

# **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

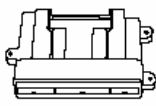
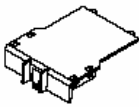









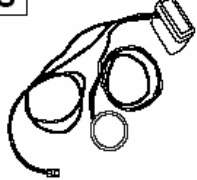

**Note:** If the package is sent without a claim number/claim number visible on the outside of the package, the shipment will be refused and returned at sender's expense.

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

### PARTS BAG CONTENTS

NOTE: Part bag contents are not available as service items

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

### 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"

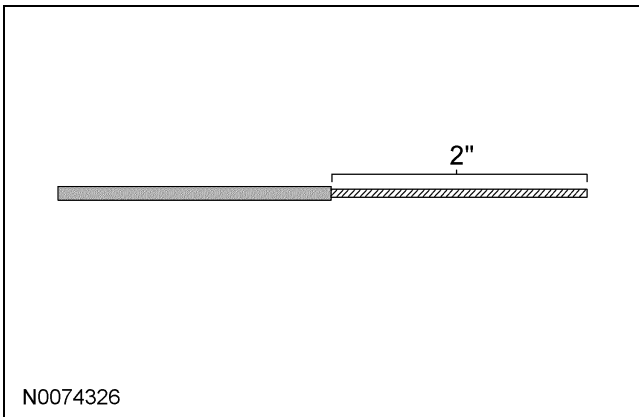
REF	DESCRIPTION	QTY
A	PC-34 MODULE ASSEMBLY	1
B	RMST DNA ASSEMBLY	1
C	1 BUTTON POWERCODE TRANSMITTER	2
G	TYPE "C" CUSTOM WIRING HARNESS	1
N	DIPOLE ANTENNA	1
M	HOOD SAFETY SWITCH ASSEMBLY	1
T - CC	INSTALLATION PARTS BAG	1
DD, EE	FUSE PARTS BAG	1
R	OPERATORS INSTRUCTION	1
Q	OPERATORS QUICK REFERENCE WALLET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

## GENERAL PROCEDURES

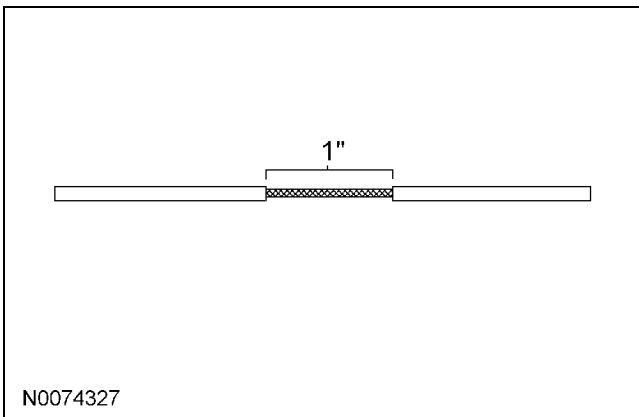
### Proper Splicing Techniques

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

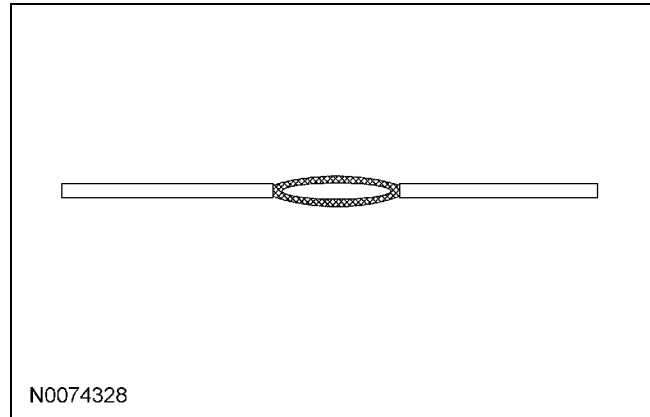
1. Strip approximately two inches of insulation from the wire to be installed in the vehicle.



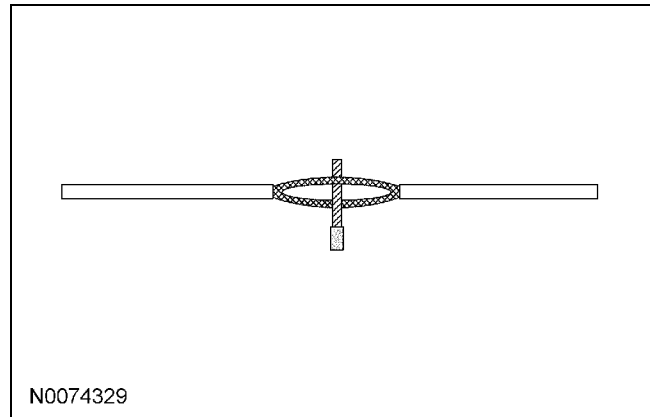
2. On the vehicle wire to be spliced into, strip one inch of insulation from the wire.



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.

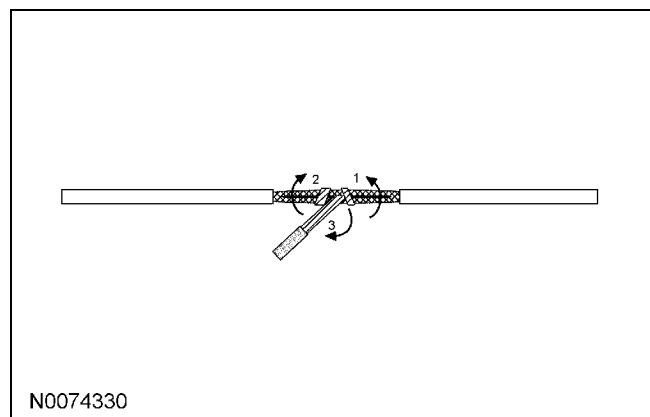


4. Insert the new wire between the parted strands. If more than one wire is being spliced, wrap them in opposite directions.



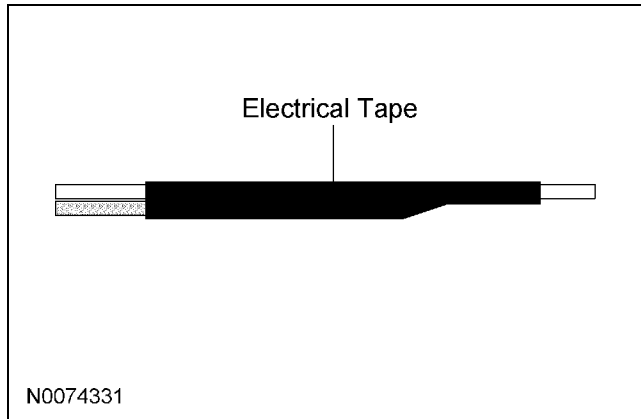
**NOTE:** Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

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)**

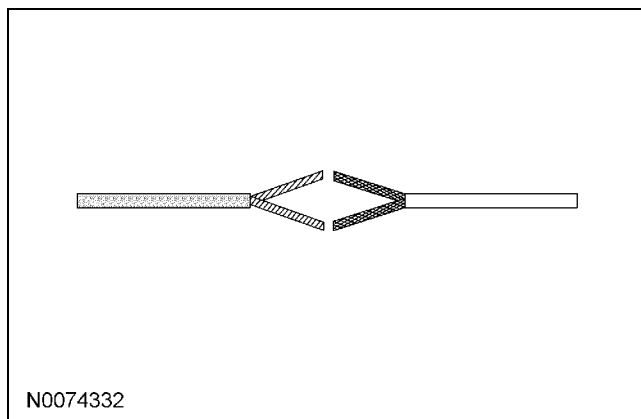
6. Wrap the connection with electrical tape so the tape covers the wires approximately two inches on either side of the connection.
  - Tape the wires together as shown in the illustration.

**Splicing End to End Connections**

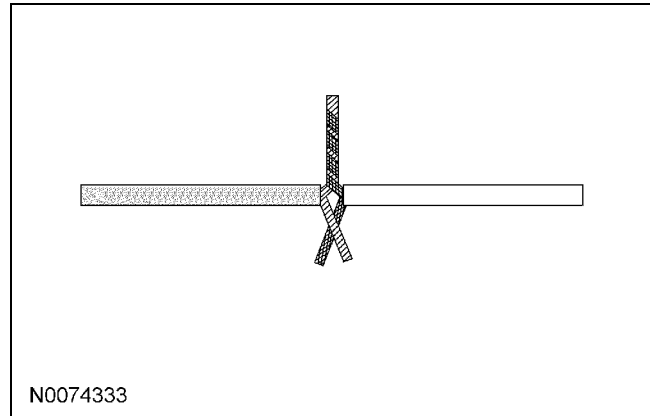
**NOTE:** When both ends of the wire are cut, use the end to end wire splicing procedure.

**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.

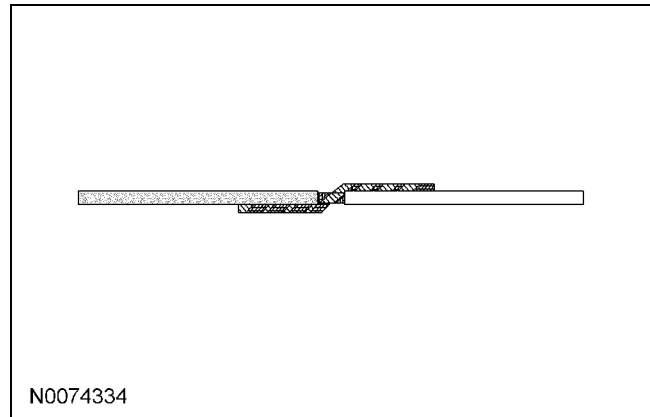


2. Place the wires next to each other and twist the upper and lower strands together as shown.

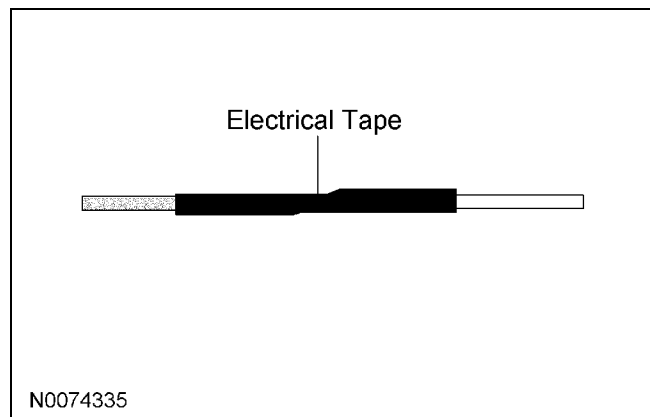


**NOTE:** Use Rosin Core Mildly-Activated (RMA) Solder. Do not use Acid Core Solder.

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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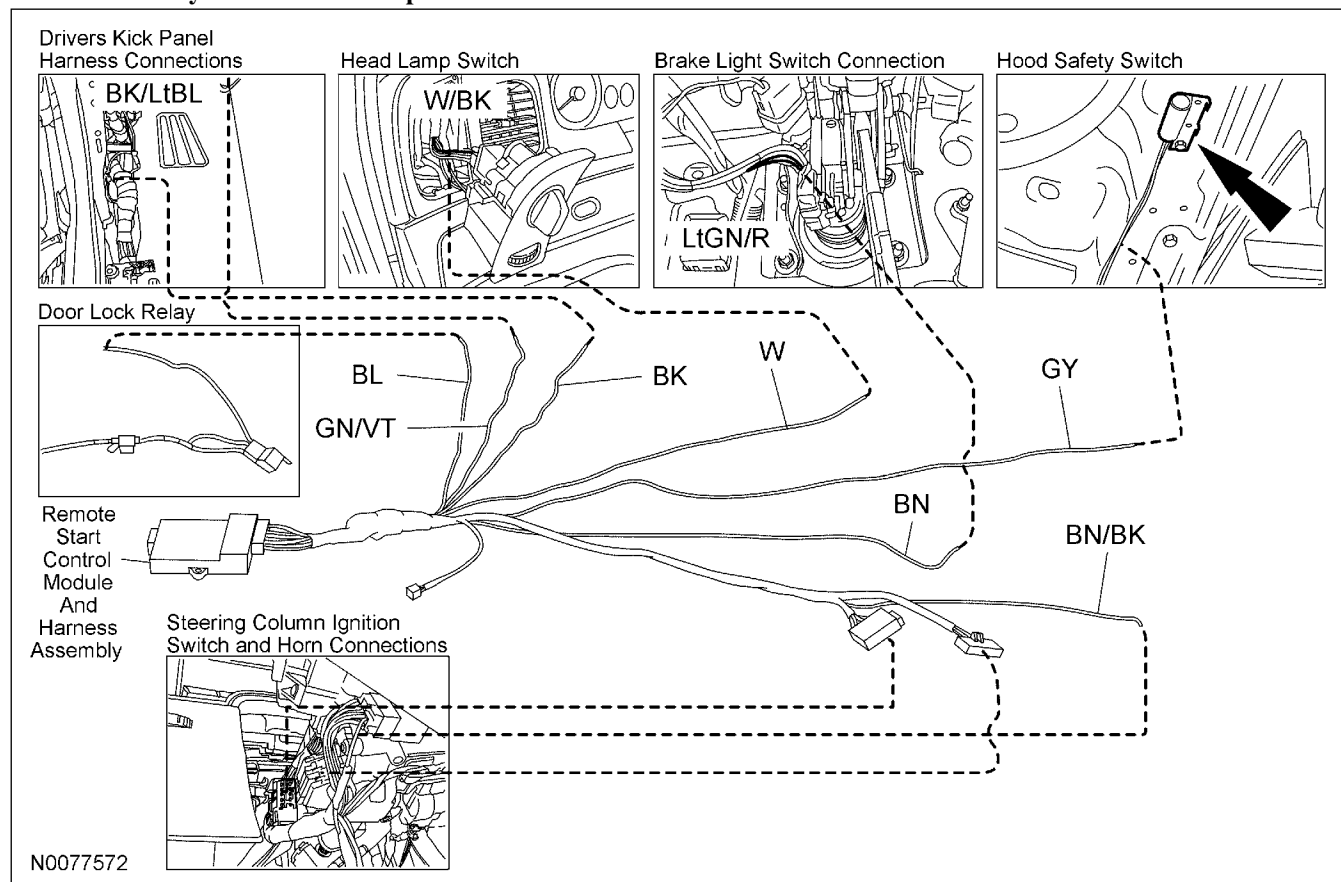
### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



#### Crown Victoria/Grand Marquis

**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 7W3Z-19G364-AA (GFA) REMOTE START SYSTEM.

9C3Z-19G364-A (GFA) BIDIRECTIONAL REMOTE START SYSTEM.

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

- Review the RMST standard 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.

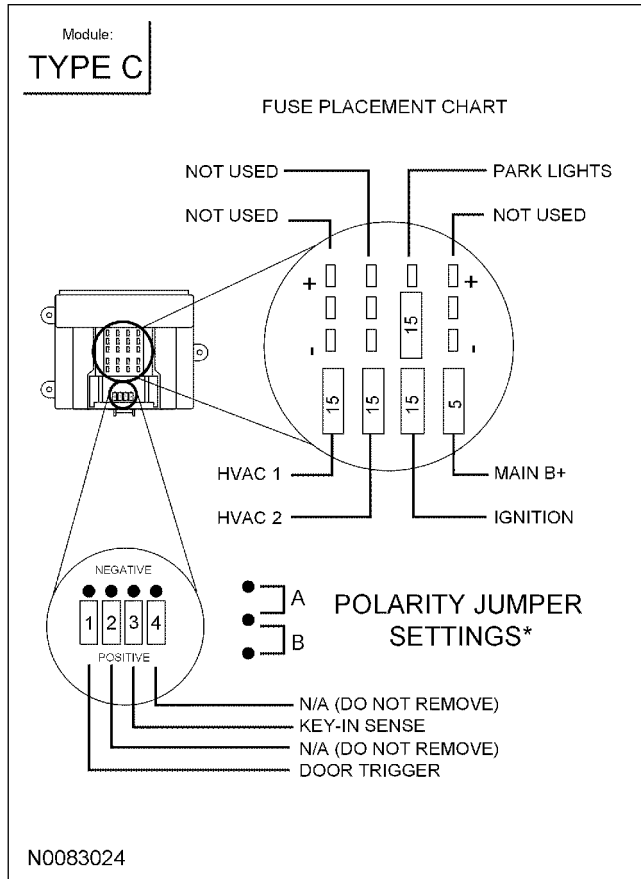
**Remote Start System Bidirectional Kit (RMST) Type - "C"**

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

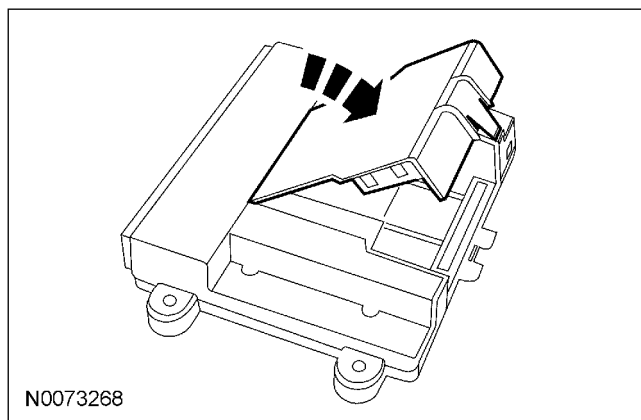
**Module Preparation**

- 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.

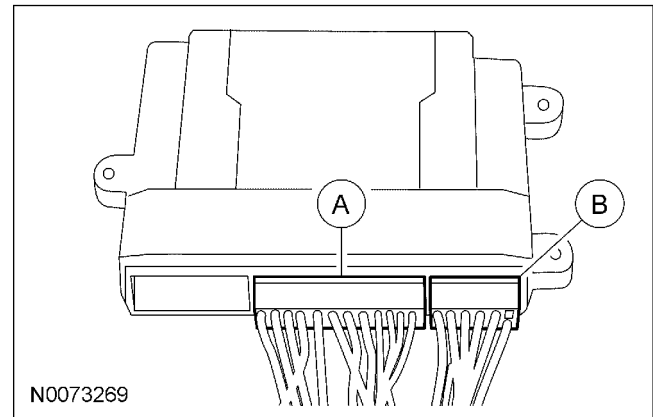
## INSTALLATION (Continued)



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



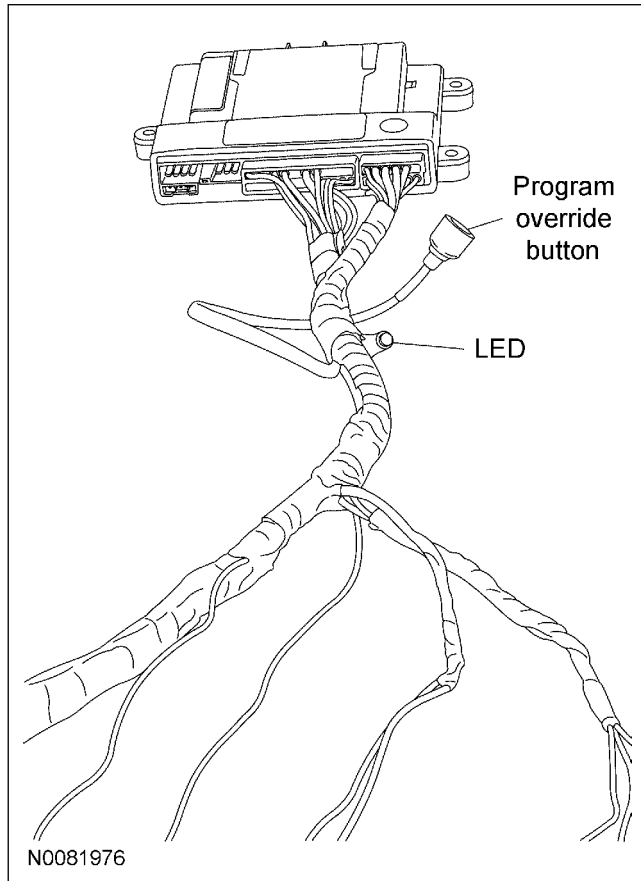
6. Plug the wiring harness(es) into the module.
  - A - Harness: 24-way, used on all systems.
  - B - Harness: 10-way, used on all systems with RMST.



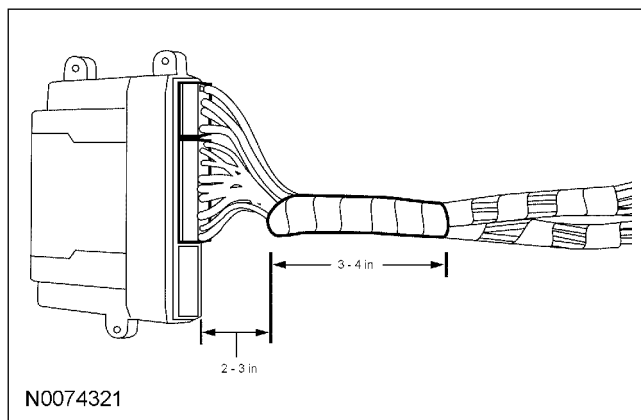
7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

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

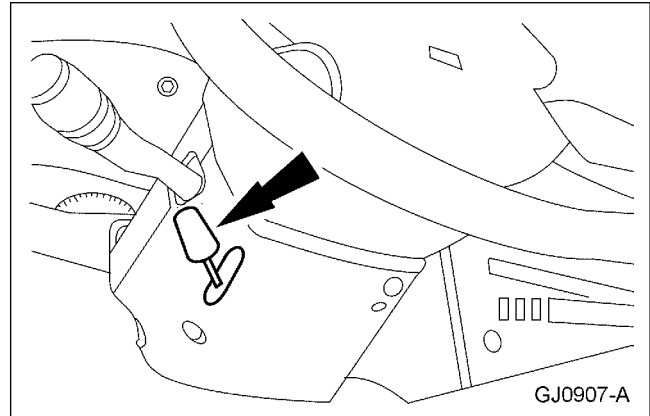
Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18". Depending on the vehicle, there will be 2 to 5 different wire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

9. Remove the steering column tilt release lever/handle.



**NOTE:** Release the upper steering column shroud by pressing the sides inward.

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.

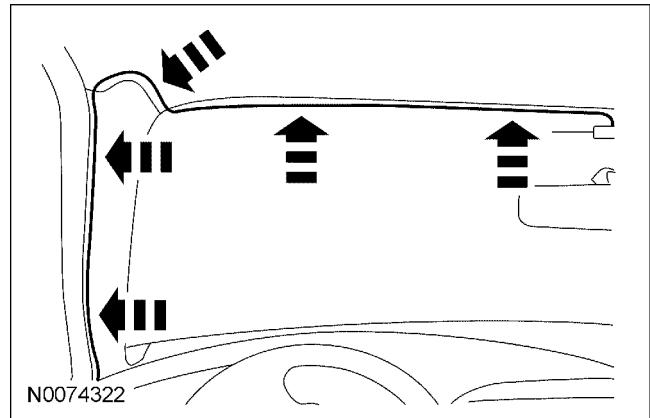
**INSTALLATION (Continued)**

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.

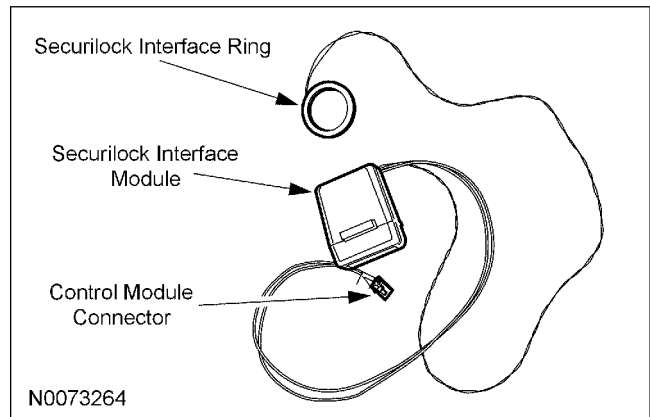
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



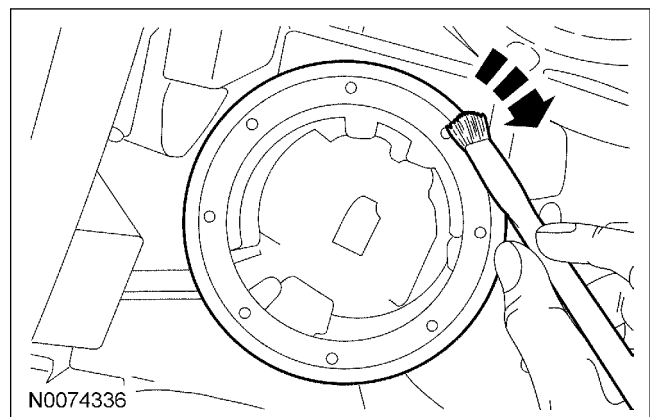
17. Reposition the A pillar trim panel.

**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.



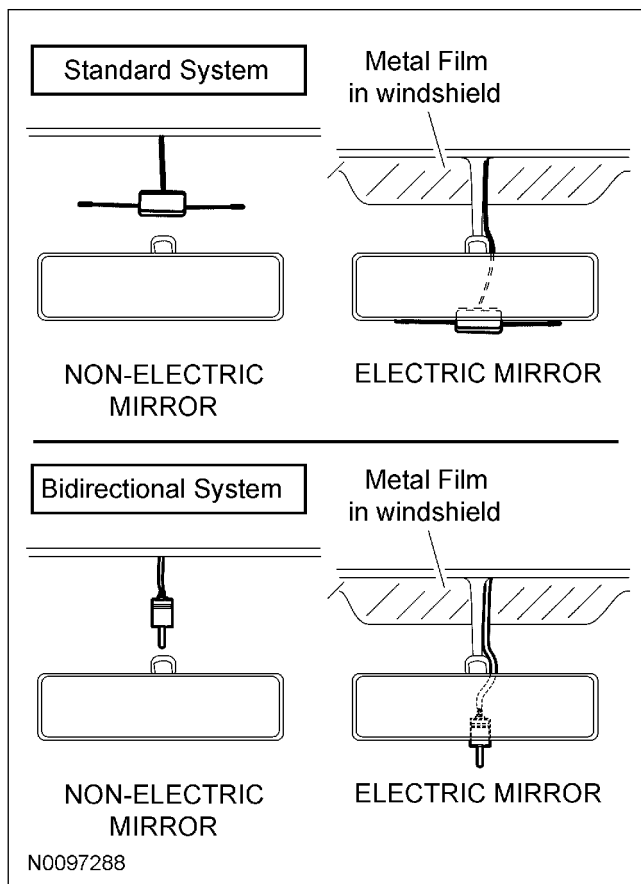
19. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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.

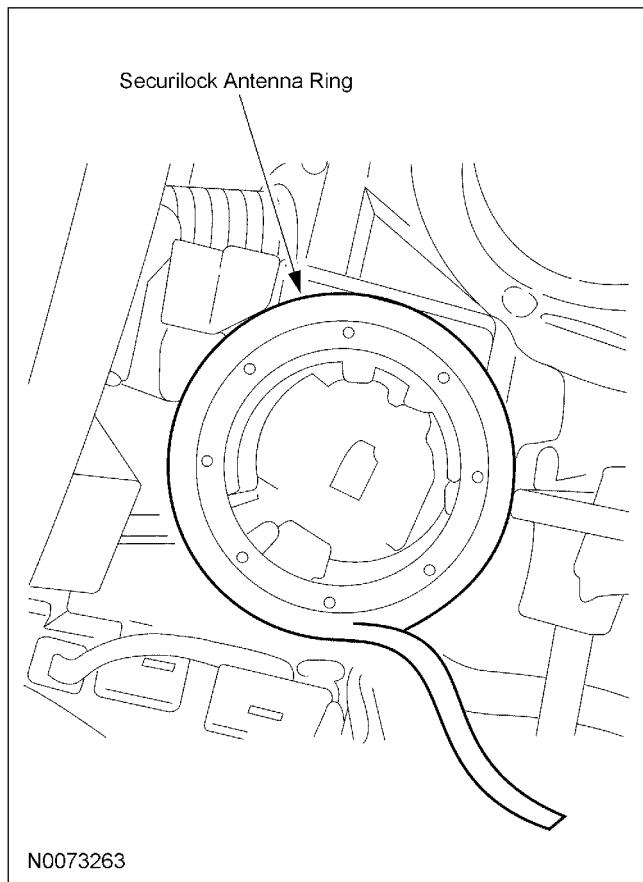


**INSTALLATION (Continued)**

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.

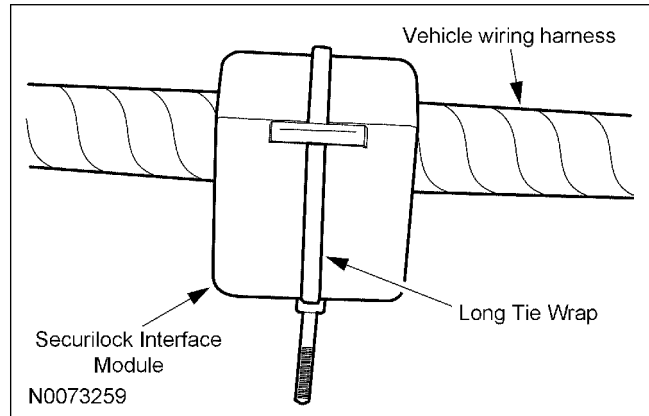
**Install The Securilock Interface Module**

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 to the module mounting location.

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

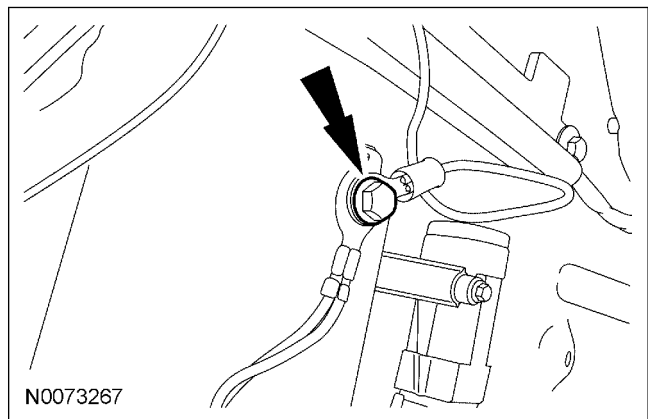
23. Place the remote start module and harness assembly on the floor of the vehicle.

**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 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 Dark Blue horn circuit wire in the steering column harness.

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

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

A logic probe connected to the correct wire will show power with the switch in the OFF position and ground with the switch in the parking lights ON position.

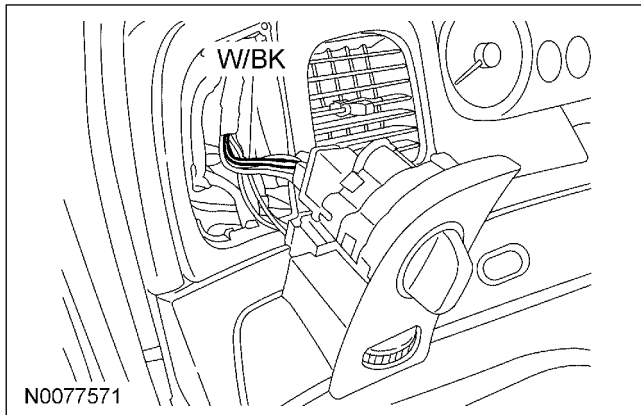
Identify the White/Black parking lights on circuit wire at the headlight switch.

30. Connect the White wire from the remote start module harness to the White/Black parking lights on circuit wire at the headlight switch.

31. **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 Light Green/Red brake switch circuit wire at the brake switch.



32. Connect the Brown wire from the remote start module harness to the Light Green/Red brake switch circuit wire at the brake switch.

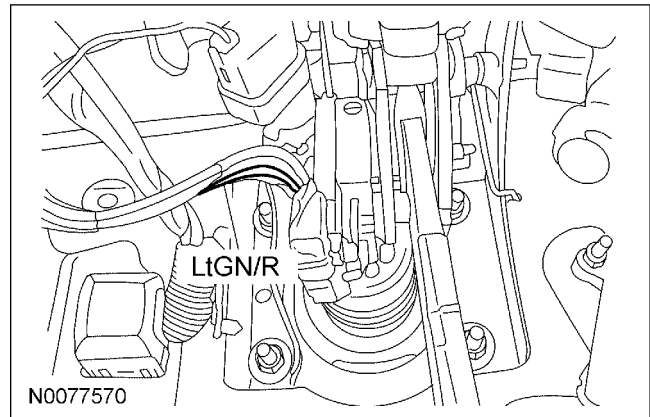
33. **NOTE:** A DVOM connected to the correct wire will show 12V with the vehicle door(s) open and the dome light ON, then show 0V with the vehicle door(s) closed and the dome light OFF.

**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 Black/Light Blue dome light circuit wire at the under dash light location.



34. Connect the Green/Violet wire from the remote start module harness to the Black/Light Blue dome light circuit wire at the under dash light location.

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

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

Identify the Pink/Yellow power door lock circuit wire at the harness above the gas pedal.

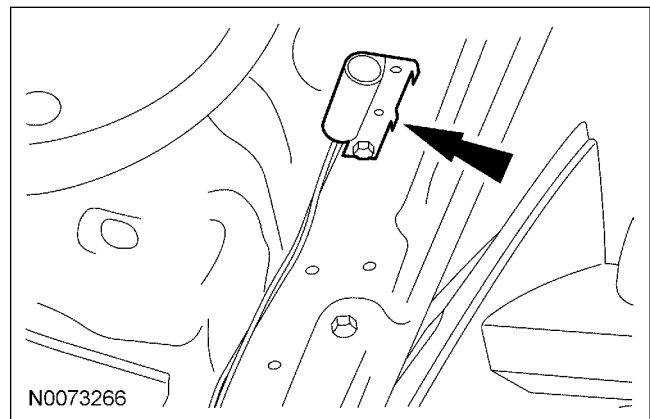
36. Connect the Blue wire from the door lock relay harness to the Pink/Yellow power door lock circuit at the harness above the gas pedal.

**INSTALLATION (Continued)****Install The Power Window Interrupt Relay**

37. Prepare the relay harness.
38. Remove the circuit 87 Yellow wire and terminals from the relay harness connector.
  - Release the locking tab and pull the wire and terminal from the connector.
39. Connect the White wire from the relay to the Blue/Black circuit wire from the remote start module harness.
40. **NOTE:** A DVOM connected to the correct wire will show 12V with the key in the on position. A logic probe connected to the correct wire will show power with the key in the on position. Identify the Violet/Orange battery wire at the ignition switch harness.
41. Connect the Black wires from the relay to the Violet/Orange battery wire at the ignition switch harness.
42. **NOTE:** Cutting this wire will disable all power windows.  
Identify the Black Run/Accessory circuit wire at the back of the instrument panel fuse box.
43. Cut the Black wire at the back of the instrument panel fuse box.
  - Connect the Red wire from the relay to the load side of the Black wire.
  - Connect the Blue wire from the relay to the feed side of the Black wire.

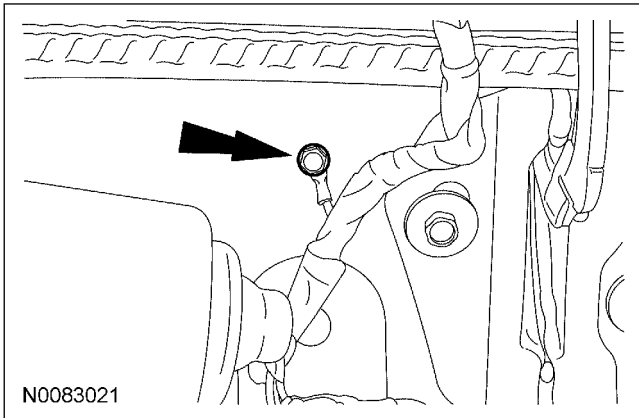
**Install The Hood Safety Switch**

44. **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 StartLocate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.
45. Apply rustproofing compound (PM-13-A) to the drilled hole and torque the screw to 1.00 Nm (10 lb-in).



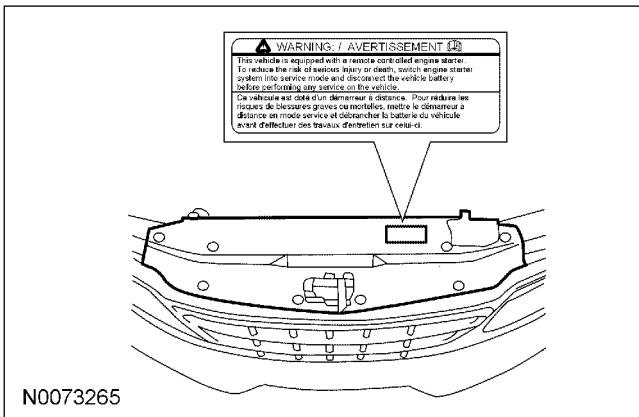
**INSTALLATION (Continued)**

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

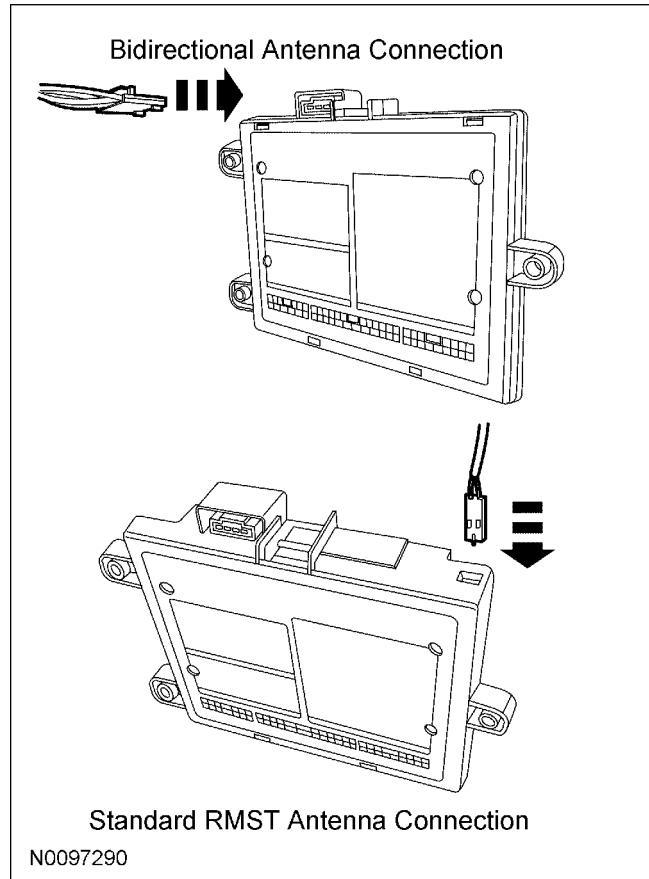


47. **NOTE:** Place the label on the radiator fan shroud or similar area.

Install the underhood warning label



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



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

**Program The RMST System**

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

**Secure RMST Harness and Control Module**

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

53. **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**

54. Install the left scuff plate and cowl trim panel.



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**INSTALLATION (Continued)**

55. Install the upper and lower steering column shrouds.

Install the 3 screws.

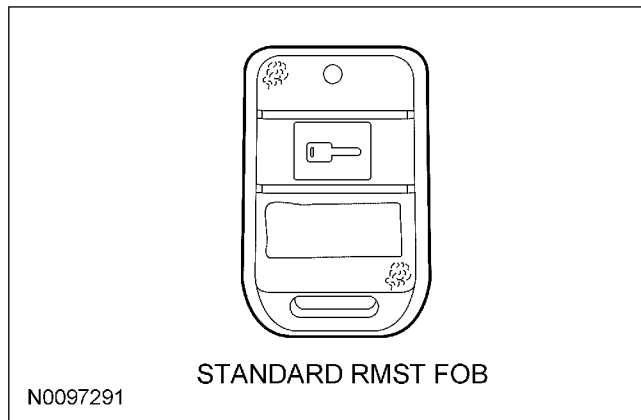
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56. Install the steering column tilt release lever/handle.

## 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.

**GENERAL PROCEDURES (Continued)**

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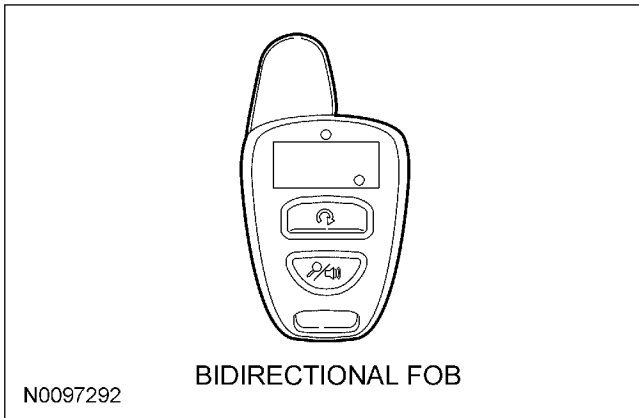
<b>CHIRPS</b>	<b>PROBLEM</b>
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

---

## GENERAL PROCEDURES

### Programming - Bidirectional Remote Start

#### Programming the Module



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 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.



# '09 Crown Vic/Grand Marquis

## 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
A-1	WHITE	Parking Light Output

#### DRIVER'S KICK PANEL HARNESS

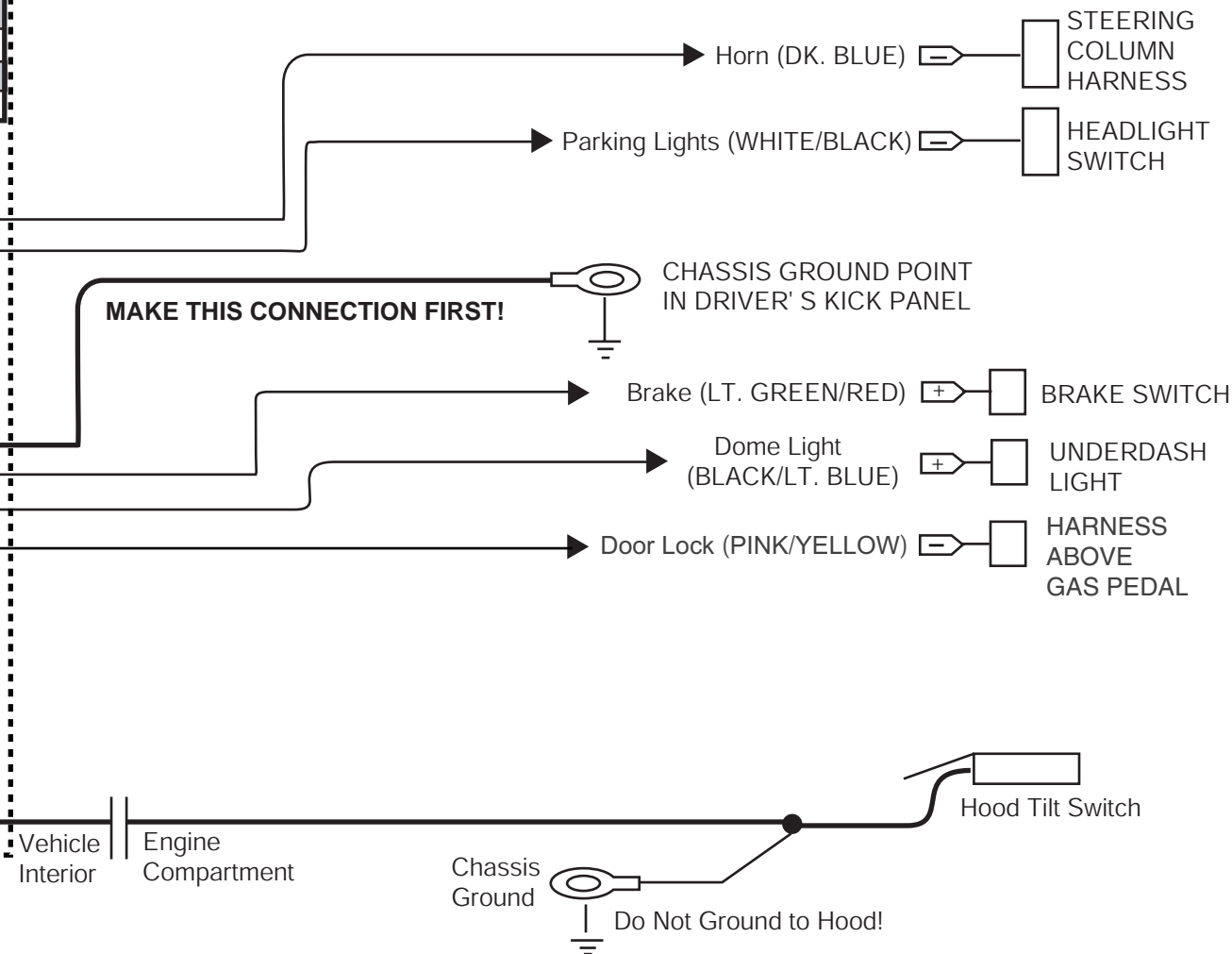
	Color	Function
A-5	BLACK	Ground
B-7	BROWN	Brake Input
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-2	BLUE	Door Lock Output

#### UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

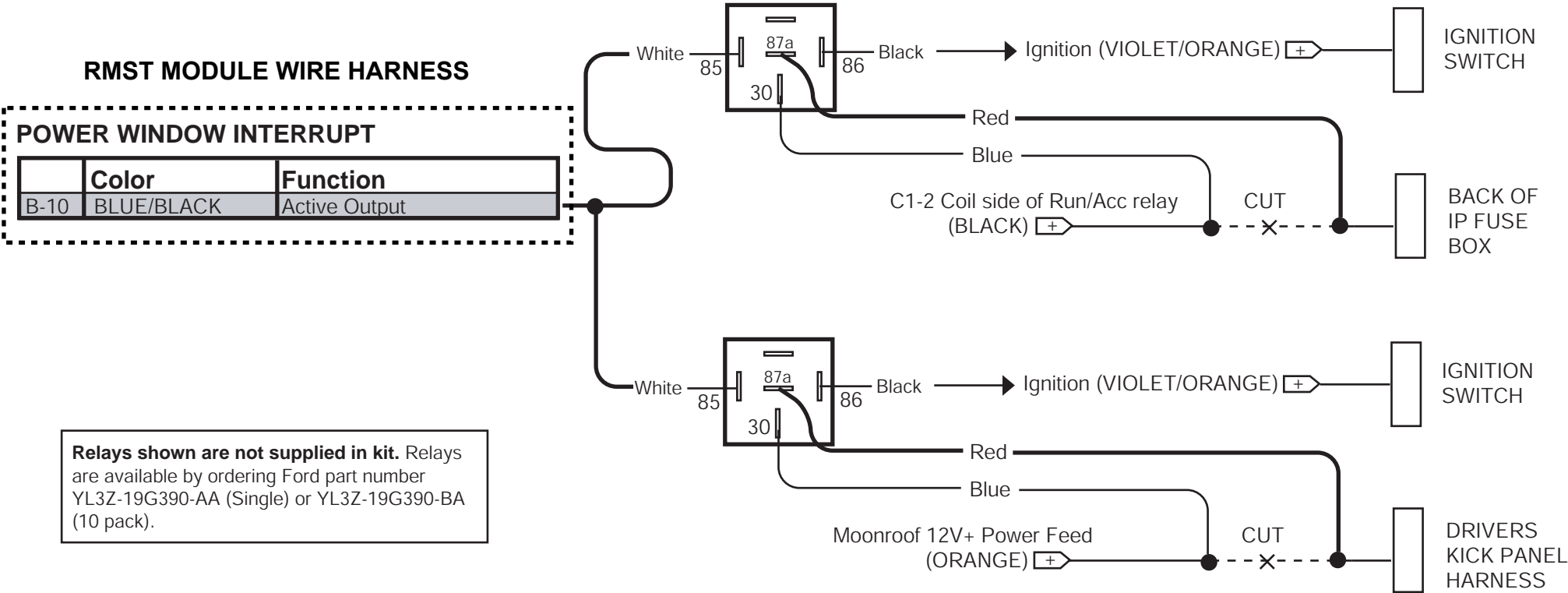
VEHICLE HARNESS

IGNITION SWITCH



POWER WINDOW / MOONROOF INTERRUPTS

NOTE: CUTTING THIS WIRE WILL DISABLE ALL POWER WINDOWS AND MOONROOF



CAUTION: REMOVE YELLOW WIRE AND TERMINAL FROM RELAY SOCKET

[Manual Table of Contents](#)

# 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](#)

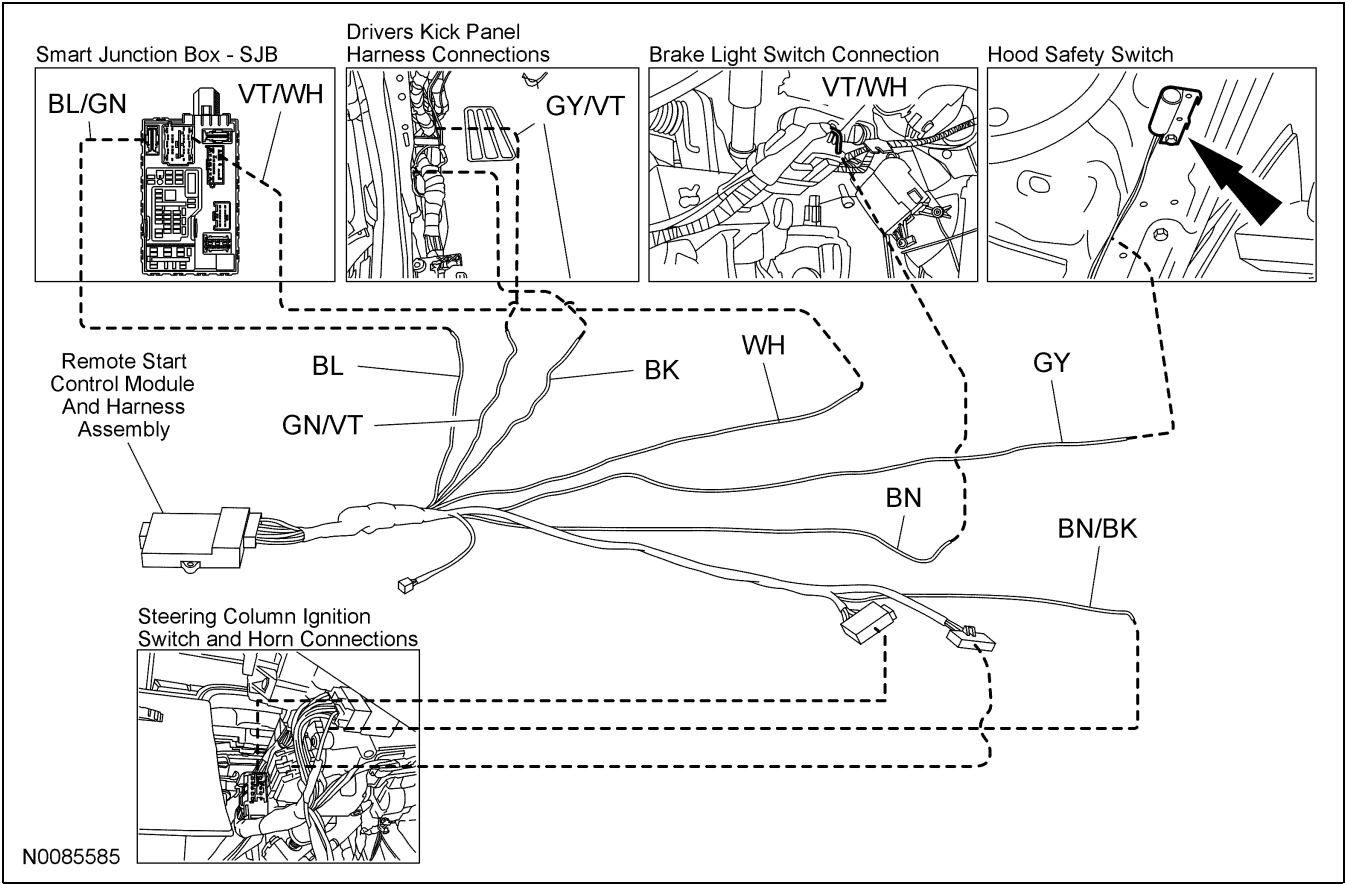
### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

INSTALLATION

Remote Start

Remote Start System RMST Components



Focus

**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.
- 2. Review the RMST kit contents.

Review Remote Start Installation Kit Contents

**NOTE:** Use kit number 7L2J-19G364-CA (FIA), 7L2J-19G364-CC (FIA) or 7L2Z-19G364-AA (GFA) REMOTE START SYSTEM. 9G1Z-19G364-A (GFA) BIDIRECTIONAL REMOTE START SYSTEM.

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

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

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

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

QUANTITY	DESCRIPTION
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 (SOLD SEPARATELY AND REQUIRED FOR VEHICLES W/PATS)

3. Review the RMST bidirectional kit contents.

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

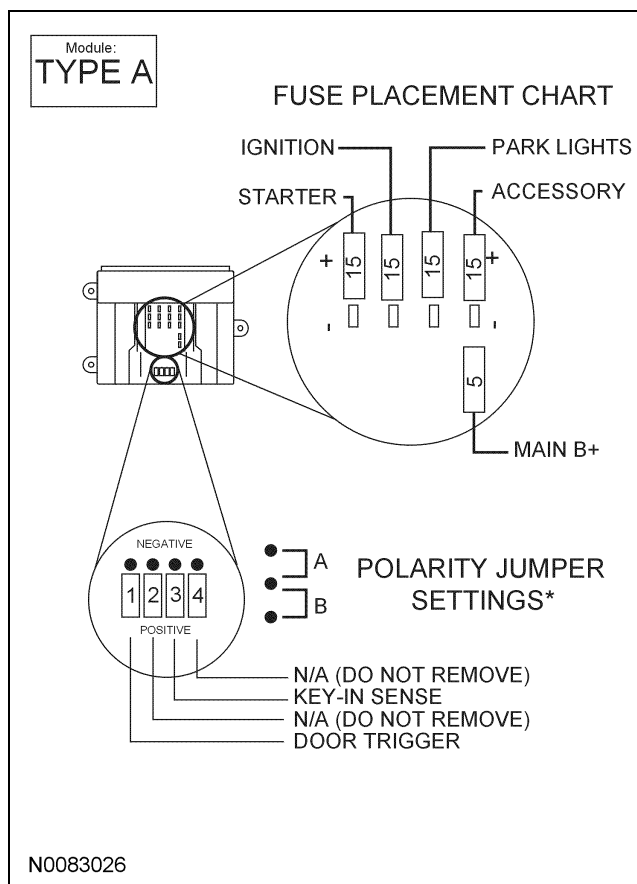
QUANTITY	DESCRIPTION
1	TYPE - "A" MODULE ASSEMBLY
1	RMST SOFTWARE CARTRIDGE ASSEMBLY
1	2 BUTTON POWERCODE TRANSMITTER
1	TYPE - "A" CUSTOM WIRING HARNESS
1	ANTENNA
1	ANTENNA HARNESS
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG

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

QUANTITY	DESCRIPTION
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)

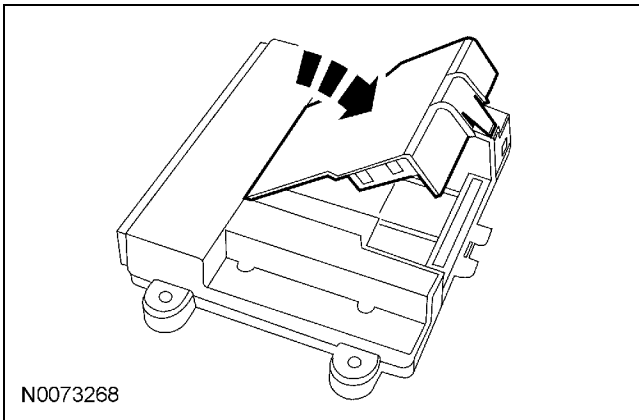
**Module Preparation**

- 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.

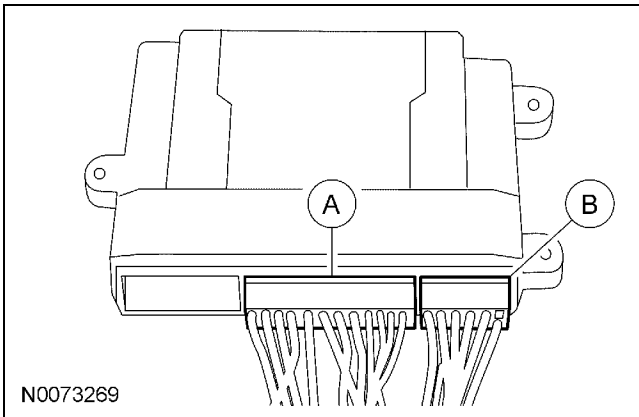


**INSTALLATION (Continued)**

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.

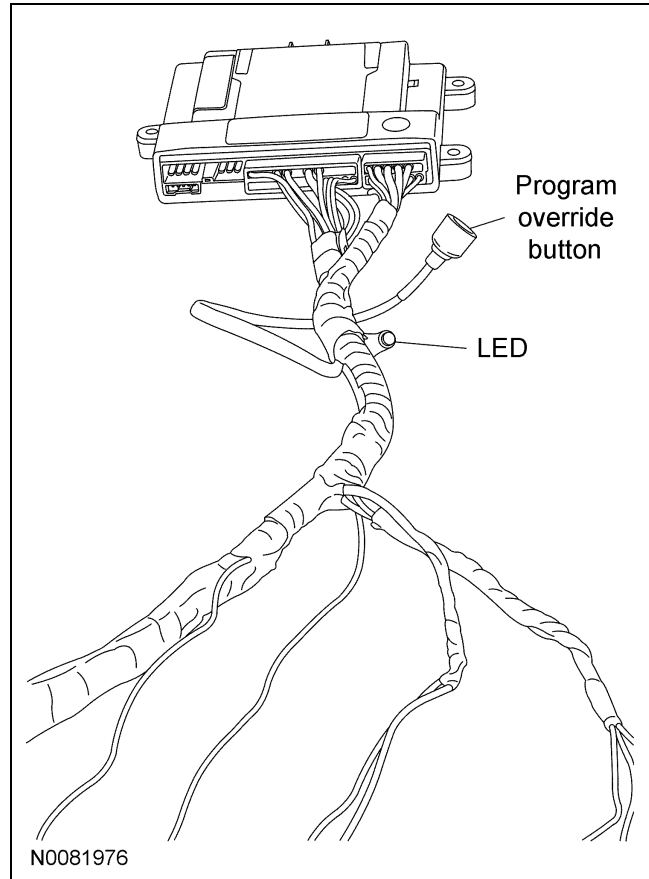


7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

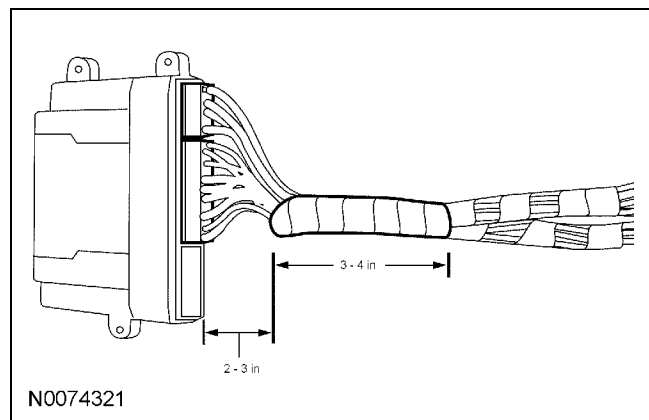
**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

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.



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

## INSTALLATION (Continued)

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

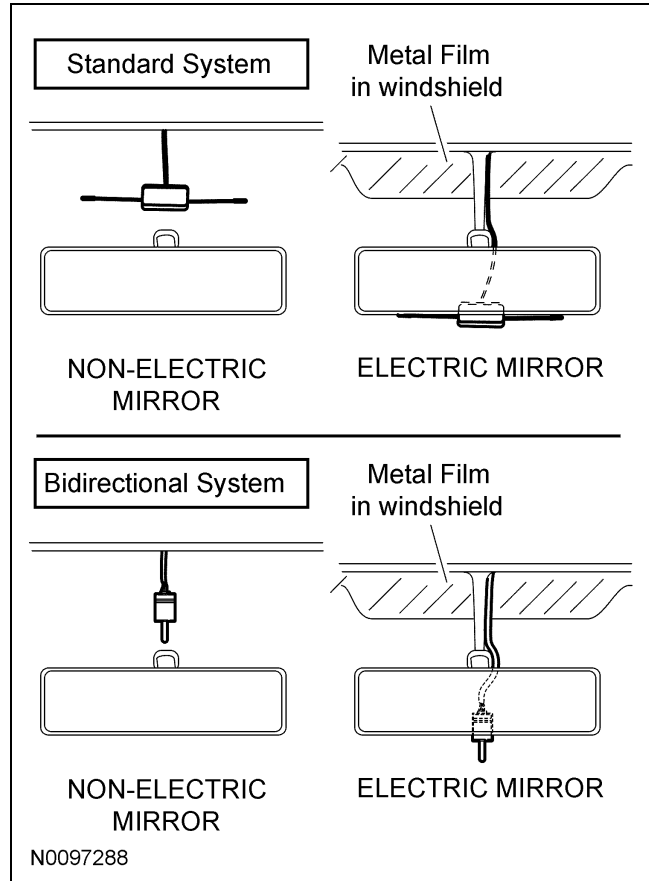
13. Clean the mounting surface using an alcohol base solution and a clean cloth.

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.

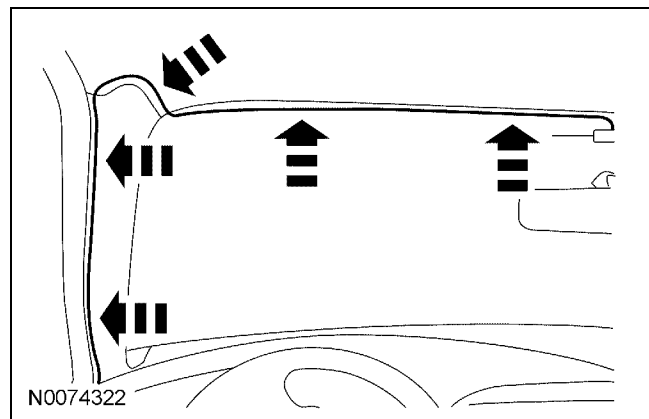
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



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.

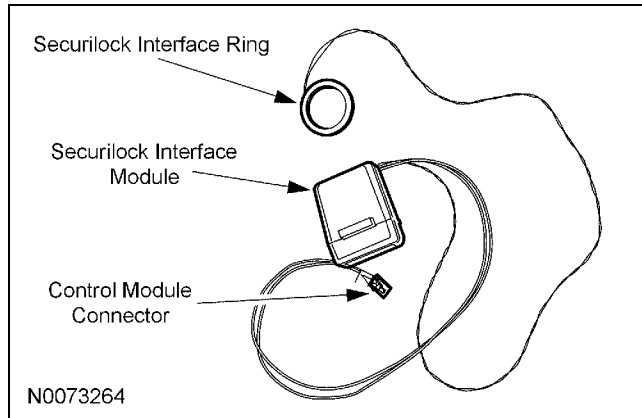
16. Route the antenna cable along the headliner and down the A pillar towards the floor.



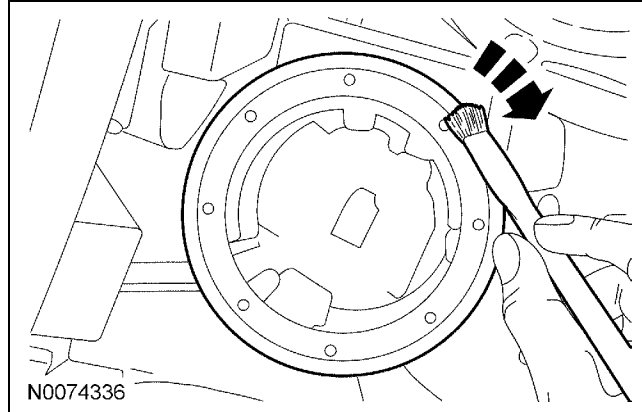
17. Reposition the A pillar trim panel.

**INSTALLATION (Continued)****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.



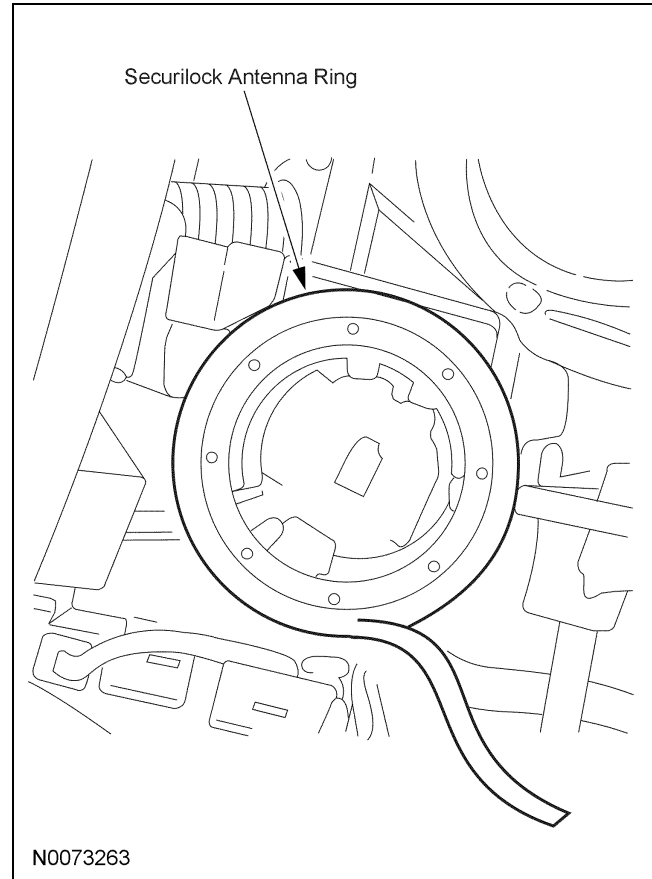
19. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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.

**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.

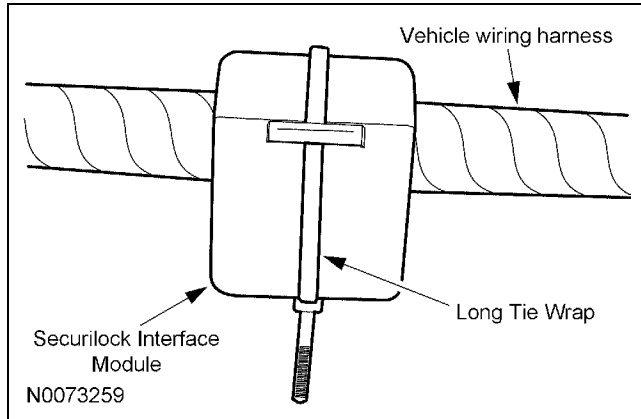
Mount the SECURILOCK Interface Module to an underdash wiring harness using one of the supplied long tie wraps.



**INSTALLATION (Continued)**

22. **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**

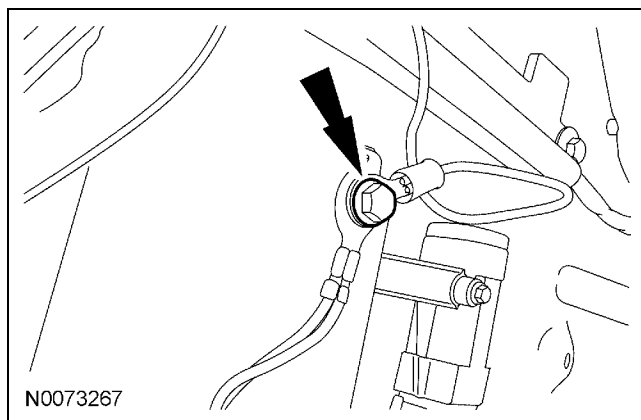
23. Place the remote start module and harness assembly on the floor of the vehicle.

**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.

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 the Smart Junction Box (SJB) connector C2280C pin 17.

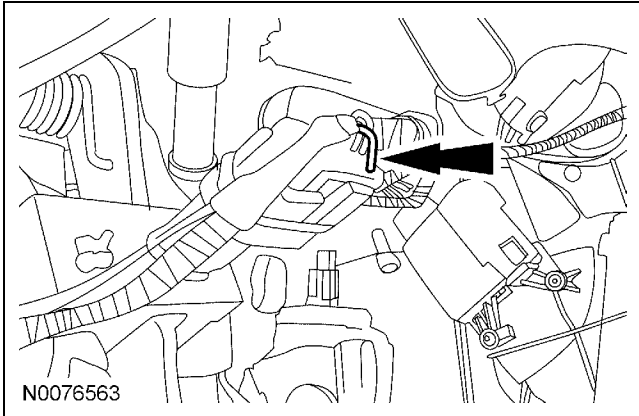
30. Connect the Blue wire from the remote start module harness to the Blue/Green power door lock circuit at the SJB connector C2280C pin 17.

31. **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.

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

**INSTALLATION (Continued)**

33. **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 connector C214A pin 7.

34. Connect the Green/Violet wire from the remote start module harness to the Grey/Violet dome light circuit wire at the driver kick panel connector C214A pin 7.

35. **NOTE:** A DVOM connected to the correct wire will show 0V with the head lamps switch in the OFF position, then show 12V with the head lamp switch in the parking lights ON position.

**NOTE:** A logic probe will show ground with the head lamp switch in the OFF position and power with the switch in the parking lamps ON position.

Identify the Violet/White parking lights circuit wire at the SJB connector C2280D pin 20.

36. Connect the White wire from the remote start module harness to the Violet/White parking lights circuit wire at the SJB connector C2280D pin 20.

**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.

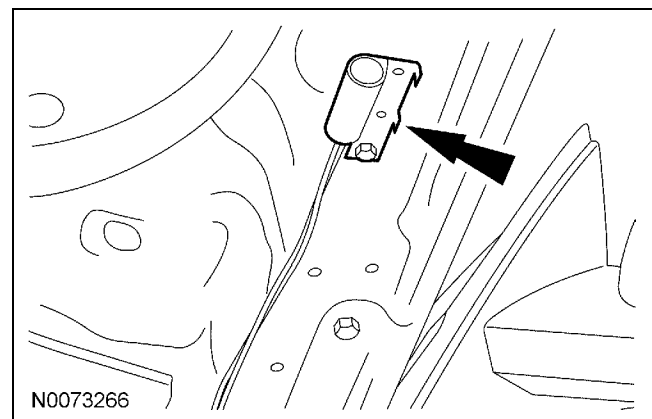
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

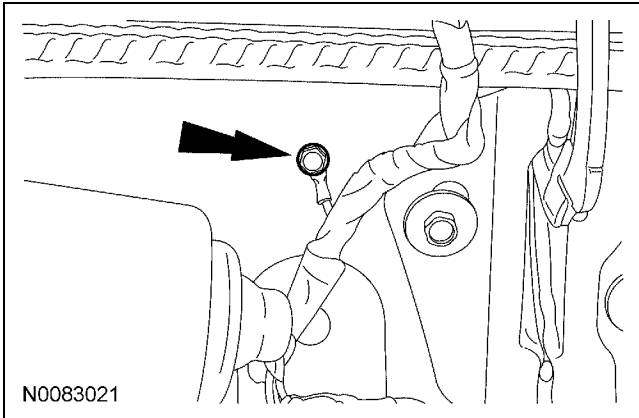
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

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



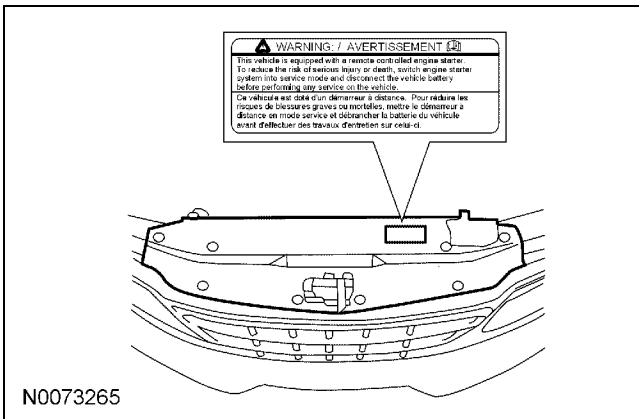
**INSTALLATION (Continued)**

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

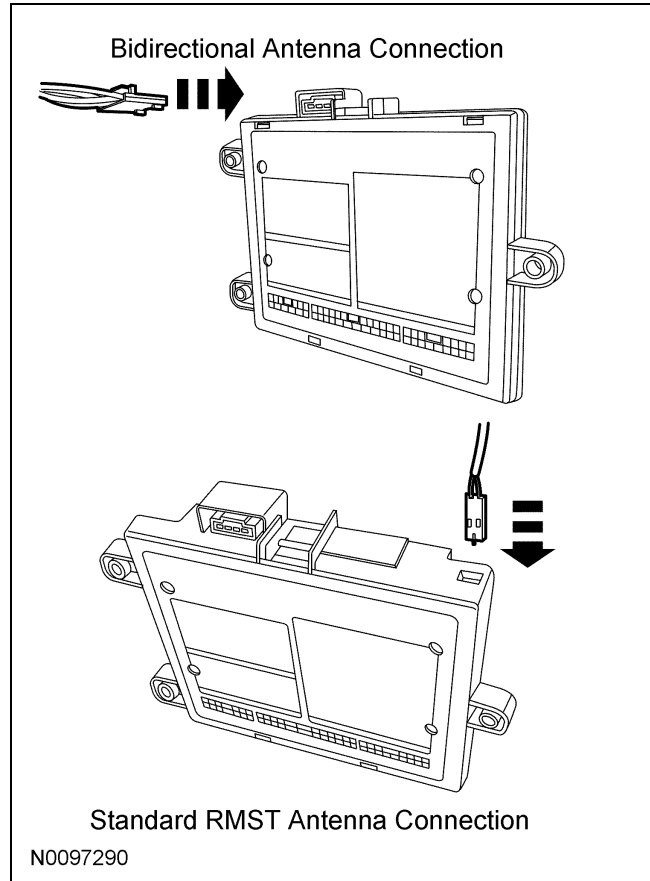


40. **NOTE:** Place the label on the radiator fan shroud or similar area.

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.
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.

**All Vehicles**

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

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**INSTALLATION (Continued)**

48. Install the upper and lower steering column shrouds.

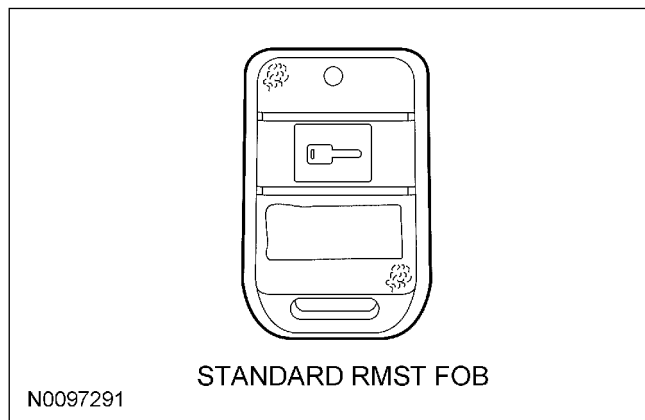
Install the 3 screws.

---

## 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.

---

**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.

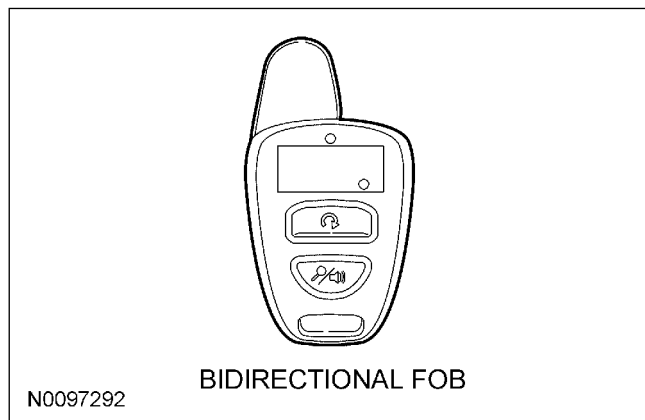
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## GENERAL PROCEDURES

### 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.

# '09 Focus

## 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
A-1	WHITE	Parking Light 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

#### UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

VEHICLE  
HARNESS

IGNITION  
SWITCH

Horn (BLUE/WHITE)

STEERING  
COLUMN  
HARNESS

Parking Lights (VIOLET/WHITE)

SJB C2280D  
Pin 20

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT  
IN DRIVER'S KICK PANEL

Door Lock ((BLUE/GREEN)

SJB C2280C  
Pin 17

Brake (VIOLET/WHITE)

BRAKE SWITCH

Dome Light Return (GREY/VIOLET)

DRIVERS  
KICK PANEL

Vehicle  
Interior

Engine  
Compartment

Hood Tilt Switch

Chassis  
Ground

Do Not Ground to Hood!

[Manual Table of Contents](#)

# REMOTE START SYSTEM INSTALLATION

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### INSTALLATION

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### GENERAL PROCEDURES

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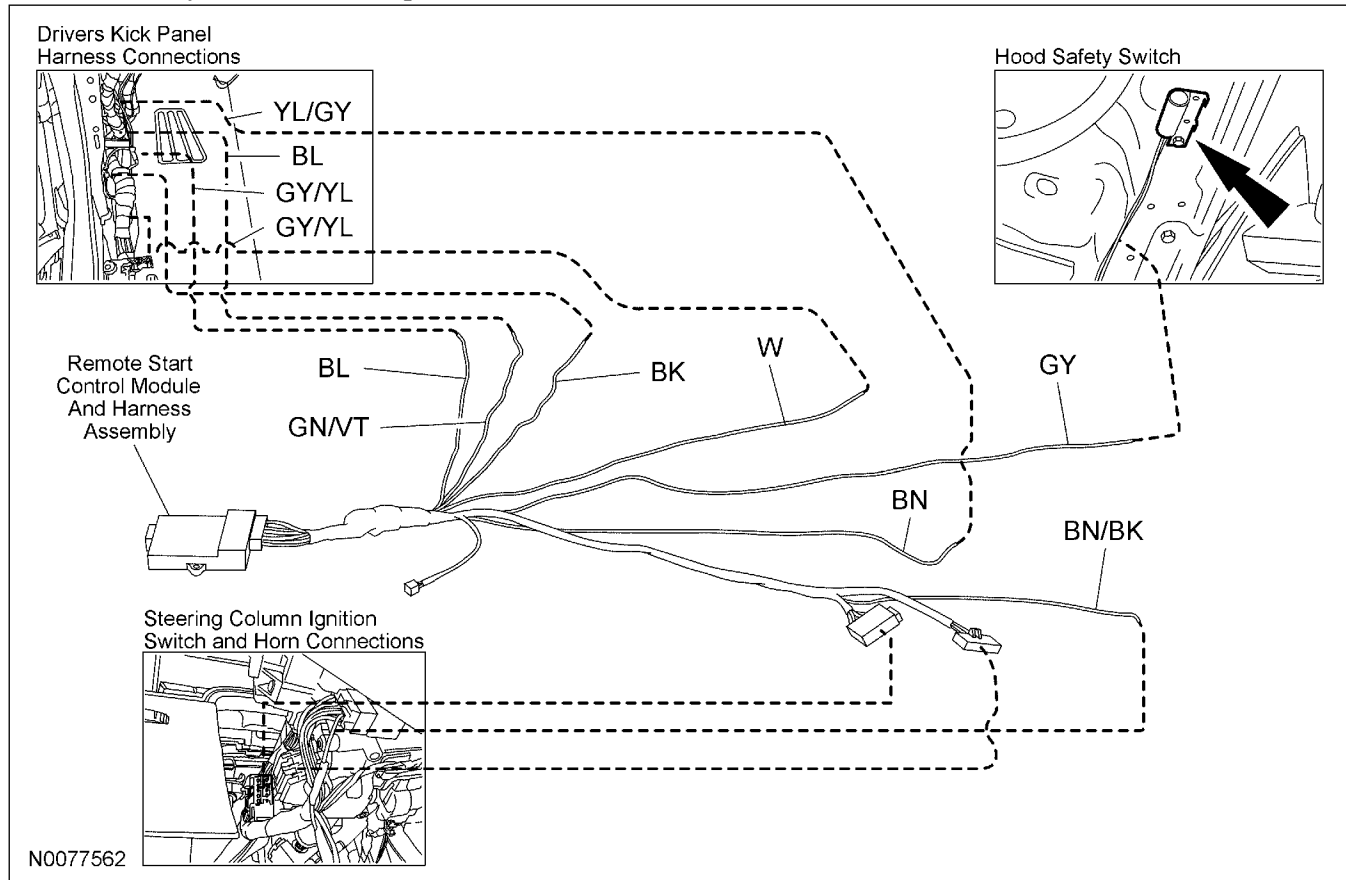
### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



#### Fusion/Milan/MKZ

**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 7L2Z-19G364-AA (GFA) REMOTE START SYSTEM

9G1Z-19G364-A (GFA) BIDIRECTIONAL REMOTE START SYSTEM.

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

2. 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

3. Review the RMST bidirectional kit contents.

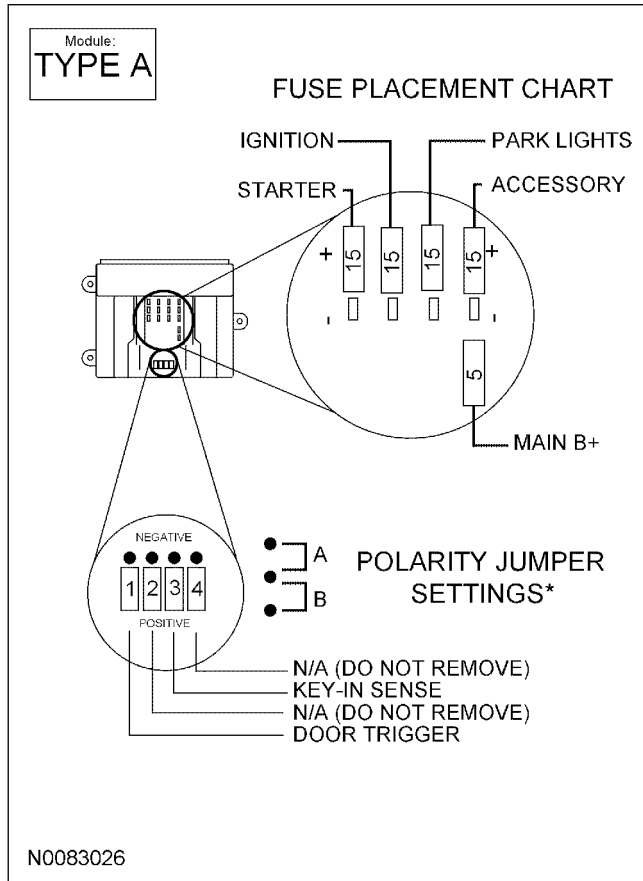
**Remote Start System Bidirectional Kit (RMST) Type - "A"**

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

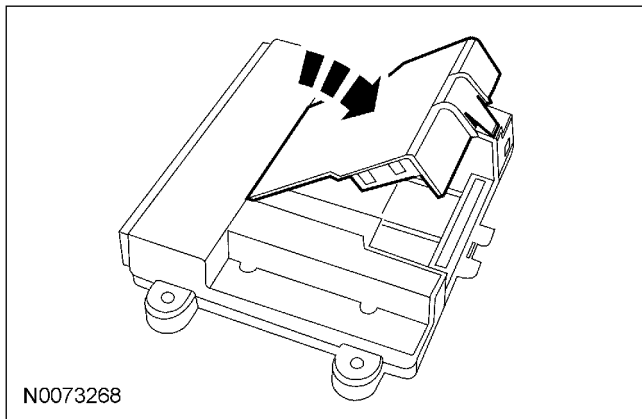
**Module Preparation**

- 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.

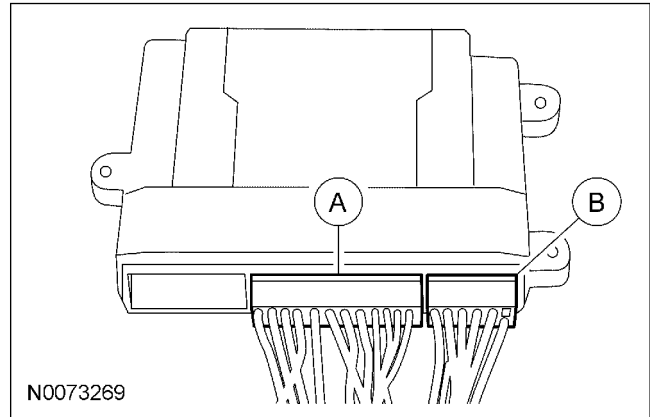
## INSTALLATION (Continued)



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.



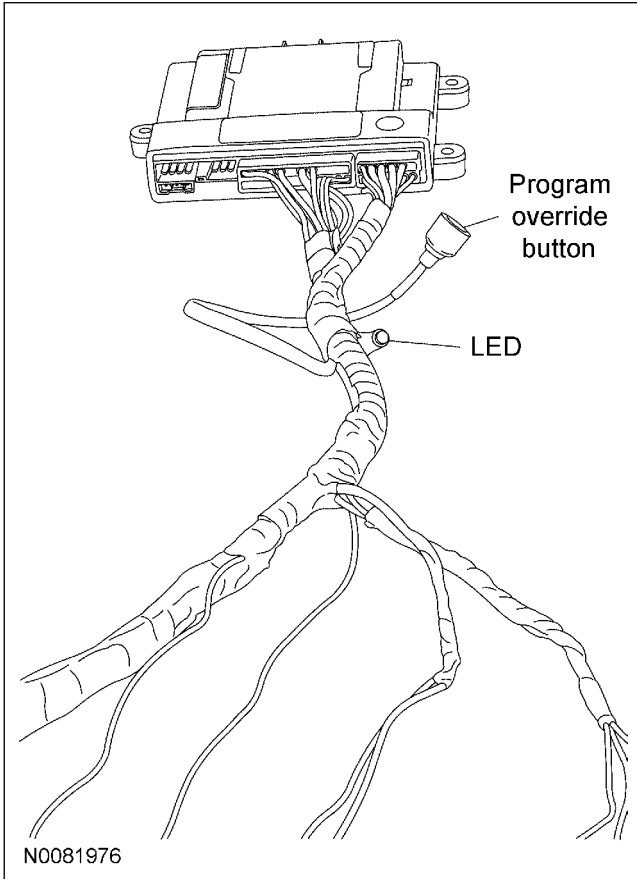
7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

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

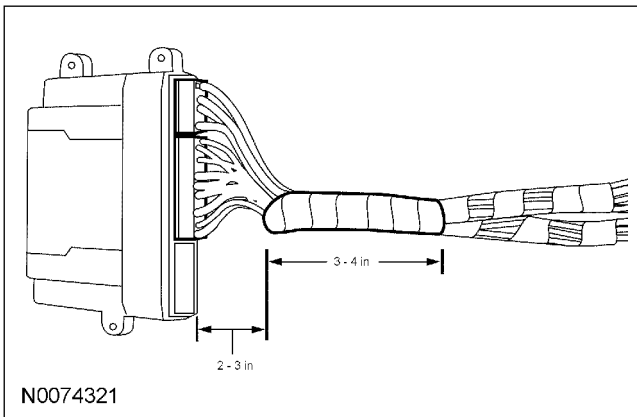
Referring to the vehicle specific wiring section for the system being installed, gather all individual wires that will be routed to the same areas of the vehicle into groups. Cover each wire group with electrical tape for approximately 18". Depending on the vehicle, there will be 2 to 5 different wire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

**NOTE:** The instrument panel steering column cover is held in place by tabs that clip to the instrument panel.

9. Remove the instrument panel steering column cover by pulling straight outward.

**NOTE:** Release the upper steering column shroud, by pressing inward on the sides of the shroud and lifting upwards.

10. Remove the upper steering column shroud.
11. Release the tilt lever, remove the 3 screws and then remove the lower steering column shroud.
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.

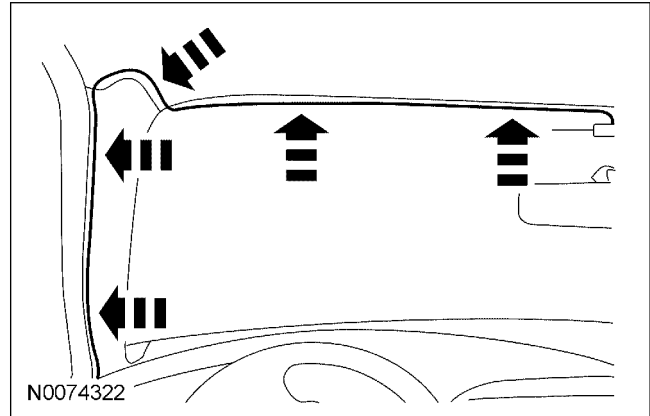
**INSTALLATION (Continued)**

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.

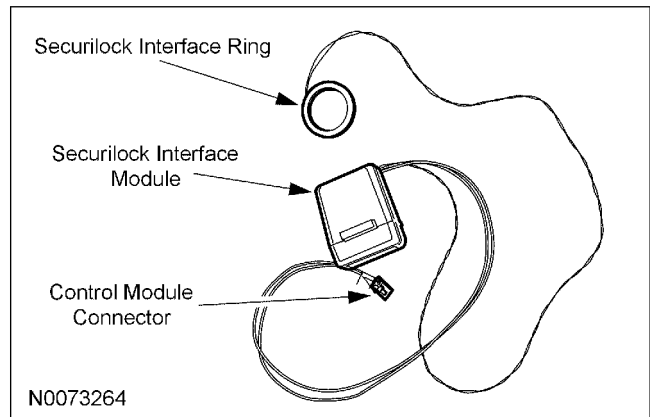
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



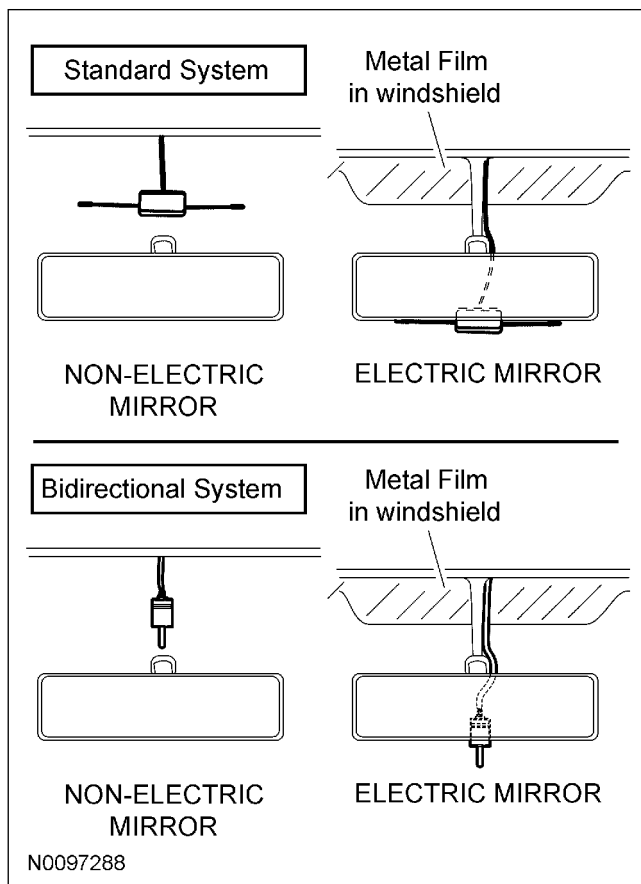
18. Reposition the A pillar trim panel.

**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.



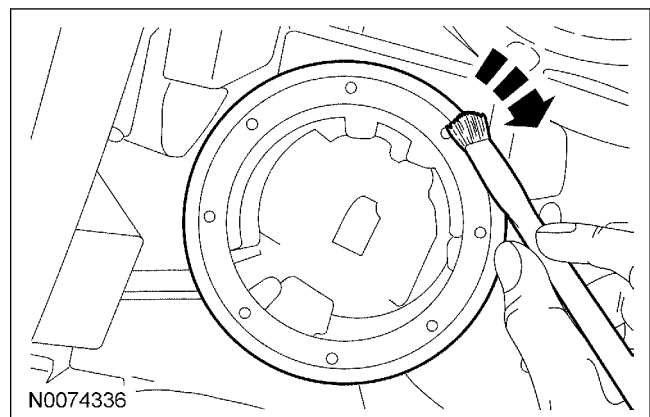
20. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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.

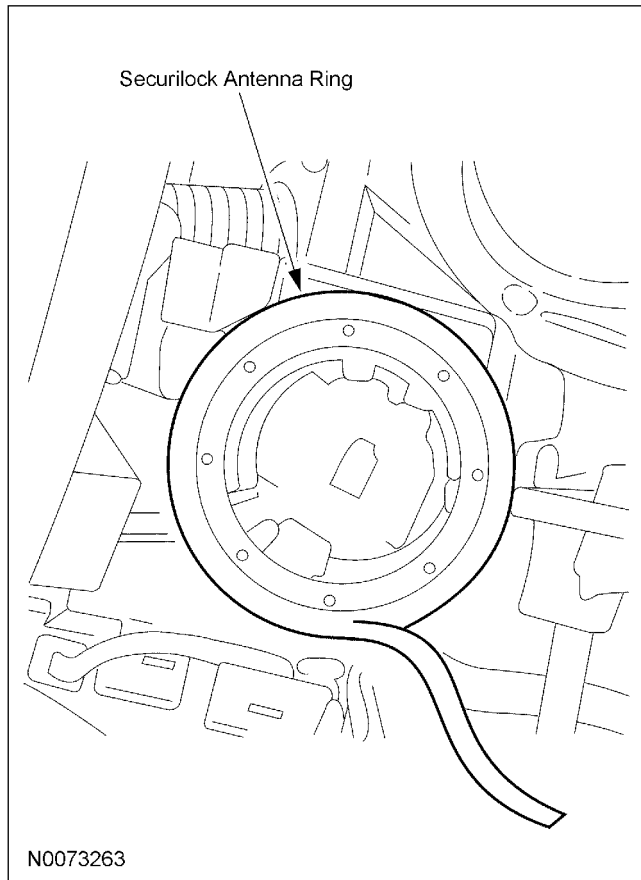


**INSTALLATION (Continued)**

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.

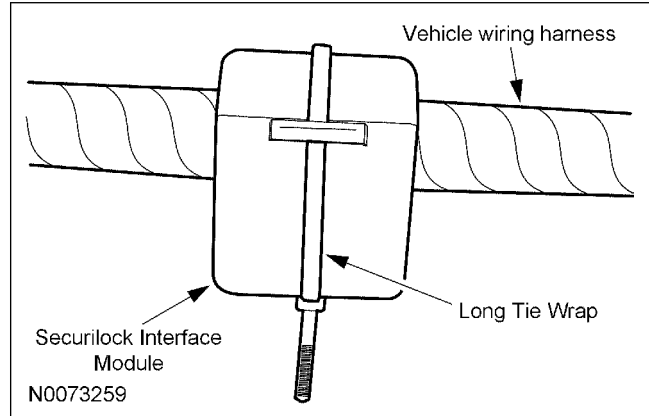
**Install The SecuriLock Interface Module**

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**

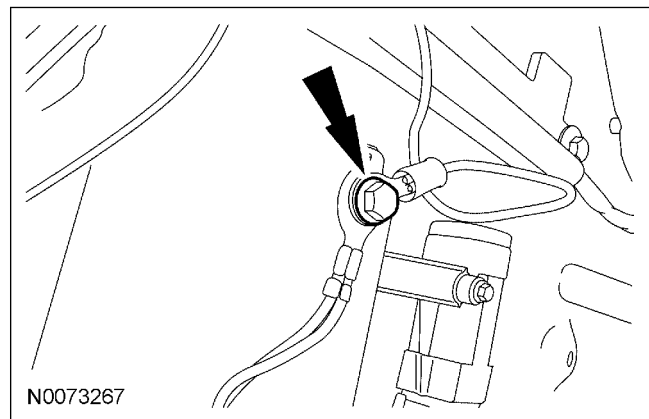
24. Place the remote start module and harness assembly on the floor of the vehicle.

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

29. Connect the Brown/Black wire from the remote start module harness to the Blue/White 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 power on the correct wire, then show ground when the door lock switch is pressed.

Identify the Gray/Yellow power door lock circuit wire at the driver kick panel harness underneath bright green electrical tape.

31. Connect the Blue wire from the remote start module harness to the Gray/Yellow power door lock circuit at the driver kick panel harness underneath bright green electrical tape.

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 ground on the correct wire, then show power while depressing the brake pedal.

Identify the looped Yellow/Gray brake switch circuit wire at the driver kick panel harness underneath bright green electrical tape.

33. Connect the Brown wire from the remote start module harness to the looped Yellow/Grey brake switch circuit wire at the driver kick panel harness underneath bright green electrical tape.

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 looped Blue dome light circuit wire at the driver kick panel harness underneath bright green electrical tape.

35. Connect the Green/Violet wire from the remote start module harness to the looped Blue dome light circuit wire at the driver kick panel harness underneath bright green electrical tape.

36. **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.

**NOTE:** 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 looped Gray/Yellow parking light on circuit wire at the driver kick panel harness underneath bright green electrical tape.

37. Connect the White wire from the remote start module harness to the looped Gray/Yellow parking light on circuit at the driver kick panel harness underneath bright green electrical tape.

**INSTALLATION (Continued)****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:** Using a piece of convolute adds in the appearance of the installation.

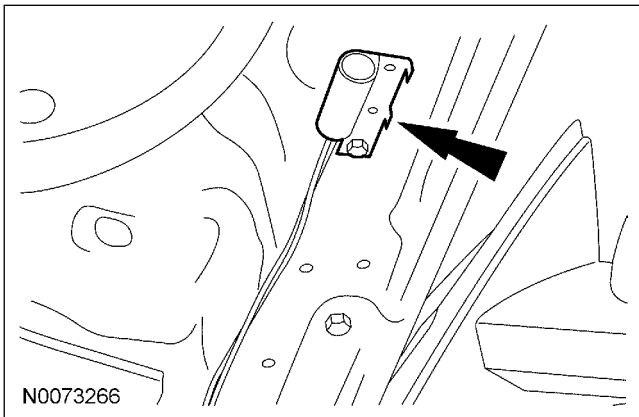
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

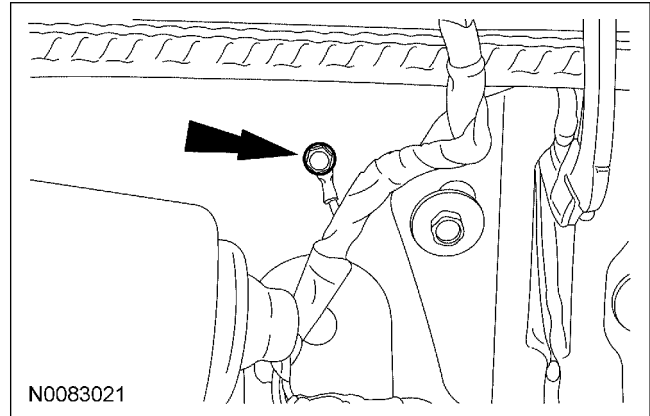
- False alarm trips
- Non-Remote Start events
- Inadvertent shutdown during Remote Start

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

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

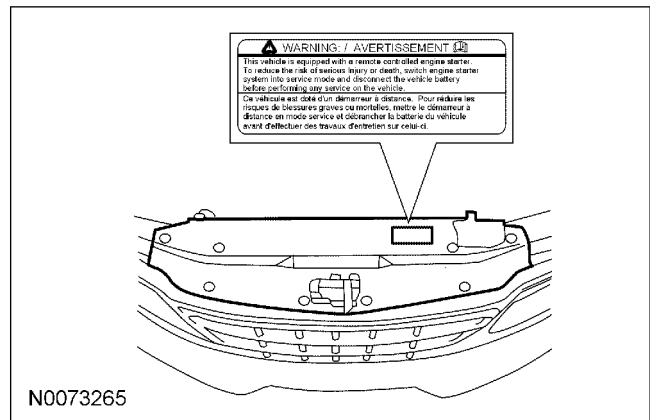


40. Connect hood switch ground wire to a suitable location on the bulkhead.



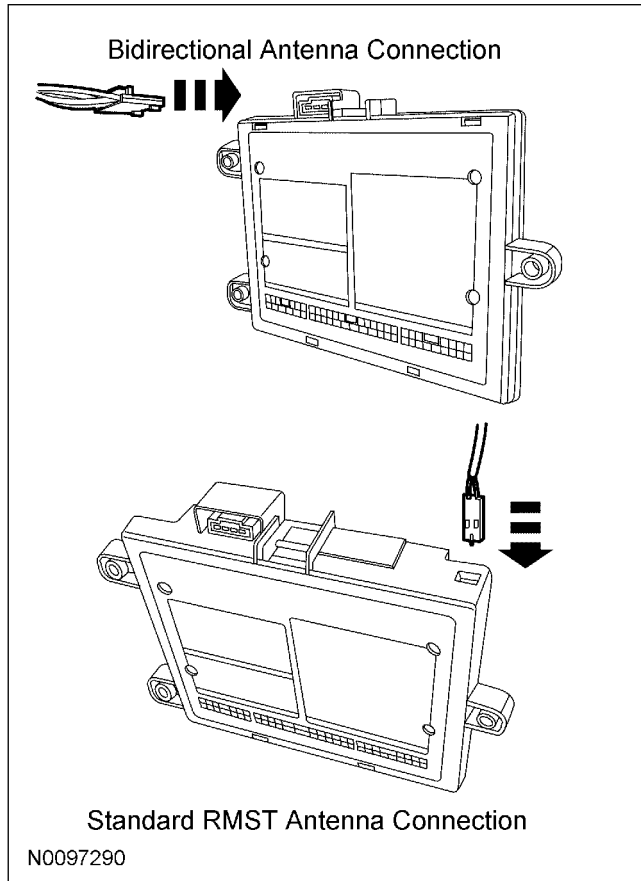
41. **NOTE:** Place the label on the radiator fan shroud or similar area.

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.

43. Connect the antenna to the RMST control module.

**INSTALLATION (Continued)**

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.

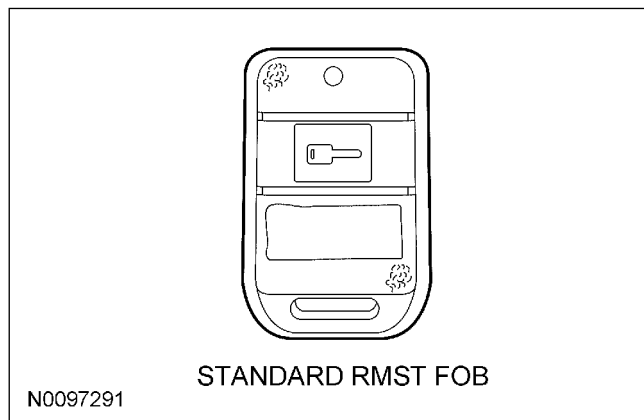
**Install Trim**

48. Install the left hand scuff plate and cowl trim panel.
49. Install the lower steering column shroud.
- Install the 3 screws.
50. Install the upper steering column shroud.
51. Install the instrument panel steering column cover by pushing straight inward.

## 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.



## 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.

**GENERAL PROCEDURES (Continued)**

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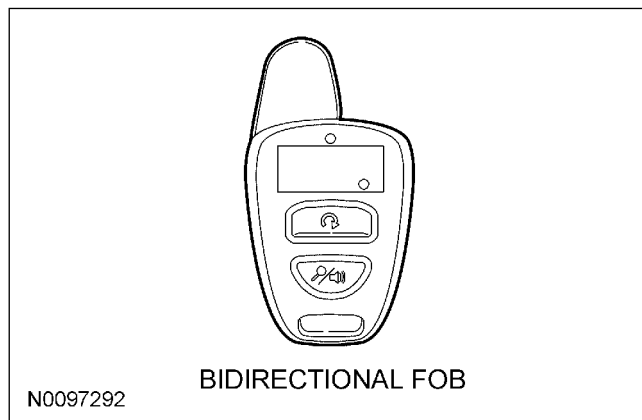
<b>CHIRPS</b>	<b>PROBLEM</b>
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

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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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.

# '09 Fusion/Milan/MKZ/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
B-7	BROWN	Brake Input
A-20	GREEN/VIOLET	Door Ajar Switch Input
A-1	WHITE	Parking Light Output

#### UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

VEHICLE HARNESS

IGNITION SWITCH

Horn (BLUE/WHITE)

STEERING COLUMN HARNESS

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT IN DRIVER'S KICK PANEL

\*\*Door Lock (GRAY/YELLOW)

\*\*Brake (YELLOW/GRAY)

\*\*Dome Light (BLUE)

\*\*Parking Lights On (GRAY/YELLOW)

DRIVERS KICK PANEL

\*\* LOOPED CIRCUIT UNDER BRIGHT GREEN TAPE

Vehicle Interior

Engine Compartment

Chassis Ground

Do Not Ground to Hood!

Hood Tilt Switch

\*\* = All The Starred Items Should Be Grouped Together (Same Location).

[Manual Table of Contents](#)

# REMOTE START SYSTEM INSTALLATION - NON PEPS EQUIPPED VEHICLES

## 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](#)

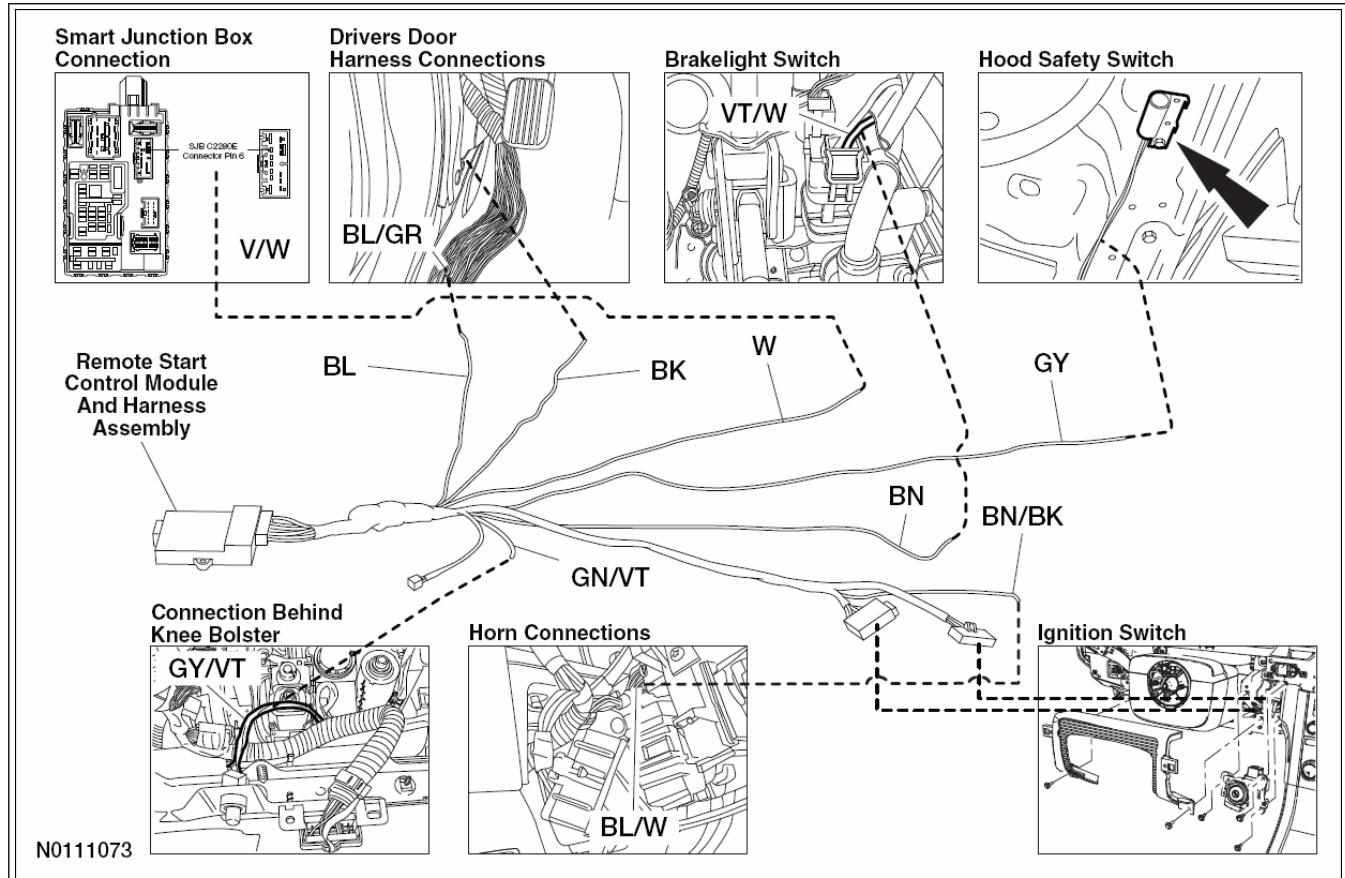
### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



**NOTICE:** NOT COMPATIBLE WITH PEPS EQUIPPED VEHICLES

#### MKS

**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 7L2J-19G364-AA (FIA), 8G1J-19G364-AA (FIA) or 7L2Z-19G364-AA (GFA) REMOTE START SYSTEM.

9G1Z-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 - "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.

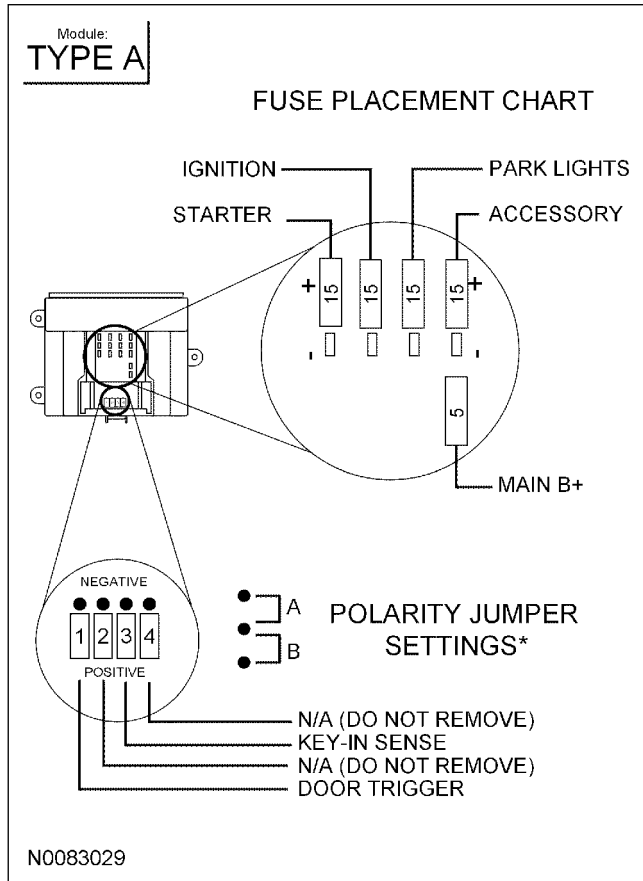
**Remote Start System Bidirectional Kit (RMST) Type - "A"**

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

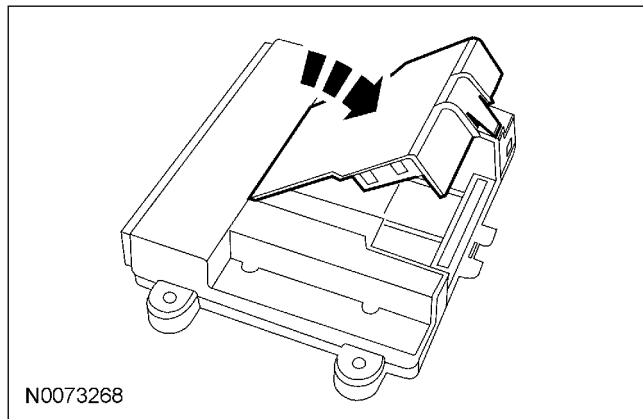
**Module Preparation**

- 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.

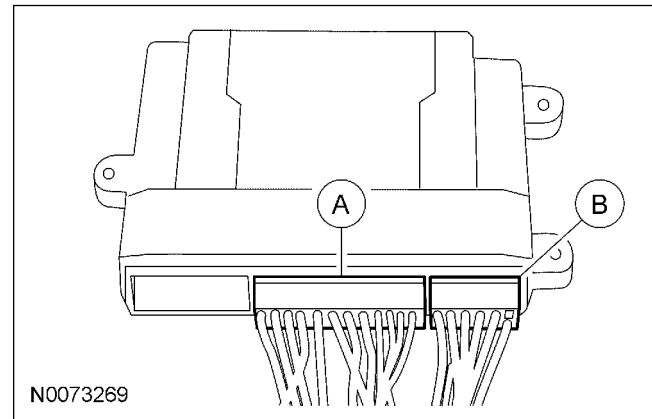
## INSTALLATION (Continued)



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.

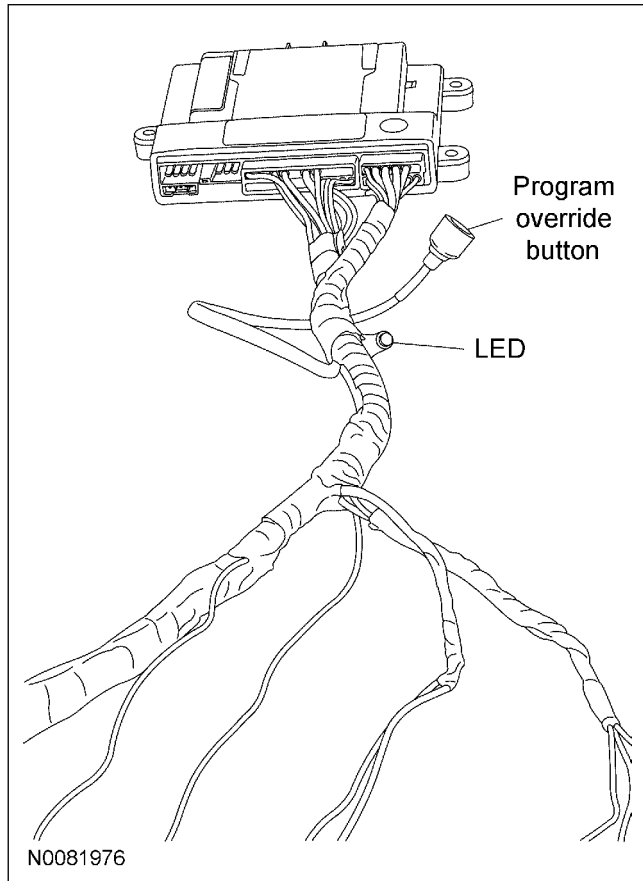


7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

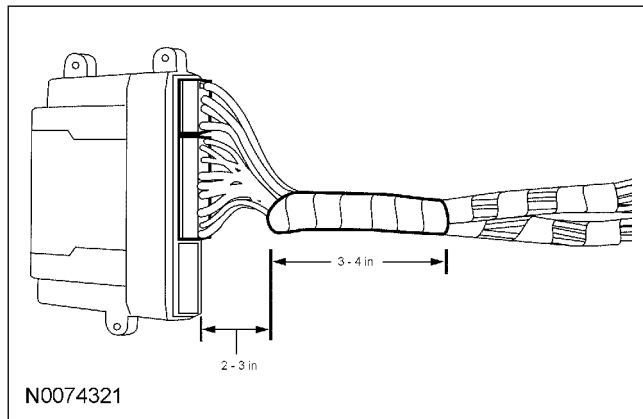
**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

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 2 lower instrument panel steering column cover screws and the cover.
10. Remove the 3 screws and the upper and lower steering column shrouds.
- Disconnect the tilt control connector.

11. Remove the left hand scuff plate and cowl trim panel.
12. Remove the center dash trim strip.
13. Remove the key surround trim.

**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.

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

**Install The Antenna**

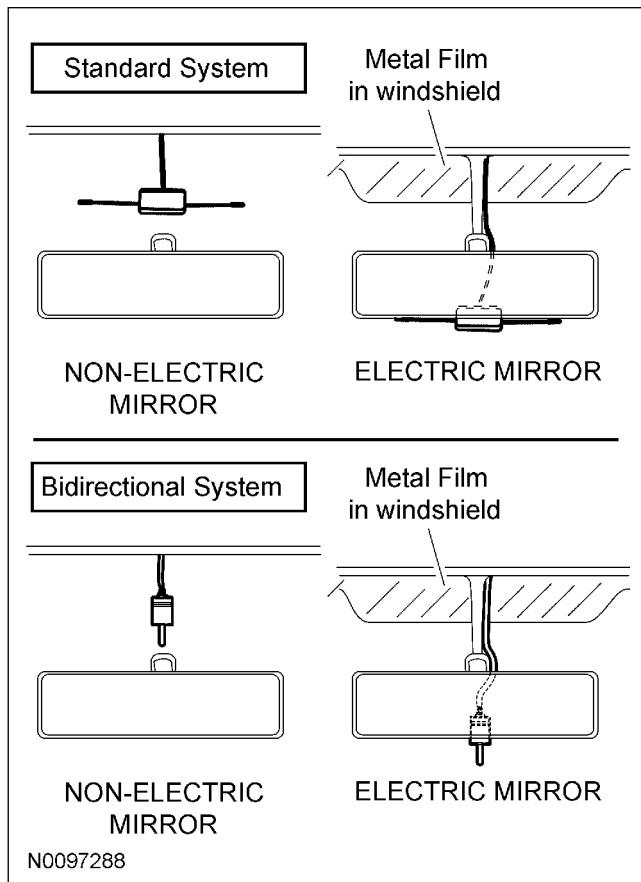
15. Clean the mounting surface using an alcohol base solution and a clean cloth.

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.

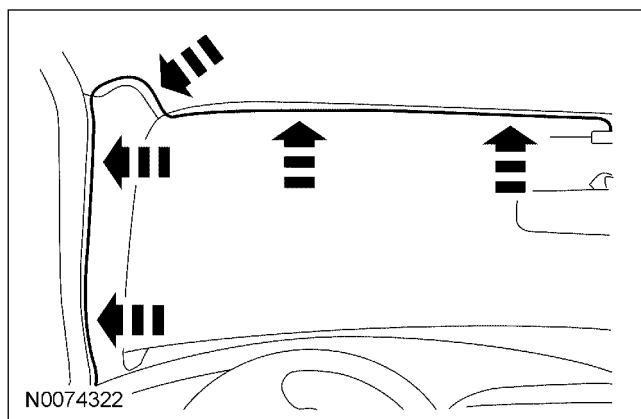
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.

**INSTALLATION (Continued)**

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.

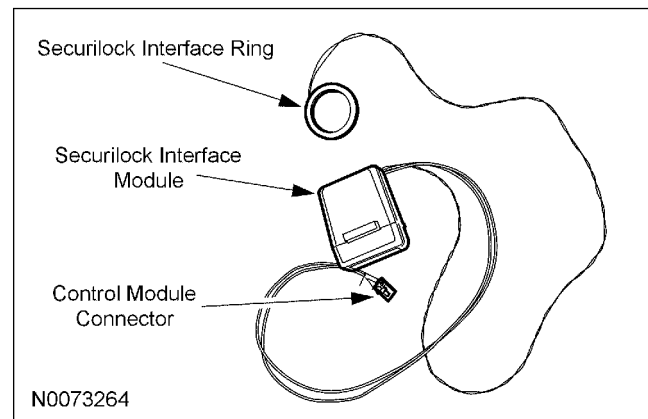
18. Route the antenna cable along the headliner and down the A pillar towards the floor.



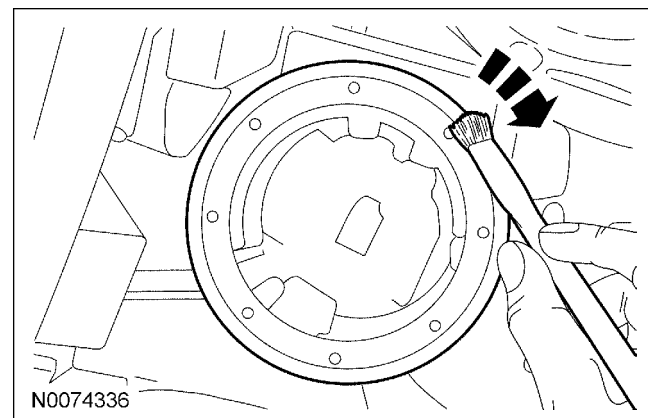
19. Reposition the A pillar trim panel.

**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.



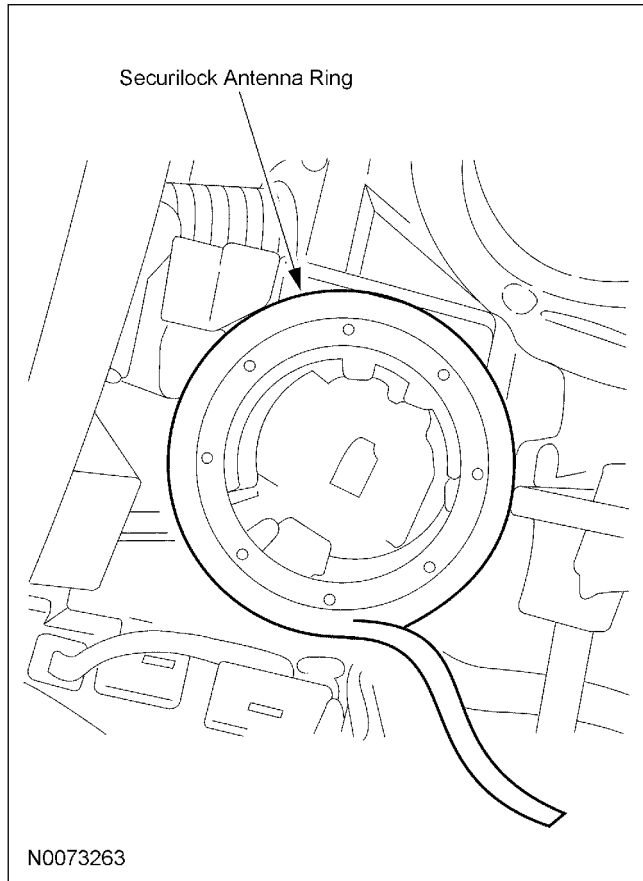
21. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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.

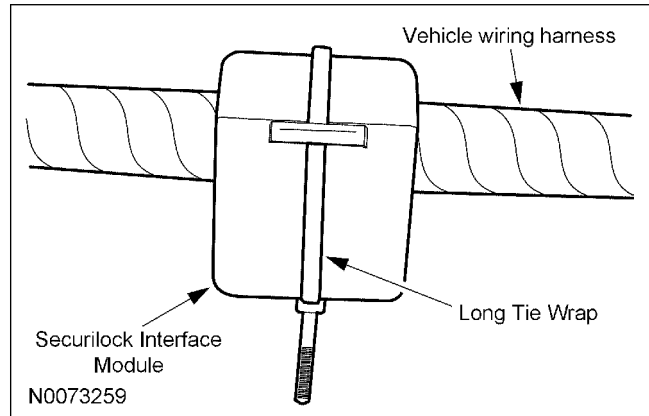
**INSTALLATION (Continued)****Install The Securilock Interface Module**

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.

24. **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**

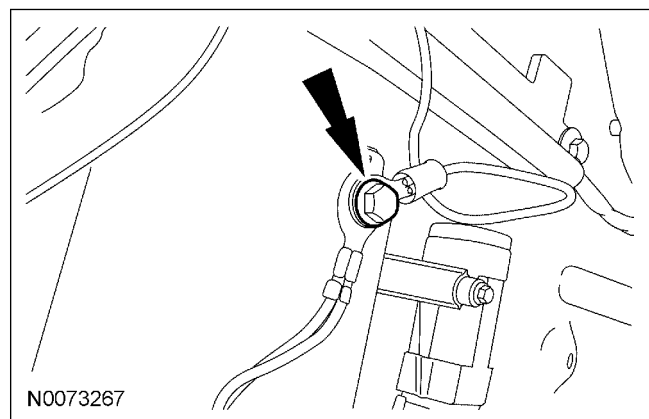
25. Place the remote start module and harness assembly on the floor of the vehicle.

**Identify Circuit Wires For Connections**

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

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

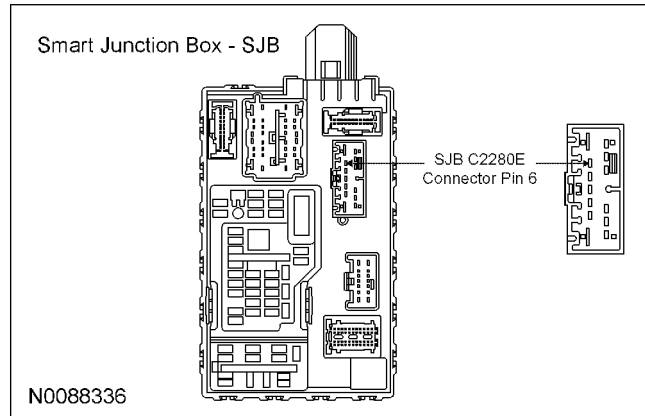
26. Connect the Black ground wire from the remote start module harness to the chassis ground point at the driver kick panel.



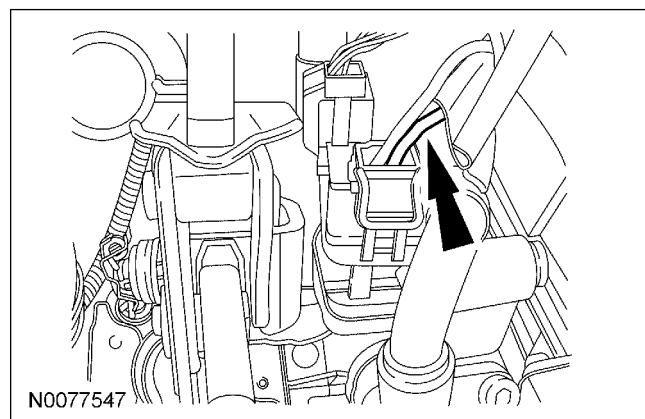
27. Remove the key cylinder assembly to gain access to the ignition switch electrical connector.
28. Disconnect the ignition switch electrical connector.

**INSTALLATION (Continued)**

29. Connect the remote start harness hard shell connectors to the ignition switch and ignition switch connector
30. Install the key cylinder assembly.
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 in the steering column harness.
32. Connect the Brown/Black wire from the remote start module harness to the Blue/White horn circuit wire in the steering column harness.
33. **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 the driver door harness.
34. Connect the Blue wire from the remote start module harness to the Blue/Green wire at the driver door harness.
35. **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 Smart Junction Box SJB C2280E Connector Pin 6.
36. 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.



37. **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 when on the correct wire, then show power while depressing the brake pedal.  
Identify the Violet/White brake switch circuit wire at the brake switch.
38. Connect the Brown wire from the remote start module harness to the Violet/White brake switch circuit wire at the brake switch.



**INSTALLATION (Continued)**

39. **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.

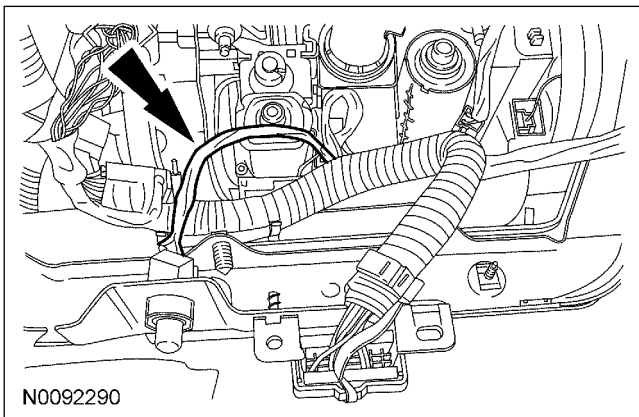
**NOTE:** A logic probe connected to the correct wire will show power with the vehicle door(s) open and the dome light on, then show ground with the vehicle door(s) closed and the dome light off.

**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 footwell light circuit wire behind the knee bolster.

40. Connect the Green/Violet wire from the remote start module harness to the Grey/Violet footwell light circuit wire behind the knee bolster.

**Install The Hood Safety Switch**

41. **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.

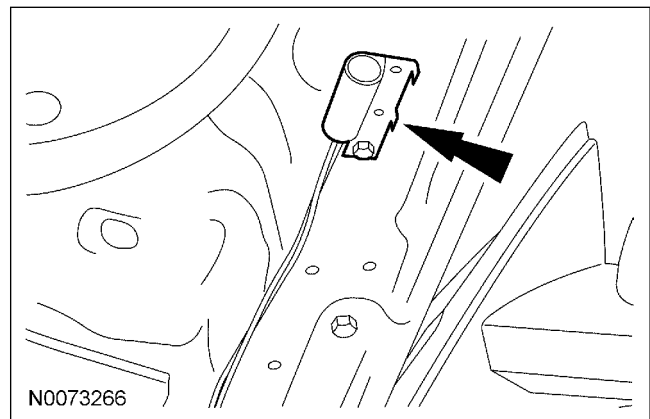
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

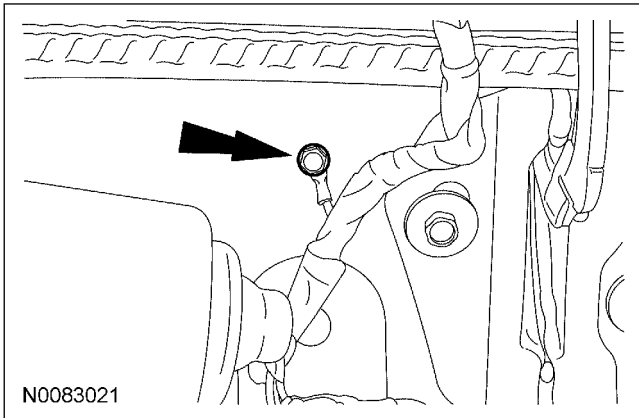
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

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



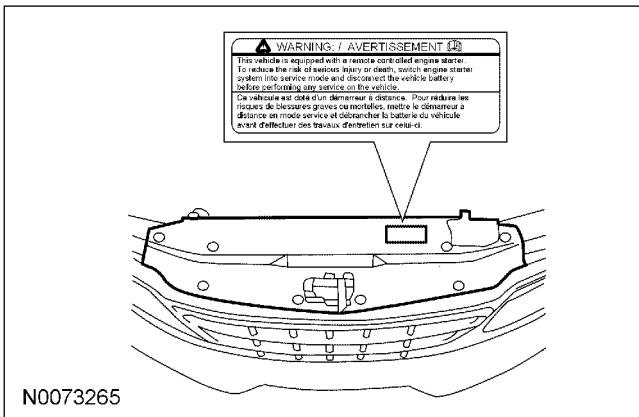
**INSTALLATION (Continued)**

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

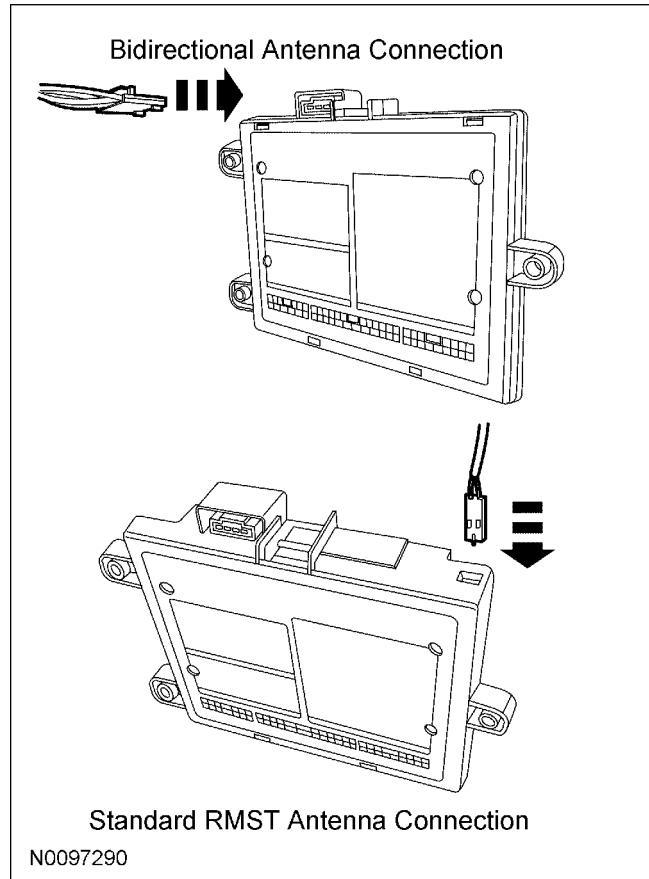


44. **NOTE:** Place the label on the radiator fan shroud or similar area.

Install the underhood warning label



45. Route the Gray hood safety switch wire through the bulkhead into the engine compartment and attach to the hood safety switch.
46. Connect the antenna to the RMST control module.



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

**Program The RMST System**

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

**Secure RMST Harness and Control Module**

49. Use the supplied tie wraps to secure the RMST harness wires.
50. **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**

51. Install the key surround trim.



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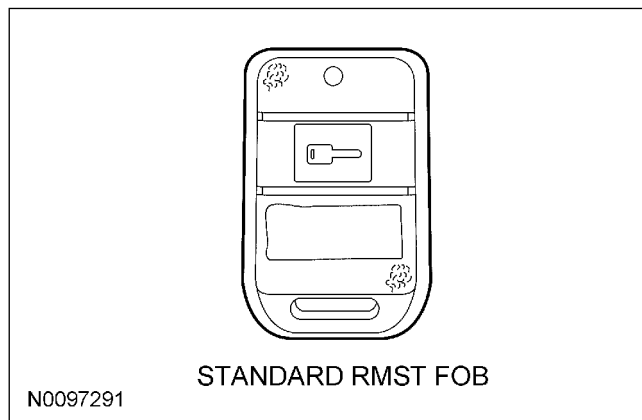
**INSTALLATION (Continued)**

- |  |   |
|--|---|
| 52. Install the center dash trim strip.                    | 54. Connect the tilt control connector.                   |
| 53. Install the left hand scuff plate and cowl trim panel. | 1    Install the upper and lower steering column shrouds. |
|  | 2    Install the 3 screws.                                |
|  | 55. Install the lower steering column opening cover.      |
|  | Install the 2 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.

---

**GENERAL PROCEDURES (Continued)**

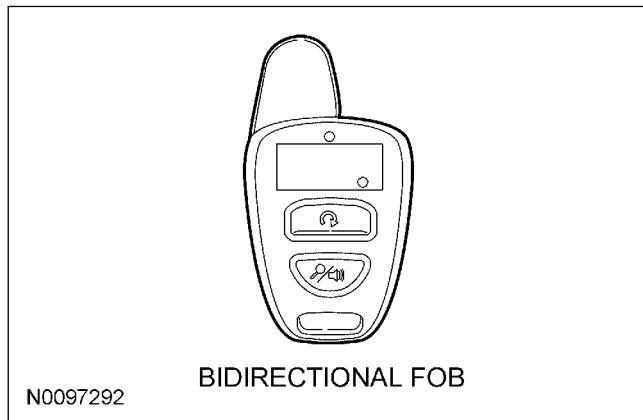
<b>CHIRPS</b>	<b>PROBLEM</b>
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

---

## 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.
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10. Close the door.
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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

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**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.



'09 MKS

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
B-7	BROWN	Brake Input
A-20	GREEN/VIOLET	Door Ajar Switch Input

HEADLAMP SWITCH HARNESS

	Color	Function
A-1	WHITE	Parking Light Output

UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

VEHICLE HARNESS

IGNITION SWITCH

Horn (BLUE/WHITE)

STEERING COLUMN HARNESS

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT  
IN DRIVER'S KICK PANEL

Door Lock ((BLUE/GREEN)

DRIVERS KICK PANEL

Brake Switch (VIOLET/WHITE)

BEHIND KNEE BOLSTER

Footwell Light (GRAY/VIOLET)

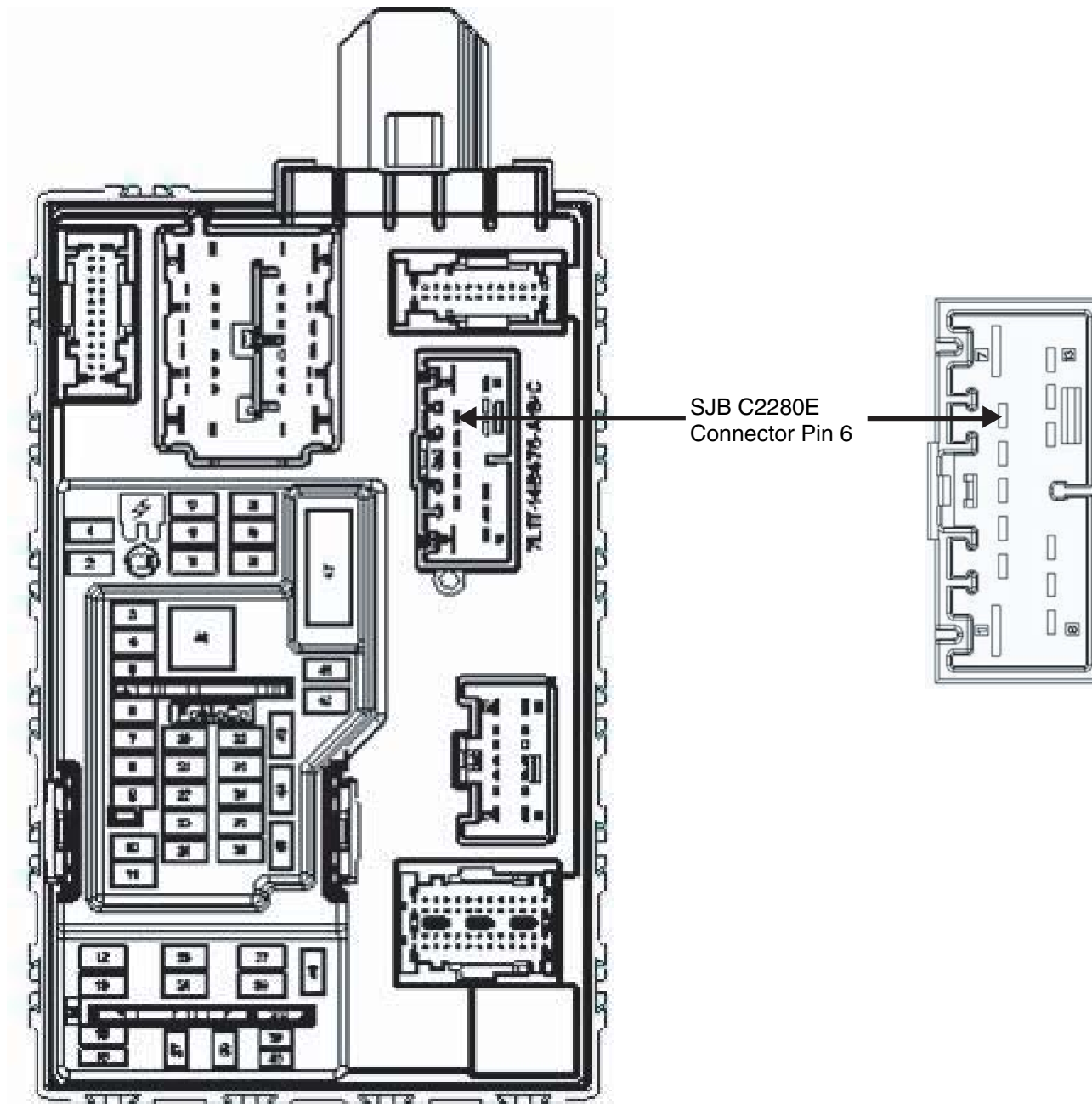
Parking Lights On (VIOLET/WHITE)

SJB C2208E  
PIN 6

Hood Tilt Switch

Chassis Ground

Do Not Ground to Hood



# 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](#)

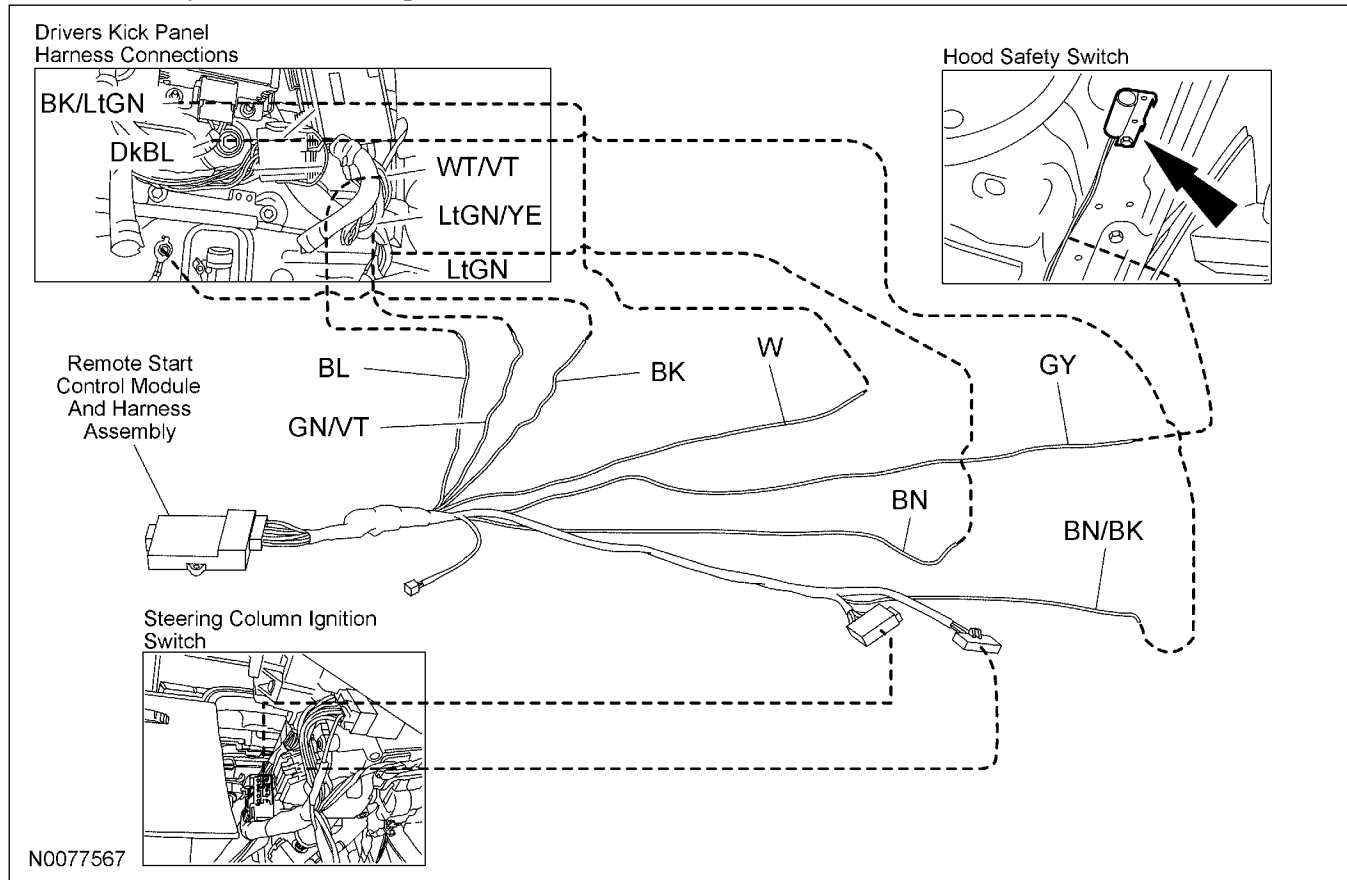
### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



### Mustang

**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 7L2Z-19G364-AA (GFA) REMOTE START SYSTEM

9G1Z-19G364-A (GFA) BIDIRECTIONAL REMOTE START SYSTEM.

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

2. 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

3. Review the RMST bidirectional kit contents.

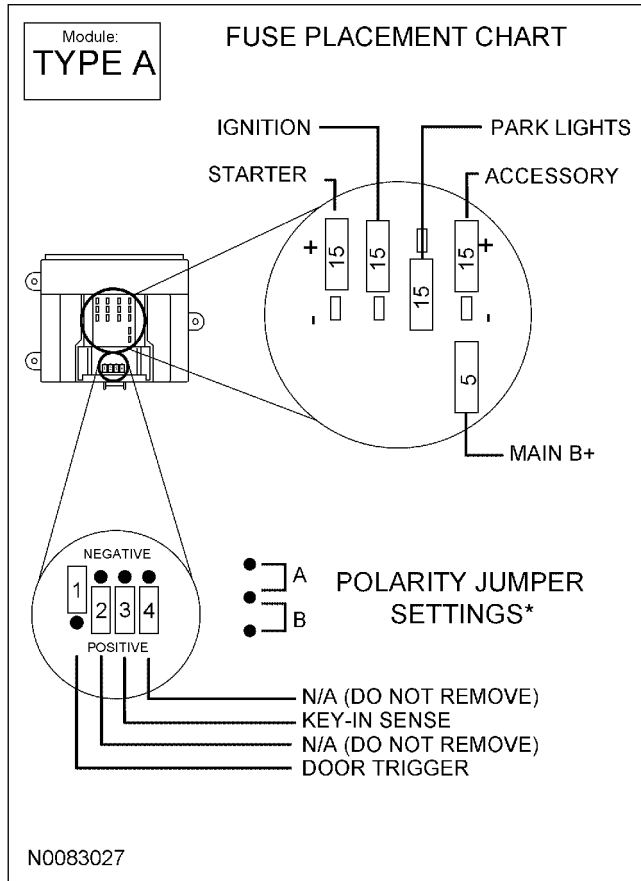
**Remote Start System Bidirectional Kit (RMST) Type - "A"**

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

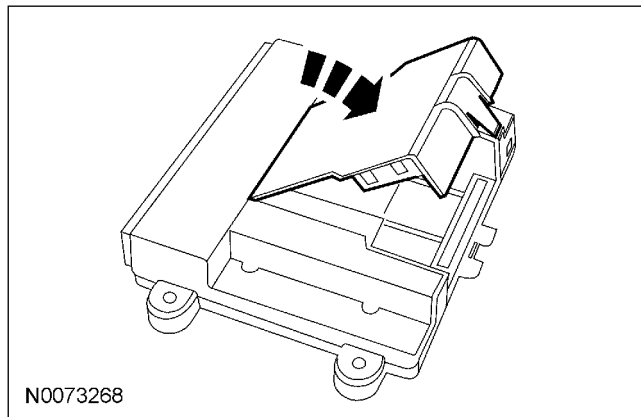
**Module Preparation**

- 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.

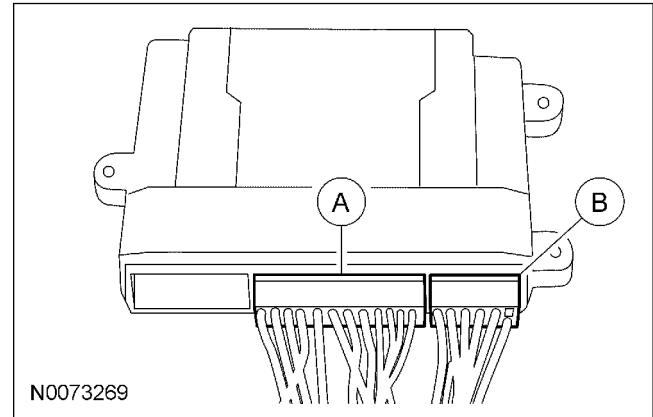
## INSTALLATION (Continued)



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.

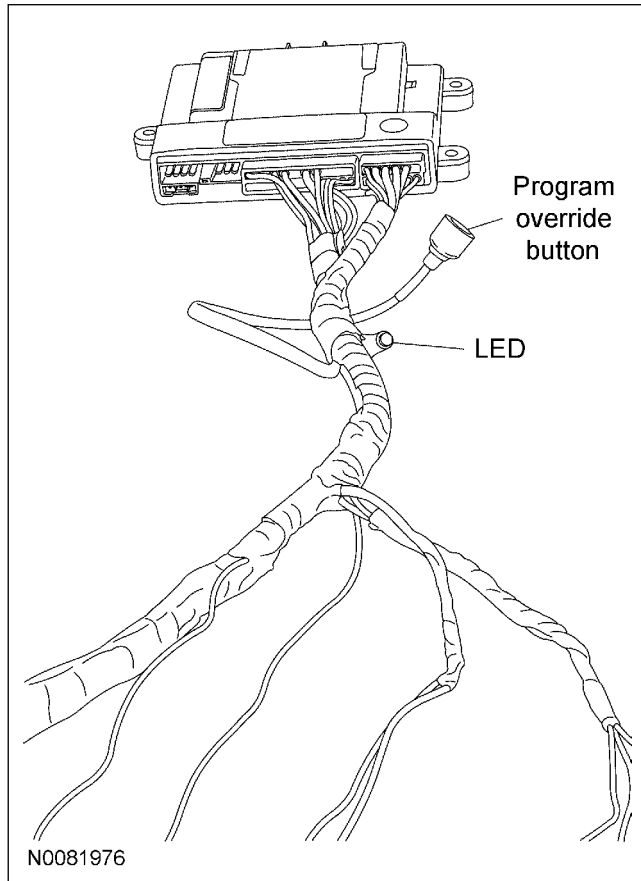


7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

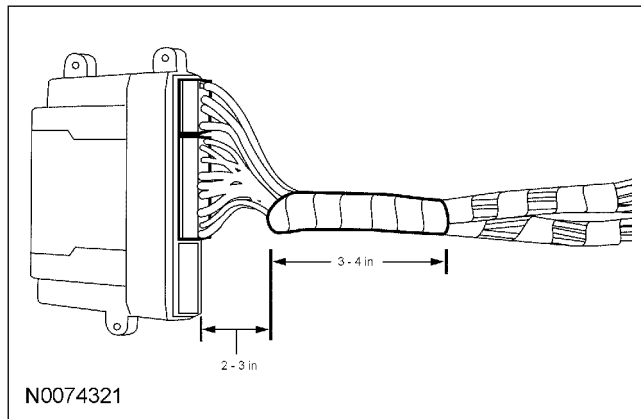
**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

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. **NOTE:** The instrument cluster finish panel is held in place with retaining clips that are attached to the bezel.  
Remove the instrument cluster finish panel.
10. If equipped, remove the shift lever bezel.

11. Remove the 2 cowl trim panel screws
12. Apply the parking brake and remove the cowl trim panel.
- If equipped, disconnect the electrical connectors.
13. Remove the LH A-pillar lower trim panel.
14. Remove the left center stack wing.
15. Remove the 2 screws and the steering column opening cover.
- Disconnect the headlamp and courtesy light switches electrical connectors.
16. Remove the 4 bolts and the steering column opening cover reinforcement.
17. Remove the upper steering column shroud by carefully pressing the sides inward.
18. Remove the 3 screws and 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.

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

**INSTALLATION (Continued)****Install The Antenna**

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

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

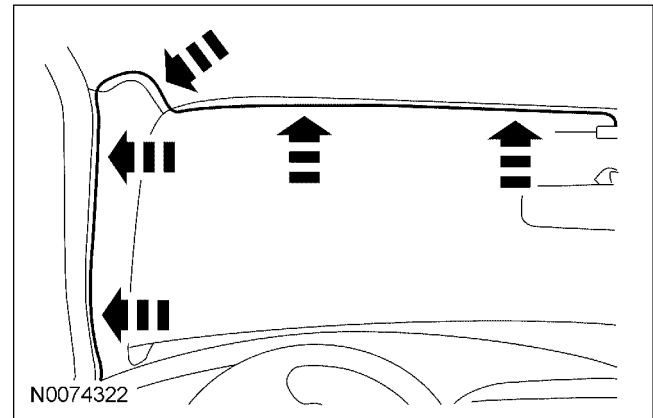
**NOTE:** Make sure that the long wire on the antenna is pointing towards the top of the windshield since this wire will be routed along the headliner.

**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.

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

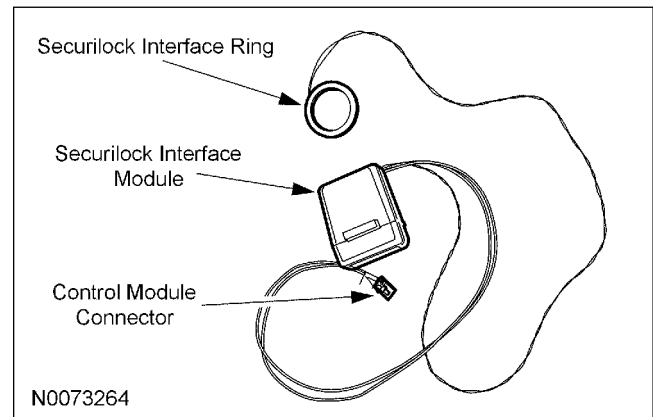
23. Route the antenna cable along the headliner and down the A pillar towards the floor.



24. Reposition the A pillar trim panel.

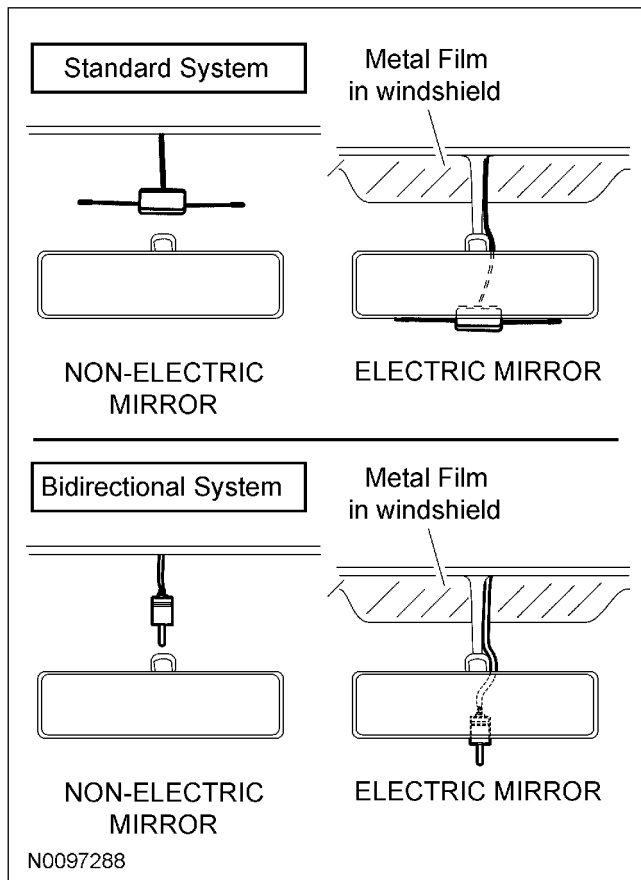
**Install The Securilock Interface Kit**

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

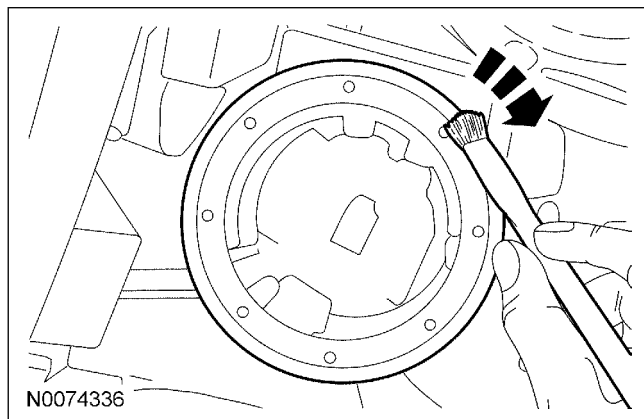


26. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.

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



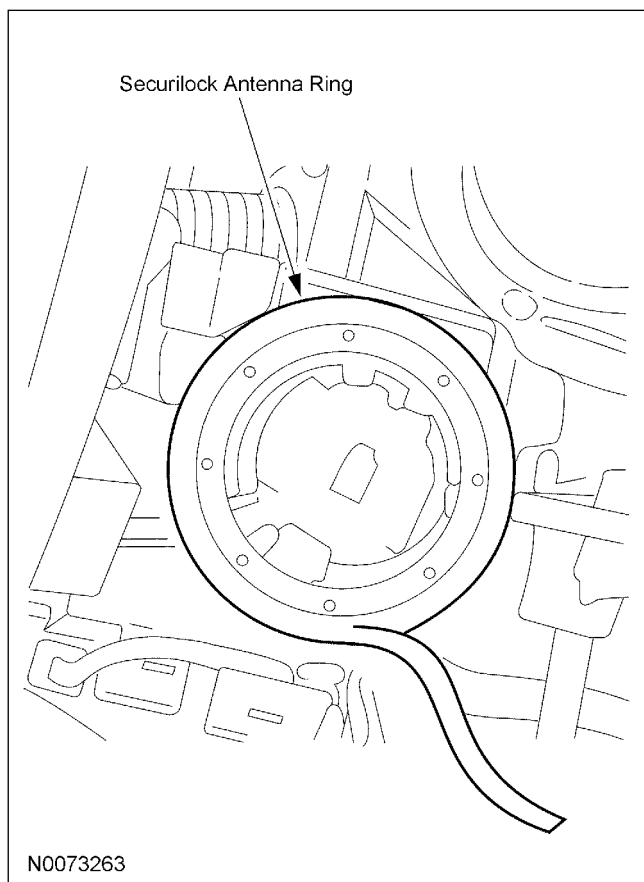


**INSTALLATION (Continued)**

27. **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.

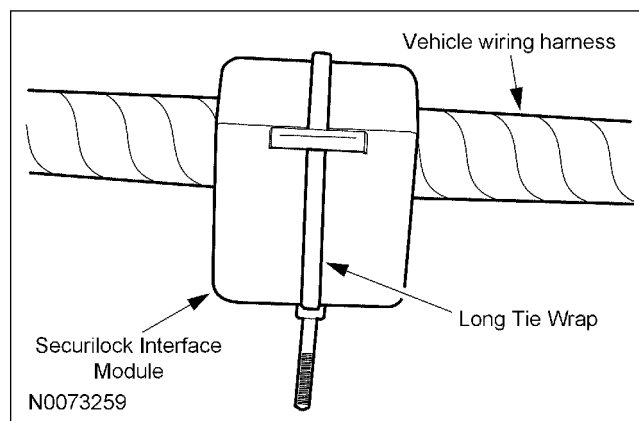
**Install The Securilock Interface Module**

28. **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.

29. **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**

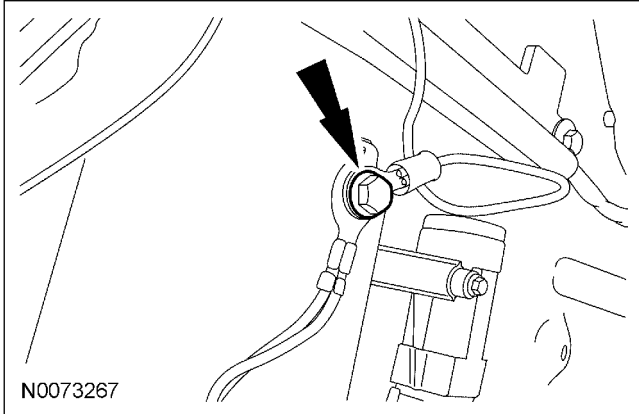
30. Place the remote start module and harness assembly on the floor of the vehicle.

**Identify Circuit Wires For Connections**

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

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

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

**INSTALLATION (Continued)**

32. Disconnect the ignition switch electrical connector.
33. Connect the remote start harness hard shell connectors to the ignition switch and ignition switch connector.
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.  
**NOTE:** Wire is located inside wire loom running to black connector but does not terminate. Wire can be found 4' from connector on the side heading toward the rear of the vehicle in a looped fashion underneath bright green tape.  
Identify the Dark Blue horn circuit wire at the driver kick panel harness.
35. Connect the Brown/Black wire from the remote start module harness to the Dark Blue horn circuit wire at the driver kick panel harness.
36. **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:** Wire is located inside wire loom running to black connector but does not terminate. Wire can be found 4' from connector on the side heading toward the bulkhead of the vehicle in a looped fashion underneath bright green tape.  
Identify the White/Violet power door lock circuit wire at the driver kick panel harness.
37. Connect the Blue wire from the remote start module harness to the White/Violet power door lock circuit at the driver kick panel harness.
38. **NOTE:** A DVOM connected to the correct wire will show 0V, then show 12V while depressing the brake pedal.  
A logic probe will show ground on the correct wire, then show power while depressing the brake pedal.  
**NOTE:** Wire is located inside wire loom running to black connector but does not terminate. Wire can be found 4' from connector on the side heading toward the bulkhead of the vehicle in a looped fashion underneath bright green tape.  
Identify the Light Green brake switch circuit wire at the driver kick panel harness.
39. Connect the Brown wire from the remote start module harness to the Light Green brake switch circuit wire at the driver kick panel harness.

**INSTALLATION (Continued)**

40. **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.

**NOTE:** Wire is located inside wire loom running to black connector but does not terminate. Wire can be found 4" from connector on the side heading toward the bulkhead of the vehicle in a looped fashion underneath bright green tape.

Identify the Light Green/Yellow dome light circuit wire at the driver kick panel.

41. Connect the Green/Violet wire from the remote start module harness to the Light Green/Yellow dome light circuit wire at the driver kick panel.
42. **NOTE:** A DVOM connected to the correct wire will show 0V, when the headlight switch is ON, then show 12V when the headlight switch is OFF.
- 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.
- NOTE:** Wire is located inside wire loom running to black connector but does not terminate. Wire can be found 4" from connector on the side heading toward the rear of the vehicle in a looped fashion underneath bright green tape.
- Identify the Black/Light Green parking light on circuit wire at the Driver kick panel.
43. Connect the White wire from the remote start module harness to the Black/Light Green parking light circuit at the driver kick panel.

**Install The Hood Safety Switch**

44. **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.

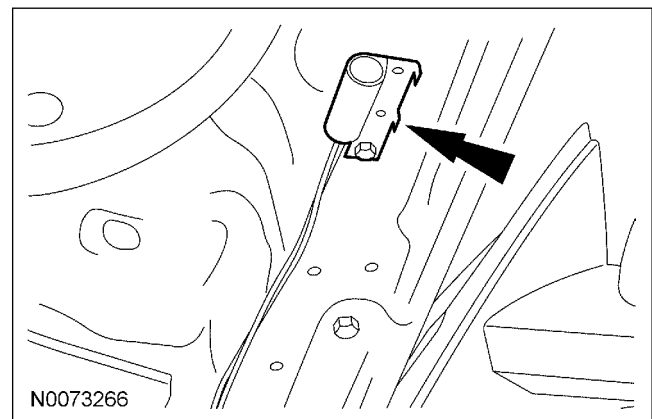
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

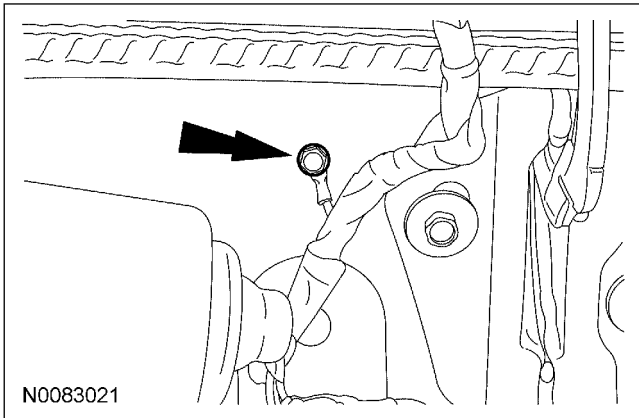
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

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



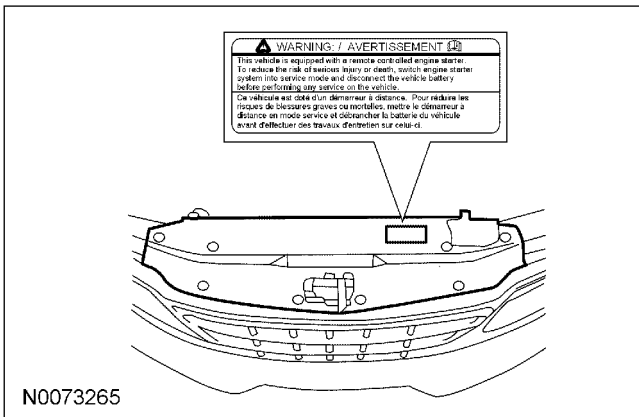
**INSTALLATION (Continued)**

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



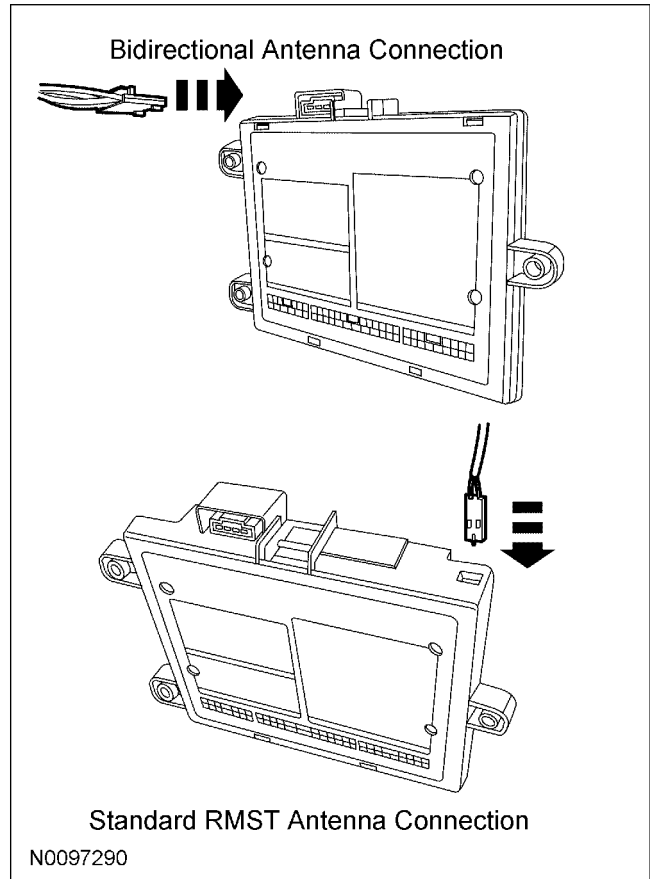
47. **NOTE:** Place the label on the radiator fan shroud or similar area.

Install the underhood warning label



**NOTE:** It is recommended that the hood safety switch wire be routed through the hood release cable grommet. Make sure that the grommet remains properly seated after installation is complete.

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



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

**Program The RMST System**

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

**Secure RMST Harness and Control Module**

52. Use the supplied tie wraps to secure the RMST harness wires.
53. **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**

54. Install the lower steering column opening cover.
- Install the 3 screws.

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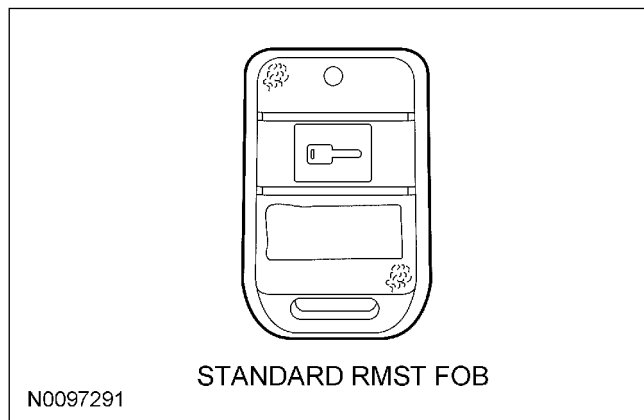
**INSTALLATION (Continued)**

- |  |  |
|--|--|
| 55. Install the upper steering column shroud   | 58. Install the left center stack wing.  |
| 56. Install the steering column opening cover reinforcement.<br>Install the 4 bolts. <ul style="list-style-type: none"><li>• Tighten to 9 Nm (80 lb-in).</li></ul>                               | 59. Install the LH A-pillar lower trim panel.  |
| 57. Install the steering column opening cover.<br>Install the 2 screws <ul style="list-style-type: none"><li>• Connect the headlamp and courtesy light switches electrical connectors.</li></ul> | 60. Install the floor console finish panel and Release the parking brake. <ul style="list-style-type: none"><li>• Connect the electrical connectors.</li></ul> |
|  | 61. Install the 2 floor console finish panel screws  |
|  | 62. Install the shift lever bezel.   |
|  | 63. Install the instrument cluster finish panel.   |
-

## 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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)**

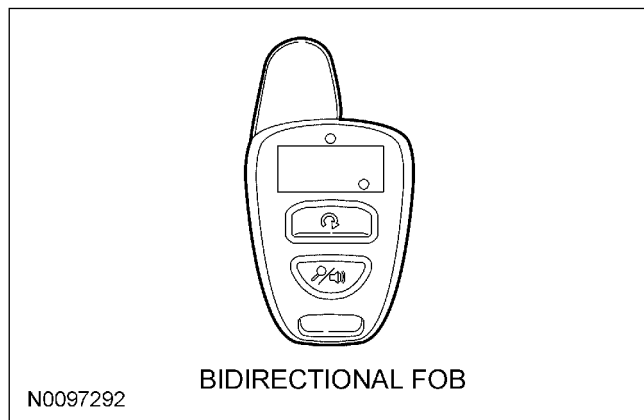
<b>CHIRPS</b>	<b>PROBLEM</b>
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

---

## 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.

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
A-1	WHITE	Parking Light Output

\*\* Wire is located inside wire loom running to black connector C211 but does not terminate. Wire can be found 4" from connector on the side heading toward the rear of the vehicle in a looped fashion underneath bright green tape.

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

\*\*\* Wire is located inside wire loom running to black connector C211 but does not terminate. Wire can be found 4" from connector on the side heading toward the bulkhead of the vehicle in a looped fashion underneath bright green tape.

UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

VEHICLE HARNESS

IGNITION SWITCH

Horn (DK. BLUE)

Parking Lights (BLACK/LT. GREEN)

NEAR BLACK CONNECTOR C211 ABOVE DRIVER'S KICK\*\*

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT IN DRIVER'S KICK PANEL

Door Lock (WHITE/VIOLET) (passenger side)

Dome Light Return (LT. GREEN/YELLOW)

Brake (LT. GREEN)

NEAR BLACK CONNECTOR C211 ABOVE DRIVER'S KICK\*\*\*

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](#)

### GENERAL PROCEDURES

[Proper Splicing Techniques](#)

[Programming - Standard Remote Start](#)

[Functional Test - Standard Remote Start](#)

[Programming - Bidirectional Remote Start](#)

[Functional Test - Bidirectional Remote Start](#)

[Troubleshooting](#)

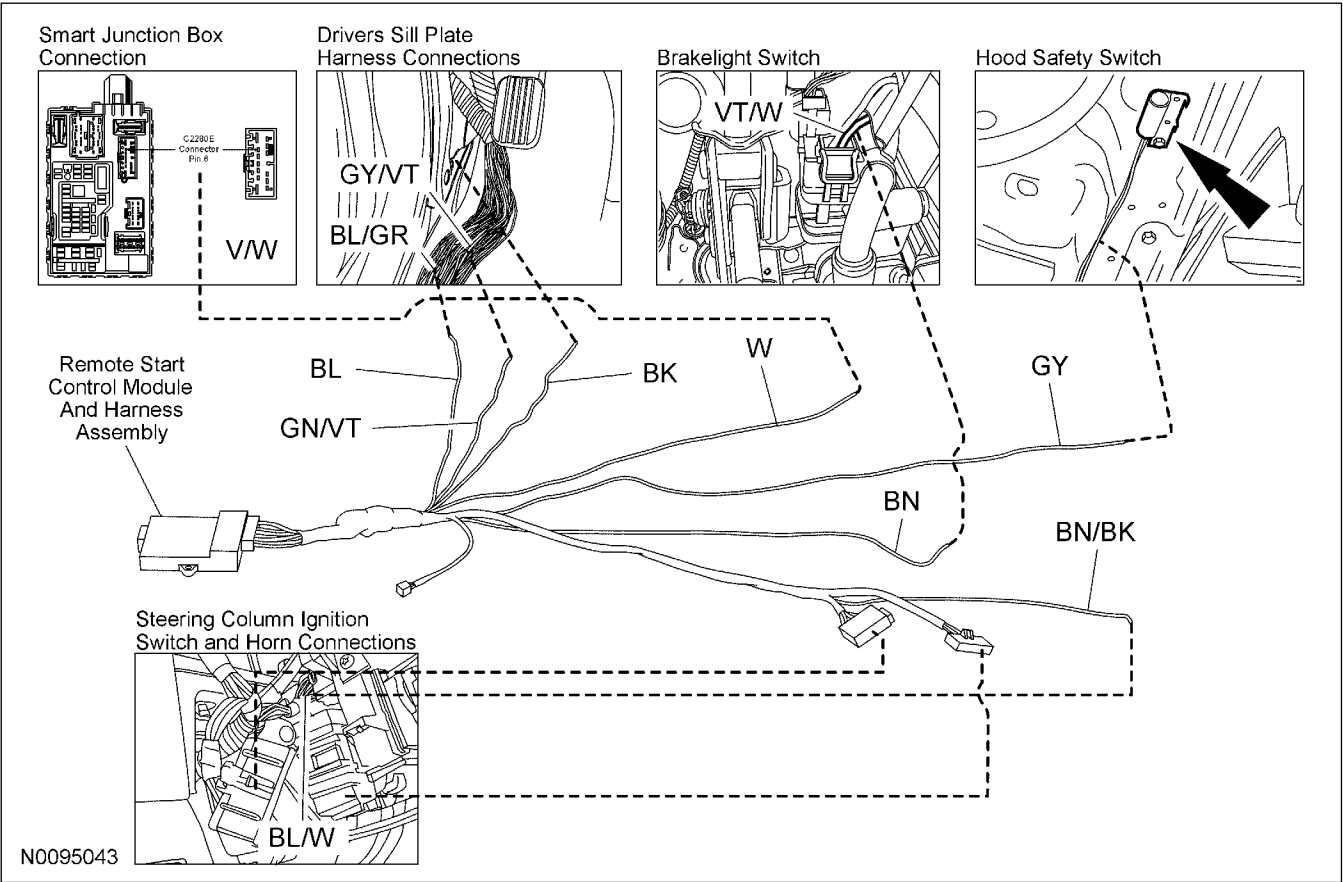
### WIRING DIAGRAMS

[Vehicle Specific Wiring Diagrams](#)

INSTALLATION

Remote Start

Remote Start System RMST Components



Taurus/Taurus X/Sable

**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.

2. Review the RMST kit contents.

Review Remote Start Installation Kit Contents

**NOTE:** Use kit number 7L2J-19G364-AA (FIA), 8G1J-19G364-AA (FIA) or 7L2Z-19G364-AA (GFA) REMOTE START SYSTEM. 9G1Z-19G364-A (GFA) BIDIRECTIONAL REMOTE START SYSTEM.

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

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

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

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

QUANTITY	DESCRIPTION
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

3. Review the RMST bidirectional kit contents.

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

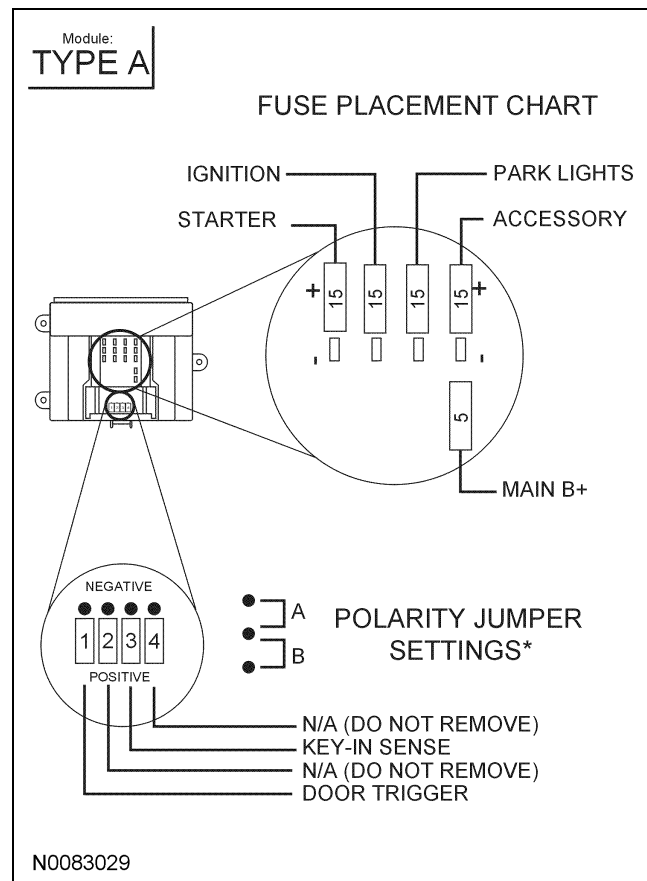
QUANTITY	DESCRIPTION
1	TYPE - "A" MODULE ASSEMBLY
1	RMST SOFTWARE CARTRIDGE ASSEMBLY
1	2 BUTTON POWERCODE TRANSMITTER
1	TYPE - "A" CUSTOM WIRING HARNESS
1	ANTENNA
1	ANTENNA HARNESS
1	HOOD SAFETY SWITCH ASSEMBLY
1	INSTALLATION PARTS BAG
1	FUSE PARTS BAG
1	OPERATORS INSTRUCTIONS

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

QUANTITY	DESCRIPTION
1	OPERATORS QUICK REFERENCE WALLET CARD
1	UNDERHOOD WARNING LABEL
1	SECURILOCK INTERFACE KIT

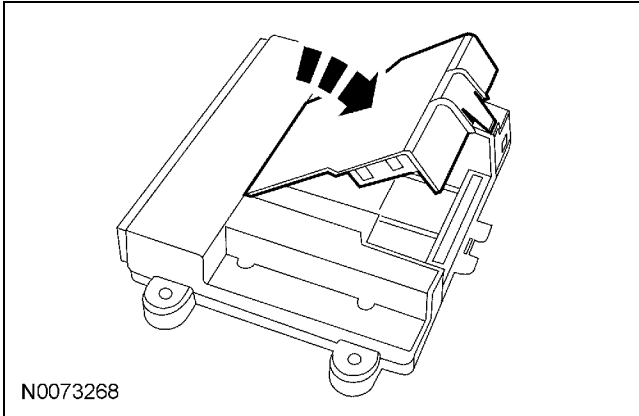
**Module Preparation**

4. 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.

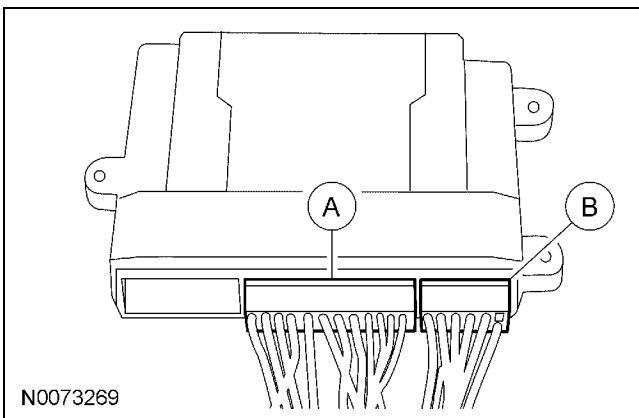


5. Place the software cartridge onto the RMST control module.



**INSTALLATION (Continued)**

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.

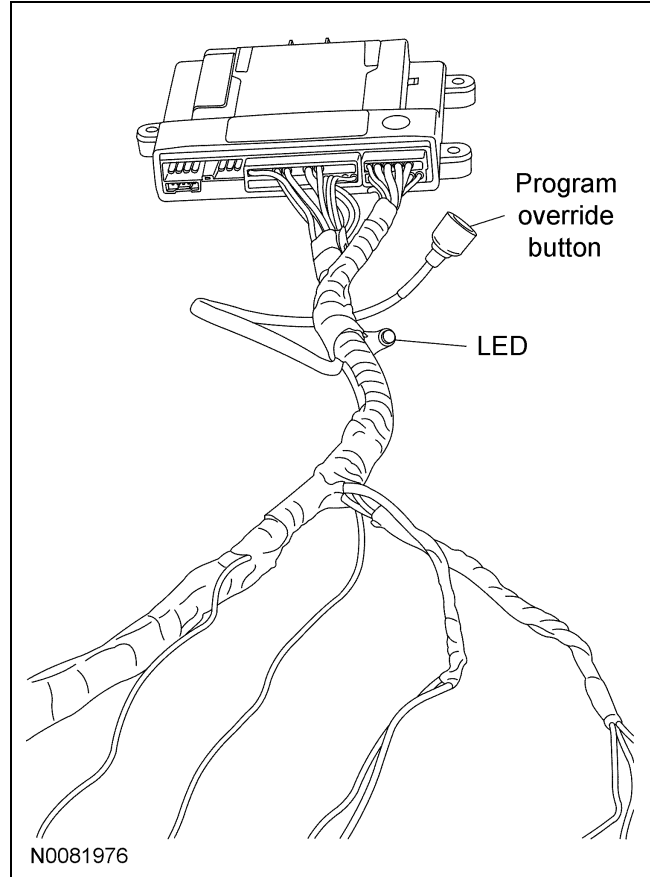


7. **NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

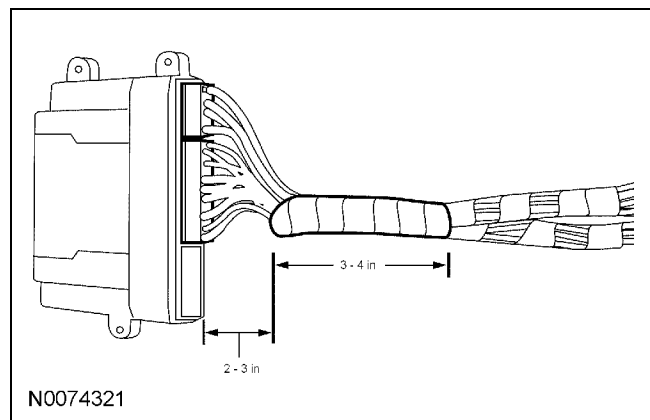
**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

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.



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

**Vehicle Preparation**

9. Remove the 2 lower instrument panel steering column cover screws and the cover.
10. Remove the 3 screws and the upper and lower steering column shrouds.

**INSTALLATION (Continued)**

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**

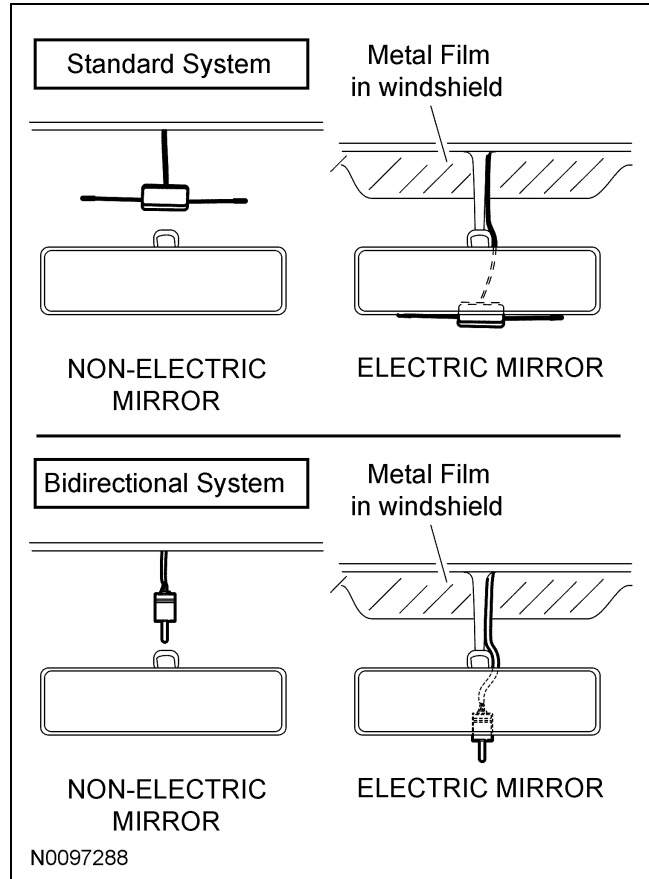
13. Clean the mounting surface using an alcohol base solution and a clean cloth.

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.

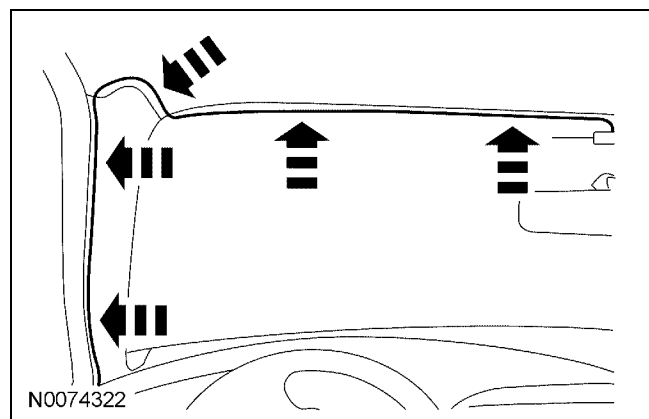
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



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.

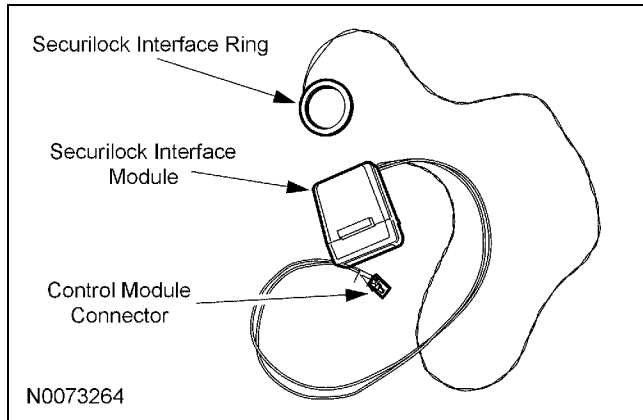
16. Route the antenna cable along the headliner and down the A pillar towards the floor.



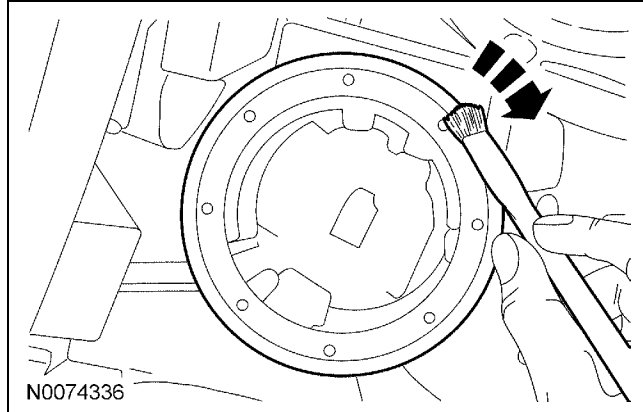
17. Reposition the A pillar trim panel.

**INSTALLATION (Continued)****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.



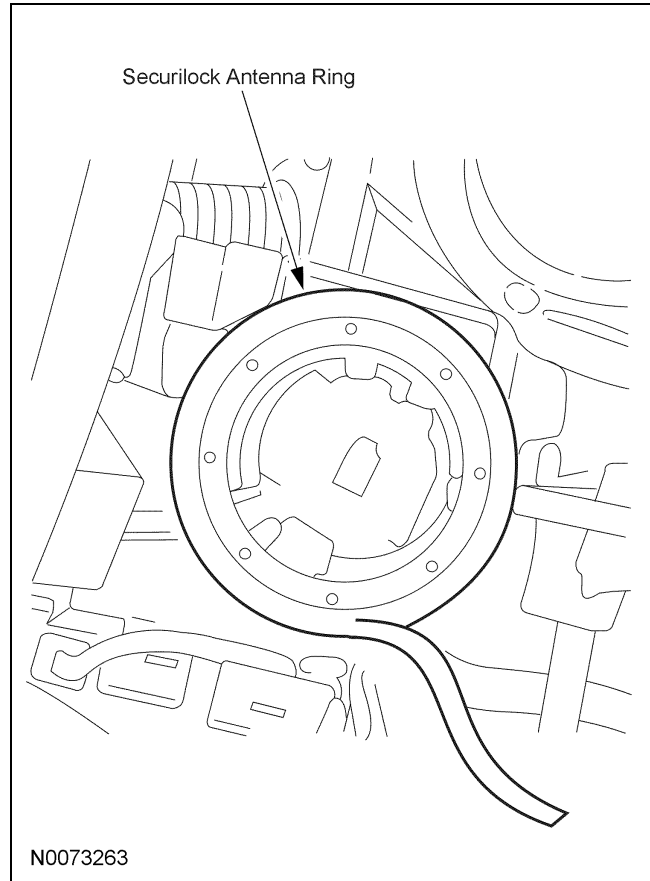
19. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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.

**Install The Securilock Interface Module**

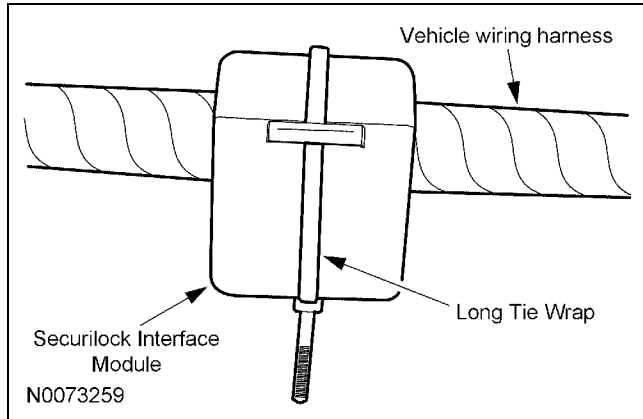
21. **NOTE:** Do Not mount the SECURILOCK Interface Module to or within 3'' of a metal surface, including any underdash brackets, or in the knee bolster area.

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

**INSTALLATION (Continued)**

22. **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**

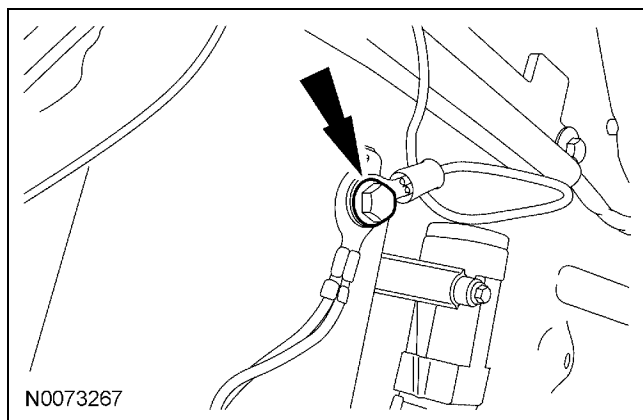
23. Place the remote start module and harness assembly on the floor of the vehicle.

**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

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 the driver kick panel harness.

30. Connect the Blue wire from the remote start module harness to the Blue/Green wire at the driver kick panel harness.

31. **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.

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

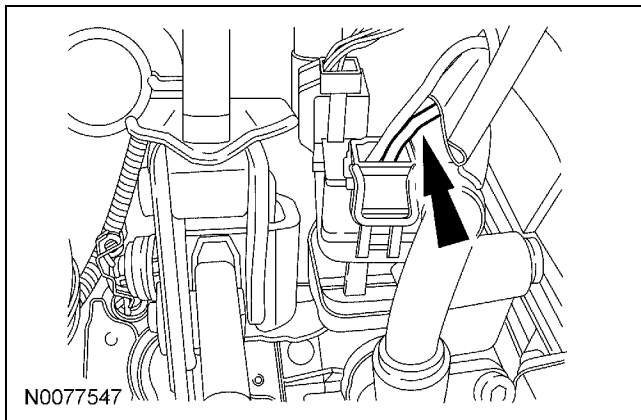
**INSTALLATION (Continued)**

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 when on the correct wire, then show power while depressing the brake pedal.

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

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

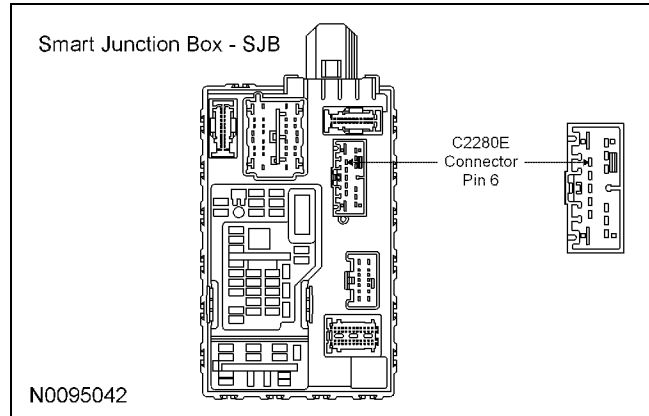


35. **NOTE:** A DVOM connected to the correct wire will show 12V, when the headlight switch is ON, then show 0V when the headlight switch is OFF.

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 Smart Junction Box SJB C2280E Connector Pin 6.

36. 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**

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.

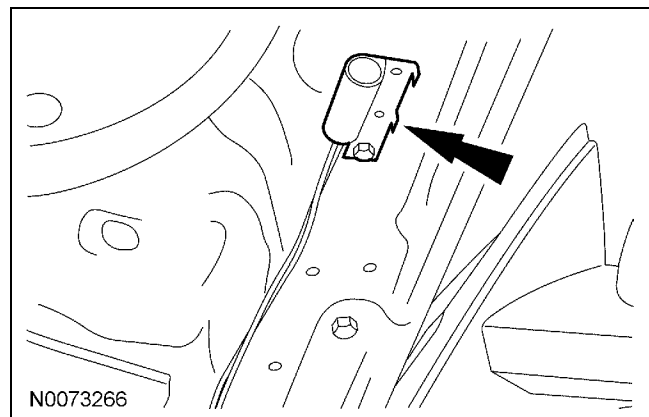
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

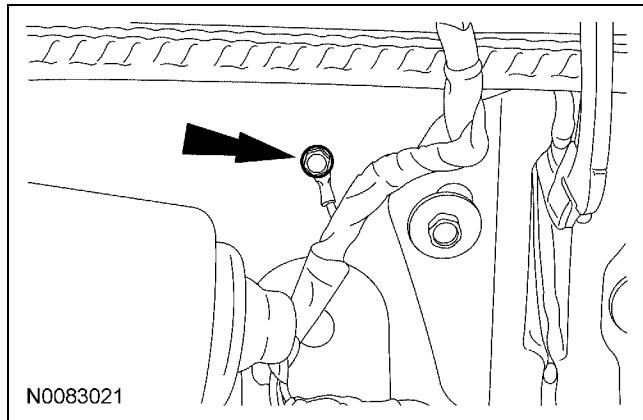
Locate an easy to access area near the driver side hood hinge and install the hood safety switch using the supplied metal screws.

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



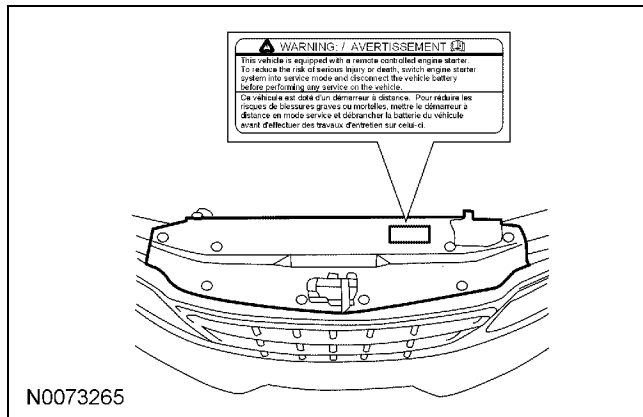
**INSTALLATION (Continued)**

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

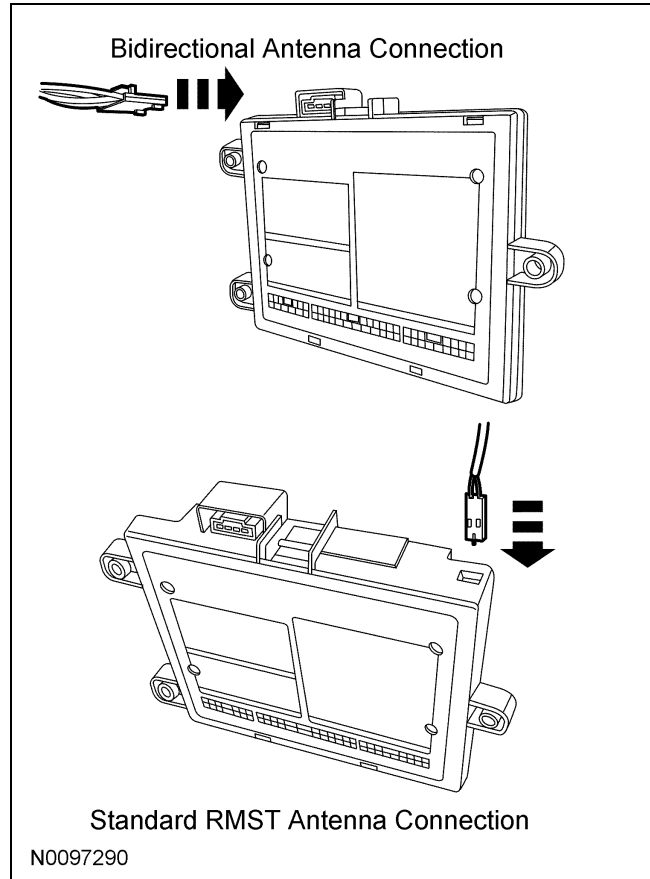


40. **NOTE:** Place the label on the radiator fan shroud or similar area.

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.
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.

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**INSTALLATION (Continued)**

48. Install the upper and lower steering column shrouds.

Install the 3 screws.

49. Install the lower steering column opening cover.

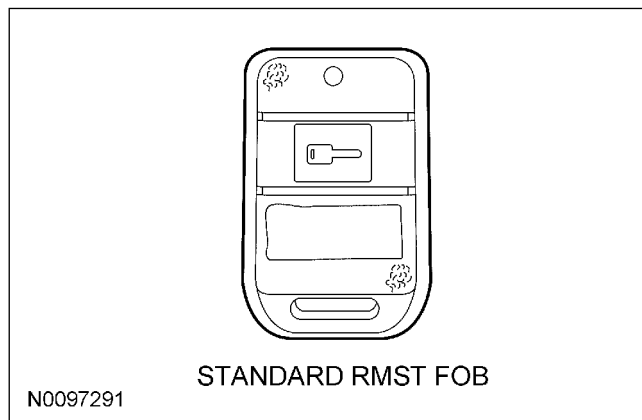
Install the 2 screws.

- Tighten to 9 Nm (80 lb-in).
-

## 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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)**

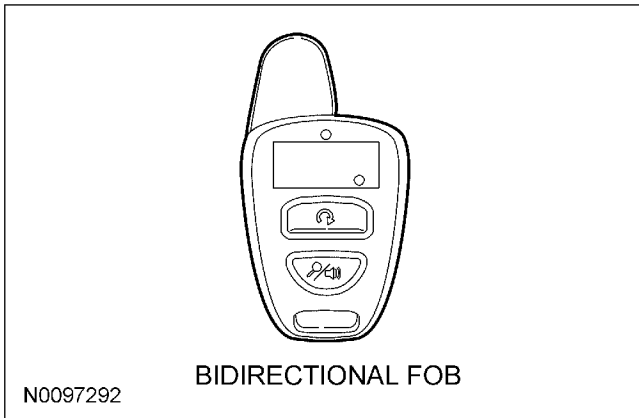
<b>CHIRPS</b>	<b>PROBLEM</b>
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

---

## 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.

# '09 Taurus/Taurus X/Sable

## 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

#### HEADLAMP SWITCH HARNESS

	Color	Function
A-1	WHITE	Parking Light Output

#### UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

VEHICLE  
HARNESS

IGNITION  
SWITCH

Horn (BLUE/WHITE)

STEERING  
COLUMN  
HARNESS

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT  
IN DRIVER' S KICK PANEL

Door Lock ((BLUE/GREEN)

DRIVERS KICK  
PANEL

Dome Light (GRAY/VIOLET)

Brake Switch (VIOLET/WHITE)

BRAKE SWITCH

Parking Lights On  
(VIOLET/WHITE)

SJB C2280E Pin 6

Chassis  
Ground

Do Not Ground to Hood

Hood Tilt Switch

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# REMOTE START SYSTEM INSTALLATION

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### INSTALLATION

[Remote Start](#)

### GENERAL PROCEDURES

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[Functional Test - Standard Remote Start](#)

[Programming - Bidirectional Remote Start](#)

[Functional Test - Bidirectional Remote Start](#)

[Troubleshooting](#)

### WIRING DIAGRAMS

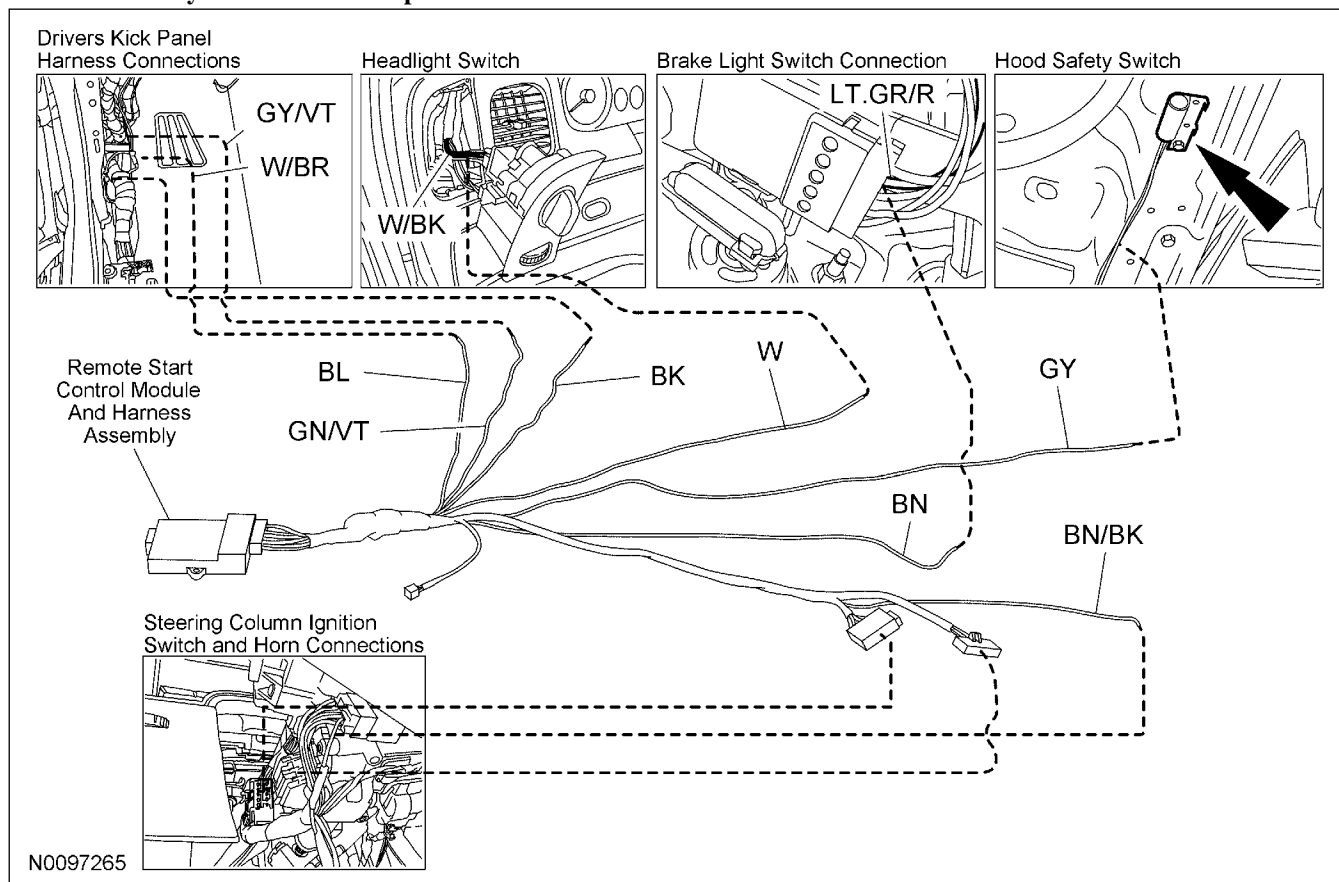
[Vehicle Specific Wiring Diagrams](#)



## INSTALLATION

### Remote Start

#### Remote Start System RMST Components



#### Towncar

**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 7W3Z-19G364-AA (GFA) REMOTE START SYSTEM

9C3Z-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 - "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.

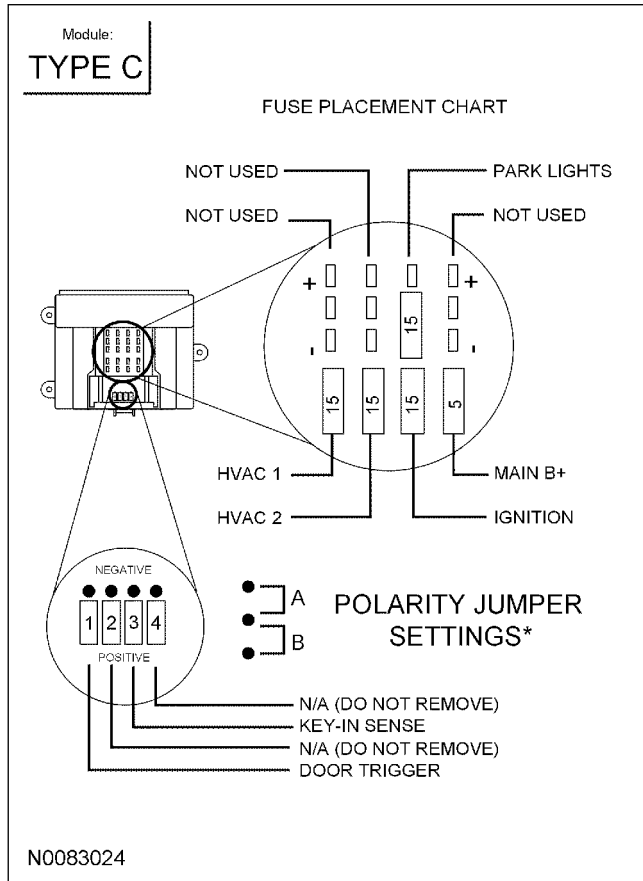
**Remote Start System Bidirectional Kit (RMST) Type - "C"**

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

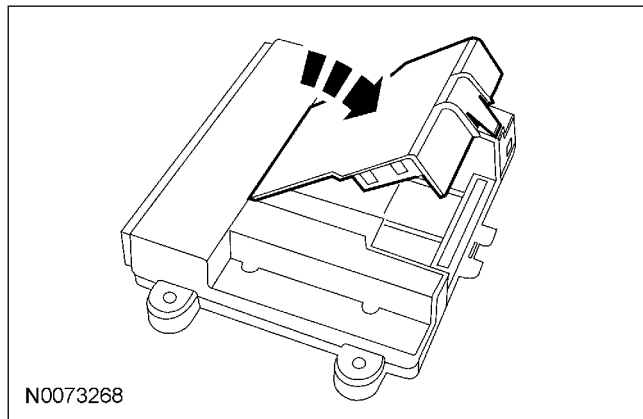
**Module Preparation**

- 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.

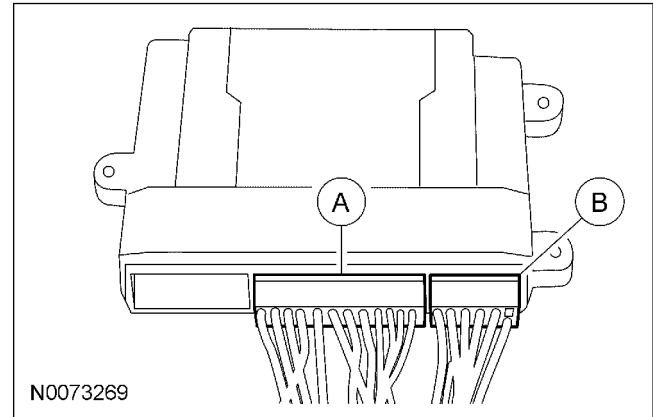
## INSTALLATION (Continued)



- 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.

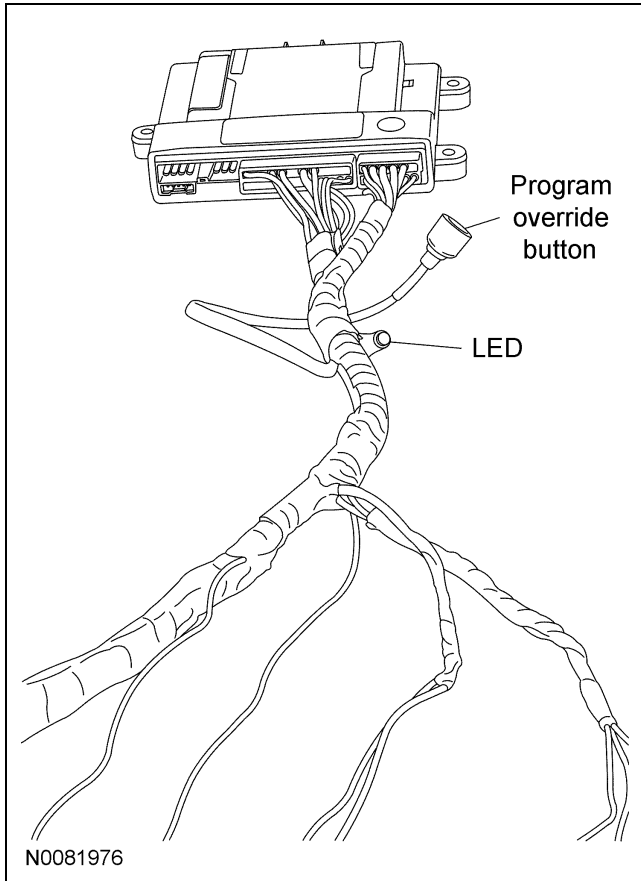


- NOTE:** Do not cut the override programming button off of the harness, it is used for all installations.

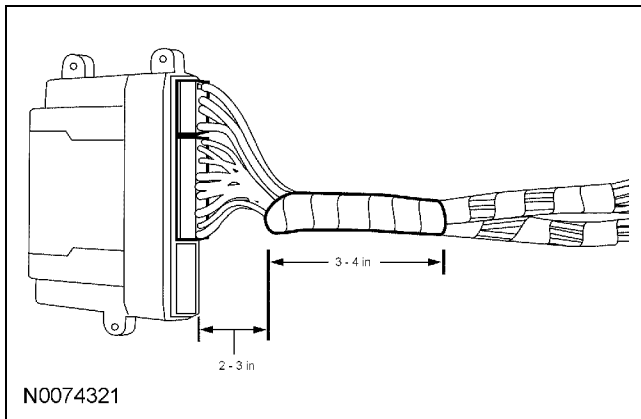
**NOTE:** For vehicle specific wiring diagram(s) [click here](#).

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.

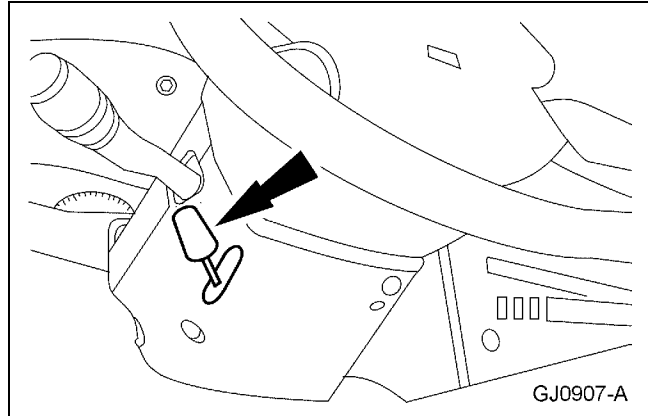
Trim the unused wires approximately 6 - 8" from the module.

**INSTALLATION (Continued)**

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

**Vehicle Preparation**

9. Remove the steering column tilt release lever/handle.



**NOTE:** Release the upper steering column shroud by pressing the sides inward.

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.

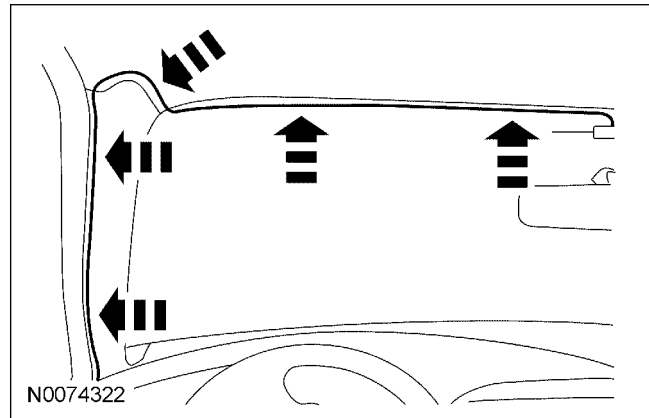
**INSTALLATION (Continued)**

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.

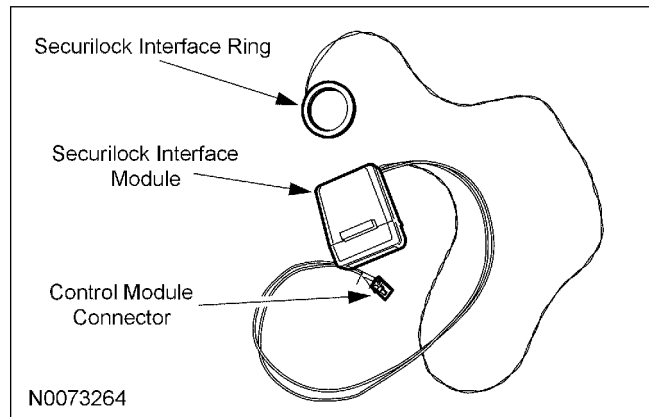
Remove the protective backing from the adhesive on the antenna and firmly press the body of the antenna to the windshield.



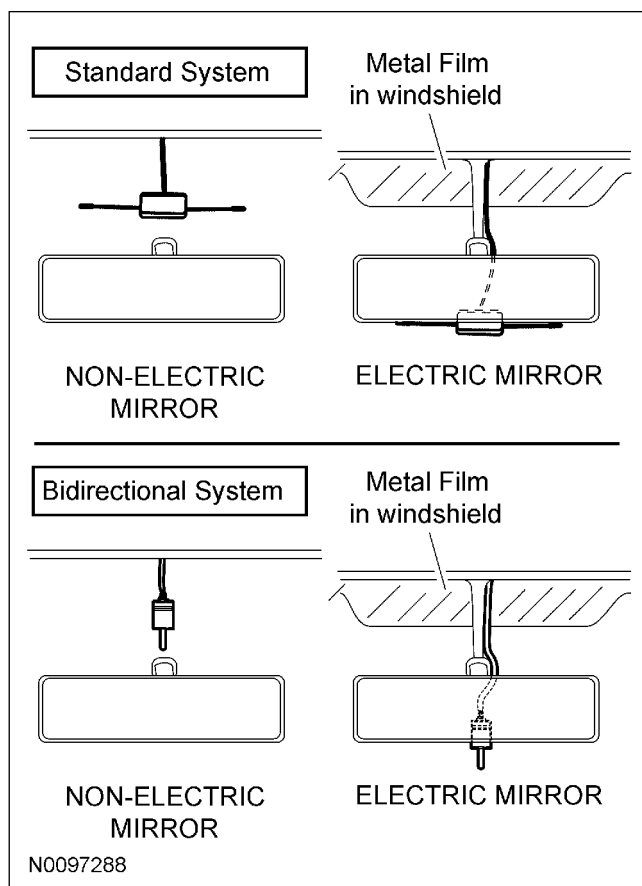
17. Reposition the A pillar trim panel.

**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.



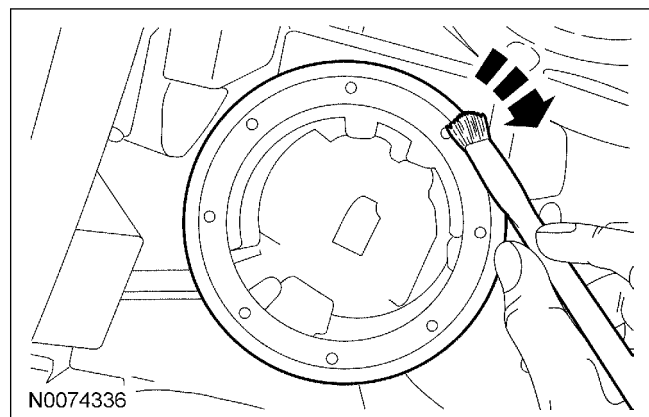
19. Following the directions on the supplied tube of adhesive primer, apply a thin coating around the transceiver antenna coil and allow to dry for approximately 5 minutes.



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 RMST control module.

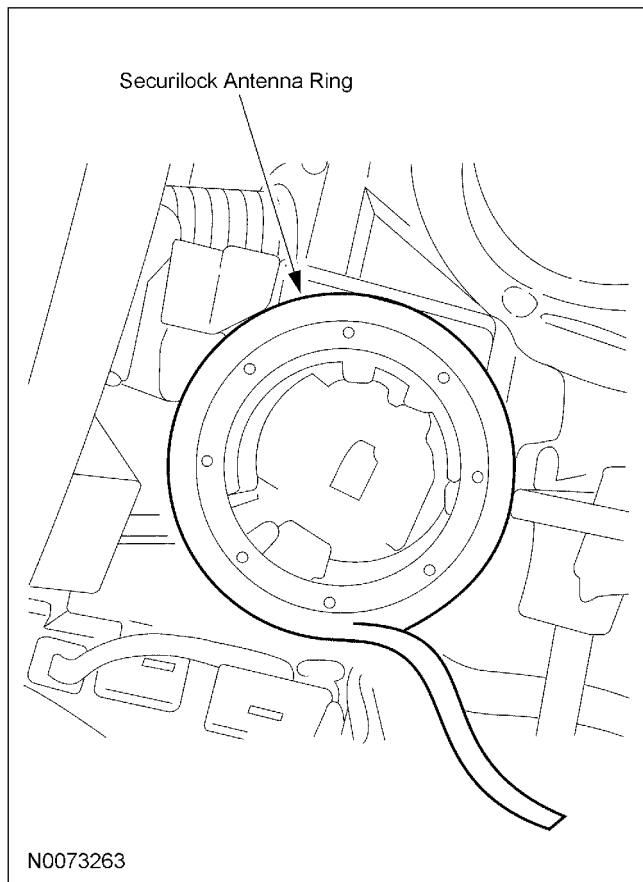


## INSTALLATION (Continued)

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.



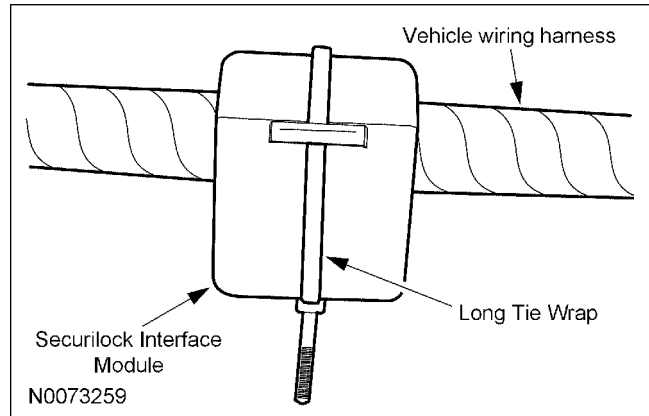
### Install The SecuriLock Interface Module

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 to the module mounting location.



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

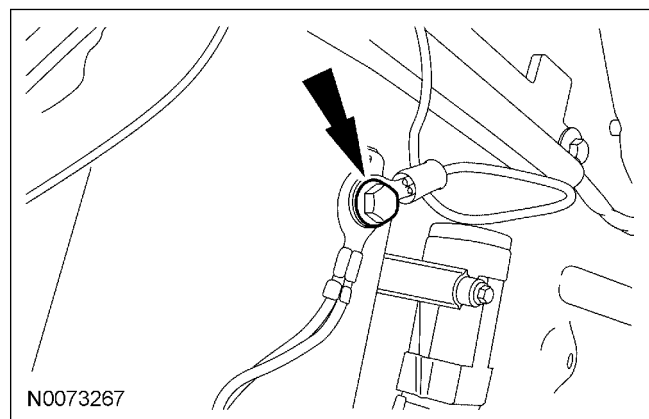
23. Place the remote start module and harness assembly on the floor of the vehicle.

### 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 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 Dark Blue horn circuit wire in the steering column harness.

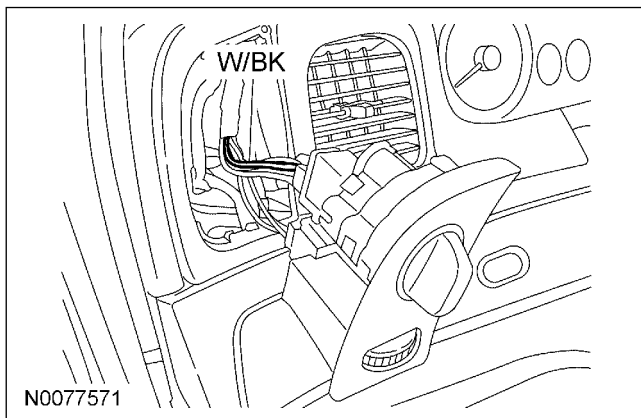
28. Connect the Brown/Black wire from the remote start module harness to the Dark Blue horn circuit wire in the steering column harness.

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

A logic probe connected to the correct wire will show power with the switch in the OFF position and ground with the switch in the parking lights ON position.

Identify the White/Black parking lights on circuit wire at the headlight switch.

30. Connect the White wire from the remote start module harness to the White/Black parking lights on circuit wire at the headlight switch.



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

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

Identify the Pink/Yellow power door lock circuit wire at the harness above the gas pedal.

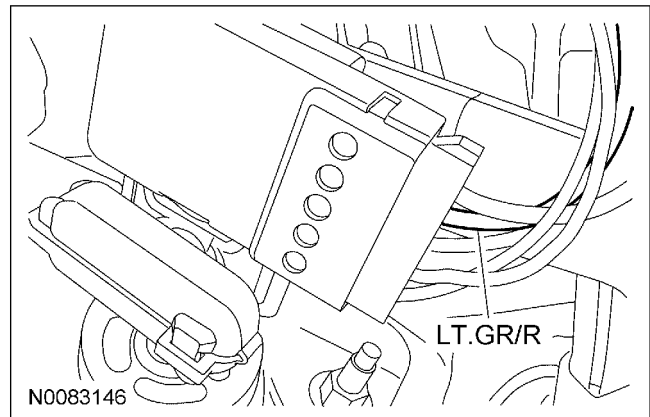
32. Connect the Blue wire from the remote start module harness to the Pink/Yellow power door lock circuit at the harness above the gas pedal.

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 Light Green/Red brake switch circuit wire at the brake switch.

34. Connect the Brown wire from the remote start module harness to the Light Green/Red 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 Black/Light Blue dome light circuit wire at the under dash light location.

## INSTALLATION (Continued)

36. Connect the Green/Violet wire from the remote start module harness to the Black/Light Blue dome light circuit wire at the under dash light location.

### 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.

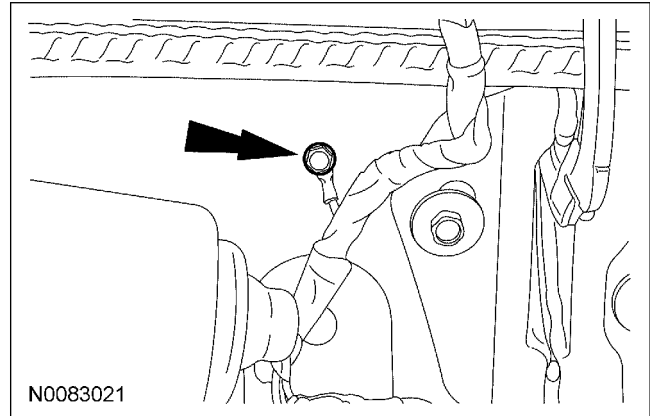
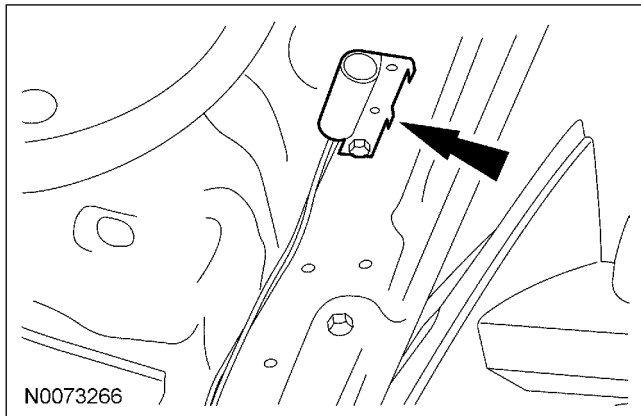
**NOTE:** The switch should be positioned about 30 degrees below parallel to the ground to accommodate for parking on inclines.

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

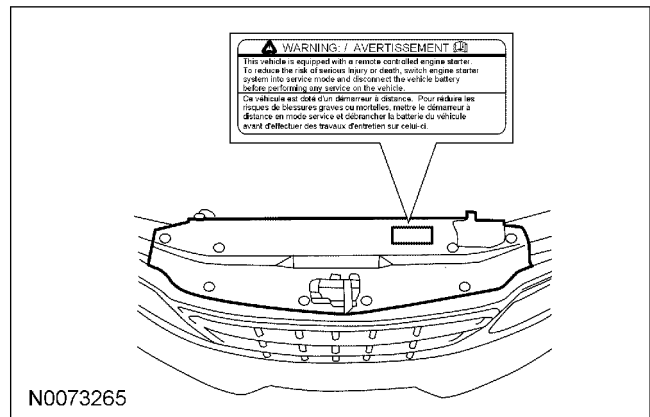
Locate an easy to access area near the drivers side hood hinge and install the hood safety switch using the supplied metal screws.

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



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

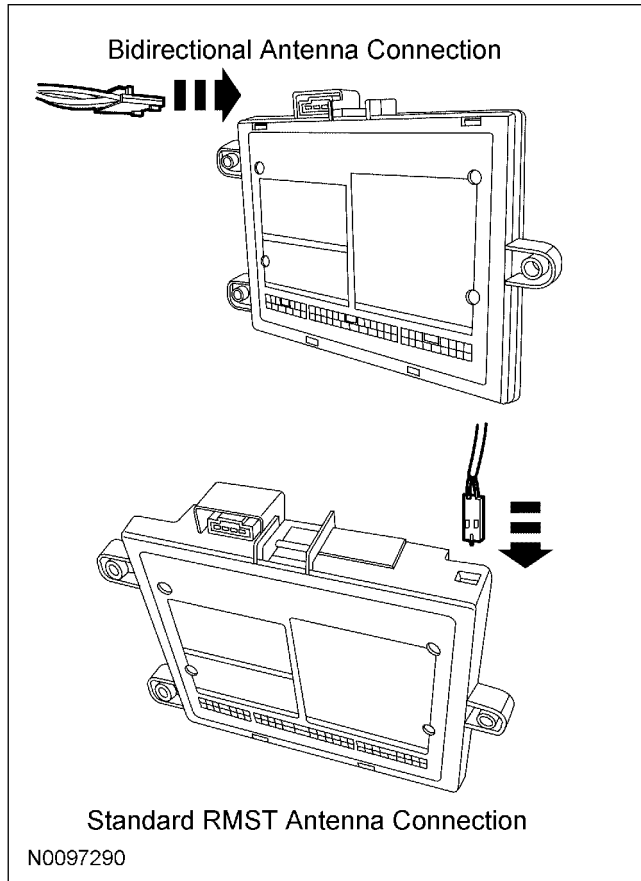
Install the underhood warning label



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

41. Connect the antenna to the RMST control module.



**INSTALLATION (Continued)**

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

**Program The RMST System**

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

**Secure RMST Harness and Control Module**

44. Use the supplied tie wraps to secure the RMST harness wires.
45. **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.

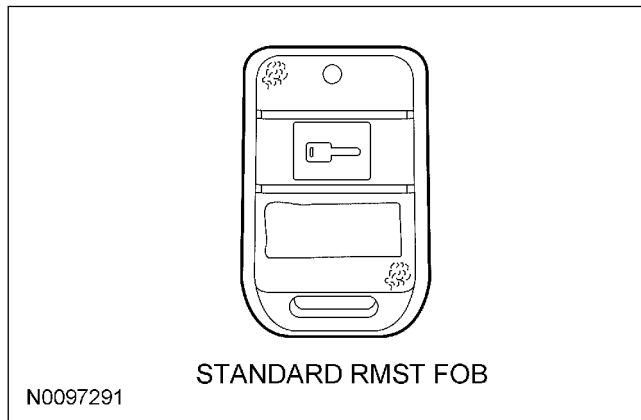
**Install Trim**

46. Install the left scuff plate and cowl trim panel.
47. Install the upper and lower steering column shrouds.
- Install the 3 screws.
48. Install the steering column tilt release lever/handle.

## 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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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)**

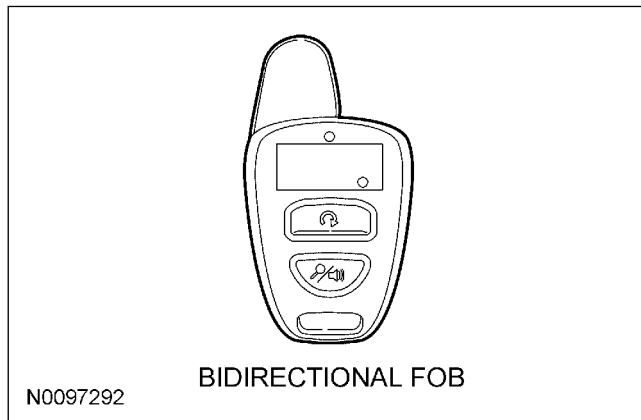
<b>CHIRPS</b>	<b>PROBLEM</b>
5 Chirps	The KEY is in the ignition.
6 Chirps	The remote start system is in SERVICE/VALET mode.

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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.

14. Place a key in the ignition and turn to the RUN position.

Depress the brake pedal and place the transmission selector lever in gear.

The vehicle should run without interruption.

## 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.
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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.



# '09 Towncar

## 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
A-1	WHITE	Parking Light Output

#### DRIVER'S KICK PANEL HARNESS

	Color	Function
A-5	BLACK	Ground
A-2	BLUE	Door Lock Output
B-7	BROWN	Brake Input
A-20	GREEN/VIOLET	Door Ajar Switch Input

#### UNDER HOOD HARNESS

	Color	Function
A-19	GRAY	Hood Open Switch Input

VEHICLE  
HARNESS

IGNITION  
SWITCH

Horn (DK. BLUE)

STEERING  
COLUMN  
HARNESS

Parking Lights (WHITE/BLACK)

HEADLIGHT  
SWITCH

MAKE THIS CONNECTION FIRST!

CHASSIS GROUND POINT  
IN DRIVER'S KICK PANEL

Door Lock (PINK/YELLOW)

HARNESS  
ABOVE  
GAS PEDAL

Brake (LT. GREEN/RED)

BRAKE SWITCH

Dome Light Return (BLACK/LT. BLUE)

UNDERDASH  
LIGHT

Vehicle  
Interior

Engine  
Compartment

Hood Tilt Switch

Chassis  
Ground

Do Not Ground to Hood!