

## **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 —> **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

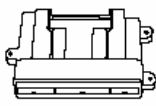
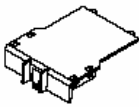









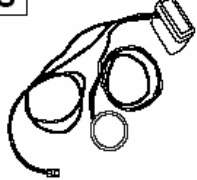

**Note:** If the package is sent without a claim number/claim number visible on the outside of the package, the shipment will be refused and returned at sender's expense.

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

### PARTS BAG CONTENTS

NOTE: Part bag contents are not available as service items

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

### Remote Start System Kit (RMST) - TYPE "A"

| REF    | DESCRIPTION                           | QTY |
|--------|---------------------------------------|-----|
| A      | PC-14 MODULE ASSEMBLY                 | 1   |
| B      | RMST DNA ASSEMBLY                     | 1   |
| C      | 1 BUTTON POWERCODE TRANSMITTER        | 2   |
| E      | TYPE "A" CUSTOM WIRING HARNESS        | 1   |
| N      | DIPOLE ANTENNA                        | 1   |
| M      | HOOD SAFETY SWITCH ASSEMBLY           | 1   |
| T - CC | INSTALLATION PARTS BAG                | 1   |
| DD, EE | FUSE PARTS BAG                        | 1   |
| R      | OPERATORS INSTRUCTION                 | 1   |
| Q      | OPERATORS QUICK REFERENCE WALLET CARD | 1   |
| P      | UNDERHOOD WARNING LABEL               | 1   |
| S      | PIK-4 PATS INTERFACE KIT              | 1   |
| T      | RELAY (7L2J-19G364-CA KIT ONLY)       | 2   |

### Remote Start System Kit (RMST) - TYPE "B"

| REF    | DESCRIPTION                           | QTY |
|--------|---------------------------------------|-----|
| A      | PC-34 MODULE ASSEMBLY                 | 1   |
| B      | RMST DNA ASSEMBLY                     | 1   |
| C      | 1 BUTTON POWERCODE TRANSMITTER        | 2   |
| F      | TYPE "B" CUSTOM WIRING HARNESS        | 1   |
| N      | DIPOLE ANTENNA                        | 1   |
| M      | HOOD SAFETY SWITCH ASSEMBLY           | 1   |
| T - CC | INSTALLATION PARTS BAG                | 1   |
| DD, EE | FUSE PARTS BAG                        | 1   |
| R      | OPERATORS INSTRUCTION                 | 1   |
| Q      | OPERATORS QUICK REFERENCE WALLET CARD | 1   |
| P      | UNDERHOOD WARNING LABEL               | 1   |
| T      | RELAY                                 | 2   |
| S      | PIK-4 PATS INTERFACE KIT              | 1   |

### Remote Start System Kit (RMST) - TYPE "C"

| REF    | DESCRIPTION                           | QTY |
|--------|---------------------------------------|-----|
| A      | PC-34 MODULE ASSEMBLY                 | 1   |
| B      | RMST DNA ASSEMBLY                     | 1   |
| C      | 1 BUTTON POWERCODE TRANSMITTER        | 2   |
| G      | TYPE "C" CUSTOM WIRING HARNESS        | 1   |
| N      | DIPOLE ANTENNA                        | 1   |
| M      | HOOD SAFETY SWITCH ASSEMBLY           | 1   |
| T - CC | INSTALLATION PARTS BAG                | 1   |
| DD, EE | FUSE PARTS BAG                        | 1   |
| R      | OPERATORS INSTRUCTION                 | 1   |
| Q      | OPERATORS QUICK REFERENCE WALLET CARD | 1   |
| P      | UNDERHOOD WARNING LABEL               | 1   |
| T      | RELAY                                 | 2   |
| S      | PIK-4 PATS INTERFACE KIT              | 1   |

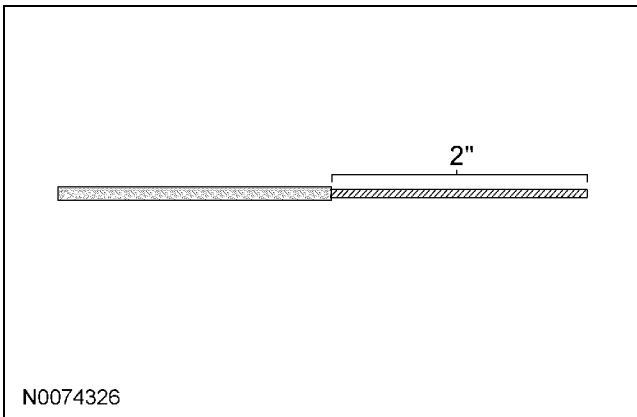


## GENERAL PROCEDURES

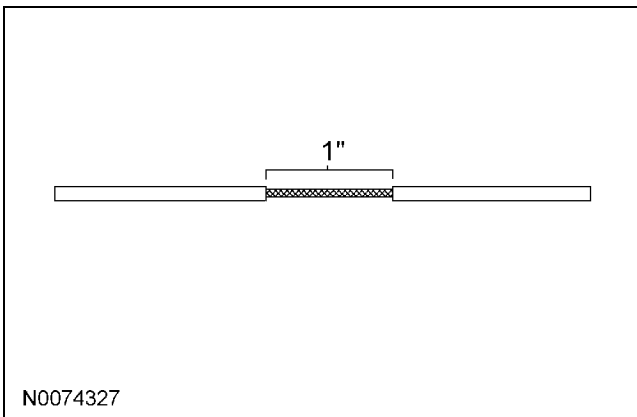
### Proper Splicing Techniques

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

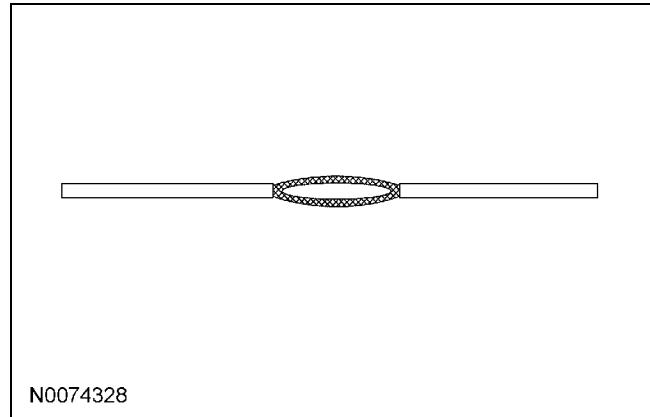
1. Strip approximately two inches of insulation from the wire to be installed in the vehicle.



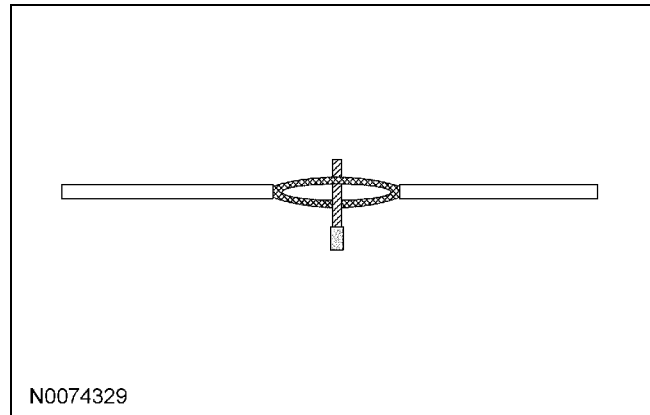
2. On the vehicle wire to be spliced into, strip one inch of insulation from the wire.



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.

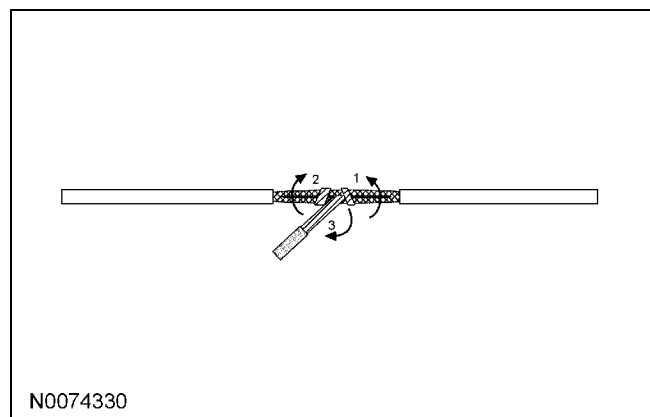


4. Insert the new wire between the parted strands. If more than one wire is being spliced, wrap them in opposite directions.



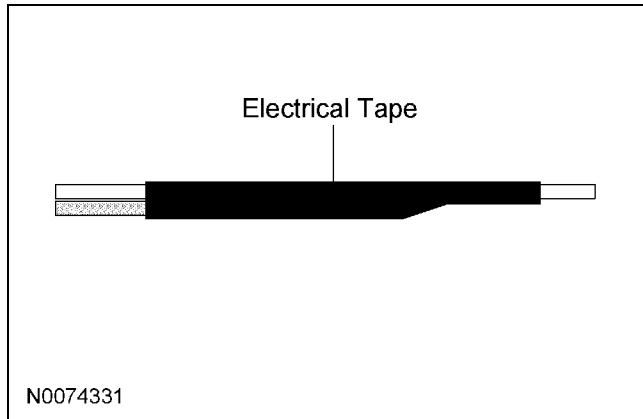
**NOTE:** Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

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)**

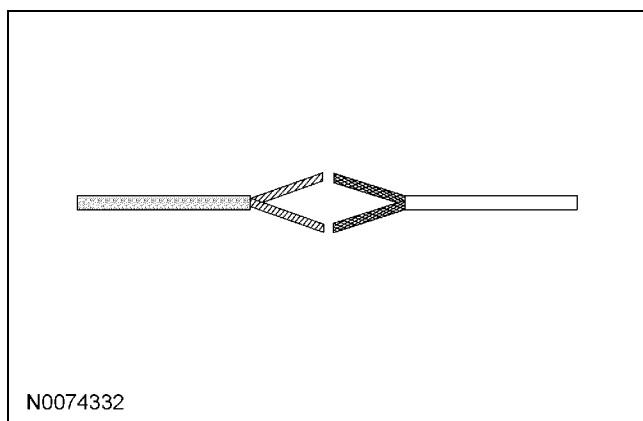
6. Wrap the connection with electrical tape so the tape covers the wires approximately two inches on either side of the connection.
  - Tape the wires together as shown in the illustration.

**Splicing End to End Connections**

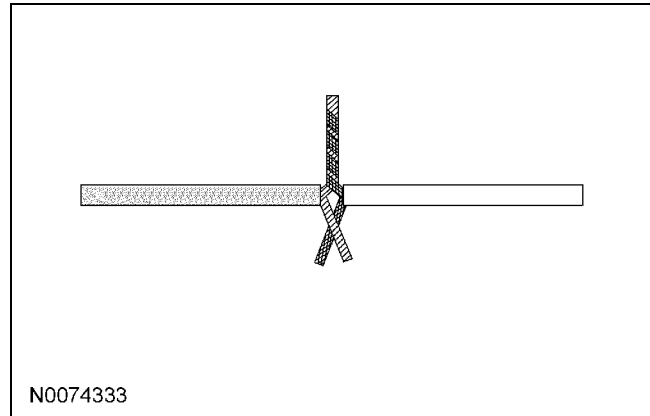
**NOTE:** When both ends of the wire are cut, use the end to end wire splicing procedure.

**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.

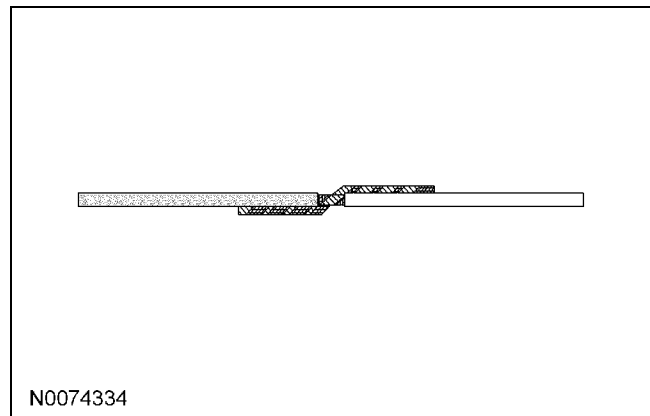


2. Place the wires next to each other and twist the upper and lower strands together as shown.

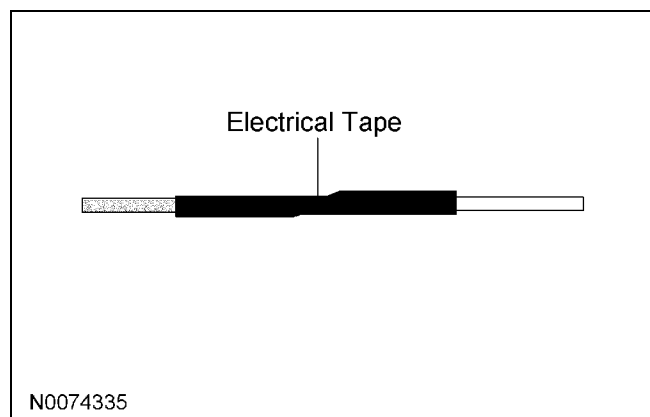


**NOTE:** Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

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.



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



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# REMOTE START SYSTEM INSTALLATION

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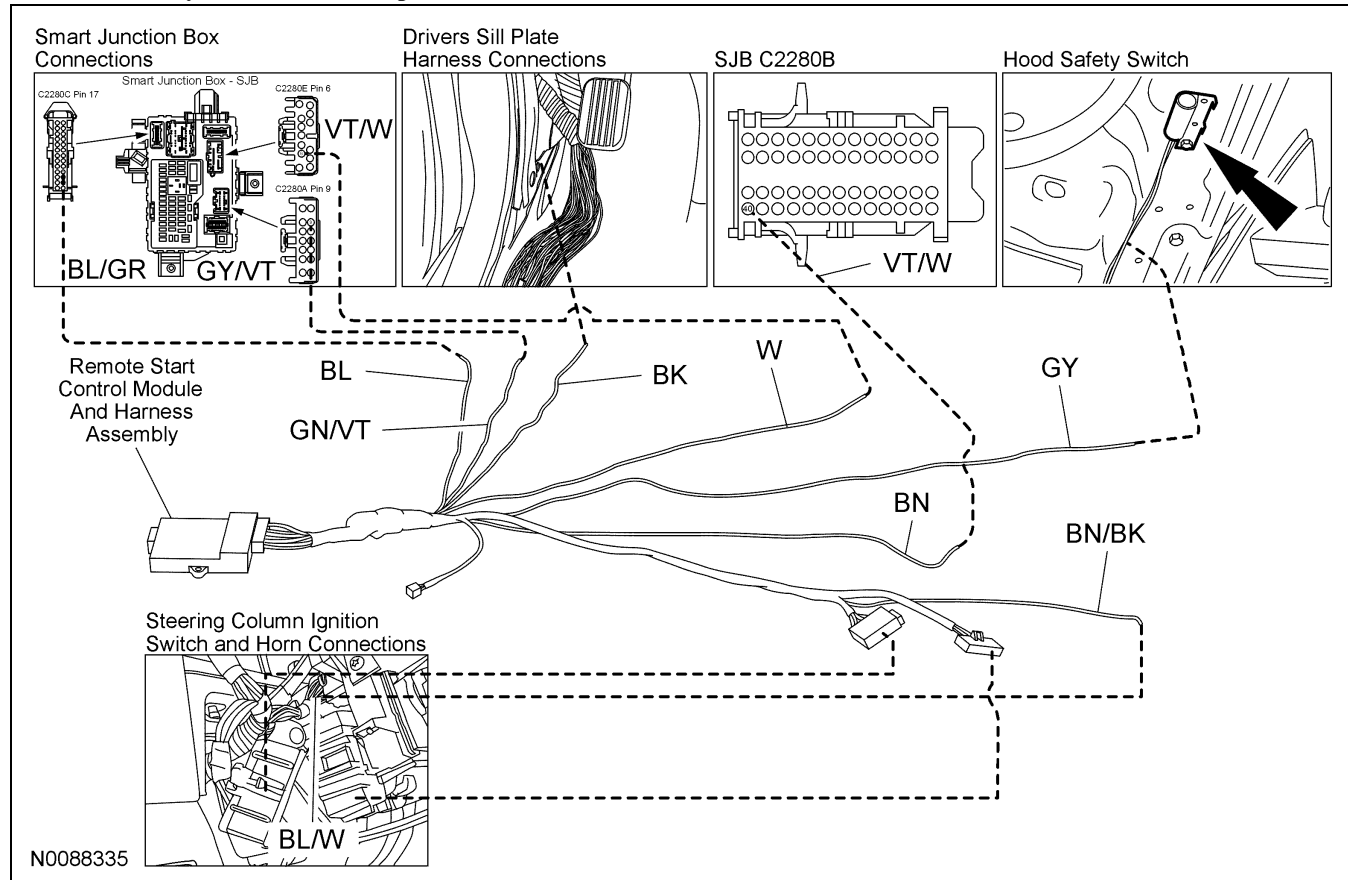
### WIRING DIAGRAMS

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# INSTALLATION

## Remote Start

### Remote Start System RMST Components



## Flex

**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.

## INSTALLATION (Continued)

### Review Remote Start Installation Kit Contents

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

- Review the RMST kit contents.

### Remote Start System Standard Kit (RMST) Type - "A"

| QUANTITY | DESCRIPTION                           |
|----------|---------------------------------------|
| 1        | TYPE - "A" MODULE ASSEMBLY            |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY      |
| 2        | 1 BUTTON POWERCODE TRANSMITTER        |
| 1        | TYPE - "A" CUSTOM WIRING HARNESS      |
| 1        | ANTENNA                               |
| 1        | HOOD SAFETY SWITCH ASSEMBLY           |
| 1        | INSTALLATION PARTS BAG                |
| 1        | FUSE PARTS BAG                        |
| 1        | OPERATORS INSTRUCTIONS                |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD |
| 1        | UNDERHOOD WARNING LABEL               |
| 1        | SECURILOCK INTERFACE KIT              |

- Review the RMST bidirectional kit contents.

### Remote Start System Bidirectional Kit (RMST) Type - "A"

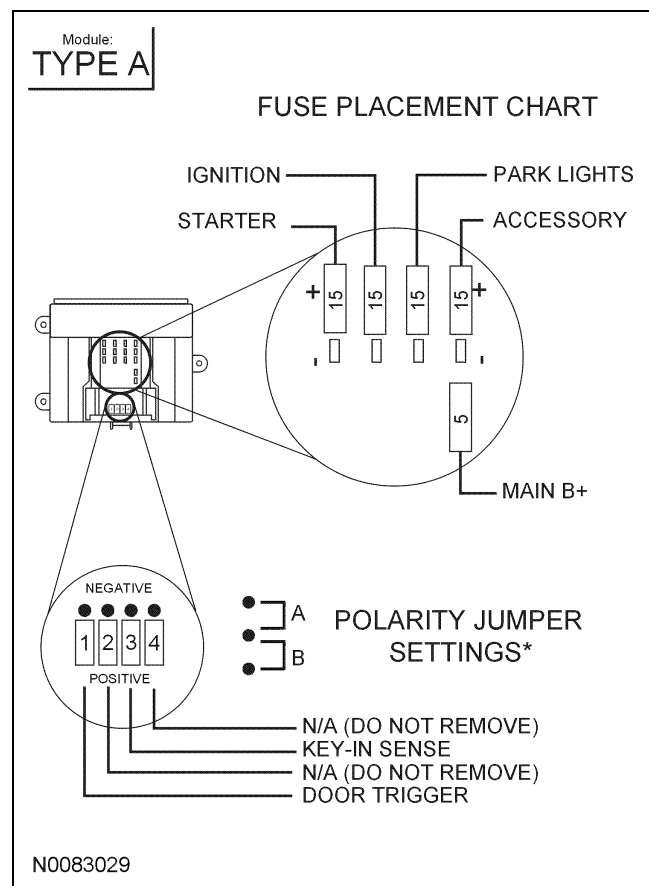
| QUANTITY | DESCRIPTION                      |
|----------|----------------------------------|
| 1        | TYPE - "A" MODULE ASSEMBLY       |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY |

### Remote Start System Bidirectional Kit (RMST) Type - "A" (Continued)

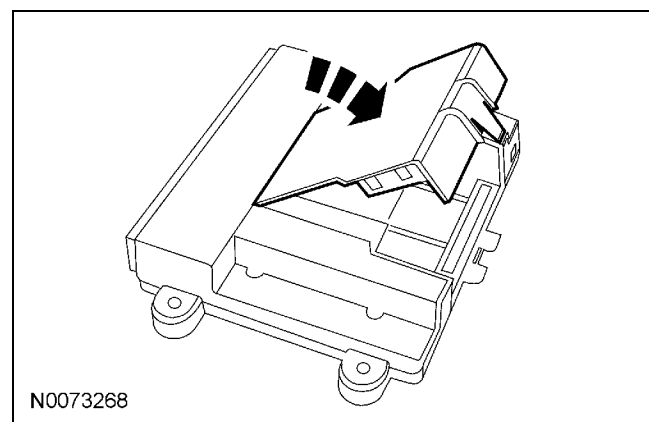
| QUANTITY | DESCRIPTION                           |
|----------|---------------------------------------|
| 1        | 2 BUTTON POWERCODE TRANSMITTER        |
| 1        | TYPE - "A" CUSTOM WIRING HARNESS      |
| 1        | ANTENNA                               |
| 1        | ANTENNA HARNESS                       |
| 1        | HOOD SAFETY SWITCH ASSEMBLY           |
| 1        | INSTALLATION PARTS BAG                |
| 1        | FUSE PARTS BAG                        |
| 1        | OPERATORS INSTRUCTIONS                |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD |
| 1        | UNDERHOOD WARNING LABEL               |
| 1        | SECURILOCK INTERFACE KIT              |

### Module Preparation

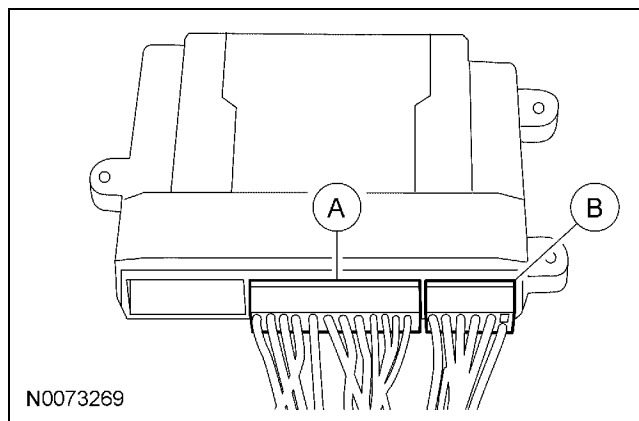
- Place the supplied fuses into the power distribution block on the remote start control module.
  - Move the polarity jumpers to their proper locations on the control module, see illustration.

**INSTALLATION (Continued)**

5. Place the software cartridge onto the RMST control module.



6. 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.



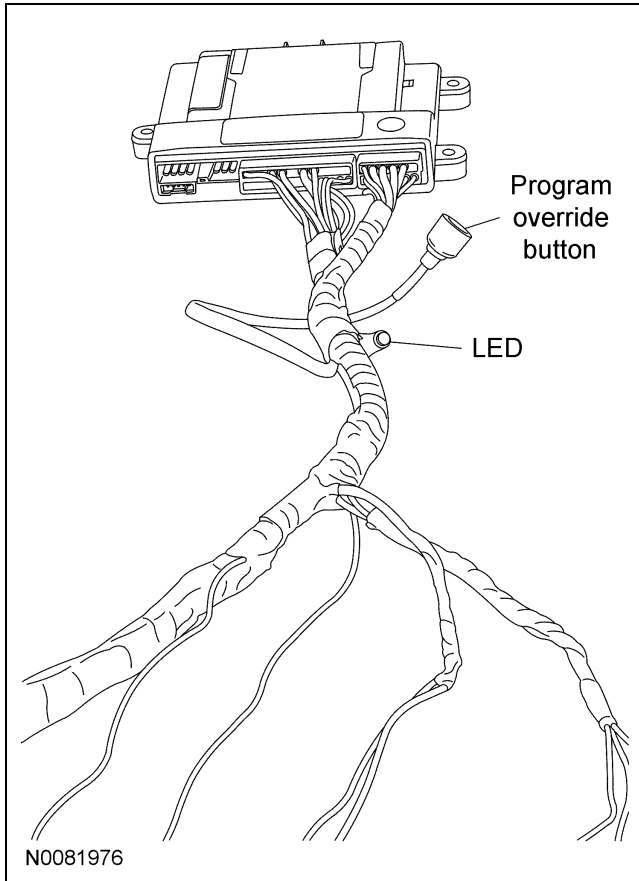
7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

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

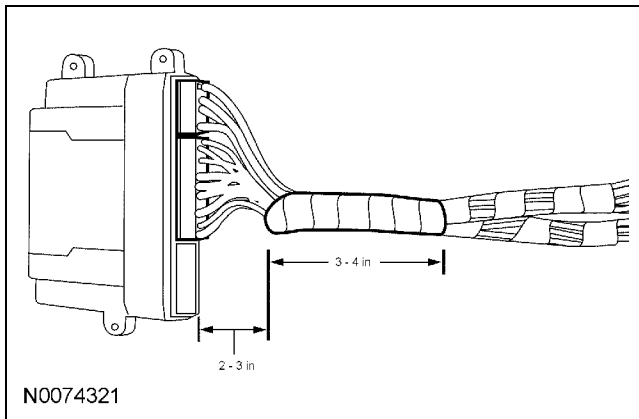
Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18". Depending on the vehicle, there will be 2 to 5 different wire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

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

## INSTALLATION (Continued)



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



### Vehicle Preparation

9. Remove the 3 lower instrument panel steering column cover screws and the cover.
10. Remove the 3 screws and the upper and lower steering column shrouds.

11. Remove the left hand scuff plate and cowl trim panel.

### Antenna Mounting

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

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

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

### Install The Antenna

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

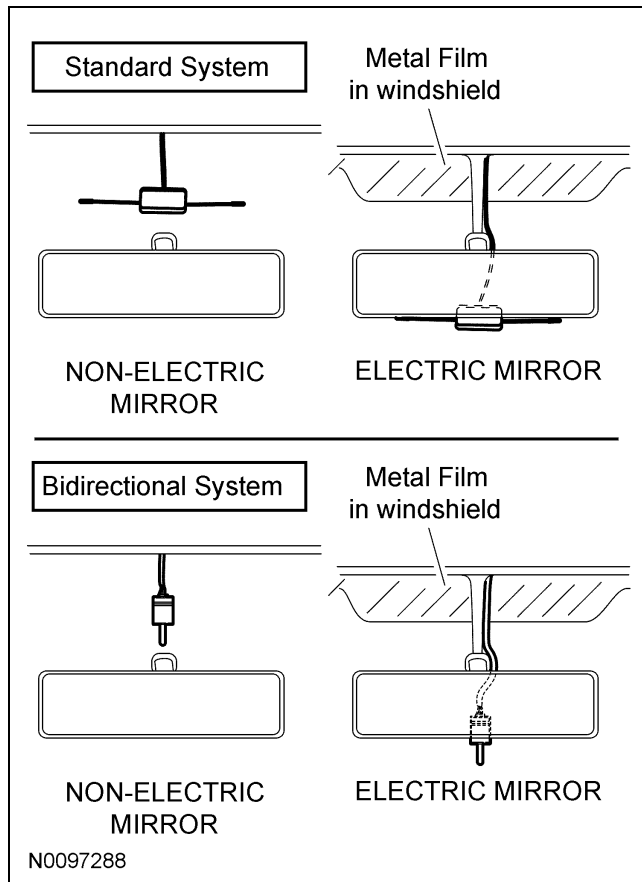
14. **NOTE:** Do not touch the adhesive, reduced adhesion may result.

**NOTE:** Make sure that the long wire on the antenna is pointing towards 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.

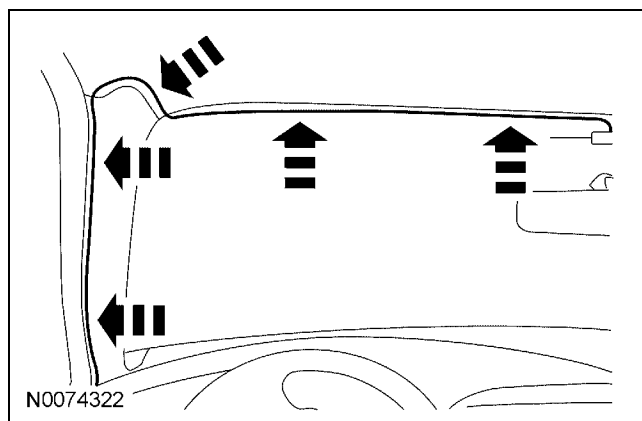
## INSTALLATION (Continued)



15. If necessary, position the A pillar trim slightly outward to provide access to route the antenna wire.

**NOTE:** Do not route the antenna wire over the top of the air bag.

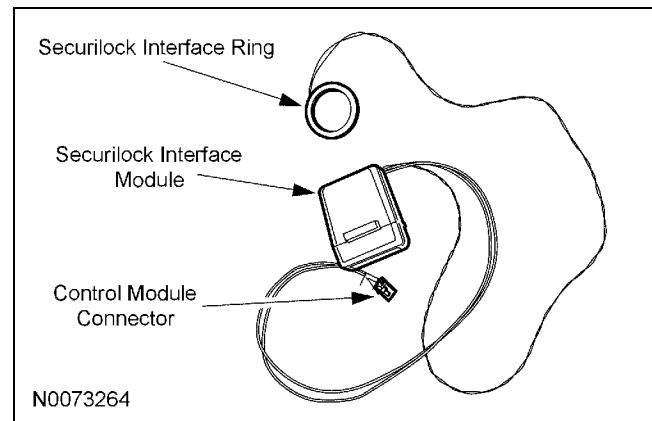
16. Route the antenna cable along the headliner and down the A pillar towards the floor.



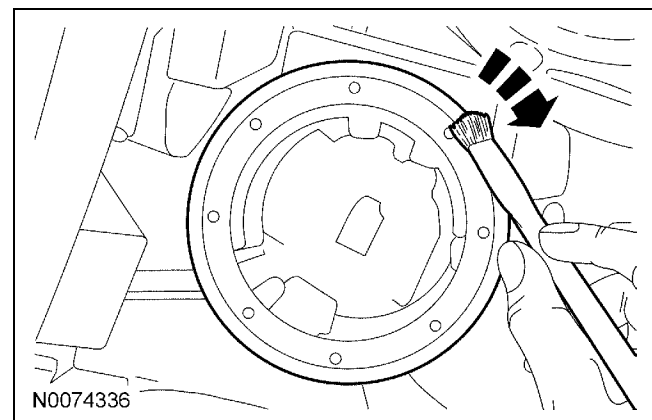
17. Reposition the A pillar trim panel.

## Install The Securilock Interface Kit

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



19. 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.



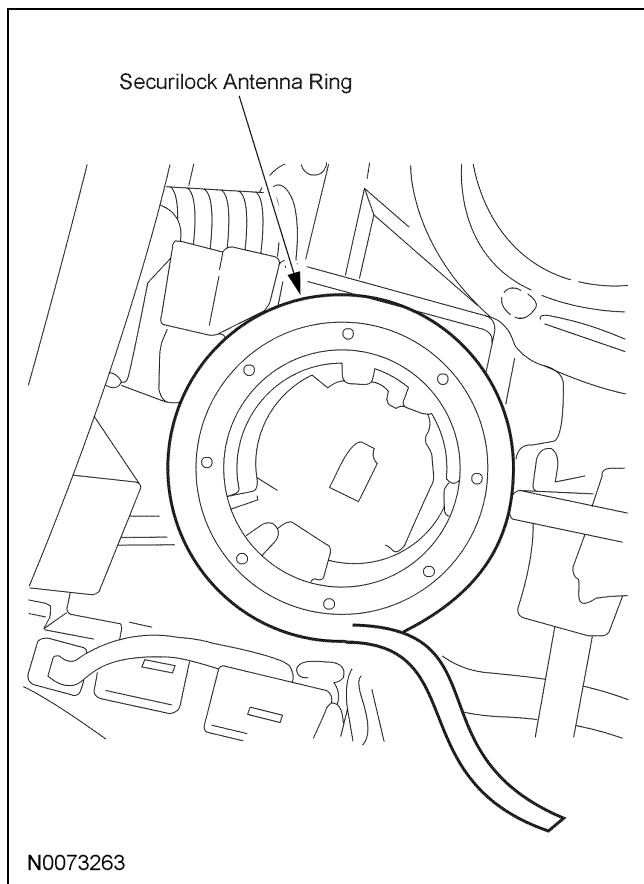
20. **NOTICE:** Do not damage the transceiver ring during installation or while installing the steering column shroud.

**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.



## INSTALLATION (Continued)



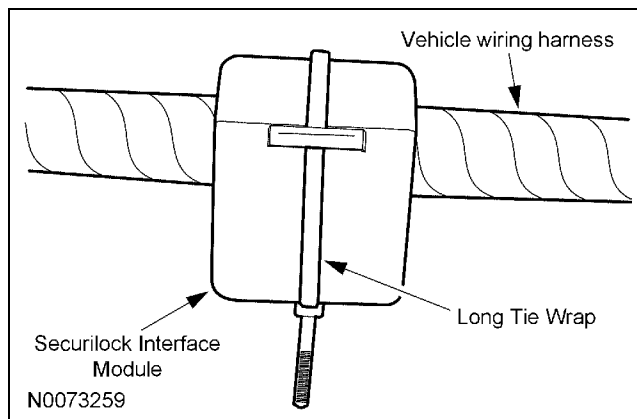
### Install The Securilock Interface Module

21. **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.

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

Route the harness and connector the to module mounting location.



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

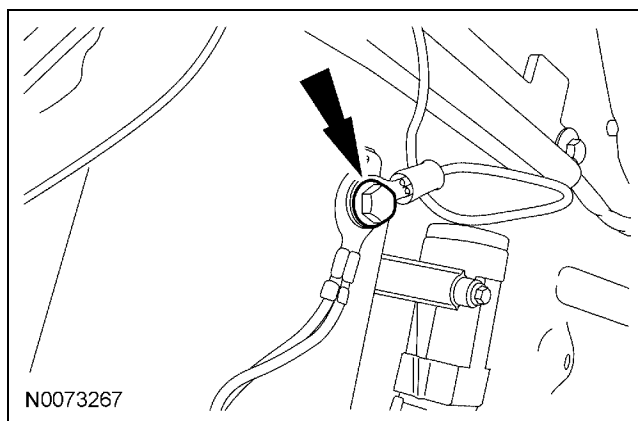
23. Place the remote start module and harness assembly on the floor of the vehicle.

### Identify Circuit Wires For Connections

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

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

24. Connect the Black ground wire from the remote start module harness to the chassis ground point at the driver kick panel.



25. Disconnect the ignition switch electrical connector.
26. Connect the remote start harness hard shell connectors to the ignition switch and ignition switch connector.

**INSTALLATION (Continued)**

27. **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 in the steering column harness.

28. Connect the Brown/Black wire from the remote start module harness to the Blue/White horn circuit wire in the steering column harness.

29. **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 power on the correct wire, then show ground when the door lock switch is pressed.

Identify the Blue/Green power door lock circuit wire at one of the following locations:

- Smart Junction Box (SJB) Connector C2280C Pin 17.
- Driver's kick panel.

30. Connect the Blue wire from the remote start module harness to the Blue/Green wire at one of the following locations:

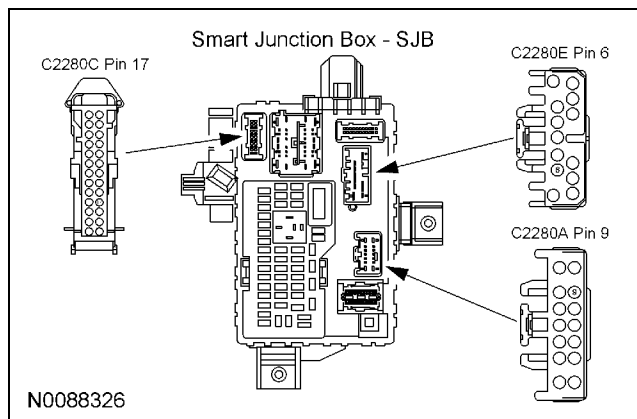
- Smart Junction Box (SJB) Connector C2280C Pin 17.
- Driver's kick panel.

31. **NOTE:** A DVOM connected to the correct wire will show 12V, when the headlight switch is ON, then show 0V when the headlight switch is OFF.

A logic probe will show power on the correct wire when the headlight switch is ON, then show ground when the headlight switch is OFF.

Identify the Violet/White parking light circuit wire at the SJB Connector C2280E Pin 6.

32. Connect the White wire from the remote start module harness to the Violet/White parking light circuit wire at the SJB Connector C2280E Pin 6.

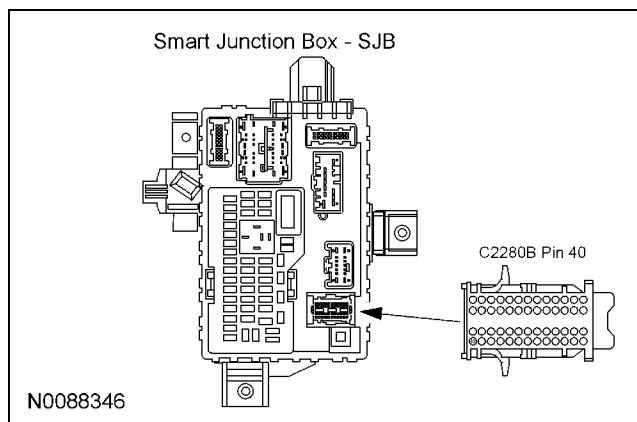


33. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the brake pedal.

A logic probe will show ground on the correct wire, then show power while depressing the brake pedal.

Identify the Violet/White brake switch circuit wire at the SJB Connector C2280B Pin 40.

34. Connect the Brown wire from the remote start module harness to the Violet/White brake switch circuit wire at the SJB Connector C2280B Pin 40.



## INSTALLATION (Continued)

35. **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 Grey/Violet dome light circuit wire at the SJB Connector C2280A Pin 9.

36. Connect the Green/Violet wire from the remote start module harness to the Grey/Violet dome light circuit wire at the SJB Connector C2280A Pin 9.

### Install The Hood Safety Switch

37. **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.

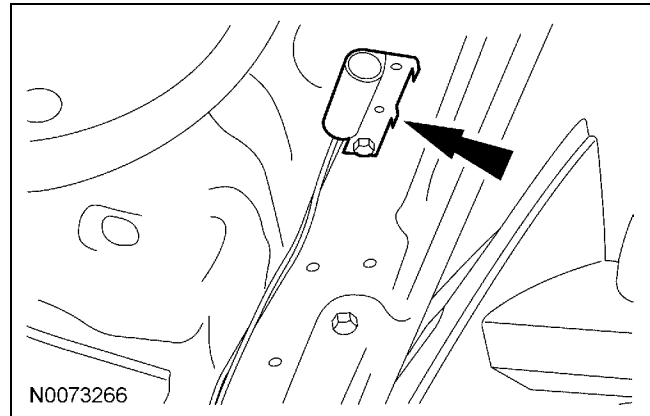
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

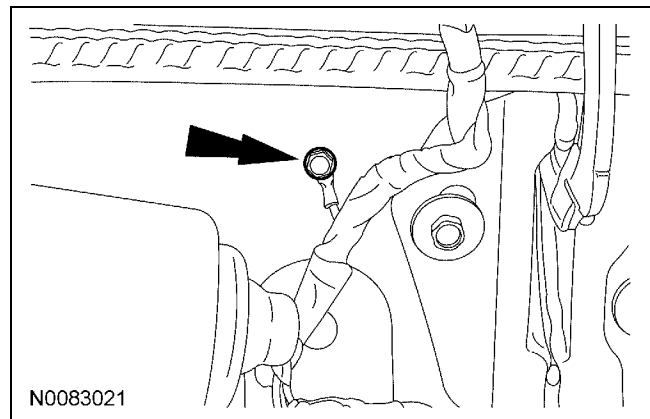
- False alarm trips
- Non-Remote Start events
- Inadvertent shutdown during Remote Start

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

38. Apply rustproofing compound (PM-13-A) to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).

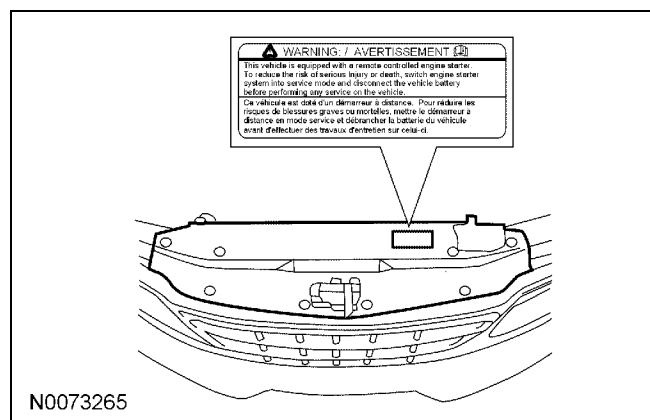


39. Connect hood switch ground wire to a suitable location on the bulkhead.



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

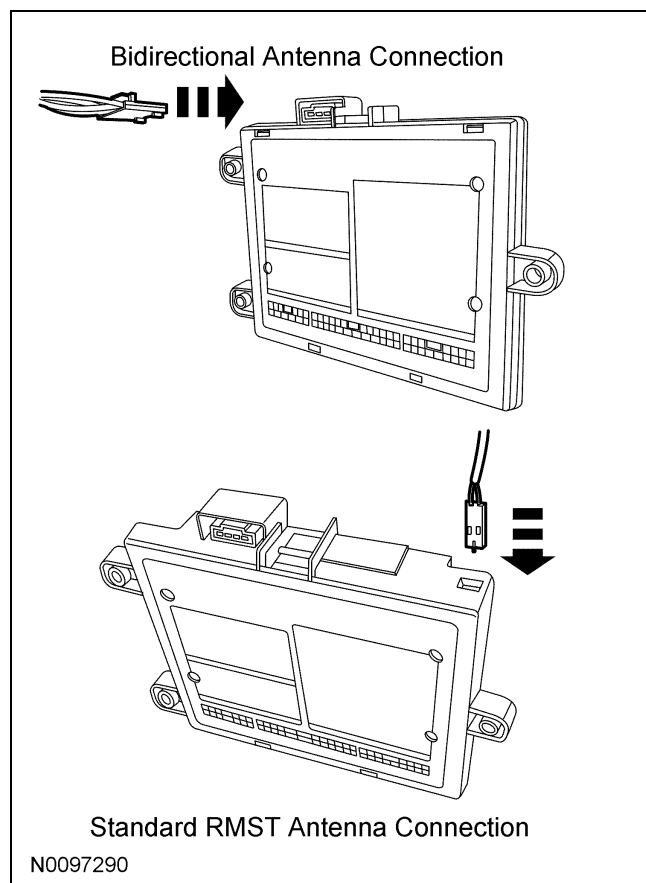
Install the underhood warning label



41. Route the Gray hood safety switch wire through the bulkhead into the engine compartment and attach to the hood safety switch.

## INSTALLATION (Continued)

42. Connect the antenna to the RMST control module.



43. Connect the SECURILOCK interface module to the RMST control module.

### Program The RMST System

44. [Refer to the RMST programming section for this vehicle click here.](#)

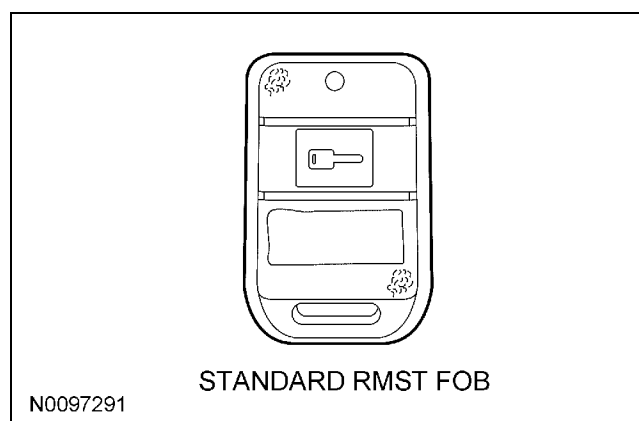
### Secure RMST Harness and Control Module

45. Use the supplied tie wraps to secure the RMST harness wires.
46. **NOTE:** Do not mount the control module in the knee bolster area.
- Secure the control module at three points to the vehicle.
- Use the supplied long tie wraps to mount the RMST control module to the underdash wiring harness.

### Install Trim

47. Install the left hand scuff plate and cowl trim panel.
48. Install the upper and lower steering column shrouds.
- Install the 3 screws.
49. Install the lower steering column opening cover.
- Install the 3 screws.
- Tighten to 2.5 Nm (22 lb-in).

### Programming - Standard Remote Start



50. **NOTE:** If the remote start 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 and doors are 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.

## INSTALLATION (Continued)

### Programming Options: Entering Programming Mode

51. See chart below for programming information.

#### Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR            | LED |
|------|---------|------------------|-----|
| 2    | 1       | TACHLESS<br>MODE | ON  |

52. Press and hold the brake pedal.

53. Turn the ignition key to the RUN position.  
The dome light will turn off.

54. 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.

Release the brake pedal and the RMST override button.

55. 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.
- All doors closed and 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.

56. Press and release the override button again. The horn will honk 5 times indicating the system has entered the second program bank.

57. Press and release the brake pedal.

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

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

**Failure to quickly release the remote start fob button will result in system defaulting to the factory options.**

58. 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 button and verify the LED illuminates.

**NOTE:** If the remote start fob button is held for more than 3 seconds the system will chirp the horn 4 times, indicating the system has returned to factory default settings. If this occurs return to step 1 of the programming section and reprogram the remote start module.

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

59. Remove the ignition key.

### 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.

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

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

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

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

## INSTALLATION (Continued)

**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.

62. 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.

### Functional Test - Standard Remote Start

**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](#).

63. Make sure all doors are closed but hood is open and windows are down (doors will be locking).
64. Press and hold the Start button on the remote control key fob for 2-3 seconds. The horn should honk once indicating receipt of the start request.
65. The remote start systems should turn on the ignition, but then honk the horn twice and shut down indicating the hood is open.
66. Close the hood, and insert a key into the ignition switch.
67. Attempt to re-start the vehicle again using the key fob.

68. 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.
69. Remove the key and open a door.
70. Attempt to re-start the vehicle again using the key fob.
71. The remote start systems should turn on the ignition, but then honk the horn three times and shut down indicating a door is open.
72. Close the door.
73. Attempt to re-start the vehicle again using the key fob.
74. Once the vehicle starts, verify that all heat and A/C functions operate normally and that the doors have locked.
75. On vehicles equipped with power window interrupt, Attempt to close windows to check power window interrupt function.
- 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.
76. Once all systems have been checked, open the door\*, or press the brake pedal - the remote start system should shut down.

## INSTALLATION (Continued)

### Troubleshooting

77. **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.  |
| 5 Chirps | The KEY is in the ignition.   |
| 6 Chirps | The remote start system is in SERVICE/VALET mode.                               |

78. **NOTE:** If the remote start 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 and doors are 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

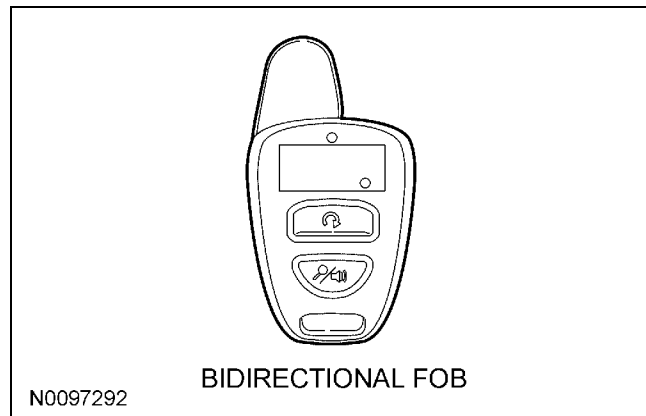
79. See chart below for programming information.

#### Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR         | LED |
|------|---------|---------------|-----|
| 2    | 1       | TACHLESS MODE | ON  |

80. Press and hold the brake pedal.
81. Turn the ignition key to the RUN position.  
The dome light will turn off.
82. 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.  
Release the brake pedal and the RMST override button.

### Programming Bidirectional Remote Start



## INSTALLATION (Continued)

83. 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.
- All doors closed and 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.

84. Press and release the override button again. The horn will honk 5 times indicating the system has entered the second program bank.

85. Press and release the brake pedal.

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

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

**Failure to quickly release the remote start fob button will result in system defaulting to the factory options.**

86. 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 button and verify the LED illuminates.

**NOTE:** If the remote start fob button is held for more than 3 seconds the system will chirp the horn 4 times, indicating the system has returned to factory default settings. If this occurs return to step 1 of the programming section and reprogram the remote start module.

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

87. Remove the ignition key.

## 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.

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

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

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

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

**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.

90. Press the remote start button twice within 3 seconds.

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

## Functional Test - Bidirectional Remote Start

**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](#).

91. Make sure all doors are closed but hood is open and windows are down (doors will be locking).

92. Press the Start button on the remote control key fob twice within 3 seconds - Horn should honk once indicating receipt of the start request.

93. The remote start systems should turn on the ignition, but then honk the horn twice and shut down indicating the hood is open.



## INSTALLATION (Continued)

94. Close the hood, and insert a key into the ignition switch.
  95. Attempt to re-start the vehicle again using the key fob.
  96. 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.
  97. Remove the key and open a door.
  98. Attempt to re-start the vehicle again using the key fob.
  99. The remote start systems should turn on the ignition, but then honk the horn three times and shut down indicating a door is open.
  100. Close the door.
  101. Attempt to re-start the vehicle again using the key fob.
  102. Once the vehicle starts, verify that all heat and A/C functions operate normally and that the doors have locked.
  103. On vehicles equipped with power window interrupt, Attempt to close windows to check power window interrupt function.
- 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.
104. Once all systems have been checked, open the door\*, or press the brake pedal - the remote start system should shut down.

## Troubleshooting

105. **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.  |
| 5 Chirps | The KEY is in the ignition.   |
| 6 Chirps | The remote start system is in SERVICE/VALET mode.                               |

# TYPE A" CUSTOM WIRE HARNESS

## RMST MODULE WIRE HARNESS

### STEERING COLUMN HARNESS

|      | Color       | Function              |
|------|-------------|-----------------------|
| A-3  | PINK        | Ignition Input/Output |
| A-2  | ORANGE      | HVAC Output           |
| A-13 | VIOLET      | Starter Output        |
| B-8  | BLACK/WHITE | Key-in-sense Input    |
| A-4  | RED         | Battery               |

|      | Color       | Function          |
|------|-------------|-------------------|
| A-21 | BROWN/BLACK | Horn Relay Output |

VEHICLE HARNESS

IGNITION SWITCH

Horn (BLUE/WHITE)

STEERING COLUMN HARNESS

## ROUTED TO SJB LOCATION

### DRIVER'S KICK PANEL HARNESS

|      | Color        | Function               |
|------|--------------|------------------------|
| A-5  | BLACK        | Ground                 |
| A-24 | BLUE         | Door Lock Output       |
| B-7  | BROWN        | Brake Input            |
| A-20 | GREEN/VIOLET | Door Ajar Switch Input |

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT  
IN DRIVER'S KICK PANEL

Door Lock ((BLUE/GREEN)

DRIVER'S KICK  
PANEL OR  
SJB C2280C PIN 17

Brake Switch (VIOLET/WHITE)

SJB C2280B  
PIN 40

Dome Light (GRAY/VIOLET)

SJB C2280A  
PIN 9

Parking Lights On  
(VIOLET/WHITE)

SJB C2280E  
PIN 6

### HEAD LAMP SWITCH HARNESS

|     | Color | Function             |
|-----|-------|----------------------|
| A-1 | WHITE | Parking Light Output |

### UNDER HOOD HARNESS

|      | Color | Function               |
|------|-------|------------------------|
| A-19 | GRAY  | Hood Open Switch Input |

Vehicle  
Interior

Engine  
Compartment

Chassis  
Ground

Do Not Ground to Hood

Hood Tilt Switch

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

### INSTALLATION

[Remote Start](#)

### GENERAL PROCEDURES

[Proper Splicing Techniques](#)

[Programming - Standard Remote Start](#)

[Functional Test - Standard Remote Start](#)

[Programming - Bidirectional Remote Start](#)

[Functional Test - Bidirectional Remote Start](#)

[Troubleshooting](#)

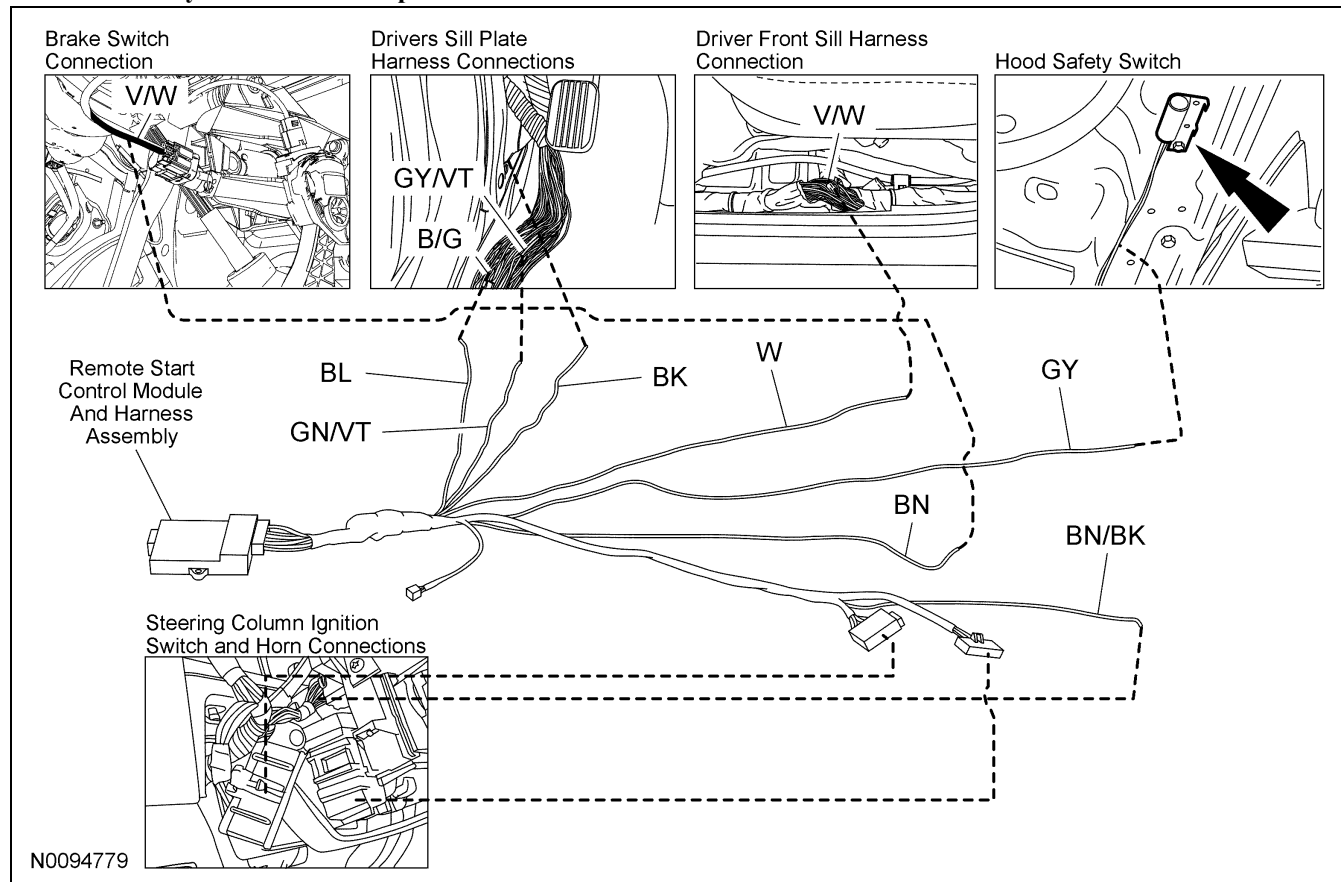
### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



### 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.

**INSTALLATION (Continued)****Review Remote Start Installation Kit Contents**

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

- Review the RMST kit contents.

**Remote Start System Standard Kit (RMST) Type - "A"**

| QUANTITY | DESCRIPTION                           |
|----------|---------------------------------------|
| 1        | TYPE - "A" MODULE ASSEMBLY            |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY      |
| 2        | 1 BUTTON POWERCODE TRANSMITTER        |
| 1        | TYPE - "A" CUSTOM WIRING HARNESS      |
| 1        | ANTENNA                               |
| 1        | HOOD SAFETY SWITCH ASSEMBLY           |
| 1        | INSTALLATION PARTS BAG                |
| 1        | FUSE PARTS BAG                        |
| 1        | OPERATORS INSTRUCTIONS                |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD |
| 1        | UNDERHOOD WARNING LABEL               |
| 1        | SECURILOCK INTERFACE KIT              |

- Review the RMST bidirectional kit contents.

**Remote Start System Bidirectional Kit (RMST) Type - "A"**

| QUANTITY | DESCRIPTION                      |
|----------|----------------------------------|
| 1        | TYPE - "A" MODULE ASSEMBLY       |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY |

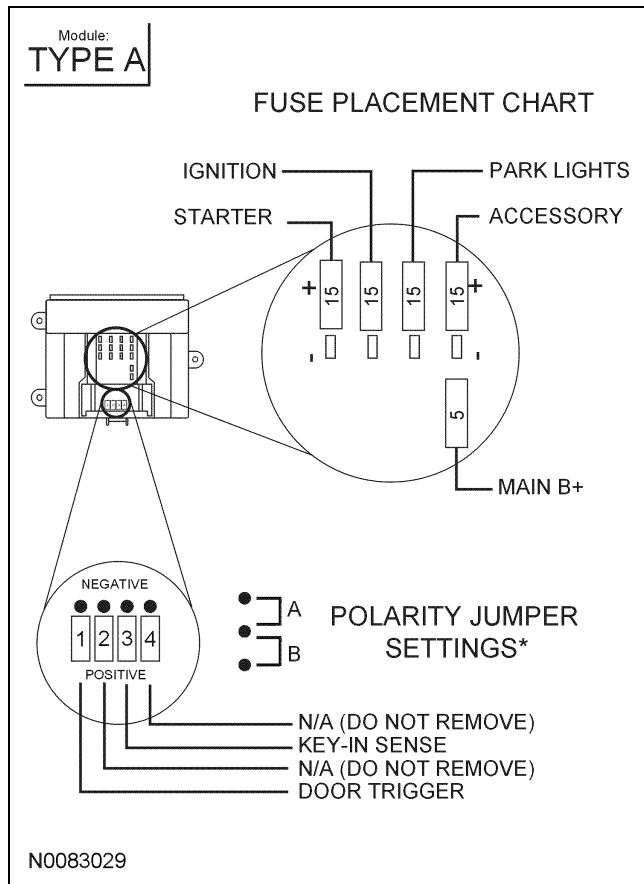
**Remote Start System Bidirectional Kit (RMST) Type - "A" (Continued)**

| QUANTITY | DESCRIPTION                           |
|----------|---------------------------------------|
| 1        | 2 BUTTON POWERCODE TRANSMITTER        |
| 1        | TYPE - "A" CUSTOM WIRING HARNESS      |
| 1        | ANTENNA                               |
| 1        | ANTENNA HARNESS                       |
| 1        | HOOD SAFETY SWITCH ASSEMBLY           |
| 1        | INSTALLATION PARTS BAG                |
| 1        | FUSE PARTS BAG                        |
| 1        | OPERATORS INSTRUCTIONS                |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD |
| 1        | UNDERHOOD WARNING LABEL               |
| 1        | SECURILOCK INTERFACE KIT              |

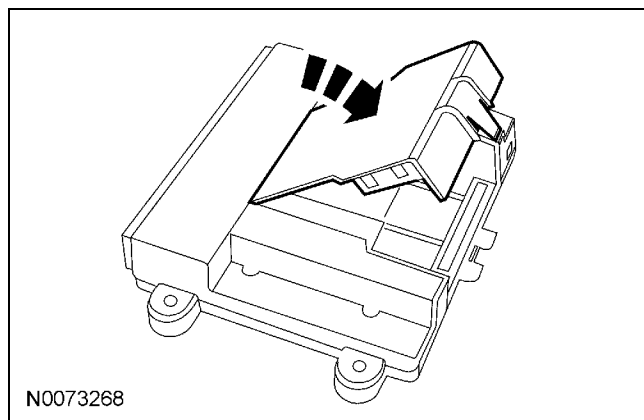
**Module Preparation**

- 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.

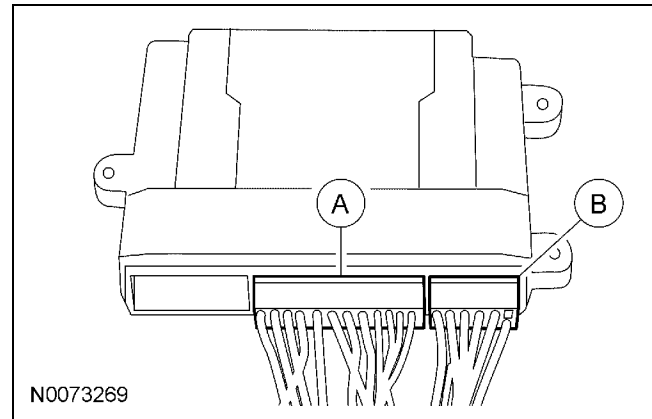
## INSTALLATION (Continued)



5. Place the software cartridge onto the RMST control module.



6. 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.

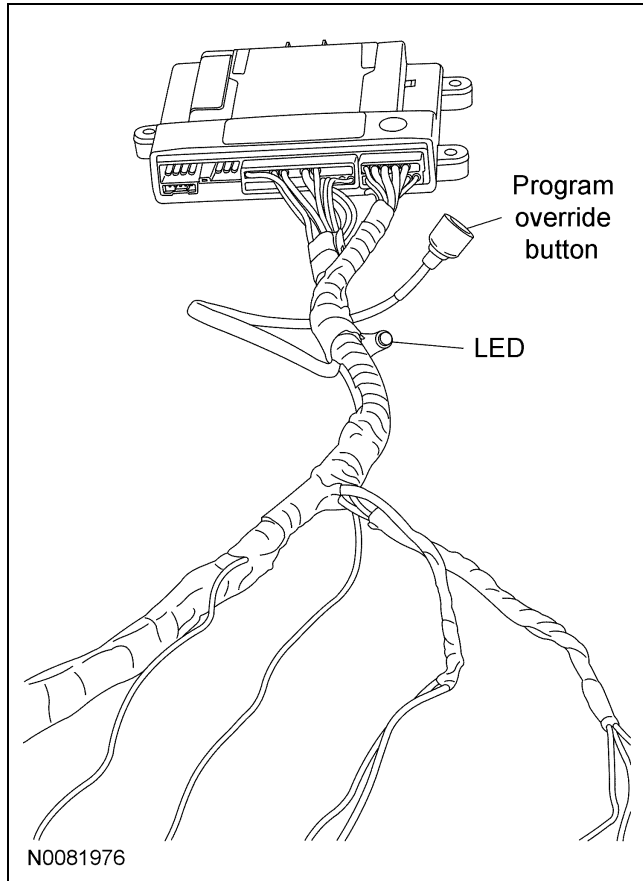


7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

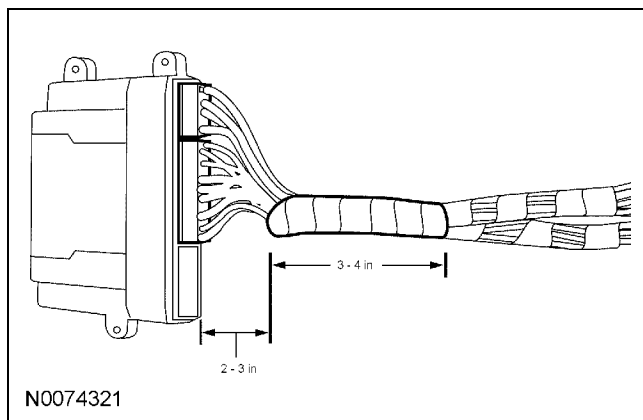
**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

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)**

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

**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.

**Antenna Mounting**

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

**NOTE:** Keep these points in mind when selecting a location and mounting the 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 Antenna**

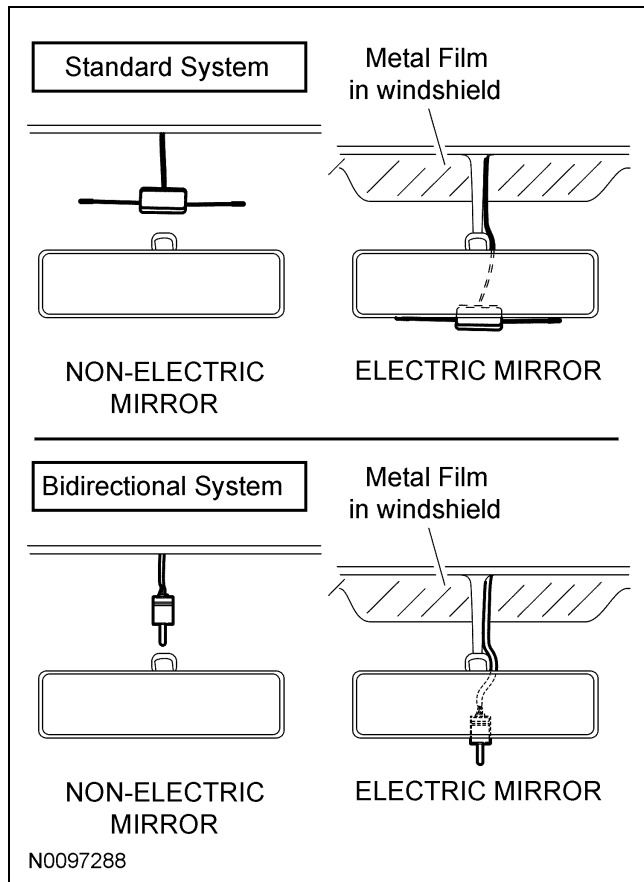
14. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

**NOTE:** Make sure that the long wire on the antenna is pointing towards 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.

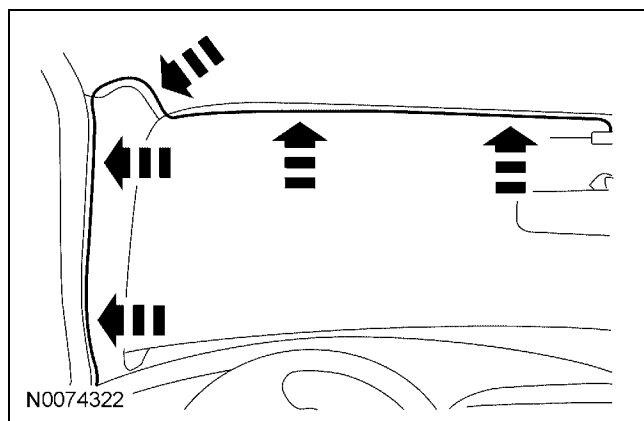
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.

**INSTALLATION (Continued)**

16. If necessary, position the A pillar trim slightly outward to provide access to route the antenna wire.

**NOTE:** Do not route the antenna wire over the top of the air bag.

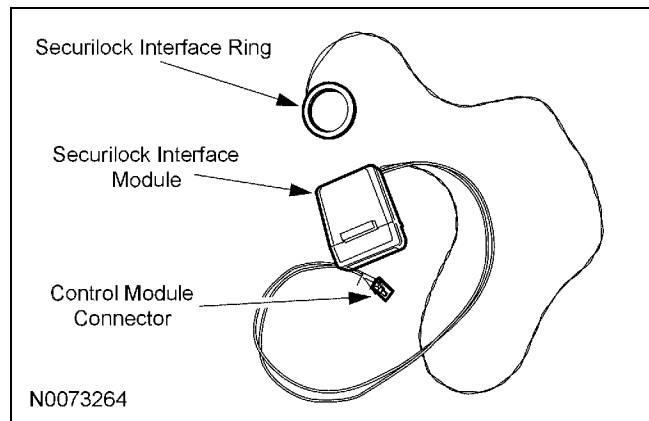
17. Route the antenna cable along the headliner and down the A pillar towards the floor.



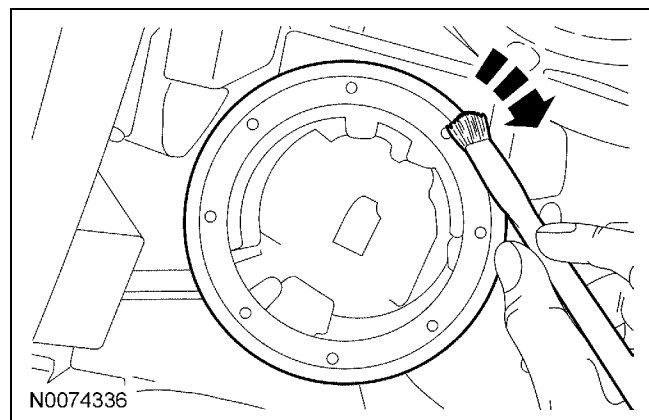
18. Reposition the A pillar trim panel.

**Install The Securilock Interface Kit**

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



20. 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.

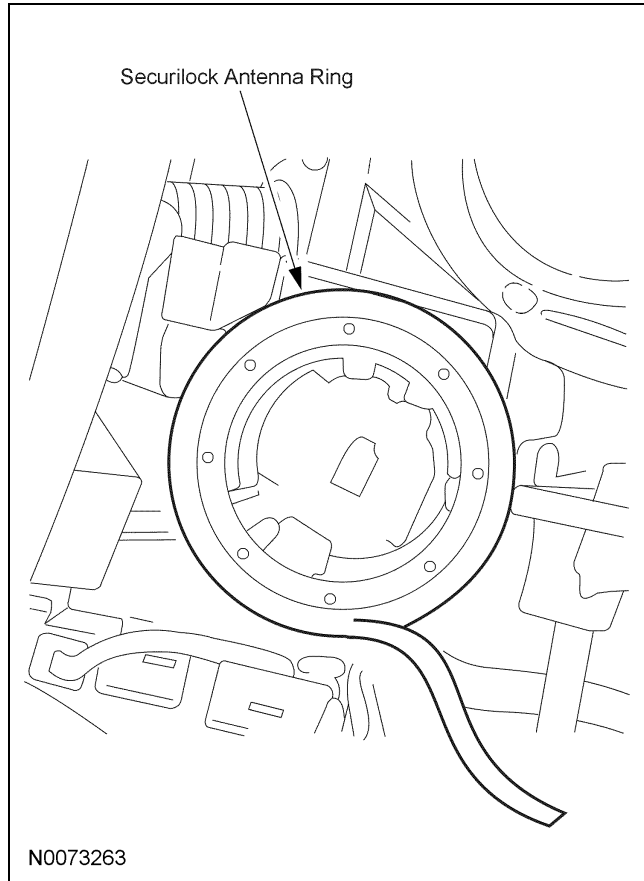


21. **NOTICE:** Do not damage the transceiver ring during installation or while installing the steering column shroud.

**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.



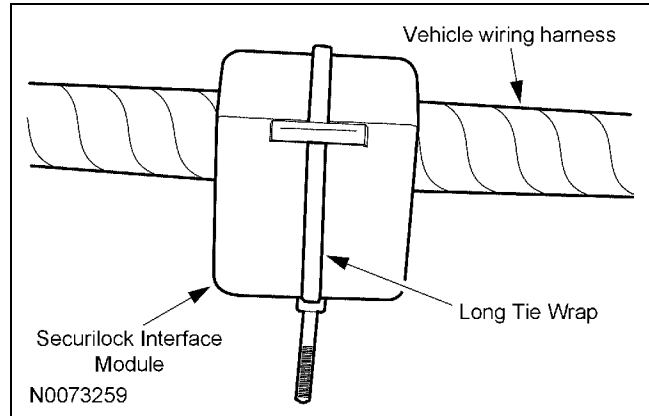
**INSTALLATION (Continued)****Install The Securilock Interface Module**

22. **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.

23. **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**

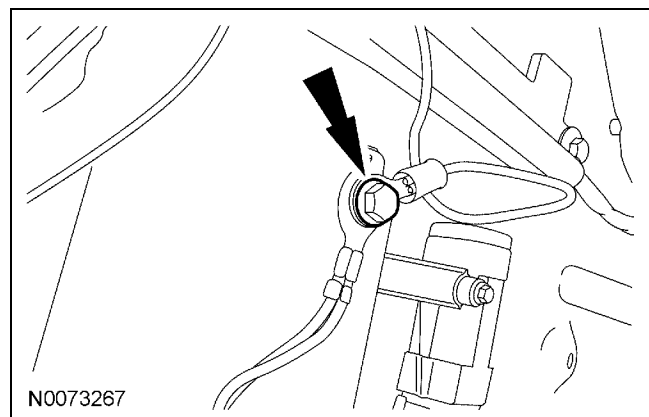
24. Place the remote start module and harness assembly on the floor of the vehicle.

**Identify Circuit Wires For Connections**

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

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

25. Connect the Black ground wire from the remote start module harness to the chassis ground point at the driver kick panel.
26. Disconnect the ignition switch electrical connector.
27. Connect the remote start harness hard shell connectors to the ignition switch and ignition switch connector.



**INSTALLATION (Continued)**

28. **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 Brown horn circuit wire in the steering column harness.

29. Connect the Brown/Black wire from the remote start module harness to the Brown horn circuit wire in the steering column harness.

30. **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 power door lock circuit wire at the driver kick panel for the.

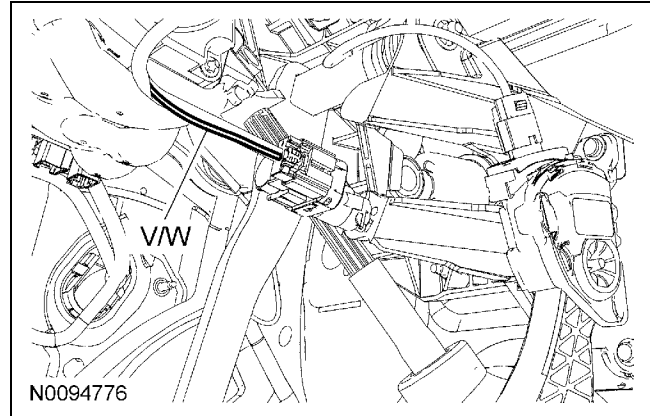
31. Connect the Blue wire from the remote start module harness to the Blue/Green power door lock circuit at the driver kick panel harness location.

32. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the brake pedal.

A logic probe will show open on the correct wire, then show power while depressing the brake pedal.

Identify the Violet/White brake output circuit wire at the brake switch.

33. Connect the Brown wire from the remote start module harness to the Violet/White brake output circuit wire at the brake switch.



34. **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 Grey/Violet dome light circuit wire at the driver kick panel.

35. Connect the Green/Violet wire from the remote start module harness to the Grey/Violet dome light circuit wire at the driver kick panel.

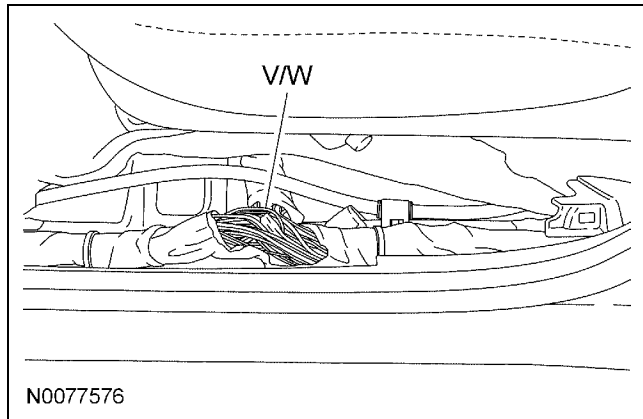
36. **NOTE:** A DVOM connected to the correct wire will show 0V with the switch in the OFF position and 12V with the switch in the parking lights ON position.

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 passenger side heading toward rear.

**INSTALLATION (Continued)**

37. Connect the White wire from the remote start module harness to the Violet/White parking lights on circuit wire at the driver sill plate harness coming from passenger side heading toward rear.

**Install The Hood Safety Switch**

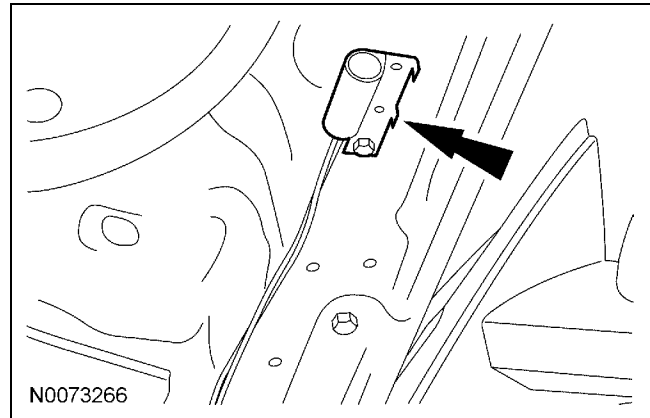
38. **NOTE:** Route the hood safety switch wire carefully avoiding any moving parts or components that can produce excessive heat.
- NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

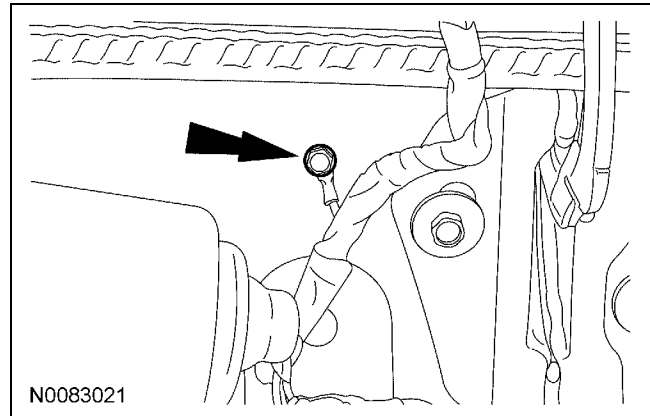
- False alarm trips
- Non-Remote Start events
- Inadvertent shutdown during Remote Start

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

39. Apply rustproofing compound (PM-13-A) to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).

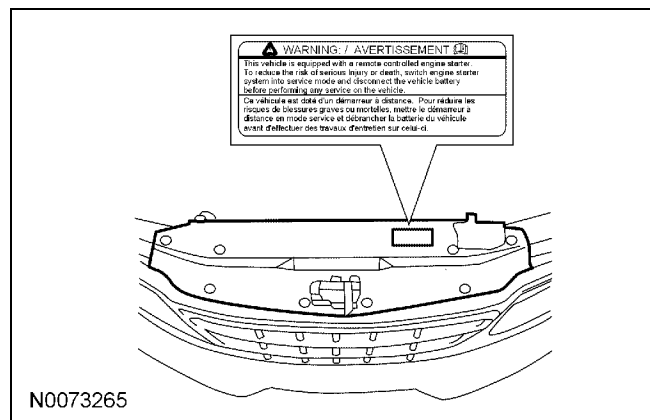


40. Connect hood switch ground wire to a suitable location on the bulkhead.



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

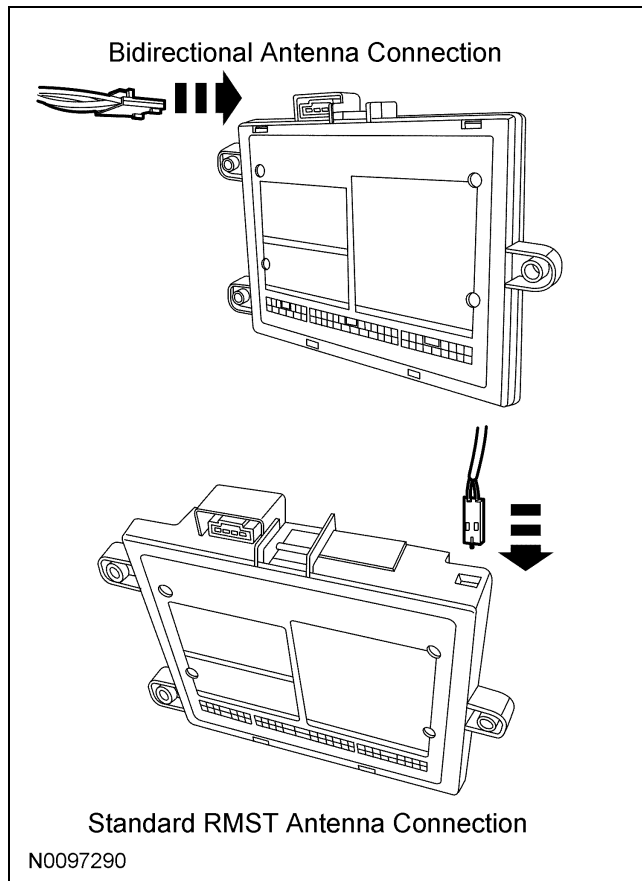
Install the underhood warning label



42. Route the Gray hood safety switch wire through the bulkhead into the engine compartment and attach to the hood safety switch.

**INSTALLATION (Continued)**

43. Connect the antenna to the RMST control module.



44. Connect the SECURILOCK interface module to the RMST control module.

**Program The RMST System**

45. [Refer to the RMST programming section for this vehicle \(click here\).](#)

**Secure RMST Harness and Control Module**

46. Use the supplied tie wraps to secure the RMST harness wires.
47. **NOTE:** Do not mount the control module in the knee bolster area.
- Secure the control module at three points to the vehicle.
- Use the supplied long tie wraps to mount the RMST control module to the underdash wiring harness.

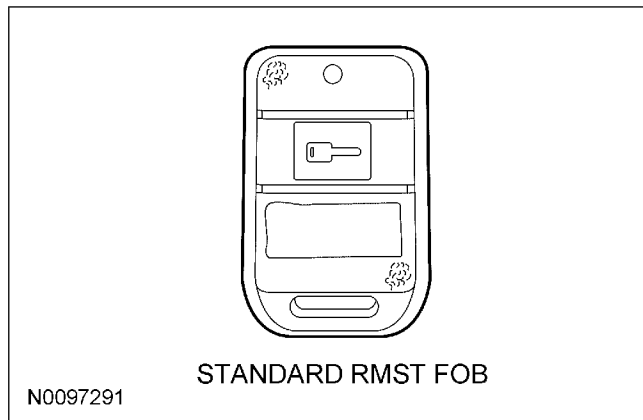
**Install Trim**

48. Install the left hand cowl trim panel.
- 1 Install the cowl trim panel.
  - 2 Install the scuff plate.
49. Install the upper and lower steering column shrouds.
- Install the 3 screws.
50. Install the steering column opening trim.

## GENERAL PROCEDURES

### Programming - Standard Remote Start

#### Programming the Module



1. **NOTE:** If the remote start 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 and doors are 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

2. See chart below for programming information.

Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR         | LED |
|------|---------|---------------|-----|
| 2    | 1       | TACHLESS MODE | ON  |

3. Press and hold the brake pedal.
4. Turn the ignition key to the RUN position.  
The dome light will turn off.

5. 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.

Release the brake pedal and the RMST override button.

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.
- All doors closed and 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 override button again. The horn will honk 5 times indicating the system has entered the second program bank.
8. Press and release the brake pedal.  
The horn will honk 1 time indicating the system has entered the option 1 of the second program bank.

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

**Failure to quickly release the remote start fob button will result in system defaulting to the factory options.**

9. 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 button and verify the LED illuminates.

**GENERAL PROCEDURES (Continued)**

**NOTE:** If the remote start fob button is held for more than 3 seconds the system will chirp the horn 4 times, indicating the system has returned to factory default settings. If this occurs return to step 1 of the programming section and reprogram the remote start module.

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

10. Remove the ignition key.

**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.

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

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

---

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

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

13. 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 - Standard Remote Start

**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)**

| <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. |

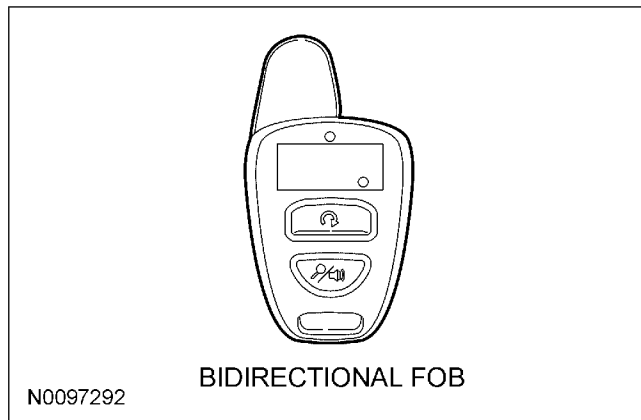
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## GENERAL PROCEDURES

### Programming - Bidirectional Remote Start

#### Programming the Module



- NOTE:** If the remote start 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 and doors are 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.

**Program Bank 2 Chart (5 Honks)**

| BANK | OPTIONS | DESCR         | LED |
|------|---------|---------------|-----|
| 2    | 1       | TACHLESS MODE | ON  |

- Press and hold the brake pedal.
- Turn the ignition key to the RUN position.  
The dome light will turn off.

- 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.

Release the brake pedal and the RMST override button.

- 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.
- All doors closed and 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.

- Press and release the override button again. The horn will honk 5 times indicating the system has entered the second program bank.
- Press and release the brake pedal.  
The horn will honk 1 time indicating the system has entered the option 1 of the second program bank.

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

**Failure to quickly release the remote start fob button will result in system defaulting to the factory options.**

- 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 button and verify the LED illuminates.

---

**GENERAL PROCEDURES (Continued)**

**NOTE:** If the remote start fob button is held for more than 3 seconds the system will chirp the horn 4 times, indicating the system has returned to factory default settings. If this occurs return to step 1 of the programming section and reprogram the remote start module.

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

10. Remove the ignition key.

**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.


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

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

---

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

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

13. Press the remote start button  twice within 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 - Bidirectional Remote Start

**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 the Start button on the remote control key fob twice within 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.  |

'12 Escape/Hybrid

TYPE "A" CUSTOM WIRE HARNESS

RMST MODULE WIRE HARNESS

STEERING COLUMN HARNESS

|      | Color       | Function              |
|------|-------------|-----------------------|
| A-3  | PINK        | Ignition Input/Output |
| A-2  | ORANGE      | HVAC Output           |
| A-13 | VIOLET      | Starter Output        |
| B-8  | BLACK/WHITE | Key-in-sense Input    |
| A-4  | RED         | Battery               |

|      | Color       | Function          |
|------|-------------|-------------------|
| A-21 | BROWN/BLACK | Horn Relay Output |

DRIVER'S KICK PANEL HARNESS

|      | Color        | Function               |
|------|--------------|------------------------|
| A-5  | BLACK        | Ground                 |
| A-24 | BLUE         | Door Lock Output       |
| A-20 | GREEN/VIOLET | Door Ajar Switch Input |
| B-7  | BROWN        | Brake Input            |
| A-1  | WHITE        | Parking Light Output   |

VEHICLE HARNESS

IGNITION SWITCH

MAKE THIS CONNECTION FIRST!

Horn (BROWN)

CHASSIS GROUND POINT  
IN DRIVER' S KICK PANEL

Door Lock (BLUE/GREEN)

Dome Light (GRAY/VIOLET)

Brake Output (VIOLET/WHITE)

Parking Lights On(VIOLET/WHITE)

STEERING  
COLUMN  
HARNESS

DRIVERS  
KICK PANEL

BRAKE  
SWITCH

DRIVERS SILL  
PLATE IN  
HARNESS  
COMING FROM  
PASSENGER  
SIDE HEADING  
TOWARD REAR

UNDER HOOD HARNESS

|      | Color | Function               |
|------|-------|------------------------|
| A-19 | GRAY  | Hood Open Switch Input |

Vehicle  
Interior

Engine  
Compartment

Chassis  
Ground

Do Not Ground to Hood!

Hood Tilt Switch

[Manual Table of Contents](#)

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

### INSTALLATION

[Remote Start](#)

[Programming - Spare Intelligent Access \(IA\)Keys](#)

### GENERAL PROCEDURES

[Proper Splicing Techniques](#)

[Functional Test](#)

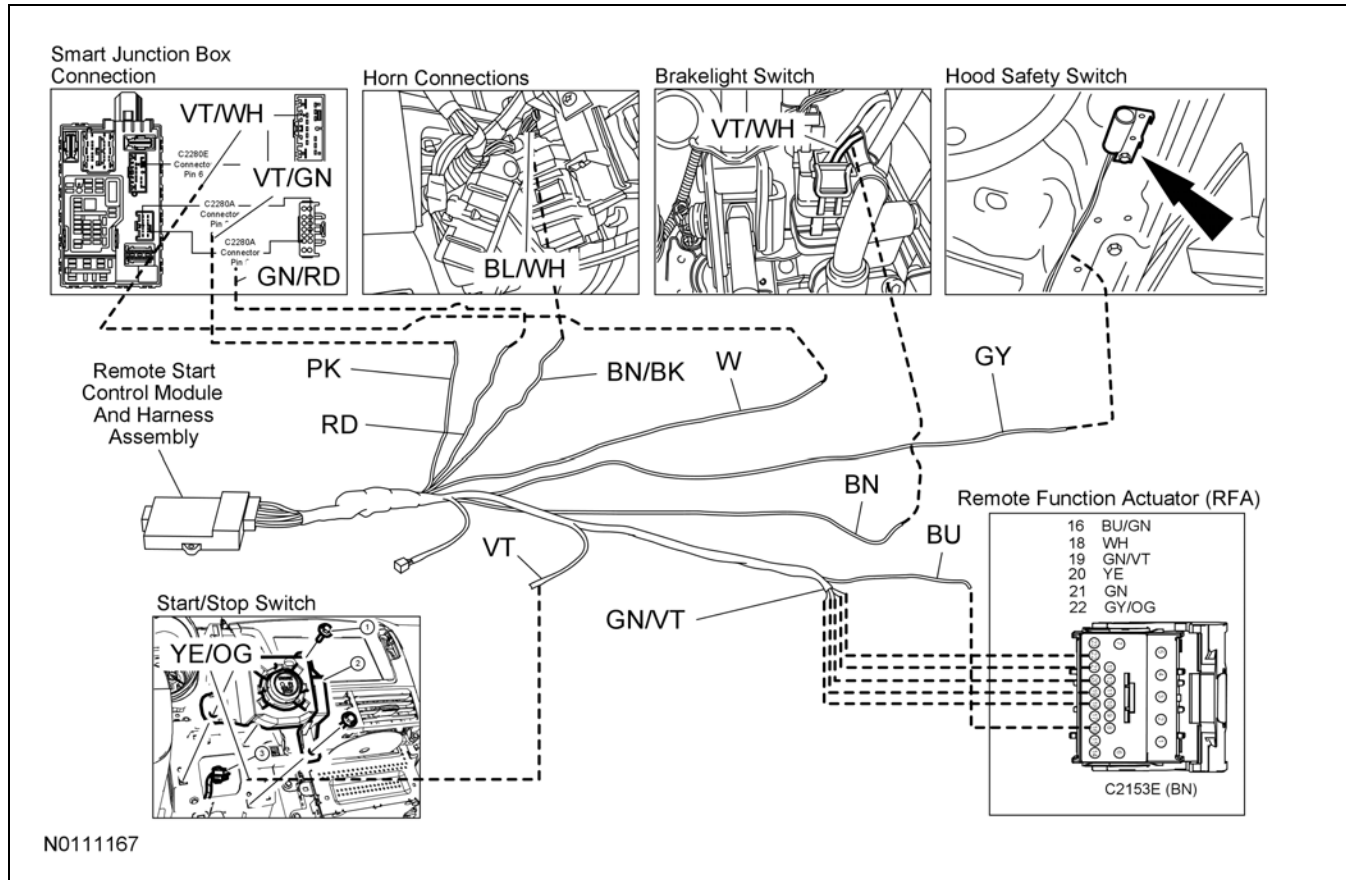
[Troubleshooting](#)

### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start System RMST Components



### MKT

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

**NOTE:** Both original keys are required for all remote start systems.

1. Verify correct kit number.

**INSTALLATION (Continued)****Review Remote Start Installation Kit Contents**

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

- Review the RMST kit contents.

**Remote Start System Standard Kit (RMST) Type - "A"**

| QUANTITY | DESCRIPTION                           |
|----------|---------------------------------------|
| 1        | TYPE - "A" MODULE ASSEMBLY            |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY      |
| 2        | 1 BUTTON POWERCODE TRANSMITTER        |
| 1        | TYPE - "A" CUSTOM WIRING HARNESS      |
| 1        | ANTENNA                               |
| 1        | HOOD SAFETY SWITCH ASSEMBLY           |
| 1        | INSTALLATION PARTS BAG                |
| 1        | FUSE PARTS BAG                        |
| 1        | OPERATORS INSTRUCTIONS                |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD |
| 1        | UNDERHOOD WARNING LABEL               |
| 1        | PEPS INTERFACE MODULE                 |
| 1        | INTELLIGENT ACCESS KEY                |

- Review the RMST bidirectional kit contents.

**Remote Start System Bidirectional Kit (RMST) Type - "A"**

| QUANTITY | DESCRIPTION                      |
|----------|----------------------------------|
| 1        | TYPE - "A" MODULE ASSEMBLY       |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY |

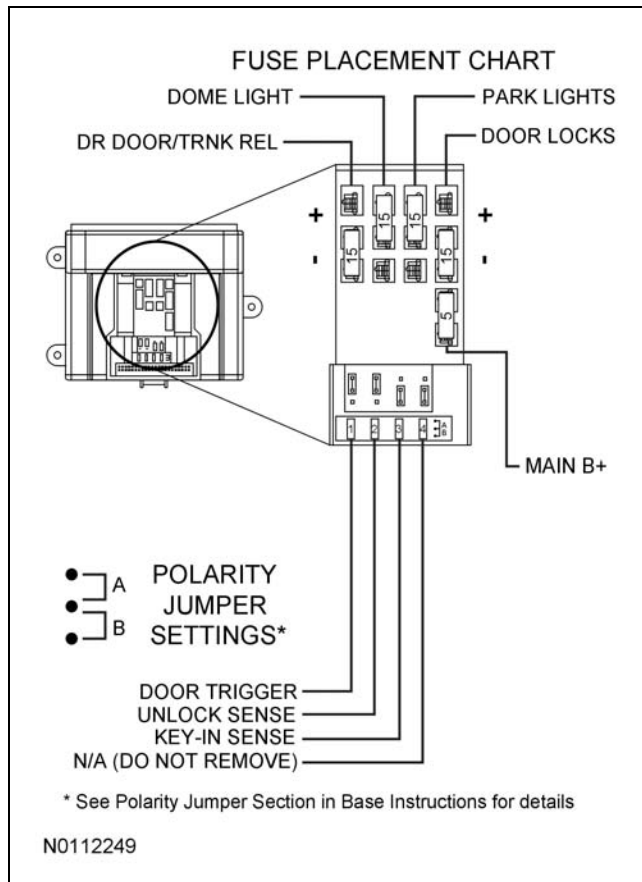
**Remote Start System Bidirectional Kit (RMST) Type - "A" (Continued)**

| QUANTITY | DESCRIPTION                           |
|----------|---------------------------------------|
| 1        | 2 BUTTON POWERCODE TRANSMITTER        |
| 1        | TYPE - "A" CUSTOM WIRING HARNESS      |
| 1        | ANTENNA                               |
| 1        | ANTENNA HARNESS                       |
| 1        | HOOD SAFETY SWITCH ASSEMBLY           |
| 1        | INSTALLATION PARTS BAG                |
| 1        | FUSE PARTS BAG                        |
| 1        | OPERATORS INSTRUCTIONS                |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD |
| 1        | UNDERHOOD WARNING LABEL               |
| 1        | PEPS INTERFACE MODULE                 |
| 1        | INTELLIGENT ACCESS KEY                |

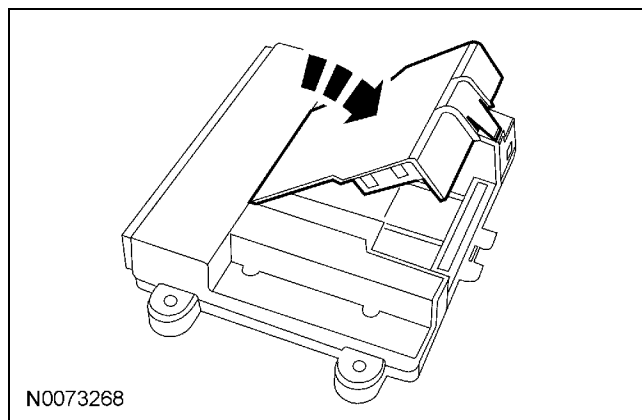
**Module Preparation**

- 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.

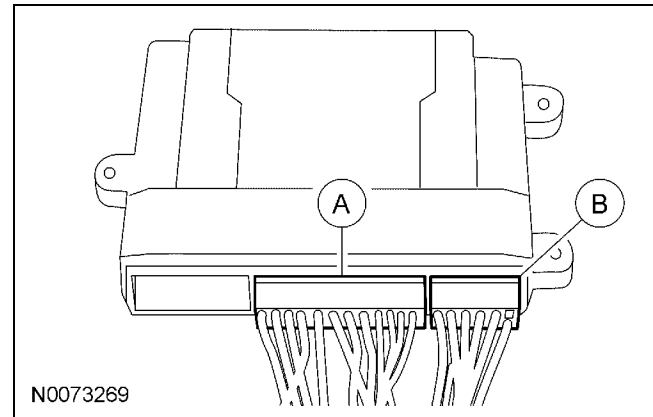
## INSTALLATION (Continued)



- Place the software cartridge onto the RMST control module.



- 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.



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

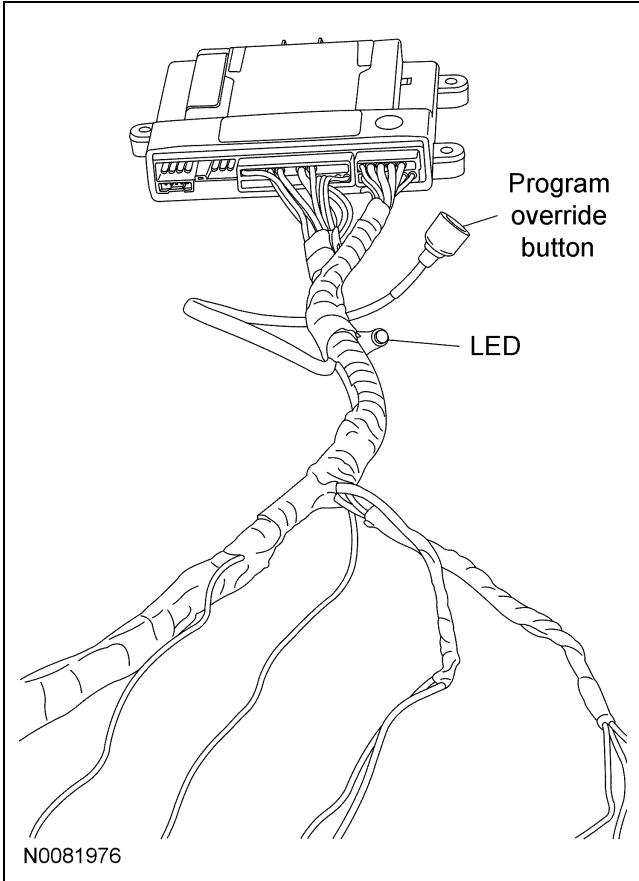
**NOTE:** For vehicle specific wiring diagram(s) click [here](#).

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.

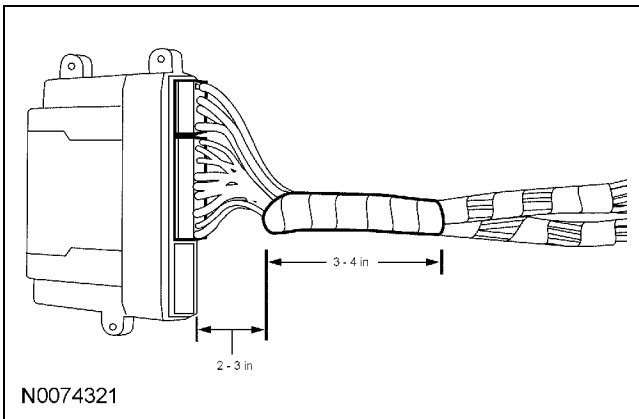
Trim the unused wires approximately 6 - 8" from the module.



## INSTALLATION (Continued)



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



### Vehicle Preparation

9. Remove the scuff plate trim panel
  - 1 Remove the instrument panel side finish panel.
    - Pull straight outward to release the retaining clips.
  - 2 Remove the lower A-pillar trim panel.
    - Pull straight outward to release the retaining clips.
  - 3 **NOTICE: When removing scuff plate trim panels with Lincoln ambient lighting, care must be taken not to damage the aluminum insert.**

Remove the scuff plate trim panel.

    - Using a flat trim tool, lift upward on the scuff plate trim panel to release the retainer clips.
    - If equipped, disconnect the ambient light electrical connector.
10. Remove the steering column opening trim panel in the following sequence.
  - 1 Remove the 2 screws.
  - 2 Pull the panel toward the rear of the vehicle releasing the retaining clips.
  - 3 Disconnect the wire harness pushpin retainer and the electrical connector.
  - 4 Press the 2 in-vehicle temperature sensor and aspirator hose assembly lock tabs inward releasing from the cover.
11. Remove the steering column shroud.
  - Remove the 3 screws from the lower steering column shroud.
  - Separate and remove the upper steering column shroud from the lower steering column shroud.
  - Remove the lower steering column shroud.
12. Remove the glove compartment.
13. Remove the RH lower instrument panel.
14. Remove the LH and RH floor console front side trim panels.

## INSTALLATION (Continued)

### Antenna Mounting

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

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

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

### Install The Antenna

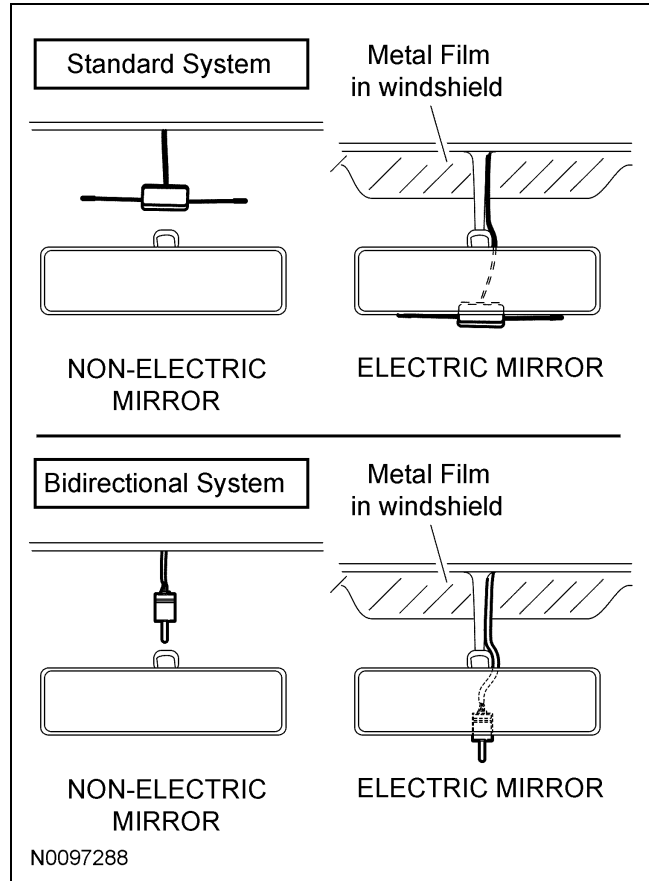
16. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

**NOTE:** Make sure that the long wire on the antenna is pointing towards 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.

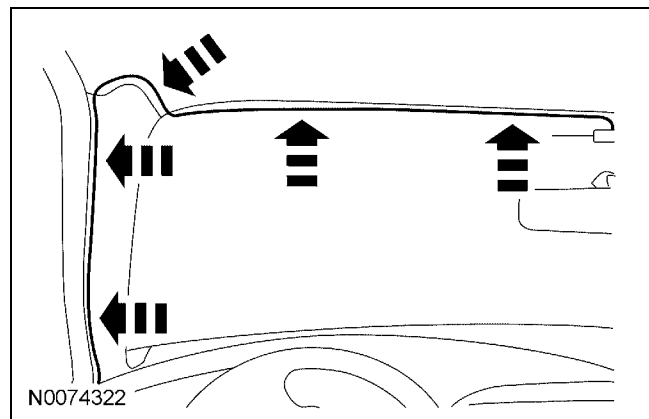
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



18. If necessary, position the A pillar trim slightly outward to provide access to route the antenna wire.

**NOTE:** Do not route the antenna wire over the top of the air bag.

19. Route the antenna cable along the headliner and down the A pillar towards the floor.



20. Reposition the A pillar trim panel.

**INSTALLATION (Continued)****Programming spare Intelligent Access (IA) Keys**

21. You must have two previously programmed Intelligent Access Keys inside the vehicle and the new unprogrammed Intelligent Access Keys readily accessible. If two previously programmed keys are not available, you must take your vehicle to your authorized dealer to have the spare key(s) programmed.

**NOTE:** A maximum of four Intelligent Access Keys can be programmed to your vehicle. If you would like to replace a previously programmed access key with a new access key, or if you already have four access keys programmed to your vehicle, you must take your vehicle and all access keys to your authorized dealer to be erased and reprogrammed.

**NOTE:** Ensure that the vehicle is off before beginning this procedure. Ensure that all doors are closed before beginning this procedure and that all doors remain closed throughout the procedure. Perform this procedure exactly as described below, and perform all steps within 30 seconds of starting the sequence. If any steps are performed out of sequence, stop and wait for at least one minute before starting again.

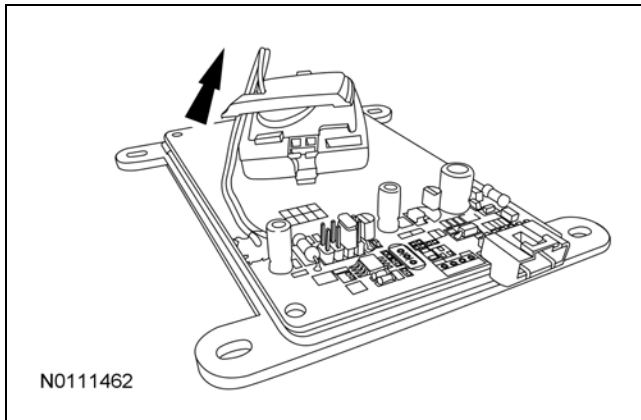
22. Please read and understand the entire procedure before you begin.
- 1 Place the new unprogrammed Intelligent Access Key in the pocket inside the center console utility compartment.
  - 2 Press the driver or passenger power door unlock control three times.
  - 3 Press and release the brake pedal one time.
  - 4 Press the driver or passenger power door lock control three times.
  - 5 Press and release the brake pedal one time. The indicator on the Start/Stop button should begin to rapidly flash, indicating that programming mode has been entered and two programmed Intelligent Access Keys have been detected in the vehicle.
  - 6 Within one minute, press the start/stop button. A message will be displayed on the message center indicating that the new Intelligent Access Key was programmed. If four Intelligent Access Keys have already been programmed to your vehicle, you cannot program anymore and the message MAX # OF KEYS LEARNED will be displayed on the message center.
  - 7 Remove Intelligent Access Key from utility compartment pocket and press the unlock or lock control on the newly programmed Intelligent Access Keys to exit programming mode.
  - 8 Verify that the remote entry functions operate (lock, unlock) and that the vehicle starts with new Intelligent Access Key.
23. If the Intelligent Access Key has been successfully programmed, it can be used to activate the Intelligent Access with Push Button Start feature and can be used to start your vehicle.

**Install The Programmed IA Key In The PEPS Interface Module**

24. Remove the back cover from the PEPS Interface Module.
25. Remove the circuit board from the PEPS interface Module.

## INSTALLATION (Continued)

26. Open the programmed IA Key and remove the battery.



27. Install the slug attached to the circuit board, into the IA Key.
- Use the supplied key back to reassemble the key.
  - Loop the wire through the tab in the key back to make sure there is slack in the wire.
28. Using the foam insert to prevent rattling, secure the IA Key to the circuit board.
29. Reassemble the PEPS Interface Module.
- 1 Install the circuit board in to the Module.
  - 2 Install the back cover to the PEPS Interface Module.
- Install the 4 screws.

### Install The PEPS Interface Module

30. Mount the PEPS Interface Module in the front of the center console, under the dash.
31. **NOTICE: Do not attach the harness to the steering column.**  
Route the harness and connector the to module mounting location.

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

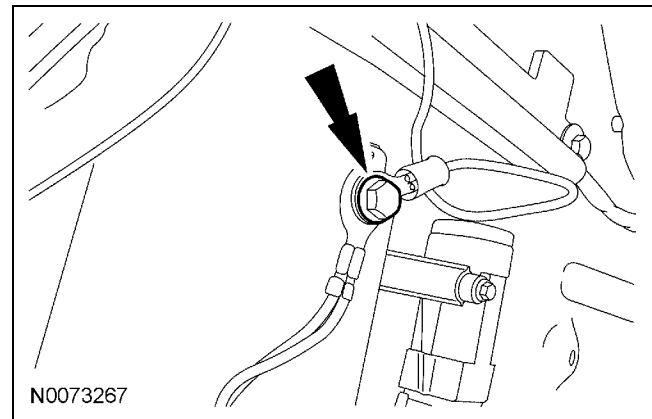
32. Place the remote start module and harness assembly on the floor of the vehicle.

### Identify Circuit Wires For Connections

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

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

33. Connect the Black ground wire from the remote start module harness to the chassis ground point at the driver kick panel.



34. **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 in the steering column harness.

35. Connect the Brown/Black wire from the remote start module harness to the Blue/White horn circuit wire in the steering column harness.
36. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V when depressing the brake pedal.  
A logic probe will show ground on the correct wire, then show power when depressing the brake pedal.  
Identify the Violet/White brake input circuit wire at the Brake Pedal Switch.
37. Connect the Brown wire from the remote start module harness to the Violet/White brake input circuit wire at the Brake Pedal Switch.

**INSTALLATION (Continued)**

38. **NOTE:** A DVOM connected to the correct wire will show 12V, then show 0V when the start button is pressed.

A logic probe will show power on the correct wire, then show ground when the start button is pressed.

Identify the Yellow/Orange push button start circuit wire at the Start/Stop Switch.

39. Connect the Violet wire from the remote start module harness to the Yellow/Orange push button start circuit wire at the Start/Stop Switch.

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 power on the correct wire, then show ground when the door lock switch is pressed.

**NOTE:** The Remote Function Actuator (RFA) Module is located behind the glove box opening.

C2153E is the Brown connector.

Identify the Blue/Green power door lock circuit wire at the Remote Function Actuator (RFA) Module C2153E Pin 16.

41. Connect the Blue wire from the remote start module harness to the Blue/Green wire at the RFA Module C2153E Pin 16.

42. **NOTE:** A DVOM connected to the correct wire will show 0V, then show open when the LF door is open.

A logic probe will show power on the correct wire, then show ground when the LF door is open.

**NOTE:** The Remote Function Actuator (RFA) Module is located behind the glove box opening.

C2153E is the Brown connector.

Identify the Green/Violet LF door ajar circuit wire at the RFA Module C2153E Pin 19.

43. Connect one of the Green/Violet wires from the remote start module harness to the Green/Violet LF door ajar circuit wire at the RFA Module C2153E Pin 19.

44. **NOTE:** A DVOM connected to the correct wire will show 0V, then show open when the LR door is open.

A logic probe will show power on the correct wire, then show ground when the LR door is open.

**NOTE:** The Remote Function Actuator (RFA) Module is located behind the glove box opening.

C2153E is the Brown connector.

Identify the Green LR door ajar circuit wire at the RFA Module C2153E Pin 21.

45. Connect one of the Green/Violet wires from the remote start module harness to the Green LR door ajar circuit wire at the RFA Module C2153E Pin 21.

46. **NOTE:** A DVOM connected to the correct wire will show 0V, then show open when the RF door is open.

A logic probe will show power on the correct wire, then show ground when the RF door is open.

**NOTE:** The Remote Function Actuator (RFA) Module is located behind the glove box opening.

C2153E is the Brown connector.

Identify the White RF door ajar circuit wire at the RFA Module C2153E Pin 18.

47. Connect one of the Green/Violet wires from the remote start module harness to the White RF door ajar circuit wire at the RFA Module C2153E Pin 18.

48. **NOTE:** A DVOM connected to the correct wire will show 0V, then show open when the RR door is open.

A logic probe will show power on the correct wire, then show ground when the RR door is open.

**NOTE:** The Remote Function Actuator (RFA) Module is located behind the glove box opening.

C2153E is the Brown connector.

Identify the Yellow RR door ajar circuit wire at the RFA Module C2153E Pin 20.

**INSTALLATION (Continued)**

49. Connect one of the Green/Violet wires from the remote start module harness to the Yellow RR door ajar circuit wire at the RFA Module C2153E Pin 20.

50. **NOTE:** A DVOM connected to the correct wire will show 0V, then show open when the liftgate is open.

A logic probe will show power on the correct wire, then show ground when the liftgate is open.

**NOTE:** The Remote Function Actuator (RFA) Module is located behind the glove box opening.

C2153E is the Brown connector.

Identify the Gray/Orange liftgate ajar circuit wire at the RFA Module C2153E Pin 22.

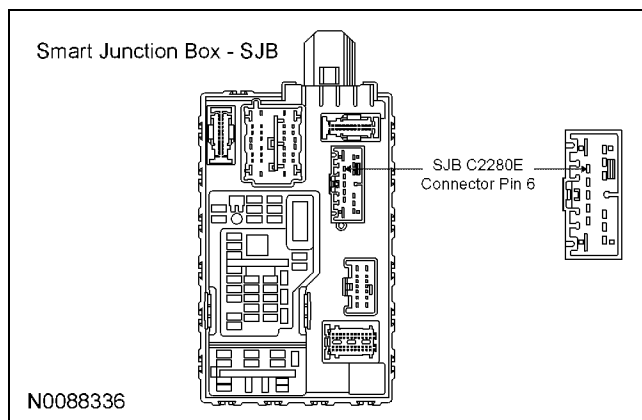
51. Connect one of the Green/Violet wires from the remote start module harness to the Gray/Orange liftgate ajar circuit wire at the RFA Module C2153E Pin 22.

52. **NOTE:** A DVOM connected to the correct wire will show 12V, when the headlight switch is ON, then show 0V when the headlight switch is OFF.

A logic probe will show power on the correct wire when the headlight switch is ON, then show ground when the headlight switch is OFF.

Identify the Violet/White parking light circuit wire at the SJB C2280E Pin 6.

53. Connect the White wire from the remote start module harness to the Violet/White parking light circuit wire at the SJB C2280E Pin 6.

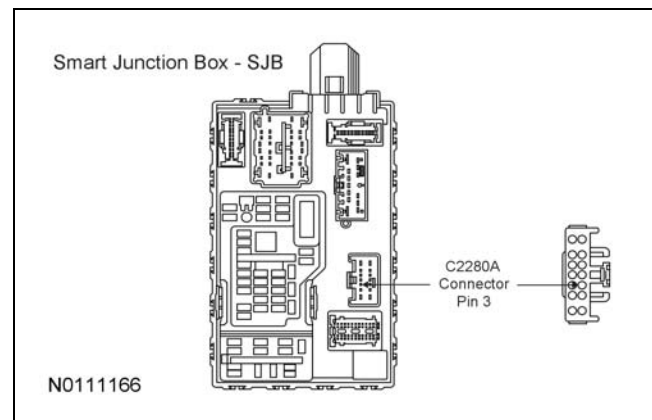


54. **NOTE:** A DVOM connected to the correct wire will show 12V in RUN/ACC.

A logic probe will show power in RUN/ACC on the correct wire.

Identify the Violet/Green ignition circuit wire at the SJB C2280A Connector Pin 3.

55. Connect the Pink wire from the remote start module harness to the Violet/Green ignition circuit wire at the SJB C2280A Connector Pin 3.

**Install The Hood Safety Switch**

56. **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.

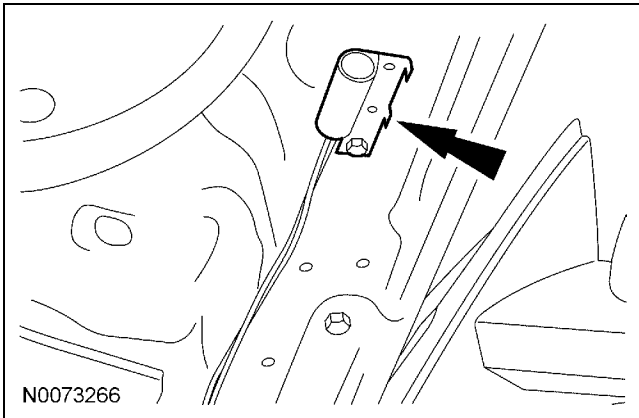
Failure to position the switch properly could result in one of the following:

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

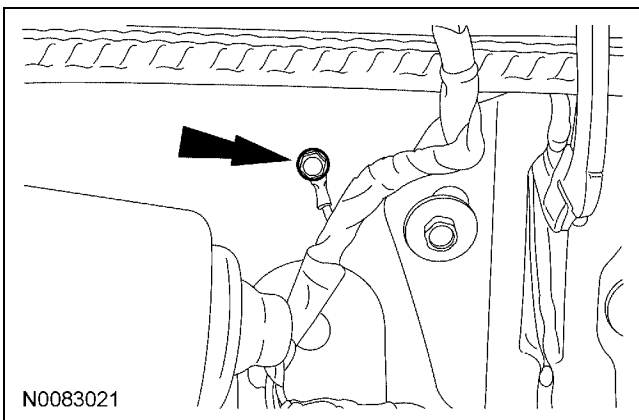
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

**INSTALLATION (Continued)**

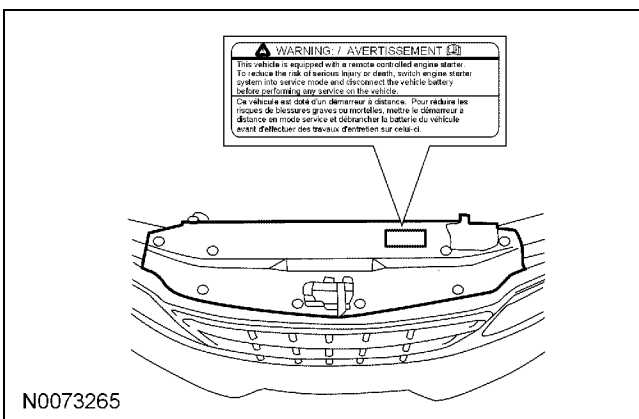
57. Apply rustproofing compound (PM-13-A) to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).



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

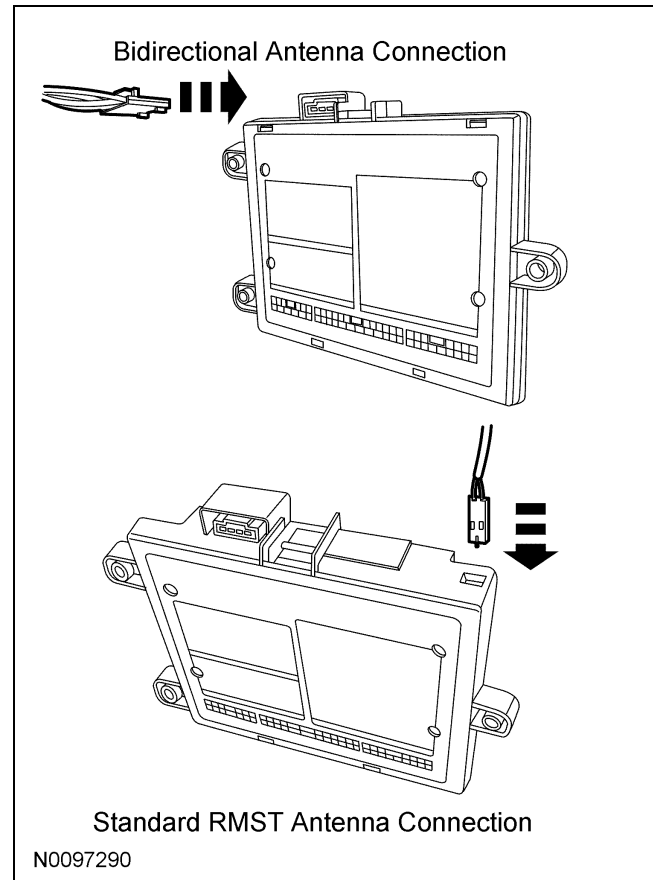


59. **NOTE:** Place the label on the radiator fan shroud or similar area.  
Install the underhood warning label.



60. Route the Gray hood safety switch wire through the bulkhead into the engine compartment and attach to the hood safety switch.

61. Connect the antenna to the RMST control module.



62. Connect the PEPS interface module to the RMST control module.

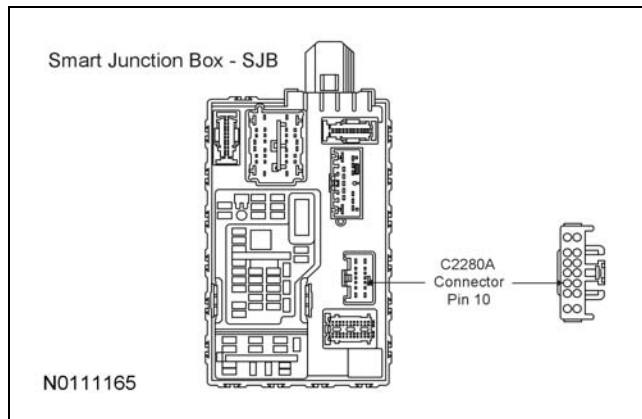
**Power Connection**

63. **NOTE:** A DVOM connected to the correct wire will show 12V at all times.

A logic probe will show power at all times on the correct wire.

Identify the Green/Red B+ circuit wire at the SJB C2280A Pin 10.

64. Connect the Red wire from the remote start module harness to the Green/Red B+ circuit wire at the SJB C2280A Pin 10.

**INSTALLATION (Continued)****Program The RMST System**

65. [Refer to the RMST programming section for this vehicle click here.](#)

**Secure RMST Harness and Control Module**

66. Use the supplied tie wraps to secure the RMST harness wires.
67. **NOTE:** Do not mount the control module in the knee bolster area.
- Secure the control module at three points to the vehicle.
- Use the supplied long tie wraps to mount the RMST control module to the underdash wiring harness.

**Install Trim**

68. Install the LH and RH floor console front side trim panels.
69. Install the RH lower instrument panel.
70. Install the glove compartment.
71. Install the upper and lower steering column shrouds.
- Connect the electrical connector.
  - Install the 3 screws to the lower steering column shroud.
72. Install the steering column opening trim panel.
- Install the 2 in-vehicle temperature sensor and aspirator hose assembly to the cover.
  - Connect the wire harness pushpin retainer and the electrical connector.
  - Install the 2 screws.
73. Install the scuff plate trim panel.
74. Install the instrument panel side finish panel.



## GENERAL PROCEDURES

### Programming

#### 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. Verify the module receives the start request from the remote control key fob.
  - For Standard Remote Start, 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.
  - For Bidirectional Remote Start, press the start button on the remote control key fob twice within 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 open a door.
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 three times and shut down indicating a door is open.
7. Close the door.
8. Attempt to re-start the vehicle again using the key fob.

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

#### Troubleshooting

12. **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"

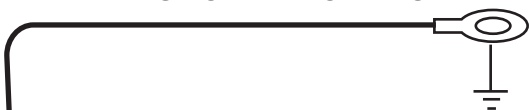
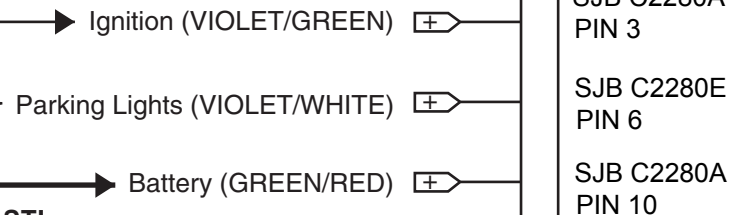
| CHIRPS   | PROBLEM  |
|----------|--|
| 1 Chirp  | Intelligent Access (IA) key not programmed correctly, or the PEPS Interface Module is damaged. |
| 2 Chirps | BRAKE is being pressed, or the HOOD is open.   |
| 3 Chirps | One of the vehicles DOORS are open.  |
| 4 Chirps | TACH not programmed.   |
| 6 Chirps | The remote start system is in SERVICE/VALET mode.  |

## RMST MODULE WIRE HARNESS

## DRIVER'S KICK PANEL HARNESS

|     | Color | Function              |
|-----|-------|-----------------------|
| A-5 | BLACK | Ground                |
| A-3 | PINK  | Ignition Input/Output |
| A-1 | WHITE | Parking Light Output  |
| A-4 | RED   | Battery               |

MAKE THIS CONNECTION FIRST!

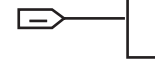
CHASSIS GROUND POINT  
IN DRIVER'S KICK PANELSMART  
JUNCTION  
BOXSJB C2280A  
PIN 3SJB C2280E  
PIN 6SJB C2280A  
PIN 10

MAKE THIS CONNECTION LAST!

## STEERING COLUMN HARNESS

|      | Color       | Function          |
|------|-------------|-------------------|
| A-21 | BROWN/BLACK | Horn Relay Output |

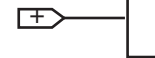
Horn (BLUE/WHITE)

STEERING  
COLUMN  
HARNESS

## BRAKE PEDAL HARNESS

|     | Color | Function    |
|-----|-------|-------------|
| A-7 | BROWN | Brake Input |

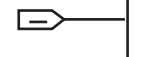
Brake (VIOLET/WHITE)

BRAKE  
PEDAL  
SWITCH

## START/ STOP SWITCH HARNESS

|      | Color  | Function       |
|------|--------|----------------|
| A-13 | VIOLET | Starter Output |

Push Button Start (YELLOW/ORANGE)

START/STOP  
SWITCH  
HARNESS

## UNDER HOOD HARNESS

|      | Color | Function               |
|------|-------|------------------------|
| A-19 | GRAY  | Hood Open Switch Input |

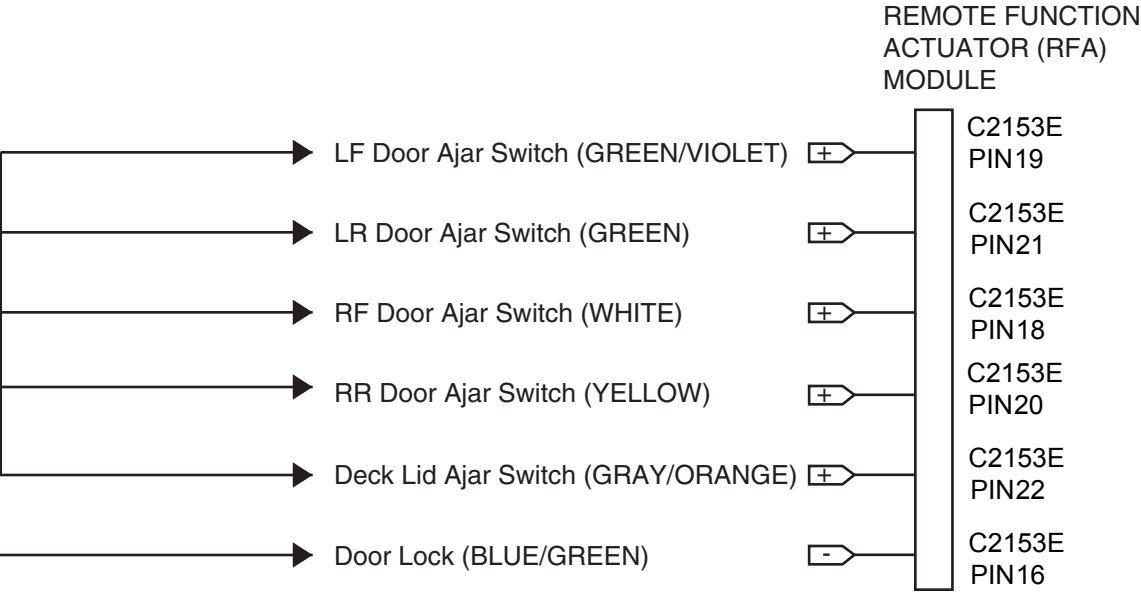
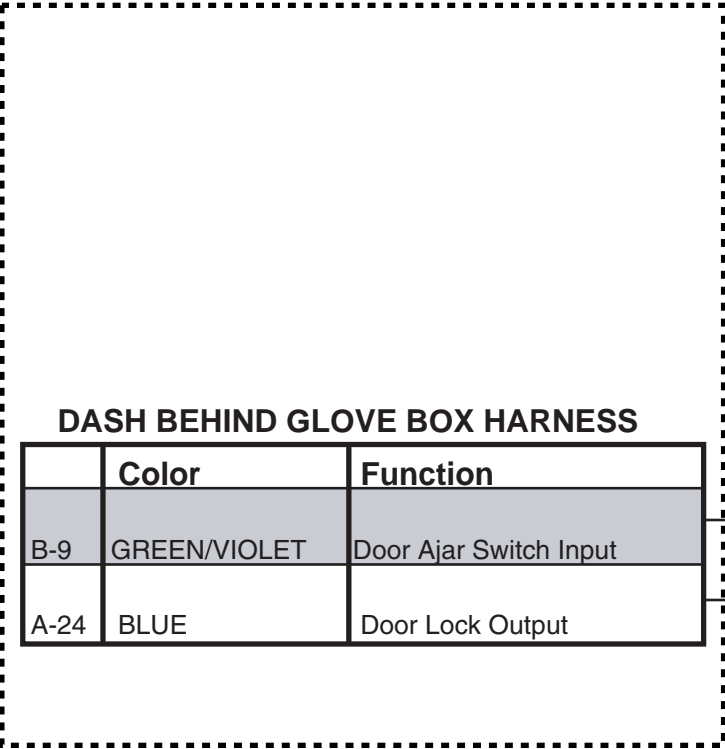
Vehicle  
InteriorEngine  
CompartmentChassis  
Ground

Do Not Ground to Hood

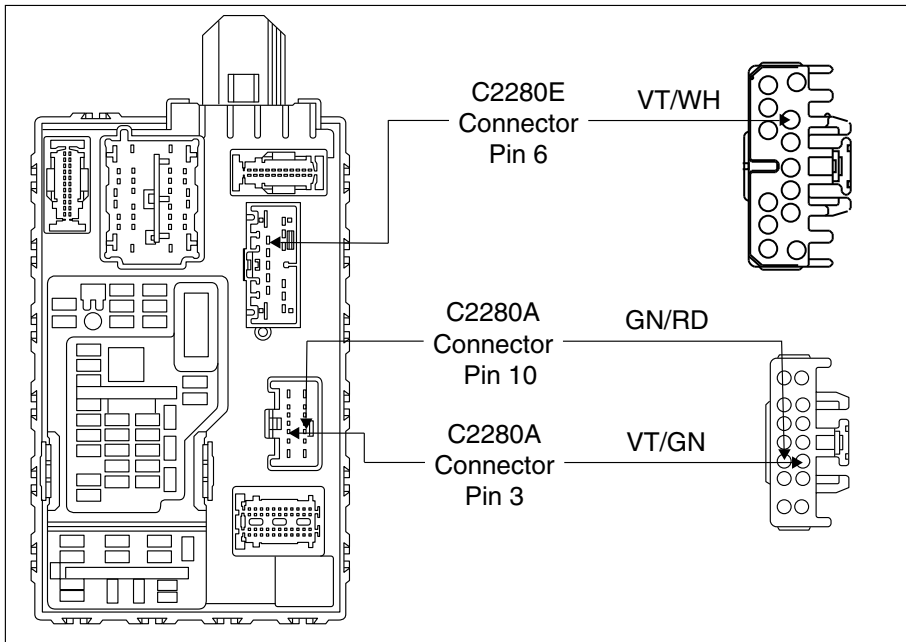
Hood Tilt Switch



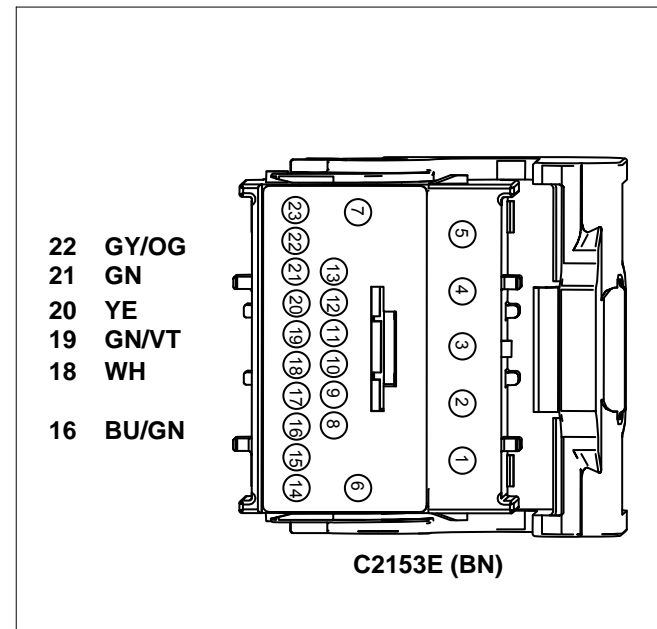
RMST MODULE WIRE HARNESS



Smart Junction Box (SJB)



Remote function Actuator (RFA)



[Manual Table of Contents](#)

# REMOTE START SYSTEM INSTALLATION

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[Functional Test - Bidirectional Remote Start](#)

[Troubleshooting](#)

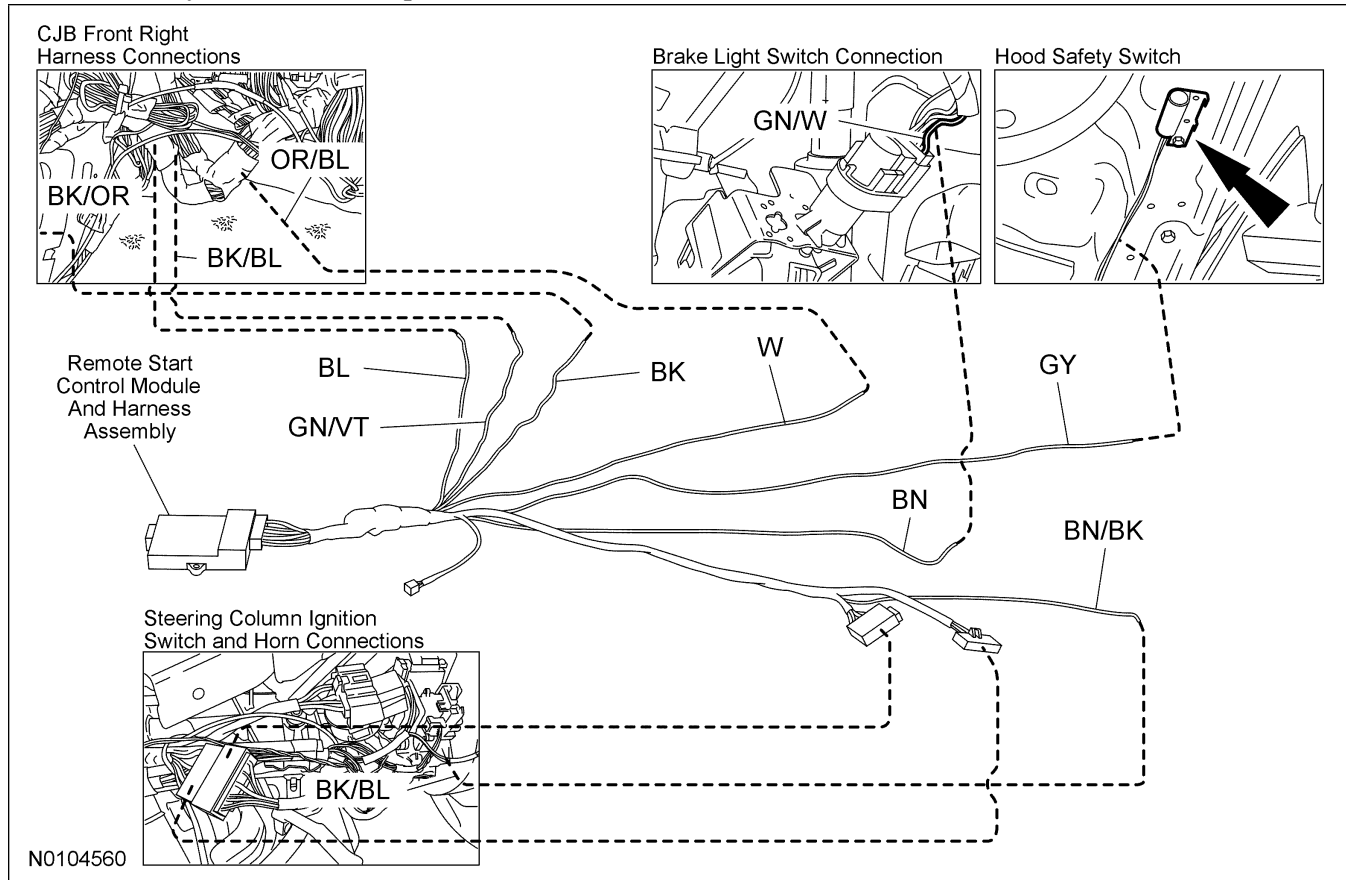
### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



### Transit Connect

**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.

**INSTALLATION (Continued)****Review Remote Start Installation Kit Contents**

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

- Review the RMST kit contents.

**Remote Start System Standard Kit (RMST) Type - "A"**

| QUANTITY | DESCRIPTION                           |
|----------|---------------------------------------|
| 1        | TYPE - "A" MODULE ASSEMBLY            |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY      |
| 2        | 1 BUTTON POWERCODE TRANSMITTER        |
| 1        | TYPE - "A" CUSTOM WIRING HARNESS      |
| 1        | ANTENNA                               |
| 1        | HOOD SAFETY SWITCH ASSEMBLY           |
| 1        | INSTALLATION PARTS BAG                |
| 1        | FUSE PARTS BAG                        |
| 1        | OPERATORS INSTRUCTIONS                |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD |
| 1        | UNDERHOOD WARNING LABEL               |
| 1        | SECURILOCK INTERFACE KIT              |

- Review the RMST bidirectional kit contents.

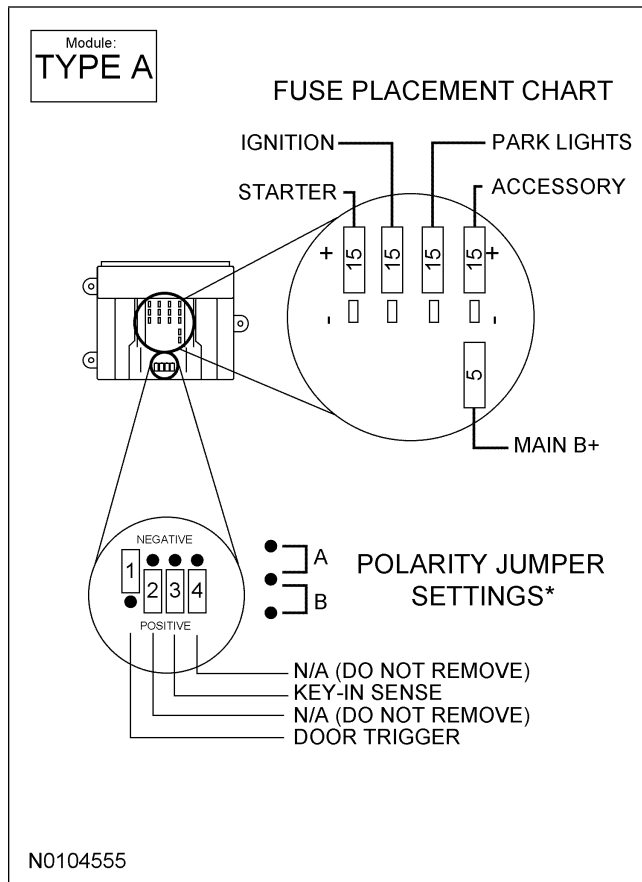
**Remote Start System Bidirectional Kit (RMST) Type - "A"**

| QUANTITY | DESCRIPTION                           |
|----------|---------------------------------------|
| 1        | TYPE - "A" MODULE ASSEMBLY            |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY      |
| 1        | 2 BUTTON POWERCODE TRANSMITTER        |
| 1        | TYPE - "A" CUSTOM WIRING HARNESS      |
| 1        | ANTENNA                               |
| 1        | ANTENNA HARNESS                       |
| 1        | HOOD SAFETY SWITCH ASSEMBLY           |
| 1        | INSTALLATION PARTS BAG                |
| 1        | FUSE PARTS BAG                        |
| 1        | OPERATORS INSTRUCTIONS                |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD |
| 1        | UNDERHOOD WARNING LABEL               |
| 1        | SECURILOCK INTERFACE KIT              |

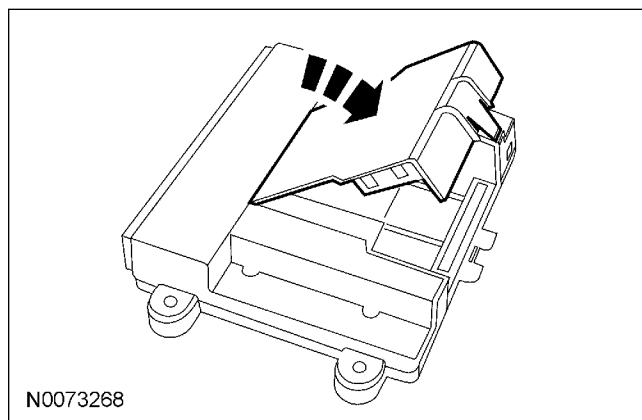
**Module Preparation**

- 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.

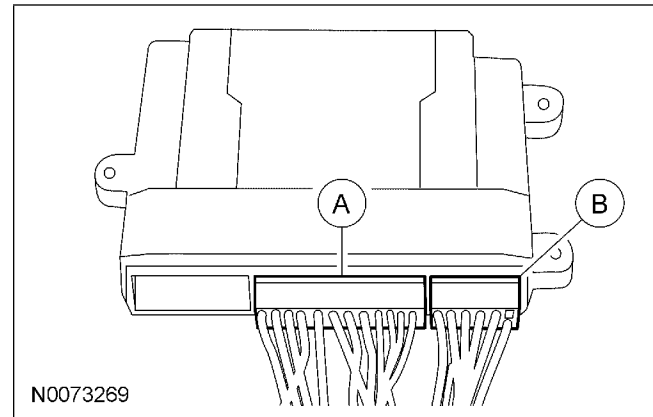
## INSTALLATION (Continued)



5. Place the software cartridge onto the RMST control module.



6. 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.



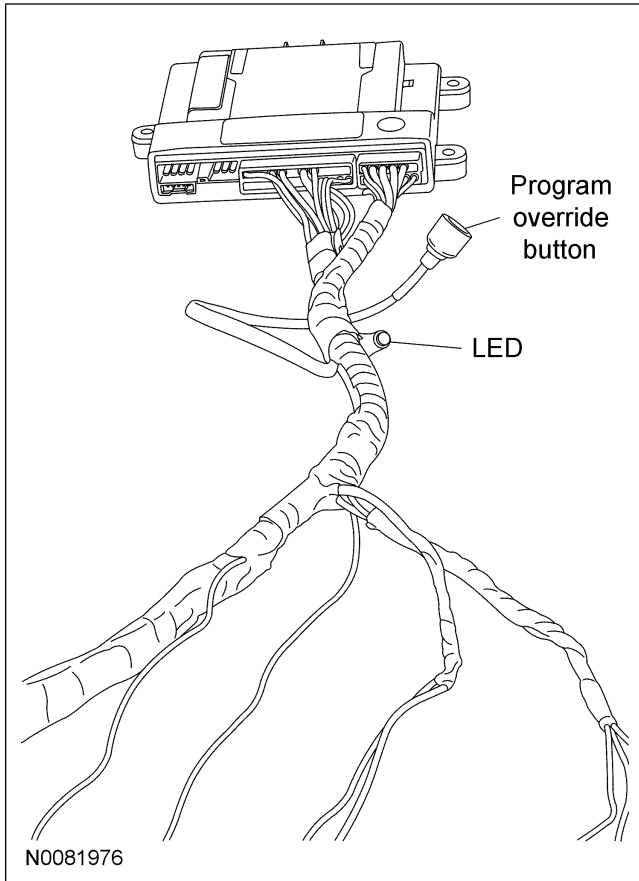
7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

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

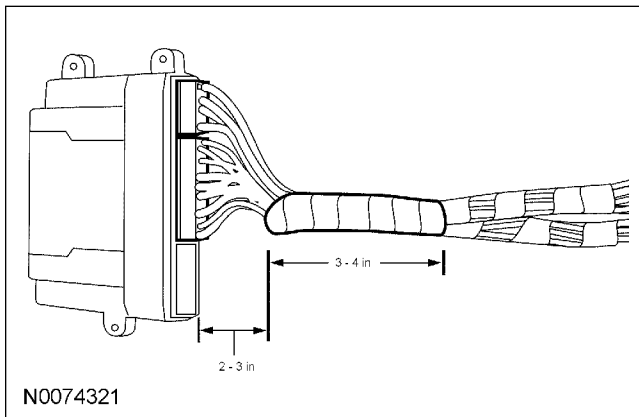
Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18". Depending on the vehicle, there will be 2 to 5 different wire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

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



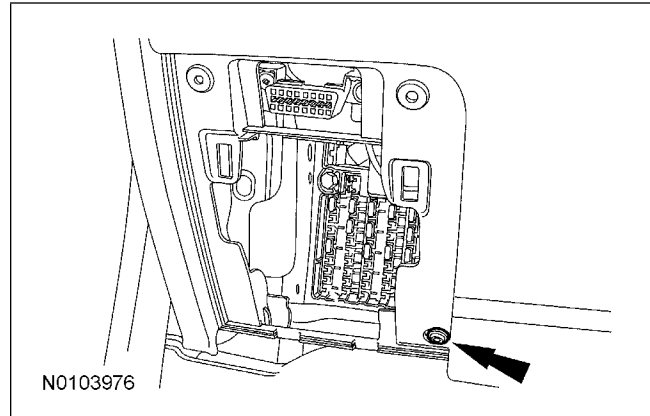
**INSTALLATION (Continued)**

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

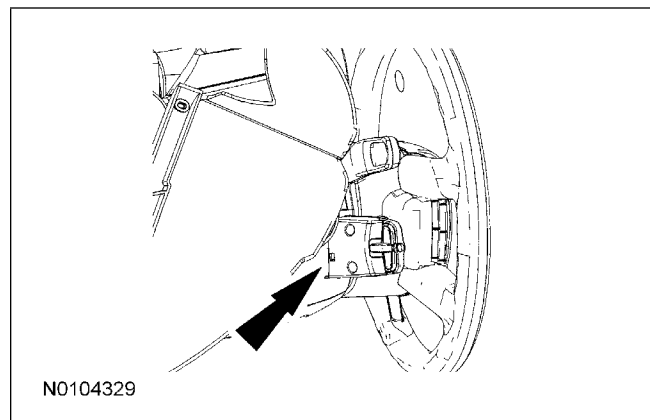
**Vehicle Preparation**

9. Remove the LH scuff plate and cowl trim panel.
10. Remove the fuse box cover.
- Open the fuse box cover, pull upward and remove the fuse box cover from the steering column opening trim panel finish panel.

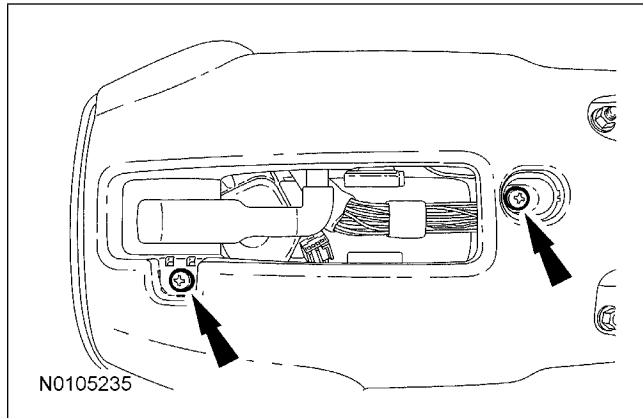
11. Remove the steering column opening trim panel screw, pull the steering column opening trim panel downward releasing the retaining clips.



12. Remove the steering column opening trim panel reinforcement.
13. If equipped, remove the steering wheel audio control switch.
- Using a suitable tool (such as a 90-degree pick), release the tab at the back of the steering wheel controls by pressing it straight in.



14. Remove the steering wheel controls by pulling them straight out of the steering column.
- Disconnect the electrical connector.
15. Release the steering column lever and move the steering column to the full outward and upward position.
16. Remove the 2 lower steering column shroud screws.

**INSTALLATION (Continued)**

17. Remove the lower steering column shroud.

**Antenna Mounting**

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

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

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

**Install The Antenna**

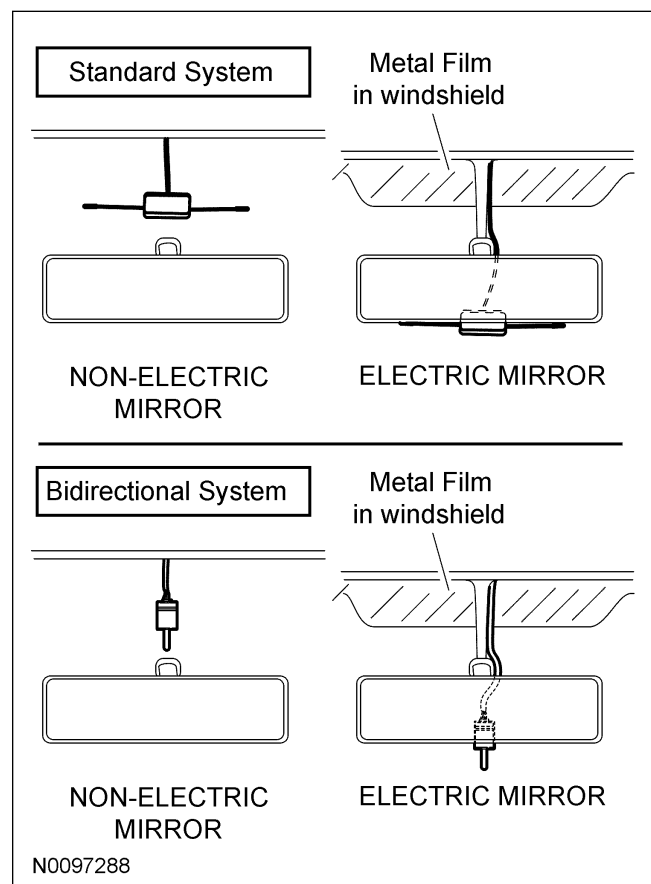
19. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

**NOTE:** Make sure that the long wire on the antenna is pointing towards 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.

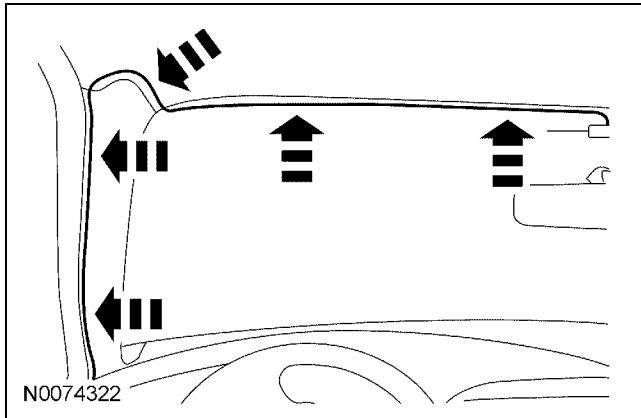
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



21. If necessary, position the A pillar trim slightly outward to provide access to route the antenna wire.

**NOTE:** Do not route the antenna wire over the top of the air bag.

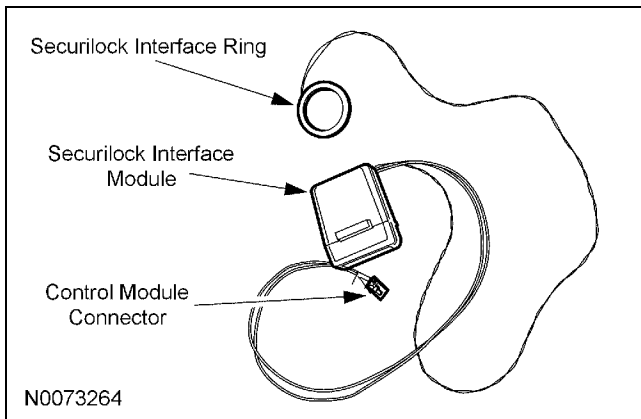
22. Route the antenna cable along the headliner and down the A pillar towards the floor.

**INSTALLATION (Continued)**

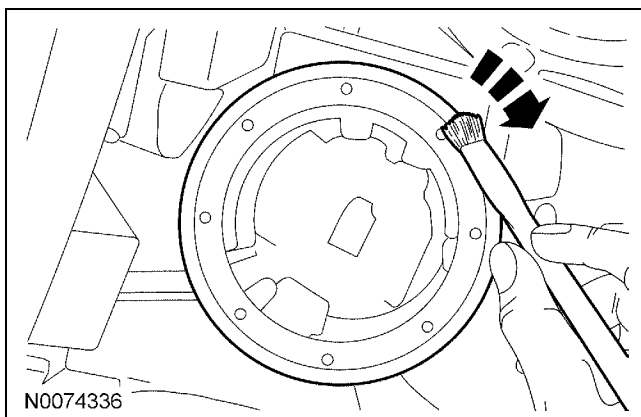
23. Reposition the A pillar trim panel.

**Install The Securilock Interface Kit**

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



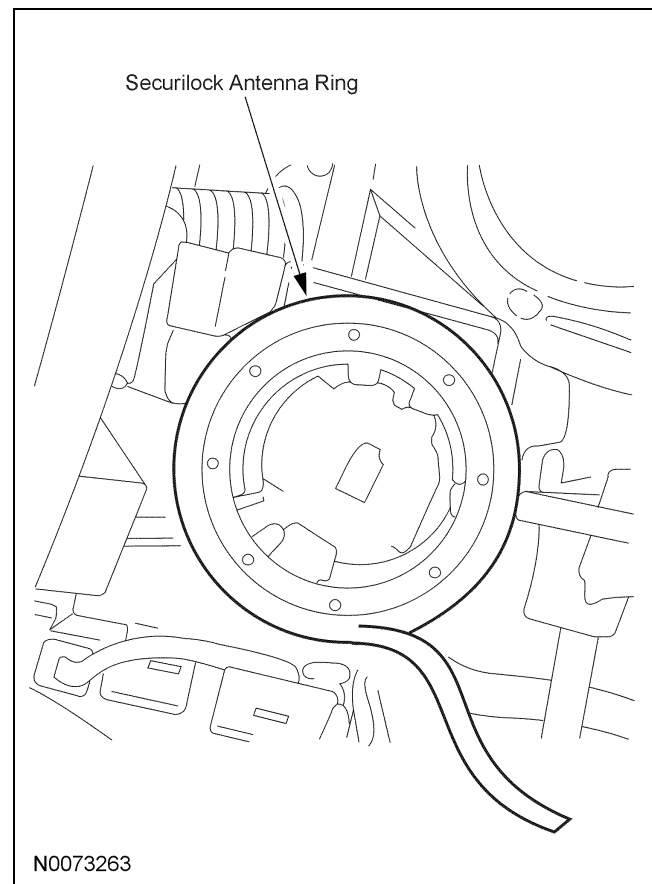
25. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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

**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.

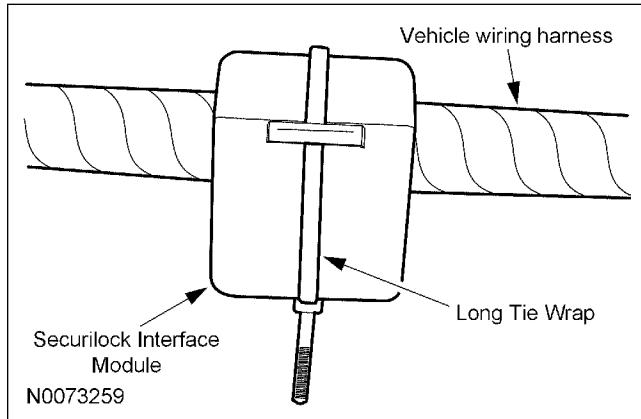
**Install The Securilock Interface Module**

27. **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)**

28. **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**

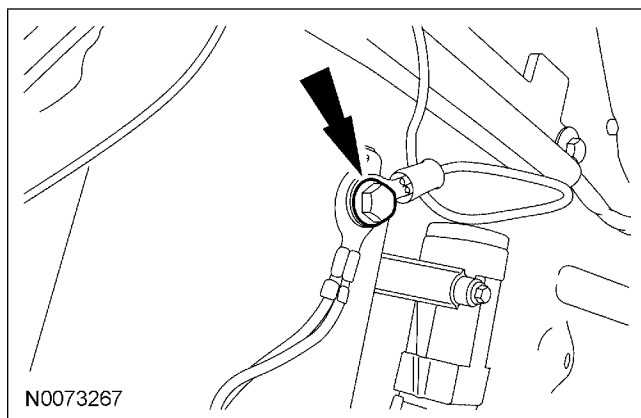
29. Place the remote start module and harness assembly on the floor of the vehicle.

**Identify Circuit Wires For Connections**

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

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

30. Connect the Black ground wire from the remote start module harness to the chassis ground point at the driver kick panel.



31. Disconnect the ignition switch electrical connector.

32. Connect the remote start harness hard shell connectors to the ignition switch and ignition switch connector.

33. **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 Black/Blue horn circuit wire in the steering column harness.

34. Connect the Brown/Black wire from the remote start module harness to the Black/Blue horn circuit wire in the steering column harness.

35. **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 Black/Orange power door lock circuit wire at the Central Junction Box (CJB) connector C201C Pin 10.

36. Connect the Blue wire from the remote start module harness to the Black/Orange power door lock circuit at the CJB connector C201C Pin 10..

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

**NOTE:** A logic probe connected to the correct wire will show ground with the vehicle door(s) open and the dome light ON, then show power 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 Black/Blue door ajar circuit wire at the CJB connector C201E Pin 19..

38. Connect the Green/Violet wire from the remote start module harness to the Black/Blue door ajar circuit wire at CJB connector C201E Pin 19.

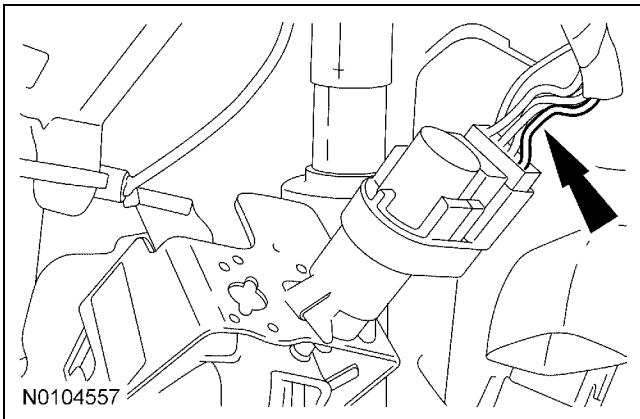
**INSTALLATION (Continued)**

39. **NOTE:** A DVOM connected to the correct wire will show 0V, when the headlight switch is OFF, then show 12V when the headlight switch is ON.

**NOTE:** A logic probe will show ground on the correct wire when the headlight switch is ON, then show power when the headlight switch is OFF.

Identify the Orange/Blue parking light on circuit wire at the CJB front right harness.

40. Connect the White wire from the remote start module harness to the Orange/Blue parking light on circuit at the CJB front right harness.
41. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the brake pedal.
- A logic probe will show open when on the correct wire, then show power while depressing the brake pedal.
- Identify the Green/White brake switch circuit wire at the brake switch connector pin 4.
42. Connect the Brown wire from the remote start module harness to the Green/White brake switch circuit wire at the brake switch connector pin 4.

**Install The Hood Safety Switch**

43. **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.

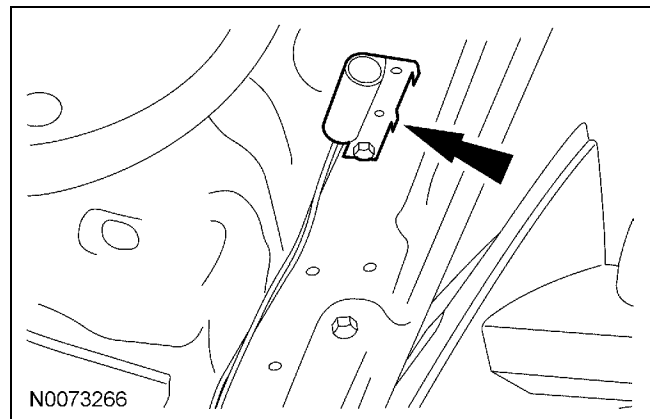
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

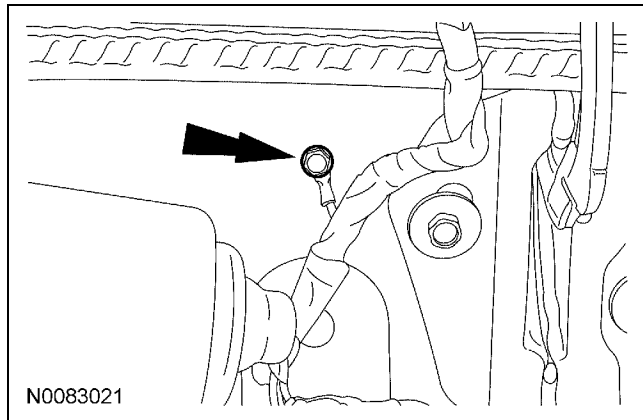
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

44. Apply rustproofing compound (PM-13-A) to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).



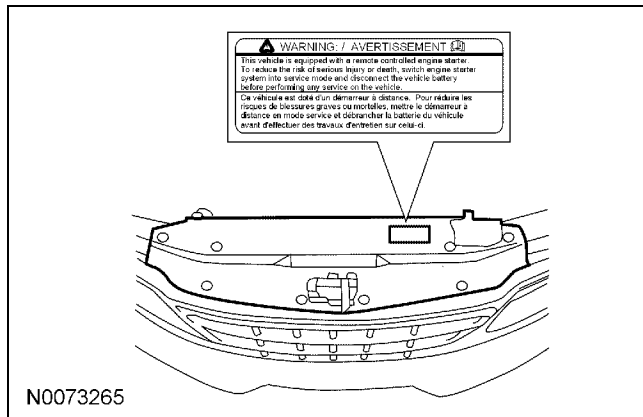
**INSTALLATION (Continued)**

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

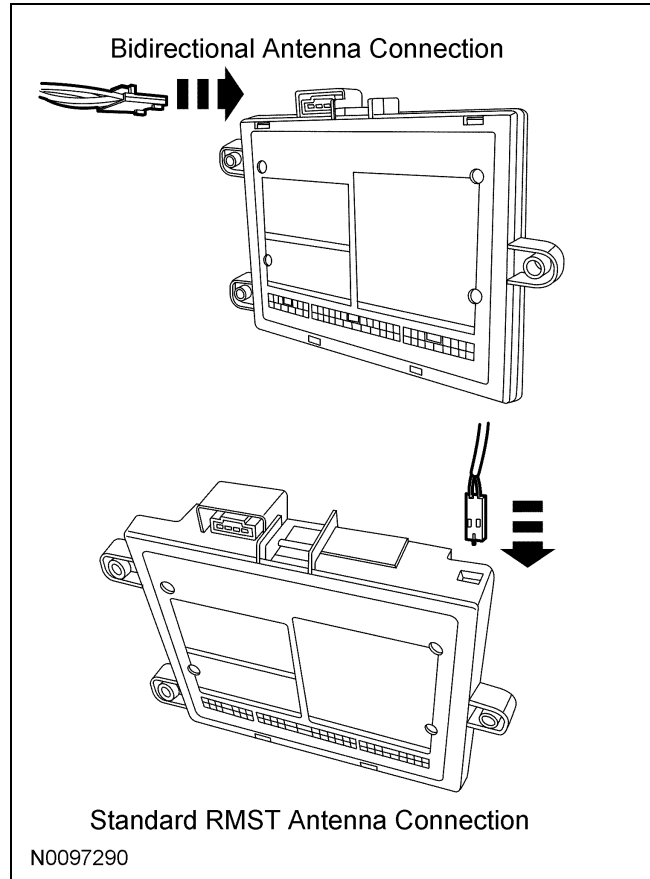


46. **NOTE:** Place the label on the radiator fan shroud or similar area.

Install the underhood warning label



47. Route the Grey hood safety switch wire through the bulkhead into the engine compartment and attach to the hood safety switch.
48. Connect the antenna to the RMST control module.



49. Connect the SECURILOCK interface module to the RMST control module.

**Program The RMST System**

50. [Refer to the RMST programming section for this vehicle \(click here\).](#)

**Secure RMST Harness and Control Module**

51. Use the supplied tie wraps to secure the RMST harness wires.
52. **NOTE:** Do not mount the control module in the knee bolster area.
- Secure the control module at three points to the vehicle.
- Use the supplied long tie wraps to mount the RMST control module to the underdash wiring harness.

**Install Trim**

53. Install the lower steering column shroud.

**INSTALLATION (Continued)**

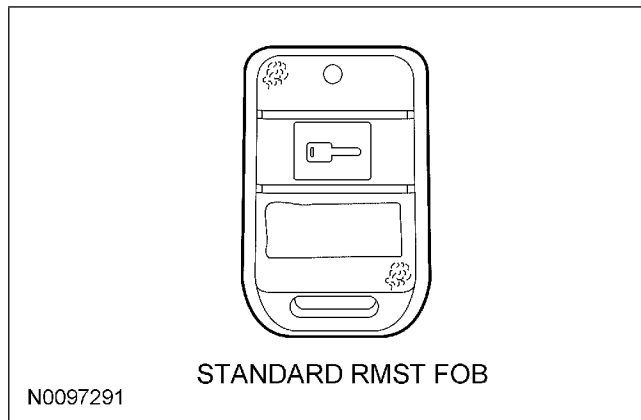
---

- |  |   |
|--|---|
| 54. Install the 2 lower steering column shroud screws.   | 57. Install the steering column opening trim panel. <ul style="list-style-type: none"><li>• Install the steering column opening trim panel screw.</li></ul> |
| 55. If Equipped, Connect the electrical connector and install the steering wheel audio controls by pushing them straight into the steering column. | 58. Install the fuse box cover.   |
| 56. Install the steering column opening trim panel reinforcement. <ul style="list-style-type: none"><li>• Tighten to 9 Nm (80 lb-in).</li></ul>    | 59. Install the left hand cowl trim panel and scuff plate.  |
-

## GENERAL PROCEDURES

### Programming - Standard Remote Start

#### Programming the Module



- NOTE:** If the remote start 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 and doors are 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.

##### Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR         | LED |
|------|---------|---------------|-----|
| 2    | 1       | TACHLESS MODE | ON  |

- Press and hold the brake pedal.
- Turn the ignition key to the RUN position.  
The dome light will turn off.

- 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.

Release the brake pedal and the RMST override button.

- 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.
- All doors closed and 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.

- Press and release the override button again. The horn will honk 5 times indicating the system has entered the second program bank.
- Press and release the brake pedal.  
The horn will honk 1 time indicating the system has entered the option 1 of the second program bank.

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

**Failure to quickly release the remote start fob button will result in system defaulting to the factory options.**

- 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 button and verify the LED illuminates.



**GENERAL PROCEDURES (Continued)**

**NOTE:** If the remote start fob button is held for more than 3 seconds the system will chirp the horn 4 times, indicating the system has returned to factory default settings. If this occurs return to step 1 of the programming section and reprogram the remote start module.

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

10. Remove the ignition key.

**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.

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

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

---

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

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

13. 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 - Standard Remote Start

**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, 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.  |

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**GENERAL PROCEDURES (Continued)**

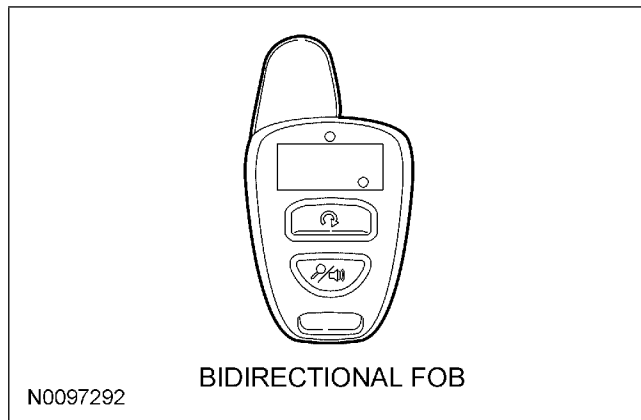
| <b>CHIRPS</b> | <b>PROBLEM</b>                                    |
|---------------|---|
| 5 Chirps      | The KEY is in the ignition.                       |
| 6 Chirps      | The remote start system is in SERVICE/VALET mode. |

---

## GENERAL PROCEDURES

### Programming - Bidirectional Remote Start

#### Programming the Module



- NOTE:** If the remote start 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 and doors are 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.

**Program Bank 2 Chart (5 Honks)**

| BANK | OPTIONS | DESCR         | LED |
|------|---------|---------------|-----|
| 2    | 1       | TACHLESS MODE | ON  |

- Press and hold the brake pedal.
- Turn the ignition key to the RUN position.  
The dome light will turn off.

- 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.

Release the brake pedal and the RMST override button.

- 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.
- All doors closed and 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.

- Press and release the override button again. The horn will honk 5 times indicating the system has entered the second program bank.
- Press and release the brake pedal.  
The horn will honk 1 time indicating the system has entered the option 1 of the second program bank.

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

**Failure to quickly release the remote start fob button will result in system defaulting to the factory options.**

- 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 button and verify the LED illuminates.

---

**GENERAL PROCEDURES (Continued)**

**NOTE:** If the remote start fob button is held for more than 3 seconds the system will chirp the horn 4 times, indicating the system has returned to factory default settings. If this occurs return to step 1 of the programming section and reprogram the remote start module.

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

10. Remove the ignition key.

**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.


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

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

---

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

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

13. Press the remote start button  twice within 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 - Bidirectional Remote Start

**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 the Start button on the remote control key fob twice within 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, 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.  |
| 5 Chirps | The KEY is in the ignition.   |
| 6 Chirps | The remote start system is in SERVICE/VALET mode.                               |

2012 Transit Connect

TYPE "A" CUSTOM WIRE HARNESS

RKE MODULE WIRE HARNESS

STEERING COLUMN HARNESS

|      | Color       | Function              |
|------|-------------|-----------------------|
| A-3  | PINK        | Ignition Input/Output |
| A-2  | ORANGE      | HVAC Output           |
| A-13 | VIOLET      | Starter Output        |
| B-8  | BLACK/WHITE | Key-in-sense Input    |
| A-4  | RED         | Battery               |

|      | Color       | Function          |
|------|-------------|-------------------|
| A-21 | BROWN/BLACK | Horn Relay Output |

DRIVER'S KICK PANEL HARNESS

|      | Color        | Function               |
|------|--------------|------------------------|
| A-5  | BLACK        | Ground                 |
| A-24 | BLUE         | Door Lock Output       |
| A-20 | GREEN/VIOLET | Door Ajar Switch Input |
| A-1  | WHITE        | Parking Light Output   |
| B-7  | BROWN        | Brake Input            |

UNDER HOOD HARNESS

|      | Color | Function               |
|------|-------|------------------------|
| A-19 | GRAY  | Hood Open Switch Input |

VEHICLE HARNESS

IGNITION SWITCH

Horn (BLACK/BLUE )

STEERING COLUMN HARNESS

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT  
IN DRIVER' S KICK PANEL

Door Lock (BLACK/ORANGE)

Door Ajar Switch (BLACK/BLUE)

Parking Lights On (ORANGE/BLUE)

Brake (GREEN/WHITE)

CJB C201C  
Pin 10  
CJB C201E  
Pin 19

CJB FRONT  
RIGHT HARNESS

BRAKE  
SWITCH  
PIN 4

Hood Tilt Switch

Chassis Ground  
Do Not Ground to Hood!

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

### VEHICLE PREPARATION

[Hood Switch Kit Installation](#)

[Spare Key Programming](#)

### INSTALLATION

[Remote Start](#)

### GENERAL PROCEDURES

[Remote Start System Activation](#)

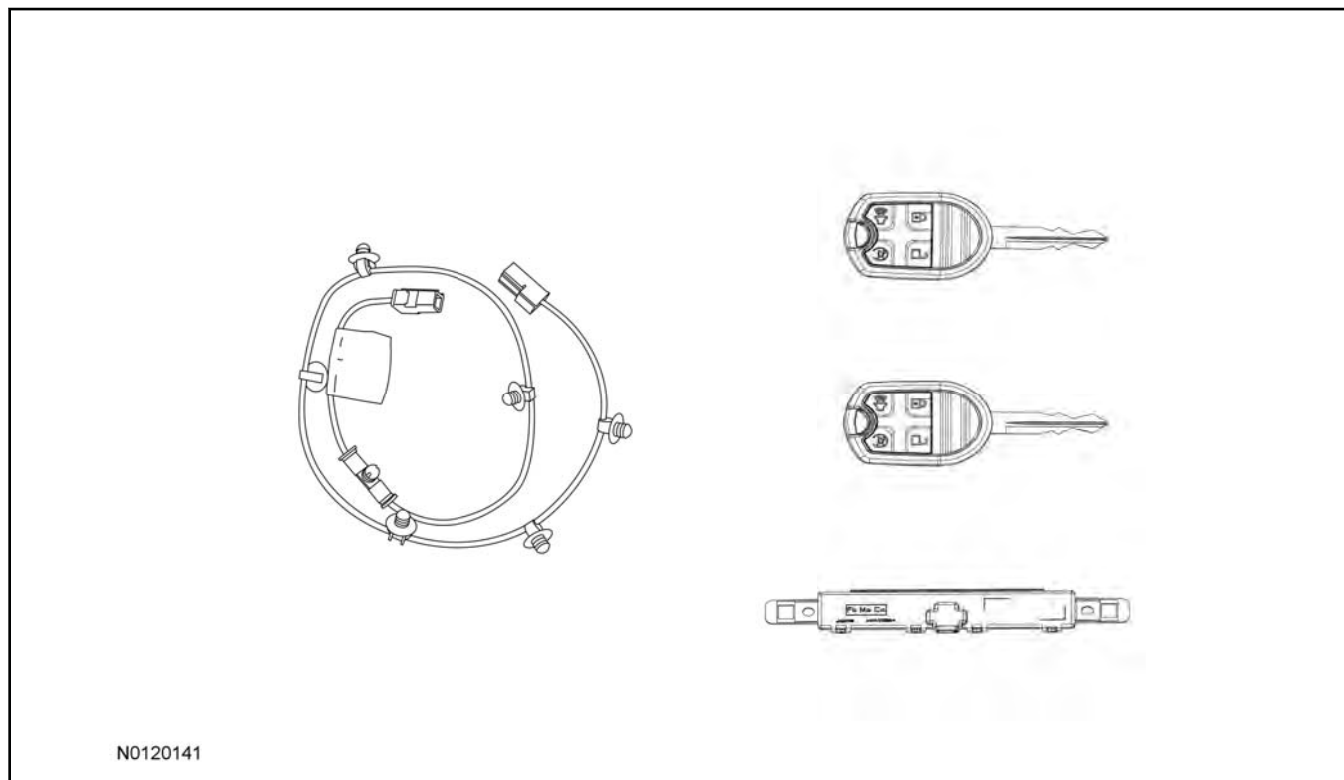
[Functional Test](#)



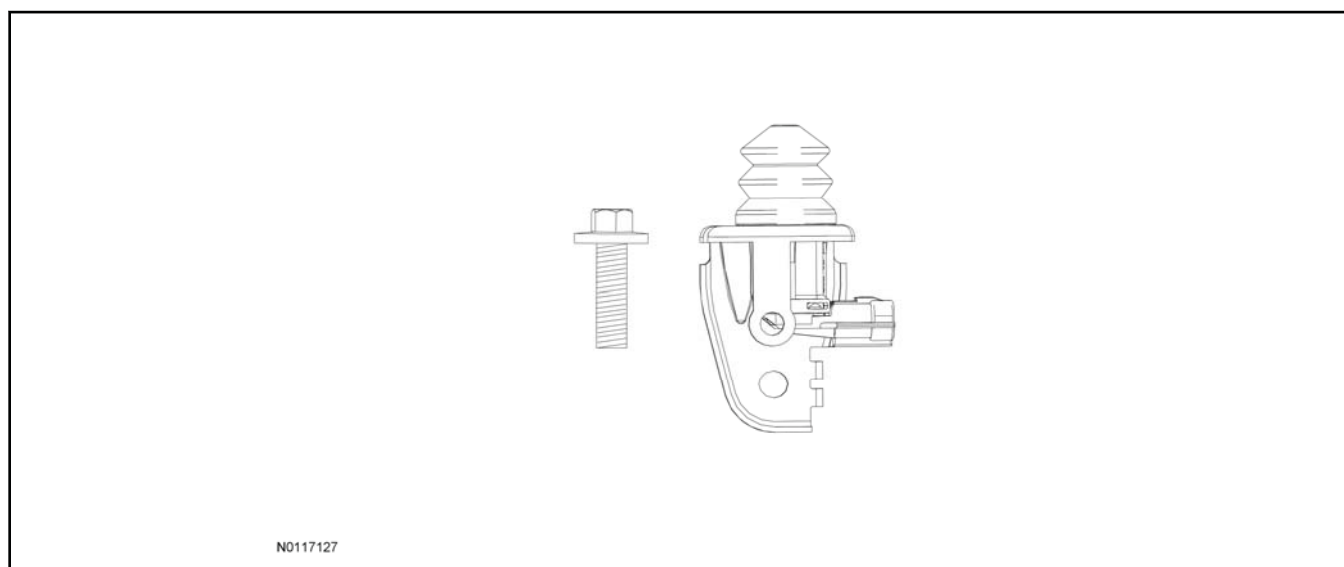
## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



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



### F-Super Duty

NOTE: The OE Remote Start kit is only applicable on vehicles that have power locks.

1. Verify correct kit number.

**INSTALLATION (Continued)****Review Remote Start Installation Kit Contents**

2. Review the RMST kit contents.

**Remote Start System OE Kit (RMST)**

| QUANTITY | DESCRIPTION         |
|----------|---------------------|
| 2        | Key (4 Button)      |
| 1        | Antenna Jumper Wire |
| 1        | Antenna Module      |

**Review Hood Switch Kit Contents**

3. Review the Hood Switch kit contents.

**Hood Switch OE Kit**

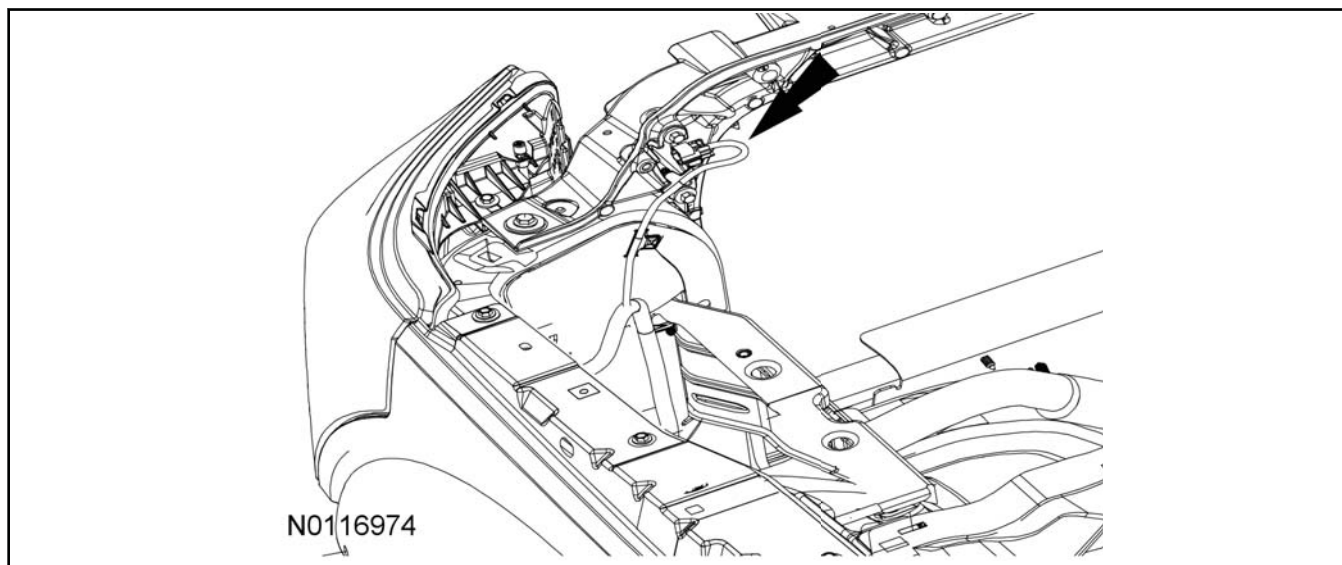
| QUANTITY | DESCRIPTION          |
|----------|----------------------|
| 1        | Bolt                 |
| 1        | Hood Switch Assembly |

**Vehicle preparation**

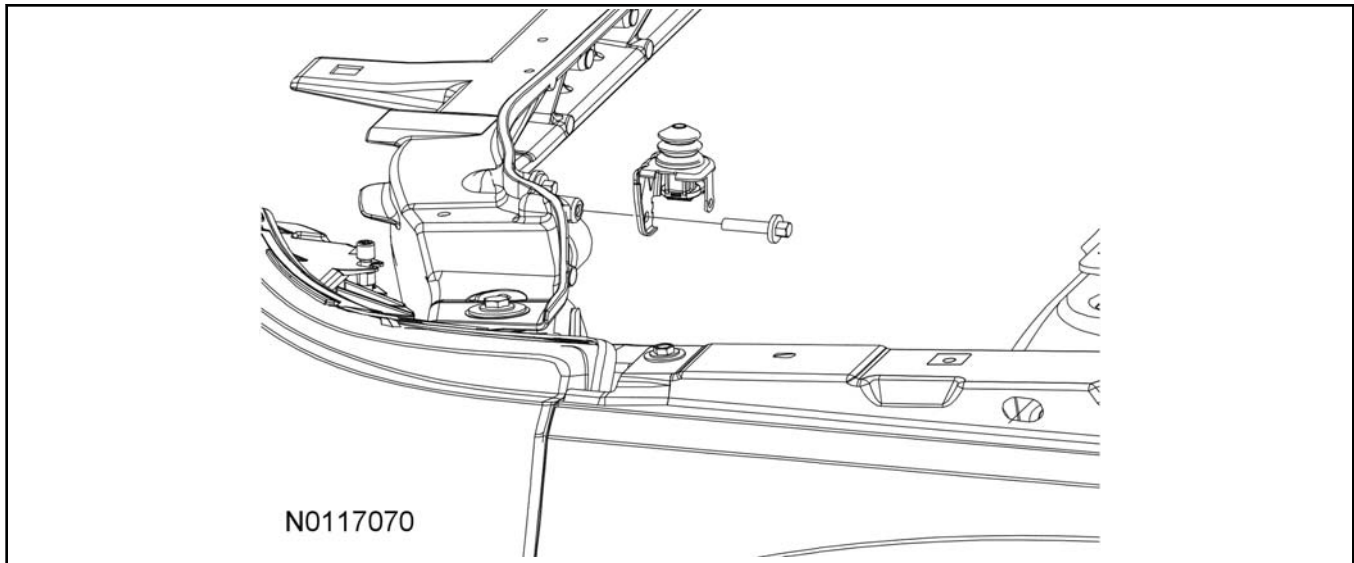
4. Verify that a OE hood switch is installed.
- If the vehicle is not equipped with a OE hood switch see hood switch installation in this procedure.

**Hood Switch Installation**

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

**INSTALLATION (Continued)**

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

**Spare Key Programming****NOTE:**

The hood switch is required for remote start activation.

**NOTE:**

Verify no related DTCs are present before beginning this procedure.

**NOTE:**

This procedure works only if 2 or more programmed keys are available. If 2 programmed keys are not available alternate programming methods in the workshop manual can be found at [www.fordtechservice.dealerconnection.com](http://www.fordtechservice.dealerconnection.com).

**NOTE:**

This procedure works only if the customer spare key programming is enabled. If customer spare key programming is disabled, refer to Key Programming — Enable/Disable Spare Key or Key Programming Using Diagnostic Equipment in the workshop manual located at [www.fordtechservice.dealerconnection.com](http://www.fordtechservice.dealerconnection.com).

9. Cut the provided 4-button keys, that are going to be programmed to match the existing keys.
10. Insert the first programmed Passive Anti-Theft System (PATS) key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).
11. Turn the first key to the OFF position and remove the key from the ignition.
12. Within 10 seconds of turning the key to the OFF position, insert a second programmed PATS key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).
13. Turn the second key to the OFF position and remove the key from the ignition.

**INSTALLATION (Continued)****14. NOTE:**

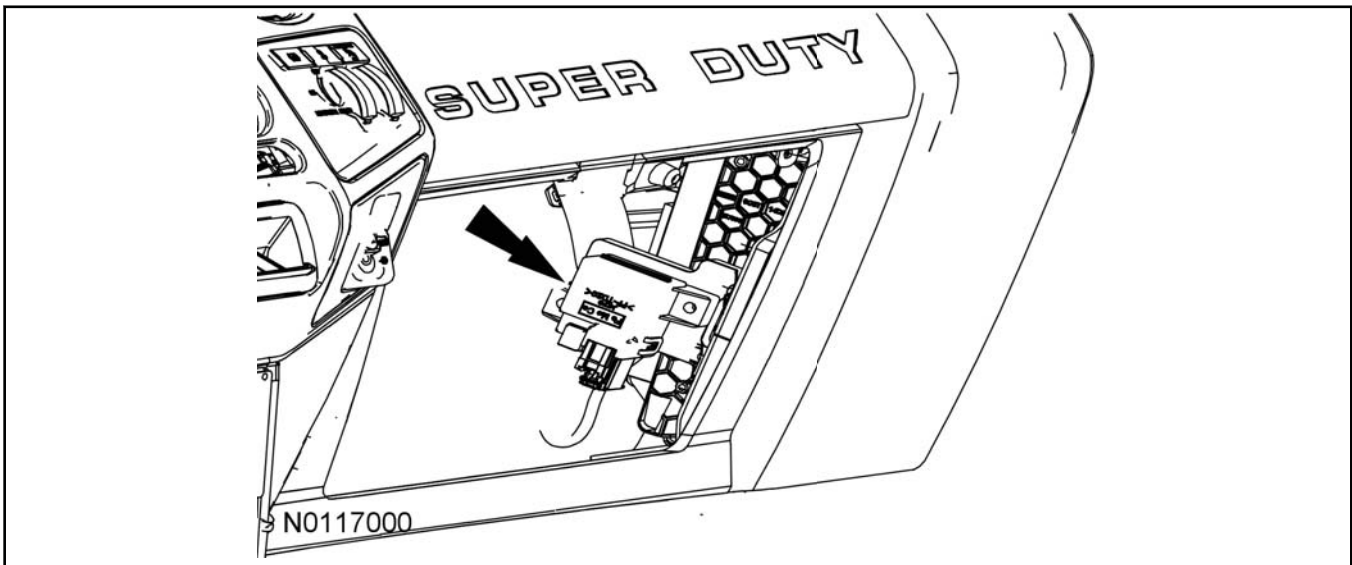
The doors lock and then unlock to confirm that each Integrated Key Transmitter (IKT) is programmed.

Within 10 seconds of turning the second key to the OFF position, insert the new, unprogrammed PATS key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).

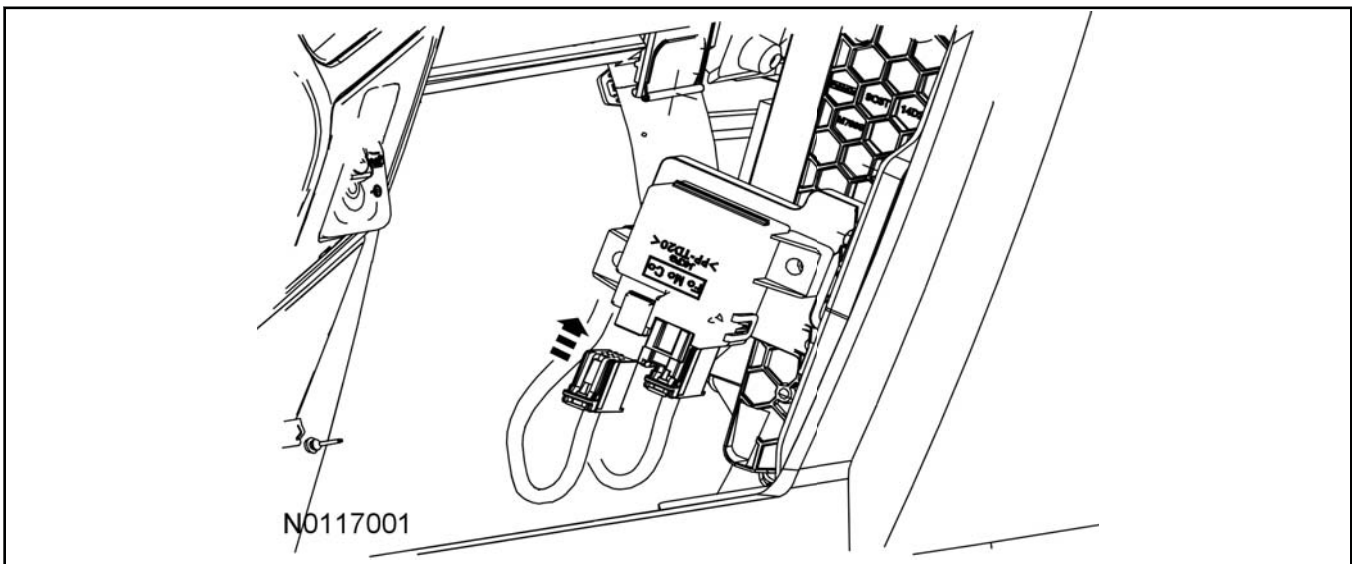
15. If it is desired to program additional key(s) (up to a total of 4 keys can be programmed), repeat Steps 1 - 5 for each additional key.

**Installation**

16. Open the glove compartment and empty the contents.
17. Push in the 2 side tabs and fully lower the glove compartment.
18. Locate the TPM module.



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



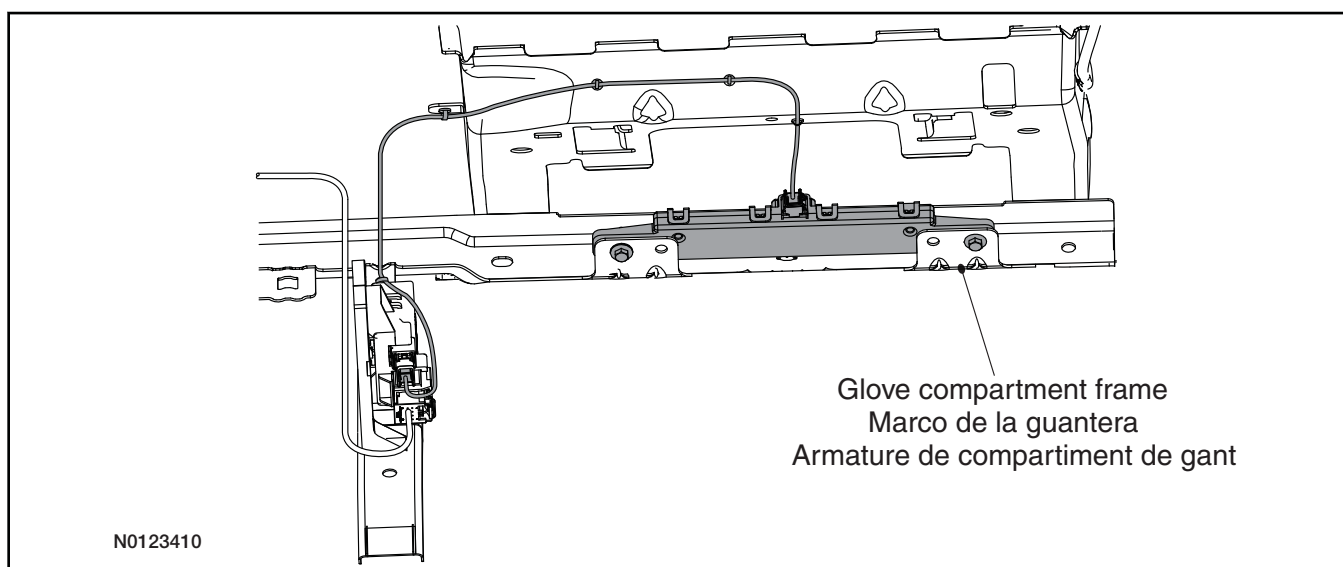
**INSTALLATION (Continued)****20. NOTE:**

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.



21. 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.

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

**23. NOTICE:**

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

Close the glove compartment.

**Remote Start Activation**

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

25. Connect IDS.

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

26. 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.

**INSTALLATION (Continued)**

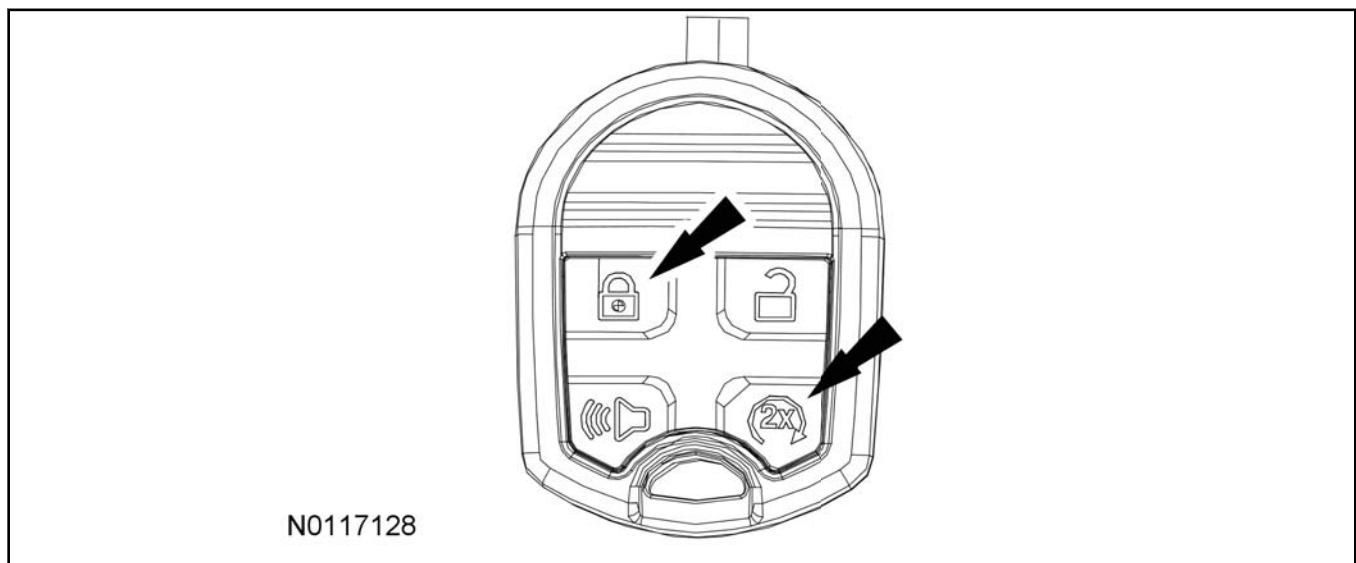
- Select Yes, this will enable the Remote Start function on the vehicle.
27. For vehicles equipped with standard message center, verify that the remote start option now appears.
- Using the select button on the LH side of the steering wheel, cycle through the options and verify that the remote start option appears.
  - Select ok and verify that the remote start system is enabled.
28. 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.
  - Select remote start.
  - Select system.
  - Verify that the remote start system is enabled.

**Functional Test****NOTE:**

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

29. Make sure the ignition is in "park" and the ignition is in the "off" position, remove all keys from the vehicle.
30. Close the hood.
31. Close all of the vehicle doors.
32. **NOTE:**  
Verify that all of the newly programmed keys function properly.

Start the vehicle by pressing the lock button once, then the remote start button 2 times on the newly programmed key.



---

**INSTALLATION (Continued)**

33. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
34. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
35. Open the hood.

36. **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.**

[Manual Table of Contents](#)

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

### INSTALLATION

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[Troubleshooting](#)

### WIRING DIAGRAMS

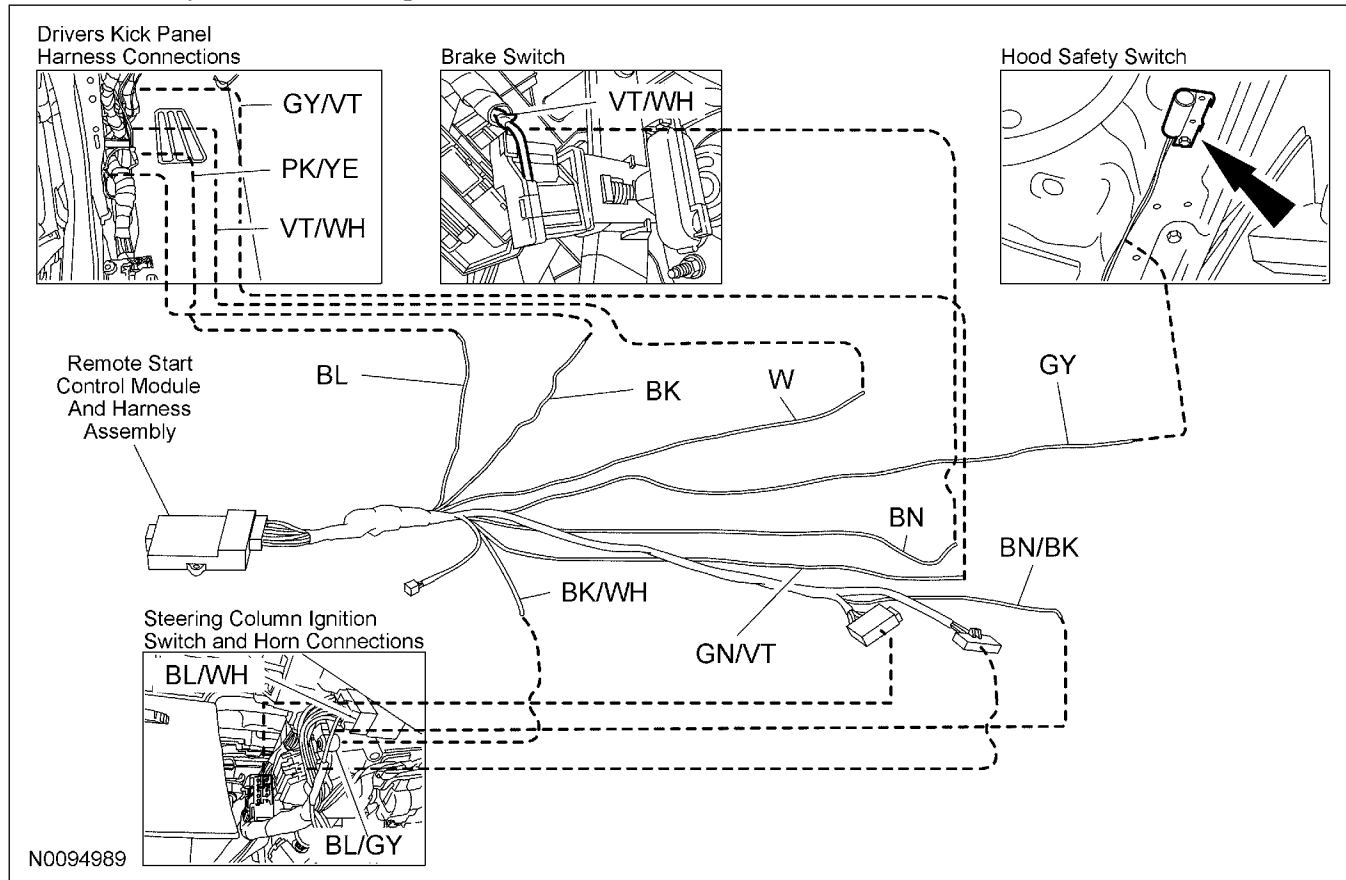
[Vehicle Specific Wiring Diagrams](#)



## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



### Econoline

**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.

**INSTALLATION (Continued)****Review Remote Start Installation Kit Contents**

**NOTE:** Use kit number 8L5J-19G364-AA (with PATS) (FIA), 8L5J-19G364-AC (with PATS) (FIA) or 7L5Z-19G364-AA (GFA) REMOTE START SYSTEM.

9L5Z-19G364-A (GFA) BIDIRECTIONAL REMOTE START SYSTEM.

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

- Review the RMST kit contents.

**Remote Start System Standard Kit (RMST) Type - "B"**

| QUANTITY | DESCRIPTION   |
|----------|---|
| 1        | TYPE - "B" MODULE ASSEMBLY  |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY  |
| 2        | 1 BUTTON POWERCODE TRANSMITTER  |
| 1        | TYPE - "B" CUSTOM WIRING HARNESS  |
| 1        | ANTENNA   |
| 1        | HOOD SAFETY SWITCH ASSEMBLY   |
| 1        | INSTALLATION PARTS BAG  |
| 1        | FUSE PARTS BAG  |
| 1        | OPERATORS INSTRUCTIONS  |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD                                       |
| 1        | UNDERHOOD WARNING LABEL   |
| 1        | SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS) |
| 1        | RELAY   |

- Review the RMST bidirectional kit contents.

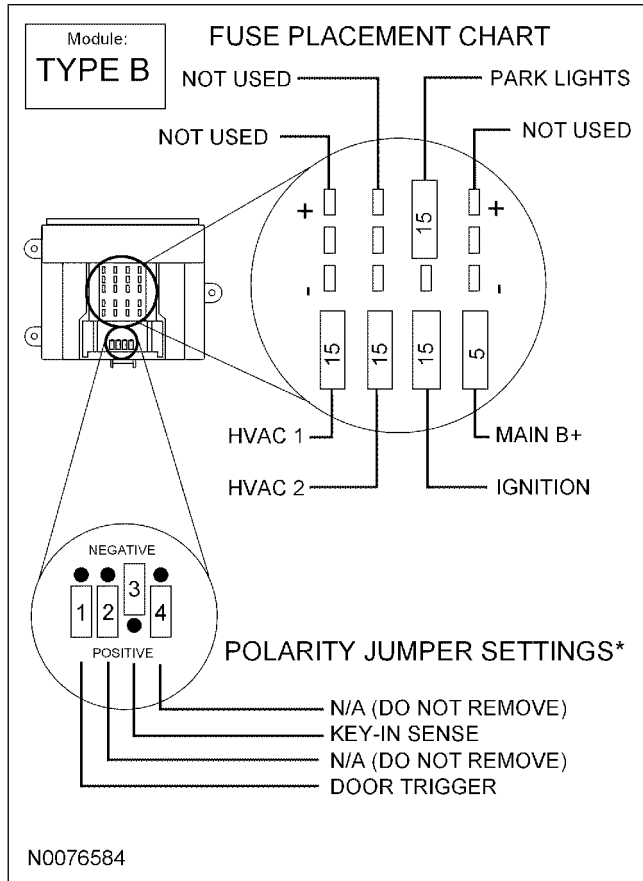
**Remote Start System Bidirectional Kit (RMST) Type - "B"**

| QUANTITY | DESCRIPTION   |
|----------|---|
| 1        | TYPE - "B" MODULE ASSEMBLY  |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY  |
| 1        | 2 BUTTON POWERCODE TRANSMITTER  |
| 1        | TYPE - "B" CUSTOM WIRING HARNESS  |
| 1        | ANTENNA   |
| 1        | ANTENNA HARNESS   |
| 1        | HOOD SAFETY SWITCH ASSEMBLY   |
| 1        | INSTALLATION PARTS BAG  |
| 1        | FUSE PARTS BAG  |
| 1        | OPERATORS INSTRUCTIONS  |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD                                       |
| 1        | UNDERHOOD WARNING LABEL   |
| 1        | SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS) |

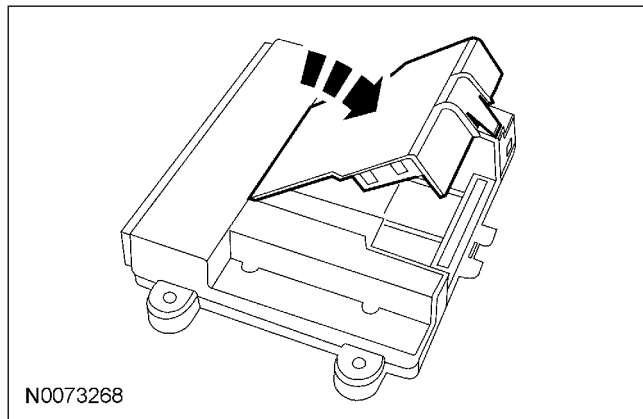
**Module Preparation**

- 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.

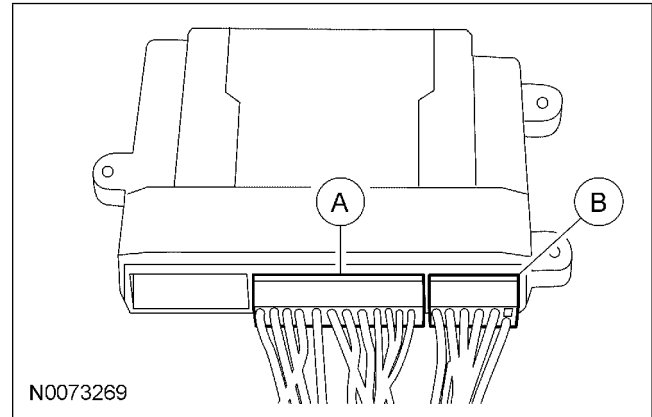
## INSTALLATION (Continued)



- Place the software cartridge onto the RMST control module.



- 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.

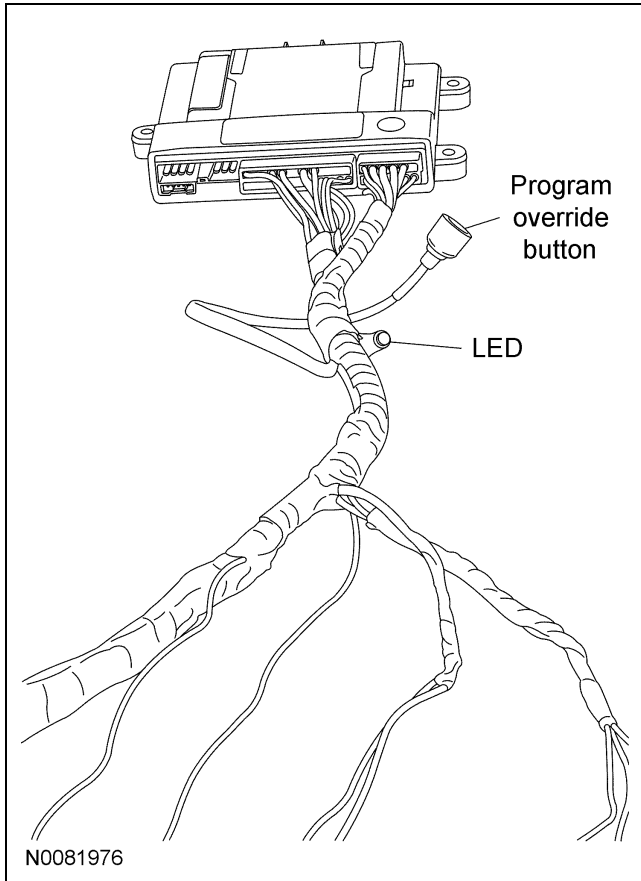


- NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

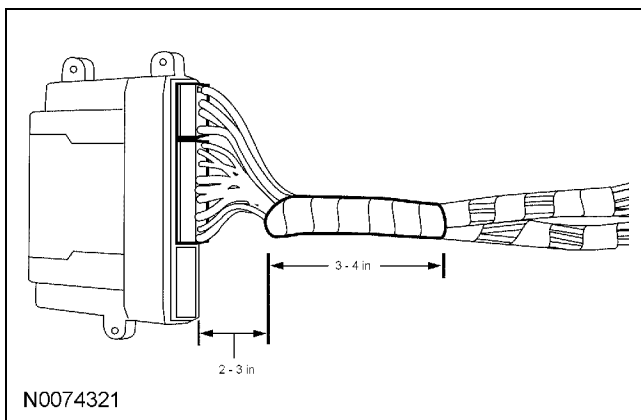
**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

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.

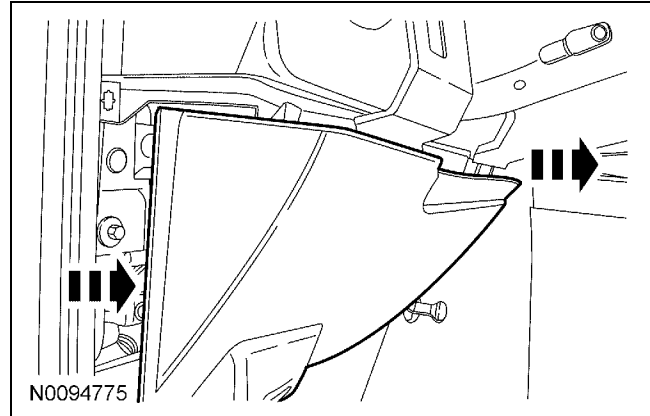
Trim the unused wires approximately 6 - 8" from the module.

**INSTALLATION (Continued)**

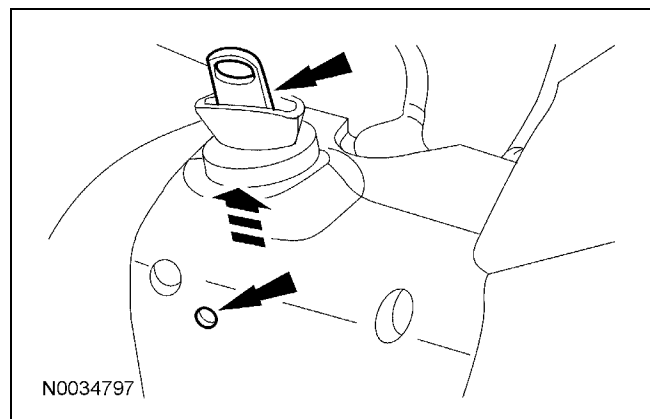
8. Tape the harness sections together, making sure to cover all of the unused wires.

**Vehicle Preparation**

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



10. Remove the lower steering column shroud.
11. Remove the left hand scuff plate and cowl trim panel.
12. 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.



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

## INSTALLATION (Continued)

### Antenna Mounting

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

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

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

### Install The Antenna

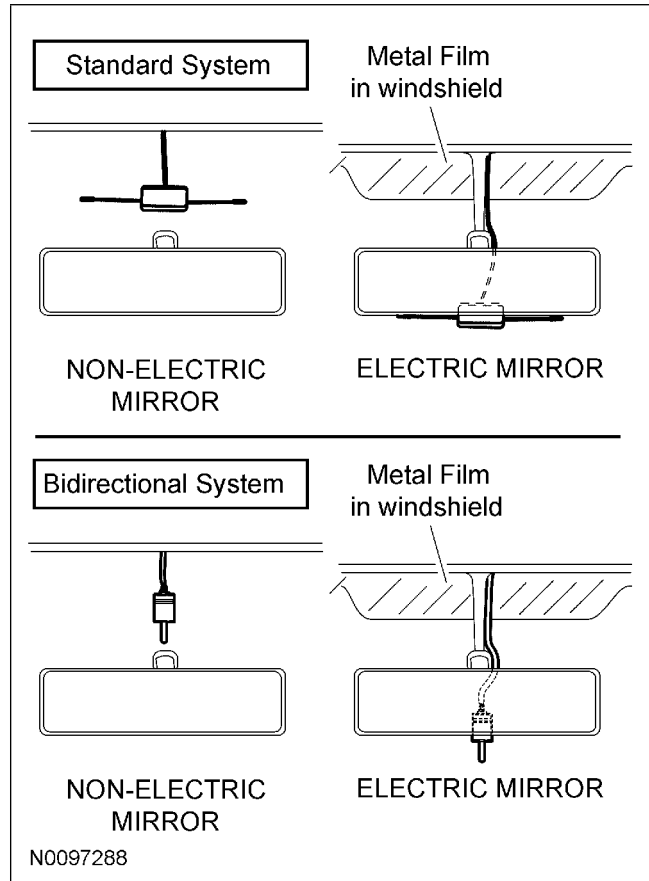
16. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

**NOTE:** Make sure that the long wire on the antenna is pointing towards 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.

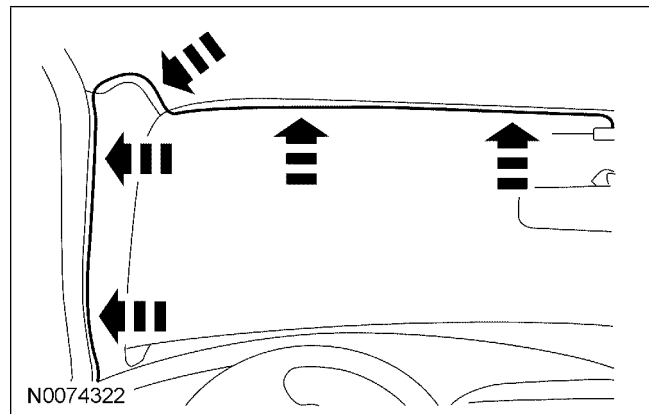
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



18. If necessary, position the A pillar trim slightly outward to provide access to route the antenna wire.

**NOTE:** Do not route the antenna wire over the top of the air bag.

19. Route the antenna cable along the headliner and down the A pillar towards the RMST control module.

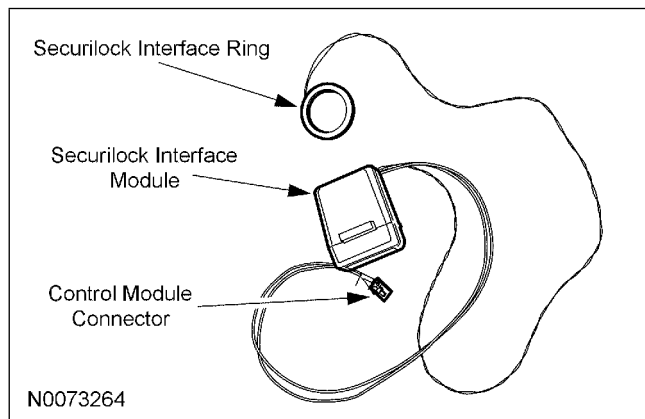


20. Reposition the A pillar trim panel.

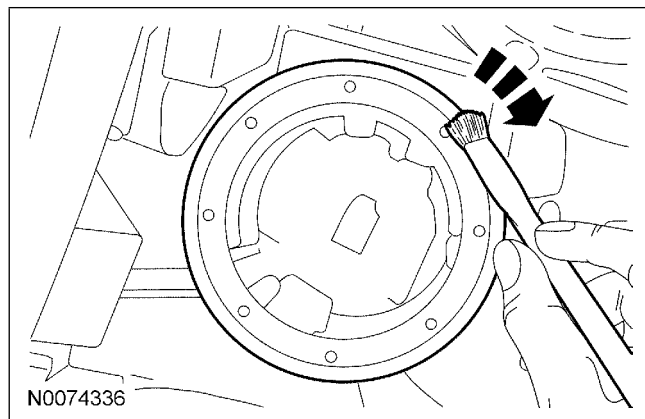
## INSTALLATION (Continued)

### Install The Securilock Interface Kit

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



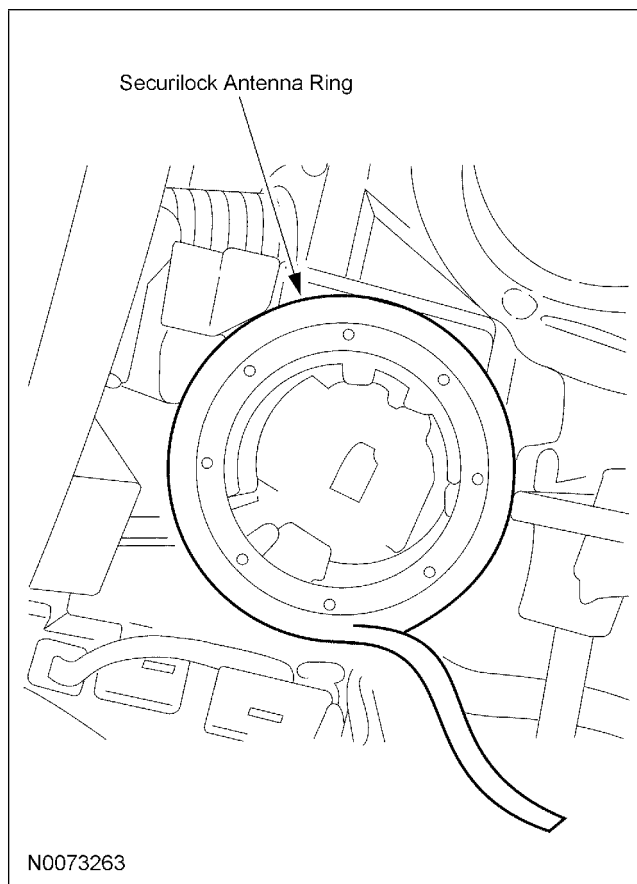
22. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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

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

Remove the protective backing from the adhesive on the antenna ring, place the ring over the PATS transceiver and press firmly in place.



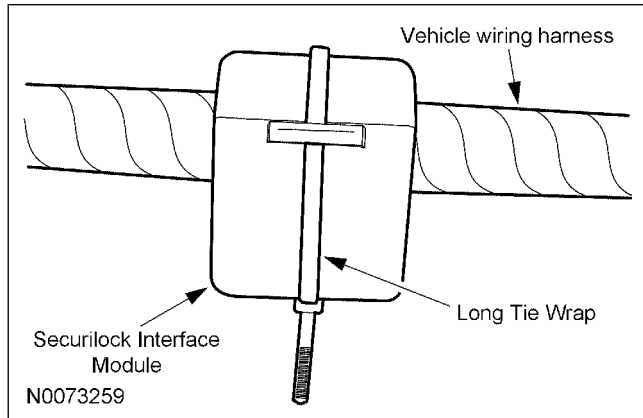
### Install The Securilock Interface Module

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.

**INSTALLATION (Continued)****Install the Remote Start Control Module and Harness Assembly**

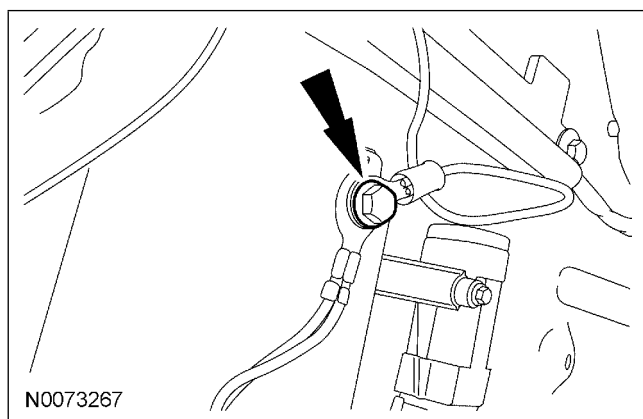
26. Install the ignition lock cylinder.
27. Place the remote start module and harness assembly in the vehicle.

**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 remote start module harness to the chassis ground point in the driver kick panel.
29. Disconnect the ignition switch electrical connector.
30. Connect the hard shell harness connectors at the ignition switch and ignition switch connector.



31. **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 Brown connector at the right side of the steering column.

32. Connect the Brown/Black wire from the remote start module harness to the Blue/White horn circuit wire at the Brown connector at the right side of the steering column.

33. **NOTE:** A DVOM connected to the correct wire will show 12V with the key removed, then show 0V when the key is installed.

A logic probe will show power on the correct wire when the key is removed, then show ground when the key is installed.

Identify the Blue/Gray Key-in-Sense circuit wire at the Brown connector at the right side of the steering column.

34. Connect the Black/White wire from the remote start module harness to the Blue/Gray Key-in-Sense circuit wire at the Brown connector at the right side of the steering column.

35. **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.

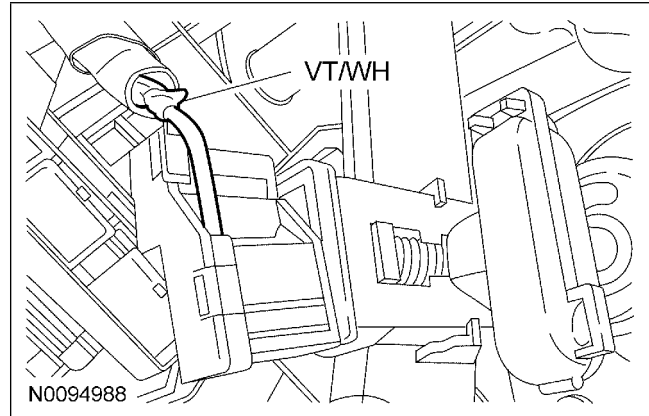
**NOTE:** Be sure that the dome light has timed out and is off before performing the door closed test.

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.

**INSTALLATION (Continued)**

36. Connect the Green/Violet wire from the remote start module harness to the Gray/Violet dome light circuit wire at the driver kick panel.
37. **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 power on the correct wire, then show ground when the door lock switch is pressed.
- Identify the Pink/Yellow power door lock circuit wire at the driver kick panel harness.
38. Connect the Blue wire from the remote start module harness to the Pink/Yellow power door lock circuit at the driver kick panel harness.
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 driver kick panel harness.
40. Connect the White wire from the remote start module harness to the Violet/White parking lights on circuit wire at the driver kick panel harness.
41. **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.
- Identify the Violet/White brake switch circuit wire at the brake switch.
42. Connect the Brown wire from the remote start module harness to the Violet/White brake switch circuit wire at the brake switch.

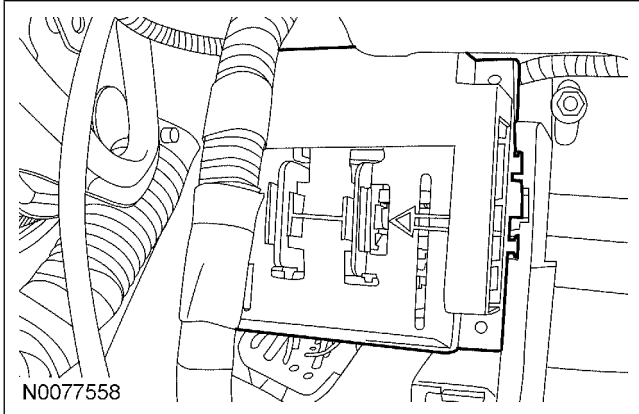
**Install The Power Window Interrupt Relay**

43. Prepare the harness.

**NOTE:** Vehicles with manual windows, skip this section and continue to the hood safety switch installation.

44. Remove circuit 87 Yellow wires and terminals from the relay harness connectors.
- Release the locking tab and pull the wire and terminal from the connector.
45. Connect the White wire from the power window, interrupt relay to the Blue/Black circuit wire from the remote start module harness.
46. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in the ON position and 0V in the OFF position.
- A logic probe connect to the correct wire will show power with the key in the ON position and ground with the key in the OFF position.
- Identify the Pink/Light Green ignition wire at the ignition switch harness.
47. Connect the Black wire from the power window interrupt relay to the Pink/Light Green battery wire at the ignition switch harness.
48. Position the Smart Junction Box (SJB) down to gain access to the SJB wire harness.
49. Identify the Red/Light Blue power window power supply circuit wire at the SJB fuse # 42.



**INSTALLATION (Continued)**

50. Cut the Red/Light Blue power window power supply circuit wire at the SJB fuse # 42.

- Connect the Blue wire from the power window interrupt relay to the feed side of the Red/Light Blue power window power supply circuit wire at the SJB fuse # 42.
- Connect the Red wire from the power window interrupt relay to the switch side of the Red/Light Blue power window power supply circuit wire at the SJB fuse # 42.

51. Position back the SJB.

**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.

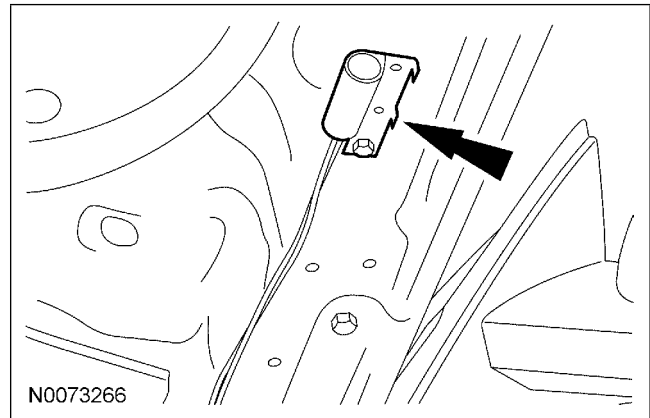
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

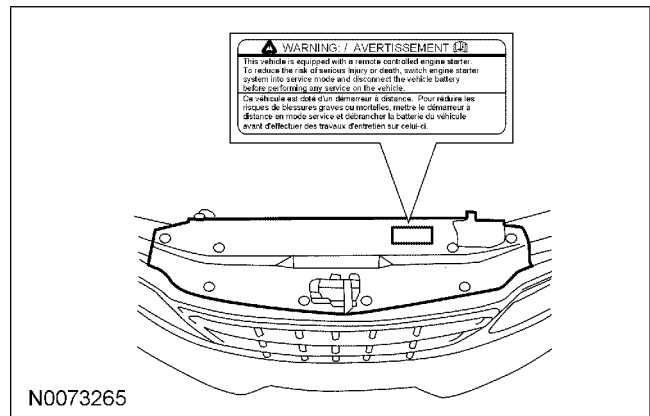
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

53. Apply rustproofing compound (PM-13-A) to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).



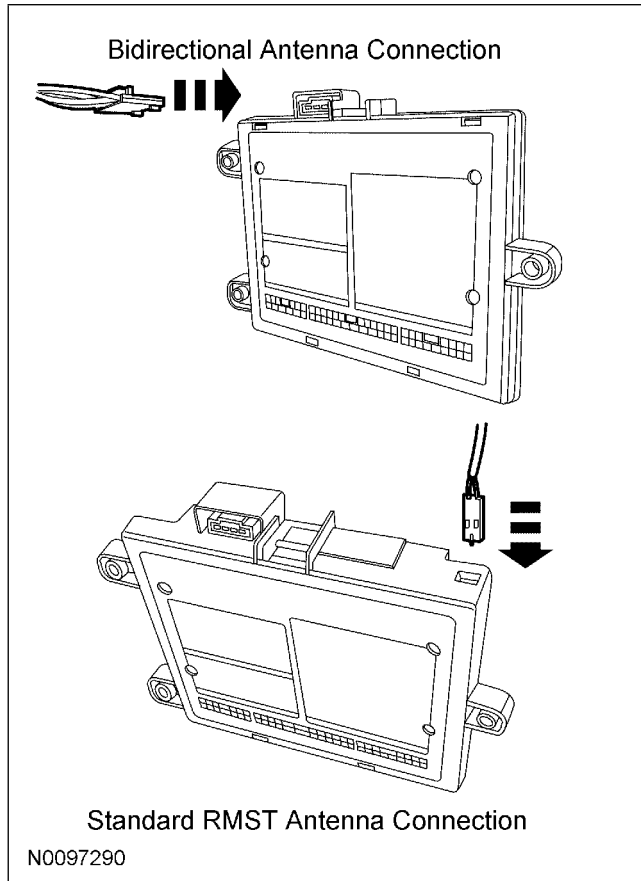
54. **NOTE:** Place the label on the radiator fan shroud or similar area.

Install the underhood warning label



55. Route the Gray hood safety switch wire through the bulkhead into the engine compartment and attach to the hood safety switch.

56. Connect the antenna to the RMST control module.

**INSTALLATION (Continued)**

57. Connect the SECURILOCK interface module to the RMST control module.

**Program The RMST System**

58. [Refer to the RMST programming section for this vehicle \(click here\).](#)

**Secure RMST Harness and Control Module**

59. Use the supplied tie wraps to secure the RMST harness wires.
60. **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 RMST control module to the underdash wiring harness.

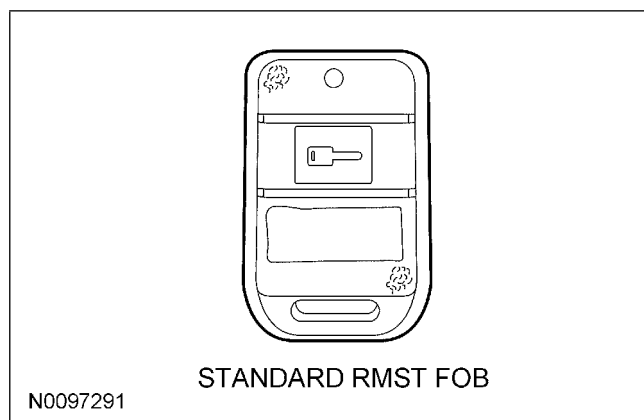
**Install Trim**

61. Install the (3) screws and the steering column shroud.
62. If equipped, install the tilt release lever handle.
63. Install the lower instrument panel steering column cover.
64. Install the left hand scuff plate and cowl trim panel.

## GENERAL PROCEDURES

### Programming - Standard Remote Start

#### Programming the Module



- NOTE:** If the remote start module 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 and doors are 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.

#### Gas Engine Only: Program Bank 1 Chart (4 Honks)

| BANK | OPTIONS | DESCR                     | LED |
|------|---------|---------------------------|-----|
| 1    | 2       | DOOR<br>AJAR<br>INVERT    | ON  |
| 1    | 3       | KEY-IN<br>SENSE<br>INVERT | ON  |

#### Gas Engine Only: Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR            | LED |
|------|---------|------------------|-----|
| 2    | 1       | TACHLESS<br>MODE | ON  |

#### Diesel Engine Only: Program Bank 1 Chart (4 Honks)

| BANK | OPTIONS | DESCR                  | LED |
|------|---------|------------------------|-----|
| 1    | 2       | DOOR<br>AJAR<br>INVERT | ON  |
| 1    | 3       | KEY-IN<br>SENSE        | ON  |

#### Diesel Engine Only: Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR            | LED |
|------|---------|------------------|-----|
| 2    | 1       | TACHLESS<br>MODE | ON  |
| 2    | 5       | DIESEL<br>TIMER  | ON  |

- Press and hold the brake pedal.
- Turn the ignition key to the RUN position. The dome light will turn off.
- 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. Release the brake pedal and the RMST override button.
- If you do not get 3 confirmation chirps, check the following items.
  - Brake pedal switch wire solder connection.
  - Hood closed and Grey hood safety switch wire solder connection.
  - All doors closed and 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 override button. The horn will honk 4 times indicating the system has entered the first program bank.

8. Press and release the brake pedal.

The horn will honk 2 times indicating the system has entered the option 2 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.

9. The LED must be on for option 2. If the LED is illuminated no action is required. If the LED is not illuminated, press and release the remote start fob button and verify the LED illuminates.

**NOTE:** When programming the remote start module, if the remote start fob button is held for more than 3 seconds, 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.

10. Press and release the brake pedal.

The horn will honk 3 times indication the system has entered the option 3 of the first program bank.

11. The LED must be on for option 3. 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.

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

13. Press and release the brake pedal.

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

14. The LED must be ON for option 1. If the LED is illuminated ON, action is required. If the LED is not illuminated press the remote start fob and verify the LED illuminates.

**NOTE:** Vehicles equipped with a diesel engine go to the next step. Vehicles equipped with a gas engine skip step 15 and proceed to step 16.

15. Press and release the brake pedal until the horn honks 5 times.

The LED must be ON for option 5. If the LED is ON no action is required. If the LED is OFF, press the remote start fob button to verify that the LED is OFF.

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

16. Remove the ignition key.

**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.

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

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

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

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

19. 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.

---

**GENERAL PROCEDURES (Continued)**

**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 - Standard Remote Start

**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)**

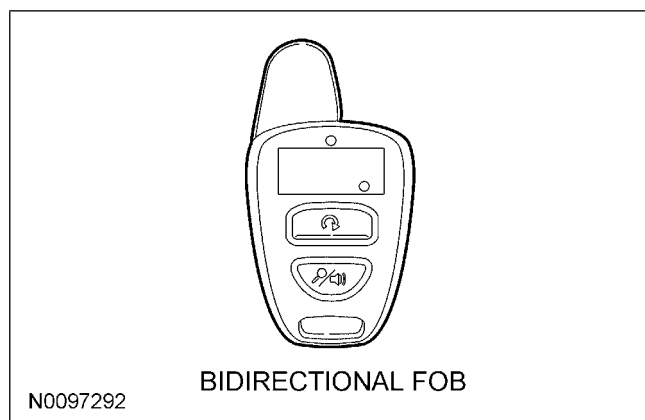
| <b>CHIRPS</b> | <b>PROBLEM</b>                                    |
|---------------|---|
| 5 Chirps      | The KEY is in the ignition.                       |
| 6 Chirps      | The remote start system is in SERVICE/VALET mode. |

---

## GENERAL PROCEDURES

### Programming - Bidirectional Remote Start

#### Programming the Module



- NOTE:** If the remote start module 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 and doors are 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.

#### Gas Engine Only: Program Bank 1 Chart (4 Honks)

| BANK | OPTIONS | DESCR                     | LED |
|------|---------|---------------------------|-----|
| 1    | 2       | DOOR<br>AJAR<br>INVERT    | ON  |
| 1    | 3       | KEY-IN<br>SENSE<br>INVERT | ON  |

#### Gas Engine Only: Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR            | LED |
|------|---------|------------------|-----|
| 2    | 1       | TACHLESS<br>MODE | ON  |

#### Diesel Engine Only: Program Bank 1 Chart (4 Honks)

| BANK | OPTIONS | DESCR                  | LED |
|------|---------|------------------------|-----|
| 1    | 2       | DOOR<br>AJAR<br>INVERT | ON  |
| 1    | 3       | KEY-IN<br>SENSE        | ON  |

#### Diesel Engine Only: Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR            | LED |
|------|---------|------------------|-----|
| 2    | 1       | TACHLESS<br>MODE | ON  |
| 2    | 5       | DIESEL<br>TIMER  | ON  |

- Press and hold the brake pedal.
- Turn the ignition key to the RUN position. The dome light will turn off.
- 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. Release the brake pedal and the RMST override button.
- If you do not get 3 confirmation chirps, check the following items.
  - Brake pedal switch wire solder connection.
  - Hood closed and Grey hood safety switch wire solder connection.
  - All doors closed and 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 override button. The horn will honk 4 times indicating the system has entered the first program bank.
8. Press and release the brake pedal.  
The horn will honk 2 times indicating the system has entered the option 2 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.

9. The LED must be on for option 2. If the LED is illuminated no action is required. If the LED is not illuminated, press and release the remote start fob button and verify the LED illuminates.

**NOTE:** When programming the remote start module, if the remote start fob button is held for more than 3 seconds, 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.

10. Press and release the brake pedal.  
The horn will honk 3 times indication the system has entered the option 3 of the first program bank.
11. The LED must be on for option 3. 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.
12. Press and release the override button. The horn will honk 5 times indicating the system has entered the second option bank.
13. Press and release the brake pedal.  
The horn will honk 1 time indication the system has entered the option 1 of the second program bank.

14. The LED must be ON for option 1. If the LED is illuminated ON, action is required. If the LED is not illuminated press the remote start fob and verify the LED illuminates.

**NOTE:** Vehicles equipped with a diesel engine go to the next step. Vehicles equipped with a gas engine skip step 15 and proceed to step 16.

15. Press and release the brake pedal until the horn honks 5 times.  
The LED must be ON for option 5. If the LED is ON no action is required. If the LED is OFF, press the remote start fob button to verify that the LED is OFF.


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

16. Remove the ignition key.

**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.

17. Insert the first ignition key and turn to the run position.  
Watch for the PATS light to turn off. Remove the first key.
18. Insert the second ignition key and turn to the run position.  
Watch for the PATS light to turn off. Remove the second key.
19. Press and hold the remote start button  twice within 3 seconds.  
The PATS light should stay on for 3-5 seconds before turning off, which means that the SECURILOCK was successfully programmed.

---

**GENERAL PROCEDURES (Continued)**

**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 - Bidirectional Remote Start

**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 the Start button on the remote control key fob twice within 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.  |
| 5 Chirps | The KEY is in the ignition.   |
| 6 Chirps | The remote start system is in SERVICE/VALET mode.                               |

'12 E-Series

TYPE "B" CUSTOM WIRE HARNESS

RMST MODULE WIRE HARNESS

STEERING COLUMN HARNESS

|     | Color        | Function              |
|-----|--------------|-----------------------|
| A-7 | PINK         | Ignition Input/Output |
| B-3 | PINK/WHITE   | Ignition 2 Output     |
| B-4 | ORANGE       | HVAC 1 Output         |
| B-5 | ORANGE/WHITE | HVAC 2 Output         |
| A-8 | VIOLET       | Starter Output        |
| A-4 | RED          | Battery               |
| B-2 | RED          | Battery               |
| B-1 | BLUE         | Battery               |

DRIVER'S KICK PANEL HARNESS

|      | Color       | Function           |
|------|-------------|--------------------|
| A-21 | BROWN/BLACK | Horn Relay Output  |
| B-8  | BLACK/WHITE | Key-in-sense Input |

DRIVER'S KICK PANEL HARNESS



|      | Color        | Function               |
|------|--------------|------------------------|
| A-5  | BLACK        | Ground                 |
| A-20 | GREEN/VIOLET | Door Ajar Switch Input |
| A-24 | BLUE         | Door Lock Output       |
| A-1  | WHITE        | Parking Light Output   |
| B-7  | BROWN        | Brake Input            |

UNDER HOOD HARNESS

|      | Color | Function               |
|------|-------|------------------------|
| A-19 | GRAY  | Hood Open Switch Input |

VEHICLE  
HARNESS




IGNITION  
SWITCH

Horn (BLUE/WHITE)   
Key-in Sense (BLUE/GRAY)   
BROWN  
CONNECTOR  
RIGHT SIDE OF  
STEERING  
COLUMN

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT  
IN DRIVER'S KICK PANEL



Dome Light (GRAY/VIOLET)   
Door Lock (PINK/YELLOW)   
Parking Lights(VIOLET/WHITE)   
DRIVER'S  
KICK PANEL

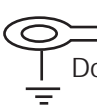
Brake (VIOLET/WHITE)   
BRAKE  
SWITCH\*\*

Vehicle  
Interior

Engine  
Compartment

Hood Tilt Switch

Chassis  
Ground



Do Not Ground to Hood!

\*\* Alternate color and location: LT. GREEN located in Driver's Side Kick Panel

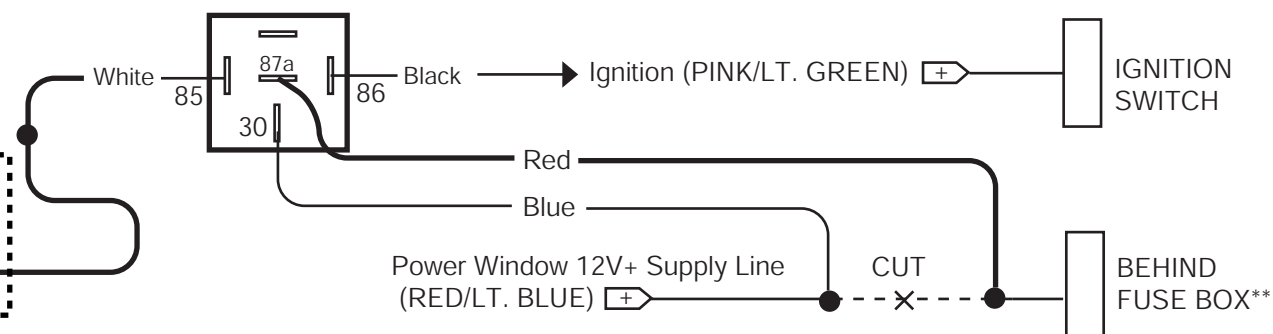
## POWER WINDOW INTERRUPT

**Relays shown are not supplied in kit.** Relays are available by ordering Ford part number YL3Z-19G390-AA (Single) or YL3Z-19G390-BA (10 pack).

### RMST MODULE WIRE HARNESS

#### POWER WINDOW INTERRUPT

|      | Color      | Function      |
|------|------------|---------------|
| B-10 | BLUE/BLACK | Active Output |



\*\*Fuse box must be removed by unclipping and sliding back to access the RED/LT. BLUE wire located behind fuse #42 on the right side.

**CAUTION: REMOVE YELLOW WIRE AND TERMINAL FROM RELAY SOCKETS**

[Manual Table of Contents](#)

# REMOTE START SYSTEM INSTALLATION

## Expedition W/O SYNC ONLY

### CONTENTS

#### INSTALLATION

[Remote Start](#)

#### GENERAL PROCEDURES

[Proper Splicing Techniques](#)

[Programming - Standard Remote Start](#)

[Functional Test - Standard Remote Start](#)

[Programming - Bidirectional Remote Start](#)

[Functional Test - Bidirectional Remote Start](#)

[Troubleshooting](#)

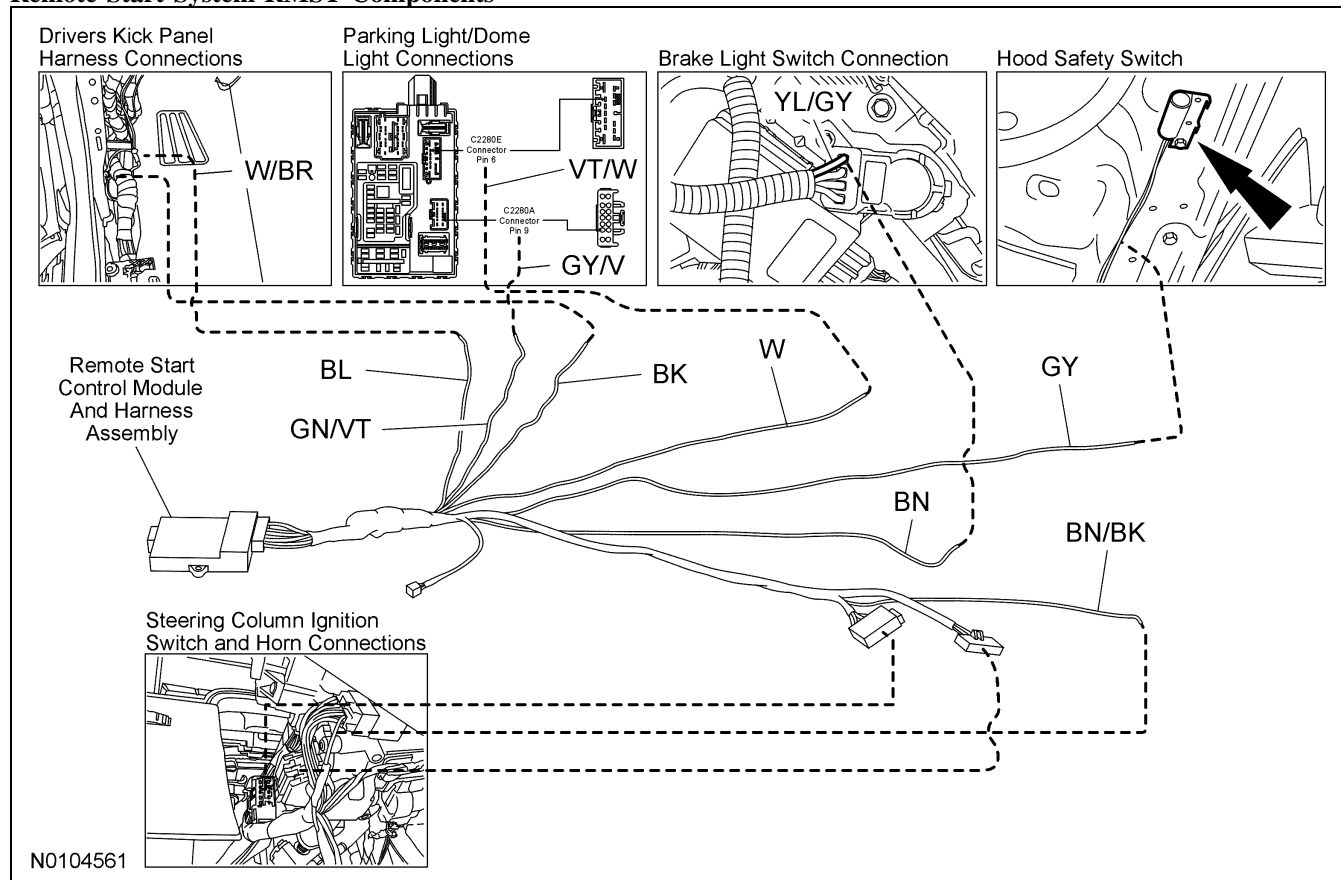
#### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start - Exped/Nav W/O SYNC

#### Remote Start System RMST Components



#### Expedition/Navigator W/O SYNC

**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.

**INSTALLATION (Continued)****Review Remote Start Installation Kit Contents**

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

- Review the RMST kit contents.

**Remote Start System Standard Kit (RMST) Type - "C"**

| QUANTITY | DESCRIPTION   |
|----------|---|
| 1        | TYPE - "C" MODULE ASSEMBLY  |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY  |
| 2        | 1 BUTTON POWERCODE TRANSMITTER  |
| 1        | TYPE - "C" CUSTOM WIRING HARNESS  |
| 1        | ANTENNA   |
| 1        | HOOD SAFETY SWITCH ASSEMBLY   |
| 1        | INSTALLATION PARTS BAG  |
| 1        | FUSE PARTS BAG  |
| 1        | OPERATORS INSTRUCTIONS  |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD                                       |
| 1        | UNDERHOOD WARNING LABEL   |
| 1        | SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS) |

- Review the RMST bidirectional kit contents.

**Remote Start System Bidirectional Kit (RMST) Type - "C"**

| QUANTITY | DESCRIPTION                      |
|----------|----------------------------------|
| 1        | TYPE - "C" MODULE ASSEMBLY       |
| 1        | RMST SOFTWARE CARTRIDGE ASSEMBLY |

**Remote Start System Bidirectional Kit (RMST) Type - "C" (Continued)**

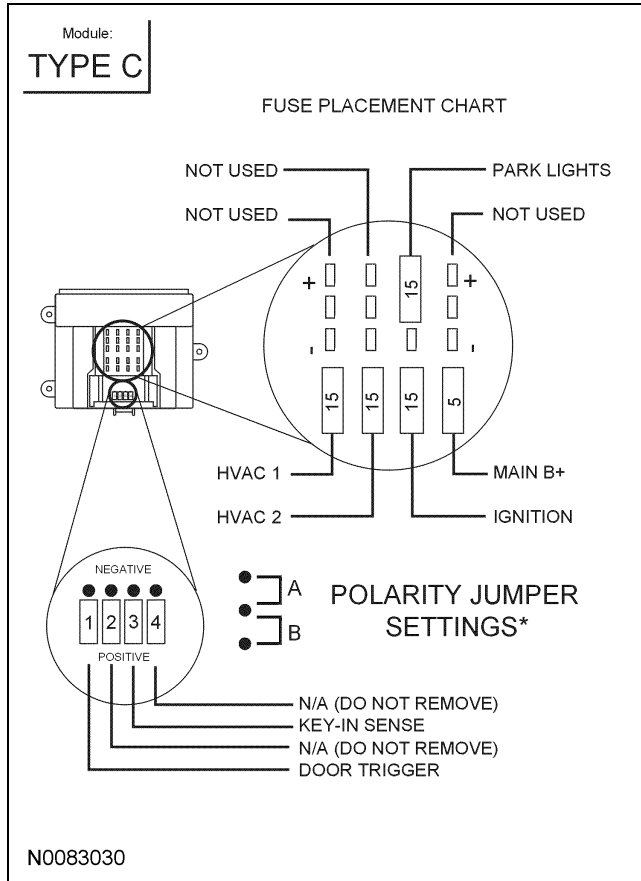
| QUANTITY | DESCRIPTION   |
|----------|---|
| 1        | 2 BUTTON POWERCODE TRANSMITTER  |
| 1        | TYPE - "C" CUSTOM WIRING HARNESS  |
| 1        | ANTENNA   |
| 1        | ANTENNA HARNESS   |
| 1        | HOOD SAFETY SWITCH ASSEMBLY   |
| 1        | INSTALLATION PARTS BAG  |
| 1        | FUSE PARTS BAG  |
| 1        | OPERATORS INSTRUCTIONS  |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD                                       |
| 1        | UNDERHOOD WARNING LABEL   |
| 1        | SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS) |

**Module Preparation**

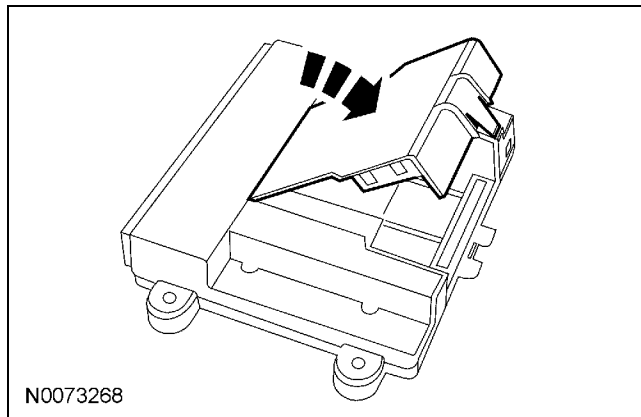
- Place the supplied fuses into the power distribution block on the remote start control module.
  - Move the polarity jumpers to their proper locations on the control module, see illustration.



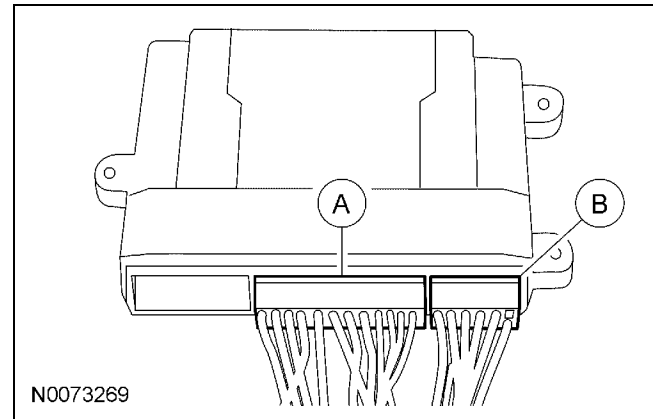
## INSTALLATION (Continued)



5. Place the software cartridge onto the RMST control module.



6. 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.

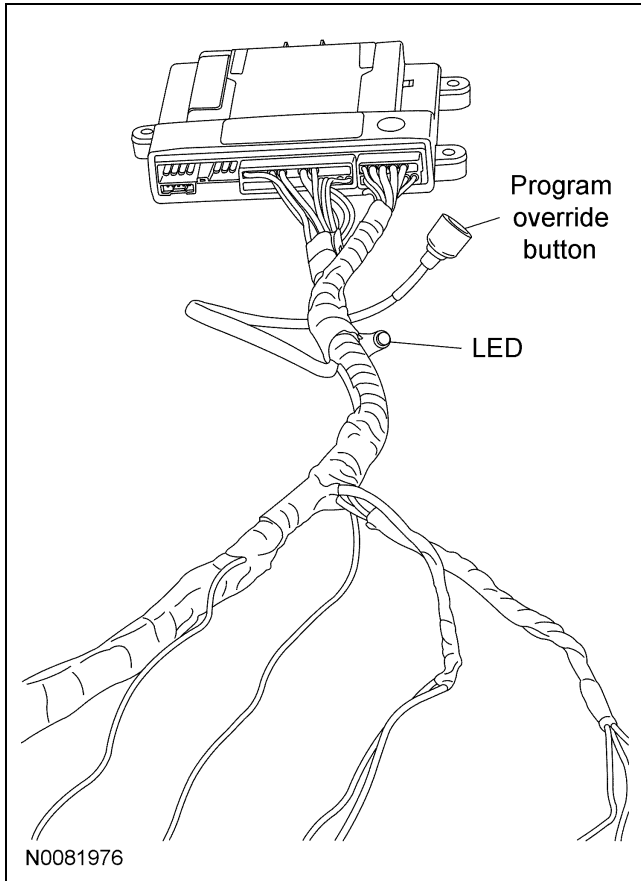


7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

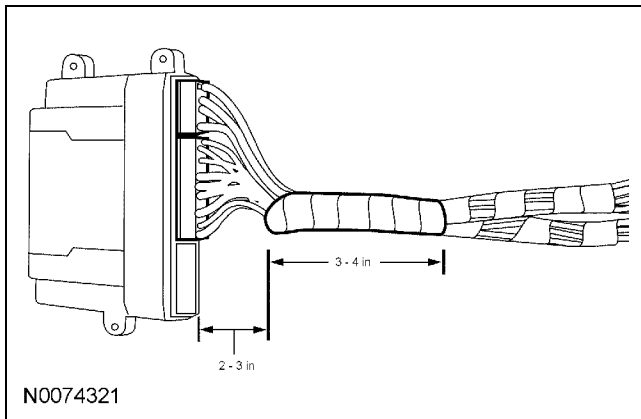
**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

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.

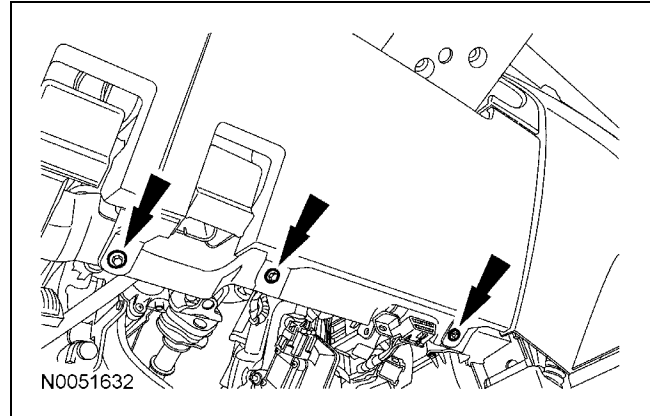
Trim the unused wires approximately 6 - 8" from the module.

**INSTALLATION (Continued)**

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

**Vehicle Preparation - All Vehicles**

9. Remove the 3 screws, pull out to release the top retaining clips and remove the lower steering column opening cover.

**Vehicles With Power Tilt**

10. Remove the 3 screws and the upper and lower steering column shrouds.

Disconnect the power tilt electrical connector switch from the lower shroud.

**Vehicles With Manual Tilt**

11. If equipped, release the tabs and slide the gear selector cover away from the steering column shrouds.

12. Remove the 3 screws and the upper and lower steering column shrouds.

**All Vehicles**

13. Remove the left hand scuff plate and cowl trim panel.

**Antenna Mounting**

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

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

## INSTALLATION (Continued)

- 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.

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

### Install The Antenna

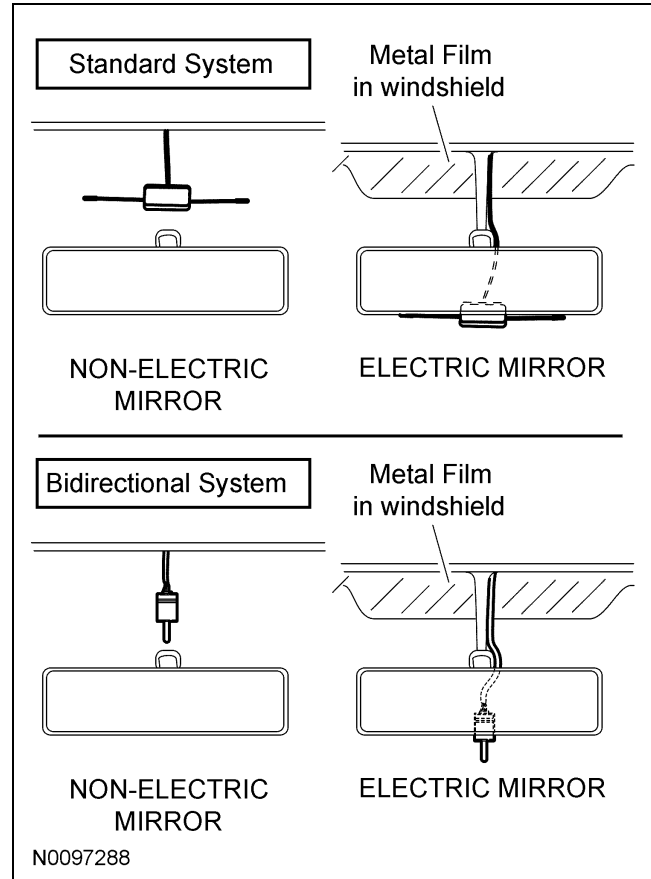
15. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

**NOTE:** Make sure that the long wire on the antenna is pointing towards 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.

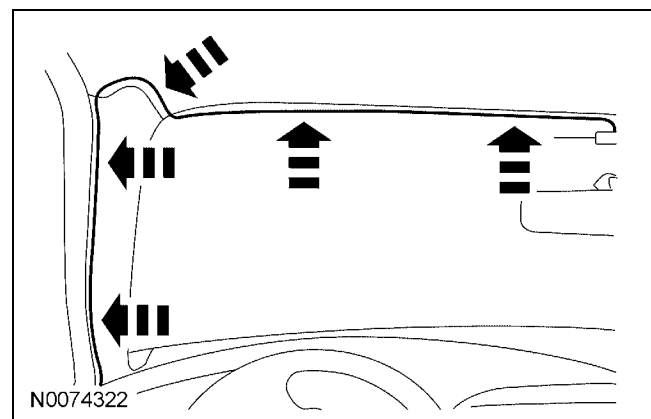
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



17. If necessary, position the A pillar trim slightly outward to provide access to route the antenna wire.

**NOTE:** Do not route the antenna wire over the top of the air bag.

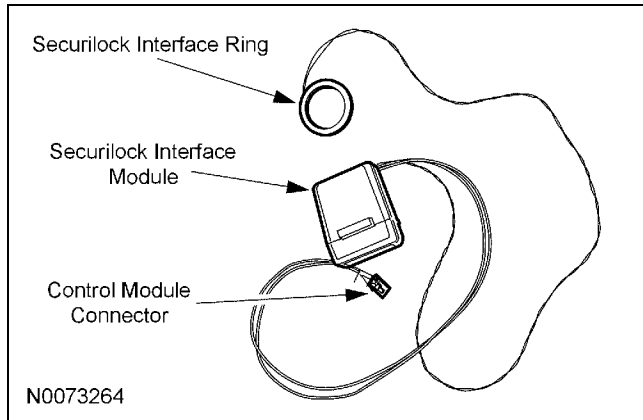
18. Route the antenna cable along the headliner and down the A pillar towards the floor.



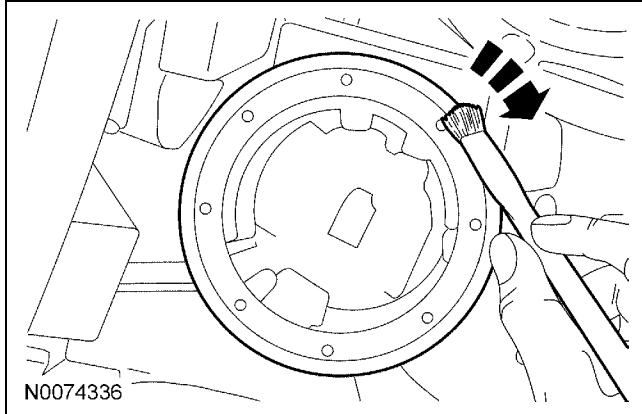
19. Reposition the A pillar trim panel.

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

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



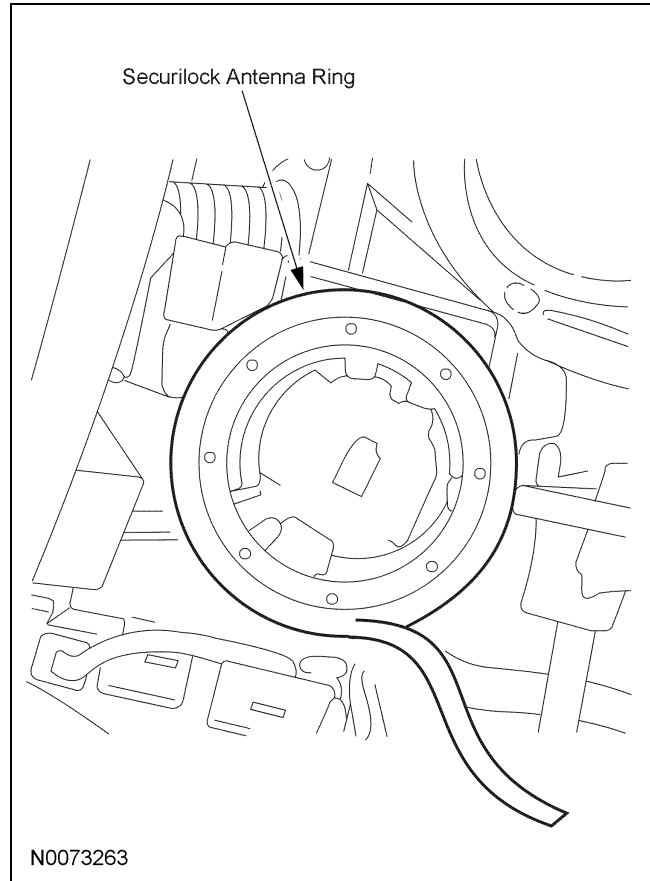
21. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



22. **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**

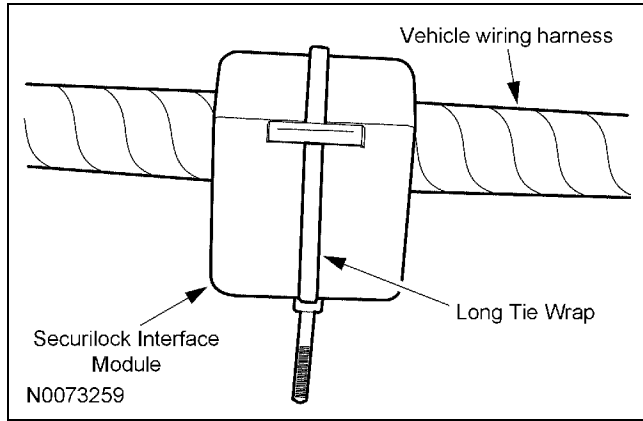
23. **NOTE:** Do Not mount the SECURILOCK Interface Module to or within 3'' of a metal surface, including any underdash brackets, or in the knee bolster area.

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

**INSTALLATION (Continued)**

24. **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**

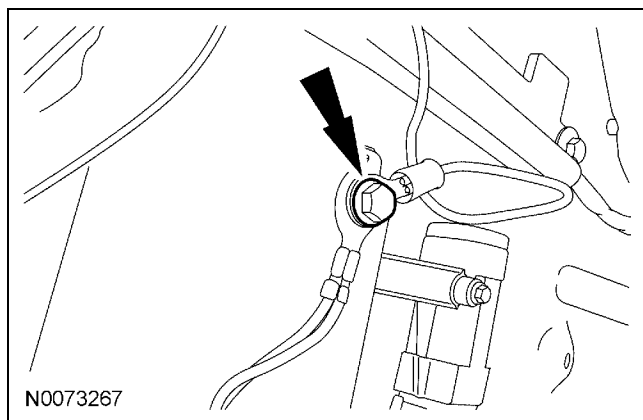
25. Place the remote start module and harness assembly on the floor of the vehicle.

**Identify Circuit Wires For Connections**

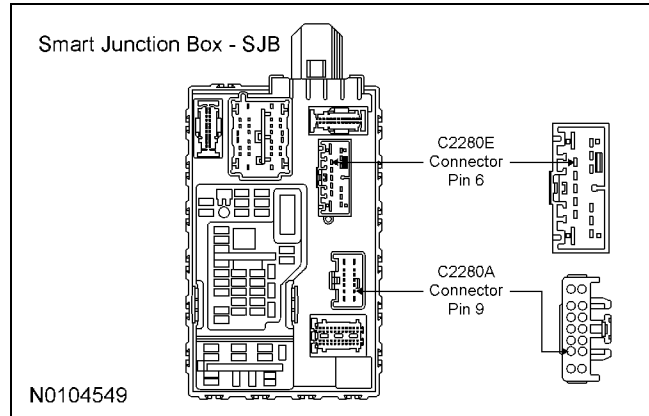
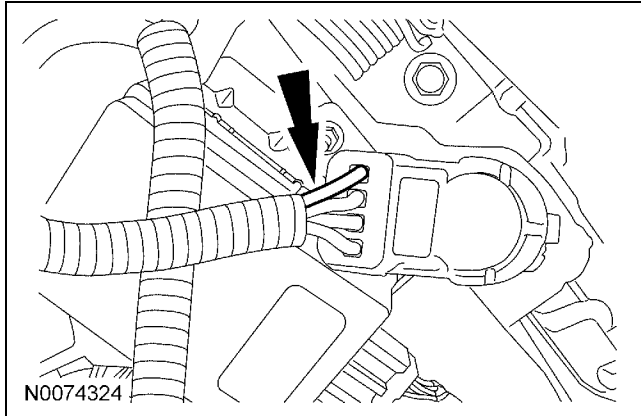
**NOTE:** For vehicle specific wiring diagram(s) click [here](#).

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

26. Connect the Black ground wire from the remote start module harness to the chassis ground point at the driver kick panel.



27. Disconnect the ignition switch electrical connector.
28. Connect the remote start harness hard shell connectors to the ignition switch and ignition switch connector.
29. **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 Yellow/Red horn circuit wire in the steering column harness.
30. Connect the Brown/Black wire from the remote start module harness to the Yellow/Red horn circuit wire in the steering column harness.
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 White/Brown power door lock circuit wire at the driver kick panel harness.
32. Connect the Blue wire from the remote start module harness to the White/Brown power door lock circuit at the driver kick panel harness.
33. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the brake pedal.  
A logic probe will show open on the correct wire, then show power while depressing the brake pedal.  
Identify the Yellow/Gray brake switch circuit wire at the brake switch.

**INSTALLATION (Continued)**

34. Connect the Brown wire from the remote start module harness to the Yellow/Grey brake switch circuit wire at the brake switch.

35. **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 Grey/Violet dome light circuit wire at the passenger kick panel Smart Junction Box (SJB) C2280A Connector Pin 9.

36. Connect the Green/Violet wire from the remote start module harness to the Grey/Violet dome light circuit wire at the passenger kick panel SJB C2280A Connector Pin 9.

37. **NOTE:** A DVOM connected to the correct wire will show 12V, when the headlight switch is ON, then show 0V when the headlight switch is OFF.

A logic probe will show power on the correct wire when the headlight switch is ON, then show ground when the headlight switch is OFF.

Identify the Violet/White parking light circuit wire at the SJB C2280E Connector Pin 6.

38. Connect the White wire from the remote start module harness to the Violet/White parking light circuit wire at the SJB C2280E Connector Pin 6.

**Install The Hood Safety Switch**

39. **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.

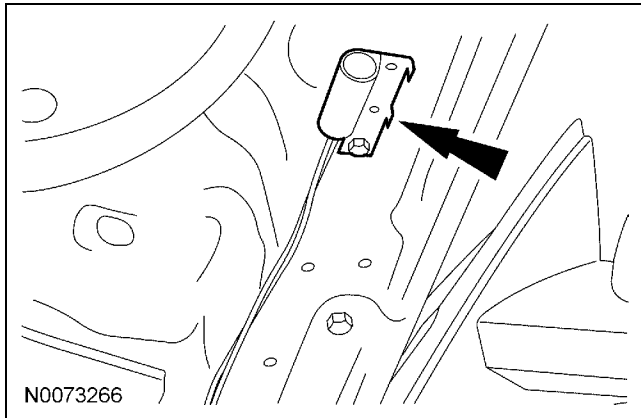
Failure to position the switch properly could result in one of the following:

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

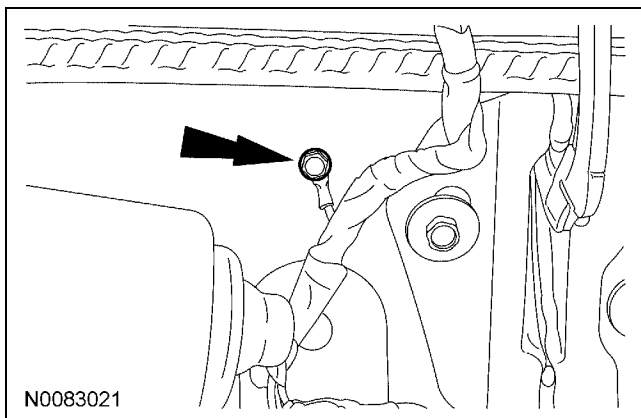
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

**INSTALLATION (Continued)**

40. Apply rustproofing compound (PM-13-A) to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).

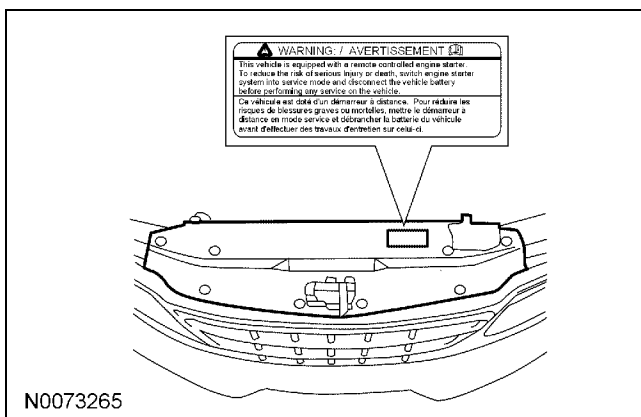


41. Connect hood switch ground wire to a suitable location on the bulkhead.



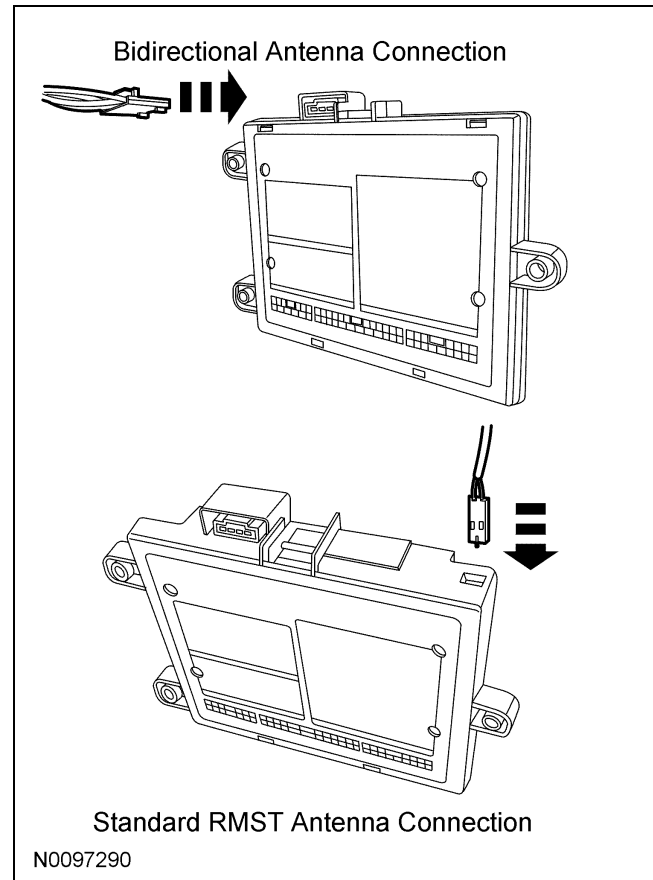
42. **NOTE:** Place the label on the radiator fan shroud or similar area.

Install the underhood warning label



43. Route the Grey hood safety switch wire through the bulkhead into the engine compartment and attach to the hood safety switch.

44. Connect the antenna to the RMST control module.



45. Connect the SECURILOCK interface module to the RMST control module.

**Program The RMST System**

46. Refer to the [RMST programming section for this vehicle \(click here\)](#).

**Secure RMST Harness and Control Module**

47. Use the supplied tie wraps to secure the RMST harness wires.

---

**INSTALLATION (Continued)**

48. **NOTE:** Do not mount the control module in the knee bolster area.

Secure the control module at three points to the vehicle.

Use the supplied long tie wraps to mount the RMST control module to the underdash wiring harness.

**All Vehicles**

49. Install the left hand scuff plate and cowl trim panel.

**Vehicles With Manual Tilt**

50. Install the upper and lower steering column shrouds.

Install the 3 screws.

---

**Vehicles With Power Tilt**

51. Connect the power tilt electrical connector switch on the lower shroud.

52. Install the upper and lower steering column shrouds.

Install the 3 screws.

**All Vehicles**

53. Install the lower steering column opening cover.

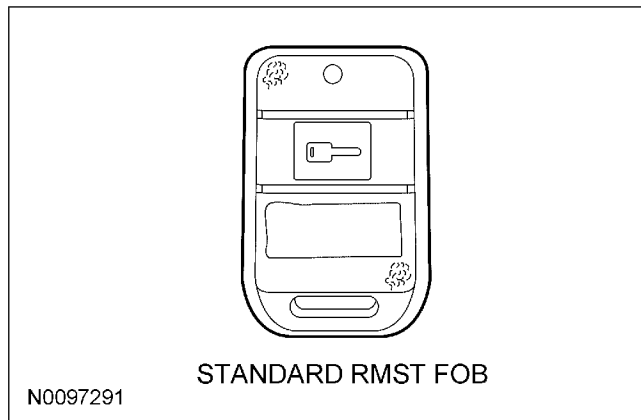
Install the 3 screws.



## GENERAL PROCEDURES

### Programming - Standard Remote Start

#### Programming the Module



- NOTE:** If the remote start 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 and doors are 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.

##### Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR         | LED |
|------|---------|---------------|-----|
| 2    | 1       | TACHLESS MODE | ON  |

- Press and hold the brake pedal.
- Turn the ignition key to the RUN position.  
The dome light will turn off.

- 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.

Release the brake pedal and the RMST override button.

- 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.
- All doors closed and 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.

- Press and release the override button again. The horn will honk 5 times indicating the system has entered the second program bank.
- Press and release the brake pedal.  
The horn will honk 1 time indicating the system has entered the option 1 of the second program bank.

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

**Failure to quickly release the remote start fob button will result in system defaulting to the factory options.**

- 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 button and verify the LED illuminates.

**GENERAL PROCEDURES (Continued)**

**NOTE:** If the remote start fob button is held for more than 3 seconds the system will chirp the horn 4 times, indicating the system has returned to factory default settings. If this occurs return to step 1 of the programming section and reprogram the remote start module.

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

10. Remove the ignition key.

**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.

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

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

---

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

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

13. 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 - Standard Remote Start

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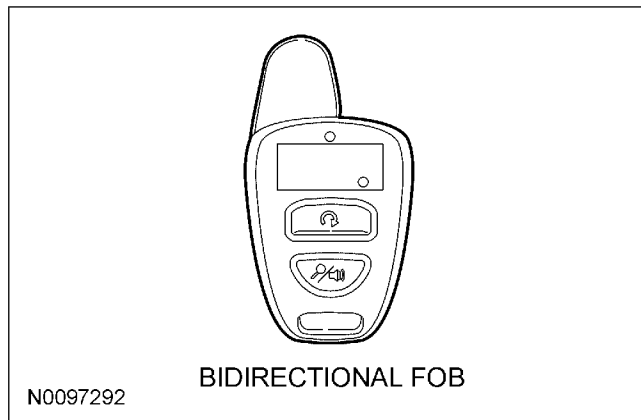
| <b>CHIRPS</b> | <b>PROBLEM</b>                                    |
|---------------|---|
| 5 Chirps      | The KEY is in the ignition.                       |
| 6 Chirps      | The remote start system is in SERVICE/VALET mode. |

---

## GENERAL PROCEDURES

### Programming - Bidirectional Remote Start

#### Programming the Module



- NOTE:** If the remote start 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 and doors are 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.

#### Program Bank 2 Chart (5 Honks)

| BANK | OPTIONS | DESCR         | LED |
|------|---------|---------------|-----|
| 2    | 1       | TACHLESS MODE | ON  |

- Press and hold the brake pedal.
- Turn the ignition key to the RUN position.  
The dome light will turn off.

- 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.

Release the brake pedal and the RMST override button.

- 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.
- All doors closed and 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.

- Press and release the override button again. The horn will honk 5 times indicating the system has entered the second program bank.
- Press and release the brake pedal.  
The horn will honk 1 time indicating the system has entered the option 1 of the second program bank.

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

**Failure to quickly release the remote start fob button will result in system defaulting to the factory options.**

- 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 button and verify the LED illuminates.

---

**GENERAL PROCEDURES (Continued)**

**NOTE:** If the remote start fob button is held for more than 3 seconds the system will chirp the horn 4 times, indicating the system has returned to factory default settings. If this occurs return to step 1 of the programming section and reprogram the remote start module.

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

10. Remove the ignition key.

**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.


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

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

---

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

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

13. Press the remote start button  twice within 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 - Bidirectional Remote Start

**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 the Start button on the remote control key fob twice within 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.  |

## '12 Expedition W/O SYNC

### TYPE "C" CUSTOM WIRE HARNESS

#### RMST MODULE WIRE HARNESS

##### STEERING COLUMN HARNESS

|     | Color        | Function                       |
|-----|--------------|--------------------------------|
| A-7 | PINK         | Ignition Input/Output          |
| B-3 | PINK/WHITE   | Ignition 2 Output              |
| B-4 | ORANGE       | HVAC 1 Output                  |
| B-5 | ORANGE/WHITE | HVAC 2 Output                  |
| A-6 | VIOLET       | Starter Interrupt (Key Side)   |
| A-8 | VIOLET       | Starter Interrupt (Motor Side) |
| A-4 | RED          | Battery                        |
| B-2 | RED          | Battery                        |
| B-1 | BLUE         | Battery                        |
| B-8 | BLACK/WHITE  | Key-In Sense Input             |

|      | Color       | Function          |
|------|-------------|-------------------|
| A-21 | BROWN/BLACK | Horn Relay Output |

##### DRIVER'S KICK PANEL HARNESS

|      | Color        | Function               |
|------|--------------|------------------------|
| A-5  | BLACK        | Ground                 |
| A-24 | BLUE         | Door Lock Output       |
| B-7  | BROWN        | Brake Input            |
| A-20 | GREEN/VIOLET | Door Ajar Switch Input |

##### PARKING LIGHT HARNESS

|     | Color | Function             |
|-----|-------|----------------------|
| A-1 | WHITE | Parking Light Output |

\*\* VIOLET/WHITE ALSO FOUND IN REAR DRIVER'S SILL PLATE IN HARNESS COMING FROM UNDER DRIVER'S SEAT AND HEADING TO REAR OF VEHICLE.

##### UNDER HOOD HARNESS

|      | Color | Function               |
|------|-------|------------------------|
| A-19 | GRAY  | Hood Open Switch Input |

VEHICLE HARNESS

IGNITION SWITCH

Horn (YELLOW/RED)

STEERING COLUMN HARNESS

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT IN DRIVER'S KICK PANEL



Door Lock (WHITE/BROWN)

DRIVERS SIDE KICK PANEL

Brake (YELLOW/GRAY)

BRAKE SWITCH

Dome Light (GRAY/VIOLET)

SPDJB C2280A PIN 9

Parking Lights On (VIOLET/WHITE)

PASSENGER KICK PANEL IN SPDJB C2280E PIN 6

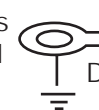
Vehicle Interior

Engine Compartment

Hood Tilt Switch

Chassis Ground

Do Not Ground to Hood!





[Manual Table of Contents](#)

# REMOTE START SYSTEM INSTALLATION

## Expedition/Navigator W/SYNC ONLY

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#### INSTALLATION

[Remote Start](#)

#### GENERAL PROCEDURES

[Proper Splicing Techniques](#)

[Programming the SECURILOCK - Standard Remote Start](#)

[Functional Test - Standard Remote Start](#)

[Programming the SECURILOCK - Bidirectional Remote Start](#)

[Functional Test - Bidirectional Remote Start](#)

[Troubleshooting](#)

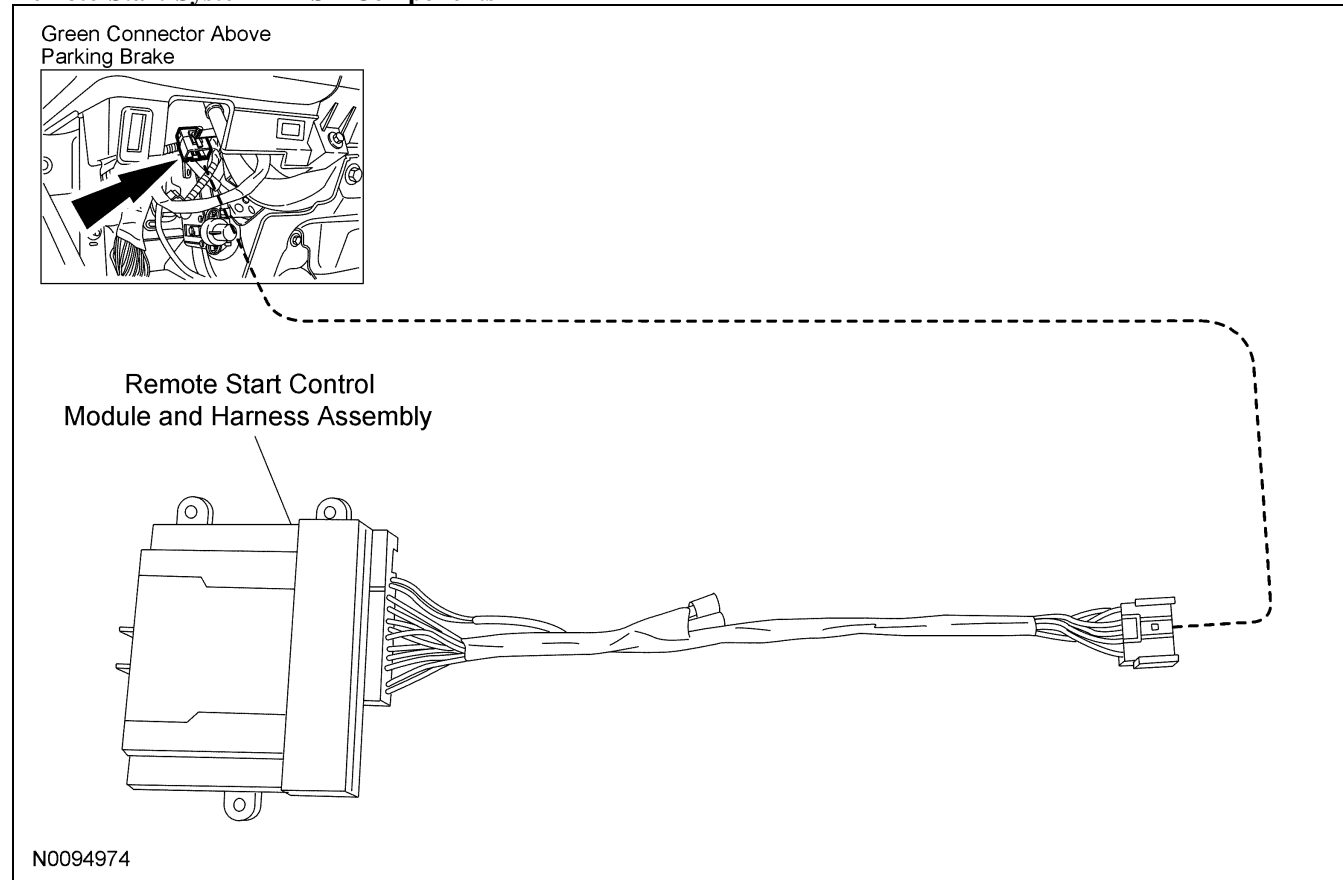
#### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start - Exped/Nav W/SYNC ONLY

#### Remote Start System RMST Components



#### Expedition/Navigator W/SYNC ONLY

**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.

**INSTALLATION (Continued)****Review Remote Start Installation Kit Contents**

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

- Review the RMST kit contents.

**Remote Start System Standard Kit (RMST) Type - "C"**

| QUANTITY | DESCRIPTION   |
|----------|---|
| 1        | TYPE - "C" MODULE ASSEMBLY  |
| 2        | 1 BUTTON POWERCODE TRANSMITTER  |
| 1        | EXPED/NAV CUSTOM WIRING HARNESS   |
| 1        | ANTENNA   |
| 1        | OPERATORS INSTRUCTIONS  |
| 1        | OPERATORS QUICK REFERENCE WALLET CARD                                       |
| 1        | UNDERHOOD WARNING LABEL   |
| 1        | SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS) |

- Review the RMST Bidirectional kit contents.

**Remote Start System Bidirectional Kit (RMST) Type - "C"**

| QUANTITY | DESCRIPTION                     |
|----------|---------------------------------|
| 1        | TYPE - "C" MODULE ASSEMBLY      |
| 1        | 2 BUTTON POWERCODE TRANSMITTER  |
| 1        | EXPED/NAV CUSTOM WIRING HARNESS |
| 1        | ANTENNA                         |
| 1        | ANTENNA HARNESS                 |
| 1        | OPERATORS INSTRUCTIONS          |

**Remote Start System Bidirectional Kit (RMST) Type - "C" (Continued)**

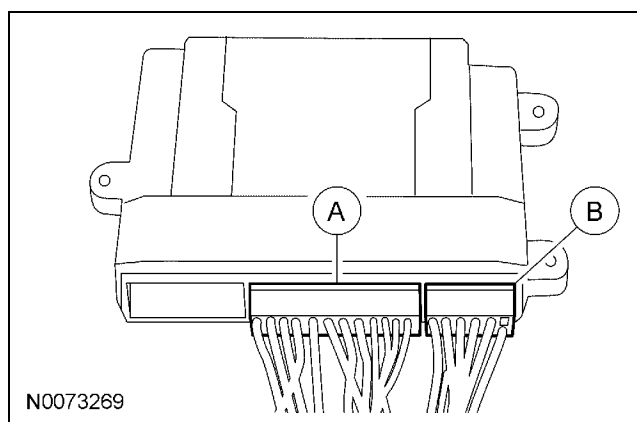
| QUANTITY | DESCRIPTION   |
|----------|---|
| 1        | OPERATORS QUICK REFERENCE WALLET CARD                                       |
| 1        | UNDERHOOD WARNING LABEL   |
| 1        | SECURILOCK INTERFACE KIT (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS) |

**Module Preparation**

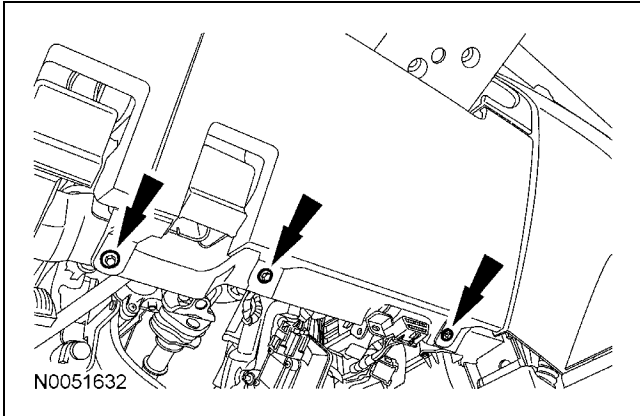
- Plug the wiring harness(es) into the module.
  - A - Harness: 24-way, used on all systems.
  - B - Harness: 10-way, used on all systems with RMST.

**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](#).

**Vehicle Preparation - All Vehicles**

- Remove the 3 screws, pull out to release the top retaining clips and remove the lower steering column opening cover.

**INSTALLATION (Continued)****Vehicles With Power Tilt**

6. Remove the 3 screws and the upper and lower steering column shrouds.

Disconnect the power tilt electrical connector switch from the lower shroud.

**Vehicles With Manual Tilt**

7. If equipped, release the tabs and slide the gear selector cover away from the steering column shrouds.
8. Remove the 3 screws and the upper and lower steering column shrouds.

**Antenna Mounting**

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

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

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

**Install The Antenna**

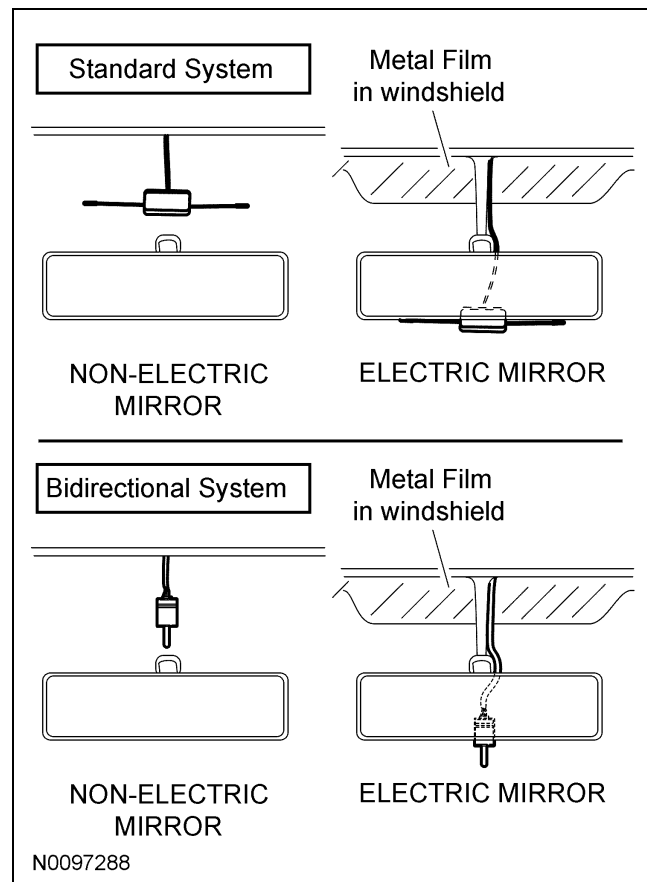
10. Clean the mounting surface using an alcohol base solution and a clean cloth.

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

**NOTE:** Make sure that the long wire on the antenna is pointing towards 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.

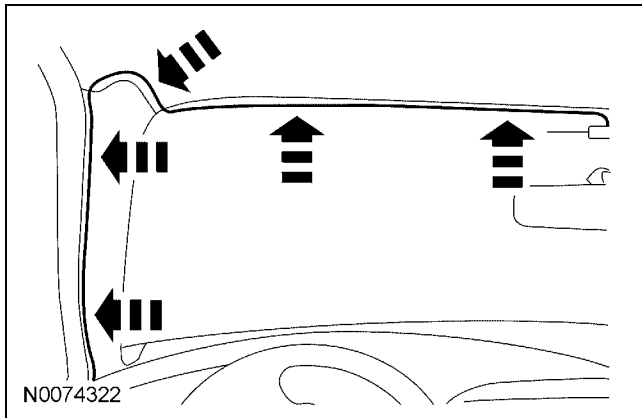


12. If necessary, position the A pillar trim slightly outward to provide access to route the antenna wire.

**INSTALLATION (Continued)**

**NOTE:** Do not route the antenna wire over the top of the air bag.

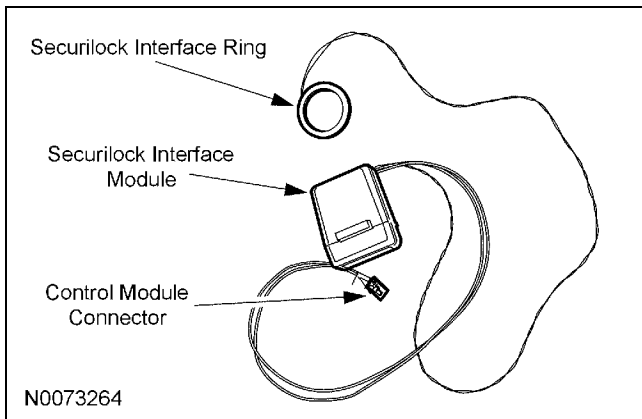
13. Route the antenna cable along the headliner and down the A pillar towards the floor.



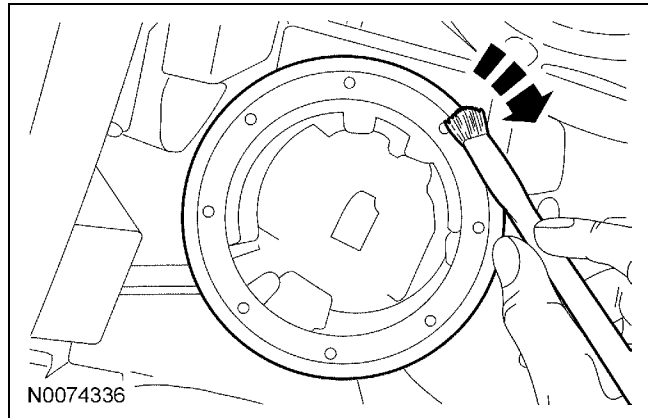
14. Reposition the A pillar trim panel.

**Install The Securilock Interface Kit**

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



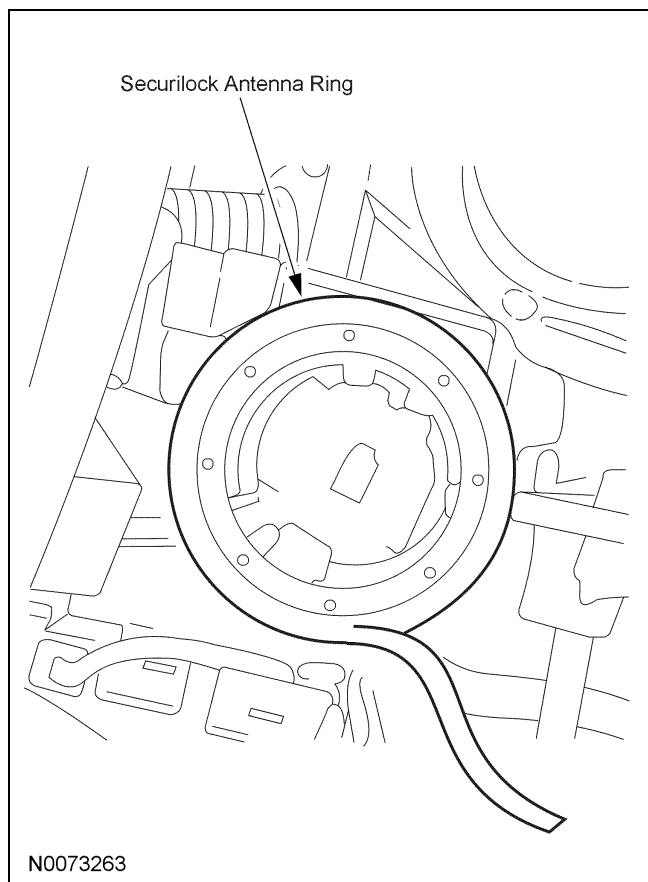
16. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



17. **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.



## INSTALLATION (Continued)

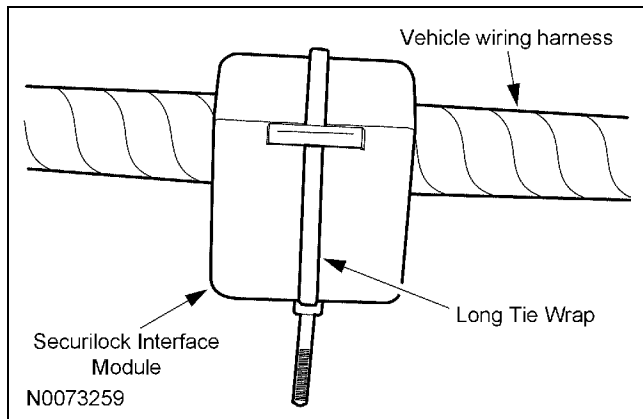
### Install The Securilock Interface Module

18. **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.

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

Route the harness and connector to the module mounting location.



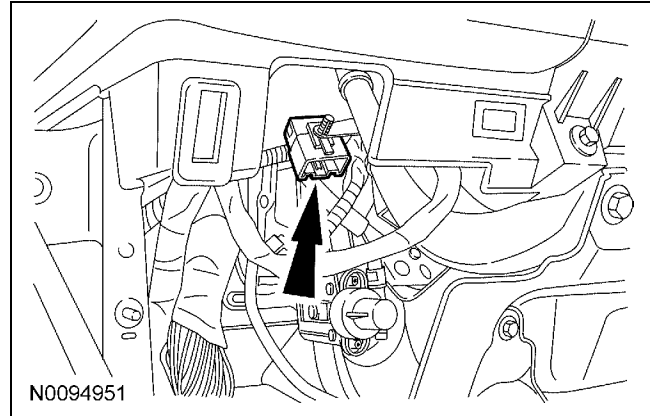
### Install the Remote Start Control Module and Harness Assembly

20. Place the remote start module and harness assembly on the floor of the vehicle.

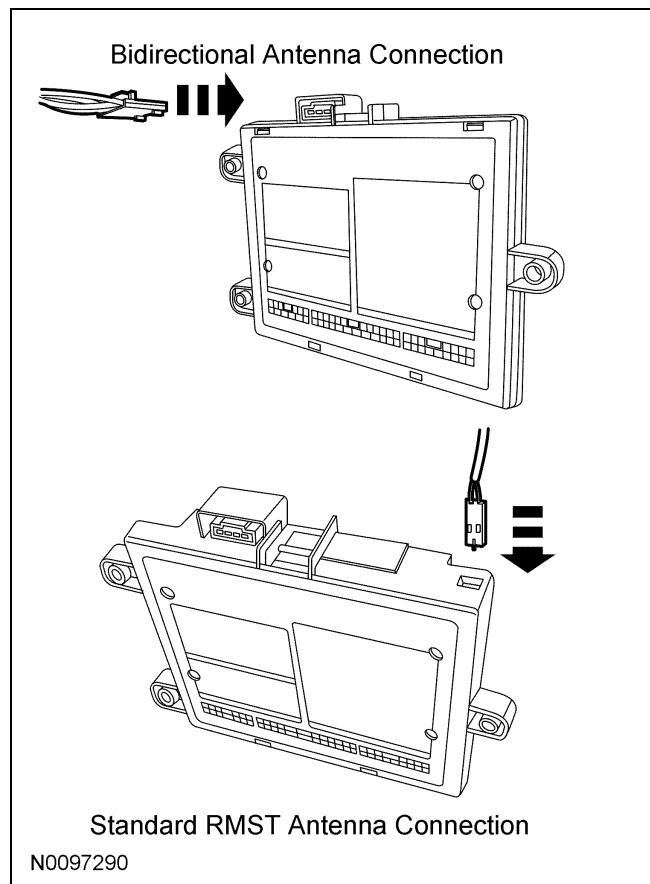
### Identify The Remote Start Connector

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

21. Identify the Green remote start connector above the parking brake behind the knee bolster.
- Connect the Green connector from the remote start module harness to the Green remote start connector above the parking brake behind the knee bolster.



22. Connect the antenna to the RMST control module.



23. Connect the SECURILOCK interface module to the RMST control module.

### Program The SECURILOCK

24. Refer to the SECURILOCK programming section for this vehicle. ([click here](#))

## INSTALLATION (Continued)

### Secure RMST Harness and Control Module

25. Use the supplied tie wraps to secure the RMST harness wires.

26. **NOTE:** Do not mount the control module in the knee bolster area.

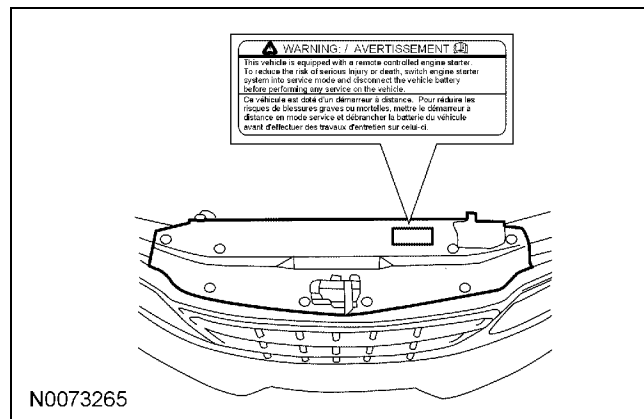
Secure the control module at three points to the vehicle.

Use the supplied long tie wraps to mount the RMST control module to the underdash wiring harness.

### Install The Underhood Warning Label

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

Install the underhood warning label



### Vehicles With Manual Tilt

28. Install the upper and lower steering column shrouds.

Install the 3 screws.

### Vehicles With Power Tilt

29. Connect the power tilt electrical connector switch on the lower shroud.

30. Install the upper and lower steering column shrouds.

Install the 3 screws.

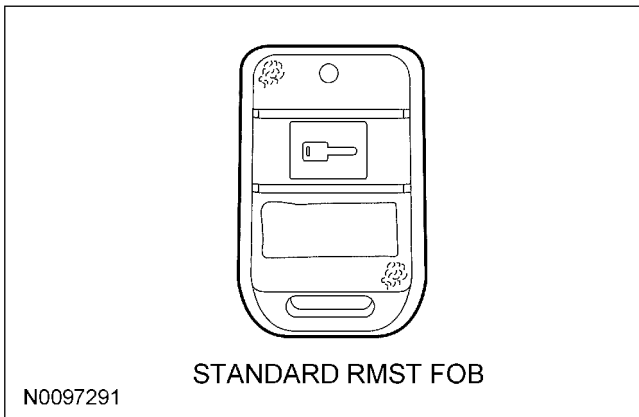
### All Vehicles

31. Install the lower steering column opening cover.

Install the 3 screws.

## GENERAL PROCEDURES

### Programming the SECURILOCK - Standard Remote Start



**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.

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

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

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

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

3. 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 - Standard Remote Start

**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)**

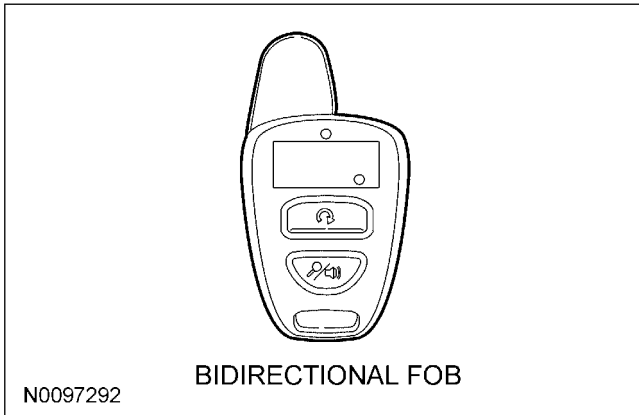
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| <b>CHIRPS</b> | <b>PROBLEM</b>                                    |
|---------------|---|
| 5 Chirps      | The KEY is in the ignition.                       |
| 6 Chirps      | The remote start system is in SERVICE/VALET mode. |

---

## GENERAL PROCEDURES

### Programming the SECURILOCK - Bidirectional Remote Start




**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.

1. Insert the first ignition key and turn to the run position.  
Watch for the PATS light to turn off. Remove the first key.

2. Insert the second ignition key and turn to the run position.  
Watch for the PATS light to turn off. Remove the second key.

3. Press the remote start button  twice within 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 - Bidirectional Remote Start

**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 the Start button on the remote control key fob twice within 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.  |

EXPEDITION / NAVIGATOR CUSTOM WIRE HARNESS

RMST MODULE WIRE HARNESS

|      | Color        | Function                 |
|------|--------------|--------------------------|
| A-1  | WHITE        | Parking Light Output     |
| A-2  | ORANGE       | Run/Acc                  |
| A-3  | PINK         | Run/Start                |
| A-4  | RED          | Battery                  |
| A-5  | BLACK        | Ground                   |
| A-7  | PINK         | Ignition Input/Output    |
| A-12 | GRAY/BLACK   | Hood Closed Switch Input |
| A-13 | VIOLET       | Starter                  |
| A-19 | GRAY         | Hood Open Switch Input   |
| A-20 | GREEN/VIOLET | Door Ajar Switch Input   |
| A-21 | TAN/BLACK    | Horn Relay Output        |
| A-24 | BLUE         | Door Lock Output         |
| B-7  | DARK BROWN   | Brake Input              |
| B-8  | BLACK/WHITE  | Key-In Sense Input       |



A thick black line representing the wire harness originates from the right side of the table, extends horizontally to the right, then curves upwards and to the left, ending at a black rectangular connector. To the right of the connector is a vertical white rectangle representing the parking brake cable.

GREEN  
CONNECTOR  
ABOVE  
PARKING  
BRAKE

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

### VEHICLE PREPARATION

[Hood Switch Kit Installation](#)

[Spare Key Programming](#)

### GENERAL PROCEDURES

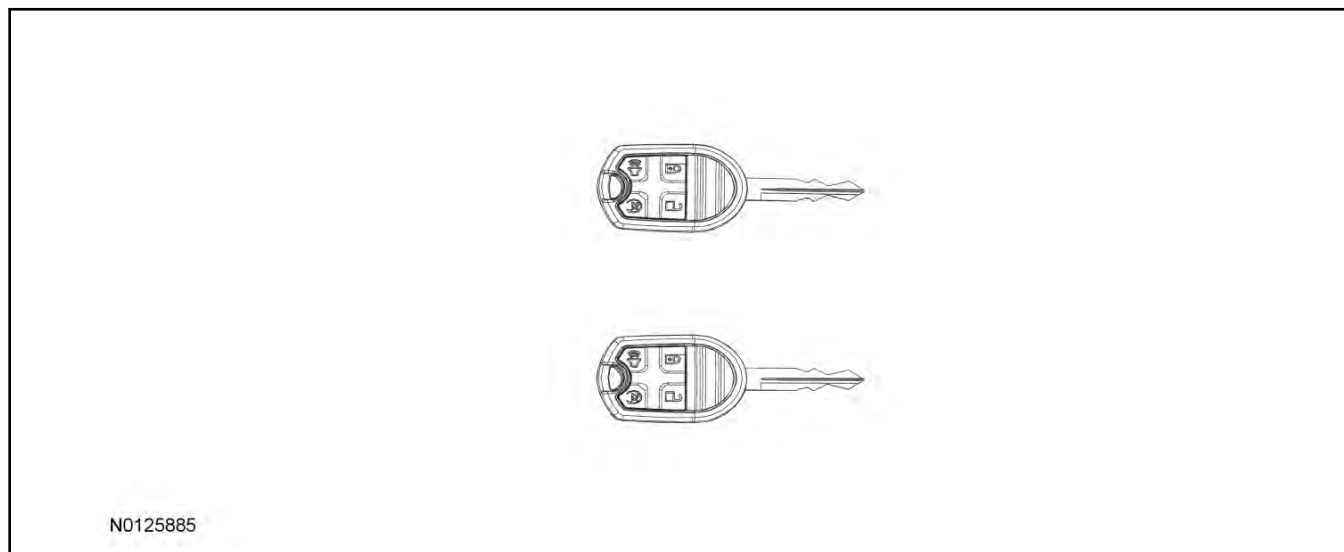
[Remote Start System Activation](#)

[Functional Test](#)

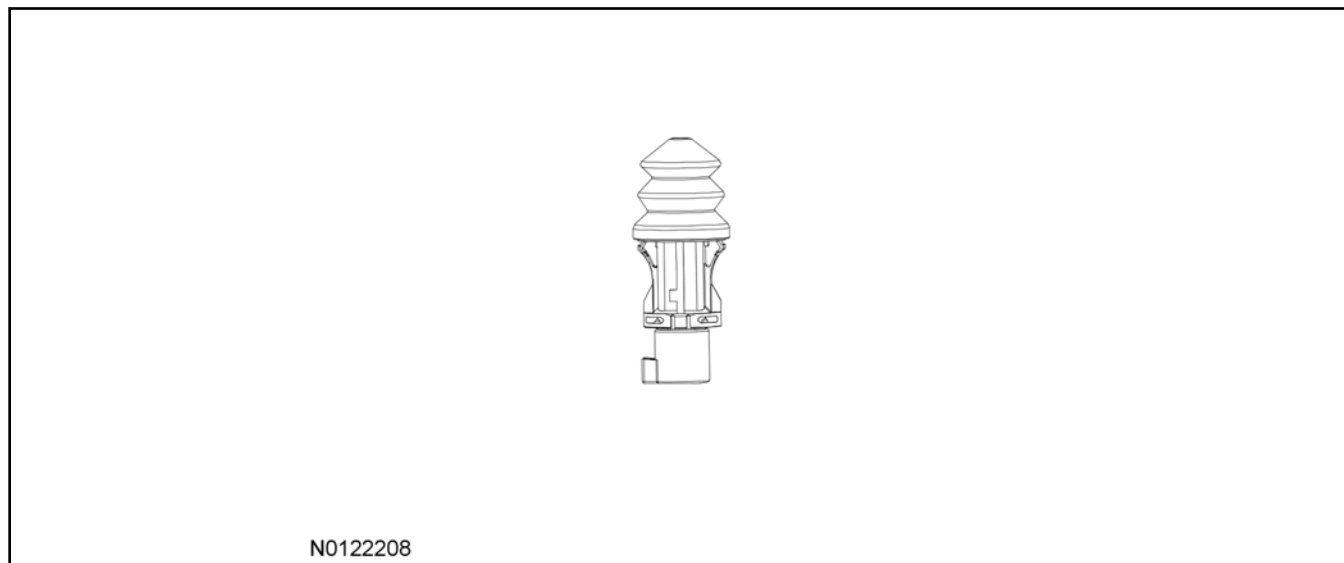
## INSTALLATION

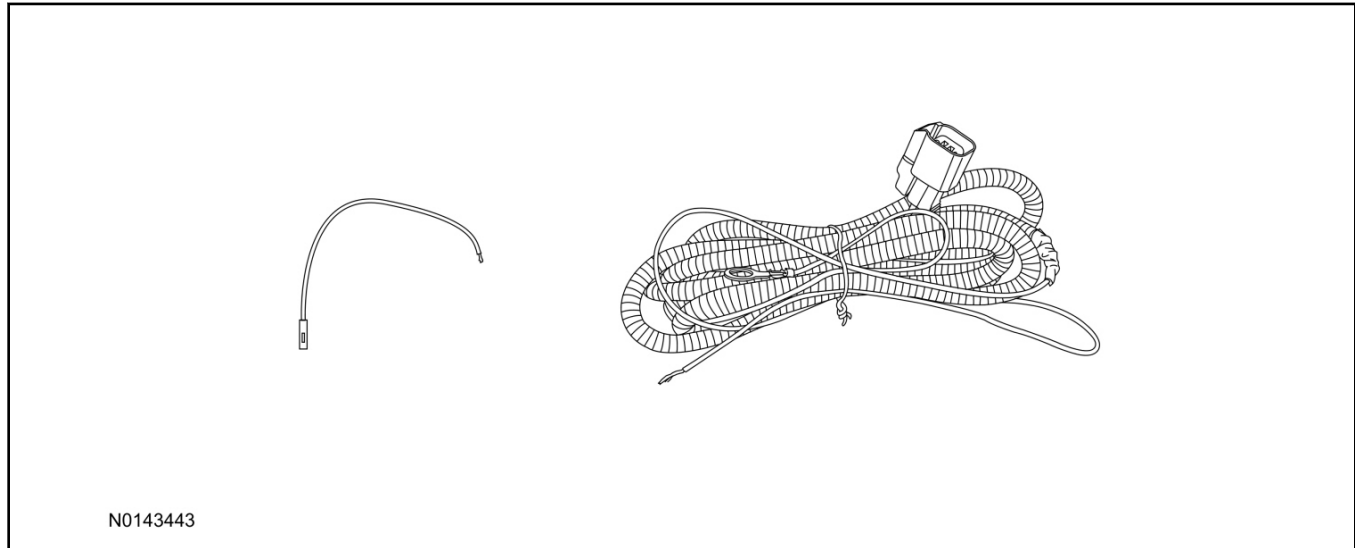
### Remote Start

#### Remote Start System (RMST) Components



#### Hood Switch Kit - SE Vehicles Only



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

The OE Remote Start System (RMST) kit is only applicable on vehicles that have power locks.

1. Verify correct RMST kit number.

**Review Remote Start System (RMST) Installation Kit Contents**

2. Review the RMST kit contents.

**Remote Start System (RMST) OE Kit**

| QUANTITY | DESCRIPTION    |
|----------|----------------|
| 2        | Key (4 Button) |

**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.

**Hood Switch Wire Harness Kit**

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



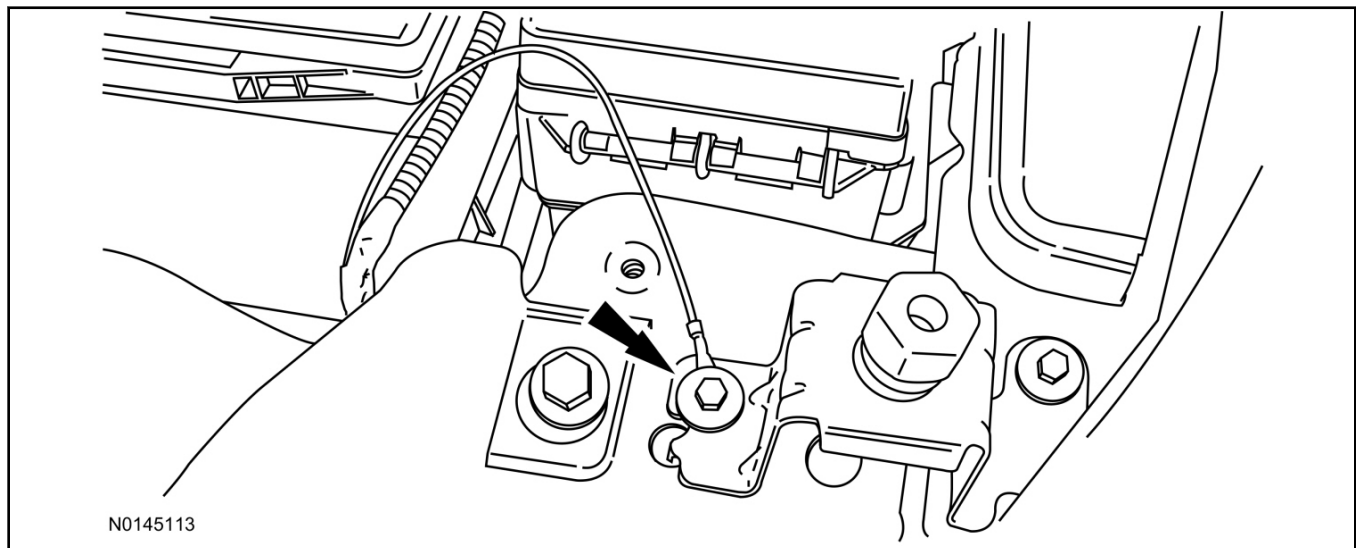
**INSTALLATION (Continued)****Vehicle Preparation**

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.

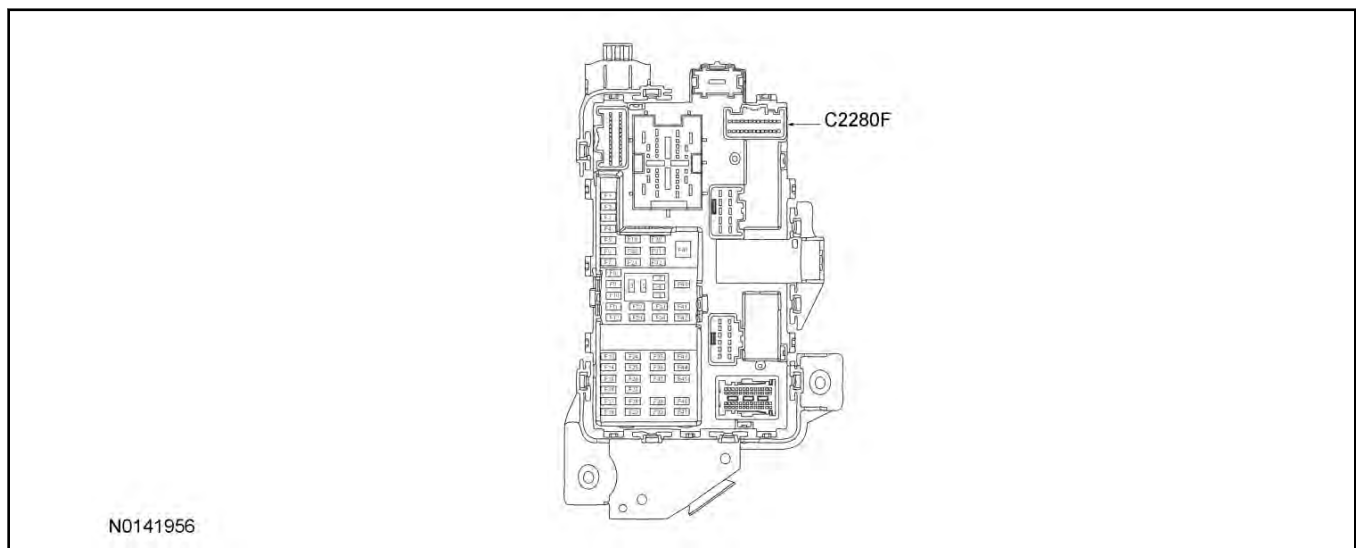
**Hood Switch Wire Harness Installation****NOTE:**

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.

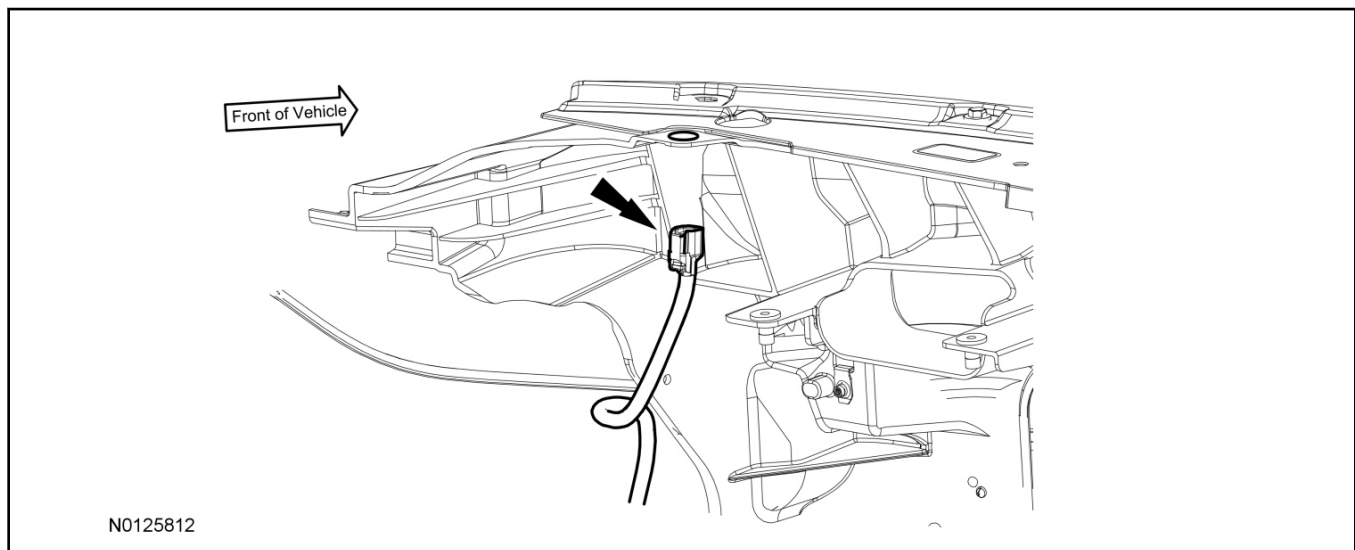
### **Hood Switch Installation**

**NOTE:**

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

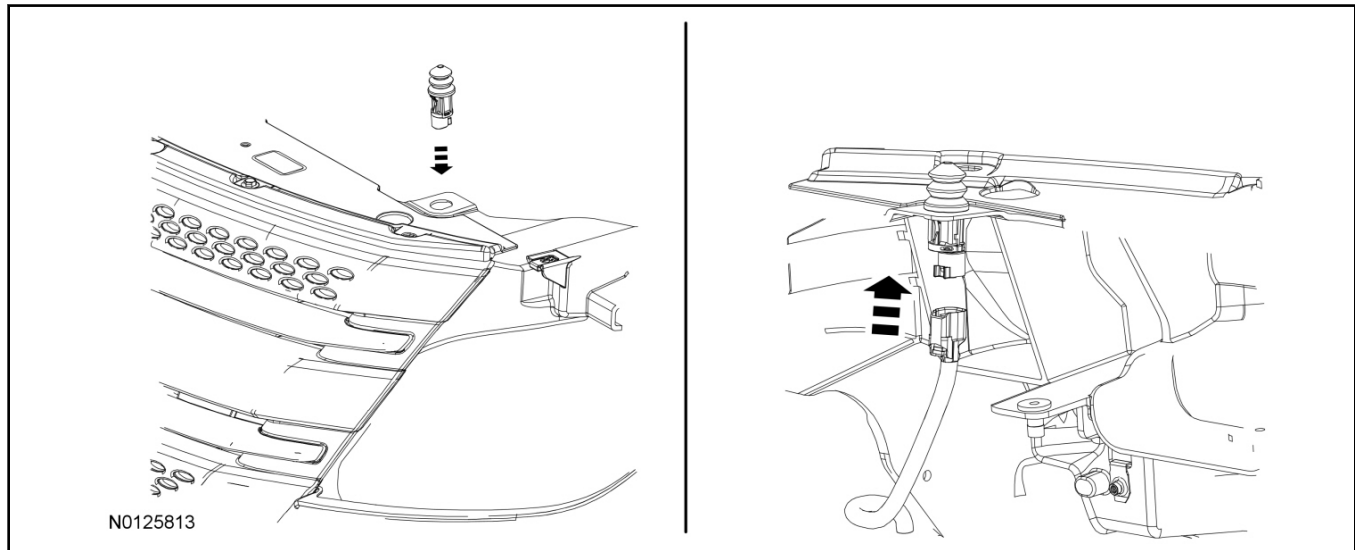
13. Locate the vehicle's existing "OE" hood switch wire harness, located on the LH side of the vehicle below the radiator core support.

- 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.

**Spare Key Programming****NOTE:**

Verify no related DTCs are present before beginning this procedure.

**NOTE:**

This procedure works only if 2 or more programmed keys are available. If 2 programmed keys are not available, alternate programming methods in the workshop manual can be found at [www.fordtechservice.dealerconnection.com](http://www.fordtechservice.dealerconnection.com).

**NOTE:**

This procedure works only if the customer spare key programming is enabled. If customer spare key programming is disabled, refer to Key Programming — Enable/Disable Spare Key or Key Programming Using Diagnostic Equipment in the workshop manual located at [www.fordtechservice.dealerconnection.com](http://www.fordtechservice.dealerconnection.com).

15. Cut the keys that are going to be programmed to match the existing keys.
16. Insert the first programmed Passive Anti-Theft System (PATS) key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).
17. Turn the first key to the OFF position and remove the key from the ignition.
18. Within 10 seconds of turning the key to the OFF position, insert a second programmed PATS key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).
19. Turn the second key to the OFF position and remove the key from the ignition.

**INSTALLATION (Continued)**

---

**20. NOTE:**

The doors lock and then unlock to confirm that each Integrated Key Transmitter (IKT) is programmed.

Within 10 seconds of turning the second key to the OFF position, insert the new, unprogrammed PATS key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).

21. If it is desired to program additional key(s) (up to a total of 4 keys can be programmed), repeat the Spare Key Programming procedure for each additional key.

**Remote Start Activation**

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

23. Connect IDS.

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

24. 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.

25. 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.

26. 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.

**INSTALLATION (Continued)****Functional Test****NOTE:**

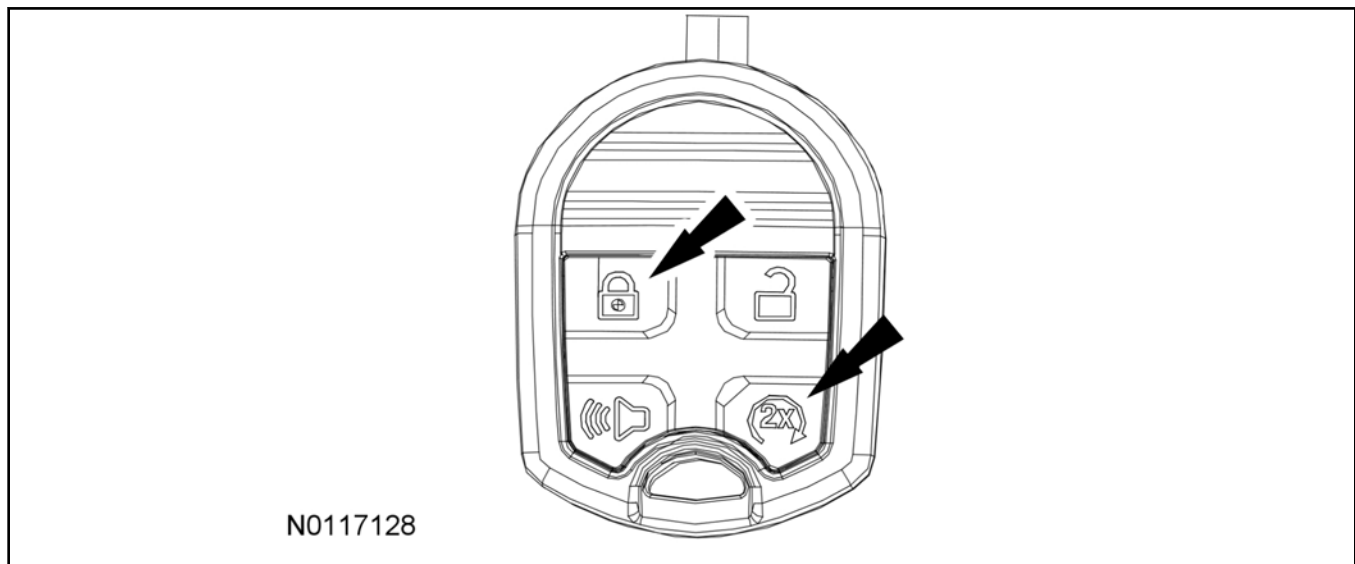
Do not put a key in the ignition while performing the following steps.

27. Make sure the shift lever is in park and the ignition is in the off position. Remove all keys from the vehicle.
28. Close the hood.
29. Close all of the vehicle doors.

**30. NOTE:**

Verify that all of the newly programmed keys function properly.

Start the vehicle by pressing the lock button once, then the remote start button 2 times on the newly programmed key.



31. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
32. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
33. Open the hood.
34. **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.**

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# REMOTE START SYSTEM INSTALLATION

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[Hood Switch Kit Installation](#)

### INSTALLATION

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[Learn Remote Start to Vehicle](#)

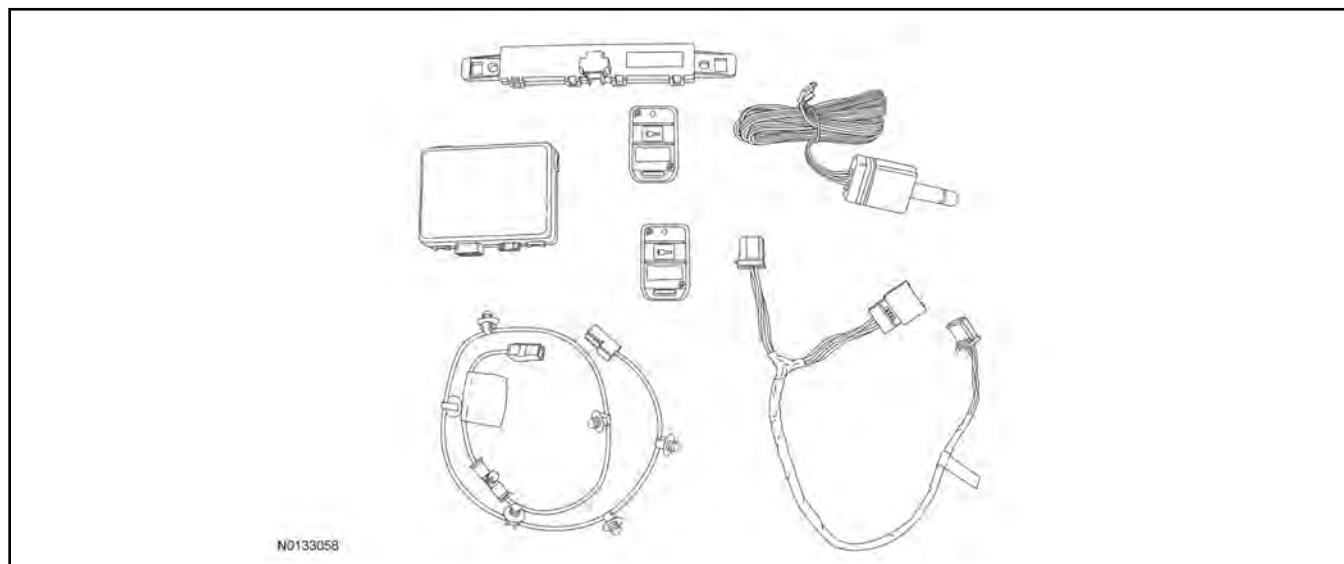
[Standard RMST - Functional Test](#)

[Bi-directional RMST - Functional Test](#)

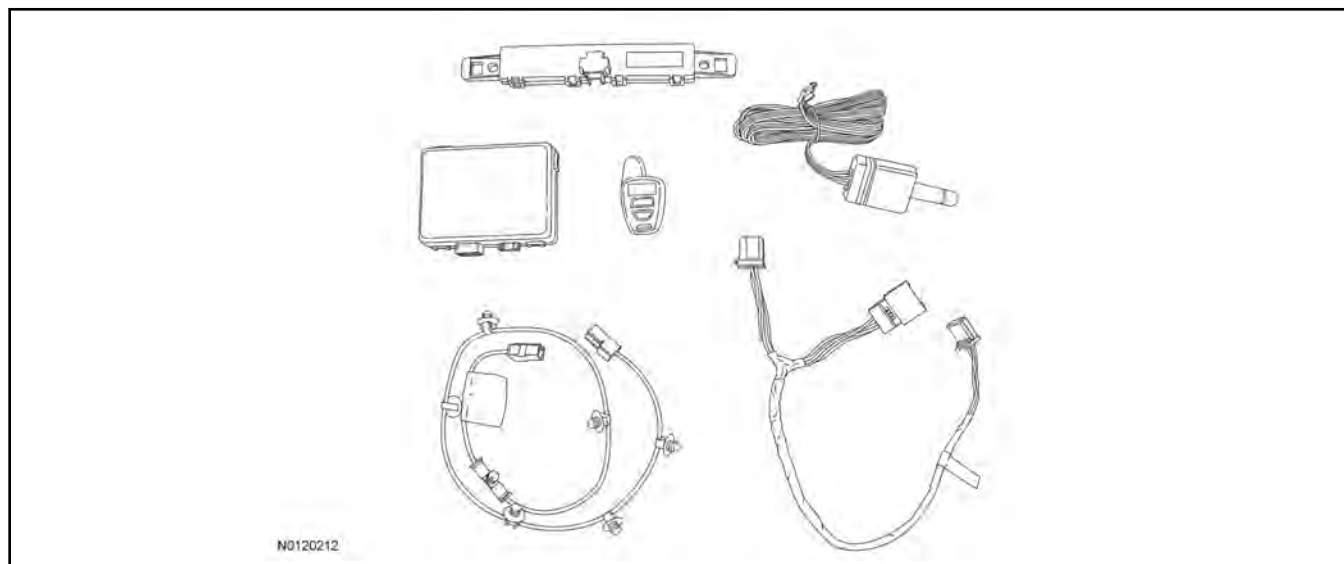
## INSTALLATION

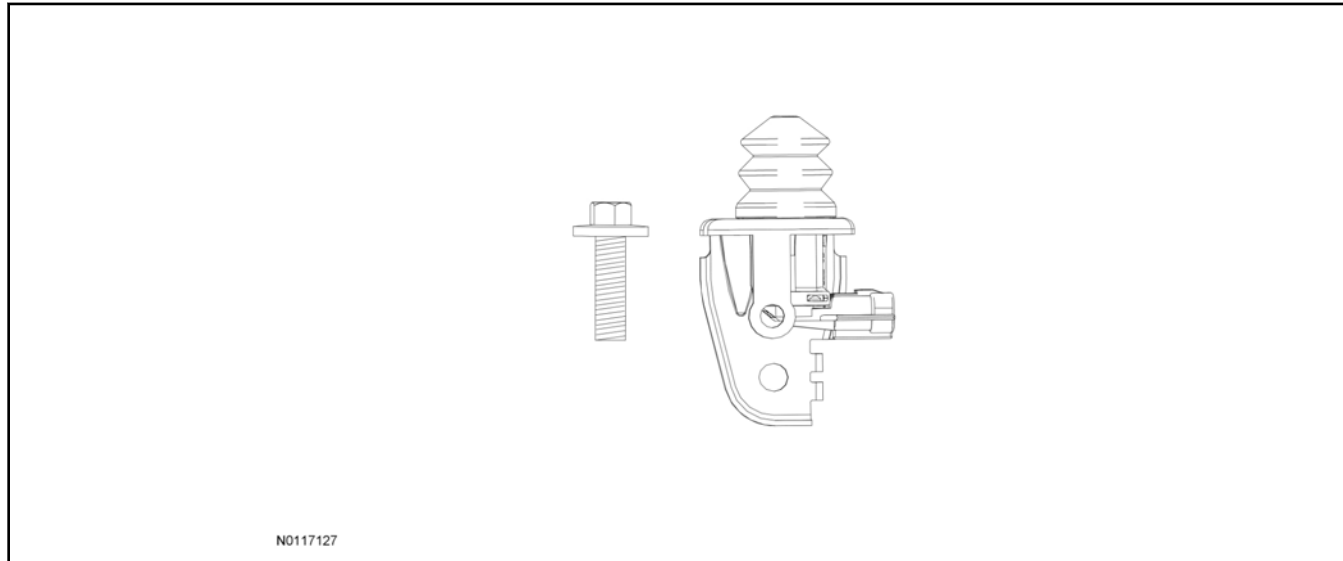
### Remote Start

#### Standard Remote Start System (RMST) Components



#### Bi-directional Remote Start System (RMST) Components



**INSTALLATION (Continued)****Hood switch Kit Components - Sold separately if needed****F-Super Duty**

1. Verify correct kit number.

**Review Standard RMST Kit Contents**

2. Review the Standard RMST kit contents.

**Standard RMST Kit**

| QUANTITY | DESCRIPTION                |
|----------|----------------------------|
| 4        | Ucpf ctf "3"Dwwqp"Mg{ 'Hqd |
| 1        | Antenna Jumper Wire        |
| 1        | Antenna Module             |
| 1        | Remote Start Module        |
| 1        | Standard Antenna           |
| 1        | T-harness                  |

**Review Bi-directional RMST Kit Contents**

3. Review Bi-directional RMST Kit Contents

**Bi-directional RMST Kit**

| QUANTITY | DESCRIPTION                 |
|----------|-----------------------------|
| 3        | Dk/f k ge v qp cnl Mg{ 'Hqd |
| 1        | Antenna Jumper Wire         |
| 1        | Antenna Module              |
| 1        | Remote Start Module         |
| 1        | Bi-directional Antenna      |



**INSTALLATION (Continued)****Bi-directional RMST Kit(Continued)**

| QUANTITY | DESCRIPTION                         |
|----------|-------------------------------------|
| 3        | Dk f k ge v k p c n l M g { ' H q d |
| 1        | T-harness                           |

**Review Hood Switch Kit Contents**

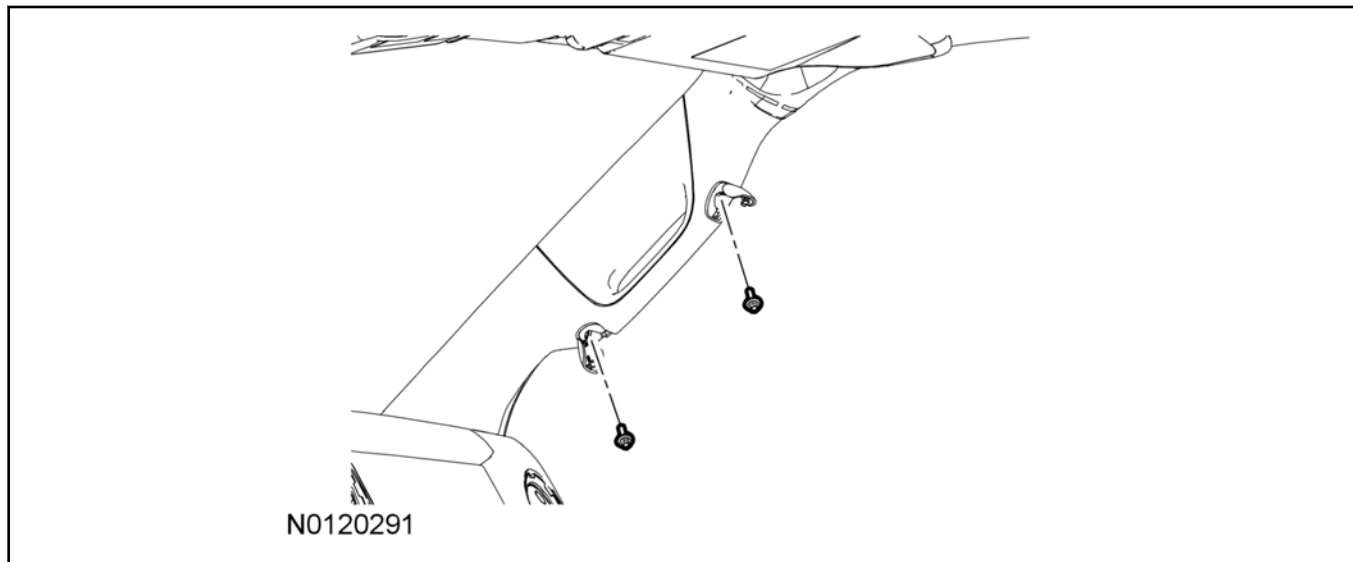
- Review the Hood Switch kit contents.

**Hood Switch OE Kit**

| QUANTITY | DESCRIPTION          |
|----------|----------------------|
| 3        | D q r v              |
| 1        | Hood Switch Assembly |

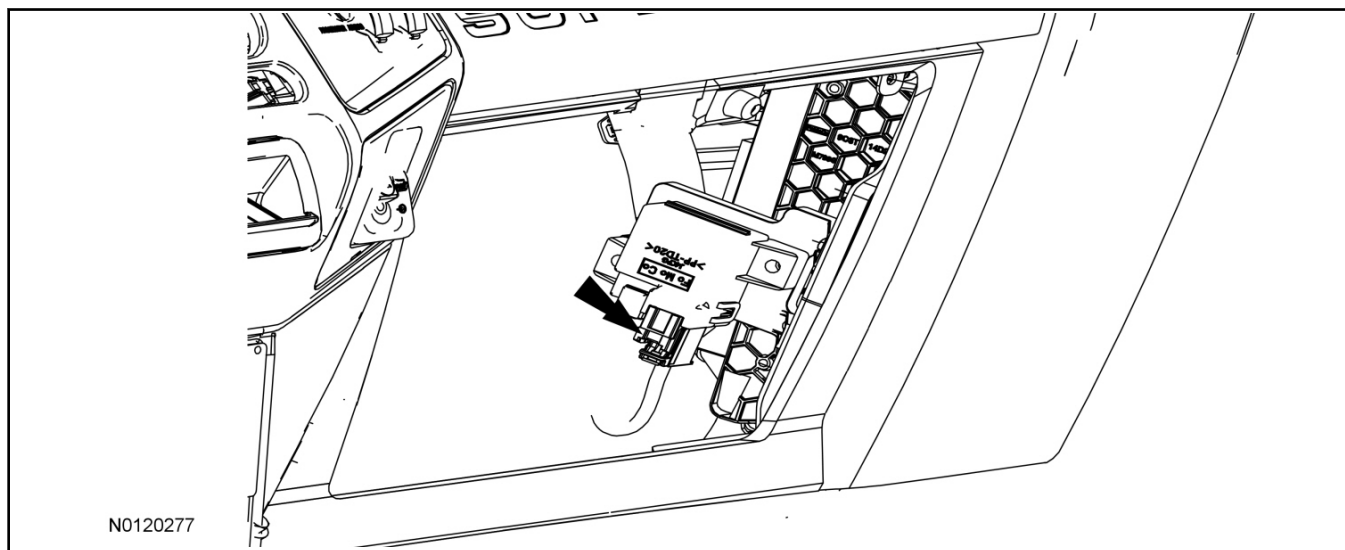
**Vehicle preparation**

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

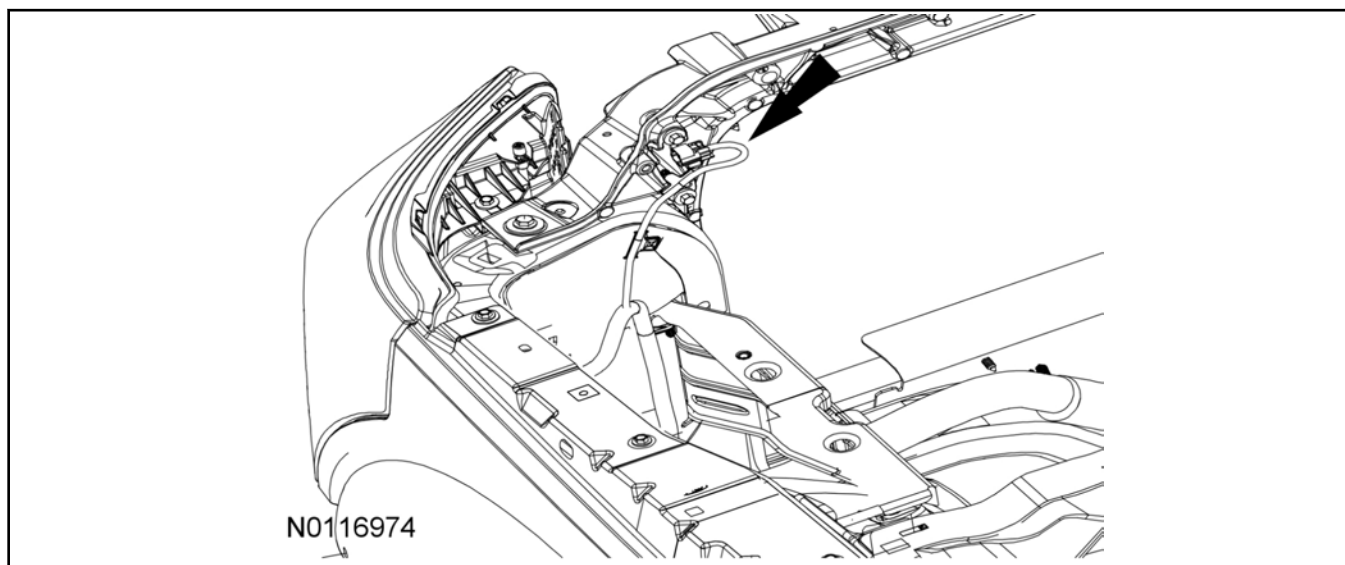
**NOTE:**

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

- Remove the RH A-pillar trim panel.
- Open the glove compartment and empty the contents.
- Push in the 2 side tabs and fully lower the glove compartment.
- Disconnect the TPM module.

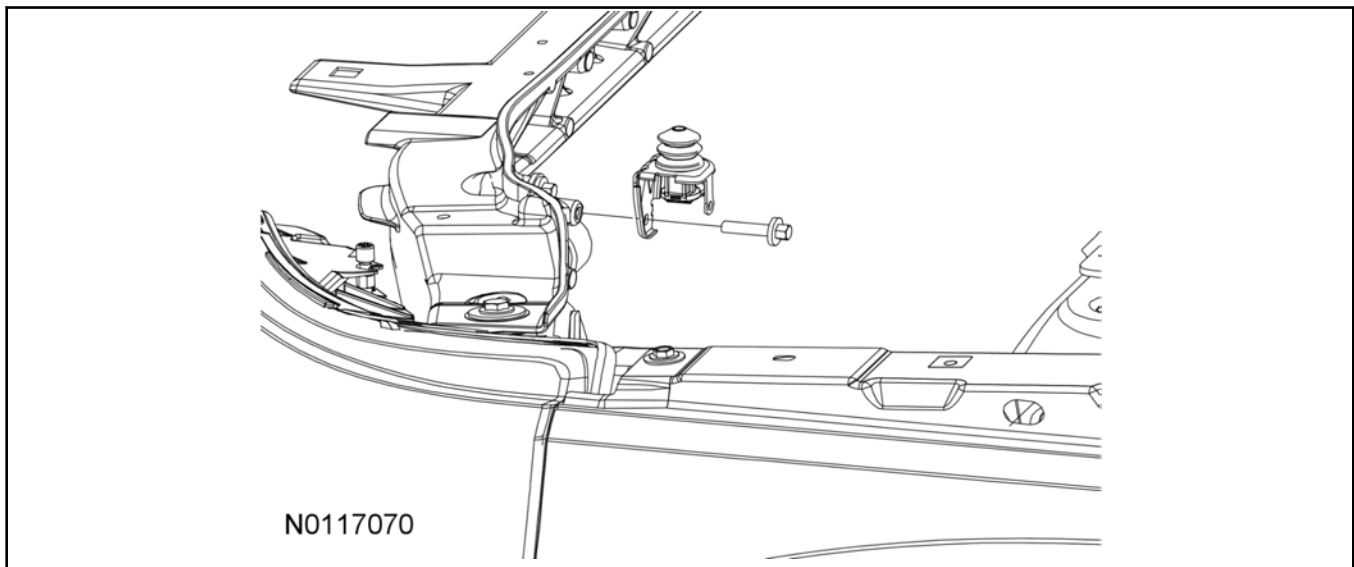
**INSTALLATION (Continued)****Hood Switch Installation (If Required)**

13. Locate the hood switch harness located on the LH side of the upper radiator core support.



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

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

**INSTALLATION (Continued)**

15. Connect the electrical connector to the hood switch.
16. Install the hood switch wire harness push pin retainer to the hood switch bracket.

**Antenna Mounting****NOTE:**

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

**NOTE:**

Keep these points in mind when selecting a location and mounting the 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 antenna mounting location based on the guidelines above.

**Install The Antenna**

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

**NOTE:**

Do not touch the adhesive, reduced adhesion may result.

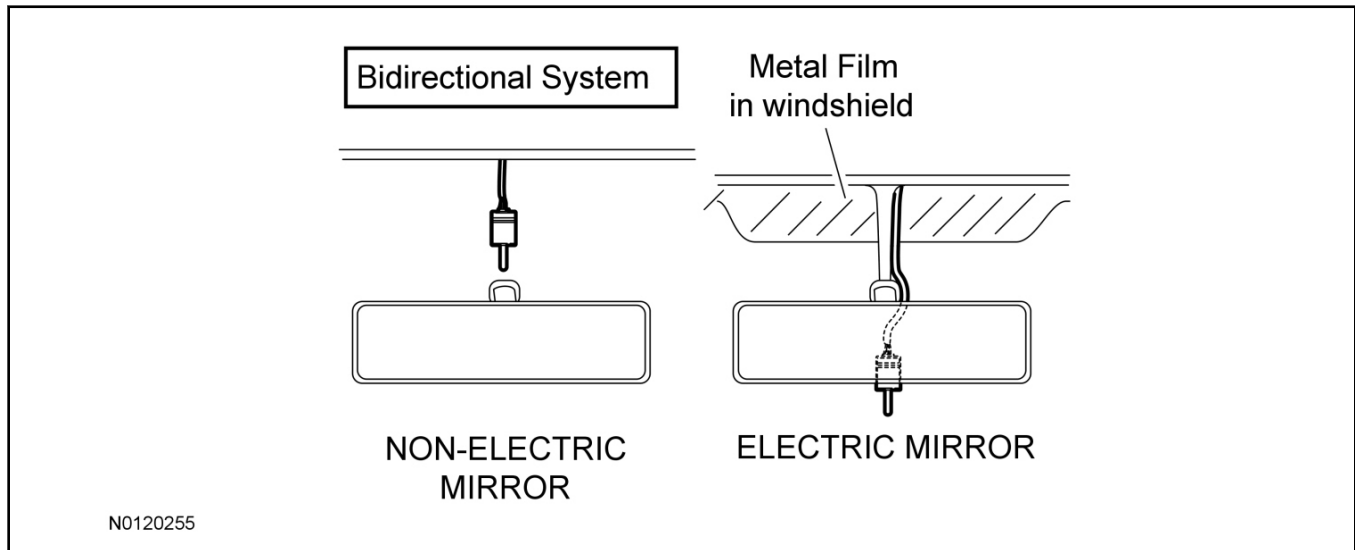
**NOTE:**

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

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

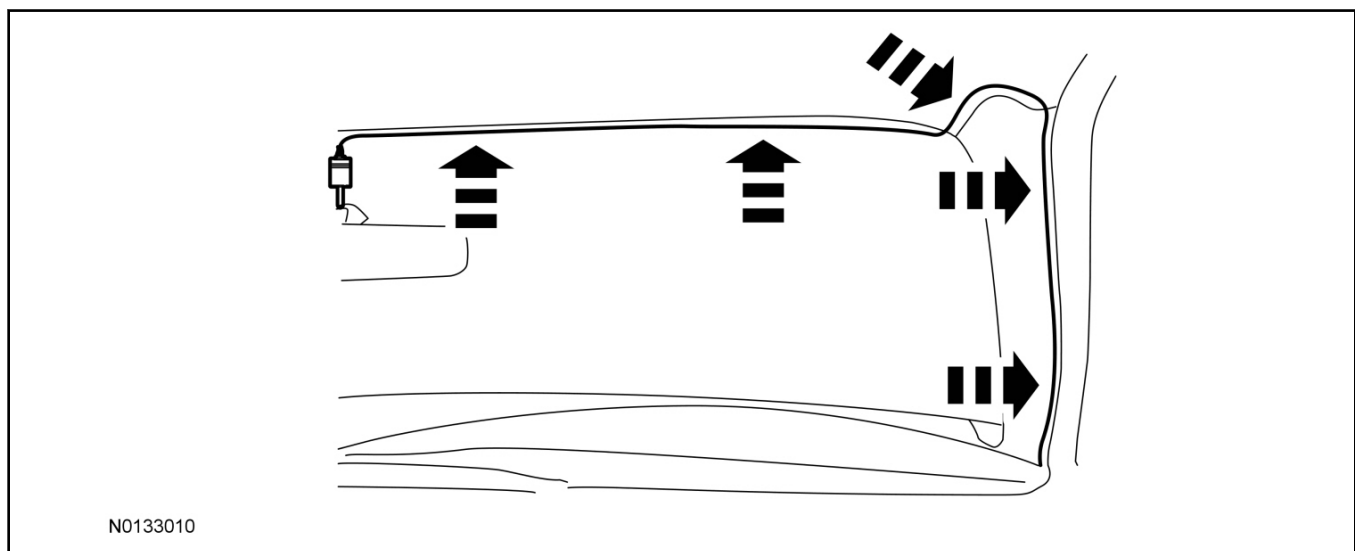
The wire will be attached to the control module later in this procedure.

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



20. Route the antenna cable.

- Route inside the headliner to the A-pillar.
- Route down the A-pillar 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.

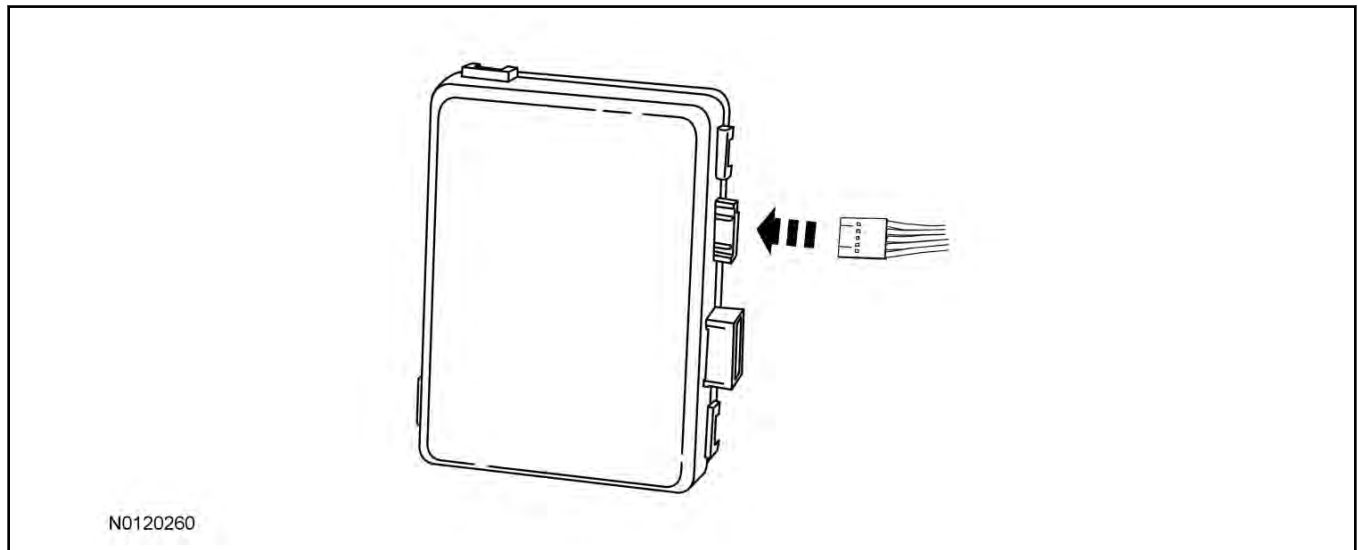
**Installation**

21. Install the CGEA module to the vehicle.

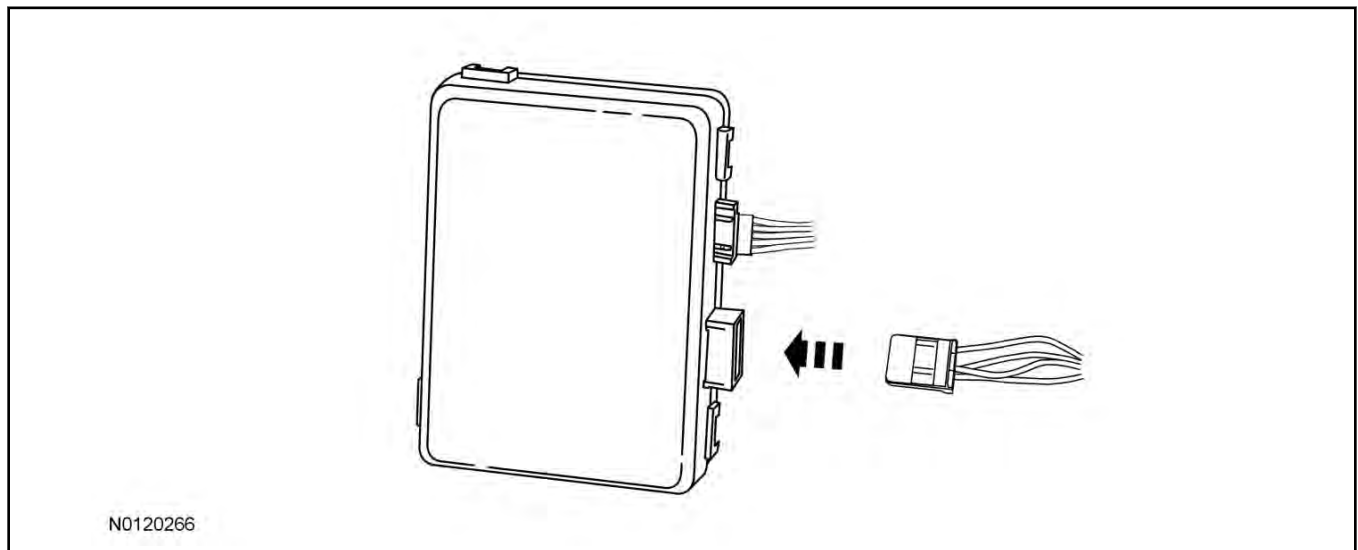
- Mount to the bulkhead metal surface behind and to the right of the TPM module.

**INSTALLATION (Continued)**

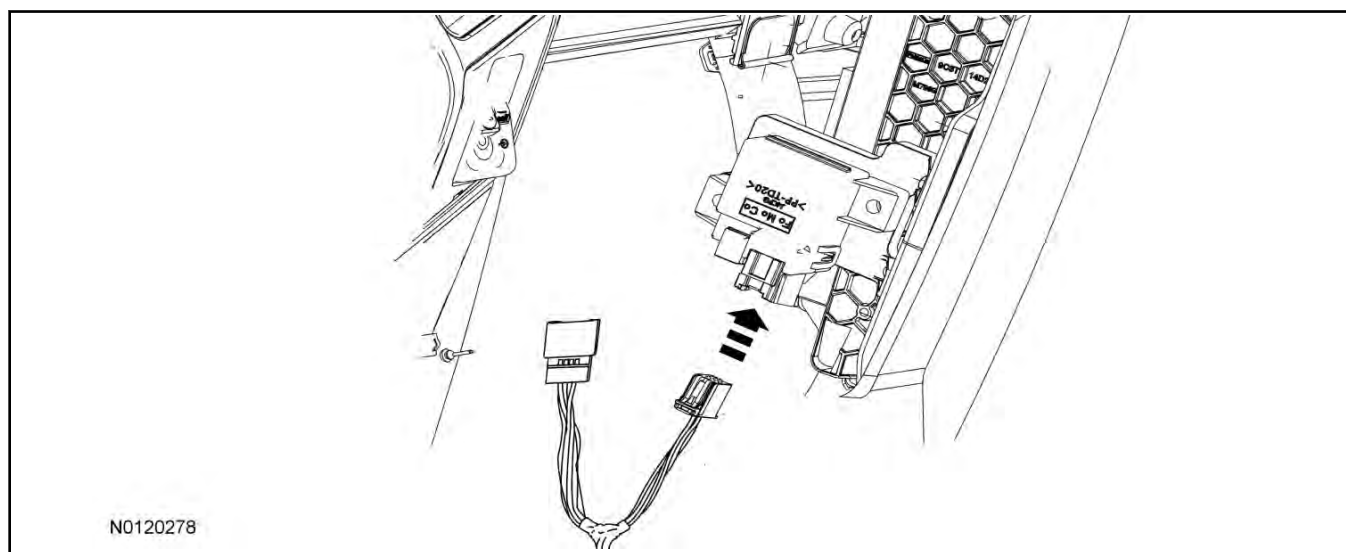
22. Connect the antenna to the CGEA module.
- Secure the antenna harness with tie-straps.



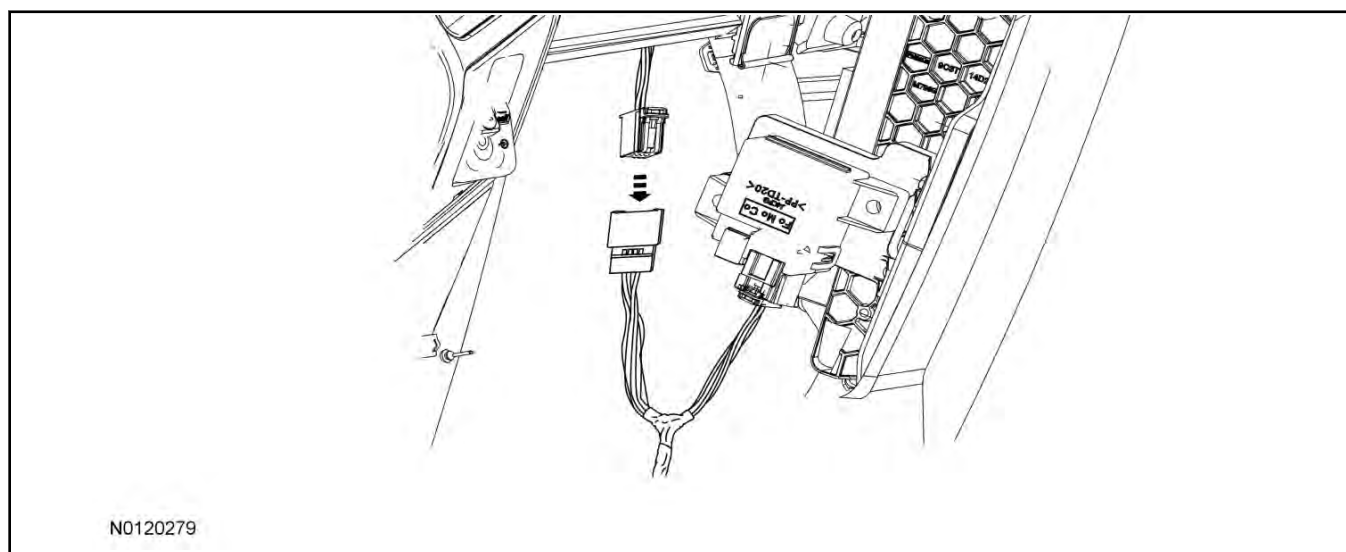
23. Connect the T-harness to the remote start module.



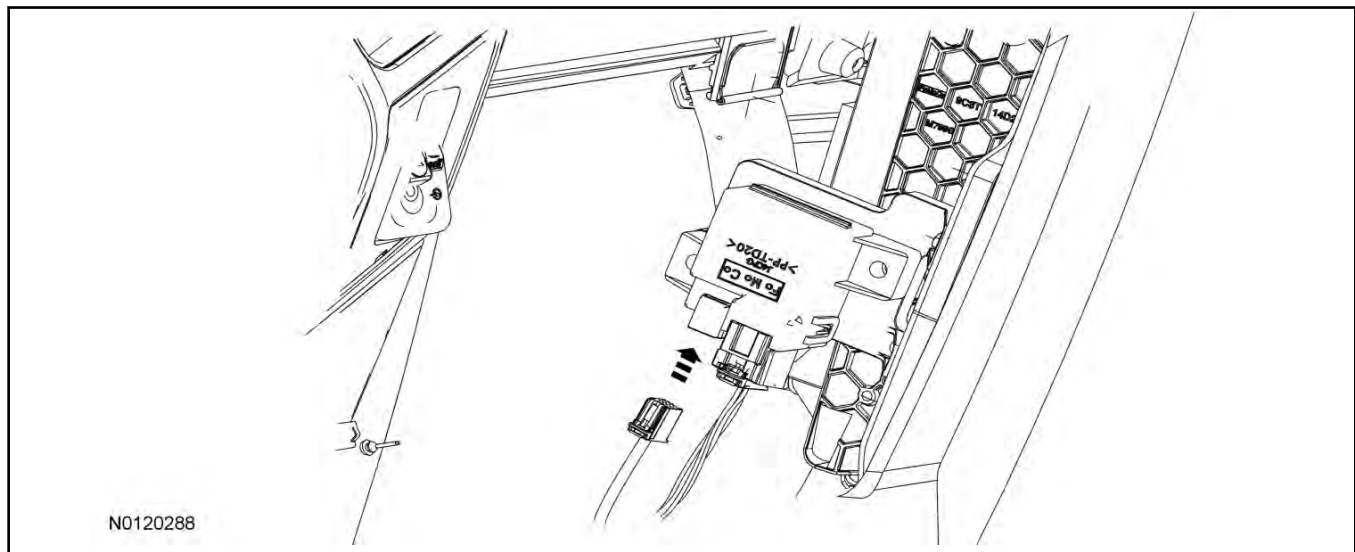
24. Route the female end of the T-harness to the TPM module.
- Secure the harness with tie-straps.
25. Connect the female end of the 8-pin T-harness to the TPM module.

**INSTALLATION (Continued)**

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



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

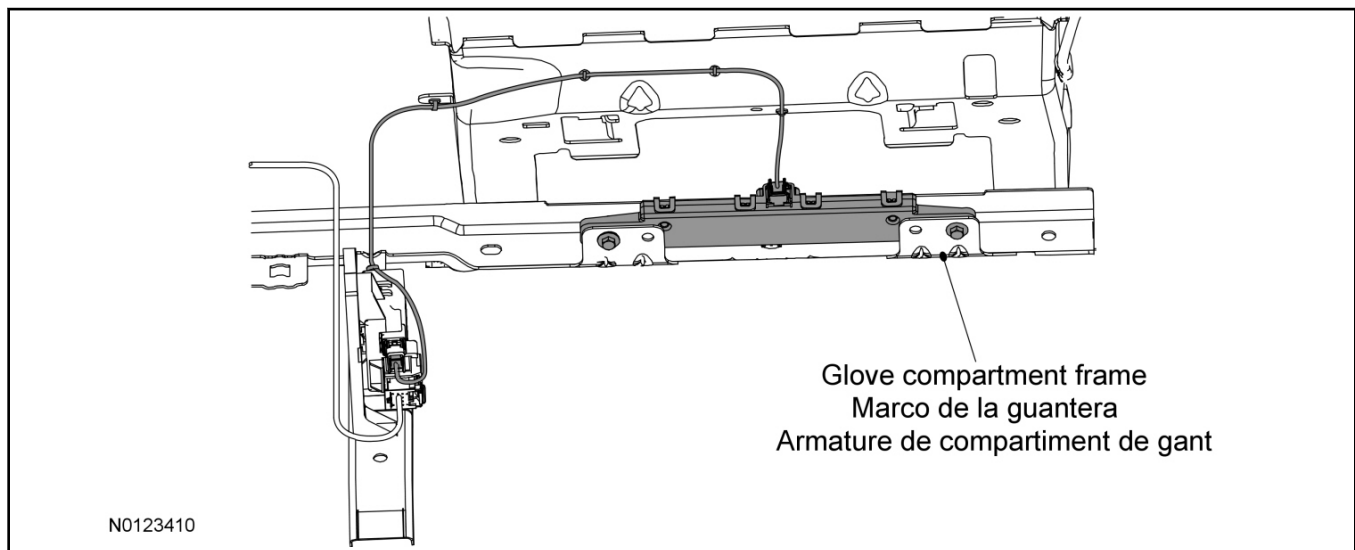
**INSTALLATION (Continued)****28. NOTE:**

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.



29. 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.

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

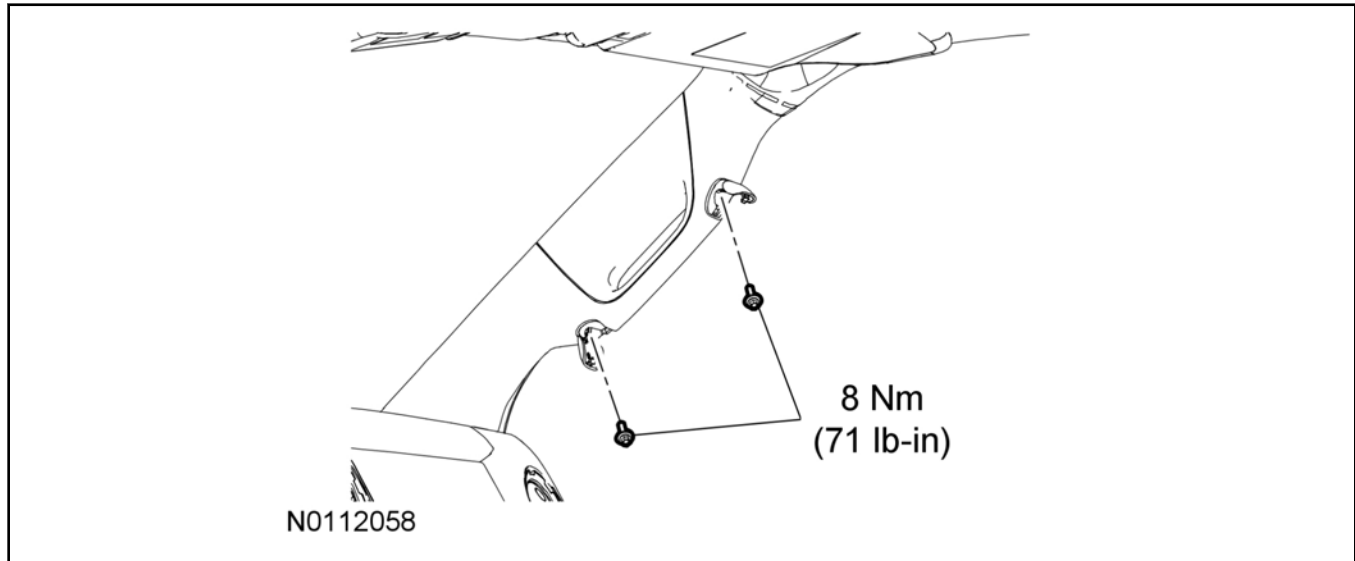
**31. NOTICE:**

**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.

**INSTALLATION (Continued)**

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



34. Close the RH A-pillar trim panel bolt covers.
35. Install the RH instrument panel side trim.

**Remote Start Activation**

36. Verify that the IDS is updated to the most current version.
37. Connect IDS.
  - Follow the prompts to select new vehicle session.
  - Enter VIN.
38. 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.
39. 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.



**INSTALLATION (Continued)**

---

40. 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.
- Select remote start.
- Select system.
- Verify that the remote start system is enabled.

**Learn Remote Start System to Vehicle****NOTE:**

Ensure the brake pedal is not depressed during this sequence.

41. Press the vehicles unlock button located on the drivers door, make sure all doors are unlocked.

42. Put the key in the ignition.

43. 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.

44. 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.

**Standard RMST Functional Test****NOTE:**

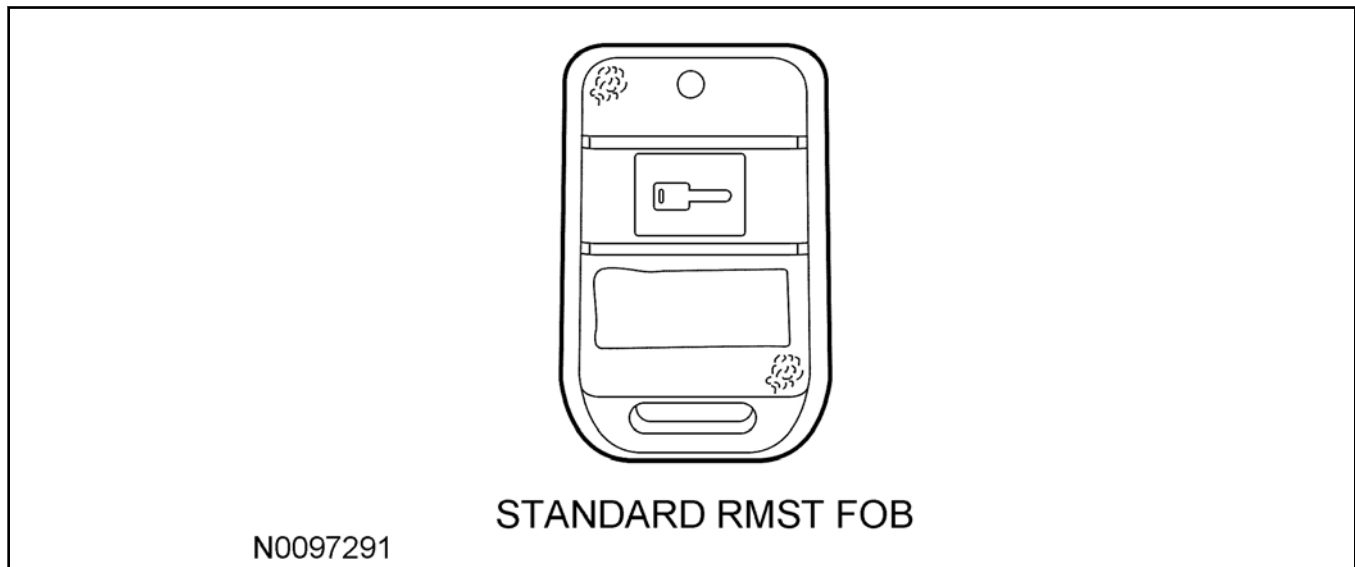
Do not put a key in the ignition for the following steps.

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

46. Close the hood.

47. Close all of the vehicle doors.

48. Start the vehicle by pressing and holding the remote start button on the remote start key fob for more than 2 seconds.

**INSTALLATION (Continued)**

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

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

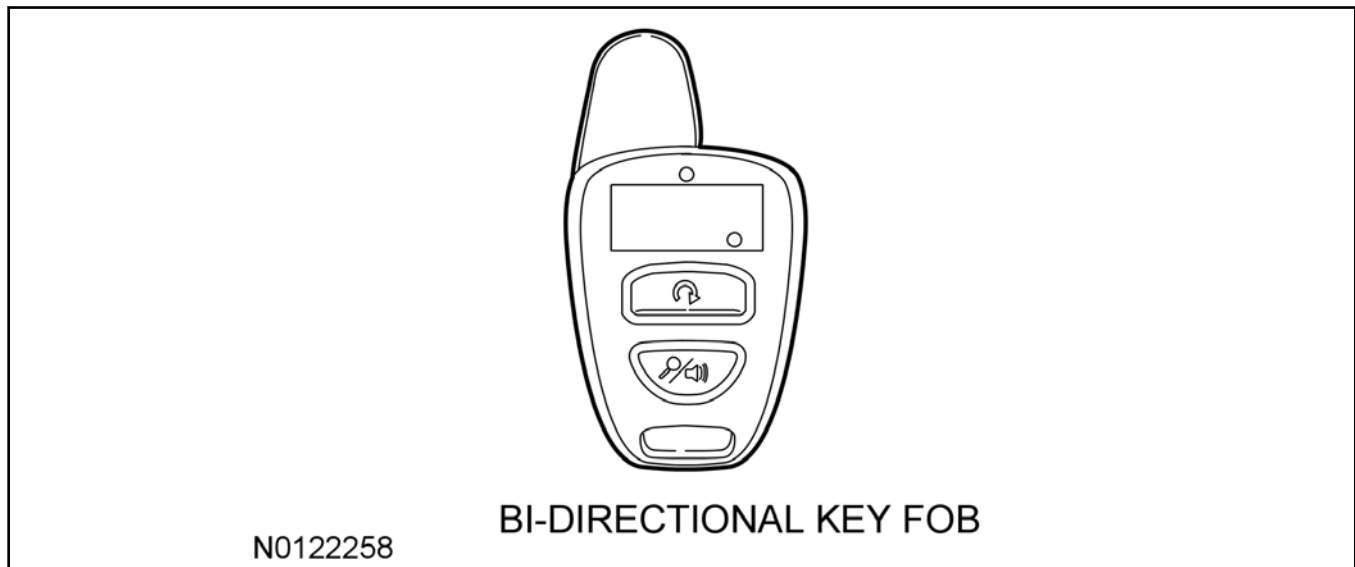
**Please contact Ford Hotline with any issues regarding remote start functionality.**

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

**Bi-directional RMST Functional Test****NOTE:**

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

53. 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.

**INSTALLATION (Continued)**

54. Make sure the ignition is in "park" and the ignition is in the "off" position, remove all keys from the vehicle.
55. Close the hood.
56. Close all of the vehicle doors.
57. Start the vehicle by pressing the remote start button 2 times on the bi-directional key fob.
58. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
59. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
60. Open the hood.
61. **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.**

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

### VEHICLE PREPARATION

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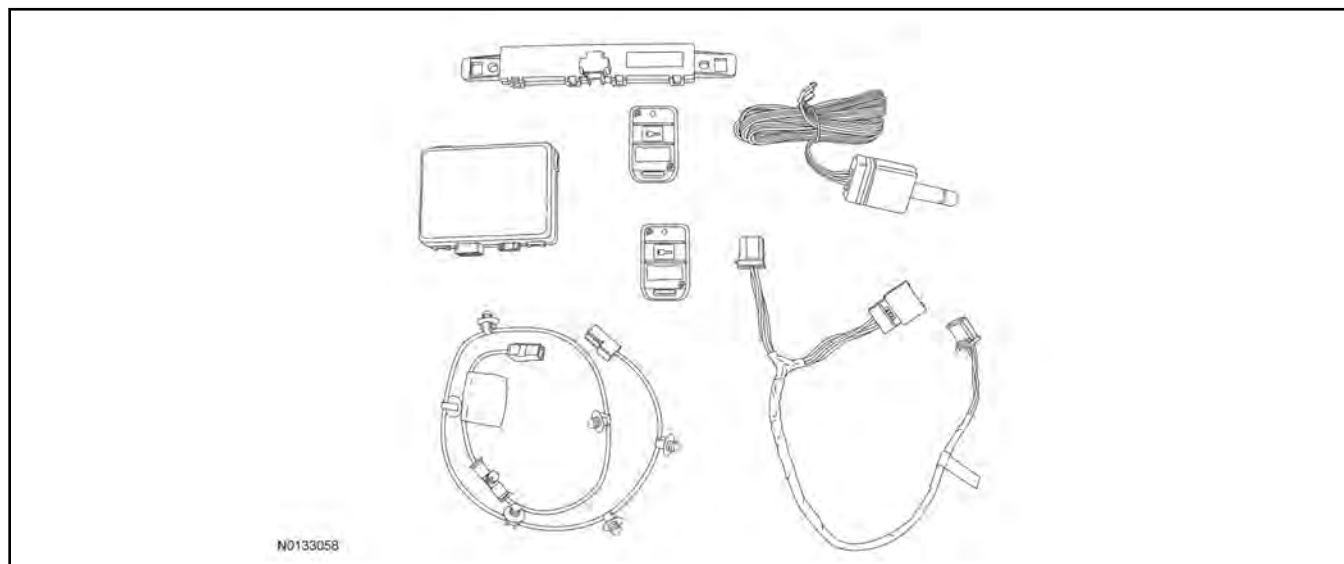
[Standard RMST - Functional Test](#)

[Bi-directional RMST - Functional Test](#)

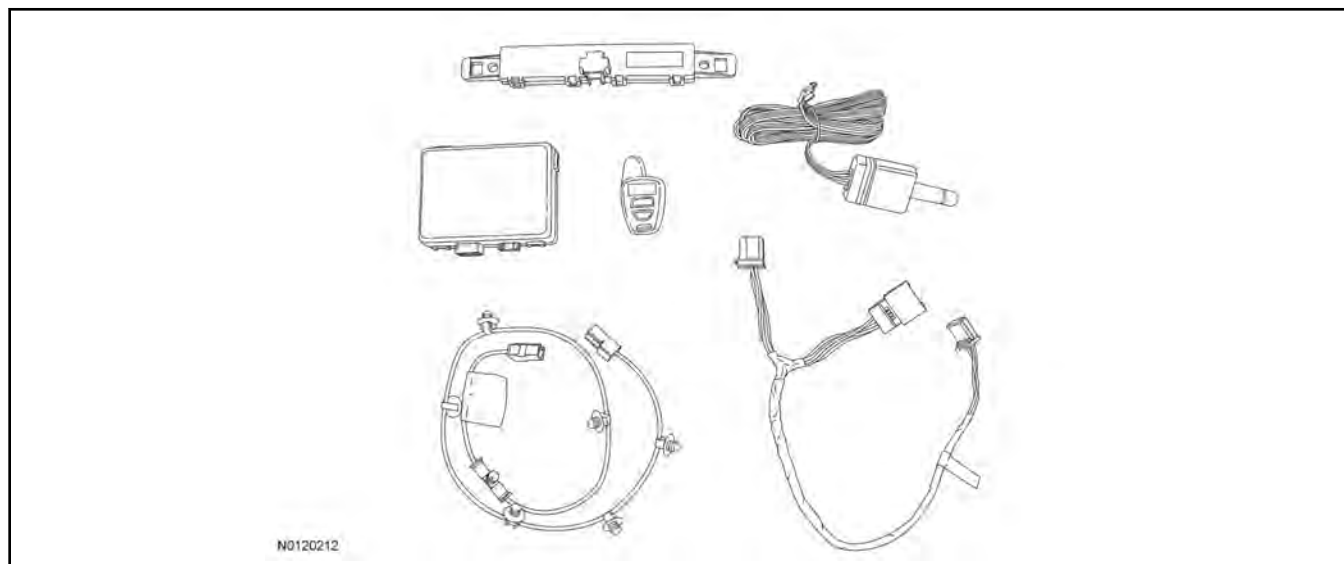
## INSTALLATION

### Remote Start

#### Standard Remote Start System (RMST) Components



#### Bi-directional Remote Start System (RMST) Components



**INSTALLATION (Continued)****Hood Switch Kit Components - Sold separately if needed**

N0122208

**Edge - Key Start**

1. Verify correct kit number.

**Review Standard RMST Kit Contents**

2. Review the Standard RMST kit contents.

**Standard RMST Kit**

| QUANTITY | DESCRIPTION               |
|----------|---------------------------|
| 2        | Standard 1 Button Key Fob |
| 1        | Antenna Jumper Wire       |
| 1        | Antenna Module            |
| 1        | Remote Start Module       |
| 1        | Standard Antenna          |
| 1        | T-harness                 |

**Review Bi-directional RMST Kit Contents**

3. Review Bi-directional RMST Kit Contents

**Bi-directional RMST Kit**

| QUANTITY | DESCRIPTION            |
|----------|------------------------|
| 1        | Bi-directional Key Fob |
| 1        | Antenna Jumper Wire    |
| 1        | Antenna Module         |
| 1        | Remote Start Module    |
| 1        | Bi-directional Antenna |
| 1        | T-harness              |

**INSTALLATION (Continued)****Review Hood Switch Kit Contents**

4. Review the Hood Switch kit contents.

**Hood Switch OE Kit**

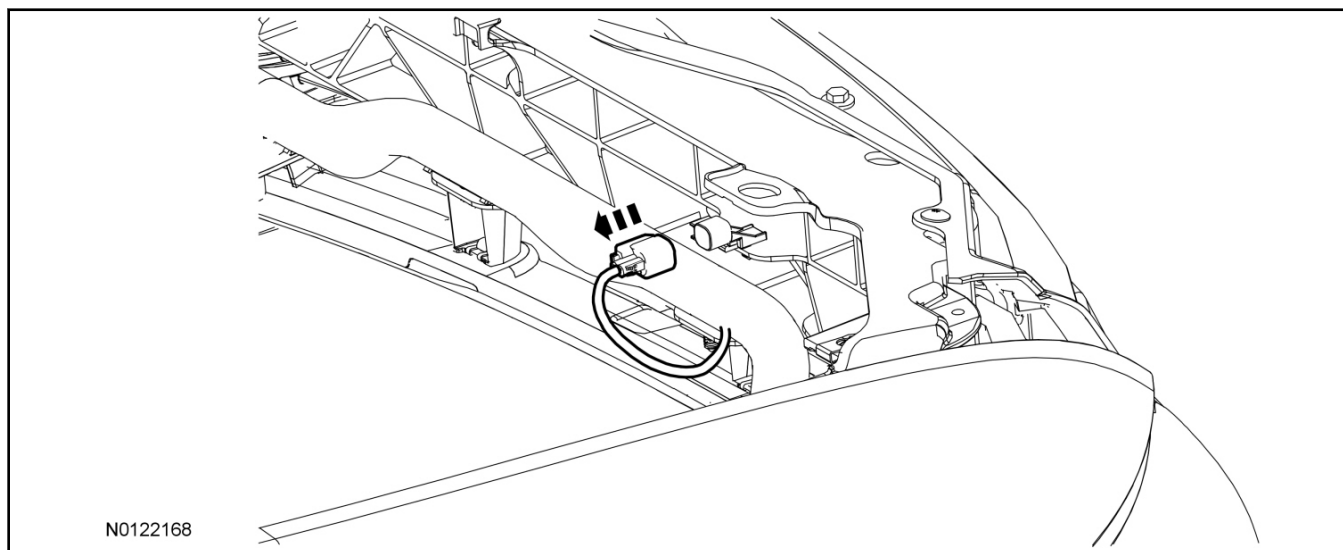
| QUANTITY | DESCRIPTION          |
|----------|----------------------|
| 1        | Hood Switch Assembly |

**Vehicle Preparation**

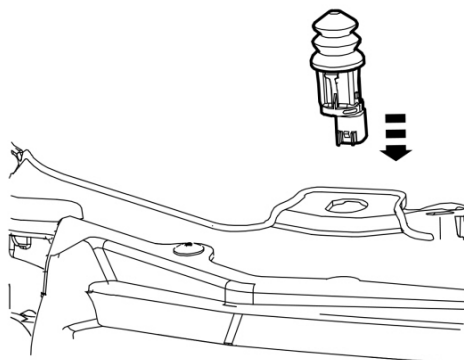
5. Verify that an OE hood switch is installed.
- If the vehicle is not equipped with an OE hood switch, refer to Hood Switch Installation in this procedure.

**Hood Switch Installation**

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



7. 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.

**INSTALLATION (Continued)**

N0122172

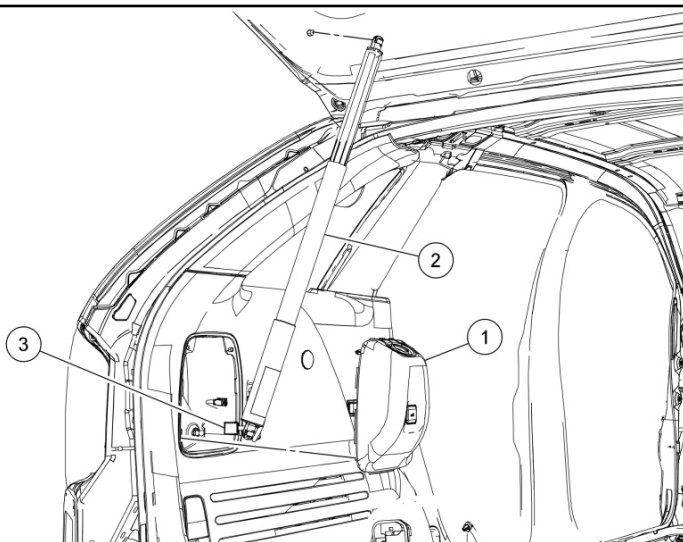
8. Connect the electrical connector to the hood switch.

**Vehicle Preparation**

9. Open the liftgate.

**Remove Power Liftgate Motor**

10. 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.



N0122123

**Position Aside LH Quarter Trim Panel**

11. Remove the rear cargo load area.
- Remove the foam blocks from the spare tire well.



**INSTALLATION (Continued)**

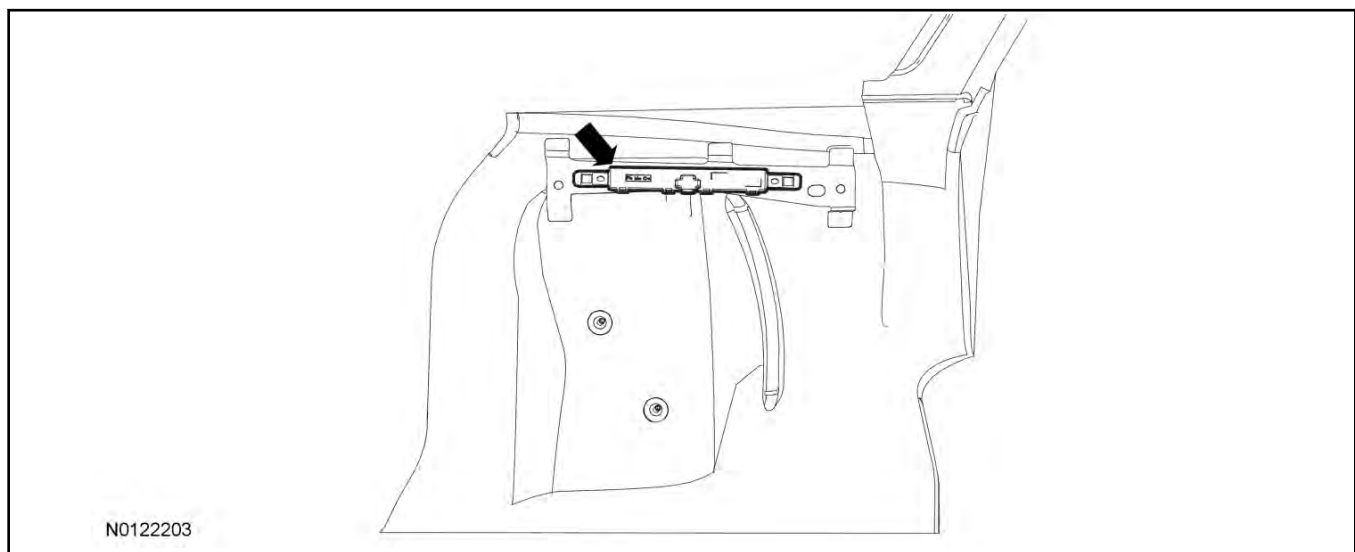
12. Remove the LH safety belt lower anchor bolt cover and remove the LH safety belt lower anchor bolt.
13. If equipped, remove the cargo net hook.
14. **NOTE:**  
Make sure the pushpin retainers are removed with the quarter trim panel.  
  
Detach the push pin retainers and position the LH quarter trim panel aside to access the Tire Pressure Monitor (TPM).

**Remove LH C-Pillar Trim Panel**

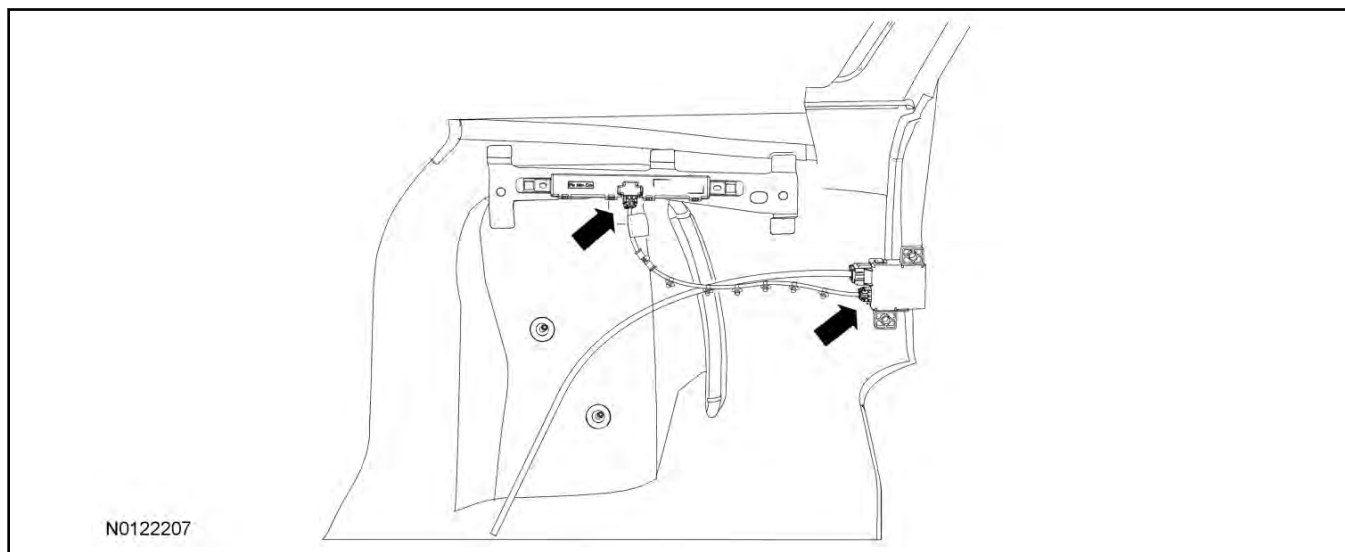
15. Remove the LH rear safety belt D-ring cover and remove the safety belt bolt.
16. Remove the LH C-pillar trim panel screw cover.
17. Remove the LH C-pillar trim panel screw.
18. Remove the C-pillar trim panel.
  - Pull outward and downward to remove the C-pillar trim panel.

**Antenna Module Installation**

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



20. **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**

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

**NOTE:**

Do not touch the adhesive, reduced adhesion may result.

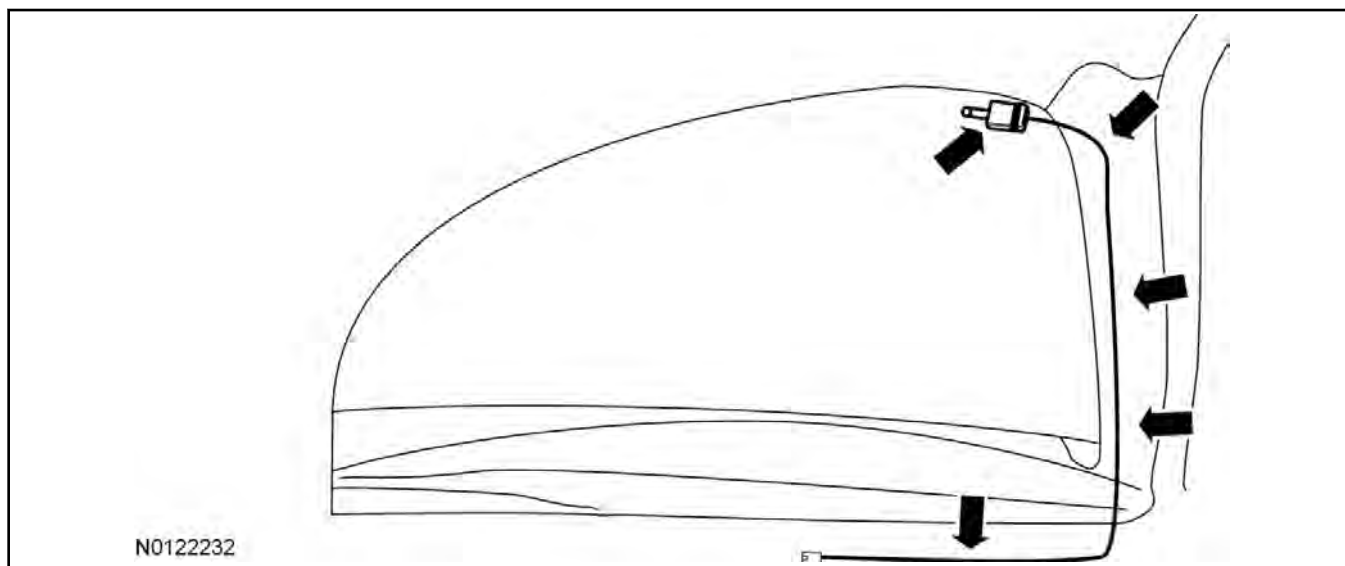
**NOTE:**

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

22. 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.

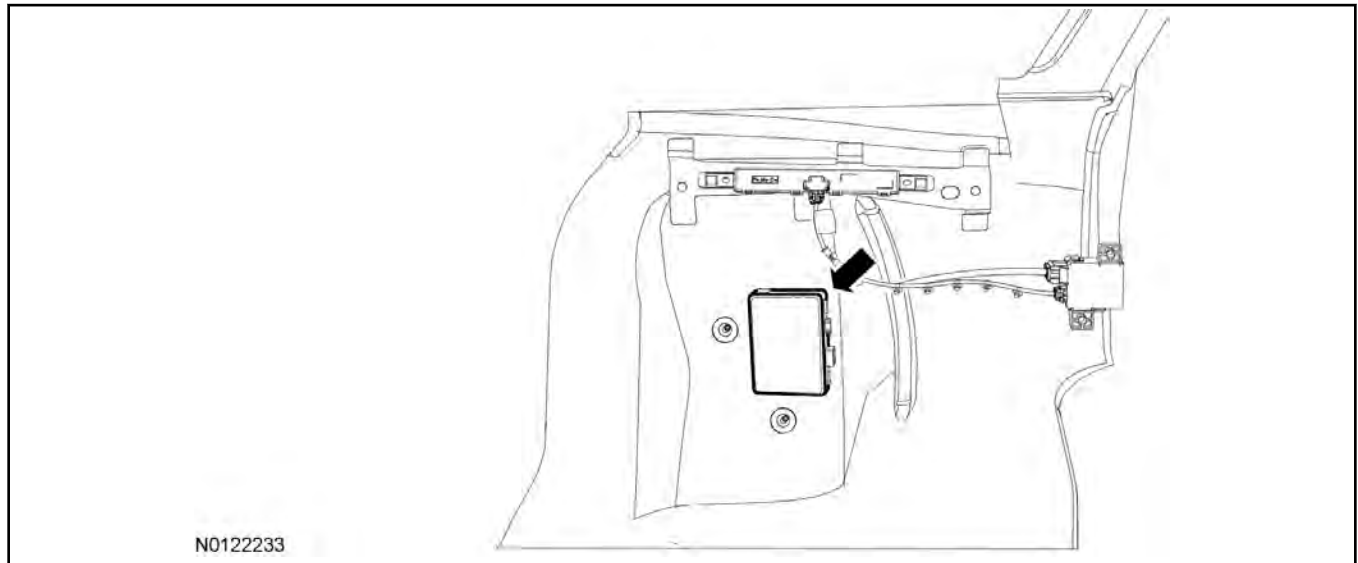
3



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

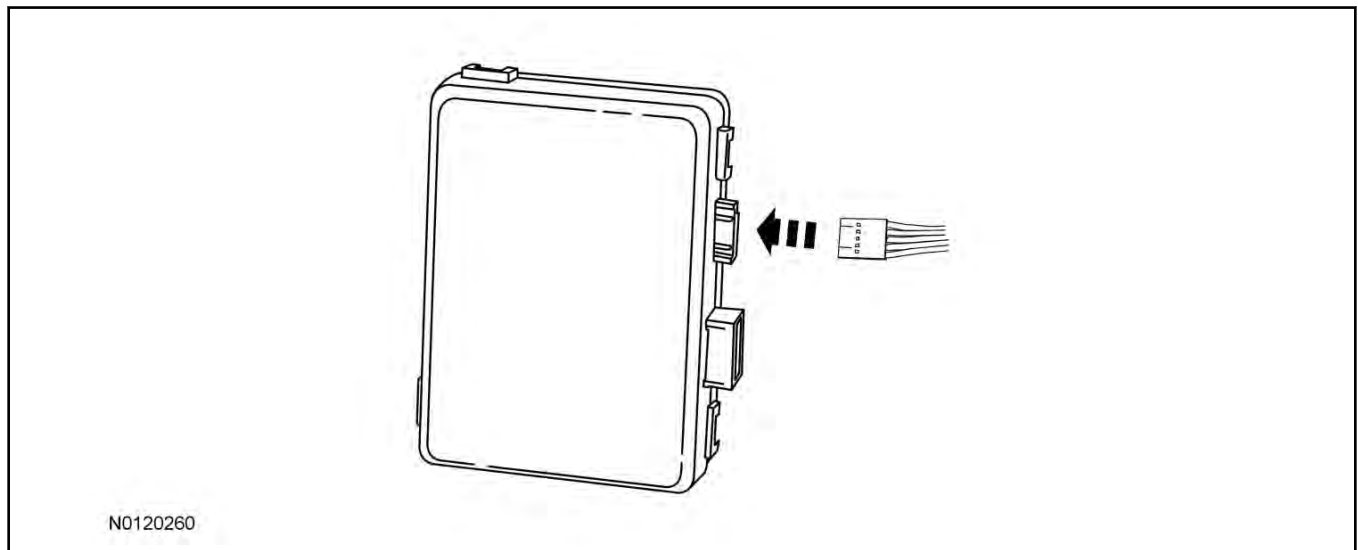
23. Remove the protective backing from the 3m Dual Lock™ strips and install the remote start module to the vehicle.

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

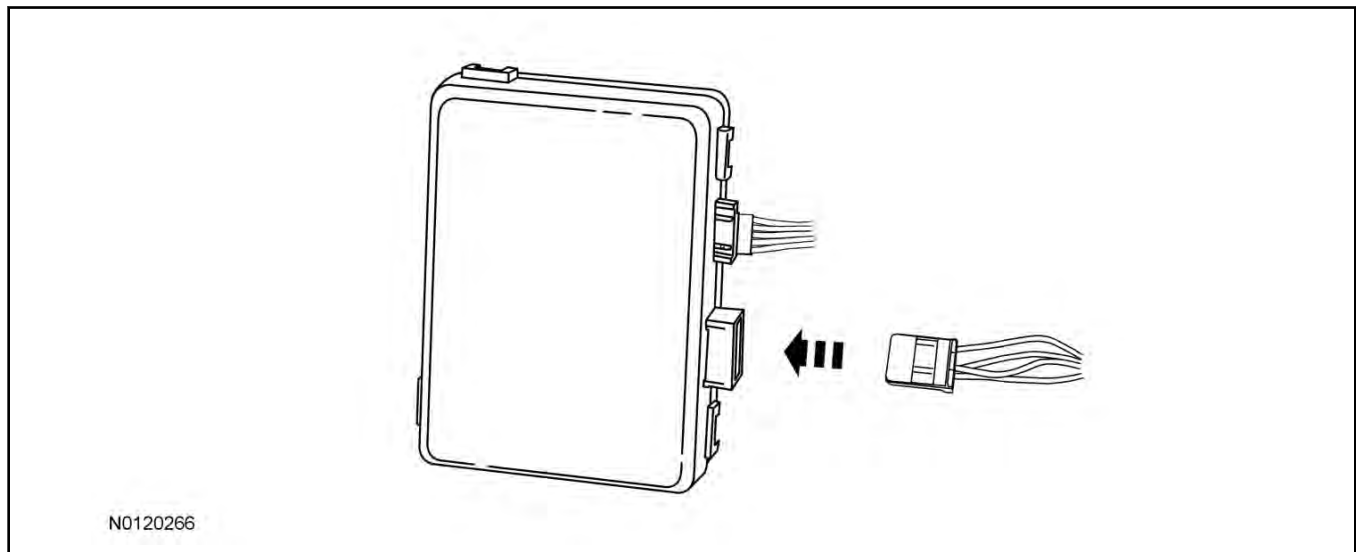


24. Connect the antenna to the remote start module.

- Secure the antenna harness with tie-straps.



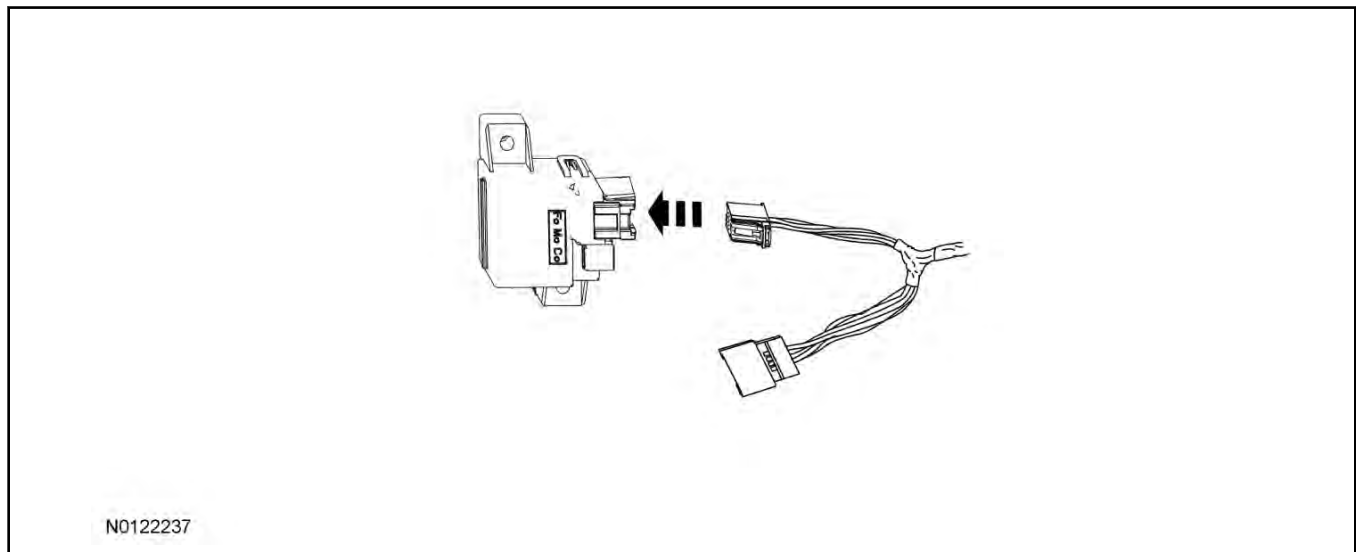
25. Connect the T-harness to the remote start module.

**INSTALLATION (Continued)**

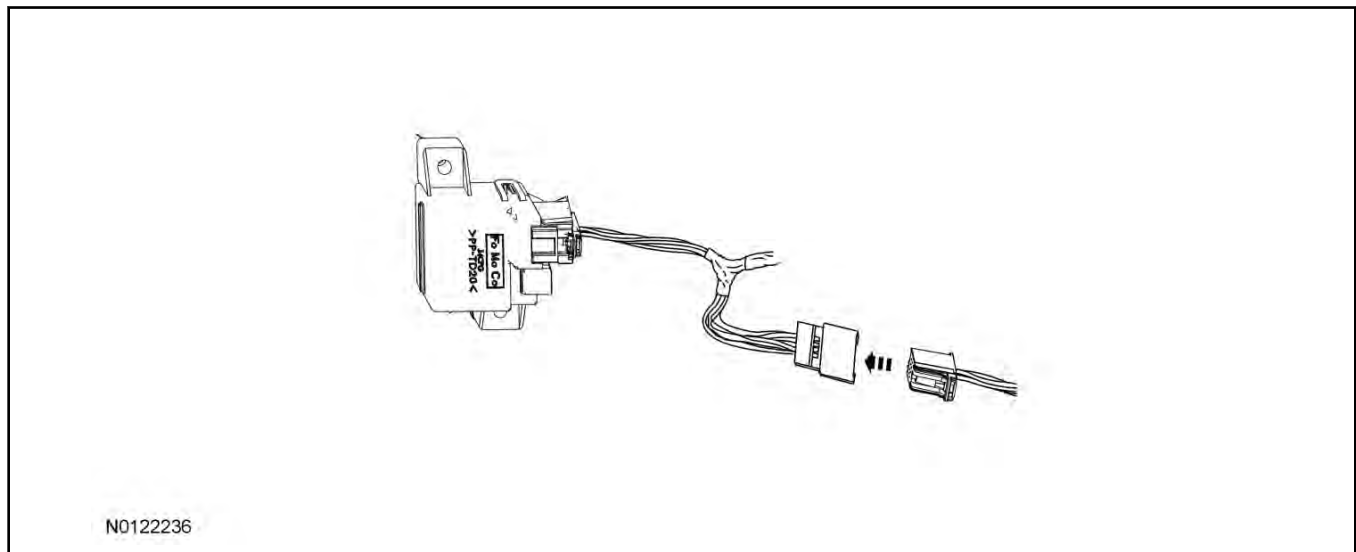
26. Route the female end of the T-harness to the TPM module.

- Secure the harness with tie-straps.

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



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

**INSTALLATION (Continued)****Install LH C-Pillar Trim Panel**

29. Install the LH C-pillar trim panel.
30. Install the LH C-pillar trim panel screw.
  - Tighten to 9 Nm (80 lb-in).
31. 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.

32. 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**

33. Position the LH quarter trim panel back.
  - Engage push pin retainers.
34. If equipped, install the cargo net hook.
  - Tighten to 3 Nm (27 lb-in).
35. Install the LH rear safety belt lower anchor bolt.
  - Tighten to 54 Nm (40 lb-ft).

**36. 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.

37. Install the rear cargo load area.
  - Install the foam blocks into the spare tire well.

**INSTALLATION (Continued)**

---

**Install Power Liftgate Motor**

38. 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**

39. Verify that the IDS is updated to the most current version.
40. Connect IDS.
- Follow the prompts to select new vehicle session.
  - Enter VIN.
41. 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.
42. 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.
43. 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.

**INSTALLATION (Continued)****Learn Remote Start System to Vehicle****NOTE:**

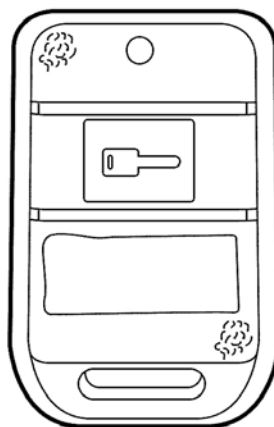
Make sure the brake pedal is not depressed during this sequence.

44. Press the vehicle's unlock button located on the driver's door. Make sure all doors are unlocked.
45. Put the key in the ignition.
46. 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.
47. 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.

**Standard RMST Functional Test****NOTE:**

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

48. Make sure the shift lever is in park and the ignition is in the off position. Remove all keys from the vehicle.
49. Close the hood.
50. Close all of the vehicle doors.
51. Start the vehicle by pressing and holding the remote start button on the remote start key fob for more than 2 seconds.



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**STANDARD RMST FOB**

52. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
53. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
54. Open the hood.

**INSTALLATION (Continued)****55. 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.**

**Bi-directional RMST Functional Test****NOTE:**

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

56. 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.



57. Make sure the shift lever is in park and the ignition is in the off position. Remove all keys from the vehicle.
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 the vehicle shuts down when attempting to shift out of 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.**



# REMOTE START SYSTEM INSTALLATION

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[Spare Key Programming](#)

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### GENERAL PROCEDURES

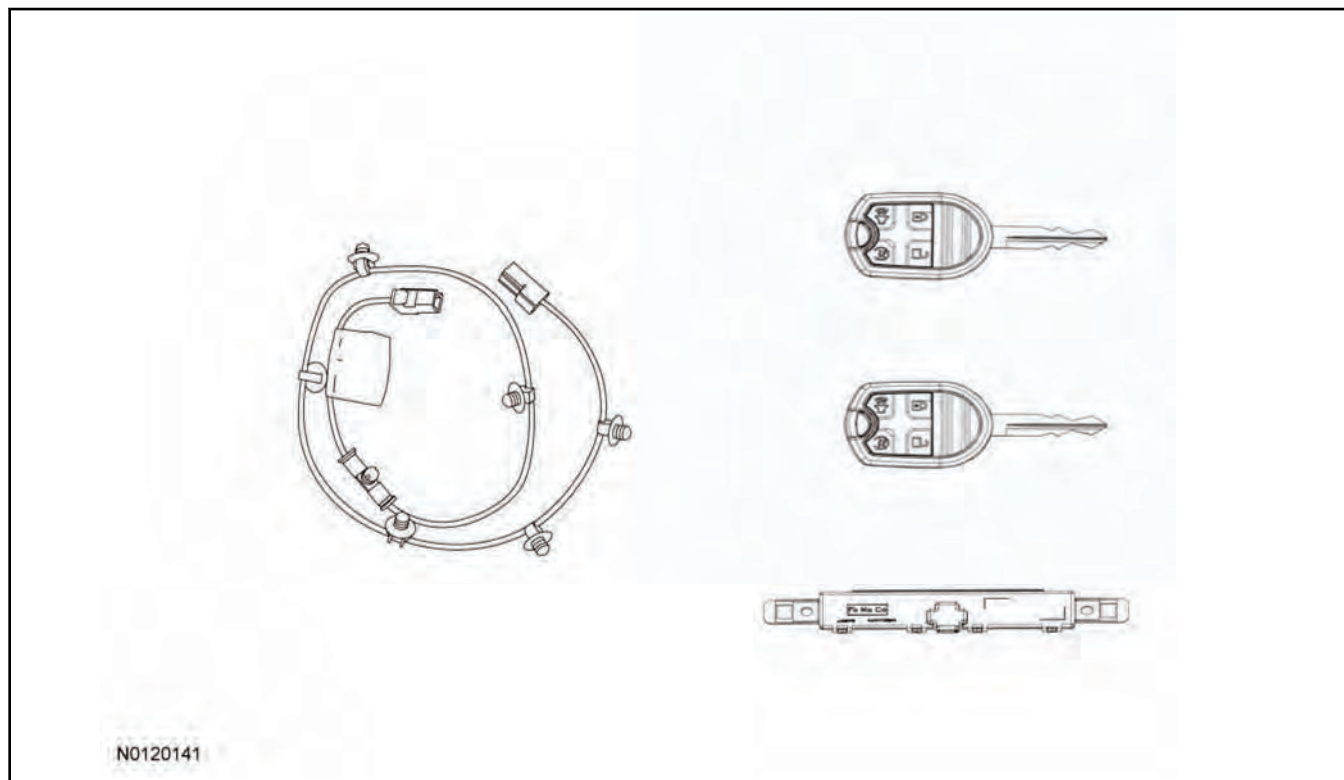
[Remote Start System Activation](#)

[Functional Test](#)

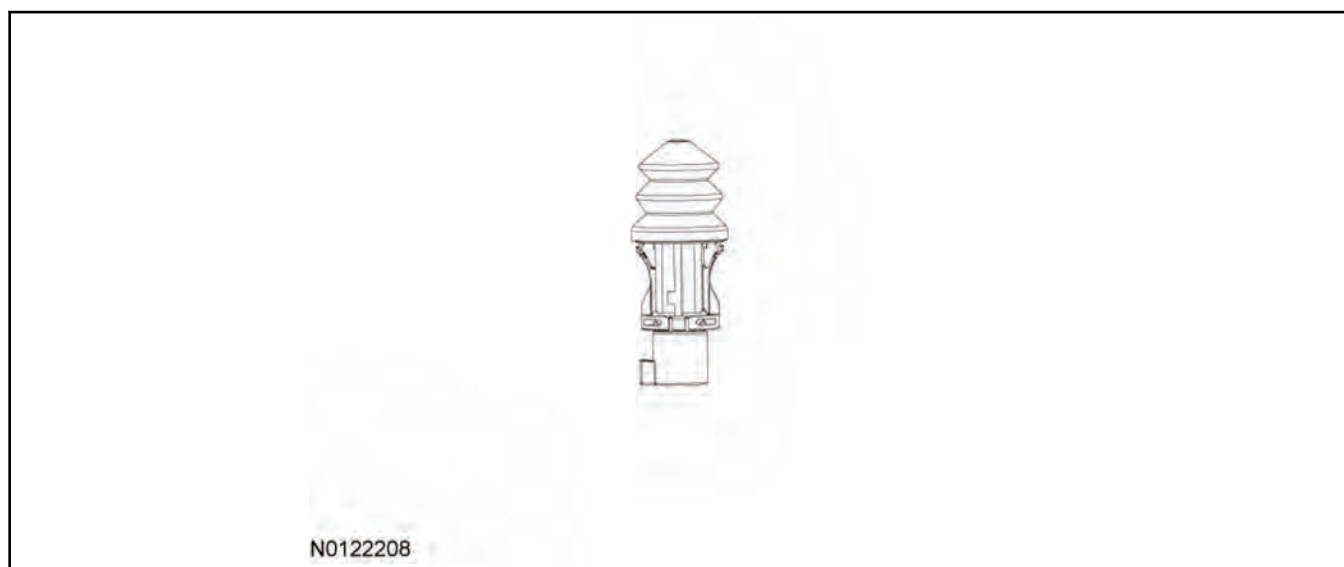
## INSTALLATION

### Remote Start - Edge

#### Remote Start System (RMST) Components



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



### Edge

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

The OE Remote Start System (RMST) kit is only applicable on vehicles that have power locks.

1. Verify correct RMST kit number.

**Review Remote Start System (RMST) Installation Kit Contents**

2. Review the RMST kit contents.

**Remote Start System (RMST) OE Kit**

| QUANTITY | DESCRIPTION         |
|----------|---------------------|
| 2        | Key (4 Button)      |
| 1        | Antenna Jumper Wire |
| 1        | Antenna Module      |

**Review Hood Switch Kit Contents**

3. Review the Hood Switch kit contents.

**Hood Switch OE Kit**

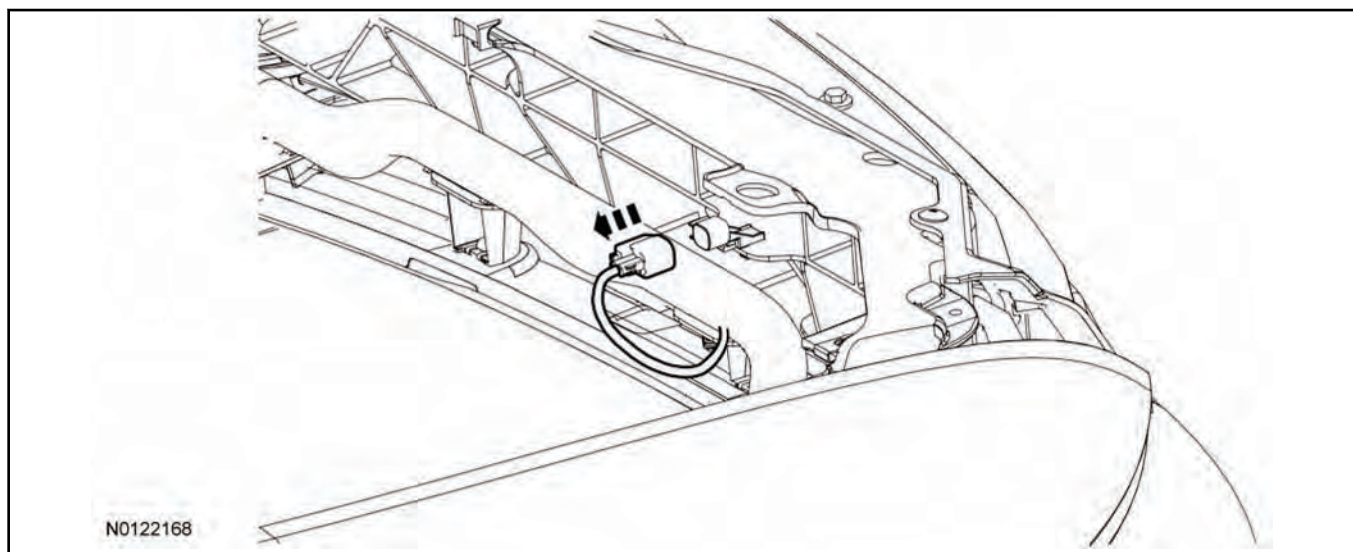
| QUANTITY | DESCRIPTION          |
|----------|----------------------|
| 1        | Hood Switch Assembly |

**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.

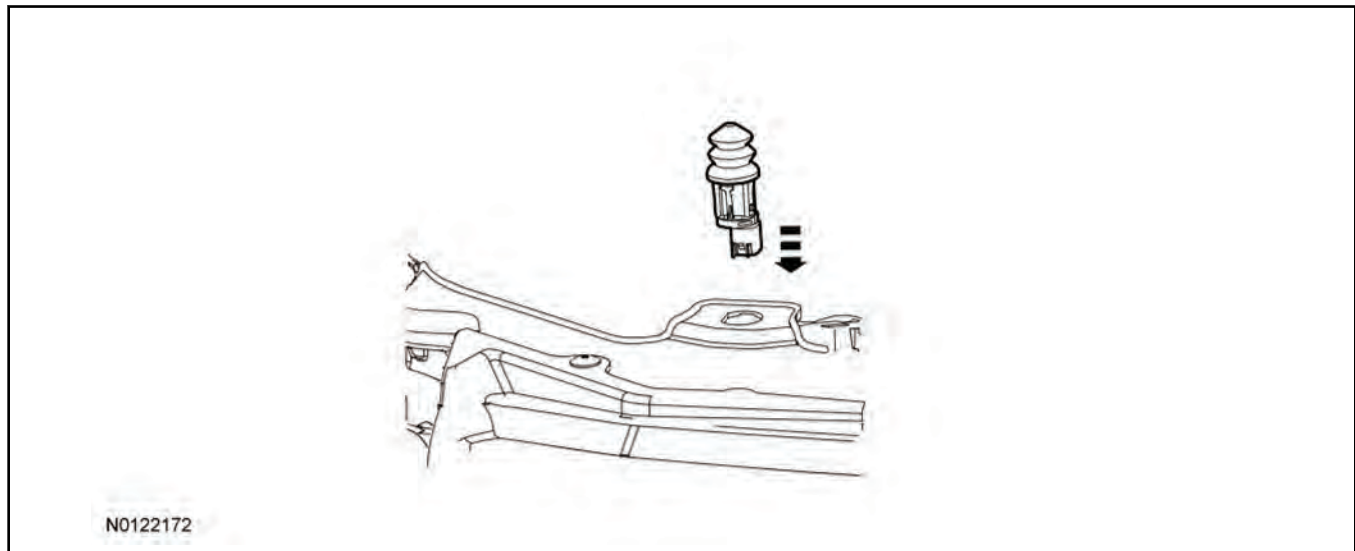
**Hood Switch Installation**

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 to the flat spot on the radiator core support.



7. Connect the electrical connector to the hood switch.

**Spare Key Programming****NOTE:**

The hood switch is required for remote start activation.

**NOTE:**

Verify no related DTCs are present before beginning this procedure.

**NOTE:**

This procedure works only if 2 or more programmed keys are available. If 2 programmed keys are not available, alternate programming methods in the workshop manual can be found at [www.fordtechservice.dealerconnection.com](http://www.fordtechservice.dealerconnection.com).

**NOTE:**

This procedure works only if the customer spare key programming is enabled. If customer spare key programming is disabled, refer to Key Programming — Enable/Disable Spare Key or Key Programming Using Diagnostic Equipment in the workshop manual located at [www.fordtechservice.dealerconnection.com](http://www.fordtechservice.dealerconnection.com).

8. Cut the provided 4-button keys that are going to be programmed to match the existing keys.
9. Insert the first programmed Passive Anti-Theft System (PATS) key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).
10. Turn the first key to the OFF position and remove the key from the ignition.
11. Within 10 seconds of turning the key to the OFF position, insert a second programmed PATS key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).

**INSTALLATION (Continued)**

12. Turn the second key to the OFF position and remove the key from the ignition.
13. **NOTE:**  
The doors lock and then unlock to confirm that each Integrated Key Transmitter (IKT) is programmed.

Within 10 seconds of turning the second key to the OFF position, insert the new, unprogrammed PATS key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).

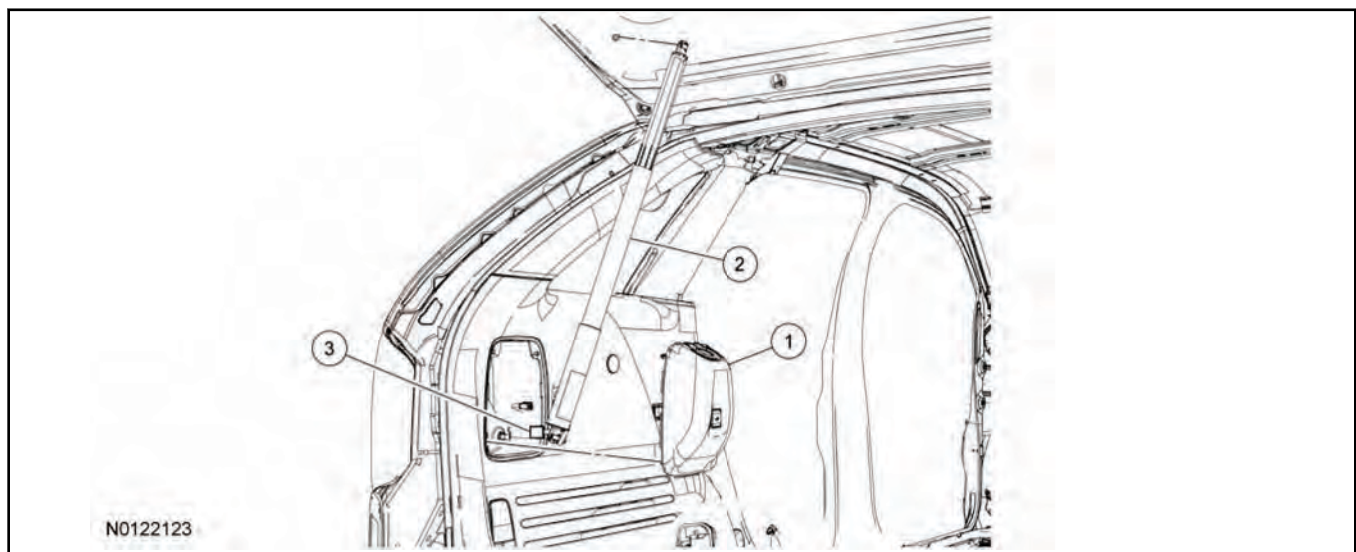
14. If it is desired to program additional key(s) (up to a total of 4 keys can be programmed), repeat the Spare Key Programming procedure for each additional key.

**Vehicle Preparation**

15. Open the liftgate.

**Remove Power Liftgate Motor**

16. 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.

**Position Aside LH Quarter Trim Panel**

17. Remove the rear cargo load area.
  - Remove the foam blocks from the spare tire well.
18. Remove the LH safety belt lower anchor bolt cover and remove the LH safety belt lower anchor bolt.
19. If equipped, remove the cargo net hook.

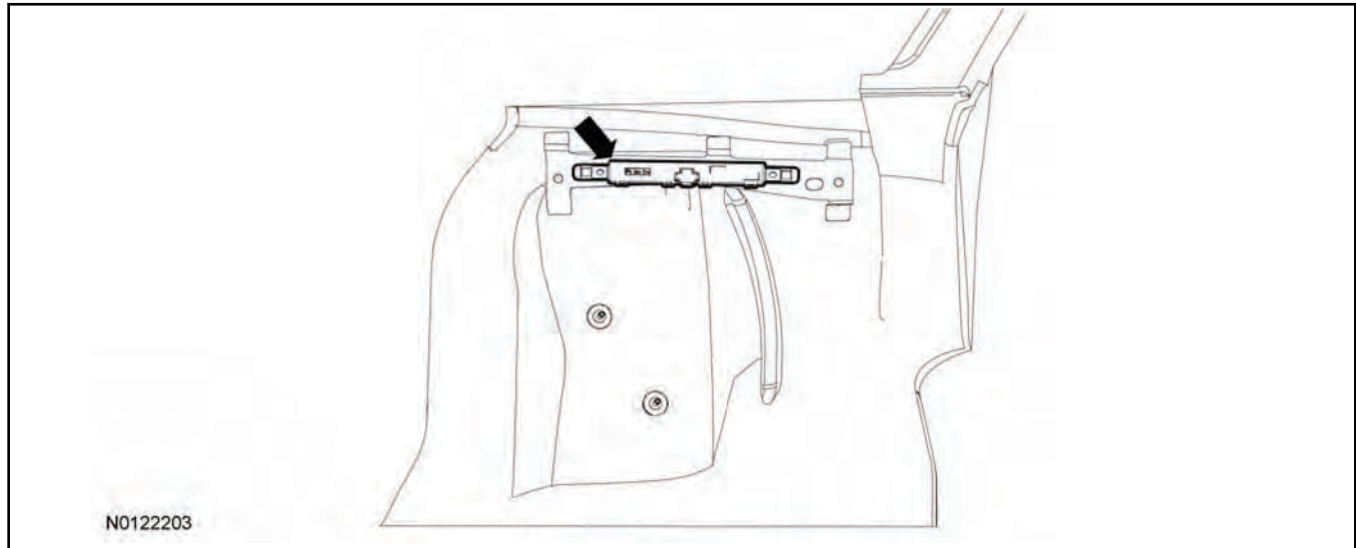
**INSTALLATION (Continued)****20. NOTE:**

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).

**Antenna Module Installation**

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

**22. NOTE:**

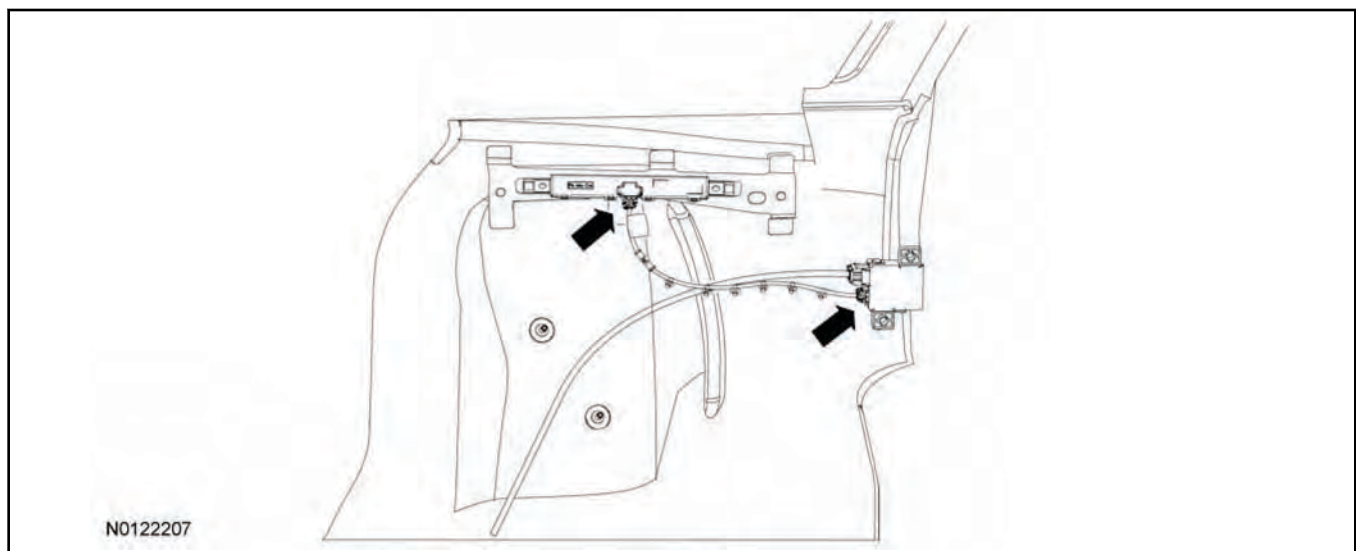
LH quarter trim panel removed for clarity.

**NOTE:**

The push pins on the antenna jumper wire are not used for this application.

Install the antenna jumper wire to the vehicle.

- Connect to the antenna module and to the TPM module.
- Secure with tie straps.



**INSTALLATION (Continued)****Install LH Quarter Trim Panel**

23. Position the LH quarter trim panel back.
  - Engage push pin retainers.
24. If equipped, install the cargo net hook.
  - Tighten to 3 Nm (27 lb-in).
25. Install the LH rear safety belt lower anchor bolt.
  - Tighten to 54 Nm (40 lb-ft).
26. **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.

27. Install the rear cargo load area.
  - Install the foam blocks into the spare tire well.

**Install Power Liftgate Motor**

28. 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**

29. Verify that the IDS is updated to the most current version.
30. Connect IDS.
  - Follow the prompts to select new vehicle session.
  - Enter VIN.
31. 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.
32. 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.

**INSTALLATION (Continued)**

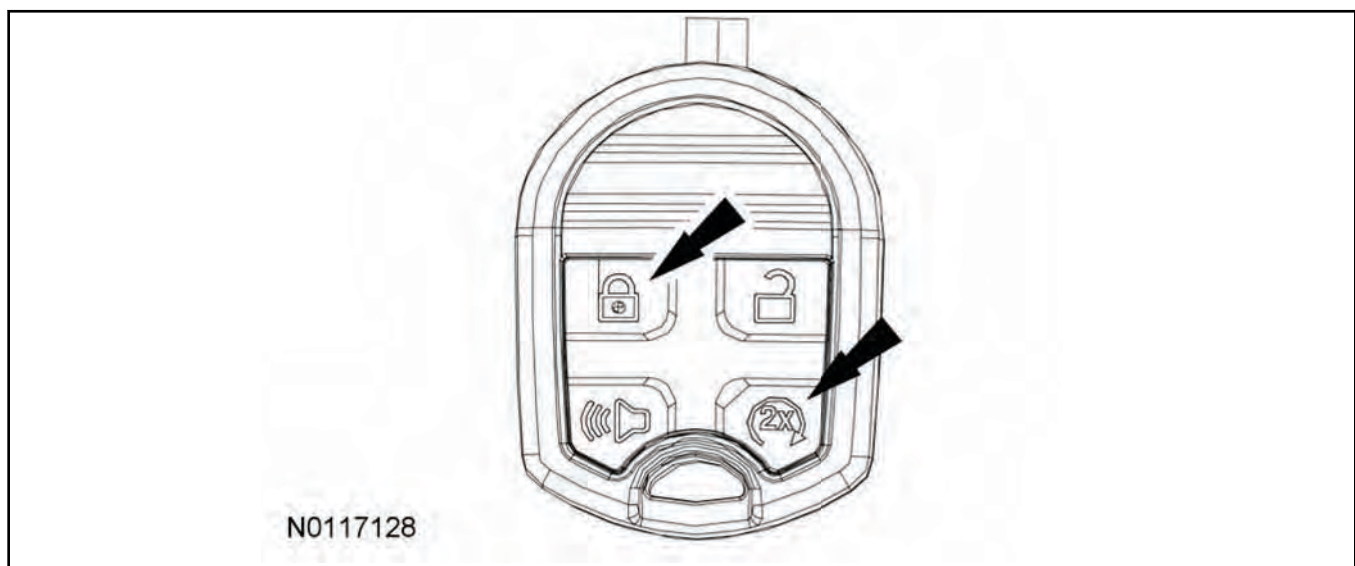
- Select system.
  - Verify that the remote start system is checked.
33. For vehicles equipped with advanced message center, verify that the remote start option now appears.
- Using the Select and Arrow buttons on the steering wheel, select Settings.
  - Select Vehicle Settings.
  - Select Vehicle.
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

**Functional Test****NOTE:**

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

34. Make sure the shift level is in park and the ignition is in the off position. Remove all keys from the vehicle.
35. Close the hood.
36. Close all of the vehicle doors.
37. **NOTE:**  
Verify that all of the newly programmed keys function properly.

Start the vehicle by pressing the lock button once, then the remote start button 2 times on the newly programmed key.



38. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
39. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
40. Open the hood.



---

**INSTALLATION (Continued)****41. 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.**

# REMOTE START SYSTEM INSTALLATION

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### INSTALLATION

[Remote Start](#)

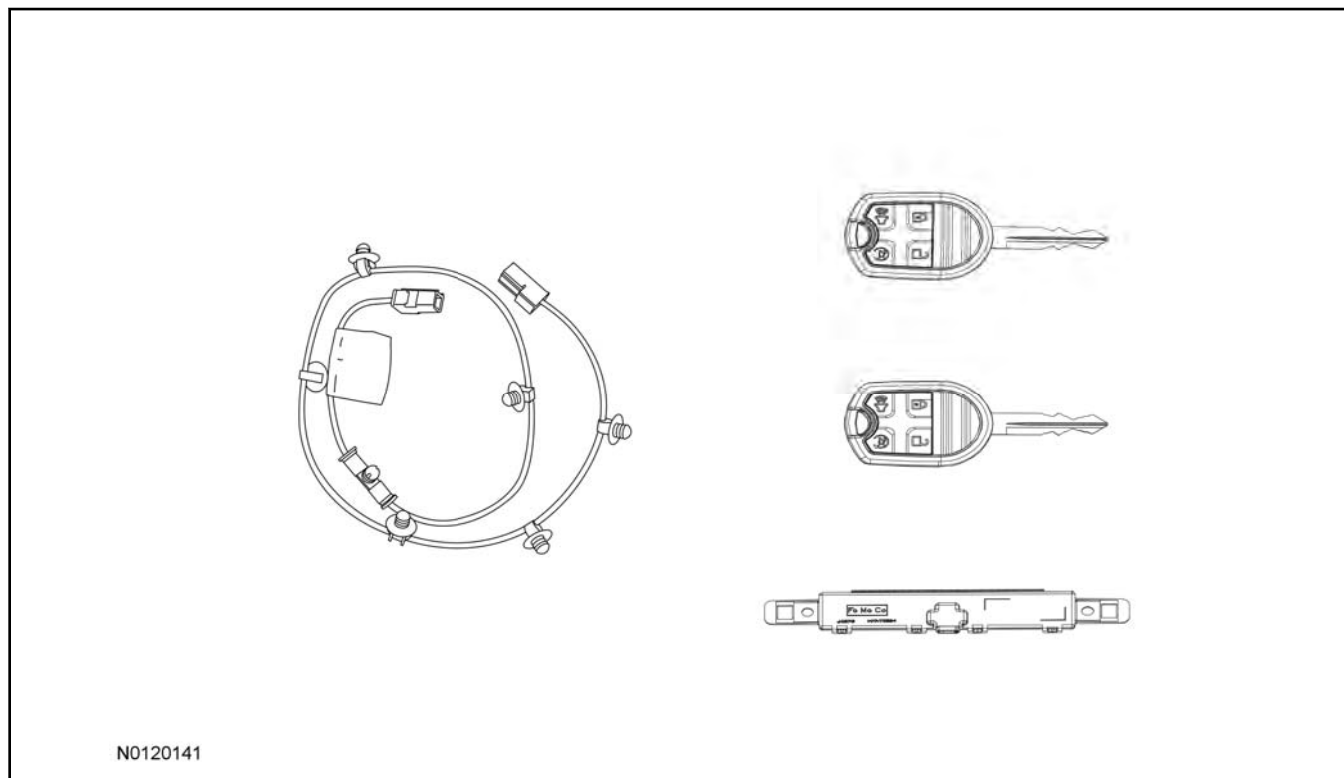
### GENERAL PROCEDURES

[Remote Start System Activation](#)  
[Functional Test](#)

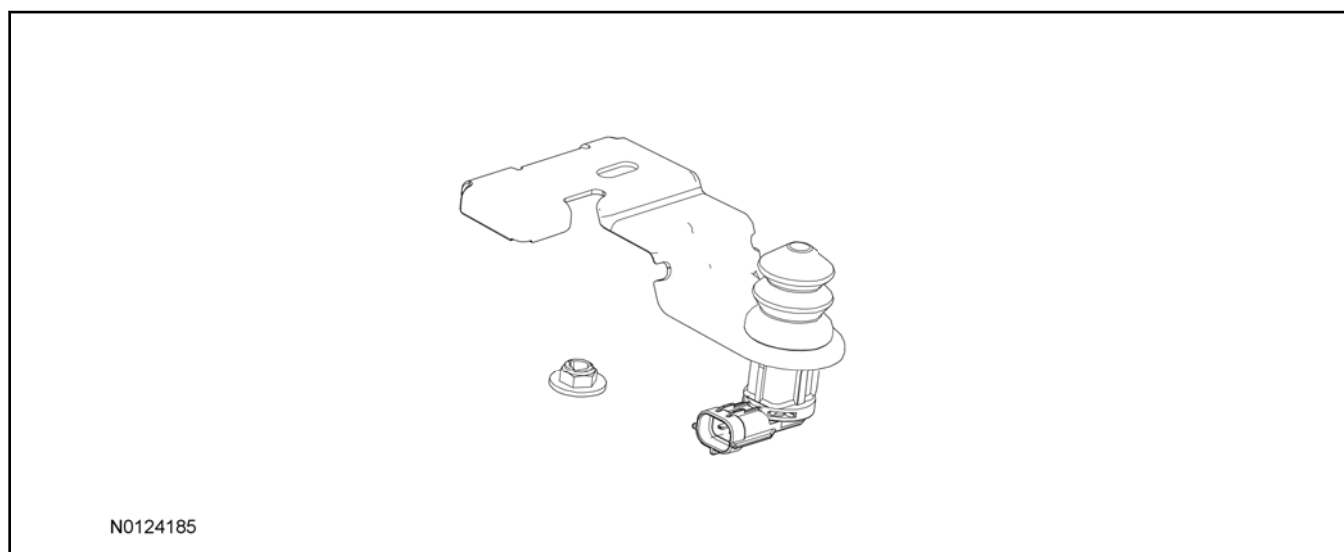
## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



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



### F-150

#### NOTE:

The OE Remote Start kit is only applicable on vehicles that have power locks.

**INSTALLATION (Continued)**

1. Verify correct kit number.

**Review Remote Start Installation Kit Contents**

2. Review the RMST kit contents.

**Remote Start System OE Kit (RMST)**

| QUANTITY | DESCRIPTION         |
|----------|---------------------|
| 2        | Key (4 Button)      |
| 1        | Antenna Jumper Wire |
| 1        | Antenna Module      |

**Review Hood Switch Kit Contents**

3. Review the Hood Switch kit contents.

**Hood Switch OE Kit**

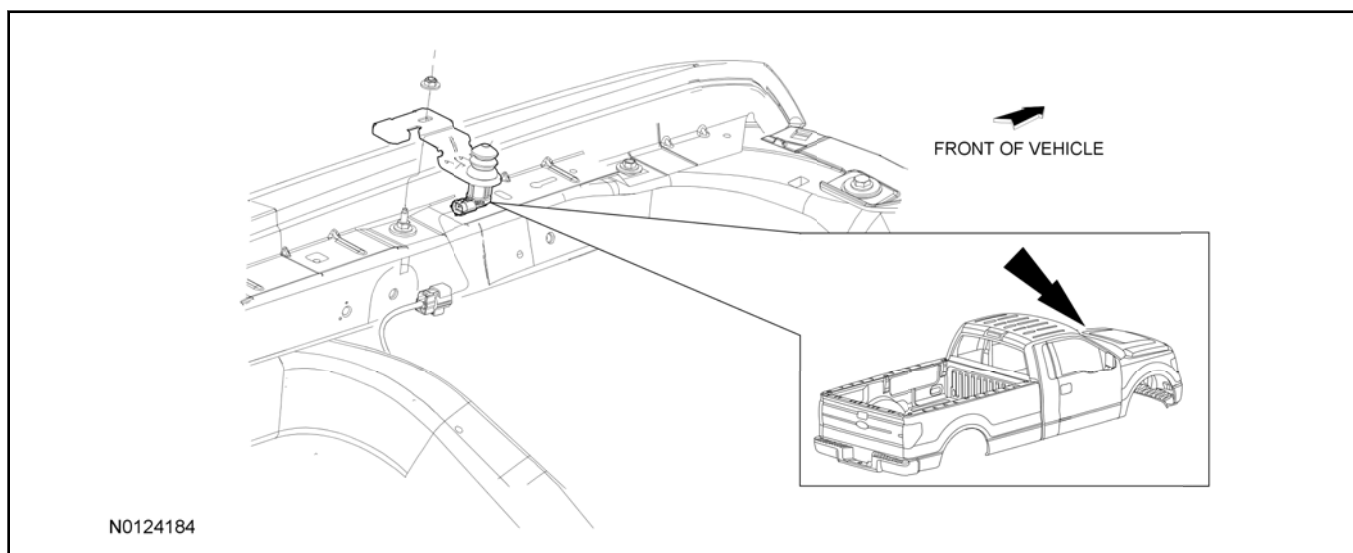
| QUANTITY | DESCRIPTION          |
|----------|----------------------|
| 1        | Bolt                 |
| 1        | Hood Switch Assembly |

**Vehicle preparation**

4. If the vehicle is not equipped with a 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).



7. Connect the electrical connector to the hood switch.

**INSTALLATION (Continued)****Spare Key Programming****NOTE:**

The hood switch is required for remote start activation.

**NOTE:**

Verify no related DTCs are present before beginning this procedure.

**NOTE:**

This procedure works only if 2 or more programmed keys are available. If 2 programmed keys are not available alternate programming methods in the workshop manual can be found at [www.fordtechservice.dealerconnection.com](http://www.fordtechservice.dealerconnection.com).

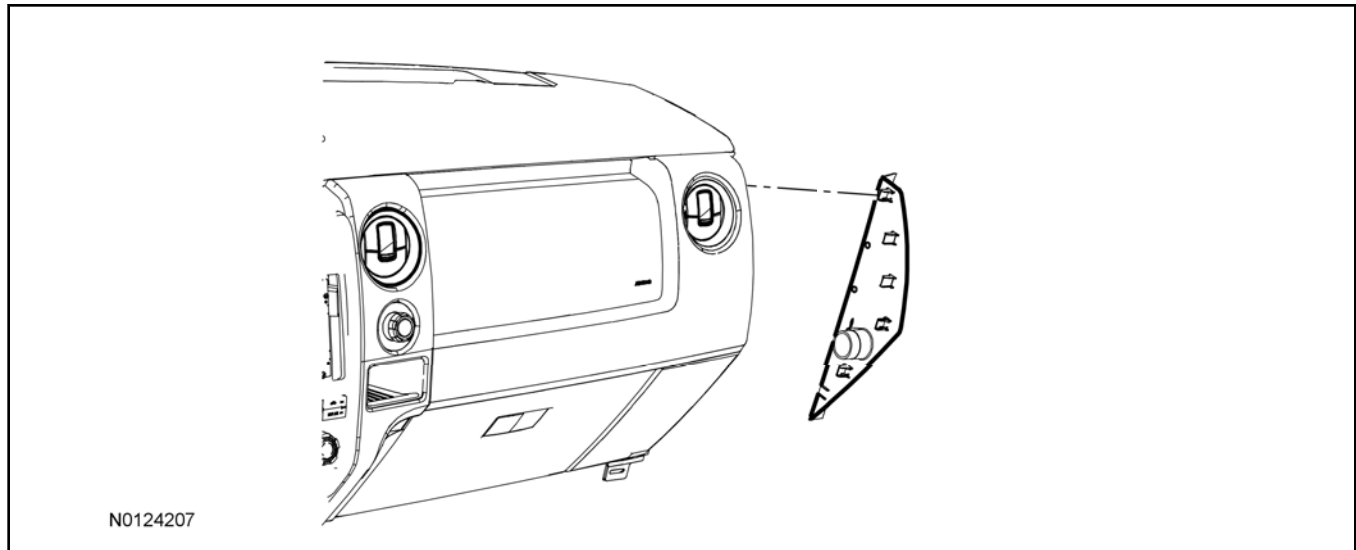
**NOTE:**

This procedure works only if the customer spare key programming is enabled. If customer spare key programming is disabled, refer to Key Programming — Enable/Disable Spare Key or Key Programming Using Diagnostic Equipment in the workshop manual located at [www.fordtechservice.dealerconnection.com](http://www.fordtechservice.dealerconnection.com).

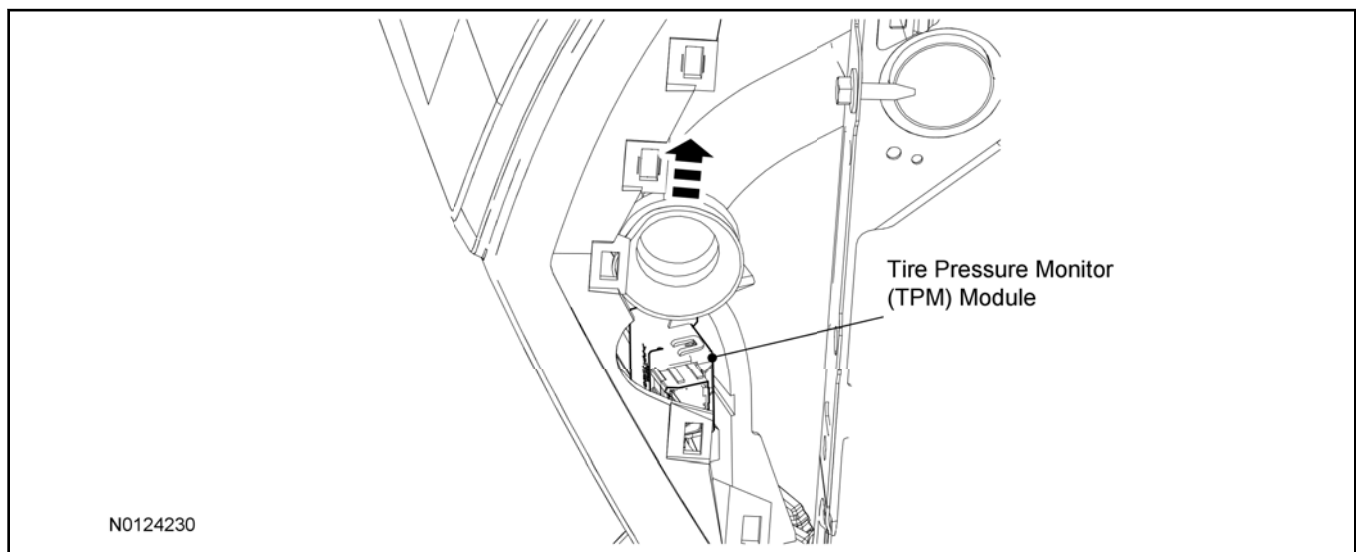
8. Cut the provided 4-button keys, that are going to be programmed to match the existing keys.
9. Insert the first programmed Passive Anti-Theft System (PATS) key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).
10. Turn the first key to the OFF position and remove the key from the ignition.
11. Within 10 seconds of turning the key to the OFF position, insert a second programmed PATS key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).
12. Turn the second key to the OFF position and remove the key from the ignition.
13. **NOTE:**  
The doors lock and then unlock to confirm that each Integrated Key Transmitter (IKT) is programmed.  
  
Within 10 seconds of turning the second key to the OFF position, insert the new, unprogrammed PATS key into the ignition and turn the key from the OFF position to the RUN position (maintain the key in the RUN position for approximately 3 seconds).
14. If it is desired to program additional key(s) (up to a total of 4 keys can be programmed), repeat Steps 1 - 5 for each additional key.

**Installation**

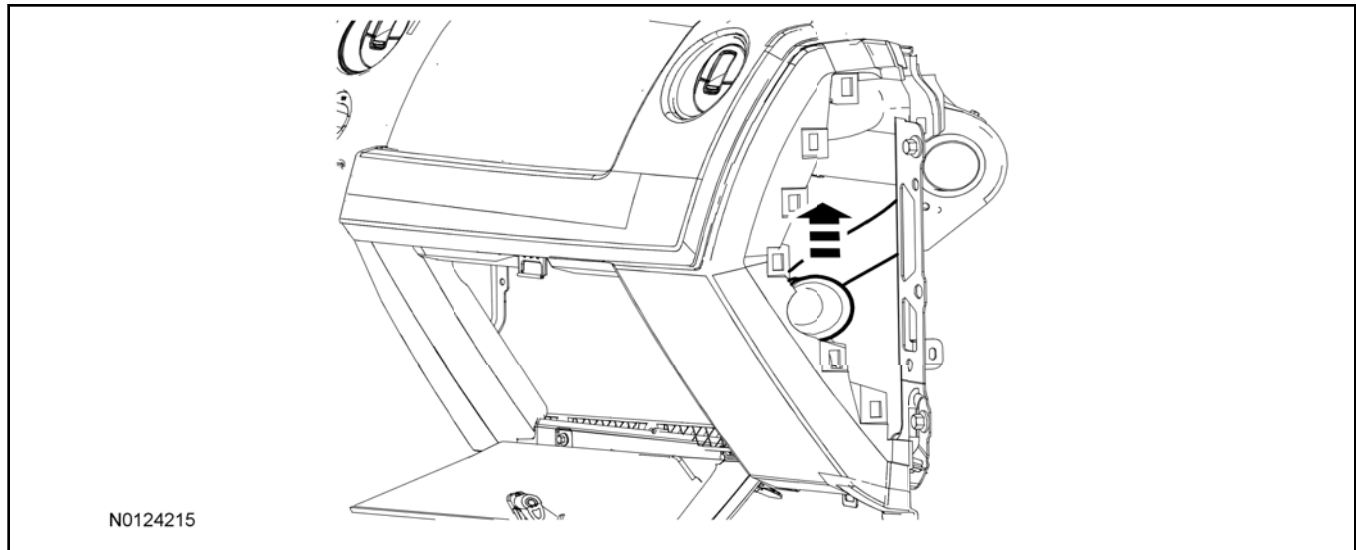
15. Remove the RH instrument panel side finish panel.

**INSTALLATION (Continued)**

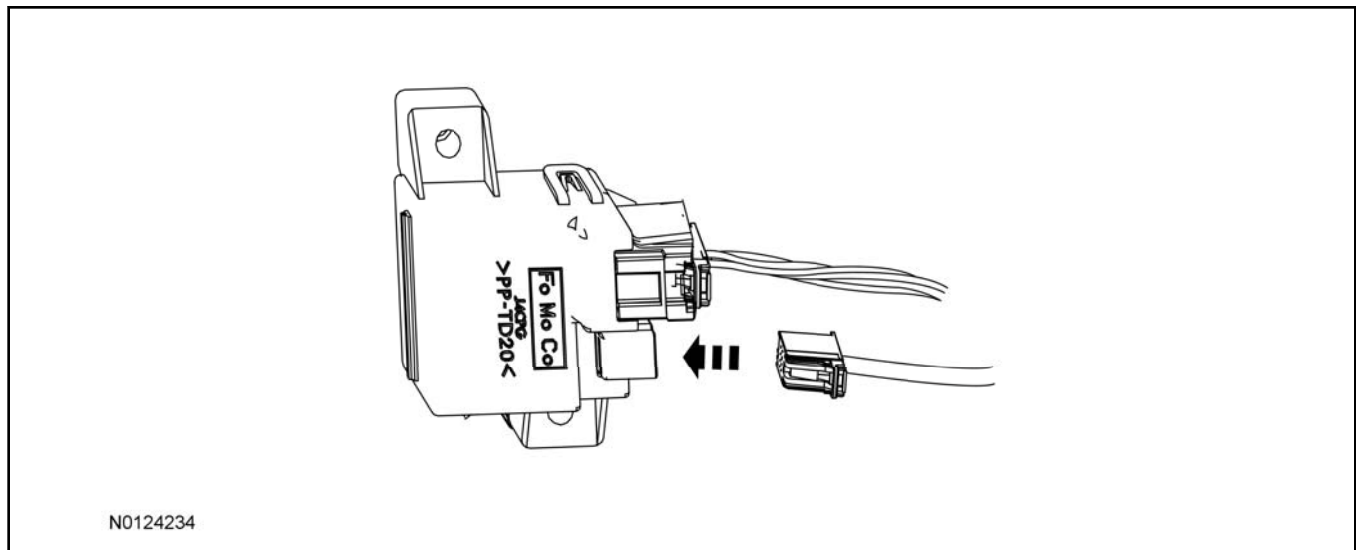
16. Open the glove compartment and empty the contents.
17. Push in the 2 side tabs and fully lower the glove compartment.
18. Locate the Tire Pressure Monitor (TPM) Module.



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

**INSTALLATION (Continued)**

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

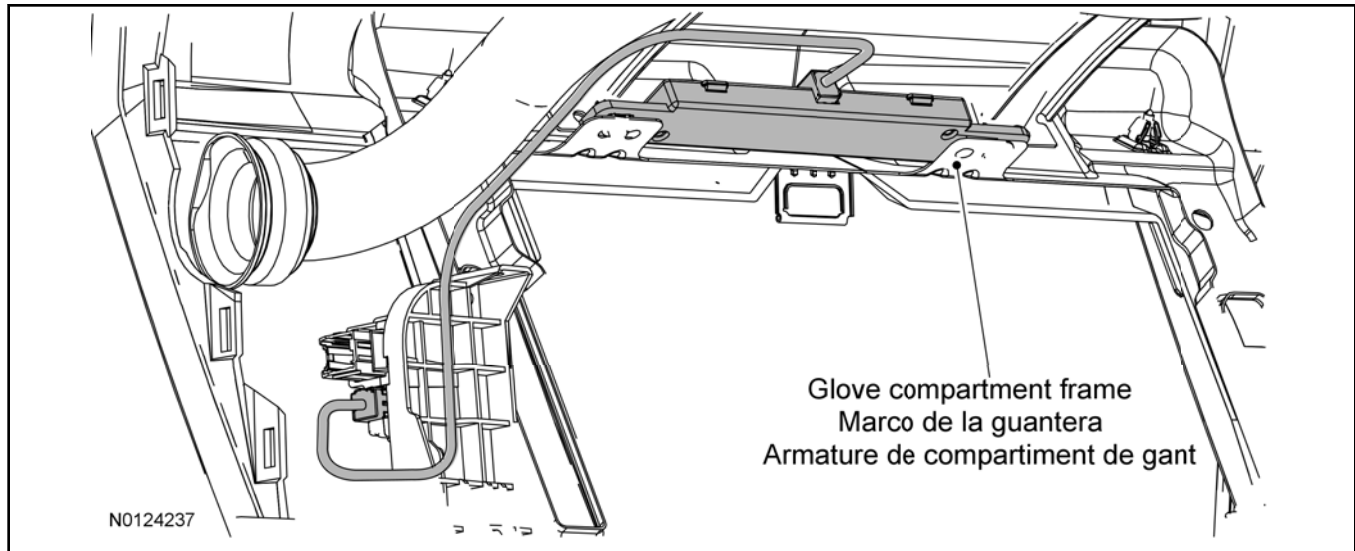


21. **NOTE:**

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)**

22. 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.

23. **NOTICE:**

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

Close the glove compartment.

24. Install the RH Instrument panel side finish panel.

### **Remote Start Activation**

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

26. Connect IDS.

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

27. 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.

28. 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.



**INSTALLATION (Continued)**

29. 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.
- Select remote start.
- Select duration
- Verify that the remote start system is set to 10 minutes

**Functional Test****NOTE:**

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

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

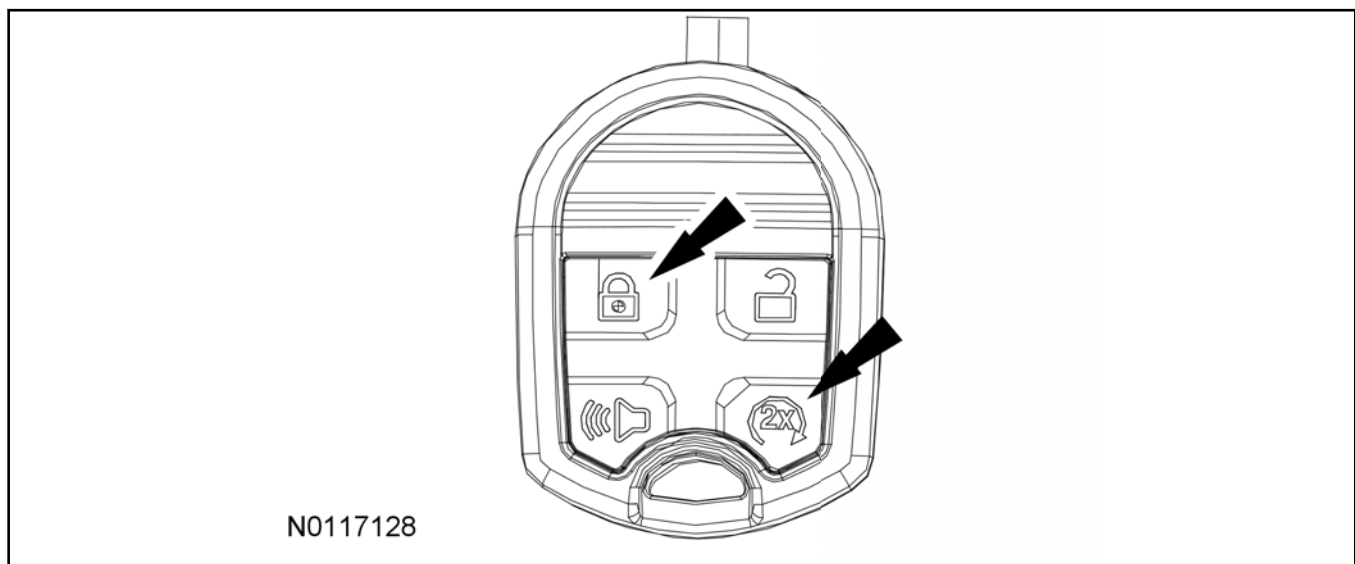
31. Close the hood.

32. Close all of the vehicle doors.

33. **NOTE:**

Verify that all of the newly programed keys function properly.

Start the vehicle by pressing the lock button once, then the remote start button 2 times on the newly programmed key.



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

35. Enter the vehicle and confirm that it cannot shift out of park.

36. Open the hood.

37. **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.**

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

### [VEHICLE PREPARATION](#)

[Hood Switch Kit Installation](#)

### [INSTALLATION](#)

[Remote Start](#)

### [GENERAL PROCEDURES](#)

[Remote Start System Activation](#)

[Learn Remote Start to Vehicle](#)

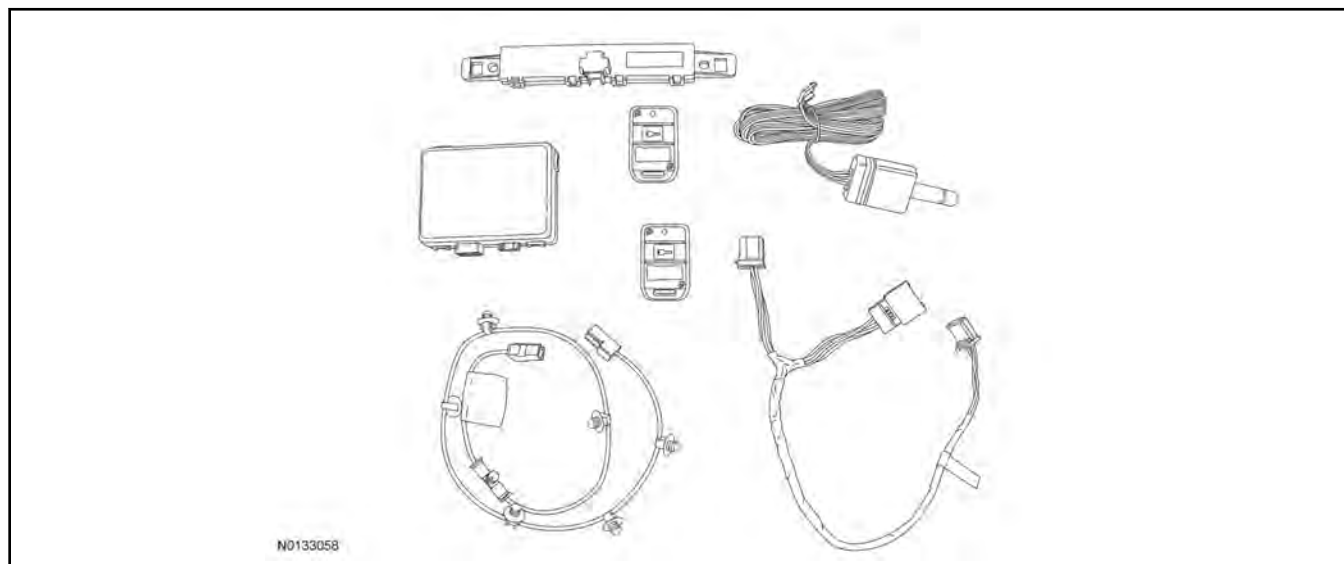
[Standard RMST - Functional Test](#)

[Bi-directional RMST - Functional Test](#)

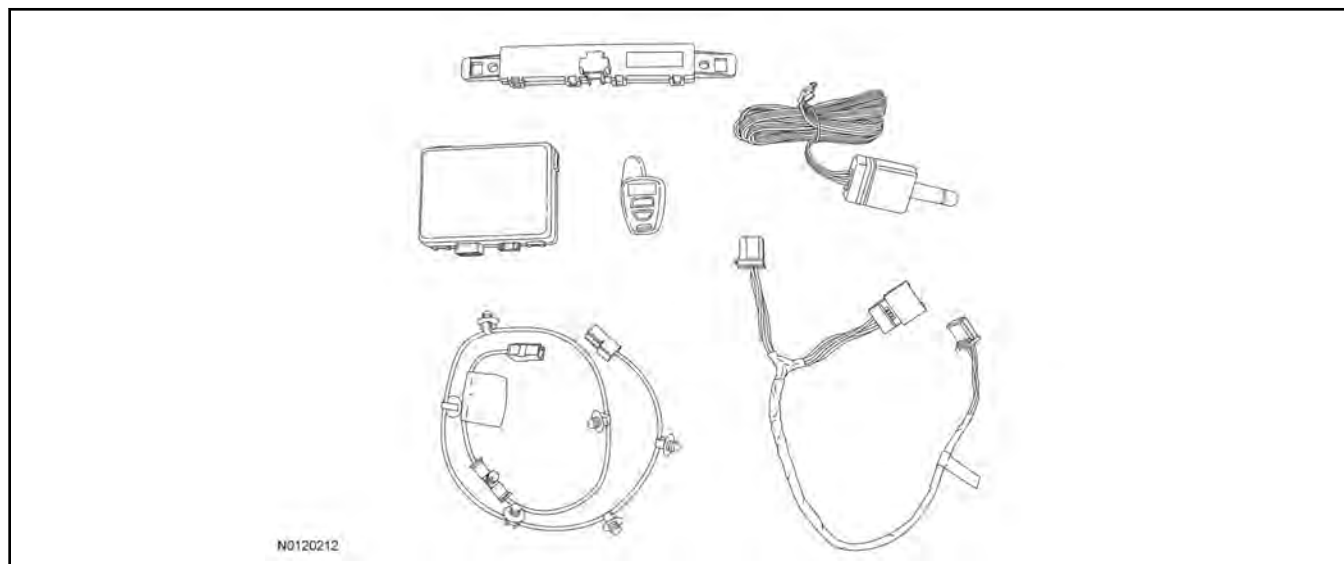
## INSTALLATION

### Remote Start

#### Standard Remote Start System (RMST) Components

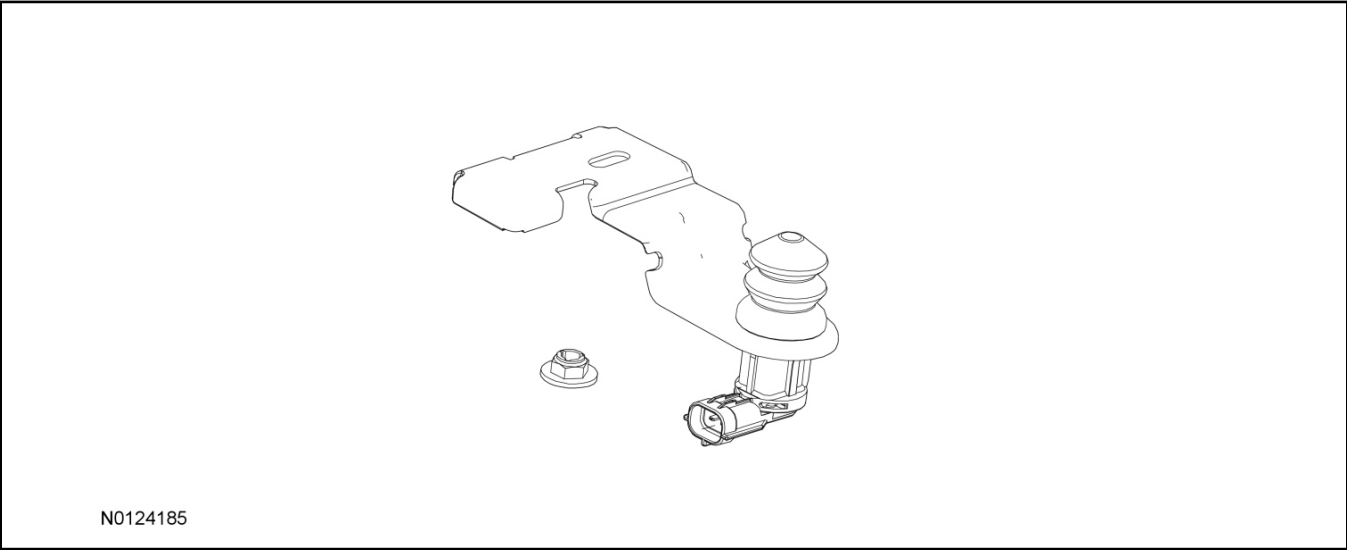


#### Bi-directional Remote Start System (RMST) Components



INSTALLATION (Continued)

Hood switch Kit Components - Sold separately if needed



F-150

- 1. Verify correct kit number.

Review Standard RMST Kit Contents

- 2. Review the Standard RMST kit contents.

Standard RMST Kit

| QUANTITY | DESCRIPTION                |
|----------|----------------------------|
| 4        | Ucpf ctf "3"Dwwqp"Mg{ 'Hqd |
| 1        | Antenna Jumper Wire        |
| 1        | Antenna Module             |
| 1        | Remote Start Module        |
| 1        | Standard Antenna           |
| 1        | T-harness                  |

Review Bi-directional RMST Kit Contents

- 3. Review Bi-directional RMST Kit Contents

Bi-directional RMST Kit

| QUANTITY | DESCRIPTION                   |
|----------|-------------------------------|
| 3        | Dk/f kt ge vk qp cti Mg{ 'Hqd |
| 1        | Antenna Jumper Wire           |
| 1        | Antenna Module                |
| 1        | Remote Start Module           |
| 1        | Bi-directional Antenna        |
| 1        | T-harness                     |

**INSTALLATION (Continued)****Review Hood Switch Kit Contents**

4. Review the Hood Switch kit contents.

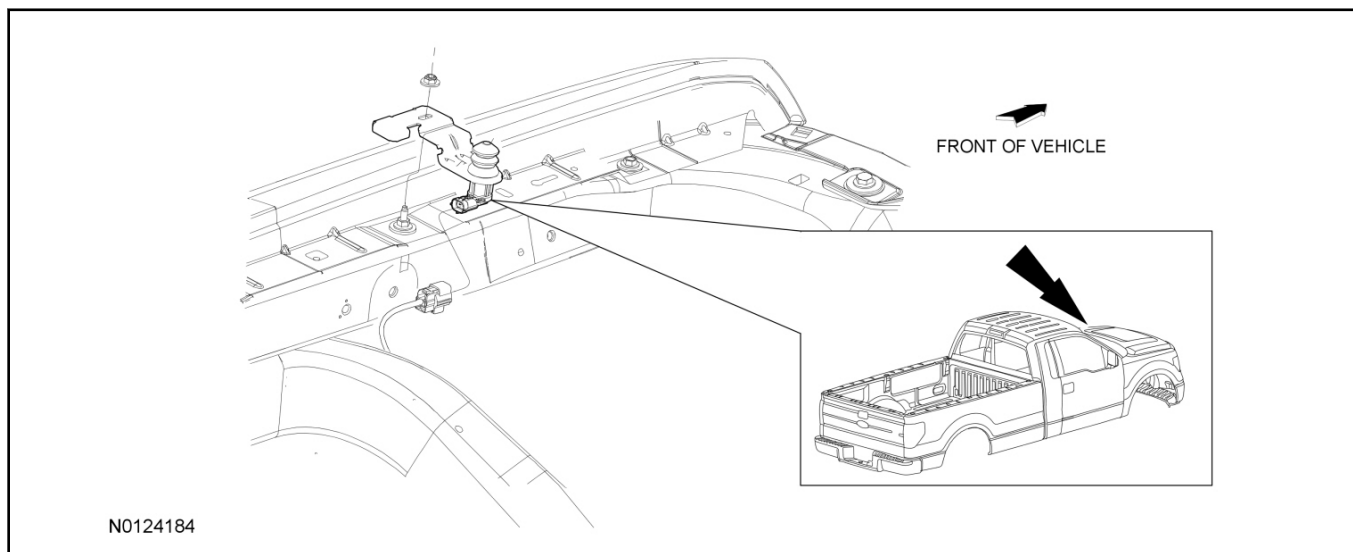
**Hood Switch OE Kit**

| QUANTITY | DESCRIPTION          |
|----------|----------------------|
| 3        | Dqrw                 |
| 1        | Hood Switch Assembly |

5. 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**

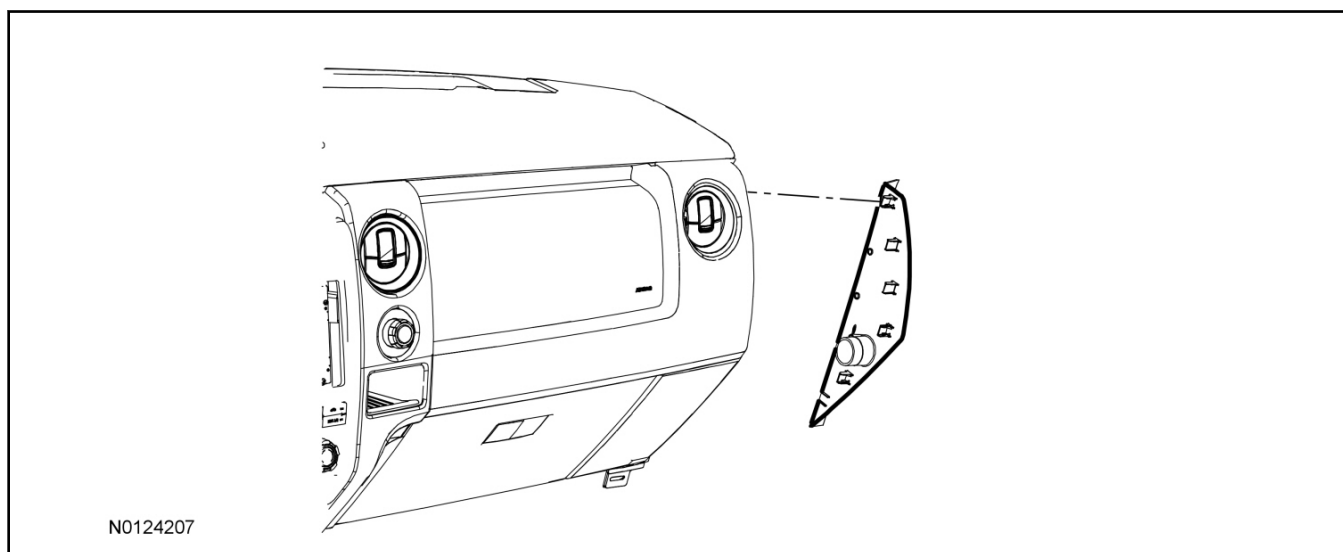
6. Locate the hood switch electrical connector located on the coolant reservoir.
- Disconnect the hood switch electrical connector from the coolant reservoir retainer plug.
7. Install the Hood switch assembly.
- Install the nut.
  - Tighten to 6 Nm (53 lb-in).



8. Connect the electrical connector to the hood switch.

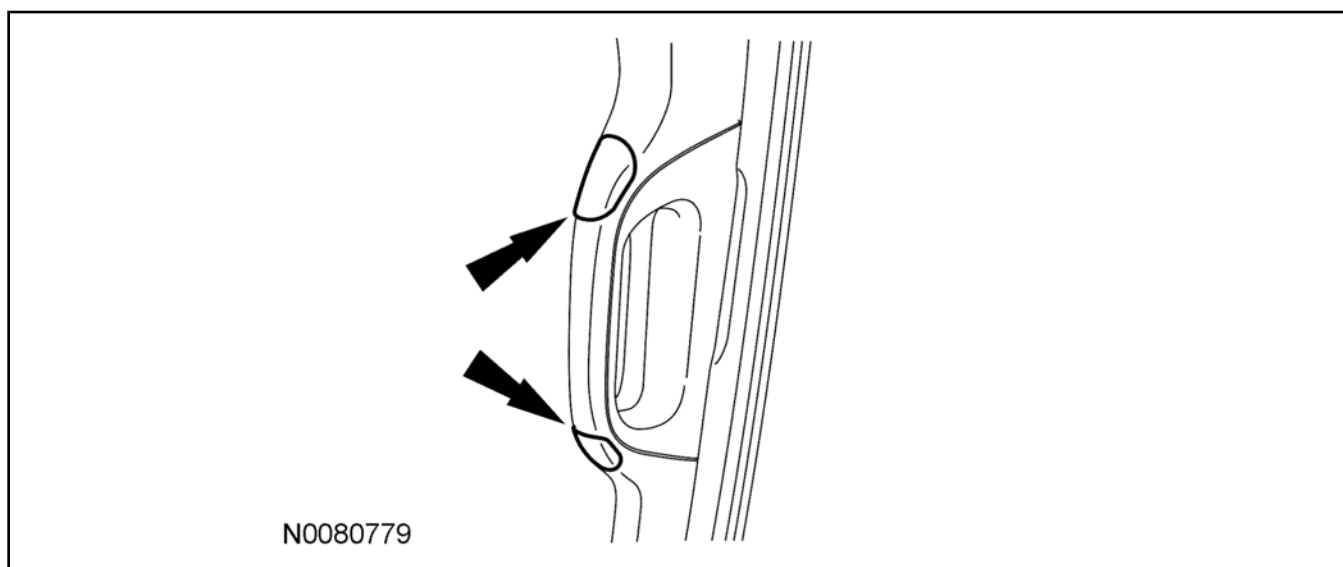
**Vehicle preparation**

9. Remove the RH instrument panel side finish panel.

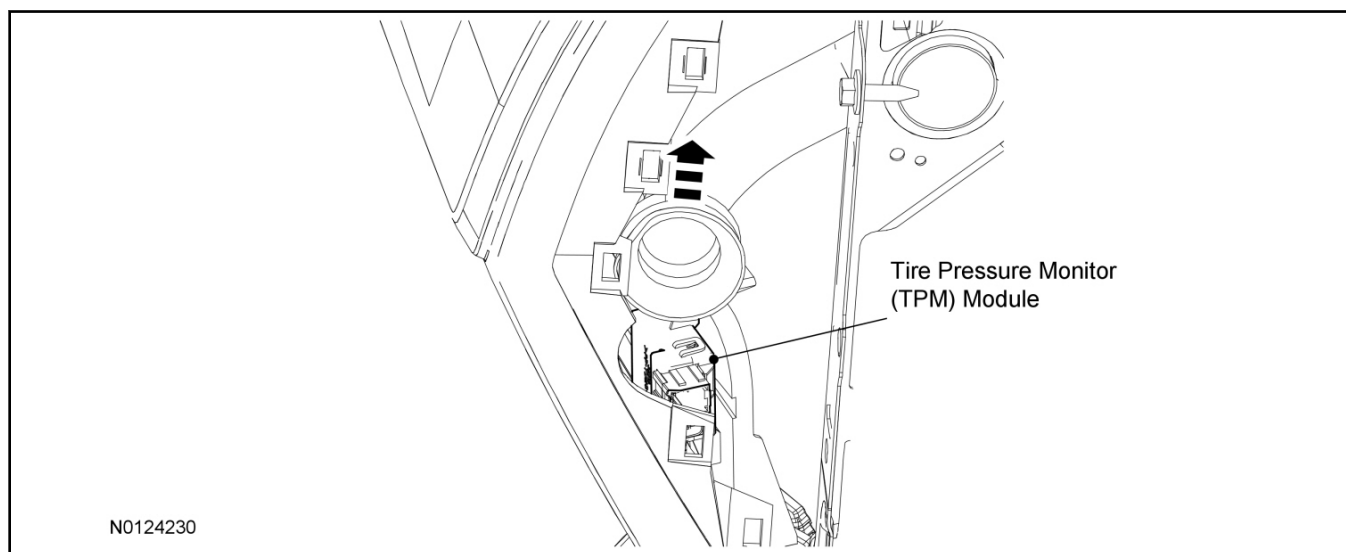
**INSTALLATION (Continued)****10. NOTICE:**

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.

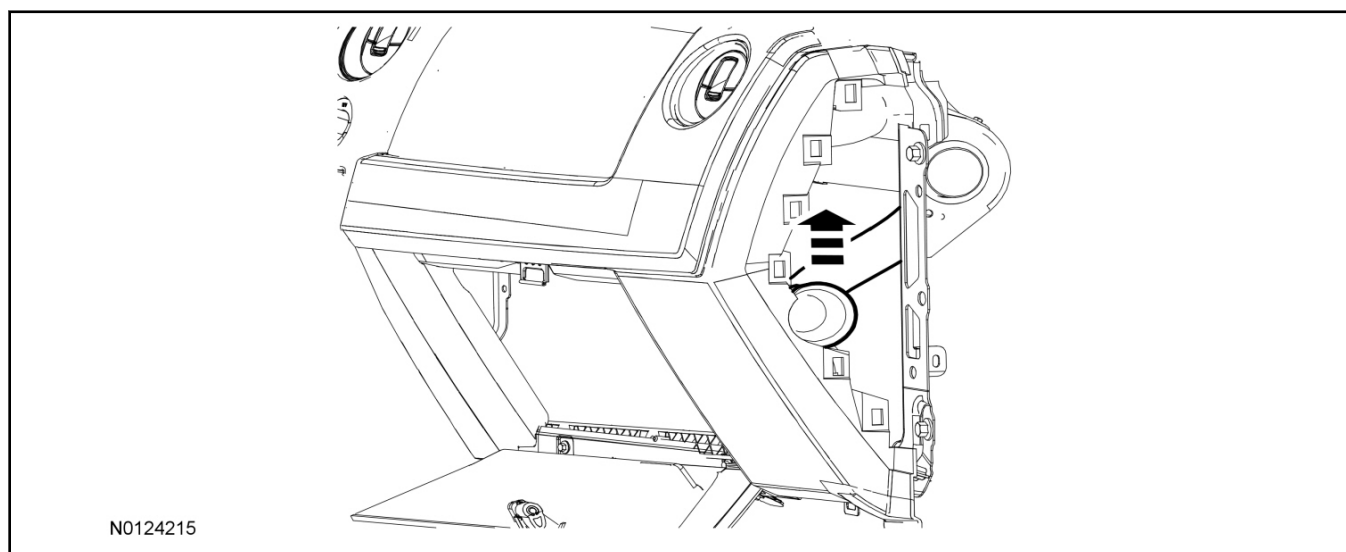
Remove the passenger side assist handle bolt covers.



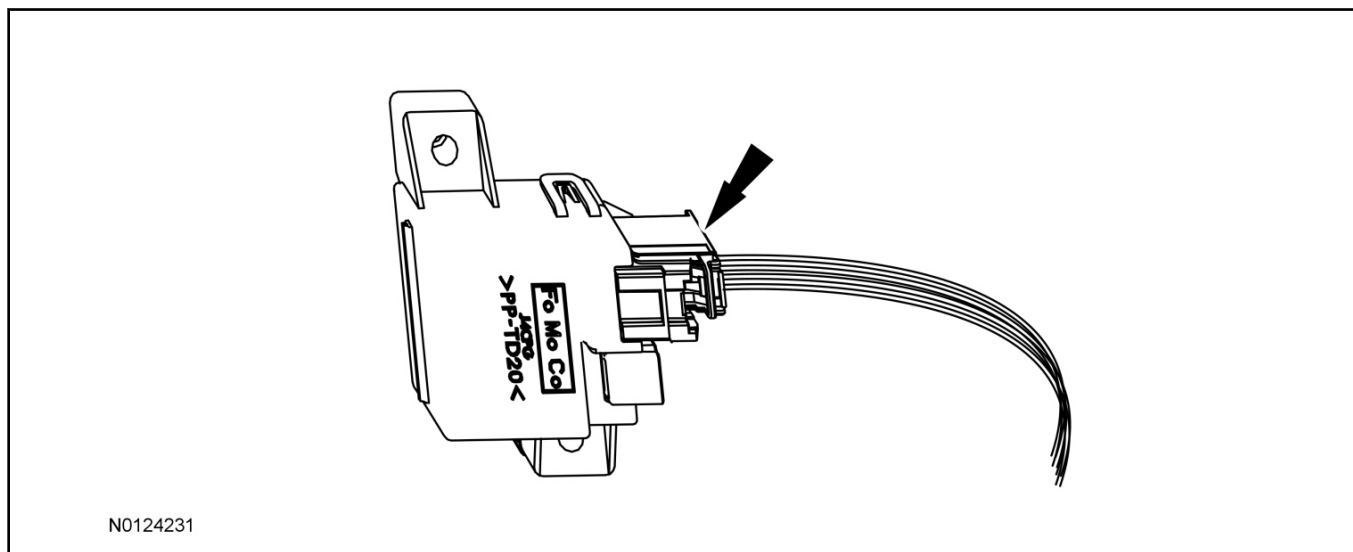
11. Remove the assist handle bolts.
12. If equipped with a speaker in the A-pillar trim panel, disconnect the speaker electrical connector.
13. Remove the RH A-pillar trim panel.
  - Pull outward to release the retainer clip.
14. Open the glove compartment and empty the contents.
15. Push in the 2 side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

**INSTALLATION (Continued)**

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



18. **NOTE:**  
Instrument panel removed for clarity.  
Disconnect the TPM module.

**INSTALLATION (Continued)****Antenna Mounting****NOTE:**

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

**NOTE:**

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

19. Choose a suitable antenna mounting location based on the guidelines above.

**Install The Antenna**

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

**NOTE:**

Do not touch the adhesive, reduced adhesion may result.

**NOTE:**

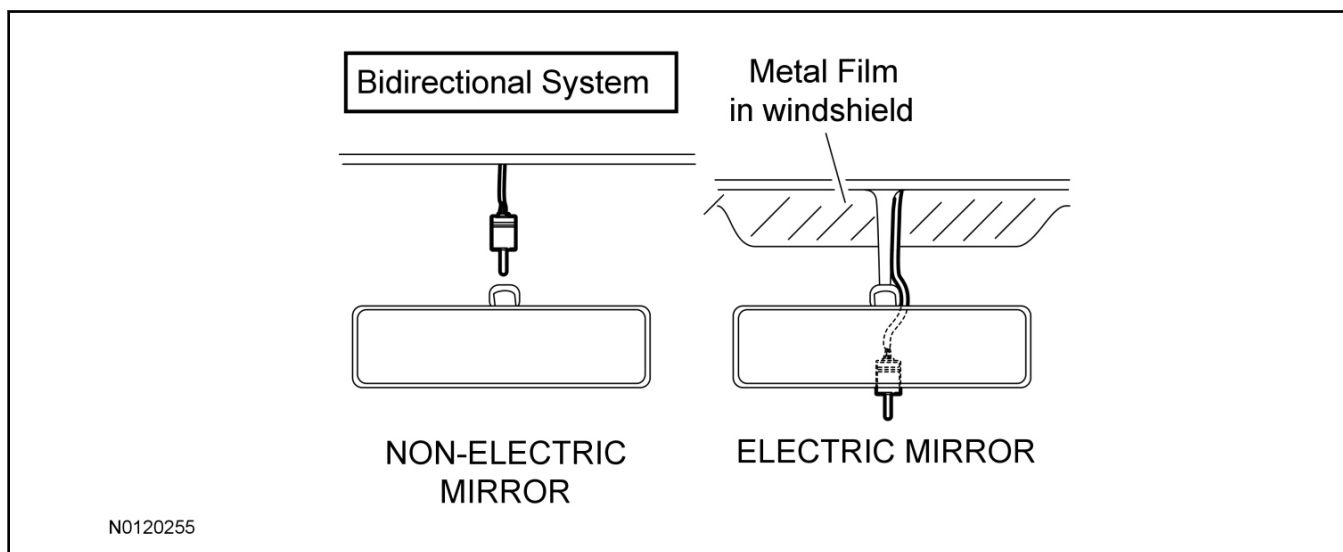
Make sure that the long wire on the antenna is pointing towards the top of the windshield since this wire will be routed along the headliner.

**NOTE:**

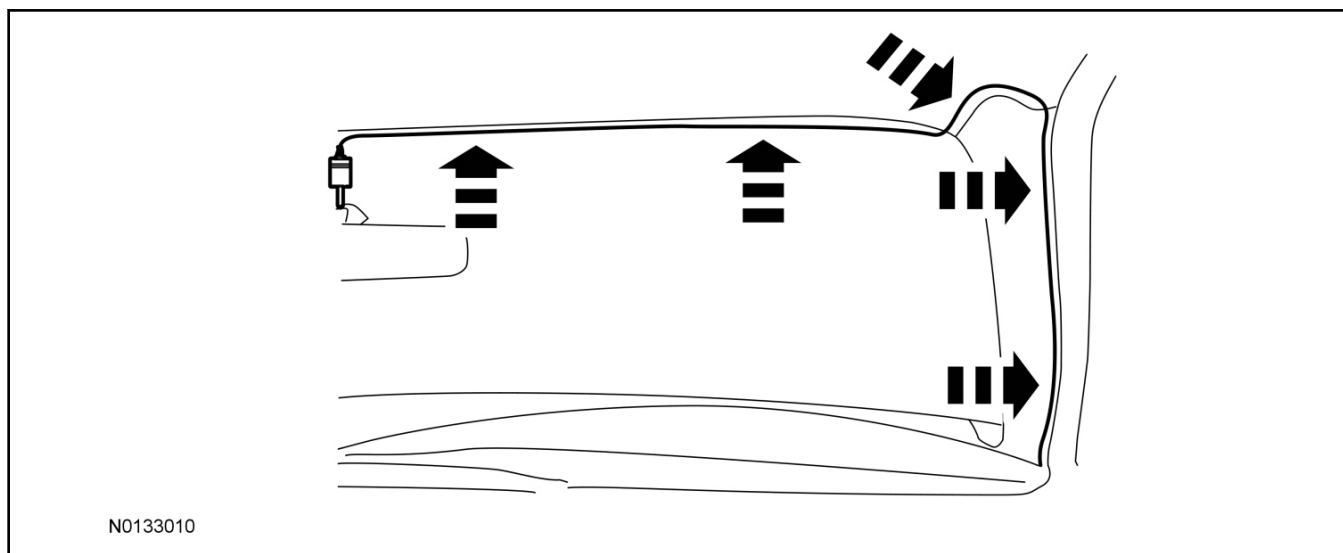
The antenna electrical connector will be attached to the control module later in this procedure.

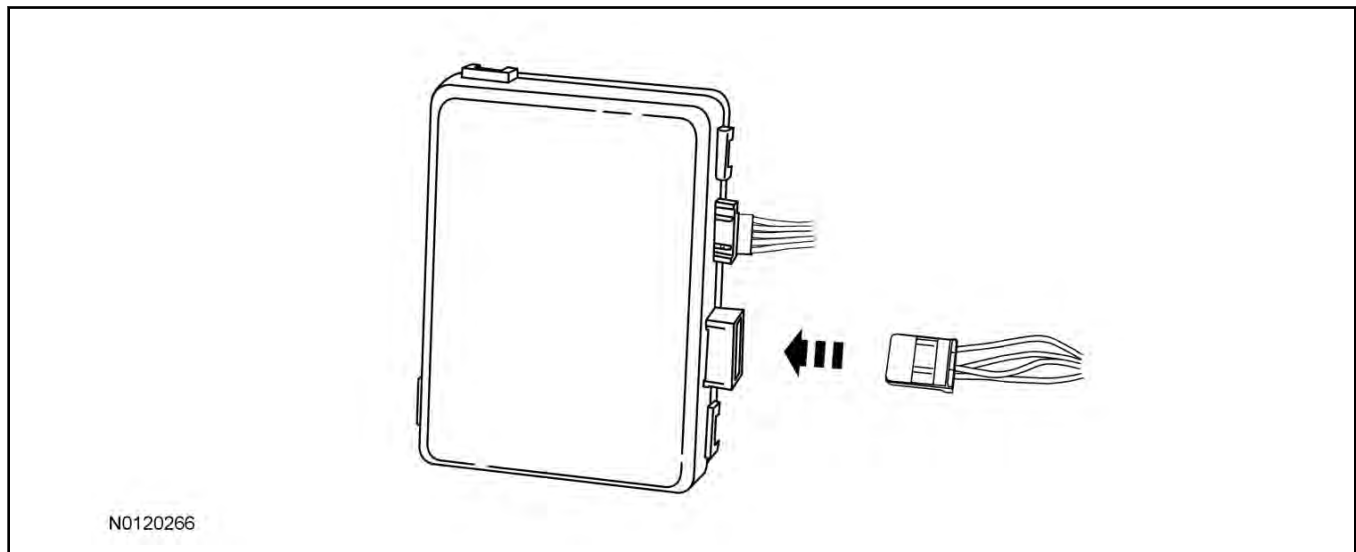
21. Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



**INSTALLATION (Continued)****22. Route the antenna cable.**

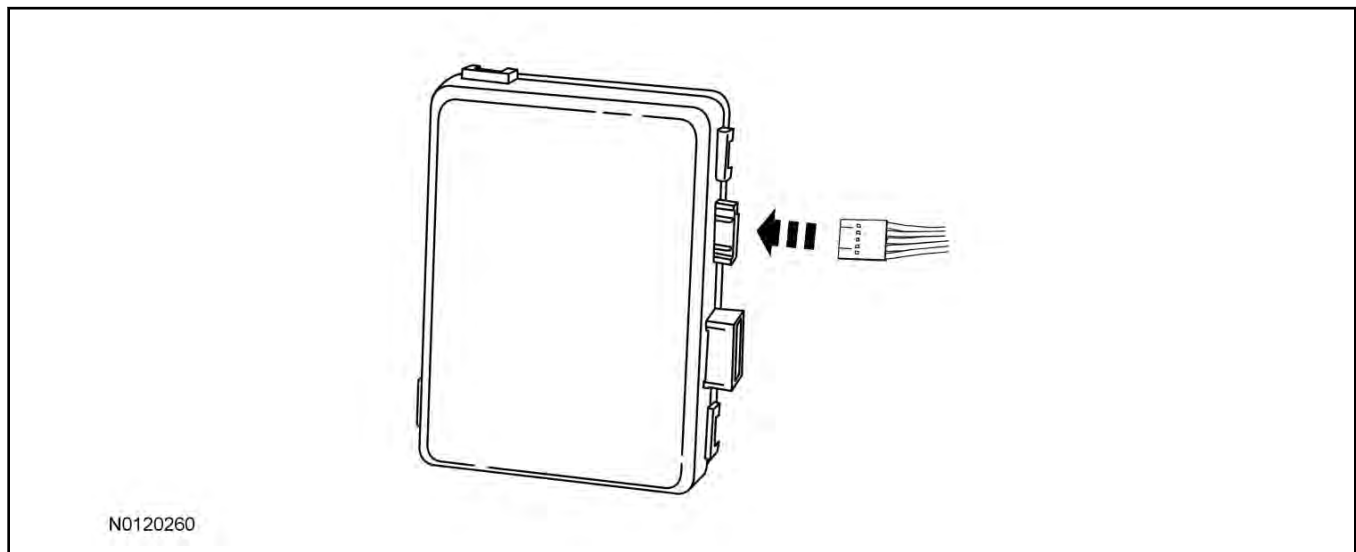
- Route inside the headliner to the A-pillar.
- Route down the A-pillar, behind the side air bag. Secure as required with tie-straps.
- Continue routing into the RH instrument panel side trim area and inside the instrument panel, coming out of the glove box.

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

**INSTALLATION (Continued)**

24. Connect the antenna to the CGEA module.

- Secure the antenna harness with tie-straps.



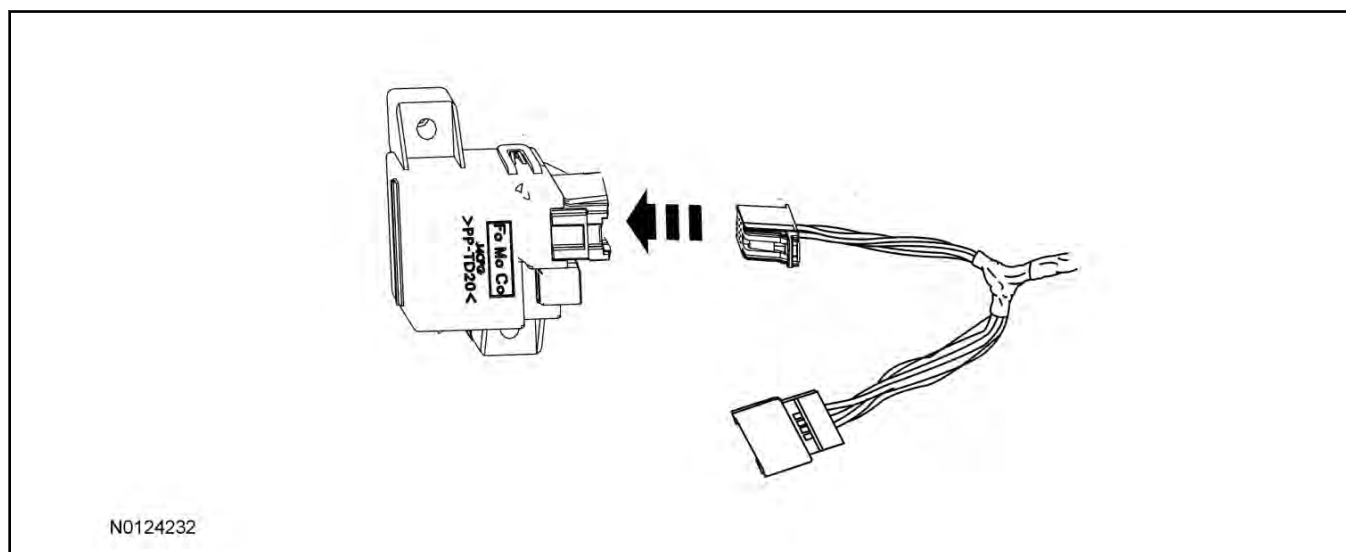
25. Position the CGEA module into the glove box opening. Secure the CGEA module to the air duct with tie-straps.

- Alternatively, the CGEA module can be mounted to the bulkhead metal surface behind the glove compartment opening.

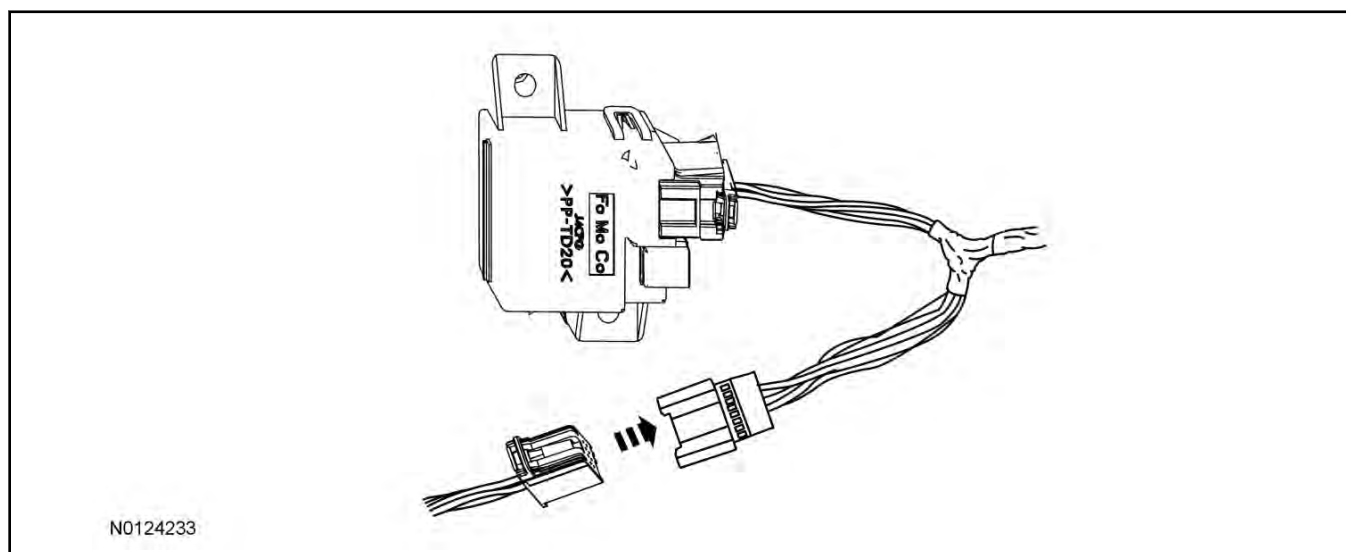
26. Route the female end of the T-harness to the TPM module.

- Secure the harness with tie-straps.

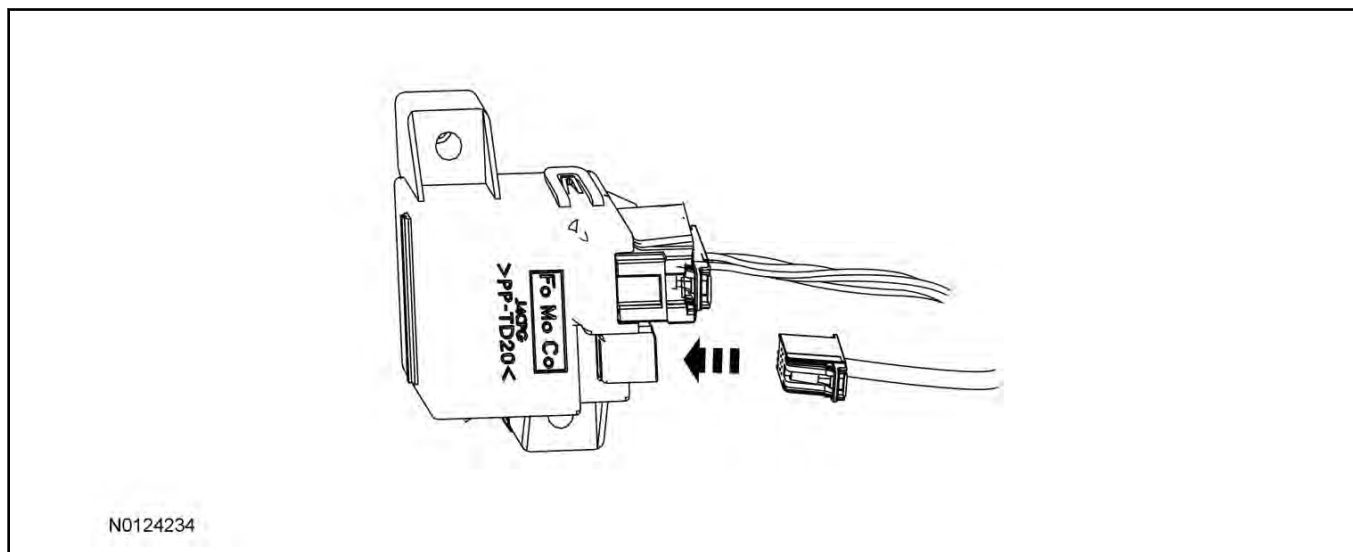
27. Connect the female end of the 8-pin T-harness to the TPM module.

**INSTALLATION (Continued)**

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



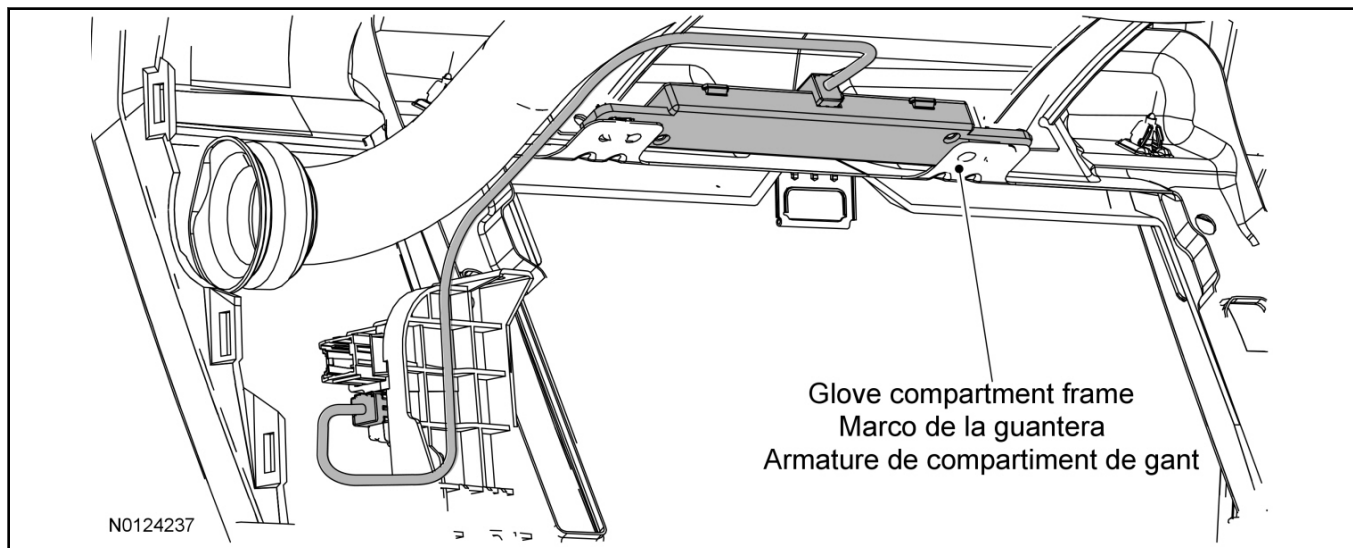
29. Connect the antenna jumper wire to the TPM module.

**INSTALLATION (Continued)****30. 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.

**31. 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.

**32. 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.

**33. Install the RH A-pillar trim panel.**

**INSTALLATION (Continued)**

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

**Remote Start Activation**

38. Verify that the IDS is updated to the most current version.
39. Connect IDS.
  - Follow the prompts to select new vehicle session.
  - Confirm VIN.
40. 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.
41. 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.
42. 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.
  - Select remote start.
  - Select duration.
  - Verify that the remote start system is set to 10 minutes.

**Learn Remote Start System to Vehicle****NOTE:**

Ensure the brake pedal is not depressed during this sequence.

43. Press the vehicles unlock button located on the drivers door, make sure all doors are unlocked.
44. Put the key in the ignition.

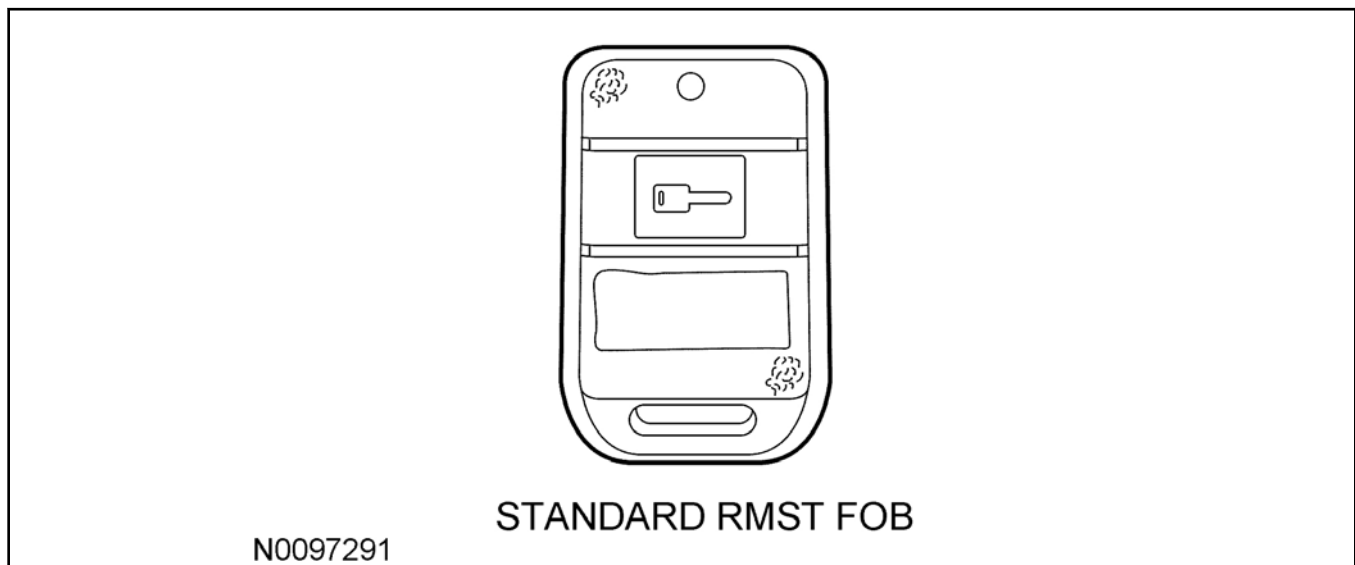
**INSTALLATION (Continued)**

45. 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.
46. Press the panic button on the 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.

**Standard RMST Functional Test****NOTE:**

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

47. Make sure the ignition is in "park" and the ignition is in the "off" position, remove all keys from the vehicle.
48. Close the hood.
49. Close all of the vehicle doors.
50. Start the vehicle by pressing and holding the remote start button on the remote start key fob for more than 2 seconds.



51. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
52. 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.
53. Open the hood.
54. **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.**

**INSTALLATION (Continued)****Bi-directional RMST Functional Test****NOTE:**

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

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.



56. Make sure the ignition is in "park" and the ignition is in the "off" position, remove all keys from the vehicle.
57. Close the hood.
58. Close all of the vehicle doors.
59. Start the vehicle by pressing the remote start button 2 times on the bi-directional key fob.
60. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
61. 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.
62. Open the hood.
63. **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.**

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

### VEHICLE PREPARATION

Hood Switch Kit Installation

### INSTALLATION

Remote Start

### GENERAL PROCEDURES

Remote Start System Activation

Learn Remote Start to Vehicle

Standard RMST - Functional Test

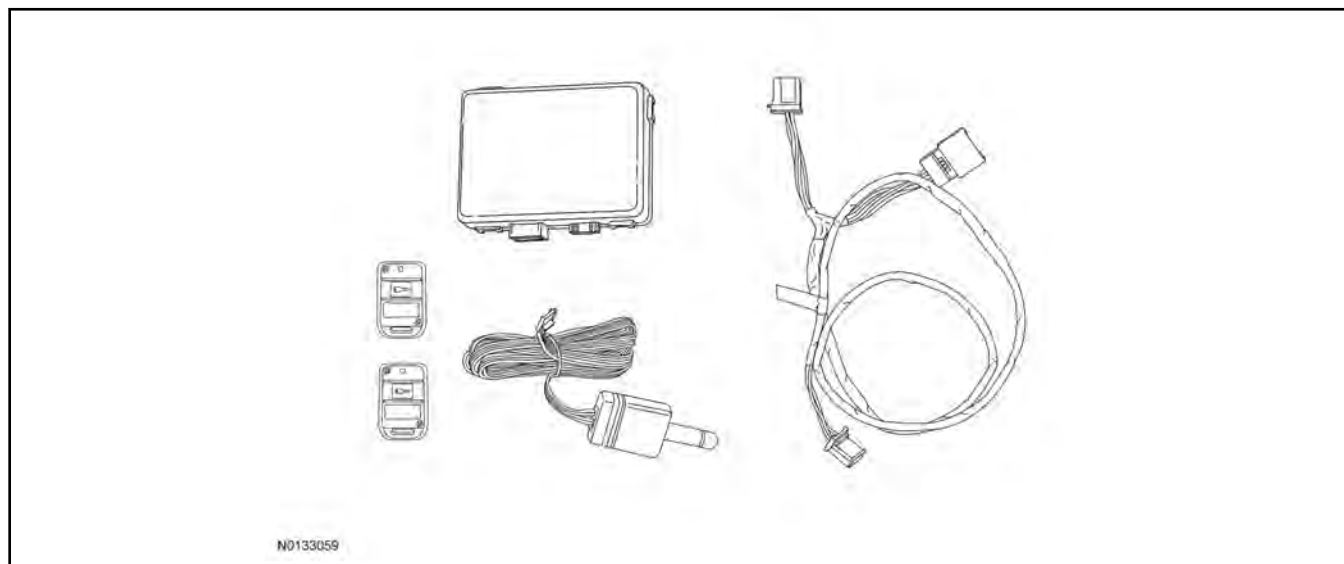
Bi-directional RMST - Functional Test



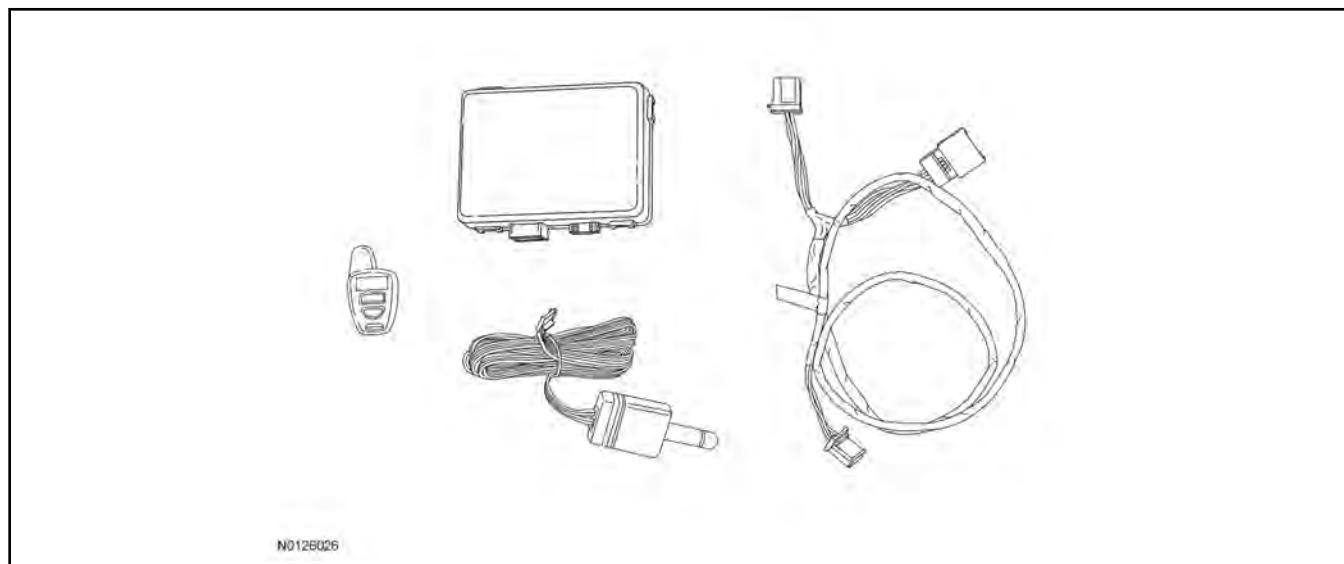
## INSTALLATION

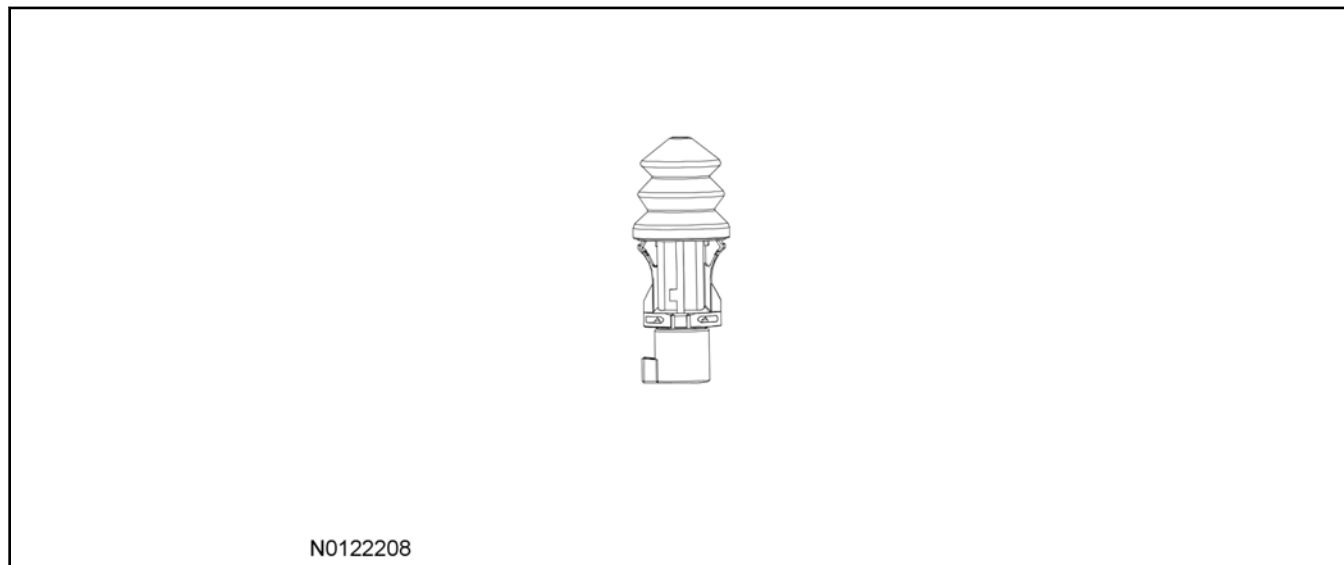
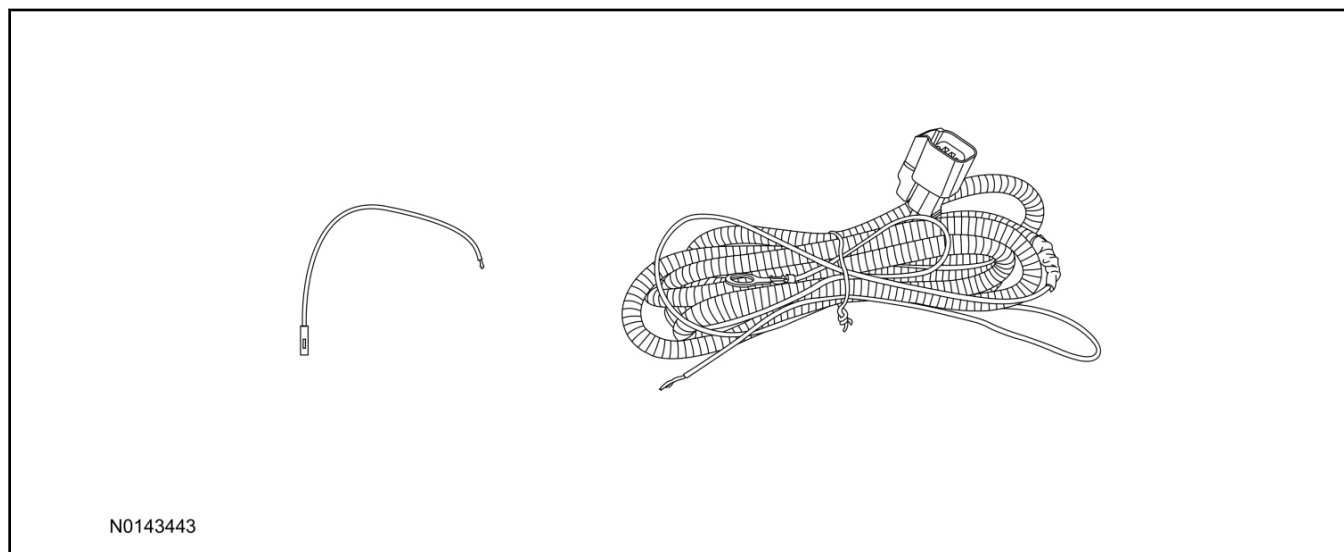
### Remote Start

#### Standard Remote Start System (RMST) Components



#### Bi-directional Remote Start System (RMST) Components



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

1. Verify correct kit number.

**Review Standard RMST Kit Contents**

2. Review the Standard RMST kit contents.

**Standard RMST Kit**

| QUANTITY | DESCRIPTION               |
|----------|---------------------------|
| 2        | Standard 1 Button Key Fob |
| 1        | Remote Start Module       |
| 1        | Standard Antenna          |

**INSTALLATION (Continued)****Standard RMST Kit(Continued)**

| <b>QUANTITY</b> | <b>DESCRIPTION</b>        |
|-----------------|---------------------------|
| 2               | Standard 1 Button Key Fob |
| 1               | T-harness                 |

**Review Bi-directional RMST Kit Contents**

## 3. Review Bi-directional RMST Kit Contents

**Bi-directional RMST Kit**

| <b>QUANTITY</b> | <b>DESCRIPTION</b>     |
|-----------------|------------------------|
| 1               | Bi-directional Key Fob |
| 1               | Remote Start Module    |
| 1               | Bi-directional Antenna |
| 1               | T-harness              |

**Review Hood Switch Kit Contents**

## 4. Review the Hood Switch kit contents.

**Hood Switch Kit**

| <b>QUANTITY</b> | <b>DESCRIPTION</b>   |
|-----------------|----------------------|
| 1               | Hood Switch Assembly |

**Review Hood Switch Wire Harness Kit Contents**

## 5. Review the Hood Switch kit contents.

**Hood Switch Wire Harness Kit**

| <b>QUANTITY</b> | <b>DESCRIPTION</b>                      |
|-----------------|---|
| 1               | Body Control Module (BCM) Terminal Wire |
| 1               | Hood Switch Wire Harness                |

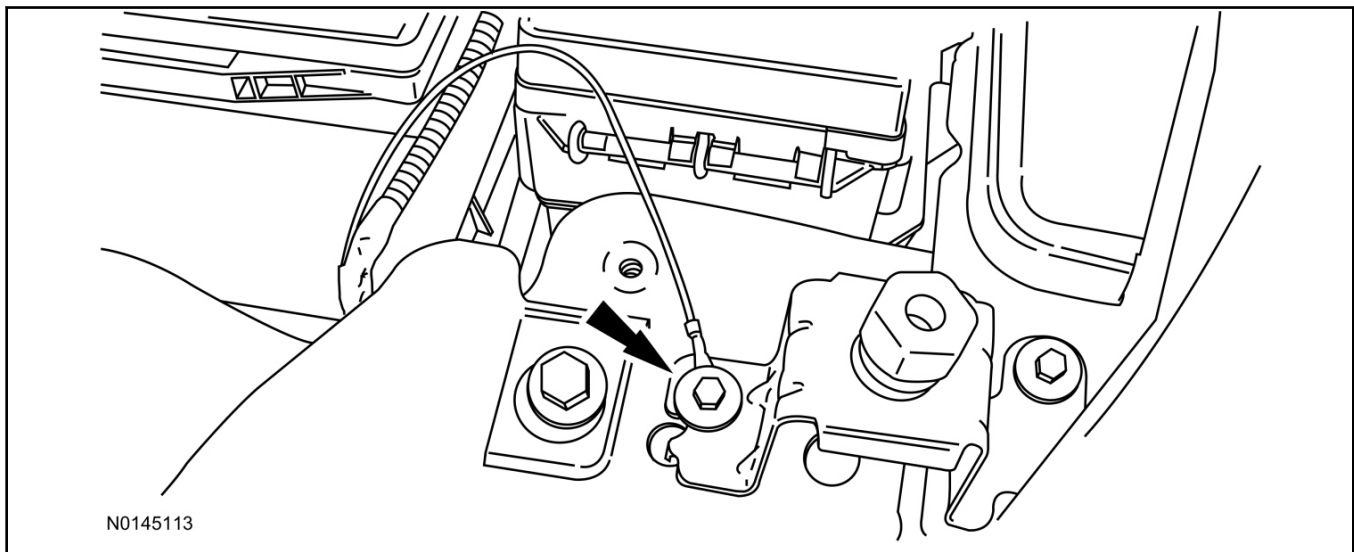
**Vehicle Preparation**

6. 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.

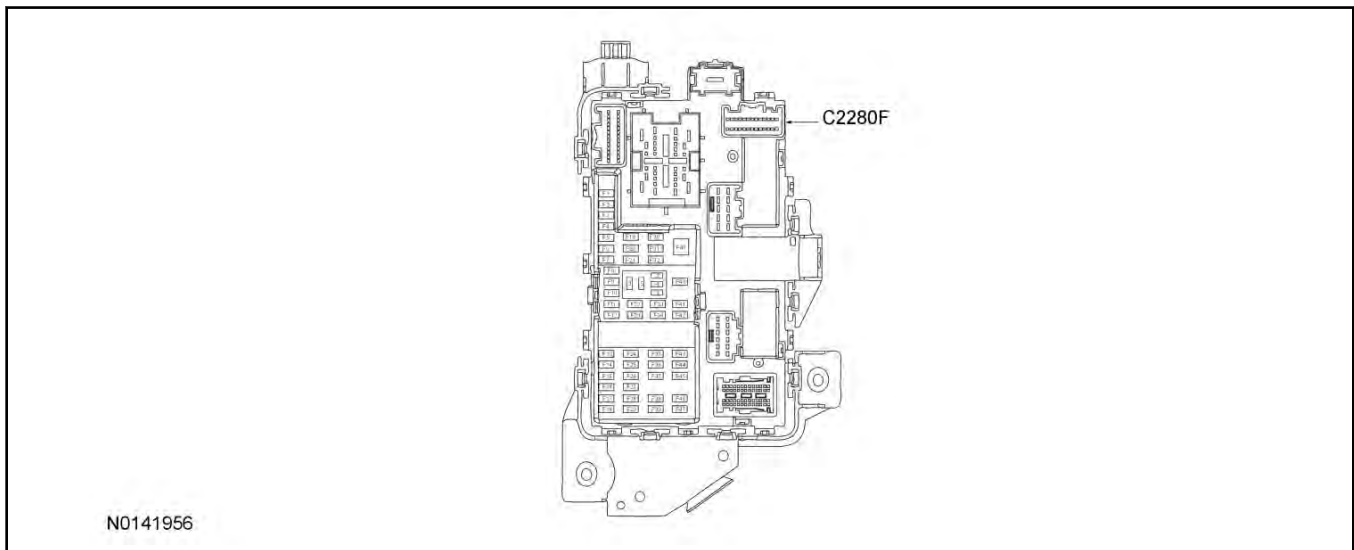
**Hood Switch Wire Harness Installation****NOTE:**

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

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

**INSTALLATION (Continued)**

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



10. 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.
11. **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.
12. Connect BCM connector C2280F.

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

Refer to "Proper Wire Splicing Techniques" before proceeding.

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

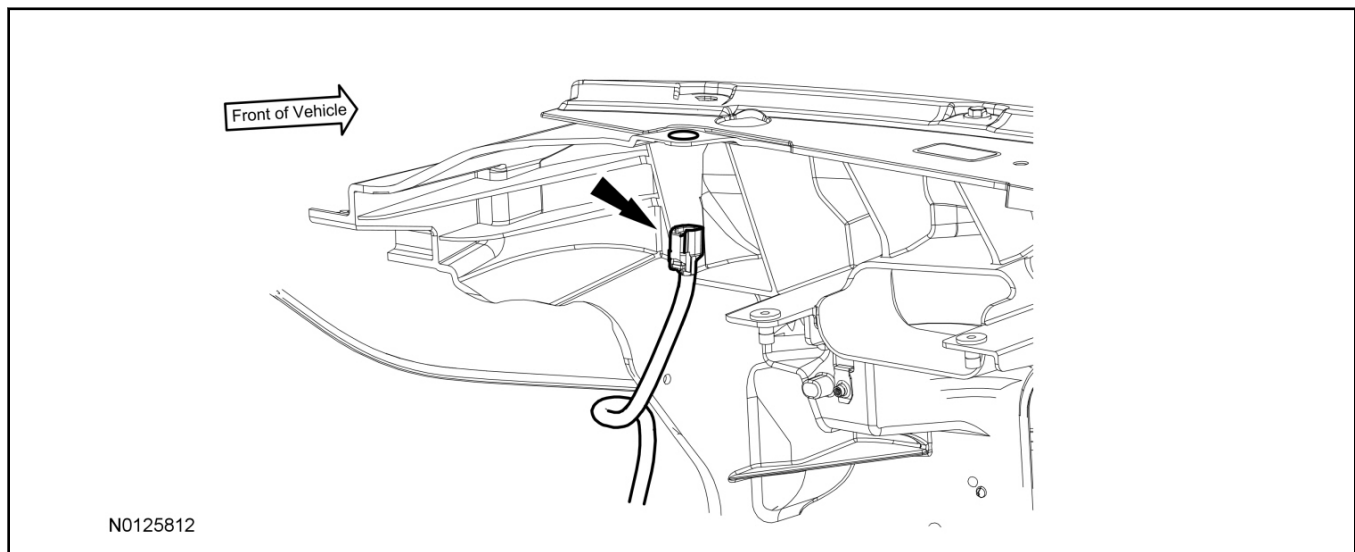
- Secure the wire harness assembly with zip-ties.

**Hood Switch Installation****NOTE:**

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

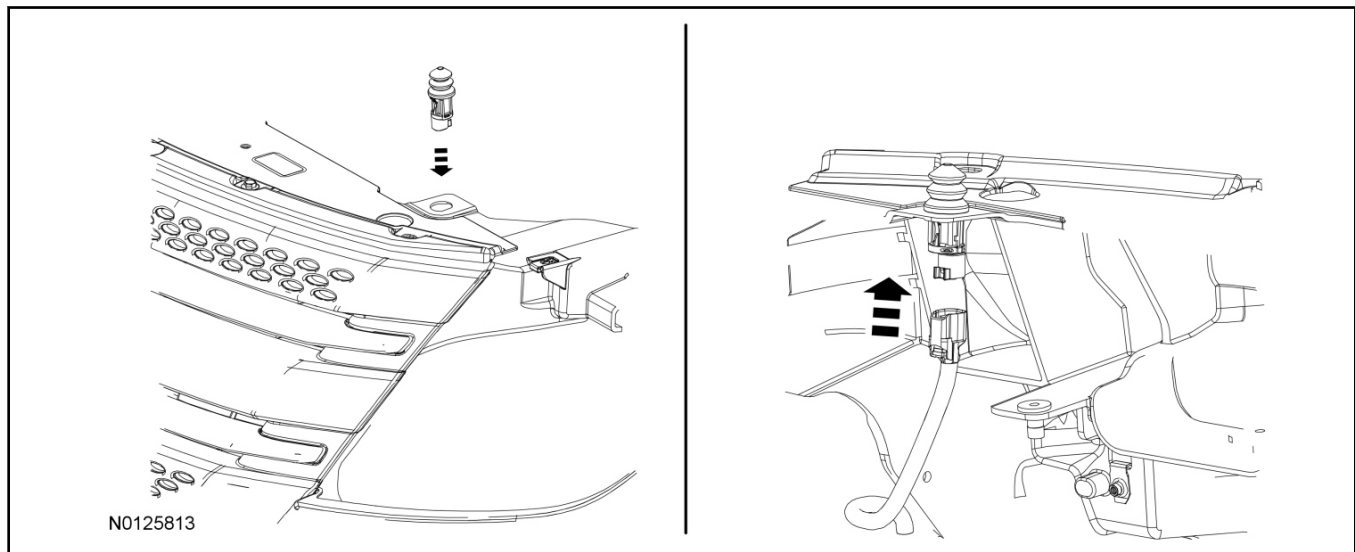
14. Locate the vehicle's existing "OE" hood switch wire harness, located on the LH side of the vehicle below the radiator core support.

- 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.



15. 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**

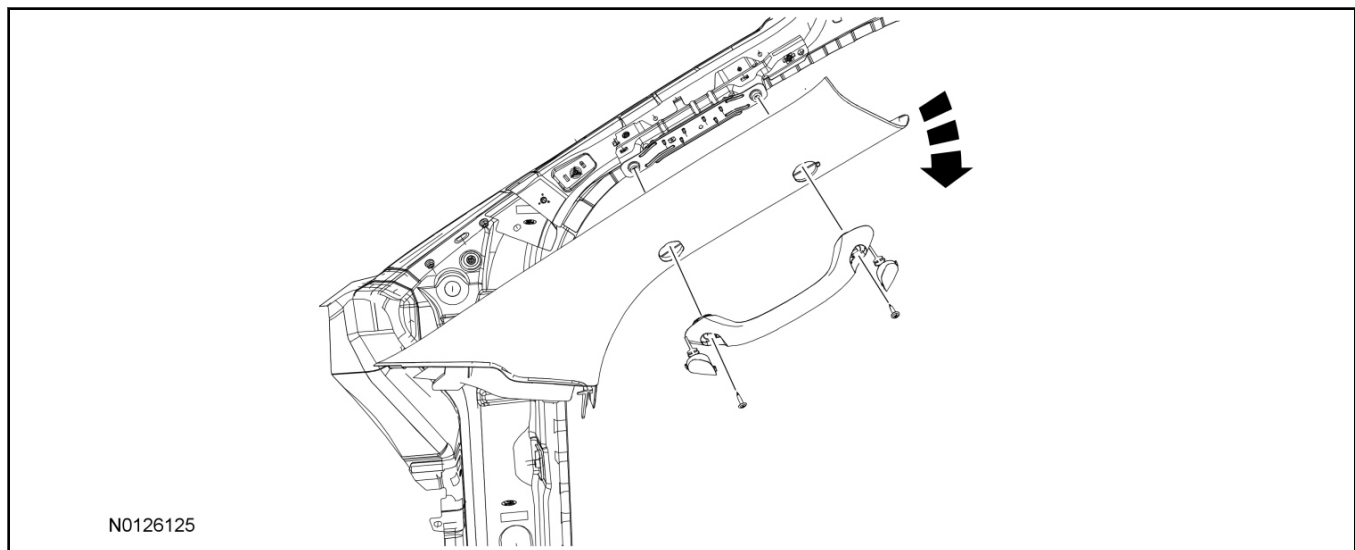
16. Position the RH front door weatherstrip away from the A-pillar trim panel.

17. **NOTICE:**

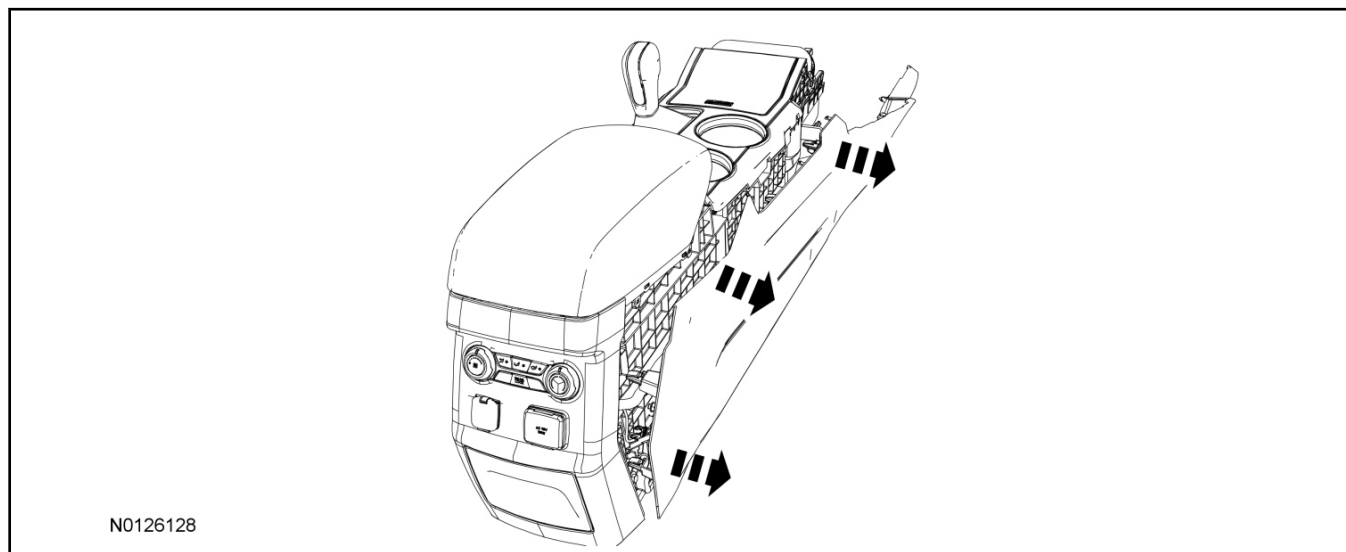
**The A-Pillar assist handle bolt covers have a tether attaching them to the assist handle and do not come off the assist handle.**

Remove the RH A-pillar trim panel.

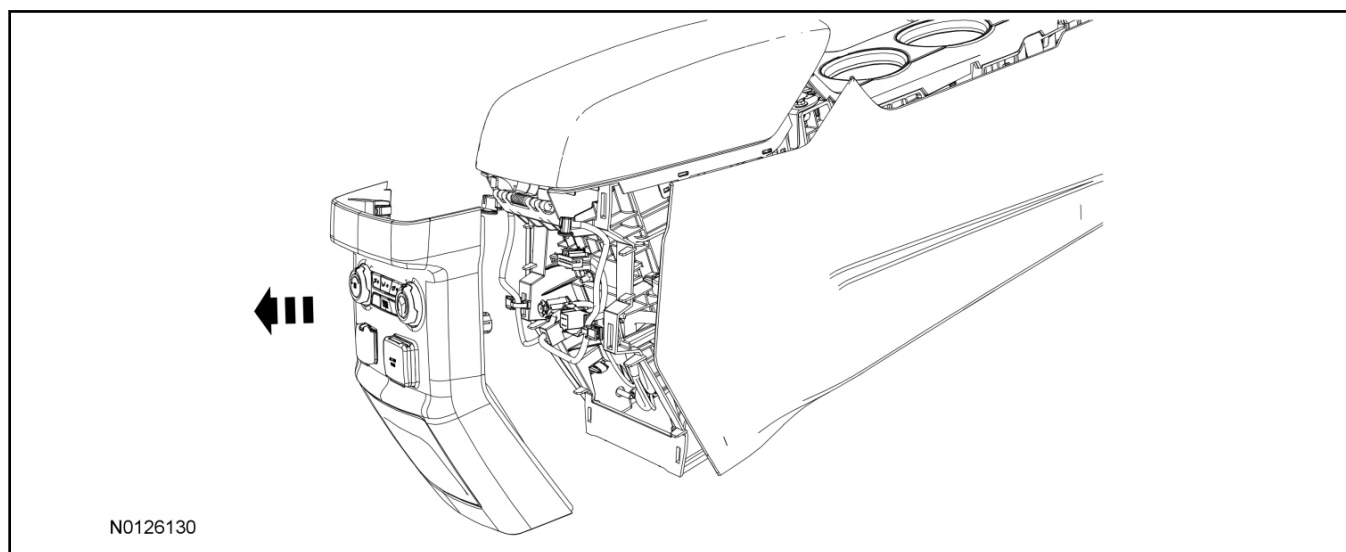
- 1 Remove the 2 A-pillar assist handle bolt covers.
- 2 Remove the 2 A-pillar assist handle bolts and the A-pillar assist handle.
- 3 Pull outward on the A-pillar trim panel to release the clips and remove the trim panel.



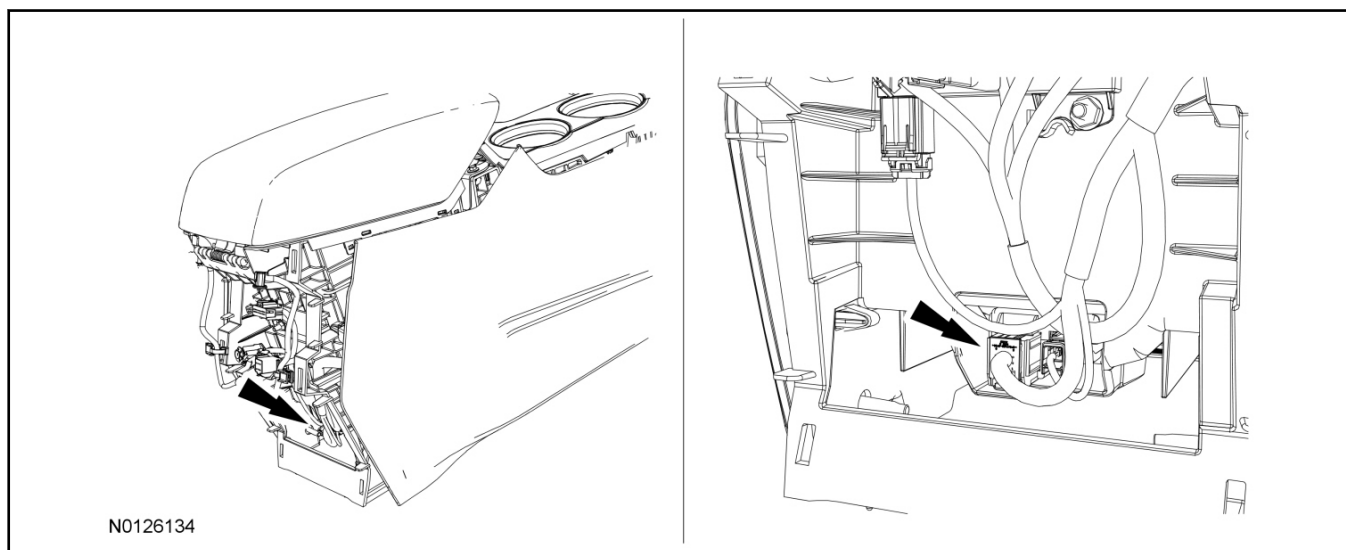
18. Remove the glove compartment opening door, For additional information, refer to Workshop Manual (WSM), Section 501-12.
19. Detach the RH floor console side trim panel from the floor console.



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



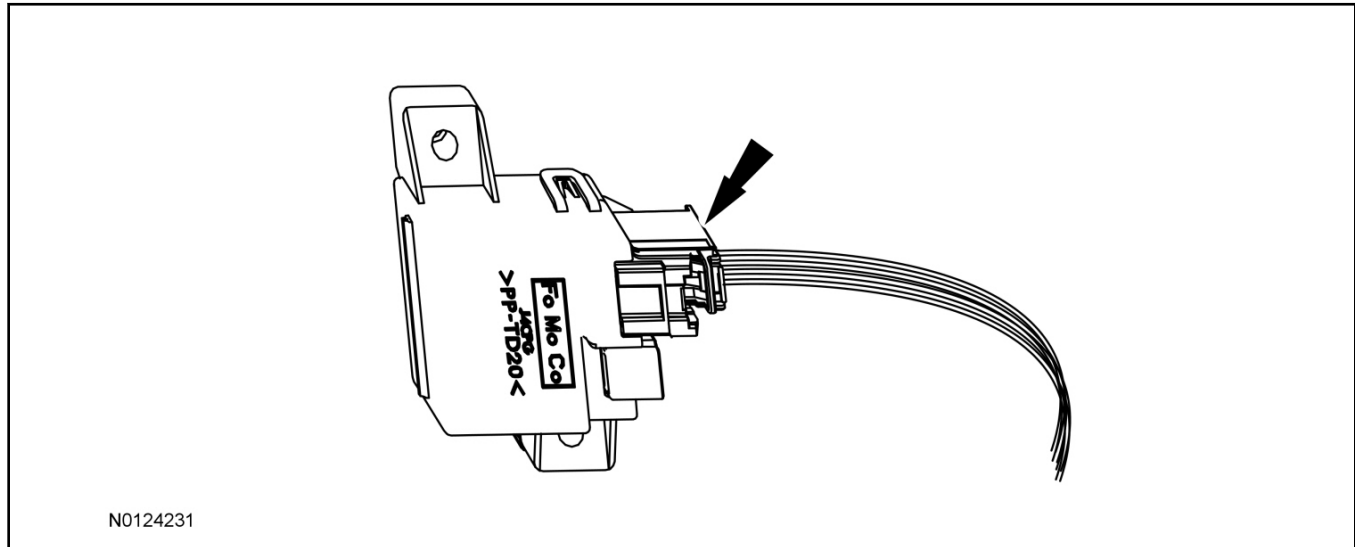
21. Locate the Tire Pressure Monitor (TPM) Module.



**INSTALLATION (Continued)****22. NOTE:**

Floor console removed for clarity.

Disconnect the TPM module.

**Antenna Mounting****NOTE:**

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

**NOTE:**

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

23. Choose a suitable antenna mounting location based on the guidelines above.

**Install The Antenna**

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

**NOTE:**

Do not touch the adhesive, reduced adhesion may result.

**NOTE:**

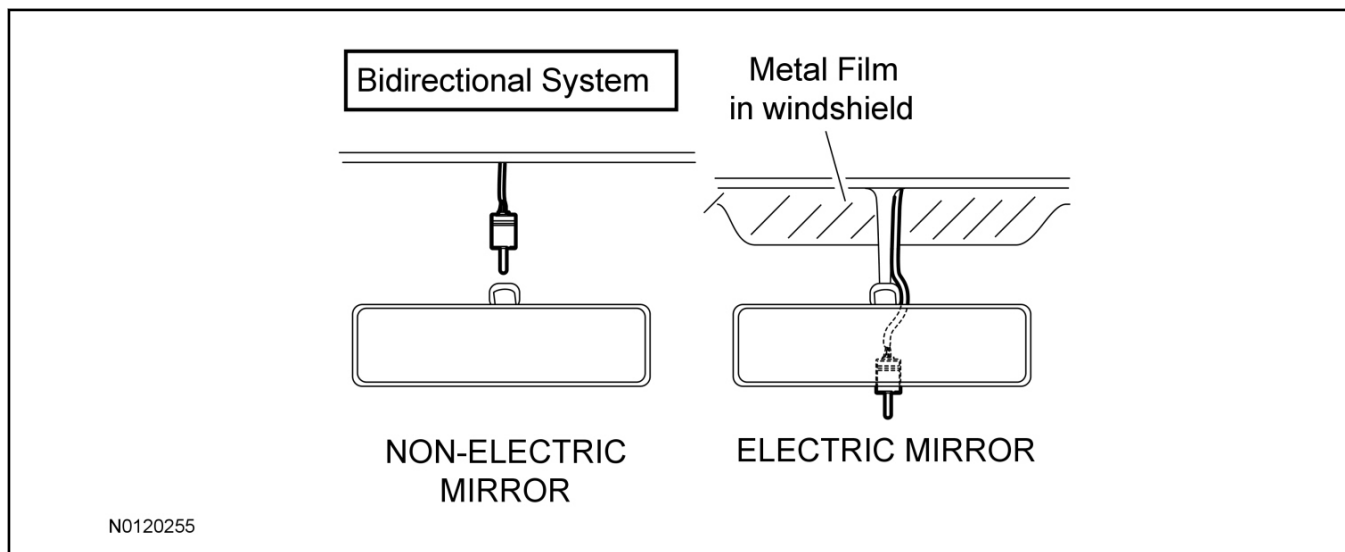
Make sure that the long wire on the antenna is pointing towards the top of the windshield since this wire will be routed along the headliner.



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

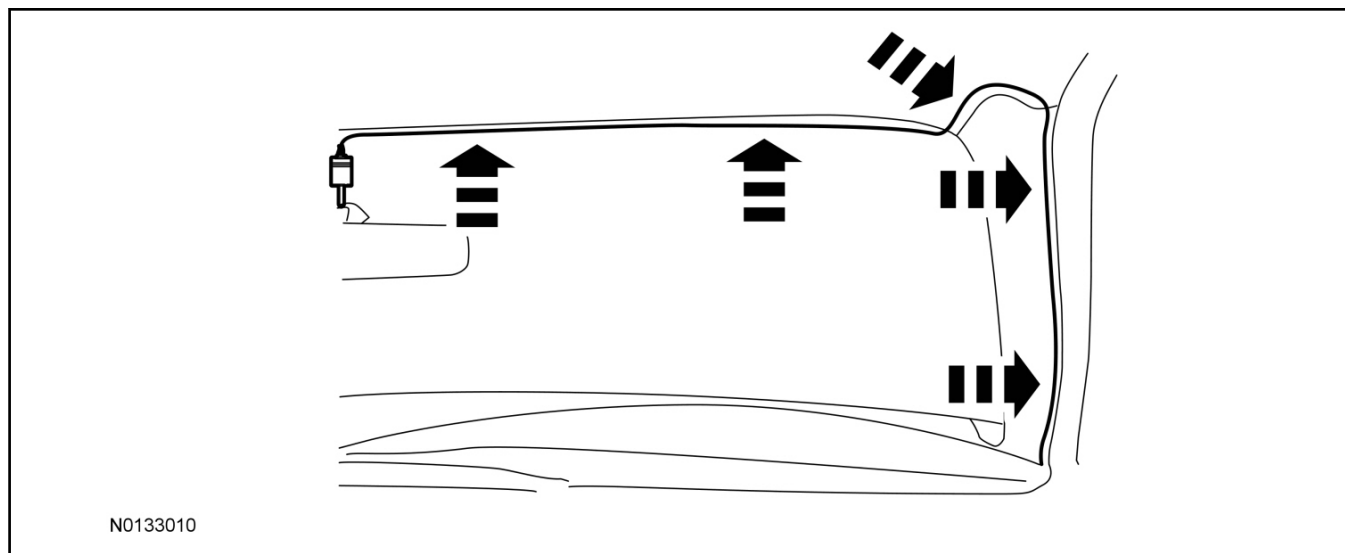
The antenna electrical connector will be attached to the control module later in this procedure.

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



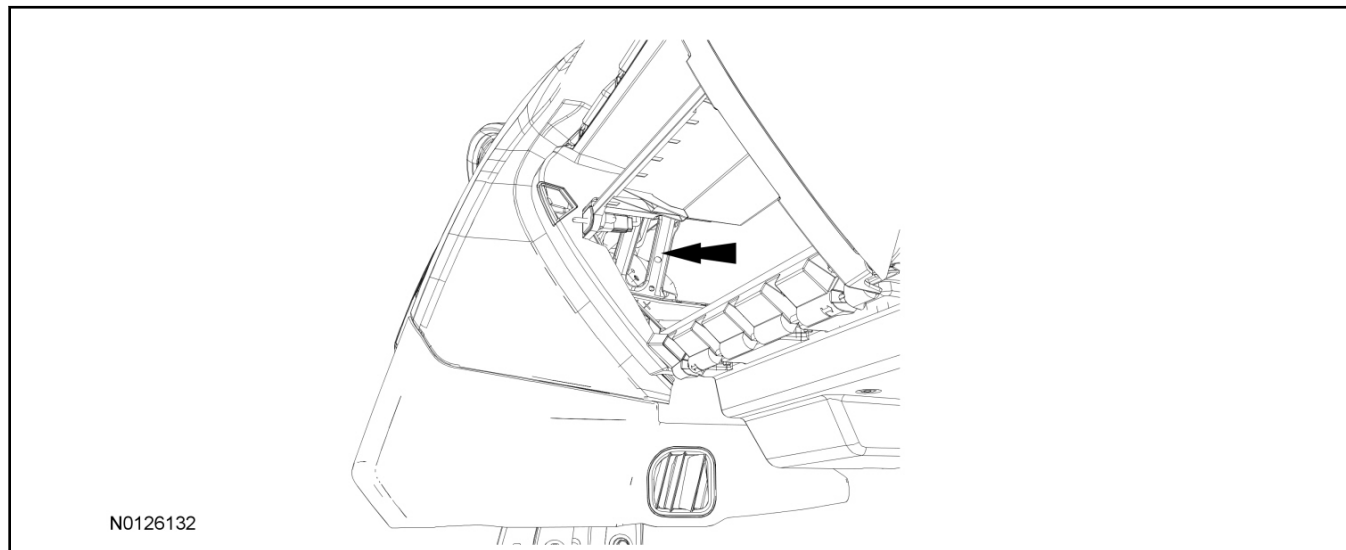
26. Route the antenna cable.

- 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.

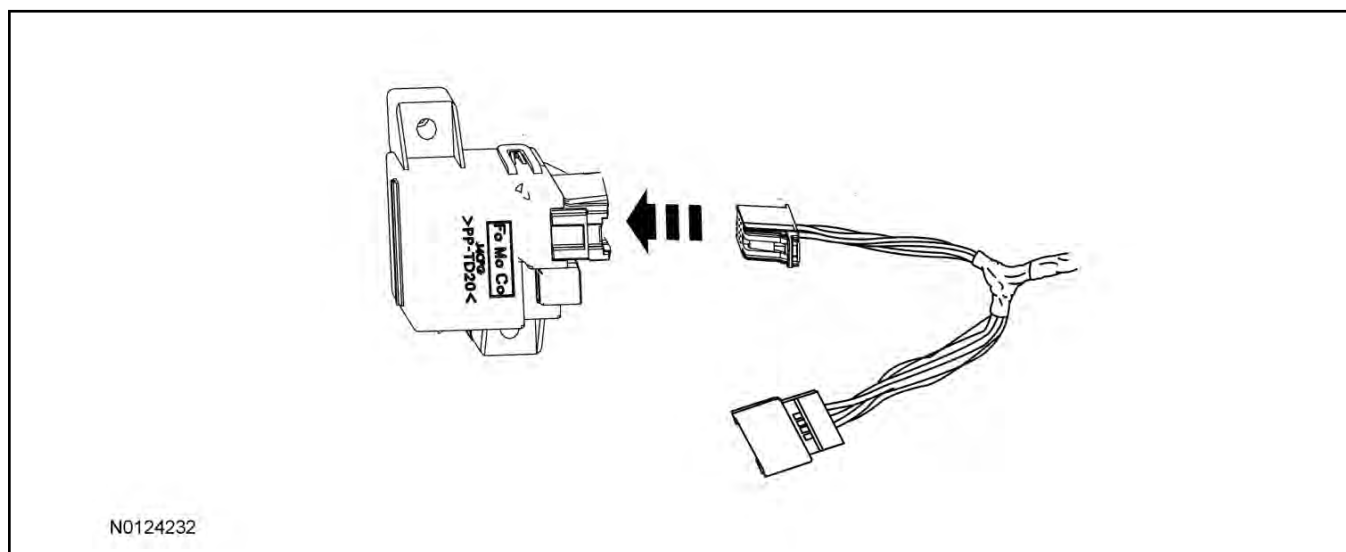


**INSTALLATION (Continued)****Install CGEA module**

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

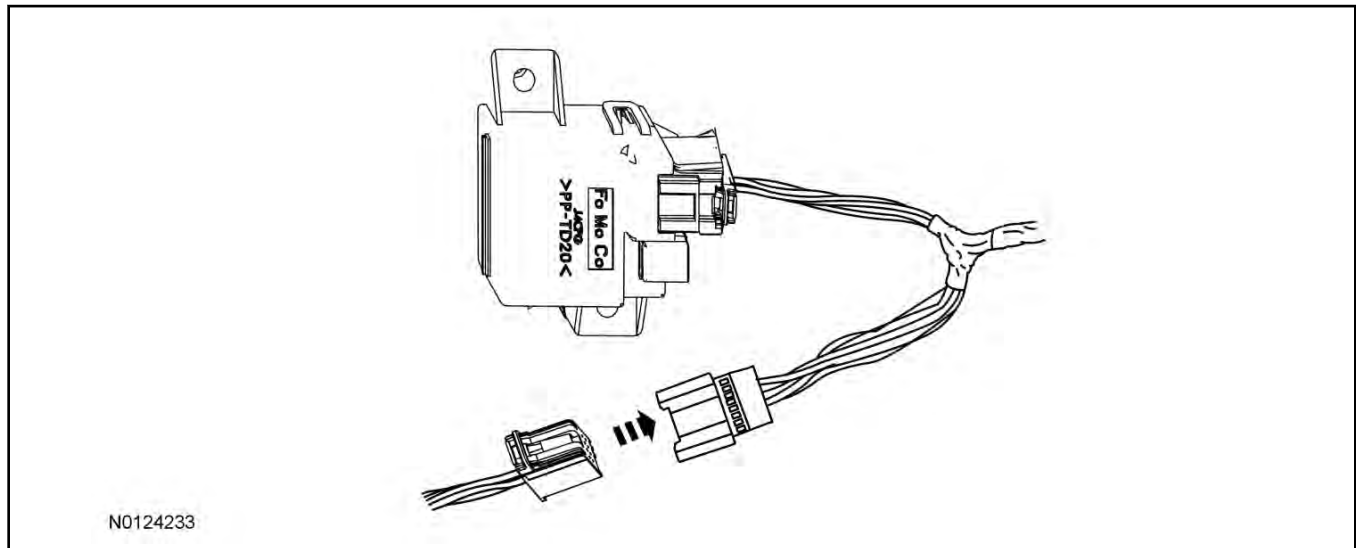


28. Connect the female end of the 8-pin T-harness to the TPM module.



**INSTALLATION (Continued)**

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

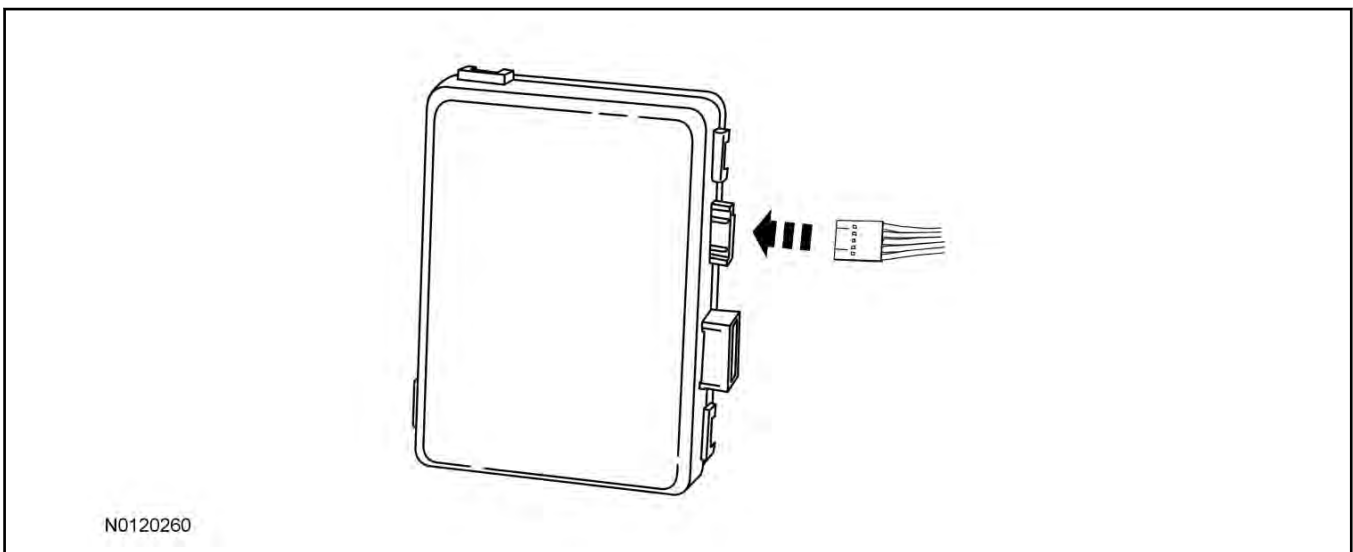


30. Route the T-harness along the floor console, from the TPM module to the CGEA module, located in the glove box .

- Secure the T-harness with tie-straps.

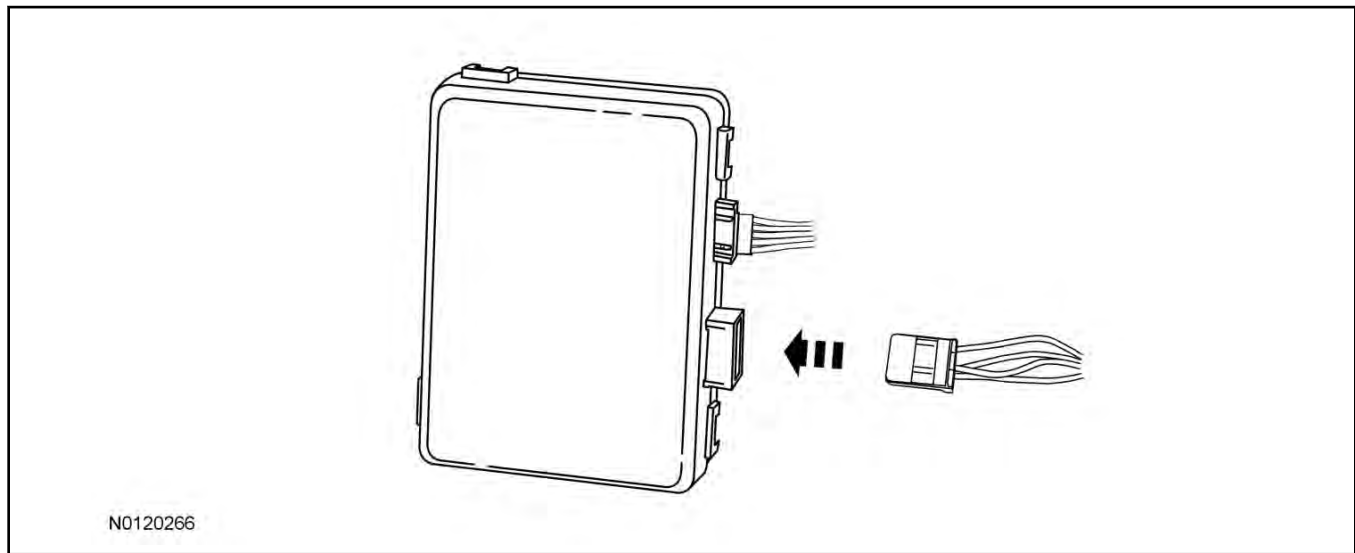
31. Connect the antenna to the CGEA module.

- Secure the antenna harness with tie-straps.



**INSTALLATION (Continued)**

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

**Install Trim**

33. Install the floor console rear trim panel to the floor console.
34. Attach the RH floor console side trim panel, to the floor console.
35. Install the glove compartment opening door, For additional information, refer to WSM, Section 501-12.

**NOTE:**

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

36. 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.
37. Position the RH front door weatherstrip back around the A-pillar trim panel.

**INSTALLATION (Continued)**

---

**Remote Start Activation**

38. Verify that the IDS is updated to the most current version.
39. Connect IDS.
  - Follow the prompts to select new vehicle session.
  - Enter VIN.
40. 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.
41. 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.
42. 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.

**Learn Remote Start System to Vehicle****NOTE:**

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

43. Press the vehicle's unlock button located on the driver's door. Make sure all doors are unlocked.
44. Put the key in the ignition.

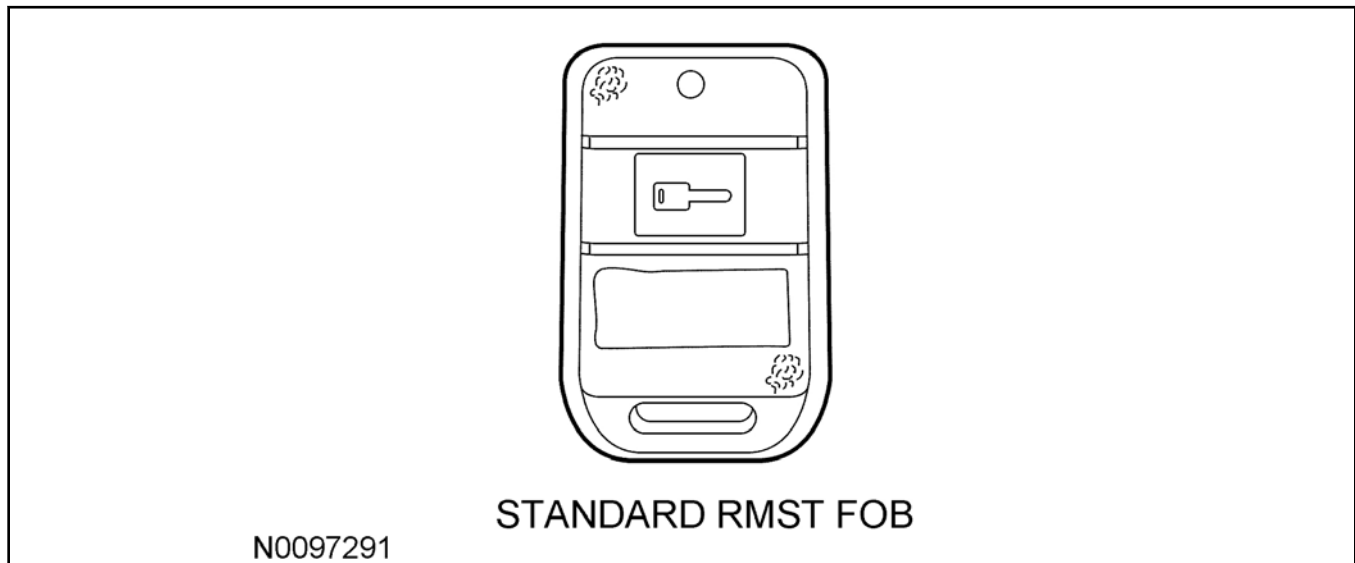
**INSTALLATION (Continued)**

45. 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.
46. 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.

**Standard RMST Functional Test****NOTE:**

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

47. Make sure the shift lever is in PARK and the ignition is in the OFF position. Remove all keys from the vehicle.
48. Close the hood.
49. Close all of the vehicle doors.
50. Start the vehicle by pressing and holding the remote start button on the remote start key fob for more than 2 seconds.



51. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
52. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
53. Open the hood.
54. **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.**

**INSTALLATION (Continued)****Bi-directional RMST Functional Test****NOTE:**

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

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.



56. Make sure the shift lever is in PARK and the ignition is in the OFF position. Remove all keys from the vehicle.
57. Close the hood.
58. Close all of the vehicle doors.
59. Start the vehicle by pressing the remote start button 2 times on the bi-directional key fob.
60. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
61. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
62. Open the hood.
63. **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.**

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

VEHICLE PREPARATION  
INSTALLATION  
Remote Start

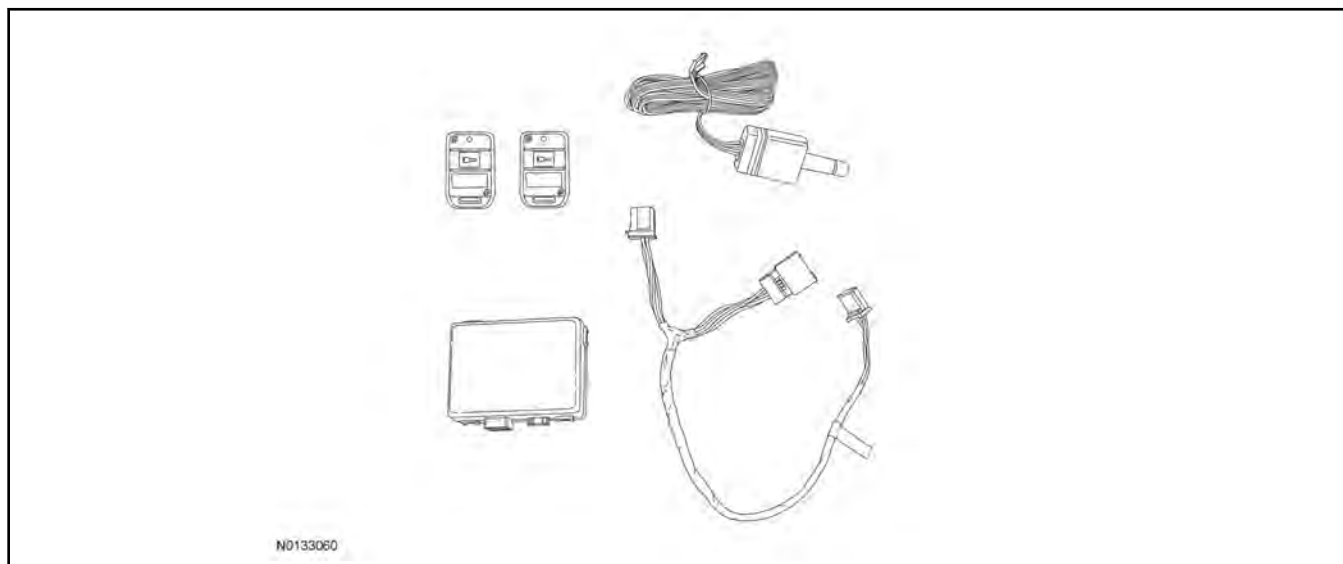
GENERAL PROCEDURES  
Functional Test



## INSTALLATION

### Remote Start System (RMST)

#### RMST Components



#### Edge/MKX - Push Button Start

1. Verify correct kit number.

#### Review RMST Kit Contents

2. Review the RMST kit contents.

##### RMST Kit

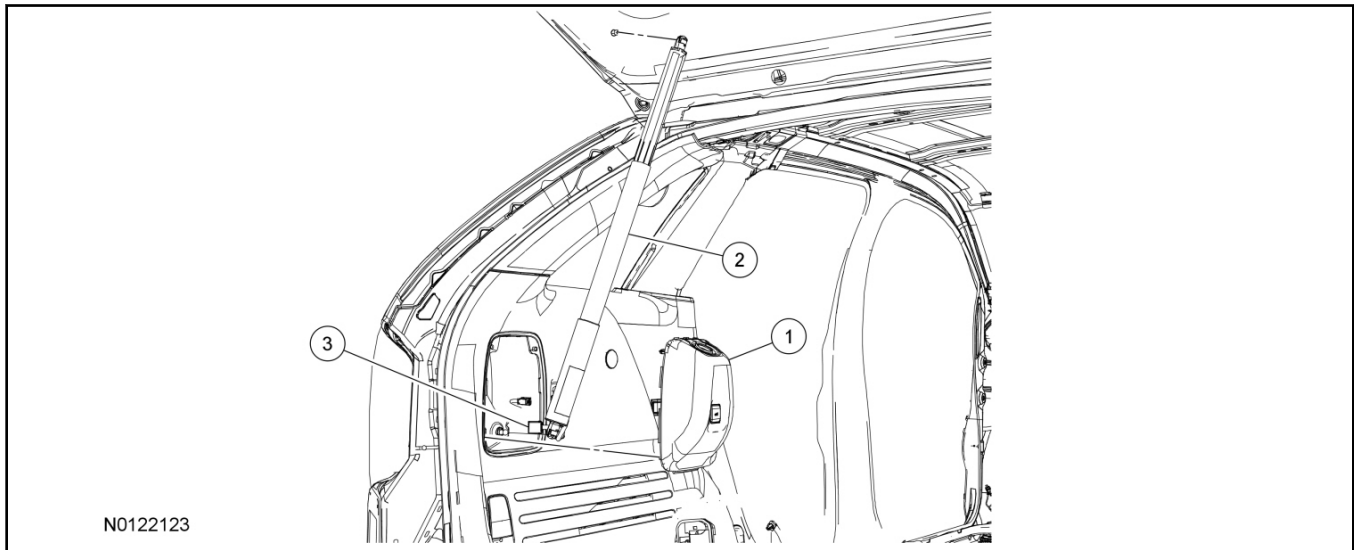
| QUANTITY | DESCRIPTION         |
|----------|---------------------|
| 2        | 1 Button Key Fob    |
| 1        | Remote Start Module |
| 1        | Antenna             |
| 1        | T-harness           |

#### Vehicle Preparation

3. Open the liftgate.

#### Remove Power Liftgate Motor

4. 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**

5. Remove the rear cargo load area.
  - Remove the foam blocks from the spare tire well.
6. Remove the LH safety belt lower anchor bolt cover and remove the LH safety belt lower anchor bolt.
7. If equipped, remove the cargo net hook.
8. **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**

9. Remove the LH rear safety belt D-ring cover and remove the safety belt bolt.
10. Remove the LH C-pillar trim panel screw cover.
11. Remove the LH C-pillar trim panel screw.
12. Remove the C-pillar trim panel.
  - Pull outward and downward to remove the C-pillar trim panel.

**Install the Antenna**

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

**NOTE:**

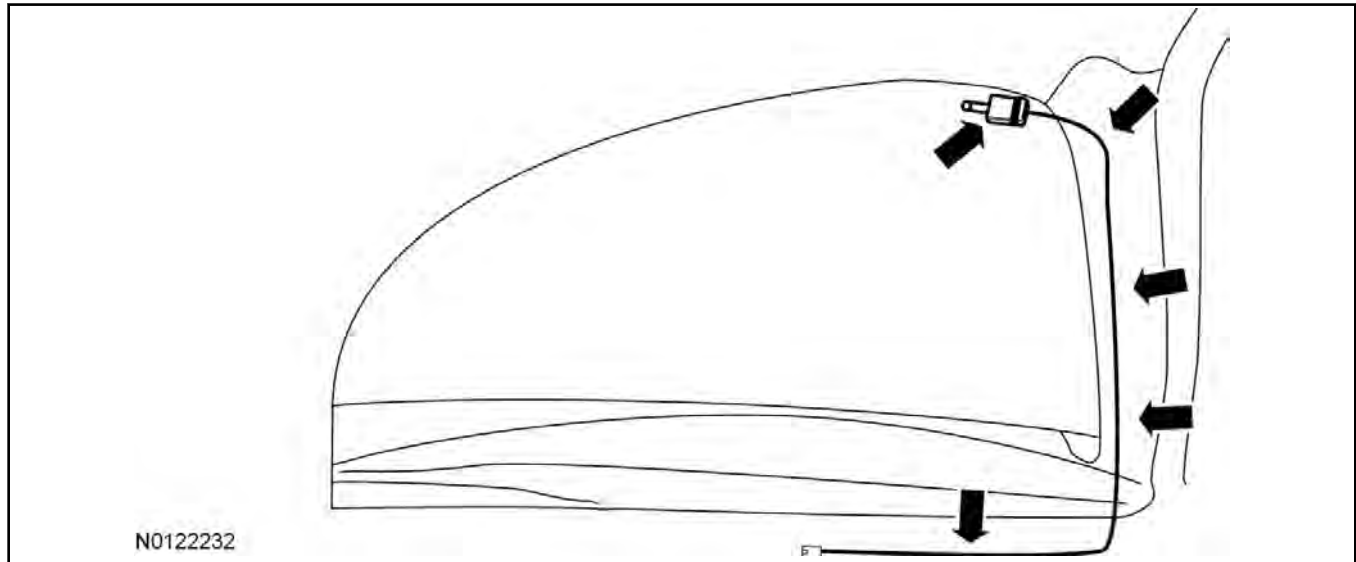
Do not touch the adhesive, reduced adhesion may result.

**NOTE:**

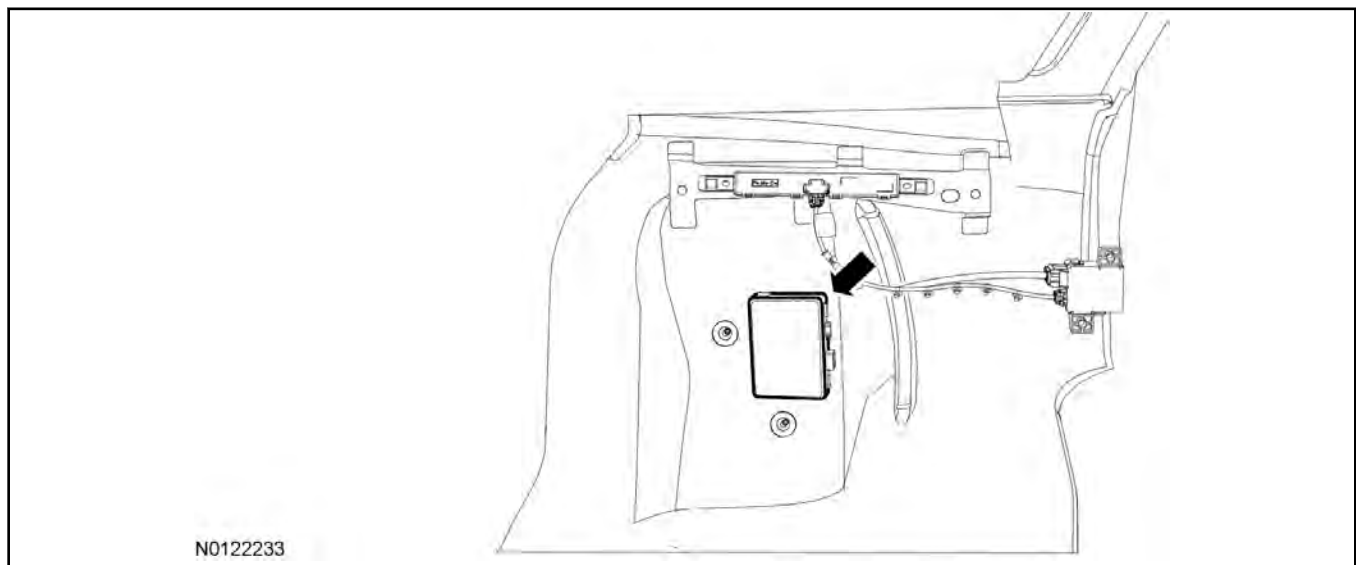
The wire harness will be connected to the control module later in this procedure.

**INSTALLATION (Continued)**

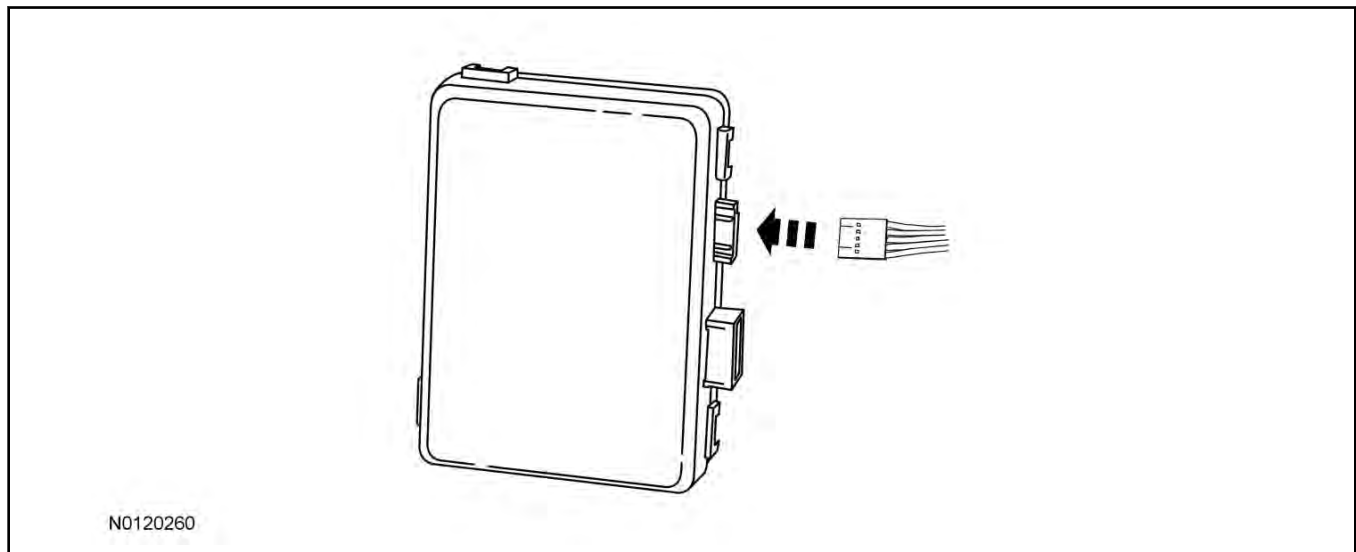
14. Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the LH rear quarter window glass.
  - Route the antenna cable down the C-pillar to the quarter panel where the remote start module will be mounted.
  - Secure the antenna wire harness with tie straps.

**Install CGEA module**

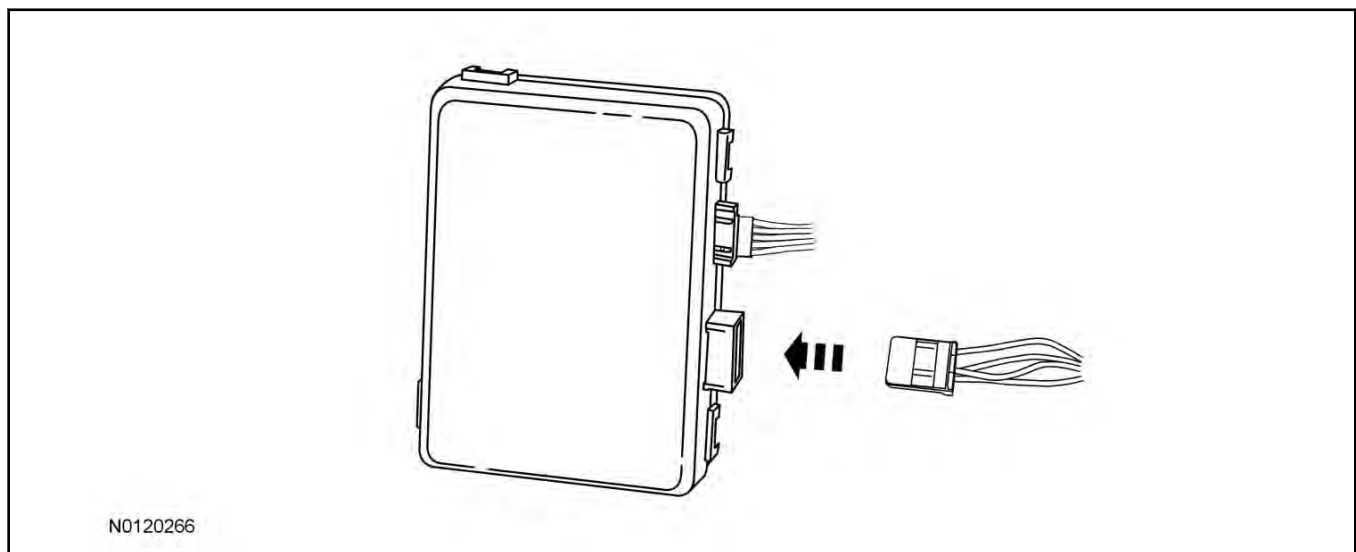
15. Remove the protective backing from the 3m Dual Lock™ strips and install the remote start module to the vehicle.
  - Mount to a flat metal surface on the vehicle's LH quarter panel.



16. Connect the antenna to the remote start module.
  - Secure the antenna harness with tie-straps.

**INSTALLATION (Continued)**

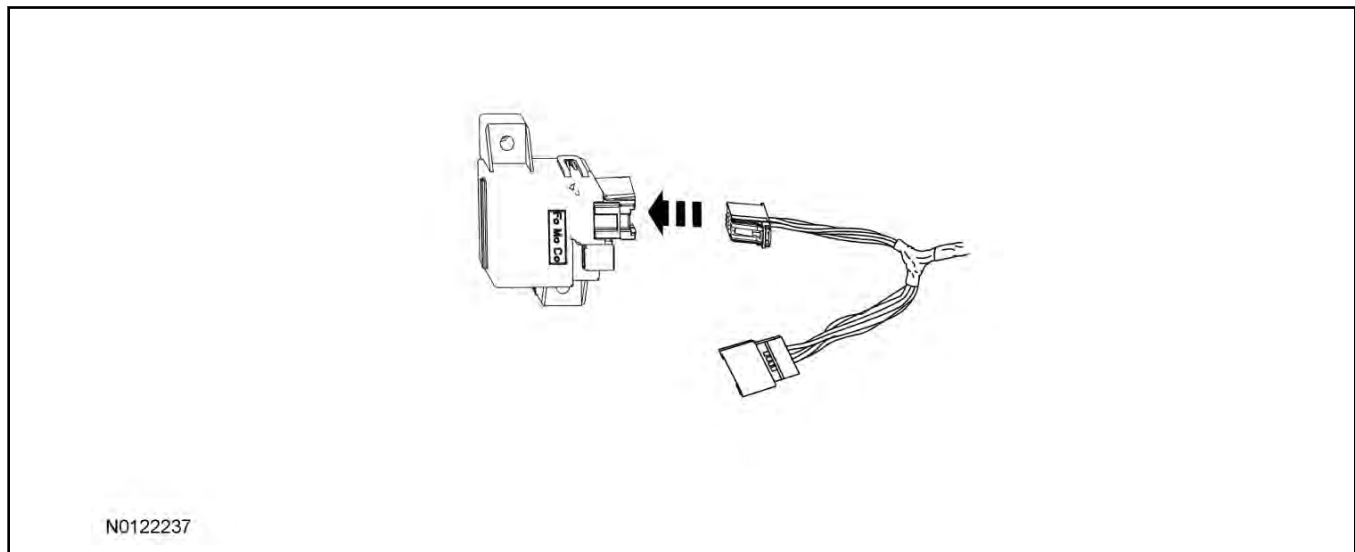
17. Connect the T-harness to the remote start module.



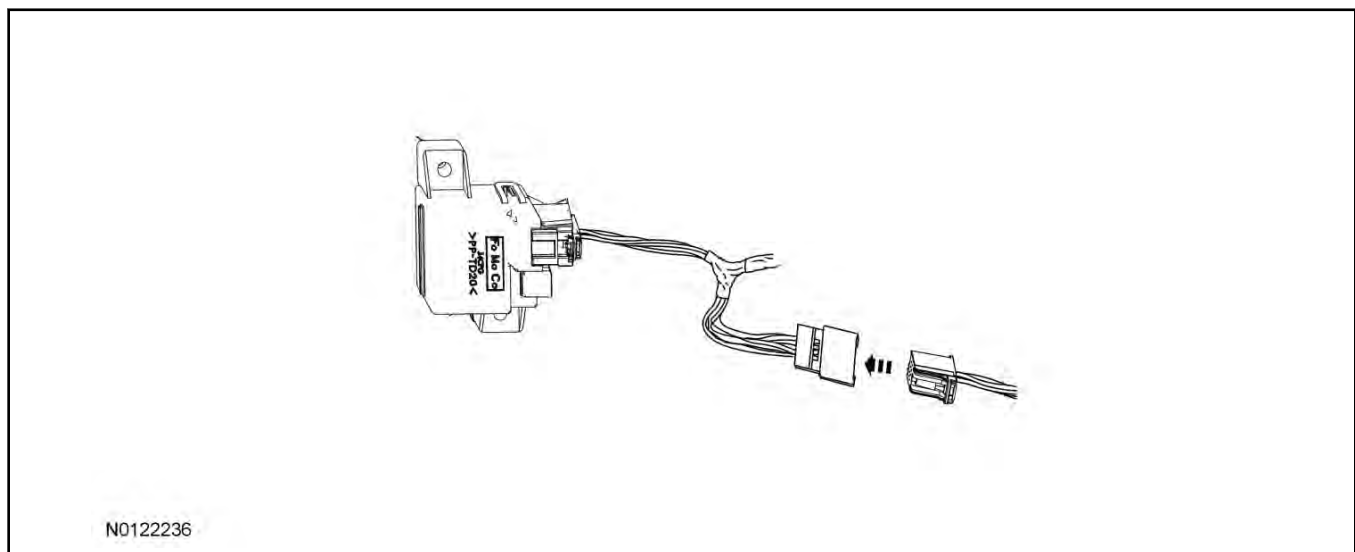
18. Route the female end of the T-harness to the TPM module.

- Secure the harness with tie-straps.

19. Disconnect the 8-pin TPM module electrical connector and connect the female end of the T-harness to the TPM module.

**INSTALLATION (Continued)**

20. Connect the male end of the 8-pin T-harness to the 8-pin TPM module electrical connector.

**Install LH C-Pillar Trim Panel**

21. Install the LH C-pillar trim panel.
22. Install the LH C-pillar trim panel screw.
  - Tighten to 9 Nm (80 lb-in).
23. 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.

24. Install the safety belt bolt and install the safety belt D-ring cover.
  - Tighten to 54 Nm (40 lb-ft).

**INSTALLATION (Continued)**

---

**Install LH Quarter Trim Panel**

25. Position the LH quarter trim panel back.

- Engage push pin retainers.

26. If equipped, install the cargo net hook.

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

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

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

28. **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.

29. Install the rear cargo load area.

- Install the foam blocks into the spare tire well.

**Install Power Liftgate Motor**

30. 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.

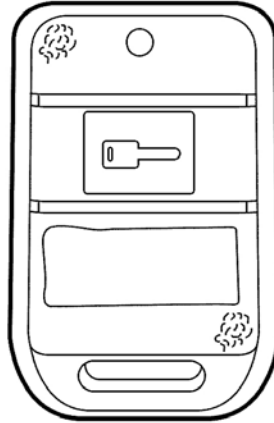
**RMST Functional Test**

31. Make sure the shift lever is in park and the engine is off. Remove all Intelligent Access (IA) Keys from the vehicle.

32. Close the hood.

33. Close all vehicle doors.

34. Start the vehicle by pressing and holding the remote start button on the remote start key fob for more than 2 seconds.

**INSTALLATION (Continued)****STANDARD RMST FOB**

N0097291

35. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
36. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
37. Open the hood.
38. **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.**

# REMOTE START SYSTEM INSTALLATION

## CONTENTS

VEHICLE PREPNRATION  
INSTALLATION  
Remote Start

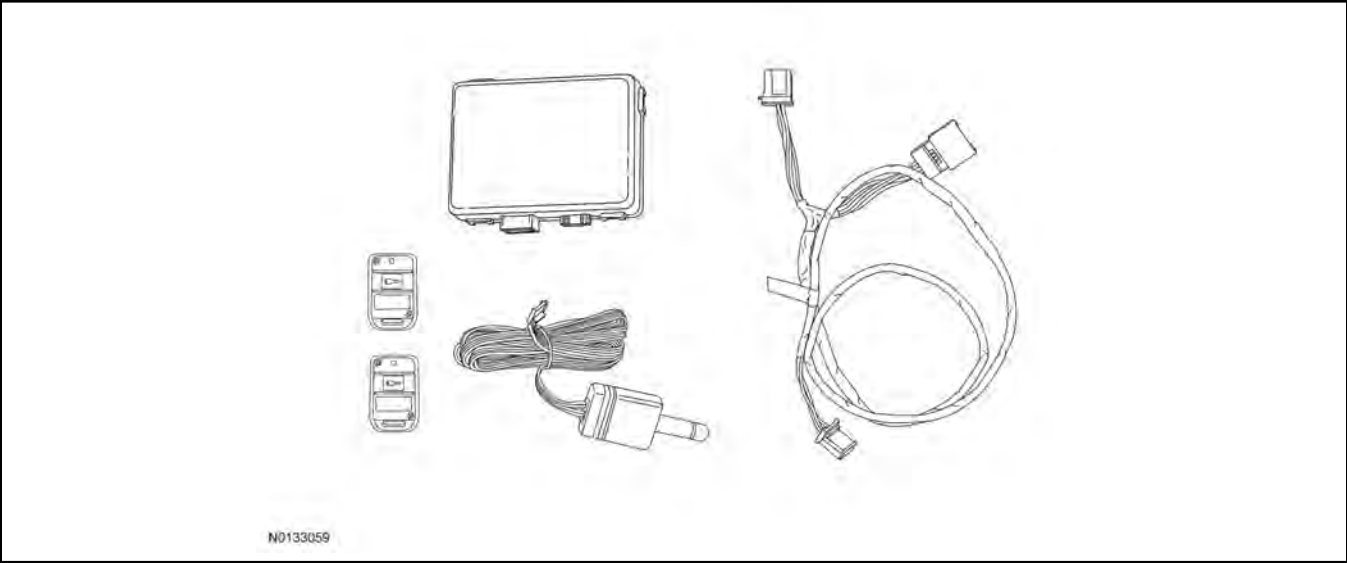
GENERAL PROCEDURES  
Functional Test



INSTALLATION

Remote Start

Remote Start System (RMST) Components



Explorer - Push Button Start

1. Verify correct kit number.  
1

Review RMST Kit Contents

2. Review the RMST kit contents.

RMST Kit

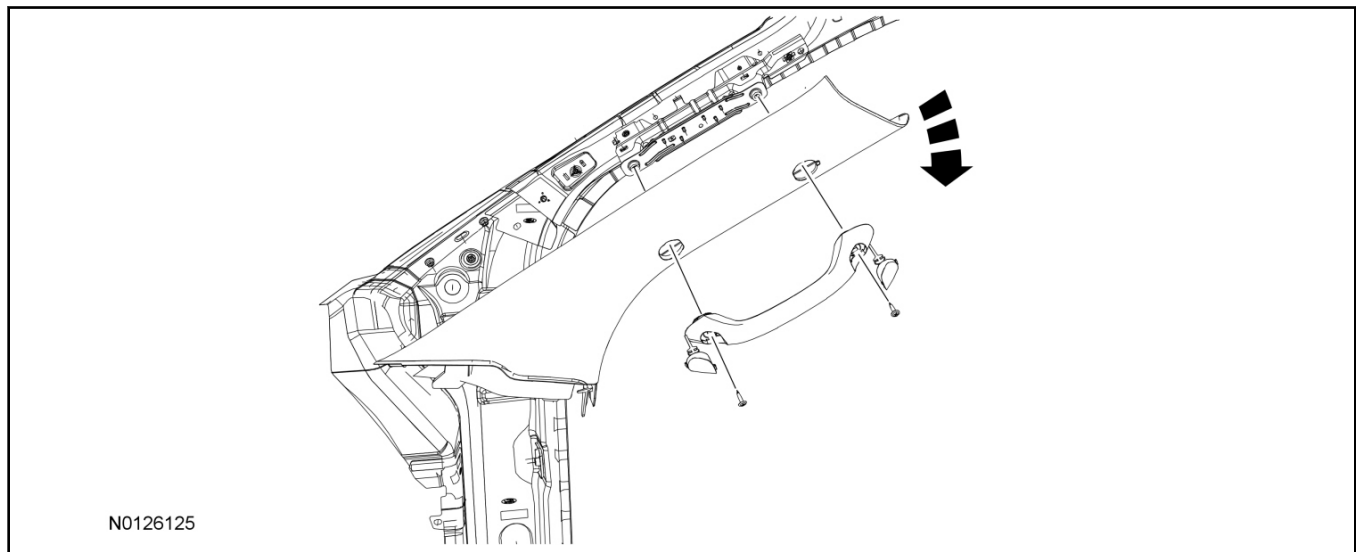
| QUANTITY | DESCRIPTION         |
|----------|---------------------|
| 4        | 3'Dwwqp'Mg{'Hqd     |
| 1        | Remote Start Module |
| 1        | Antenna             |
| 1        | T-harness           |

Vehicle Preparation

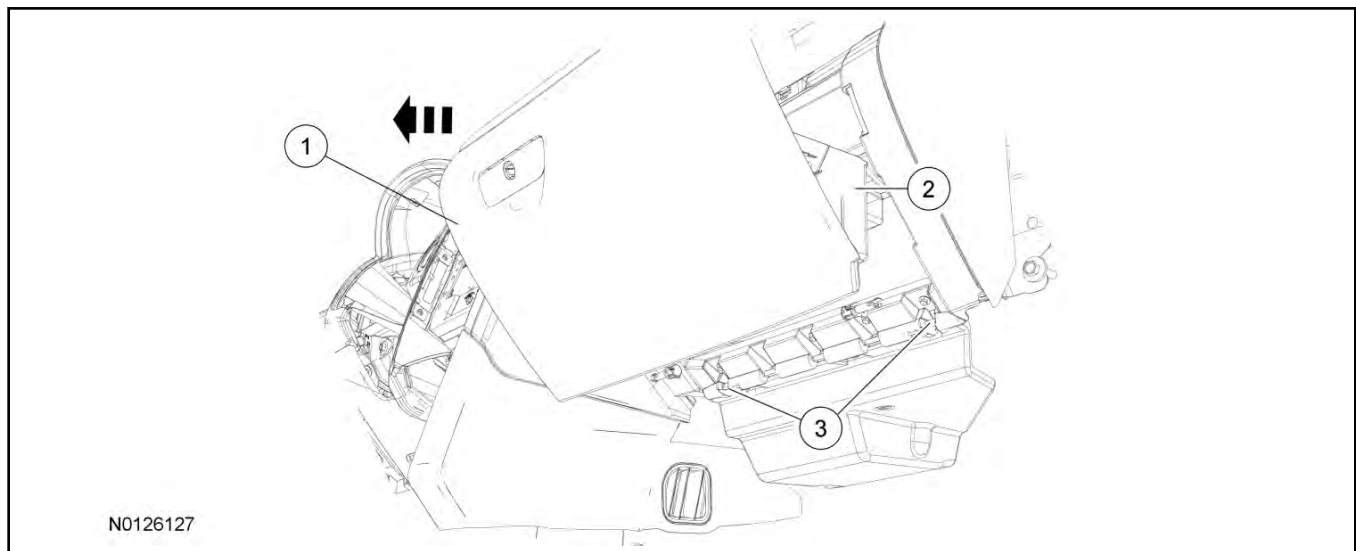
3. **NOTICE:**  
The A-Pillar assist handle bolt covers have a tether attaching them to the assist handle and do not come off the assist handle.

Remove the RH A-pillar trim panel.

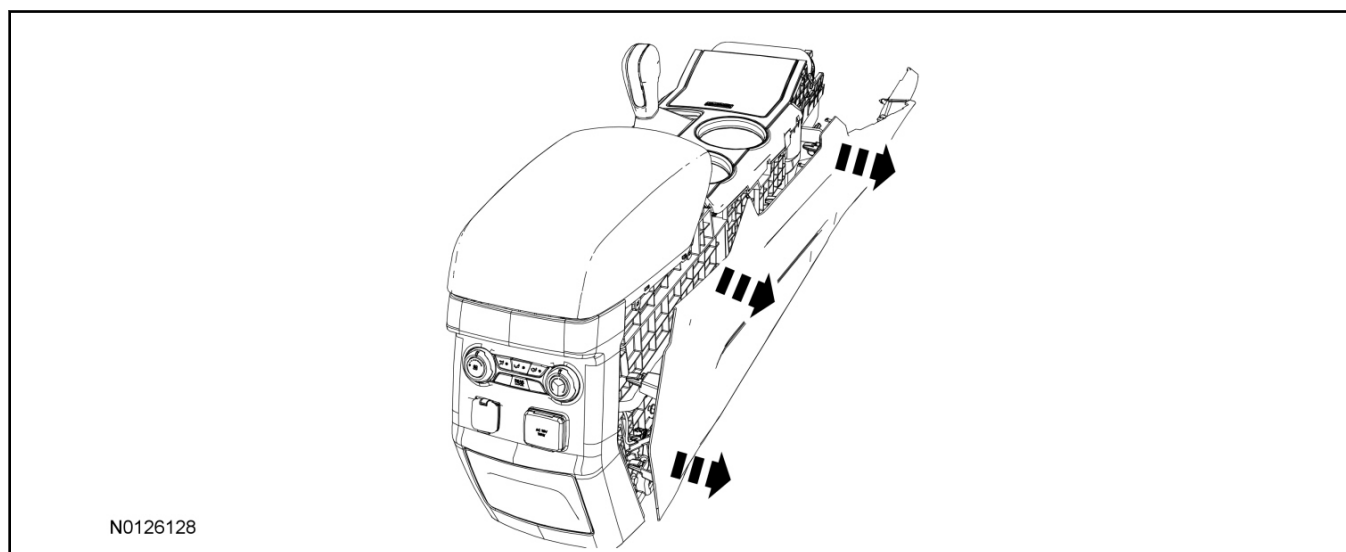
- 1 Remove the 2 A-pillar assist handle bolt covers.
- 2 Remove the 2 A-pillar assist handle bolts and the A-pillar assist handle.
- 3 Pull outward on the A-pillar trim panel to release the clips and remove the trim panel.

**INSTALLATION (Continued)**

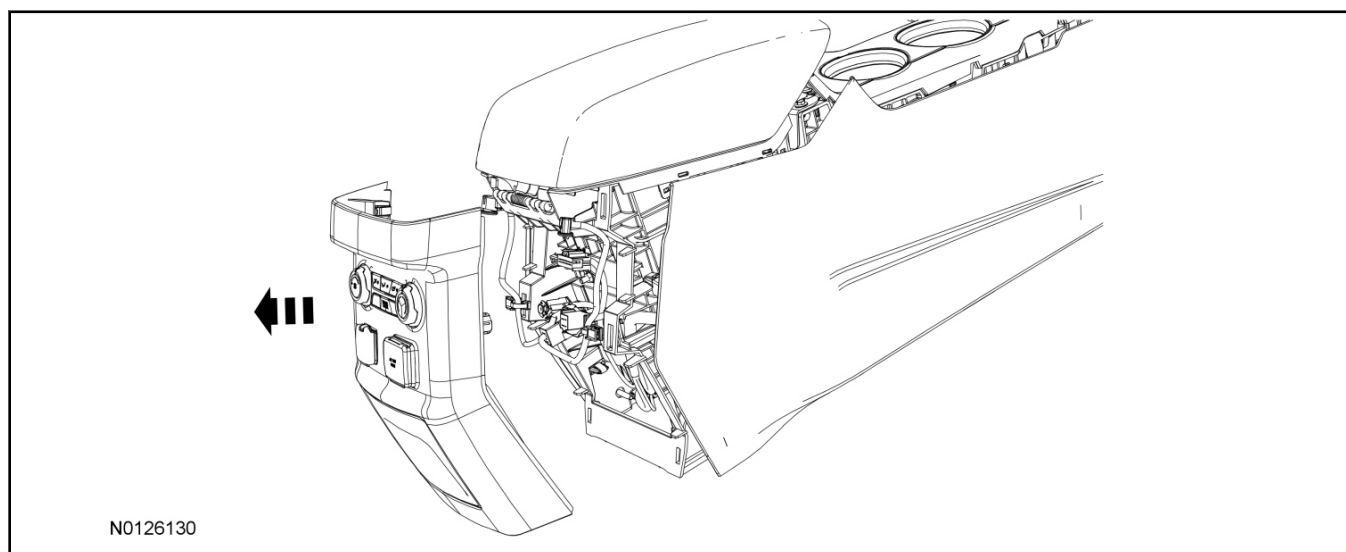
4. Remove the glove compartment opening door.
  - 1 Open the glove compartment.
  - 2 Disconnect the glove compartment tether.
  - 3 Remove the retaining pins, from the RH and LH sides. Unhook and remove the glove compartment opening door.



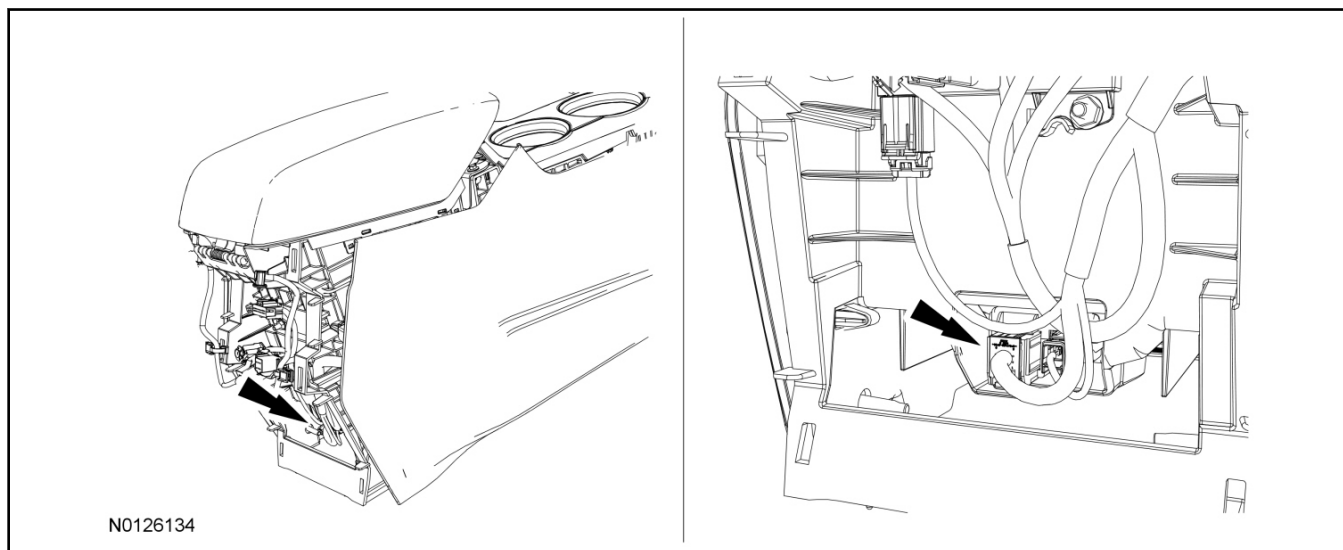
5. Detach the RH floor console side trim panel from the floor console.

**INSTALLATION (Continued)**

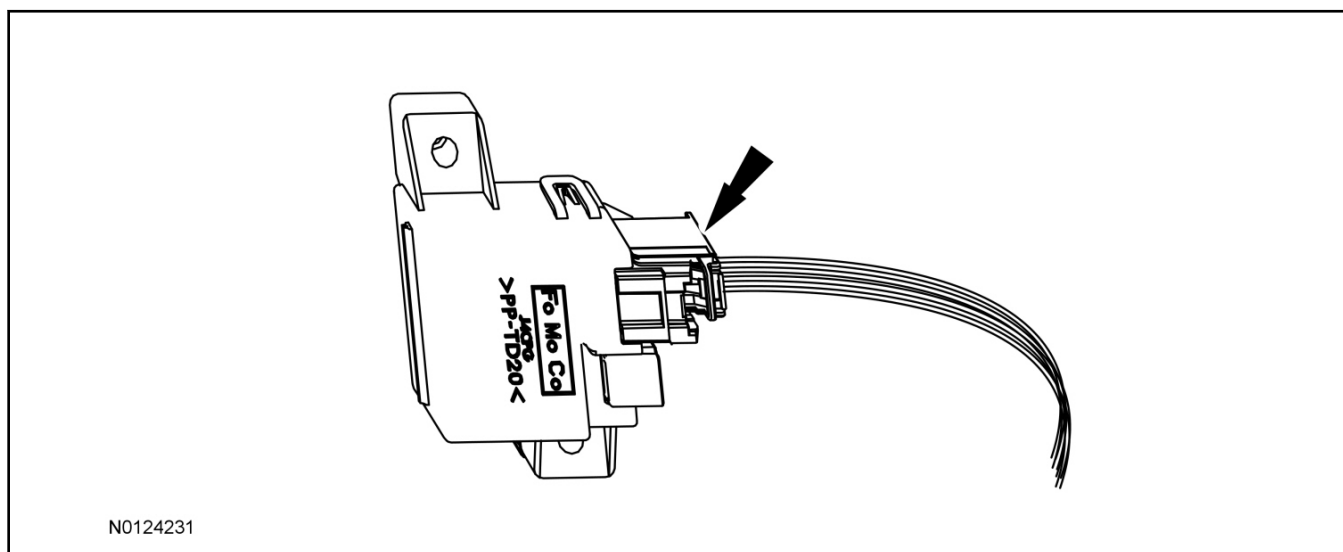
6. Detach the floor console rear trim panel from the floor console.



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

**INSTALLATION (Continued)**

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

**Antenna Mounting**

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

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

**INSTALLATION (Continued)**

- 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.
9. Choose a suitable antenna mounting location based on the guidelines above.

**Install The Antenna**

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

**NOTE:**

Do not touch the adhesive, reduced adhesion may result.

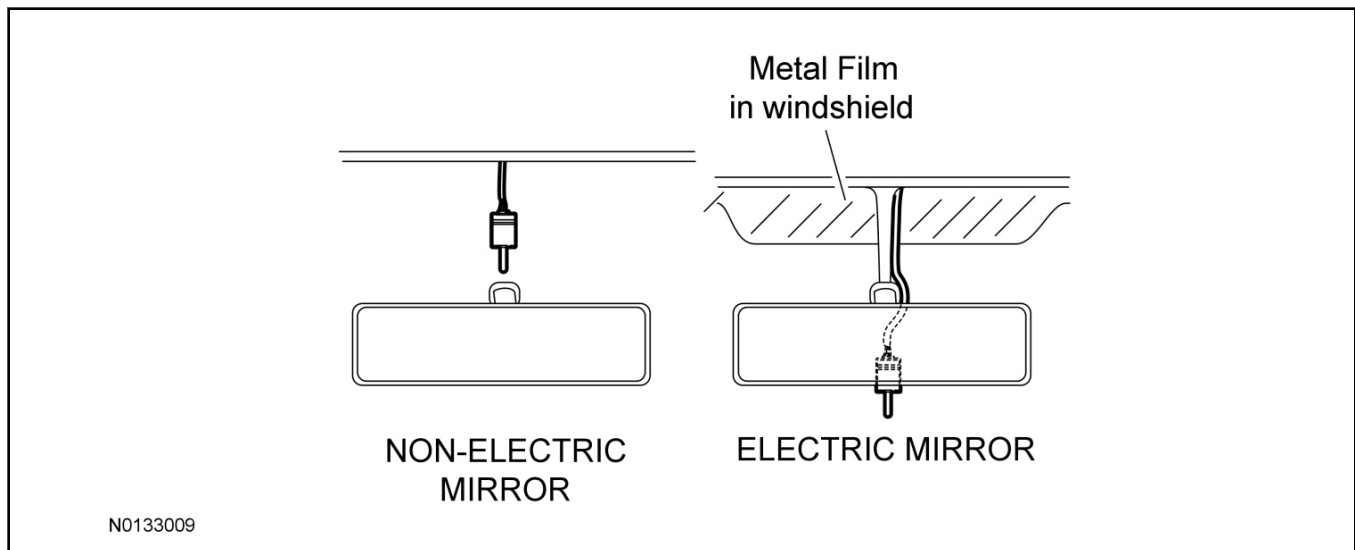
**NOTE:**

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

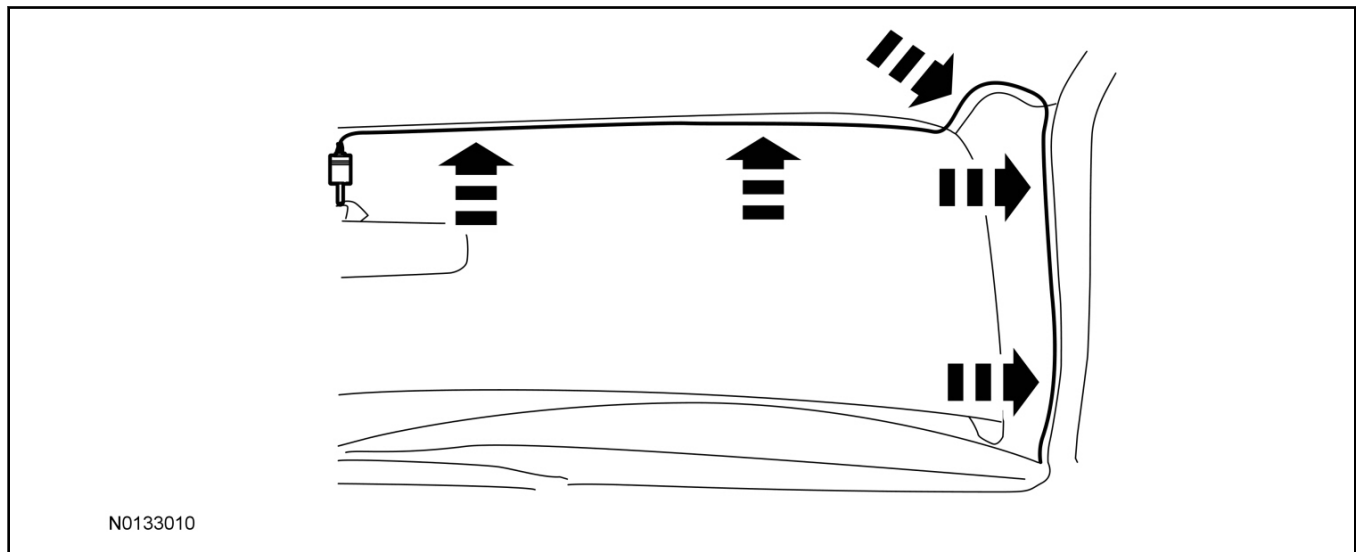
**NOTE:**

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

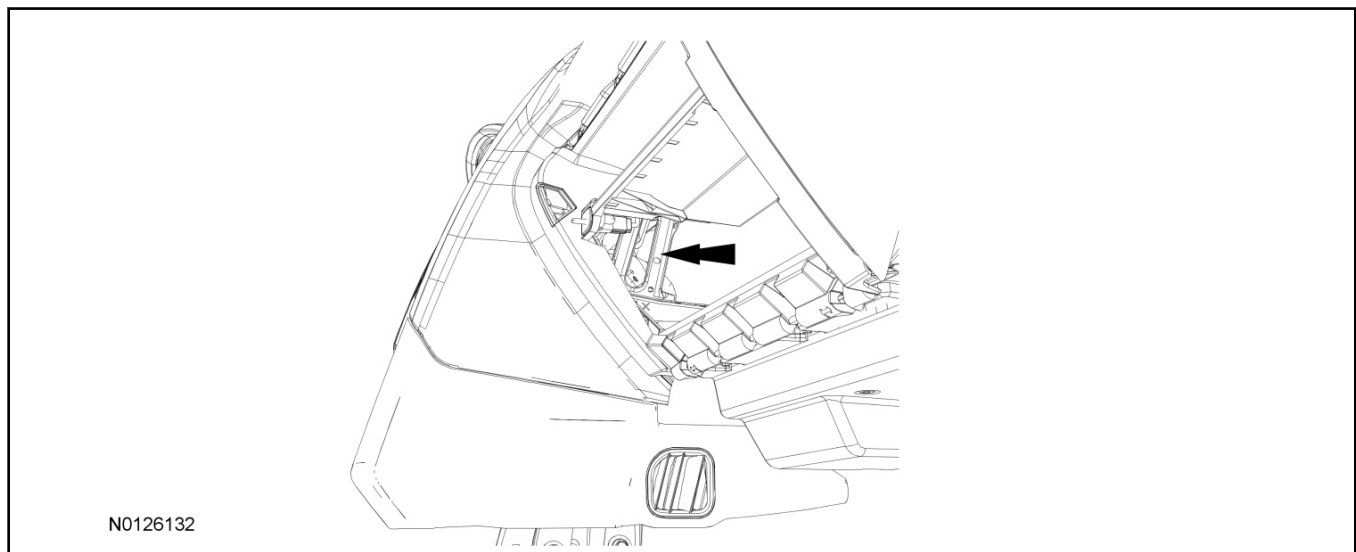
11. Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



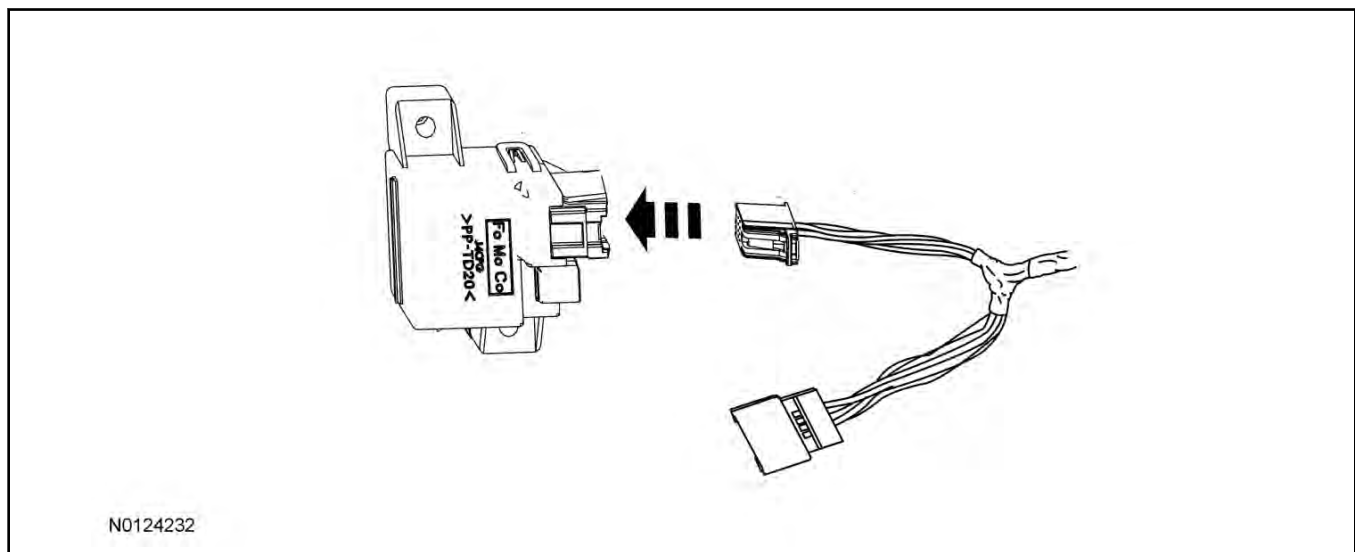
12. Route the antenna cable.
- Route inside the headliner to the A-pillar.
  - Route down the A-pillar, behind the side air bag. Secure as required with tie-straps.
  - Continue routing into the RH instrument panel side trim area and inside the instrument panel, coming out of the glove box.

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

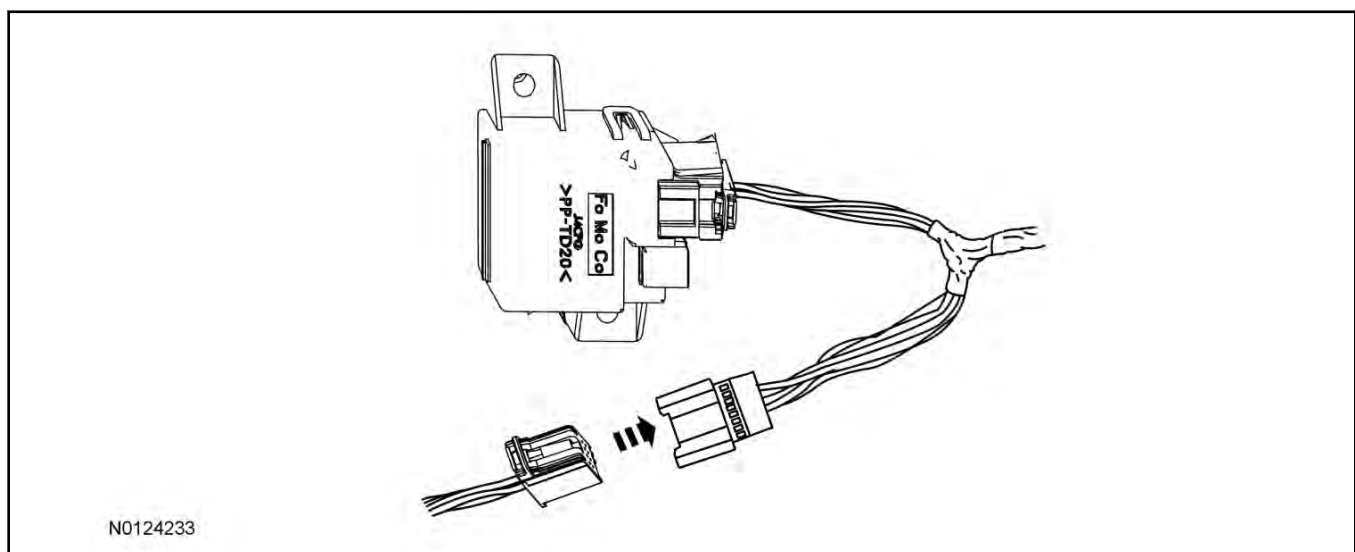
13. Position the CGEA module into the glove box opening. Secure the CGEA module to the glove box frame with tie-straps.



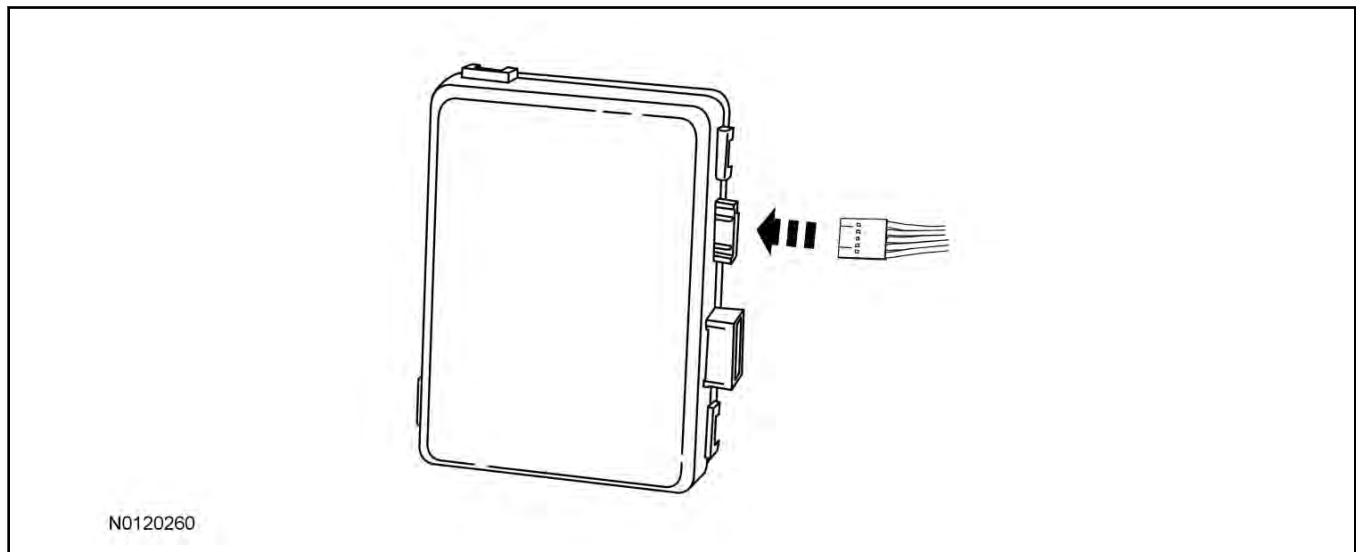
14. Disconnect the 8-pin TPM module electrical connector and connect the female end of the T-harness to the TPM module.

**INSTALLATION (Continued)**

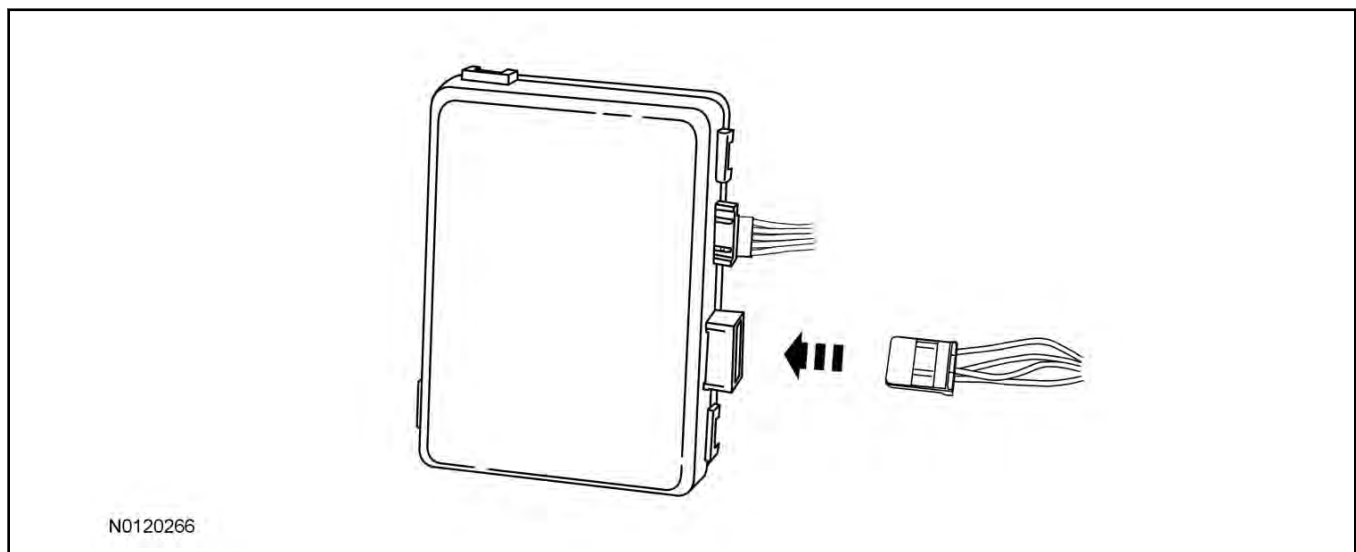
15. Connect the male end of the 8-pin T-harness to the 8-pin TPM module electrical connector.



16. Route the T-harness along the floor console, from the TPM module to the CGEA module, located in the glove box .
- Secure the T-harness with tie-straps.
17. Connect the antenna to the CGEA module.
- Secure the antenna harness with tie-straps.

**INSTALLATION (Continued)**

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

**Assemble Trim**

19. Install the floor console rear trim panel to the floor console.
20. Attach the RH floor console side trim panel, to the floor console.
21. Install the glove compartment opening door.
  - 1 Connect the glove compartment tether.
  - 2 Install the retaining pins for the RH and LH sides.

**NOTE:**

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



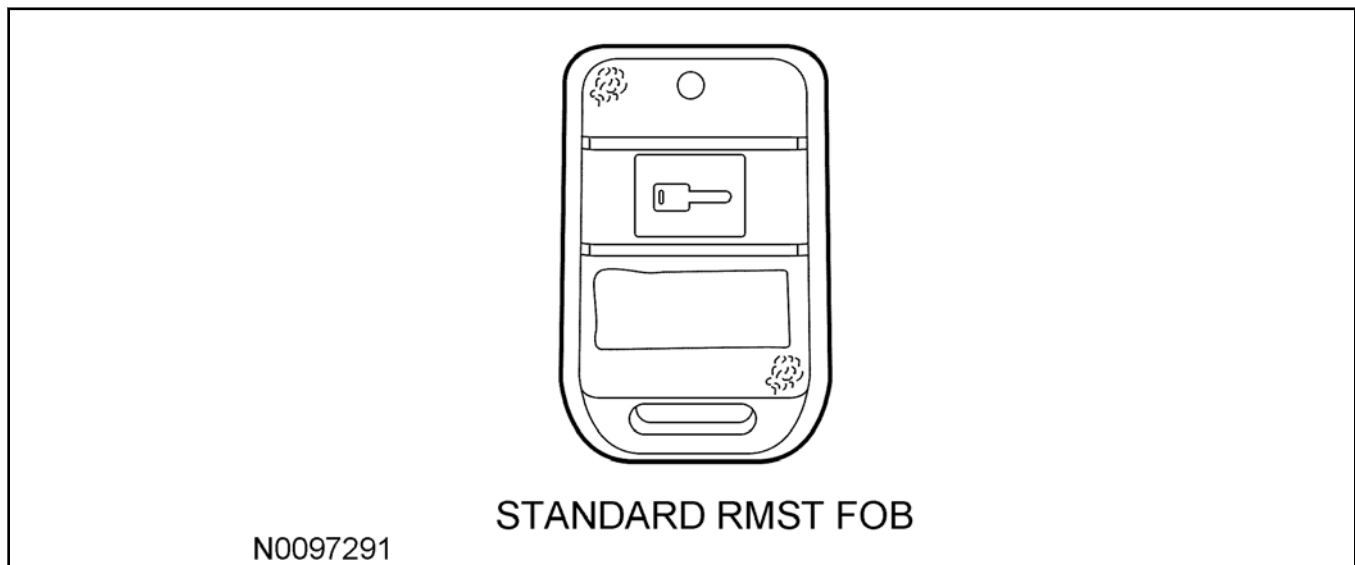
**INSTALLATION (Continued)**

22. 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.

**RMST Functional Test**

23. Make sure the shift lever is in park and the engine is off. Remove all Intelligent Access (IA) Keys from the vehicle.
24. Close the hood.
25. Close all vehicle doors.
26. Start the vehicle by pressing and holding the remote start button on the remote start key fob for more than 2 seconds.



27. Confirm the remote start works with the vehicle in park and with the hood and doors closed.
28. Enter the vehicle and confirm that the vehicle shuts down when attempting to shift out of park.
29. Open the hood.
30. **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.**