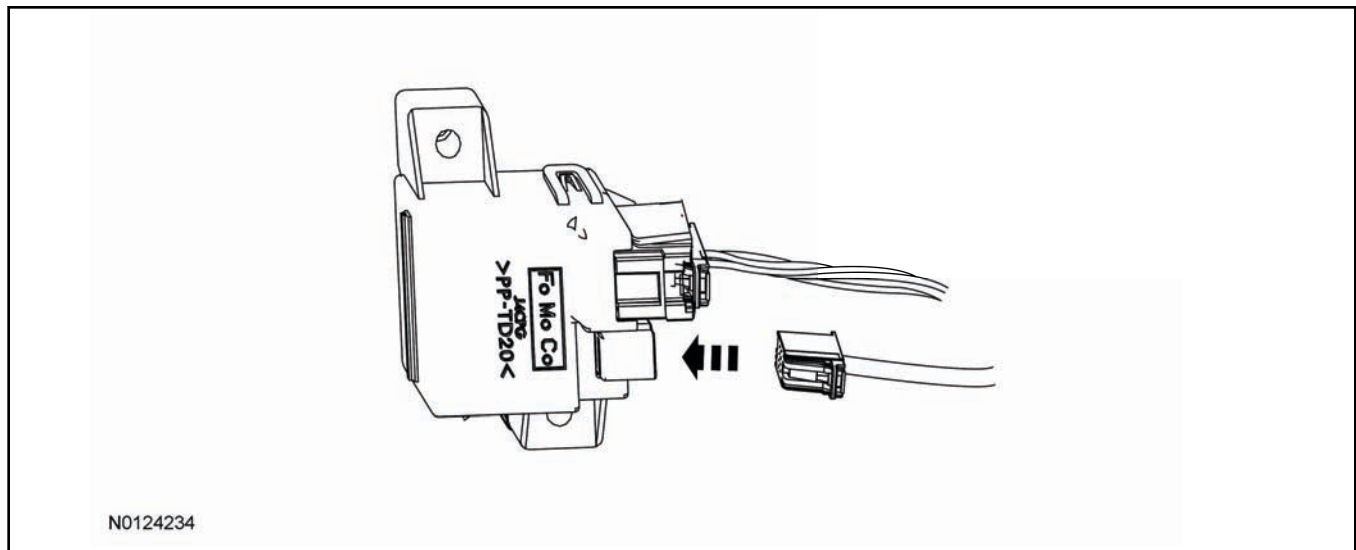
24. Position the CGEA module into the glove box opening. Secure the CGEA module to the air duct with tie-straps.
  - Alternatively, the CGEA module can be mounted to the bulkhead metal surface behind the glove compartment opening.
25. Route the female end of the T-harness to the TPM module.
  - Secure the harness with tie-straps.
26. Connect the female end of the 8-pin T-harness to the TPM module.



27. Connect the male end of the 8-pin T-harness to the vehicle's existing TPM module harness.

**INSTALLATION (Continued)**

28. Connect the antenna jumper wire to the TPM module.

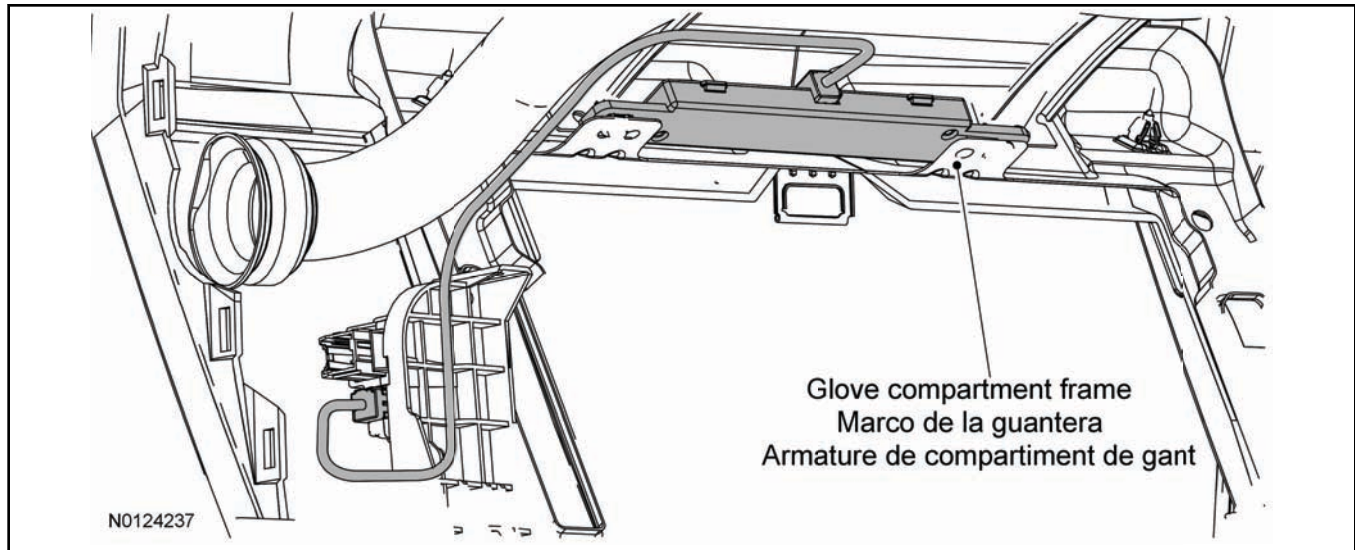


29. **NOTE:**

View is from inside the instrument panel glove box area.

Secure the antenna module to the glove box frame on top of the existing antenna module brackets.

- Secure the antenna module with tie straps through the existing bracket holes.

**INSTALLATION (Continued)**

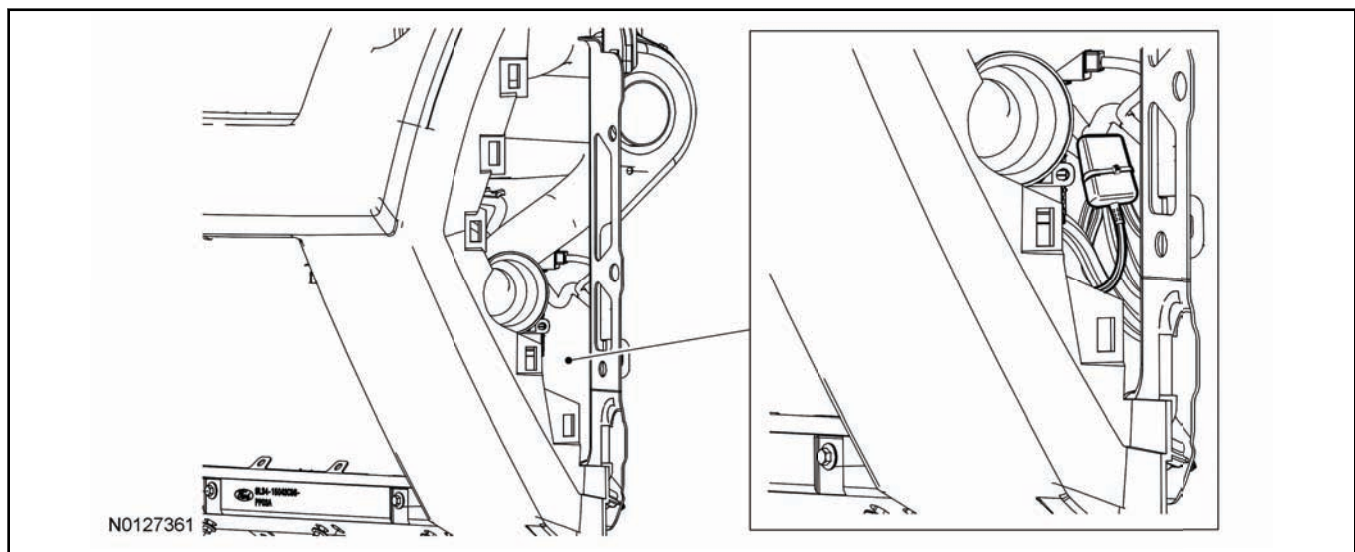
30. Connect the antenna jumper wire connector to the antenna module.

- Secure with tie straps.
- The push pins on the antenna jumper wire are not used for this application.

**Shock Sensor Mounting**

31. Mount the Shock Sensor onto the instrument panel wire harness, located between the TPM module and the bulkhead.

- Secure with tie-straps.

**LED Mounting**

32. Route the LED harness through the instrument panel to the driver side of the vehicle.

33. Using the following guidelines select a mounting location for the LED on the driver's side of the vehicle.

- Have at least 3/4" clearance behind any trim panel for the wiring harness to be routed.
- Be clearly visible from the driver's side window.

**INSTALLATION (Continued)**

- Do not mount the LED on trim panels that cover air bags.
34. Mount the LED at an appropriate location on the driver's side of the vehicle using the guidelines listed above.
- Drill a 9/32" hole into the selected location, for the LED to mount in.
35. Secure the LED wire harness with tie-straps.

**Install Trim****36. NOTICE:**

**While closing the glove compartment make sure that the TPM harness and antenna harness do not come in contact with the glove compartment door.**

Close the glove compartment.

37. Install the RH A-pillar trim panel.
38. If equipped with a speaker in the A-pillar trim panel, connect the speaker electrical connector.
39. Install the assist handle bolts.
- Tighten to 8 Nm (71 lb-in).
40. Install the passenger side assist handle bolt covers.
41. Install the RH Instrument panel side finish panel.

**Remote Start Activation**

42. Verify that the IDS is updated to the most current version.
43. Connect IDS.
- Follow the prompts to select new vehicle session.
  - Confirm VIN.
44. Activate the remote start using the IDS.
- Select the Tool box icon.
  - Select Body.
  - Select Security.
  - Select Remote Start.
  - Verify that the information on the IDS screen is correct and all procedures have been followed.
  - Select Yes, this will enable the Remote Start function on the vehicle.
45. For vehicles equipped with standard message center, verify that the remote start option now appears.
- Using the select button on the LH side of the steering wheel, cycle through the options and verify that the remote start option appears.
  - Select ok and verify that the remote start system is enabled.
46. For vehicles equipped with advanced message center, verify that the remote start option now appears.

**INSTALLATION (Continued)**

- Using the select and arrow buttons on the LH side of the steering wheel, select settings.
- Select vehicle.
- Select remote start.
- Select duration.
- Verify that the remote start system is set to 10 minutes.

**Programming the Panic/Car Finder button****NOTE:**

Ensure the brake pedal is not depressed during this sequence.

47. Press the vehicles unlock button located on the drivers door, make sure all doors are unlocked.
48. Put the key in the ignition.
49. Cycle eight times rapidly (within 10 seconds) between the 1 (OFF/LOCK) position and 3 (ON).
  - The eighth turn must end in the 3 (ON) position. The doors will lock, then unlock, to confirm that the programming mode has been activated.
50. Press the panic button on the bi-directional keyfob once, and the door locks should cycle to signal that the remote start system has been programmed.
  - After 20 seconds, you will automatically exit the programming mode. The doors will lock, then unlock, to confirm that the programming mode has been exited.
51. Press and release the Panic/Car Finder button on the Remote Start key fob to confirm that the button has been programmed. The vehicle should honk 4-6 times.

**Vehicle Security System Activation**

52. Cycle the vehicle ignition from OFF to ON.
53. Wait 10 seconds.
54. Press and hold the Program Override Button for 3 seconds. The LED will turn ON for 5 seconds. The parking lights will flash, and the horn will honk once to confirm Vehicle Security activation.
55. Turn OFF the vehicle ignition.

**Functional Test**

56. The Shock Sensor sensitivity setting defaults to maximum sensitivity (fully clockwise). This level can be reduced by turning the knob on the sensor counter clockwise to the desired sensitivity.
  - With the Vehicle Security System armed, a light tap of the Shock Sensor should trigger the warning chirp.
  - With the Vehicle Security System armed, a hard tap of the Shock Sensor should trigger the vehicle panic alarm.

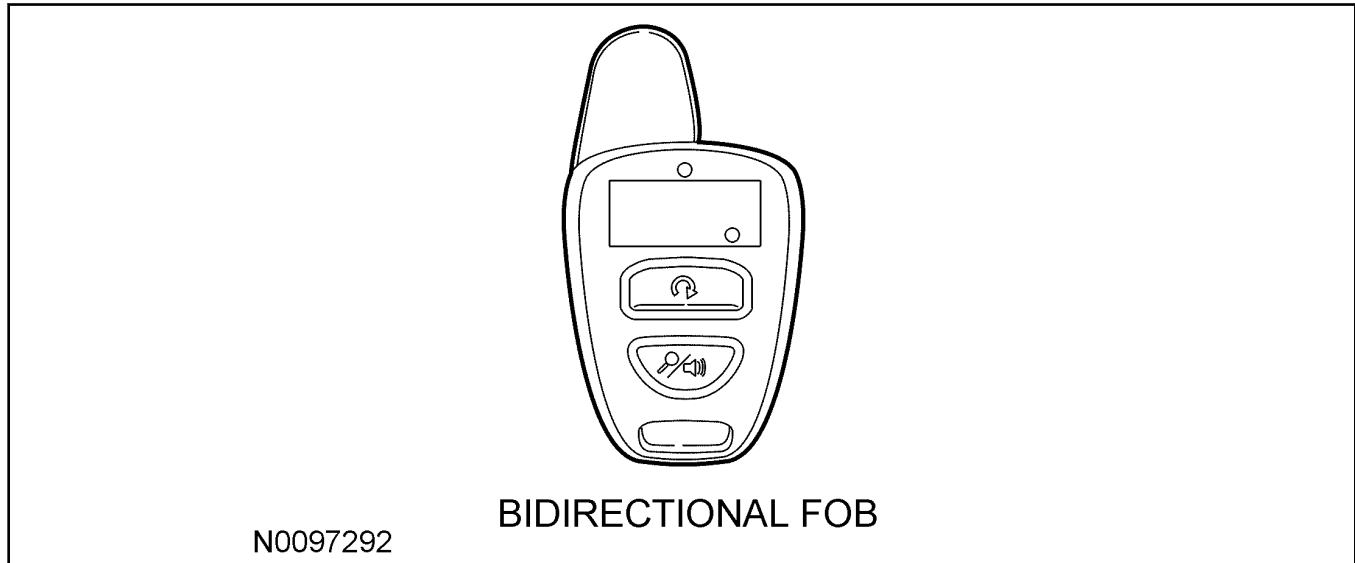
**NOTE:**

Do not put a key in the ignition for the following steps.

57. Make sure the ignition is in "park" and the ignition is in the "off" position, remove all keys from the vehicle.

**INSTALLATION (Continued)**

58. Close the hood.
59. Close all of the vehicle doors.
60. Start the vehicle by pressing the remote start button 2 times on the bi-directional key fob.



61. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
62. Enter the vehicle and confirm that it cannot shift out of park. The engine will remain running as long as the transmission stays in park.
63. Open the hood.
64. **NOTE:**  
Vehicle doors should be closed while performing this step.

Confirm that the vehicle will not start with the hood open.

**Please contact Ford Hotline with any issues regarding remote start functionality.**

**Please contact 1-800-FORD-KEY with any issues regarding hardware or kit contents.**